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May 24, 2017

Ms. Joyce Munie, P.E.
Manager, Permit Section
Illinois Environmental Protection Agency
Bureau of Land
1021 North Grand Avenue East
Springfield, Illinois 62794

Submittal of Corrected Information
Groundwater Monitoring Report –4th Quarter 2014
Roxana, Illinois
1191150002 – Madison County
Equilon Enterprises LLC d/b/a Shell Oil Products US
Log No. B-43R

Dear Ms. Munie:

On behalf of Shell Oil Products US (SOPUS), AECOM Technical Services, Inc. (AECOM) hereby submits the enclosed addendum to the above-referenced report (the Report).

AECOM collects a variety of samples for SOPUS as part of the work performed in connection with the above-referenced site including the samples referenced and utilized in the Report. AECOM contracts with independent laboratories to analyze the samples collected. As noted in SOPUS' initial disclosure letter and our subsequent communications, Accutest Laboratories (Accutest) issued revised laboratory analyses in response to an internal evaluation performed of its process. Please note, the majority of the corrected analyses were issued only to include a revised footnote and the numeric value of the analytical results reported remained unchanged. If any numeric values of analytical results presented in the Report were updated by Accutest, the updated results are presented as part of the information included in the Report addendum. Moreover, based upon our evaluation of the Report and the revised information received from Accutest, the conclusion(s) of the Report as originally issued are unaffected.

The information provided within and the format of this addendum is as discussed during our meeting with IEPA on March 23, 2017. This addendum includes the following information:

- IEPA LPC form
- Data Review Addendum Tables (summarizing changed information)
- Revised analytical results tables
- Revised figure
- Revised laboratory reports (on CD)

If you have any questions during your review, please contact Kevin Dyer, SOPUS Senior Principal Program Manager, at kevin.dyer@shell.com (618/288-7237), or Bob Billman at bob.billman@aecom.com (314/743-4108).

Sincerely,

AECOM, on behalf of Shell Oil Products US

Robert Billman, PG
Senior Project Manager

Robert E. Mooshegian, CHMM
Senior Program Manager

Enclosures: 2 copies

cc: Kevin Dyer, SOPUS
Eric Petersen, Phillips 66
Shannon Haney, Greensfelder, Hemker & Gale P.C.
Repositories – Village Hall, Roxana Public Library, website
Project File

Illinois Environmental Protection Agency

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RCRA FACILITY GROUNDWATER, LEACHATE AND GAS REPORTING FORM

This form must be used as a cover sheet for the notices and reports, identified below as required by: (1) a facility's RCRA interim status closure plan; (2) the RCRA interim status regulations; or (3) a facility's RCRA permit. All reports must be submitted to the Illinois EPA's Bureau of Land Permit Section. This form is for use by Hazardous Waste facilities only. Reporting for Solid Waste facilities should be submitted on a separate form. All reports submitted to the Illinois EPA's Bureau of Land Permit Section must contain an original, plus a minimum of two copies.

Note: This form is not to be used with permit or closure plan modification requests. The facility's approved permit or closure plan will state whether the document you are submitting is required as a report or a modification request.

Facility Name: Equilon Enterprises LLC dba Shell Oil Products US

Facility Address: 900 South Central Ave., Roxana, IL 62048

Site ID #: 1191150002 Fed ID #: ILD 080 012 305

Check the appropriate heading. Only one heading may be checked for each corresponding submittal. Check the appropriate sub-heading, where applicable. Attach the original and all copies behind this form.

☐ LPC-160 Forms

Groundwater	Leachate
____ Quarterly - Enter: 1, 2, 3, or 4	____ Quarterly - Enter: 1, 2, 3, or 4
☐ Semi-Annual	☐ Semi-Annual
☐ Annual	☐ Annual
☐ Biennial	☐ Biennial

☐ Groundwater Data (without LPC-160 Forms)

____ Quarterly - Enter: 1, 2, 3, or 4 ☐ Annual ☐ Semi-Annual ☐ Biennial

☐ Well Construction Information

- ☐ Well Construction Forms, Boring Logs and/or Abandonment Forms
- ☐ Well Survey Data (e.g., Stick-up Elevation Data)

☐ Notice of Statistically Significant Evidence of Groundwater Contamination (35 Ill. Adm. Code 724.198)

☐ Notice of Exceedence of Groundwater Concentration Limit (35 Ill. Adm. Code 724.199(h))

☐ Notice of Alternate Source or Error in Sampling Analysis or Evaluation of Groundwater (35 Ill. Adm. Code 724.199(i))

☐ Gas Monitoring Reports

☑ Other (identify)

1Q14, 2Q14, 3Q14, 4Q14, 1Q15, & 2Q15 Groundwater Sampling Report Addenda - Addenda being issued due to revised laboratory reports.

Analytical Method	Sample ID	Lab Sample ID	Sample Date	Analyte	Original Result	Corrected Result	Laboratory Qualifier	Units	Laboratory Footnote	AECOM Qualifier
SW846 8260C	MW1-ROX-100614	MC34126-1	10/06/2014	Acetone	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW1-ROX-100614	MC34126-1	10/06/2014	Acrolein	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW1-ROX-100614	MC34126-1	10/06/2014	Acrylonitrile	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW1-ROX-100614	MC34126-1	10/06/2014	2-Chloroethyl vinyl ether	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW1-ROX-100614	MC34126-1	10/06/2014	4-Methyl-2-pentanone (MIBK)	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW1-ROX-100614	MC34126-1	10/06/2014	Vinyl Acetate	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW12-ROX-100614	MC34126-2	10/06/2014	Acetone	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW12-ROX-100614	MC34126-2	10/06/2014	Acrolein	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ

Analytical Method	Sample ID	Lab Sample ID	Sample Date	Analyte	Original Result	Corrected Result	Laboratory Qualifier	Units	Laboratory Footnote	AECOM Qualifier
SW846 8260C	MW12-ROX-100614	MC34126-2	10/06/2014	Acrylonitrile	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW12-ROX-100614	MC34126-2	10/06/2014	2-Chloroethyl vinyl ether	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW12-ROX-100614	MC34126-2	10/06/2014	4-Methyl-2-pentanone (MIBK)	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW12-ROX-100614	MC34126-2	10/06/2014	Vinyl Acetate	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW11-ROX-100714	MC34156-2	10/07/2014	Vinyl Acetate	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW10-ROX-100714	MC34156-3	10/07/2014	Vinyl Acetate	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW9-ROX-100714	MC34156-4	10/07/2014	Vinyl Acetate	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW16-ROX-100714	MC34156-5	10/07/2014	Vinyl Acetate	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ

Analytical Method	Sample ID	Lab Sample ID	Sample Date	Analyte	Original Result	Corrected Result	Laboratory Qualifier	Units	Laboratory Footnote	AECOM Qualifier
SW846 8260C	MW6D-ROX-100814	MC34198-1	10/08/2014	Methyl Tert Butyl Ether	0.54	ND		ug/l	Ana: Continuing Calibration outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW6D-ROX-100814-DUP	MC34198-2	10/08/2014	Methyl Tert Butyl Ether	0.62	0.57	J	ug/l	Ana: Continuing Calibration outside of acceptance criteria. Sample result may be biased low.	J
SW846 8260C	MW6C-ROX-100814	MC34198-3	10/08/2014	Methyl Tert Butyl Ether	0.57	0.52	J	ug/l	Ana: Continuing Calibration outside of acceptance criteria. Sample result may be biased low.	J
SW846 8260C	MW6B-ROX-100814	MC34198-4	10/08/2014	Methyl Tert Butyl Ether	3.1	3.0		ug/l	Ana: Continuing Calibration outside of acceptance criteria. Sample result may be biased low.	J
SW846 8260C	MW6A-ROX-100814	MC34198-6	10/08/2014	Methyl Tert Butyl Ether	8.2	8.2		ug/l	Ana: Continuing Calibration outside of acceptance criteria. Sample result may be biased low.	J
SW846 8260C	MW24-ROX-100814	MC34198-7	10/08/2014	Methyl Tert Butyl Ether	ND	ND		ug/l	Ana: Continuing Calibration outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P54-ROX-100814	MC34198-8	10/08/2014	Methyl Tert Butyl Ether	ND	ND		ug/l	Ana: Continuing Calibration outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW3-ROX-100914	MC34231-2	10/09/2014	Methyl Tert Butyl Ether	3.1	3.0		ug/l	Ana: Continuing Calibration outside of acceptance criteria. Sample result may be biased low.	J

Analytical Method	Sample ID	Lab Sample ID	Sample Date	Analyte	Original Result	Corrected Result	Laboratory Qualifier	Units	Laboratory Footnote	AECOM Qualifier
SW846 8260C	ROST3MW-ROX-100914	MC34231-3	10/09/2014	Methyl Tert Butyl Ether	ND	ND		ug/l	Ana: Continuing Calibration outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	ROST4PZC-ROX-100914	MC34231-4	10/09/2014	Methyl Tert Butyl Ether	ND	ND		ug/l	Ana: Continuing Calibration outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW-5-ROX-100914	MC34231-7	10/09/2014	Acetone	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW-5-ROX-100914	MC34231-7	10/09/2014	Acrolein	ND	ND		ug/l	Ana: Initial & Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW-5-ROX-100914	MC34231-7	10/09/2014	Acrylonitrile	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW-5-ROX-100914	MC34231-7	10/09/2014	Bromoform	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW-5-ROX-100914	MC34231-7	10/09/2014	Carbon disulfide	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW-5-ROX-100914	MC34231-7	10/09/2014	Chlorobenzene	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ

Analytical Method	Sample ID	Lab Sample ID	Sample Date	Analyte	Original Result	Corrected Result	Laboratory Qualifier	Units	Laboratory Footnote	AECOM Qualifier
SW846 8260C	MW-5-ROX-100914	MC34231-7	10/09/2014	2-Chloroethyl vinyl ether	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW-5-ROX-100914	MC34231-7	10/09/2014	Dichlorodifluoromethane	ND	ND		ug/l	Ana: Initial & Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW-5-ROX-100914	MC34231-7	10/09/2014	1,3-Dichloropropane	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW-5-ROX-100914	MC34231-7	10/09/2014	Ethylbenzene	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW-5-ROX-100914	MC34231-7	10/09/2014	2-Hexanone	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW-5-ROX-100914	MC34231-7	10/09/2014	4-Methyl-2-pentanone (MIBK)	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW-5-ROX-100914	MC34231-7	10/09/2014	Methylene bromide	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW-5-ROX-100914	MC34231-7	10/09/2014	Vinyl chloride	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ

Analytical Method	Sample ID	Lab Sample ID	Sample Date	Analyte	Original Result	Corrected Result	Laboratory Qualifier	Units	Laboratory Footnote	AECOM Qualifier
SW846 8260C	MW-5-ROX-100914	MC34231-7	10/09/2014	m,p-Xylene	2.7	2.7		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	J
SW846 8260C	MW-5-ROX-100914	MC34231-7	10/09/2014	Xylene (total)	3.9	3.9		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	J
SW846 8260C	MW2-ROX-101014	MC34267-1	10/10/2014	Acetone	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW2-ROX-101014	MC34267-1	10/10/2014	Acrolein	ND	ND		ug/l	Ana: Initial & Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW2-ROX-101014	MC34267-1	10/10/2014	Acrylonitrile	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW2-ROX-101014	MC34267-1	10/10/2014	Bromoform	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW2-ROX-101014	MC34267-1	10/10/2014	Carbon disulfide	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW2-ROX-101014	MC34267-1	10/10/2014	Chlorobenzene	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ

Analytical Method	Sample ID	Lab Sample ID	Sample Date	Analyte	Original Result	Corrected Result	Laboratory Qualifier	Units	Laboratory Footnote	AECOM Qualifier
SW846 8260C	MW2-ROX-101014	MC34267-1	10/10/2014	2-Chloroethyl vinyl ether	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW2-ROX-101014	MC34267-1	10/10/2014	Dichlorodifluoromethane	ND	ND		ug/l	Ana: Initial & Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW2-ROX-101014	MC34267-1	10/10/2014	1,3-Dichloropropane	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW2-ROX-101014	MC34267-1	10/10/2014	Ethylbenzene	386	386		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	J
SW846 8260C	MW2-ROX-101014	MC34267-1	10/10/2014	2-Hexanone	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW2-ROX-101014	MC34267-1	10/10/2014	4-Methyl-2-pentanone (MIBK)	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW2-ROX-101014	MC34267-1	10/10/2014	Methylene bromide	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW2-ROX-101014	MC34267-1	10/10/2014	Vinyl chloride	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ

Analytical Method	Sample ID	Lab Sample ID	Sample Date	Analyte	Original Result	Corrected Result	Laboratory Qualifier	Units	Laboratory Footnote	AECOM Qualifier
SW846 8260C	MW2-ROX-101014	MC34267-1	10/10/2014	m,p-Xylene	260	260		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	J
SW846 8260C	MW2-ROX-101014	MC34267-1	10/10/2014	Xylene (total)	278	278		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	J
SW846 8260C	MW22-ROX-101014	MC34267-2	10/10/2014	Acetone	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW22-ROX-101014	MC34267-2	10/10/2014	Acrolein	ND	ND		ug/l	Ana: Initial & Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW22-ROX-101014	MC34267-2	10/10/2014	Acrylonitrile	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW22-ROX-101014	MC34267-2	10/10/2014	Bromoform	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW22-ROX-101014	MC34267-2	10/10/2014	Carbon disulfide	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW22-ROX-101014	MC34267-2	10/10/2014	Chlorobenzene	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ

Analytical Method	Sample ID	Lab Sample ID	Sample Date	Analyte	Original Result	Corrected Result	Laboratory Qualifier	Units	Laboratory Footnote	AECOM Qualifier
SW846 8260C	MW22-ROX-101014	MC34267-2	10/10/2014	2-Chloroethyl vinyl ether	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW22-ROX-101014	MC34267-2	10/10/2014	Dichlorodifluoromethane	ND	ND		ug/l	Ana: Initial & Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW22-ROX-101014	MC34267-2	10/10/2014	1,3-Dichloropropane	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW22-ROX-101014	MC34267-2	10/10/2014	Ethylbenzene	1880	1880		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	J
SW846 8260C	MW22-ROX-101014	MC34267-2	10/10/2014	2-Hexanone	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW22-ROX-101014	MC34267-2	10/10/2014	4-Methyl-2-pentanone (MIBK)	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW22-ROX-101014	MC34267-2	10/10/2014	Methylene bromide	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW22-ROX-101014	MC34267-2	10/10/2014	Vinyl chloride	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ

Analytical Method	Sample ID	Lab Sample ID	Sample Date	Analyte	Original Result	Corrected Result	Laboratory Qualifier	Units	Laboratory Footnote	AECOM Qualifier
SW846 8260C	MW22-ROX-101014	MC34267-2	10/10/2014	m,p-Xylene	3080	3080		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	J
SW846 8260C	MW22-ROX-101014	MC34267-2	10/10/2014	Xylene (total)	4820	4820		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	J
SW846 8260C	MW13-ROX-101014	MC34267-3	10/10/2014	Acrolein	ND	ND		ug/l	Ana: Initial & Continuing Calibration outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW13-ROX-101014	MC34267-3	10/10/2014	Bromoform	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW13-ROX-101014	MC34267-3	10/10/2014	Chlorobenzene	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW13-ROX-101014	MC34267-3	10/10/2014	Dichlorodifluoromethane	ND	ND		ug/l	Ana: Initial Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW13-ROX-101014	MC34267-3	10/10/2014	1,3-Dichloropropane	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW13-ROX-101014	MC34267-3	10/10/2014	1,2,3-Trichlorobenzene	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ

Analytical Method	Sample ID	Lab Sample ID	Sample Date	Analyte	Original Result	Corrected Result	Laboratory Qualifier	Units	Laboratory Footnote	AECOM Qualifier
SW846 8260C	MW13-ROX-101014	MC34267-3	10/10/2014	m,p-Xylene	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW13-ROX-101014	MC34267-3	10/10/2014	Xylene (total)	1.1	1.1		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	J
SW846 8260C	P56-ROX-101314	MC34289-1	10/13/2014	Acetone	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P56-ROX-101314	MC34289-1	10/13/2014	Acrolein	ND	ND		ug/l	Ana: Initial & Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P56-ROX-101314	MC34289-1	10/13/2014	Acrylonitrile	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P56-ROX-101314	MC34289-1	10/13/2014	Bromoform	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P56-ROX-101314	MC34289-1	10/13/2014	Carbon disulfide	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P56-ROX-101314	MC34289-1	10/13/2014	Chlorobenzene	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ

Analytical Method	Sample ID	Lab Sample ID	Sample Date	Analyte	Original Result	Corrected Result	Laboratory Qualifier	Units	Laboratory Footnote	AECOM Qualifier
SW846 8260C	P56-ROX-101314	MC34289-1	10/13/2014	2-Chloroethyl vinyl ether	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P56-ROX-101314	MC34289-1	10/13/2014	Dichlorodifluoromethane	ND	ND		ug/l	Ana: Initial & Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P56-ROX-101314	MC34289-1	10/13/2014	1,3-Dichloropropane	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P56-ROX-101314	MC34289-1	10/13/2014	Ethylbenzene	164	164		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	J
SW846 8260C	P56-ROX-101314	MC34289-1	10/13/2014	2-Hexanone	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P56-ROX-101314	MC34289-1	10/13/2014	4-Methyl-2-pentanone (MIBK)	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P56-ROX-101314	MC34289-1	10/13/2014	Methylene bromide	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P56-ROX-101314	MC34289-1	10/13/2014	Vinyl chloride	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ

Analytical Method	Sample ID	Lab Sample ID	Sample Date	Analyte	Original Result	Corrected Result	Laboratory Qualifier	Units	Laboratory Footnote	AECOM Qualifier
SW846 8260C	P56-ROX-101314	MC34289-1	10/13/2014	m,p-Xylene	170	170		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	J
SW846 8260C	P56-ROX-101314	MC34289-1	10/13/2014	Xylene (total)	176	176		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	J
SW846 8260C	MW14-ROX-101414	MC34338-1	10/14/2014	Acrolein	ND	ND		ug/l	Ana: Initial & Continuing Calibration outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW14-ROX-101414	MC34338-1	10/14/2014	Bromoform	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW14-ROX-101414	MC34338-1	10/14/2014	Chlorobenzene	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW14-ROX-101414	MC34338-1	10/14/2014	Dichlorodifluoromethane	ND	ND		ug/l	Ana: Initial Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW14-ROX-101414	MC34338-1	10/14/2014	1,3-Dichloropropane	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW14-ROX-101414	MC34338-1	10/14/2014	1,2,3-Trichlorobenzene	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ

Analytical Method	Sample ID	Lab Sample ID	Sample Date	Analyte	Original Result	Corrected Result	Laboratory Qualifier	Units	Laboratory Footnote	AECOM Qualifier
SW846 8260C	MW14-ROX-101414	MC34338-1	10/14/2014	m,p-Xylene	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW14-ROX-101414	MC34338-1	10/14/2014	Xylene (total)	0.41	0.41	J	ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	J
SW846 8260C	P66-ROX-101414	MC34338-2	10/14/2014	Acrolein	ND	ND		ug/l	Ana: Initial & Continuing Calibration outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P66-ROX-101414	MC34338-2	10/14/2014	Bromoform	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P66-ROX-101414	MC34338-2	10/14/2014	Chlorobenzene	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P66-ROX-101414	MC34338-2	10/14/2014	Dichlorodifluoromethane	ND	ND		ug/l	Ana: Initial Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P66-ROX-101414	MC34338-2	10/14/2014	1,3-Dichloropropane	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P66-ROX-101414	MC34338-2	10/14/2014	1,2,3-Trichlorobenzene	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ

Analytical Method	Sample ID	Lab Sample ID	Sample Date	Analyte	Original Result	Corrected Result	Laboratory Qualifier	Units	Laboratory Footnote	AECOM Qualifier
SW846 8260C	P66-ROX-101414	MC34338-2	10/14/2014	m,p-Xylene	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P66-ROX-101414	MC34338-2	10/14/2014	Xylene (total)	1.8	1.8		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	J
SW846 8260C	P74-ROX-101414	MC34338-3	10/14/2014	Acrolein	ND	ND		ug/l	Ana: Initial & Continuing Calibration outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P74-ROX-101414	MC34338-3	10/14/2014	Bromoform	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P74-ROX-101414	MC34338-3	10/14/2014	Chlorobenzene	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P74-ROX-101414	MC34338-3	10/14/2014	Dichlorodifluoromethane	ND	ND		ug/l	Ana: Initial Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P74-ROX-101414	MC34338-3	10/14/2014	1,3-Dichloropropane	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P74-ROX-101414	MC34338-3	10/14/2014	1,2,3-Trichlorobenzene	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ

Analytical Method	Sample ID	Lab Sample ID	Sample Date	Analyte	Original Result	Corrected Result	Laboratory Qualifier	Units	Laboratory Footnote	AECOM Qualifier
SW846 8260C	P74-ROX-101414	MC34338-3	10/14/2014	m,p-Xylene	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P74-ROX-101414	MC34338-3	10/14/2014	Xylene (total)	0.43	0.43	J	ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	J
SW846 8260C	P59-ROX-101414	MC34338-5	10/14/2014	Acetone	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P59-ROX-101414	MC34338-5	10/14/2014	Acrolein	ND	ND		ug/l	Ana: Initial & Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P59-ROX-101414	MC34338-5	10/14/2014	Acrylonitrile	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P59-ROX-101414	MC34338-5	10/14/2014	Bromoform	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P59-ROX-101414	MC34338-5	10/14/2014	Carbon disulfide	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P59-ROX-101414	MC34338-5	10/14/2014	Chlorobenzene	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ

Analytical Method	Sample ID	Lab Sample ID	Sample Date	Analyte	Original Result	Corrected Result	Laboratory Qualifier	Units	Laboratory Footnote	AECOM Qualifier
SW846 8260C	P59-ROX-101414	MC34338-5	10/14/2014	2-Chloroethyl vinyl ether	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P59-ROX-101414	MC34338-5	10/14/2014	Dichlorodifluoromethane	ND	ND		ug/l	Ana: Initial & Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P59-ROX-101414	MC34338-5	10/14/2014	1,3-Dichloropropane	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P59-ROX-101414	MC34338-5	10/14/2014	2-Hexanone	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P59-ROX-101414	MC34338-5	10/14/2014	4-Methyl-2-pentanone (MIBK)	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P59-ROX-101414	MC34338-5	10/14/2014	Methylene bromide	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P59-ROX-101414	MC34338-5	10/14/2014	Vinyl chloride	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P59-ROX-101414	MC34338-5	10/14/2014	m,p-Xylene	5140	5140		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	J

Analytical Method	Sample ID	Lab Sample ID	Sample Date	Analyte	Original Result	Corrected Result	Laboratory Qualifier	Units	Laboratory Footnote	AECOM Qualifier
SW846 8260C	P59-ROX-101414	MC34338-5	10/14/2014	Xylene (total)	6170	6170		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	J
SW846 8260C	P57-ROX-101414	MC34338-6	10/14/2014	Acetone	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P57-ROX-101414	MC34338-6	10/14/2014	Acrolein	ND	ND		ug/l	Ana: Initial & Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P57-ROX-101414	MC34338-6	10/14/2014	Acrylonitrile	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P57-ROX-101414	MC34338-6	10/14/2014	Bromoform	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P57-ROX-101414	MC34338-6	10/14/2014	Carbon disulfide	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P57-ROX-101414	MC34338-6	10/14/2014	Chlorobenzene	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P57-ROX-101414	MC34338-6	10/14/2014	2-Chloroethyl vinyl ether	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ

Analytical Method	Sample ID	Lab Sample ID	Sample Date	Analyte	Original Result	Corrected Result	Laboratory Qualifier	Units	Laboratory Footnote	AECOM Qualifier
SW846 8260C	P57-ROX-101414	MC34338-6	10/14/2014	Dichlorodifluoromethane	ND	ND		ug/l	Ana: Initial & Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P57-ROX-101414	MC34338-6	10/14/2014	1,3-Dichloropropane	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P57-ROX-101414	MC34338-6	10/14/2014	Ethylbenzene	3860	3860		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	J
SW846 8260C	P57-ROX-101414	MC34338-6	10/14/2014	2-Hexanone	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P57-ROX-101414	MC34338-6	10/14/2014	4-Methyl-2-pentanone (MIBK)	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P57-ROX-101414	MC34338-6	10/14/2014	Methylene bromide	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P57-ROX-101414	MC34338-6	10/14/2014	Vinyl chloride	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P57-ROX-101414	MC34338-6	10/14/2014	m,p-Xylene	5790	5790		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	J

Analytical Method	Sample ID	Lab Sample ID	Sample Date	Analyte	Original Result	Corrected Result	Laboratory Qualifier	Units	Laboratory Footnote	AECOM Qualifier
SW846 8260C	P57-ROX-101414	MC34338-6	10/14/2014	Xylene (total)	7890	7890		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	J
SW846 8260C	P57-ROX-101414-DUP	MC34338-7	10/14/2014	Acetone	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P57-ROX-101414-DUP	MC34338-7	10/14/2014	Acrolein	ND	ND		ug/l	Ana: Initial & Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P57-ROX-101414-DUP	MC34338-7	10/14/2014	Acrylonitrile	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P57-ROX-101414-DUP	MC34338-7	10/14/2014	Bromoform	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P57-ROX-101414-DUP	MC34338-7	10/14/2014	Carbon disulfide	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P57-ROX-101414-DUP	MC34338-7	10/14/2014	Chlorobenzene	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P57-ROX-101414-DUP	MC34338-7	10/14/2014	2-Chloroethyl vinyl ether	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ

Analytical Method	Sample ID	Lab Sample ID	Sample Date	Analyte	Original Result	Corrected Result	Laboratory Qualifier	Units	Laboratory Footnote	AECOM Qualifier
SW846 8260C	P57-ROX-101414-DUP	MC34338-7	10/14/2014	Dichlorodifluoromethane	ND	ND		ug/l	Ana: Initial & Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P57-ROX-101414-DUP	MC34338-7	10/14/2014	1,3-Dichloropropane	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P57-ROX-101414-DUP	MC34338-7	10/14/2014	Ethylbenzene	1770	1770	J	ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	J
SW846 8260C	P57-ROX-101414-DUP	MC34338-7	10/14/2014	2-Hexanone	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P57-ROX-101414-DUP	MC34338-7	10/14/2014	4-Methyl-2-pentanone (MIBK)	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P57-ROX-101414-DUP	MC34338-7	10/14/2014	Methylene bromide	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P57-ROX-101414-DUP	MC34338-7	10/14/2014	Vinyl chloride	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P57-ROX-101414-DUP	MC34338-7	10/14/2014	m,p-Xylene	2370	2370		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	J

Analytical Method	Sample ID	Lab Sample ID	Sample Date	Analyte	Original Result	Corrected Result	Laboratory Qualifier	Units	Laboratory Footnote	AECOM Qualifier
SW846 8260C	P57-ROX-101414-DUP	MC34338-7	10/14/2014	Xylene (total)	3320	3320		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	J
SW846 8260C	P93A-ROX-101514	MC34365-1	10/15/2014	Carbon tetrachloride	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P93A-ROX-101514	MC34365-1	10/15/2014	Ethylbenzene	229	229	J	ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased high.	J
SW846 8260C	P93A-ROX-101514-DUP	MC34365-2	10/15/2014	Carbon tetrachloride	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P93A-ROX-101514-DUP	MC34365-2	10/15/2014	Ethylbenzene	226	226	J	ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased high.	J
SW846 8260C	P58-ROX-101514	MC34365-3	10/15/2014	Carbon tetrachloride	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P58-ROX-101514	MC34365-3	10/15/2014	Ethylbenzene	793	793		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased high.	J
SW846 8260C	P93C-ROX-101514	MC34365-4	10/15/2014	Carbon tetrachloride	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ

Analytical Method	Sample ID	Lab Sample ID	Sample Date	Analyte	Original Result	Corrected Result	Laboratory Qualifier	Units	Laboratory Footnote	AECOM Qualifier
SW846 8260C	P93D-ROX-101514	MC34365-5	10/15/2014	Carbon tetrachloride	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P93B-ROX-101514	MC34365-6	10/15/2014	Acetone	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P93B-ROX-101514	MC34365-6	10/15/2014	Carbon disulfide	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P93B-ROX-101514	MC34365-6	10/15/2014	Carbon tetrachloride	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P93B-ROX-101514	MC34365-6	10/15/2014	2-Hexanone	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P114-ROX-101714	MC34459-3	10/17/2014	1,2,3-Trichlorobenzene	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P114-ROX-101714	MC34459-3	10/17/2014	Vinyl Acetate	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	T12-ROX-101714	MC34459-4	10/17/2014	Naphthalene	184	184		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased high.	J

Analytical Method	Sample ID	Lab Sample ID	Sample Date	Analyte	Original Result	Corrected Result	Laboratory Qualifier	Units	Laboratory Footnote	AECOM Qualifier
SW846 8260C	T12-ROX-101714	MC34459-4	10/17/2014	1,2,3-Trichlorobenzene	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	T12-ROX-101714	MC34459-4	10/17/2014	Vinyl Acetate	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW4-ROX-101614	MC34463-3	10/16/2014	2-Butanone (MEK)	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW4-ROX-101614	MC34463-3	10/16/2014	1,2,3-Trichlorobenzene	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW4-ROX-101614	MC34463-3	10/16/2014	Vinyl Acetate	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW8-ROX-101614	MC34463-4	10/16/2014	2-Butanone (MEK)	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW8-ROX-101614	MC34463-4	10/16/2014	1,2,3-Trichlorobenzene	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ

Analytical Method	Sample ID	Lab Sample ID	Sample Date	Analyte	Original Result	Corrected Result	Laboratory Qualifier	Units	Laboratory Footnote	AECOM Qualifier
SW846 8260C	MW8-ROX-101614	MC34463-4	10/16/2014	Vinyl Acetate	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW7-ROX-101614	MC34463-5	10/16/2014	2-Butanone (MEK)	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW7-ROX-101614	MC34463-5	10/16/2014	1,2,3-Trichlorobenzene	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW7-ROX-101614	MC34463-5	10/16/2014	Vinyl Acetate	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW7-ROX-101614-DUP	MC34463-6	10/16/2014	2-Butanone (MEK)	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW7-ROX-101614-DUP	MC34463-6	10/16/2014	1,2,3-Trichlorobenzene	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW7-ROX-101614-DUP	MC34463-6	10/16/2014	Vinyl Acetate	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW26-ROX-102114	MC34553-3	10/21/2014	Chloromethane	ND	ND		ug/l	Ana: Continuing Calibration outside of acceptance criteria. Sample result may be biased low.	UJ

Analytical Method	Sample ID	Lab Sample ID	Sample Date	Analyte	Original Result	Corrected Result	Laboratory Qualifier	Units	Laboratory Footnote	AECOM Qualifier
SW846 8260C	MW26-ROX-102114	MC34553-3	10/21/2014	1,2-Dichloroethane	ND	ND		ug/l	Ana: Continuing Calibration outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW26-ROX-102114	MC34553-3	10/21/2014	Methyl Tert Butyl Ether	2.0	1.9		ug/l		
SW846 8260C	MW28-ROX-102114	MC34553-1	10/21/2014	Chloromethane	ND	ND		ug/l	Ana: Continuing Calibration outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW28-ROX-102114	MC34553-1	10/21/2014	1,2-Dichloroethane	ND	ND		ug/l	Ana: Continuing Calibration outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW27-ROX-102114	MC34553-2	10/21/2014	Chloromethane	ND	ND		ug/l	Ana: Continuing Calibration outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW27-ROX-102114	MC34553-2	10/21/2014	1,2-Dichloroethane	ND	ND		ug/l	Ana: Continuing Calibration outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW25-ROX-102114	MC34553-4	10/21/2014	Chloromethane	ND	ND		ug/l	Ana: Continuing Calibration outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW25-ROX-102114	MC34553-4	10/21/2014	1,2-Dichloroethane	ND	ND		ug/l	Ana: Continuing Calibration outside of acceptance criteria. Sample result may be biased low.	UJ

Analytical Method	Sample ID	Lab Sample ID	Sample Date	Analyte	Original Result	Corrected Result	Laboratory Qualifier	Units	Laboratory Footnote	AECOM Qualifier
SW846 8260C	P93D-ROX-110414	MC34842-1	11/04/2014	Trichlorofluoromethane	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	P93D-ROX-110414	MC34842-1	11/04/2014	1,2,3-Trichloropropane	ND	ND		ug/l	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ

LABORATORY QUALIFIERS:

J = The analyte was detected below the reporting limit. Result is estimated.

ND = Not detected.

AECOM QUALIFIERS:

J = The result is estimated.

UJ = Estimated nondetect.

Analytical Method	Sample ID	Lab Sample ID	Sample Date	Analyte	Original Result	Corrected Result	Laboratory Qualifier	Units	Laboratory Footnote	AECOM Qualifier
SW846 8260C	MW26-082714 (38-40')	MC33201-1	08/27/2014	Dichlorodifluoromethane	ND	ND		mg/kg	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW26-082714 (38-40')	MC33201-1	08/27/2014	Hexachlorobutadiene	ND	ND		mg/kg	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW26-082714 (38-40')	MC33201-1	08/27/2014	2-Hexanone	ND	ND		mg/kg	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW26-082714 (38-40')	MC33201-1	08/27/2014	Tetrachloroethene	ND	ND		mg/kg	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW26-082714 (38-40')	MC33201-1	08/27/2014	Trichlorofluoromethane	ND	ND		mg/kg	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW26-082714 (38-40')	MC33201-1	08/27/2014	Vinyl Acetate	ND	ND		mg/kg	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW26-082714 (46-48')	MC33201-2	08/27/2014	Dichlorodifluoromethane	ND	ND		mg/kg	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW26-082714 (46-48')	MC33201-2	08/27/2014	Hexachlorobutadiene	ND	ND		mg/kg	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ

Analytical Method	Sample ID	Lab Sample ID	Sample Date	Analyte	Original Result	Corrected Result	Laboratory Qualifier	Units	Laboratory Footnote	AECOM Qualifier
SW846 8260C	MW26-082714 (46-48')	MC33201-2	08/27/2014	2-Hexanone	ND	ND		mg/kg	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW26-082714 (46-48')	MC33201-2	08/27/2014	Tetrachloroethene	ND	ND		mg/kg	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW26-082714 (46-48')	MC33201-2	08/27/2014	Trichlorofluoromethane	ND	ND		mg/kg	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW26-082714 (46-48')	MC33201-2	08/27/2014	Vinyl Acetate	ND	ND		mg/kg	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW25-082814(36'-38')	MC33265-1	08/28/2014	Bromomethane	ND	ND		mg/kg	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW25-082814(36'-38')	MC33265-1	08/28/2014	2-Chloroethyl vinyl ether	ND	ND		mg/kg	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW25-082814(36'-38')	MC33265-1	08/28/2014	Chloromethane	ND	ND		mg/kg	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW25-082814(36'-38')	MC33265-1	08/28/2014	Dichlorodifluoromethane	ND	ND		mg/kg	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ

Analytical Method	Sample ID	Lab Sample ID	Sample Date	Analyte	Original Result	Corrected Result	Laboratory Qualifier	Units	Laboratory Footnote	AECOM Qualifier
SW846 8260C	MW25-082814(36'-38')	MC33265-1	08/28/2014	Trichlorofluoromethane	ND	ND		mg/kg	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW25-082814(36'-38')	MC33265-1	08/28/2014	Vinyl Acetate	ND	ND		mg/kg	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW25-082814(36'-38')	MC33265-1	08/28/2014	Vinyl chloride	ND	ND		mg/kg	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW25-082814(44'-46')	MC33265-2	08/28/2014	1,4-Dioxane	ND	ND		mg/kg	Ana: Initial Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW25-082814(44'-46')-DUP	MC33265-3	08/28/2014	1,4-Dioxane	ND	ND		mg/kg	Ana: Initial Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW28-090214 (32-34')	MC33299-1	09/02/2014	Acetone	ND	ND		mg/kg	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW28-090214 (32-34')	MC33299-1	09/02/2014	Acrolein	ND	ND		mg/kg	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW28-090214 (32-34')	MC33299-1	09/02/2014	Carbon disulfide	0.00071	0.00071	J	mg/kg	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	J

Analytical Method	Sample ID	Lab Sample ID	Sample Date	Analyte	Original Result	Corrected Result	Laboratory Qualifier	Units	Laboratory Footnote	AECOM Qualifier
SW846 8260C	MW28-090214 (32-34')	MC33299-1	09/02/2014	2-Hexanone	ND	ND		mg/kg	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW28-090214 (36-40')	MC33299-2	09/02/2014	Acetone	ND	ND		mg/kg	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW28-090214 (36-40')	MC33299-2	09/02/2014	Acrolein	ND	ND		mg/kg	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW28-090214 (36-40')	MC33299-2	09/02/2014	Carbon disulfide	ND	ND		mg/kg	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW28-090214 (36-40')	MC33299-2	09/02/2014	2-Hexanone	ND	ND		mg/kg	Ana: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW-27-101614 (40-42)	MC34460-1	10/16/2014	2-Chloroethyl vinyl ether	ND	ND		mg/kg	Ana: Continuing Calibration outside of acceptance criteria. Sample result may be biased low.	UJ
SW846 8260C	MW-27-101614 (48-50)	MC34460-2	10/16/2014	2-Butanone (MEK)	0.0799	0.0799		mg/kg	Ana: Continuing Calibration outside of acceptance criteria. Sample result may be biased high.	J

Analytical Method	Sample ID	Lab Sample ID	Sample Date	Analyte	Original Result	Corrected Result	Laboratory Qualifier	Units	Laboratory Footnote	AECOM Qualifier
SW846 8260C	MW-27-101614 (48-50)	MC34460-2	10/16/2014	2-Chloroethyl vinyl ether	ND	ND		mg/kg	Ana: Continuing Calibration outside of acceptance criteria. Sample result may be biased low.	UJ

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SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
CUMULATIVE SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL RESULTS AND EXCEEDANCES

						VOCs																		
						Acetone	Benzene	Butane	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	4-Chlorotoluene	Cymene (p-Isopropyltoluene)	1,1-Dichloroethane	Dichloromethane (Methylene chloride)	1,2-Dichloropropane	trans-1,3-Dichloropropene	1,4-Dioxane	Ethylbenzene
					Screening Values (mg/L)	6.3 [1]	0.005 [1]		4.2 [1]	0.35 [3]			0.7 [1]	0.005 [1]	0.1 [1]		0.07 [1]				1.4 [1]	0.005 [2]	0.005 [2]	0.001 [2]	0.0077 [1]	0.7 [1]
Location	Sample ID	Sample Date	Screened Interval (ft btoc)	Depth to Water (ft btoc)	Product Thickness (ft)	Analytical Results (mg/L)																			
MW-01	MW1-ROX-011612	1/16/2012	48.80 - 58.80	37.75	NE	<0.005	0.0142		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW1-ROX-050112	5/1/2012		39.09	NE	<0.005	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW1-ROX-073012	7/30/2012		39.39	NE	<0.005	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW1-ROX-102612	10/26/2012		41.22	NE																				
	MW1-ROX-121712	12/17/2012		41.22	NE	<0.005 UJ	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW1-ROX-011013	1/10/2013		41.89	NE	<0.005	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW1-ROX-040913	4/9/2013		42.55	NE	<0.005	0.0004 J		<0.01	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW1-ROX-070813	7/8/2013		39.56	NE	<0.01	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.00097 U	<0.002	<0.0005	<0.025	<0.001
	MW1-ROX-100313	10/3/2013		40.28	NE	<0.01	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW1-ROX-011414	1/14/2014		42.77	NE	<0.01	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW1-ROX-040714	4/7/2014		43.28	NE	<0.01 UJ	0.00066		<0.005 UJ	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025 UJ	<0.001
	MW1-ROX-070914	7/9/2014		42.09	NE	<0.01 UJ	<0.0005		<0.005 UJ	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW1-ROX-100614	10/6/2014	48.80 - 58.80	41.1	NE	<0.01 UJ	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
MW-02	MW2-ROX-011612	1/16/2012	49.87 - 59.87	38.89	NE	<0.025	0.0161		<0.025	<0.025	<0.025	<0.025	<0.025	<0.005	<0.005	<0.01	<0.005	<0.01	<0.025	<0.025	<0.005	<0.01	<0.01	<0.0025	<0.13	0.777
	MW2-ROX-050112	5/1/2012		40.25	NE	<0.025	0.0145		<0.025	<0.025	0.0068 J	<0.025	<0.025	<0.005	<0.005	<0.01	<0.005	<0.01	<0.025	0.008 J	<0.005	<0.01	<0.01	<0.0025	<0.13	0.948
	MW2-ROX-073012	7/30/2012		40.60	NE	<0.005	0.01		<0.005	<0.005	0.0078	0.001 J	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	0.009	<0.001	<0.002	<0.002	<0.0005	<0.025	0.952
	MW2-ROX-102612	10/26/2012		42.35	NE	<0.025 UJ	0.0142		<0.025	<0.025	<0.025	<0.025	<0.025	<0.005	<0.005	<0.01	<0.005	<0.01	0.0172 J	<0.025	<0.005	<0.01	<0.01	<0.0025	<0.13	0.763
	MW2-ROX-011113	1/11/2013		42.94	NE	<0.01	0.0192		<0.01	0.0176 J	0.0077 J	0.002 J	<0.01	<0.002	<0.002	0.0083	<0.002	<0.004	<0.01	0.0094 J	<0.002	<0.004	<0.004	<0.001	<0.05	0.676
	MW2-ROX-040913	4/9/2013		43.70	NE	<0.05	0.0174		<0.025	0.0191 J	0.0085 J	<0.025	<0.025	<0.005	<0.005	<0.01	<0.005	<0.01	<0.025	0.0101 J	<0.005	<0.01	<0.01	<0.0025	<0.13	0.91
	MW2-ROX-071113	7/11/2013		40.82	NE	<0.01 UJ	0.006		<0.005 UJ	<0.005	0.0073	0.0029 J	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	0.0075	<0.001	<0.002	<0.002	<0.0005		1.57
	MW2-ROX-100813	10/8/2013		41.73	NE	<0.01	0.0139		0.0133	<0.005	0.0082	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	0.0104	<0.001	<0.002	<0.002	<0.0005	<0.025	0.942
	MW2-ROX-012014	1/20/2014		44.00	NE	<0.01	0.0238		<0.005	0.0254	0.0096	0.0015 J	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	0.0106	0.0043	<0.002	<0.002	<0.0005	<0.025	0.426
	MW2-ROX-041014	4/10/2014		44.66	NE	<0.01	0.0214		0.0136	0.0208	0.0077	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	0.009	<0.001	<0.002	<0.002	<0.0005	<0.025	0.478
	MW2-ROX-071414	7/14/2014		43.13	NE	<0.01	0.0102 J		<0.005	0.0194 J	0.0073 J	0.0013 J J	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	0.008 J	<0.001	<0.002	<0.002	<0.0005	<0.025	0.955
	MW2-ROX-101014	10/10/2014	49.87 - 59.87	42.49	NE	<0.02 UJ	0.0132		<0.01	0.0145	0.0057 J	0.0011 J	<0.01 UJ	<0.002	<0.002 UJ	<0.004	<0.002	<0.004	<0.01	0.0063 J	<0.002	<0.004	<0.004	<0.001	<0.05	0.386 J
MW-03	MW3-ROX-011612	1/16/2012	34.67 - 44.67	24.93	NE	<0.005	0.00091		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW3-ROX-043012	4/30/2012		26.19	NE	<0.005	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW3-ROX-072712	7/27/2012		26.60	NE	<0.005 UJ	0.0089		<0.005 UJ	<0.005	<0.005	<0.005	<0.005 UJ	<0.001	<0.001	<0.002 UJ	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005		<0.001
	MW3-ROX-102512	10/25/2012		28.39	NE	<0.005 UJ	0.0017		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW3-ROX-010913	1/9/2013		29.35	NE	<0.005	0.0014		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW3-ROX-040813	4/8/2013		29.74	NE	<0.005 UJ	0.008		<0.005	<0.005	<0.005	<0.005	<0.005 UJ	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW3-ROX-071113	7/11/2013		26.32	NE	<0.01 UJ	0.0059		<0.005 UJ	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005		<0.001
	MW3-ROX-100813	10/8/2013		27.38	NE	<0.01	0.00057		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	0.0025
	MW3-ROX-011614	1/16/2014		29.91	NE	<0.01	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025 UJ	<0.001
	MW3-ROX-040914	4/9/2014		30.50	NE	<0.01	0.0015		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW3-ROX-071114	7/10/2014		29.05	NE	<0.01 UJ	0.00062		<0.005 UJ	<0.005	<0.005	<0.005	<0.005 UJ	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW3-ROX-100914	10/9/2014	34.67 - 44.67	28.18	NE	<0.01 UJ	0.0005		<0.005	<0.005	<0.005	0.00083 J	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
MW-04	MW4-ROX-011612	1/16/2012	46.06 - 56.06	36.00	NE	<0.005	0.115		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW4-ROX-050312	5/3/2012		37.45	NE	<0.005	0.0941		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW4-ROX-050312-DUP	5/3/2012		37.45	NE	<0.063 U	0.0933		<0.005	<0.005	<0.005	0.0012 J	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW4-ROX-072512	7/25/2012		37.63	NE	<0.005	0.191		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	0.00082 J
	MW4-ROX-072512-Dup	7/25/2012		37.63	NE	<0.005	0.199		<0.005	0.0014 J	0.0017 J	0.002 J	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	0.00083 J
	MW4-ROX-102912	10/29/2012		39.45	NE	<0.01 UJ	0.354		<0.01	<0.01	<0.01	<0.01	<0.01	<0.002	<0.002	<0.004	<0.002	<0.004 UJ	<0.01	<0.01	<0.002	<0.004	<0.004	<0.001	<0.05	<0.002
	MW4-ROX-011113	1/11/2013		40.20	NE	<0.005	9.04 J		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	0.00052 J
	MW4-ROX-011113-DUP	1/11/2013		40.20	NE	<0.005	8.96 J		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	0.00056 J
	MW4-ROX-030413	3/4/2013		40.20	NE	<0.5	21.4		<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.2	<0.1	<0.2	<0.5	<0.5	<0.1	<0.2	<0.2	<0.05	<2.5	<0.1
	MW4-ROX-040913	4/9/2013		40.90	NE	<0.02	64.2		<0.01	<0.01	<0.01	<0.01	<0.01	<0.002	<0.002	<0.004	<0.002	<0.004	<0.01	<0.01	<0.002	<0.004	<0.004	<0.001	<0.05	<0.002
	MW4-ROX-040913-DUP	4/9/2013		40.90	NE	<0.01	72.9		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	0.00081 J
	MW4-ROX-071713	7/17/2013		37.61	NE	<0.01	12.2		<0.005	<0.005	0.0016 J	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.001 UJ	<0.05	0.0015
	MW4-ROX-101613	10/16/2013		38.80	NE	<0.1	1.7		<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.01	<0.02	<0.01	<0.02	<0.05	<0.05	<0.01	<0.02	<0.02	<0.005	<0.25	<0.01
	MW4-ROX-013014	1/30/2014		41.09	NE	<0.01	2.01		<0.005	0.00058 J	<0.005	<0.005	<0.005 UJ	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025 UJ	0.00048 J
	MW4-ROX-041614	4/16/2014		41.91	NE	<0.01	0.553		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW4-ROX-071614	7/16/2014		40.18	NE	<0.01	1.86		<0.005	<0.005	<0.05	<0.05	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.01
	MW4-ROX-101614	10/16/2014	46.06 - 56.06	39.49	NE	<0.05	0.815		<0.025 UJ	<0.025	<0.025	<0.025	<0.025	<0.005	<0.005	<0.01	<0.005	<0.01	<0.025	<0.025	<0.005	<0.01	<0.01	<0.0025	<0.13	<0.005

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
CUMULATIVE SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL RESULTS AND EXCEEDANCES

						VOCs																		
						Acetone	Benzene	Butane	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	4-Chlorotoluene	Cymene (p-Isopropyltoluene)	1,1-Dichloroethane	Dichloromethane (Methylene chloride)	1,2-Dichloropropane	trans-1,3-Dichloropropene	1,4-Dioxane	Ethylbenzene
					Screening Values (mg/L)	6.3 [1]	0.005 [1]		4.2 [1]	0.35 [3]			0.7 [1]	0.005 [1]	0.1 [1]		0.07 [1]				1.4 [1]	0.005 [2]	0.005 [2]	0.001 [2]	0.0077 [1]	0.7 [1]
Location	Sample ID	Sample Date	Screened Interval (ft btoc)	Depth to Water (ft btoc)	Product Thickness (ft)	Analytical Results (mg/L)																			
MW-05	MW5-ROX-011712	1/17/2012	33.97 - 43.97	24.76	NE	<0.005	0.0442		<0.005	<0.005	<0.005	0.0057	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW5-ROX-050312	5/3/2012		25.89	NE	<0.005	0.0532		<0.005	<0.005	0.0029 J	0.0073	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	0.0014 J	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW5-ROX-072512	7/25/2012		26.18	NE	<0.005	0.0925		<0.005	<0.005	0.0015 J	0.007	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	0.00099 J	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW5-ROX-102912	10/29/2012		28.16	NE	<0.005 UJ	0.0628		<0.005	<0.005	<0.005	0.0059	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002 UJ	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW5-ROX-011113	1/11/2013		28.75	NE	<0.005	0.0072		<0.005	<0.005	0.0016 J	0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW5-ROX-040913	4/9/2013		29.41	NE	<0.005	0.0018		<0.01	<0.005	0.0018 J	0.0063	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW5-ROX-070913	7/9/2013		26.04	NE	<0.01	0.0075		<0.005	<0.005	<0.005	0.0085	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005		<0.001
	MW5-ROX-100813	10/8/2013		26.97	NE	<0.01	0.0016		<0.005	<0.005	<0.005	0.0064	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW5-ROX-011714	1/17/2014		29.59	NE	<0.01	0.002		<0.005	<0.005	0.002 J	0.0064	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW5-ROX-041014	4/10/2014		30.09	NE	0.021 J	0.0037		<0.005	<0.005	0.0017 J	0.0062	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW5-ROX-071414	7/14/2014		28.59	NE	<0.01	0.001		<0.005	<0.005	0.0011 J	0.0046 J	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW-5-ROX-100914	10/9/2014	33.97 - 43.97	27.75	NE	<0.01 UJ	0.028		<0.005	<0.005	0.00083 J	0.0049 J	<0.005 UJ	<0.001	<0.001 UJ	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001 UJ
MW-06A	MW6A-ROX-011712	1/17/2012	34.83 - 44.83	26.74	NE	<0.005	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW6A-ROX-050212	5/2/2012		27.77	NE	<0.005	0.00077		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW6A-ROX-080112	8/1/2012		28.36	NE	<0.005	0.0016		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW6A-ROX-102412	10/24/2012		30.06	NE	<0.12 UJ	0.00073		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW6A-ROX-011413	1/14/2013		31.00	NE	<0.005	0.0276		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW6A-ROX-040313	4/3/2013		31.62	NE	<0.005 UJ	0.0017		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW6A-ROX-070913	7/9/2013		28.25	NE	<0.01	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005		<0.001
	MW6A-ROX-070913-DUP	7/9/2013		28.25	NE	<0.01	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005		<0.001
	MW6A-ROX-100713	10/7/2013		28.87	NE	<0.01 UJ	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW6A-ROX-100713-DUP	10/7/2013		28.87	NE	<0.01 UJ	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW6A-ROX-011614	1/16/2014		31.62	NE	<0.01	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025 UJ	<0.001
	MW6A-ROX-011614-DUP	1/16/2014		31.62	NE	<0.01	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025 UJ	<0.001
	MW6A-ROX-040814	4/8/2014		32.16	NE	0.11 J	0.0011		<0.005 UJ	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025 UJ	<0.001
	MW6A-ROX-040814-DUP	4/8/2014		32.16	NE	0.116 J	0.001		<0.005 UJ	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025 UJ	<0.001
	MW6A-ROX-071014	7/10/2014		30.75	NE	<0.01 UJ	<0.0005		<0.005 UJ	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002 UJ	<0.001	<0.002 UJ	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025 UJ	<0.001
	MW6A-ROX-100814	10/8/2014	34.83 - 44.83	29.84	NE	<0.01	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
MW-06B	MW6B-ROX-011712	1/17/2012	64.05 - 69.05	26.77	NE	<0.005	0.0013		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW6B-ROX-050212	5/2/2012		27.82	NE	<0.005	0.00086		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW6B-ROX-080112	8/1/2012		28.39	NE	<0.0032 UJ	0.00045 J		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW6B-ROX-102412	10/24/2012		30.11	NE	<0.005 UJ	0.0015		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW6B-ROX-011713	1/17/2013		31.11	NE	<0.005	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW6B-ROX-040313	4/3/2013		31.68	NE	<0.005 UJ	0.00043 J		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW6B-ROX-070913	7/9/2013		28.25	NE	<0.01	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005		<0.001
	MW6B-ROX-100713	10/7/2013		28.93	NE	<0.01 UJ	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW6B-ROX-011614	1/16/2014		31.67	NE	<0.01	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025 UJ	<0.001
	MW6B-ROX-040814	4/8/2014		32.21	NE	<0.01 UJ	0.0009		<0.005 UJ	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025 UJ	<0.001
	MW6B-ROX-071014	7/10/2014		30.81	NE	<0.01 UJ	<0.0005		<0.005 UJ	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002 UJ	<0.001	<0.002 UJ	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025 UJ	<0.001
	MW6B-ROX-100814	10/8/2014	64.05 - 69.05	29.87	NE	<0.01	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
MW-06C	MW6C-ROX-011712	1/17/2012	84.95 - 89.95	26.50	NE	<0.005	0.0028		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW6C-ROX-050212	5/2/2012		27.62	NE	<0.005	0.0015		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW6C-ROX-080112	8/1/2012		28.15	NE	<0.003 UJ	0.00061		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW6C-ROX-102412	10/24/2012		27.85	NE	<0.005 UJ	0.00035 J		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW6C-ROX-011713	1/17/2013		30.88	NE	<0.005 UJ	<0.0005 UJ		<0.005 UJ	<0.005 UJ	<0.005 UJ	<0.005 UJ	<0.005 UJ	<0.001 UJ	<0.001 UJ	<0.002 UJ	<0.001 UJ	<0.002 UJ	<0.005 UJ	<0.005 UJ	<0.001 UJ	<0.002 UJ	<0.002 UJ	<0.0005 UJ	<0.025 UJ	<0.001 UJ
	MW6C-ROX-040313	4/3/2013		31.41	NE	<0.005 UJ	0.00062		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW6C-ROX-070913	7/9/2013		28.03	NE	<0.01	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005		<0.001
	MW6C-ROX-100713	10/7/2013		28.72	NE	<0.01 UJ	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW6C-ROX-011614	1/16/2014		31.48	NE	<0.01	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025 UJ	<0.001
	MW6C-ROX-040814	4/8/2014		32.01	NE	<0.01 UJ	0.0021		<0.005 UJ	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025 UJ	<0.001
	MW6C-ROX-071014	7/10/2014		30.60	NE	<0.01 UJ	<0.0005		<0.005 UJ	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002 UJ	<0.001	<0.002 UJ	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025 UJ	<0.001
	MW6C-ROX-100814	10/8/2014	84.95 - 89.95	29.67	NE	<0.01	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001

TABLE 3
CUMULATIVE SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL RESULTS AND EXCEEDANCES

						VOCs																			
						Acetone	Benzene	Butane	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	4-Chlorotoluene	Cymene (p-Isopropyltoluene)	1,1-Dichloroethane	Dichloromethane (Methylene chloride)	1,2-Dichloropropane	trans-1,3-Dichloropropene	1,4-Dioxane	Ethylbenzene
					Screening Values (mg/L)	6.3 [1]	0.005 [1]		4.2 [1]	0.35 [3]			0.7 [1]	0.005 [1]	0.1 [1]		0.07 [1]				1.4 [1]	0.005 [2]	0.005 [2]	0.001 [2]	0.0077 [1]	0.7 [1]
Location	Sample ID	Sample Date	Screened Interval (ft btoc)	Depth to Water (ft btoc)	Product Thickness (ft)	Analytical Results (mg/L)																			
MW-06D	MW6D-ROX-011712	1/17/2012	104.72 - 109.72	26.33	NE	<0.005	0.0022		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW6D-ROX-050212	5/2/2012		27.45	NE	<0.005	0.0015		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW6D-ROX-080212	8/2/2012		30.56	NE	<0.005 UJ	0.00068		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005		<0.001
	MW6D-ROX-102412	10/24/2012		29.71	NE	<0.005 UJ	0.00055		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW6D-ROX-011713	1/17/2013		30.75	NE	<0.005 UJ	0.00053 J		<0.005 UJ	<0.005 UJ	<0.005 UJ	<0.005 UJ	<0.005 UJ	<0.001 UJ	<0.001 UJ	<0.002 UJ	<0.001 UJ	<0.002 UJ	<0.005 UJ	<0.005 UJ	<0.001 UJ	<0.002 UJ	<0.002 UJ	<0.0005 UJ	<0.025 UJ	<0.001 UJ
	MW6D-ROX-040313	4/3/2013		31.27	NE	<0.005 UJ	0.00055		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW6D-ROX-070913	7/9/2013		27.91	NE	<0.01	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005		<0.001
	MW6D-ROX-100713	10/7/2013		28.58	NE	<0.01 UJ	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW6D-ROX-011614	1/16/2014		31.33	NE	<0.01	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025 UJ	<0.001
	MW6D-ROX-040814	4/8/2014		31.85	NE	<0.01 UJ	0.0064		<0.005 UJ	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025 UJ	<0.001
	MW6D-ROX-071014	7/10/2014		31.47	NE	<0.01 UJ	<0.0005		<0.005 UJ	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002 UJ	<0.001	<0.002 UJ	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025 UJ	<0.001
	MW6D-ROX-071014-DUP	7/10/2014		31.47	NE	<0.01 UJ	<0.0005		<0.005 UJ	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002 UJ	<0.001	<0.002 UJ	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025 UJ	<0.001
	MW6D-ROX-100814	10/8/2014	104.72 - 109.72	29.53	NE	<0.01	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW6D-ROX-100814-DUP	10/8/2014		29.53	NE	<0.01	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
MW-07	MW7-ROX-011812	1/18/2012	42.92 - 52.92	38.10	NE	<0.166 U	1330 J		<0.005	0.0026 J	0.0021 J	0.003 J	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	0.0727
	MW7-ROX-011812-DUP	1/18/2012		38.10	NE	<0.146 U	1110		<0.005	0.0027 J	0.0022 J	0.0029 J	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	0.0015 J	<0.001	<0.002	<0.002	<0.0005	<0.025	0.0718
	MW7-ROX-050412	5/4/2012		39.19	NE	<0.5	738		<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.2	<0.1	<0.2	<0.5	<0.5	<0.1	<0.2	<0.2	<0.05	<2.5	<0.1
	MW7-ROX-080712	8/7/2012		39.50	NE	0.199 J	591 J		<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.01	<0.02	<0.01	<0.02	<0.05	<0.05	<0.01	<0.02	<0.02	<0.005	<0.25	0.0619
	MW7-ROX-103012	10/30/2012		41.23	NE	<10 UJ	833		<10	<10	<10	<10	<10	<2	<2	<4	<2	<4 UJ	<10	<10	<2	<4	<4	<1	<50	<2
	MW7-ROX-103012-DUP	10/30/2012		41.23	NE	<10 UJ	863		<10	<10	<10	<10	<10	<2	<2	<4	<2	<4 UJ	<10	<10	<2	<4	<4	<1	<50	<2
	MW7-ROX-011513	1/15/2013		42.21	NE	<20	1230		<20	<20	<20	<20	<20	<4	<4	<8	<4	<8	<20	<20	<4	<8	<8	<2	<100	<4
	MW7-ROX-011513-DUP	1/15/2013		42.21	NE	<20	1320		<20	<20	<20	<20	<20	<4	<4	<8	<4	<8	<20	<20	<4	<8	<8	<2	<100	<4
	MW7-ROX-041013	4/10/2013		42.70	NE	<20	475		<20	<10	<10	<10	<10	<2	<2	<4	<2	<4	<10	<10	<2	<4	<4	<1	<50	<2
	MW7-ROX-041013-DUP	4/10/2013		42.70	NE	<20	499		<20	<10	<10	<10	<10	<2	<2	<4	<2	<4	<10	<10	<2	<4	<4	<1	<50	<2
	MW7-ROX-071713	7/17/2013		39.60	NE	<0.01	1000 J		<0.005	<0.005	0.0023 J J	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	0.0016 J J	<0.001	<0.002	<0.002	<0.001 UJ	<0.05	0.2 J
	MW7-ROX-101613	10/16/2013		40.64	NE	<20	553		<10	<10	<10	<10	<10	<2	<2	<4	<2	<4	<10	<10	<2	<4	<4	<1	<50	<2
	MW7-ROX-013014	1/30/2014		42.94	NE	<25	1490		<13	<13	<13	<13	<13 UJ	<2.5	<2.5	<5	<2.5	<5	<13	<13	<2.5	<5	<5	<1.3	<63 UJ	<2.5
	MW7-ROX-041614	4/16/2014		43.79	NE	<50	1390		<25	<25	<25	<25	<25	<5	<5	<10	<5	<10	<25	<25	<5	<10	<10	<2.5	<130	<5
	MW7-ROX-071614	7/16/2014		42.05	NE	<0.01	1270		<0.005	0.0036 J J	0.0022 J J	0.0022 J J	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	0.0015 J J	<0.001	<0.002	<0.002	<0.0005	<0.025	0.208 J
	MW7-ROX-071614-DUP	7/16/2014		42.05	NE	<0.01	1370		<0.005	0.0034 J J	0.0023 J J	0.0022 J J	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	0.0015 J J	<0.001	<0.002	<0.002	<0.0005	<0.025	0.206 J
	MW7-ROX-101614	10/16/2014	42.92 - 52.92	41.31	NE	<50	1130		<25 UJ	<25	<25	<25	<25	<5	<5	<10	<5	<10	<25	<25	<5	<10	<10	<2.5	<130	<5
	MW7-ROX-101614-DUP	10/16/2014		41.31	NE	<50	984		<25 UJ	<25	<25	<25	<25	<5	<5	<10	<5	<10	<25	<25	<5	<10	<10	<2.5	<130	<5
MW-08	MW8-ROX-011812	1/18/2012	33.60 - 43.60	29.15	NE	<0.005	386		<0.005	0.0043 J	0.003 J	0.002 J	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	0.0022 J	<0.001	<0.002	<0.002	<0.0005	<0.025	0.285
	MW8-ROX-050412	5/4/2012		30.21	NE	<0.5	1070		<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.2	<0.1	<0.2	<0.5	<0.5	<0.1	<0.2	<0.2	<0.05	<2.5	0.393
	MW8-ROX-050412-DUP	5/4/2012		30.21	NE	<0.5	1040		<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.2	<0.1	<0.2	<0.5	<0.5	<0.1	<0.2	<0.2	<0.05	<2.5	0.396
	MW8-ROX-080712	8/7/2012		30.97	NE	<0.378 UJ	397 J		<0.1	<0.1	<0.1	<0.1	<0.1	<0.02	<0.02	<0.04	<0.02	<0.04	<0.1	<0.1	<0.02	<0.04	<0.04	<0.01	<0.5	0.249
	MW8-ROX-080712-DUP	8/7/2012		30.97	NE	<0.235 UJ	653 J		<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.01	<0.02	<0.01	<0.02	<0.05	<0.05	<0.01	<0.02	<0.02	<0.005	<0.25	0.232
	MW8-ROX-103012	10/30/2012		32.32	NE	<5 UJ	523		<5	<5	<5	<5	<5	<1	<1	<2	<1	<2 UJ	<5	<5	<1	<2	<2	<0.5	<25	<1
	MW8-ROX-011513	1/15/2013		33.30	NE	<10	1120 J		<10	<10	<10	<10	<10	<2	<2	<4	<2	<4	<10	<10	<2	<4	<4	<1	<50	<2
	MW8-ROX-041013	4/10/2013		33.77	NE	<50	969		<50	<25	<25	<25	<25	<5	<5	<10	<5	<10	<25	<25	<5	<10	<10	<2.5	<130	<5
	MW8-ROX-071713	7/17/2013		30.43	NE	<0.008 U	532		<0.005	<0.005	0.0033 J	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	0.0023 J	<0.001	<0.002	<0.002	<0.001 UJ	<0.05	0.508
	MW8-ROX-071713-DUP	7/17/2013		30.43	NE	<0.01	494		<0.005	<0.005	0.0031 J	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	0.0024 J	<0.001	<0.002	<0.002	<0.001 UJ	<0.05	0.442 J
	MW8-ROX-101613	10/16/2013		31.59	NE	<20	360		<10	<10	<10	<10	<10	<2	<2	<4	<2	<4	<10	<10	<2	<4	<4	<1	<50	<2
	MW8-ROX-101613-DUP	10/16/2013		31.59	NE	<20	351		<10	<10	<10	<10	<10	<2	<2	<4	<2	<4	<10	<10	<2	<4	<4	<1	<50	<2
	MW8-ROX-013014	1/30/2014		34.02	NE	<25	721		<13	<13	<13	<13	<13 UJ	<2.5	<2.5	<5	<2.5	<5	<13	<13	<2.5	<5	<5	<1.3	<63 UJ	<2.5
	MW8-ROX-013014-DUP	1/30/2014		34.02	NE	<25	748		<13	<13	<13	<13	<13 UJ	<2.5	<2.5	<5	<2.5	<5	<13	<13	<2.5	<5	<5	<1.3	<63 UJ	<2.5
	MW8-ROX-041614	4/16/2014		34.73	NE	<20	862		<10	<10	<10	<10	<10	<2	<2	<4	<2	<4	<10	<10	<2	<4	<4	<1	<50	<2
	MW8-ROX-041614-DUP	4/16/2014		34.73	NE	<20	1060		<10	<10	<10	<10	<10	<2	<2	<4	<2	<4	<10	<10	<2	<4	<4	<1	<50	<2
	MW8-ROX-071614	7/16/2014		33.01	NE	<0.01 UJ	276		<0.005 UJ	0.0069 J	0.0042 J J	0.0028 J J	<0.005 UJ	<0.001 UJ	<0.001 UJ	<0.002 UJ	<0.001 UJ	<0.002 UJ	<0.005 UJ	0.0032 J J	<0.001 UJ	<0.002 UJ	<0.002 UJ	<0.0005 UJ	<0.025 UJ	0.266
	MW8-ROX-101614	10/16/2014	33.60 - 43.60	32.23	NE	<10	486		<5 UJ	<5	<5	<5	<5	<1	<1	<2	<1	<2	<5	<5	<1	<2	<2	<0.5	<25	0.305 J

TABLE 3
CUMULATIVE SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL RESULTS AND EXCEEDANCES

						VOCs																			
						Acetone	Benzene	Butane	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	4-Chlorotoluene	Cymene (p-Isopropyltoluene)	1,1-Dichloroethane	Dichloromethane (Methylene chloride)	1,2-Dichloropropane	trans-1,3-Dichloropropene	1,4-Dioxane	Ethylbenzene
					Screening Values (mg/L)	6.3 [1]	0.005 [1]		4.2 [1]	0.35 [3]			0.7 [1]	0.005 [1]	0.1 [1]		0.07 [1]				1.4 [1]	0.005 [2]	0.005 [2]	0.001 [2]	0.0077 [1]	0.7 [1]
Location	Sample ID	Sample Date	Screened Interval (ft btoc)	Depth to Water (ft btoc)	Product Thickness (ft)	Analytical Results (mg/L)																			
MW-09	MW9-ROX-011612	1/16/2012	46.45 - 56.45	39.50	NE	<0.005	0.0031		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW9-ROX-050312	5/3/2012		41.03	NE	<0.005	0.001		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW9-ROX-072712	7/27/2012		41.30	NE	<0.005 UJ	0.00058		<0.005 UJ	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002 UJ	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005		<0.001
	MW9-ROX-102912	10/29/2012		43.17	NE	<0.005 UJ	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002 UJ	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW9-ROX-011113	1/11/2013		43.90	NE	<0.123 U	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW9-ROX-040913	4/9/2013		44.67	NE	<0.005	<0.0005		<0.01	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW9-ROX-070813	7/8/2013		42.35	NE	<0.01	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.0015 U	<0.002	<0.0005	<0.025	<0.001
	MW9-ROX-100313	10/3/2013		42.27	NE	<0.01	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW9-ROX-011414	1/14/2014		44.47	NE	<0.01	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW9-ROX-040714	4/7/2014		44.99	NE	<0.01 UJ	0.0044		<0.005 UJ	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025 UJ	<0.001
	MW9-ROX-070914	7/9/2014		44.35	NE	<0.01 UJ	<0.0005		<0.005 UJ	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW9-ROX-100714	10/7/2014	46.45 - 56.45	43.52	NE	<0.01	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
MW-10	MW10-ROX-011612	1/16/2012	44.43 - 54.43	39.28	NE	<0.005	0.0026		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW10-ROX-050112	5/1/2012		40.86	NE	<0.005	0.00079		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW10-ROX-072712	7/27/2012		41.21	NE	<0.005 UJ	0.00058		<0.005 UJ	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002 UJ	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005		<0.001
	MW10-ROX-102612	10/26/2012		43.08	NE																				
	MW10-ROX-121712	12/17/2012		43.08	NE	<0.005 UJ	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	0.00095 J	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW10-ROX-011013	1/10/2013		44.10	NE	<0.101 U	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	0.0074	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW10-ROX-012113	1/21/2013		44.10	NE	<0.025	0.003		<0.0051 U	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.001	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001		<0.005
	MW10-ROX-040913	4/9/2013		44.60	NE	<0.005	0.00067		<0.01	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW10-ROX-070813	7/8/2013		42.27	NE	<0.01	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.0016 U	<0.002	<0.0005	<0.025	<0.001
	MW10-ROX-100313	10/3/2013		42.38	NE	<0.01	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW10-ROX-011514	1/15/2014		44.42	NE	0.0174	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW10-ROX-040714	4/7/2014		45.00	NE	0.0684 J	0.0018		<0.005 UJ	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	0.0032	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025 UJ	<0.001
	MW10-ROX-070914	7/9/2014		44.35	NE	<0.01 UJ	<0.0005		<0.005 UJ	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW10-ROX-100714	10/7/2014	44.43 - 54.43	43.58	NE	<0.01	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
MW-11	MW11-ROX-011712	1/17/2012	41.66 - 51.66	37.44	NE	<0.005	0.0024		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW11-ROX-043012	4/30/2012		38.66	NE	<0.005	0.00087		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW11-ROX-072712	7/27/2012		38.90	NE	<0.005 UJ	0.00073		<0.005 UJ	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002 UJ	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005		<0.001
	MW11-ROX-102512	10/25/2012		40.59	NE	<0.005 UJ	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW11-ROX-011013	1/10/2013		41.43	NE	<0.005	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW11-ROX-040813	4/8/2013		42.02	NE	<0.005 UJ	<0.00065 U		<0.005	<0.005	<0.005	<0.005	<0.005 UJ	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW11-ROX-070813	7/8/2013		39.24	NE	<0.01	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.001 U	<0.002	<0.0005	<0.025	<0.001
	MW11-ROX-100713	10/7/2013		39.95	NE	<0.01 UJ	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW11-ROX-011514	1/15/2014		42.16	NE	<0.01	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW11-ROX-040714	4/7/2014		42.70	NE	<0.01 UJ	0.0014		<0.005 UJ	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025 UJ	<0.001
	MW11-ROX-070914	7/9/2014		41.75	NE	<0.01 UJ	<0.0005		<0.005 UJ	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW11-ROX-100714	10/7/2014	41.66 - 51.66	40.89	NE	<0.01	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
MW-12	MW12-ROX-011712	1/17/2012	41.92 - 51.92	37.70	NE	<0.005	0.0023		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW12-ROX-011712-DUP	1/17/2012		37.70	NE	<0.005	0.0028		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW12-ROX-043012	4/30/2012		38.98	NE	<0.005	0.00066		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW12-ROX-072712	7/27/2012		39.22	NE	<0.005 UJ	0.0013		<0.005 UJ	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002 UJ	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005		<0.001
	MW12-ROX-102512	10/25/2012		40.95	NE	<0.005 UJ	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW12-ROX-011013	1/10/2013		41.83	NE	<0.35 U	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW12-ROX-040813	4/8/2013		42.46	NE	<0.005 UJ	<0.00088 U		<0.005	<0.005	<0.005	<0.005	<0.005 UJ	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW12-ROX-070913	7/9/2013		39.28	NE	<0.01	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005		<0.001
	MW12-ROX-100713	10/7/2013		40.22	NE	<0.01 UJ	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW12-ROX-011514	1/15/2014		42.54	NE	<0.01	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW12-ROX-040814	4/8/2014		43.15	NE	<0.01 UJ	<0.0005		<0.005 UJ	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025 UJ	<0.001
	MW12-ROX-070914	7/9/2014		41.97	NE	<0.01 UJ	<0.0005		<0.005 UJ	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW12-ROX-100614	10/6/2014	41.92 - 51.92	40.98	NE	<0.01 UJ	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
CUMULATIVE SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL RESULTS AND EXCEEDANCES

						VOCs																				
						Acetone	Benzene	Butane	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	4-Chlorotoluene	Cymene (p-Isopropyltoluene)	1,1-Dichloroethane	Dichloromethane (Methylene chloride)	1,2-Dichloropropane	trans-1,3-Dichloropropene	1,4-Dioxane	Ethylbenzene
						Screening Values (mg/L)	6.3 [1]	0.005 [1]		4.2 [1]	0.35 [3]			0.7 [1]	0.005 [1]	0.1 [1]		0.07 [1]				1.4 [1]	0.005 [2]	0.005 [2]	0.001 [2]	0.0077 [1]	0.7 [1]
Location	Sample ID	Sample Date	Screened Interval (ft btoc)	Depth to Water (ft btoc)	Product Thickness (ft)	Analytical Results (mg/L)																				
MW-13	MW13-ROX-012012	1/20/2012	25.57 - 35.57	24.77	NE	<0.005	0.0742 J		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW13-ROX-050712	5/7/2012		25.79	NE	<0.005	0.009		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW13-ROX-080812	8/8/2012		26.67	NE	<0.037 U	0.0069 J		<0.005 UJ	<0.005 UJ	<0.005 UJ	<0.005 UJ	<0.005 UJ	<0.001 UJ	<0.001 UJ	<0.002 UJ	<0.001 UJ	<0.002 UJ	<0.005 UJ	<0.005 UJ	<0.001 UJ	<0.002 UJ	<0.002 UJ	<0.0005 UJ	<0.025 UJ	<0.001 UJ
	MW13-ROX-110812	11/8/2012		25.30	NE	<0.005	0.0048		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW13-ROX-012313	1/23/2013		29.26	NE	<0.005	0.0067 J		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025 UJ	<0.001
	MW13-ROX-041213	4/12/2013		29.44	NE	<0.0319 UJ	0.0102 J		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW13-ROX-071213	7/12/2013		25.67	NE	<0.01	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001 UJ	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW13-ROX-100913	10/9/2013		26.94	NE	<0.01	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW13-ROX-012914	1/29/2014		29.63	NE	<0.01	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW13-ROX-041114	4/11/2014		30.15	NE	<0.01	0.00058		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025 UJ	<0.001
	MW13-ROX-070714	7/7/2014		28.49	NE	<0.01 UJ	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW13-ROX-101014	10/10/2014	25.57 - 35.57	27.48	NE	<0.01 UJ	0.00037 J		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001 UJ	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
MW-14	MW14-ROX-051012	5/10/2012	33.42 - 43.42	NM	NE	<0.005	0.009		<0.005	0.0014 J	0.0026 J	0.0012 J	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW14-ROX-080312	8/3/2012		NM	NE	<0.005	0.0131		<0.005	0.0015 J	0.0027 J	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	0.00065 J
	MW14-ROX-103112	10/31/2012		32.02	NE	<0.005 UJ	0.00093		<0.005	<0.005	0.0028 J	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW14-ROX-011813	1/18/2013		33.05	NE	<0.005	0.0017		<0.005	0.0014 J	0.0032 J	0.0011 J	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW14-ROX-041113	4/11/2013		33.31	NE	<0.01	0.0125 J		<0.01	0.0021 J	0.0048 J	0.0016 J	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW14-ROX-071213	7/12/2013		30.36	NE	<0.01	0.00064		<0.005	0.00066 J	0.002 J	0.0013 J	<0.005	<0.001 UJ	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW14-ROX-101013	10/10/2013		30.80	NE	<0.01	<0.0005		<0.005	<0.005	0.0013 J	0.0012 J	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	0.0011 J	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW14-ROX-012914	1/29/2014		33.67	NE	<0.01	<0.0005		<0.005	<0.005	0.0013 J	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW14-ROX-041114	4/11/2014		34.30	NE	<0.01	0.0017		<0.005	<0.005	<0.005	0.00046 J	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025 UJ	<0.001
	MW14-ROX-070714	7/7/2014		32.82	NE	<0.01 UJ	<0.0005		<0.005	<0.005	0.00042 J	0.00047 J	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW14-ROX-101414	10/14/2014	33.42 - 43.42	31.65	NE	<0.01 UJ	<0.0005		<0.005	<0.005	<0.005	0.00063 J	<0.005	<0.001	<0.001 UJ	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
MW-16	MW16-ROX-012313	1/23/2013	37.06 - 47.06	43.05	NE	<0.005	0.00057 J		0.0029 J	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025 UJ	<0.001
	MW16-ROX-040813	4/8/2013		43.39	NE	<0.005 UJ	<0.00058 U		<0.005	<0.005	<0.005	<0.005	<0.005 UJ	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW16-ROX-070813	7/8/2013		40.62	NE	<0.01	<0.00062 U		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW16-ROX-100813	10/8/2013		41.62	NE	<0.01	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW16-ROX-011514	1/15/2014		43.76	NE	<0.01	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW16-ROX-040914	4/9/2014		44.63	NE	<0.01	0.00034 J		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW16-ROX-071014	7/10/2014		43.15	NE	<0.01 UJ	<0.0005		<0.005 UJ	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002 UJ	<0.001	<0.002 UJ	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025 UJ	<0.001
	MW16-ROX-100714	10/7/2014	37.06 - 47.06	42.27	NE	<0.01	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
MW-22	MW22-ROX-012313	1/23/2013	37.88 - 47.88	41.80	NE	<0.25	2.12		<0.295 U	<0.25	<0.25	<0.25	<0.25	<0.05	<0.05	<0.1	<0.05	<0.1	<0.25	<0.25	<0.05	<0.1	<0.1	<0.025	<1.3 UJ	3.45
	MW22-ROX-012313-DUP	1/23/2013		41.80	NE	<0.25	2.09		<0.31 U	<0.25	<0.25	<0.25	<0.25	<0.05	<0.05	<0.1	<0.05	<0.1	<0.25	<0.25	<0.05	<0.1	<0.1	<0.025	<1.3 UJ	3.19
	MW22-ROX-040513	4/5/2013		42.23	NE	<0.005 UJ	1.5		<0.005	0.0413 J	0.0142 J	0.0171 J	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	0.0122 J	<0.001	<0.002	<0.002	<0.0005	<0.025	2.44
	MW22-ROX-071113	7/11/2013		39.35	NE	<0.01 UJ	1.19		<0.005 UJ	<0.005	0.0116	0.0142	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	0.0087	<0.001	<0.002	<0.002	<0.0005		2.07
	MW22-ROX-071113-DUP	7/11/2013		39.35	NE	<0.01 UJ	1.11		<0.005 UJ	<0.005	0.0116	0.0148	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	0.0087	<0.001	<0.002	<0.002	<0.0005		1.79
	MW22-ROX-100913	10/9/2013		40.39	NE	<0.01	1.33		<0.005	0.0286	0.012	0.0167	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	0.01	<0.001	<0.002	<0.002	<0.0005	<0.025	3.79
	MW22-ROX-100913-DUP	10/9/2013		40.39	NE	<0.01	1.39		<0.005	0.0276	0.0118	0.0163	<0.005	<0.001	<0.001	0.0018 J	<0.001	<0.002	<0.005	0.0095	<0.001	<0.002	<0.002	<0.0005	<0.025	3.97
	MW22-ROX-012014	1/20/2014		42.49	NE	<0.01	1.47		0.0804	0.0357	0.0128	0.0147	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	0.0094	0.0028	<0.002	<0.002	<0.0005	<0.025 UJ	3.17
	MW22-ROX-012014-DUP	1/20/2014		42.49	NE	<0.01	1.58		0.0815	0.0355	0.0127	0.0146	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	0.0094	<0.001	<0.002	<0.002	<0.0005	<0.025 UJ	3.4
	MW22-ROX-041014	4/10/2014		43.15	NE	0.0911 J	1.7		0.0334	0.0331	0.0128	0.0152	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	0.0094	<0.001	<0.002	<0.002	<0.0005	<0.025	3.32
	MW22-ROX-041014-DUP	4/10/2014		43.15	NE	<0.01 UJ	1.56		0.0287	0.0319	0.0123	0.0144	<0.005	<0.001	0.00046 J	<0.002	<0.001	<0.002	<0.005	0.0089	<0.001	<0.002	<0.002	<0.0005	<0.025	3.02
	MW22-ROX-071414	7/14/2014		41.85	NE	<0.01	1.74		0.0185 J	0.0349 J	0.013 J	0.0137 J	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	0.0085 J	<0.001	<0.002	<0.002	<0.0005	<0.025	1.93
	MW22-ROX-101014	10/10/2014	37.88 - 47.88	41.43	NE	<0.1 UJ	1.62		<0.05	0.0165 J	0.0066 J	0.0096 J	<0.05 UJ	<0.01	<0.01 UJ	<0.02	<0.01	<0.02	<0.05	0.0045 J	<0.01	<0.02	<0.02	<0.005	<0.25	1.88 J
MW-24	MW24-ROX-040513	4/5/2013	38.89 - 48.89	43.39	NE	<0.005	0.0029		<0.01	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	0.0012
	MW24-ROX-071113	7/11/2013		40.35	NE	<0.0157 UJ	<0.0005		<0.005 UJ	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005		<0.001
	MW24-ROX-100913	10/9/2013		41.27	NE	<0.01	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW24-ROX-011514	1/15/2014		43.47	NE	<0.01	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW24-ROX-040914	4/9/2014		44.13	NE	<0.01	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW24-ROX-071114	7/10/2014		42.97	NE	<0.01 UJ	<0.0005		<0.005 UJ	<0.005	<0.005	<0.005	<0.005 UJ	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	MW24-ROX-100814	10/8/2014	38.89 - 48.89	42.16	NE	<0.01	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
MW-25	MW25-ROX-102114	10/21/2014	35.59 - 45.59	36.44	NE	<20	501		<10	<10	<10	<10	<10	<2	<2	<4	<2	<4 UJ	<10	<10	<2	<4	<4	<1	<50	<2
MW-26	MW26-ROX-102114	10/21/2014	38.15 - 48.15	39.43	NE	<0.01	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002 UJ	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
MW-27	MW27-ROX-102114	10/21/2014	39.79 - 49.79	41.57	NE	<0.01	0.00033 J		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002 UJ	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
MW-28	MW28-ROX-102114	10/21/2014	33.61 - 43.61	36.44	NE	<0.01	0.0081		<0.005	<0.005	0.00083 J	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002 UJ	<0.005	0.00049 J	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001

TABLE 3
CUMULATIVE SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL RESULTS AND EXCEEDANCES

						VOCs																			
						Acetone	Benzene	Butane	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	4-Chlorotoluene	Cymene (p-Isopropyltoluene)	1,1-Dichloroethane	Dichloromethane (Methylene chloride)	1,2-Dichloropropane	trans-1,3-Dichloropropene	1,4-Dioxane	Ethylbenzene
					Screening Values (mg/L)	6.3 [1]	0.005 [1]		4.2 [1]	0.35 [3]			0.7 [1]	0.005 [1]	0.1 [1]		0.07 [1]				1.4 [1]	0.005 [2]	0.005 [2]	0.001 [2]	0.0077 [1]	0.7 [1]
Location	Sample ID	Sample Date	Screened Interval (ft btoc)	Depth to Water (ft btoc)	Product Thickness (ft)	Analytical Results (mg/L)																			
P-54	P54-ROX-011712	1/17/2012	38.00 - 63.00	37.17	NE	<0.005	0.0025		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	P54-ROX-050412	5/4/2012		38.77	NE	<0.005	0.00082		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	P54-ROX-080212	8/2/2012		38.95	NE	<0.005 UJ	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005		<0.001
	P54-ROX-103012	10/30/2012		40.70	NE	<0.005 UJ	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	P54-ROX-011113	1/11/2013		41.56	NE	<0.005	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	P54-ROX-041013	4/10/2013		41.80	NE	<0.01	0.172		<0.01	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	P54-ROX-050313	5/3/2013		41.80	NE	<0.01 UJ	0.0028		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	P54-ROX-071113	7/11/2013		39.07	NE	<0.01 UJ	<0.0005		<0.005 UJ	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005		<0.001
	P54-ROX-100813	10/8/2013		39.94	NE	<0.01	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	P54-ROX-011514	1/15/2014		42.20	NE	<0.01	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	P54-ROX-040914	4/9/2014		42.80	NE	<0.01	0.00081		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	P54-ROX-071114	7/10/2014		41.71	NE	<0.01 UJ	<0.0005		<0.005 UJ	<0.005	<0.005	<0.005	<0.005 UJ	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	P54-ROX-100814	10/8/2014	38.00 - 63.00	40.88	NE	<0.01	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
P-55	P55-ROX-011912	1/19/2012	39.82 - 64.82	41.09	NE	<0.005	<0.197 U		<0.005	<0.005	0.0036 J	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	0.0656
	P55-ROX-011912-D	1/19/2012		41.09	NE	<0.005	<0.202 U		<0.005	<0.005	0.0038 J	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	0.0683
	P55-ROX-050912	5/9/2012		42.44	NE	<0.005	0.388		<0.005	0.0099	0.0093	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	0.0031 J	<0.001	<0.002	<0.002	<0.0005	<0.025	0.41
	P55-ROX-012113	1/21/2013	40.43 - 50.43	43.60	NE	<0.25	0.571		<0.25	0.0533	0.011 J	<0.05	<0.05	<0.05	<0.05	<0.1	<0.01	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01		0.316
	P55-ROX-012113	1/21/2013		43.60	NE	<0.005	0.538		<0.253 U	0.0203	0.0143	0.0013 J	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	0.0055	<0.001	<0.002	<0.002	<0.0005	<0.025	0.366
	P55-ROX-041513	4/15/2013		43.63	NE	<0.02 UJ	0.434		<0.01	0.0052 J	0.0196	<0.01	<0.01	<0.002	<0.002	<0.004	<0.002	<0.004	<0.01	<0.01	<0.002	<0.004	<0.004	<0.001	<0.05	0.35
	P55-ROX-071613	7/16/2013		40.06	NE	<0.01	0.573	0.88	<0.005	0.0256	0.0155	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	0.0065	<0.001	<0.002	<0.002	<0.0005	<0.025	0.495
	P55-ROX-101013	10/10/2013		41.67	NE	<0.01	0.757		<0.005	0.0239	0.0147	0.0013 J	<0.005	<0.001	<0.001	0.005	<0.001	0.0017 J J	<0.005	0.0066	<0.001	<0.002	<0.002	<0.0005	<0.025	0.602
P-56	P56-ROX-011912	1/19/2012	40.82 - 65.82	41.81	NE	<0.005	0.335		<0.005	<0.005	0.0035 J	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	0.227
	P56-ROX-050812	5/8/2012		43.09	NE	<0.23 U	0.144		<0.005	0.0086	0.0051	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	0.0069	<0.005	0.0044 J	<0.001	<0.002	<0.002	<0.0005	<0.025	1.14
	P56-ROX-080612	8/6/2012		43.60	NE	<0.025 UJ	0.164		<0.025 UJ	<0.025	<0.025	<0.025	<0.025	<0.005	<0.005	<0.01	<0.005	<0.01	<0.025	<0.025	<0.005	<0.01 UJ	<0.01	<0.0025		0.101
	P56-ROX-103112	10/31/2012		44.80	NE	<0.005 UJ	0.176		<0.005	<0.005	0.005	0.0021 J	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	0.0041 J	<0.001	<0.002	<0.002	<0.0005	<0.025	1.29
	P56-ROX-011713	1/17/2013		45.65	NE	<0.025	0.191		<0.025	0.0031 J	<0.025	<0.025	<0.025	<0.005	<0.005	<0.01	<0.005	<0.01	<0.025	<0.025	<0.005	<0.01	<0.01	<0.0025	<0.13	0.0088
	P56-ROX-041213	4/12/2013		46.12	NE	<0.02 U	0.131		<0.01	<0.01	0.0142	<0.01	<0.01	<0.002	<0.002	<0.004	<0.002	<0.004	<0.01	<0.01	<0.002	<0.004	<0.004	<0.001	<0.05	0.691
	P56-ROX-071513	7/15/2013		43.25	NE	<0.156 U	0.131		<0.005	0.0141	0.0072	0.0038 J	<0.005	<0.001	<0.001	0.0047	<0.001	<0.002	<0.005	0.0061	<0.001	<0.002	<0.002	<0.0005	<0.025	2
	P56-ROX-101013	10/10/2013		44.48	NE	<0.01	0.14		<0.005	0.0088	0.005	0.0018 J	<0.005	<0.001	<0.001	0.0038	<0.001	<0.002	<0.005	0.0046 J	<0.001	<0.002	<0.002	0.001	<0.025	1.58
	P56-ROX-012214	1/22/2014		46.35	NE	<0.01	0.0895		<0.005	0.0033 J	0.0023 J	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	0.0018 J	<0.001	<0.002	<0.002	<0.0005	<0.025	0.305
	P56-ROX-041414	4/14/2014		47.32	NE	<0.01	0.128		<0.005	0.0069	0.0046 J	0.0014 J	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	0.0034 J	<0.001	<0.002	<0.002	<0.0005	<0.025	0.608
	P56-ROX-070814	7/8/2014		45.97	NE	0.0626 J	0.127 J		0.0132 J	0.0159 J	0.0073 J	0.0034 J J	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	0.0058 J	0.0018 J	<0.002	<0.002	<0.0005	<0.025 UJ	1.71 J
	P56-ROX-101314	10/13/2014	40.82 - 65.82	45.05	NE	<0.01 UJ	0.107		<0.005	0.0062	0.004 J	0.0012 J	<0.005 UJ	<0.001	<0.001 UJ	<0.002	<0.001	<0.002	<0.005	0.0035 J	<0.001	<0.002	<0.002	<0.0005	<0.025	0.164 J
P-57	P57-ROX-021312	2/13/2012	40.46 - 65.46	42.13	NE	<2.5 UJ	126		<2.5	<2.5	<2.5	<2.5	<2.5	<0.5	<0.5	<1	<0.5	<1	<2.5	<2.5	<0.5	<1	<1	<0.25	<13	0.719
	P57-ROX-050712	5/7/2012		42.92	NE	<0.5	147		<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.2	<0.1	<0.2	<0.5	<0.5	<0.1	<0.2	<0.2	<0.05	<2.5	1.07
	P57-ROX-080612	8/6/2012		43.53	NE	<0.25 UJ	99.4 J		<0.25 UJ	<0.25	<0.25	<0.25	<0.25	<0.05	<0.05	<0.1	<0.05	<0.1	<0.25	<0.25	<0.05	<0.1	<0.1	<0.025		0.795
	P57-ROX-080612-DUP	8/6/2012		43.53	NE	<0.005 UJ	106 J		<0.005 UJ	<0.005	0.0107	0.0124	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	0.0109	<0.001	<0.002	<0.002	<0.0005		0.759 E
	P57-ROX-110512	11/5/2012		44.98	NE	<2.5	142		<2.5	<2.5	<2.5	<2.5	<2.5	<0.5	<0.5	<1	<0.5	<1	<2.5	<2.5	<0.5	<1	<1	<0.25	<13	1.09
	P57-ROX-012913	1/29/2013		45.92	NE	<2.5	114		<2.5	<2.5	<2.5	<2.5	<2.5	<0.5	1.43	<1	<0.5	<1	<2.5	<2.5	<0.5	<1	<1	<0.25	<13	1.1
	P57-ROX-041113	4/11/2013		46.29	NE	<5	141		<5	<2.5	<2.5	<2.5	<2.5	<0.5	<0.5	<1	<0.5	<1	<2.5	<2.5	<0.5	<1	<1	<0.25	<13	1.19
	P57-ROX-071613	7/16/2013		43.38	NE	<0.01	254		<0.005	0.0143 J	0.0131 J	0.0103 J	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	0.0119 J	<0.001	<0.002	<0.002	<0.0005	<0.025	1.59
	P57-ROX-101413	10/14/2013		44.38	NE	<0.01	288		<0.005	0.0129	0.0116	0.0163	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	0.0113	<0.001	<0.002	<0.002	<0.0005	<0.025	1.1
	P57-ROX-020314	2/3/2014		46.57	NE	<10	261		<5	<5	<5	<5	<5 UJ	<1	<1	<2	<1	<2	<5	<5	<1	<2	<2	<0.5	<25	0.697 J
	P57-ROX-041514	4/15/2014		46.70	NE	<0.01 UJ	384		0.0055 J	0.0151	0.0131	0.0147	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	0.0114	<0.001	<0.002	<0.002	<0.0005	<0.025	1.08
	P57-ROX-070814	7/8/2014		45.95	NE	0.0497 J	378		<0.005 UJ	0.011 J	0.0091 J	0.0066 J	<0.005 UJ	<0.001 UJ	<0.001 UJ	<0.002 UJ	<0.001 UJ	<0.002 UJ	<0.005 UJ	0.0081 J	<0.001 UJ	<0.002 UJ	<0.002 UJ	<0.0005 UJ	<0.025 UJ	1.12
	P57-ROX-070814-DUP	7/8/2014		45.95	NE	0.0441 J	371		0.0086 J	0.0114 J	0.0097 J	0.007 J	<0.005 UJ	<0.001 UJ	<0.001 UJ	<0.002 UJ	<0.001 UJ	<0.002 UJ	<0.005 UJ	0.0085 J	<0.001 UJ	<0.002 UJ	<0.002 UJ	<0.0005 UJ	<0.025 UJ	1.21
	P57-ROX-101414	10/14/2014	40.46 - 65.46	45.00	NE	<20 UJ	255		<10	<10	<10	<10	<10 UJ	<2	<2 UJ	<4	<2	<4	<10	<10	<2	<4	<4	<1	<50	3.86 J
	P57-ROX-101414-DUP	10/14/2014		45.00	NE	<20 UJ	220		<10	<10	<10	<10	<10 UJ	<2	<2 UJ	<4	<2	<4	<10	<10	<2	<4	<4	<1	<50	1.77 J J

TABLE 3
CUMULATIVE SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL RESULTS AND EXCEEDANCES

						VOCs																			
						Acetone	Benzene	Butane	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	4-Chlorotoluene	Cymene (p-Isopropyltoluene)	1,1-Dichloroethane	Dichloromethane (Methylene chloride)	1,2-Dichloropropane	trans-1,3-Dichloropropene	1,4-Dioxane	Ethylbenzene
					Screening Values (mg/L)	6.3 [1]	0.005 [1]		4.2 [1]	0.35 [3]			0.7 [1]	0.005 [1]	0.1 [1]		0.07 [1]				1.4 [1]	0.005 [2]	0.005 [2]	0.001 [2]	0.0077 [1]	0.7 [1]
Location	Sample ID	Sample Date	Screened Interval (ft btoc)	Depth to Water (ft btoc)	Product Thickness (ft)	Analytical Results (mg/L)																			
P-58	P58-ROX-011912	1/19/2012	40.21 - 65.21	39.73	NE	<0.005	487		<0.005	0.027	0.0215	0.056 J	<0.005	<0.001	0.0013	<0.002	<0.001	<0.002	<0.005	0.0149	<0.001	<0.002	<0.002	<0.0005	<0.025	0.97 J
	P58-ROX-011912-D	1/19/2012		39.73	NE	<0.005	474		<0.005	0.0235 J	0.0168 J	0.0387 J	<0.005	<0.001	0.0014 J	<0.002	<0.001	<0.002	<0.005	0.0123 J	<0.001	<0.002	<0.002	<0.0005	<0.025	1.03
	P58-ROX-050712	5/7/2012		40.90	NE	<0.5	477		<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.2	<0.1	<0.2	<0.5	<0.5	<0.1	<0.2	<0.2	<0.05	<2.5	1.03
	P58-ROX-050712-DUP	5/7/2012		40.90	NE	<0.5	440		<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.2	<0.1	<0.2	<0.5	<0.5	<0.1	<0.2	<0.2	<0.05	<2.5	1
	P58-ROX-080612	8/6/2012		41.63	NE	<0.1 UJ	313 J		<0.1 UJ	<0.1	<0.1	0.0317 J	<0.1	<0.02	<0.02	<0.04	<0.02	<0.04	<0.1	<0.1	<0.02	<0.04	<0.04	<0.01		0.889
	P58-ROX-080612-DUP	8/6/2012		41.63	NE	<0.05	308 J		<0.05	<0.05	0.0176 J	0.0339 J	<0.05	<0.01	<0.01	<0.02	<0.01	<0.02	<0.05	0.0118 J	<0.01	<0.02	<0.02	<0.005	<0.25	0.931
	P58-ROX-110612	11/6/2012		43.09	NE	<0.5 UJ	415		<0.5	<0.5	<0.5	<0.5	<0.5	<0.1 UJ	<0.1	<0.2	<0.1	<0.2	<0.5	<0.5	<0.1	<0.2	<0.2	<0.05	<2.5	0.844
	P58-ROX-121012	12/10/2012		43.09	NE																				
	P58-ROX-012213	1/22/2013		44.21	NE	<5	552		<5	<5	<5	<5	<5	<1	<1	<2	<1	<2	<5	<5	<1	<2	<2	<0.5	<25	1.27
	P58-ROX-041113	4/11/2013		44.40	NE	<20	532		<20	<10	<10	<10	<10	<2	<2	<4	<2	<4	<10	<10	<2	<4	<4	<1	<50	1.28 J
	P58-ROX-071613	7/16/2013		41.49	NE	<0.01	398		<0.005	0.0239	0.0215	0.0532	<0.005	<0.001	0.0017	<0.002	<0.001	<0.002	<0.005	0.0152	<0.001	<0.002	<0.002	<0.0005	<0.025	1.07
	P58-ROX-101413	10/14/2013		42.19	NE	<0.01	647		<0.005	0.023	0.0235	0.0483	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	0.0143	<0.001	<0.002	<0.002	<0.0005	<0.025	1.53
	P58-ROX-020314	2/3/2014		44.66	NE	<10	496		<5	<5	<5	<5	<5 UJ	<1	<1	<2	<1	<2	<5	<5	<1	<2	<2	<0.5	<25	0.767 J
	P58-ROX-041514	4/15/2014		45.66	NE	<0.01 UJ	782		0.0056 J	0.0216 J	0.0185 J	0.0396 J	<0.005	<0.001	0.0013 J	<0.002	<0.001	<0.002	<0.005	0.0116 J	<0.001	<0.002	<0.002	<0.0005	<0.025	0.891 J
	P58-ROX-071814	7/18/2014		43.80	NE	<20	406		<10	<10	<10	<10	<10	<2	<2	<4	<2	<4	<10	<10	<2	<4	<4	<1	<25 UJ	<2
	P58-ROX-101514	10/15/2014	40.21 - 65.21	43.14	NE	<5	493		<2.5	<2.5	<2.5	<2.5	<2.5	<0.5	<0.5	<1	<0.5	<1	<2.5	<2.5	<0.5	<1	<1	<0.25	<13	0.793 J
P-59	P59-ROX-011912	1/19/2012	47.91 - 72.91	42.88	NE	<0.005	6.61		<0.158 U	<0.005 UJ	0.0054	0.0031 J J	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	0.0036 J	<0.001	<0.002	<0.002	<0.0005	<0.025	1.28
	P59-ROX-011912-DUP	1/19/2012		42.88	NE	<0.005	7.04		<0.185 U	0.0264 J	0.0055	0.0372 J	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	0.0038 J	<0.001	<0.002	<0.002	<0.0005	<0.025	1.4
	P59-ROX-050912	5/9/2012		44.11	NE	<0.25	7.86		<0.25	<0.25	<0.25	<0.25	<0.25	<0.05	<0.05	<0.1	<0.05	<0.1	<0.25	<0.25	<0.05	<0.1	<0.1	<0.025	<1.3	1.93
	P59-ROX-080212	8/2/2012		44.07	NE	<0.1 UJ	11		<0.1	<0.1	<0.1	<0.1	<0.1	<0.02	<0.02	<0.04	<0.02	<0.04	<0.1	<0.1	<0.02	<0.04	<0.04	<0.01		1.74
	P59-ROX-110212	11/2/2012		45.98	NE	<0.5 UJ	10.3		<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.2	<0.1	<0.2	<0.5	<0.5	<0.1	<0.2	<0.2	<0.05	<2.5	1.87
	P59-ROX-110212-DUP	11/2/2012		45.98	NE	<0.5 UJ	10.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.2	<0.1	<0.2	<0.5	<0.5	<0.1	<0.2	<0.2	<0.05	<2.5	1.94
	P59-ROX-013013	1/30/2013		46.60	NE	<0.25	12.1		<0.25	<0.25	<0.25	<0.25	<0.25	<0.05	<0.05	<0.1	<0.05	<0.1	<0.25	<0.25	<0.05	<0.1	<0.1	<0.025	<1.3	1.9
	P59-ROX-041213	4/12/2013		46.95	NE	<0.5 UJ	15		<0.25	<0.25	0.289	<0.25	<0.25	<0.05	<0.05	<0.1	<0.05	<0.1	<0.25	<0.25	<0.05	<0.1	<0.1	<0.025	<1.3	2.85
	P59-ROX-041213-DUP	4/12/2013		46.95	NE	<0.5 UJ	13.4		<0.25	<0.25	0.288	<0.25	<0.25	<0.05	<0.05	<0.1	<0.05	<0.1	<0.25	<0.25	<0.05	<0.1	<0.1	<0.025	<1.3	2.57
	P59-ROX-071613	7/16/2013		44.13	NE	<0.01	10.2		<0.005	0.0213 J	0.0068 J	0.0027 J J	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	0.0046 J J	<0.001	<0.002	<0.002	<0.0005	<0.025	2.4
	P59-ROX-101013	10/10/2013		45.50	NE	<0.01	14.7		<0.005	0.0224	<0.005	0.0024 J	<0.005	<0.001	<0.001	0.0034	<0.001	<0.002	<0.005	0.0051	<0.001	<0.002	<0.002	<0.0005	<0.025	3.19
	P59-ROX-020314	2/3/2014		47.35	NE	<0.2	15.9		<0.1	0.0165 J	<0.1	<0.1	<0.1 UJ	<0.02	<0.02	<0.04	<0.02	<0.04	<0.1	<0.1	<0.02	<0.04	<0.04	<0.01	<0.5	1.86
	P59-ROX-041514	4/15/2014		48.60	NE	<0.01 UJ	14.8		0.0253 J	0.0181	0.0035 J	0.0014 J	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	0.0029 J	0.0023	<0.002	<0.002	<0.0005	<0.025	1.69
	P59-ROX-070814	7/8/2014		47.69	NE	0.057 J	12.2		0.0169 J	0.0251 J	0.0073 J	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	0.0046 J J	<0.001	<0.002	<0.002	<0.0005	<0.025 UJ	1.92
	P59-ROX-101414	10/14/2014	47.91 - 72.91	46.18	NE	<0.01 UJ	12		<0.005	0.0278 J	0.0097 J	0.0024 J J	<0.005 UJ	<0.001	<0.001 UJ	<0.002	<0.001	<0.002	<0.005	0.0043 J J	<0.001	<0.002	<0.002	<0.0005	<0.025	2.33
P-66	P66-ROX-051012	5/10/2012	34.72 - 59.72	32.48	NE	<0.005	0.0193		<0.005	0.0139	0.019	0.0059	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	0.0015
	P66-ROX-080312	8/3/2012		30.51	NE	<0.005	0.0994		<0.005	0.0118	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	0.0013
	P66-ROX-103112	10/31/2012		34.75	NE	<0.005	0.223		<0.005	0.0145	0.02	0.0054	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	0.0012
	P66-ROX-011813	1/18/2013		35.70	NE	<0.005	0.0896		<0.005	0.0129	0.0227	0.0087	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	0.0014
	P66-ROX-041113	4/11/2013		36.03	NE	<0.01	0.0444		<0.01	0.0199	0.0249	0.0104	<0.005	<0.001	<0.001	0.00065 J	<0.001	<0.002	<0.005	0.0093	<0.001	<0.002	<0.002	<0.0005	<0.025	0.0036
	P66-ROX-071213	7/12/2013		33.20	NE	<0.01	0.187		<0.005	0.0146	0.0221	0.006	<0.005	<0.001 UJ	0.00059 J	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	0.0022
	P66-ROX-101013	10/10/2013		33.66	NE	0.0095 J	0.0646		<0.005	0.0141	0.0186	0.0067	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	0.0045
	P66-ROX-110713	11/7/2013		33.66	NE	<0.01	0.03		<0.005	0.0088	0.0102	0.0071	<0.005	<0.001	0.0007 J	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	0.0016
	P66-ROX-012914	1/29/2014		36.39	NE	<0.01	0.008		<0.005	0.016	0.0205	0.0053	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	0.0013
	P66-ROX-041114	4/11/2014		37.10	NE	<0.01	0.0052		<0.005	0.0129	0.0168	0.0041 J	<0.005	<0.001	0.00052 J	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025 UJ	0.0014
	P66-ROX-070714	7/7/2014		35.60	NE	<0.01 UJ	0.0429		<0.005	0.0112	0.0147	0.0023 J	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	0.0016
	P66-ROX-101414	10/14/2014	34.72 - 59.72	34.48	NE	<0.01 UJ	0.0212		<0.005	0.0135	0.0173	0.0036 J	<0.005	<0.001	<0.001 UJ	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	0.0013
P-74	P74-ROX-011912	1/19/2012	44.43 - 69.43	38.77	NE	<0.005	<0.205 U		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	0.0095
	P74-ROX-050712	5/7/2012		39.92	NE	<0.005	0.336		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	0.0081
	P74-ROX-080612	8/6/2012		40.71	NE	<0.05 UJ	2.46		<0.05 UJ	<0.05	<0.05	<0.05	<0.05	<0.01	<0.01	<0.02	<0.01	<0.02	<0.05	<0.05	<0.01	<0.02	<0.02	<0.005		0.0782
	P74-ROX-110112	11/1/2012		41.72	NE	<0.1	3.5		<0.1	<0.1	<0.1	<0.1	<0.1	<0.02	<0.02	<0.04	<0.02	<0.04	<0.1	<0.1	<0.02	<0.04	<0.04	<0.01	<0.5	0.0493
	P74-ROX-011713	1/17/2013		42.65	NE	<0.1	4.99		<0.1	0.0143 J	<0.1	<0.1	<0.1	<0.02	<0.02	<0.04	<0.02	<0.04	<0.1	<0.1	<0.02	<0.04	<0.04	<0.01	<0.5	0.0997
	P74-ROX-041113	4/11/2013		42.83	NE	<0.01	0.144		<0.01	0.0026 J	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	0.0086
	P74-ROX-071513	7/15/2013		40.11	NE	<0.0046 U	0.117		<0.005	0.0088	0.002 J	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	0.0017 J	<0.001	<0.002	<0.002	<0.0005	<0.025	0.0306
	P74-ROX-101413	10/14/2013		41.72	NE	<0.01	1.55		<0.005	0.0158	0.003 J	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	0.0031 J	<0.001	<0.002	<0.002	<0.0005	<0.025	0.0653
	P74-ROX-012414	1/24/2014		43.35	NE	<0.01	4.45		<0.005	0.0252	0.0031 J	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	0.0031 J	<0.001	<0.002	<0.002	<0.0005	<0.025	0.115
	P74-ROX-041514	4/15/2014		44.74	NE	0.0398 J	0.0349		<0.005 UJ	0.0013 J	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	0.0043
	P74-ROX-070814	7/8/2014		43.02	NE	<0.01 UJ	0.309		<0.005	0.0138	0.0014 J	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	0.0018 J	<0.001	<0.002	<0.002	<0.0005	<0.025 UJ	0.0374
	P74-ROX-101414	10/14/2014	44.43 - 69.43	41.48	NE	<0.01 UJ	0.00068		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001 UJ	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
CUMULATIVE SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL RESULTS AND EXCEEDANCES

						VOCs																				
						Acetone	Benzene	Butane	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	4-Chlorotoluene	Cymene (p-Isopropyltoluene)	1,1-Dichloroethane	Dichloromethane (Methylene chloride)	1,2-Dichloropropane	trans-1,3-Dichloropropene	1,4-Dioxane	Ethylbenzene
						Screening Values (mg/L)	6.3 [1]	0.005 [1]		4.2 [1]	0.35 [3]			0.7 [1]	0.005 [1]	0.1 [1]		0.07 [1]				1.4 [1]	0.005 [2]	0.005 [2]	0.001 [2]	0.0077 [1]	0.7 [1]
Location	Sample ID	Sample Date	Screened Interval (ft btoc)	Depth to Water (ft btoc)	Product Thickness (ft)	Analytical Results (mg/L)																				
P-93A	P93A-ROX-012012	1/20/2012	48.17 - 63.17	41.66	NE	<0.005	164 J		<0.005	0.0037 J J	0.0045 J	0.0122	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	0.0023 J	<0.001	<0.002	<0.002	<0.0005	<0.025	0.185
	P93A-ROX-050812	5/8/2012		42.75	NE	<0.0441 U	200		<0.005 UJ	0.005 J	0.0069 J	0.0179 J	<0.005 UJ	<0.001 UJ	<0.001 UJ	<0.002 UJ	<0.001 UJ	<0.002 UJ	<0.005 UJ	0.0035 J J	<0.001 UJ	<0.002 UJ	<0.002 UJ	<0.0005 UJ	<0.025 UJ	0.38 J
	P93A-ROX-080912	8/9/2012		43.66	NE	<1.63 U	87		<0.005	0.0016 J	0.0048 J	0.0128	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	0.0022 J	<0.001	<0.002	<0.002	<0.0005	<0.025	0.225
	P93A-ROX-110712	11/7/2012		45.00	NE	<0.5 UJ	148		<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.2	<0.1	<0.2	<0.5	<0.5	<0.1	<0.2	<0.2	<0.05	<2.5	0.265
	P93A-ROX-110712-DUP	11/7/2012		45.00	NE	<0.5 UJ	156		<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.2	<0.1	<0.2	<0.5	<0.5	<0.1	<0.2	<0.2	<0.05	<2.5	0.262
	P93A-ROX-012313	1/23/2013		45.89	NE	<2.5	101		<2.5	<2.5	<2.5	<2.5	<2.5	<0.5	<0.5	<1	<0.5	<1	<2.5	<2.5	<0.5	<1	<1	<0.25	<13 UJ	<0.5
	P93A-ROX-012313-DUP	1/23/2013		45.89	NE	<2.5	98.5		<2.5	<2.5	<2.5	<2.5	<2.5	<0.5	<0.5	<1	<0.5	<1	<2.5	<2.5	<0.5	<1	<1	<0.25	<13 UJ	<0.5
	P93A-ROX-041113	4/11/2013		46.29	NE	<5	120		<5	<2.5	<2.5	<2.5	<2.5	<0.5	<0.5	<1	<0.5	<1	<2.5	<2.5	<0.5	<1	<1	<0.25	<13	0.255 J
	P93A-ROX-041113-DUP	4/11/2013		46.29	NE	<5	120		<5	<2.5	<2.5	<2.5	<2.5	<0.5	<0.5	<1	<0.5	<1	<2.5	<2.5	<0.5	<1	<1	<0.25	<13	<0.5
	P93A-ROX-071813	7/18/2013		43.25	NE	<0.0053 U	89.1		<0.005	<0.005	0.0056	0.0916	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	0.0024 J	<0.001	<0.002	<0.002	<0.001 UJ	<0.05	0.162
	P93A-ROX-101113	10/11/2013		44.18	NE	<0.01 UJ	197		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	0.0025 J	<0.001	<0.002	<0.002	<0.0005	<0.025	0.264
	P93A-ROX-012914	1/29/2014		46.53	NE	<5	136		<2.5	<2.5	<2.5	<2.5	<2.5	<0.5	<0.5	<1	<0.5	<1	<2.5	<2.5	<0.5	<1	<1	<0.25	<13	<0.5
	P93A-ROX-041714	4/17/2014		47.41	NE	<5	132		<2.5	<2.5	<2.5	<2.5	<2.5	<0.5	<0.5	<1	<0.5	<1	<2.5	<2.5	<0.5	<1	<1	<0.25	<13	<0.5
	P93A-ROX-071814	7/18/2014		45.70	NE	<10	170		<5	<5	<5	<5	<5	<1	<1	<2	<1	<2	<5	<5	<1	<2	<2	<0.5	<13 UJ	<1
	P93A-ROX-071814-DUP	7/18/2014		45.70	NE	<10	174		<5	<5	<5	<5	<5	<1	<1	<2	<1	<2	<5	<5	<1	<2	<2	<0.5	<13 UJ	<1
	P93A-ROX-101514	10/15/2014	48.17 - 63.17	45.06	NE	<5	293		<2.5	<2.5	<2.5	<2.5	<2.5	<0.5	<0.5	<1	<0.5	<1	<2.5	<2.5	<0.5	<1	<1	<0.25	<13	0.229 J J
	P93A-ROX-101514-DUP	10/15/2014		45.06	NE	<5	277		<2.5	<2.5	<2.5	<2.5	<2.5	<0.5	<0.5	<1	<0.5	<1	<2.5	<2.5	<0.5	<1	<1	<0.25	<13	0.226 J J
P-93B	P93B-ROX-012012	1/20/2012	74.60 - 76.60	41.72	NE	<0.005	337		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	0.0831 J	0.0274 J
	P93B-ROX-050812	5/8/2012		42.79	NE	<0.0747 U	304		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	0.0379 J
	P93B-ROX-080912	8/9/2012		43.69	NE	<0.0672 UJ	317		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	0.0741
	P93B-ROX-110712	11/7/2012		45.05	NE	<0.5 UJ	162 J		<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.2	<0.1	<0.2	<0.5	<0.5	<0.1	<0.2	<0.2	<0.05	<2.5	<0.1
	P93B-ROX-110712-DUP	11/7/2012		45.05	NE	<0.5 UJ	413 J		<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.2	<0.1	<0.2	<0.5	<0.5	<0.1	<0.2	<0.2	<0.05	<2.5	0.0695 J
	P93B-ROX-012313	1/23/2013		45.89	NE	<5	415		<5	<5	<5	<5	<5	<1	<1	<2	<1	<2	<5	<5	<1	<2	<2	<0.5	<25 UJ	<1
	P93B-ROX-041113	4/11/2013		46.32	NE	<5	618		<5	<2.5	<2.5	<2.5	<2.5	<0.5	<0.5	<1	<0.5	<1	<2.5	<2.5	<0.5	<1	<1	<0.25	<13	<0.5
	P93B-ROX-071813	7/18/2013		43.30	NE	<0.01	296		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.001 UJ	<0.05	0.0652
	P93B-ROX-101613	10/16/2013		44.43	NE	<20	187		<10	<10	<10	<10	<10	<2	<2	<4	<2	<4	<10	<10	<2	<4	<4	<1	<50	<2
	P93B-ROX-101613-DUP	10/16/2013		44.43	NE	<20	180		<10	<10	<10	<10	<10	<2	<2	<4	<2	<4	<10	<10	<2	<4	<4	<1	<50	<2
	P93B-ROX-012814	1/28/2014		46.58	NE	<10	242		<5	<5	<5	<5	<5	<1	<1	<2	<1	<2	<5	<5	<1	<2	<2	<0.5	<25	<1
	P93B-ROX-012814-DUP	1/28/2014		46.58	NE	<10 UJ	293		<5 UJ	<5	<5	<5	<5	<1	<1	<2	<1	<2	<5	<5	<1	<2	<2	<0.5	<25	<1
	P93B-ROX-041714	4/17/2014		47.46	NE	<5	134		<2.5	<2.5	<2.5	<2.5	<2.5	<0.5	<0.5	<1	<0.5	<1	<2.5	<2.5	<0.5	<1	<1	<0.25	<13	<0.5
	P93B-ROX-041714-DUP	4/17/2014		47.46	NE	<5	126		<2.5	<2.5	<2.5	<2.5	<2.5	<0.5	<0.5	<1	<0.5	<1	<2.5	<2.5	<0.5	<1	<1	<0.25	<13	<0.5
	P93B-ROX-071714	7/17/2014		45.75	NE	<0.01 UJ	172		<0.005 UJ	<0.005 UJ	<0.005 UJ	0.00042 J J	<0.005 UJ	<0.001 UJ	<0.001 UJ	<0.002 UJ	<0.001 UJ	<0.002 UJ	<0.005 UJ	<0.005 UJ	<0.001 UJ	<0.002 UJ	<0.002 UJ	<0.0005 UJ	<0.025 UJ	0.0236 J
	P93B-ROX-101514	10/15/2014	74.60 - 76.60	45.15	NE	<5 UJ	241		<2.5	<2.5	<2.5	<2.5	<2.5 UJ	<0.5	<0.5	<1	<0.5	<1	<2.5	<2.5	<0.5	<1	<1	<0.25	<13	<0.5
P-93C	P93C-ROX-012012	1/20/2012	94.26 - 96.26	41.57	NE	<0.005	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	P93C-ROX-050812	5/8/2012		42.68	NE	<0.005	0.0057		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	P93C-ROX-080912	8/9/2012		43.57	NE	<0.0056 UJ	0.00084		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	P93C-ROX-110812	11/8/2012		45.12	NE	<0.005	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	P93C-ROX-012313	1/23/2013		45.78	NE	<0.005	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025 UJ	<0.001
	P93C-ROX-041213	4/12/2013		46.21	NE	<0.0056 UJ	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	P93C-ROX-071813	7/18/2013		43.31	NE	<0.01	101		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.001 UJ	<0.05	0.0041
	P93C-ROX-080813	8/8/2013		43.31	NE	<0.5	19.1		<0.25	<0.25	<0.25	<0.25	<0.25	<0.05	<0.05	<0.1	<0.05	<0.1	<0.25	<0.25	<0.05	<0.1	<0.1	<0.025	<1.3	<0.05
	P93C-ROX-101613	10/16/2013		44.31	NE	<0.01	1.4		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	P93C-ROX-012414	1/24/2014		46.44	NE	<0.01 UJ	<0.0005		<0.005 UJ	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	P93C-ROX-041714	4/17/2014		47.34	NE	<0.01	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	P93C-ROX-071714	7/17/2014		45.61	NE	<0.01	1.52		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	P93C-ROX-101514	10/15/2014	94.26 - 96.26	44.99	NE	<0.01	0.00075		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001

TABLE 3
CUMULATIVE SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL RESULTS AND EXCEEDANCES

						VOCs																				
						Acetone	Benzene	Butane	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	4-Chlorotoluene	Cymene (p-Isopropyltoluene)	1,1-Dichloroethane	Dichloromethane (Methylene chloride)	1,2-Dichloropropane	trans-1,3-Dichloropropene	1,4-Dioxane	Ethylbenzene
					Screening Values (mg/L)	6.3 [1]	0.005 [1]		4.2 [1]	0.35 [3]			0.7 [1]	0.005 [1]	0.1 [1]		0.07 [1]				1.4 [1]	0.005 [2]	0.005 [2]	0.001 [2]	0.0077 [1]	0.7 [1]
Location	Sample ID	Sample Date	Screened Interval (ft btoc)	Depth to Water (ft btoc)	Product Thickness (ft)	Analytical Results (mg/L)																				
P-93D	P93D-ROX-012012	1/20/2012	125.75 - 127.75	41.77	NE	<0.005	0.0513		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	P93D-ROX-050812	5/8/2012		42.96	NE	<0.005	0.0056		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	P93D-ROX-080812	8/8/2012		43.71	NE	<0.005 UJ	0.0134		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	P93D-ROX-110812	11/8/2012		NM	NE	<0.005	0.049		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	P93D-ROX-012213	1/22/2013		44.21	NE	<0.005	0.106		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	0.00069 J
	P93D-ROX-041113	4/11/2013		46.37	NE	<0.01	<0.0005		<0.01	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	P93D-ROX-071213	7/12/2013		43.51	NE	<0.01	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001 UJ	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	P93D-ROX-101113	10/11/2013		44.24	NE	<0.01	0.0014		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	P93D-ROX-013114	1/31/2014		46.62	NE	<0.01	0.0012		<0.005	<0.005	<0.005	<0.005	<0.005 UJ	<0.001	0.00062 J	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	0.0044	<0.0005	<0.025 UJ	<0.001
	P93D-ROX-041414	4/14/2014		47.54	NE	<0.01	0.0022		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	0.00069 J	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	0.0164	<0.0005	<0.025	<0.001
	P93D-ROX-071714	7/17/2014		45.78	NE	<0.01	0.00063		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	P93D-ROX-101514	10/15/2014	125.75 - 127.75	45.14	NE	<0.1	36.4		<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.01	<0.02	<0.01	<0.02	<0.05	<0.05	<0.01	<0.02	<0.02	<0.005	<0.25	<0.01
	P93D-ROX-110414	11/4/2014		45.14	NE	<0.01	19.9		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	0.0079	<0.0005	<0.025	0.0013
P-114	P114-ROX-012012	1/20/2012	32.67 - 52.67	27.17	NE	<0.005	0.0011 J		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	P114-ROX-050912	5/9/2012		28.09	NE	<0.005	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	P114-ROX-080912	8/9/2012		29.13	NE	<0.0756 UJ	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	P114-ROX-110912	11/9/2012		30.90	NE	<0.0144 UJ	<0.0005		<0.005 UJ	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025 UJ	<0.001
	P114-ROX-012313	1/23/2013		30.22	NE	<0.005	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025 UJ	<0.001
	P114-ROX-041513	4/15/2013		31.80	NE	<0.0059 UJ	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	P114-ROX-071813	7/18/2013		27.22	NE	<0.251 U	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	P114-ROX-071813-DUP	7/18/2013		27.22	NE	<0.245 U	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	P114-ROX-101713	10/17/2013		29.43	NE	0.0047 J	0.00074		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	P114-ROX-012814	1/28/2014		32.11	NE	0.142 J	0.0013		<0.005 UJ	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	P114-ROX-042114	4/21/2014		32.22	NE	<0.01	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	P114-ROX-071814	7/18/2014		30.87	NE	<0.01	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025 UJ	<0.001
	P114-ROX-101714	10/17/2014	32.67 - 52.67	29.43	NE	<0.01	<0.0005		<0.005	0.0052 J	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	0.0006 J J	<0.002	<0.0005	<0.025	0.00045 J J
ROST-3-PZ	ROST3PZ-ROX-051412	5/14/2012	40.00 - 50.00	38.82	NE	<0.61 U	0.0074		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	0.0167
	ROST3PZ-ROX-080712	8/7/2012		39.00	NE	<0.005	0.0041		<0.005	<0.005	<0.005	0.00072 J	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	0.0047
	ROST3PZ-ROX-110112	11/1/2012		40.82	NE	<0.005	0.0052		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	0.0018
ROST-3-MW	ROST3MW-ROX-012313	1/23/2013	37.81 - 47.81	41.50	NE	<0.005	0.0051 J		<0.005	0.0028 J	0.0013 J	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	0.0011 J	<0.001	<0.002	<0.002	<0.0005	<0.025 UJ	0.0296
	ROST3MW-ROX-040513	4/5/2013				<0.005 UJ	0.0605		<0.005	<0.005	0.0011 J	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	0.0012 J	<0.001	<0.002	<0.002	<0.0005	<0.025	0.0136
	ROST3MW-ROX-071113	7/11/2013		39.50	NE	<0.01 UJ	0.0125		<0.005 UJ	<0.005	0.0014 J	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	0.0014 J	<0.001	<0.002	<0.002	<0.0005		0.218
	ROST3-MW-ROX-100913	10/9/2013		40.16	NE	<0.01	0.0033		<0.0164	0.00073 J	<0.005	<0.005	<0.005	<0.001	<0.001	0.0034	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	0.0182
	ROST3MW-ROX-011714	1/17/2014		42.20	NE	<0.01	0.004		<0.005	0.0012 J	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	0.008
	ROST3MW-ROX-041014	4/10/2014		42.80	NE	<0.01	0.0075		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	0.0055
	ROST3MW-ROX-071414	7/14/2014		41.88	NE	<0.01	0.0058		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	0.008
	ROST3MW-ROX-100914	10/9/2014	37.81 - 47.81	41.31	NE	<0.01 UJ	0.003		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	0.0398
ROST-4-PZ(C)	ROST4PZ-C-051412	5/14/2012	34.95 - 44.95	39.04	NE	<0.005	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	<0.001
	ROST4PZ-C-ROX-072512	7/25/2012		39.10	NE	<0.005	0.0849		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	0.177
	ROST4PZC-ROX-102912	10/29/2012		40.75	NE	<0.005 UJ	0.0033		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	0.0014
	ROST4PZ(C)-ROX-011113	1/11/2013		41.42	NE	<0.005	<0.0005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	0.0013
	ROST4PZC-ROX-041013	4/10/2013		42.27	NE	<0.01	0.0153 J		<0.01	<0.005	<0.005	<0.005	<0.005	<0.001 UJ	<0.001 UJ	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002 UJ	<0.0005 UJ	<0.025	0.0028 J
	ROST4PZC-ROX-071113	7/11/2013		40.18	NE	<0.01 UJ	0.0497		<0.005 UJ	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005		0.0651
	ROST4PZC-ROX-100913	10/9/2013		39.91	NE	<0.01	0.00066		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	0.0064
	ROST4PZC-ROX-011714	1/17/2014		41.92	NE	<0.01	0.0015		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	0.0039
	ROST4PZC-ROX-041014	4/10/2014		42.05	NE	<0.01	0.0019		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	0.00059 J
	ROST4C-ROX-071114	7/10/2014		42.22	NE	<0.01 UJ	0.0751		<0.005 UJ	<0.005	<0.005	<0.005	<0.005 UJ	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	0.0594
	ROST4PZC-ROX-100914	10/9/2014	34.95 - 44.95	41.30	NE	<0.01 UJ	0.039		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	0.0688

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
CUMULATIVE SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL RESULTS AND EXCEEDANCES

						VOCs																			
						Acetone	Benzene	Butane	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	4-Chlorotoluene	Cymene (p-Isopropyltoluene)	1,1-Dichloroethane	Dichloromethane (Methylene chloride)	1,2-Dichloropropane	trans-1,3-Dichloropropene	1,4-Dioxane	Ethylbenzene
					Screening Values (mg/L)	6.3 [1]	0.005 [1]		4.2 [1]	0.35 [3]			0.7 [1]	0.005 [1]	0.1 [1]		0.07 [1]				1.4 [1]	0.005 [2]	0.005 [2]	0.001 [2]	0.0077 [1]	0.7 [1]
Location	Sample ID	Sample Date	Screened Interval (ft btoc)	Depth to Water (ft btoc)	Product Thickness (ft)	Analytical Results (mg/L)																			
T-12	T12-ROX-011912	1/19/2012	46.72 - 72.72	41.0	NE	<0.005	1.51		<0.005	0.0062	0.0022 J	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	0.0024 J	<0.001	<0.002	<0.002	<0.0005	<0.025	0.285
	T12-ROX-050912	5/9/2012		42.62	NE	<0.025	1.48		<0.025	<0.025	<0.025	<0.025	<0.025	<0.005	<0.005	<0.01	<0.005	<0.01	<0.025	<0.025	<0.005	<0.01	<0.01	<0.0025	<0.13	1.88
	T12-ROX-080212	8/2/2012		41.92	NE	<0.05 UJ	1.64		<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.01	<0.02	<0.01	<0.02	<0.05	<0.05	<0.01	<0.02	<0.02	<0.005		0.573
	T12-ROX-110512	11/5/2012		43.91	NE	<0.05	1.71		<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.01	<0.02	<0.01	<0.02	<0.05	<0.05	<0.01	<0.02	<0.02	<0.005	<0.25	1.73
	T12-ROX-011813	1/18/2013		44.50	NE	<0.025	2.03 J		<0.0795 U	0.0056 J	0.0036 J	<0.025	<0.025	<0.005	<0.005	<0.01	<0.005	<0.01	<0.025	<0.025	<0.005	<0.01	<0.01	<0.0025	<0.13 UJ	0.426
	T12-ROX-041513	4/15/2013		44.99	NE	<0.1 UJ	1.61		<0.05	<0.05	0.0595	<0.05	<0.05	<0.01	<0.01	<0.02	<0.01	<0.02	<0.05	<0.05	<0.01	<0.02	<0.02	<0.005	<0.25	1.03
	T12-ROX-071613	7/16/2013		42.33	NE	<0.01	1.65		<0.005	0.0069 J	0.003 J J	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	0.0025 J J	<0.001	<0.002	<0.002	<0.0005	<0.025	0.45
	T12-ROX-101513	10/15/2013		43.73	NE	0.0803	2.02		0.0246 J	0.0098 J	0.0038 J	<0.025	<0.025	<0.005	<0.005	<0.01	<0.005	<0.01	<0.025	<0.025	<0.005	<0.01	<0.01	<0.0025	<0.13	1.82
	T12-ROX-012414	1/24/2014		45.26	NE	<0.01	2.48		<0.005	0.0083	0.0029 J	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	<0.005	<0.001	<0.002	<0.002	<0.0005	<0.025	0.518
	T12-ROX-041514	4/15/2014		46.72	NE	<0.01 UJ	2.07		0.017 J	0.0062	0.0024 J	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	0.0018 J	<0.001	<0.002	<0.002	<0.0005	<0.025	0.376
	T12-ROX-070814	7/8/2014		45.13	NE	0.0658 J	2.1		0.0094	0.0096	0.0039 J	<0.005	<0.005	<0.001	<0.001	<0.002	<0.001	<0.002	<0.005	0.0024 J	0.0022	<0.002	<0.002	<0.0005	<0.025 UJ	0.614
	T12-ROX-101714	10/17/2014	46.72 - 72.72	44.40	NE	<0.1	1.83		<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.01	<0.02	<0.01	<0.02	<0.05	<0.05	<0.01	<0.02	<0.02	<0.005	<0.25	1.75

TABLE 3
CUMULATIVE SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL RESULTS AND EXCEEDANCES

						VOCs																				
						Ethyl methacrylate	Hexachlorobutadiene	Hexane	2-Hexanone (Methyl N-Butyl Ketone)	Isopentane	Isopropylbenzene (Cumene)	4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	Methyl tert-Butyl Ether (MTBE)	Naphthalene	n-Propylbenzene	Toluene	1,2,3-Trichlorobenzene	1,2,4-Trichlorobenzene	1,1,2-Trichloroethane	1,2,3-Trimethylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl acetate	m,p-Xylenes	o-Xylenes	Xylenes (total)
			Screening Values (mg/L)				0.007 [3]	0.42 [3]	0.035 [3]		0.7 [1]	0.56 [3]	0.07 [1]	0.14 [1]	0.7 [3]	1.0 [1]	0.0056 [3]	0.07 [1]	0.005 [1]			0.07 [3]	7.0 [2]	10 [1]		10 [1]
Location	Sample ID	Sample Date	Screened Interval (ft btoc)	Depth to Water (ft btoc)	Product Thickness (ft)	Analytical Results (mg/L)																				
MW-01	MW1-ROX-011612	1/16/2012	48.80 - 58.80	37.75	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0032	0.000079 J	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW1-ROX-050112	5/1/2012		39.09	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0031	<0.0001	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW1-ROX-073012	7/30/2012		39.39	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0022	0.0001 J	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW1-ROX-102612	10/26/2012		41.22	NE																					
	MW1-ROX-121712	12/17/2012		41.22	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0022	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW1-ROX-011013	1/10/2013		41.89	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0015	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW1-ROX-040913	4/9/2013		42.55	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0012	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW1-ROX-070813	7/8/2013		39.56	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0049	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW1-ROX-100313	10/3/2013		40.28	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0013	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW1-ROX-011414	1/14/2014		42.77	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0018	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW1-ROX-040714	4/7/2014		43.28	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW1-ROX-070914	7/9/2014		42.09	NE	<0.005	<0.005		<0.005 UJ		<0.005	<0.005	0.0035	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW1-ROX-100614	10/6/2014	48.80 - 58.80	41.1	NE	<0.005	<0.005		<0.005		<0.005	<0.005 UJ	0.00082 J	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005 UJ	<0.001	<0.001	<0.001
MW-02	MW2-ROX-011612	1/16/2012	49.87 - 59.87	38.89	NE	<0.025	<0.025		<0.025		0.0832	<0.025	<0.005	0.0859	0.0993	0.0375	<0.025	<0.025	<0.005		0.388	0.162	<0.025	0.857	0.056	0.913
	MW2-ROX-050112	5/1/2012		40.25	NE	<0.025	<0.025		<0.025		0.0886	<0.025	<0.005	0.0497	0.119	0.0445	<0.025	<0.025	<0.005		0.413	0.154	<0.025	1.14	0.0797	1.22
	MW2-ROX-073012	7/30/2012		40.60	NE	<0.005	<0.005		<0.005		0.0818	<0.005	<0.001	0.0554	0.116	0.0374	<0.005	<0.005	<0.001		0.338	0.135	<0.005	1.27	0.0906	1.34
	MW2-ROX-102612	10/26/2012		42.35	NE	<0.025	<0.025		<0.025		0.0764	<0.025	0.0115	0.0821	0.104	0.0216	<0.025	<0.025	<0.005		0.299	0.129	<0.025	0.878	0.052	0.93
	MW2-ROX-011113	1/11/2013		42.94	NE	<0.01	<0.01		<0.01		0.0879	<0.01	<0.002	0.0768	0.121	0.0093	<0.01	<0.01	<0.002		0.219	0.105	<0.01	0.685	0.0287	0.713
	MW2-ROX-040913	4/9/2013		43.70	NE	<0.025	<0.025		<0.025		0.085	<0.025	<0.005	0.0578	0.11	0.0073	<0.025	<0.025	<0.005		0.338	0.155	<0.025	1.01	0.0454	1.05
	MW2-ROX-071113	7/11/2013		40.82	NE	<0.005	<0.005		<0.005 UJ		0.0931	<0.005	0.0062	0.114	0.127	0.11	<0.005	<0.005	<0.001		0.522	0.175	<0.005 UJ	1.88	0.174	1.88
	MW2-ROX-100813	10/8/2013		41.73	NE	<0.005	<0.005		0.0079		0.0983	<0.005	0.0032	0.0939	0.132	0.0164	<0.005	<0.005	<0.001		0.368	0.174	0.0768	0.912	0.0519	0.912
	MW2-ROX-012014	1/20/2014		44.00	NE	<0.005	<0.005		<0.005		0.102	<0.005	<0.001	0.0663	0.133	0.0099	<0.005	<0.005	<0.001		0.264	0.156	<0.005	0.486	0.0304	0.516
	MW2-ROX-041014	4/10/2014		44.66	NE	<0.005	<0.005		<0.005		0.0816	<0.005	<0.001	0.0474	0.106	0.0072	<0.005	<0.005	<0.001		0.181	0.121	<0.005	0.444	0.0275	0.472
	MW2-ROX-071414	7/14/2014		43.13	NE	<0.005	<0.005		<0.005		0.0966 J	<0.005	<0.001	0.0792 J	0.112 J	0.0113 J	<0.005	<0.005	<0.001		0.341 J	0.15 J	<0.005	0.764	0.0845	0.804
	MW2-ROX-101014	10/10/2014	49.87 - 59.87	42.49	NE	<0.01	<0.01		<0.01 UJ		0.0675	<0.01 UJ	<0.002	0.0512	0.0867	0.006	<0.01	<0.01	<0.002		0.135	0.0901	<0.01	0.26 J	0.0183	0.278 J
MW-03	MW3-ROX-011612	1/16/2012	34.67 - 44.67	24.93	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.0001	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW3-ROX-043012	4/30/2012		26.19	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0039	<0.0001	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW3-ROX-072712	7/27/2012		26.60	NE	<0.005	<0.005		<0.005 UJ		<0.005	<0.005	<0.001	<0.00011	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005 UJ	<0.001	<0.001	<0.001
	MW3-ROX-102512	10/25/2012		28.39	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0027	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW3-ROX-010913	1/9/2013		29.35	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0008 J	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	0.007	<0.001	<0.001	<0.001
	MW3-ROX-040813	4/8/2013		29.74	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001 UJ	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW3-ROX-071113	7/11/2013		26.32	NE	<0.005	<0.005		<0.005 UJ		0.0049 J	<0.005	0.0035	<0.005	0.0055	0.0013	<0.005	<0.005	<0.001		0.0013 J	<0.005	<0.005 UJ	0.0028	<0.001	0.0028
	MW3-ROX-100813	10/8/2013		27.38	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.00075 J	<0.005	0.0021 J	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	0.0197	0.0011	<0.001	0.0011
	MW3-ROX-011614	1/16/2014		29.91	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005 UJ	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW3-ROX-040914	4/9/2014		30.50	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW3-ROX-071114	7/10/2014		29.05	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005 UJ	<0.005	<0.001	<0.005 UJ	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW3-ROX-100914	10/9/2014	34.67 - 44.67	28.18	NE	<0.005	<0.005		<0.005		0.0004 J	<0.005	0.003 J	<0.005	0.00053 J	0.00046 J	<0.005	<0.005	<0.001		0.0012 J	<0.005	<0.005 UJ	0.00095 J	<0.001	<0.00095 U
MW-04	MW4-ROX-011612	1/16/2012	46.06 - 56.06	36.00	NE	0.0017 J	<0.005		<0.005		0.0061	<0.005	<0.001	<0.0001	0.0061	0.0283	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	0.0148	0.0025	0.0173
	MW4-ROX-050312	5/3/2012		37.45	NE	<0.005	<0.005		<0.005		0.0038 J	<0.005	0.0174	<0.0001	<0.005	0.0255	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	0.016	0.003	0.0189
	MW4-ROX-050312-DUP	5/3/2012		37.45	NE	<0.005	<0.005		<0.005		0.0036 J	<0.005	0.0162	<0.0001	0.0043 J	0.0252	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	0.0151	0.0031	0.0182
	MW4-ROX-072512	7/25/2012		37.63	NE	<0.005	<0.005 UJ		<0.005		0.0061	<0.005	0.015	<0.0001	0.0071	0.0418	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	0.0221	0.0042	0.0262
	MW4-ROX-072512-Dup	7/25/2012		37.63	NE	<0.005	<0.005 UJ		<0.005		0.0063	<0.005	0.0154	<0.0001	0.0072	0.0427	<0.005	<0.005	<0.001		0.00068 J	0.0057	<0.005	0.0214	0.0043	0.0257
	MW4-ROX-102912	10/29/2012		39.45	NE	<0.01	<0.01		<0.01		0.0029 J	<0.01	0.0324	<0.01	0.0033 J	0.0175	<0.01	<0.01	<0.002		<0.01	<0.01	<0.01	0.0114	<0.002	0.0114
	MW4-ROX-011113	1/11/2013		40.20	NE	<0.005	<0.005		<0.005		0.0012 J	<0.005	0.0654	<0.005	0.0026 J	0.0075	<0.005	<0.005	<0.001		0.0019 J	0.0024 J	<0.005	0.0056	<0.001	0.0056
	MW4-ROX-011113-DUP	1/11/2013		40.20	NE	<0.005	<0.005		<0.005		0.0014 J	<0.005	0.0681	<0.005	0.003 J	0.0083	<0.005	<0.005	<0.001		0.0019 J	0.0026 J	<0.005	0.006	<0.001	0.006
	MW4-ROX-030413	3/4/2013		40.20	NE	<0.5	<0.5		<0.5		<0.5	<0.5	0.112	<0.5	<0.5	<0.1	<0.5	<0.5	<0.1		<0.5	<0.5	<0.5	<0.1	<0.1	<0.1
	MW4-ROX-040913	4/9/2013		40.90	NE	<0.01	<0.01		<0.01		<0.01	<0.01	0.112	<0.01	<0.01	0.0057	<0.01	<0.01	<0.002		<0.01	<0.01	<0.01	0.0052	<0.002	0.0062
	MW4-ROX-040913-DUP	4/9/2013		40.90	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.125	<0.005	0.004 J	0.0076	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	0.0073	0.0011	0.0084
	MW4-ROX-071713	7/17/2013		37.61	NE	<0.005	<0.005		0.0041 J		0.0067	<0.005	0.0559 J	<0.005	0.008	0.0381	<0.005	<0.005	0.00085 J		0.0012 J	<0.005	0.0392 J	0.0302	0.0052	0.0353
	MW4-ROX-101613	10/16/2013		38.80	NE	<0.05 UJ	<0.05		<0.05		<0.05	<0.05	0.0333 J	<0.05	<0.05	<0.01	<0.05	<0.05	<0.01		<0.05	<0.05	<0.05 UJ	<0.01	<0.01	0.0058 J
	MW4-ROX-013014	1/30/2014		41.09	NE	<0.005	<0.005		<0.005		0.0021 J	<0.005	<0.001	<0.005	0.0026 J	0.0037	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	0.0132	0.0049	0.0181
	MW4-ROX-041614	4/16/2014		41.91	NE	<0.005	<0.005		<0.005		0.00059 J	<0.005	<0.001	<0.005	0.00081 J	0.00099 J	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	0.0027	0.00039 J	0.0031
	MW4-ROX-071614	7/16/2014		40.18	NE	<0.005	<0.005		<0.005		<0.05	<0.005	<0.001	<0.05 UJ	<0.05	0.006 J	<0.005	<0.005	<0.001		<0.05	<0.05	<0.005	<0.01	<0.01	0.0055 J
	MW4-ROX-101614	10/16/2014	46.06 - 56.06	39.49	NE	<0.025	<0.025		<0.025		0.0026 J	<0.025	0.0379	<0.025	<0.025	<0.005	<0.025 UJ	<0.025	<0.005		0.0037 J	<0.025	<0.025 UJ	0.0086	0.0022 J	0.0108

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
CUMULATIVE SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL RESULTS AND EXCEEDANCES

						VOCs																				
						Ethyl methacrylate	Hexachlorobutadiene	Hexane	2-Hexanone (Methyl N-Butyl Ketone)	Isopentane	Isopropylbenzene (Cumene)	4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	Methyl tert-Butyl Ether (MTBE)	Naphthalene	n-Propylbenzene	Toluene	1,2,3-Trichlorobenzene	1,2,4-Trichlorobenzene	1,1,2-Trichloroethane	1,2,3-Trimethylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl acetate	m,p-Xylenes	o-Xylenes	Xylenes (total)
					Screening Values (mg/L)		0.007 [3]	0.42 [3]	0.035 [3]		0.7 [1]	0.56 [3]	0.07 [1]	0.14 [1]	0.7 [3]	1.0 [1]	0.0056 [3]	0.07 [1]	0.005 [1]			0.07 [3]	7.0 [2]	10 [1]		10 [1]
Location	Sample ID	Sample Date	Screened Interval (ft btoc)	Depth to Water (ft btoc)	Product Thickness (ft)	Analytical Results (mg/L)																				
MW-05	MW5-ROX-011712	1/17/2012	33.97 - 43.97	24.76	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0187	<0.00011	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.00081 U
	MW5-ROX-050312	5/3/2012		25.89	NE	<0.005	<0.005		<0.005		0.001 J	<0.005	0.022	<0.0001	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW5-ROX-072512	7/25/2012		26.18	NE	<0.005	<0.005 UJ		<0.005		0.0066	<0.005	0.013	0.00032	0.0018 J	0.0032	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	0.008	0.0017	0.0097
	MW5-ROX-102912	10/29/2012		28.16	NE	<0.005	<0.005		<0.005		0.002 J	<0.005	0.0219	<0.005	<0.005	0.0018	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	0.0018	<0.001	0.0018
	MW5-ROX-011113	1/11/2013		28.75	NE	<0.005	<0.005		<0.005		0.00086 J	<0.005	0.0295	<0.005	<0.005	0.0008 J	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW5-ROX-040913	4/9/2013		29.41	NE	<0.005	<0.005		<0.005		0.00085 J	<0.005	0.0427	<0.005	<0.005	0.002	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	0.001	<0.001	0.0014
	MW5-ROX-070913	7/9/2013		26.04	NE	<0.005	<0.005		<0.005		0.0268	<0.005	0.0121	<0.005	0.0132	0.0029	<0.005	<0.005	0.0018		<0.005	<0.005	<0.005 UJ	0.0079	0.0018	0.0097
	MW5-ROX-100813	10/8/2013		26.97	NE	<0.005	<0.005		<0.005		0.0045 J	<0.005	0.0221	<0.005	<0.005	0.002	<0.005	<0.005	<0.001		<0.005	<0.005	0.0129	0.0044	0.00097 J	0.0054
	MW5-ROX-011714	1/17/2014		29.59	NE	<0.005	<0.005		<0.005		0.00097 J	<0.005	0.0282	<0.005	<0.005	0.0014	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	0.0081	0.0045	0.0127
	MW5-ROX-041014	4/10/2014		30.09	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0344	0.001 J	<0.005	0.0013	<0.005	<0.005	<0.001		0.00052 J	<0.005	<0.005	0.0013	0.00095 J	0.0023
	MW5-ROX-071414	7/14/2014		28.59	NE	<0.005	<0.005		<0.005		0.00049 J	<0.005	<0.001	<0.005	<0.005	0.0016	<0.005	<0.005	<0.001		0.00033 J	<0.005	<0.005	0.002	0.00073 J	0.0027
	MW-5-ROX-100914	10/9/2014	33.97 - 43.97	27.75	NE	<0.005	<0.005		<0.005 UJ		0.0012 J	<0.005 UJ	0.019	<0.005	<0.005	0.0015	<0.005	<0.005	<0.001		0.00058 J	<0.005	<0.005	0.0027 J	0.0012 J	0.0039 J
MW-06A	MW6A-ROX-011712	1/17/2012	34.83 - 44.83	26.74	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0185	<0.00011	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW6A-ROX-050212	5/2/2012		27.77	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.0001	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW6A-ROX-080112	8/1/2012		28.36	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0019	<0.0001	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW6A-ROX-102412	10/24/2012		30.06	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW6A-ROX-011413	1/14/2013		31.00	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW6A-ROX-040313	4/3/2013		31.62	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW6A-ROX-070913	7/9/2013		28.25	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0027	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005 UJ	<0.001	<0.001	<0.001
	MW6A-ROX-070913-DUP	7/9/2013		28.25	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0025	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005 UJ	<0.001	<0.001	<0.001
	MW6A-ROX-100713	10/7/2013		28.87	NE	<0.005	<0.005		<0.005 UJ		<0.005	<0.005	0.0131	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW6A-ROX-100713-DUP	10/7/2013		28.87	NE	<0.005	<0.005		<0.005 UJ		<0.005	<0.005	0.0132	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW6A-ROX-011614	1/16/2014		31.62	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0108	<0.005 UJ	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW6A-ROX-011614-DUP	1/16/2014		31.62	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0103	<0.005 UJ	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW6A-ROX-040814	4/8/2014		32.16	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.00086 J	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW6A-ROX-040814-DUP	4/8/2014		32.16	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW6A-ROX-071014	7/10/2014		30.75	NE	<0.005	<0.005		<0.005 UJ		<0.005	<0.005	0.0148	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW6A-ROX-100814	10/8/2014	34.83 - 44.83	29.84	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0082 J	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
MW-06B	MW6B-ROX-011712	1/17/2012	64.05 - 69.05	26.77	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0049	<0.00011	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW6B-ROX-050212	5/2/2012		27.82	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0115	<0.0001	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW6B-ROX-080112	8/1/2012		28.39	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0122	<0.0001	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW6B-ROX-102412	10/24/2012		30.11	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0091	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW6B-ROX-011713	1/17/2013		31.11	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0166	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW6B-ROX-040313	4/3/2013		31.68	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0132	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW6B-ROX-070913	7/9/2013		28.25	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0069	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005 UJ	<0.001	<0.001	<0.001
	MW6B-ROX-100713	10/7/2013		28.93	NE	<0.005	<0.005		<0.005 UJ		<0.005	<0.005	0.0113	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW6B-ROX-011614	1/16/2014		31.67	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0069	<0.005 UJ	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW6B-ROX-040814	4/8/2014		32.21	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0047	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW6B-ROX-071014	7/10/2014		30.81	NE	<0.005	<0.005		<0.005 UJ		<0.005	<0.005	0.0054	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW6B-ROX-100814	10/8/2014	64.05 - 69.05	29.87	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.003 J	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
MW-06C	MW6C-ROX-011712	1/17/2012	84.95 - 89.95	26.50	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.00011	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW6C-ROX-050212	5/2/2012		27.62	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.0001	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW6C-ROX-080112	8/1/2012		28.15	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.0001	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW6C-ROX-102412	10/24/2012		27.85	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW6C-ROX-011713	1/17/2013		30.88	NE	<0.005 UJ	<0.005 UJ		<0.005 UJ		<0.005 UJ	<0.005 UJ	0.0012 J	<0.005 UJ	<0.005 UJ	<0.001 UJ	<0.005 UJ	<0.005 UJ	<0.001 UJ		<0.005 UJ	<0.005 UJ	<0.005 UJ	<0.001 UJ	<0.001 UJ	<0.001 UJ
	MW6C-ROX-040313	4/3/2013		31.41	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0022	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW6C-ROX-070913	7/9/2013		28.03	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005 UJ	<0.001	<0.001	<0.001
	MW6C-ROX-100713	10/7/2013		28.72	NE	<0.005	<0.005		<0.005 UJ		<0.005	<0.005	0.00075 J	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW6C-ROX-011614	1/16/2014		31.48	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.00068 J	<0.005 UJ	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW6C-ROX-040814	4/8/2014		32.01	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW6C-ROX-071014	7/10/2014		30.60	NE	<0.005	<0.005		<0.005 UJ		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW6C-ROX-100814	10/8/2014	84.95 - 89.95	29.67	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.00052 J J	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
CUMULATIVE SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL RESULTS AND EXCEEDANCES

						VOCs																				
						Ethyl methacrylate	Hexachlorobutadiene	Hexane	2-Hexanone (Methyl N-Butyl Ketone)	Isopentane	Isopropylbenzene (Cumene)	4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	Methyl tert-Butyl Ether (MTBE)	Naphthalene	n-Propylbenzene	Toluene	1,2,3-Trichlorobenzene	1,2,4-Trichlorobenzene	1,1,2-Trichloroethane	1,2,3-Trimethylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl acetate	m,p-Xylenes	o-Xylenes	Xylenes (total)
Screening Values (mg/L)							0.007 [3]	0.42 [3]	0.035 [3]		0.7 [1]	0.56 [3]	0.07 [1]	0.14 [1]	0.7 [3]	1.0 [1]	0.0056 [3]	0.07 [1]	0.005 [1]			0.07 [3]	7.0 [2]	10 [1]		10 [1]
Location	Sample ID	Sample Date	Screened Interval (ft btoc)	Depth to Water (ft btoc)	Product Thickness (ft)	Analytical Results (mg/L)																				
MW-06D	MW6D-ROX-011712	1/17/2012	104.72 - 109.72	26.33	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.00016 U	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW6D-ROX-050212	5/2/2012		27.45	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.0001	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW6D-ROX-080212	8/2/2012		30.56	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.0001	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW6D-ROX-102412	10/24/2012		29.71	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW6D-ROX-011713	1/17/2013		30.75	NE	<0.005 UJ	<0.005 UJ		<0.005 UJ		<0.005 UJ	<0.005 UJ	<0.001 UJ	<0.005 UJ	<0.005 UJ	<0.001 UJ	<0.005 UJ	<0.005 UJ	<0.001 UJ		<0.005 UJ	<0.005 UJ	<0.005 UJ	<0.001 UJ	<0.001 UJ	<0.001 UJ
	MW6D-ROX-040313	4/3/2013		31.27	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW6D-ROX-070913	7/9/2013		27.91	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005 UJ	<0.001	<0.001	<0.001
	MW6D-ROX-100713	10/7/2013		28.58	NE	<0.005	<0.005		<0.005 UJ		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW6D-ROX-011614	1/16/2014		31.33	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.00061 J	<0.005 UJ	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW6D-ROX-040814	4/8/2014		31.85	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.00094 J	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW6D-ROX-071014	7/10/2014		31.47	NE	<0.005	<0.005		<0.005 UJ		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW6D-ROX-071014-DUP	7/10/2014		31.47	NE	<0.005	<0.005		<0.005 UJ		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW6D-ROX-100814	10/8/2014	104.72 - 109.72	29.53	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.00051 UJ	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW6D-ROX-100814-DUP	10/8/2014		29.53	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.00057 J J	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
MW-07	MW7-ROX-011812	1/18/2012	42.92 - 52.92	38.10	NE	<0.005	<0.005		<0.005		0.0101	<0.005	0.0022	0.0134	0.0135	0.158	<0.005	<0.005	<0.001		0.148	0.0341	<0.005	0.137	0.0527	0.19
	MW7-ROX-011812-DUP	1/18/2012		38.10	NE	<0.005	<0.005		<0.005		0.01	<0.005	0.0024	0.0138	0.0138	0.156	<0.005	<0.005	<0.001		0.146	0.0332	<0.005	0.134	0.051	0.184
	MW7-ROX-050412	5/4/2012		39.19	NE	<0.5	<0.5		<0.5		<0.5	<0.5	<0.1	0.0158	<0.5	0.101	<0.5	<0.5	<0.1		<0.5	<0.5	<0.5	<0.1	<0.1	<0.1
	MW7-ROX-080712	8/7/2012		39.50	NE	<0.05	<0.05		<0.05		<0.05	<0.05	<0.01	0.0089	0.0102 J	0.0629	<0.05	<0.05	<0.01		0.1	0.021 J	<0.05	0.12	0.0486	0.169
	MW7-ROX-103012	10/30/2012		41.23	NE	<10	<10		<10		<10	<10	<2	<10	<10	<2	<10	<10	<2		<10	<10	<10	<2	<2	<2
	MW7-ROX-103012-DUP	10/30/2012		41.23	NE	<10	<10		<10		<10	<10	<2	<10	<10	<2	<10	<10	<2		<10	<10	<10	<2	<2	<2
	MW7-ROX-011513	1/15/2013		42.21	NE	<20	<20		<20		<20	<20	<4	<20	<20	<4	<20	<20	<4		<20	<20	<20	<4	<4	<4
	MW7-ROX-011513-DUP	1/15/2013		42.21	NE	<20	<20		<20		<20	<20	<4	<20	<20	<4	<20	<20	<4		<20	<20	<20	<4	<4	<4
	MW7-ROX-041013	4/10/2013		42.70	NE	<10	<10		<10		<10	<10	<2	<10	<10	<2	<10	<10	<2		<10	<10	<10	<2	<2	<2
	MW7-ROX-041013-DUP	4/10/2013		42.70	NE	<10	<10		<10		<10	<10	<2	<10	<10	<2	<10	<10	<2		<10	<10	<10	<2	<2	<2
	MW7-ROX-071713	7/17/2013		39.60	NE	<0.005	<0.005		<0.005		0.0096 J	<0.005	0.0031 J	0.0185 J	0.0173 J	0.289 J	<0.005	<0.005	<0.001		0.117 J	0.0264 J	0.0094 J	0.455 J	0.183 J	0.639 J
	MW7-ROX-101613	10/16/2013		40.64	NE	<10 UJ	<10		<10		<10	<10	<2 UJ	<10	<10	<2	<10	<10	<2		<10	<10	<10 UJ	<2	<2	<2
	MW7-ROX-013014	1/30/2014		42.94	NE	<13	<13		<13		<13	<13	<2.5	<13	<13	<2.5	<13	<13	<2.5		<13	<13	<13	<2.5	<2.5	<2.5
	MW7-ROX-041614	4/16/2014		43.79	NE	<25	<25		<25		<25	<25	<5	<25	<25	<5	<25	<25	<5		<25	<25	<25	<5	<5	<5
	MW7-ROX-071614	7/16/2014		42.05	NE	<0.005	<0.005		<0.005		0.0127 J	<0.005	<0.001	0.0165 J	0.0197 J	0.224 J	<0.005	<0.005	<0.001		0.143 J	0.0324 J	<0.005	0.48 J	0.187 J	0.667 J
	MW7-ROX-071614-DUP	7/16/2014		42.05	NE	<0.005	<0.005		<0.005		0.0131 J	<0.005	<0.001	0.0141 J	0.0194 J	0.222 J	<0.005	<0.005	<0.001		0.142 J	0.0318 J	<0.005	0.465 J	0.181 J	0.647 J
	MW7-ROX-101614	10/16/2014	42.92 - 52.92	41.31	NE	<25	<25		<25		<25	<25	<5	<25	<25	<5	<25 UJ	<25	<5		<25	<25	<25 UJ	<5	<5	<5
	MW7-ROX-101614-DUP	10/16/2014		41.31	NE	<25	<25		<25		<25	<25	<5	<25	<25	<5	<25 UJ	<25	<5		<25	<25	<25 UJ	<5	<5	<5
MW-08	MW8-ROX-011812	1/18/2012	33.60 - 43.60	29.15	NE	<0.005	<0.005		<0.005		0.0162	<0.005	1.41 J	0.0239	0.0377	<2	<0.005	<0.005	<0.001		0.163	0.061	<0.005	0.574	0.219	0.794
	MW8-ROX-050412	5/4/2012		30.21	NE	<0.5	<0.5		<0.5		<0.5	<0.5	4.15	0.0186	<0.5	1.55	<0.5	<0.5	<0.1		<0.5	<0.5	<0.5	0.978	0.37	1.35
	MW8-ROX-050412-DUP	5/4/2012		30.21	NE	<0.5	<0.5		<0.5		<0.5	<0.5	4.07	0.0188	<0.5	1.52	<0.5	<0.5	<0.1		<0.5	<0.5	<0.5	0.939	0.381	1.32
	MW8-ROX-080712	8/7/2012		30.97	NE	<0.1	<0.1		<0.1		<0.1	<0.1	0.878	0.0164	0.0191 J	0.781	<0.1	<0.1	<0.02		0.104	0.0299 J	<0.1	0.623	0.246	0.868
	MW8-ROX-080712-DUP	8/7/2012		30.97	NE	<0.05	<0.05		<0.05		<0.05	<0.05	0.885	0.0164	0.0176 J	0.729	<0.05	<0.05	<0.01		0.0921	0.0265 J	<0.05	0.598	0.235	0.833
	MW8-ROX-103012	10/30/2012		32.32	NE	<5	<5		<5		<5	<5	<1	<5	<5	<1	<5	<5	<1		<5	<5	<5	<1	<1	<1
	MW8-ROX-011513	1/15/2013		33.30	NE	<10	<10		<10		<10	<10	<2	<10	<10	2.09	<10	<10	<2		<10	<10	<10	<2	<2	<2
	MW8-ROX-041013	4/10/2013		33.77	NE	<25	<25		<25		<25	<25	<5	<25	<25	<5	<25	<25	<5		<25	<25	<25	<5	<5	<5
	MW8-ROX-071713	7/17/2013		30.43	NE	<0.005	<0.005		<0.005		0.0173	<0.005	0.197 J	0.0335	0.0374	0.348	<0.005	<0.005	<0.001		0.199	0.0598	<0.005 UJ	1.01	0.361	1.3
	MW8-ROX-071713-DUP	7/17/2013		30.43	NE	<0.005	<0.005		<0.005		0.0174	<0.005	0.187 J	0.0347	0.0383	0.341	<0.005	<0.005	<0.001		0.203	0.0613	<0.005 UJ	0.818 J	0.364	1.05
	MW8-ROX-101613	10/16/2013		31.59	NE	<10 UJ	<10		<10		<10	<10	<2 UJ	<10	<10	<2	<10	<10	<2		<10	<10	<10 UJ	<2	<2	<2
	MW8-ROX-101613-DUP	10/16/2013		31.59	NE	<10 UJ	<10		<10		<10	<10	<2 UJ	<10	<10	<2	<10	<10	<2		<10	<10	<10 UJ	<2	<2	<2
	MW8-ROX-013014	1/30/2014		34.02	NE	<13	<13		<13		<13	<13	1.92 J	<13	<13	<2.5	<13	<13	<2.5		<13	<13	<13	<2.5	<2.5	<2.5
	MW8-ROX-013014-DUP	1/30/2014		34.02	NE	<13	<13		<13		<13	<13	1.99 J	<13	<13	<2.5	<13	<13	<2.5		<13	<13	<13	<2.5	<2.5	<2.5
	MW8-ROX-041614	4/16/2014		34.73	NE	<10	<10		<10		<10	<10	<2	<10	<10	<2	<10	<10	<2		<10	<10	<10	<2	<2	<2
	MW8-ROX-041614-DUP	4/16/2014		34.73	NE	<10	<10		<10		<10	<10	<2	<10	<10	<2	<10	<10	<2		<10	<10	<10	<2	<2	<2
	MW8-ROX-071614	7/16/2014		33.01	NE	<0.005 UJ	<0.005 UJ		<0.005 UJ		0.0266 J	<0.005 UJ	0.392 J	0.0598 J	0.0606 J	0.108 J	<0.005 UJ	<0.005 UJ	<0.001 UJ		0.226 J	0.0904 J	<0.005 UJ	0.377 J	0.141 J	0.518 J
	MW8-ROX-101614	10/16/2014	33.60 - 43.60	32.23	NE	<5	<5		<5		<5	<5	1.19	<5	<5	<1	<5 UJ	<5	<1		<5	<5	<5 UJ	<1	<1	<1

TABLE 3
CUMULATIVE SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL RESULTS AND EXCEEDANCES

						VOCs																			
						Ethyl methacrylate	Hexachlorobutadiene	Hexane	2-Hexanone (Methyl N-Butyl Ketone)	Isopentane	Isopropylbenzene (Cumene)	4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	Methyl tert-Butyl Ether (MTBE)	Naphthalene	n-Propylbenzene	Toluene	1,2,3-Trichlorobenzene	1,2,4-Trichlorobenzene	1,1,2-Trichloroethane	1,2,3-Trimethylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl acetate	m,p-Xylenes	o-Xylenes	Xylenes (total)
Screening Values (mg/L)							0.007 [3]	0.42 [3]	0.035 [3]		0.7 [1]	0.56 [3]	0.07 [1]	0.14 [1]	0.7 [3]	1.0 [1]	0.0056 [3]	0.07 [1]	0.005 [1]			0.07 [3]	7.0 [2]	10 [1]		10 [1]
Location	Sample ID	Sample Date	Screened Interval (ft btoc)	Depth to Water (ft btoc)	Product Thickness (ft)	Analytical Results (mg/L)																			
MW-09	MW9-ROX-011612	1/16/2012	46.45 - 56.45	39.50	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	0.000062 J	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW9-ROX-050312	5/3/2012		41.03	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001		<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW9-ROX-072712	7/27/2012		41.30	NE	<0.005	<0.005		<0.005 UJ		<0.005	<0.005	<0.001	<0.0001	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005 UJ	<0.001	<0.001	<0.001
	MW9-ROX-102912	10/29/2012		43.17	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW9-ROX-011113	1/11/2013		43.90	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW9-ROX-040913	4/9/2013		44.67	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW9-ROX-070813	7/8/2013		42.35	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW9-ROX-100313	10/3/2013		42.27	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW9-ROX-011414	1/14/2014		44.47	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW9-ROX-040714	4/7/2014		44.99	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW9-ROX-070914	7/9/2014		44.35	NE	<0.005	<0.005		<0.005 UJ		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW9-ROX-100714	10/7/2014	46.45 - 56.45	43.52	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005 UJ	<0.001	<0.001	<0.001
MW-10	MW10-ROX-011612	1/16/2012	44.43 - 54.43	39.28	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	0.000047 J	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW10-ROX-050112	5/1/2012		40.86	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	0.000052 J	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW10-ROX-072712	7/27/2012		41.21	NE	<0.005	<0.005		<0.005 UJ		<0.005	<0.005	<0.001	<0.0001	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005 UJ	<0.001	<0.001	<0.001
	MW10-ROX-102612	10/26/2012		43.08	NE																				
	MW10-ROX-121712	12/17/2012		43.08	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	0.00058 J
	MW10-ROX-011013	1/10/2013		44.10	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	0.016	<0.001	<0.001	<0.001
	MW10-ROX-012113	1/21/2013		44.10	NE	<0.005	<0.005	<0.02	<0.025		<0.005	<0.025	<0.002	<0.0001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	
	MW10-ROX-040913	4/9/2013		44.60	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW10-ROX-070813	7/8/2013		42.27	NE	<0.005	<0.005		<0.005	1.9	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW10-ROX-100313	10/3/2013		42.38	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW10-ROX-011514	1/15/2014		44.42	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW10-ROX-040714	4/7/2014		45.00	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW10-ROX-070914	7/9/2014		44.35	NE	<0.005	<0.005		<0.005 UJ		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW10-ROX-100714	10/7/2014	44.43 - 54.43	43.58	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005 UJ	<0.001	<0.001	<0.001
MW-11	MW11-ROX-011712	1/17/2012	41.66 - 51.66	37.44	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001		<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW11-ROX-043012	4/30/2012		38.66	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.0001	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW11-ROX-072712	7/27/2012		38.90	NE	<0.005	<0.005		<0.005 UJ		<0.005	<0.005	<0.001	<0.00012	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005 UJ	<0.001	<0.001	<0.001
	MW11-ROX-102512	10/25/2012		40.59	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW11-ROX-011013	1/10/2013		41.43	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW11-ROX-040813	4/8/2013		42.02	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001 UJ	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW11-ROX-070813	7/8/2013		39.24	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW11-ROX-100713	10/7/2013		39.95	NE	<0.005	<0.005		<0.005 UJ		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW11-ROX-011514	1/15/2014		42.16	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW11-ROX-040714	4/7/2014		42.70	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW11-ROX-070914	7/9/2014		41.75	NE	<0.005	<0.005		<0.005 UJ		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW11-ROX-100714	10/7/2014	41.66 - 51.66	40.89	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005 UJ	<0.001	<0.001	<0.001
MW-12	MW12-ROX-011712	1/17/2012	41.92 - 51.92	37.70	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.00011	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW12-ROX-011712-DUP	1/17/2012		37.70	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.00011	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW12-ROX-043012	4/30/2012		38.98	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.0001	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW12-ROX-072712	7/27/2012		39.22	NE	<0.005	<0.005		<0.005 UJ		<0.005	<0.005	<0.001	<0.00011	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005 UJ	<0.001	<0.001	<0.001
	MW12-ROX-102512	10/25/2012		40.95	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW12-ROX-011013	1/10/2013		41.83	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	0.00089 J	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW12-ROX-040813	4/8/2013		42.46	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001 UJ	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW12-ROX-070913	7/9/2013		39.28	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005 UJ	<0.001	<0.001	<0.001
	MW12-ROX-100713	10/7/2013		40.22	NE	<0.005	<0.005		<0.005 UJ		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW12-ROX-011514	1/15/2014		42.54	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW12-ROX-040814	4/8/2014		43.15	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW12-ROX-070914	7/9/2014		41.97	NE	<0.005	<0.005		<0.005 UJ		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW12-ROX-100614	10/6/2014	41.92 - 51.92	40.98	NE	<0.005	<0.005		<0.005		<0.005	<0.005 UJ	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005 UJ	<0.001	<0.001	<0.001

TABLE 3
CUMULATIVE SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL RESULTS AND EXCEEDANCES

						VOCs																				
						Ethyl methacrylate	Hexachlorobutadiene	Hexane	2-Hexanone (Methyl N-Butyl Ketone)	Isopentane	Isopropylbenzene (Cumene)	4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	Methyl tert-Butyl Ether (MTBE)	Naphthalene	n-Propylbenzene	Toluene	1,2,3-Trichlorobenzene	1,2,4-Trichlorobenzene	1,1,2-Trichloroethane	1,2,3-Trimethylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl acetate	m,p-Xylenes	o-Xylenes	Xylenes (total)
			Screening Values (mg/L)				0.007 [3]	0.42 [3]	0.035 [3]		0.7 [1]	0.56 [3]	0.07 [1]	0.14 [1]	0.7 [3]	1.0 [1]	0.0056 [3]	0.07 [1]	0.005 [1]			0.07 [3]	7.0 [2]	10 [1]		10 [1]
Location	Sample ID	Sample Date	Screened Interval (ft btoc)	Depth to Water (ft btoc)	Product Thickness (ft)	Analytical Results (mg/L)																				
MW-13	MW13-ROX-012012	1/20/2012	25.57 - 35.57	24.77	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0066 J	0.00021	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW13-ROX-050712	5/7/2012		25.79	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0083	<0.0001	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW13-ROX-080812	8/8/2012		26.67	NE	<0.005 UJ	<0.005 UJ		<0.005 UJ		<0.005 UJ	<0.005 UJ	0.0133 J	<0.0013 U	<0.005 UJ	<0.001 UJ	<0.005 UJ	<0.005 UJ	<0.001 UJ		<0.005 UJ	<0.005 UJ	<0.005 UJ	<0.001 UJ	<0.001 UJ	<0.001 UJ
	MW13-ROX-110812	11/8/2012		25.30	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0093	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW13-ROX-012313	1/23/2013		29.26	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0082	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005 UJ	<0.001	<0.001	<0.001
	MW13-ROX-041213	4/12/2013		29.44	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0093	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW13-ROX-071213	7/12/2013		25.67	NE	<0.005	<0.005 UJ		<0.005		<0.005	<0.005	0.0094	<0.005	0.00064 J	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005 UJ	<0.001	<0.001	<0.001
	MW13-ROX-100913	10/9/2013		26.94	NE	<0.005	<0.005 UJ		<0.005		<0.005	<0.005	0.0072	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW13-ROX-012914	1/29/2014		29.63	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.008 J	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW13-ROX-041114	4/11/2014		30.15	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0062	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW13-ROX-070714	7/7/2014		28.49	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0091 J	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW13-ROX-101014	10/10/2014	25.57 - 35.57	27.48	NE	<0.005	<0.005		<0.005 UJ		<0.005	<0.005	0.0045	<0.005	<0.005	<0.001	<0.005 UJ	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001 UJ	<0.001	0.0011 J
MW-14	MW14-ROX-051012	5/10/2012	33.42 - 43.42	NM	NE	<0.005	<0.005		<0.005		0.0104	<0.005	<0.001	0.00099	0.0078	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	0.0016	0.00041 J	0.002
	MW14-ROX-080312	8/3/2012		NM	NE	<0.005	<0.005		<0.005		0.0173	<0.005	<0.001	0.0013	0.0137	0.00093 J	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	0.0033	0.00061 J	0.0039
	MW14-ROX-103112	10/31/2012		32.02	NE	<0.005	<0.005		<0.005		0.0161	<0.005	<0.001	<0.005	0.0121	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	0.0024	<0.001	0.0024
	MW14-ROX-011813	1/18/2013		33.05	NE	<0.005	<0.005		<0.005		0.021	<0.005	<0.001	<0.005	0.0162	0.00097 J	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	0.0026	<0.001	0.003
	MW14-ROX-041113	4/11/2013		33.31	NE	<0.005	<0.005		<0.005		0.0346	<0.005	<0.001	<0.005	0.0206	0.0014	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	0.0038	<0.001	0.0043
	MW14-ROX-071213	7/12/2013		30.36	NE	<0.005	<0.005 UJ		<0.005		0.0168	<0.005	<0.001	<0.005	0.0109	0.00059 J	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005 UJ	0.0026	<0.001	0.0029
	MW14-ROX-101013	10/10/2013		30.80	NE	<0.005	<0.005		<0.005		0.0011 J	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		0.00088 J	0.0011 J	<0.005	<0.001	<0.001	<0.001
	MW14-ROX-012914	1/29/2014		33.67	NE	<0.005	<0.005		<0.005		0.0036 J	<0.005	<0.001	<0.005	0.002 J	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW14-ROX-041114	4/11/2014		34.30	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW14-ROX-070714	7/7/2014		32.82	NE	<0.005	<0.005		<0.005		0.00073 J	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW14-ROX-101414	10/14/2014	33.42 - 43.42	31.65	NE	<0.005	<0.005		<0.005 UJ		0.00043 J	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005 UJ	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001 UJ	<0.001	0.00041 J J
MW-16	MW16-ROX-012313	1/23/2013	37.06 - 47.06	43.05	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005 UJ	<0.001	<0.001	<0.001
	MW16-ROX-040813	4/8/2013		43.39	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001 UJ	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW16-ROX-070813	7/8/2013		40.62	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW16-ROX-100813	10/8/2013		41.62	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW16-ROX-011514	1/15/2014		43.76	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW16-ROX-040914	4/9/2014		44.63	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW16-ROX-071014	7/10/2014		43.15	NE	<0.005	<0.005		<0.005 UJ		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW16-ROX-100714	10/7/2014	37.06 - 47.06	42.27	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005 UJ	<0.001	<0.001	<0.001
MW-22	MW22-ROX-012313	1/23/2013	37.88 - 47.88	41.80	NE	<0.25	<0.25		<0.25		0.126 J	<0.25	<0.05	0.396	0.22 J	10.5	<0.25	<0.25	<0.05		1.23	0.288	<0.25 UJ	7.56	3.73	11.3
	MW22-ROX-012313-DUP	1/23/2013		41.80	NE	<0.25	<0.25		<0.25		0.124 J	<0.25	<0.05	0.377	0.234 J	9.06	<0.25	<0.25	<0.05		1.26	0.291	<0.25 UJ	6.96	3.52	10.5
	MW22-ROX-040513	4/5/2013		42.23	NE	<0.005	<0.005		<0.005		0.159 J	0.0124 J	<0.001	0.286 J	0.29 J	6.14	<0.005	<0.005	<0.001		0.931	0.379 J	<0.005	5.15	2.64	7.79
	MW22-ROX-071113	7/11/2013		39.35	NE	<0.005	<0.005		<0.005 UJ		0.131	0.0102	<0.001	0.345	0.242	3.92	<0.005	<0.005	<0.001		0.864	0.309	<0.005 UJ	4.13	2.26	6.39
	MW22-ROX-071113-DUP	7/11/2013		39.35	NE	<0.005	<0.005		<0.005 UJ		0.133	0.0103	<0.001	0.362	0.245	3.57	<0.005	<0.005	<0.001		0.754	0.311	<0.005 UJ	3.83	2.05	5.88
	MW22-ROX-100913	10/9/2013		40.39	NE	<0.005	<0.005 UJ		<0.005		0.137	0.0101	<0.001	0.47	0.244	6.02	<0.005	<0.005	<0.001		1.37	0.357	<0.005	7.46	3.48	10.9
	MW22-ROX-100913-DUP	10/9/2013		40.39	NE	<0.005	<0.005 UJ		<0.005		0.136	0.0084	<0.001	0.445	0.243	6.32	<0.005	<0.005	<0.001		1.43	0.343	<0.005	7.75	3.65	11.4
	MW22-ROX-012014	1/20/2014		42.49	NE	<0.005	<0.005		0.0082		0.169	0.007	<0.001	0.287	0.287	5.33	<0.005	<0.005	<0.001		1.3	0.298	<0.005	5.65	2.65	8.29
	MW22-ROX-012014-DUP	1/20/2014		42.49	NE	<0.005	<0.005		0.0088		0.169	0.007	<0.001	0.262	0.286	5.71	<0.005	<0.005	<0.001		1.37	0.398	<0.005	6.01	2.81	8.83
	MW22-ROX-041014	4/10/2014		43.15	NE	<0.005	<0.005		<0.005		0.157	<0.005	<0.001	0.334	0.254	5.95	<0.005	<0.005	<0.001		1.1	0.384	<0.005	6.85	3.38	10.2
	MW22-ROX-041014-DUP	4/10/2014		43.15	NE	<0.005	<0.005		<0.005		0.138	0.0082	<0.001	0.28	0.235	5.52	<0.005	<0.005	<0.001		1	0.35	<0.005	6.23	3.12	9.35
	MW22-ROX-071414	7/14/2014		41.85	NE	<0.005	<0.005		<0.005		0.153 J	<0.005	<0.001	0.282 J	0.205 J	3.14	<0.005	<0.005	<0.001		0.353 J	0.262 J	<0.005	3.78	1.85	5.64
	MW22-ROX-101014	10/10/2014	37.88 - 47.88	41.43	NE	<0.05	<0.05		<0.05 UJ		0.0661	<0.05 UJ	<0.01	0.202	0.112	2.3	<0.05	<0.05	<0.01		0.688	0.207	<0.05	3.08 J	1.74	4.82 J
MW-24	MW24-ROX-040513	4/5/2013	38.89 - 48.89	43.39	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	0.0014	<0.005	<0.005	<0.001		0.00051 J	<0.005	<0.005	0.0021	0.0009 J	0.003
	MW24-ROX-071113	7/11/2013		40.35	NE	<0.005	<0.005		<0.005 UJ		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005 UJ	<0.001	<0.001	<0.001
	MW24-ROX-100913	10/9/2013		41.27	NE	<0.005	<0.005 UJ		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW24-ROX-011514	1/15/2014		43.47	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW24-ROX-040914	4/9/2014		44.13	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW24-ROX-071114	7/10/2014		42.97	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005 UJ	<0.005	<0.001	<0.005 UJ	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	MW24-ROX-100814	10/8/2014	38.89 - 48.89	42.16	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001 UJ	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
MW-25	MW25-ROX-102114	10/21/2014	35.59 - 45.59	36.44	NE	<10	<10		<10		<10	<10	<2	<10	<10	2.65	<10	<10	<2		<10	<10	<10	<2	<2	0.753 J
MW-26	MW26-ROX-102114	10/21/2014	38.15 - 48.15	39.43	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0019	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
MW-27	MW27-ROX-102114	10/21/2014	39.79 - 49.79	41.57	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
MW-28	MW28-ROX-102114	10/21/2014	33.61 - 43.61	36.44	NE	<0.005	<0.005		<0.005		0.00075 J	<0.005	<0.001	<0.005	<0.005	0.0011	<0.005	<0.005	<0.001		0.0036 J	0.00059 J	<0.005	0.0036	0.0051	0.0087

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
CUMULATIVE SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL RESULTS AND EXCEEDANCES

						VOCs																				
						Ethyl methacrylate	Hexachlorobutadiene	Hexane	2-Hexanone (Methyl N-Butyl Ketone)	Isopentane	Isopropylbenzene (Cumene)	4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	Methyl tert-Butyl Ether (MTBE)	Naphthalene	n-Propylbenzene	Toluene	1,2,3-Trichlorobenzene	1,2,4-Trichlorobenzene	1,1,2-Trichloroethane	1,2,3-Trimethylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl acetate	m,p-Xylenes	o-Xylenes	Xylenes (total)
			Screening Values (mg/L)				0.007 [3]	0.42 [3]	0.035 [3]		0.7 [1]	0.56 [3]	0.07 [1]	0.14 [1]	0.7 [3]	1.0 [1]	0.0056 [3]	0.07 [1]	0.005 [1]			0.07 [3]	7.0 [2]	10 [1]		10 [1]
Location	Sample ID	Sample Date	Screened Interval (ft btoc)	Depth to Water (ft btoc)	Product Thickness (ft)	Analytical Results (mg/L)																				
P-54	P54-ROX-011712	1/17/2012	38.00 - 63.00	37.17	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.000089 U	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	P54-ROX-050412	5/4/2012		38.77	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.0001	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	P54-ROX-080212	8/2/2012		38.95	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.00011	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	P54-ROX-103012	10/30/2012		40.70	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	P54-ROX-011113	1/11/2013		41.56	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	P54-ROX-041013	4/10/2013		41.80	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	P54-ROX-050313	5/3/2013		41.80	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	P54-ROX-071113	7/11/2013		39.07	NE	<0.005	<0.005		<0.005 UJ		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005 UJ	<0.001	<0.001	<0.001
	P54-ROX-100813	10/8/2013		39.94	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	P54-ROX-011514	1/15/2014		42.20	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	P54-ROX-040914	4/9/2014		42.80	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	P54-ROX-071114	7/10/2014		41.71	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005 UJ	<0.005	<0.001	<0.005 UJ	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	P54-ROX-100814	10/8/2014	38.00 - 63.00	40.88	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001 UJ	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
P-55	P55-ROX-011912	1/19/2012	39.82 - 64.82	41.09	NE	<0.005	<0.005		<0.005		0.0105 J	<0.005	<0.001	0.0197	0.0173	0.0337	<0.005	<0.005	<0.001		0.017	0.009	<0.005	0.205	0.0663	0.271
	P55-ROX-011912-D	1/19/2012		41.09	NE	<0.005	<0.005		<0.005		0.0105 J	<0.005	<0.001	0.0169	0.0176	0.0359	<0.005	<0.005	<0.001		0.0179	0.0097	<0.005	0.21	0.0649	0.275
	P55-ROX-050912	5/9/2012		42.44	NE	<0.005	<0.005		<0.005		0.0392	<0.005	<0.001	0.0271	0.0699	0.227	<0.005	<0.005	<0.001		0.158	0.0368	<0.005	0.885	0.112	0.97
	P55-ROX-012113	1/21/2013	40.43 - 50.43	43.60	NE	<0.05	<0.01	0.276	<0.25		0.0678	<0.25	<0.02	0.079 J	0.14	0.189	<0.05	<0.01	<0.05	0.183	0.039 J	0.026 J	<0.1	0.279	0.347	
	P55-ROX-012113	1/21/2013		43.60	NE	<0.005	<0.005		<0.005		0.0937	<0.005	0.002	0.12	0.206	0.262	<0.005	<0.005	<0.001		0.046	0.0312	<0.005	0.356	0.382	0.738
	P55-ROX-041513	4/15/2013		43.63	NE	<0.01	<0.01		<0.01		0.068	<0.01	<0.002	0.0974 J	0.148	0.143	<0.01	<0.01	<0.002		0.0241	0.0229	<0.01	0.235	0.362	0.597
	P55-ROX-071613	7/16/2013		40.06	NE	<0.005	<0.005 UJ		<0.005	0.72	0.0884	<0.005	<0.001	0.0841	0.175	0.343	<0.005	<0.005	<0.001		0.073	0.0559	<0.005 UJ	0.535	0.558	1.11
	P55-ROX-101013	10/10/2013		41.67	NE	<0.005	<0.005		<0.005		0.0851	<0.005	0.001	0.121	0.167	0.601	<0.005	<0.005	<0.001		0.151	0.062	<0.005	0.739	0.639	1.38
P-56	P56-ROX-011912	1/19/2012	40.82 - 65.82	41.81	NE	<0.005	<0.005		<0.005		0.0787 J	<0.005	<0.001	0.0596	0.0697	0.023	<0.005	<0.005	<0.001		0.0229	0.0077	<0.005	0.202	0.0161	0.218
	P56-ROX-050812	5/8/2012		43.09	NE	<0.005	<0.005		<0.005		0.0876	<0.005	<0.001	0.0667	0.111	0.197	<0.005	<0.005	<0.001		0.312	0.0708	<0.005	1.37	0.197	1.53
	P56-ROX-080612	8/6/2012		43.60	NE	<0.025	<0.025		<0.025 UJ		0.0442	<0.025	<0.005	0.0197	0.0439	0.0109	<0.025 UJ	<0.025 UJ	<0.005		0.0131 J	0.005 J	<0.025 UJ	0.11	0.0083	0.118
	P56-ROX-103112	10/31/2012		44.80	NE	<0.005	<0.005		<0.005		0.0752	<0.005	<0.001	0.167	0.105	0.187	<0.005	<0.005	<0.001		0.387	0.0901	<0.005	1.62	0.144	1.73
	P56-ROX-011713	1/17/2013		45.65	NE	<0.025	<0.025		<0.025		0.0398	<0.025	<0.005	0.0322	0.0456	0.0119	<0.025	<0.025	<0.005		0.0172 J	0.0092 J	<0.025	0.0745	<0.005	0.0745
	P56-ROX-041213	4/12/2013		46.12	NE	<0.01	<0.01		<0.01		0.0581	<0.01	<0.002	0.0964 J	0.0805	0.0799	<0.01	<0.01	<0.002		0.27	0.0486	<0.01	1	0.0243	1.03
	P56-ROX-071513	7/15/2013		43.25	NE	<0.005	<0.005		<0.005		0.0968	<0.005	<0.001	0.316	0.145	0.311	<0.005	<0.005	<0.001		0.551	0.134	<0.005	2.67	0.21	2.85
	P56-ROX-101013	10/10/2013		44.48	NE	<0.005	<0.005		<0.005		0.0822	<0.005	0.00058 J	0.156	0.105	0.157	<0.005	<0.005	<0.001		0.33	0.0714	<0.005	1.7	0.0617	1.76
	P56-ROX-012214	1/22/2014		46.35	NE	<0.005	<0.005		<0.005		0.0399	<0.005	<0.001	0.0566	0.0426	0.0263	<0.005	<0.005	<0.001		0.074	0.0172	<0.005	0.224	0.0093	0.233
	P56-ROX-041414	4/14/2014		47.32	NE	<0.005	<0.005		<0.005		0.0781	<0.005	<0.001	0.0836	0.0951	0.0669	<0.005	<0.005	<0.001		0.205	0.0472	<0.005	0.742	0.0156	0.758
	P56-ROX-070814	7/8/2014		45.97	NE	<0.005	<0.005		<0.005		0.106 J	<0.005	<0.001	0.156 J	0.133 J	0.288 J	<0.005	<0.005	<0.001		0.487 J	0.166 J	<0.005	2.04 J	0.122 J	2.09 J
	P56-ROX-101314	10/13/2014	40.82 - 65.82	45.05	NE	<0.005	<0.005		<0.005 UJ		0.0645	<0.005 UJ	<0.001	0.0679	0.0709	0.0183	<0.005	<0.005	<0.001		0.0657	0.0194	<0.005	0.17 J	0.0066	0.176 J
P-57	P57-ROX-021312	2/13/2012	40.46 - 65.46	42.13	NE	<2.5	<2.5		<2.5		<2.5	<2.5	<0.5	0.271 J	<2.5	<0.5	<2.5	<2.5	<0.5		<2.5	<2.5	<2.5	0.502	<0.5	0.502
	P57-ROX-050712	5/7/2012		42.92	NE	<0.5	<0.5		<0.5		<0.5	<0.5	0.453	0.0894	<0.5	<0.1	<0.5	<0.5	<0.1		0.632	0.159 J	<0.5	0.928	0.0563 J	0.984
	P57-ROX-080612	8/6/2012		43.53	NE	<0.25	<0.25		<0.25 UJ		<0.25	<0.25	0.238	0.119	<0.25	0.0577	<0.25	<0.25	<0.05		0.506	0.123 J	<0.25 UJ	0.74	0.0328 J	0.773
	P57-ROX-080612-DUP	8/6/2012		43.53	NE	<0.005	<0.005		<0.005 UJ		0.0432	<0.005	0.212	0.115	0.0519	0.0558	<0.005	<0.005	<0.001		0.505 E	0.137	<0.005 UJ	0.692	0.0348	0.727
	P57-ROX-110512	11/5/2012		44.98	NE	<2.5	<2.5		<2.5		<2.5	<2.5	<0.5	1.53 J	<2.5	<0.5	<2.5	<2.5	<0.5		0.577 J	<2.5	<2.5	1.03	<0.5	1.03
	P57-ROX-012913	1/29/2013		45.92	NE	<2.5	<2.5		<2.5		<2.5	<2.5	<0.5	<2.5	0.331 J	<0.5	<2.5	<2.5	<0.5		<2.5	<2.5	<2.5	<0.5	<0.5	<0.5
	P57-ROX-041113	4/11/2013		46.29	NE	<2.5	<2.5		<2.5		<2.5	<2.5	<0.5	<2.5	<2.5	<0.5	<2.5	<2.5	<0.5		0.494 J	<2.5	<2.5	<0.5	<0.5	<0.5
	P57-ROX-071613	7/16/2013		43.38	NE	<0.005	<0.005 UJ		<0.005		0.0698 J	<0.005	0.112 J	0.203 J	0.0802 J	0.202 J	<0.005	<0.005	<0.001		<5	0.129 J	<0.005 UJ	1.81	0.256 J	2.01
	P57-ROX-101413	10/14/2013		44.38	NE	<0.005	<0.005		<0.005		0.0539	<0.005	0.107	0.206	0.0586	0.0421	<0.005	<0.005	<0.001		0.763 J	0.12	<0.005	0.468	0.0206	0.489
	P57-ROX-020314	2/3/2014		46.57	NE	<5	<5		<5		<5	<5	<1	<5	<5	<1	<5	<5	<1		<5	<5	<5	<1	<1	<1
	P57-ROX-041514	4/15/2014		46.70	NE	<0.005	<0.005		0.0062		0.0492	<0.005	0.0563	0.272	0.0585	0.0248	0.0015 J	<0.005	<0.001		0.503 E J	0.114	<0.005	0.296	0.0143	0.311
	P57-ROX-070814	7/8/2014		45.95	NE	<0.005 UJ	<0.005 UJ		<0.005 UJ		0.0656 J	<0.005 UJ	<0.001 UJ	0.128 J	0.0605 J	0.154 J	<0.005 UJ	<0.005 UJ	<0.001 UJ		0.375 J	0.0913 J	<0.005 UJ	1.46	0.237	1.7
	P57-ROX-070814-DUP	7/8/2014		45.95	NE	<0.005 UJ	<0.005 UJ		<0.005 UJ		0.0689 J	<0.005 UJ	<0.001 UJ	0.139 J	0.0633 J	0.16 J	<0.005 UJ	<0.005 UJ	<0.001 UJ		0.392 J	0.0954 J	<0.005 UJ	1.56	0.234	1.79
	P57-ROX-101414	10/14/2014	40.46 - 65.46	45.00	NE	<10	<10		<10 UJ		<10	<10 UJ	<2	2.05 J	<10	2.65	<10	<10	<2		2.37 J	<10	<10	5.79 J	2.1	7.89 J
	P57-ROX-101414-DUP	10/14/2014		45.00	NE	<10	<10		<10 UJ		<10	<10 UJ	<2	<10	<10	0.849 J	<10	<10	<2		1.18 J	<10	<10	2.37 J	0.949 J	3.32 J

TABLE 3
CUMULATIVE SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL RESULTS AND EXCEEDANCES

						VOCs																		
						Ethyl methacrylate	Hexachlorobutadiene	Hexane	2-Hexanone (Methyl N-Butyl Ketone)	Isopentane	Isopropylbenzene (Cumene)	4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	Methyl tert-Butyl Ether (MTBE)	Naphthalene	n-Propylbenzene	Toluene	1,2,3-Trichlorobenzene	1,2,4-Trichlorobenzene	1,1,2-Trichloroethane	1,2,3-Trimethylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl acetate	m,p-Xylenes	o-Xylenes	Xylenes (total)
					Screening Values (mg/L)		0.007 [3]	0.42 [3]	0.035 [3]		0.7 [1]	0.56 [3]	0.07 [1]	0.14 [1]	0.7 [3]	1.0 [1]	0.0056 [3]	0.07 [1]	0.005 [1]			0.07 [3]	7.0 [2]	10 [1]		10 [1]
Location	Sample ID	Sample Date	Screened Interval (ft btoc)	Depth to Water (ft btoc)	Product Thickness (ft)	Analytical Results (mg/L)																				
P-58	P58-ROX-011912	1/19/2012	40.21 - 65.21	39.73	NE	<0.005	<0.005		0.0097		0.108 J	<0.005	0.0082	0.212	0.129 J	0.155 J	<0.005	<0.005	<0.001			0.14 J	0.0408 J	0.679	0.108	0.787
	P58-ROX-011912-D	1/19/2012		39.73	NE	<0.005	<0.005		<0.005		0.0832 J	<0.005	0.0101 J	0.191 J	0.0993 J	0.119 J	<0.005	<0.005	<0.001		<5	0.11	<0.005 UJ	<1	<1	<1
	P58-ROX-050712	5/7/2012		40.90	NE	<0.5	<0.5		<0.5		<0.5	<0.5	<0.1	0.112 J	0.106 J	0.137	<0.5	<0.5	<0.1		0.776	0.108 J	<0.5	0.666	0.0982 J	0.764
	P58-ROX-050712-DUP	5/7/2012		40.90	NE	<0.5	<0.5		<0.5		<0.5	<0.5	<0.1	0.0697 J	0.108 J	0.145	<0.5	<0.5	<0.1		0.757	0.109 J	<0.5	0.636	0.0968 J	0.733
	P58-ROX-080612	8/6/2012		41.63	NE	<0.1	<0.1		<0.1 UJ		0.0649 J	<0.1	<0.02	0.142	0.0909 J	0.117	<0.1	<0.1	<0.02		0.705	0.0955 J	<0.1 UJ	0.652	0.0976	0.749
	P58-ROX-080612-DUP	8/6/2012		41.63	NE	<0.05	<0.05		<0.05		0.0718	<0.05	<0.01	0.15	0.0996	0.128	<0.05	<0.05	<0.01		0.737	0.102	<0.05	0.656	0.104	0.759
	P58-ROX-110612	11/6/2012		43.09	NE	<0.5	<0.5		<0.5		<0.5	<0.5	<0.1	<0.5	<0.5	0.124	<0.5	<0.5	<0.1		0.658	0.108 J	<0.5	0.544	0.0807 J	0.624
	P58-ROX-121012	12/10/2012		43.09	NE																					
	P58-ROX-012213	1/22/2013		44.21	NE	<5	<5		<5		<5	<5	<1	<5	<5	<1	<5	<5	<1		<5	<5	<5	<1	<1	0.728 J
	P58-ROX-041113	4/11/2013		44.40	NE	<10	<10		<10		<10	<10	<2	<10	<10	<2	<10	<10	<2		0.926 J	<10	<10	<2	<2	<2
	P58-ROX-071613	7/16/2013		41.49	NE	<0.005	<0.005 UJ		<0.005		0.101	<0.005	<0.001	0.234	0.131	0.147	<0.005	<0.005	<0.001		0.634 J	0.13	<0.005 UJ	0.723	0.12	0.843
	P58-ROX-101413	10/14/2013		42.19	NE	<0.005	<0.005		<0.005		0.0999	0.0055	0.0015	0.234	0.135	0.2	<0.005	<0.005	<0.001		1.17 J	0.131	<0.005	0.74	0.112	0.852
	P58-ROX-020314	2/3/2014		44.66	NE	<5	<5		<5		<5	<5	<1	<5	<5	<1	<5	<5	<1		<5	<5	<5	<1	<1	<1
	P58-ROX-041514	4/15/2014		45.66	NE	<0.005	<0.005		<0.005		0.0777 J	<0.005	<0.001	0.277 J	0.104 J	0.127 J	<0.005	<0.005	<0.001		0.53 E J	0.0992 J	<0.005	0.552 J	0.0908 J	0.643 J
	P58-ROX-071814	7/18/2014		43.80	NE	<10	<10		<10		<10	<10	<2	<10	<10	<2	<10	<10	<2		<10	<10	<10	<2	<2	<2
	P58-ROX-101514	10/15/2014	40.21 - 65.21	43.14	NE	<2.5	<2.5		<2.5		1.43 J	<2.5	<0.5	<2.5	0.781 J	<0.5	<2.5	<2.5	<0.5		0.72 J	0.453 J	<2.5	<0.5	0.253 J	0.718
P-59	P59-ROX-011912	1/19/2012	47.91 - 72.91	42.88	NE	<0.005	<0.005		<0.005		0.0713	<0.005	<0.001	0.18	0.128	0.896	<0.005	<0.005	<0.001		0.483 J	0.198	<0.005	3.03	0.587	3.62
	P59-ROX-011912-DUP	1/19/2012		42.88	NE	<0.005	<0.005		<0.005		0.0733	<0.005	<0.001	0.183	0.133	0.931	<0.005	<0.005	<0.001		0.536	0.203	<0.005	3.21	0.587	3.8
	P59-ROX-050912	5/9/2012		44.11	NE	<0.25	<0.25		<0.25		0.0585 J	<0.25	<0.05	0.0925	0.123 J	2.35	<0.25	<0.25	<0.05		0.67	0.171 J	<0.25	4.56	1.08	5.64
	P59-ROX-080212	8/2/2012		44.07	NE	<0.1	<0.1		<0.1		0.0452 J	<0.1	<0.02	0.0886	0.0974 J	0.506	<0.1	<0.1	<0.02		0.563	0.158	<0.1	4.35	0.376	4.73
	P59-ROX-110212	11/2/2012		45.98	NE	<0.5	<0.5		<0.5		<0.5	<0.5	<0.1	<0.5	0.105 J	1.09	<0.5	<0.5	<0.1		0.558	0.154 J	<0.5	4.49	0.686	5.17
	P59-ROX-110212-DUP	11/2/2012		45.98	NE	<0.5	<0.5		<0.5		<0.5	<0.5	<0.1	<0.5	0.111 J	1.1	<0.5	<0.5	<0.1		0.592	0.167 J	<0.5	4.68	0.721	5.4
	P59-ROX-013013	1/30/2013		46.60	NE	<0.25	<0.25		<0.25		0.0455 J	<0.25 UJ	<0.05 UJ	0.376	0.085 J	0.296	<0.25	<0.25	<0.05		0.563	0.0491 J	<0.25	4.19	0.264	4.45
	P59-ROX-041213	4/12/2013		46.95	NE	<0.25	<0.25		<0.25		0.062 J	<0.25	<0.05	0.664	0.136 J	0.523	<0.25	<0.25	<0.05		0.946	<0.25	<0.25	6.52	0.646	7.16
	P59-ROX-041213-DUP	4/12/2013		46.95	NE	<0.25	<0.25		<0.25		0.0543 J	<0.25	<0.05	0.547	0.117 J	0.463	<0.25	<0.25	<0.05		0.843	<0.25	<0.25	5.89	0.591	6.48
	P59-ROX-071613	7/16/2013		44.13	NE	<0.005	<0.005 UJ		<0.005		0.074 J	<0.005	<0.001	0.215 J	0.149 J	1.03	<0.005	<0.005	<0.001		0.784	0.219	<0.005 UJ	5.76	0.431	6.19
	P59-ROX-101013	10/10/2013		45.50	NE	<0.005	<0.005		<0.005		0.086	<0.005	0.0012	0.285	0.176	2.89	<0.005	<0.005	<0.001		1.14	0.273	<0.005	7.47	1.28	8.75
	P59-ROX-020314	2/3/2014		47.35	NE	<0.1	<0.1		<0.1		0.0409 J	<0.1	<0.02	0.0321 J	0.0824 J	0.66	<0.1	<0.1	<0.02		0.621	0.193	<0.1	3.79	0.438	4.23
	P59-ROX-041514	4/15/2014		48.60	NE	<0.005	<0.005		0.054		0.0495	<0.005	<0.001	0.196	0.0798	0.746	0.0027 J	<0.005	<0.001		0.385	0.214	<0.005	4.83	0.902	5.73
	P59-ROX-070814	7/8/2014		47.69	NE	<0.005	<0.005		<0.005		0.0948 J	<0.005	<0.001	0.228 J	0.16 J	1.55	<0.005	<0.005	<0.001		0.607	0.285 J	<0.005	4.48	0.929	5.41
	P59-ROX-101414	10/14/2014	47.91 - 72.91	46.18	NE	<0.005	<0.005		<0.005 UJ		0.0932 J	<0.005 UJ	0.0041 J	0.38 J	0.188 J	1.13	<0.005	<0.005	<0.001		0.901	0.26 J	<0.005	5.14 J	1.03	6.17 J
P-66	P66-ROX-051012	5/10/2012	34.72 - 59.72	32.48	NE	<0.005	<0.005		<0.005		0.123	<0.005	0.0771	<0.0001	0.152	0.0021	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	0.0012	0.0012	0.0024
	P66-ROX-080312	8/3/2012		30.51	NE	<0.005	<0.005		<0.005		0.0874	<0.005	0.103	0.0013	0.112	0.0013	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	0.0011	0.0011	0.0022
	P66-ROX-103112	10/31/2012		34.75	NE	<0.005	<0.005		<0.005		0.122	<0.005	0.0733	<0.005	0.156	0.0014	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	P66-ROX-011813	1/18/2013		35.70	NE	<0.005	<0.005		<0.005		0.146	<0.005	0.104	<0.005	0.193	0.0015	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	0.00093 J	0.00093 J
	P66-ROX-041113	4/11/2013		36.03	NE	<0.005	<0.005		<0.005		0.287	<0.005	0.086	<0.005	0.384	0.0012	<0.005	<0.005	<0.001		0.0041 J	<0.005	<0.005	<0.001	<0.001	<0.001
	P66-ROX-071213	7/12/2013		33.20	NE	<0.005	<0.005 UJ		<0.005		0.191	<0.005	<0.001	<0.005	0.229	0.0018	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005 UJ	<0.001	0.001	0.0015
	P66-ROX-101013	10/10/2013		33.66	NE	<0.005	<0.005		<0.005		0.151	<0.005	0.085	0.0104	0.204	0.0013	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	0.00096 J	0.00096 J
	P66-ROX-110713	11/7/2013		33.66	NE	<0.005	<0.005		<0.005		0.0958	<0.005	0.0528	0.0057	0.0658	0.00086 J	<0.005	<0.005	0.0015		<0.005	<0.005	<0.005	<0.001	0.00057 J	0.00057 J
	P66-ROX-012914	1/29/2014		36.39	NE	<0.005	<0.005		<0.005		0.131	<0.005	<0.001	<0.005	0.157	0.0017	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	0.0045	0.0045
	P66-ROX-041114	4/11/2014		37.10	NE	<0.005	<0.005		<0.005		0.115	<0.005	<0.001	0.0014 J	0.136	0.0017	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	0.00072 J	0.0013
	P66-ROX-070714	7/7/2014		35.60	NE	<0.005	<0.005		<0.005		0.144	<0.005	<0.001	<0.005	0.102	0.0022	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	0.001	0.00099 J	0.002
	P66-ROX-101414	10/14/2014	34.72 - 59.72	34.48	NE	<0.005	<0.005		<0.005 UJ		0.129	<0.005	0.0111	<0.005	0.137	0.0016	<0.005 UJ	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001 UJ	0.0009 J	0.0018 J
P-74	P74-ROX-011912	1/19/2012	44.43 - 69.43	38.77	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	0.0158	0.0012 J	0.0038	<0.005	<0.005	<0.001		0.0292	0.0126	<0.005	0.0526	0.0262	0.0788
	P74-ROX-050712	5/7/2012		39.92	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	0.00024	0.001 J	0.0017	<0.005	<0.005	<0.001		0.0155	0.0063	<0.005	0.0273	0.0093	0.0366
	P74-ROX-080612	8/6/2012		40.71	NE	<0.05	<0.05		<0.05 UJ		<0.05	<0.05	<0.01	0.0177	<0.05	0.159	<0.05	<0.05	<0.01		0.187	0.0663	<0.05 UJ	0.388	0.125	0.512
	P74-ROX-110112	11/1/2012		41.72	NE	<0.1	<0.1		<0.1		<0.1	<0.1	<0.02	0.0834 J	<0.1	0.232	<0.1	<0.1	<0.02		0.125	0.0414 J	<0.1	0.246	0.0811	0.328
	P74-ROX-011713	1/17/2013		42.65	NE	<0.1	<0.1		<0.1		<0.1	<0.1	<0.02	0.141	<0.1	0.278	<0.1	<0.1	<0.02		0.249	0.0973 J	<0.1	0.547	<0.02	0.555
	P74-ROX-041113	4/11/2013		42.83	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	0.0016 J	<0.005	0.003	<0.005	<0.005	<0.001		0.0184	0.0138	<0.005	0.0456	0.0146	0.0601
	P74-ROX-071513	7/15/2013		40.11	NE	<0.005	<0.005		<0.005		0.0031 J	<0.005	<0.001	0.024	0.0054	0.0064	<0.005	<0.005	<0.001		0.101	0.0365	<0.005	0.109	0.027	0.136
	P74-ROX-101413	10/14/2013		41.72	NE	<0.005	<0.005		<0.005		0.0052	0.0074	0.0011	0.0257	0.0094	0.0344	<0.005	<0.005	<0.001		0.192	0.0739	<0.005	0.237	0.0483	0.285
	P74-ROX-012414	1/24/2014		43.35	NE	<0.005	<0.005		<0.005		0.0058	<0.005	<0.001	0.0322	0.0112	0.153	<0.005	<0.005	<0.001		0.292	0.11	<0.005	0.316	0.0579	0.374
	P74-ROX-041514	4/15/2014		44.74	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	0.00074 J	<0.005	0.00078 J	<0.005	<0.005	<0.001		0.0083	0.0039 J	<0.005	0.0193	0.0015	0.0208
	P74-ROX-070814	7/8/2014		43.02	NE	<0.005	<0.005		<0.005		0.0018 J J	<0.005	<0.001	0.0128	0.0036 J	0.0087	<0.005	<0.005	<0.001		0.117	0.0518	<0.005	0.121	0.0122	0.133
	P74-ROX-101414	10/14/2014	44.43 - 69.43	41.48	NE	<0.005	<0.005		<0.005 UJ		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005 UJ	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001 UJ	<0.001	0.00043 J J

TABLE 3
CUMULATIVE SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL RESULTS AND EXCEEDANCES

						VOCs																			
						Ethyl methacrylate	Hexachlorobutadiene	Hexane	2-Hexanone (Methyl N-Butyl Ketone)	Isopentane	Isopropylbenzene (Cumene)	4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	Methyl tert-Butyl Ether (MTBE)	Naphthalene	n-Propylbenzene	Toluene	1,2,3-Trichlorobenzene	1,2,4-Trichlorobenzene	1,1,2-Trichloroethane	1,2,3-Trimethylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl acetate	m,p-Xylenes	o-Xylenes	Xylenes (total)
					Screening Values (mg/L)		0.007 [3]	0.42 [3]	0.035 [3]		0.7 [1]	0.56 [3]	0.07 [1]	0.14 [1]	0.7 [3]	1.0 [1]	0.0056 [3]	0.07 [1]	0.005 [1]			0.07 [3]	7.0 [2]	10 [1]		10 [1]
Location	Sample ID	Sample Date	Screened Interval (ft btoc)	Depth to Water (ft btoc)	Product Thickness (ft)	Analytical Results (mg/L)																			
P-93A	P93A-ROX-012012	1/20/2012	48.17 - 63.17	41.66	NE	<0.005	<0.005		0.0041 J		0.0134	<0.005	0.0604	0.059 J	0.0134	0.0196	<0.005	<0.005	<0.001		0.101	0.025	<0.005 UJ	0.292	0.0416	0.333
	P93A-ROX-050812	5/8/2012		42.75	NE	<0.005 UJ	<0.005 UJ		<0.005 UJ		0.0218 J	<0.005 UJ	0.0557 J	0.0472	0.0239 J	0.0407 J	<0.005 UJ	<0.005 UJ	<0.001 UJ		0.194 J	0.0416 J	<0.005 UJ	0.647 J	0.0841 J	0.731 J
	P93A-ROX-080912	8/9/2012		43.66	NE	<0.005	<0.005		<0.005		0.0126	<0.005	0.0485	0.0496	0.0137	0.0091	<0.005	<0.005	<0.001		0.145	0.0273	<0.005	0.436	0.0642	0.5
	P93A-ROX-110712	11/7/2012		45.00	NE	<0.5	<0.5		<0.5		<0.5	<0.5	<0.1	<0.5	<0.5	<0.1	<0.5	<0.5	<0.1		<0.5	<0.5	<0.5	0.43	0.076 J	0.506
	P93A-ROX-110712-DUP	11/7/2012		45.00	NE	<0.5	<0.5		<0.5		<0.5	<0.5	<0.1	<0.5	<0.5	<0.1	<0.5	<0.5	<0.1		<0.5	<0.5	<0.5	0.404	0.073 J	0.477
	P93A-ROX-012313	1/23/2013		45.89	NE	<2.5	<2.5		<2.5		<2.5	<2.5	<0.5	<2.5	<2.5	<0.5	<2.5	<2.5	<0.5		<2.5	<2.5	<2.5 UJ	<0.5	<0.5	<0.5
	P93A-ROX-012313-DUP	1/23/2013		45.89	NE	<2.5	<2.5		<2.5		<2.5	<2.5	<0.5	<2.5	<2.5	<0.5	<2.5	<2.5	<0.5		<2.5	<2.5	<2.5 UJ	<0.5	<0.5	<0.5
	P93A-ROX-041113	4/11/2013		46.29	NE	<2.5	<2.5		<2.5		<2.5	<2.5	<0.5	<2.5	<2.5	<0.5	<2.5	<2.5	<0.5		<2.5	<2.5	<2.5	<0.5	<0.5	<0.5
	P93A-ROX-041113-DUP	4/11/2013		46.29	NE	<2.5	<2.5		<2.5		<2.5	<2.5	<0.5	<2.5	<2.5	<0.5	<2.5	<2.5	<0.5		<2.5	<2.5	<2.5	<0.5	<0.5	<0.5
	P93A-ROX-071813	7/18/2013		43.25	NE	<0.005	<0.005		<0.005		0.0101	<0.005	0.0054 J	0.0303	0.0113	0.0072	<0.005	<0.005	<0.001		0.0915	0.0116	<0.005 UJ	0.273	0.0426	0.316
	P93A-ROX-101113	10/11/2013		44.18	NE	<0.005	<0.005		<0.005		0.0142	<0.005	0.0034	0.0621	0.015	0.0133	<0.005	<0.005	<0.001		0.146	0.0163	<0.005 UJ	0.451	0.0789	0.53
	P93A-ROX-012914	1/29/2014		46.53	NE	<2.5	<2.5		<2.5		<2.5	<2.5	<0.5	<2.5	<2.5	<0.5	<2.5	<2.5	<0.5		<2.5	<2.5	<2.5	<0.5	<0.5	<0.5
	P93A-ROX-041714	4/17/2014		47.41	NE	<2.5	<2.5		<2.5		<2.5	<2.5	<0.5	<2.5	<2.5	<0.5	<2.5	<2.5	<0.5		<2.5	<2.5	<2.5	<0.5	<0.5	<0.5
	P93A-ROX-071814	7/18/2014		45.70	NE	<5	<5		<5		<5	<5	<1	<5	<5	<1	<5	<5	<1		<5	<5	<5	<1	<1	<1
	P93A-ROX-071814-DUP	7/18/2014		45.70	NE	<5	<5		<5		<5	<5	<1	<5	<5	<1	<5	<5	<1		<5	<5	<5	<1	<1	<1
	P93A-ROX-101514	10/15/2014	48.17 - 63.17	45.06	NE	<2.5	<2.5		<2.5		<2.5	<2.5	<0.5	<2.5	<2.5	<0.5	<2.5	<2.5	<0.5		0.442 J	<2.5	<2.5	<0.5	0.263 J	0.65
	P93A-ROX-101514-DUP	10/15/2014		45.06	NE	<2.5	<2.5		<2.5		<2.5	<2.5	<0.5	<2.5	<2.5	<0.5	<2.5	<2.5	<0.5		<2.5	<2.5	<2.5	<0.5	0.258 J	0.635
P-93B	P93B-ROX-012012	1/20/2012	74.60 - 76.60	41.72	NE	<0.005	<0.005		<0.005		0.022 J	<0.005	0.0063 J	0.0041 J J	0.0244 J	0.0678 J	<0.005	<0.005	<0.001		0.0114 J	0.0028 J J	<0.005 UJ	0.0598 J	0.0224 J	0.0822 J
	P93B-ROX-050812	5/8/2012		42.79	NE	<0.005	<0.005		<0.005		0.0188 J	<0.005	<0.001	0.002	0.0272 J	0.0512 J	<0.005	<0.005	<0.001		0.0196 J	0.0054 J	<0.005	0.116 J	0.0251 J	0.141 J
	P93B-ROX-080912	8/9/2012		43.69	NE	<0.005	<0.005		<0.005		0.0266	<0.005	<0.001	0.0049	0.0406	0.0786	<0.005	<0.005	<0.001		0.0372	0.0107	<0.005	0.245	0.0468	0.292
	P93B-ROX-110712	11/7/2012		45.05	NE	<0.5	<0.5		<0.5		<0.5	<0.5	<0.1	<0.5	<0.5	<0.1	<0.5	<0.5	<0.1		<0.5	<0.5	<0.5	0.0986 J	<0.1	0.0986 J
	P93B-ROX-110712-DUP	11/7/2012		45.05	NE	<0.5	<0.5		<0.5		<0.5	<0.5	<0.1	<0.5	<0.5	0.0719 J	<0.5	<0.5	<0.1		<0.5	<0.5	<0.5	0.237	<0.1	0.237
	P93B-ROX-012313	1/23/2013		45.89	NE	<5	<5		<5		<5	<5	<1	<5	<5	<1	<5	<5	<1		<5	<5	<5 UJ	<1	<1	<1
	P93B-ROX-041113	4/11/2013		46.32	NE	<2.5	<2.5		<2.5		<2.5	<2.5	<0.5	<2.5	<2.5	<0.5	<2.5	<2.5	<0.5		<2.5	<2.5	<2.5	<0.5	<0.5	<0.5
	P93B-ROX-071813	7/18/2013		43.30	NE	<0.005	<0.005		<0.005		0.0247	<0.005	0.0035 J	0.0093	0.0357	0.0646	<0.005	<0.005	<0.001		0.025	0.0069	0.0176 J	0.195	0.0418	0.236
	P93B-ROX-101613	10/16/2013		44.43	NE	<10 UJ	<10		<10		<10	<10	<2 UJ	<10	<10	<2	<10	<10	<2		<10	<10	<10 UJ	<2	<2	<2
	P93B-ROX-101613-DUP	10/16/2013		44.43	NE	<10 UJ	<10		<10		<10	<10	<2 UJ	<10	<10	<2	<10	<10	<2		<10	<10	<10 UJ	<2	<2	<2
	P93B-ROX-012814	1/28/2014		46.58	NE	<5	<5		<5		<5	<5	<1	<5	<5	<1	<5	<5	<1		<5	<5	<5	<1	<1	<1
	P93B-ROX-012814-DUP	1/28/2014		46.58	NE	<5	<5		<5 UJ		<5	<5	<1	<5	<5	<1	<5	<5	<1		<5	<5	<5	<1	<1	<1
	P93B-ROX-041714	4/17/2014		47.46	NE	<2.5	<2.5		<2.5		<2.5	<2.5	<0.5	<2.5	<2.5	<0.5	<2.5	<2.5	<0.5		<2.5	<2.5	<2.5	<0.5	<0.5	<0.5
	P93B-ROX-041714-DUP	4/17/2014		47.46	NE	<2.5	<2.5		<2.5		<2.5	<2.5	<0.5	<2.5	<2.5	<0.5	<2.5	<2.5	<0.5		<2.5	<2.5	<2.5	<0.5	<0.5	<0.5
	P93B-ROX-071714	7/17/2014		45.75	NE	<0.005 UJ	<0.005 UJ		<0.005 UJ		0.0227 J	<0.005 UJ	<0.001 UJ	0.0053 J	0.0297 J	0.0129 J	<0.005 UJ	<0.005 UJ	<0.001 UJ		0.008 J	0.0037 J J	<0.005 UJ	0.0662 J	0.0047 J	0.0708
	P93B-ROX-101514	10/15/2014	74.60 - 76.60	45.15	NE	<2.5	<2.5		<2.5 UJ		<2.5	<2.5	<0.5	<2.5	<2.5	<0.5	<2.5	<2.5	<0.5		<2.5	<2.5	<2.5	<0.5	<0.5	<0.5
P-93C	P93C-ROX-012012	1/20/2012	94.26 - 96.26	41.57	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.006	<0.0001	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	P93C-ROX-050812	5/8/2012		42.68	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.004	<0.00011	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	P93C-ROX-080912	8/9/2012		43.57	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0053	0.000065 J	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	P93C-ROX-110812	11/8/2012		45.12	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0056	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	P93C-ROX-012313	1/23/2013		45.78	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0044	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005 UJ	<0.001	<0.001	<0.001
	P93C-ROX-041213	4/12/2013		46.21	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0045	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	P93C-ROX-071813	7/18/2013		43.31	NE	<0.005	<0.005		<0.005		0.002 J	<0.005	0.0049 J	<0.005	0.002 J	0.007	<0.005	<0.005	<0.001		0.0016 J	<0.005	<0.005 UJ	0.0076	0.0015	0.0091
	P93C-ROX-080813	8/8/2013		43.31	NE	<0.25	<0.25		<0.25		<0.25	<0.25	<0.05	<0.25	<0.25	<0.05	<0.25	<0.25	<0.05		<0.25	<0.25	<0.25	<0.05	<0.05	<0.05
	P93C-ROX-101613	10/16/2013		44.31	NE	<0.005 UJ	<0.005		<0.005		<0.005	<0.005	0.0035 J	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005 UJ	<0.001	<0.001	<0.001
	P93C-ROX-012414	1/24/2014		46.44	NE	<0.005	<0.005		<0.005 UJ		<0.005	<0.005	0.0047 J	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	P93C-ROX-041714	4/17/2014		47.34	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0043	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	P93C-ROX-071714	7/17/2014		45.61	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0061 J	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	P93C-ROX-101514	10/15/2014	94.26 - 96.26	44.99	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0046	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001

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						VOCs																			
						Ethyl methacrylate	Hexachlorobutadiene	Hexane	2-Hexanone (Methyl N-Butyl Ketone)	Isopentane	Isopropylbenzene (Cumene)	4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	Methyl tert-Butyl Ether (MTBE)	Naphthalene	n-Propylbenzene	Toluene	1,2,3-Trichlorobenzene	1,2,4-Trichlorobenzene	1,1,2-Trichloroethane	1,2,3-Trimethylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl acetate	m,p-Xylenes	o-Xylenes	Xylenes (total)
Screening Values (mg/L)							0.007 [3]	0.42 [3]	0.035 [3]		0.7 [1]	0.56 [3]	0.07 [1]	0.14 [1]	0.7 [3]	1.0 [1]	0.0056 [3]	0.07 [1]	0.005 [1]			0.07 [3]	7.0 [2]	10 [1]		10 [1]
Location	Sample ID	Sample Date	Screened Interval (ft btoc)	Depth to Water (ft btoc)	Product Thickness (ft)	Analytical Results (mg/L)																			
P-93D	P93D-ROX-012012	1/20/2012	125.75 - 127.75	41.77	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	0.00016	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	P93D-ROX-050812	5/8/2012		42.96	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.00077 J	<0.0001	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	P93D-ROX-080812	8/8/2012		43.71	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.0092 U	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	P93D-ROX-110812	11/8/2012		NM	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0023	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	P93D-ROX-012213	1/22/2013		44.21	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		0.0015 J	<0.005	<0.005	<0.001	<0.001	<0.001
	P93D-ROX-041113	4/11/2013		46.37	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	P93D-ROX-071213	7/12/2013		43.51	NE	<0.005	<0.005 UJ		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005 UJ	<0.001	<0.001	<0.001
	P93D-ROX-101113	10/11/2013		44.24	NE	<0.005 UJ	<0.005		<0.005		<0.005	<0.005	0.00066 J J	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005 UJ	<0.001	<0.001	<0.001
	P93D-ROX-013114	1/31/2014		46.62	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0011	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	P93D-ROX-041414	4/14/2014		47.54	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	0.0017 J	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	P93D-ROX-071714	7/17/2014		45.78	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0011 J	<0.005 UJ	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	P93D-ROX-101514	10/15/2014	125.75 - 127.75	45.14	NE	<0.05	<0.05		<0.05		<0.05	<0.05	<0.01	<0.05	<0.05	<0.01	<0.05	<0.05	<0.01		0.0083 J	<0.05	<0.05	<0.01	<0.01	<0.01
	P93D-ROX-110414	11/4/2014		45.14	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.002	<0.005	0.00067 J	0.0018	<0.005	<0.005	<0.001		0.00057 J	<0.005	<0.005	<0.001	<0.001	<0.001
P-114	P114-ROX-012012	1/20/2012	32.67 - 52.67	27.17	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.0001	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	P114-ROX-050912	5/9/2012		28.09	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0035 J	<0.0001	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	P114-ROX-080912	8/9/2012		29.13	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.00083 J	<0.0001	<0.005	<0.001	<0.005	<0.005	<0.001		0.00039 J	<0.005	<0.005	<0.001	<0.001	<0.001
	P114-ROX-110912	11/9/2012		30.90	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0076 J	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005 UJ	0.0013 J	<0.001	0.0013 J
	P114-ROX-012313	1/23/2013		30.22	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.003 J	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005 UJ	<0.001	<0.001	<0.001
	P114-ROX-041513	4/15/2013		31.80	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0051	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	P114-ROX-071813	7/18/2013		27.22	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0023 J	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005 UJ	<0.001	<0.001	<0.001
	P114-ROX-071813-DUP	7/18/2013		27.22	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0022 J	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005 UJ	<0.001	<0.001	<0.001
	P114-ROX-101713	10/17/2013		29.43	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0036	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	P114-ROX-012814	1/28/2014		32.11	NE	<0.005	<0.005		<0.005 UJ		<0.005	<0.005	0.0153	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	P114-ROX-042114	4/21/2014		32.22	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0093	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	P114-ROX-071814	7/18/2014		30.87	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0037	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	P114-ROX-101714	10/17/2014	32.67 - 52.67	29.43	NE	<0.005	<0.005		<0.005		<0.005	<0.005	0.0098 J	<0.005	0.00087 J J	<0.001	<0.005 UJ	<0.005	<0.001		<0.005	0.00043 J J	<0.005 UJ	0.00059 J J	<0.001	0.00059 J J
ROST-3-PZ	ROST3PZ-ROX-051412	5/14/2012	40.00 - 50.00	38.82	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	0.00048	0.00096 J	0.0038	<0.005	<0.005	<0.001		0.0095	0.0023 J	<0.005	0.0607	0.0151	0.0758
	ROST3PZ-ROX-080712	8/7/2012		39.00	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	0.00038	<0.005	0.0015	<0.005	<0.005	<0.001		0.0042 J	0.0012 J	<0.005	0.0289	0.0074	0.0363
	ROST3PZ-ROX-110112	11/1/2012		40.82	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		0.0026 J	<0.005	<0.005	0.0122	0.0037	0.0159
ROST-3-MW	ROST3MW-ROX-012313	1/23/2013	37.81 - 47.81	41.50	NE	<0.005	<0.005		<0.005		0.0066	<0.005	<0.001	0.0076	0.0156	0.0016	<0.005	<0.005	<0.001		0.0786	0.022	<0.005 UJ	0.114	0.0159	0.13
	ROST3MW-ROX-040513	4/5/2013				<0.005	<0.005		<0.005		0.0032 J	<0.005	<0.001	0.132 J	0.0082	0.0076	<0.005	<0.005	<0.001		0.0531	0.0145	<0.005	0.0603	0.0126	0.0729
	ROST3MW-ROX-071113	7/11/2013		39.50	NE	<0.005	<0.005		<0.005 UJ		0.0146	<0.005	<0.001	0.0411	0.0279	0.014	<0.005	<0.005	<0.001		0.164	0.0373	<0.005 UJ	0.644	0.124	0.768
	ROST3-MW-ROX-100913	10/9/2013		40.16	NE	<0.005	<0.005 UJ		<0.005		0.0017 J	<0.005	<0.001	0.0045 J	0.0029 J	0.0018	<0.005	<0.005	<0.001		0.0168	0.0035 J	<0.005	0.0422	0.0123	0.0546
	ROST3MW-ROX-011714	1/17/2014		42.20	NE	<0.005	<0.005		<0.005		0.00099 J	<0.005	<0.001	<0.005	0.002 J	0.0012	<0.005	<0.005	<0.001		0.0207	0.0057	<0.005	0.0377	0.0063	0.044
	ROST3MW-ROX-041014	4/10/2014		42.80	NE	<0.005	<0.005		<0.005		0.00043 J	<0.005	<0.001	0.00084 J	0.00082 J	0.0015	<0.005	<0.005	<0.001		0.0121	0.003 J	<0.005	0.0287	0.0028	0.0315
	ROST3MW-ROX-071414	7/14/2014		41.88	NE	<0.005	<0.005		<0.005		0.00053 J	<0.005	<0.001	0.0045 J	0.00098 J	0.0024	<0.005	<0.005	<0.001		0.0132	0.0032 J	<0.005	0.0371	0.0041	0.0412
	ROST3MW-ROX-100914	10/9/2014	37.81 - 47.81	41.31	NE	<0.005	<0.005		<0.005		0.0021 J	<0.005	<0.001 UJ	0.0061	0.0028 J	0.0032	<0.005	<0.005	<0.001		0.018	0.005	<0.005 UJ	0.0651	0.0205	0.0856
ROST-4-PZ(C)	ROST4PZ-C-051412	5/14/2012	34.95 - 44.95	39.04	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	0.0018	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	<0.001	<0.001	<0.001
	ROST4PZ-C-ROX-072512	7/25/2012		39.10	NE	<0.005	<0.005 UJ		<0.005		0.0036 J	<0.005	<0.001	0.0331	0.0059	0.0596	<0.005	<0.005	<0.001		0.0374	0.0076	<0.005	0.373	0.207	0.581
	ROST4PZC-ROX-102912	10/29/2012		40.75	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	0.0021	<0.001	0.0021
	ROST4PZ(C)-ROX-011113	1/11/2013		41.42	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001		0.002 J	0.0014 J	<0.005	0.0018	<0.001	0.0018
	ROST4PZC-ROX-041013	4/10/2013		42.27	NE	<0.005	<0.005		<0.005 UJ		0.00061 J J	<0.005 UJ	<0.001	<0.005	0.0011 J	0.0006 J J	<0.005 UJ	<0.005 UJ	<0.001 UJ		0.0016 J	<0.005	<0.005	<0.001 UJ	<0.001 UJ	<0.001 UJ
	ROST4PZC-ROX-071113	7/11/2013		40.18	NE	<0.005	<0.005		<0.005 UJ		0.0025 J	<0.005	<0.001	0.0189	0.0041 J	0.041	<0.005	<0.005	<0.001		0.0194	0.0044 J	<0.005 UJ	0.126	0.0649	0.191
	ROST4PZC-ROX-100913	10/9/2013		39.91	NE	<0.005	<0.005 UJ		<0.005		0.00066 J	<0.005	<0.001	0.0054	0.0012 J	0.0013	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	0.0101	0.0054	0.0155
	ROST4PZC-ROX-011714	1/17/2014		41.92	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	0.00073 J	0.0014	<0.005	<0.005	<0.001		0.0017 J	<0.005	<0.005	0.0124	0.0057	0.018
	ROST4PZC-ROX-041014	4/10/2014		42.05	NE	<0.005	<0.005		<0.005		<0.005	<0.005	<0.001	<0.005	<0.005	0.00057 J	<0.005	<0.005	<0.001		<0.005	<0.005	<0.005	0.0015	0.0015	0.003
	ROST4C-ROX-071114	7/10/2014		42.22	NE	<0.005	<0.005		<0.005		0.00037 J	<0.005	<0.001	0.0104 J	<0.005	0.0421	<0.005 UJ	<0.005	<0.001		0.00082 J	<0.005	<0.005	0.0574	0.0815	0.139
	ROST4PZC-ROX-100914	10/9/2014	34.95 - 44.95	41.30	NE	<0.005	<0.005		<0.005		0.0011 J	<0.005	<0.001 UJ	0.0169	0.0011 J	0.0196	<0.005	<0.005	<0.001		0.0046 J	0.00047 J	<0.005 UJ	0.112	0.0634	0.176

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TABLE 3
CUMULATIVE SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL RESULTS AND EXCEEDANCES

						VOCs																			
						Ethyl methacrylate	Hexachlorobutadiene	Hexane	2-Hexanone (Methyl N-Butyl Ketone)	Isopentane	Isopropylbenzene (Cumene)	4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	Methyl tert-Butyl Ether (MTBE)	Naphthalene	n-Propylbenzene	Toluene	1,2,3-Trichlorobenzene	1,2,4-Trichlorobenzene	1,1,2-Trichloroethane	1,2,3-Trimethylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl acetate	m,p-Xylenes	o-Xylenes	Xylenes (total)
Screening Values (mg/L)							0.007 [3]	0.42 [3]	0.035 [3]		0.7 [1]	0.56 [3]	0.07 [1]	0.14 [1]	0.7 [3]	1.0 [1]	0.0056 [3]	0.07 [1]	0.005 [1]			0.07 [3]	7.0 [2]	10 [1]		10 [1]
Location	Sample ID	Sample Date	Screened Interval (ft btoc)	Depth to Water (ft btoc)	Product Thickness (ft)	Analytical Results (mg/L)																			
T-12	T12-ROX-011912	1/19/2012	46.72 - 72.72	41.0	NE	<0.005	<0.005		<0.005		0.022	<0.005	0.0016	0.132	0.03	0.175	<0.005	<0.005	<0.001		0.34	0.0715	0.0952	0.684	0.0399	0.724
	T12-ROX-050912	5/9/2012		42.62	NE	<0.025	<0.025		<0.025		0.0572	<0.025	<0.005	0.0924	0.101	0.388	<0.025	<0.025	<0.005		0.476	0.0765	<0.025	2.87	0.251	3.12
	T12-ROX-080212	8/2/2012		41.92	NE	<0.05	<0.05		<0.05		0.0297 J	<0.05	<0.01	0.0625	0.0486 J	0.197	<0.05	<0.05	<0.01		0.403	0.0474 J	<0.05	1.32	0.0709	1.39
	T12-ROX-110512	11/5/2012		43.91	NE	<0.05	<0.05		<0.05		0.0468 J	<0.05	<0.01	0.125	0.0831	0.322	<0.05	<0.05	<0.01		0.385	0.0543	<0.05	2.55	0.176	2.73
	T12-ROX-011813	1/18/2013		44.50	NE	<0.025	<0.025		<0.025		0.031	<0.025	<0.005	0.129	0.0466	0.184	<0.025	<0.025	<0.005		0.42	0.0407	<0.025	1.11	0.0252	1.13
	T12-ROX-041513	4/15/2013		44.99	NE	<0.05	<0.05		<0.05		0.0405 J	<0.05	<0.01	0.266 J	0.076	0.592	<0.05	<0.05	<0.01		0.309	<0.05	<0.05	1.2	0.104	1.3
	T12-ROX-071613	7/16/2013		42.33	NE	<0.005	<0.005 UJ		<0.005		0.0363 J	<0.005	<0.001	0.122 J	0.0627 J	0.186 J	<0.005	<0.005	<0.001		0.361 J	0.0238 J	<0.005 UJ	0.794 J	0.0145 J	0.808 J
	T12-ROX-101513	10/15/2013		43.73	NE	<0.025	<0.025		<0.025		0.0618	<0.025	<0.005	0.215 J	0.114	0.697	<0.025	<0.025	<0.005		0.575	0.0607	<0.025	2.43	0.139	2.57
	T12-ROX-012414	1/24/2014		45.26	NE	<0.005	<0.005		<0.005		0.0362	<0.005	<0.001	0.171	0.0676	0.421	<0.005	<0.005	<0.001		0.526	0.0507	<0.005	1.12	0.0469	1.23
	T12-ROX-041514	4/15/2014		46.72	NE	<0.005	<0.005		<0.005		0.0306	<0.005	<0.001	0.12	0.0534	0.406	<0.005	<0.005	<0.001		0.22 J	0.0339	<0.005	0.841	0.0401	0.864
	T12-ROX-070814	7/8/2014		45.13	NE	<0.005	<0.005		<0.005		0.0577 J	<0.005	<0.001	0.146	0.0912	0.686	<0.005	<0.005	<0.001		0.425	0.0589	<0.005	1.25	0.0909	1.3
	T12-ROX-101714	10/17/2014	46.72 - 72.72	44.40	NE	<0.05	<0.05		<0.05		0.0459 J	<0.05	<0.01	0.184 J	0.0707	0.722	<0.05 UJ	<0.05	<0.01		0.244	0.0391 J	<0.05 UJ	2.25	0.114	2.36

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TABLE 3
CUMULATIVE SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL RESULTS AND EXCEEDANCES

						SVOCs																			
						Acenaphthene	Acenaphthylene	Aniline	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Benzoic Acid	Benzyl alcohol	bis(2-Chloroethylether	bis(2-Ethylhexyl)phthalate	Butyl benzyl phthalate	4-Chloro-3-methylphenol (p-Chloro-m-cresol)	2-Chlorophenol	Chrysene (1,2-Benzphenanthracene)	Dibenzo(a,h)anthracene	Dibenzofuran	2,4-Dichlorophenol	Diethyl phthalate	2,4-Dimethylphenol
					Screening Values (mg/L)	0.42 [1]	0.21 [3]	0.023 [3]	2.1 [1]	0.00013 [1]	0.0002 [1]	0.00018 [1]	0.21 [3]	0.00017 [1]	28 [1]	0.7 [3]	0.01 [2]	0.006 [2]	1.4 [2]		0.035 [2]	0.012 [1]	0.0003 [1]	0.007 [3]	0.021 [2]	5.6 [1]	0.14 [2]
Location	Sample ID	Sample Date	Screened Interval (ft btoc)	Depth to Water (ft btoc)	Product Thickness (ft)	Analytical Results (mg/L)																					
MW-01	MW1-ROX-011612	1/16/2012	48.80 - 58.80	37.75	NE	0.000077 J	0.000035 J	<0.01	0.000062 J	0.00011	0.0001	0.00011	<0.00011 U	0.00012	<0.01 UJ	<0.01	<0.0051	<0.002	<0.00039 U	<0.01	<0.0051	0.00011	<0.00011 U	<0.0051	<0.01	<0.0051	<0.01
	MW1-ROX-050112	5/1/2012		39.09	NE	<0.0001	<0.0001	<0.01 UJ	<0.0001	<0.000051	<0.0001	<0.000051	<0.0001	<0.0001	<0.01 UJ	<0.01	<0.0051	<0.002	<0.0051	<0.01	<0.0051	<0.0001	<0.0001	<0.0051	<0.01	<0.0051	<0.01
	MW1-ROX-073012	7/30/2012		39.39	NE	<0.00011	<0.00011	<0.011 UJ	<0.00011	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.011	<0.011	<0.0053	<0.0021	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	<0.0021	<0.011	0.00032 J	<0.011
	MW1-ROX-102612	10/26/2012		41.22	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000057	<0.00011	<0.000057	<0.00011	<0.00011	<0.011 UJ	<0.011	<0.0057	0.00099 J	<0.0057	<0.011	<0.0057	<0.00011	<0.00011	<0.0023	<0.011	<0.0057	<0.011
	MW1-ROX-121712	12/17/2012		41.22	NE																						
	MW1-ROX-011013	1/10/2013		41.89	NE	<0.000024 U	<0.0001	<0.01 UJ	<0.0001	<0.000052	<0.0001	<0.000052	<0.0001	<0.0001	<0.01	<0.01	<0.0052	<0.0021	<0.0052	<0.01	<0.0052	<0.0001	<0.0001	<0.0021	<0.01	<0.0052	<0.01
	MW1-ROX-040913	4/9/2013		42.55	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.011	<0.011	<0.0053	<0.0021	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	<0.0021	<0.011	<0.0011 U	<0.011
	MW1-ROX-070813	7/8/2013		39.56	NE	<0.000026 U	<0.0001	<0.01	<0.0001	<0.000051	<0.0001	0.000027 J	<0.0001	<0.0001	<0.01	<0.01	<0.0051	<0.0024 U	<0.0051	<0.01	<0.0051	<0.0001	<0.0001	<0.002	<0.01	<0.0051	<0.01
	MW1-ROX-100313	10/3/2013		40.28	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011	<0.011	<0.0054	0.00065 J	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	<0.0022	<0.011	<0.0054	<0.011
	MW1-ROX-011414	1/14/2014		42.77	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.011 UJ	<0.011	<0.0053	<0.0021	<0.0053	<0.011 UJ	<0.0053 UJ	<0.00011	<0.00011	<0.0021	<0.011 UJ	<0.0053	<0.011 UJ
	MW1-ROX-040714	4/7/2014		43.28	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	0.003 J J	<0.011	<0.0054	<0.0022	<0.0054	<0.011 UJ	<0.0057 UJ	<0.00011	<0.00011	<0.0022	<0.011 UJ	<0.0054	<0.011 UJ
	MW1-ROX-070914	7/9/2014		42.09	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011	<0.011	<0.0054	<0.0022	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	<0.0022	<0.011	<0.0054	<0.011
	MW1-ROX-100614	10/6/2014	48.80 - 58.80	41.1	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.011	<0.011	<0.0053	<0.0021	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	<0.0021	<0.011	<0.0053	<0.011
MW-02	MW2-ROX-011612	1/16/2012	49.87 - 59.87	38.89	NE	0.000057 J	<0.00011	<0.011	<0.00011	<0.000053	0.000033 J	0.00004 J	<0.000047 U	<0.00011	<0.011 UJ	<0.011	<0.0053	<0.00083 U	<0.00047 U	<0.011	<0.0053	<0.00011	<0.000047 U	<0.0053	<0.011	<0.0053	0.0035 J
	MW2-ROX-050112	5/1/2012		40.25	NE	<0.0001	<0.0001	<0.01 UJ	<0.0001	<0.000052	<0.0001	<0.000052	<0.0001	<0.0001	<0.01 UJ	<0.01	<0.0052	<0.0021	<0.0052	<0.01	<0.0052	<0.0001	<0.0001	<0.0052	<0.01	<0.0052	0.0055 J
	MW2-ROX-073012	7/30/2012		40.60	NE	0.000051 J	<0.00011	<0.011 UJ	<0.00011	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.011	<0.011	<0.0053	0.00059 J	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	<0.0021	<0.011	0.00036 J	0.0045 J
	MW2-ROX-102612	10/26/2012		42.35	NE	0.000093 J	<0.00011	<0.011	<0.00011	0.00016	<0.00011	<0.000054	<0.00011	<0.00011	<0.011 UJ	<0.011	<0.0054	<0.0022	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	<0.0022	<0.011	<0.0054	0.0034 J
	MW2-ROX-011113	1/11/2013		42.94	NE	0.00016	0.000019 J	<0.011 UJ	<0.00011	<0.000056	0.000027 J	0.000039 J	<0.00011	<0.00011	<0.011	<0.011	<0.0056	<0.0022	<0.0056	<0.011	<0.0056	<0.00011	<0.00011	<0.0022	<0.011	<0.0056	<0.011
	MW2-ROX-040913	4/9/2013		43.70	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011	<0.011	<0.0054	<0.0022	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	<0.0022	<0.011	<0.0054	0.005 J
	MW2-ROX-071113	7/11/2013		40.82	NE	0.000035 J	<0.00011	<0.011	<0.00011	<0.000055	<0.00011	<0.000055	<0.00011	<0.00011	<0.011 UJ	<0.011	<0.0055	0.00063 J	<0.0055	<0.011	<0.0055	<0.00011	<0.00011	<0.0022	<0.011	<0.0055	0.005 J
	MW2-ROX-100813	10/8/2013		41.73	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011	<0.011	<0.0054	<0.0022	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	<0.0022	<0.011	<0.0054	<0.011
	MW2-ROX-012014	1/20/2014		44.00	NE	<0.00011	0.00018	<0.011	<0.00011	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.011	<0.011	<0.0053	<0.0021	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	<0.0021	<0.011	<0.0053	<0.011
	MW2-ROX-041014	4/10/2014		44.66	NE	<0.00012	<0.00012	<0.012	<0.00012	<0.00006	<0.00012	<0.00006	<0.00012	<0.00012	<0.012 UJ	<0.012	<0.006	<0.0024	<0.006	<0.012	<0.006	<0.00012	<0.00012	<0.0024	<0.012	<0.006	<0.012
	MW2-ROX-071414	7/14/2014		43.13	NE	0.000084 J	<0.00011	<0.011	<0.00011	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011	<0.011	<0.0054	0.00037 J	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	<0.0022	<0.011	<0.0054	<0.011
	MW2-ROX-101014	10/10/2014	49.87 - 59.87	42.49	NE	<0.0001	<0.0001	<0.01	<0.0001	<0.000051	<0.0001	<0.000051	<0.0001	<0.0001	<0.01	<0.01	<0.0051	<0.002	<0.0051	<0.01	<0.0051	<0.0001	<0.0001	<0.002	<0.01	<0.0051	<0.01
MW-03	MW3-ROX-011612	1/16/2012	34.67 - 44.67	24.93	NE	<0.0001	<0.0001	<0.01	0.000063 J	0.00011	0.00012	0.00013	<0.00013 U	0.00012	<0.01 UJ	<0.01	<0.0052	<0.0004 U	<0.00039 U	<0.01	<0.0052	0.000098 J	<0.00013 U	<0.0052	<0.01	<0.0052	<0.01
	MW3-ROX-043012	4/30/2012		26.19	NE	<0.0001	<0.0001	<0.01	<0.0001	<0.000052	<0.0001	<0.000052	<0.0001	<0.0001	<0.01 UJ	<0.01	<0.0052	<0.0021	<0.0052	<0.01	<0.0052	<0.0001	<0.0001	<0.0052	<0.01	<0.0052	<0.01
	MW3-ROX-072712	7/27/2012		26.60	NE	<0.00011	<0.00011	<0.011 UJ	<0.00011	<0.000053	<0.00011	<0.000053	<0.00011 UJ	<0.00011	<0.011	<0.011	<0.0053	<0.00067 U	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	<0.0021	<0.011	<0.0053	<0.011
	MW3-ROX-102512	10/25/2012		28.39	NE	<0.0001	<0.0001	<0.01 UJ	<0.0001	<0.000051	<0.0001	<0.000051	<0.0001	<0.0001	<0.01	<0.01	<0.0051	<0.002	<0.0051	<0.01	<0.0051	<0.0001	<0.0001	<0.002	<0.01	<0.00059 U	<0.01
	MW3-ROX-010913	1/9/2013		29.35	NE	<0.0001	0.000023 J	<0.01 UJ	0.000037 J	<0.00005	<0.0001	<0.00005	<0.0001	<0.0001	<0.01	<0.01	<0.005	<0.002	<0.005	<0.01	<0.005	<0.0001	<0.0001	<0.002	<0.01	<0.005	<0.01
	MW3-ROX-040813	4/8/2013		29.74	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000057	<0.00011	<0.000057	<0.00011	<0.00011	<0.011	<0.011	<0.0057	<0.0023	<0.0057	<0.011	<0.0057	<0.00011	<0.00011	<0.0023	<0.011	<0.0057	<0.011
	MW3-ROX-071113	7/11/2013		26.32	NE	0.000028 J	<0.00011	<0.011	<0.00011	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011 UJ	<0.011	<0.0054	0.0038	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	<0.0022	<0.011	<0.0054	<0.011
	MW3-ROX-100813	10/8/2013		27.38	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011	<0.011	<0.0054	<0.0022	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	<0.0022	<0.011	<0.0054	<0.011
	MW3-ROX-011614	1/16/2014		29.91	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.011 UJ	<0.011	<0.0053	<0.0021	<0.0053	<0.011 UJ	<0.0053 UJ	<0.00011	<0.00011	<0.0021	<0.011 UJ	<0.0053	<0.011 UJ
	MW3-ROX-040914	4/9/2014		30.50	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000056	<0.00011	<0.000056	<0.00011	<0.00011	<0.011	<0.011	<0.0056	0.00038 J	<0.0056	<0.011	<0.0056	<0.00011	<0.00011	<0.0022	<0.011	<0.0056	<0.011
	MW3-ROX-071114	7/10/2014		29.05	NE	<0.0001	<0.0001	<0.011	<0.0001	<0.00005	<0.0001	<0.00005	<0.0001	<0.0001	<0.011	<0.011	<0.0054	0.0013 J	<0.0054	<0.011	<0.0054	0.000028 J	<0.0001	<0.0022	<0.011	<0.0054	<0.011
	MW3-ROX-100914	10/9/2014	34.67 - 44.67	28.18	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000056	<0.00011	<0.000056	<0.00011	<0.00011	<0.011	<0.011	<0.0056	<0.0022	<0.0056	<0.011	<0.0056	<0.00011	<0.00011	<0.0022	<0.011	<0.0056	<0.011
MW-04	MW4-ROX-011612	1/16/2012	46.06 - 56.06	36.00	NE	<0.0001	<0.0001	<0.01	0.00003 J	0.00012	0.00012	0.00013	<0.0002 U	0.00015	<0.01 UJ	<0.01	<0.0052	<0.0005 U	<0.00073 U	<0.01	<0.0052	0.00014	<0.00019 U	<0.0052	<0.01	<0.0052	<0.01
	MW4-ROX-050312	5/3/2012		37.45	NE	<0.0001	<0.0001	<0.01	<0.0001	<0.00005	<0.0001	<0.00005	<0.0001	<0.0001	<0.01	<0.01	<0.005	<0.002	<0.005	<0.01	<0.005	<0.0001	<0.0001	<0.005	<0.01	<0.005	<0.01
	MW4-ROX-050312-DUP	5/3/2012		37.45	NE	<0.0001	<0.0001	<0.01	<0.0001	<0.000051	<0.0001	<0.000051	<0.0001	<0.0001	<0.01	<0.01	<0.0051	<0.002	<0.0051	<0.01	<0.0051	<0.0001	<0.0001	<0.0051	<0.01	<0.0051	<0.01
	MW4-ROX-072512	7/25/2012		37.63	NE	<0.0001	<0.0001	<0.01	<0.0001	<0.000051	<0.0001	<0.000051	<0.0001	<0.0001	0.0056 J	<0.01	<0.0051	<0.00079 U	0.00039 J	<0.01	<0.0051	<0.0001	<0.0001	<0.002	<0.01	0.0014 J	<0.01
	MW4-ROX-072512-Dup	7/25/2012		37.63	NE	<0.0001	<0.0001	<0.01	<0.0001	<0.000051	<0.0001	<0.000046 U	<0.0001	<0.0001	<0.01	<0.01	<0.0051	<0.00069 U	<0.0051	<0.01	<0.0051	<0.0001	<0.0001	<0.002	<0.01	0.0012 J	<0.01
	MW4-ROX-102912	10/29/2012		39.45	NE	<0.0001	<0.0001	<0.01 UJ	<0.0001	<0.000052	<0.0001	<0.000052	<0.0001	<0.0001	<0.01	<0.01	<0.0052	<0.0021	<0.0052	<0.01	<0.0052	<0.0001	<0.0001	<0.0021	<0.01	<0.0052	<0.01
	MW4-ROX-011113	1/11/2013		40.20	NE	<0.00011	<0.00011	<0.011 UJ	<0.00011	<0.000056	<0.00011	<0.000056	<0.00011	<0.00011	<0.011	<0.011	<0.0056	<0.0022	<0.0056	<0.011	<0.0056	<0.00011	<0.00011	<0.0022	<0.011	<0.0056	<0.011
	MW4-ROX-011113-DUP	1/11/2013		40.20	NE	<0.00012	<0.00012	<0.012 UJ	<0.00012	<0.00006	<0.00012	<0.00006	<0.00012	<0.00012	<0.012	<0.012	<0.006	<0.0024	<0.006	<0.012	<0.006	<0.00012	<0.00012	<0.0024	<0.012	<0.006	<0.012
	MW4-ROX-030413	3/4/2013		40.20	NE																						
	MW4-ROX-040913	4/9/2013		40.90	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011	<0.011	<0.0053	<0.0021	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	<0.0021	<0.011	<0.0053	<0.011
	MW4-ROX-040913-DUP	4/9/2013		40.90	NE	<0.00011	<0.00011	<0.011 UJ	<0.00011	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.011	<0.011	<0.0053	<0.0021	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	<0.0021	<0.011	<0.0053 UJ	<0.011
	MW4-ROX-071713	7/17/2013		37.61	NE	<0.000036 U	<0.00011	<0.011	<0.00011	<0.000055	0.00004 J	0.000034 J	0.000061 J	<0.00011	<0.011	<0.011	<0.0055	<0.0022	<0.0055	<0.011	<0.0055	<0.00011	<0.00011	<0.0022	<0.011	<0.0055	<0.011
	MW4-ROX-101613	10/16/2013		38.80	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011 UJ	<0.011	<0.0054	<0.0022	<0.0054	<0.011 UJ	<0.0055 UJ	<0.00011	<0.00011	<0.0022	<0.011 UJ	<0.0054	<0.011 UJ
	MW4-ROX-013014	1/30/2014		41.09	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011 UJ	<0.011	<0.0054	<0.0022	<0.0054	<0.011 UJ	<0.0054 UJ	<0.00011	<0.00011	<0.0022	<0.011 UJ	<0.0054	<0.011 UJ
	MW4-ROX-041614	4/16/2014		41.91	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000056	<0.00011	<0.000056	<0.00011	<0.00011	<0.011 UJ	<0.011	<0.0056	<0.0022	<0.0056	<0.011	<0.0056	<0.00011	<0.00011	<0.0022	<0.011	<0.0056	<0.011
	MW4-ROX-071614	7/16/2014		40.18	NE	<0.0001	<0.0001	<0.01	<0.0001	<0.000052	<0.0001	<0.000052	<0.0001	<0.0001	<0.01	<0.01	<0.0052	0.00038 J	<0.0052	<0.01	<0.0052	<0.0001	<0.0001	<0.0021	<0.01	<0.0052	<0.01
	MW4-ROX-101614	10/16/2014	46.06 - 56.06	39.49	NE	<0.00012	<0.00012	<0.012	<0.00012	<0.000059	<0.00012	<0.000059	<0.00012	<0.00012	<0.012	<0.012	<0.0059	<0.0024	<0.0059	<0.012	<0.0059	<0.00012	<0.00012	<0.0024	<0.012	<0.0059	<0.012

TABLE 3
CUMULATIVE SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL RESULTS AND EXCEEDANCES

						SVOCs																			
						Acenaphthene	Acenaphthylene	Aniline	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Benzoic Acid	Benzyl alcohol	bis(2-Chloroethylether	bis(2-Ethylhexyl)phthalate	Butyl benzyl phthalate	4-Chloro-3-methylphenol (p-Chloro-m-cresol)	2-Chlorophenol	Chrysene (1,2-Benzphenanthracene)	Dibenzo(a,h)anthracene	Dibenzofuran	2,4-Dichlorophenol	Diethyl phthalate	2,4-Dimethylphenol
					Screening Values (mg/L)	0.42 [1]	0.21 [3]	0.023 [3]	2.1 [1]	0.00013 [1]	0.0002 [1]	0.00018 [1]	0.21 [3]	0.00017 [1]	28 [1]	0.7 [3]	0.01 [2]	0.006 [2]	1.4 [2]		0.035 [2]	0.012 [1]	0.0003 [1]	0.007 [3]	0.021 [2]	5.6 [1]	0.14 [2]
Location	Sample ID	Sample Date	Screened Interval (ft btoc)	Depth to Water (ft btoc)	Product Thickness (ft)	Analytical Results (mg/L)																				
MW-05	MW5-ROX-011712	1/17/2012	33.97 - 43.97	24.76	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.011 UJ	<0.011	<0.0053	<0.0015 U	<0.00049 U	<0.011	<0.0053	<0.00011	<0.00011	<0.0053	<0.011	<0.0053	<0.011
	MW5-ROX-050312	5/3/2012		25.89	NE	<0.0001	<0.0001	<0.01	<0.0001	<0.000051	<0.0001	<0.000051	<0.0001	<0.0001	<0.01	<0.01	<0.0051	<0.002	<0.0051	<0.01	<0.0051	<0.0001	<0.0001	<0.0051	<0.01	<0.0051	<0.01
	MW5-ROX-072512	7/25/2012		26.18	NE	<0.0001	<0.0001	<0.01	<0.0001	<0.000052	<0.0001	<0.000052	<0.0001	<0.0001	<0.01	<0.01	<0.0052	<0.00064 U	<0.0052	<0.01	<0.0052	<0.0001	<0.0001	<0.0021	<0.01	0.0011 J	<0.01
	MW5-ROX-102912	10/29/2012		28.16	NE	<0.0001	<0.0001	<0.01 UJ	<0.0001	<0.000051	<0.0001	<0.000051	<0.0001	<0.0001	<0.01	<0.01	<0.0051	<0.002	<0.0051	<0.01	<0.0051	<0.0001	<0.0001	<0.002	<0.01	<0.0051	<0.01
	MW5-ROX-011113	1/11/2013		28.75	NE	0.000071 J	0.000066 J	<0.011 UJ	0.000028 J	<0.000055	<0.00011	<0.000055	<0.00011	<0.00011	<0.011	<0.011	<0.0055	<0.0022	<0.0055	<0.011	<0.0055	<0.00011	<0.00011	<0.0022	<0.011	<0.0055	<0.011
	MW5-ROX-040913	4/9/2013		29.41	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011	<0.011	<0.0054	<0.0022	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	<0.0022	<0.011	<0.0054	<0.011
	MW5-ROX-070913	7/9/2013		26.04	NE	<0.0001	<0.0001	<0.01	<0.0001	0.0001 J	<0.0001	<0.00005	<0.0001	<0.0001	<0.01	<0.01	<0.005	<0.002	<0.005	<0.01	<0.005	<0.0001	<0.0001	<0.002	<0.01	<0.005	<0.01
	MW5-ROX-100813	10/8/2013		26.97	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000055	<0.00011	<0.000055	<0.00011	<0.00011	<0.011	<0.011	<0.0055	<0.0022	<0.0055	<0.011	<0.0055	<0.00011	<0.00011	<0.0022	<0.011	<0.0055	<0.011
	MW5-ROX-011714	1/17/2014		29.59	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.011	<0.011	<0.0053	<0.0021	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	<0.0021	<0.011	<0.0053	<0.011
	MW5-ROX-041014	4/10/2014		30.09	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000056	<0.00011	<0.000056	<0.00011	<0.00011	<0.011 UJ	<0.011	<0.0056	<0.0022	<0.0056	<0.011	<0.0056	<0.00011	<0.00011	<0.0022	<0.011	<0.0056	<0.011
	MW5-ROX-071414	7/14/2014		28.59	NE	0.000075 J	<0.00011	<0.011	<0.00011	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.011	<0.011	<0.0053	<0.0021	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	<0.0021	<0.011	<0.0053	<0.011
	MW-5-ROX-100914	10/9/2014	33.97 - 43.97	27.75	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011	<0.011	<0.0054	<0.0022	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	<0.0022	<0.011	<0.0054	<0.011
MW-06A	MW6A-ROX-011712	1/17/2012	34.83 - 44.83	26.74	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000064 U	<0.00008 U	<0.00009 U	<0.00015 U	0.000094 J	<0.011 UJ	<0.011	<0.0054	<0.0022	<0.0054	<0.011	<0.0054	<0.00011	<0.00014 U	<0.0054	<0.011	<0.0054	<0.011
	MW6A-ROX-050212	5/2/2012		27.77	NE	<0.0001	<0.0001	<0.01	<0.0001	<0.00005	<0.0001	<0.00005	<0.0001	<0.0001	<0.0029 UJ	<0.01	<0.005	<0.002	<0.005	<0.01	<0.005	<0.0001	<0.0001	<0.005	<0.01	<0.005	<0.01
	MW6A-ROX-080112	8/1/2012		28.36	NE	<0.0001	<0.0001	<0.01 UJ	<0.0001	<0.00005	<0.0001	<0.00005	<0.0001	<0.0001	<0.01	<0.01	<0.005	<0.002	<0.005	<0.01	<0.005	<0.0001	<0.0001	<0.002	<0.01	<0.005	<0.01
	MW6A-ROX-102412	10/24/2012		30.06	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.011	<0.011	<0.0053	<0.0021	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	<0.0021	<0.011	<0.0053	<0.011
	MW6A-ROX-011413	1/14/2013		31.00	NE	<0.0001	<0.0001	<0.01 UJ	<0.0001	<0.000051	<0.0001	<0.000051	0.000073 J	<0.0001	<0.01 UJ	<0.01	<0.0051	0.00054 J	<0.0051	<0.01	<0.0051	<0.0001	0.000066 J	<0.002	<0.01	<0.0051	<0.01
	MW6A-ROX-040313	4/3/2013		31.62	NE	<0.00011	<0.00011 UJ	<0.011 UJ	<0.00011	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.011	<0.011 UJ	<0.0053	0.00052 J	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	<0.0021	<0.011	<0.0053	<0.011
	MW6A-ROX-070913	7/9/2013		28.25	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000055	<0.00011	<0.000055	<0.00011	<0.00011	<0.011	<0.011	<0.0055	<0.0022	<0.0055	<0.011	<0.0055	<0.00011	<0.00011	<0.0022	<0.011	<0.0055	<0.011
	MW6A-ROX-070913-DUP	7/9/2013		28.25	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000055	<0.00011	<0.000055	<0.00011	<0.00011	<0.011	<0.011	<0.0055	<0.0022	<0.0055	<0.011	<0.0055	<0.00011	<0.00011	<0.0022	<0.011	<0.0055	<0.011
	MW6A-ROX-100713	10/7/2013		28.87	NE	0.0001 J	<0.00011	<0.011	<0.00011	<0.000056	<0.00011	<0.000056	<0.00011	<0.00011	<0.011	<0.011	<0.0056	<0.0022	<0.0056	<0.011	<0.0056	<0.00011	<0.00011	<0.0022	<0.011	<0.00082 U	<0.011
	MW6A-ROX-100713-DUP	10/7/2013		28.87	NE	0.000093 J	<0.00011	<0.011	<0.00011	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011	<0.011	<0.0054	<0.0022	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	<0.0022	<0.011	0.00078 J	<0.011
	MW6A-ROX-011614	1/16/2014		31.62	NE	<0.0001	<0.0001	<0.01	<0.0001	<0.000052	<0.0001	<0.000052	<0.0001	<0.0001	<0.01 UJ	<0.01	<0.0052	<0.0021	<0.0052	<0.01	<0.0052	<0.0001	<0.0001	<0.0021	<0.01	<0.0052	<0.01
	MW6A-ROX-011614-DUP	1/16/2014		31.62	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.011 UJ	<0.011	<0.0053	<0.0021	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	<0.0021	<0.011	<0.0053	<0.011
	MW6A-ROX-040814	4/8/2014		32.16	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011	<0.011 UJ	<0.0056	<0.00057 U	<0.0056	<0.011	<0.0056	<0.00011	<0.00011	<0.0022	<0.011	<0.0056	<0.011
	MW6A-ROX-040814-DUP	4/8/2014		32.16	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000055	<0.00011	<0.000055	<0.00011	<0.00011	<0.011	<0.011 UJ	<0.0054	<0.00066 U	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	<0.0022	<0.011	<0.0054	<0.011
	MW6A-ROX-071014	7/10/2014		30.75	NE	<0.00011	0.000075 J	<0.011 UJ	<0.00011	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011	<0.011	<0.0054	<0.0022	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	<0.0022	<0.011	<0.0054	<0.011
	MW6A-ROX-100814	10/8/2014	34.83 - 44.83	29.84	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.011	<0.011	<0.0053	<0.0021	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	<0.0021	<0.011	<0.0053	<0.011
MW-06B	MW6B-ROX-011712	1/17/2012	64.05 - 69.05	26.77	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000055	<0.00015 U	<0.00011 U	<0.00028 U	0.0001 J	<0.011 UJ	<0.011	<0.0055	<0.0011 U	<0.0055	<0.011	<0.0055	<0.00011	<0.00027 U	<0.0055	<0.011	<0.0055	<0.011
	MW6B-ROX-050212	5/2/2012		27.82	NE	<0.0001	<0.0001	<0.01	<0.0001	<0.00005	<0.0001	<0.00005	<0.0001	<0.0001	<0.01 UJ	<0.01	<0.005	<0.002	<0.005	<0.01	<0.005	<0.0001	<0.0001	<0.005	<0.01	<0.005	<0.01
	MW6B-ROX-080112	8/1/2012		28.39	NE	<0.0001	<0.0001	<0.01 UJ	<0.0001	<0.000051	<0.0001	<0.000051	<0.0001	<0.0001	<0.01	<0.01	<0.0051	0.00049 J	<0.0051	<0.01	<0.0051	<0.0001	<0.0001	<0.002	<0.01	<0.0051	<0.01
	MW6B-ROX-102412	10/24/2012		30.11	NE	<0.0001	<0.0001	<0.01	<0.0001	<0.000051	<0.0001	<0.000051	<0.0001	<0.0001	<0.01	<0.01	<0.0051	<0.002	0.00057 J	<0.01	<0.0051	<0.0001	<0.0001	<0.002	<0.01	<0.0051	<0.01
	MW6B-ROX-011713	1/17/2013		31.11	NE	<0.0001	<0.0001	<0.01 UJ	<0.0001	<0.00005	<0.0001	<0.00005	<0.0001	<0.0001	<0.01	<0.01	<0.005	<0.002	<0.005	<0.01	<0.005	<0.0001	<0.0001	<0.002	<0.01	<0.005	<0.01
	MW6B-ROX-040313	4/3/2013		31.68	NE	<0.00011	<0.00011 UJ	<0.011 UJ	<0.00011	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011	<0.011 UJ	<0.0054	<0.0022	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	<0.0022	<0.011	<0.0054	<0.011
	MW6B-ROX-070913	7/9/2013		28.25	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000056	<0.00011	<0.000056	<0.00011	<0.00011	<0.011	<0.011	<0.0056	<0.0022	<0.0056	<0.011	<0.0056	<0.00011	<0.00011	<0.0022	<0.011	<0.0056	<0.011
	MW6B-ROX-100713	10/7/2013		28.93	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011	<0.011	<0.0054	<0.00057 U	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	<0.0022	<0.011	<0.00084 U	<0.011
	MW6B-ROX-011614	1/16/2014		31.67	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000054	<0.00011	<0.000054	0.000051 J	<0.00011	<0.011 UJ	<0.011	<0.0054	<0.0022	<0.0054	<0.011	<0.0054	<0.00011	0.000042 J	<0.0022	<0.011	<0.0054	<0.011
	MW6B-ROX-040814	4/8/2014		32.21	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.011	<0.011	<0.0053	<0.0021	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	<0.0021	<0.011	<0.0053	<0.011
	MW6B-ROX-071014	7/10/2014		30.81	NE	<0.00011	<0.00011	<0.011 UJ	<0.00011	<0.000056	<0.00011	<0.000056	<0.00011	<0.00011	<0.011	<0.011	<0.0056	<0.0022	<0.0056	<0.011	<0.0056	<0.00011	<0.00011	<0.0022	<0.011	<0.0056	<0.011
	MW6B-ROX-100814	10/8/2014	64.05 - 69.05	29.87	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.011	<0.011	<0.0053	<0.0021	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	<0.0021	<0.011	<0.0053	<0.011
MW-06C	MW6C-ROX-011712	1/17/2012	84.95 - 89.95	26.50	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011 UJ	<0.011	<0.0054	<0.0022	<0.00046 U	<0.011	<0.0054	<0.00011	<0.00011	<0.0054	<0.011	<0.0054	<0.011
	MW6C-ROX-050212	5/2/2012		27.62	NE	<0.0001	<0.0001	<0.01	<0.0001	<0.00005	<0.0001	<0.00005	<0.0001	<0.0001	<0.01 UJ	<0.01	<0.005	<0.002	<0.005	<0.01	<0.005	<0.0001	<0.0001	<0.005	<0.01	<0.005	<0.01
	MW6C-ROX-080112	8/1/2012		28.15	NE	<0.0001	<0.0001	<0.01 UJ	<0.0001	<0.00005	<0.0001	<0.00005	<0.0001	<0.0001	<0.01	<0.01	<0.005	<0.002	<0.005	<0.01	<0.005	<0.0001	<0.0001	<0.002	<0.01	<0.005	<0.01
	MW6C-ROX-102412	10/24/2012		27.85	NE	<0.0001	<0.0001	<0.01	<0.0001	<0.000051	<0.0001	<0.000051	<0.0001	<0.0001	<0.01	<0.01	<0.0051	<0.002	<0.0051	<0.01	<0.0051	<0.0001	<0.0001	<0.002	<0.01	<0.0051	<0.01
	MW6C-ROX-011713	1/17/2013		30.88	NE	<0.0001	<0.0001	<0.01 UJ	<0.0001	<0.00005	<0.0001	<0.00005	<0.0001	<0.0001	<0.01	<0.01	<0.005	<0.002	<0.005	<0.01	<0.005	<0.0001	<0.0001	<0.002	<0.01	<0.005	<0.01
	MW6C-ROX-040313	4/3/2013		31.41	NE	<0.0001	<0.0001 UJ	<0.01 UJ	<0.0001	<0.000052	<0.0001	<0.000052	<0.0001	<0.0001	<0.01	<0.01 UJ	<0.0052	<0.0021	<0.0052	<0.01	<0.0052	<0.0001	<0.0001	<0.0021	<0.01	<0.0052	<0.01
	MW6C-ROX-070913	7/9/2013		28.03	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000056	<0.00011	<0.000056	<0.00011	<0.00011	<0.011	<0.011	<0.0056	<0.0022	<0.0056	<0.011	<0.0056	<0.00011	<0.00011	<0.0022	<0.011	<0.0056	<0.011
	MW6C-ROX-100713	10/7/2013		28.72	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000055	<0.00011	<0.000055	<0.00011	<0.00011	<0.011	<0.011	<0.0055	<0.00056 U	<0.0055	<0.011	<0.0055	<0.00011	<0.00011	<0.0022	<0.011	<0.0013 U	<0.011
	MW6C-ROX-011614	1/16/2014		31.48	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000053	<0.00011	<0.000053	0.000041 J	<0.00011	<0.011 UJ	<0.011	<0.0053	<0.0021	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	<0.0021	<0.011	<0.0053	<0.011
	MW6C-ROX-040814	4/8/2014		32.01	NE	<0.00012	<0.00012	<0.012	<0.00012	<0.000059	<0.00012	<0.000059	<0.00012	<0.00012	<0.012	<0.012	<0.0059	<0.0024	<0.0059	<0.012	<0.0059	<0.00012	<0.00012	<0.0024	<0.012	<0.0059	<0.012
	MW6C-ROX-071014	7/10/2014		30.60	NE	<0.00011	<0.00011	<0.011 UJ	<0.00011	0.000034 J	<0.00011	<0.000056	0.000035 J	<0.00011	<0.011	<0.011	<0.0056	<0.0022	<0.0056	<0.011	<0.0056	0.000037 J	<0.00011	<0.0022	<0.011	<0.0056	<0.011
	MW6C-ROX-100814	10/8/2014	84.95 - 89.95	29.67	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000056	<0.00011	<0.000056	<0.00011	<0.00011	<0.011	<0.011	<0.0056	<0.0022	<0.0056	<0.011	<0.0056	<0.00011	<0.00011	<0.0022	<0.011	<0.0056	<0.011

TABLE 3
CUMULATIVE SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL RESULTS AND EXCEEDANCES

						SVOCs																		
						Acenaphthene	Acenaphthylene	Aniline	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Benzoic Acid	Benzyl alcohol	bis(2-Chloroethylether	bis(2-Ethylhexyl)phthalate	Butyl benzyl phthalate	4-Chloro-3-methylphenol (p-Chloro-m-cresol)	2-Chlorophenol	Chrysene (1,2-Benzphenanthracene)	Dibenzo(a,h)anthracene	Dibenzofuran	2,4-Dichlorophenol	Diethyl phthalate	2,4-Dimethylphenol
			Screening Values (mg/L)			0.42 [1]	0.21 [3]	0.023 [3]	2.1 [1]	0.00013 [1]	0.0002 [1]	0.00018 [1]	0.21 [3]	0.00017 [1]	28 [1]	0.7 [3]	0.01 [2]	0.006 [2]	1.4 [2]		0.035 [2]	0.012 [1]	0.0003 [1]	0.007 [3]	0.021 [2]	5.6 [1]	0.14 [2]
Location	Sample ID	Sample Date	Screened Interval (ft btoc)	Depth to Water (ft btoc)	Product Thickness (ft)	Analytical Results (mg/L)																				
MW-06D	MW6D-ROX-011712	1/17/2012	104.72 - 109.72	26.33	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000055	<0.00011	<0.000055	<0.00011	<0.00011	<0.011 UJ	<0.011	<0.0055	<0.0022	<0.0055	<0.011	<0.0055	<0.00011	<0.00011	<0.0055	<0.011	<0.0055	<0.011
	MW6D-ROX-050212	5/2/2012		27.45	NE	<0.0001	<0.0001	<0.01	<0.0001	<0.000052	<0.0001	<0.000052	<0.0001	<0.0001	<0.0044 UJ	<0.01	<0.005	<0.002	<0.005	<0.01	<0.005	<0.0001	<0.0001	<0.005	<0.01	<0.005	<0.01
	MW6D-ROX-080212	8/2/2012		30.56	NE	<0.0001	<0.0001	<0.01 UJ	<0.0001	<0.000051	<0.0001	<0.000051	<0.0001	<0.0001	<0.01	<0.01	<0.0051	<0.002	<0.0051	<0.01	<0.0051	<0.0001	<0.0001	<0.002	<0.01	0.00022 J	<0.01
	MW6D-ROX-102412	10/24/2012		29.71	NE	<0.0001	<0.0001	<0.01	<0.0001	<0.000052	<0.0001	<0.000052	<0.0001	<0.0001	<0.01	<0.01	<0.0052	<0.0021	<0.0052	<0.01	<0.0052	<0.0001	<0.0001	<0.0021	<0.01	<0.0052	<0.01
	MW6D-ROX-011713	1/17/2013		30.75	NE	<0.0001	<0.0001	<0.01 UJ	<0.0001	<0.00005	<0.0001	<0.00005	<0.0001	<0.0001	<0.01	<0.01	<0.005	<0.002	<0.005	<0.01	<0.005	<0.0001	<0.0001	<0.002	<0.01	<0.005	<0.01
	MW6D-ROX-040313	4/3/2013		31.27	NE	<0.00011	<0.00011 UJ	<0.011 UJ	<0.00011	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.011	<0.011 UJ	<0.0053	<0.0021	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	<0.0021	<0.011	<0.0053	<0.011
	MW6D-ROX-070913	7/9/2013		27.91	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000055	<0.00011	<0.000055	<0.00011	<0.00011	<0.011	<0.011	<0.0055	<0.0022	<0.0055	<0.011	<0.0055	<0.00011	<0.00011	<0.0022	<0.011	<0.0055	<0.011
	MW6D-ROX-100713	10/7/2013		28.58	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011	<0.011	<0.0054	<0.0022	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	<0.0022	<0.011	<0.001 U	<0.011
	MW6D-ROX-011614	1/16/2014		31.33	NE	<0.0001	<0.0001	<0.01	<0.0001	<0.000052	<0.0001	<0.000052	<0.0001	<0.0001	<0.01 UJ	<0.01	<0.0052	<0.0021	<0.0052	<0.01	<0.0052	<0.0001	<0.0001	<0.0021	<0.01	<0.0052	<0.01
	MW6D-ROX-040814	4/8/2014		31.85	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000055	<0.00011	<0.000055	<0.00011	<0.00011	<0.011	<0.011	<0.0055	<0.0022	<0.0055	<0.011	<0.0055	<0.00011	<0.00011	<0.0022	<0.011	<0.0055	<0.011
	MW6D-ROX-071014	7/10/2014		31.47	NE	<0.00011	<0.00011	<0.011 UJ	<0.00011	<0.000056	<0.00011	<0.000056	<0.00011	<0.00011	<0.011	<0.011	<0.0056	<0.0022	<0.0056	<0.011	<0.0056	<0.00011	<0.00011	<0.0022	<0.011	<0.0056	<0.011
	MW6D-ROX-071014-DUP	7/10/2014		31.47	NE	<0.00011	<0.00011	<0.011 UJ	<0.00011	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011	<0.011	<0.0054	<0.0022	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	<0.0022	<0.011	<0.0054	<0.011
	MW6D-ROX-100814	10/8/2014	104.72 - 109.72	29.53	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	0.016	<0.011	<0.0054	<0.0022	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	<0.0022	<0.011	<0.0054	<0.011
	MW6D-ROX-100814-DUP	10/8/2014		29.53	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000056	<0.00011	<0.000056	<0.00011	<0.00011	<0.011	<0.011	<0.0056	<0.0022	<0.0056	<0.011	<0.0056	<0.00011	<0.00011	<0.0022	<0.011	<0.0056	<0.011
MW-07	MW7-ROX-011812	1/18/2012	42.92 - 52.92	38.10	NE	0.00025	<0.0001	<0.01	<0.0001	<0.00005	<0.000024 U	<0.00005	<0.0001	<0.0001		<0.01 UJ	<0.005	<0.002	0.00049 J	<0.01	<0.005	<0.0001	<0.0001	<0.005	<0.01	<0.005	<0.01
	MW7-ROX-011812-DUP	1/18/2012		38.10	NE	0.00027	<0.00011	<0.011	<0.00011	<0.000056	<0.00003 U	<0.000056	<0.00011	<0.00011		<0.011 UJ	<0.0056	0.00044 J	0.00048 J	<0.011	<0.0056	<0.00011	<0.00011	<0.0056	<0.011	<0.0056	<0.011
	MW7-ROX-050412	5/4/2012		39.19	NE	0.00028	<0.0001	<0.01	<0.0001	0.00011	<0.0001	<0.00005	<0.0001	<0.0001	<0.01	<0.01	<0.005	0.00071 J	<0.005	<0.01	<0.005	<0.0001	<0.0001	<0.005	<0.01	<0.005	<0.01
	MW7-ROX-080712	8/7/2012		39.50	NE	0.00024	0.000037 J	<0.01 UJ	0.000022 J	<0.000051	<0.0001	<0.000051	<0.0001	<0.0001	<0.01	<0.01	<0.0051	0.0006 J	<0.0051	<0.01	<0.0051	<0.0001	<0.0001	<0.002	<0.01	<0.00058 U	<0.01
	MW7-ROX-103012	10/30/2012		41.23	NE	0.00031	<0.00012	<0.012 UJ	<0.00012	<0.000058	<0.00012	<0.000058	<0.00012	<0.00012	<0.012	<0.012	<0.0058	0.0015 J	<0.0058	<0.012	<0.0058	<0.00012	<0.00012	<0.0023	<0.012	<0.0058	<0.012
	MW7-ROX-103012-DUP	10/30/2012		41.23	NE	0.00034	<0.00011	<0.011 UJ	<0.00011	<0.000056	<0.00011	<0.000056	<0.00011	<0.00011	<0.011	<0.011	<0.0056	0.0007 J	<0.0056	<0.011	<0.0056	<0.00011	<0.00011	<0.0022	<0.011	<0.0056	<0.011
	MW7-ROX-011513	1/15/2013		42.21	NE	0.00073	0.00011	<0.011 UJ	0.000059 J	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.011 UJ	<0.011	<0.0053	0.00061 J	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	<0.0021	<0.011	<0.0053	<0.011
	MW7-ROX-011513-DUP	1/15/2013		42.21	NE	0.00066	0.000093 J	<0.01 UJ	<0.0001	<0.000052	<0.0001	<0.000052	<0.0001	<0.0001	<0.01 UJ	<0.01	<0.0052	0.00055 J	<0.0052	<0.01	<0.0052	<0.0001	<0.0001	<0.0021	<0.01	<0.0052	<0.01
	MW7-ROX-041013	4/10/2013		42.70	NE	0.0012	0.00015	<0.011	0.000089 J	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011	<0.011	<0.0054	<0.0022	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	0.00083 J	<0.011	<0.0054	<0.011
	MW7-ROX-041013-DUP	4/10/2013		42.70	NE	0.0012	0.00016	<0.011	0.00011	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.011	<0.011	<0.0053	<0.0021	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	0.00088 J	<0.011	<0.0053	<0.011
	MW7-ROX-071713	7/17/2013		39.60	NE	0.00019	0.000031 J	<0.011	0.000028 J	0.00004 J	0.000044 J	0.000045 J	0.00008 J	<0.00011	<0.011	<0.011	<0.0054	<0.0022	<0.0054	<0.011	<0.0054	<0.00011	0.000077 J	<0.0022	<0.011	<0.0054	<0.011
	MW7-ROX-101613	10/16/2013		40.64	NE	0.00035	<0.00011	<0.011	<0.00011	<0.000055	<0.00011	<0.000055	<0.00011	<0.00011	<0.011	<0.011	<0.0055	<0.0022	<0.0055	<0.011	<0.0055	<0.00011	<0.00011	<0.0022	<0.011	<0.0055	<0.011
	MW7-ROX-013014	1/30/2014		42.94	NE	0.00028	<0.0001	<0.01	0.00029	<0.00005	<0.0001	<0.00005	<0.0001	<0.0001	<0.01	<0.01	<0.005	<0.002	<0.005	<0.01	<0.005	<0.0001	<0.0001	<0.002	<0.01	<0.005	<0.01
	MW7-ROX-041614	4/16/2014		43.79	NE	0.00034	<0.0001	<0.01	<0.0001	<0.000052	<0.0001	<0.000052	<0.0001	<0.0001	<0.01 UJ	<0.01	<0.0052	<0.0021	<0.0052	<0.01	<0.0052	<0.0001	<0.0001	<0.0021	<0.01	<0.0052	<0.01
	MW7-ROX-071614	7/16/2014		42.05	NE	0.00024	<0.0001	<0.01	<0.0001	<0.00005	<0.0001	<0.00005	<0.0001	<0.0001	<0.01	<0.01	<0.0052	<0.0021	<0.0052	<0.01	<0.0052	<0.0001	<0.0001	<0.0021	<0.01	<0.0052	<0.01
	MW7-ROX-071614-DUP	7/16/2014		42.05	NE	0.00022	<0.0001	<0.01	<0.0001	<0.00005	<0.0001	<0.00005	<0.0001	<0.0001	<0.01	<0.01	<0.0052	<0.0021	<0.0052	<0.01	<0.0052	<0.0001	<0.0001	<0.0021	<0.01	<0.0052	<0.01
	MW7-ROX-101614	10/16/2014	42.92 - 52.92	41.31	NE	0.00024	<0.00011	<0.011	<0.00011	<0.000056	<0.00011	<0.000056	<0.00011	<0.00011	<0.011	<0.011	<0.0056	<0.0022	<0.0056	<0.011	<0.0056	<0.00011	<0.00011	<0.0022	<0.011	<0.0056	<0.011
	MW7-ROX-101614-DUP	10/16/2014		41.31	NE	0.00022	<0.00011	<0.011	<0.00011	<0.000057	<0.00011	<0.000057	<0.00011	<0.00011	<0.011	<0.011	<0.0057	<0.0023	<0.0057	<0.011	<0.0057	<0.00011	<0.00011	<0.0023	<0.011	<0.0057	<0.011
MW-08	MW8-ROX-011812	1/18/2012	33.60 - 43.60	29.15	NE	0.00038 J	<0.00053	<0.011	<0.00053	<0.00026	<0.00053	<0.00026	<0.00053	<0.00053		<0.011 UJ	<0.0053	0.00052 J	0.00042 J	<0.011	<0.0053	<0.00053	<0.00053	0.0006 J	<0.011	<0.0053	0.015
	MW8-ROX-050412	5/4/2012		30.21	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	0.0204	<0.011	<0.0053	0.00053 J	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	0.00044 J	<0.011	<0.0053	0.0595
	MW8-ROX-050412-DUP	5/4/2012		30.21	NE	<0.0001	<0.0001	<0.01	<0.0001	0.00012	<0.0001	<0.00005	<0.0001	<0.0001	<0.01	<0.01	<0.005	0.00047 J	<0.005	<0.01	<0.005	<0.0001	<0.0001	<0.005	<0.01	<0.005	0.0557
	MW8-ROX-080712	8/7/2012		30.97	NE	0.00023	0.00013	<0.011 UJ	0.000055 J	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011	<0.011	<0.0054	0.00051 J	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	0.00035 J	<0.011	<0.0016 U	0.015
	MW8-ROX-080712-DUP	8/7/2012		30.97	NE	0.0002	0.00029	<0.011 UJ	0.000071 J	<0.000056	<0.00011	<0.000056	<0.00011	<0.00011	<0.011	<0.011	<0.0056	0.00043 J	<0.0056	<0.011	<0.0056	<0.00011	<0.00011	0.0004 J	<0.011	<0.0018 U	0.0158
	MW8-ROX-103012	10/30/2012		32.32	NE	0.00026	0.00011	<0.011 UJ	0.00044	<0.00087 U	0.00053 B	0.00057 B	0.00058 B	0.00064 B	<0.011	<0.011	<0.0053	0.0012 J	0.00086 J	<0.011	<0.0053	0.00066 B	0.00059 B	<0.0021	<0.011	<0.0053	0.0085 J
	MW8-ROX-011513	1/15/2013		33.30	NE	0.00017	0.000085 J	<0.011 UJ	0.000029 J	<0.000056	<0.00011	<0.000056	<0.00011	<0.00011	<0.011 UJ	<0.011	<0.0056	0.00089 J	<0.0056	<0.011	<0.0056	<0.00011	<0.00011	<0.0022	<0.011	<0.0056	0.019
	MW8-ROX-041013	4/10/2013		33.77	NE	0.00018	0.000059 J	<0.011	0.000072 J	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.011	<0.011	<0.0053	0.0023	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	<0.0021	<0.011	<0.0053	0.0358
	MW8-ROX-071713	7/17/2013		30.43	NE	0.0002	<0.0001	<0.01	0.000049 J	<0.000052	0.000021 J	<0.000052	0.00004 J	<0.0001	<0.01	<0.01	<0.0052	<0.0021	<0.0052	<0.01	<0.0052	<0.0001	<0.0001	<0.0021	<0.01	<0.0052	0.009 J
	MW8-ROX-071713-DUP	7/17/2013		30.43	NE	0.00019	0.000056 J	<0.011	0.000061 J	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011	<0.011	<0.0054	<0.0022	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	0.0004 J	<0.011	<0.0054	0.0089 J
	MW8-ROX-101613	10/16/2013		31.59	NE	0.00021	0.000089 J	<0.011	<0.00011	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011	<0.011	<0.0054	<0.0022	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	0.0005 J	<0.011	<0.0054	0.0066 J
	MW8-ROX-101613-DUP	10/16/2013		31.59	NE	0.0002	0.000058 J	<0.012	<0.00012	<0.000059	<0.00012	<0.000059	<0.00012	<0.00012	<0.012	<0.012	<0.0059	<0.0024	<0.0059	<0.012	<0.0059	<0.00012	<0.00012	0.0004 J	<0.012	<0.0059	0.0062 J
	MW8-ROX-013014	1/30/2014		34.02	NE	0.0002	0.000089 J	<0.01	<0.0001	<0.000051	<0.0001	<0.000051	<0.0001	<0.0001	<0.01	<0.01	<0.0051	0.00053 J	<0.0051	<0.01	<0.0051	<0.0001	<0.0001	0.0005 J	<0.01	<0.0051	0.0124
	MW8-ROX-013014-DUP	1/30/2014		34.02	NE	0.00021	0.000083 J	<0.011	<0.00011	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011	<0.011	<0.0054	0.00072 J	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	0.00053 J	<0.011	<0.0054	0.0121
	MW8-ROX-041614	4/16/2014		34.73	NE	0.00018	0.000074 J	<0.011	<0.00011	<0.000056	<0.00011	<0.000056	<0.00011	<0.00011	<0.011 UJ	<0.011	<0.0056	<0.0022	<0.0056	<0.011	<0.0056	<0.00011	<0.00011	0.0005 J	<0.011	<0.0056	<0.011
	MW8-ROX-041614-DUP	4/16/2014		34.73	NE	0.00016	0.000063 J	<0.01	<0.0001	<0.000051	<0.0001	<0.000051	<0.0001	<0.0001	<0.01 UJ	<0.01	<0.0051	<0.002	<0.0051	<0.01	<0.0051	<0.0001	<0.0001	0.00045 J	<0.01	<0.0051	<0.01
	MW8-ROX-071614	7/16/2014		33.01	NE	0.00018	0.000068 J	<0.01	<0.0001	<0.000052	<0.0001	<0.000052	<0.0001	<0.0001	<0.01	<0.01	<0.0052	0.00038 J	<0.0052	<0.01	<0.0052	<0.0001	<0.0001	0.00041 J	<0.01	0.00057 J	<0.01
	MW8-ROX-101614	10/16/2014	33.60 - 43.60	32.23	NE	0.00021	<0.00011	<0.011	<0.00011	<0.000056	<0.00011	<0.000056	<0.00011	<0.00011	<0.011	<0.011	<0.0056	<0.0022	<0.0056	<0.011	<0.0056	<0.00011	<0.00011	<0.0022	<0.011	<0.0056	0.0099 J

TABLE 3
CUMULATIVE SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL RESULTS AND EXCEEDANCES

						SVOCs																				
						Acenaphthene	Acenaphthylene	Aniline	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Benzoic Acid	Benzyl alcohol	bis(2-Chloroethylether	bis(2-Ethylhexyl)phthalate	Butyl benzyl phthalate	4-Chloro-3-methylphenol (p-Chloro-m-cresol)	2-Chlorophenol	Chrysene (1,2-Benzphenanthracene)	Dibenzo(a,h)anthracene	Dibenzofuran	2,4-Dichlorophenol	Diethyl phthalate	2,4-Dimethylphenol
				Screening Values (mg/L)		0.42 [1]	0.21 [3]	0.023 [3]	2.1 [1]	0.00013 [1]	0.0002 [1]	0.00018 [1]	0.21 [3]	0.00017 [1]	28 [1]	0.7 [3]	0.01 [2]	0.006 [2]	1.4 [2]		0.035 [2]	0.012 [1]	0.0003 [1]	0.007 [3]	0.021 [2]	5.6 [1]	0.14 [2]
Location	Sample ID	Sample Date	Screened Interval (ft btoc)	Depth to Water (ft btoc)	Product Thickness (ft)	Analytical Results (mg/L)																				
MW-09	MW9-ROX-011612	1/16/2012	46.45 - 56.45	39.50	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000057	0.000058 J	0.000051 J	<0.000096 U	<0.00011	<0.011 UJ	<0.011	<0.0057	<0.00085 U	<0.00037 U	<0.011	<0.0057	<0.00011	<0.000078 U	<0.0057	<0.011	<0.0057	<0.011
	MW9-ROX-050312	5/3/2012		41.03	NE													0.0016 J J	0.00045 JB J								
	MW9-ROX-072712	7/27/2012		41.30	NE	<0.0001	<0.0001	<0.01 UJ	<0.0001	<0.00005	<0.0001	<0.00005	<0.0001 UJ	<0.0001	<0.01	<0.01	<0.005	<0.00043 U	<0.005	<0.01	<0.005	<0.0001	<0.0001	<0.002	<0.01	<0.005	<0.01
	MW9-ROX-102912	10/29/2012		43.17	NE	<0.0001	<0.0001	<0.01 UJ	<0.0001	<0.000052	<0.0001	<0.000052	<0.0001	<0.0001	<0.01	<0.01	<0.0052	<0.0021	<0.0052	<0.01	<0.0052	<0.0001	<0.0001	<0.0021	<0.01	<0.0052	<0.01
	MW9-ROX-011113	1/11/2013		43.90	NE	0.000068 J	0.000064 J	<0.011 UJ	0.00006 J	<0.000054	<0.00011	0.000026 J	<0.00011	<0.00011	<0.011	<0.011	<0.0054	<0.0022	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	<0.0022	<0.011	<0.0054	<0.011
	MW9-ROX-040913	4/9/2013		44.67	NE	<0.0001 UJ	<0.0001 UJ	<0.01 UJ	<0.0001 UJ	<0.000052 UJ	<0.0001 UJ	<0.000052 UJ	<0.0001 UJ	<0.0001 UJ	<0.01 UJ	<0.01 UJ	<0.0052 UJ	<0.0021 UJ	<0.0052 UJ	<0.01 UJ	<0.0052 UJ	<0.0001 UJ	<0.0001 UJ	<0.0021 UJ	<0.01 UJ	<0.0016 UJ	<0.01 UJ
	MW9-ROX-070813	7/8/2013		42.35	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000056	<0.00011	0.000035 J	<0.00011	<0.00011		<0.011	<0.0056	<0.0022	<0.0056			<0.00011	<0.00011	<0.0022		<0.0056	
	MW9-ROX-100313	10/3/2013		42.27	NE	<0.0001	<0.0001	<0.01	<0.0001	<0.00005	<0.0001	<0.00005	<0.0001	<0.0001	<0.01	<0.01	<0.005	<0.002	<0.005	<0.01	<0.005	<0.0001	<0.0001	<0.002	<0.01	<0.005	<0.01
	MW9-ROX-011414	1/14/2014		44.47	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.011 UJ	<0.011	<0.0053	<0.0021	<0.0053	<0.011 UJ	<0.0053 UJ	<0.00011	<0.00011	<0.0021	<0.011 UJ	<0.0053	<0.011 UJ
	MW9-ROX-040714	4/7/2014		44.99	NE	<0.00011	<0.00011	<0.011	<0.00011	0.000024 J	<0.00011	<0.000056	<0.00011	<0.00011	<0.011	<0.011 UJ	<0.0056	<0.00054 U	<0.0056	<0.011	<0.0056	<0.00011	<0.00011	<0.0022	<0.011	<0.0056	<0.011
	MW9-ROX-070914	7/9/2014		44.35	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011	<0.011	<0.0054	0.00036 J	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	<0.0022	<0.011	<0.0054	<0.011
	MW9-ROX-100714	10/7/2014	46.45 - 56.45	43.52	NE	<0.00012	<0.00012	<0.012	<0.00012	<0.000059	<0.00012	<0.000059	<0.00012	<0.00012	<0.012	<0.012	<0.0059	<0.0024	<0.0059	<0.012	<0.0059	<0.00012	<0.00012	<0.0024	<0.012	<0.0059	<0.012
MW-10	MW10-ROX-011612	1/16/2012	44.43 - 54.43	39.28	NE	<0.00011	<0.00011	<0.011	0.000027 J	0.000037 J	0.000031 J	0.000043 J	<0.000042 U	<0.00011	<0.011 UJ	<0.011	<0.0053	0.0255	<0.0013 U	<0.011	<0.0053	<0.00011	<0.00011	<0.0053	<0.011	<0.0053	<0.011
	MW10-ROX-050112	5/1/2012		40.86	NE	<0.0001	<0.0001	<0.01 UJ	0.000018 J	<0.000052	<0.0001	<0.000052	<0.0001	<0.0001	<0.01 UJ	<0.01	<0.0052	<0.0021	<0.0052	<0.01	<0.0052	<0.0001	<0.0001	<0.0052	<0.01	<0.0052	<0.01
	MW10-ROX-072712	7/27/2012		41.21	NE	<0.0001	<0.0001	<0.01 UJ	<0.0001	<0.00005	<0.0001	<0.00005	<0.0001 UJ	<0.0001	<0.01	<0.01	<0.005	<0.00067 U	<0.005	<0.01	<0.005	<0.0001	<0.0001	<0.002	<0.01	<0.005	<0.01
	MW10-ROX-102612	10/26/2012		43.08	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000056	<0.00011	<0.000056	<0.00011	<0.00011	<0.011 UJ	<0.011	<0.0056	<0.0022	<0.0056	<0.011	<0.0056	<0.00011	<0.00011	<0.0022	<0.011	<0.0056	<0.011
	MW10-ROX-121712	12/17/2012		43.08	NE																						
	MW10-ROX-011013	1/10/2013		44.10	NE	<0.0001	<0.0001	<0.01 UJ	<0.0001	<0.00005	<0.0001	<0.00005	<0.0001	<0.0001	<0.01	<0.01	<0.005	<0.002	<0.005	<0.01	<0.005	<0.0001	<0.0001	<0.002	<0.01	<0.005	<0.01
	MW10-ROX-012113	1/21/2013		44.10	NE	<0.0001	<0.0001	<0.02	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.05	<0.02	<0.01	<0.006	<0.01	<0.02	<0.01	<0.0001	<0.0001	<0.01	<0.01	<0.01	<0.01
	MW10-ROX-040913	4/9/2013		44.60	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011	<0.011	<0.0054	<0.0022	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	<0.0022	<0.011	<0.0018 U	<0.011
	MW10-ROX-070813	7/8/2013		42.27	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000056	<0.00011	<0.000056	<0.00011	<0.00011	<0.011	<0.011	<0.0056	<0.0027 U	<0.0056	<0.011	<0.0056	<0.00011	<0.00011	<0.0022	<0.011	<0.0056	<0.011
	MW10-ROX-100313	10/3/2013		42.38	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000056	<0.00011	<0.000056	<0.00011	<0.00011	<0.011	<0.011	<0.0056	<0.0022	<0.0056	<0.011	<0.0056	<0.00011	<0.00011	<0.0022	<0.011	<0.0056	<0.011
	MW10-ROX-011514	1/15/2014		44.42	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000053	<0.00011	<0.000053	0.000096 J	<0.00011	<0.011 UJ	<0.011	<0.0053	0.00054 J	<0.0053	<0.011 UJ	<0.0054 UJ	<0.00011	0.000074 J	<0.0021	<0.011 UJ	<0.0053	<0.011 UJ
	MW10-ROX-040714	4/7/2014		45.00	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.011	<0.011 UJ	<0.0053	<0.00068 U	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	<0.0021	<0.011	<0.0053	<0.011
	MW10-ROX-070914	7/9/2014		44.35	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011	<0.011	<0.0054	0.00052 J	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	<0.0022	<0.011	<0.0054	<0.011
	MW10-ROX-100714	10/7/2014	44.43 - 54.43	43.58	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000057	<0.00011	<0.000057	<0.00011	<0.00011	<0.011	<0.011	<0.0057	<0.0023	<0.0057	<0.011	<0.0057	<0.00011	<0.00011	<0.0023	<0.011	<0.0057	<0.011
MW-11	MW11-ROX-011712	1/17/2012	41.66 - 51.66	37.44	NE				0.000022 J J					0.000065 J J													
	MW11-ROX-043012	4/30/2012		38.66	NE	<0.0001	<0.0001	<0.01	<0.0001	<0.000051	<0.0001	<0.000051	<0.0001	<0.0001	<0.01 UJ	<0.01	<0.0051	<0.002	<0.0051	<0.01	<0.0051	<0.0001	<0.0001	<0.0051	<0.01	<0.0051	<0.01
	MW11-ROX-072712	7/27/2012		38.90	NE	<0.00012	<0.00012	<0.012 UJ	<0.00012	<0.000058	<0.00012	<0.000058	<0.00012 UJ	<0.00012	<0.012	<0.012	<0.0058	<0.00056 U	<0.0058	<0.012	<0.0058	<0.00012	<0.00012	<0.0023	<0.012	<0.0058	<0.012
	MW11-ROX-102512	10/25/2012		40.59	NE	<0.00011	<0.00011	<0.011 UJ	<0.00011	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011	<0.011	<0.0054	<0.0022	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	<0.0022	<0.011	<0.00042 U	<0.011
	MW11-ROX-011013	1/10/2013		41.43	NE	<0.0001 UJ	<0.0001 UJ	<0.01 UJ	<0.0001 UJ	<0.00005 UJ	<0.0001 UJ	<0.00005 UJ	<0.0001 UJ	<0.0001 UJ	<0.01 UJ	<0.01 UJ	<0.005 UJ	<0.002 UJ	<0.005 UJ	<0.01 UJ	<0.005 UJ	<0.0001 UJ	<0.0001 UJ	<0.002 UJ	<0.01 UJ	<0.005 UJ	<0.01 UJ
	MW11-ROX-040813	4/8/2013		42.02	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.011	<0.011	<0.0053	<0.0021	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	<0.0021	<0.011	<0.0053	<0.011
	MW11-ROX-070813	7/8/2013		39.24	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011	<0.011	<0.0054	<0.0052 U	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	<0.0022	<0.011	<0.0054	<0.011
	MW11-ROX-100713	10/7/2013		39.95	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000055	<0.00011	<0.000055	<0.00011	<0.00011	<0.011	<0.011	<0.0055	<0.0011 U	<0.0055	<0.011	<0.0055	<0.00011	<0.00011	<0.0022	<0.011	<0.0011 U	<0.011
	MW11-ROX-011514	1/15/2014		42.16	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000055	<0.00011	<0.000055	<0.00011	<0.00011	<0.011	<0.011	<0.0055	<0.0022	<0.0055	<0.011	<0.0055	<0.00011	<0.00011	<0.0022	<0.011	<0.0055	<0.011
	MW11-ROX-040714	4/7/2014		42.70	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000056	<0.00011	<0.000056	<0.00011	<0.00011	<0.011	<0.011 UJ	<0.0056	<0.0056 U	<0.0056	<0.011	<0.0056	<0.00011	<0.00011	<0.0022	<0.011	<0.0056	<0.011
	MW11-ROX-070914	7/9/2014		41.75	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000057	<0.00011	<0.000057	<0.00011	<0.00011	<0.011	<0.011	<0.0057	<0.0023	<0.0057	<0.011	<0.0057	<0.00011	<0.00011	<0.0023	<0.011	<0.0057	<0.011
	MW11-ROX-100714	10/7/2014	41.66 - 51.66	40.89	NE	<0.0001	<0.0001	<0.01	<0.0001	<0.000052	<0.0001	<0.000052	<0.0001	<0.0001	<0.01	<0.01	<0.0052	<0.0021	<0.0052	<0.01	<0.0052	<0.0001	<0.0001	<0.0021	<0.01	<0.0052	<0.01
MW-12	MW12-ROX-011712	1/17/2012	41.92 - 51.92	37.70	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000054	<0.00016 U	<0.00013 U	<0.00021 U	0.00013	<0.011 UJ	<0.011	<0.0054	<0.0022	<0.00029 U	<0.011	<0.0054	<0.00011	<0.00021 U	<0.0054	<0.011	<0.0054	<0.011
	MW12-ROX-011712-DUP	1/17/2012		37.70	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000056	<0.000039 U	<0.00004 U	<0.000067 U	<0.00011	<0.011 UJ	<0.011	<0.0056	<0.0022	<0.00033 U	<0.011	<0.0056	<0.00011	<0.000051 U	<0.0056	<0.011	<0.0056	<0.011
	MW12-ROX-043012	4/30/2012		38.98	NE	<0.0001	<0.0001	<0.01	<0.0001	<0.000051	<0.0001	<0.000051	<0.0001	<0.0001	<0.01 UJ	<0.01	<0.0051	<0.002	<0.0051	<0.01	<0.0051	<0.0001	<0.0001	<0.0051	<0.01	<0.0051	<0.01
	MW12-ROX-072712	7/27/2012		39.22	NE	<0.00011	<0.00011	<0.011 UJ	<0.00011	<0.000053	<0.00011	<0.000053	<0.00011 UJ	<0.00011	<0.011	<0.011	<0.0053	<0.0019 U	0.00029 J	<0.011	<0.0053	<0.00011	<0.00011	<0.0021	<0.011	<0.0053	<0.011
	MW12-ROX-102512	10/25/2012		40.95	NE	<0.00011	<0.00011	<0.011 UJ	<0.00011	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.011	<0.011	<0.0053	<0.0021	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	<0.0021	<0.011	<0.00077 U	<0.011
	MW12-ROX-011013	1/10/2013		41.83	NE	<0.0001	<0.0001	<0.01 UJ	<0.0001	<0.000051	<0.0001	0.000026 J	<0.0001	<0.0001	<0.01	<0.01	<0.0051	<0.002	<0.0051	<0.01	<0.0051	<0.0001	<0.0001	<0.002	<0.01	<0.0051	<0.01
	MW12-ROX-040813	4/8/2013		42.46	NE	<0.0001	<0.0001	<0.01	<0.0001	<0.000052	<0.0001	<0.000052	<0.0001	<0.0001	<0.01	<0.01	<0.0052	<0.0021	<0.0052	<0.01	<0.0052	<0.0001	<0.0001	<0.0021	<0.01	<0.0052	<0.01
	MW12-ROX-070913	7/9/2013		39.28	NE	<0.00011	<0.00011	<0.011	<0.00011	0.00012 J	<0.00011	<0.000055	<0.00011	<0.00011	<0.011	<0.011	<0.0055	<0.0022	<0.0055	<0.011	<0.0055	<0.00011	<0.00011	<0.0022	<0.011	<0.0055	<0.011
	MW12-ROX-100713	10/7/2013		40.22	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000055	<0.00011	<0.000055	<0.00011	<0.00011	<0.011 UJ	<0.011	<0.0055	<0.0022	<0.0055	<0.011 UJ	<0.0053 UJ	<0.00011	<0.00011	<0.0022	<0.011 UJ	<0.00062 U	<0.011 UJ
	MW12-ROX-011514	1/15/2014		42.54	NE	<0.0001	<0.0001	<0.01	<0.0001	<0.000052	<0.0001	<0.000052	<0.0001	<0.0001	<0.01 UJ	<0.01	<0.0052	<0.0021	<0.0052	<0.01 UJ	<0.0052 UJ	<0.0001	<0.0001	<0.0021	<0.01 UJ	<0.0052	<0.01 UJ
	MW12-ROX-040814	4/8/2014		43.15	NE	<0.00011	<0.00011	<0.01	<0.00011	<0.000057	<0.00011	<0.000057	<0.00011	<0.00011	<0.01	<0.01 UJ	<0.0051	<0.00039 U	<0.0051	<0.01	<0.0051	<0.00011	<0.00011	<0.002	<0.01	<0.0051	<0.01
	MW12-ROX-070914	7/9/2014		41.97	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000056	<0.00011	<0.000056	<0.00011	<0.00011	<0.011	<0.011	<0.0056	<0.0022	<0.0056	<0.011	<0.0056	<0.00011	<0.00011	<0.0022	<0.011	<0.0056	<0.011
	MW12-ROX-100614	10/6/2014	41.92 - 51.92	40.98	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.011	<0.011	<0.0053	<0.0021	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	<0.0021	<0.011	<0.0053	<0.011

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
CUMULATIVE SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL RESULTS AND EXCEEDANCES

						SVOCs																				
						Acenaphthene	Acenaphthylene	Aniline	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Benzoic Acid	Benzyl alcohol	bis(2-Chloroethylether	bis(2-Ethylhexyl)phthalate	Butyl benzyl phthalate	4-Chloro-3-methylphenol (p-Chloro-m-cresol)	2-Chlorophenol	Chrysene (1,2-Benzphenanthracene)	Dibenzo(a,h)anthracene	Dibenzofuran	2,4-Dichlorophenol	Diethyl phthalate	2,4-Dimethylphenol
					Screening Values (mg/L)	0.42 [1]	0.21 [3]	0.023 [3]	2.1 [1]	0.00013 [1]	0.0002 [1]	0.00018 [1]	0.21 [3]	0.00017 [1]	28 [1]	0.7 [3]	0.01 [2]	0.006 [2]	1.4 [2]		0.035 [2]	0.012 [1]	0.0003 [1]	0.007 [3]	0.021 [2]	5.6 [1]	0.14 [2]
Location	Sample ID	Sample Date	Screened Interval (ft btoc)	Depth to Water (ft btoc)	Product Thickness (ft)	Analytical Results (mg/L)																				
MW-13	MW13-ROX-012012	1/20/2012	25.57 - 35.57	24.77	NE	<0.00011	0.00014	<0.011 UJ	<0.00011	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	0.0087 J J	<0.011	<0.0053	<0.0007 U	<0.0007 U	<0.011	<0.0053	<0.00011	<0.00011	<0.0053	<0.011	<0.0053	<0.011
	MW13-ROX-050712	5/7/2012		25.79	NE	<0.0001	<0.0001	<0.01	<0.0001	<0.000052	<0.0001	<0.000052	<0.0001	<0.0001	<0.01	<0.01	<0.0052	<0.0021	<0.0052	<0.01	<0.0052	<0.0001	<0.0001	<0.0052	<0.01	<0.0052	<0.01
	MW13-ROX-080812	8/8/2012		26.67	NE	0.0001 J	0.00019	<0.011 UJ	0.000063 J	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.011	<0.011	<0.0053	<0.0021	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	<0.0021	<0.011	<0.0053	<0.011
	MW13-ROX-110812	11/8/2012		25.30	NE	<0.0001	<0.0001	<0.01 UJ	<0.0001	<0.00005	<0.0001	<0.00005	<0.0001	<0.0001	<0.01	<0.01	<0.005	<0.002	<0.005	<0.01	<0.005	<0.0001	<0.0001	<0.002	<0.01	<0.005	<0.01
	MW13-ROX-012313	1/23/2013		29.26	NE	<0.00011	<0.00011	<0.011 UJ	<0.00011	<0.000055	<0.00011	<0.000055	<0.00011	<0.00011	<0.011	<0.011	<0.0055	<0.0022	<0.0055	<0.011	<0.0055	<0.00011	<0.00011	<0.0022	<0.011	<0.0055 UJ	<0.011
	MW13-ROX-041213	4/12/2013		29.44	NE	<0.0001	<0.0001	<0.01	<0.0001	<0.000051	<0.0001	<0.000051	<0.0001	<0.0001	<0.01	<0.01	<0.0051	<0.002	<0.0051	<0.01	<0.0051	<0.0001	<0.0001	<0.002	<0.01	<0.0051	<0.01
	MW13-ROX-071213	7/12/2013		25.67	NE	<0.00011	<0.000063 U	<0.011	<0.000058 U	<0.00014 U	<0.00011	<0.000054	<0.00011	<0.00011	<0.011 UJ	<0.011	<0.0054	0.00079 J	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	<0.0022	<0.011	<0.0054	<0.011
	MW13-ROX-100913	10/9/2013		26.94	NE	0.000098 J	0.000071 J	<0.01	<0.0001	0.000022 J	<0.0001	<0.000052	<0.0001	<0.0001	<0.01	<0.01	<0.0052	0.00068 J	<0.0052	<0.01	<0.0052	0.000034 J	<0.0001	<0.0021	<0.01	<0.0052	<0.01
	MW13-ROX-012914	1/29/2014		29.63	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000055	<0.00011	<0.000055	<0.00011	<0.00011	<0.011	<0.011	<0.0055	<0.0022	<0.0055	<0.011	<0.0055	<0.00011	<0.00011	<0.0022	<0.011	<0.0055	<0.011
	MW13-ROX-041114	4/11/2014		30.15	NE	0.00013	0.000066 J	<0.012	<0.00012	<0.00006	<0.00012	<0.00006	<0.00012	<0.00012	<0.012	<0.012	<0.006	<0.00069 U	<0.006	<0.012	<0.006	<0.00012	<0.00012	<0.0024	<0.012	<0.006	<0.012
	MW13-ROX-070714	7/7/2014		28.49	NE	<0.00011	0.000061 J	<0.011	<0.00011	<0.000055	<0.00011	<0.000055	<0.00011	<0.00011	<0.011	<0.011	<0.0055	<0.0022	<0.0055	<0.011	<0.0055	<0.00011	<0.00011	<0.0022	<0.011	<0.0055	<0.011
	MW13-ROX-101014	10/10/2014	25.57 - 35.57	27.48	NE	<0.00012	0.00019	<0.012	<0.00012	<0.00006	<0.00012	<0.00006	<0.00012	<0.00012	<0.012	<0.012	<0.006	<0.0024	<0.006	<0.012	<0.006	<0.00012	<0.00012	<0.0024	<0.012	<0.006	<0.012
MW-14	MW14-ROX-051012	5/10/2012	33.42 - 43.42	NM	NE	0.00046	<0.0001	<0.01	<0.0001	<0.000052	<0.0001	<0.000052	<0.0001	<0.0001	<0.01	<0.01	<0.0052	<0.00042 U	<0.0052	<0.01	<0.0052	<0.0001	<0.0001	<0.0052	0.00084 J	<0.0052	<0.01
	MW14-ROX-080312	8/3/2012		NM	NE	0.00095	0.00015	<0.011 UJ	<0.00011	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.011	<0.011	<0.0053	0.00049 J	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	0.00076 J	0.00096 J	<0.0053	<0.011
	MW14-ROX-103112	10/31/2012		32.02	NE	0.00074	0.00008 J	<0.01 UJ	<0.0001	<0.000051	<0.0001	<0.000051	<0.0001	<0.0001	<0.01 UJ	<0.01	<0.005	<0.002	<0.005	<0.01	<0.005	<0.0001	<0.0001	0.0003 J	<0.01	<0.005	<0.01 UJ
	MW14-ROX-011813	1/18/2013		33.05	NE	0.00092	0.00013	<0.01 UJ	<0.0001	<0.00005	<0.0001	<0.00005	<0.0001	<0.0001	<0.01	<0.01	<0.005	<0.002	<0.005	<0.01	<0.005	<0.0001	<0.0001	<0.002	<0.01	<0.005	<0.01
	MW14-ROX-041113	4/11/2013		33.31	NE	0.00068	0.000098 J	<0.011	<0.00011	0.00013	<0.00011	0.000054	0.000053 J	<0.00011	<0.011	<0.011	<0.0054	<0.0022	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	<0.0022	<0.011	<0.0054	<0.011
	MW14-ROX-071213	7/12/2013		30.36	NE	0.00046 B	<0.000062 U	<0.011	<0.00011	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.011 UJ	<0.011	<0.0053	0.00066 J	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	<0.0021	<0.011	<0.0053	<0.011
	MW14-ROX-101013	10/10/2013		30.80	NE	0.00065	0.00011	<0.011	<0.00011	<0.000057	<0.00011	<0.000057	<0.00011	<0.00011	<0.011 UJ	<0.011	<0.0057	<0.0023	<0.0057	<0.011	<0.0057	<0.00011	<0.00011	0.00019 J	<0.011	<0.0057	<0.011
	MW14-ROX-012914	1/29/2014		33.67	NE	0.00062	0.00012	<0.011	<0.00011	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011	<0.011	<0.0054	0.00056 J	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	<0.0022	<0.011	<0.0054	<0.011
	MW14-ROX-041114	4/11/2014		34.30	NE	0.00037	0.000089 J	<0.012	<0.00011	<0.000057	<0.00011	<0.000057	<0.00011	<0.00011	<0.012	<0.012	<0.006	<0.00069 U	<0.006	<0.012	<0.006	<0.00011	<0.00011	<0.0024	<0.012	<0.006	<0.012
	MW14-ROX-070714	7/7/2014		32.82	NE	0.00033	0.000063 J	<0.011	<0.00011	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011	<0.011	<0.0054	0.00048 J	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	<0.0022	<0.011	<0.0054	<0.011
	MW14-ROX-101414	10/14/2014	33.42 - 43.42	31.65	NE	0.00054	<0.00011	<0.011	<0.00011	<0.000056	<0.00011	<0.000056	<0.00011	<0.00011	<0.011	<0.011	<0.0056	<0.0022	<0.0056	<0.011	<0.0056	<0.00011	<0.00011	<0.0022	<0.011	<0.0056	<0.011
MW-16	MW16-ROX-012313	1/23/2013	37.06 - 47.06	43.05	NE	<0.00011	<0.00011	<0.011 UJ	<0.00011	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.011	<0.011	<0.0053	<0.0021	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	<0.0021	<0.011	<0.0053 UJ	<0.011
	MW16-ROX-040813	4/8/2013		43.39	NE	<0.0001	<0.0001	<0.01	<0.0001	<0.000052	<0.0001	<0.000052	<0.0001	<0.0001	<0.01	<0.01	<0.0052	<0.0021	<0.0052	<0.01	<0.0052	<0.0001	<0.0001	<0.0021	<0.01	<0.0052	<0.01
	MW16-ROX-070813	7/8/2013		40.62	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000056	<0.00011	<0.000056	<0.00011	<0.00011	<0.011	<0.011	<0.0056	<0.0022	<0.0056	<0.011	<0.0056	<0.00011	<0.00011	<0.0022	<0.011	<0.0056	<0.011
	MW16-ROX-100813	10/8/2013		41.62	NE	<0.0001 UJ	<0.0001 UJ	<0.01 UJ	<0.0001 UJ	<0.000052 UJ	<0.0001 UJ	<0.000052 UJ	<0.0001 UJ	<0.0001 UJ	<0.01 UJ	<0.01 UJ	<0.0052 UJ	<0.0021 UJ	<0.0052 UJ	<0.01 UJ	<0.0052 UJ	<0.0001 UJ	<0.0001 UJ	<0.0021 UJ	<0.01 UJ	<0.0052 UJ	<0.01 UJ
	MW16-ROX-011514	1/15/2014		43.76	NE	<0.0001	<0.0001	<0.01	<0.0001	<0.000052	<0.0001	<0.000052	<0.0001	<0.0001	<0.01	<0.01	<0.0052	0.00061 J	<0.0052	<0.01	<0.0052	<0.0001	<0.0001	<0.0021	<0.01	<0.0052	<0.01
	MW16-ROX-040914	4/9/2014		44.63	NE	<0.00012	<0.00012	<0.012	<0.00012	<0.000059	<0.00012	<0.000059	<0.00012	<0.00012	<0.012	<0.012	<0.0059	<0.0024	<0.0059	<0.012	<0.0059	<0.00012	<0.00012	<0.0024	<0.012	<0.0059	<0.012
	MW16-ROX-071014	7/10/2014		43.15	NE	<0.00011	<0.00011	<0.011 UJ	<0.00011	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011	<0.011	<0.0054	<0.0022	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	<0.0022	<0.011	<0.0054	<0.011
	MW16-ROX-100714	10/7/2014	37.06 - 47.06	42.27	NE	<0.00012	<0.00012	<0.012	<0.00012	<0.00006	<0.00012	<0.00006	<0.00012	<0.00012	<0.012	<0.012	<0.006	<0.0024	<0.006	<0.012	<0.006	<0.00012	<0.00012	<0.0024	<0.012	<0.006	<0.012
MW-22	MW22-ROX-012313	1/23/2013	37.88 - 47.88	41.80	NE	0.00018	<0.0001	<0.01 UJ	0.00002 J	<0.000052	<0.0001	<0.000052	<0.0001	<0.0001	<0.01	0.0031 J	<0.0052	<0.0021	<0.0052	<0.01	<0.0052	<0.0001	<0.0001	<0.0021	<0.01	<0.0052 UJ	0.0146
	MW22-ROX-012313-DUP	1/23/2013		41.80	NE	0.00018	<0.00011	<0.011 UJ	<0.00011	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.011	0.0033 J	<0.0053	<0.0021	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	<0.0021	<0.011	<0.0053 UJ	0.0149
	MW22-ROX-040513	4/5/2013		42.23	NE	0.00018	0.000049 J J	<0.011 UJ	<0.00011	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.011	<0.011	<0.0053	<0.0021	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	<0.0021	<0.011	<0.0053	0.0269
	MW22-ROX-071113	7/11/2013		39.35	NE	0.00026	0.00048	<0.011	0.000035 J	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011 UJ	<0.011	<0.0054	0.0017 J	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	<0.0022	<0.011	<0.0054	0.104
	MW22-ROX-071113-DUP	7/11/2013		39.35	NE	0.00018	0.00047	<0.011	<0.00011	<0.000056	<0.00011	<0.000056	<0.00011	<0.00011	<0.011 UJ	<0.011	<0.0056	0.0021 J	<0.0056	<0.011	<0.0056	<0.00011	<0.00011	<0.0022	<0.011	<0.0056	0.0978
	MW22-ROX-100913	10/9/2013		40.39	NE	0.00019	<0.00011	<0.011	<0.00011	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011	<0.011	<0.0054	<0.0022	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	<0.0022	<0.011	<0.0054	0.0863
	MW22-ROX-100913-DUP	10/9/2013		40.39	NE	0.00018	<0.00011	<0.011	<0.00011	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011	<0.011	<0.0054	<0.0022	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	<0.0022	<0.011	<0.0054	0.0826
	MW22-ROX-012014	1/20/2014		42.49	NE	0.00015	<0.00011	<0.053	<0.00011	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.053	<0.053	<0.027	<0.011	<0.027	<0.053	<0.027	<0.00011	<0.00011	<0.011	<0.053	<0.027	0.0399 J
	MW22-ROX-012014-DUP	1/20/2014		42.49	NE	0.00014	<0.00011	<0.054	<0.00011	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.054	<0.054	<0.027	<0.011	<0.027	<0.054	<0.027	<0.00011	<0.00011	<0.011	<0.054	<0.027	0.0364 J
	MW22-ROX-041014	4/10/2014		43.15	NE	0.0001 J	<0.00011	<0.056	<0.00011	<0.000056	<0.00011	<0.000056	<0.00011	<0.00011	<0.056 UJ	<0.056	<0.028	<0.011	<0.028	<0.056	<0.028	<0.00011	<0.00011	<0.011	<0.056	<0.028	0.0316 J
	MW22-ROX-041014-DUP	4/10/2014		43.15	NE	0.00012	<0.00011	<0.056	<0.00011	<0.000056	<0.00011	<0.000056	<0.00011	<0.00011	<0.056 UJ	<0.056	<0.028	<0.011	<0.028	<0.056	<0.028	<0.00011	<0.00011	<0.011	<0.056	<0.028	0.032 J
	MW22-ROX-071414	7/14/2014		41.85	NE	0.00013	<0.00011	<0.011	<0.00011	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011	<0.011	<0.0054	0.00045 J	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	<0.0022	<0.011	<0.0054	0.0281
	MW22-ROX-101014	10/10/2014	37.88 - 47.88	41.43	NE	0.00029	0.00019	<0.013	0.00019	<0.000063	<0.00013	<0.000063	<0.00013	<0.00013	<0.013	<0.013	<0.0063	<0.0025	<0.0063	<0.013	<0.0063	<0.00013	<0.00013	<0.0025	<0.013	<0.0063	<0.013
MW-24	MW24-ROX-040513	4/5/2013	38.89 - 48.89	43.39	NE	<0.0001	<0.0001 UJ	<0.01 UJ	<0.0001	<0.000052	<0.0001	0.000057	<0.0001	<0.0001	<0.01	<0.01	<0.0052	<0.0021	<0.0052	<0.01	<0.0052	<0.0001	<0.0001	<0.0021	<0.01	<0.0052	<0.01
	MW24-ROX-071113	7/11/2013		40.35	NE	0.000024 J	<0.00011	<0.011	<0.00011	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011 UJ	<0.011	<0.0054	<0.0022	<0.0054	<0.011 UJ	<0.0053 UJ	<0.00011	<0.00011	<0.0022	<0.011 UJ	<0.0054	<0.011 UJ
	MW24-ROX-100913	10/9/2013		41.27	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.011	<0.011	<0.0053	<0.0021	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	<0.0021	<0.011	<0.0053	<0.011
	MW24-ROX-011514	1/15/2014		43.47	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.011	<0.011	<0.0053	<0.0021	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	<0.0021	<0.011	<0.0053	<0.011
	MW24-ROX-040914	4/9/2014		44.13	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000056	<0.00011	<0.000056	<0.00011	<0.00011	<0.011	<0.011	<0.0056	<0.0022	<0.0056	<0.011	<0.0056	<0.00011	<0.00011	<0.0022	<0.011	<0.0056	<0.011
	MW24-ROX-071114	7/10/2014		42.97	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.011	<0.011	<0.0053	<0.0021	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	<0.0021	<0.011	<0.0053	<0.011
	MW24-ROX-100814	10/8/2014	38.89 - 48.89	42.16	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011	<0.011	<0.0054	<0.0022	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	<0.0022	<0.011	<0.0054	<0.011
MW-25	MW25-ROX-102114	10/21/2014	35.59 - 45.59	36.44	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000056	<0.00011	<0.000056	<0.00011	<0.00011	<0.011 UJ	<0.011	<0.0056	<0.0022	<0.0056	<0.011	<0.0056	<0.00011	<0.00011	<0.0022	<0.011	<0.0056	0.0025 J
MW-26	MW26-ROX-102114	10/21/2014	38.15 - 48.15	39.43	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.011 UJ	<0.011	<0.0053	<0.0021	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	<0.0021	<0.011	<0.0053	<0.011
MW-27	MW27-ROX-102114	10/21/2014	39.79 - 49.79	41.57	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.011 UJ	<0.011	<0.0053	<0.0021	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	<0.0021	<0.011	<0.0053	<0.011
MW-28	MW28-ROX-102114	10/21/2014	33.61 - 43.61	36.44	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.011 UJ	<0.011	<0.0053	<0.0021	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	<0.0021	<0.011	<0.0053	<0.011

TABLE 3
CUMULATIVE SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL RESULTS AND EXCEEDANCES

						SVOCs																			
						Acenaphthene	Acenaphthylene	Aniline	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Benzoic Acid	Benzyl alcohol	bis(2-Chloroethylether	bis(2-Ethylhexyl)phthalate	Butyl benzyl phthalate	4-Chloro-3-methylphenol (p-Chloro-m-cresol)	2-Chlorophenol	Chrysene (1,2-Benzphenanthracene)	Dibenzo(a,h)anthracene	Dibenzofuran	2,4-Dichlorophenol	Diethyl phthalate	2,4-Dimethylphenol
					Screening Values (mg/L)	0.42 [1]	0.21 [3]	0.023 [3]	2.1 [1]	0.00013 [1]	0.0002 [1]	0.00018 [1]	0.21 [3]	0.00017 [1]	28 [1]	0.7 [3]	0.01 [2]	0.006 [2]	1.4 [2]		0.035 [2]	0.012 [1]	0.0003 [1]	0.007 [3]	0.021 [2]	5.6 [1]	0.14 [2]
Location	Sample ID	Sample Date	Screened Interval (ft btoc)	Depth to Water (ft btoc)	Product Thickness (ft)	Analytical Results (mg/L)																					
P-54	P54-ROX-011712	1/17/2012	38.00 - 63.00	37.17	NE	<0.0001	<0.0001	<0.01	<0.0001	<0.000052	<0.000024 U	<0.000052	<0.0001	<0.0001	<0.01 UJ	<0.01	<0.0052	<0.0021	<0.0052	<0.01	<0.0052	<0.0001	<0.0001	<0.0052	<0.01	<0.0052	<0.01
	P54-ROX-050412	5/4/2012		38.77	NE	<0.0001	<0.0001	<0.01	<0.0001	<0.000051	<0.0001	<0.000051	<0.0001	<0.0001	0.0045 J	<0.01	<0.0051	0.0133	<0.0051	<0.01	<0.0051	<0.0001	<0.0001	<0.0051	<0.01	<0.0051	<0.01
	P54-ROX-080212	8/2/2012		38.95	NE	<0.00011	<0.00011	<0.011 UJ	<0.00011	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.011	<0.011	<0.0053	<0.0021	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	<0.0021	<0.011	<0.0053	<0.011
	P54-ROX-103012	10/30/2012		40.70	NE	<0.0001	<0.0001	<0.01 UJ	<0.0001	<0.000051	<0.0001	<0.000051	<0.0001	<0.0001	<0.01	<0.01	<0.0051	<0.002	<0.0051	<0.01	<0.0051	<0.0001	<0.0001	<0.002	<0.01	<0.0051	<0.01
	P54-ROX-011113	1/11/2013		41.56	NE	<0.00011	<0.00011	<0.011 UJ	<0.00011	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.011	<0.011	<0.0053	<0.0021	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	<0.0021	<0.011	<0.0053	<0.011
	P54-ROX-041013	4/10/2013		41.80	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000057	<0.00011	<0.000057	<0.00011	<0.00011	<0.011	<0.011	<0.0057	<0.0023	<0.0057	<0.011	<0.0057	<0.00011	<0.00011	<0.0023	<0.011	<0.0057	<0.011
	P54-ROX-050313	5/3/2013		41.80	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000056	<0.00011	<0.000056	<0.00011	<0.00011	<0.011	<0.011	<0.0056	<0.0022	<0.0056	<0.011	<0.0056	<0.00011	<0.00011	<0.0022	<0.011	<0.0056	<0.011
	P54-ROX-071113	7/11/2013		39.07	NE	0.000032 J	0.000016 J	<0.01	0.000018 J	<0.000052	<0.0001	<0.000052	<0.0001	<0.0001	<0.01 UJ	<0.01	<0.0052	0.00052 J	<0.0052	<0.01	<0.0052	<0.0001	<0.0001	<0.0021	<0.01	<0.0052	<0.01
	P54-ROX-100813	10/8/2013		39.94	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000057	<0.00011	<0.000057	<0.00011	<0.00011	<0.011	<0.011	<0.0057	<0.0023	<0.0057	<0.011	<0.0057	<0.00011	<0.00011	<0.0023	<0.011	<0.0057	<0.011
	P54-ROX-011514	1/15/2014		42.20	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011	<0.011	<0.0054	0.00058 J	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	<0.0022	<0.011	<0.0054	<0.011
	P54-ROX-040914	4/9/2014		42.80	NE	<0.00012	<0.00012	<0.012	<0.00012	<0.00006	<0.00012	<0.00006	<0.00012	<0.00012	<0.012	<0.012	<0.006	<0.0024	<0.006	<0.012	<0.006	<0.00012	<0.00012	<0.0024	<0.012	<0.006	<0.012
	P54-ROX-071114	7/10/2014		41.71	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011	<0.011	<0.0054	<0.0022	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	<0.0022	<0.011	<0.0054	<0.011
	P54-ROX-100814	10/8/2014	38.00 - 63.00	40.88	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000056	<0.00011	<0.000056	<0.00011	<0.00011	<0.011	<0.011	<0.0056	<0.0022	<0.0056	<0.011	<0.0056	<0.00011	<0.00011	<0.0022	<0.011	<0.0056	<0.011
P-55	P55-ROX-011912	1/19/2012	39.82 - 64.82	41.09	NE	0.00017	<0.0001	<0.01	<0.0001	<0.000052	0.000022 J	<0.000052	<0.0001	<0.0001		<0.01 UJ	<0.0052	<0.0021	<0.00048 U	<0.01	<0.0052	<0.0001	<0.0001	0.00035 J	<0.01	<0.0052	<0.01
	P55-ROX-011912-D	1/19/2012		41.09	NE	0.00015	<0.00011	<0.011	<0.00011	<0.000054	0.000067 J	0.000061	0.00011	0.000071 J		<0.011 UJ	<0.0054	<0.0022	<0.00035 U	<0.011	<0.0054	<0.00011	0.000086 J	0.00033 J	<0.011	<0.0054	<0.011
	P55-ROX-050912	5/9/2012		42.44	NE	0.00036	0.000095 J	<0.01	<0.0001	<0.00005	<0.0001	<0.00005	<0.0001	<0.0001	<0.01	<0.01	<0.0051	<0.002	<0.0051	<0.01	<0.0051	<0.0001	<0.0001	<0.0051	<0.01	<0.0051	<0.01
	P55-ROX-012113	1/21/2013	40.43 - 50.43	43.60	NE	0.00069	0.00019	<0.02	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.05	<0.02	<0.01	<0.006	<0.01	<0.02	<0.01	<0.0001	<0.0001	0.001 J	<0.01	<0.01	0.004 J
	P55-ROX-012113	1/21/2013		43.60	NE	0.00054	0.00014	<0.01 UJ	<0.0001	<0.000051	<0.0001	<0.000051	<0.0001	<0.0001	<0.01	<0.01	<0.0051	<0.002	<0.0051	<0.01	<0.0051	<0.0001	<0.0001	0.001 J	<0.01	0.00073 J	0.0024 J
	P55-ROX-041513	4/15/2013		43.63	NE	0.00073	0.00021	<0.01	<0.0001	<0.000052	<0.0001	<0.000052	<0.0001 UJ	<0.0001 UJ	<0.01	<0.01	<0.0052	<0.0021	<0.0052	<0.01	<0.0052	<0.0001	<0.0001	0.0017 J	<0.01	<0.0052	<0.01
	P55-ROX-071613	7/16/2013		40.06	NE	0.00066	0.0002	<0.011	<0.00011	<0.000056	<0.00011	<0.000056	<0.00011	<0.00011	<0.011	<0.011	<0.0056 UJ	<0.00066 U	<0.0056	<0.011	<0.0056 UJ	<0.00011	<0.00011	0.0016 J	<0.011	<0.0056	0.0024 J
	P55-ROX-101013	10/10/2013		41.67	NE	0.00071	0.00019	<0.011	<0.00011	<0.000055	<0.00011	<0.000055	<0.00011	<0.00011	<0.011 UJ	<0.011	<0.0055	0.0006 J	<0.0055	<0.011	<0.0055	<0.00011	<0.00011	0.0016 J	<0.011	<0.0055	0.0014 J
P-56	P56-ROX-011912	1/19/2012	40.82 - 65.82	41.81	NE	0.00064	<0.0001	<0.01	0.00011	<0.000051	0.000021 J	<0.000051	<0.0001	<0.0001		<0.01 UJ	<0.0051	<0.00066 U	<0.00053 U	<0.01	<0.0051	<0.0001	<0.0001	0.00064 J	<0.01	<0.0051	<0.01
	P56-ROX-050812	5/8/2012		43.09	NE	0.00057	0.0001	<0.01	<0.0001	<0.00011 U	<0.00012 U	<0.000052	<0.0001	<0.0001	<0.01	<0.01	<0.0052	<0.0021	<0.0052	<0.01	<0.0052	<0.0001	<0.0001	<0.0052	<0.01	<0.0052	<0.01
	P56-ROX-080612	8/6/2012		43.60	NE	0.00058	0.000087 J		0.00013	<0.000051	<0.0001	<0.000051	<0.0001	<0.0001	<0.01	<0.01	<0.0051	<0.002	<0.0051	<0.01	<0.0051	<0.0001	<0.0001	0.00051 J	<0.01	<0.0014 U	<0.01
	P56-ROX-103112	10/31/2012		44.80	NE	0.0011	<0.0001	<0.01 UJ	0.00012	<0.00005	<0.0001	<0.00005	<0.0001	<0.0001	<0.01 UJ	<0.01	<0.0051	<0.002	<0.0051	<0.01	<0.0051	<0.0001	<0.0001	0.00066 J	<0.01	<0.0051	<0.01 UJ
	P56-ROX-011713	1/17/2013		45.65	NE	0.00039	0.000083 J	<0.01 UJ	0.0001	<0.00005	<0.0001	<0.00005	<0.0001	<0.0001	<0.01	<0.01	<0.005	0.0044	<0.005	<0.01	<0.005	<0.0001	<0.0001	<0.002	<0.01	<0.005	<0.01
	P56-ROX-041213	4/12/2013		46.12	NE	0.00053	0.000088 J	<0.011	0.0001 J	<0.000055	<0.00011	<0.000055	<0.00011	<0.00011	<0.011	<0.011	<0.0055	<0.0022	<0.0055	<0.011	<0.0055	<0.00011	<0.00011	<0.0022	<0.011	<0.0055	<0.011
	P56-ROX-071513	7/15/2013		43.25	NE	0.00065	0.00013	<0.011	0.00014	<0.000055	<0.00011	<0.000055	<0.00011	<0.00011	<0.011	<0.011	<0.0055 UJ	<0.0022	<0.0055	<0.011	<0.0055 UJ	<0.00011	<0.00011	0.00075 J	<0.011	<0.0055	0.0086 J
	P56-ROX-101013	10/10/2013		44.48	NE	0.0006	0.000092 J	<0.011	0.00011	<0.000055	<0.00011	<0.000055	<0.00011	<0.00011	<0.011 UJ	<0.011	<0.0055	<0.0022	<0.0055	<0.011	<0.0055	<0.00011	<0.00011	0.00059 J	<0.011	<0.0055	0.0042 J
	P56-ROX-012214	1/22/2014		46.35	NE	0.00055	<0.0001	<0.01	0.00013	<0.000052	<0.0001	<0.000052	<0.0001	<0.0001	<0.01	<0.01	<0.0052	<0.0021	<0.0052	<0.01	<0.0052	<0.0001	<0.0001	0.00047 J	<0.01	<0.0052	<0.01
	P56-ROX-041414	4/14/2014		47.32	NE	0.00051	0.000081 J	<0.012	<0.00012	<0.000059	<0.00012	<0.000059	<0.00012	<0.00012	<0.012	<0.012	<0.0059	<0.0024	<0.0059	<0.012	<0.0059	<0.00012	<0.00012	0.00067 J	<0.012	<0.0059	<0.012
	P56-ROX-070814	7/8/2014		45.97	NE	0.00035	0.000081 J	<0.011 UJ	0.0001 J	<0.000056	<0.00011	<0.000056	<0.00011	<0.00011	<0.011	<0.011	<0.0056	<0.0022	<0.0056	<0.011	<0.0056	<0.00011	<0.00011	0.00049 J	<0.011	<0.0056	<0.011
	P56-ROX-101314	10/13/2014	40.82 - 65.82	45.05	NE	0.00057	0.00011	<0.011	0.00012	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011	<0.011	<0.0054	0.001 J	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	0.00055 J	<0.011	<0.0054	<0.011
P-57	P57-ROX-021312	2/13/2012	40.46 - 65.46	42.13	NE	0.00056	<0.0001	<0.01	<0.0001	<0.000051	<0.0001	<0.000051	<0.0001	<0.0001	<0.01	<0.01	<0.0051	0.00043 J	<0.00043 U	<0.01	<0.0051	<0.0001	<0.0001	0.00087 J	<0.01	<0.0051	0.0045 J
	P57-ROX-050712	5/7/2012		42.92	NE	0.00033	<0.0001	<0.01	<0.0001	0.00011	0.00012	<0.000052	<0.0001	<0.0001	<0.01	<0.01	0.0008 J	<0.0021	<0.0052	<0.01	<0.0052	<0.0001	<0.0001	<0.0052	<0.01	<0.0052	<0.01
	P57-ROX-080612	8/6/2012		43.53	NE	0.00056	0.0001		0.000073 J	<0.00005	<0.0001	<0.00005	<0.0001	<0.0001	<0.01	<0.01	<0.005	<0.002	<0.005	<0.01	<0.005	<0.0001	<0.0001	0.00079 J	<0.01	<0.00096 U	0.0029 J
	P57-ROX-080612-DUP	8/6/2012		43.53	NE	0.00051	0.0001		0.000064 J	<0.00005	<0.0001	<0.00005	<0.0001	<0.0001	<0.01	<0.01	<0.005	<0.002	<0.005	<0.01	<0.005	<0.0001	<0.0001	0.00073 J	<0.01	<0.001 U	0.0029 J
	P57-ROX-110512	11/5/2012		44.98	NE	0.00053	<0.0001	<0.01	0.000061 J	<0.00005	<0.0001	<0.00005	0.00005 J	<0.0001	<0.01 UJ	<0.01	<0.005	0.00052 J	<0.005	<0.01	<0.005	<0.0001	0.000049 J	0.0006 J	<0.01	<0.005	<0.01 UJ
	P57-ROX-012913	1/29/2013		45.92	NE	0.00061	0.00013	<0.012 UJ	0.000076 J	<0.000059	<0.00012	<0.000059	<0.00012	<0.00012	<0.012	<0.012	<0.0059	<0.0024	<0.0059	<0.012	<0.0059	<0.00012	<0.00012	<0.0024	<0.012	<0.0059	0.0023 J J
	P57-ROX-041113	4/11/2013		46.29	NE	0.00063	0.00012	<0.01	0.000073 J	<0.000051	<0.0001	<0.000051	<0.0001	<0.0001	<0.01	<0.01	<0.0051	<0.002	<0.0051	<0.01	<0.0051	<0.0001	<0.0001	<0.002	<0.01	<0.0051	<0.01
	P57-ROX-071613	7/16/2013		43.38	NE	0.00047	0.0001 J	<0.011	0.000077 J	0.00012	<0.00011	<0.000056	<0.00011	<0.00011	<0.011	<0.011	<0.0056 UJ	<0.0022	<0.0056	<0.011	<0.0056 UJ	<0.00011	<0.00011	0.00088 J	<0.011	<0.0056	0.002 J
	P57-ROX-101413	10/14/2013		44.38	NE	0.00045	0.000071 J	<0.011	<0.00011	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011	<0.011	<0.0054	0.0012 J	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	0.00082 J	<0.011	<0.0054	0.0029 J
	P57-ROX-020314	2/3/2014		46.57	NE	0.00041	0.000075 J	<0.011	<0.00011	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.011 UJ	<0.011	<0.0053	<0.0021	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	0.00067 J	<0.011	<0.0053	<0.011
	P57-ROX-041514	4/15/2014		46.70	NE	0.00036	0.000074 J	<0.011	<0.00011	<0.000056	<0.00011	<0.000056	<0.00011	<0.00011	<0.011	<0.011	<0.0056	<0.0022	<0.0056	<0.011	<0.0056	<0.00011	<0.00011	0.0007 J	<0.011	<0.0056	<0.011 UJ
	P57-ROX-070814	7/8/2014		45.95	NE	0.00029	0.000069 J	<0.011 UJ	<0.00011	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.011	<0.011	<0.0053	<0.0021	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	0.0007 J	<0.011	<0.0053	<0.011
	P57-ROX-070814-DUP	7/8/2014		45.95	NE	0.00029	0.000075 J	<0.011 UJ	<0.00011	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011	<0.011	<0.0054	<0.0022	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	0.00071 J	<0.011	<0.0054	<0.011
	P57-ROX-101414	10/14/2014	40.46 - 65.46	45.00	NE	0.00036	<0.00011	<0.011	<0.00011	<0.000056	<0.00011	<0.000056	<0.00011	<0.00011	<0.011	<0.011	<0.0056	<0.0022	<0.0056	<0.011	<0.0056	<0.00011	<0.00011	<0.0022	<0.011	<0.0056	<0.011
	P57-ROX-101414-DUP	10/14/2014		45.00	NE	0.0003	<0.00012	<0.012	<0.00012	<0.000058	<0.00012	<0.000058	<0.00012	<0.00012	<0.012	<0.012	<0.0058	<0.0023	<0.0058	<0.012	<0.0058	<0.00012	<0.00012	<0.0023	<0.012	<0.0058	<0.012

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
CUMULATIVE SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL RESULTS AND EXCEEDANCES

						SVOCs																				
						Acenaphthene	Acenaphthylene	Aniline	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Benzoic Acid	Benzyl alcohol	bis(2-Chloroethylether	bis(2-Ethylhexyl)phthalate	Butyl benzyl phthalate	4-Chloro-3-methylphenol (p-Chloro-m-cresol)	2-Chlorophenol	Chrysene (1,2-Benzphenanthracene)	Dibenzo(a,h)anthracene	Dibenzofuran	2,4-Dichlorophenol	Diethyl phthalate	2,4-Dimethylphenol
				Screening Values (mg/L)		0.42 [1]	0.21 [3]	0.023 [3]	2.1 [1]	0.00013 [1]	0.0002 [1]	0.00018 [1]	0.21 [3]	0.00017 [1]	28 [1]	0.7 [3]	0.01 [2]	0.006 [2]	1.4 [2]		0.035 [2]	0.012 [1]	0.0003 [1]	0.007 [3]	0.021 [2]	5.6 [1]	0.14 [2]
Location	Sample ID	Sample Date	Screened Interval (ft btoc)	Depth to Water (ft btoc)	Product Thickness (ft)	Analytical Results (mg/L)																				
P-58	P58-ROX-011912	1/19/2012	40.21 - 65.21	39.73	NE	0.001	<0.00011	<0.011	<0.00011	0.000039 J	0.000051 J	0.000032 J	0.000047 J	<0.00011		<0.011 UJ	<0.0053	0.0361 J	<0.00059 U	<0.011	<0.0053	<0.00011	<0.00011	0.0026 J	<0.011	<0.0053	<0.011
	P58-ROX-011912-D	1/19/2012		39.73	NE	0.00092	<0.00011	<0.011	<0.00011	0.000036 J	0.000036 J	<0.000053	<0.00011	<0.00011		<0.011 UJ	<0.0053	0.024 J	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	0.0023 J	<0.011	<0.0053	<0.011
	P58-ROX-050712	5/7/2012		40.90	NE	0.00059	0.00019	<0.01	0.00057 J	0.00017	<0.0001	<0.000051	<0.0001	<0.0001	<0.01	<0.01	<0.0051	<0.002	<0.0051	<0.01	<0.0051	<0.0001	<0.0001	0.0017 J	<0.01	<0.0051	<0.01
	P58-ROX-050712-DUP	5/7/2012		40.90	NE	0.00044	0.00015	<0.01	<0.0001 UJ	0.00015	0.000032 J	<0.000052	<0.0001	<0.0001	<0.01	<0.01	<0.0052	<0.0021	<0.0052	<0.01	<0.0052	<0.0001	<0.0001	<0.0052	<0.01	<0.0052	<0.01
	P58-ROX-080612	8/6/2012		41.63	NE	0.00086	0.00029		0.000094 J	0.00024	0.00011	0.000064	0.000043 J	<0.0001	<0.01	<0.01	<0.005	0.00043 J	<0.005	<0.01	<0.005	0.0001	<0.0001	0.0022	<0.01	<0.005	<0.01
	P58-ROX-080612-DUP	8/6/2012		41.63	NE	0.00098	0.0003		0.00011	0.00021	0.000098 J	0.00005	<0.0001	<0.0001	<0.01	<0.01	<0.005	0.00042 J	<0.005	<0.01	<0.005	0.000099 J	<0.0001	0.0025	<0.01	<0.005	<0.01
	P58-ROX-110612	11/6/2012		43.09	NE																					
	P58-ROX-121012	12/10/2012		43.09	NE	0.00093	0.00024	<0.011	0.00083	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011	<0.011	<0.0054	0.0103	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	0.002 J	<0.011	<0.0054	<0.011
	P58-ROX-012213	1/22/2013		44.21	NE	0.0011	0.0006	<0.011 UJ	<0.00011	0.00038	0.00022	0.00012	0.00012	<0.00011	<0.011	<0.011	<0.0054	<0.0022	<0.0054	<0.011	<0.0054	0.00039	0.000068 J	0.0038	<0.011	<0.0054	<0.011
	P58-ROX-041113	4/11/2013		44.40	NE	0.0015	0.0005	<0.011	<0.00011	0.0003	0.00019	0.000095	0.000074 J	<0.00011	<0.011	<0.011	<0.0054	<0.0022	<0.0054	<0.011	<0.0054	0.00032	<0.00011	0.0044	<0.011	<0.0054	<0.011
	P58-ROX-071613	7/16/2013		41.49	NE	0.00076	0.00027	<0.011	0.000096 J	0.00018	0.000073 J	0.000045 J	<0.00011	<0.00011	<0.011	<0.011	<0.0055 UJ	<0.0022	<0.0055	<0.011	<0.0055 UJ	0.00012	<0.00011	0.0025	<0.011	<0.0055	<0.011
	P58-ROX-101413	10/14/2013		42.19	NE	0.00084	<0.00011	<0.011	<0.00011	<0.000054	0.000067 J	<0.000054	<0.00011	<0.00011	<0.011	<0.011	<0.0054	0.0099	<0.0054	<0.011	<0.0054	0.000099 J	<0.00011	0.0024	<0.011	<0.0054	0.0016 J
	P58-ROX-020314	2/3/2014		44.66	NE	0.00061	0.00018	<0.01	<0.0001	0.000035 J	0.000047 J	<0.000052	<0.0001	<0.0001	<0.01 UJ	<0.01	<0.0052	<0.0021	<0.0052	<0.01	<0.0052	0.000079 J	<0.0001	0.0016 J	<0.01	<0.0052	<0.01
	P58-ROX-041514	4/15/2014		45.66	NE	0.0011	0.00072	0.0028 J	0.00071	0.00082	0.00063	0.00072	0.00071	0.00071	<0.011 UJ	0.0051 J	0.0015 J	<0.00099 U	0.00091 J	0.0044 J	0.0043 J	0.00073	0.00075	0.0023	<0.011 UJ	0.00077 J	<0.011 UJ
	P58-ROX-071814	7/18/2014		43.80	NE	0.00067	0.00021	<0.011	<0.00011	0.000083	0.000086 J	0.000045 J	0.000035 J	<0.00011	<0.011 UJ	<0.011	<0.0055	<0.0022	<0.0055	<0.011	<0.0055	0.00015	<0.00011	0.0018 J	<0.011	<0.0055	<0.011
	P58-ROX-101514	10/15/2014	40.21 - 65.21	43.14	NE	0.00058	0.00023	<0.011	<0.00011	0.00013	0.00011	0.000074	0.000065 J	<0.00011	<0.011	<0.011	0.014	<0.00042 U	<0.0054	<0.011	<0.0054	0.00018	<0.00011	0.0022	<0.011	<0.0054	<0.011
P-59	P59-ROX-011912	1/19/2012	47.91 - 72.91	42.88	NE	0.00036	<0.00011	<0.011	0.00025	0.000055 J	0.000038 J	0.000037 J	0.000052 J	<0.00011		0.0011 J	<0.0057	<0.00079 U	<0.0011 U	<0.011	<0.0057	0.000085 J	<0.00011	<0.0057	<0.011	<0.0057	0.0133
	P59-ROX-011912-DUP	1/19/2012		42.88	NE	0.00037	<0.0001	<0.01	0.00015	0.00005 J	0.000029 J	0.000027 J	<0.0001	<0.0001		0.00091 J	<0.0051	<0.002	<0.00061 U	<0.01	<0.0051	0.000074 J	<0.0001	0.00042 J	<0.01	<0.0051	0.0108
	P59-ROX-050912	5/9/2012		44.11	NE	0.00022	<0.0001	<0.01	0.000095 J	<0.00005	<0.0001	<0.00005	<0.0001	<0.0001	0.0161	<0.01	<0.005	<0.002	<0.005	<0.01	<0.005	<0.0001	<0.0001	<0.005	<0.01	<0.005	0.0085 J
	P59-ROX-080212	8/2/2012		44.07	NE	0.00042	0.0001 J	<0.011 UJ	0.00014	0.00021	0.000036 J	0.000047 J	<0.00011	<0.00011	<0.011	<0.011	<0.0053	<0.0021	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	0.00036 J	<0.011	<0.0053	0.0088 J
	P59-ROX-110212	11/2/2012		45.98	NE	0.00043	<0.00011	<0.011	0.000086 J	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.011 UJ	<0.011	<0.0053	<0.0021	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	0.00031 J	<0.011	<0.0053	0.0102 J J
	P59-ROX-110212-DUP	11/2/2012		45.98	NE	0.00042	<0.0001	<0.01	0.000084 J	<0.000052	<0.0001	<0.000052	<0.0001	<0.0001	<0.01 UJ	<0.01	<0.0052	<0.0021	<0.0052	<0.01	<0.0052	<0.0001	<0.0001	0.00029 J	<0.01	<0.0052	0.0092 J J
	P59-ROX-013013	1/30/2013		46.60	NE	0.00047	<0.0001	<0.01 UJ	0.00012	<0.000052	<0.0001	<0.000052	<0.0001	<0.0001	<0.01	<0.01	<0.0052	0.0041	<0.0052	<0.01	<0.0052	<0.0001	<0.0001	<0.0021	<0.01	<0.0052	0.0581
	P59-ROX-041213	4/12/2013		46.95	NE	0.00057	0.00013	<0.011	<0.00011	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	0.0831 J	<0.011	<0.0054	<0.0022	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	<0.0022	<0.011	<0.0054	0.0919
	P59-ROX-041213-DUP	4/12/2013		46.95	NE	0.00058	0.00012	<0.011	<0.00011	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	0.0518 J	<0.011	<0.0053	<0.0021	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	<0.0021	<0.011	<0.0053	0.0914
	P59-ROX-071613	7/16/2013		44.13	NE	0.00035	0.000071 J	<0.011	0.000092 J	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011	<0.011	<0.0054 UJ	<0.0022	<0.0054	<0.011	<0.0054 UJ	<0.00011	<0.00011	0.00041 J	<0.011	<0.0054	0.0583
	P59-ROX-101013	10/10/2013		45.50	NE	0.00055	0.000084 J	<0.011	0.00021	0.000068	<0.00011	0.000039 J	<0.00011	<0.00011	<0.011 UJ	0.0009 J	<0.0054	0.00069 J	<0.0054	<0.011	<0.0054	0.000088 J	<0.00011	<0.0022	<0.011	<0.0054	0.078
	P59-ROX-020314	2/3/2014		47.35	NE	0.00046	<0.0001	<0.01	0.00018	0.000035 J	<0.0001	<0.000052	<0.0001	<0.0001	<0.01 UJ	<0.01	<0.0052	<0.0021	<0.0052	<0.01	<0.0052	0.000046 J	<0.0001	<0.0021	<0.01	<0.0052	0.147 J
	P59-ROX-041514	4/15/2014		48.60	NE	0.0013	<0.00011	<0.011	0.00018	0.00006	0.000042 J	0.000044 J	0.000035 J	<0.00011	<0.011	<0.011	<0.0053	<0.0021	<0.0053	<0.011	<0.0053	0.0001 J	<0.00011	<0.0021	<0.011	<0.0053	<0.011 UJ
	P59-ROX-070814	7/8/2014		47.69	NE	0.0015	0.000091 J	<0.011 UJ	0.00012	0.000029 J	<0.00011	<0.000057	<0.00011	<0.00011	<0.011	<0.011	<0.0057	<0.0023	<0.0057	<0.011	<0.0057	0.000027 J	<0.00011	<0.0023	<0.011	<0.0057	0.17
	P59-ROX-101414	10/14/2014	47.91 - 72.91	46.18	NE	0.00045 J	<0.00054	<0.011	<0.00054	<0.00027	<0.00054	<0.00027	<0.00054	<0.00054	<0.011	<0.011	0.0035 J	<0.0022	<0.0054	<0.011	<0.0054	<0.00054	<0.00054	<0.0022	<0.011	<0.0054	0.0492
P-66	P66-ROX-051012	5/10/2012	34.72 - 59.72	32.48	NE	0.00078	<0.0001	<0.01	<0.0001	<0.00005	<0.0001	0.000024 J	<0.0001	<0.0001	<0.01	<0.01	<0.005	<0.00053 U	<0.005	<0.01	<0.005	<0.0001	<0.0001	0.0018 J	<0.01	<0.005	<0.01
	P66-ROX-080312	8/3/2012		30.51	NE	0.00073	0.00025	<0.011 UJ	<0.00011	0.00018	0.000066 J	0.00008	0.000066 J	<0.00011	<0.011	<0.011	<0.0053	0.00075 J	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	<0.0021	<0.011	<0.0053	<0.011
	P66-ROX-103112	10/31/2012		34.75	NE	0.00078	0.00022	<0.01 UJ	0.0006	<0.00005	<0.0001	<0.00005	<0.0001	<0.0001	<0.01 UJ	<0.01	<0.005	<0.002	<0.005	<0.01	<0.005	<0.0001	<0.0001	0.0019 J	<0.01	<0.005	<0.01 UJ
	P66-ROX-011813	1/18/2013		35.70	NE	0.00074	0.00034	<0.011 UJ	<0.000055 U	<0.000053	<0.00011	<0.000028 U	<0.00011	<0.00011	<0.011	<0.011	<0.0053	<0.0021	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	0.0018 J	<0.011	<0.0053	<0.011
	P66-ROX-041113	4/11/2013		36.03	NE	0.0011	0.00028	<0.011	<0.00011	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.011	<0.011	<0.0053	<0.0021	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	0.0025	<0.011	<0.0053	<0.011
	P66-ROX-071213	7/12/2013		33.20	NE	0.00087	<0.00011	<0.011	<0.0002 U	0.00018 B	<0.00015 U	0.00017 B	<0.00019 U	0.00015	<0.011 UJ	<0.011	<0.0056	0.0124	<0.0056	<0.011	<0.0056	0.00017	0.00017	0.0016 J	<0.011	<0.0056	<0.011
	P66-ROX-101013	10/10/2013		33.66	NE	0.00066	0.0002	<0.011	<0.00011	0.000028 J	<0.00011	<0.000056	0.000036 J	<0.00011	<0.011 UJ	<0.011	<0.0056	<0.0022	<0.0056	<0.011	<0.0056	<0.00011	<0.00011	0.0016 J	<0.011	<0.0056	<0.011
	P66-ROX-110713	11/7/2013		33.66	NE																					
	P66-ROX-012914	1/29/2014		36.39	NE	0.00099	0.00032	<0.011	<0.00011	0.000039 J	0.000044 J	0.000048 J	0.000052 J	<0.00011	<0.011	<0.011	<0.0053	<0.0021	<0.0053	<0.011	<0.0053	0.000047 J	0.000035 J	0.0019 J	<0.011	<0.0053	<0.011
	P66-ROX-041114	4/11/2014		37.10	NE	0.00058	0.00017	<0.012	<0.00012	<0.000058	<0.00012	<0.000058	<0.00012	<0.00012	<0.012	<0.012	<0.0058	<0.00068 U	<0.0058	<0.012	<0.0058	<0.00012	<0.00012	<0.0023	<0.012	<0.0058	<0.012
	P66-ROX-070714	7/7/2014		35.60	NE	0.00033	0.00016	<0.011	<0.00011	<0.000056	<0.00011	<0.000056	<0.00011	<0.00011	<0.011	<0.011	<0.0056	<0.0022	<0.0056	<0.011	<0.0056	<0.00011	<0.00011	<0.0022	<0.011	<0.0056	<0.011
	P66-ROX-101414	10/14/2014	34.72 - 59.72	34.48	NE	0.00045	0.00018	<0.011	<0.00011	<0.000055	<0.00011	<0.000055	<0.00011	<0.00011	<0.011	<0.011	<0.0055	<0.0022	<0.0055	<0.011	<0.0055	<0.00011	<0.00011	0.0012 J	<0.011	<0.0055	<0.011
P-74	P74-ROX-011912	1/19/2012	44.43 - 69.43	38.77	NE	<0.000095	<0.000095	<0.0095	<0.000095	<0.000048	<0.000095	<0.000048	<0.000095	<0.000095		<0.0095 UJ	<0.0048	<0.0019	<0.00043 U	<0.0095	<0.0048	<0.000095	<0.000095	<0.0048	<0.0095	<0.0048	<0.0095
	P74-ROX-050712	5/7/2012		39.92	NE	<0.0001	<0.0001	<0.01	<0.0001	0.00012	<0.0001	<0.000052	<0.0001	<0.0001	<0.01	<0.01	<0.0052	<0.0021	<0.0052	<0.01	<0.0052	<0.0001	<0.0001	<0.0052	<0.01	<0.0052	<0.01
	P74-ROX-080612	8/6/2012		40.71	NE	0.00016	0.000056 J		0.000041 J	<0.00005	<0.0001	<0.00005	<0.0001	<0.0001	<0.01	<0.01	<0.005	<0.002	<0.005	<0.01	<0.005	<0.0001	<0.0001	<0.002	<0.01	<0.0012 U	0.0039 J
	P74-ROX-110112	11/1/2012		41.72	NE	0.00023	<0.0001	<0.01 UJ	0.000044 J	<0.000052	<0.0001	<0.000052	<0.0001	<0.0001	<0.01 UJ	<0.01	<0.0052	0.00044 J	<0.0052	<0.01	<0.0052	<0.0001	<0.0001	0.00031 J	0.001 J	<0.0052	0.008 J J
	P74-ROX-011713	1/17/2013		42.65	NE	0.00019	0.0001	<0.01 UJ	0.000063 J	<0.000051	<0.0001	<0.000051	<0.0001	<0.0001	<0.01	0.0028 J	<0.0051	<0.002	<0.0051	<0.01	<0.0051	<0.0001	<0.0001	<0.002	<0.01	<0.0051	0.0021 J
	P74-ROX-041113	4/11/2013		42.83	NE	<0.0001	<0.0001	<0.01	<0.0001	<0.000052	<0.0001	<0.000052	<0.0001	<0.0001	<0.01	<0.01	<0.0052	<0.0021	<0.0052	<0.01	<0.0052	<0.0001	<0.0001	<0.0021	<0.01	<0.0052	<0.01
	P74-ROX-071513	7/15/2013		40.11	NE	<0.000063 U	<0.00011	<0.011	0.000032 J	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011	<0.011	<0.0054	<0.0022	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	<0.0022	0.0013 J	<0.0054	<0.011
	P74-ROX-101413	10/14/2013		41.72	NE	0.0002	<0.00011	<0.011	<0.00011	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011	<0.011	<0.0054	0.00097 J	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	0.00033 J	0.0012 J	<0.0054	0.0019 J
	P74-ROX-012414	1/24/2014		43.35	NE	0.00023	<0.0001	<0.01	<0.0001	<0.000051	<0.0001	<0.000051	<0.0001	<0.0001	<0.01	<0.01	<0.0051	0.00063 J	0.00097 J	<0.01	<0.0051	<0.0001	<0.0001	<0.002	<0.01	<0.0051	<0.01
	P74-ROX-041514	4/15/2014		44.74	NE	<0.00012	<0.00012	<0.012	<0.00012	<0.000059	<0.00012	<0.000059	<0.00012	<0.00012	<0.012	<0.012	<0.0059	<0.0024	<0.0059	<0.012	<0.0059	<0.00012	<0.00012	<0.0024	<0.012	<0.0059	<0.012 UJ
	P74-ROX-070814	7/8/2014		43.02	NE	<0.00011	<0.00011	<0.011 UJ	<0.00011	<0.000057	<0.00011	<0.000057	<0.00011	<0.00011	<0.011	<0.011	<0.0057	<0.0023	<0.0057	<0.011	<0.0057	<0.00011	<0.00011	<0.0023	<0.011	<0.0057	<0.011
	P74-ROX-101414	10/14/2014	44.43 - 69.43	41.48	NE	<0.0001	<0.0001	<0.01	<0.0001	<0.00005	<0.0001	<0.00005	<0.0001	<0.0001	<0.01	<0.01	<0.005	<0.002	0.00096 J	<0.01	<0.005	<0.0001	<0.0001	<0.002	<0.01	<0.005	<0.01

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
CUMULATIVE SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL RESULTS AND EXCEEDANCES

						SVOCs																				
						Acenaphthene	Acenaphthylene	Aniline	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Benzoic Acid	Benzyl alcohol	bis(2-Chloroethylether	bis(2-Ethylhexyl)phthalate	Butyl benzyl phthalate	4-Chloro-3-methylphenol (p-Chloro-m-cresol)	2-Chlorophenol	Chrysene (1,2-Benzphenanthracene)	Dibenzo(a,h)anthracene	Dibenzofuran	2,4-Dichlorophenol	Diethyl phthalate	2,4-Dimethylphenol
				Screening Values (mg/L)		0.42 [1]	0.21 [3]	0.023 [3]	2.1 [1]	0.00013 [1]	0.0002 [1]	0.00018 [1]	0.21 [3]	0.00017 [1]	28 [1]	0.7 [3]	0.01 [2]	0.006 [2]	1.4 [2]		0.035 [2]	0.012 [1]	0.0003 [1]	0.007 [3]	0.021 [2]	5.6 [1]	0.14 [2]
Location	Sample ID	Sample Date	Screened Interval (ft btoc)	Depth to Water (ft btoc)	Product Thickness (ft)	Analytical Results (mg/L)																				
P-93A	P93A-ROX-012012	1/20/2012	48.17 - 63.17	41.66	NE	0.00014	<0.000095	<0.0095 UJ	0.000032 J	<0.000048	<0.000095	<0.000048	<0.000095	<0.000095	<0.0095 UJ	<0.0095	<0.0048	<0.006 U	<0.00053 U	<0.0095	<0.0048	<0.000095	<0.000095	<0.0048	<0.0095	<0.0048	<0.0095
	P93A-ROX-050812	5/8/2012		42.75	NE	<0.0001	<0.0001	<0.01	<0.0001	<0.0001 U	<0.00012 U	<0.000051	<0.0001	<0.0001	<0.01	<0.01	<0.0051	0.0029	<0.0051	<0.01	<0.0051	<0.0001	<0.0001	<0.0051	<0.01	<0.0051	<0.01
	P93A-ROX-080912	8/9/2012		43.66	NE	0.00015	<0.00011	<0.011	0.000048 J	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	0.0032 J	<0.011	<0.0054	0.0153	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	<0.0022	<0.011	<0.0054	<0.011
	P93A-ROX-110712	11/7/2012		45.00	NE	<0.00022 U	<0.0001	<0.01	<0.0001	<0.000052	<0.0001	<0.000052	<0.0001	<0.0001	<0.01	<0.01	<0.0052	0.0026	<0.0052	<0.01	<0.0052	<0.0001	<0.0001	0.00027 J	<0.01	<0.0052	<0.01
	P93A-ROX-110712-DUP	11/7/2012		45.00	NE	0.00029 B	<0.0001	<0.01	0.000061 J	<0.000052	<0.0001	<0.000052	<0.0001	<0.0001	<0.01	<0.01	<0.0052	0.0023	<0.0052	<0.01	<0.0052	<0.0001	<0.0001	<0.0021	<0.01	<0.0052	<0.01
	P93A-ROX-012313	1/23/2013		45.89	NE	0.00016	<0.0001	<0.01 UJ	0.000028 J	<0.000052	<0.0001	<0.000052	<0.0001	<0.0001	<0.01	<0.01	<0.0052	0.0099	<0.0052	<0.01	<0.0052	<0.0001	<0.0001	<0.0021	<0.01	<0.0052 UJ	<0.01
	P93A-ROX-012313-DUP	1/23/2013		45.89	NE	0.00014	<0.0001	<0.01 UJ	<0.0001	<0.000052	<0.0001	<0.000052	<0.0001	<0.0001	<0.01	<0.01	<0.0052	0.011	<0.0052	<0.01	<0.0052	<0.0001	<0.0001	<0.0021	<0.01	<0.0052 UJ	<0.01
	P93A-ROX-041113	4/11/2013		46.29	NE	0.00023	<0.0001	<0.01	0.000074 J	<0.00005	<0.0001	<0.00005	<0.0001	<0.0001	<0.01	<0.01	<0.005	<0.002	<0.005	<0.01	<0.005	<0.0001	<0.0001	<0.002	<0.01	<0.005	<0.01
	P93A-ROX-041113-DUP	4/11/2013		46.29	NE	0.00021	<0.0001	<0.01	<0.0001	<0.00005	<0.0001	<0.00005	<0.0001	<0.0001	<0.01	<0.01	<0.005	<0.002	<0.005	<0.01	<0.005	<0.0001	<0.0001	<0.002	<0.01	<0.005	<0.01
	P93A-ROX-071813	7/18/2013		43.25	NE	<0.00011	0.000032 J	<0.011	0.00003 J	<0.000056	<0.00011	<0.000056	<0.00011	<0.00011	<0.011 UJ	<0.011	<0.0056	<0.0022	<0.0056	<0.011	<0.0056	<0.00011	<0.00011	0.00024 J	<0.011	<0.0056	<0.011
	P93A-ROX-101113	10/11/2013		44.18	NE	0.00017	<0.0001	<0.01	<0.0001	<0.00005	<0.0001	<0.00005	<0.0001	<0.0001	<0.01 UJ	<0.01	<0.005	<0.002	<0.005	<0.01	<0.005	<0.0001	<0.0001	<0.002	<0.01	<0.005	<0.01
	P93A-ROX-012914	1/29/2014		46.53	NE	0.00022	<0.00011	<0.011	<0.00011	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011	<0.011	<0.0054	<0.0022	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	<0.0022	<0.011	<0.0054	<0.011
	P93A-ROX-041714	4/17/2014		47.41	NE	0.00013	<0.00011	<0.011	<0.00011	<0.000056	<0.00011	<0.000056	<0.00011	<0.00011	<0.011 UJ	<0.011	<0.0056	<0.0022	<0.0056	<0.011	<0.0056	<0.00011	<0.00011	<0.0022	<0.011	<0.0056	<0.011
	P93A-ROX-071814	7/18/2014		45.70	NE	0.00017	<0.00011	<0.011	<0.00011	<0.000057	<0.00011	<0.000057	<0.00011	<0.00011	<0.011 UJ	<0.011	<0.0057	0.0041	<0.0057	<0.011	<0.0057	<0.00011	<0.00011	<0.0023	<0.011	<0.00037 U	<0.011
	P93A-ROX-071814-DUP	7/18/2014		45.70	NE	0.00016	<0.00011	<0.011	<0.00011	<0.000057	<0.00011	<0.000057	<0.00011	<0.00011	<0.011 UJ	<0.011	<0.0057	<0.0023	<0.0057	<0.011	<0.0057	<0.00011	<0.00011	<0.0023	<0.011	<0.0057	<0.011
	P93A-ROX-101514	10/15/2014	48.17 - 63.17	45.06	NE	0.0002	<0.0001	<0.01	<0.0001	<0.000052	<0.0001	<0.000052	<0.0001	<0.0001	<0.01	<0.01	<0.0052	<0.0004 U	<0.0052	<0.01	<0.0052	<0.0001	<0.0001	0.0003 J	<0.01	<0.0052	<0.01
	P93A-ROX-101514-DUP	10/15/2014		45.06	NE	0.00022 J	<0.00011 UJ	<0.011 UJ	<0.00011 UJ	<0.000054 UJ	<0.00011 UJ	<0.000054 UJ	<0.00011 UJ	<0.00011 UJ	<0.011 UJ	<0.011 UJ	0.0044 J J	<0.0041 UJ	<0.0054 UJ	<0.011 UJ	<0.0054 UJ	<0.00011 UJ	<0.00011 UJ	0.00033 J J	<0.011 UJ	<0.0054 UJ	<0.011 UJ
P-93B	P93B-ROX-012012	1/20/2012	74.60 - 76.60	41.72	NE	<0.000095	0.000028 J	<0.0095 UJ	<0.000095	<0.000048	<0.000095	<0.000048	<0.000095	<0.000095	<0.0095 UJ	<0.0095	<0.0048	<0.0033 U	<0.00033 U	<0.0095	<0.0048	<0.000095	<0.000095	<0.0048	<0.0095	<0.0048	<0.0095
	P93B-ROX-050812	5/8/2012		42.79	NE	<0.0001	<0.0001	<0.01	<0.0001	<0.000051	<0.00012 U	<0.000051	<0.0001	<0.0001	<0.01	<0.01	<0.0051	<0.002	<0.0051	<0.01	<0.0051	<0.0001	<0.0001	<0.0051	<0.01	<0.0051	<0.01
	P93B-ROX-080912	8/9/2012		43.69	NE	<0.00011	0.000087 J	<0.011	<0.00011	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011	<0.011	<0.0054	0.0036	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	<0.0022	<0.011	<0.00051 U	<0.011
	P93B-ROX-110712	11/7/2012		45.05	NE	<0.0001	0.000073 JB	<0.01	<0.0001	<0.000051	<0.0001	<0.000051	<0.0001	<0.0001	<0.01	<0.01	<0.0051	0.0017 J	<0.0051	<0.01	<0.0051	<0.0001	<0.0001	<0.002	<0.01	<0.0051	<0.01
	P93B-ROX-110712-DUP	11/7/2012		45.05	NE	<0.000047 U	0.000058 J	<0.01	<0.0001	<0.00005	<0.0001	<0.00005	<0.0001	<0.0001	<0.01	<0.01	<0.005	0.00057 J	<0.005	<0.01	<0.005	<0.0001	<0.0001	<0.002	<0.01	<0.005	<0.01
	P93B-ROX-012313	1/23/2013		45.89	NE	0.00014	0.000072 J	<0.011 UJ	0.00013	0.00022	0.00011	0.00013	0.00012	0.00012	<0.011	<0.011	<0.0053	0.0055	0.0032 J	0.0013 J	<0.0053	0.00012	0.00012	<0.0021	<0.011	<0.0053 UJ	0.0021 J
	P93B-ROX-041113	4/11/2013		46.32	NE	<0.0001	<0.0001	<0.01	<0.0001	<0.000051	<0.0001	<0.000051	<0.0001	<0.0001	<0.01	<0.01	<0.0051	<0.002	<0.0051	<0.01	<0.0051	<0.0001	<0.0001	<0.002	<0.01	<0.0051	<0.01
	P93B-ROX-071813	7/18/2013		43.30	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000056	<0.00011	<0.000056	<0.00011	<0.00011	<0.011 UJ	<0.011	<0.0056	<0.0022	<0.0056	<0.011	<0.0056	<0.00011	<0.00011	<0.0022	<0.011	<0.0056	<0.011
	P93B-ROX-101613	10/16/2013		44.43	NE	<0.0001	0.000065 J	<0.01	<0.0001	<0.00005	<0.0001	<0.00005	<0.0001	<0.0001	<0.01	<0.01	<0.005	<0.002	<0.005	<0.01	<0.005	<0.0001	<0.0001	<0.002	<0.01	<0.005	<0.01
	P93B-ROX-101613-DUP	10/16/2013		44.43	NE	<0.0001	0.000091 J	<0.01	<0.0001	<0.000051	<0.0001	<0.000051	<0.0001	<0.0001	<0.01	<0.01	<0.0051	<0.002	<0.0051	<0.01	<0.0051	<0.0001	<0.0001	<0.002	<0.01	<0.0051	<0.01
	P93B-ROX-012814	1/28/2014		46.58	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000055	<0.00011	<0.000055	<0.00011	<0.00011	<0.011	<0.011	<0.0055	0.00072 J	<0.0055	<0.011	<0.0055	<0.00011	<0.00011	<0.0022	<0.011	<0.0055	<0.011
	P93B-ROX-012814-DUP	1/28/2014		46.58	NE	<0.0001	<0.0001	<0.01	<0.0001	<0.000051	<0.0001	<0.000051	<0.0001	<0.0001	<0.01	<0.01	<0.0051	0.0012 J	<0.0051	<0.01	<0.0051	<0.0001	<0.0001	<0.002	<0.01	<0.0051	<0.01
	P93B-ROX-041714	4/17/2014		47.46	NE	<0.0001	<0.0001	<0.01	<0.0001	<0.000051	<0.0001	<0.000051	<0.0001	<0.0001	<0.01 UJ	<0.01	<0.0051	0.0015 J	<0.0051	<0.01	<0.0051	<0.0001	<0.0001	<0.002	<0.01	<0.0051	<0.01
	P93B-ROX-041714-DUP	4/17/2014		47.46	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.011 UJ	<0.011	<0.0053	0.00045 J	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	<0.0021	<0.011	<0.0053	<0.011
	P93B-ROX-071714	7/17/2014		45.75	NE	<0.0001	<0.0001	<0.01	<0.0001	<0.000052	<0.0001	<0.000052	<0.0001	<0.0001	<0.01	<0.01	<0.0052	<0.0021	<0.0052	<0.01	<0.0052	<0.0001	<0.0001	<0.0021	<0.01	<0.0052	<0.01
	P93B-ROX-101514	10/15/2014	74.60 - 76.60	45.15	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000056	<0.00011	<0.000056	<0.00011	<0.00011	<0.011	<0.011	<0.0056	<0.0022	<0.0056	<0.011	<0.0056	<0.00011	<0.00011	<0.0022	<0.011	<0.0056	<0.011
P-93C	P93C-ROX-012012	1/20/2012	94.26 - 96.26	41.57	NE	<0.0001	<0.0001	<0.01 UJ	<0.0001	<0.000051	0.000019 J	0.000027 J	<0.0001	<0.0001	<0.01 UJ	<0.01	<0.0051	<0.0096 U	<0.00037 U	<0.01	<0.0051	<0.0001	<0.0001	<0.0051	<0.01	<0.0051	<0.01
	P93C-ROX-050812	5/8/2012		42.68	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.00012 U	<0.00011	<0.000053	<0.00011	<0.00011	<0.011	<0.011	<0.0053	0.008	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	<0.0053	<0.011	<0.0053	<0.011
	P93C-ROX-080912	8/9/2012		43.57	NE	0.000089 J	0.000022 J	<0.01	<0.0001	<0.000052	<0.0001	<0.000052	<0.0001	<0.0001	<0.01	<0.01	<0.0052	0.0043	<0.0052	<0.01	<0.0052	<0.0001	<0.0001	<0.0021	<0.01	<0.00046 U	<0.01
	P93C-ROX-110812	11/8/2012		45.12	NE	<0.0001	<0.0001	<0.01 UJ	<0.0001	<0.00005	<0.0001	<0.00005	<0.0001	<0.0001	<0.01	<0.01	<0.005	0.00081 J	<0.005	<0.01	<0.005	<0.0001	<0.0001	<0.002	<0.01	<0.005	<0.01
	P93C-ROX-012313	1/23/2013		45.78	NE	<0.00011	<0.00011	<0.011 UJ	<0.00011	<0.000055	<0.00011	<0.000055	<0.00011	<0.00011	<0.011	<0.011	<0.0055	0.0049	<0.0055	<0.011	<0.0055	<0.00011	<0.00011	<0.0022	<0.011	<0.0055 UJ	<0.011
	P93C-ROX-041213	4/12/2013		46.21	NE	<0.0001	<0.0001	<0.01	<0.0001	<0.00005	<0.0001	<0.00005	<0.0001	<0.0001	<0.01	<0.01	<0.005	<0.002	<0.005	<0.01	<0.005	<0.0001	<0.0001	<0.002	<0.01	<0.005	<0.01
	P93C-ROX-071813	7/18/2013		43.31	NE	<0.000045 U	<0.00011	<0.011	0.000021 J	<0.000056	0.00015	<0.000056	<0.00011	<0.00011	<0.011 UJ	<0.011	<0.0056	<0.0022	<0.0056	<0.011	<0.0056	<0.00011	<0.00011	<0.0022	<0.011	<0.0056	<0.011
	P93C-ROX-080813	8/8/2013		43.31	NE																					
	P93C-ROX-101613	10/16/2013		44.31	NE	<0.0001	<0.0001	<0.01	<0.0001	<0.000051	<0.0001	<0.000051	<0.0001	<0.0001	<0.01	<0.01	<0.0051	<0.002	<0.0051	<0.01	<0.0051	<0.0001	<0.0001	<0.002	<0.01	<0.0051	<0.01
	P93C-ROX-012414	1/24/2014		46.44	NE	<0.0001	<0.0001	<0.01	<0.0001	<0.000051	<0.0001	<0.000051	<0.0001	<0.0001	<0.01	<0.01	<0.0051	<0.002	<0.0051	<0.01	<0.0051	<0.0001	<0.0001	<0.002	<0.01	<0.0051	<0.01
	P93C-ROX-041714	4/17/2014		47.34	NE	<0.0001	<0.0001	<0.01	<0.0001	<0.000052	<0.0001	<0.000052	<0.0001	<0.0001	<0.01 UJ	<0.01	<0.0052	<0.0021	<0.0052	<0.01	<0.0052	<0.0001	<0.0001	<0.0021	<0.01	<0.0052	<0.01
	P93C-ROX-071714	7/17/2014		45.61	NE	<0.0001	<0.0001	<0.01	<0.0001	<0.000052	<0.0001	<0.000052	<0.0001	<0.0001	<0.01	<0.01	<0.0052	<0.0021	<0.0052	<0.01	<0.0052	<0.0001	<0.0001	<0.0021	<0.01	<0.0052	<0.01
	P93C-ROX-101514	10/15/2014	94.26 - 96.26	44.99	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000056	<0.00011	<0.000056	<0.00011	<0.00011	<0.011	<0.011	<0.0056	<0.0022	<0.0056	<0.011	<0.0056	<0.00011	<0.00011	<0.0022	<0.011	<0.0056	<0.011

TABLE 3
CUMULATIVE SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL RESULTS AND EXCEEDANCES

						SVOCs																			
						Acenaphthene	Acenaphthylene	Aniline	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Benzoic Acid	Benzyl alcohol	bis(2-Chloroethylether	bis(2-Ethylhexyl)phthalate	Butyl benzyl phthalate	4-Chloro-3-methylphenol (p-Chloro-m-cresol)	2-Chlorophenol	Chrysene (1,2-Benzphenanthracene)	Dibenzo(a,h)anthracene	Dibenzofuran	2,4-Dichlorophenol	Diethyl phthalate	2,4-Dimethylphenol
					Screening Values (mg/L)	0.42 [1]	0.21 [3]	0.023 [3]	2.1 [1]	0.00013 [1]	0.0002 [1]	0.00018 [1]	0.21 [3]	0.00017 [1]	28 [1]	0.7 [3]	0.01 [2]	0.006 [2]	1.4 [2]		0.035 [2]	0.012 [1]	0.0003 [1]	0.007 [3]	0.021 [2]	5.6 [1]	0.14 [2]
Location	Sample ID	Sample Date	Screened Interval (ft btoc)	Depth to Water (ft btoc)	Product Thickness (ft)	Analytical Results (mg/L)																					
P-93D	P93D-ROX-012012	1/20/2012	125.75 - 127.75	41.77	NE	<0.00011	<0.00011	<0.011 UJ	<0.00011	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011 UJ	<0.011	<0.0054	<0.0022	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	<0.0054	<0.011	<0.0054	<0.011
	P93D-ROX-050812	5/8/2012		42.96	NE	<0.0001	<0.0001	<0.01	<0.0001	<0.0001 U	<0.0001	<0.000051	<0.0001	<0.0001	<0.01	<0.01	<0.0051	<0.002	<0.0051	<0.01	<0.0051	<0.0001	<0.0001	<0.0051	<0.01	<0.0051	<0.01
	P93D-ROX-080812	8/8/2012		43.71	NE	0.00017	0.000051 J	<0.01 UJ	<0.0001	<0.000052	<0.0001	<0.000052	<0.0001	<0.0001	<0.01	<0.01 U	<0.0052	<0.0021	<0.0052	<0.01	<0.0052	<0.0001	<0.0001	<0.0021	<0.01	<0.0052	<0.01
	P93D-ROX-110812	11/8/2012		NM	NE	<0.00011	<0.00011	<0.011 UJ	<0.00011	<0.000055	<0.00011	<0.000055	<0.00011	<0.00011	<0.011	<0.011	<0.0055	<0.0022	<0.0055	<0.011	<0.0055	<0.00011	<0.00011	<0.0022	<0.011	<0.0055	<0.011
	P93D-ROX-012213	1/22/2013		44.21	NE	<0.00011	<0.00011	<0.011 UJ	<0.00011	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.011	<0.011	<0.0053	<0.0021	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	<0.0021	<0.011	<0.0053	<0.011
	P93D-ROX-041113	4/11/2013		46.37	NE	<0.0001	<0.0001	<0.01	<0.0001	<0.000052	<0.0001	<0.000052	<0.0001	<0.0001	<0.01	<0.01	<0.0052	<0.0021	<0.0052	<0.01	<0.0052	<0.0001	<0.0001	<0.0021	<0.01	<0.0052	<0.01
	P93D-ROX-071213	7/12/2013		43.51	NE	<0.000026 U	<0.00011	<0.011	<0.00011	<0.000056	<0.00011	<0.000056	<0.00011	<0.00011	<0.011 UJ	<0.011	<0.0056	0.00057 J	<0.0056	<0.011	<0.0056	<0.00011	<0.00011	<0.0022	<0.011	<0.0056	<0.011
	P93D-ROX-101113	10/11/2013		44.24	NE	<0.0001	<0.0001	<0.01	<0.0001	<0.00005	<0.0001	<0.00005	<0.0001	<0.0001	<0.01 UJ	<0.01	<0.005	<0.002	<0.005	<0.01 UJ	<0.005 UJ	<0.0001	<0.0001	<0.002	<0.01 UJ	<0.005	<0.01 UJ
	P93D-ROX-013114	1/31/2014		46.62	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.011	<0.011	<0.0053	0.0045	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	<0.0021	<0.011	<0.0053	<0.011
	P93D-ROX-041414	4/14/2014		47.54	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.011	<0.011	<0.0053	<0.0005 U	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	<0.0021	<0.011	<0.0053	<0.011
	P93D-ROX-071714	7/17/2014		45.78	NE	<0.0001	<0.0001	<0.01	<0.0001	<0.000052	<0.0001	<0.000052	<0.0001	<0.0001	<0.01	<0.01	<0.0052	<0.0021	<0.0052	<0.01	<0.0052	<0.0001	<0.0001	<0.0021	<0.01	<0.0052	<0.01
	P93D-ROX-101514	10/15/2014	125.75 - 127.75	45.14	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011	<0.011	<0.0054	<0.0022	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	<0.0022	<0.011	<0.0054	<0.011
	P93D-ROX-110414	11/4/2014		45.14	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
P-114	P114-ROX-012012	1/20/2012	32.67 - 52.67	27.17	NE	<0.0001	<0.0001	<0.01 UJ	<0.0001	<0.000051	0.000055 J	0.00005 J	0.000058 J	<0.0001	<0.01 UJ	<0.01	<0.0051	<0.0013 U	<0.00044 U	<0.01	<0.0051	<0.0001	0.000053 J	<0.0051	<0.01	<0.0051	<0.01
	P114-ROX-050912	5/9/2012		28.09	NE	<0.0001	<0.0001	<0.01	<0.0001	<0.00005	<0.0001	<0.00005	<0.0001	<0.0001	<0.01	<0.01	<0.0052	0.0015 J	<0.0052	<0.01	<0.0052	<0.0001	<0.0001	<0.0052	<0.01	<0.0052	<0.01
	P114-ROX-080912	8/9/2012		29.13	NE	<0.0001	0.000029 J	<0.01	<0.0001	<0.00005	<0.0001	<0.00005	<0.0001	<0.0001	<0.01	<0.01	<0.005	0.0039	<0.005	<0.01	<0.005	<0.0001	<0.0001	<0.002	<0.01	<0.005	<0.01
	P114-ROX-110912	11/9/2012		30.90	NE	<0.0001	<0.0001	<0.01 UJ	<0.0001	<0.000052	<0.0001	<0.000052	<0.0001	<0.0001	<0.01	<0.01	<0.0052	<0.0021	<0.0052	<0.01	<0.0052	<0.0001	<0.0001	<0.0021	<0.01	<0.0052	<0.01
	P114-ROX-012313	1/23/2013		30.22	NE	<0.00011	<0.00011	<0.011 UJ	<0.00011	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.011	<0.011	<0.0053	0.0059	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	<0.0021	<0.011	<0.0053 UJ	<0.011
	P114-ROX-041513	4/15/2013		31.80	NE	<0.0001	<0.0001	<0.01	<0.0001	<0.000052	<0.0001	<0.000052	<0.0001 UJ	<0.0001 UJ	<0.01	<0.01	<0.0052	0.0023	<0.0052	<0.01	<0.0052	<0.0001	<0.0001	<0.0021	<0.01	<0.0052	<0.01
	P114-ROX-071813	7/18/2013		27.22	NE	0.00013 B	<0.00011	<0.011	0.00011	0.000045 J	0.000034 J	0.000064	0.000067 J	<0.00011	<0.011 UJ	<0.011	<0.0055	<0.0022	<0.0055	<0.011	<0.0055	<0.00011	0.000073 J	<0.0022	<0.011	<0.0055	<0.011
	P114-ROX-071813-DUP	7/18/2013		27.22	NE	<0.00011	<0.00011	<0.011	0.00013	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.011 UJ	<0.011	<0.0053	<0.0021	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	<0.0021	<0.011	<0.0053	<0.011
	P114-ROX-101713	10/17/2013		29.43	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011	<0.011	<0.0054	<0.0022	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	<0.0022	<0.011	<0.0054	<0.011
	P114-ROX-012814	1/28/2014		32.11	NE	<0.00011	<0.00011	<0.011	0.00011	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011	<0.011	<0.0054	0.00066 J	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	<0.0022	<0.011	<0.0054	<0.011
	P114-ROX-042114	4/21/2014		32.22	NE	0.00011	<0.0001	<0.01	0.0001	<0.000051	<0.0001	<0.000051	<0.0001	<0.0001	<0.01 UJ	<0.01	<0.0051	<0.002	<0.0051	<0.01	<0.0051	<0.0001	<0.0001	<0.002	<0.01	<0.0051	<0.01
	P114-ROX-071814	7/18/2014		30.87	NE	0.000082 J	<0.0001	<0.01	<0.0001	<0.000051	<0.0001	<0.000051	<0.0001	<0.0001	<0.01 UJ	<0.01	<0.0051	<0.002	<0.0051	<0.01	<0.0051	<0.0001	<0.0001	<0.002	<0.01	<0.0051	<0.01
	P114-ROX-101714	10/17/2014	32.67 - 52.67	29.43	NE	0.000078 J	<0.00011	<0.011	<0.00011	<0.000057	<0.00011	<0.000057	<0.00011	<0.00011	<0.011	<0.011	<0.0057	<0.0023	<0.0057	<0.011	<0.0057	<0.00011	<0.00011	<0.0023	<0.011	<0.0057	<0.011
ROST-3-PZ	ROST3PZ-ROX-051412	5/14/2012	40.00 - 50.00	38.82	NE	0.000023 J	<0.0001	<0.01	<0.0001	<0.000052	<0.0001	<0.000052	<0.0001	<0.0001	<0.01	<0.01	<0.0052	0.00065 J	<0.0052	<0.01	<0.0052	<0.0001	<0.0001	<0.0052	<0.01	<0.0052	<0.01
	ROST3PZ-ROX-080712	8/7/2012		39.00	NE	<0.00011	<0.00011	<0.011 UJ	<0.00011	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011	<0.011	<0.0054	<0.0022	0.0016 J	<0.011	<0.0054	<0.00011	<0.00011	<0.0022	<0.011	0.0033 J	<0.011
	ROST3PZ-ROX-110112	11/1/2012		40.82	NE	<0.00011	<0.00011	<0.011 UJ	<0.00011	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.011 UJ	<0.011	<0.0053	<0.0021	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	<0.0021	<0.011	<0.0053	<0.011 UJ
ROST-3-MW	ROST3MW-ROX-012313	1/23/2013	37.81 - 47.81	41.50	NE	0.00025	0.000059 J	<0.01 UJ	0.000074 J	<0.00005	<0.0001	<0.00005	<0.0001	<0.0001	<0.01	<0.01	<0.005	<0.002	<0.005	<0.01	<0.005	<0.0001	<0.0001	<0.002	<0.01	<0.005 UJ	<0.01
	ROST3MW-ROX-040513	4/5/2013				0.00016	<0.00011 UJ	<0.011 UJ	<0.00011	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011	<0.011	<0.0054	<0.0022	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	<0.0022	<0.011	<0.0054	<0.011
	ROST3MW-ROX-071113	7/11/2013		39.50	NE	0.00029	<0.00011	<0.011	0.000091 J	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011 UJ	<0.011	<0.0054	0.00061 J	<0.0054	<0.011 UJ	<0.0054 UJ	<0.00011	<0.00011	0.00025 J	<0.011 UJ	<0.0054	0.0016 J J
	ROST3-MW-ROX-100913	10/9/2013		40.16	NE	0.0001 J	<0.00011	<0.011	<0.00011	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011 UJ	<0.011	<0.0054	<0.0022	<0.0054	<0.011 UJ	<0.0054 UJ	<0.00011	<0.00011	<0.0022	<0.011 UJ	<0.0054	<0.011 UJ
	ROST3MW-ROX-011714	1/17/2014		42.20	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.011 UJ	<0.011	<0.0053	<0.0021	<0.0053	<0.011 UJ	<0.0053 UJ	<0.00011	<0.00011	<0.0021	<0.011 UJ	<0.0053	<0.011 UJ
	ROST3MW-ROX-041014	4/10/2014		42.80	NE	<0.00012	<0.00012	<0.012	<0.00012	<0.00006	<0.00012	<0.00006	<0.00012	<0.00012	<0.012 UJ	<0.012	<0.006	<0.0024	<0.006	<0.012	<0.006	<0.00012	<0.00012	<0.0024	<0.012	<0.006	<0.012
	ROST3MW-ROX-071414	7/14/2014		41.88	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011	<0.011	<0.0054	<0.0022	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	<0.0022	<0.011	<0.0054	<0.011
	ROST3MW-ROX-100914	10/9/2014	37.81 - 47.81	41.31	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000056	<0.00011	<0.000056	<0.00011	<0.00011	<0.011	<0.011	<0.0056	0.00046 J	<0.0056	<0.011	<0.0056	<0.00011	<0.00011	<0.0022	<0.011	<0.0056	<0.011
ROST-4-PZ(C)	ROST4PZ-C-051412	5/14/2012	34.95 - 44.95	39.04	NE	0.00027	0.000072 J	<0.01	0.00011	<0.00005	<0.0001	<0.00005	<0.0001	<0.0001	<0.01	<0.01	<0.005	<0.002	<0.005	<0.01	<0.005	<0.0001	<0.0001	0.00027 J	<0.01	<0.005	<0.01
	ROST4PZ-C-ROX-072512	7/25/2012		39.10	NE	0.00039 B	<0.00011	<0.011	<0.00018 U	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.011	0.00042 J	<0.0053	<0.00051 U	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	0.00036 J	<0.011	0.0012 J	0.003 J
	ROST4PZC-ROX-102912	10/29/2012		40.75	NE	0.000054 J	<0.0001	<0.01 UJ	0.00005 J	<0.000052	<0.0001	<0.000052	<0.0001	<0.0001	<0.01	<0.01	<0.0052	0.0045	<0.0052	<0.01	<0.0052	<0.0001	<0.0001	<0.0021	<0.01	<0.0052	<0.01
	ROST4PZ(C)-ROX-011113	1/11/2013		41.42	NE	<0.00011	<0.00011	<0.011 UJ	<0.00011	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.011	<0.011	<0.0053	<0.0021	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	<0.0021	<0.011	<0.0053	<0.011
	ROST4PZC-ROX-041013	4/10/2013		42.27	NE	0.000066 J	0.000018 J	<0.011	0.000033 J	<0.000055	<0.00011	<0.000055	<0.00011	<0.00011	<0.011	<0.011	<0.0055	<0.0022	<0.0055	<0.011	<0.0055	<0.00011	<0.00011	<0.0022	<0.011	<0.0055	<0.011
	ROST4PZC-ROX-071113	7/11/2013		40.18	NE	0.00019	0.000073 J	<0.011	0.00012	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011 UJ	<0.011	<0.0054	0.0032	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	<0.0022	<0.011	<0.0054	<0.011
	ROST4PZC-ROX-100913	10/9/2013		39.91	NE	0.00012	<0.00011	<0.011	<0.00011	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.011	<0.011	<0.0053	<0.0021	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	<0.0021	<0.011	<0.0053	<0.011
	ROST4PZC-ROX-011714	1/17/2014		41.92	NE	<0.00012	<0.00012	<0.012	<0.00012	<0.000059	<0.00012	<0.000059	<0.00012	<0.00012	<0.01 UJ	<0.012	<0.0059	<0.0024	<0.0059	<0.01 UJ	<0.005 UJ	<0.00012	<0.00012	<0.0024	<0.01 UJ	<0.0059	<0.01 UJ
	ROST4PZC-ROX-041014	4/10/2014		42.05	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000056	<0.00011	<0.000056	<0.00011	<0.00011	<0.011	<0.011	<0.0056	<0.0022	<0.0056	<0.011	<0.0056	<0.00011	<0.00011	<0.0022	<0.011	<0.0056	<0.011
	ROST4C-ROX-071114	7/10/2014		42.22	NE	<0.0001	<0.0001	<0.011	<0.0001	<0.00005	<0.0001	<0.00005	<0.0001	<0.0001	<0.011	<0.011	<0.0053	0.0007 J	<0.0053	<0.011	<0.0053	<0.0001	<0.0001	<0.0021	<0.011	<0.0053	<0.011
	ROST4PZC-ROX-100914	10/9/2014	34.95 - 44.95	41.30	NE	<0.00011	<0.00011	<0.011	<0.00011	<0.000056	<0.00011	<0.000056	<0.00011	<0.00011	<0.011	<0.011	<0.0056	<0.0022	<0.0056	<0.011	<0.0056	<0.00011	<0.00011	<0.0022	<0.011	<0.0056	<0.011

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
CUMULATIVE SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL RESULTS AND EXCEEDANCES

						SVOCs																		
						Acenaphthene	Acenaphthylene	Aniline	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Benzoic Acid	Benzyl alcohol	bis(2-Chloroethyl)ether	bis(2-Ethylhexyl)phthalate	Butyl benzyl phthalate	4-Chloro-3-methylphenol (p-Chloro-m-cresol)	2-Chlorophenol	Chrysene (1,2-Benzphenanthracene)	Dibenzo(a,h)anthracene	Dibenzofuran	2,4-Dichlorophenol	Diethyl phthalate	2,4-Dimethylphenol
				Screening Values (mg/L)		0.42 [1]	0.21 [3]	0.023 [3]	2.1 [1]	0.00013 [1]	0.0002 [1]	0.00018 [1]	0.21 [3]	0.00017 [1]	28 [1]	0.7 [3]	0.01 [2]	0.006 [2]	1.4 [2]		0.035 [2]	0.012 [1]	0.0003 [1]	0.007 [3]	0.021 [2]	5.6 [1]	0.14 [2]
Location	Sample ID	Sample Date	Screened Interval (ft btoc)	Depth to Water (ft btoc)	Product Thickness (ft)	Analytical Results (mg/L)																				
T-12	T12-ROX-011912	1/19/2012	46.72 - 72.72	41.0	NE	0.00047	<0.00011	<0.011	0.00014	<0.000056	0.000032 J	0.000035 J	0.000069 J	<0.00011		<0.011 UJ	<0.0056	<0.0017 U	<0.00062 U	<0.011	<0.0056	<0.00011	0.00005 J	0.00029 J	<0.011	<0.0056	0.0095 J
	T12-ROX-050912	5/9/2012		42.62	NE	0.00032	<0.0001	<0.01	0.000081 J	<0.00005	<0.0001	<0.00005	<0.0001	<0.0001	<0.01	<0.01	<0.005	<0.002	<0.005	<0.01	<0.005	<0.0001	<0.0001	<0.005	<0.01	<0.005	<0.01
	T12-ROX-080212	8/2/2012		41.92	NE	0.00044	0.000082 J	<0.011 UJ	0.0001 J	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011	<0.011	<0.0054	<0.0022	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	0.0003 J	<0.011	<0.0054	0.0153
	T12-ROX-110512	11/5/2012		43.91	NE	0.00044	<0.0001	<0.01	0.0001	<0.00005	<0.0001	<0.00005	<0.0001	<0.0001	<0.01 UJ	<0.01	<0.005	0.00054 J	<0.005	<0.01	<0.005	<0.0001	<0.0001	0.00029 J	<0.01	<0.005	0.0028 J J
	T12-ROX-011813	1/18/2013		44.50	NE	0.0005	0.000093 J	<0.011 UJ	<0.00013 U	<0.000053	<0.00011	<0.000053	<0.00011	<0.00011	<0.011	<0.011	<0.0053	<0.0021	<0.0053	<0.011	<0.0053	<0.00011	<0.00011	<0.0021	<0.011	<0.0053	0.0065 J
	T12-ROX-041513	4/15/2013		44.99	NE	0.00063	0.00009 J	<0.01	<0.0001	<0.000051	<0.0001	<0.000051	<0.0001 UJ	<0.0001 UJ	<0.01	<0.01	<0.0051	<0.002	<0.0051	<0.01	<0.0051	<0.0001	<0.0001	0.00048 J	<0.01	<0.0051	<0.01
	T12-ROX-071613	7/16/2013		42.33	NE	0.00055	0.0001 J	<0.011	0.00015	0.00013	<0.00011	<0.000054	<0.00011	<0.00011	<0.011	0.001 J	<0.0054 UJ	<0.0044 U	<0.0054	<0.011	<0.0054 UJ	<0.00011	<0.00011	0.00042 J	<0.011	<0.0054	0.0096 J
	T12-ROX-101513	10/15/2013		43.73	NE	0.00036	<0.00011	<0.011	0.00012	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011	<0.011	<0.0054	<0.0022	<0.0054	<0.011	<0.0054	0.000028 J	<0.00011	0.00029 J	<0.011	<0.0054	0.0047 J
	T12-ROX-012414	1/24/2014		45.26	NE	0.0005	<0.0001	<0.01	0.00014	<0.000051	<0.0001	<0.000051	<0.0001	<0.0001	<0.01	<0.01	<0.0051	<0.002	<0.0051	<0.01	<0.0051	<0.0001	<0.0001	<0.002	<0.01	<0.0051	0.0073 J
	T12-ROX-041514	4/15/2014		46.72	NE	0.00037	<0.00011	<0.011	0.00012	<0.000056	<0.00011	<0.000056	<0.00011	<0.00011	<0.011	<0.011	<0.0056	<0.0022	<0.0056	<0.011	<0.0056	<0.00011	<0.00011	0.00031 J	<0.011	<0.0056	<0.011 UJ
	T12-ROX-070814	7/8/2014		45.13	NE	0.00024	<0.00011	<0.011 UJ	<0.00011	<0.000054	<0.00011	<0.000054	<0.00011	<0.00011	<0.011	<0.011	<0.0054	<0.0022	<0.0054	<0.011	<0.0054	<0.00011	<0.00011	<0.0022	<0.011	<0.0054	<0.011
	T12-ROX-101714	10/17/2014	46.72 - 72.72	44.40	NE	0.00036	0.000072 J	<0.011	<0.00011	<0.000056	<0.00011	<0.000056	<0.00011	<0.00011	<0.011	<0.011	<0.0056	<0.0022	<0.0056	<0.011	<0.0056	<0.00011	<0.00011	<0.0022	<0.011	<0.0056	<0.011

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TABLE 3
CUMULATIVE SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL RESULTS AND EXCEEDANCES

						SVOCs																							
						Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate	2,6-Dinitrotoluene	Fluoranthene	Fluorene	Hexachlorobenzene	Indene	Indeno(1,2,3-cd)pyrene	Isophorone (3,5,5-trimethyl-2-cyclohexene-1-one)	1-Methylnaphthalene	2-Methylnaphthalene	2-Methylphenol (o-Cresol)	3 & 4-Methylphenol (m & p-Cresol)	3-Nitroaniline	Nitrobenzene	N-Nitrosodimethylamine	N-Nitrosodiphenylamine	Pentachlorophenol	Phenanthrene	Phenol	Pyrene
			Screening Values (mg/L)				0.7 [1]	0.14 [2]	0.00031 [2]	0.28 [1]	0.28 [1]	0.00006 [2]		0.00043 [1]	1.4 [2]	0.49 [3]	0.028 [1]	0.35 [1]	0.35 [3]		0.014 [1]	0.0006 [3]	0.0032 [2]	0.001 [1]	0.21 [3]	0.1 [1]	0.21 [1]
Location	Sample ID	Sample Date	Screened Interval (ft btoc)	Depth to Water (ft btoc)	Product Thickness (ft)	Analytical Results (mg/L)																							
MW-01	MW1-ROX-011612	1/16/2012	48.80 - 58.80	37.75	NE	<0.0051	<0.0051	<0.0051	<0.01	0.00011	0.000059 J	<0.0051		<0.00012 U	<0.0051	<0.0002	0.000098 J	<0.01	<0.01	<0.01	<0.0051	<0.0051	<0.0051	<0.01	0.000098	<0.0051	0.00009 J
	MW1-ROX-050112	5/1/2012		39.09	NE	<0.0051	<0.00054 U	<0.0051	<0.01	<0.0001	<0.0001	<0.0051		<0.0001	<0.0051	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.0051	<0.0051 UJ	<0.0051	<0.01	<0.000051	<0.0051 UJ	<0.0001
	MW1-ROX-073012	7/30/2012		39.39	NE	<0.0053	<0.00043 U	<0.0053	<0.011	<0.00011	<0.00011	<0.0053		<0.00011	<0.0053	<0.00021	<0.00021	<0.011	<0.011	<0.011	<0.0053	<0.0053	<0.0053	<0.011	0.000025 J	<0.0053	<0.00011
	MW1-ROX-102612	10/26/2012		41.22	NE	<0.0057	<0.0057	<0.0057	<0.011	<0.00011	<0.00011	<0.0057		<0.00011	<0.0057	<0.00023	<0.00023	<0.011	<0.011	<0.011	<0.0057	<0.0057	<0.0057	<0.011	<0.000057	<0.0057	<0.00011
	MW1-ROX-121712	12/17/2012		41.22	NE																						
	MW1-ROX-011013	1/10/2013		41.89	NE	<0.0052 UJ	<0.0052	<0.0052	<0.01	<0.0001	<0.0001	<0.0052		<0.0001	<0.0052	<0.00021	<0.00021	<0.01	<0.01	<0.01	<0.0052	<0.0052	<0.0052	<0.01	<0.000021 U	<0.0052	<0.0001
	MW1-ROX-040913	4/9/2013		42.55	NE	<0.0053 UJ	<0.0012 U	<0.0053	<0.011	<0.00011	<0.00011	<0.0053		<0.00011	<0.0053	<0.00021	<0.00021	<0.011	<0.011	<0.011	<0.0053	<0.0053	<0.0053	<0.011	<0.000053	<0.0053	<0.00011
	MW1-ROX-070813	7/8/2013		39.56	NE	<0.0051	<0.0051	<0.0051	<0.01	0.000033 J	<0.0001	<0.0051		<0.0001	<0.0051	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.0051	<0.0051	<0.0051	<0.01	<0.000043 U	<0.0051	<0.0001
	MW1-ROX-100313	10/3/2013		40.28	NE	<0.0054	<0.0054	<0.0054	<0.011	<0.00011	<0.00011	<0.0054		<0.00011	<0.0054	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.0054	<0.0054	<0.0054	<0.011	<0.000054	<0.0054	<0.00011
	MW1-ROX-011414	1/14/2014		42.77	NE	<0.0053	<0.0053	<0.0053	<0.011	<0.00011	<0.00011	<0.0053		<0.00011	<0.0053	<0.00021	<0.00021	<0.011 UJ	<0.011 UJ	<0.011	<0.0053	<0.0053	<0.0053	<0.011 UJ	0.000031 J	<0.0053 UJ	<0.00011
	MW1-ROX-040714	4/7/2014		43.28	NE	<0.0054	<0.00029 U	<0.0054	<0.011	<0.00011	<0.00011	<0.0054		<0.00011	<0.0054	<0.00022	<0.00022	<0.011 UJ	<0.011 UJ	<0.011	<0.0054	<0.0054	<0.0054	<0.011 UJ	<0.000023 U	<0.0057 UJ	<0.00011
	MW1-ROX-070914	7/9/2014		42.09	NE	<0.0054	0.0016 JB	<0.0054	<0.011	<0.00011	<0.00011	<0.0054		<0.00011	<0.0054	0.000085 J	0.00012 JB J	<0.011	<0.011	<0.011	<0.0054	<0.0054	<0.0054	<0.011	<0.000054	<0.0054	<0.00011
	MW1-ROX-100614	10/6/2014	48.80 - 58.80	41.1	NE	<0.0053	<0.0053	<0.0053	<0.011	<0.00011	<0.00011	<0.0053		<0.00011	<0.0053	<0.0021	<0.0021	<0.011	<0.011	<0.011	<0.0053	<0.0053	<0.0053	<0.011	<0.000053	<0.0053 UJ	<0.00011
MW-02	MW2-ROX-011612	1/16/2012	49.87 - 59.87	38.89	NE	<0.0053	0.00056 J	<0.0053	<0.011	<0.00011	0.000052 J	<0.0053		<0.000054 U	<0.0053	0.0107	0.0229	<0.011	<0.011	<0.011	<0.0053	<0.0053	<0.0053	<0.011	0.000066	<0.0053	<0.00011
	MW2-ROX-050112	5/1/2012		40.25	NE	<0.0052	<0.0005 U	<0.0052	<0.01	<0.0001	<0.0001	<0.0052		<0.0001	<0.0052	0.0105	0.021	<0.01	<0.01	<0.01	<0.0052	<0.0052 UJ	<0.0052	<0.01	<0.000052	<0.0052 UJ	<0.0001
	MW2-ROX-073012	7/30/2012		40.60	NE	<0.0053	<0.00047 U	<0.0053	<0.011	<0.00011	<0.00011	<0.0053		<0.00011	<0.0053	0.0097	0.0229	<0.011	<0.011	<0.011	<0.0053	<0.0053	<0.0053	<0.011	0.00004 J	<0.0053	0.000039 J
	MW2-ROX-102612	10/26/2012		42.35	NE	<0.0054	<0.0054	<0.0054	<0.011	0.000061 J	0.00011	<0.0054		<0.00011	<0.0054	0.0091	0.0182	<0.011	<0.011	<0.011	<0.0054	<0.0054	<0.0054	<0.011	0.00011	<0.0054	0.000046 J
	MW2-ROX-011113	1/11/2013		42.94	NE	<0.0056 UJ	<0.0056	<0.0056	<0.011	0.00004 J	<0.00011	<0.0056		<0.00011	<0.0056	0.008	0.0162	<0.011	<0.011	<0.011	<0.0056	<0.0056	<0.0056	<0.011	0.000044 J	<0.0056	0.000039 J
	MW2-ROX-040913	4/9/2013		43.70	NE	<0.0054 UJ	<0.0054	<0.0054	<0.011	<0.00011	<0.00011	<0.0054		<0.00011	<0.0054	0.012	0.0256	<0.011	<0.011	<0.011	<0.0054	<0.0054	<0.0054	<0.011	<0.000054	<0.0054	<0.00011
	MW2-ROX-071113	7/11/2013		40.82	NE	<0.0055	<0.0055	<0.0055	<0.011	<0.00011	<0.00011	<0.0055		<0.00011	<0.0055	0.0123 J	0.0249	<0.011	<0.011	<0.011 UJ	<0.0055	<0.0055	<0.0055	<0.011	<0.000051 U	<0.0055 UJ	<0.00011
	MW2-ROX-100813	10/8/2013		41.73	NE	<0.0054	<0.0054	<0.0054	<0.011	<0.00011	<0.00011	<0.0054		<0.00011	<0.0054	0.009	0.0201	<0.011	<0.011	<0.011	<0.0054	<0.0054	<0.0054	<0.011	<0.000054	<0.0054	<0.00011
	MW2-ROX-012014	1/20/2014		44.00	NE	<0.0053	<0.0053	<0.0053	<0.011	<0.00011	<0.00011	<0.0053		<0.00011	<0.0053	0.0094	0.0208	<0.011	<0.011	<0.011	<0.0053	<0.0053	<0.0053	<0.011	<0.000043 U	<0.0053	<0.00011
	MW2-ROX-041014	4/10/2014		44.66	NE	<0.006	<0.00046 U	<0.006	<0.012	<0.00012	<0.00012	<0.006		<0.00012	<0.006	0.0083	0.0193	<0.012	<0.012	<0.012	<0.006	<0.006	<0.006	<0.012	<0.00006	<0.006	<0.00012
	MW2-ROX-071414	7/14/2014		43.13	NE	<0.0054	<0.00045 U	<0.0054	<0.011	0.00012	0.00014	<0.0054		<0.00011	<0.0054	0.01	0.0215	<0.011	<0.011	<0.011	<0.0054	<0.0054	<0.0054	<0.011	<0.00017 U	<0.0054	0.000096 J
	MW2-ROX-101014	10/10/2014	49.87 - 59.87	42.49	NE	<0.0051	<0.0051	<0.0051	<0.01	<0.0001	<0.0001	<0.0051		<0.0001	<0.0051	0.01	0.0214	<0.01	<0.01	<0.01	<0.0051	<0.0051	<0.0051	<0.01	<0.000051	<0.0051	<0.0001
MW-03	MW3-ROX-011612	1/16/2012	34.67 - 44.67	24.93	NE	<0.0052	<0.0052	<0.0052	<0.01	0.000098 J	<0.0001	<0.0052		<0.00015 U	<0.0052	<0.00021	0.00015 J	<0.01	<0.01	<0.01	<0.0052	<0.0052	<0.0052	<0.01	0.000095	<0.0052	0.000078 J
	MW3-ROX-043012	4/30/2012		26.19	NE	<0.0052	<0.00047 U	<0.0052	<0.01	<0.0001	<0.0001	<0.0052		<0.0001	<0.0052	<0.00021	<0.00021	<0.01	<0.01	<0.01	<0.0052	<0.0052	<0.0052	<0.01	<0.000052	<0.0052	<0.0001
	MW3-ROX-072712	7/27/2012		26.60	NE	<0.0053	<0.00066 U	<0.0053	<0.011	<0.00011	<0.00011	<0.0053		<0.00011	<0.0053	<0.00021	<0.00021	<0.011	<0.011 UJ	<0.011	<0.0053	<0.0053	<0.0053	<0.011	0.000025 J J	<0.0053	<0.00011
	MW3-ROX-102512	10/25/2012		28.39	NE	<0.0051	<0.0051	<0.0051	<0.01	<0.0001	<0.0001	<0.0051		<0.0001	<0.0051	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.0051	<0.0051	<0.0051	<0.01	<0.000051	<0.0051 UJ	<0.0001
	MW3-ROX-010913	1/9/2013		29.35	NE	<0.005	0.0025 J	<0.005	<0.01	0.000047 J	0.000052 J	<0.005		<0.0001	<0.005	<0.0002	0.000081 J	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.01	0.000068	<0.005 UJ	0.000036 J
	MW3-ROX-040813	4/8/2013		29.74	NE	<0.0057	<0.0057	<0.0057	<0.011	<0.00011	<0.00011	<0.0057		<0.00011	<0.0057	<0.00023	<0.00023	<0.011	<0.011	<0.011	<0.0057	<0.0057	<0.0057	<0.011	<0.000057	<0.0057	<0.00011
	MW3-ROX-071113	7/11/2013		26.32	NE	<0.0054	<0.0054	<0.0054	<0.011	<0.00011	<0.00011	<0.0054		<0.00011	<0.0054	0.00044 J	0.00038	<0.011	<0.011	<0.011 UJ	<0.0054	<0.0054	<0.0054	<0.011	<0.000039 U	<0.0054 UJ	<0.000072 U
	MW3-ROX-100813	10/8/2013		27.38	NE	<0.0054	<0.0054	<0.0054	<0.011	<0.00011	<0.00011	<0.0054		<0.00011	<0.0054	0.00013 J	0.00014 J	<0.011	<0.011	<0.011	<0.0054	<0.0054	<0.0054	<0.011	<0.000054	<0.0054	<0.00011
	MW3-ROX-011614	1/16/2014		29.91	NE	<0.0053	<0.0053	<0.0053	<0.011	<0.00011	<0.00011	<0.0053		<0.00011	<0.0053	<0.00021	<0.00021	<0.011 UJ	<0.011 UJ	<0.011	<0.0053	<0.0053 UJ	<0.0053	<0.011 UJ	<0.000053	<0.0053 UJ	<0.00011
	MW3-ROX-040914	4/9/2014		30.50	NE	<0.0056	<0.00056 U	<0.0056	<0.011	<0.00011	<0.00011	<0.0056		<0.00011	<0.0056	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.0056	<0.0056	<0.0056	<0.011	<0.000019 U	<0.0056	<0.00011
	MW3-ROX-071114	7/10/2014		29.05	NE	<0.0054	<0.00028 U	<0.0054	<0.011	<0.0001	<0.0001	<0.0054		<0.0001	<0.0054	0.000067 J	<0.0002	<0.011	<0.011	<0.011	<0.0054	<0.0054	<0.0054	<0.011	<0.00003 U	<0.0054	<0.0001
	MW3-ROX-100914	10/9/2014	34.67 - 44.67	28.18	NE	<0.0056	<0.00023 U	<0.0056	<0.011	<0.00011	<0.00011	<0.0056		<0.00011	<0.0056	<0.0022	<0.0022	<0.011	<0.011	<0.011	<0.0056	<0.0056	<0.0056	<0.011	<0.000056	<0.0056	<0.00011
MW-04	MW4-ROX-011612	1/16/2012	46.06 - 56.06	36.00	NE	<0.0052	0.00077 J	<0.0052	<0.01	0.000047 J	<0.0001	<0.0052		<0.00018 U	<0.0052	0.0006	0.00059	<0.01	<0.01	<0.01	<0.0052	<0.0052	<0.0052	<0.01	0.000057	<0.0052	0.000065 J
	MW4-ROX-050312	5/3/2012		37.45	NE	<0.005	<0.00062 U	<0.005	<0.01	<0.0001	<0.0001	<0.005		<0.0001	<0.005	0.00032	0.00025	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.01	<0.00005	<0.005	<0.0001
	MW4-ROX-050312-DUP	5/3/2012		37.45	NE	<0.0051	<0.00061 U	<0.0051	<0.01	<0.0001	<0.0001	<0.0051		<0.0001	<0.0051	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.0051	<0.0051	<0.0051	<0.01	<0.000051	<0.0051	<0.0001
	MW4-ROX-072512	7/25/2012		37.63	NE	<0.0051	0.00075 J	<0.0051	<0.01	<0.0001	<0.0001	<0.0051		<0.0001	<0.0051	0.00054	0.00045 B	<0.01	<0.01	<0.01	<0.0051	<0.0051	<0.0051	<0.01	<0.000051	0.0018 J	<0.0001
	MW4-ROX-072512-Dup	7/25/2012		37.63	NE	<0.0051	0.00057 J	<0.0051	<0.01	<0.000047 U	<0.0001	<0.0051		<0.0001	<0.0051	0.00049	0.0004 B	<0.01	<0.01	<0.01	<0.0051	<0.0051	<0.0051	<0.01	<0.000031 U	0.0023 J	<0.0001
	MW4-ROX-102912	10/29/2012		39.45	NE	<0.0052	<0.0052	<0.0052	<0.01	<0.0001	<0.0001	<0.0052		<0.0001	<0.0052	0.00025	0.00016 J	<0.01	<0.01	<0.01	<0.0052	<0.0052	<0.0052	<0.01	<0.000052	<0.0052	<0.0001
	MW4-ROX-011113	1/11/2013		40.20	NE	<0.0056 UJ	<0.0056	<0.0056	<0.011	<0.00011	<0.00011	<0.0056		<0.00011	<0.0056	<0.00022	0.00014 J	<0.011	<0.011	<0.011	<0.0056	<0.0056	<0.0056	<0.011	<0.000056	0.0608	<0.00011
	MW4-ROX-011113-DUP	1/11/2013		40.20	NE	<0.006 UJ	<0.006	<0.006	<0.012	<0.00012	<0.00012	<0.006		<0.00012	<0.006	<0.00024	0.000099 J	<0.012	<0.012	<0.012	<0.006	<0.006	<0.006	<0.012	<0.00006	0.0665	<0.00012
	MW4-ROX-030413	3/4/2013		40.20	NE																						
	MW4-ROX-040913	4/9/2013		40.90	NE	<0.0053 UJ	<0.0053	<0.0053	<0.011	<0.00011	<0.00011	<0.0053		<0.00011	<0.0053	<0.00022	0.000082 J	<0.011	<0.011	<0.011	<0.0053	<0.0053	<0.0053	<0.011	<0.000054	0.11	<0.00011
	MW4-ROX-040913-DUP	4/9/2013		40.90	NE	<0.0053 UJ	<0.00062 U	<0.0053	<0.011	<0.00011	<0.00011	<0.0053		<0.00011	<0.0053	<0.00021	0.000076 J	<0.011	<0.011	<0.011	<0.0053	<0.0053	<0.0053	<0.011	<0.000053	0.103	<0.00011
	MW4-ROX-071713	7/17/2013		37.61	NE	<0.0055	<0.0055	<0.0055	<0.011	<0.00011	<0.00011	<0.0055		0.000052 J	<0.0055	0.00037	0.00023	<0.011	<0.011	<0.011	<0.0055	<0.0055	<0.0055	<0.011	<0.00003 U	0.0661	<0.00011
	MW4-ROX-101613	10/16/2013		38.80	NE	<0.0054	<0.0054	<0.0054	<0.011	<0.00011	<0.00011	<0.0054		<0.00011	<0.0054	0.00016 J	0.00015 J	<0.011 UJ	<0.011 UJ	<0.011	<0.0054	<0.0054	<0.0054	<0.011 UJ	<0.000054	0.0168 J	<0.00011
	MW4-ROX-013014	1/30/2014		41.09	NE	<0.0054	<0.0013 U	<0.0054	<0.011	<0.00011	<0.00011	<0.0054		<0.00011	<0.0054	0.00027	0.00022	<0.011 UJ	<0.011 UJ	<0.011	<0.0054	<0.0054	<0.0054	<0.011 UJ	<0.000022 U	0.0164 J	<0.00011
	MW4-ROX-041614	4/16/2014		41.91	NE	<0.0056	<0.00076 U	<0.0056	<0.011	<0.00011	<0.00011	<0.0056		<0.00011	<0.0056	0.000072 J	<0.00022	<0.011	<0.011	<0.011	<0.0056	<0.0056	<0.0056	<0.011	<0.000056	<0.0056	<0.00011
	MW4-ROX-071614	7/16/2014		40.18	NE	<0.0052	<0.00043 U	<0.0052	<0.01	<0.0001	<0.0001	<0.0052		<0.0001	<0.0052	0.00024	0.00022	<0.01	<0.01	<0.01	<0.0052	<0.0052	<0.0052	<0.01	<0.000041 U	<0.0052	<0.0001
	MW4-ROX-101614	10/16/2014	46.06 - 56.06	39.49	NE	<0.0059	<0.0059	<0.0059	<0.012	<0.00012	<0.00012	<0.0059		<0.00012	<0.0059	<0.0024	<0.0024	<0.012	<0.012	<0.012	<0.0059	<0.0059	<0.0059	<0.012	0.000029 J	0.0115	<0.00012

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
CUMULATIVE SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL RESULTS AND EXCEEDANCES

						SVOCs																					
						Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate	2,6-Dinitrotoluene	Fluoranthene	Fluorene	Hexachlorobenzene	Indene	Indeno(1,2,3-cd)pyrene	Isophorone (3,5,5-trimethyl-2-cyclohexene-1-one)	1-Methylnaphthalene	2-Methylnaphthalene	2-Methylphenol (o-Cresol)	3 & 4-Methylphenol (m & p-Cresol)	3-Nitroaniline	Nitrobenzene	N-Nitrosodimethylamine	N-Nitrosodiphenylamine	Pentachlorophenol	Phenanthrene	Phenol	Pyrene
						Screening Values (mg/L)	0.7 [1]	0.14 [2]	0.00031 [2]	0.28 [1]	0.28 [1]	0.00006 [2]		0.00043 [1]	1.4 [2]	0.49 [3]	0.028 [1]	0.35 [1]	0.35 [3]		0.014 [1]	0.0006 [3]	0.0032 [2]	0.001 [1]	0.21 [3]	0.1 [1]	0.21 [1]
Location	Sample ID	Sample Date	Screened Interval (ft btoc)	Depth to Water (ft btoc)	Product Thickness (ft)	Analytical Results (mg/L)																					
MW-05	MW5-ROX-011712	1/17/2012	33.97 - 43.97	24.76	NE	<0.0053	<0.0053	<0.0053	<0.011	<0.00011	<0.00011	<0.0053		<0.00011	<0.0053	0.0016	<0.00021	<0.011	<0.011	<0.011	<0.0053	0.00078 J	<0.0053	<0.011	<0.000053	<0.0053	<0.00011
	MW5-ROX-050312	5/3/2012		25.89	NE	<0.0051	<0.0005 U	<0.0051	<0.01	<0.0001	<0.0001	<0.0051		<0.0001	0.00072 J	0.0117	<0.0002	<0.01	<0.01	<0.01	<0.0051	<0.0051	<0.0051	<0.01	<0.000051	<0.0051	<0.0001
	MW5-ROX-072512	7/25/2012		26.18	NE	<0.0052	0.00057 J	<0.0052	<0.01	<0.0001	<0.0001	<0.0052		<0.0001	<0.0052	0.003	<0.00021	<0.01	<0.01	<0.01	<0.0052	<0.0052	<0.0052	<0.01	<0.000025 U	0.0015 J	<0.0001
	MW5-ROX-102912	10/29/2012		28.16	NE	<0.0051	<0.0051	<0.0051	<0.01	<0.0001	<0.0001	<0.0051		<0.0001	<0.0051	0.0091	0.000084 J	<0.01	<0.01	<0.01	<0.0051	<0.0051	<0.0051	<0.01	<0.000051	<0.0051	<0.0001
	MW5-ROX-011113	1/11/2013		28.75	NE	<0.0055 UJ	<0.0055	<0.0055	<0.011	<0.00011	<0.00011	<0.0055		<0.00011	<0.0055	0.0043	0.000084 J	<0.011	<0.011	<0.011	<0.0055	<0.0055	<0.0055	<0.011	0.000048 J	<0.0055	<0.00011
	MW5-ROX-040913	4/9/2013		29.41	NE	<0.0054 UJ	<0.0054	<0.0054	<0.011	<0.00011	<0.00011	<0.0054		<0.00011	<0.0054	0.004	<0.00022	<0.011	<0.011	<0.011	<0.0054	<0.0054	<0.0054	<0.011	<0.000054	<0.0054	<0.00011
	MW5-ROX-070913	7/9/2013		26.04	NE	<0.005	<0.005	<0.005	<0.01	<0.0001	<0.00099 U	<0.005		<0.0001	<0.005	0.0015	<0.0002 UJ	<0.01	<0.01	<0.01 UJ	<0.005	<0.005	<0.005	<0.01	<0.000074 U	<0.005	<0.0001
	MW5-ROX-100813	10/8/2013		26.97	NE	<0.0055	<0.0055	<0.0055	<0.011	<0.00011	<0.00011	<0.0055		<0.00011	<0.0055	0.0038	0.00009 J	<0.011	<0.011	<0.011	<0.0055	<0.0055	<0.0055	<0.011	<0.000055	<0.0055	<0.00011
	MW5-ROX-011714	1/17/2014		29.59	NE	<0.0053	<0.0053	<0.0053	<0.011	<0.00011	<0.00011	<0.0053		<0.00011	<0.0053	0.0035	<0.00021	<0.011	<0.011	<0.011	<0.0053	<0.0053	<0.0053	<0.011	<0.000053	<0.0053	<0.00011
	MW5-ROX-041014	4/10/2014		30.09	NE	<0.0056	<0.00087 U	<0.0056	<0.011	<0.00011	<0.00011	<0.0056		<0.00011	<0.0056	0.0038	<0.00022	<0.011	<0.011	<0.011	<0.0056	<0.0056	<0.0056	<0.011	<0.000056	<0.0056	<0.00011
	MW5-ROX-071414	7/14/2014		28.59	NE	<0.0053	<0.00037 U	<0.0053	<0.011	<0.00011	<0.00011	<0.0053		<0.00011	<0.0053	0.00052 B	<0.00021	<0.011	<0.011	<0.011	<0.0053	<0.0053	<0.0053	<0.011	<0.000088 U	<0.0053	<0.00011
	MW-5-ROX-100914	10/9/2014	33.97 - 43.97	27.75	NE	<0.0054	<0.00023 U	<0.0054	<0.011	<0.00011	<0.00011	<0.0054		<0.00011	<0.0054	0.00099 J	<0.0022	<0.011	<0.011	<0.011	<0.0054	<0.0054	<0.0054	<0.011	<0.00003 U	0.00072 J	<0.00011
MW-06A	MW6A-ROX-011712	1/17/2012	34.83 - 44.83	26.74	NE	<0.0054	<0.0054	<0.0054	<0.011	<0.00011	<0.00011	<0.0054		<0.00015 U	<0.0054	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.0054	<0.0054	<0.0054	<0.011	<0.000054	<0.0054	<0.00011
	MW6A-ROX-050212	5/2/2012		27.77	NE	<0.005	<0.005	<0.005	<0.01	<0.0001	<0.0001	<0.005		<0.0001	<0.005	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.01	<0.00005	<0.005	<0.0001
	MW6A-ROX-080112	8/1/2012		28.36	NE	<0.005	0.00049 J	<0.005	<0.01	<0.0001	<0.0001	<0.005		<0.0001	<0.005	<0.002	<0.0002	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.01	<0.00005	<0.005	<0.0001
	MW6A-ROX-102412	10/24/2012		30.06	NE	<0.0053	<0.0053	<0.0053	<0.011	<0.00011	<0.00011	<0.0053		<0.00011	<0.0053	<0.00021	<0.00021	<0.011	<0.011	<0.011	<0.0053	<0.0053	<0.0053	<0.011	<0.000053	<0.0053	<0.00011
	MW6A-ROX-011413	1/14/2013		31.00	NE	<0.0051 UJ	<0.0051	<0.0051	<0.01	<0.0001	<0.0001	<0.0051		0.000072 J	<0.0051	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.0051	<0.0051 UJ	<0.0051	<0.01	<0.000051	<0.0051 UJ	<0.0001
	MW6A-ROX-040313	4/3/2013		31.62	NE	<0.0053	0.0018 J	<0.0053	<0.011	<0.00011	<0.00011	<0.0053		<0.00011	<0.0053	<0.00021	<0.00021	<0.011	<0.011	<0.011	<0.0053	<0.0053 UJ	<0.0053	<0.011	0.000084	<0.0053 UJ	0.000053 J
	MW6A-ROX-070913	7/9/2013		28.25	NE	<0.0055	<0.0055	<0.0055	<0.011	<0.00011	<0.00011	<0.0055		<0.00011	<0.0055	<0.00022	<0.00022	<0.011	<0.011	<0.011 UJ	<0.0055	<0.0055	<0.0055	<0.011	<0.000055	<0.0055	<0.00011
	MW6A-ROX-070913-DUP	7/9/2013		28.25	NE	<0.0055	<0.0055	<0.0055	<0.011	<0.00011	<0.00011	<0.0055		<0.00011	<0.0055	<0.00022	<0.00022	<0.011	<0.011	<0.011 UJ	<0.0055	<0.0055	<0.0055	<0.011	<0.000055	<0.0055	<0.00011
	MW6A-ROX-100713	10/7/2013		28.87	NE	<0.0056 UJ	<0.0056	<0.0056	<0.011	<0.00011	<0.00011	<0.0056		<0.00011	<0.0056	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.0056	<0.0056	<0.0056	<0.011	<0.000056	<0.0056	<0.00011
	MW6A-ROX-100713-DUP	10/7/2013		28.87	NE	<0.0054 UJ	<0.0054	<0.0054	<0.011	<0.00011	<0.00011	<0.0054		<0.00011	<0.0054	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.0054	<0.0054	<0.0054	<0.011	<0.000054	<0.0054	<0.00011
	MW6A-ROX-011614	1/16/2014		31.62	NE	<0.0052	<0.0052	<0.0052	<0.01	<0.0001	<0.0001	<0.0052		<0.0001	<0.0052	<0.00021	<0.00021	<0.01	<0.01	<0.01	<0.0052	<0.0052 UJ	<0.0052	<0.01	<0.000052	<0.0052 UJ	<0.0001
	MW6A-ROX-011614-DUP	1/16/2014		31.62	NE	<0.0053	<0.0053	<0.0053	<0.011	<0.00011	<0.00011	<0.0053		<0.00011	<0.0053	<0.00021	<0.00021	<0.011	<0.011	<0.011	<0.0053	<0.0053 UJ	<0.0053	<0.011	<0.000053	<0.0053 UJ	<0.00011
	MW6A-ROX-040814	4/8/2014		32.16	NE	<0.0056	<0.00075 U	<0.0056	<0.011	<0.00011	<0.00011	<0.0056		<0.00011	<0.0056	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.0056	<0.0056	<0.0056	<0.011	<0.000054	<0.0056	<0.00011
	MW6A-ROX-040814-DUP	4/8/2014		32.16	NE	<0.0054	<0.00077 U	<0.0054	<0.011	<0.00011	<0.00011	<0.0054		<0.00011	<0.0054	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.0054	<0.0054	<0.0054	<0.011	<0.000055	<0.0054	<0.00011
	MW6A-ROX-071014	7/10/2014		30.75	NE	<0.0054	<0.00026 U	<0.0054	<0.011	<0.00011	0.00013	<0.0054		<0.00011	<0.0054	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.0054	<0.0054	<0.0054	<0.011	0.000046 J	<0.0054	<0.00011
	MW6A-ROX-100814	10/8/2014	34.83 - 44.83	29.84	NE	<0.0053	<0.0053	<0.0053	<0.011	<0.00011	<0.00011	<0.0053		<0.00011	<0.0053	<0.0021	<0.0021	<0.011	<0.011	<0.011	<0.0053	<0.0053	<0.0053	<0.011	<0.000053	<0.0053	<0.00011
MW-06B	MW6B-ROX-011712	1/17/2012	64.05 - 69.05	26.77	NE	<0.0055	0.00055 J	<0.0055	<0.011	<0.00011	<0.00011	<0.0055		<0.00028 U	<0.0055	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.0055	<0.0055	<0.0055	<0.011	<0.000055	<0.0055	<0.00011
	MW6B-ROX-050212	5/2/2012		27.82	NE	<0.005	0.00039 J	<0.005	<0.01	<0.0001	<0.0001	<0.005		<0.0001	<0.005	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.01	<0.00005	<0.005	<0.0001
	MW6B-ROX-080112	8/1/2012		28.39	NE	<0.0051	0.0007 J	<0.0051	<0.01	<0.0001	<0.0001	<0.0051		<0.0001	<0.0051	<0.002	<0.0002	<0.01	<0.01	<0.01	<0.0051	<0.0051	<0.0051	<0.01	<0.000051	<0.0051	<0.0001
	MW6B-ROX-102412	10/24/2012		30.11	NE	<0.0051	0.00079 J	<0.0051	<0.01	<0.0001	<0.0001	<0.0051		<0.0001	<0.0051	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.0051	<0.0051	<0.0051	<0.01	<0.000051	<0.0051	<0.0001
	MW6B-ROX-011713	1/17/2013		31.11	NE	<0.005	0.0026 J	<0.005	<0.01	<0.0001	<0.0001	<0.005		<0.0001	<0.005	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.01	<0.00005	<0.005	<0.0001
	MW6B-ROX-040313	4/3/2013		31.68	NE	<0.0054	0.0012 J	<0.0054	<0.011	<0.00011	<0.00011	<0.0054		<0.00011	<0.0054	<0.00022	0.0002 J	<0.011	<0.011	<0.011	<0.0054	<0.0054 UJ	<0.0054	<0.011	<0.000054	<0.0054 UJ	<0.00011
	MW6B-ROX-070913	7/9/2013		28.25	NE	<0.0056	<0.0056	<0.0056	<0.011	<0.00011	<0.00011	<0.0056		<0.00011	<0.0056	<0.00022	<0.00022	<0.011	<0.011	<0.011 UJ	<0.0056	<0.0056	<0.0056	<0.011	<0.000056	<0.0056	<0.00011
	MW6B-ROX-100713	10/7/2013		28.93	NE	<0.0054 UJ	<0.0054	<0.0054	0.0224	<0.00011	<0.00011	<0.0054		<0.00011	<0.0054	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.0054	<0.0054	<0.0054	<0.011	<0.000054	<0.0054	<0.00011
	MW6B-ROX-011614	1/16/2014		31.67	NE	<0.0054	<0.0054	<0.0054	<0.011	<0.00011	<0.00011	<0.0054		0.000043 J	<0.0054	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.0054	<0.0054 UJ	<0.0054	<0.011	<0.000054	<0.0054 UJ	<0.00011
	MW6B-ROX-040814	4/8/2014		32.21	NE	<0.0053	<0.00043 U	<0.0053	<0.011	<0.00011	<0.00011	<0.0053		<0.00011	<0.0053	<0.00021	<0.00021	<0.011	<0.011	<0.011	<0.0053	<0.0053	<0.0053	<0.011	0.000018 J	<0.0053	<0.00011
	MW6B-ROX-071014	7/10/2014		30.81	NE	<0.0056	<0.0056	<0.0056	<0.011	<0.00011	<0.00011	<0.0056		<0.00011	<0.0056	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.0056	<0.0056	<0.0056	<0.011	<0.000056	<0.0056	<0.00011
	MW6B-ROX-100814	10/8/2014	64.05 - 69.05	29.87	NE	<0.0053	<0.0053	<0.0053	<0.011	<0.00011	<0.00011	<0.0053		<0.00011	<0.0053	<0.0021	<0.0021	<0.011	<0.011	<0.011	<0.0053	<0.0053	<0.0053	<0.011	<0.000053	<0.0053	<0.00011
MW-06C	MW6C-ROX-011712	1/17/2012	84.95 - 89.95	26.50	NE	<0.0054	<0.0054	<0.0054	<0.011	<0.00011	<0.00011	<0.0054		<0.00011	<0.0054	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.0054	<0.0054	<0.0054	<0.011	<0.000054	<0.0054	<0.00011
	MW6C-ROX-050212	5/2/2012		27.62	NE	<0.005	<0.005	<0.005	<0.01	<0.0001	<0.0001	<0.005		<0.0001	<0.005	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.01	<0.00005	<0.005	<0.0001
	MW6C-ROX-080112	8/1/2012		28.15	NE	<0.005	0.001 J	<0.005	<0.01	<0.0001	<0.0001	<0.005		<0.0001	<0.005	<0.002	<0.0002	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.01	<0.00005	<0.005	<0.0001
	MW6C-ROX-102412	10/24/2012		27.85	NE	<0.0051	<0.0051	<0.0051	<0.01	<0.0001	<0.0001	<0.0051		<0.0001	<0.0051	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.0051	<0.0051	<0.0051	<0.01	<0.000051	<0.0051	<0.0001
	MW6C-ROX-011713	1/17/2013		30.88	NE	<0.005	0.0022 J	<0.005	<0.01	<0.0001	<0.0001	<0.005		<0.0001	<0.005	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.01	<0.00005	<0.005	<0.0001
	MW6C-ROX-040313	4/3/2013		31.41	NE	<0.0052	0.00077 J	<0.0052	<0.01	<0.0001	<0.0001	<0.0052		<0.0001	<0.0052	<0.00021	0.00016 J	<0.01	<0.01	<0.01	<0.0052	<0.0052 UJ	<0.0052	<0.01	<0.000052	<0.0052 UJ	<0.0001
	MW6C-ROX-070913	7/9/2013		28.03	NE	<0.0056	<0.0056	<0.0056	<0.011	<0.00011	<0.00011	<0.0056		<0.00011	<0.0056	<0.00022	<0.00022	<0.011	<0.011	<0.011 UJ	<0.0056	<0.0056	<0.0056	<0.011	<0.000056	<0.0056	<0.00011
	MW6C-ROX-100713	10/7/2013		28.72	NE	<0.0055 UJ	0.00043 J	<0.0055	<0.011	<0.00011	<0.00011	<0.0055		<0.00011	<0.0055	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.0055	<0.0055	<0.0055	<0.011	<0.000055	<0.0055	<0.00011
	MW6C-ROX-011614	1/16/2014		31.48	NE	<0.0053	<0.0053	<0.0053	<0.011	<0.00011	<0.00011	<0.0053		<0.00011	<0.0053	<0.00021	<0.00021	<0.011	<0.011	<0.011	<0.0053	<0.0053 UJ	<0.0053	<0.011	<0.000053	<0.0053 UJ	<0.00011
	MW6C-ROX-040814	4/8/2014		32.01	NE	<0.0059	<0.0004 U	<0.0059	<0.012	<0.00012	<0.00012	<0.0059		<0.00012	<0.0059	<0.00024	<0.00024	<0.012	<0.012	<0.012	<0.0059	<0.0059	<0.0059	<0.012	<0.000059	<0.0059	<0.00012
	MW6C-ROX-071014	7/10/2014		30.60	NE	<0.0056	<0.00032 U	<0.0056	<0.011	<0.00011	<0.00011	<0.0056		0.000035 J	<0.0056	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.0056	<0.0056	<0.0056	<0.011	<0.000056	<0.0056	<0.00011
	MW6C-ROX-100814	10/8/2014	84.95 - 89.95	29.67	NE	<0.0056	<0.0056	<0.0056	<0.011	<0.00011	<0.00011	<0.0056		<0.00011	<0.0056	<0.0022	<0.0022	<0.011	<0.011	<0.011	<0.0056	<0.0056	<0.0056	<0.011	<0.000056	<0.0056	<0.00011

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
CUMULATIVE SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL RESULTS AND EXCEEDANCES

						SVOCs																					
						Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate	2,6-Dinitrotoluene	Fluoranthene	Fluorene	Hexachlorobenzene	Indene	Indeno(1,2,3-cd)pyrene	Isophorone (3,5,5-trimethyl-2-cyclohexene-1-one)	1-Methylnaphthalene	2-Methylnaphthalene	2-Methylphenol (o-Cresol)	3 & 4-Methylphenol (m & p-Cresol)	3-Nitroaniline	Nitrobenzene	N-Nitrosodimethylamine	N-Nitrosodiphenylamine	Pentachlorophenol	Phenanthrene	Phenol	Pyrene
						Screening Values (mg/L)	0.7 [1]	0.14 [2]	0.00031 [2]	0.28 [1]	0.28 [1]	0.00006 [2]		0.00043 [1]	1.4 [2]	0.49 [3]	0.028 [1]	0.35 [1]	0.35 [3]		0.014 [1]	0.0006 [3]	0.0032 [2]	0.001 [1]	0.21 [3]	0.1 [1]	0.21 [1]
Location	Sample ID	Sample Date	Screened Interval (ft btoc)	Depth to Water (ft btoc)	Product Thickness (ft)	Analytical Results (mg/L)																					
MW-06D	MW6D-ROX-011712	1/17/2012	104.72 - 109.72	26.33	NE	<0.0055	0.00047 J	<0.0055	<0.011	<0.00011	<0.00011	<0.0055		<0.00011	<0.0055	<0.00022	<0.000085 U	<0.011	<0.011	<0.011	<0.0055	<0.0055	<0.0055	<0.011	<0.000055	<0.0055	<0.00011
	MW6D-ROX-050212	5/2/2012		27.45	NE	<0.005	0.00047 J	<0.005	<0.01	<0.0001	<0.0001	<0.005		<0.0001	<0.0005 U	<0.00021	<0.00021	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.01	<0.000052	<0.005	<0.0001
	MW6D-ROX-080212	8/2/2012		30.56	NE	<0.0051	<0.0051	<0.0051	<0.01	<0.0001	<0.0001	<0.0051		<0.0001	<0.0051	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.0051	<0.0051	<0.0051	<0.01	<0.000051	<0.0051	<0.0001
	MW6D-ROX-102412	10/24/2012		29.71	NE	<0.0052	<0.0052	<0.0052	<0.01	<0.0001	<0.0001	<0.0052		<0.0001	<0.0052	<0.00021	<0.00021	<0.01	<0.01	<0.01	<0.0052	<0.0052	<0.0052	<0.01	<0.000052	<0.0052	<0.0001
	MW6D-ROX-011713	1/17/2013		30.75	NE	<0.005	<0.005	<0.005	<0.01	<0.0001	<0.0001	<0.005		<0.0001	<0.005	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.01	<0.00005	<0.005	<0.0001
	MW6D-ROX-040313	4/3/2013		31.27	NE	<0.0053	0.00069 J	<0.0053	<0.011	<0.00011	<0.00011	<0.0053		<0.00011	<0.0053	<0.00021	<0.00021	<0.011	<0.011	<0.011	<0.0053	<0.0053 UJ	<0.0053	<0.011	<0.000053	<0.0053 UJ	<0.00011
	MW6D-ROX-070913	7/9/2013		27.91	NE	<0.0055	<0.0055	<0.0055	<0.011	<0.00011	<0.00011	<0.0055		<0.00011	<0.0055	<0.00022	<0.00022	<0.011	<0.011	<0.011 UJ	<0.0055	<0.0055	<0.0055	<0.011	<0.000055	<0.0055	<0.00011
	MW6D-ROX-100713	10/7/2013		28.58	NE	<0.0054 UJ	<0.0054	<0.0054	<0.011	<0.00011	<0.00011	<0.0054		<0.00011	<0.0054	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.0054	<0.0054	<0.0054	<0.011	<0.000054	<0.0054	<0.00011
	MW6D-ROX-011614	1/16/2014		31.33	NE	<0.0052	<0.0052	<0.0052	<0.01	<0.0001	<0.0001	<0.0052		<0.0001	<0.0052	<0.00021	<0.00021	<0.01	<0.01	<0.01	<0.0052	<0.0052 UJ	<0.0052	<0.01	<0.000052	<0.0052 UJ	<0.0001
	MW6D-ROX-040814	4/8/2014		31.85	NE	<0.0055	<0.00039 U	<0.0055	<0.011	<0.00011	<0.00011	<0.0055		<0.00011	<0.0055	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.0055	<0.0055	<0.0055	<0.011	<0.000055	<0.0055	<0.00011
	MW6D-ROX-071014	7/10/2014		31.47	NE	<0.0056	<0.00027 U	<0.0056	<0.011	<0.00011	<0.00011	<0.0056		<0.00011	<0.0056	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.0056	<0.0056	<0.0056	<0.011	<0.000056	<0.0056	<0.00011
	MW6D-ROX-071014-DUP	7/10/2014		31.47	NE	<0.0054	<0.00029 U	<0.0054	<0.011	<0.00011	<0.00011	<0.0054		<0.00011	<0.0054	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.0054	<0.0054	<0.0054	<0.011	<0.000054	<0.0054	<0.00011
	MW6D-ROX-100814	10/8/2014	104.72 - 109.72	29.53	NE	<0.0054	<0.0054	<0.0054	<0.011	<0.00011	<0.00011	<0.0054		<0.00011	<0.0054	<0.0022	<0.0022	<0.011	<0.011	<0.011	<0.0054	<0.0054	<0.0054	<0.011	<0.000054	<0.0054	<0.00011
	MW6D-ROX-100814-DUP	10/8/2014		29.53	NE	<0.0056	<0.0056	<0.0056	<0.011	<0.00011	<0.00011	<0.0056		<0.00011	<0.0056	<0.0022	<0.0022	<0.011	<0.011	<0.011	<0.0056	<0.0056	<0.0056	<0.011	<0.000056	<0.0056	<0.00011
MW-07	MW7-ROX-011812	1/18/2012	42.92 - 52.92	38.10	NE	<0.005	0.00045 J	<0.005	<0.01	<0.0001	0.00018	<0.005		<0.0001	<0.005	0.0055	0.0069	<0.01	<0.01	<0.01 UJ	<0.005	<0.005	<0.005	<0.01	0.00029	0.15	<0.000042 U
	MW7-ROX-011812-DUP	1/18/2012		38.10	NE	<0.0056	<0.0056	<0.0056	<0.011	<0.00011	0.0002	<0.0056		<0.00011	<0.0056	0.0057	0.0071	<0.011	<0.011	<0.011 UJ	<0.0056	<0.0056	<0.0056	<0.011	0.00028	0.165	<0.000043 U
	MW7-ROX-050412	5/4/2012		39.19	NE	<0.005	<0.00095 U	<0.005	<0.01	0.000039 J	0.00019	<0.005		<0.0001	<0.005	0.0075	0.0087	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.01	0.00028	0.0944	<0.0001
	MW7-ROX-080712	8/7/2012		39.50	NE	<0.0051	<0.0051	<0.0051	<0.01	<0.0001	0.00016	<0.0051		<0.0001	<0.0051	0.0055	0.0065	<0.01	<0.01	<0.01	<0.0051	<0.0051	<0.0051	<0.01	0.00019	0.0576	<0.0001
	MW7-ROX-103012	10/30/2012		41.23	NE	<0.0058	<0.0058	<0.0058	<0.012	<0.00012	0.00023	<0.0058		<0.00012	<0.0058	0.0061 J	0.0077	<0.012	<0.012	<0.012	<0.0058	<0.0058 UJ	<0.0058	<0.012	0.00036	0.0615 J	<0.00005 U
	MW7-ROX-103012-DUP	10/30/2012		41.23	NE	<0.0056	<0.0056	<0.0056	<0.011	<0.00011	0.00026	<0.0056		<0.00011	<0.0056	0.008 J	0.0098	<0.011	<0.011	<0.011	<0.0056	<0.0056 UJ	<0.0056	<0.011	0.00037	0.0812 J	<0.00005 U
	MW7-ROX-011513	1/15/2013		42.21	NE	<0.0053 UJ	<0.0053	<0.0053	<0.011	0.00004 J	0.00061	<0.0053		<0.00011	<0.0053	0.0187	0.0224	<0.011	<0.011	<0.011	<0.0053	<0.0053 UJ	<0.0053	<0.011	0.00086	0.0865 J	0.000089 J
	MW7-ROX-011513-DUP	1/15/2013		42.21	NE	<0.0052 UJ	<0.0052	<0.0052	<0.01	<0.0001	0.00057	<0.0052		<0.0001	<0.0052	0.0173	0.0207	<0.01	<0.01	<0.01	<0.0052	<0.0052 UJ	<0.0052	<0.01	0.00078	0.0735 J	0.000078 J
	MW7-ROX-041013	4/10/2013		42.70	NE	<0.0054	<0.0054	<0.0054	<0.011	0.000039 J	0.00081	<0.0054		<0.00011	<0.0054	0.0271	0.0351	<0.011	<0.011	<0.011	<0.0054	<0.0054	<0.0054	<0.011	0.0014	0.147	0.00015
	MW7-ROX-041013-DUP	4/10/2013		42.70	NE	<0.0053	<0.0053	<0.0053	<0.011	0.000068 J	0.00087	<0.0053		<0.00011	<0.0053	0.0274	0.0357	<0.011	<0.011	<0.011	<0.0053	<0.0053	<0.0053	<0.011	0.0015	0.148	0.00016
	MW7-ROX-071713	7/17/2013		39.60	NE	<0.0054	<0.0054	<0.0054	<0.011	<0.00011	0.00019	<0.0054		0.000078 J	<0.0054	0.0043	0.006	<0.011	<0.011	<0.011	<0.0054	<0.0054	<0.0054	<0.011	0.00024	0.118	0.000039 J
	MW7-ROX-101613	10/16/2013		40.64	NE	<0.0055	<0.0055	<0.0055	<0.011	<0.00011	0.00022	<0.0055		<0.00011	<0.0055	0.0082	0.011	<0.011	<0.011	<0.011	<0.0055	<0.0055	<0.0055	<0.011	0.00019	0.0849	<0.00011
	MW7-ROX-013014	1/30/2014		42.94	NE	<0.005	<0.0007 U	<0.005	<0.01	<0.0001	0.00021	<0.005		<0.0001	<0.005	0.0059	0.0083	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.01	0.00029	0.0314	<0.0001
	MW7-ROX-041614	4/16/2014		43.79	NE	<0.0052	<0.00071 U	<0.0052	<0.01	<0.0001	0.00026	<0.0052		<0.0001	<0.0052	0.0074	0.0103	<0.01	<0.01	<0.01	<0.0052	<0.0052	<0.0052	<0.01	0.00033 B	0.0988	<0.0001
	MW7-ROX-071614	7/16/2014		42.05	NE	<0.0052	<0.00027 U	<0.0052	<0.01	<0.0001	0.00021	<0.0052		<0.0001	<0.0052	0.0052	0.0079	<0.01	<0.01	<0.01	<0.0052	<0.0052	<0.0052	<0.01	0.00028	0.0618	<0.0001
	MW7-ROX-071614-DUP	7/16/2014		42.05	NE	<0.0052	<0.00038 U	<0.0052	<0.01	<0.0001	0.00019	<0.0052		<0.0001	<0.0052	0.0052	0.0077	<0.01	<0.01	<0.01	<0.0052	<0.0052	<0.0052	<0.01	0.00026	0.0638	<0.0001
	MW7-ROX-101614	10/16/2014	42.92 - 52.92	41.31	NE	<0.0056	<0.0056	<0.0056	<0.011	<0.00011	0.0002	<0.0056		<0.00011	<0.0056	0.0049	0.0074	<0.011	<0.011	<0.011	<0.0056	<0.0056	<0.0056	<0.011	0.00028	0.155	<0.00011
	MW7-ROX-101614-DUP	10/16/2014		41.31	NE	<0.0057	<0.0057	<0.0057	<0.011	<0.00011	0.00019	<0.0057		<0.00011	<0.0057	0.0047	0.007	<0.011	<0.011	<0.011	<0.0057	<0.0057	<0.0057	<0.011	0.00027	0.133	<0.00011
MW-08	MW8-ROX-011812	1/18/2012	33.60 - 43.60	29.15	NE	<0.0053	<0.0053	<0.0053	<0.011	<0.00053	0.00074	<0.0053		<0.00053	<0.0053	0.0165	0.0204	0.0044 J	0.0121	<0.011 UJ	<0.0053	<0.0053	<0.0053	<0.011	0.00041	0.375	<0.00053
	MW8-ROX-050412	5/4/2012		30.21	NE	<0.0053	<0.00063 U	<0.0053	<0.011	<0.00011	0.00024	<0.0053		<0.00011	<0.0053	0.0085	0.0099	0.0302	0.0657	<0.011	<0.0053	<0.0053	<0.0053	<0.011	0.00014	0.258 J	<0.00011
	MW8-ROX-050412-DUP	5/4/2012		30.21	NE	<0.005	<0.005	<0.005	<0.01	<0.0001	0.00031	<0.005		<0.0001	<0.005	0.0086	0.0102	0.0275	0.0569	<0.01	<0.005	<0.005	<0.005	<0.01	0.00014	0.12 J	<0.0001
	MW8-ROX-080712	8/7/2012		30.97	NE	<0.0054	<0.0054	<0.0054	<0.011	<0.00011	0.00027	<0.0054		<0.00011	<0.0054	0.0091	0.0109	0.0075 J	0.0231	<0.011	<0.0054	<0.0054	<0.0054	<0.011	0.00015	0.136	<0.00011
	MW8-ROX-080712-DUP	8/7/2012		30.97	NE	<0.0056	<0.0056	<0.0056	<0.011	<0.00011	0.00026	<0.0056		<0.00011	<0.0056	0.0092	0.0111	0.0081 J	0.024	<0.011	<0.0056	<0.0056	<0.0056	<0.011	0.00014	0.134	<0.00011
	MW8-ROX-103012	10/30/2012		32.32	NE	<0.0053	0.00082 J	0.00063 J	<0.011	0.00059 B	0.00053	<0.0053		0.00059 B	<0.0053	0.0097	0.0112	0.0058 J	0.0158	<0.011	<0.0053	<0.0053 UJ	0.00052 J	0.003 J	0.00057	0.165 J	0.00054 B
	MW8-ROX-011513	1/15/2013		33.30	NE	<0.0056 UJ	<0.0056	<0.0056	<0.011	<0.00011	0.00041	<0.0056		<0.00011	<0.0056	0.011	0.0129	0.0332	0.102	<0.011	<0.0056	<0.0056 UJ	<0.0056	<0.011	0.00016	0.0997 J	<0.00011
	MW8-ROX-041013	4/10/2013		33.77	NE	<0.0053	0.0013 J	<0.0053	<0.011	0.000056 J	0.00032	<0.0053		<0.00011	<0.0053	0.0091	0.0113	0.0388	0.084	<0.011	<0.0053	<0.0053	<0.0053	<0.011	0.00019	0.253 J	0.000042 J
	MW8-ROX-071713	7/17/2013		30.43	NE	<0.0052	<0.0052	<0.0052	<0.01	<0.0001	0.00033	<0.0052		<0.0001	<0.0052	0.0097 J	0.0113	0.0046 J	0.0106	<0.01	<0.0052	<0.0052	<0.0052	<0.01	0.00015	0.328	0.000062 J
	MW8-ROX-071713-DUP	7/17/2013		30.43	NE	<0.0054	<0.0054	<0.0054	<0.011	<0.00011	0.00036	<0.0054		<0.00011	<0.0054	0.0087 J	0.0098	0.0037 J	0.0091 J	<0.011	<0.0054	<0.0054	<0.0054	<0.011	0.00016	0.303	<0.00011
	MW8-ROX-101613	10/16/2013		31.59	NE	<0.0054	<0.0054	<0.0054	<0.011	<0.00011	0.00041	<0.0054		<0.00011	<0.0054	0.0117	0.0136	0.0022 J	0.0052 J	<0.011	<0.0054	<0.0054	<0.0054	<0.011	0.00011	0.0996	<0.00011
	MW8-ROX-101613-DUP	10/16/2013		31.59	NE	<0.0059	<0.0059	<0.0059	<0.012	<0.00012	0.00037	<0.0059		<0.00012	<0.0059	0.0108	0.0128	0.0019 J	0.0046 J	<0.012	<0.0059	<0.0059	<0.0059	<0.012	0.000097	0.108	<0.00012
	MW8-ROX-013014	1/30/2014		34.02	NE	<0.0051	<0.0011 U	<0.0051	<0.01	<0.0001	0.00054	<0.0051		<0.0001	<0.0051	0.0137	0.0123	0.0128	0.0198	<0.01	<0.0051	<0.0051	<0.0051	<0.01	0.00018	0.105	<0.0001
	MW8-ROX-013014-DUP	1/30/2014		34.02	NE	<0.0054	<0.00092 U	<0.0054	<0.011	<0.00011	0.00052	<0.0054		<0.00011	<0.0054	0.0136	0.0123	0.0129	0.019	<0.011	<0.0054	<0.0054	<0.0054	<0.011	0.00019	0.135	<0.00011
	MW8-ROX-041614	4/16/2014		34.73	NE	<0.0056	<0.00073 U	<0.0056	<0.011	<0.00011	0.00046	<0.0056		<0.00011	<0.0056	0.0142	0.0097	<0.011	0.0062 J	<0.011	<0.0056	<0.0056	<0.0056	<0.011	0.00015 B J	0.135	<0.00011
	MW8-ROX-041614-DUP	4/16/2014		34.73	NE	<0.0051	<0.0006 U	<0.0051	<0.01	<0.0001	0.00043	<0.0051		<0.0001	<0.0051	0.0129	0.0086	<0.01	0.0053 J	<0.01	<0.0051	<0.0051	<0.0051	<0.01	0.00016 B J	0.118	<0.0001
	MW8-ROX-071614	7/16/2014		33.01	NE	<0.0052	<0.00045 U	<0.0052	<0.01	<0.0001	0.00038	<0.0052		<0.0001	<0.0052	0.0125	0.0048	0.0037 J	0.0045 J	<0.01	<0.0052	<0.0052	<0.0052	<0.01	0.0002 B	0.111	<0.0001
	MW8-ROX-101614	10/16/2014	33.60 - 43.60	32.23	NE	<0.0056	<0.0056	<0.0056	<0.011	<0.00011	0.00054	<0.0056		<0.00011	<0.0056	0.0145	0.0045	0.019	0.0558	<0.011	<0.0056	<0.0056	<0.0056	<0.011	0.00023	0.126	<0.00011

TABLE 3
CUMULATIVE SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL RESULTS AND EXCEEDANCES

						SVOCs																							
						Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate	2,6-Dinitrotoluene	Fluoranthene	Fluorene	Hexachlorobenzene	Indene	Indeno(1,2,3-cd)pyrene	Isophorone (3,5,5-trimethyl-2-cyclohexene-1-one)	1-Methylnaphthalene	2-Methylnaphthalene	2-Methylphenol (o-Cresol)	3 & 4-Methylphenol (m & p-Cresol)	3-Nitroaniline	Nitrobenzene	N-Nitrosodimethylamine	N-Nitrosodiphenylamine	Pentachlorophenol	Phenanthrene	Phenol	Pyrene
			Screening Values (mg/L)				0.7 [1]	0.14 [2]	0.00031 [2]	0.28 [1]	0.28 [1]	0.00006 [2]		0.00043 [1]	1.4 [2]	0.49 [3]	0.028 [1]	0.35 [1]	0.35 [3]		0.014 [1]	0.0006 [3]	0.0032 [2]	0.001 [1]	0.21 [3]	0.1 [1]	0.21 [1]
Location	Sample ID	Sample Date	Screened Interval (ft btoc)	Depth to Water (ft btoc)	Product Thickness (ft)	Analytical Results (mg/L)																					
MW-09	MW9-ROX-011612	1/16/2012	46.45 - 56.45	39.50	NE	<0.0057	0.00048 J	<0.0057	<0.011	<0.00011	<0.00011	<0.0057		<0.000098 U	<0.0057	<0.00023	<0.00023	<0.011	<0.011	<0.011	<0.0057	<0.0057	<0.0057	<0.011	<0.000057	<0.0057	<0.00011
	MW9-ROX-050312	5/3/2012		41.03	NE																						
	MW9-ROX-072712	7/27/2012		41.30	NE	<0.005	<0.00054 U	<0.005	<0.01	<0.0001	<0.0001	<0.005		<0.0001	<0.005	<0.0002	<0.0002	<0.01	<0.01 UJ	<0.01	<0.005	<0.005	<0.005	<0.01	<0.00005	<0.005	<0.0001
	MW9-ROX-102912	10/29/2012		43.17	NE	<0.0052	<0.0052	<0.0052	<0.01	<0.0001	<0.0001	<0.0052		<0.0001	<0.0052	<0.00021	<0.00021	<0.01	<0.01	<0.01	<0.0052	<0.0052	<0.0052	<0.01	<0.000052	<0.0052	<0.0001
	MW9-ROX-011113	1/11/2013		43.90	NE	<0.0054 UJ	<0.0054	<0.0054	<0.011	0.000066 J	0.00011	<0.0054		<0.00011	<0.0054	<0.00022	0.00014 J	<0.011	<0.011	<0.011	<0.0054	<0.0054	<0.0054	<0.011	0.00012	<0.0054	0.000057 J
	MW9-ROX-040913	4/9/2013		44.67	NE	<0.0052 UJ	<0.0018 UJ	<0.0052 UJ	<0.01 UJ	<0.0001 UJ	<0.0001 UJ	<0.0052 UJ		<0.0001 UJ	<0.0052 UJ	<0.00021 UJ	<0.00021 UJ	<0.01 UJ	<0.01 UJ	<0.01 UJ	<0.0052 UJ	<0.0052 UJ	<0.0052 UJ	<0.01 UJ	<0.000052 UJ	<0.0052 UJ	<0.0001 UJ
	MW9-ROX-070813	7/8/2013		42.35	NE	<0.0056	<0.0056	<0.0056	<0.011	<0.00011	<0.00011	<0.0056		<0.00011	<0.0056	<0.00022	<0.00022				<0.0056	<0.0056	<0.0056		<0.000028 U		<0.00011
	MW9-ROX-100313	10/3/2013		42.27	NE	<0.005	<0.005	<0.005	<0.01	<0.0001	<0.0001	<0.005		<0.0001	<0.005	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.01	<0.00005	<0.005	<0.0001
	MW9-ROX-011414	1/14/2014		44.47	NE	<0.0053 UJ	<0.0053	<0.0053	<0.011	<0.00011	<0.00011	<0.0053		<0.00011	<0.0053	<0.00021	<0.00021	<0.011 UJ	<0.011 UJ	<0.011 UJ	<0.0053	<0.0053	<0.0053	<0.011 UJ	<0.000053	<0.0053 UJ	<0.00011
	MW9-ROX-040714	4/7/2014		44.99	NE	<0.0056	<0.00062 U	<0.0056	<0.011	<0.00011	<0.00011	<0.0056		<0.00011	<0.0056	<0.00022	0.0001 J	<0.011	<0.011	<0.011	<0.0056	<0.0056	<0.0056	<0.011	<0.000056 U	<0.0056	<0.00011
	MW9-ROX-070914	7/9/2014		44.35	NE	<0.0054	<0.0006 U	<0.0054	<0.011	<0.00011	<0.00011	<0.0054		<0.00011	<0.0054	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.0054	<0.0054	<0.0054	<0.011	<0.000054	<0.0054	<0.00011
	MW9-ROX-100714	10/7/2014	46.45 - 56.45	43.52	NE	<0.0059	<0.0059	<0.0059	<0.012	<0.00012	<0.00012	<0.0059		<0.00012	<0.0059	<0.0024	<0.0024	<0.012	<0.012	<0.012	<0.0059	<0.0059	<0.0059	<0.012	<0.000059	<0.0059	<0.00012
MW-10	MW10-ROX-011612	1/16/2012	44.43 - 54.43	39.28	NE	<0.0053	0.00081 J	<0.0053	<0.011	0.000052 J	<0.00011	<0.0053		<0.00011	<0.0053	<0.00021	0.000055 J	<0.011	<0.011	<0.011	<0.0053	<0.0053	<0.0053	<0.011	0.000072	<0.0053	0.00005 J
	MW10-ROX-050112	5/1/2012		40.86	NE	<0.0052	<0.00041 U	<0.0052	<0.01	<0.0001	<0.0001	<0.0052		<0.0001	<0.0052	<0.00021	<0.00021	<0.01	<0.01	<0.01	<0.0052	<0.0052 UJ	<0.0052	<0.01	0.000033 J	<0.0052 UJ	<0.0001
	MW10-ROX-072712	7/27/2012		41.21	NE	<0.005	<0.00043 U	<0.005	<0.01	<0.0001	<0.0001	<0.005		<0.0001	<0.005	<0.0002	<0.0002	<0.01	<0.01 UJ	<0.01	<0.005	<0.005	<0.005	<0.01	<0.00005	<0.005	<0.0001
	MW10-ROX-102612	10/26/2012		43.08	NE	<0.0056	<0.0056	<0.0056	<0.011	0.000052 J	0.000086 J	<0.0056		<0.00011	<0.0056	<0.00022	0.00009 J	<0.011	<0.011	<0.011	<0.0056	<0.0056	<0.0056	<0.011	0.000076	<0.0056	0.00004 J
	MW10-ROX-121712	12/17/2012		43.08	NE																						
	MW10-ROX-011013	1/10/2013		44.10	NE	<0.005 UJ	<0.005	<0.005	<0.01	<0.0001	<0.0001	<0.005		<0.0001	<0.005	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.01	<0.000021 U	<0.005	<0.0001
	MW10-ROX-012113	1/21/2013		44.10	NE	<0.01	<0.01	<0.01	<0.001	<0.0001	<0.0001	<0.002		<0.0001	<0.01		<0.01	<0.01	<0.01	<0.01	<0.002	<0.004	<0.02	<0.003	<0.004	<0.0001	<0.005	<0.0001
	MW10-ROX-040913	4/9/2013		44.60	NE	<0.0054 UJ	<0.0019 U	<0.0054	<0.011	<0.00011	<0.00011	<0.0054		<0.00011	<0.0054	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.0054	<0.0054	<0.0054	<0.011	<0.000054	<0.0054	<0.00011
	MW10-ROX-070813	7/8/2013		42.27	NE	<0.0056	<0.0056	<0.0056	<0.011	<0.00011	<0.00011	<0.0056		<0.00011	<0.0056	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.0056	<0.0056	<0.0056	<0.011	<0.000021 U	<0.0056	<0.00011
	MW10-ROX-100313	10/3/2013		42.38	NE	<0.0056	<0.0056	<0.0056	<0.011	<0.00011	<0.00011	<0.0056		<0.00011	<0.0056	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.0056	<0.0056	<0.0056	<0.011	<0.000056	<0.0056	<0.00011
	MW10-ROX-011514	1/15/2014		44.42	NE	<0.0053	<0.0053	<0.0053	<0.011	<0.00011	<0.00011	<0.0053		0.000072 J	<0.0053	<0.00021	<0.00021	<0.011 UJ	<0.011 UJ	<0.011	<0.0053	<0.0053	<0.0053	<0.011 UJ	0.000037 JB	<0.0054 UJ	<0.00011
	MW10-ROX-040714	4/7/2014		45.00	NE	<0.0053	<0.00085 U	<0.0053	<0.011	<0.00011	<0.00011	<0.0053		<0.00011	<0.0053	<0.00021	<0.00021	<0.011	<0.011	<0.011	<0.0053	<0.0053	<0.0053	<0.011	<0.000042 U	<0.0053	<0.00011
	MW10-ROX-070914	7/9/2014		44.35	NE	<0.0054	<0.00065 U	<0.0054	<0.011	<0.00011	<0.00011	<0.0054		<0.00011	<0.0054	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.0054	<0.0054	<0.0054	<0.011	<0.000054	<0.0054	<0.00011
	MW10-ROX-100714	10/7/2014	44.43 - 54.43	43.58	NE	<0.0057	<0.0057	<0.0057	<0.011	<0.00011	<0.00011	<0.0057		<0.00011	<0.0057	<0.0023	<0.0023	<0.011	<0.011	<0.011	<0.0057	<0.0057	<0.0057	<0.011	<0.000057	<0.0057	<0.00011
MW-11	MW11-ROX-011712	1/17/2012	41.66 - 51.66	37.44	NE																						
	MW11-ROX-043012	4/30/2012		38.66	NE	<0.0051	<0.0051	<0.0051	<0.01	<0.0001	<0.0001	<0.0051		<0.0001	<0.0051	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.0051	<0.0051	<0.0051	<0.01	<0.000051	<0.0051	<0.0001
	MW11-ROX-072712	7/27/2012		38.90	NE	<0.0058	<0.00057 U	<0.0058	<0.012	<0.00012	<0.00012	<0.0058		<0.00012	<0.0058	<0.00023	<0.00023	<0.012	<0.012 UJ	<0.012	<0.0058	<0.0058	<0.0058	<0.012	<0.000058	<0.0058	<0.00012
	MW11-ROX-102512	10/25/2012		40.59	NE	<0.0054	<0.0054	<0.0054	<0.011	<0.00011	<0.00011	<0.0054		<0.00011	<0.0054	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.0054	<0.0054	<0.0054	<0.011	<0.000054	<0.0054 UJ	<0.00011
	MW11-ROX-011013	1/10/2013		41.43	NE	<0.005 UJ	<0.005 UJ	<0.005 UJ	<0.01 UJ	<0.0001 UJ	<0.0001 UJ	<0.005 UJ		<0.0001 UJ	<0.005 UJ	<0.0002 UJ	<0.0002 UJ	<0.01 UJ	<0.01 UJ	<0.01 UJ	<0.005 UJ	<0.005 UJ	<0.005 UJ	<0.01 UJ	<0.000015 UJ	<0.005 UJ	<0.0001 UJ
	MW11-ROX-040813	4/8/2013		42.02	NE	<0.0053	<0.0053	<0.0053	<0.011	<0.00011	<0.00011	<0.0053		<0.00011	<0.0053	<0.00021	<0.00021	<0.011	<0.011	<0.011	<0.0053	<0.0053	<0.0053	<0.011	<0.000053	<0.0053	<0.00011
	MW11-ROX-070813	7/8/2013		39.24	NE	<0.0054	<0.0054	<0.0054	<0.011	<0.00011	<0.00011	<0.0054		<0.00011	<0.0054	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.0054	<0.0054	<0.0054	<0.011	<0.000054	<0.0054	<0.00011
	MW11-ROX-100713	10/7/2013		39.95	NE	<0.0055 UJ	<0.0055	<0.0055	<0.011	<0.00011	<0.00011	<0.0055		<0.00011	<0.0055	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.0055	<0.0055	<0.0055	<0.011	<0.000055	<0.0055	<0.00011
	MW11-ROX-011514	1/15/2014		42.16	NE	<0.0055	<0.0055	<0.0055	<0.011	<0.00011	<0.00011	<0.0055		<0.00011	<0.0055	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.0055	<0.0055	<0.0055	<0.011	<0.000026 U	<0.0055	<0.00011
	MW11-ROX-040714	4/7/2014		42.70	NE	<0.0056	<0.0007 U	<0.0056	<0.011	<0.00011	<0.00011	<0.0056		<0.00011	<0.0056	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.0056	<0.0056	<0.0056	<0.011	<0.000023 U	<0.0056	<0.00011
	MW11-ROX-070914	7/9/2014		41.75	NE	<0.0057	<0.00042 U	<0.0057	<0.011	<0.00011	<0.00011	<0.0057		<0.00011	<0.0057	<0.00023	<0.00023	<0.011	<0.011	<0.011	<0.0057	<0.0057	<0.0057	<0.011	0.00003 J	<0.0057	<0.00011
	MW11-ROX-100714	10/7/2014	41.66 - 51.66	40.89	NE	<0.0052	<0.0052	<0.0052	<0.01	<0.0001	<0.0001	<0.0052		<0.0001	<0.0052	<0.0021	<0.0021	<0.01	<0.01	<0.01	<0.0052	<0.0052	<0.0052	<0.01	<0.000052	<0.0052	<0.0001
MW-12	MW12-ROX-011712	1/17/2012	41.92 - 51.92	37.70	NE	<0.0054	<0.0054	<0.0054	<0.011	<0.00011	<0.00011	<0.0054		<0.00023 U	<0.0054	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.0054	<0.0054	<0.0054	<0.011	<0.000054	<0.0054	<0.00011
	MW12-ROX-011712-DUP	1/17/2012		37.70	NE	<0.0056	<0.0056	<0.0056	<0.011	<0.00011	<0.00011	<0.0056		<0.00007 U	<0.0056	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.0056	<0.0056	<0.0056	<0.011	<0.000056	<0.0056	<0.00011
	MW12-ROX-043012	4/30/2012		38.98	NE	<0.0051	<0.0051	<0.0051	<0.01	<0.0001	<0.0001	<0.0051		<0.0001	<0.0051	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.0051	<0.0051	<0.0051	<0.01	<0.000051	<0.0051	<0.0001
	MW12-ROX-072712	7/27/2012		39.22	NE	<0.0053	<0.00063 U	<0.0053	<0.011	<0.00011	<0.00011	<0.0053		<0.00011	<0.0053	<0.00021	<0.00021	<0.011	<0.011 UJ	<0.011	<0.0053	<0.0053	<0.0053	<0.011	<0.000053	<0.0053	<0.00011
	MW12-ROX-102512	10/25/2012		40.95	NE	<0.0053	<0.0053	<0.0053	<0.011	<0.00011	<0.00011	<0.0053		<0.00011	<0.0053	<0.00021	<0.00021	<0.011	<0.011	<0.011	<0.0053	<0.0053	<0.0053	<0.011	<0.000053	<0.0053 UJ	<0.00011
	MW12-ROX-011013	1/10/2013		41.83	NE	<0.0051 UJ	<0.0051	<0.0051	<0.01	0.000045 J	<0.0001	<0.0051		<0.0001	<0.0051	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.0051	<0.0051	<0.0051	<0.01	<0.000032 U	<0.0051	<0.0001
	MW12-ROX-040813	4/8/2013		42.46	NE	<0.0052	<0.0052	<0.0052	<0.01	0.000044 J	<0.0001	<0.0052		<0.0001	<0.0052	<0.00021	<0.00021	<0.01	<0.01	<0.01	<0.0052	<0.0052	<0.0052	<0.01	<0.000052	<0.0052	<0.0001
	MW12-ROX-070913	7/9/2013		39.28	NE	<0.0055	<0.0055	<0.0055	<0.011	<0.00011	<0.00011	<0.0055		<0.00011	<0.0055	<0.00022	<0.00022	<0.011	<0.011	<0.011 UJ	<0.0055	<0.0055	<0.0055	<0.011	<0.000055	<0.0055	<0.00011
	MW12-ROX-100713	10/7/2013		40.22	NE	<0.0055 UJ	<0.0055	<0.0055	<0.011	<0.00011	<0.00011	<0.0055		<0.00011	<0.0055	<0.00022	<0.00022	<0.011 UJ	<0.011 UJ	<0.011	<0.0055	<0.0055	<0.0055	0.0018 J J	<0.000055	<0.0053 UJ	<0.00011
	MW12-ROX-011514	1/15/2014		42.54	NE	<0.0052	<0.0052	<0.0052	<0.01	<0.0001	<0.0001	<0.0052		<0.0001	<0.0052	<0.00021	<0.00021	<0.01 UJ	<0.01 UJ	<0.01	<0.0052	<0.0052	<0.0052	<0.01 UJ	<0.000022 U	<0.0052 UJ	<0.0001
	MW12-ROX-040814	4/8/2014		43.15	NE	<0.0051	<0.0006 U	<0.0051	<0.01	<0.00011	<0.00011	<0.0051		<0.00011	<0.0051	<0.00023	<0.00023	<0.01	<0.01	<0.01	<0.0051	<0.0051	<0.0051	<0.01	0.000021 J	<0.0051	<0.00011
	MW12-ROX-070914	7/9/2014		41.97	NE	<0.0056	<0.00098 U	<0.0056	<0.011	<0.00011	<0.00011	<0.0056		<0.00011	<0.0056	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.0056	<0.0056	<0.0056	<0.011	<0.000056	<0.0056	<0.00011
	MW12-ROX-100614	10/6/2014	41.92 - 51.92	40.98	NE	<0.0053	<0.0053	<0.0053	<0.011	<0.00011	<0.00011	<0.0053		<0.00011	<0.0053	<0.0021	<0.0021	<0.011	<0.011	<0.011	<0.0053	<0.0053	<0.0053	<0.011	<0.000053	<0.0053 UJ	<0.00011

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
CUMULATIVE SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL RESULTS AND EXCEEDANCES

						SVOCs																							
						Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate	2,6-Dinitrotoluene	Fluoranthene	Fluorene	Hexachlorobenzene	Indene	Indeno(1,2,3-cd)pyrene	Isophorone (3,5,5-trimethyl-2-cyclohexene-1-one)	1-Methylnaphthalene	2-Methylnaphthalene	2-Methylphenol (o-Cresol)	3 & 4-Methylphenol (m & p-Cresol)	3-Nitroaniline	Nitrobenzene	N-Nitrosodimethylamine	N-Nitrosodiphenylamine	Pentachlorophenol	Phenanthrene	Phenol	Pyrene
						Screening Values (mg/L)	0.7 [1]	0.14 [2]	0.00031 [2]	0.28 [1]	0.28 [1]	0.00006 [2]		0.00043 [1]	1.4 [2]	0.49 [3]	0.028 [1]	0.35 [1]	0.35 [3]		0.014 [1]	0.0006 [3]	0.0032 [2]	0.001 [1]	0.21 [3]	0.1 [1]	0.21 [1]
Location	Sample ID	Sample Date	Screened Interval (ft btoc)	Depth to Water (ft btoc)	Product Thickness (ft)	Analytical Results (mg/L)																							
MW-13	MW13-ROX-012012	1/20/2012	25.57 - 35.57	24.77	NE	<0.0053	<0.00058 U	<0.0053	<0.011	<0.00011	<0.00011	<0.0053		<0.00011	<0.0053	0.00022	<0.00027 U	<0.011	<0.011	<0.011	<0.0053	<0.0053	<0.0053	<0.011	<0.000053	0.0015 J	0.000065 J
	MW13-ROX-050712	5/7/2012		25.79	NE	<0.0052	<0.0052	<0.0052	<0.01	<0.0001	<0.0001	<0.0052		<0.0001	<0.0052	<0.00021	<0.00021	<0.01	<0.01	<0.01	<0.0052	<0.0052	<0.0052	<0.01	<0.000052	<0.0052	<0.0001
	MW13-ROX-080812	8/8/2012		26.67	NE	<0.0053	<0.0053	<0.0053	<0.011	<0.00011	<0.00011	<0.0053		<0.00011	<0.0053	0.00021	<0.00014 UJ	<0.011	<0.011	<0.011	<0.0053	<0.0053	<0.0053	<0.011	<0.000053	<0.0053	<0.00011
	MW13-ROX-110812	11/8/2012		25.30	NE	<0.005	0.00054 J	<0.005	<0.01	<0.0001	<0.0001	<0.005		<0.0001	<0.005	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.01	<0.00005	<0.005	<0.0001
	MW13-ROX-012313	1/23/2013		29.26	NE	<0.0055 UJ	0.0027 J	<0.0055	<0.011	<0.00011	<0.00011	<0.0055		<0.00011	<0.0055	<0.00022	0.00011 J	<0.011	<0.011	<0.011	<0.0055	<0.0055	<0.0055	<0.011	<0.000055	<0.0055	<0.00011
	MW13-ROX-041213	4/12/2013		29.44	NE	<0.0051	<0.0051	<0.0051	<0.01	<0.0001	<0.0001	<0.0051		<0.0001	<0.0051	<0.0002	0.00011 J	<0.01	<0.01	<0.01	<0.0051	<0.0051	<0.0051	<0.01	<0.000051	<0.0051	<0.0001
	MW13-ROX-071213	7/12/2013		25.67	NE	<0.0054 UJ	<0.0054	<0.0054	<0.011	<0.000042	<0.00011	<0.0054		<0.00011	<0.0054	<0.00022	<0.000067 U	<0.011	<0.011	<0.011	<0.0054	<0.0054 UJ	<0.0054	<0.011	<0.000076	<0.0054 UJ	<0.00004
	MW13-ROX-100913	10/9/2013		26.94	NE	<0.0052	<0.0052	<0.0052	<0.01	<0.0001	<0.0001	<0.0052		<0.0001	<0.0052	<0.00021	<0.00021	<0.01	<0.01	<0.01	<0.0052	<0.0052	<0.0052	<0.01	<0.000052	<0.0052	<0.0001
	MW13-ROX-012914	1/29/2014		29.63	NE	<0.0055	<0.0055	<0.0055	<0.011	<0.00011	<0.00011	<0.0055		<0.00011	<0.0055	<0.000096 U	<0.00022	<0.011	<0.011	<0.011	<0.0055	<0.0055	<0.0055	<0.011	<0.000055	<0.0055	<0.00011
	MW13-ROX-041114	4/11/2014		30.15	NE	<0.006	<0.00079 U	<0.006	<0.012	<0.00012	<0.00012	<0.006		<0.00012	<0.006	<0.00024	<0.00024	<0.012	<0.012	<0.012	<0.006	<0.006	<0.006	<0.012	0.000033 J	<0.006	<0.00012
	MW13-ROX-070714	7/7/2014		28.49	NE	<0.0055	<0.0055	<0.0055	<0.011	<0.00011	<0.00011	<0.0055		<0.00011	<0.0055	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.0055	<0.0055	<0.0055	<0.011	<0.000055	<0.0055	<0.00011
	MW13-ROX-101014	10/10/2014	25.57 - 35.57	27.48	NE	<0.006	<0.006	<0.006	<0.012	<0.00012	<0.00012	<0.006		<0.00012	<0.006	<0.0024	<0.0024	<0.012	<0.012	<0.012	<0.006	<0.006	<0.006	<0.012	0.000032 J	<0.006	<0.00012
MW-14	MW14-ROX-051012	5/10/2012	33.42 - 43.42	NM	NE	<0.0052	0.00043 J	<0.0052	<0.01	<0.0001	0.00022	<0.0052		<0.0001	<0.0052	0.0101	0.0015	<0.01	<0.01	<0.01	<0.0052	<0.0052	<0.0052	<0.01	<0.000052	<0.0052	<0.0001
	MW14-ROX-080312	8/3/2012		NM	NE	<0.0053	<0.0053	<0.0053	<0.011	<0.00011	0.00071	<0.0053		<0.00011	<0.0053	0.019	0.0038	<0.011	<0.011	<0.011	0.00032 J	<0.0053	<0.0053	<0.011	<0.000053	<0.0053	<0.00011
	MW14-ROX-103112	10/31/2012		32.02	NE	<0.005	0.00044 J	<0.005	<0.01	<0.0001	0.00029	<0.005		<0.0001	<0.005	0.0192	0.004	<0.01	<0.01	<0.01	<0.005	<0.005 UJ	<0.005	<0.01	<0.000051	<0.005 UJ	<0.0001
	MW14-ROX-011813	1/18/2013		33.05	NE	<0.005 UJ	<0.005	<0.005	<0.01	<0.0001	0.00064	<0.005		<0.0001	<0.005	0.0215	0.0084	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.01	<0.00005	<0.005	<0.0001
	MW14-ROX-041113	4/11/2013		33.31	NE	<0.0054	<0.0054	<0.0054	<0.011	0.000068 J	0.00016	<0.0054		<0.00011	<0.0054	0.0124	0.0018	<0.011	<0.011	<0.011	<0.0054	<0.0054	<0.0054	<0.011	0.0001	<0.0054	0.000053 J
	MW14-ROX-071213	7/12/2013		30.36	NE	<0.0053 UJ	0.00043 J	<0.0053	<0.011	<0.00011	<0.000093 U	<0.0053		<0.00011	<0.0053	0.0127	0.0027	<0.011	<0.011	<0.011	<0.0053	<0.0053 UJ	<0.0053	<0.011	<0.000032 U	<0.0053 UJ	<0.000067 U
	MW14-ROX-101013	10/10/2013		30.80	NE	<0.0057	<0.0057	<0.0057	<0.011	<0.00011	0.00034	<0.0057		<0.00011	<0.0057	0.0184	<0.00023	<0.011	<0.011	<0.011	<0.0057	<0.0057	<0.0057	<0.011	<0.000057	<0.0057	<0.00011
	MW14-ROX-012914	1/29/2014		33.67	NE	<0.0054	0.00045 J	<0.0054	<0.011	<0.00011	0.00041	<0.0054		<0.00011	<0.0054	0.0075	<0.00022	<0.011	<0.011	<0.011	<0.0054	<0.0054	<0.0054	<0.011	<0.000054	<0.0054	<0.00011
	MW14-ROX-041114	4/11/2014		34.30	NE	<0.006	<0.00082 U	<0.006	<0.012	<0.00011	0.0003	<0.006		<0.00011	<0.006	0.0018	<0.00023	<0.012	<0.012	<0.012	<0.006	<0.006	<0.006	<0.012	<0.000057	<0.006	<0.00011
	MW14-ROX-070714	7/7/2014		32.82	NE	<0.0054	0.00031 J	<0.0054	<0.011	<0.00011	0.00024	<0.0054		<0.00011	<0.0054	0.0014	<0.00022	<0.011	<0.011	<0.011	<0.0054	<0.0054	<0.0054	<0.011	0.00024 J	<0.0054	<0.00011
	MW14-ROX-101414	10/14/2014	33.42 - 43.42	31.65	NE	<0.0056	<0.00056 U	<0.0056	<0.011	<0.00011	0.00024	<0.0056		<0.00011	<0.0056	0.0014 J	<0.0022	<0.011	<0.011	<0.011	<0.0056	<0.0056	<0.0056	<0.011	<0.000021 U	<0.0056	<0.00011
MW-16	MW16-ROX-012313	1/23/2013	37.06 - 47.06	43.05	NE	<0.0053 UJ	<0.0053	<0.0053	<0.011	<0.00011	<0.00011	<0.0053		<0.00011	<0.0053	<0.00021	0.000085 J	<0.011	<0.011	<0.011	<0.0053	<0.0053	<0.0053	<0.011	0.000025 J J	<0.0053	<0.00011
	MW16-ROX-040813	4/8/2013		43.39	NE	<0.0052	<0.0052	<0.0052	<0.01	<0.0001	<0.0001	<0.0052		<0.0001	<0.0052	<0.00021	0.000058 J	<0.01	<0.01	<0.01	<0.0052	<0.0052	<0.0052	<0.01	<0.000052	<0.0052	<0.0001
	MW16-ROX-070813	7/8/2013		40.62	NE	<0.0056	<0.0056	<0.0056	<0.011	<0.00011	<0.00011	<0.0056		<0.00011	<0.0056	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.0056	<0.0056	<0.0056	<0.011	<0.000018 U	<0.0056	<0.00011
	MW16-ROX-100813	10/8/2013		41.62	NE	<0.0052 UJ	<0.0052 UJ	<0.0052 UJ	<0.01 UJ	<0.0001 UJ	<0.0001 UJ	<0.0052 UJ		<0.0001 UJ	<0.0052 UJ	<0.00021 UJ	<0.00021 UJ	<0.01 UJ	<0.01 UJ	<0.01 UJ	<0.0052 UJ	<0.0052 UJ	<0.0052 UJ	<0.01 UJ	<0.000052 UJ	<0.0052 UJ	<0.0001 UJ
	MW16-ROX-011514	1/15/2014		43.76	NE	<0.0052	<0.0052	<0.0052	<0.01	<0.0001	<0.0001	<0.0052		<0.0001	<0.0052	<0.00021	<0.00021	<0.01	<0.01	<0.01	<0.0052	<0.0052	<0.0052	<0.01	<0.000031 U	<0.0052	<0.0001
	MW16-ROX-040914	4/9/2014		44.63	NE	<0.0059	<0.00067 U	<0.0059	<0.012	<0.00012	<0.00012	<0.0059		<0.00012	<0.0059	<0.00024	<0.00024	<0.012	<0.012	<0.012	<0.0059	<0.0059	<0.0059	<0.012	<0.000059	<0.0059	<0.00012
	MW16-ROX-071014	7/10/2014		43.15	NE	<0.0054	<0.00021 U	<0.0054	<0.011	<0.00011	<0.00011	<0.0054		<0.00011	<0.0054	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.0054	<0.0054	<0.0054	<0.011	<0.000054	<0.0054	<0.00011
	MW16-ROX-100714	10/7/2014	37.06 - 47.06	42.27	NE	<0.006	<0.006	<0.006	<0.012	<0.00012	<0.00012	<0.006		<0.00012	<0.006	<0.0024	<0.0024	<0.012	<0.012	<0.012	<0.006	<0.006	<0.006	<0.012	<0.00006	<0.006	<0.00012
MW-22	MW22-ROX-012313	1/23/2013	37.88 - 47.88	41.80	NE	<0.0052 UJ	0.0024 J	<0.0052	<0.01	<0.0001	0.00018	<0.0052		<0.0001	<0.0052	0.0276	0.05	0.018	0.0322	<0.01	<0.0052	<0.0052	<0.0052	<0.01	0.00019	0.0111	<0.0001
	MW22-ROX-012313-DUP	1/23/2013		41.80	NE	<0.0053 UJ	0.0024 J	<0.0053	<0.011	<0.00011	0.00018	<0.0053		<0.00011	<0.0053	0.028	0.0501	0.0187	0.0349	<0.011	<0.0053	<0.0053	<0.0053	<0.011	0.0002	0.0122	<0.00011
	MW22-ROX-040513	4/5/2013		42.23	NE	<0.0053	0.00057 J	<0.0053	<0.011	<0.00011	0.00018	<0.0053		<0.00011	<0.0053	0.0241	0.0413	0.0236	0.0403	<0.011	<0.0053	<0.0053 UJ	<0.0053	<0.011	0.00019	0.0123 J	<0.00011
	MW22-ROX-071113	7/11/2013		39.35	NE	<0.0054	<0.0054	<0.0054	<0.011	<0.00011	0.00027	<0.0054		<0.00011	<0.0054	0.0232 J	0.0393	0.0159	0.029	<0.011 UJ	<0.0054	<0.0054	<0.0054	<0.011	0.0002 B	0.0094 J	<0.00011
	MW22-ROX-071113-DUP	7/11/2013		39.35	NE	<0.0056	0.00052 J	<0.0056	<0.011	<0.00011	0.00017	<0.0056		<0.00011	<0.0056	0.0216 J	0.037	0.0147	0.0269	<0.011 UJ	<0.0056	<0.0056	<0.0056	<0.011	0.0002 B	0.0088 J	<0.00011
	MW22-ROX-100913	10/9/2013		40.39	NE	<0.0054	<0.0054	<0.0054	<0.011	<0.00011	0.00019	<0.0054		<0.00011	<0.0054	0.0276	0.0468	0.0152	0.0319	<0.011	<0.0054	<0.0054	<0.0054	<0.011	0.00019	<0.0054	<0.00011
	MW22-ROX-100913-DUP	10/9/2013		40.39	NE	<0.0054	<0.0054	<0.0054	<0.011	<0.00011	0.0002	<0.0054		<0.00011	<0.0054	0.0265	0.0451	0.0139	0.0296	<0.011	<0.0054	<0.0054	<0.0054	<0.011	0.00016	<0.0054	<0.00011
	MW22-ROX-012014	1/20/2014		42.49	NE	<0.027	<0.027	<0.027	<0.053	<0.00011	0.00017	<0.027		<0.00011	<0.027	0.0258	0.0459	0.0124 J	0.0313 J	<0.053	<0.027	<0.027	<0.027	<0.053	0.0002 B	0.0071 J	<0.00011
	MW22-ROX-012014-DUP	1/20/2014		42.49	NE	<0.027	<0.027	<0.027	<0.054	<0.00011	0.00015	<0.027		<0.00011	<0.027	0.0232	0.0416	0.0118 J	0.0296 J	<0.054	<0.027	<0.027	<0.027	<0.054	0.0002 B	0.007 J	<0.00011
	MW22-ROX-041014	4/10/2014		43.15	NE	<0.028	<0.0016 U	<0.028	<0.056	<0.00011	<0.00011	<0.028		<0.00011	<0.028	0.0174	0.0287	0.0156 J	0.035 J	<0.056	<0.028	<0.028	<0.028	<0.056	0.0001	<0.028	<0.00011
	MW22-ROX-041014-DUP	4/10/2014		43.15	NE	<0.028	<0.0018 U	<0.028	<0.056	<0.00011	0.00012	<0.028		<0.00011	<0.028	0.0199	0.0322	0.0159 J	0.038 J	<0.056	<0.028	<0.028	<0.028	<0.056	0.0001	<0.028	<0.00011
	MW22-ROX-071414	7/14/2014		41.85	NE	<0.0054	<0.00057 U	<0.0054	<0.011	<0.00011	0.00015	<0.0054		<0.00011	<0.0054	0.0198	0.0355	0.0102 J	0.0204	<0.011	<0.0054	<0.0054	<0.0054	<0.011	<0.00018 U	<0.0054	<0.00011
	MW22-ROX-101014	10/10/2014	37.88 - 47.88	41.43	NE	<0.0063	<0.0063	<0.0063	<0.013	<0.00013	0.00014	<0.0063		<0.00013	<0.0063	0.0193	0.0339	0.0064 J	0.011 J	<0.013	<0.0063	<0.0063	<0.0063	<0.013	0.00036	0.0079	<0.00013
MW-24	MW24-ROX-040513	4/5/2013	38.89 - 48.89	43.39	NE	<0.0052	0.00049 J	<0.0052	<0.01	0.000088 J	<0.0001	<0.0052		<0.0001	<0.0052	<0.00021	0.00015 J	<0.01	<0.01	<0.01	<0.0052	<0.0052 UJ	<0.0052	<0.01	<0.000052	<0.0052 UJ	0.000066 J
	MW24-ROX-071113	7/11/2013		40.35	NE	<0.0054	<0.0054	<0.0054	<0.011	<0.00011	<0.00011	<0.0054		<0.00011	<0.0054	<0.00022 UJ	0.000062 J	<0.011 UJ	<0.011 UJ	<0.011 UJ	<0.0054	<0.0054	<0.0054	<0.011 UJ	<0.000038 U	<0.0053 UJ	<0.00011
	MW24-ROX-100913	10/9/2013		41.27	NE	<0.0053	<0.0053	<0.0053	<0.011	<0.00011	<0.00011	<0.0053		<0.00011	<0.0053	<0.00021	<0.00021	<0.011	<0.011	<0.011	<0.0053	<0.0053	<0.0053	<0.011	<0.000053	<0.0053	<0.00011
	MW24-ROX-011514	1/15/2014		43.47	NE	<0.0053	<0.0053	<0.0053	<0.011	<0.00011	<0.00011	<0.0053		<0.00011	<0.0053	<0.00021	<0.00021	<0.011	<0.011	<0.011	<0.0053	<0.0053	<0.0053	<0.011	<0.000053	<0.0053	<0.00011
	MW24-ROX-040914	4/9/2014		44.13	NE	<0.0056	<0.00092 U	<0.0056	<0.011	<0.00011	<0.00011	<0.0056		<0.00011	<0.0056	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.0056	<0.0056	<0.0056	<0.011	<0.000056	<0.0056	<0.00011
	MW24-ROX-071114	7/10/2014		42.97	NE	<0.0053	<0.0053	<0.0053	<0.011	<0.00011	<0.00011	<0.0053		<0.00011	<0.0053	<0.00021	<0.00021	<0.011	<0.011	<0.011	<0.0053	<0.0053	<0.0053	<0.011	<0.000053	<0.0053	<0.00011
	MW24-ROX-100814	10/8/2014	38.89 - 48.89	42.16	NE	<0.0054	<0.0054	<0.0054	<0.011	<0.00011	<0.00011	<0.0054		<0.00011	<0.0054	<0.0022	<0.0022	<0.011	<0.011	<0.011	<0.0054	<0.0054	<0.0054	<0.011	<0.000054	<0.0054	<0.00011
MW-25	MW25-ROX-102114	10/21/2014	35.59 - 45.59	36.44	NE	<0.0056	<0.0056	<0.0056	<0.011	<0.00011	<0.00011	<0.0056		<0.00011	<0.0056	0.00093 J	0.00057 J	0.0011 J	0.0028 J	<0.011	<0.0056	<0.0056	<0.0056	<0.011	0.000033 J	0.173	<0.00011
MW-26	MW26-ROX-102114	10/21/2014	38.15 - 48.15	39.43	NE	<0.0053	<0.0053	<0.0053	<0.011	<0.00011	<0.00011	<0.0053		<0.00011	<0.0053	<0.0021	<0.0021	<0.011	<0.011	<0.011	<0.0053	<0.0053	<0.0053	<0.011	<0.000053	<0.0053	<0.00011
MW-27	MW27-ROX-102114	10/21/2014	39.79 - 49.79	41.57	NE	<0.0053	<0.0053	<0.0053	<0.011	<0.00011	<0.00011	<0.0053		<0.00011	<0.0053	<0.0021	<0.0021	<0.011	<0.011	<0.011	<0.0053	<0.0053	<0.0053	<0.011	<0.000053	<0.0053	<0.00011
MW-28	MW28-ROX-102114	10/21/2014	33.61 - 43.61	36.44	NE	<0.0053	0.00026 J	<0.0053	<0.011	<0.00011	<0.00011	<0.0053		<0.00011	<0.0053	0.00075 J	<0.0021	<0.011	<0.011	<0.011	<0.0053	<0.0053	<0.0053	<0.011	0.000017 J	<0.0053	<0.00011

TABLE 3
CUMULATIVE SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL RESULTS AND EXCEEDANCES

						SVOCs																							
						Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate	2,6-Dinitrotoluene	Fluoranthene	Fluorene	Hexachlorobenzene	Indene	Indeno(1,2,3-cd)pyrene	Isophorone (3,5,5-trimethyl-2-cyclohexene-1-one)	1-Methylnaphthalene	2-Methylnaphthalene	2-Methylphenol (o-Cresol)	3 & 4-Methylphenol (m & p-Cresol)	3-Nitroaniline	Nitrobenzene	N-Nitrosodimethylamine	N-Nitrosodiphenylamine	Pentachlorophenol	Phenanthrene	Phenol	Pyrene
			Screening Values (mg/L)				0.7 [1]	0.14 [2]	0.00031 [2]	0.28 [1]	0.28 [1]	0.00006 [2]		0.00043 [1]	1.4 [2]	0.49 [3]	0.028 [1]	0.35 [1]	0.35 [3]		0.014 [1]	0.0006 [3]	0.0032 [2]	0.001 [1]	0.21 [3]	0.1 [1]	0.21 [1]
Location	Sample ID	Sample Date	Screened Interval (ft btoc)	Depth to Water (ft btoc)	Product Thickness (ft)	Analytical Results (mg/L)																							
P-54	P54-ROX-011712	1/17/2012	38.00 - 63.00	37.17	NE	<0.0052	<0.0052	<0.0052	<0.01	<0.0001	<0.0001	<0.0052		<0.0001	<0.0052	<0.00021	<0.000081 U	<0.01	<0.01	<0.01	<0.0052	<0.0052	<0.0052	<0.01	<0.000052	<0.0052	<0.0001
	P54-ROX-050412	5/4/2012		38.77	NE	<0.0051	<0.00085 U	<0.0051	<0.01	<0.0001	<0.0001	<0.0051		<0.0001	<0.0051	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.0051	<0.0051	<0.0051	<0.01	<0.000051	0.0026 J	<0.0001
	P54-ROX-080212	8/2/2012		38.95	NE	<0.0053	<0.0053	<0.0053	<0.011	<0.00011	<0.00011	<0.0053		<0.00011	<0.0053	<0.00021	<0.00021	<0.011	<0.011	<0.011	<0.0053	<0.0053	<0.0053	<0.011	<0.000053	<0.0053	<0.00011
	P54-ROX-103012	10/30/2012		40.70	NE	<0.0051	<0.0051	<0.0051	<0.01	<0.0001	<0.0001	<0.0051		<0.0001	<0.0051	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.0051	<0.0051 UJ	<0.0051	<0.01	<0.000051	<0.0051 UJ	<0.0001
	P54-ROX-011113	1/11/2013		41.56	NE	<0.0053 UJ	<0.0053	<0.0053	<0.011	<0.00011	<0.00011	<0.0053		<0.00011	<0.0053	<0.00021	<0.00021	<0.011	<0.011	<0.011	<0.0053	<0.0053	<0.0053	<0.011	0.000032 J	<0.0053	<0.00011
	P54-ROX-041013	4/10/2013		41.80	NE	<0.0057 UJ	<0.0057	<0.0057	<0.011	<0.00011	<0.00011	<0.0057		<0.00011	<0.0057	<0.00023	<0.00023	<0.011	<0.011	<0.011	<0.0057	<0.0057	<0.0057	<0.011	<0.000057	<0.0057	<0.00011
	P54-ROX-050313	5/3/2013		41.80	NE	<0.0056	<0.0056	<0.0056	<0.011	<0.00011	<0.00011	<0.0056		<0.00011	<0.0056	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.0056	<0.0056	<0.0056	<0.011	<0.000056	<0.0056	<0.00011
	P54-ROX-071113	7/11/2013		39.07	NE	<0.0052	<0.0052	<0.0052	<0.01	<0.0001	<0.0001	<0.0052		<0.0001	<0.0052	<0.00021 UJ	0.000083 J	<0.01	<0.01	<0.01 UJ	<0.0052	<0.0052	<0.0052	<0.01	<0.000049 U	<0.0052 UJ	<0.0001
	P54-ROX-100813	10/8/2013		39.94	NE	<0.0057	<0.0057	<0.0057	<0.011	<0.00011	<0.00011	<0.0057		<0.00011	<0.0057	<0.00023	<0.00023	<0.011	<0.011	<0.011	<0.0057	<0.0057	<0.0057	<0.011	<0.000057	<0.0057	<0.00011
	P54-ROX-011514	1/15/2014		42.20	NE	<0.0054	<0.0054	<0.0054	<0.011	<0.00011	<0.00011	<0.0054		<0.00011	<0.0054	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.0054	<0.0054	<0.0054	<0.011	<0.000054	<0.0054	<0.00011
	P54-ROX-040914	4/9/2014		42.80	NE	<0.006	<0.00062 U	<0.006	<0.012	<0.00012	<0.00012	<0.006		<0.00012	<0.006	<0.00024	<0.00024	<0.012	<0.012	<0.012	<0.006	<0.006	<0.006	<0.012	<0.00006	<0.006	<0.00012
	P54-ROX-071114	7/10/2014		41.71	NE	<0.0054	<0.00028 U	<0.0054	<0.011	<0.00011	<0.00011	<0.0054		<0.00011	<0.0054	0.00011 J	0.00013 J	<0.011	<0.011	<0.011	<0.0054	<0.0054	<0.0054	<0.011	<0.000051 U	<0.0054	<0.00011
	P54-ROX-100814	10/8/2014	38.00 - 63.00	40.88	NE	<0.0056	<0.0056	<0.0056	<0.011	<0.00011	<0.00011	<0.0056		<0.00011	<0.0056	<0.0022	<0.0022	<0.011	<0.011	<0.011	<0.0056	<0.0056	<0.0056	<0.011	<0.000056	<0.0056	<0.00011
P-55	P55-ROX-011912	1/19/2012	39.82 - 64.82	41.09	NE	<0.0052	<0.0052	<0.0052	<0.01	<0.0001	0.00038	<0.0052		<0.0001	<0.0052	0.0048	0.0076	<0.01	<0.01	<0.01 UJ	<0.0052	<0.0052	<0.0052	<0.01	0.00039	<0.0052	<0.0001
	P55-ROX-011912-D	1/19/2012		41.09	NE	<0.0054	<0.0054	<0.0054	<0.011	<0.00011	0.00032	<0.0054		0.00011	<0.0054	0.0046	0.0076	<0.011	<0.011	<0.011 UJ	<0.0054	<0.0054	<0.0054	<0.011	0.00036	0.0029 J	<0.00011
	P55-ROX-050912	5/9/2012		42.44	NE	<0.0051	<0.0051	<0.0051	<0.01	<0.0001	0.00069	<0.0051		<0.0001	<0.0051	0.0118	0.0179	<0.01	<0.01	<0.01	<0.0051	<0.0051	<0.0051	<0.01	0.00066	<0.0051	<0.0001
	P55-ROX-012113	1/21/2013	40.43 - 50.43	43.60	NE	<0.01	<0.01	<0.01	<0.001	<0.0001	0.00133	<0.002		<0.0001	<0.01		0.042	<0.01	<0.01	<0.002	<0.004	<0.02	<0.003	<0.004	0.00211	0.004 J	<0.0001
	P55-ROX-012113	1/21/2013		43.60	NE	<0.0051	0.00069 J	<0.0051	<0.01	<0.0001	0.00093	<0.0051		<0.0001	<0.0051	0.0176	0.0254	<0.01	0.0018 J	<0.01	<0.0051	<0.0051	<0.0051	<0.01	0.0017	0.0034 J	<0.0001
	P55-ROX-041513	4/15/2013		43.63	NE	<0.0052	<0.0052	<0.0052	<0.01	<0.0001	0.0013	<0.0052		<0.0001	<0.0052	0.0268	0.0389	<0.01	<0.01	<0.01	<0.0052	<0.0052	<0.0052	<0.01	0.0021	<0.0052	<0.0001
	P55-ROX-071613	7/16/2013		40.06	NE	<0.0056	<0.0056	<0.0056	<0.011	<0.00011	0.0015	<0.0056		<0.00011	<0.0056	0.0244	0.0353	<0.011 UJ	<0.011	<0.011	<0.0056	<0.0056	<0.0056	<0.011	0.0019	0.0048 J J	<0.00011
	P55-ROX-101013	10/10/2013		41.67	NE	<0.0055	<0.0055	<0.0055	<0.011	<0.00011	0.0014	<0.0055		<0.00011	<0.0055	0.0279	0.0415	<0.011	<0.011	<0.011	<0.0055	<0.0055	<0.0055	<0.011	0.0017	0.002 J	<0.00011
P-56	P56-ROX-011912	1/19/2012	40.82 - 65.82	41.81	NE	<0.0051	<0.00044 U	<0.0051	<0.01	<0.0001	0.00046	<0.0051		<0.0001	<0.0051	0.0186	0.024	<0.01	<0.01	<0.01 UJ	<0.0051	<0.0051	<0.0051	<0.01	0.0012	<0.0051	0.000036 J
	P56-ROX-050812	5/8/2012		43.09	NE	<0.0052	<0.0052	<0.0052	<0.01	<0.0001	0.00033	<0.0052		<0.0001	<0.0052	0.0186	0.0236	<0.01	<0.01	<0.01	<0.0052	<0.0052	<0.0052	<0.01	0.0011	<0.0052	<0.0001
	P56-ROX-080612	8/6/2012		43.60	NE	<0.0051	<0.00075 U	<0.0051	<0.01	<0.0001	0.0003	<0.0051		<0.0001	<0.0051	0.0143	0.0178	<0.01	<0.01	<0.01	<0.0051	<0.0051	<0.0051	<0.01	0.0013	<0.0051	<0.0001
	P56-ROX-103112	10/31/2012		44.80	NE	<0.0051	<0.0051	<0.0051	<0.01	<0.0001	0.00046	<0.0051		<0.0001	<0.0051	0.024	0.0307	<0.01	0.0011 J	<0.01	<0.0051	<0.0051 UJ	<0.0051	<0.01	0.0013	<0.0051 UJ	<0.0001
	P56-ROX-011713	1/17/2013		45.65	NE	<0.005	<0.005	<0.005	<0.01	<0.0001	0.00032	<0.005		<0.0001	<0.005	0.0147	0.0131	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.01	0.0012	0.0014 J	<0.0001
	P56-ROX-041213	4/12/2013		46.12	NE	<0.0055	<0.0055	<0.0055	<0.011	<0.00011	0.00032	<0.0055		<0.00011	<0.0055	0.0208	0.0239	<0.011	<0.011	<0.011	<0.0055	<0.0055	<0.0055	<0.011	0.0012	<0.0055	<0.00011
	P56-ROX-071513	7/15/2013		43.25	NE	<0.0055	<0.0055	<0.0055	<0.011	<0.00011	0.00059	<0.0055		<0.00011	<0.0055	0.0315	0.0431	<0.011 UJ	0.0064 J	<0.011	<0.0055	<0.0055	<0.0055	<0.011	0.0015	<0.0055 UJ	<0.00011
	P56-ROX-101013	10/10/2013		44.48	NE	<0.0055	<0.0055	<0.0055	<0.011	<0.00011	0.00044	<0.0055		<0.00011	<0.0055	0.0251	0.03	<0.011	<0.011	<0.011	<0.0055	<0.0055	<0.0055	<0.011	0.0013	<0.0055	<0.00011
	P56-ROX-012214	1/22/2014		46.35	NE	<0.0052	<0.0052	<0.0052	<0.01	<0.0001	0.00035	<0.0052		<0.0001	<0.0052	0.0193	0.0228	<0.01	<0.01	<0.01	<0.0052	<0.0052	<0.0052	<0.01	0.0012	<0.0052	<0.0001
	P56-ROX-041414	4/14/2014		47.32	NE	<0.0059	0.00051 J	<0.0059	<0.012	<0.00012	0.00038	<0.0059		<0.00012	<0.0059	0.0223	0.0269	<0.012	0.0008 J	<0.012	<0.0059	<0.0059	<0.0059	<0.012	0.0012	<0.0059	<0.00012
	P56-ROX-070814	7/8/2014		45.97	NE	<0.0056	<0.0056	<0.0056	<0.011	<0.00011	0.00036	<0.0056		<0.00011	<0.0056	0.0181	0.0243	<0.011	0.0165	<0.011	<0.0056	<0.0056	<0.0056	<0.011	0.001	<0.0056	<0.00011
	P56-ROX-101314	10/13/2014	40.82 - 65.82	45.05	NE	<0.0054	<0.00035 U	<0.0054	<0.011	<0.00011	0.00041	<0.0054		<0.00011	<0.0054	0.0235	0.0296	<0.011	<0.011	<0.011	<0.0054	<0.0054	<0.0054	<0.011	0.0015	<0.0054	<0.00011
P-57	P57-ROX-021312	2/13/2012	40.46 - 65.46	42.13	NE	<0.0051	<0.00046 U	<0.0051	<0.01	<0.0001	0.00087	<0.0051		<0.0001	<0.0051		0.0403	<0.01	<0.01	<0.01	<0.0051	<0.0051	<0.0051	<0.01	0.00051	0.297	<0.0001
	P57-ROX-050712	5/7/2012		42.92	NE	<0.0052	<0.0052	<0.0052	<0.01	<0.0001	0.00045	<0.0052		<0.0001	<0.0052	0.0169	0.0212	<0.01	0.0023 J	<0.01	<0.0052	<0.0052	<0.0052	<0.01	0.00035	0.141	<0.0001
	P57-ROX-080612	8/6/2012		43.53	NE	<0.005	<0.00087 U	<0.005	<0.01	<0.0001	0.0006	<0.005		<0.0001	<0.005	0.0244	0.0326	<0.01	0.0013 J	<0.01	<0.005	<0.005	<0.005	<0.01	0.00053	0.0697 J	<0.0001
	P57-ROX-080612-DUP	8/6/2012		43.53	NE	<0.005	<0.00089 U	<0.005	<0.01	<0.0001	0.00063	<0.005		<0.0001	<0.005	0.0242	0.0321	<0.01	0.0013 J	<0.01	<0.005	<0.005	<0.005	<0.01	0.00054	0.0921 J	<0.0001
	P57-ROX-110512	11/5/2012		44.98	NE	<0.005	<0.005	<0.005	<0.01	<0.0001	0.00062	<0.005		0.00005 J	<0.005	0.0249	0.0305	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.01	0.00048	0.0547 J	<0.0001
	P57-ROX-012913	1/29/2013		45.92	NE	<0.0059	<0.0059	<0.0059	<0.012	<0.00012	0.00094	<0.0059		<0.00012	<0.0059	0.0369	0.0447	<0.012	<0.012	<0.012	<0.0059	<0.0059	<0.0059	<0.012	0.00074	<0.0059 UJ	<0.00012
	P57-ROX-041113	4/11/2013		46.29	NE	<0.0051	<0.0051	<0.0051	<0.01	<0.0001	0.00076	<0.0051		<0.0001	<0.0051	0.0348	0.0453	<0.01	<0.01	<0.01	<0.0051	<0.0051	<0.0051	<0.01	0.00074	0.146	<0.0001
	P57-ROX-071613	7/16/2013		43.38	NE	<0.0056	<0.0056	<0.0056	<0.011	0.000038 J	0.0008	<0.0056		<0.00011	<0.0056	0.0267	0.0365	<0.011 UJ	0.0086 J	<0.011	<0.0056	<0.0056	<0.0056	<0.011	0.00073	0.164 J	<0.000052 U
	P57-ROX-101413	10/14/2013		44.38	NE	<0.0054	0.00049 J	<0.0054	<0.011	<0.00011	0.00067	<0.0054		<0.00011	<0.0054	0.0252	0.0324	<0.011	<0.011	<0.011	<0.0054	<0.0054 UJ	<0.0054	<0.011	0.00049	0.202	0.000047 J
	P57-ROX-020314	2/3/2014		46.57	NE	<0.0053	<0.0053	<0.0053	<0.011	<0.00011	0.00062	<0.0053		<0.00011	<0.0053	0.0234	0.0314	<0.011	0.0027 J	<0.011	<0.0053	<0.0053	<0.0053	<0.011	0.00052	0.168 J	<0.00011
	P57-ROX-041514	4/15/2014		46.70	NE	<0.0056	<0.00058 U	<0.0056	<0.011	<0.00011	0.00061	<0.0056		<0.00011	<0.0056	0.0238	0.032	<0.011	<0.011	<0.011	<0.0056	<0.0056 UJ	<0.0056	<0.011	0.00045 J	0.106 J	<0.00011
	P57-ROX-070814	7/8/2014		45.95	NE	<0.0053	0.00026 J	<0.0053	<0.011	<0.00011 UJ	0.00055	<0.0053	0.024 JN	<0.00011	<0.0053	0.022	0.0306	<0.011	0.0303	<0.011	<0.0053	<0.0053	<0.0053	<0.011	0.00047	0.141	<0.00011
	P57-ROX-070814-DUP	7/8/2014		45.95	NE	<0.0054	0.00027 J	<0.0054	<0.011	<0.00011 UJ	0.00054	<0.0054	0.023 JN	<0.00011	<0.0054	0.022	0.03	<0.011	0.0299	<0.011	<0.0054	<0.0054	<0.0054	<0.011	0.00048	0.136	<0.00011
	P57-ROX-101414	10/14/2014	40.46 - 65.46	45.00	NE	<0.0056	<0.00086 U	<0.0056	<0.011	<0.00011	0.00068	<0.0056		<0.00011	<0.0056	0.026	0.0345	<0.011	0.0152	<0.012	<0.0056	<0.0056	<0.0056	<0.011	0.00059	0.274 J	<0.00011
	P57-ROX-101414-DUP	10/14/2014		45.00	NE	<0.0058	<0.00082 U	<0.0058	<0.012	<0.00012	0.00065	<0.0058		<0.00012	<0.0058	0.0243	0.0338	<0.012	0.0138	<0.011	<0.0058	<0.0058	<0.0058	<0.012	0.00058	0.271 J	<0.00012

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TABLE 3
CUMULATIVE SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL RESULTS AND EXCEEDANCES

						SVOCs																							
						Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate	2,6-Dinitrotoluene	Fluoranthene	Fluorene	Hexachlorobenzene	Indene	Indeno(1,2,3-cd)pyrene	Isophorone (3,5,5-trimethyl-2-cyclohexene-1-one)	1-Methylnaphthalene	2-Methylnaphthalene	2-Methylphenol (o-Cresol)	3 & 4-Methylphenol (m & p-Cresol)	3-Nitroaniline	Nitrobenzene	N-Nitrosodimethylamine	N-Nitrosodiphenylamine	Pentachlorophenol	Phenanthrene	Phenol	Pyrene
					Screening Values (mg/L)		0.7 [1]	0.14 [2]	0.00031 [2]	0.28 [1]	0.28 [1]	0.00006 [2]		0.00043 [1]	1.4 [2]	0.49 [3]	0.028 [1]	0.35 [1]	0.35 [3]		0.014 [1]	0.0006 [3]	0.0032 [2]	0.001 [1]	0.21 [3]	0.1 [1]	0.21 [1]
Location	Sample ID	Sample Date	Screened Interval (ft btoc)	Depth to Water (ft btoc)	Product Thickness (ft)	Analytical Results (mg/L)																							
P-58	P58-ROX-011912	1/19/2012		39.73	NE	<0.0053	<0.00057 U	<0.0053	<0.011	0.000047 J	0.0017	<0.0053		<0.00011	<0.0053	0.0639	0.0904	<0.011	0.0171	<0.011 UJ	<0.0053	<0.0053	<0.0053	<0.011	0.00084	0.259	0.00012
	P58-ROX-011912-D	1/19/2012		39.73	NE	<0.0053	<0.00059 U	<0.0053	<0.011	0.000052 J	0.0018	<0.0053		<0.00011	<0.0053	0.0588	0.0821	<0.011	0.0156	<0.011 UJ	<0.0053	<0.0053	<0.0053	<0.011	0.0008	0.225	0.00012
	P58-ROX-050712	5/7/2012		40.90	NE	<0.0051	<0.0051	<0.0051	<0.01	<0.0001	0.0009 J	<0.0051		<0.0001	<0.0051	0.0351 J	0.0435 J	<0.01	0.0181	<0.01	<0.0051	<0.0051	<0.0051	<0.01	0.00056 J	0.161	0.0001
	P58-ROX-050712-DUP	5/7/2012		40.90	NE	<0.0052	<0.0052	<0.0052	<0.01	<0.0001	0.00067 J	<0.0052		<0.0001	<0.0052	0.0267 J	0.0338 J	<0.01	0.0122	<0.01	<0.0052	<0.0052	<0.0052	<0.01	0.00041 J	0.147	0.000076 J
	P58-ROX-080612	8/6/2012		41.63	NE	<0.005	<0.00053 U	<0.005	<0.01	0.000068 J	0.0014	<0.005		<0.0001	<0.005	0.0524	0.0691	<0.01	0.0146	<0.01	<0.005	<0.005	<0.005	<0.01	0.001	0.15	<0.0001 UJ
	P58-ROX-080612-DUP	8/6/2012		41.63	NE	<0.005	<0.00063 U	<0.005	<0.01	0.000066 J	0.0015	<0.005		<0.0001	<0.005	0.0596	0.079	<0.01	0.0195	<0.01	<0.005	<0.005	<0.005	<0.01	0.0011	0.19	0.00021 J
	P58-ROX-110612	11/6/2012		43.09	NE																								
	P58-ROX-121012	12/10/2012	40.21 - 65.21	43.09	NE	<0.0054 UJ	<0.0054	<0.0054	<0.011	<0.00011	0.0014	<0.0054		<0.00011	<0.0054	0.0616	0.0807	<0.011	0.0124	<0.011	<0.0054	<0.0054	<0.0054	<0.011	0.00085	0.178	0.00012
	P58-ROX-012213	1/22/2013		44.21	NE	<0.0054	<0.0054	<0.0054	<0.011	0.00024	0.003	<0.0054		0.000072 J	<0.0054	0.068	0.0846	<0.011	0.0198	<0.011	<0.0054	<0.0054	<0.0054	<0.011	0.0023	0.208	0.00077
	P58-ROX-041113	4/11/2013		44.40	NE	<0.0054	<0.0054	<0.0054	<0.011	0.00019	0.0022	<0.0054		<0.00011	<0.0054	0.0692	0.0961	<0.011	0.014	<0.011	<0.0054	<0.0054	<0.0054	<0.011	0.0021	0.0985	0.00055
	P58-ROX-071613	7/16/2013		41.49	NE	<0.0055	<0.0055	<0.0055	<0.011	0.000071 J	0.0013	<0.0055		<0.00011	<0.0055	0.0544	0.0708	<0.011 UJ	0.0359	<0.011	<0.0055	<0.0055	<0.0055	<0.011	0.00099	0.247	<0.0002 U
	P58-ROX-101413	10/14/2013		42.19	NE	<0.0054	0.00058 J	<0.0054	<0.011	0.000066 J	0.0014	<0.0054		<0.00011	<0.0054	0.0488	0.0628	<0.011	0.0481	<0.011	<0.0054	<0.0054 UJ	<0.0054	<0.011	0.00095	0.213	0.00021
	P58-ROX-020314	2/3/2014		44.66	NE	<0.0052	<0.0052	<0.0052	<0.01	0.000058 J	0.0011	<0.0052		<0.0001	<0.0052	0.0353	0.0474	<0.01	0.0073 J	<0.01	<0.0052	<0.0052	<0.0052	<0.01	0.00069	0.123 J	0.00014
	P58-ROX-041514	4/15/2014		45.66	NE	<0.0053 UJ	<0.0013 U	0.00072 J	<0.011 UJ	0.00079	0.0017	0.00088 J		0.00072	<0.0053 UJ	0.0284	0.0381	<0.011 UJ	0.0136 J	<0.011 UJ	<0.0053	0.0021 J J	<0.0053 UJ	<0.011 UJ	0.0013	0.123 J	0.00085
	P58-ROX-071814	7/18/2014		43.80	NE	<0.0055	<0.00032 U	<0.0055	<0.011	0.000062 J	0.0012	<0.0055		0.0005	<0.0055	0.0412	0.0554	<0.011	0.012	<0.011	<0.0055	<0.0055	<0.0055	<0.011	0.00092	0.173	0.00022
	P58-ROX-101514	10/15/2014	40.21 - 65.21	43.14	NE	<0.0054	<0.0054	<0.0054	<0.011	0.000064 J	0.0015	<0.0054		<0.00011	<0.0054	0.0504	0.0674	<0.011	0.0237	<0.011	<0.0054	<0.0054	<0.0054	<0.011	0.001	0.145	0.00024
P-59	P59-ROX-011912	1/19/2012		42.88	NE	<0.0057	<0.0005 U	<0.0057	<0.011	0.000073 J	0.0008	<0.0057		<0.00011	<0.0057	0.0175	0.0279	0.0045 J	0.0092 J	<0.011 UJ	<0.0057	<0.0057	0.00079 J	<0.011	0.00081	0.0906 J	0.00013
	P59-ROX-011912-DUP	1/19/2012		42.88	NE	<0.0051	<0.00041 U	<0.0051	<0.01	0.000073 J	0.00063	<0.0051		<0.0001	<0.0051	0.0178	0.029	<0.01	0.0076 J	<0.01 UJ	<0.0051	<0.0051	0.00087 J	<0.01	0.00081	0.0646 J	0.00013
	P59-ROX-050912	5/9/2012		44.11	NE	<0.005	<0.005	<0.005	<0.01	0.000062 J	0.00034	<0.005	0.0056 JN	<0.0001	<0.005	0.0117	0.018	<0.01	0.0062 J	<0.01	<0.005	<0.005	<0.005	<0.01	0.00053	0.0241	0.000092 J
	P59-ROX-080212	8/2/2012		44.07	NE	<0.0053	<0.0053	<0.0053	<0.011	0.00015	0.00048	<0.0053		<0.00011	<0.0053	0.0136	0.0207	0.0018 J	0.0032 J	<0.011	<0.0053	<0.0053	<0.0053	<0.011	0.001	0.0419	0.00021
	P59-ROX-110212	11/2/2012		45.98	NE	<0.0053	<0.0053	<0.0053	<0.011	0.000063 J	0.0005	<0.0053		<0.00011	<0.0053	0.0187	0.0282	0.0065 J	0.0137	<0.011	<0.0053	<0.0053	<0.0053	<0.011	0.00075	0.0766 J	0.00009 J
	P59-ROX-110212-DUP	11/2/2012		45.98	NE	<0.0052	<0.0052	<0.0052	<0.01	0.000066 J	0.00048	<0.0052		<0.0001	<0.0052	0.0179	0.0268	0.0056 J	0.0116	<0.01	<0.0052	<0.0052	<0.0052	<0.01	0.00073	0.0656 J	0.000093 J
	P59-ROX-013013	1/30/2013	47.91 - 72.91	46.60	NE	<0.0052 UJ	0.0022 J	<0.0052	<0.01	<0.000079 U	0.00069	<0.0052		<0.0001	<0.0052	0.0222	0.0305	0.154	0.107	<0.01 UJ	<0.0052	<0.0052 UJ	<0.0052	<0.01	0.001	0.141 J	<0.00011 U
	P59-ROX-041213	4/12/2013		46.95	NE	<0.0054	<0.0054	<0.0054	<0.011	0.000077 J	0.00064	<0.0054		<0.00011	<0.0054	0.0247	0.0369	0.174	0.0842	<0.011	<0.0054	<0.0054	<0.0054	<0.011	0.0012	0.119	0.000098 J
	P59-ROX-041213-DUP	4/12/2013		46.95	NE	<0.0053	<0.0053	<0.0053	<0.011	0.000078 J	0.00065	<0.0053		<0.00011	<0.0053	0.0265	0.0383	0.154	0.0794	<0.011	<0.0053	<0.0053	<0.0053	<0.011	0.0012	0.101	0.0001 J
	P59-ROX-071613	7/16/2013		44.13	NE	<0.0054	<0.0054	<0.0054	<0.011	0.000061 J	0.00063	<0.0054		<0.00011	<0.0054	0.0189	0.0302	0.17	0.042	<0.011	<0.0054	<0.0054	<0.0054	<0.011	0.00087	0.121 J	<0.000078 U
	P59-ROX-101013	10/10/2013		45.50	NE	<0.0054	<0.0054	0.00091 J	<0.011	0.00015	0.0007	<0.0054		<0.00011	<0.0054	0.0192	0.0305	0.201	0.0528	<0.011	<0.0054	<0.0054	<0.0054	<0.011	0.0014	0.0524	0.00028
	P59-ROX-020314	2/3/2014		47.35	NE	<0.0052	<0.0052	<0.0052	<0.01	0.00012	0.00067	<0.0052		<0.0001	<0.0052	0.0141	0.0214	0.31 J	0.0142	<0.01	<0.0052	<0.0052	<0.0052	<0.01	0.0014	0.0444 J	0.00019
	P59-ROX-041514	4/15/2014		48.60	NE	<0.0053	<0.0053	<0.0053	<0.011	0.00015	0.00066	<0.0053		<0.00011	<0.0053	0.0233	0.0317	<0.011	0.0186 J	<0.011	<0.0053	<0.0053 UJ	<0.0053	<0.011	0.0016	0.13 J	0.0003
	P59-ROX-070814	7/8/2014		47.69	NE	<0.0057	0.00045 J	<0.0057	<0.011	0.000053 J J	0.00046	<0.0057		<0.00011	<0.0057	0.0181	0.0291	0.0793	0.0184	<0.011	<0.0057	<0.0057	<0.0057	<0.011	0.00088	<0.0057	0.0001 J
	P59-ROX-101414	10/14/2014	47.91 - 72.91	46.18	NE	<0.0054	<0.00042 U	<0.0054	<0.011	<0.00054	0.00087	<0.0054		<0.00054	<0.0054	0.0268	0.0425	0.0387	0.0092 J	<0.011	<0.0054	<0.0054	<0.0054	<0.011	0.0015	0.0361	<0.00054
P-66	P66-ROX-051012	5/10/2012		32.48	NE	<0.005	0.00054 J	<0.005	<0.01	0.000056 J	0.0015	<0.005		<0.0001	<0.005	0.0647	0.025	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.01	0.00057	<0.005	0.000082 J
	P66-ROX-080312	8/3/2012		30.51	NE	<0.0053	<0.0053	<0.0053	<0.011	0.000082 J	0.0011	<0.0053		<0.00011	<0.0053	0.0541	0.028	<0.011	<0.011	<0.011	<0.0053	<0.0053	<0.0053	<0.011	0.00057	<0.0053	0.00013
	P66-ROX-103112	10/31/2012		34.75	NE	<0.005	<0.005	<0.005	<0.01	<0.000051 U	0.0017	<0.005		<0.0001	<0.005	0.0689	0.0268	<0.01	<0.01	<0.01	<0.005	<0.005 UJ	<0.005	<0.01	0.00054	<0.005 UJ	<0.00007 U
	P66-ROX-011813	1/18/2013		35.70	NE	<0.0053 UJ	<0.0053	<0.0053	<0.011	0.000076 J	0.0019	<0.0053		<0.00011	<0.0053	0.0655	0.0315	<0.011	<0.011	<0.011	<0.0053	<0.0053	<0.0053	<0.011	0.00082	0.0019 J	0.00011
	P66-ROX-041113	4/11/2013		36.03	NE	<0.0053	<0.0053	<0.0053	<0.011	0.000072 J	0.0017	<0.0053		<0.00011	<0.0053	0.0681	0.0131	<0.011	<0.011	<0.011	<0.0053	<0.0053	<0.0053	<0.011	0.00091	<0.0053	0.000087 J
	P66-ROX-071213	7/12/2013	34.72 - 59.72	33.20	NE	<0.0056 UJ	<0.0056	<0.0056	<0.011	<0.00019 U	0.0018	<0.0056		0.00017	<0.0056	0.0688	0.0642	<0.011	<0.011	<0.011	<0.0056	<0.0056 UJ	<0.0056	<0.011	0.00088	0.0035 J J	<0.0002 U
	P66-ROX-101013	10/10/2013		33.66	NE	<0.0056	<0.0056	<0.0056	<0.011	0.000052 J	0.0013	<0.0056		<0.00011	<0.0056	0.0571	0.0218	<0.011	0.0034 J	<0.011	<0.0056	<0.0056	<0.0056	<0.011	0.0005	<0.0056	0.00009 J
	P66-ROX-110713	11/7/2013		33.66	NE																								
	P66-ROX-012914	1/29/2014		36.39	NE	<0.0053	<0.0053	<0.0053	<0.011	0.000065 J	0.0016	<0.0053		0.000041 J	<0.0053	0.0701	0.0284	<0.011	<0.011	<0.011	<0.0053	<0.0053	<0.0053	<0.011	0.00077	<0.0053	0.000099 J
	P66-ROX-041114	4/11/2014		37.10	NE	<0.0058	<0.00088 U	<0.0058	<0.012	<0.00012	0.0013	<0.0058		<0.00012	<0.0058	0.0649	0.023	<0.012	<0.012	<0.012	<0.0058	<0.0058	<0.0058	<0.012	0.00049	<0.0058	0.000049 J
	P66-ROX-070714	7/7/2014		35.60	NE	<0.0056	0.0003 J	<0.0056	<0.011	<0.00011	0.00078	<0.0056		<0.00011	<0.0056	0.0445	0.006	<0.011	<0.011	<0.011	<0.0056	<0.0056	<0.0056	<0.011	0.00041 J	<0.0056	<0.00011
	P66-ROX-101414	10/14/2014	34.72 - 59.72	34.48	NE	<0.0055	<0.00066 U	<0.0055	<0.011	<0.00011	0.0011	<0.0055		<0.00011	<0.0055	0.0595	0.0075	<0.011	<0.011	<0.011	<0.0055	<0.0055	<0.0055	<0.011	0.00064	<0.0055	0.000043 J
P-74	P74-ROX-011912	1/19/2012		38.77	NE	<0.0048	<0.0048	<0.0048	<0.0095	<0.000095	<0.000095	<0.0048		<0.000095	<0.0048	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095 UJ	<0.0048	<0.0048	<0.0048	<0.0095	<0.000048	0.002 J	<0.000095
	P74-ROX-050712	5/7/2012		39.92	NE	<0.0052	<0.0052	<0.0052	<0.01	<0.0001	<0.0001	<0.0052		<0.0001	<0.0052	0.00016 J	<0.00021	<0.01	<0.01	<0.01	<0.0052	<0.0052	<0.0052	<0.01	0.000047 J	0.0089	<0.0001
	P74-ROX-080612	8/6/2012		40.71	NE	<0.005	<0.00082 U	<0.005	<0.01	<0.0001	0.00021	<0.005		<0.0001	<0.005	0.009	0.0103	0.0014 J	0.001 J	<0.01	<0.005	<0.005	<0.005	<0.01	<0.00012 U	0.0158	<0.0001
	P74-ROX-110112	11/1/2012		41.72	NE	<0.0052	<0.0052	<0.0052	<0.01	<0.0001	0.0003	<0.0052		<0.0001	<0.0052	0.0123	0.0136	0.0054 J	0.002 J	<0.01	<0.0052	<0.0052 UJ	<0.0052	<0.01	0.00013	0.0307 J	<0.0001
	P74-ROX-011713	1/17/2013		42.65	NE	<0.0051	<0.0051	<0.0051	<0.01	0.000038 J	0.00038	<0.0051		<0.0001	<0.0051	0.0156	0.0198	<0.01	0.001 J	<0.01	<0.0051	<0.0051	<0.0051	<0.01	0.00023	0.0298	0.000048 J
	P74-ROX-041113	4/11/2013	44.43 - 69.43	42.83	NE	<0.0052	<0.0052	<0.0052	<0.01	<0.0001	<0.0001	<0.0052		<0.0001	<0.0052	<0.00021	<0.00021	<0.01	<0.01	<0.01	<0.0052	<0.0052	<0.0052	<0.01	<0.000052	<0.0046 U	<0.0001
	P74-ROX-071513	7/15/2013		40.11	NE	<0.0054	<0.0054	<0.0054	<0.011	0.00014	0.00011	<0.0054		<0.00011	<0.0054	0.0019	0.00019 J	<0.011	<0.011	<0.011	<0.0054	<0.0054	<0.0054	<0.011	<0.00008 U	0.008	0.000074 J
	P74-ROX-101413	10/14/2013		41.72	NE	<0.0054	0.00047 J	<0.0054	<0.011	0.00015	0.00025	<0.0054		<0.00011	<0.0054	0.0073	0.0079	<0.011	<0.011	<0.011	<0.0054	<0.0054 UJ	<0.0054	<0.011	0.000079	0.0125	0.000057 J
	P74-ROX-012414	1/24/2014		43.35	NE	<0.0051	0.00048 J	<0.0051	<0.01	0.000088 J	0.00028	<0.0051		<0.0001	<0.0051	0.0088	0.0106	<0.01	<0.01	<0.01	<0.0051	<0.0051	<0.0051	<0.01	<0.00014 U	0.0278	0.000049 J
	P74-ROX-041514	4/15/2014		44.74	NE	<0.0059	<0.0014 U	<0.0059	<0.012	<0.00012	<0.00012	<0.0059		<0.00012	<0.0059	0.0017 J	0.0022 J	<0.012	<0.012	<0.012	<0.0059	<0.0059 UJ	<0.0059	<0.012	0.000054 JB J	<0.0059 UJ	<0.00012
	P74-ROX-070814	7/8/2014		43.02	NE	<0.0057	0.00039 J	<0.0057	<0.011	<0.00011	0.00011	<0.0057		<0.00011	<0.0057	0.0034	0.003	<0.011	<0.011	<0.011	<0.0057	<0.0057	<0.0057	<0.011	0.000054 J	<0.0057	<0.00011
	P74-ROX-101414	10/14/2014	44.43 - 69.43	41.48	NE	<0.005	<0.0019 U	<0.005	<0.01	<0.0001	<0.0001	<0.005		<0.0001	<0.005	<0.002	<0.002	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.01	<0.00005	<0.005	<0.0001

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
CUMULATIVE SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL RESULTS AND EXCEEDANCES

						SVOCs																							
						Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate	2,6-Dinitrotoluene	Fluoranthene	Fluorene	Hexachlorobenzene	Indene	Indeno(1,2,3-cd)pyrene	Isophorone (3,5,5-trimethyl-2-cyclohexene-1-one)	1-Methylnaphthalene	2-Methylnaphthalene	2-Methylphenol (o-Cresol)	3 & 4-Methylphenol (m & p-Cresol)	3-Nitroaniline	Nitrobenzene	N-Nitrosodimethylamine	N-Nitrosodiphenylamine	Pentachlorophenol	Phenanthrene	Phenol	Pyrene
						Screening Values (mg/L)	0.7 [1]	0.14 [2]	0.00031 [2]	0.28 [1]	0.28 [1]	0.00006 [2]		0.00043 [1]	1.4 [2]	0.49 [3]	0.028 [1]	0.35 [1]	0.35 [3]		0.014 [1]	0.0006 [3]	0.0032 [2]	0.001 [1]	0.21 [3]	0.1 [1]	0.21 [1]
Location	Sample ID	Sample Date	Screened Interval (ft btoc)	Depth to Water (ft btoc)	Product Thickness (ft)	Analytical Results (mg/L)																							
P-93A	P93A-ROX-012012	1/20/2012	48.17 - 63.17	41.66	NE	<0.0048	<0.00038 U	<0.0048	<0.0095	<0.000095	<0.000095	<0.0048		<0.000095	<0.0048	0.0133	0.0188	<0.0095	0.0029 J	<0.0095	<0.0048	<0.0048	<0.0048	<0.0095	<0.00022 U	0.234	<0.000095
	P93A-ROX-050812	5/8/2012		42.75	NE	<0.0051	<0.0051	<0.0051	<0.01	<0.0001	0.00021	<0.0051		<0.0001	<0.0051	0.0121	0.0151	<0.01	0.0014 J	<0.01	<0.0051	<0.0051	<0.0051	<0.01	0.00021	<0.0051	<0.0001
	P93A-ROX-080912	8/9/2012		43.66	NE	<0.0054	<0.0054	<0.0054	<0.011	<0.00011	0.00021	<0.0054		<0.00011	<0.0054	0.0097	0.013	<0.011	0.00096 J	<0.011	<0.0054	<0.0054	<0.0054	<0.011	0.00025	0.208	<0.00011
	P93A-ROX-110712	11/7/2012		45.00	NE	<0.0052	<0.0052	<0.0052	<0.01	<0.0001	0.00029	<0.0052		<0.0001	<0.0052	0.015	0.0194	<0.01	<0.01	<0.01	<0.0052	<0.0052	<0.0052	<0.01	0.00028 B	0.19	<0.0001
	P93A-ROX-110712-DUP	11/7/2012		45.00	NE	<0.0052	<0.0052	<0.0052	<0.01	<0.0001	0.00037	<0.0052		<0.0001	<0.0052	0.016	0.0206	<0.01	<0.01	<0.01	<0.0052	<0.0052	<0.0052	<0.01	0.00034 B	0.217	<0.0001
	P93A-ROX-012313	1/23/2013		45.89	NE	<0.0052 UJ	<0.0052	<0.0052	<0.01	<0.0001	0.00021	<0.0052		<0.0001	<0.0052	0.0096	0.0093	<0.01	<0.01	<0.01	<0.0052	<0.0052	<0.0052	<0.01	0.00024	0.168	<0.0001
	P93A-ROX-012313-DUP	1/23/2013		45.89	NE	<0.0052 UJ	<0.0052	<0.0052	<0.01	<0.0001	0.00019	<0.0052		<0.0001	<0.0052	0.0094	0.009	<0.01	<0.01	<0.01	<0.0052	<0.0052	<0.0052	<0.01	0.00023	0.165	<0.0001
	P93A-ROX-041113	4/11/2013		46.29	NE	<0.005	<0.005	<0.005	<0.01	0.000046 J	0.0003	<0.005		<0.0001	<0.005	0.0146 J	0.0098	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.01	0.00035	0.2	0.00004 J
	P93A-ROX-041113-DUP	4/11/2013		46.29	NE	<0.005	<0.005	<0.005	<0.01	<0.0001	0.00025	<0.005		<0.0001	<0.005	0.0146 J	0.0096	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.01	0.00024	0.179	<0.0001
	P93A-ROX-071813	7/18/2013		43.25	NE	<0.0056	<0.0056	<0.0056	<0.011	<0.00011	0.00023	<0.0056		<0.00011	<0.0056	0.0089	0.0062	<0.011	<0.011	<0.011	<0.0056	<0.0056	<0.0056	<0.011	0.00021	0.107	<0.00011
	P93A-ROX-101113	10/11/2013		44.18	NE	<0.005	<0.005	<0.005	<0.01	<0.0001	0.00028	<0.005		<0.0001	<0.005	0.0128	0.0085	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.01	0.00013	0.0837 J	<0.0001
	P93A-ROX-012914	1/29/2014		46.53	NE	<0.0054	<0.0054	<0.0054	<0.011	<0.00011	0.00032	<0.0054		<0.00011	<0.0054	0.0133	0.0072	<0.011	<0.011	<0.011	<0.0054	<0.0054	<0.0054	<0.011	0.00022 B	0.105	<0.00011
	P93A-ROX-041714	4/17/2014		47.41	NE	<0.0056	<0.0012 U	<0.0056	<0.011	<0.00011	0.00027	<0.0056		<0.00011	<0.0056	0.0086	0.0048	<0.011	<0.011	<0.011	<0.0056	<0.0056	<0.0056	<0.011	0.00018 B J	0.0735	<0.00011
	P93A-ROX-071814	7/18/2014		45.70	NE	<0.0057	<0.00077 U	<0.0057	<0.011	<0.00011	0.00024	<0.0057		<0.00011	<0.0057	0.0084	0.0053	<0.011	<0.011	<0.011	0.0059	<0.0057	<0.0057	<0.011	0.00017 B	0.0355	<0.00011
	P93A-ROX-071814-DUP	7/18/2014		45.70	NE	<0.0057	<0.00041 U	<0.0057	<0.011	<0.00011	0.00025	<0.0057		<0.00011	<0.0057	0.0095	0.0062	<0.011	<0.011	<0.011	0.0052 J	<0.0057	<0.0057	<0.011	0.00017 B	0.0396	<0.00011
	P93A-ROX-101514	10/15/2014	48.17 - 63.17	45.06	NE	<0.0052	0.00024 J	<0.0052	<0.01	<0.0001	0.00037	<0.0052		<0.0001	<0.0052	0.0114	0.0095	<0.01	<0.01	<0.01	0.0052	<0.0052	<0.0052	<0.01	0.0003	0.0471	<0.0001
	P93A-ROX-101514-DUP	10/15/2014		45.06	NE	<0.0054 UJ	0.00046 J J	<0.0054 UJ	<0.011 UJ	<0.00011 UJ	0.00039 J	<0.0054 UJ		<0.00011 UJ	<0.0054 UJ	0.0122 J	0.0101 J	<0.011 UJ	<0.011 UJ	<0.011 UJ	0.0011 J J	<0.0054 UJ	<0.0054 UJ	<0.011 UJ	0.0003 J	0.05 J	<0.00011 UJ
P-93B	P93B-ROX-012012	1/20/2012	74.60 - 76.60	41.72	NE	<0.0048	<0.0048	<0.0048	<0.0095	<0.000095	<0.000095	<0.0048		<0.000095	<0.0048	<0.00019	<0.00019	<0.0095	<0.0095	<0.0095	<0.0048	<0.0048	<0.0048	<0.0095	<0.000048	0.107	<0.000095
	P93B-ROX-050812	5/8/2012		42.79	NE	<0.0051	<0.0051	<0.0051	<0.01	<0.0001	<0.0001	<0.0051		<0.0001	<0.0051	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.0051	<0.0051	<0.0051	<0.01	<0.000051	<0.0051	<0.0001
	P93B-ROX-080912	8/9/2012		43.69	NE	<0.0054	<0.0054	<0.0054	<0.011	<0.00011	<0.00011	<0.0054		<0.00011	<0.0054	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.0054	<0.0054	<0.0054	<0.011	<0.000054	0.178	<0.00011
	P93B-ROX-110712	11/7/2012		45.05	NE	<0.0051	<0.0051	<0.0051	<0.01	<0.0001	<0.0001	<0.0051		<0.0001	<0.0051	0.00026	0.00045 B	<0.01	<0.01	<0.01	<0.0051	<0.0051	<0.0051	<0.01	<0.000051	0.13	<0.0001
	P93B-ROX-110712-DUP	11/7/2012		45.05	NE	<0.005	<0.005	<0.005	<0.01	<0.0001	<0.0001	<0.005		<0.0001	<0.005	0.0003	0.0005 B	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.01	<0.00005	0.114	<0.0001
	P93B-ROX-012313	1/23/2013		45.89	NE	0.00024 J J	0.003 J	<0.0053	<0.011	0.00013	0.00012	0.00058 J		0.00012	<0.0053	<0.00021	0.00012 J	<0.011	0.0014 J	<0.011	<0.0053	<0.0053	<0.0053	<0.011	0.00016	0.176	0.00013
	P93B-ROX-041113	4/11/2013		46.32	NE	<0.0051	0.0013 J	<0.0051	<0.01	<0.0001	<0.0001	<0.0051		<0.0001	<0.0051	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.0051	<0.0051	<0.0051	<0.01	<0.000051	0.122	<0.0001
	P93B-ROX-071813	7/18/2013		43.30	NE	<0.0056	0.0005 J	<0.0056	<0.011	<0.00011	<0.00011	<0.0056		<0.00011	<0.0056	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.0056	<0.0056	<0.0056	<0.011	0.000034 J	0.151	<0.00011
	P93B-ROX-101613	10/16/2013		44.43	NE	<0.005	<0.005	<0.005	<0.01	<0.0001	<0.0001	<0.005		<0.0001	<0.005	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.01	<0.00005	0.069	<0.0001
	P93B-ROX-101613-DUP	10/16/2013		44.43	NE	<0.0051	<0.0051	<0.0051	<0.01	<0.0001	<0.0001	<0.0051		<0.0001	<0.0051	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.0051	<0.0051	<0.0051	<0.01	<0.000051	0.082	<0.0001
	P93B-ROX-012814	1/28/2014		46.58	NE	<0.0055	0.00045 J	<0.0055	<0.011	<0.00011	<0.00011	<0.0055		<0.00011	<0.0055	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.0055	<0.0055	<0.0055	<0.011	<0.000022 U	0.074	<0.00011
	P93B-ROX-012814-DUP	1/28/2014		46.58	NE	<0.0051	0.00048 J	<0.0051	<0.01	<0.0001	<0.0001	<0.0051		<0.0001	<0.0051	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.0051	<0.0051	<0.0051	<0.01	<0.000024 U	0.0927	<0.0001
	P93B-ROX-041714	4/17/2014		47.46	NE	<0.0051	<0.0024 U	<0.0051	<0.01	<0.0001	<0.0001	<0.0051		<0.0001	<0.0051	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.0051	<0.0051	<0.0051	<0.01	<0.000051	0.0719	<0.0001
	P93B-ROX-041714-DUP	4/17/2014		47.46	NE	<0.0053	<0.00098 U	<0.0053	<0.011	<0.00011	<0.00011	<0.0053		<0.00011	<0.0053	<0.00021	<0.00021	<0.011	<0.011	<0.011	<0.0053	<0.0053	<0.0053	<0.011	<0.000053	0.0861	<0.00011
	P93B-ROX-071714	7/17/2014		45.75	NE	<0.0052	<0.00046 U	<0.0052	<0.01	<0.0001	<0.0001	<0.0052		<0.0001	<0.0052	<0.00021	<0.00021	<0.01	<0.01	<0.01	<0.0052	<0.0052	<0.0052	<0.01	<0.000023 U	<0.0052 UJ	<0.0001
	P93B-ROX-101514	10/15/2014	74.60 - 76.60	45.15	NE	<0.0056	0.00024 J	<0.0056	<0.011	<0.00011	<0.00011	<0.0056		<0.00011	<0.0056	<0.0022	<0.0022	<0.011	<0.011	<0.011	<0.0056	<0.0056	<0.0056	<0.011	<0.000056	0.128	<0.00011
P-93C	P93C-ROX-012012	1/20/2012	94.26 - 96.26	41.57	NE	<0.0051	<0.0051	<0.0051	<0.01	<0.0001	<0.0001	<0.0051		<0.0001	<0.0051	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.0051	<0.0051	<0.0051	<0.01	<0.000051	<0.0051	<0.0001
	P93C-ROX-050812	5/8/2012		42.68	NE	<0.0053	<0.0053	<0.0053	<0.011	<0.00011	<0.00011	<0.0053		<0.00011	<0.0053	<0.00021	<0.00021	<0.011	<0.011	<0.011	<0.0053	<0.0053	<0.0053	<0.011	<0.000053	<0.0053	<0.00011
	P93C-ROX-080912	8/9/2012		43.57	NE	<0.0052	<0.0052	<0.0052	<0.01	<0.0001	<0.0001	<0.0052		<0.0001	<0.0052	<0.00021	<0.00021	<0.01	<0.01	<0.01	<0.0052	<0.0052	<0.0052	<0.01	<0.000052	<0.0052	<0.0001
	P93C-ROX-110812	11/8/2012		45.12	NE	<0.005	<0.005	<0.005	<0.01	<0.0001	<0.0001	<0.005		<0.0001	<0.005	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.01	<0.00005	<0.005	<0.0001
	P93C-ROX-012313	1/23/2013		45.78	NE	<0.0055 UJ	0.0025 J	<0.0055	<0.011	<0.00011	<0.00011	<0.0055		<0.00011	<0.0055	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.0055	<0.0055	<0.0055	<0.011	<0.000055	<0.0055	<0.00011
	P93C-ROX-041213	4/12/2013		46.21	NE	<0.005 UJ	<0.005	<0.005	<0.01	<0.0001	<0.0001	<0.005		<0.0001	<0.005	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.005	<0.005 UJ	<0.005	<0.01	<0.00005	<0.005	<0.0001
	P93C-ROX-071813	7/18/2013		43.31	NE	<0.0056	<0.0056	<0.0056	<0.011	<0.00011	<0.00011	<0.0056		<0.00011	<0.0056	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.0056	<0.0056	<0.0056	<0.011	0.000026 J	0.0352	<0.00011
	P93C-ROX-080813	8/8/2013		43.31	NE																						
	P93C-ROX-101613	10/16/2013		44.31	NE	<0.0051	<0.0051	<0.0051	<0.01	<0.0001	<0.0001	<0.0051		<0.0001	<0.0051	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.0051	<0.0051	<0.0051	<0.01	<0.000051	0.005 J	<0.0001
	P93C-ROX-012414	1/24/2014		46.44	NE	<0.0051	0.00051 J	<0.0051	<0.01	<0.0001	<0.0001	<0.0051		<0.0001	<0.0051	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.0051	<0.0051	<0.0051	<0.01	<0.000051	<0.0051	<0.0001
	P93C-ROX-041714	4/17/2014		47.34	NE	<0.0052	<0.00048 U	<0.0052	<0.01	<0.0001	<0.0001	<0.0052		<0.0001	<0.0052	<0.00021	<0.00021	<0.01	<0.01	<0.01	<0.0052	<0.0052	<0.0052	<0.01	<0.000052	<0.0052 UJ	<0.0001
	P93C-ROX-071714	7/17/2014		45.61	NE	<0.0052	<0.00035 U	<0.0052	<0.01	<0.0001	<0.0001	<0.0052		<0.0001	<0.0052	<0.00021	<0.00021	<0.01	<0.01	<0.01	<0.0052	<0.0052	<0.0052	<0.01	<0.000024 U	<0.0087 UJ	<0.0001
	P93C-ROX-101514	10/15/2014	94.26 - 96.26	44.99	NE	<0.0056	<0.0056	<0.0056	<0.011	<0.00011	<0.00011	<0.0056		<0.00011	<0.0056	<0.0022	<0.0022	<0.011	<0.011	<0.011	<0.0056	<0.0056	<0.0056	<0.011	<0.000056	<0.0056	<0.00011

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
CUMULATIVE SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL RESULTS AND EXCEEDANCES

						SVOCs																							
						Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate	2,6-Dinitrotoluene	Fluoranthene	Fluorene	Hexachlorobenzene	Indene	Indeno(1,2,3-cd)pyrene	Isophorone (3,5,5-trimethyl-2-cyclohexene-1-one)	1-Methylnaphthalene	2-Methylnaphthalene	2-Methylphenol (o-Cresol)	3 & 4-Methylphenol (m & p-Cresol)	3-Nitroaniline	Nitrobenzene	N-Nitrosodimethylamine	N-Nitrosodiphenylamine	Pentachlorophenol	Phenanthrene	Phenol	Pyrene
Screening Values (mg/L)							0.7 [1]	0.14 [2]	0.00031 [2]	0.28 [1]	0.28 [1]	0.00006 [2]		0.00043 [1]	1.4 [2]	0.49 [3]	0.028 [1]	0.35 [1]	0.35 [3]		0.014 [1]	0.0006 [3]	0.0032 [2]	0.001 [1]	0.21 [3]	0.1 [1]	0.21 [1]
Location	Sample ID	Sample Date	Screened Interval (ft btoc)	Depth to Water (ft btoc)	Product Thickness (ft)	Analytical Results (mg/L)																							
P-93D	P93D-ROX-012012	1/20/2012	125.75 - 127.75	41.77	NE	<0.0054	<0.0054	<0.0054	<0.011	<0.00011	<0.00011	<0.0054		<0.00011	<0.0054	<0.00022	<0.00006 U	<0.011	<0.011	<0.011	<0.0054	<0.0054	<0.0054	<0.011	<0.000054	<0.0054	<0.00011
	P93D-ROX-050812	5/8/2012		42.96	NE	<0.0051	<0.0051	<0.0051	<0.01	<0.0001	<0.0001	<0.0051		<0.0001	<0.0051	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.0051	<0.0051	<0.0051	<0.01	<0.000051	<0.0051	<0.0001
	P93D-ROX-080812	8/8/2012		43.71	NE	<0.0052	<0.0052	<0.0052	<0.01	<0.0001	<0.0001	<0.0052		<0.0001	<0.0052	0.0004	<0.00042 U	0.00076 J	0.0011 J	<0.01	<0.0052	<0.0052	<0.0052	<0.01	0.000054	<0.0052	<0.0001
	P93D-ROX-110812	11/8/2012		NM	NE	<0.0055	<0.0055	<0.0055	<0.011	<0.00011	<0.00011	<0.0055		<0.00011	<0.0055	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.0055	<0.0055	<0.0055	<0.011	<0.000055	<0.0055	<0.00011
	P93D-ROX-012213	1/22/2013		44.21	NE	<0.0053	<0.0053	<0.0053	<0.011	<0.00011	<0.00011	<0.0053		<0.00011	<0.0053	0.00027	0.00036	<0.011	<0.011	<0.011	<0.0053	<0.0053	<0.0053	<0.011	0.000042 J	<0.0053	<0.00011
	P93D-ROX-041113	4/11/2013		46.37	NE	<0.0052	<0.0052	<0.0052	<0.01	<0.0001	<0.0001	<0.0052		<0.0001	<0.0052	<0.00021	<0.00021	<0.01	<0.01	<0.01	<0.0052	<0.0052	<0.0052	<0.01	<0.000052	<0.0087 U	<0.0001
	P93D-ROX-071213	7/12/2013		43.51	NE	<0.0056 UJ	0.00045 J	<0.0056	<0.011	<0.00011	<0.00011	<0.0056		<0.00011	<0.0056	<0.00022	<0.000059 U	<0.011	<0.011	<0.011	<0.0056	<0.0056 UJ	<0.0056	<0.011	<0.000056	<0.0056 UJ	<0.00011
	P93D-ROX-101113	10/11/2013		44.24	NE	<0.005	<0.005	<0.005	<0.01	0.000087 J	<0.0001	<0.005		<0.0001	<0.005	<0.0002	<0.0002	<0.01 UJ	<0.01 UJ	<0.01	<0.005	<0.005	<0.005	<0.01 UJ	<0.00005	<0.005 UJ	0.000084 J
	P93D-ROX-013114	1/31/2014		46.62	NE	<0.0053	<0.0053	<0.0053	<0.011	<0.00011	<0.00011	<0.0053		<0.00011	<0.0053	<0.00021	<0.00021	<0.011	<0.011	<0.011	<0.0053	<0.0053	<0.0053	<0.011	<0.000024 U	<0.0053	<0.00011
	P93D-ROX-041414	4/14/2014		47.54	NE	<0.0053	0.00036 J	<0.0053	<0.011	<0.00011	<0.00011	<0.0053		<0.00011	<0.0053	<0.00021	<0.00021	<0.011	<0.011	<0.011	<0.0053	<0.0053	<0.0053	<0.011	<0.00003 U	<0.0053	<0.00011
	P93D-ROX-071714	7/17/2014		45.78	NE	<0.0052	<0.00025 U	<0.0052	<0.01	<0.0001	<0.0001	<0.0052		<0.0001	<0.0052	<0.00021	<0.00021	<0.01	<0.01	<0.01	<0.0052	<0.0052	<0.0052	<0.01	<0.000022 U	<0.0052 UJ	<0.0001
	P93D-ROX-101514	10/15/2014	125.75 - 127.75	45.14	NE	<0.0054	0.00031 J	<0.0054	<0.011	<0.00011	<0.00011	<0.0054		<0.00011	<0.0054	<0.0022	<0.0022	<0.011	<0.011	<0.011	<0.0054	<0.0054	<0.0054	<0.011	0.000019 J	0.0458	<0.00011
	P93D-ROX-110414	11/4/2014		45.14	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
P-114	P114-ROX-012012	1/20/2012	32.67 - 52.67	27.17	NE	<0.0051	<0.0051	<0.0051	<0.01	<0.0001	<0.0001	<0.0051		0.000066 J	<0.0051	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.0051	<0.0051	<0.0051	<0.01	<0.000051	<0.0051	<0.0001
	P114-ROX-050912	5/9/2012		28.09	NE	<0.0052	<0.0052	<0.0052	<0.01	<0.0001	<0.0001	<0.0052		<0.0001	<0.0052	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.0052	<0.0052	<0.0052	<0.01	<0.00005	<0.0052	<0.0001
	P114-ROX-080912	8/9/2012		29.13	NE	<0.005	<0.005	<0.005	<0.01	<0.0001	<0.0001	<0.005		<0.0001	<0.005	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.01	<0.00005	<0.005	<0.0001
	P114-ROX-110912	11/9/2012		30.90	NE	<0.0052	<0.0052	<0.0052	<0.01	<0.0001	<0.0001	<0.0052		<0.0001	<0.0052	<0.00021	<0.00021	<0.01	<0.01	<0.01	<0.0052	<0.0052	<0.0052	<0.01	<0.000052	<0.0052	<0.0001
	P114-ROX-012313	1/23/2013		30.22	NE	<0.0053 UJ	0.0024 J	<0.0053	<0.011	<0.00011	<0.00011	<0.0053		<0.00011	<0.0053	<0.00021	<0.00021	<0.011	<0.011	<0.011	<0.0053	<0.0053	<0.0053	<0.011	<0.000053	<0.0053	<0.00011
	P114-ROX-041513	4/15/2013		31.80	NE	<0.0052	0.00047 J	<0.0052	<0.01	<0.0001	<0.0001	<0.0052		<0.0001	<0.0052	<0.00021	<0.00021	<0.01	<0.01	<0.01	<0.0052	<0.0052	<0.0052	<0.01	<0.000052	<0.0052	<0.0001
	P114-ROX-071813	7/18/2013		27.22	NE	<0.0055	<0.0055	<0.0055	<0.011	<0.00011	<0.00011	<0.0055		0.000071 J	<0.0055	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.0055	<0.0055	<0.0055	<0.011	0.000059	<0.0055	<0.00011
	P114-ROX-071813-DUP	7/18/2013		27.22	NE	<0.0053	<0.0053	<0.0053	<0.011	<0.00011	<0.00011	<0.0053		<0.00011	<0.0053	<0.00021	<0.00021	<0.011	<0.011	<0.011	<0.0053	<0.0053	<0.0053	<0.011	0.000052 J	<0.0053	<0.00011
	P114-ROX-101713	10/17/2013		29.43	NE	<0.0054	<0.0054	<0.0054	<0.011	<0.00011	<0.00011	<0.0054		<0.00011	<0.0054	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.0054	<0.0054	<0.0054	<0.011	<0.000054	<0.0054	<0.00011
	P114-ROX-012814	1/28/2014		32.11	NE	<0.0054	<0.0054	<0.0054	<0.011	<0.00011	<0.00011	<0.0054		<0.00011	<0.0054	<0.00022	<0.00022	<0.011	<0.011	<0.011	<0.0054	<0.0054	<0.0054	<0.011	0.00015 B	<0.0054	<0.00011
	P114-ROX-042114	4/21/2014		32.22	NE	<0.0051	0.0026 JB	<0.0051	<0.01	<0.0001	<0.0001	<0.0051		<0.0001	<0.0051	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.0051	<0.0051	<0.0051	<0.01 UJ	<0.000051	<0.0051	<0.0001
	P114-ROX-071814	7/18/2014		30.87	NE	<0.0051	<0.00028 U	<0.0051	<0.01	<0.0001	<0.0001	<0.0051		<0.0001	<0.0051	<0.0002	<0.0002	<0.01	<0.01	<0.01	<0.0051	<0.0051	<0.0051	<0.01	<0.00012 U	<0.0051	<0.0001
	P114-ROX-101714	10/17/2014	32.67 - 52.67	29.43	NE	<0.0057	<0.0057	<0.0057	<0.011	<0.00011	<0.00011	<0.0057		<0.00011	<0.0057	<0.0023	<0.0023	<0.011	<0.011	<0.011	<0.0057	<0.0057	<0.0057	<0.011	<0.000057	<0.0057	<0.00011
ROST-3-PZ	ROST3PZ-ROX-051412	5/14/2012	40.00 - 50.00	38.82	NE	<0.0052	<0.00043 U	<0.0052	<0.01	<0.0001	<0.0001	<0.0052		<0.0001	<0.0052	0.0002 J	0.00017 J	<0.01	0.0087 J	<0.01	<0.0052	<0.0052	<0.0052	<0.01	0.000043 J	<0.0052	<0.0001
	ROST3PZ-ROX-080712	8/7/2012		39.00	NE	<0.0054	0.0049 J	<0.0054	<0.011	<0.00011	<0.00011	<0.0054		<0.00011	<0.0054	0.00031	0.00038 J	<0.011	0.0056 J	<0.011	<0.0054	<0.0054	<0.0054	<0.011	<0.000054	<0.0054	<0.00011
	ROST3PZ-ROX-110112	11/1/2012		40.82	NE	<0.0053	0.0017 J	<0.0053	<0.011	<0.00011	<0.00011	<0.0053		<0.00011	<0.0053	0.00028	0.00031	<0.011	0.0019 J	<0.011	<0.0053	<0.0053 UJ	<0.0053	<0.011	<0.000053	<0.0053 UJ	<0.00011
ROST-3-MW	ROST3MW-ROX-012313	1/23/2013	37.81 - 47.81	41.50	NE	<0.005 UJ	<0.005	<0.005	<0.01	<0.0001	0.00031	<0.005		<0.0001	<0.005	0.0061	0.0087	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.01	0.00068	<0.005	<0.0001
	ROST3MW-ROX-040513	4/5/2013				<0.0054	0.00044 J	<0.0054	<0.011	<0.00011	0.00017	<0.0054		<0.00011	<0.0054	0.0029	0.0039	<0.011	<0.011	<0.011	<0.0054	<0.0054 UJ	<0.0054	<0.011	0.00055	<0.0054 UJ	<0.00011
	ROST3MW-ROX-071113	7/11/2013		39.50	NE	<0.0054	<0.0054	<0.0054	<0.011	<0.00011	0.00043	<0.0054		<0.00011	<0.0054	0.0105 J	0.0142	<0.011 UJ	<0.011 UJ	<0.011 UJ	<0.0054	<0.0054	<0.0054	<0.011 UJ	0.00073	<0.0054 UJ	<0.000044 U
	ROST3-MW-ROX-100913	10/9/2013		40.16	NE	<0.0054	<0.0054	<0.0054	<0.011	<0.00011	0.00012	<0.0054		<0.00011	<0.0054	0.0024	0.0026	<0.011 UJ	<0.011 UJ	<0.011	<0.0054	<0.0054	<0.0054	<0.011 UJ	0.00014	<0.0054 UJ	0.000044 J
	ROST3MW-ROX-011714	1/17/2014		42.20	NE	<0.0053	<0.0053	<0.0053	<0.011	<0.00011	<0.00011	<0.0053		<0.00011	<0.0053	0.0011	0.00099	<0.011 UJ	<0.011 UJ	<0.011	<0.0053	<0.0053	<0.0053	<0.011 UJ	0.0002	<0.0053 UJ	<0.00011
	ROST3MW-ROX-041014	4/10/2014		42.80	NE	<0.006	<0.00076 U	<0.006	<0.012	<0.00012	<0.00012	<0.006		<0.00012	<0.006	0.00075	0.0008	<0.012	<0.012	<0.012	<0.006	<0.006	<0.006	<0.012	0.0001	<0.006	<0.00012
	ROST3MW-ROX-071414	7/14/2014		41.88	NE	<0.0054	<0.0004 U	<0.0054	<0.011	<0.00011	<0.00011	<0.0054		<0.00011	<0.0054	0.00092	0.00097	<0.011	<0.011	<0.011	<0.0054	<0.0054	<0.0054	<0.011	<0.00016 U	<0.0054	<0.00011
	ROST3MW-ROX-100914	10/9/2014	37.81 - 47.81	41.31	NE	<0.0056	<0.00026 U	<0.0056	<0.011	<0.00011	<0.00011	<0.0056		<0.00011	<0.0056	0.00075 J	0.00057 J	<0.011	<0.011	<0.011	<0.0056	<0.0056	<0.0056	<0.011	0.00014 B	<0.0056	<0.00011
ROST-4-PZ(C)	ROST4PZ-C-051412	5/14/2012	34.95 - 44.95	39.04	NE	<0.005	<0.00058 U	<0.005	<0.01	<0.0001	0.00022	<0.005		<0.0001	<0.005	0.0044	0.0049	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.01	0.00082	<0.005	0.000041 J
	ROST4PZ-C-ROX-072512	7/25/2012		39.10	NE	<0.0053	0.0015 J	<0.0053	<0.011	<0.000041 U	0.00032 B	<0.0053		<0.00011	<0.0053	0.0102	0.0136	<0.011	0.00098 J	<0.011	<0.0053	<0.0053	<0.0053	<0.011	0.0014	0.0023 J	<0.000081 U
	ROST4PZC-ROX-102912	10/29/2012		40.75	NE	<0.0052	0.0018 J	<0.0052	<0.01	<0.0001	<0.0001	<0.0052		<0.0001	<0.0052	0.0004	0.00041	<0.01	<0.01	<0.01	<0.0052	<0.0052	<0.0052	<0.01	0.0002	<0.0052	<0.0001
	ROST4PZ(C)-ROX-011113	1/11/2013		41.42	NE	<0.0053 UJ	<0.0053	<0.0053	<0.011	<0.00011	<0.00011	<0.0053		<0.00011	<0.0053	<0.00021	0.000064 J	<0.011	<0.011	<0.011	<0.0053	<0.0053	<0.0053	<0.011	0.00012	<0.0053	<0.00011
	ROST4PZC-ROX-041013	4/10/2013		42.27	NE	<0.0055	<0.0055	<0.0055	<0.011	<0.00011	0.000069 J	<0.0055		<0.00011	<0.0055	0.00062	0.000078 J	<0.011	<0.011	<0.011	<0.0055	<0.0055	<0.0055	<0.011	0.00018	<0.0055 U	<0.00011
	ROST4PZC-ROX-071113	7/11/2013		40.18	NE	<0.0054	<0.0054	<0.0054	<0.011	0.000099 J	0.00027	<0.0054		<0.00011	<0.0054	0.0027 J	0.0021	<0.011	<0.011	<0.011 UJ	<0.0054	<0.0054	<0.0054	<0.011	0.00052	0.00057 J J	<0.00009 U
	ROST4PZC-ROX-100913	10/9/2013		39.91	NE	<0.0053	<0.0053	<0.0053	<0.011	<0.00011	<0.00011	<0.0053		<0.00011	<0.0053	0.002	0.00095	<0.011	<0.011	<0.011	<0.0053	<0.0053	<0.0053	<0.011	0.0002	<0.0053	<0.00011
	ROST4PZC-ROX-011714	1/17/2014		41.92	NE	<0.0059	<0.0059	<0.0059	<0.012	<0.00012	<0.00012	<0.0059		<0.00012	<0.0059	0.00019 J	<0.00024	<0.01 UJ	<0.01 UJ	<0.012	<0.0059	<0.0059	<0.0059	<0.01 UJ	0.000077	<0.005 UJ	<0.00012
	ROST4PZC-ROX-041014	4/10/2014		42.05	NE	<0.0056	<0.00038 U	<0.0056	<0.011	<0.00011	<0.00011	<0.0056		<0.00011	<0.0056	0.000065 J	<0.00022	<0.011	<0.011	<0.011	<0.0056	<0.0056	<0.0056	<0.011	0.000051 J	<0.0056	<0.00011
	ROST4C-ROX-071114	7/10/2014		42.22	NE	<0.0053	<0.00031 U	<0.0053	<0.011	<0.0001	<0.0001	<0.0053		<0.0001	<0.0053	0.00021	<0.0002	<0.011	<0.011	<0.011	<0.0053	<0.0053	<0.0053	<0.011	<0.00012 U	<0.0053	<0.0001
	ROST4PZC-ROX-100914	10/9/2014	34.95 - 44.95	41.30	NE	<0.0056	<0.00032 U	<0.0056	<0.011	<0.00011	<0.00011	<0.0056		<0.00011	<0.0056	<0.0022	<0.0022	<0.011	0.00071 J	<0.011	<0.0056	<0.0056	<0.0056	<0.011	<0.000088 U	0.00088 J	<0.00011

TABLE 3
CUMULATIVE SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL RESULTS AND EXCEEDANCES

						SVOCs																				
						Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate	2,6-Dinitrotoluene	Fluoranthene	Fluorene	Hexachlorobenzene	Indene	Indeno(1,2,3-cd)pyrene	Isophorone (3,5,5-trimethyl-2-cyclohexene-1-one)	1-Methylnaphthalene	2-Methylnaphthalene	2-Methylphenol (o-Cresol)	3 & 4-Methylphenol (m & p-Cresol)	3-Nitroaniline	Nitrobenzene	N-Nitrosodimethylamine	N-Nitrosodiphenylamine	Pentachlorophenol	Phenanthrene	Phenol	Pyrene
					Screening Values (mg/L)		0.7 [1]	0.14 [2]	0.00031 [2]	0.28 [1]	0.28 [1]	0.00006 [2]		0.00043 [1]	1.4 [2]	0.49 [3]	0.028 [1]	0.35 [1]	0.35 [3]		0.014 [1]	0.0006 [3]	0.0032 [2]	0.001 [1]	0.21 [3]	0.1 [1]	0.21 [1]
Location	Sample ID	Sample Date	Screened Interval (ft btoc)	Depth to Water (ft btoc)	Product Thickness (ft)	Analytical Results (mg/L)																				
T-12	T12-ROX-011912	1/19/2012	46.72 - 72.72	41.0	NE	<0.0056	<0.00048 U	<0.0056	<0.011	0.000044 J	0.00043	<0.0056		0.000061 J	<0.0056	0.0158	0.0186	0.00091 J	<0.011	<0.011 UJ	<0.0056	<0.0056	<0.0056	<0.011	0.00054	0.0188	0.000067 J
	T12-ROX-050912	5/9/2012		42.62	NE	<0.005	<0.005	<0.005	<0.01	<0.0001	0.00024	<0.005		<0.0001	<0.005	0.0164	0.0254	<0.01	0.0026 J	<0.01	<0.005	<0.005	<0.005	<0.01	0.00062	0.0094	0.000039 J
	T12-ROX-080212	8/2/2012		41.92	NE	<0.0054	<0.0054	<0.0054	<0.011	0.000046 J	0.00029	<0.0054		<0.00011	<0.0054	0.0199	0.0294	0.0021 J	0.0027 J	<0.011	<0.0054	<0.0054	<0.0054	<0.011	0.00089	0.042	0.000062 J
	T12-ROX-110512	11/5/2012		43.91	NE	<0.005	<0.005	<0.005	<0.01	<0.0001	0.00031	<0.005		<0.0001	<0.005	0.0232	0.0354	0.00096 J	0.0015 J	<0.01	<0.005	<0.005	<0.005	<0.01	0.00083	<0.005 UJ	0.000048 J
	T12-ROX-011813	1/18/2013		44.50	NE	<0.0053 UJ	<0.0053	<0.0053	<0.011	<0.00011	0.00046	<0.0053		<0.00011	<0.0053	0.0241	0.0322	<0.011	<0.011	<0.011	<0.0053	<0.0053	<0.0053	<0.011	0.0011	0.0265	0.000067 J
	T12-ROX-041513	4/15/2013		44.99	NE	<0.0051	<0.0051	<0.0051	<0.01	<0.0001	0.00037	<0.0051		<0.0001	<0.0051	0.0289	0.0444	0.0047 J	0.0042 J	<0.01	<0.0051	<0.0051	<0.0051	<0.01	0.0011	0.0149	0.000063 J
	T12-ROX-071613	7/16/2013		42.33	NE	<0.0054	<0.0054	<0.0054	<0.011	0.000044 J	0.00034	<0.0054		<0.00011	<0.0054	0.0236	0.0331	0.0029 J J	<0.011	<0.011	<0.0054	<0.0054	<0.0054	<0.011	0.0011	0.0514 J	<0.00009 U
	T12-ROX-101513	10/15/2013		43.73	NE	<0.0054	<0.0054	<0.0054	<0.011	<0.00011	0.00029	<0.0054		<0.00011	<0.0054	0.0199	0.0319	0.0018 J	0.0032 J	<0.011	<0.0054	<0.0054	<0.0054	<0.011	0.00077	0.0083	0.00009 J
	T12-ROX-012414	1/24/2014		45.26	NE	<0.0051	0.00044 J	<0.0051	<0.01	<0.0001	0.00035	<0.0051		<0.0001	<0.0051	0.0215	0.0326	0.0022 J	<0.01	<0.01	<0.0051	<0.0051	<0.0051	<0.01	0.001	0.0498	0.00006 J
	T12-ROX-041514	4/15/2014		46.72	NE	<0.0056	<0.00034 U	<0.0056	<0.011	<0.00011	0.0003	<0.0056		<0.00011	<0.0056	0.0189	0.0283	<0.011	<0.011	<0.011	<0.0056	<0.0056 UJ	<0.0056	<0.011	0.00078	0.0672 J	0.00005 J
	T12-ROX-070814	7/8/2014		45.13	NE	<0.0054	0.00038 J	<0.0054	<0.011	<0.00011	0.00022	<0.0054		<0.00011	<0.0054	0.015	0.0245	0.0092 J	0.0033 J	<0.011	<0.0054	<0.0054	<0.0054	<0.011	0.00051	<0.0054	<0.00011
	T12-ROX-101714	10/17/2014	46.72 - 72.72	44.40	NE	<0.0056	0.00061 J	<0.0056	<0.011	<0.00011	0.00031	<0.0056		<0.00011	<0.0056	0.022	0.0369	0.003 J	0.0059 J	<0.011	<0.0056	<0.0056	<0.0056	<0.011	0.00079	0.0154	<0.00011

Notes:

1 Denotes screening critieria source from 35 I.A.C. 620, Subpart D.

2 Denotes screening critieria source from 35 I.A.C. 742 (TACO), Appendix B, Table E.

3 Denotes screening criteria source from IL EPA Toxicity Assessment Unit (Chemicals not in TACO, Tier 1 Tables).

4 Beginning in 4Q12, naphthalene was analyzed via 8260 VOC, and prior historical results were reported by PAH analysis.

5 Beginning in 4Q13, professional judgment criteria used to review common laboratory contaminants was reevaluated. Acetone, 2-butanone, and methylene chloride are only U-qualified when present in the method blank.

6 The laboratory has been requested to perform a library search in all samples for butane, hexane, isopentane, 1,2,3-trimethylbenzene, and indene, which are reported as Tentatively Identified Compounds (TICs), when identified.

	Indicates a historical exceedance of screening criteria.
	Indicates a current exceedance of screening criteria.
NA	Indicates current quarter analyte result was not analyzed.
	Empty cell without a value indicates previous quarter analyte result was rejected, the analyte was not analyzed, or the TIC was not identified.

LABORATORY QUALIFIERS
B = Target analyte or common lab contaminant was identified in the method blank indicating possible field or lab contamination.
D = The result is from a diluted sample.
J = The analyte was detected below the reporting limit. Result is estimated.
E = The value exceeds calibration range.
JN = Estimated value for tentatively identified compound (library search).

URS QUALIFIERS
J = The result is estimated.
UJ = Estimated non-detect.
U = Result is non-detect.

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SUMMARY OF SOIL ANALYTICAL DETECTIONS
MW-25 THROUGH MW-28

Location	Sample ID	Depth	Sample Date	VOCs													
				Benzene			2-Butanone			Carbon disulfide			Chloroform			Dichloromethane (Methylene chloride)		
				0.03 [1]			17 [2]			32 [1]			0.3 [1]			0.02 [1]		
				Result (mg/kg)	Lab Quals	URS Quals	Result (mg/kg)	Lab Quals	URS Quals	Result (mg/kg)	Lab Quals	URS Quals	Result (mg/kg)	Lab Quals	URS Quals	Result (mg/kg)	Lab Quals	URS Quals
MW-25	MW25-082814(36'-38')	36 - 38 ft	8/28/2014	0.0102			< 0.011	U		< 0.0057	U		< 0.0023	U		< 0.0023	U	
MW-25	MW25-082814(44'-46')	44 - 46 ft	8/28/2014	3.63		J	< 1.4	U		< 0.72	U		0.126	J		0.153	J	
MW-25	MW25-082814(44'-46')-DUP	44 - 46 ft	8/28/2014	1.75		J	< 1.3	U		< 0.64	U		0.124	J		0.132	J	
MW-26	MW26-082714 (38-40')	38 - 40 ft	8/27/2014	0.0011			< 0.011	U		< 0.0055	U		< 0.0022	U		< 0.0022	U	
MW-26	MW26-082714 (46-48')	46 - 48 ft	8/27/2014	0.0011			< 0.018	U		0.0012	J		< 0.0035	U		< 0.0035	U	
MW-27	MW-27-101614 (40-42)	40 - 42 ft	10/16/2014	0.0011			< 0.012	U		0.0013	J		< 0.0024	U		< 0.0024	U	
MW-27	MW-27-101614 (48-50)	48 - 50 ft	10/16/2014	0.0128			0.0799		J	< 0.0054	U		< 0.0021	U		< 0.0021	U	
MW-28	MW28-090214 (32-34')	32 - 34 ft	9/2/2014	0.00072			< 0.013	U		0.00071	J	J	< 0.0026	U		< 0.0026	U	
MW-28	MW28-090214 (36-40')	36 - 40 ft	9/2/2014	0.00098		J	< 0.012	U	UJ	< 0.0058	U	UJ	< 0.0023	U	UJ	< 0.0023	U	UJ

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SUMMARY OF SOIL ANALYTICAL DETECTIONS
MW-25 THROUGH MW-28

Location	Sample ID	Depth	Sample Date	VOCs												VOC TICs		
				Ethylbenzene			Methyl tert-Butyl Ether (MTBE)			Toluene			Xylenes (total)			Butane		
				13 [1]						12 [1]			150 [1]					
				Result (mg/kg)	Lab Quals	URS Quals	Result (mg/kg)	Lab Quals	URS Quals	Result (mg/kg)	Lab Quals	URS Quals	Result (mg/kg)	Lab Quals	URS Quals	Result (mg/kg)	Lab Quals	URS Quals
MW-25	MW25-082814(36'-38')	36 - 38 ft	8/28/2014	< 0.0023	U		0.00055	J		0.0012	J		< 0.0023	U				
MW-25	MW25-082814(44'-46')	44 - 46 ft	8/28/2014	< 0.29	U		< 0.29	U		< 0.72	U		< 0.29	U				
MW-25	MW25-082814(44'-46')-DUP	44 - 46 ft	8/28/2014	< 0.25	U		< 0.25	U		< 0.64	U		< 0.25	U				
MW-26	MW26-082714 (38-40')	38 - 40 ft	8/27/2014	0.00083	J		< 0.0022	U		0.0017	J		0.00033	J		0.052	JN	
MW-26	MW26-082714 (46-48')	46 - 48 ft	8/27/2014	0.0014	J		< 0.0035	U		0.0024	J		0.00065	J				
MW-27	MW-27-101614 (40-42)	40 - 42 ft	10/16/2014	0.0019	J		< 0.0024	U		0.0023	J		0.0005	J				
MW-27	MW-27-101614 (48-50)	48 - 50 ft	10/16/2014	0.001	J		< 0.0021	U		0.0018	J		< 0.0021	U				
MW-28	MW28-090214 (32-34')	32 - 34 ft	9/2/2014	0.0012	J		< 0.0026	U		0.0012	J		< 0.0026	U		0.021	JN	
MW-28	MW28-090214 (36-40')	36 - 40 ft	9/2/2014	0.0011	J	J	< 0.0023	U	UJ	0.0013	J	J	< 0.0023	U	UJ	0.47	JN	J

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SUMMARY OF SOIL ANALYTICAL DETECTIONS
MW-25 THROUGH MW-28

Location	Sample ID	Depth	Sample Date	VOC TICs															
				Cyclohexane			Butane, 2,2-dimethyl-			Butane, 2,3-dimethyl-			Pentane, 2,4-dimethyl-			Cyclopentane, 1,3-dimethyl-		
				280 [2]														
				Result (mg/kg)	Lab Quals	URS Quals	Result (mg/kg)	Lab Quals	URS Quals	Result (mg/kg)	Lab Quals	URS Quals	Result (mg/kg)	Lab Quals	URS Quals	Result (mg/kg)	Lab Quals	URS Quals
MW-25	MW25-082814(36'-38')	36 - 38 ft	8/28/2014															
MW-25	MW25-082814(44'-46')	44 - 46 ft	8/28/2014															
MW-25	MW25-082814(44'-46')-DUP	44 - 46 ft	8/28/2014															
MW-26	MW26-082714 (38-40')	38 - 40 ft	8/27/2014															
MW-26	MW26-082714 (46-48')	46 - 48 ft	8/27/2014															
MW-27	MW-27-101614 (40-42)	40 - 42 ft	10/16/2014															
MW-27	MW-27-101614 (48-50)	48 - 50 ft	10/16/2014															
MW-28	MW28-090214 (32-34')	32 - 34 ft	9/2/2014				0.039	JN		0.24	JN		0.14	JN				
MW-28	MW28-090214 (36-40')	36 - 40 ft	9/2/2014	0.13	JN	J	0.078	JN	J	0.72	JN	J				0.094	JN	J

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SUMMARY OF SOIL ANALYTICAL DETECTIONS
MW-25 THROUGH MW-28

Location	Sample ID	Depth	Sample Date	VOC TICs														
				Pentane, 2,3-dimethyl-			Isobutane			Isopentane			Cyclohexane, methyl-			Cyclopentane, methyl-		
				Result (mg/kg)	Lab Quals	URS Quals	Result (mg/kg)	Lab Quals	URS Quals	Result (mg/kg)	Lab Quals	URS Quals	Result (mg/kg)	Lab Quals	URS Quals	Result (mg/kg)	Lab Quals	URS Quals
MW-25	MW25-082814(36'-38')	36 - 38 ft	8/28/2014				0.016	JN		0.014	JN							
MW-25	MW25-082814(44'-46')	44 - 46 ft	8/28/2014															
MW-25	MW25-082814(44'-46')-DUP	44 - 46 ft	8/28/2014															
MW-26	MW26-082714 (38-40')	38 - 40 ft	8/27/2014				0.031	JN		0.021	JN							
MW-26	MW26-082714 (46-48')	46 - 48 ft	8/27/2014							0.019	JN							
MW-27	MW-27-101614 (40-42)	40 - 42 ft	10/16/2014															
MW-27	MW-27-101614 (48-50)	48 - 50 ft	10/16/2014															
MW-28	MW28-090214 (32-34')	32 - 34 ft	9/2/2014				0.036	JN		0.43	JN							
MW-28	MW28-090214 (36-40')	36 - 40 ft	9/2/2014	0.36	JN	J	0.083	JN	J	1.4	JN	J	0.25	JN	J	0.41	JN	J

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SUMMARY OF SOIL ANALYTICAL DETECTIONS
MW-25 THROUGH MW-28

Location	Sample ID	Depth	Sample Date	VOC TICs														
				Pentane, 2-methyl-			Pentane, 3-methyl-			Pentane			Butane, 2,2,3,3-tetramethyl-			Hexane, 2,2,3-trimethyl-		
				Result (mg/kg)	Lab Quals	URS Quals	Result (mg/kg)	Lab Quals	URS Quals	Result (mg/kg)	Lab Quals	URS Quals	Result (mg/kg)	Lab Quals	URS Quals	Result (mg/kg)	Lab Quals	URS Quals
MW-25	MW25-082814(36'-38')	36 - 38 ft	8/28/2014							0.0075	JN							
MW-25	MW25-082814(44'-46')	44 - 46 ft	8/28/2014															
MW-25	MW25-082814(44'-46')-DUP	44 - 46 ft	8/28/2014															
MW-26	MW26-082714 (38-40')	38 - 40 ft	8/27/2014	0.0072	JN					0.012	JN							
MW-26	MW26-082714 (46-48')	46 - 48 ft	8/27/2014	0.0066	JN					0.011	JN							
MW-27	MW-27-101614 (40-42)	40 - 42 ft	10/16/2014															
MW-27	MW-27-101614 (48-50)	48 - 50 ft	10/16/2014															
MW-28	MW28-090214 (32-34')	32 - 34 ft	9/2/2014				0.2	JN		0.012	JN		0.089	JN				
MW-28	MW28-090214 (36-40')	36 - 40 ft	9/2/2014							0.18	JN	J				0.48	JN	J

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SUMMARY OF SOIL ANALYTICAL DETECTIONS
MW-25 THROUGH MW-28

Location	Sample ID	Depth	Sample Date	VOC TICs						SVOCs								
				Pentane, 2,2,4-trimethyl-			Pentane, 2,3,3-trimethyl-			Acenaphthene			Acenaphthylene			Anthracene		
										570 [1]			85 [2]			12000 [1]		
				Result (mg/kg)	Lab Quals	URS Quals	Result (mg/kg)	Lab Quals	URS Quals	Result (mg/kg)	Lab Quals	URS Quals	Result (mg/kg)	Lab Quals	URS Quals	Result (mg/kg)	Lab Quals	URS Quals
MW-25	MW25-082814(36'-38')	36 - 38 ft	8/28/2014							< 0.0056	U		< 0.0056	U		< 0.0056	U	
MW-25	MW25-082814(44'-46')	44 - 46 ft	8/28/2014							< 0.0059	U		< 0.0059	U		< 0.0059	U	
MW-25	MW25-082814(44'-46')-DUP	44 - 46 ft	8/28/2014							< 0.0058	U		< 0.0058	U		< 0.0058	U	
MW-26	MW26-082714 (38-40')	38 - 40 ft	8/27/2014							< 0.0054	U		< 0.0054	U		< 0.0054	U	
MW-26	MW26-082714 (46-48')	46 - 48 ft	8/27/2014							< 0.0059	U		< 0.0059	U		< 0.0059	U	
MW-27	MW-27-101614 (40-42)	40 - 42 ft	10/16/2014							0.0278			0.0029	J		0.0403		
MW-27	MW-27-101614 (48-50)	48 - 50 ft	10/16/2014							< 0.0063	U		< 0.0063	U		< 0.0063	U	
MW-28	MW28-090214 (32-34')	32 - 34 ft	9/2/2014							< 0.006	U		< 0.006	U		< 0.006	U	
MW-28	MW28-090214 (36-40')	36 - 40 ft	9/2/2014	0.3	JN	J	0.1	JN	J	< 0.0061	U		< 0.0061	U		< 0.0061	U	

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SUMMARY OF SOIL ANALYTICAL DETECTIONS
MW-25 THROUGH MW-28

Location	Sample ID	Depth	Sample Date	SVOCs													
				Benzo(a)anthracene			Benzo(a)pyrene			Benzo(b)fluoranthene			Benzo(g,h,i)perylene			Benzo(k)fluoranthene		
				0.9 [1]			0.09 [1]			0.9 [1]			2300 [2]			9 [1]		
				Result (mg/kg)	Lab Quals	URS Quals	Result (mg/kg)	Lab Quals	URS Quals	Result (mg/kg)	Lab Quals	URS Quals	Result (mg/kg)	Lab Quals	URS Quals	Result (mg/kg)	Lab Quals	URS Quals
MW-25	MW25-082814(36'-38')	36 - 38 ft	8/28/2014	< 0.0056	U		< 0.0056	U		< 0.0056	U		< 0.0056	U		< 0.0056	U	
MW-25	MW25-082814(44'-46')	44 - 46 ft	8/28/2014	< 0.0059	U		< 0.0059	U		< 0.0059	U		< 0.0059	U		< 0.0059	U	
MW-25	MW25-082814(44'-46')-DUP	44 - 46 ft	8/28/2014	< 0.0058	U		< 0.0058	U		< 0.0058	U		< 0.0058	U		< 0.0058	U	
MW-26	MW26-082714 (38-40')	38 - 40 ft	8/27/2014	< 0.0054	U		< 0.0054	U		< 0.0054	U		< 0.0054	U		< 0.0054	U	
MW-26	MW26-082714 (46-48')	46 - 48 ft	8/27/2014	< 0.0059	U		< 0.0059	U		< 0.0059	U		< 0.0059	U		< 0.0059	U	
MW-27	MW-27-101614 (40-42)	40 - 42 ft	10/16/2014	0.0154			0.0056	J		0.0035	J		0.0017	J		0.004	J	
MW-27	MW-27-101614 (48-50)	48 - 50 ft	10/16/2014	0.0036	J		< 0.0063	U		0.0113			0.006	J		0.0047	J	
MW-28	MW28-090214 (32-34')	32 - 34 ft	9/2/2014	< 0.006	U		< 0.006	U		0.0032	J		0.0032	J		< 0.006	U	
MW-28	MW28-090214 (36-40')	36 - 40 ft	9/2/2014	< 0.0061	U		< 0.0061	U		< 0.0061	U		< 0.0061	U		< 0.0061	U	

SEE LAST PAGE OF TABLE FOR NOTES

SUMMARY OF SOIL ANALYTICAL DETECTIONS
MW-25 THROUGH MW-28

Location	Sample ID	Depth	Sample Date	SVOCs													
				Chrysene (1,2-Benzphenanthracene)			Di-n-butyl phthalate			Fluoranthene			Fluorene			Indeno(1,2,3-cd)pyrene		
				88 [1]			2300 [1]			3100 [1]			560 [1]			0.9 [1]		
				Result (mg/kg)	Lab Quals	URS Quals	Result (mg/kg)	Lab Quals	URS Quals	Result (mg/kg)	Lab Quals	URS Quals	Result (mg/kg)	Lab Quals	URS Quals	Result (mg/kg)	Lab Quals	URS Quals
MW-25	MW25-082814(36'-38')	36 - 38 ft	8/28/2014	< 0.0056	U		< 0.28	U		< 0.0056	U		< 0.0056	U		< 0.0056	U	
MW-25	MW25-082814(44'-46')	44 - 46 ft	8/28/2014	< 0.0059	U		< 0.29	U		< 0.0059	U		< 0.0059	U		< 0.0059	U	
MW-25	MW25-082814(44'-46')-DUP	44 - 46 ft	8/28/2014	< 0.0058	U		< 0.29	U		< 0.0058	U		< 0.0058	U		< 0.0058	U	
MW-26	MW26-082714 (38-40')	38 - 40 ft	8/27/2014	< 0.0054	U		< 0.27	U		< 0.0054	U		< 0.0054	U		< 0.0054	U	
MW-26	MW26-082714 (46-48')	46 - 48 ft	8/27/2014	< 0.0059	U		< 0.29	U		< 0.0059	U		< 0.0059	U		< 0.0059	U	
MW-27	MW-27-101614 (40-42)	40 - 42 ft	10/16/2014	0.014			< 0.3	U		0.028			0.0256			< 0.006	U	
MW-27	MW-27-101614 (48-50)	48 - 50 ft	10/16/2014	0.0038	J		< 0.32	U		0.0029	J		< 0.0063	U		0.0047	J	
MW-28	MW28-090214 (32-34')	32 - 34 ft	9/2/2014	< 0.006	U		0.0325	J		0.0025	J		< 0.006	U		0.0017	J	
MW-28	MW28-090214 (36-40')	36 - 40 ft	9/2/2014	< 0.0061	U		< 0.31	U		< 0.0061	U		< 0.0061	U		< 0.0061	U	

SEE LAST PAGE OF TABLE FOR NOTES

SUMMARY OF SOIL ANALYTICAL DETECTIONS
MW-25 THROUGH MW-28

Location	Sample ID	Depth	Sample Date	SVOCs														
				1-Methylnaphthalene			2-Methylnaphthalene			p-Chloroaniline			Phenanthrene			Phenol		
				130 [2]			1.9 [2]			0.7 [1]			210 [2]			100 [1]		
				Result (mg/kg)	Lab Quals	URS Quals	Result (mg/kg)	Lab Quals	URS Quals	Result (mg/kg)	Lab Quals	URS Quals	Result (mg/kg)	Lab Quals	URS Quals	Result (mg/kg)	Lab Quals	URS Quals
MW-25	MW25-082814(36'-38')	36 - 38 ft	8/28/2014	< 0.011	U		< 0.011	U		< 0.56	U		< 0.0056	U		< 0.28	U	
MW-25	MW25-082814(44'-46')	44 - 46 ft	8/28/2014	0.0022	J		0.0021	J		< 0.59	U		< 0.0059	U		0.116	J	
MW-25	MW25-082814(44'-46')-DUP	44 - 46 ft	8/28/2014	0.0019	J		0.0018	J		< 0.58	U		< 0.0058	U		0.0969	J	
MW-26	MW26-082714 (38-40')	38 - 40 ft	8/27/2014	< 0.011	U		< 0.011	U		< 0.54	U		< 0.0054	U		< 0.27	U	
MW-26	MW26-082714 (46-48')	46 - 48 ft	8/27/2014	< 0.012	U		0.0011	J		< 0.59	U		< 0.0013	JB	U	< 0.29	U	
MW-27	MW-27-101614 (40-42)	40 - 42 ft	10/16/2014	0.041	J		0.0798	J		0.041	J		0.106			< 0.3	U	
MW-27	MW-27-101614 (48-50)	48 - 50 ft	10/16/2014	< 0.13	U		< 0.13	U		< 0.63	U		< 0.002	JB	U	< 0.32	U	
MW-28	MW28-090214 (32-34')	32 - 34 ft	9/2/2014	< 0.012	U		< 0.012	U		< 0.6	U		0.0022	J		< 0.3	U	
MW-28	MW28-090214 (36-40')	36 - 40 ft	9/2/2014	< 0.012	U		< 0.012	U		< 0.61	U		< 0.0061	U		< 0.31	U	

SEE LAST PAGE OF TABLE FOR NOTES

SUMMARY OF SOIL ANALYTICAL DETECTIONS
MW-25 THROUGH MW-28

Location	Sample ID	Depth	Sample Date	SVOCs			Hydrocarbons		
				Pyrene			TPH-GRO (VOA)		
				2300 [1]					
				Result (mg/kg)	Lab Quals	URS Quals	Result	Lab Quals	URS Quals
MW-25	MW25-082814(36'-38')	36 - 38 ft	8/28/2014	< 0.0056	U		< 13	U	
MW-25	MW25-082814(44'-46')	44 - 46 ft	8/28/2014	< 0.0059	U		3.55	J	
MW-25	MW25-082814(44'-46')-DUP	44 - 46 ft	8/28/2014	< 0.0058	U		4.7	J	
MW-26	MW26-082714 (38-40')	38 - 40 ft	8/27/2014	< 0.0054	U		5.09	J	
MW-26	MW26-082714 (46-48')	46 - 48 ft	8/27/2014	< 0.0059	U		< 34	U	
MW-27	MW-27-101614 (40-42)	40 - 42 ft	10/16/2014	0.0377			< 16	U	
MW-27	MW-27-101614 (48-50)	48 - 50 ft	10/16/2014	0.0058	J		5.31	J	
MW-28	MW28-090214 (32-34')	32 - 34 ft	9/2/2014	0.0028	J		2.86	J	
MW-28	MW28-090214 (36-40')	36 - 40 ft	9/2/2014	< 0.0061	U		7.7	J	

Laboratory Qualifiers
< "U" = Not detected at the reporting limit.
J = The analyte was detected below the reporting limit. Result is estimated.
JN = Estimated value for tentatively identified compound (TICs). (library search)
B = Analyte is detected in the method blank.

Note: L brary searches for TICs are used to look for the presence of non-target analytes.
TICs reported are those present at levels above ten percent of associated internal standard responses.

URS Qualifiers
J = The result is estimated.
UJ = The result is estimated non-detect.
= Exceedance of residential soil screening criteria, see Notes for criteria source

Notes
1 Denotes screening critieria source from 35 I.A.C. 742 (TACO), Appendix B, Table A.
2 Denotes screening criteria source from IL EPA Toxicity Assessment Unit (Chemicals not in TACO, Tier 1 Tables).

File: \\URSSTLOUIS.US.IE.URS\STLOUIS\PROJECTS\ENVIRONMENTAL\SHELL\ACCUTEST_DATA_REVIEW\1_DRAFT_DELIVERABLES\2015-01-30_ROXANA_4Q14_GW_RPT\FIGURES\FIGURE_5_4Q14_GROUNDWATER_ANALYTICAL_RESULTS_SUMMARY.DWG Last edited: APR 20, 17 @ 2:41 p.m. by: wendy.pennington

LEGEND

- GROUNDWATER MONITORING WELL SAMPLING LOCATION
- GROUNDWATER MONITORING WELL LOCATION NOT SAMPLED
- GROUNDWATER PIEZOMETER SAMPLING LOCATION
- GROUNDWATER PIEZOMETER LOCATION NOT SAMPLED

NOTES:

1. PER DIRECTION FROM IEPA, ANALYTICAL RESULTS ARE SCREENED AGAINST CRITERIA OUTLINED IN THE WRR RCRA PART B PERMIT.
2. GROUNDWATER CLASS I SCREENING CRITERIA.

Analyte	Screening Criteria (mg/L)
Benzene	0.005
1,2-Dichloropropane	0.005
Ethylbenzene	0.7
Isopropylbenzene	0.7
MTBE	0.07
n-Propylbenzene	0.7
Naphthalene	0.14
Toluene	1.0
1,3,5-Trimethylbenzene	0.07
bis(2-Chloroethyl)ether	0.01
2-Methylnaphthalene	0.028
Phenol	0.1

3. J = THE TARGET ANALYTE DETECTED BELOW THE REPORTING LIMIT AND THE RESULT IS ESTIMATED.
4. MULTIPLE RESULTS (e.g., 1130/984) INDICATE DUPLICATE SAMPLES OR CONFIRMATION SAMPLES.
5. WELLS IDENTIFIED IN BLUE WITH NO DATA BOX INDICATE THE RESULTS DID NOT EXCEED SCREENING CRITERIA.
6. WELLS P-55 AND P-68 WERE NOT SAMPLED DURING 4Q14 DUE TO THE PRESENCE OF LNAPL.
7. INSTALLATION OF GROUNDWATER MONITORING WELLS MW-25 THROUGH MW-28 BEGAN DURING 3Q14 AND WAS COMPLETED DURING 4Q14. THESE MONITORING WELLS WERE ADDED TO THE INTERIM GROUNDWATER MONITORING PROGRAM IN 4Q14.
8. GROUNDWATER MONITORING WELL MW-28 WAS SPLIT SAMPLED WITH THE VILLAGE OF ROXANA DURING 4Q14.

Sample Location	MW-28
Sampled 10/21/14	Result (mg/L)
Benzene	0.0081

Sample Location	ROST-4-PZ (C)
Sampled 10/9/14	Result (mg/L)
Benzene	0.039

Sample Location	T-12
Sampled 10/17/14	Result (mg/L)
Benzene	1.83
Ethylbenzene	1.75
Naphthalene	0.184 J
2-Methylnaphthalene	0.0369

Sample Location	MW-22
Sampled 10/10/14	Result (mg/L)
Benzene	1.62
Ethylbenzene	1.88 J
Naphthalene	0.202
Toluene	2.3
1,3,5-Trimethylbenzene	0.207
2-Methylnaphthalene	0.0339

Sample Location	P-56
Sampled 10/13/14	Result (mg/L)
Benzene	0.107
2-Methylnaphthalene	0.0296

Sample Location	MW-2
Sampled 10/10/14	Result (mg/L)
Benzene	0.0132
1,3,5-Trimethylbenzene	0.0901

Sample Location	P-57
Sampled 10/14/14	Result (mg/L)
Benzene	220 / 255
Ethylbenzene	3.86 J / 1.77 J J
Naphthalene	<10 / 2.05 J
Toluene	0.849 J / 2.65
2-Methylnaphthalene	0.0338 / 0.0345
Phenol	0.271 J / 0.274 J

Sample Location	P-59
Sampled 10/14/14	Result (mg/L)
Benzene	12
Ethylbenzene	2.33
Naphthalene	0.38 J
Toluene	1.13
1,3,5-Trimethylbenzene	0.26 J
2-Methylnaphthalene	0.0425

Sample Location	P93A	P93B	P93D
Sampled 10/15/14, 11/4/14	Result (mg/L)	Result (mg/L)	Result (mg/L)
Benzene	293 / 277	241	36.4 / 19.9
1,2-Dichloropropane			<0.02 / 0.0079
Phenol		0.128	

Sample Location	MW-4
Sampled 10/16/14	Result (mg/L)
Benzene	0.815

Sample Location	MW-7
Sampled 10/16/14	Result (mg/L)
Benzene	1130 / 984
Phenol	0.155 / 0.133

Sample Location	MW-5
Sampled 10/9/14	Result (mg/L)
Benzene	0.028

Sample Location	P-58
Sampled 10/15/14	Result (mg/L)
Benzene	493
Ethylbenzene	0.793 J
Isopropylbenzene	1.43 J
n-Propylbenzene	0.781 J
1,3,5-Trimethylbenzene	0.453 J
bis(2-Chloroethyl)ether	0.014
2-Methylnaphthalene	0.0674
Phenol	0.145

Sample Location	MW-25
Sampled 10/21/14	Result (mg/L)
Benzene	501
Toluene	2.65
Phenol	0.173

Sample Location	MW-8
Sampled 10/16/14	Result (mg/L)
Benzene	486
MTBE	1.19
Phenol	0.126

Sample Location	P-66
Sampled 10/14/14	Result (mg/L)
Benzene	0.0212

MW-9, MW-10, MW-28, SECOND ST, NORTH PROPERTY, P-55, MW-27, ROST-4-PZ(A), ROST-4-PZ(B), ROST-4-PZ(C), ROST-4-PZ, THIRD ST, ROST-3-MW, ROST-4-PZ(D), ROST-4-PZ(E), ROST-4-PZ(F), P-60-S, P-60-12, P-60-12S, P-68, A-28, T-24, MW-11, ROST-4-PZ(G), ROST-5-PZ, P-60-13, P-60-13S, HIGHWAY 111 (S. CENTRAL AVE), P-54, ROST-7-PZ, MW-17, T-12, MW-24, FOURTH ST, MW-22, P-69, WOOD RIVER REFINERY, A-27, P-70, MW-18, P-74, MW-19, P-59, FIFTH ST, MW-16, ROST-21-PZ, MW-12, VILLAGE OF ROXANA, ROST-10-PZ, MW-20, P-56, CHAFFER ST, SIXTH ST, MW-1, MW-2, BP, MW-26, SEVENTH ST, T-6, MW-21, P-57, MW-4, MW-3, P-93A, P-93B, P-93C, P-93D, MW-25, EIGHTH ST, MW-5, MW-7, MW-8, 1986 APPROXIMATE BENZENE RELEASE SITE, RAND AVENUE, P-66, P-75, MW-13, MW-6A, MW-6B, MW-6C, MW-6D, WEST PROPERTY, MAIN PROPERTY, MW-14, P-114

0 200 SCALE FEET

N

SHELL OIL PRODUCTS US
INTERIM GROUNDWATER MONITORING PROGRAM
ROXANA, ILLINOIS

PROJECT NO. 21562973

URS

REVISION 1 APRIL 2017

DRN. BY: djd January 2015
DSGN. BY: lr
CHKD. BY: bbb

4Q14 Groundwater Monitoring Well Analytical Exceedances

FIG. NO. 5

SGS ACCUTEST IS PART OF SGS, THE WORLD'S LEADING INSPECTION, VERIFICATION, TESTING AND CERTIFICATION COMPANY.

e-Hardcopy 2.0
Automated Report

Technical Report for

Shell Oil

URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

21562973.15000

SGS Accutest Job Number: MC33201



Sampling Date: 08/27/14

Report to:

AECOM, INC.

Melissa.mansker@aecom.com

ATTN: Melissa Mansker

Total number of pages in report: 93

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

H. (Brad) Madadian
Lab Director

Client Service contact: Jeremy Vienneau 508-481-6200

Certifications: MA (M-MA136,SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) FL (E87579) NY (11791) NJ (MA926) PA (6801121) ND (R-188) CO (MA00136) MN (11546AA) NC (653) IL (002337) WI (399080220) DoD ELAP (L-A-B L2235)

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Test results relate only to samples analyzed.

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Unauthorized modification of this report is strictly prohibited.

SGS ACCUTEST

October 27, 2016

AECOM
1001 Highlands Plaza Drive West Suite 300
St. Louis, MO 63110

RE: SGS Accutest Job # MC33201

Dear Elizabeth Kunkel

As you are aware, SGS Accutest Inc. - Marlborough has been conducting an extensive review of data associated with some historical Gas Chromatography-Mass Spectroscopy volatiles analyses. As a result of this review it was determined that some revisions of the original test report for this job were needed. These corrections have been incorporated into the revised report.

Please be assured that corrective actions have been put in place to address this matter and prevent a recurrence.

We apologize for any inconvenience that this issue may have caused. Please don't hesitate to contact us if we can be of further assistance.

Sincerely,

H. (Brad) Madadian

Regional Laboratory Director
SGS Accutest Inc. - Marlborough

SGS ACCUTEST IS PART OF SGS, THE WORLD'S LEADING INSPECTION, VERIFICATION, TESTING AND CERTIFICATION COMPANY.

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Sample Summary

Shell Oil

Job No: MC33201

URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL
Project No: 21562973.15000

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
MC33201-1	08/27/14	14:00		08/28/14	SO	Soil	MW26-082714 (38-40')
MC33201-2	08/27/14	14:15		08/28/14	SO	Soil	MW26-082714 (46-48')
MC33201-3	08/27/14	00:00		08/28/14	AQ	Trip Blank Water	TB-082714 HCL
MC33201-4	08/27/14	00:00		08/28/14	AQ	Trip Blank Water	TB-082714 ST

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: She O **Job No** MC3320

Site: URSMOSTL: Roxana Add t ona Character zat on, 900 South Centr **Report Date** 0/27/20 6 2:58: 4 P

2 Samp e(s), 2 Tr p B ank(s) were co ected on 08/27/20 4 and were rece ved at SGS Accutest New Eng and on 08/28/20 4 proper y preserved, at 0 9 Deg C and ntact These Samp es rece ved a job number of MC3320 A st ng of the Laboratory Samp e ID, C ent Samp e ID and dates of co ect on are presented n the Resu ts Summary Sect on of th s report -Ch orohexane, Benzeneth o ,
D benz(a,h)acr d ne, Indene, and Qu no ne were searched n the brary search and repo ted on y f detect ons were found

Except as noted be ow, a method spec f ed ca brat ons and qua ty contro performance cr ter a were met for th s job For more nformat on, p ease refer to QC summary pages

Volatiles by GCMS By Method SW846 8260C

Matrix: AQ **Batch ID:** MSU975

- A samp es were ana yzed w th n the recommended method ho d ng t me
- Samp e(s) MC332 8-3MS, MC332 8-3MSD were used as the QC samp es nd cated
- A method b anks for th s batch meet method spec f c cr ter a
- MSU975-BSD Recovery(s) for D ch orod f uoromethane are outs de contro m ts
- B ank Sp ke Recovery(s) for Acro e n are outs de contro m ts
- Matr x Sp ke Recovery(s) for 2-Ch oroethy v ny ether, 2-Hexanone, Acetone are outs de contro m ts Outs de contro m ts due to poss b e matr x nterference
- Matr x Sp ke Dup cate Recove y(s) for 2-Ch oroethy v ny ether, Acetone, ,4-D oxane are outs de contro m ts Outs de contro m ts due to poss b e matr x nterference
- RPD(s) for MSD for ,4-D oxane are outs de contro m ts for samp e MC332 8-3MSD H gh RPD due to poss b e matr x nterference and/or samp e non-homogene ty
- RPD of MSU975-BSD for ,4-D oxane: Outs de contro m ts Ind v dua sp ke recover es w th n acceptance m ts
- MSU975-BS/BSD for V ny Acetate: Outs de contro m ts Assoc ated samp es are non-detect for th s compound
- MC332 8-3MS/MSD for V ny Acetate: Outs de contro m ts Assoc ated samp es are non-detect for th s compound

Matrix: SO **Batch ID:** MSM2404

- A samp es were ana yzed w th n the recommended method ho d ng t me
- Samp e(s) MC33233- MS, MC33233- MSD were used as the QC samp es nd cated
- A method b anks for th s batch meet method spec f c cr ter a
- Matr x Sp ke Recovery(s) for ,2,3-Tr ch orobenzene, ,2,4-Tr ch orobenzene, ,2,4-Tr methy benzene, ,2-D ch orobenzene, ,3-D ch orobenzene, ,4-D ch orobenzene, ,4-D oxane, 2-Ch oroethy v ny ether, 4-Methy -2-pentanone (MIBK), Acry on tr e, Bromobenzene, D ch orod f uoromethane, Hexach orobutad ene, n-Buty benzene, Naphtha ene, p-Ch oroto uene, Styrene are outs de contro m ts Outs de contro m ts due to poss b e matr x nterference
- Matr x Sp ke Dup cate Recove y(s) for , , ,2-Tetrach oroethane, ,2,3-Tr ch orobenzene, ,2,4-Tr ch orobenzene, ,2,4-Tr methy benzene, ,2-D ch orobenzene, ,3,5-Tr methy benzene, ,3-D ch orobenzene, ,4-D ch orobenzene, ,4-D oxane, 2-Ch oroethy v ny ether, Bromobenzene, Ch orobenzene, D ch orod f uoromethane, Ethy benzene, Hexach orobutad ene, m,p-Xy ene, n-Buty benzene, Naphtha ene, o-Ch oroto uene, o-Xy ene, p-Ch oroto uene, p-Isopropy to uene, sec-Buty benzene, Styrene, Tetrach oroethene, Tr ch orof uoromethane, Xy ene (tota) are outs de contro m ts Outs de contro m ts due to poss b e matr x nterference
- Tetrach oroethene: Cont nu ng Ca brat on Ver f cat on outs de of acceptance cr ter a Samp e resu t may be b ased ow
- V ny Acetate: Cont nu ng Ca brat on Ver f cat on outs de of acceptance cr ter a Samp e resu t may be b ased ow
- 2-Hexanone: Cont nu ng Ca brat on Ver f cat on outs de of acceptance cr ter a Samp e resu t may be b ased ow
- Hexach orobutad ene: Cont nu ng Ca brat on Ver f cat on outs de of acceptance cr ter a Samp e resu t may be b ased ow
- Tr ch orof uoromethane: Cont nu ng Ca brat on Ver f cat on outs de of acceptance cr ter a Samp e resu t may be b ased ow
- D ch orod f uoromethane: Cont nu ng Ca brat on Ver f cat on outs de of acceptance cr ter a Samp e resu t may be b ased ow

Extractables by GCMS By Method SW846 8270D

Matrix: SO **Batch ID:** OP39607

- A samp es were extracted w th n the recommended method ho d ng t me
- A samp es were ana yzed w th n the recommended method ho d ng t me
- A method b anks for th s batch meet method spec f c cr ter a
- Samp e(s) MC3320 - MS, MC3320 - MSD were used as the QC samp es nd cated
- Matr x Sp ke Recovery(s) for 2,4-D n tropheno , Benzo c ac d, Hexach orocyc opentad ene, Pyr d ne are outs de contro m ts Outs de contro m ts due to poss b e matr x nterference Refer to B ank Sp ke
- Matr x Sp ke Dup cate Recove y(s) for 2,4-D n tropheno , Benzo c ac d, Hexach orocyc opentad ene are outs de contro m ts Outs de contro m ts due to poss b e matr x nterference Refer to B ank Sp ke

Extractables by GCMS By Method SW846 8270D BY SIM

Matrix: SO **Batch ID:** OP39608

- A samp es were extracted w th n the recommended method ho d ng t me
- A samp es were ana yzed w th n the recommended method ho d ng t me
- Samp e(s) MC3320 - MS, MC3320 - MSD were used as the QC samp es nd cated
- Samp e(s) MC3320 -2 have compound(s) repo ted w th a “B” qua f er, nd cat ng ana yte s found n the assoc ated method b ank

Volatiles by GC By Method SW846 8011

Matrix: AQ **Batch ID:** OP39646

- A samp es were extracted w th n the recommended method ho d ng t me
- A samp es were ana yzed w th n the recommended method ho d ng t me
- Samp e(s) MC33200-2MS, MC33200-2MSD were used as the QC samp es nd cated
- A method b anks for th s batch meet method spec f c cr ter a
- Matr x Sp ke Dup cate Recove y(s) for ,2-D bromo-3-ch oropropane are outs de contro m ts Outs de contro m ts due to poss b e matr x nterference

Matrix: SO **Batch ID:** OP39625

- A samp es were extracted w th n the recommended method ho d ng t me
- A samp es were ana yzed w th n the recommended method ho d ng t me
- A method b anks for th s batch meet method spec f c cr ter a
- Samp e(s) MC33265- MS, MC33265- MSD were used as the QC samp es nd cated
- MC3320 -2 for Bromof uorobenzene (S): Outs de contro m ts due to poss b e matr x nterference
- MC3320 - for Bromof uorobenzene (S): Outs de contro m ts due to poss b e matr x nterference

Volatiles by GC By Method SW846 8015

Matrix: SO **Batch ID:** GWX3653

- A samp es were ana yzed w th n the recommended method ho d ng t me
- Samp e(s) MC3320 - MS, MC3320 - MSD were used as the QC samp es nd cated
- A method b anks for th s batch meet method spec f c cr ter a
- Ca brat on standard GWX3234-ICC3234, GWX3234-ICV3234, GWX3654-CC3234, GWX3358-ICC3358, GWX3358-ICV3358, GWX3655-CC3358 not assoc ate w th th s job

Wet Chemistry By Method SM21 2540 B MOD.

Matrix: SO **Batch ID:** GN48 24

- Samp e(s) MC332 0- DUP were used as the QC samp es for So ds, Percent

SGS Accutest New Eng and cert f es that a ana ys s were performed w th n method spec f cat on It s further recommended that th s report to be used n ts ent rety The Laborato y D rector for SGS Accutest New Eng and or ass gnee as ver f ed by the s gnature on the cover page has author zed the re ease of th s repo t(MC3320)

Summary of Hits

Job Number: MC33201
Account: Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL
Collected: 08/27/14

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
MC33201-1	MW26-082714 (38-40')					
Benzene		0.0011	0.00055	0.00037	mg/kg	SW846 8260C
Ethylbenzene		0.00083 J	0.0022	0.00076	mg/kg	SW846 8260C
Toluene		0.0017 J	0.0055	0.00023	mg/kg	SW846 8260C
Xylene (total)		0.00033 J	0.0022	0.00024	mg/kg	SW846 8260C
Total TIC, Volatile		0.1232 J			mg/kg	
TPH-GRO (VOA)		5.09 J	12	1.7	mg/kg	SW846 8015
MC33201-2	MW26-082714 (46-48')					
Benzene		0.0011	0.00088	0.00059	mg/kg	SW846 8260C
Carbon disulfide		0.0012 J	0.0088	0.00023	mg/kg	SW846 8260C
Ethylbenzene		0.0014 J	0.0035	0.0012	mg/kg	SW846 8260C
Toluene		0.0024 J	0.0088	0.00036	mg/kg	SW846 8260C
Xylene (total)		0.00065 J	0.0035	0.00038	mg/kg	SW846 8260C
Total TIC, Volatile		0.0366 J			mg/kg	
2-Methylnaphthalene		0.0011 J	0.012	0.0011	mg/kg	SW846 8270D BY SIM
Phenanthrene		0.0013 JB	0.0059	0.0012	mg/kg	SW846 8270D BY SIM
MC33201-3	TB-082714 HCL					
No hits reported in this sample.						
MC33201-4	TB-082714 ST					
No hits reported in this sample.						

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW26-082714 (38-40')		
Lab Sample ID:	MC33201-1	**Date Sampled:**	08/27/14
Matrix:	SO - Soil	**Date Received:**	08/28/14
Method:	SW846 8260C	**Percent Solids:**	91.1
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M67941.D	1	09/03/14	KD	n/a	n/a	MSM2404
Run #2							

	Initial Weight	Final Volume
Run #1	4.97 g	5.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	0.011	0.0031	mg/kg	
107-02-8	Acrolein	ND	0.028	0.0097	mg/kg	
107-13-1	Acrylonitrile	ND	0.028	0.0030	mg/kg	
71-43-2	Benzene	0.0011	0.00055	0.00037	mg/kg	
108-86-1	Bromobenzene	ND	0.0055	0.00028	mg/kg	
74-97-5	Bromochloromethane	ND	0.0055	0.00038	mg/kg	
75-27-4	Bromodichloromethane	ND	0.0022	0.00023	mg/kg	
75-25-2	Bromoform	ND	0.0022	0.00039	mg/kg	
74-83-9	Bromomethane	ND	0.0022	0.00066	mg/kg	
78-93-3	2-Butanone (MEK)	ND	0.011	0.0034	mg/kg	
104-51-8	n-Butylbenzene	ND	0.0055	0.00027	mg/kg	
135-98-8	sec-Butylbenzene	ND	0.0055	0.00082	mg/kg	
98-06-6	tert-Butylbenzene	ND	0.0055	0.00023	mg/kg	
75-15-0	Carbon disulfide	ND	0.0055	0.00014	mg/kg	
56-23-5	Carbon tetrachloride	ND	0.0022	0.00024	mg/kg	
108-90-7	Chlorobenzene	ND	0.0022	0.00017	mg/kg	
75-00-3	Chloroethane	ND	0.0055	0.00083	mg/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	0.0055	0.0014	mg/kg	
67-66-3	Chloroform	ND	0.0022	0.00019	mg/kg	
74-87-3	Chloromethane	ND	0.0055	0.00062	mg/kg	
95-49-8	o-Chlorotoluene	ND	0.0055	0.00021	mg/kg	
106-43-4	p-Chlorotoluene	ND	0.0055	0.00029	mg/kg	
124-48-1	Dibromochloromethane	ND	0.0022	0.00036	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0022	0.00023	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.0022	0.00033	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.0022	0.00038	mg/kg	
75-71-8	Dichlorodifluoromethane [a]	ND	0.0022	0.00089	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0022	0.00029	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0022	0.00036	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0022	0.00046	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0022	0.00050	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0022	0.00046	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW26-082714 (38-40')		
Lab Sample ID:	MC33201-1	**Date Sampled:**	08/27/14
Matrix:	SO - Soil	**Date Received:**	08/28/14
Method:	SW846 8260C	**Percent Solids:**	91.1
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	0.0022	0.00046	mg/kg	
142-28-9	1,3-Dichloropropane	ND	0.0055	0.00036	mg/kg	
594-20-7	2,2-Dichloropropane	ND	0.0055	0.00062	mg/kg	
563-58-6	1,1-Dichloropropene	ND	0.0055	0.00029	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0022	0.00025	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	0.0022	0.00029	mg/kg	
123-91-1	1,4-Dioxane	ND	0.028	0.022	mg/kg	
97-63-2	Ethyl methacrylate	ND	0.0055	0.00039	mg/kg	
100-41-4	Ethylbenzene	0.00083	0.0022	0.00076	mg/kg	J
87-68-3	Hexachlorobutadiene [a]	ND	0.0055	0.00063	mg/kg	
591-78-6	2-Hexanone [a]	ND	0.011	0.00084	mg/kg	
98-82-8	Isopropylbenzene	ND	0.0055	0.00018	mg/kg	
99-87-6	p-Isopropyltoluene	ND	0.0055	0.00019	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.0022	0.00020	mg/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	0.0055	0.00060	mg/kg	
74-95-3	Methylene bromide	ND	0.0055	0.00050	mg/kg	
75-09-2	Methylene chloride	ND	0.0022	0.00059	mg/kg	
91-20-3	Naphthalene	ND	0.0055	0.00044	mg/kg	
103-65-1	n-Propylbenzene	ND	0.0055	0.00017	mg/kg	
100-42-5	Styrene	ND	0.0055	0.00019	mg/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.0055	0.00044	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.0022	0.00043	mg/kg	
127-18-4	Tetrachloroethene [a]	ND	0.0022	0.00035	mg/kg	
108-88-3	Toluene	0.0017	0.0055	0.00023	mg/kg	J
87-61-6	1,2,3-Trichlorobenzene	ND	0.0055	0.00047	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.0055	0.00057	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0022	0.00024	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	0.0022	0.00063	mg/kg	
79-01-6	Trichloroethene	ND	0.0022	0.00027	mg/kg	
75-69-4	Trichlorofluoromethane [a]	ND	0.0022	0.00044	mg/kg	
96-18-4	1,2,3-Trichloropropane	ND	0.0055	0.00032	mg/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	0.0055	0.0016	mg/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	0.0055	0.0017	mg/kg	
108-05-4	Vinyl Acetate [a]	ND	0.0055	0.0017	mg/kg	
75-01-4	Vinyl chloride	ND	0.0022	0.0010	mg/kg	
	m,p-Xylene	ND	0.0022	0.00048	mg/kg	
95-47-6	o-Xylene	ND	0.0022	0.00031	mg/kg	
1330-20-7	Xylene (total)	0.00033	0.0022	0.00024	mg/kg	J

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW26-082714 (38-40')		
Lab Sample ID:	MC33201-1	**Date Sampled:**	08/27/14
Matrix:	SO - Soil	**Date Received:**	08/28/14
Method:	SW846 8260C	**Percent Solids:**	91.1
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		70-130%
2037-26-5	Toluene-D8	92%		70-130%
460-00-4	4-Bromofluorobenzene	89%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
75-28-5	Isobutane	4.75	.031	mg/kg	JN
106-97-8	Butane	5.08	.052	mg/kg	JN
78-78-4	Butane, 2-methyl-	6.07	.021	mg/kg	JN
109-66-0	Pentane	6.48	.012	mg/kg	JN
107-83-5	Pentane, 2-methyl-	7.83	.0072	mg/kg	JN
	Total TIC, Volatile		.1232	mg/kg	J

(a) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW26-082714 (38-40')		
Lab Sample ID:	MC33201-1	**Date Sampled:**	08/27/14
Matrix:	SO - Soil	**Date Received:**	08/28/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	91.1
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F75749.D	1	09/02/14	WK	08/28/14	OP39607	MSF3328
Run #2							

	Initial Weight	Final Volume
Run #1	20.3 g	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	0.54	0.068	mg/kg	
95-57-8	2-Chlorophenol	ND	0.27	0.012	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	0.54	0.014	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	0.54	0.016	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	0.54	0.088	mg/kg	
51-28-5	2,4-Dinitrophenol	ND	1.1	0.14	mg/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	0.54	0.068	mg/kg	
95-48-7	2-Methylphenol	ND	0.54	0.021	mg/kg	
	3&4-Methylphenol	ND	0.54	0.026	mg/kg	
88-75-5	2-Nitrophenol	ND	0.54	0.014	mg/kg	
100-02-7	4-Nitrophenol	ND	1.1	0.10	mg/kg	
87-86-5	Pentachlorophenol	ND	0.54	0.038	mg/kg	
108-95-2	Phenol	ND	0.27	0.015	mg/kg	
95-95-4	2,4,5-Trichlorophenol	ND	0.54	0.014	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	0.54	0.013	mg/kg	
62-53-3	Aniline	ND	0.54	0.027	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	0.27	0.014	mg/kg	
85-68-7	Butyl benzyl phthalate	ND	0.27	0.011	mg/kg	
100-51-6	Benzyl Alcohol	ND	0.54	0.027	mg/kg	
91-58-7	2-Chloronaphthalene	ND	0.27	0.015	mg/kg	
106-47-8	4-Chloroaniline	ND	0.54	0.014	mg/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	0.27	0.013	mg/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	0.27	0.016	mg/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	0.27	0.019	mg/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	0.27	0.017	mg/kg	
122-66-7	1,2-Diphenylhydrazine	ND	0.27	0.012	mg/kg	
121-14-2	2,4-Dinitrotoluene	ND	0.54	0.036	mg/kg	
606-20-2	2,6-Dinitrotoluene	ND	0.54	0.014	mg/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	0.27	0.027	mg/kg	
132-64-9	Dibenzofuran	ND	0.11	0.015	mg/kg	
84-74-2	Di-n-butyl phthalate	ND	0.27	0.029	mg/kg	
117-84-0	Di-n-octyl phthalate	ND	0.27	0.0085	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW26-082714 (38-40')		
Lab Sample ID:	MC33201-1	**Date Sampled:**	08/27/14
Matrix:	SO - Soil	**Date Received:**	08/28/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	91.1
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	0.27	0.014	mg/kg	
131-11-3	Dimethyl phthalate	ND	0.27	0.016	mg/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	0.27	0.010	mg/kg	
118-74-1	Hexachlorobenzene	ND	0.27	0.017	mg/kg	
77-47-4	Hexachlorocyclopentadiene	ND	0.54	0.14	mg/kg	
67-72-1	Hexachloroethane	ND	0.27	0.013	mg/kg	
78-59-1	Isophorone	ND	0.27	0.012	mg/kg	
88-74-4	2-Nitroaniline	ND	0.54	0.014	mg/kg	
99-09-2	3-Nitroaniline	ND	0.54	0.030	mg/kg	
100-01-6	4-Nitroaniline	ND	0.54	0.014	mg/kg	
98-95-3	Nitrobenzene	ND	0.27	0.015	mg/kg	
62-75-9	n-Nitrosodimethylamine	ND	0.27	0.013	mg/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	0.27	0.015	mg/kg	
86-30-6	N-Nitrosodiphenylamine	ND	0.27	0.016	mg/kg	
110-86-1	Pyridine	ND	0.54	0.027	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	49%		30-130%
4165-62-2	Phenol-d5	47%		30-130%
118-79-6	2,4,6-Tribromophenol	61%		30-130%
4165-60-0	Nitrobenzene-d5	45%		30-130%
321-60-8	2-Fluorobiphenyl	51%		30-130%
1718-51-0	Terphenyl-d14	79%		30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW26-082714 (38-40')		
Lab Sample ID:	MC33201-1	**Date Sampled:**	08/27/14
Matrix:	SO - Soil	**Date Received:**	08/28/14
Method:	SW846 8270D BY SIM SW846 3546	**Percent Solids:**	91.1
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I91432.D	1	09/02/14	WK	08/28/14	OP39608	MSI3408
Run #2							

	Initial Weight	Final Volume
Run #1	20.3 g	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.0054	0.00094	mg/kg	
208-96-8	Acenaphthylene	ND	0.0054	0.00082	mg/kg	
120-12-7	Anthracene	ND	0.0054	0.0012	mg/kg	
56-55-3	Benzo(a)anthracene	ND	0.0054	0.0025	mg/kg	
50-32-8	Benzo(a)pyrene	ND	0.0054	0.0022	mg/kg	
205-99-2	Benzo(b)fluoranthene	ND	0.0054	0.0024	mg/kg	
191-24-2	Benzo(g,h,i)perylene	ND	0.0054	0.0015	mg/kg	
207-08-9	Benzo(k)fluoranthene	ND	0.0054	0.0017	mg/kg	
218-01-9	Chrysene	ND	0.0054	0.0015	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	0.0054	0.0016	mg/kg	
206-44-0	Fluoranthene	ND	0.0054	0.0016	mg/kg	
86-73-7	Fluorene	ND	0.0054	0.0011	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.0054	0.0013	mg/kg	
90-12-0	1-Methylnaphthalene	ND	0.011	0.0012	mg/kg	
91-57-6	2-Methylnaphthalene	ND	0.011	0.0010	mg/kg	
85-01-8	Phenanthrene	ND	0.0054	0.0011	mg/kg	
129-00-0	Pyrene	ND	0.0054	0.0017	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	55%		30-130%
321-60-8	2-Fluorobiphenyl	54%		30-130%
1718-51-0	Terphenyl-d14	106%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW26-082714 (38-40')		
Lab Sample ID:	MC33201-1	**Date Sampled:**	08/27/14
Matrix:	SO - Soil	**Date Received:**	08/28/14
Method:	SW846 8011 SW846 3550B	**Percent Solids:**	91.1
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ91608.D	1	09/02/14	NK	08/29/14	OP39625	GYZ7634
Run #2							

	Initial Weight	Final Volume
Run #1	30.6 g	100 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.0054	0.0016	mg/kg	
106-93-4	1,2-Dibromoethane	ND	0.0054	0.0013	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	196% [a]		61-167%
460-00-4	Bromofluorobenzene (S)	145%		61-167%

(a) Outside control limits due to possible matrix interference.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW26-082714 (38-40')		
Lab Sample ID:	MC33201-1	**Date Sampled:**	08/27/14
Matrix:	SO - Soil	**Date Received:**	08/28/14
Method:	SW846 8015	**Percent Solids:**	91.1
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	WX75011.D	1	08/29/14	TB	n/a	n/a	GWX3653
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.88 g	10.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (VOA)	5.09	12	1.7	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	2,3,4-Trifluorotoluene	98%		61-116%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW26-082714 (46-48')		
Lab Sample ID:	MC33201-2	**Date Sampled:**	08/27/14
Matrix:	SO - Soil	**Date Received:**	08/28/14
Method:	SW846 8260C	**Percent Solids:**	82.9
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M67942.D	1	09/03/14	KD	n/a	n/a	MSM2404
Run #2							

	Initial Weight	Final Volume
Run #1	3.44 g	5.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	0.018	0.0049	mg/kg	
107-02-8	Acrolein	ND	0.044	0.015	mg/kg	
107-13-1	Acrylonitrile	ND	0.044	0.0048	mg/kg	
71-43-2	Benzene	0.0011	0.00088	0.00059	mg/kg	
108-86-1	Bromobenzene	ND	0.0088	0.00044	mg/kg	
74-97-5	Bromochloromethane	ND	0.0088	0.00060	mg/kg	
75-27-4	Bromodichloromethane	ND	0.0035	0.00037	mg/kg	
75-25-2	Bromoform	ND	0.0035	0.00062	mg/kg	
74-83-9	Bromomethane	ND	0.0035	0.0011	mg/kg	
78-93-3	2-Butanone (MEK)	ND	0.018	0.0054	mg/kg	
104-51-8	n-Butylbenzene	ND	0.0088	0.00042	mg/kg	
135-98-8	sec-Butylbenzene	ND	0.0088	0.0013	mg/kg	
98-06-6	tert-Butylbenzene	ND	0.0088	0.00037	mg/kg	
75-15-0	Carbon disulfide	0.0012	0.0088	0.00023	mg/kg	J
56-23-5	Carbon tetrachloride	ND	0.0035	0.00039	mg/kg	
108-90-7	Chlorobenzene	ND	0.0035	0.00028	mg/kg	
75-00-3	Chloroethane	ND	0.0088	0.0013	mg/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	0.0088	0.0022	mg/kg	
67-66-3	Chloroform	ND	0.0035	0.00030	mg/kg	
74-87-3	Chloromethane	ND	0.0088	0.00099	mg/kg	
95-49-8	o-Chlorotoluene	ND	0.0088	0.00034	mg/kg	
106-43-4	p-Chlorotoluene	ND	0.0088	0.00047	mg/kg	
124-48-1	Dibromochloromethane	ND	0.0035	0.00057	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0035	0.00037	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.0035	0.00053	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.0035	0.00061	mg/kg	
75-71-8	Dichlorodifluoromethane [a]	ND	0.0035	0.0014	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0035	0.00047	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0035	0.00056	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0035	0.00072	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0035	0.00079	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0035	0.00073	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW26-082714 (46-48')		
Lab Sample ID:	MC33201-2	**Date Sampled:**	08/27/14
Matrix:	SO - Soil	**Date Received:**	08/28/14
Method:	SW846 8260C	**Percent Solids:**	82.9
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	0.0035	0.00074	mg/kg	
142-28-9	1,3-Dichloropropane	ND	0.0088	0.00057	mg/kg	
594-20-7	2,2-Dichloropropane	ND	0.0088	0.00099	mg/kg	
563-58-6	1,1-Dichloropropene	ND	0.0088	0.00046	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0035	0.00040	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	0.0035	0.00046	mg/kg	
123-91-1	1,4-Dioxane	ND	0.044	0.035	mg/kg	
97-63-2	Ethyl methacrylate	ND	0.0088	0.00062	mg/kg	
100-41-4	Ethylbenzene	0.0014	0.0035	0.0012	mg/kg	J
87-68-3	Hexachlorobutadiene [a]	ND	0.0088	0.0010	mg/kg	
591-78-6	2-Hexanone [a]	ND	0.018	0.0013	mg/kg	
98-82-8	Isopropylbenzene	ND	0.0088	0.00029	mg/kg	
99-87-6	p-Isopropyltoluene	ND	0.0088	0.00031	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.0035	0.00032	mg/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	0.0088	0.00095	mg/kg	
74-95-3	Methylene bromide	ND	0.0088	0.00080	mg/kg	
75-09-2	Methylene chloride	ND	0.0035	0.00093	mg/kg	
91-20-3	Naphthalene	ND	0.0088	0.00069	mg/kg	
103-65-1	n-Propylbenzene	ND	0.0088	0.00027	mg/kg	
100-42-5	Styrene	ND	0.0088	0.00030	mg/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.0088	0.00070	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.0035	0.00069	mg/kg	
127-18-4	Tetrachloroethene [a]	ND	0.0035	0.00055	mg/kg	
108-88-3	Toluene	0.0024	0.0088	0.00036	mg/kg	J
87-61-6	1,2,3-Trichlorobenzene	ND	0.0088	0.00075	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.0088	0.00090	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0035	0.00038	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	0.0035	0.0010	mg/kg	
79-01-6	Trichloroethene	ND	0.0035	0.00043	mg/kg	
75-69-4	Trichlorofluoromethane [a]	ND	0.0035	0.00070	mg/kg	
96-18-4	1,2,3-Trichloropropane	ND	0.0088	0.00050	mg/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	0.0088	0.0025	mg/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	0.0088	0.0027	mg/kg	
108-05-4	Vinyl Acetate [a]	ND	0.0088	0.0027	mg/kg	
75-01-4	Vinyl chloride	ND	0.0035	0.0016	mg/kg	
	m,p-Xylene	ND	0.0035	0.00077	mg/kg	
95-47-6	o-Xylene	ND	0.0035	0.00050	mg/kg	
1330-20-7	Xylene (total)	0.00065	0.0035	0.00038	mg/kg	J

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW26-082714 (46-48')		
Lab Sample ID:	MC33201-2	**Date Sampled:**	08/27/14
Matrix:	SO - Soil	**Date Received:**	08/28/14
Method:	SW846 8260C	**Percent Solids:**	82.9
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		70-130%
2037-26-5	Toluene-D8	94%		70-130%
460-00-4	4-Bromofluorobenzene	87%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
78-78-4	Butane, 2-methyl-	6.06	.019	mg/kg	JN
109-66-0	Pentane	6.47	.011	mg/kg	JN
107-83-5	Pentane, 2-methyl-	7.83	.0066	mg/kg	JN
	Total TIC, Volatile		.0366	mg/kg	J

(a) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW26-082714 (46-48')		
Lab Sample ID:	MC33201-2	**Date Sampled:**	08/27/14
Matrix:	SO - Soil	**Date Received:**	08/28/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	82.9
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F75750.D	1	09/02/14	WK	08/28/14	OP39607	MSF3328
Run #2							

	Initial Weight	Final Volume
Run #1	20.5 g	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	0.59	0.073	mg/kg	
95-57-8	2-Chlorophenol	ND	0.29	0.013	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	0.59	0.015	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	0.59	0.017	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	0.59	0.096	mg/kg	
51-28-5	2,4-Dinitrophenol	ND	1.2	0.15	mg/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	0.59	0.073	mg/kg	
95-48-7	2-Methylphenol	ND	0.59	0.023	mg/kg	
	3&4-Methylphenol	ND	0.59	0.029	mg/kg	
88-75-5	2-Nitrophenol	ND	0.59	0.016	mg/kg	
100-02-7	4-Nitrophenol	ND	1.2	0.11	mg/kg	
87-86-5	Pentachlorophenol	ND	0.59	0.041	mg/kg	
108-95-2	Phenol	ND	0.29	0.017	mg/kg	
95-95-4	2,4,5-Trichlorophenol	ND	0.59	0.015	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	0.59	0.014	mg/kg	
62-53-3	Aniline	ND	0.59	0.029	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	0.29	0.015	mg/kg	
85-68-7	Butyl benzyl phthalate	ND	0.29	0.012	mg/kg	
100-51-6	Benzyl Alcohol	ND	0.59	0.030	mg/kg	
91-58-7	2-Chloronaphthalene	ND	0.29	0.016	mg/kg	
106-47-8	4-Chloroaniline	ND	0.59	0.015	mg/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	0.29	0.014	mg/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	0.29	0.018	mg/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	0.29	0.021	mg/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	0.29	0.018	mg/kg	
122-66-7	1,2-Diphenylhydrazine	ND	0.29	0.013	mg/kg	
121-14-2	2,4-Dinitrotoluene	ND	0.59	0.039	mg/kg	
606-20-2	2,6-Dinitrotoluene	ND	0.59	0.015	mg/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	0.29	0.029	mg/kg	
132-64-9	Dibenzofuran	ND	0.12	0.016	mg/kg	
84-74-2	Di-n-butyl phthalate	ND	0.29	0.031	mg/kg	
117-84-0	Di-n-octyl phthalate	ND	0.29	0.0092	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW26-082714 (46-48')		
Lab Sample ID:	MC33201-2	**Date Sampled:**	08/27/14
Matrix:	SO - Soil	**Date Received:**	08/28/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	82.9
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	0.29	0.015	mg/kg	
131-11-3	Dimethyl phthalate	ND	0.29	0.017	mg/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	0.29	0.011	mg/kg	
118-74-1	Hexachlorobenzene	ND	0.29	0.018	mg/kg	
77-47-4	Hexachlorocyclopentadiene	ND	0.59	0.15	mg/kg	
67-72-1	Hexachloroethane	ND	0.29	0.014	mg/kg	
78-59-1	Isophorone	ND	0.29	0.014	mg/kg	
88-74-4	2-Nitroaniline	ND	0.59	0.015	mg/kg	
99-09-2	3-Nitroaniline	ND	0.59	0.032	mg/kg	
100-01-6	4-Nitroaniline	ND	0.59	0.015	mg/kg	
98-95-3	Nitrobenzene	ND	0.29	0.016	mg/kg	
62-75-9	n-Nitrosodimethylamine	ND	0.29	0.014	mg/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	0.29	0.017	mg/kg	
86-30-6	N-Nitrosodiphenylamine	ND	0.29	0.018	mg/kg	
110-86-1	Pyridine	ND	0.59	0.029	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	47%		30-130%
4165-62-2	Phenol-d5	50%		30-130%
118-79-6	2,4,6-Tribromophenol	60%		30-130%
4165-60-0	Nitrobenzene-d5	41%		30-130%
321-60-8	2-Fluorobiphenyl	47%		30-130%
1718-51-0	Terphenyl-d14	83%		30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW26-082714 (46-48')		
Lab Sample ID:	MC33201-2	**Date Sampled:**	08/27/14
Matrix:	SO - Soil	**Date Received:**	08/28/14
Method:	SW846 8270D BY SIM SW846 3546	**Percent Solids:**	82.9
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I91433.D	1	09/02/14	WK	08/28/14	OP39608	MSI3408
Run #2							

	Initial Weight	Final Volume
Run #1	20.5 g	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.0059	0.0010	mg/kg	
208-96-8	Acenaphthylene	ND	0.0059	0.00089	mg/kg	
120-12-7	Anthracene	ND	0.0059	0.0013	mg/kg	
56-55-3	Benzo(a)anthracene	ND	0.0059	0.0027	mg/kg	
50-32-8	Benzo(a)pyrene	ND	0.0059	0.0023	mg/kg	
205-99-2	Benzo(b)fluoranthene	ND	0.0059	0.0026	mg/kg	
191-24-2	Benzo(g,h,i)perylene	ND	0.0059	0.0016	mg/kg	
207-08-9	Benzo(k)fluoranthene	ND	0.0059	0.0018	mg/kg	
218-01-9	Chrysene	ND	0.0059	0.0016	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	0.0059	0.0017	mg/kg	
206-44-0	Fluoranthene	ND	0.0059	0.0017	mg/kg	
86-73-7	Fluorene	ND	0.0059	0.0012	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.0059	0.0015	mg/kg	
90-12-0	1-Methylnaphthalene	ND	0.012	0.0013	mg/kg	
91-57-6	2-Methylnaphthalene	0.0011	0.012	0.0011	mg/kg	J
85-01-8	Phenanthrene	0.0013	0.0059	0.0012	mg/kg	JB
129-00-0	Pyrene	ND	0.0059	0.0018	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	50%		30-130%
321-60-8	2-Fluorobiphenyl	50%		30-130%
1718-51-0	Terphenyl-d14	112%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW26-082714 (46-48')		
Lab Sample ID:	MC33201-2	**Date Sampled:**	08/27/14
Matrix:	SO - Soil	**Date Received:**	08/28/14
Method:	SW846 8011 SW846 3550B	**Percent Solids:**	82.9
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ91609.D	1	09/02/14	NK	08/29/14	OP39625	GYZ7634
Run #2							

	Initial Weight	Final Volume
Run #1	30.6 g	100 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.0059	0.0017	mg/kg	
106-93-4	1,2-Dibromoethane	ND	0.0059	0.0014	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	194% [a]		61-167%
460-00-4	Bromofluorobenzene (S)	139%		61-167%

(a) Outside control limits due to possible matrix interference.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW26-082714 (46-48')		
Lab Sample ID:	MC33201-2	**Date Sampled:**	08/27/14
Matrix:	SO - Soil	**Date Received:**	08/28/14
Method:	SW846 8015	**Percent Solids:**	82.9
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	WX75014.D	1	08/29/14	TB	n/a	n/a	GWX3653
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	1.85 g	10.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (VOA)	ND	34	4.9	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	2,3,4-Trifluorotoluene	98%		61-116%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-082714 HCL		
Lab Sample ID:	MC33201-3	**Date Sampled:**	08/27/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	08/28/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	U22217.D	1	09/05/14	GK	n/a	n/a	MSU975
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-082714 HCL		
Lab Sample ID:	MC33201-3	**Date Sampled:**	08/27/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	08/28/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	50	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-082714 HCL		
Lab Sample ID:	MC33201-3	**Date Sampled:**	08/27/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	08/28/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		70-130%
2037-26-5	Toluene-D8	93%		70-130%
460-00-4	4-Bromofluorobenzene	97%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-082714 ST		
Lab Sample ID:	MC33201-4	**Date Sampled:**	08/27/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	08/28/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ91631.D	1	09/03/14	NK	09/02/14	OP39646	GYZ7636
Run #2							

	Initial Volume	Final Volume
Run #1	36.0 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.015	0.0059	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.015	0.0059	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	65%		36-173%
460-00-4	Bromofluorobenzene (S)	70%		36-173%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

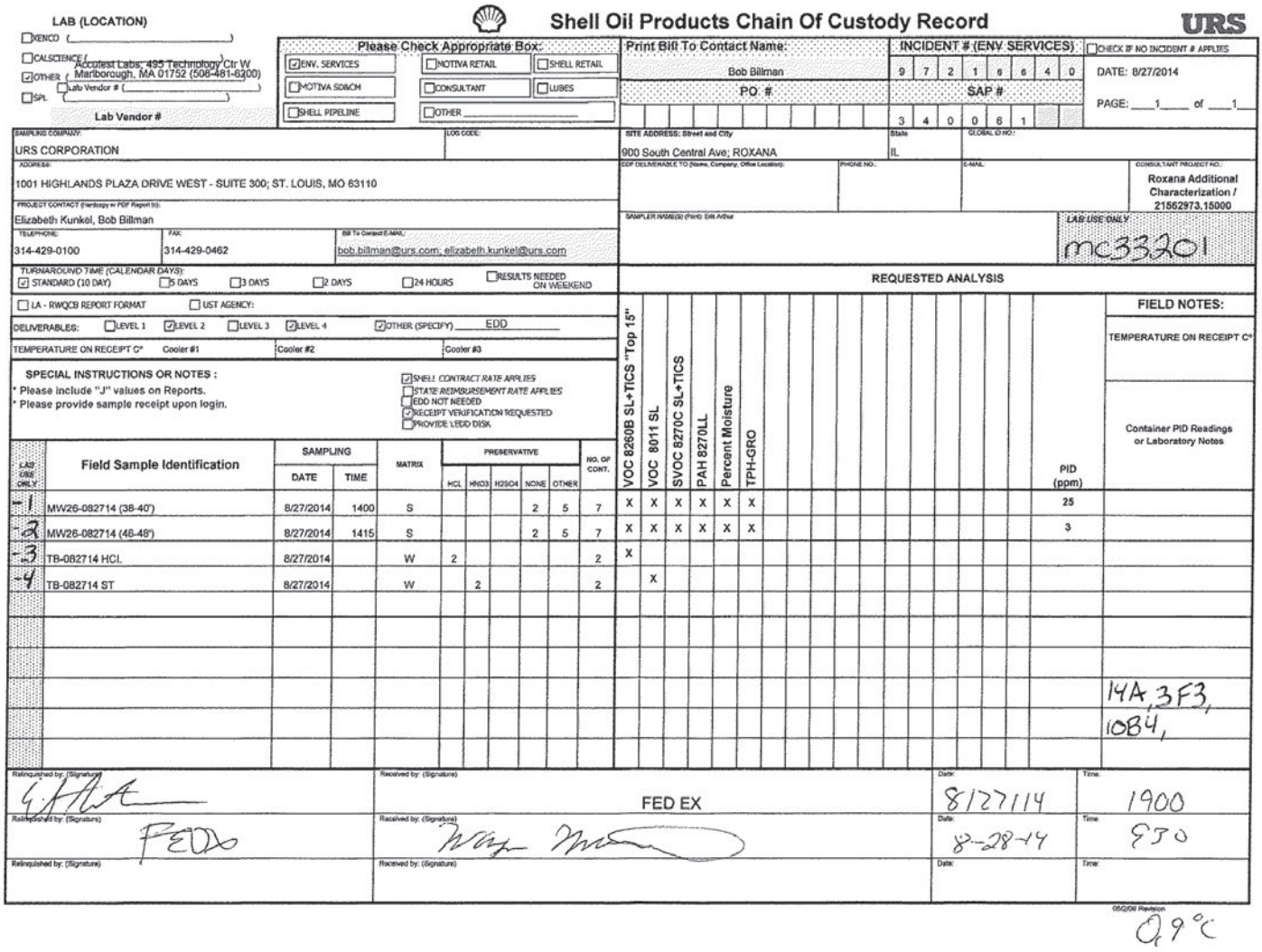
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody



LAB (LOCATION)
☐XENCO (_____)
☐CALSCIENCE (_____)
☑OTHER (Accutest Labs; 495 Technology Ctr W Marlborough, MA 01752 (508-481-6200))
☐SPL (Lab Vendor # (_____))
Lab Vendor #

Shell Oil Products Chain Of Custody Record

URS

Please Check Appropriate Box:
☑ENV. SERVICES ☐MOTIVA RETAIL ☐SHELL RETAIL
☐MOTIVA SD&CM ☐CONSULTANT ☐LUBES
☐SHELL PIPELINE ☐OTHER _____

Print Bill To Contact Name: Bob Billman
INCIDENT # (ENV SERVICES): 9 7 2 1 6 6 4 0 ☐CHECK IF NO INCIDENT # APPLIES
PO: #
SAP #: 3 4 0 0 6 1
DATE: 8/27/2014
PAGE: 1 of 1

SAMPLING COMPANY: URS CORPORATION
LOG CODE:
SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA
State: IL
GLOBAL ID NO:
ADDRESS: 1001 HIGHLANDS PLAZA DRIVE WEST - SUITE 300; ST. LOUIS, MO 63110
EDF DELIVERABLE TO (Name, Company, Office Location):
PHONE NO.:
E-MAIL:
CONSULTANT PROJECT NO.: Roxana Additional Characterization / 21562973.15000
PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Bob Billman
SAMPLER NAME(S) (Print): Erik Arthur
LAB USE ONLY: MC33201
TELEPHONE: 314-429-0100
FAX: 314-429-0462
Bill To Contact E-MAIL: bob.billman@urs.com; elizabeth.kunkel@urs.com

TURNAROUND TIME (CALENDAR DAYS):
☑ STANDARD (10 DAY) ☐5 DAYS ☐3 DAYS ☐2 DAYS ☐24 HOURS ☐RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT ☐ UST AGENCY:

DELIVERABLES: ☐LEVEL 1 ☑LEVEL 2 ☐LEVEL 3 ☑LEVEL 4 ☑OTHER (SPECIFY) EDD

TEMPERATURE ON RECEIPT C°: Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :
* Please include "J" values on Reports.
* Please provide sample receipt upon login.

☑SHELL CONTRACT RATE APPLIES
☐STATE REIMBURSEMENT RATE APPLIES
☐EDD NOT NEEDED
☑RECEIPT VERIFICATION REQUESTED
☐PROVIDE LEDD DISK

REQUESTED ANALYSIS

FIELD NOTES:
TEMPERATURE ON RECEIPT C°

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260B SL+TICS "Top 15"	VOC 8011 SL	SVOC 8270C SL+TICS	PAH 8270LL	Percent Moisture	TPH-GRO	PID (ppm)	Container PID Readings or Laboratory Notes
-1	MW26-082714 (38-40')	8/27/2014	1400	S				2	5	7	X	X	X	X	X	X	25	
-2	MW26-082714 (46-48')	8/27/2014	1415	S				2	5	7	X	X	X	X	X	X	3	
-3	TB-082714 HCL	8/27/2014		W	2					2	X							
-4	TB-082714 ST	8/27/2014		W		2				2		X						
																		14A, 3F3, 1084,

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
[signature]	FED EX	8/27/14	1900
FEDEX	[signature]	8-28-14	930

05/2/06 Revision

0.9°C

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MC33201: Chain of Custody
Page 1 of 2

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: MC33201 **Client:** URS **Immediate Client Services Action Required:** No

Date / Time Received: 8/28/2014 **Delivery Method:** **Client Service Action Required at Login:** No

Project: 900 SOUTH CENTRAL **No. Coolers:** 1 **Airbill #'s:**

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	Infared gun		
3. Cooler media:	Ice (bag)		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☑		☐	☐
2. Trip Blank listed on COC:	☑		☐	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

Accutest Laboratories
V:508.481.6200

495 Technology Center West, Bldg One
F: 508.481.7753

Marlborough, MA
www/accutest.com

5.1

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MC33201: Chain of Custody
Page 2 of 2

Internal Sample Tracking Chronicle

Shell Oil

Job No: MC33201

URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL
Project No: 21562973.15000

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC33201-1 Collected: 27-AUG-14 14:00 By: MW26-082714 (38-40')			Received: 28-AUG-14 By:			
MC33201-1	SM21 2540 B MOD.	28-AUG-14	CF			%SOL
MC33201-1	SW846 8015	29-AUG-14 13:20	TB			V8015GRO
MC33201-1	SW846 8270D BY SIM	02-SEP-14 12:22	WK	28-AUG-14	PA	B8270SIMSL
MC33201-1	SW846 8270D	02-SEP-14 16:03	WK	28-AUG-14	PA	AB8270SL+
MC33201-1	SW846 8011	02-SEP-14 17:23	NK	29-AUG-14	PA	V8011SL
MC33201-1	SW846 8260C	03-SEP-14 14:31	KD			V8260SL+
MC33201-2 Collected: 27-AUG-14 14:15 By: MW26-082714 (46-48')			Received: 28-AUG-14 By:			
MC33201-2	SM21 2540 B MOD.	28-AUG-14	CF			%SOL
MC33201-2	SW846 8015	29-AUG-14 15:12	TB			V8015GRO
MC33201-2	SW846 8270D BY SIM	02-SEP-14 12:45	WK	28-AUG-14	PA	B8270SIMSL
MC33201-2	SW846 8270D	02-SEP-14 16:26	WK	28-AUG-14	PA	AB8270SL+
MC33201-2	SW846 8011	02-SEP-14 17:43	NK	29-AUG-14	PA	V8011SL
MC33201-2	SW846 8260C	03-SEP-14 15:00	KD			V8260SL+
MC33201-3 Collected: 27-AUG-14 00:00 By: TB-082714 HCL			Received: 28-AUG-14 By:			
MC33201-3	SW846 8260C	05-SEP-14 13:12	GK			V8260SL+
MC33201-4 Collected: 27-AUG-14 00:00 By: TB-082714 ST			Received: 28-AUG-14 By:			
MC33201-4	SW846 8011	03-SEP-14 21:22	NK	02-SEP-14	MT	V8011SL

SGS Accutest Internal Chain of Custody

Job Number: MC33201
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL
Received: 08/28/14

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC33201-1.2	Walk In Ref #9	Crystall Woodruff	08/28/14 18:46	Retrieve from Storage
MC33201-1.2	Crystall Woodruff	Walk In Ref #9	08/29/14 15:06	Return to Storage
MC33201-1.2	Walk In Ref #9	Nicole Estey	08/29/14 20:36	Retrieve from Storage
MC33201-1.2	Nicole Estey	Walk In Ref #9	08/29/14 22:19	Return to Storage
MC33201-1.2	Scott Parsick		10/27/14 14:47	Disposed
MC33201-1.4	VOC Ref #10	Krysten Dufort	09/03/14 11:41	Retrieve from Storage
MC33201-1.4	Krysten Dufort	GCMSM	09/03/14 11:41	Load on Instrument
MC33201-1.4	GCMSM	Krysten Dufort	09/04/14 08:49	Unload from Instrument
MC33201-1.4	Krysten Dufort	VOC Ref #10	09/04/14 08:49	Return to Storage
MC33201-1.4	Scott Parsick		10/27/14 14:47	Disposed
MC33201-1.5	VOC Ref #10	Todd Bahosh	08/29/14 11:29	Retrieve from Storage
MC33201-1.5	Todd Bahosh	GCWX	08/29/14 11:29	Load on Instrument
MC33201-1.5	GCWX	Todd Bahosh	09/02/14 14:45	Unload from Instrument
MC33201-1.5	Todd Bahosh	VOC Ref #10	09/02/14 14:46	Return to Storage
MC33201-1.5	VOC Ref #10	Jaime Maslowski	09/02/14 15:38	Retrieve from Storage
MC33201-1.5	Jaime Maslowski	VOC Ref #10	09/03/14 09:12	Return to Storage
MC33201-1.5	Scott Parsick		10/27/14 14:47	Disposed
MC33201-2.2	Walk In Ref #9	Crystall Woodruff	08/28/14 18:46	Retrieve from Storage
MC33201-2.2	Crystall Woodruff	Walk In Ref #9	08/29/14 15:06	Return to Storage
MC33201-2.2	Walk In Ref #9	Nicole Estey	08/29/14 20:36	Retrieve from Storage
MC33201-2.2	Nicole Estey	Walk In Ref #9	08/29/14 22:19	Return to Storage
MC33201-2.2	Scott Parsick		10/27/14 14:47	Disposed
MC33201-2.4	VOC Ref #10	Krysten Dufort	09/03/14 11:41	Retrieve from Storage
MC33201-2.4	Krysten Dufort	GCMSM	09/03/14 11:41	Load on Instrument
MC33201-2.4	GCMSM	Krysten Dufort	09/04/14 08:49	Unload from Instrument
MC33201-2.4	Krysten Dufort	VOC Ref #10	09/04/14 08:49	Return to Storage
MC33201-2.4	Scott Parsick		10/27/14 14:47	Disposed
MC33201-2.5	VOC Ref #10	Todd Bahosh	08/29/14 11:29	Retrieve from Storage
MC33201-2.5	Todd Bahosh	GCWX	08/29/14 11:29	Load on Instrument
MC33201-2.5	GCWX	Todd Bahosh	09/02/14 14:45	Unload from Instrument
MC33201-2.5	Todd Bahosh	VOC Ref #10	09/02/14 14:46	Return to Storage
MC33201-2.5	Scott Parsick		10/27/14 14:47	Disposed
MC33201-2.7	VOC Ref #10	Jaime Maslowski	09/02/14 15:38	Retrieve from Storage
MC33201-2.7	Jaime Maslowski	VOC Ref #10	09/03/14 09:12	Return to Storage
MC33201-2.7	Scott Parsick		10/27/14 14:47	Disposed
MC33201-3.1	VOC Ref #3	Gary Krasinski	09/05/14 12:28	Retrieve from Storage
MC33201-3.1	Gary Krasinski	GCMSU	09/05/14 12:28	Load on Instrument

SGS Accutest Internal Chain of Custody

Job Number: MC33201
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL
Received: 08/28/14

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC33201-3.1	GCMSU	Gary Krasinski	09/08/14 09:27	Unload from Instrument
MC33201-3.1	Gary Krasinski	VOC Ref #3	09/08/14 09:27	Return to Storage
MC33201-3.1	Scott Parsick		10/27/14 14:47	Disposed
MC33201-4.2	VOC Ref #3	Marc Tahtamoni	09/02/14 14:46	Retrieve from Storage
MC33201-4.2	Scott Parsick		10/27/14 14:47	Disposed

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: MC33201
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSM2404-MB	M67936.D	1	09/03/14	KD	n/a	n/a	MSM2404

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33201-1, MC33201-2

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	24.0	10	2.8	ug/kg	
107-02-8	Acrolein	ND	25	8.8	ug/kg	
107-13-1	Acrylonitrile	ND	25	2.7	ug/kg	
71-43-2	Benzene	ND	0.50	0.34	ug/kg	
108-86-1	Bromobenzene	ND	5.0	0.25	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	0.35	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	0.21	ug/kg	
75-25-2	Bromoform	ND	2.0	0.35	ug/kg	
74-83-9	Bromomethane	ND	2.0	0.60	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	3.1	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	0.24	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	0.75	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	0.21	ug/kg	
75-15-0	Carbon disulfide	ND	5.0	0.13	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	0.22	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	0.16	ug/kg	
75-00-3	Chloroethane	ND	5.0	0.76	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/kg	
67-66-3	Chloroform	ND	2.0	0.17	ug/kg	
74-87-3	Chloromethane	ND	5.0	0.56	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	0.19	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	0.27	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	0.32	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	2.0	0.21	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	2.0	0.30	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	2.0	0.35	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.81	ug/kg	
75-34-3	1,1-Dichloroethane	ND	2.0	0.27	ug/kg	
107-06-2	1,2-Dichloroethane	ND	2.0	0.32	ug/kg	
75-35-4	1,1-Dichloroethene	ND	2.0	0.41	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	2.0	0.45	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	2.0	0.42	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	0.42	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	0.33	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	0.56	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	0.26	ug/kg	

Method Blank Summary

Job Number: MC33201
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSM2404-MB	M67936.D	1	09/03/14	KD	n/a	n/a	MSM2404

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33201-1, MC33201-2

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.23	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.26	ug/kg	
123-91-1	1,4-Dioxane	ND	25	20	ug/kg	
97-63-2	Ethyl methacrylate	ND	5.0	0.36	ug/kg	
100-41-4	Ethylbenzene	ND	2.0	0.69	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.0	0.57	ug/kg	
591-78-6	2-Hexanone	ND	10	0.76	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	0.17	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	0.17	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	2.0	0.18	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.54	ug/kg	
74-95-3	Methylene bromide	ND	5.0	0.46	ug/kg	
75-09-2	Methylene chloride	ND	2.0	0.53	ug/kg	
91-20-3	Naphthalene	ND	5.0	0.40	ug/kg	
103-65-1	n-Propylbenzene	ND	5.0	0.15	ug/kg	
100-42-5	Styrene	ND	5.0	0.17	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.40	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.39	ug/kg	
127-18-4	Tetrachloroethene	ND	2.0	0.31	ug/kg	
108-88-3	Toluene	ND	5.0	0.21	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.43	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.51	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.22	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.57	ug/kg	
79-01-6	Trichloroethene	ND	2.0	0.24	ug/kg	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.29	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	1.4	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.5	ug/kg	
108-05-4	Vinyl Acetate	ND	5.0	1.5	ug/kg	
75-01-4	Vinyl chloride	ND	2.0	0.91	ug/kg	
	m,p-Xylene	ND	2.0	0.44	ug/kg	
95-47-6	o-Xylene	ND	2.0	0.28	ug/kg	
1330-20-7	Xylene (total)	ND	2.0	0.22	ug/kg	

Method Blank Summary

Job Number: MC33201
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSM2404-MB	M67936.D	1	09/03/14	KD	n/a	n/a	MSM2404

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33201-1, MC33201-2

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	94%	70-130%
2037-26-5	Toluene-D8	91%	70-130%
460-00-4	4-Bromofluorobenzene	87%	70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

Method Blank Summary

Job Number: MC33201
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSU975-MB	U22216.D	1	09/05/14	GK	n/a	n/a	MSU975

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33201-3

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	

Method Blank Summary

Job Number: MC33201
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSU975-MB	U22216.D	1	09/05/14	GK	n/a	n/a	MSU975

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33201-3

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	50	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

Method Blank Summary

Job Number: MC33201
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSU975-MB	U22216.D	1	09/05/14	GK	n/a	n/a	MSU975

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33201-3

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	101%	70-130%
2037-26-5	Toluene-D8	93%	70-130%
460-00-4	4-Bromofluorobenzene	96%	70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Blank Spike Summary

Job Number: MC33201
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSM2404-BS	M67934.D	1	09/03/14	KD	n/a	n/a	MSM2404

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33201-1, MC33201-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	50	41.5	83	70-130
107-02-8	Acrolein	250	259	104	70-130
107-13-1	Acrylonitrile	50	52.6	105	70-130
71-43-2	Benzene	50	45.7	91	70-130
108-86-1	Bromobenzene	50	44.7	89	70-130
74-97-5	Bromochloromethane	50	47.8	96	70-130
75-27-4	Bromodichloromethane	50	51.9	104	70-130
75-25-2	Bromoform	50	43.2	86	70-130
74-83-9	Bromomethane	50	40.5	81	70-130
78-93-3	2-Butanone (MEK)	50	44.6	89	70-130
104-51-8	n-Butylbenzene	50	41.8	84	70-130
135-98-8	sec-Butylbenzene	50	41.7	83	70-130
98-06-6	tert-Butylbenzene	50	42.2	84	70-130
75-15-0	Carbon disulfide	50	48.8	98	70-130
56-23-5	Carbon tetrachloride	50	42.1	84	70-130
108-90-7	Chlorobenzene	50	41.5	83	70-130
75-00-3	Chloroethane	50	48.2	96	70-130
110-75-8	2-Chloroethyl vinyl ether	50	44.2	88	10-160
67-66-3	Chloroform	50	47.3	95	70-130
74-87-3	Chloromethane	50	42.8	86	70-130
95-49-8	o-Chlorotoluene	50	43.7	87	70-130
106-43-4	p-Chlorotoluene	50	43.5	87	70-130
124-48-1	Dibromochloromethane	50	43.5	87	70-130
95-50-1	1,2-Dichlorobenzene	50	44.6	89	70-130
541-73-1	1,3-Dichlorobenzene	50	43.1	86	70-130
106-46-7	1,4-Dichlorobenzene	50	43.1	86	70-130
75-71-8	Dichlorodifluoromethane	50	36.2	72	70-130
75-34-3	1,1-Dichloroethane	50	48.5	97	70-130
107-06-2	1,2-Dichloroethane	50	47.7	95	70-130
75-35-4	1,1-Dichloroethene	50	44.6	89	70-130
156-59-2	cis-1,2-Dichloroethene	50	46.0	92	70-130
156-60-5	trans-1,2-Dichloroethene	50	44.7	89	70-130
78-87-5	1,2-Dichloropropane	50	49.5	99	70-130
142-28-9	1,3-Dichloropropane	50	43.6	87	70-130
594-20-7	2,2-Dichloropropane	50	45.4	91	70-130
563-58-6	1,1-Dichloropropene	50	43.7	87	70-130

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC33201
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSM2404-BS	M67934.D	1	09/03/14	KD	n/a	n/a	MSM2404

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33201-1, MC33201-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
10061-01-5	cis-1,3-Dichloropropene	50	48.0	96	70-130
10061-02-6	trans-1,3-Dichloropropene	50	51.0	102	70-130
123-91-1	1,4-Dioxane	125	139	111	70-130
97-63-2	Ethyl methacrylate	50	52.1	104	76-141
100-41-4	Ethylbenzene	50	40.3	81	70-130
87-68-3	Hexachlorobutadiene	50	39.6	79	70-130
591-78-6	2-Hexanone	50	35.2	70	70-130
98-82-8	Isopropylbenzene	50	43.8	88	70-130
99-87-6	p-Isopropyltoluene	50	42.0	84	70-130
1634-04-4	Methyl Tert Butyl Ether	50	53.8	108	70-130
108-10-1	4-Methyl-2-pentanone (MIBK)	50	47.4	95	70-130
74-95-3	Methylene bromide	50	49.9	100	70-130
75-09-2	Methylene chloride	50	47.7	95	70-130
91-20-3	Naphthalene	50	46.9	94	70-130
103-65-1	n-Propylbenzene	50	43.1	86	70-130
100-42-5	Styrene	50	42.7	85	70-130
630-20-6	1,1,1,2-Tetrachloroethane	50	40.8	82	70-130
79-34-5	1,1,2,2-Tetrachloroethane	50	48.4	97	70-130
127-18-4	Tetrachloroethene	50	36.3	73	70-130
108-88-3	Toluene	50	45.3	91	70-130
87-61-6	1,2,3-Trichlorobenzene	50	44.0	88	70-130
120-82-1	1,2,4-Trichlorobenzene	50	42.8	86	70-130
71-55-6	1,1,1-Trichloroethane	50	44.5	89	70-130
79-00-5	1,1,2-Trichloroethane	50	49.6	99	70-130
79-01-6	Trichloroethene	50	43.8	88	70-130
75-69-4	Trichlorofluoromethane	50	38.1	76	70-130
96-18-4	1,2,3-Trichloropropane	50	47.7	95	70-130
95-63-6	1,2,4-Trimethylbenzene	50	43.9	88	70-130
108-67-8	1,3,5-Trimethylbenzene	50	41.2	82	70-130
108-05-4	Vinyl Acetate	50	35.4	71	70-130
75-01-4	Vinyl chloride	50	41.7	83	70-130
	m,p-Xylene	100	81.4	81	70-130
95-47-6	o-Xylene	50	41.2	82	70-130
1330-20-7	Xylene (total)	150	123	82	70-130

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC33201
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSM2404-BS	M67934.D	1	09/03/14	KD	n/a	n/a	MSM2404

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33201-1, MC33201-2

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	92%	70-130%
2037-26-5	Toluene-D8	90%	70-130%
460-00-4	4-Bromofluorobenzene	88%	70-130%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC33201
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSU975-BS	U22213.D	1	09/05/14	GK	n/a	n/a	MSU975
MSU975-BSD	U22214.D	1	09/05/14	GK	n/a	n/a	MSU975

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33201-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	50	41.3	83	40.8	82	1	70-130/25
107-02-8	Acrolein	250	332	133* [a]	303	121	9	70-130/25
107-13-1	Acrylonitrile	50	48.0	96	46.9	94	2	70-130/25
71-43-2	Benzene	50	48.1	96	46.3	93	4	70-130/25
108-86-1	Bromobenzene	50	49.3	99	48.1	96	2	70-130/25
74-97-5	Bromochloromethane	50	48.6	97	47.5	95	2	70-130/25
75-27-4	Bromodichloromethane	50	53.0	106	50.9	102	4	70-130/25
75-25-2	Bromoform	50	47.9	96	47.5	95	1	70-130/25
74-83-9	Bromomethane	50	48.3	97	44.3	89	9	70-130/25
78-93-3	2-Butanone (MEK)	50	40.9	82	39.4	79	4	70-130/25
104-51-8	n-Butylbenzene	50	52.0	104	50.0	100	4	70-130/25
135-98-8	sec-Butylbenzene	50	53.0	106	51.2	102	3	70-130/25
98-06-6	tert-Butylbenzene	50	52.3	105	50.4	101	4	70-130/25
75-15-0	Carbon disulfide	50	50.4	101	47.6	95	6	70-130/25
56-23-5	Carbon tetrachloride	50	47.9	96	45.8	92	4	70-130/25
108-90-7	Chlorobenzene	50	47.6	95	46.4	93	3	70-130/25
75-00-3	Chloroethane	50	57.6	115	53.8	108	7	70-130/25
110-75-8	2-Chloroethyl vinyl ether	50	51.2	102	48.5	97	5	70-130/25
67-66-3	Chloroform	50	49.9	100	48.1	96	4	70-130/25
74-87-3	Chloromethane	50	47.3	95	43.1	86	9	70-130/25
95-49-8	o-Chlorotoluene	50	51.0	102	49.2	98	4	70-130/25
106-43-4	p-Chlorotoluene	50	49.3	99	47.9	96	3	70-130/25
124-48-1	Dibromochloromethane	50	50.1	100	50.1	100	0	70-130/25
95-50-1	1,2-Dichlorobenzene	50	51.4	103	50.3	101	2	70-130/25
541-73-1	1,3-Dichlorobenzene	50	50.5	101	49.3	99	2	70-130/25
106-46-7	1,4-Dichlorobenzene	50	50.9	102	49.7	99	2	70-130/25
75-71-8	Dichlorodifluoromethane	50	36.4	73	32.9	66* [a]	10	70-130/25
75-34-3	1,1-Dichloroethane	50	50.8	102	48.8	98	4	70-130/25
107-06-2	1,2-Dichloroethane	50	51.1	102	50.2	100	2	70-130/25
75-35-4	1,1-Dichloroethene	50	46.4	93	44.1	88	5	70-130/25
156-59-2	cis-1,2-Dichloroethene	50	46.8	94	46.1	92	2	70-130/25
156-60-5	trans-1,2-Dichloroethene	50	46.0	92	45.2	90	2	70-130/25
78-87-5	1,2-Dichloropropane	50	49.9	100	48.8	98	2	70-130/25
142-28-9	1,3-Dichloropropane	50	48.6	97	49.1	98	1	70-130/25
594-20-7	2,2-Dichloropropane	50	52.1	104	49.2	98	6	70-130/25
563-58-6	1,1-Dichloropropene	50	53.0	106	50.3	101	5	70-130/25

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC33201
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSU975-BS	U22213.D	1	09/05/14	GK	n/a	n/a	MSU975
MSU975-BSD	U22214.D	1	09/05/14	GK	n/a	n/a	MSU975

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33201-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
10061-01-5	cis-1,3-Dichloropropene	50	51.1	102	50.1	100	2	70-130/25
10061-02-6	trans-1,3-Dichloropropene	50	54.4	109	54.8	110	1	70-130/25
123-91-1	1,4-Dioxane	125	159	127	123	98	26* b	70-130/25
97-63-2	Ethyl methacrylate	50	44.5	89	45.2	90	2	77-137/25
100-41-4	Ethylbenzene	50	47.6	95	46.1	92	3	70-130/25
87-68-3	Hexachlorobutadiene	50	54.0	108	50.7	101	6	70-130/25
591-78-6	2-Hexanone	50	38.4	77	38.8	78	1	70-130/25
98-82-8	Isopropylbenzene	50	51.3	103	49.2	98	4	70-130/25
99-87-6	p-Isopropyltoluene	50	51.6	103	50.2	100	3	70-130/25
1634-04-4	Methyl Tert Butyl Ether	50	44.5	89	44.5	89	0	70-130/25
108-10-1	4-Methyl-2-pentanone (MIBK)	50	42.7	85	43.0	86	1	70-130/25
74-95-3	Methylene bromide	50	49.5	99	48.8	98	1	70-130/25
75-09-2	Methylene chloride	50	49.1	98	47.8	96	3	70-130/25
91-20-3	Naphthalene	50	58.6	117	58.2	116	1	70-130/25
103-65-1	n-Propylbenzene	50	52.1	104	49.9	100	4	70-130/25
100-42-5	Styrene	50	47.8	96	47.0	94	2	70-130/25
630-20-6	1,1,1,2-Tetrachloroethane	50	49.9	100	48.2	96	3	70-130/25
79-34-5	1,1,2,2-Tetrachloroethane	50	50.0	100	50.1	100	0	70-130/25
127-18-4	Tetrachloroethene	50	49.2	98	46.8	94	5	70-130/25
108-88-3	Toluene	50	48.5	97	46.9	94	3	70-130/25
87-61-6	1,2,3-Trichlorobenzene	50	55.6	111	55.1	110	1	70-130/25
120-82-1	1,2,4-Trichlorobenzene	50	53.5	107	51.8	104	3	70-130/25
71-55-6	1,1,1-Trichloroethane	50	49.6	99	46.8	94	6	70-130/25
79-00-5	1,1,2-Trichloroethane	50	48.5	97	48.7	97	0	70-130/25
79-01-6	Trichloroethene	50	48.3	97	46.9	94	3	70-130/25
75-69-4	Trichlorofluoromethane	50	46.4	93	42.0	84	10	70-130/25
96-18-4	1,2,3-Trichloropropane	50	42.7	85	43.4	87	2	70-130/25
95-63-6	1,2,4-Trimethylbenzene	50	52.7	105	51.2	102	3	70-130/25
108-67-8	1,3,5-Trimethylbenzene	50	51.3	103	49.6	99	3	70-130/25
108-05-4	Vinyl Acetate	50	94.7	189* c	94.2	188* c	1	70-130/25
75-01-4	Vinyl chloride	50	47.6	95	43.2	86	10	70-130/25
	m,p-Xylene	100	96.2	96	92.3	92	4	70-130/25
95-47-6	o-Xylene	50	49.8	100	48.0	96	4	70-130/25
1330-20-7	Xylene (total)	150	146	97	140	93	4	70-130/25

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC33201
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSU975-BS	U22213.D	1	09/05/14	GK	n/a	n/a	MSU975
MSU975-BSD	U22214.D	1	09/05/14	GK	n/a	n/a	MSU975

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33201-3

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	100%	99%	70-130%
2037-26-5	Toluene-D8	98%	98%	70-130%
460-00-4	4-Bromofluorobenzene	96%	97%	70-130%

(a) Outside control limits. Blank Spike meets program technical requirements.
(b) Outside control limits. Individual spike recoveries within acceptance limits.
(c) Outside control limits. Associated samples are non-detect for this compound.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC33201
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC33233-1MS	M67952.D	1	09/03/14	KD	n/a	n/a	MSM2404
MC33233-1MSD	M67953.D	1	09/03/14	KD	n/a	n/a	MSM2404
MC33233-1	M67943.D	1	09/03/14	KD	n/a	n/a	MSM2404

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33201-1, MC33201-2

CAS No.	Compound	MC33233-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		48.7	44.5	91	51.4	38.9	76	13	70-130/30
107-02-8	Acrolein	ND		244	283	116	257	236	92	18	70-130/30
107-13-1	Acrylonitrile	ND		48.7	67.9	139* [a]	51.4	60.7	118	11	70-130/30
71-43-2	Benzene	5.8		48.7	50.7	92	51.4	46.6	79	8	70-130/30
108-86-1	Bromobenzene	ND		48.7	31.6	65* [a]	51.4	30.0	58* [a]	5	70-130/30
74-97-5	Bromochloromethane	ND		48.7	55.1	113	51.4	49.0	95	12	70-130/30
75-27-4	Bromodichloromethane	ND		48.7	52.4	108	51.4	48.9	95	7	70-130/30
75-25-2	Bromoform	ND		48.7	40.3	83	51.4	36.3	71	10	70-130/30
74-83-9	Bromomethane	ND		48.7	37.6	77	51.4	37.4	73	1	70-130/30
78-93-3	2-Butanone (MEK)	ND		48.7	54.3	111	51.4	50.3	98	8	70-130/30
104-51-8	n-Butylbenzene	ND		48.7	32.5	67* [a]	51.4	30.0	58* [a]	8	70-130/30
135-98-8	sec-Butylbenzene	ND		48.7	35.6	73	51.4	34.8	68* [a]	2	70-130/30
98-06-6	tert-Butylbenzene	ND		48.7	37.2	76	51.4	36.7	71	1	70-130/30
75-15-0	Carbon disulfide	ND		48.7	54.6	112	51.4	49.8	97	9	70-130/30
56-23-5	Carbon tetrachloride	ND		48.7	47.4	97	51.4	42.3	82	11	70-130/30
108-90-7	Chlorobenzene	ND		48.7	35.8	73	51.4	32.4	63* [a]	10	70-130/30
75-00-3	Chloroethane	ND		48.7	45.1	93	51.4	45.1	88	0	70-130/30
110-75-8	2-Chloroethyl vinyl ether	ND		48.7	ND	0* [a]	51.4	ND	0* [a]	nc	10-160/30
67-66-3	Chloroform	ND		48.7	52.7	108	51.4	46.8	91	12	70-130/30
74-87-3	Chloromethane	ND		48.7	38.5	79	51.4	38.6	75	0	70-130/30
95-49-8	o-Chlorotoluene	ND		48.7	34.1	70	51.4	33.3	65* [a]	2	70-130/30
106-43-4	p-Chlorotoluene	ND		48.7	30.8	63* [a]	51.4	30.1	59* [a]	2	70-130/30
124-48-1	Dibromochloromethane	ND		48.7	44.8	92	51.4	40.4	79	10	70-130/30
95-50-1	1,2-Dichlorobenzene	ND		48.7	26.3	54* [a]	51.4	22.6	44* [a]	15	70-130/30
541-73-1	1,3-Dichlorobenzene	ND		48.7	26.5	54* [a]	51.4	24.1	47* [a]	9	70-130/30
106-46-7	1,4-Dichlorobenzene	ND		48.7	25.4	52* [a]	51.4	22.6	44* [a]	12	70-130/30
75-71-8	Dichlorodifluoromethane	ND		48.7	31.4	64* [a]	51.4	31.5	61* [a]	0	70-130/30
75-34-3	1,1-Dichloroethane	ND		48.7	54.5	112	51.4	49.9	97	9	70-130/30
107-06-2	1,2-Dichloroethane	ND		48.7	54.2	111	51.4	49.0	95	10	70-130/30
75-35-4	1,1-Dichloroethene	ND		48.7	51.6	106	51.4	47.0	91	9	70-130/30
156-59-2	cis-1,2-Dichloroethene	ND		48.7	51.2	105	51.4	45.3	88	12	70-130/30
156-60-5	trans-1,2-Dichloroethene	ND		48.7	49.1	101	51.4	45.0	88	9	70-130/30
78-87-5	1,2-Dichloropropane	ND		48.7	51.0	105	51.4	46.8	91	9	70-130/30
142-28-9	1,3-Dichloropropane	ND		48.7	48.6	100	51.4	44.3	86	9	70-130/30
594-20-7	2,2-Dichloropropane	ND		48.7	52.7	108	51.4	45.6	89	14	70-130/30
563-58-6	1,1-Dichloropropene	ND		48.7	49.1	101	51.4	44.5	87	10	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC33201
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC33233-1MS	M67952.D	1	09/03/14	KD	n/a	n/a	MSM2404
MC33233-1MSD	M67953.D	1	09/03/14	KD	n/a	n/a	MSM2404
MC33233-1	M67943.D	1	09/03/14	KD	n/a	n/a	MSM2404

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33201-1, MC33201-2

CAS No.	Compound	MC33233-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
10061-01-5	cis-1,3-Dichloropropene	ND		48.7	48.4	99	51.4	45.9	89	5	70-130/30
10061-02-6	trans-1,3-Dichloropropene	ND		48.7	51.1	105	51.4	44.6	87	14	70-130/30
123-91-1	1,4-Dioxane	ND		122	216	177* a	128	184	143* a	16	70-130/30
97-63-2	Ethyl methacrylate	ND		48.7	60.7	125	51.4	54.1	105	11	41-160/30
100-41-4	Ethylbenzene	1.3		48.7	39.3	78	51.4	36.1	68* a	8	70-130/30
87-68-3	Hexachlorobutadiene	ND		48.7	26.6	55* a	51.4	25.6	50* a	4	70-130/30
591-78-6	2-Hexanone	ND		48.7	47.6	98	51.4	37.8	74	23	70-130/30
98-82-8	Isopropylbenzene	ND		48.7	40.1	82	51.4	39.3	76	2	70-130/30
99-87-6	p-Isopropyltoluene	ND		48.7	34.6	71	51.4	32.3	63* a	7	70-130/30
1634-04-4	Methyl Tert Butyl Ether	ND		48.7	46.7	96	51.4	62.6	122	29	70-130/30
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		48.7	67.8	139* a	51.4	62.3	121	8	70-130/30
74-95-3	Methylene bromide	ND		48.7	53.3	109	51.4	47.9	93	11	70-130/30
75-09-2	Methylene chloride	1.3		48.7	56.9	114	51.4	50.5	96	12	70-130/30
91-20-3	Naphthalene	ND		48.7	16.2	33* a	51.4	14.0	27* a	15	70-130/30
103-65-1	n-Propylbenzene	ND		48.7	36.8	76	51.4	37.4	73	2	70-130/30
100-42-5	Styrene	ND		48.7	31.0	64* a	51.4	28.7	56* a	8	70-130/30
630-20-6	1,1,1,2-Tetrachloroethane	ND		48.7	40.4	83	51.4	35.7	69* a	12	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	ND		48.7	46.2	95	51.4	43.7	85	6	70-130/30
127-18-4	Tetrachloroethene	ND		48.7	38.6	79	51.4	34.9	68* a	10	70-130/30
108-88-3	Toluene	4.8		48.7	49.7	92	51.4	46.7	82	6	70-130/30
87-61-6	1,2,3-Trichlorobenzene	ND		48.7	17.4	36* a	51.4	15.3	30* a	13	70-130/30
120-82-1	1,2,4-Trichlorobenzene	ND		48.7	18.0	37* a	51.4	16.0	31* a	12	70-130/30
71-55-6	1,1,1-Trichloroethane	ND		48.7	50.1	103	51.4	45.2	88	10	70-130/30
79-00-5	1,1,2-Trichloroethane	ND		48.7	56.1	115	51.4	50.9	99	10	70-130/30
79-01-6	Trichloroethene	0.65		48.7	44.9	91	51.4	41.6	80	8	70-130/30
75-69-4	Trichlorofluoromethane	ND		48.7	34.9	72	51.4	34.4	67* a	1	70-130/30
96-18-4	1,2,3-Trichloropropane	ND		48.7	44.6	92	51.4	42.7	83	4	70-130/30
95-63-6	1,2,4-Trimethylbenzene	ND		48.7	33.8	69* a	51.4	33.0	64* a	2	70-130/30
108-67-8	1,3,5-Trimethylbenzene	ND		48.7	34.1	70	51.4	33.4	65* a	2	70-130/30
108-05-4	Vinyl Acetate	ND		48.7	43.7	90	51.4	38.6	75	12	70-130/30
75-01-4	Vinyl chloride	ND		48.7	40.1	82	51.4	38.0	74	5	70-130/30
	m,p-Xylene	2.0		97.5	75.8	76	103	71.4	68* a	6	70-130/30
95-47-6	o-Xylene	0.77		48.7	37.2	75	51.4	36.2	69* a	3	70-130/30
1330-20-7	Xylene (total)	2.8		146	113	75	154	108	68* a	5	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC33201
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC33233-1MS	M67952.D	1	09/03/14	KD	n/a	n/a	MSM2404
MC33233-1MSD	M67953.D	1	09/03/14	KD	n/a	n/a	MSM2404
MC33233-1	M67943.D	1	09/03/14	KD	n/a	n/a	MSM2404

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33201-1, MC33201-2

CAS No.	Surrogate Recoveries	MS	MSD	MC33233-1	Limits
1868-53-7	Dibromofluoromethane	103%	99%	103%	70-130%
2037-26-5	Toluene-D8	91%	92%	89%	70-130%
460-00-4	4-Bromofluorobenzene	88%	92%	95%	70-130%

(a) Outside control limits due to possible matrix interference. Refer to Blank Spike.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC33201
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC33218-3MS	U22227.D	5	09/05/14	GK	n/a	n/a	MSU975
MC33218-3MSD	U22228.D	5	09/05/14	GK	n/a	n/a	MSU975
MC33218-3	U22219.D	1	09/05/14	GK	n/a	n/a	MSU975

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33201-3

CAS No.	Compound	MC33218-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		250	127	51* [a]	250	140	56* [a]	10	70-130/30
107-02-8	Acrolein	ND		1250	1400	112	1250	1480	118	6	70-130/30
107-13-1	Acrylonitrile	ND		250	241	96	250	248	99	3	70-130/30
71-43-2	Benzene	ND		250	240	96	250	232	93	3	70-130/30
108-86-1	Bromobenzene	ND		250	239	96	250	236	94	1	70-130/30
74-97-5	Bromochloromethane	ND		250	239	96	250	239	96	0	70-130/30
75-27-4	Bromodichloromethane	ND		250	256	102	250	255	102	0	70-130/30
75-25-2	Bromoform	ND		250	226	90	250	226	90	0	70-130/30
74-83-9	Bromomethane	ND		250	230	92	250	229	92	0	70-130/30
78-93-3	2-Butanone (MEK)	ND		250	180	72	250	186	74	3	70-130/30
104-51-8	n-Butylbenzene	ND		250	245	98	250	241	96	2	70-130/30
135-98-8	sec-Butylbenzene	ND		250	257	103	250	253	101	2	70-130/30
98-06-6	tert-Butylbenzene	ND		250	257	103	250	254	102	1	70-130/30
75-15-0	Carbon disulfide	ND		250	225	90	250	226	90	0	70-130/30
56-23-5	Carbon tetrachloride	ND		250	244	98	250	238	95	2	70-130/30
108-90-7	Chlorobenzene	ND		250	238	95	250	229	92	4	70-130/30
75-00-3	Chloroethane	ND		250	275	110	250	272	109	1	70-130/30
110-75-8	2-Chloroethyl vinyl ether	ND		250	ND	0* [a]	250	ND	0* [a]	nc	70-130/30
67-66-3	Chloroform	ND		250	249	100	250	248	99	0	70-130/30
74-87-3	Chloromethane	ND		250	225	90	250	223	89	1	70-130/30
95-49-8	o-Chlorotoluene	ND		250	248	99	250	246	98	1	70-130/30
106-43-4	p-Chlorotoluene	ND		250	239	96	250	237	95	1	70-130/30
124-48-1	Dibromochloromethane	ND		250	243	97	250	238	95	2	70-130/30
95-50-1	1,2-Dichlorobenzene	ND		250	249	100	250	249	100	0	70-130/30
541-73-1	1,3-Dichlorobenzene	ND		250	242	97	250	241	96	0	70-130/30
106-46-7	1,4-Dichlorobenzene	ND		250	245	98	250	244	98	0	70-130/30
75-71-8	Dichlorodifluoromethane	ND		250	178	71	250	175	70	2	70-130/30
75-34-3	1,1-Dichloroethane	ND		250	255	102	250	250	100	2	70-130/30
107-06-2	1,2-Dichloroethane	ND		250	255	102	250	253	101	1	70-130/30
75-35-4	1,1-Dichloroethene	ND		250	239	96	250	231	92	3	70-130/30
156-59-2	cis-1,2-Dichloroethene	ND		250	236	94	250	232	93	2	70-130/30
156-60-5	trans-1,2-Dichloroethene	ND		250	235	94	250	235	94	0	70-130/30
78-87-5	1,2-Dichloropropane	ND		250	246	98	250	242	97	2	70-130/30
142-28-9	1,3-Dichloropropane	ND		250	248	99	250	238	95	4	70-130/30
594-20-7	2,2-Dichloropropane	ND		250	252	101	250	242	97	4	70-130/30
563-58-6	1,1-Dichloropropene	ND		250	270	108	250	261	104	3	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC33201
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC33218-3MS	U22227.D	5	09/05/14	GK	n/a	n/a	MSU975
MC33218-3MSD	U22228.D	5	09/05/14	GK	n/a	n/a	MSU975
MC33218-3	U22219.D	1	09/05/14	GK	n/a	n/a	MSU975

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33201-3

CAS No.	Compound	MC33218-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-01-5	cis-1,3-Dichloropropene	ND		250	247	99	250	241	96	2	70-130/30
10061-02-6	trans-1,3-Dichloropropene	ND		250	265	106	250	262	105	1	70-130/30
123-91-1	1,4-Dioxane	ND		625	586	94	625	824	132* [a]	34* [b]	70-130/30
97-63-2	Ethyl methacrylate	ND		250	223	89	250	226	90	1	72-139/30
100-41-4	Ethylbenzene	ND		250	242	97	250	234	94	3	70-130/30
87-68-3	Hexachlorobutadiene	ND		250	244	98	250	245	98	0	70-130/30
591-78-6	2-Hexanone	ND		250	172	69* [a]	250	177	71	3	70-130/30
98-82-8	Isopropylbenzene	ND		250	257	103	250	251	100	2	70-130/30
99-87-6	p-Isopropyltoluene	ND		250	251	100	250	245	98	2	70-130/30
1634-04-4	Methyl Tert Butyl Ether	13.1		250	244	92	250	244	92	0	70-130/30
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		250	233	93	250	226	90	3	70-130/30
74-95-3	Methylene bromide	ND		250	246	98	250	245	98	0	70-130/30
75-09-2	Methylene chloride	ND		250	242	97	250	241	96	0	70-130/30
91-20-3	Naphthalene	ND		250	283	113	250	294	118	4	70-130/30
103-65-1	n-Propylbenzene	ND		250	254	102	250	250	100	2	70-130/30
100-42-5	Styrene	ND		250	229	92	250	223	89	3	70-130/30
630-20-6	1,1,1,2-Tetrachloroethane	ND		250	252	101	250	244	98	3	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	257	103	250	258	103	0	70-130/30
127-18-4	Tetrachloroethene	ND		250	256	102	250	245	98	4	70-130/30
108-88-3	Toluene	ND		250	243	97	250	236	94	3	70-130/30
87-61-6	1,2,3-Trichlorobenzene	ND		250	246	98	250	257	103	4	70-130/30
120-82-1	1,2,4-Trichlorobenzene	ND		250	242	97	250	248	99	2	70-130/30
71-55-6	1,1,1-Trichloroethane	ND		250	254	102	250	246	98	3	70-130/30
79-00-5	1,1,2-Trichloroethane	ND		250	239	96	250	238	95	0	70-130/30
79-01-6	Trichloroethene	ND		250	240	96	250	236	94	2	70-130/30
75-69-4	Trichlorofluoromethane	ND		250	225	90	250	221	88	2	70-130/30
96-18-4	1,2,3-Trichloropropane	ND		250	218	87	250	221	88	1	70-130/30
95-63-6	1,2,4-Trimethylbenzene	ND		250	255	102	250	252	101	1	70-130/30
108-67-8	1,3,5-Trimethylbenzene	ND		250	250	100	250	249	100	0	70-130/30
108-05-4	Vinyl Acetate	ND		250	481	192* [c]	250	479	192* [c]	0	70-130/30
75-01-4	Vinyl chloride	ND		250	231	92	250	226	90	2	70-130/30
	m,p-Xylene	ND		500	482	96	500	461	92	4	70-130/30
95-47-6	o-Xylene	ND		250	251	100	250	242	97	4	70-130/30
1330-20-7	Xylene (total)	ND		750	733	98	750	703	94	4	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC33201
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC33218-3MS	U22227.D	5	09/05/14	GK	n/a	n/a	MSU975
MC33218-3MSD	U22228.D	5	09/05/14	GK	n/a	n/a	MSU975
MC33218-3	U22219.D	1	09/05/14	GK	n/a	n/a	MSU975

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33201-3

CAS No.	Surrogate Recoveries	MS	MSD	MC33218-3	Limits
1868-53-7	Dibromofluoromethane	100%	101%	98%	70-130%
2037-26-5	Toluene-D8	98%	97%	89%	70-130%
460-00-4	4-Bromofluorobenzene	94%	96%	98%	70-130%

(a) Outside control limits due to possible matrix interference. Refer to Blank Spike.
(b) High RPD due to possible matrix interference and/or sample non-homogeneity.
(c) Outside control limits. Associated samples are non-detect for this compound.

* = Outside of Control Limits.

Volatile Internal Standard Area Summary

Job Number: MC33201
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Check Std:	MSM2404-CC2378	Injection Date:	09/03/14
Lab File ID:	M67934.D	Injection Time:	11:06
Instrument ID:	GCMSM	Method:	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	275213	9.35	450932	10.23	209310	13.50	255231	16.07	95943	6.84
Upper Limit [a]	550426	9.85	901864	10.73	418620	14.00	510462	16.57	191886	7.34
Lower Limit [b]	137607	8.85	225466	9.73	104655	13.00	127616	15.57	47972	6.34

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSM2404-BS	275213	9.35	450932	10.23	209310	13.50	255231	16.07	95943	6.84
MSM2404-MB	274170	9.35	442419	10.23	199089	13.50	246593	16.07	95164	6.84
ZZZZZZ	250010	9.35	416316	10.23	190830	13.51	252826	16.07	183195	6.84
ZZZZZZ	255031	9.35	429010	10.22	200592	13.51	247828	16.07	170172	6.85
ZZZZZZ	282497	9.35	470684	10.23	212605	13.50	260461	16.07	152640	6.84
ZZZZZZ	271248	9.35	448925	10.23	214711	13.51	271498	16.07	200428[c]	6.86
MC33201-1	281826	9.34	474286	10.22	217740	13.50	279531	16.07	176282	6.84
MC33201-2	181206	9.34	298023	10.22	135880	13.51	184379	16.07	145658	6.84
MC33233-1	283219	9.35	472570	10.23	201667	13.50	234893	16.07	180521	6.85
ZZZZZZ	282180	9.35	479916	10.23	205714	13.51	232300	16.07	208901[c]	6.86
ZZZZZZ	277856	9.35	458290	10.23	195112	13.51	206525	16.07	204460[c]	6.84
ZZZZZZ	266031	9.35	445197	10.23	193958	13.51	238977	16.07	186413	6.86
ZZZZZZ	273790	9.35	446345	10.23	189277	13.51	230657	16.07	187047	6.85
ZZZZZZ	213382	9.35	302088	10.23	116690	13.51	121036[c]	16.07	117959	6.85
ZZZZZZ	262048	9.35	436727	10.22	185822	13.50	194644	16.07	194972[c]	6.84
ZZZZZZ	287929	9.35	479569	10.22	214719	13.51	280961	16.07	176356	6.85
ZZZZZZ	291745	9.35	486429	10.22	215055	13.51	271327	16.07	185294	6.84
MC33233-1MS	290608	9.34	482126	10.22	222460	13.51	273836	16.07	194265[c]	6.84
MC33233-1MSD	300883	9.35	499527	10.23	225745	13.50	275995	16.07	194445[c]	6.85
MSM2404-ECC2378	287930	9.35	479870	10.22	214734	13.51	280421	16.07	101464	6.86

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Outside control limits. Target analytes not associated with this internal standard.

Volatile Internal Standard Area Summary

Job Number: MC33201
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Check Std:	MSU975-CC972	**Injection Date:**	09/05/14
Lab File ID:	U22212.D	**Injection Time:**	10:55
Instrument ID:	GCMSU	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	509601	8.97	896778	9.84	371874	13.09	622574	15.66	228091	6.63
Upper Limit [a]	1019202	9.47	1793556	10.34	743748	13.59	1245148	16.16	456182	7.13
Lower Limit [b]	254801	8.47	448389	9.34	185937	12.59	311287	15.16	114046	6.13

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSU975-BS	522380	8.97	916802	9.84	382421	13.09	630637	15.66	241574	6.61
MSU975-BSD	532591	8.97	930245	9.84	390834	13.09	641979	15.66	246598	6.63
MSU975-MB	496978	8.98	817564	9.84	309916	13.10	571554	15.66	247790	6.62
MC33201-3	492984	8.98	812321	9.84	312198	13.10	554714	15.66	198616	6.63
ZZZZZZ	502822	8.98	825465	9.84	316352	13.10	554651	15.66	222458	6.62
MC33218-3	494999	8.98	814876	9.84	303904	13.10	541479	15.66	225054	6.63
ZZZZZZ	487140	8.98	823423	9.84	334337	13.10	537542	15.66	226783	6.63
ZZZZZZ	488568	8.98	813310	9.84	313212	13.10	543364	15.66	241594	6.63
ZZZZZZ	536526	8.98	982892	9.84	415762	13.10	685603	15.66	260509	6.62
ZZZZZZ	566639	8.98	925844	9.84	340699	13.10	603442	15.66	274740	6.62
ZZZZZZ	527707	8.97	876783	9.84	331009	13.10	589659	15.66	289348	6.64
ZZZZZZ	521000	8.98	857902	9.84	319624	13.10	587648	15.66	277896	6.63
MC33218-3MS	534048	8.97	938538	9.84	381624	13.09	637394	15.66	282760	6.61
MC33218-3MSD	536822	8.97	948108	9.84	390399	13.09	639875	15.66	298800	6.63
ZZZZZZ	605038	8.97	1134672	9.84	533139	13.10	747279	15.66	324551	6.65
ZZZZZZ	575209	8.98	943676	9.84	360186	13.10	672692	15.66	306921	6.62
ZZZZZZ	562664	8.98	921216	9.84	347012	13.10	638103	15.66	290696	6.64
ZZZZZZ	533655	8.98	870900	9.84	336331	13.10	633940	15.66	265554	6.64
ZZZZZZ	573443	8.98	972380	9.84	341347	13.10	608169	15.66	297546	6.62
ZZZZZZ	548306	8.98	932906	9.84	331893	13.10	597658	15.66	276486	6.63
ZZZZZZ	500316	8.98	797362	9.84	302237	13.10	563142	15.66	244899	6.64
ZZZZZZ	495998	8.98	781389	9.85	293571	13.10	557538	15.66	265949	6.64

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary

Job Number: MC33201
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Method: SW846 8260C **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
MC33201-3	U22217.D	101	93	97
MC33218-3MS	U22227.D	100	98	94
MC33218-3MSD	U22228.D	101	97	96
MSU975-BS	U22213.D	100	98	96
MSU975-BSD	U22214.D	99	98	97
MSU975-MB	U22216.D	101	93	96

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	70-130%
S2 = Toluene-D8	70-130%
S3 = 4-Bromofluorobenzene	70-130%

Volatile Surrogate Recovery Summary

Job Number: MC33201
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Method: SW846 8260C **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
MC33201-1	M67941.D	105	92	89
MC33201-2	M67942.D	104	94	87
MC33233-1MS	M67952.D	103	91	88
MC33233-1MSD	M67953.D	99	92	92
MSM2404-BS	M67934.D	92	90	88
MSM2404-MB	M67936.D	94	91	87

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	70-130%
S2 = Toluene-D8	70-130%
S3 = 4-Bromofluorobenzene	70-130%

GC/MS Semi-volatiles

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QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: MC33201
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP39607-MB	F75745.D	1	09/02/14	WK	08/28/14	OP39607	MSF3328

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC33201-1, MC33201-2

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	480	60	ug/kg	
95-57-8	2-Chlorophenol	ND	240	11	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	480	12	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	480	14	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	480	79	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	960	120	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	480	60	ug/kg	
95-48-7	2-Methylphenol	ND	480	19	ug/kg	
	3&4-Methylphenol	ND	480	23	ug/kg	
88-75-5	2-Nitrophenol	ND	480	13	ug/kg	
100-02-7	4-Nitrophenol	ND	960	90	ug/kg	
87-86-5	Pentachlorophenol	ND	480	34	ug/kg	
108-95-2	Phenol	ND	240	14	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	480	12	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	480	12	ug/kg	
62-53-3	Aniline	ND	480	24	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	240	12	ug/kg	
85-68-7	Butyl benzyl phthalate	35.3	240	9.8	ug/kg	J
100-51-6	Benzyl Alcohol	ND	480	24	ug/kg	
91-58-7	2-Chloronaphthalene	ND	240	13	ug/kg	
106-47-8	4-Chloroaniline	ND	480	12	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	240	11	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	240	15	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	240	17	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	240	15	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	240	11	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	480	32	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	480	12	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	240	24	ug/kg	
132-64-9	Dibenzofuran	ND	96	13	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	240	26	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	240	7.5	ug/kg	
84-66-2	Diethyl phthalate	ND	240	12	ug/kg	
131-11-3	Dimethyl phthalate	ND	240	14	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	240	8.9	ug/kg	
118-74-1	Hexachlorobenzene	ND	240	15	ug/kg	

Method Blank Summary

Job Number: MC33201
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP39607-MB	F75745.D	1	09/02/14	WK	08/28/14	OP39607	MSF3328

The QC reported here applies to the following samples: Method: SW846 8270D

MC33201-1, MC33201-2

CAS No.	Compound	Result	RL	MDL	Units	Q
77-47-4	Hexachlorocyclopentadiene	ND	480	120	ug/kg	
67-72-1	Hexachloroethane	ND	240	12	ug/kg	
78-59-1	Isophorone	ND	240	11	ug/kg	
88-74-4	2-Nitroaniline	ND	480	12	ug/kg	
99-09-2	3-Nitroaniline	ND	480	26	ug/kg	
100-01-6	4-Nitroaniline	ND	480	12	ug/kg	
98-95-3	Nitrobenzene	ND	240	13	ug/kg	
62-75-9	n-Nitrosodimethylamine	ND	240	11	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	240	14	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	240	15	ug/kg	
110-86-1	Pyridine	ND	480	24	ug/kg	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	58%	30-130%
4165-62-2	Phenol-d5	55%	30-130%
118-79-6	2,4,6-Tribromophenol	64%	30-130%
4165-60-0	Nitrobenzene-d5	55%	30-130%
321-60-8	2-Fluorobiphenyl	59%	30-130%
1718-51-0	Terphenyl-d14	81%	30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/kg	

Method Blank Summary

Job Number: MC33201
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP39608-MB	I91428.D	1	09/02/14	WK	08/28/14	OP39608	MSI3408

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

MC33201-1, MC33201-2

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	4.8	0.83	ug/kg	
208-96-8	Acenaphthylene	ND	4.8	0.73	ug/kg	
120-12-7	Anthracene	ND	4.8	1.1	ug/kg	
56-55-3	Benzo(a)anthracene	ND	4.8	2.2	ug/kg	
50-32-8	Benzo(a)pyrene	ND	4.8	1.9	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	4.8	2.1	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	1.3	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	4.8	1.5	ug/kg	
218-01-9	Chrysene	ND	4.8	1.3	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	1.4	ug/kg	
206-44-0	Fluoranthene	ND	4.8	1.4	ug/kg	
86-73-7	Fluorene	ND	4.8	0.95	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	1.2	ug/kg	
90-12-0	1-Methylnaphthalene	ND	9.6	1.1	ug/kg	
91-57-6	2-Methylnaphthalene	ND	9.6	0.90	ug/kg	
85-01-8	Phenanthrene	1.1	4.8	1.0	ug/kg	J
129-00-0	Pyrene	ND	4.8	1.5	ug/kg	

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	65%	30-130%
321-60-8	2-Fluorobiphenyl	63%	30-130%
1718-51-0	Terphenyl-d14	108%	30-130%

Blank Spike Summary

Job Number: MC33201
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP39607-BS	F75746.D	1	09/02/14	WK	08/28/14	OP39607	MSF3328

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC33201-1, MC33201-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
65-85-0	Benzoic acid	2400	1250	52	30-130
95-57-8	2-Chlorophenol	2400	1730	72	30-130
59-50-7	4-Chloro-3-methyl phenol	2400	1960	82	30-130
120-83-2	2,4-Dichlorophenol	2400	1930	80	30-130
105-67-9	2,4-Dimethylphenol	2400	1780	74	30-130
51-28-5	2,4-Dinitrophenol	2400	756	31	30-130
534-52-1	4,6-Dinitro-o-cresol	2400	1530	64	30-130
95-48-7	2-Methylphenol	2400	1730	72	30-130
	3&4-Methylphenol	4810	3590	75	30-130
88-75-5	2-Nitrophenol	2400	1680	70	30-130
100-02-7	4-Nitrophenol	2400	1870	78	30-130
87-86-5	Pentachlorophenol	2400	1940	81	30-130
108-95-2	Phenol	2400	1710	71	30-130
95-95-4	2,4,5-Trichlorophenol	2400	1980	82	30-130
88-06-2	2,4,6-Trichlorophenol	2400	2080	87	30-130
62-53-3	Aniline	2400	1260	52	40-140
101-55-3	4-Bromophenyl phenyl ether	2400	1960	82	40-140
85-68-7	Butyl benzyl phthalate	2400	2010	84	40-140
100-51-6	Benzyl Alcohol	2400	1340	56	40-140
91-58-7	2-Chloronaphthalene	2400	1790	74	40-140
106-47-8	4-Chloroaniline	2400	1500	62	40-140
111-91-1	bis(2-Chloroethoxy)methane	2400	1520	63	40-140
111-44-4	bis(2-Chloroethyl)ether	2400	1530	64	40-140
108-60-1	bis(2-Chloroisopropyl)ether	2400	1650	69	40-140
7005-72-3	4-Chlorophenyl phenyl ether	2400	1850	77	40-140
122-66-7	1,2-Diphenylhydrazine	2400	1790	74	40-140
121-14-2	2,4-Dinitrotoluene	2400	1970	82	40-140
606-20-2	2,6-Dinitrotoluene	2400	1840	77	40-140
91-94-1	3,3'-Dichlorobenzidine	2400	2550	106	40-140
132-64-9	Dibenzofuran	2400	1750	73	40-140
84-74-2	Di-n-butyl phthalate	2400	1950	81	40-140
117-84-0	Di-n-octyl phthalate	2400	2000	83	40-140
84-66-2	Diethyl phthalate	2400	1890	79	40-140
131-11-3	Dimethyl phthalate	2400	1890	79	40-140
117-81-7	bis(2-Ethylhexyl)phthalate	2400	2070	86	40-140
118-74-1	Hexachlorobenzene	2400	2030	84	40-140

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC33201
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP39607-BS	F75746.D	1	09/02/14	WK	08/28/14	OP39607	MSF3328

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC33201-1, MC33201-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
77-47-4	Hexachlorocyclopentadiene	2400	987	41	40-140
67-72-1	Hexachloroethane	2400	1430	60	40-140
78-59-1	Isophorone	2400	1510	63	40-140
88-74-4	2-Nitroaniline	2400	1860	77	40-140
99-09-2	3-Nitroaniline	2400	1830	76	40-140
100-01-6	4-Nitroaniline	2400	1850	77	40-140
98-95-3	Nitrobenzene	2400	1480	62	40-140
62-75-9	n-Nitrosodimethylamine	2400	1350	56	40-140
621-64-7	N-Nitroso-di-n-propylamine	2400	1650	69	40-140
86-30-6	N-Nitrosodiphenylamine	2400	1740	72	40-140
110-86-1	Pyridine	2400	1140	47	40-140

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	62%	30-130%
4165-62-2	Phenol-d5	64%	30-130%
118-79-6	2,4,6-Tribromophenol	80%	30-130%
4165-60-0	Nitrobenzene-d5	62%	30-130%
321-60-8	2-Fluorobiphenyl	70%	30-130%
1718-51-0	Terphenyl-d14	83%	30-130%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC33201
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP39608-BS	I91429.D	1	09/02/14	WK	08/28/14	OP39608	MSI3408

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

MC33201-1, MC33201-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
83-32-9	Acenaphthene	2400	1780	74	40-140
208-96-8	Acenaphthylene	2400	1750	73	40-140
120-12-7	Anthracene	2400	2010	84	40-140
56-55-3	Benzo(a)anthracene	2400	2410	100	40-140
50-32-8	Benzo(a)pyrene	2400	2400	100	40-140
205-99-2	Benzo(b)fluoranthene	2400	2730	114	40-140
191-24-2	Benzo(g,h,i)perylene	2400	2280	95	40-140
207-08-9	Benzo(k)fluoranthene	2400	2030	84	40-140
218-01-9	Chrysene	2400	2040	85	40-140
53-70-3	Dibenzo(a,h)anthracene	2400	2430	101	40-140
206-44-0	Fluoranthene	2400	2300	96	40-140
86-73-7	Fluorene	2400	1860	77	40-140
193-39-5	Indeno(1,2,3-cd)pyrene	2400	2360	98	40-140
90-12-0	1-Methylnaphthalene	2400	1730	72	40-140
91-57-6	2-Methylnaphthalene	2400	1770	74	40-140
85-01-8	Phenanthrene	2400	1970	82	40-140
129-00-0	Pyrene	2400	2350	98	40-140

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	73%	30-130%
321-60-8	2-Fluorobiphenyl	72%	30-130%
1718-51-0	Terphenyl-d14	106%	30-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC33201
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP39607-MS	F75747.D	1	09/02/14	WK	08/28/14	OP39607	MSF3328
OP39607-MSD	F75748.D	1	09/02/14	WK	08/28/14	OP39607	MSF3328
MC33201-1	F75749.D	1	09/02/14	WK	08/28/14	OP39607	MSF3328

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC33201-1, MC33201-2

CAS No.	Compound	MC33201-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic acid	ND		2690	128	5* [a]	2650	100	4* [a]	25	30-130/30
95-57-8	2-Chlorophenol	ND		2690	1670	62	2650	1880	71	12	30-130/30
59-50-7	4-Chloro-3-methyl phenol	ND		2690	2140	80	2650	2170	82	1	30-130/30
120-83-2	2,4-Dichlorophenol	ND		2690	1950	72	2650	2070	78	6	30-130/30
105-67-9	2,4-Dimethylphenol	ND		2690	1850	69	2650	1930	73	4	30-130/30
51-28-5	2,4-Dinitrophenol	ND		2690	255	9* [a]	2650	216	8* [a]	17	30-130/30
534-52-1	4,6-Dinitro-o-cresol	ND		2690	1300	48	2650	1310	49	1	30-130/30
95-48-7	2-Methylphenol	ND		2690	1760	65	2650	1850	70	5	30-130/30
	3&4-Methylphenol	ND		5380	3610	67	5310	3870	73	7	30-130/30
88-75-5	2-Nitrophenol	ND		2690	1670	62	2650	1830	69	9	30-130/30
100-02-7	4-Nitrophenol	ND		2690	2130	79	2650	2070	78	3	30-130/30
87-86-5	Pentachlorophenol	ND		2690	2220	83	2650	2180	82	2	30-130/30
108-95-2	Phenol	ND		2690	1680	62	2650	1800	68	7	30-130/30
95-95-4	2,4,5-Trichlorophenol	ND		2690	2180	81	2650	2230	84	2	30-130/30
88-06-2	2,4,6-Trichlorophenol	ND		2690	2250	84	2650	2350	89	4	30-130/30
62-53-3	Aniline	ND		2690	1210	45	2650	1400	53	15	40-140/30
101-55-3	4-Bromophenyl phenyl ether	ND		2690	2280	85	2650	2220	84	3	40-140/30
85-68-7	Butyl benzyl phthalate	ND		2690	2360	88	2650	2350	89	0	40-140/30
100-51-6	Benzyl Alcohol	ND		2690	1420	53	2650	1510	57	6	40-140/30
91-58-7	2-Chloronaphthalene	ND		2690	1880	70	2650	1980	75	5	40-140/30
106-47-8	4-Chloroaniline	ND		2690	1560	58	2650	1640	62	5	40-140/30
111-91-1	bis(2-Chloroethoxy)methane	ND		2690	1500	56	2650	1690	64	12	40-140/30
111-44-4	bis(2-Chloroethyl)ether	ND		2690	1470	55	2650	1700	64	15	40-140/30
108-60-1	bis(2-Chloroisopropyl)ether	ND		2690	1570	58	2650	1760	66	11	40-140/30
7005-72-3	4-Chlorophenyl phenyl ether	ND		2690	2080	77	2650	2080	78	0	40-140/30
122-66-7	1,2-Diphenylhydrazine	ND		2690	2070	77	2650	2020	76	2	40-140/30
121-14-2	2,4-Dinitrotoluene	ND		2690	2210	82	2650	2180	82	1	40-140/30
606-20-2	2,6-Dinitrotoluene	ND		2690	2100	78	2650	2120	80	1	40-140/30
91-94-1	3,3'-Dichlorobenzidine	ND		2690	3200	119	2650	3200	121	0	40-140/30
132-64-9	Dibenzofuran	ND		2690	1940	72	2650	1970	74	2	40-140/30
84-74-2	Di-n-butyl phthalate	ND		2690	2260	84	2650	2200	83	3	40-140/30
117-84-0	Di-n-octyl phthalate	ND		2690	2310	86	2650	2280	86	1	40-140/30
84-66-2	Diethyl phthalate	ND		2690	2180	81	2650	2150	81	1	40-140/30
131-11-3	Dimethyl phthalate	ND		2690	2140	80	2650	2140	81	0	40-140/30
117-81-7	bis(2-Ethylhexyl)phthalate	ND		2690	2390	89	2650	2410	91	1	40-140/30
118-74-1	Hexachlorobenzene	ND		2690	2340	87	2650	2310	87	1	40-140/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC33201
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP39607-MS	F75747.D	1	09/02/14	WK	08/28/14	OP39607	MSF3328
OP39607-MSD	F75748.D	1	09/02/14	WK	08/28/14	OP39607	MSF3328
MC33201-1	F75749.D	1	09/02/14	WK	08/28/14	OP39607	MSF3328

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC33201-1, MC33201-2

CAS No.	Compound	MC33201-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
77-47-4	Hexachlorocyclopentadiene	ND		2690	914	34* [a]	2650	1020	38* [a]	11	40-140/30
67-72-1	Hexachloroethane	ND		2690	1360	51	2650	1520	57	11	40-140/30
78-59-1	Isophorone	ND		2690	1570	58	2650	1650	62	5	40-140/30
88-74-4	2-Nitroaniline	ND		2690	2070	77	2650	2090	79	1	40-140/30
99-09-2	3-Nitroaniline	ND		2690	2100	78	2650	2100	79	0	40-140/30
100-01-6	4-Nitroaniline	ND		2690	2090	78	2650	2040	77	2	40-140/30
98-95-3	Nitrobenzene	ND		2690	1500	56	2650	1620	61	8	40-140/30
62-75-9	n-Nitrosodimethylamine	ND		2690	1240	46	2650	1410	53	13	40-140/30
621-64-7	N-Nitroso-di-n-propylamine	ND		2690	1660	62	2650	1790	67	8	40-140/30
86-30-6	N-Nitrosodiphenylamine	ND		2690	2030	75	2650	2000	75	1	40-140/30
110-86-1	Pyridine	ND		2690	995	37* [a]	2650	1200	45	19	40-140/30

CAS No.	Surrogate Recoveries	MS	MSD	MC33201-1	Limits
367-12-4	2-Fluorophenol	52%	59%	49%	30-130%
4165-62-2	Phenol-d5	53%	59%	47%	30-130%
118-79-6	2,4,6-Tribromophenol	81%	79%	61%	30-130%
4165-60-0	Nitrobenzene-d5	55%	59%	45%	30-130%
321-60-8	2-Fluorobiphenyl	64%	68%	51%	30-130%
1718-51-0	Terphenyl-d14	85%	85%	79%	30-130%

(a) Outside control limits due to possible matrix interference. Refer to Blank Spike.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC33201
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP39608-MS	I91430.D	1	09/02/14	WK	08/28/14	OP39608	MSI3408
OP39608-MSD	I91431.D	1	09/02/14	WK	08/28/14	OP39608	MSI3408
MC33201-1	I91432.D	1	09/02/14	WK	08/28/14	OP39608	MSI3408

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

MC33201-1, MC33201-2

CAS No.	Compound	MC33201-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	ND		2690	1980	74	2650	2010	76	2	40-140/30
208-96-8	Acenaphthylene	ND		2690	1920	71	2650	1970	74	3	40-140/30
120-12-7	Anthracene	ND		2690	2310	86	2650	2280	86	1	40-140/30
56-55-3	Benzo(a)anthracene	ND		2690	2790	104	2650	2760	104	1	40-140/30
50-32-8	Benzo(a)pyrene	ND		2690	2800	104	2650	2760	104	1	40-140/30
205-99-2	Benzo(b)fluoranthene	ND		2690	3050	113	2650	3090	116	1	40-140/30
191-24-2	Benzo(g,h,i)perylene	ND		2690	2630	98	2650	2590	98	2	40-140/30
207-08-9	Benzo(k)fluoranthene	ND		2690	2480	92	2650	2380	90	4	40-140/30
218-01-9	Chrysene	ND		2690	2370	88	2650	2340	88	1	40-140/30
53-70-3	Dibenzo(a,h)anthracene	ND		2690	2810	104	2650	2790	105	1	40-140/30
206-44-0	Fluoranthene	ND		2690	2660	99	2650	2680	101	1	40-140/30
86-73-7	Fluorene	ND		2690	2110	78	2650	2120	80	0	40-140/30
193-39-5	Indeno(1,2,3-cd)pyrene	ND		2690	2730	101	2650	2710	102	1	40-140/30
90-12-0	1-Methylnaphthalene	ND		2690	1800	67	2650	1890	71	5	40-140/30
91-57-6	2-Methylnaphthalene	ND		2690	1830	68	2650	1930	73	5	40-140/30
85-01-8	Phenanthrene	ND		2690	2270	84	2650	2260	85	0	40-140/30
129-00-0	Pyrene	ND		2690	2750	102	2650	2750	104	0	40-140/30

CAS No.	Surrogate Recoveries	MS	MSD	MC33201-1	Limits
4165-60-0	Nitrobenzene-d5	64%	69%	55%	30-130%
321-60-8	2-Fluorobiphenyl	67%	70%	54%	30-130%
1718-51-0	Terphenyl-d14	107%	108%	106%	30-130%

* = Outside of Control Limits.

Semivolatile Internal Standard Area Summary

Job Number: MC33201
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Check Std:	MSF3328-CC3320	**Injection Date:**	09/02/14
Lab File ID:	F75728.D	**Injection Time:**	07:51
Instrument ID:	GCMSF	**Method:**	SW846 8270D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	135623	4.32	510659	5.38	314494	6.90	546727	8.18	623190	10.80	600018	12.51
Upper Limit [a]	271246	4.82	1021318	5.88	628988	7.40	1093454	8.68	1246380	11.30	1200036	13.01
Lower Limit [b]	67812	3.82	255330	4.88	157247	6.40	273364	7.68	311595	10.30	300009	12.01

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP39622-MB	147114	4.32	550586	5.37	335048	6.90	551940	8.18	623950	10.79	583242	12.51
OP39622-BS	160227	4.32	594548	5.38	357502	6.90	607596	8.18	669123	10.79	615880	12.51
OP39622-MS	153222	4.32	575467	5.38	331500	6.91	560837	8.20	615339	10.79	578855	12.51
OP39622-MSD	138201	4.32	529736	5.38	307890	6.91	530040	8.20	586193	10.79	553822	12.51
MC33246-1	152930	4.32	577576	5.38	337064	6.91	572837	8.19	613891	10.79	587033	12.51
OP39590-MB	147651	4.32	569018	5.37	341912	6.90	567116	8.18	613355	10.79	558681	12.51
OP39590-BS	149337	4.32	556016	5.38	334593	6.90	573907	8.19	621495	10.79	591569	12.51
OP39590-MS	121843	4.32	474149	5.37	285033	6.90	490359	8.18	551076	10.79	545519	12.51
OP39590-MSD	123129	4.32	477011	5.37	288958	6.90	502263	8.18	573314	10.79	578925	12.51
OP39614-MB	138183	4.32	519749	5.38	327688	6.90	568324	8.18	668374	10.79	678934	12.51
OP39614-LB	138183	4.32	519749	5.38	327688	6.90	568324	8.18	668374	10.79	678934	12.51
OP39607-MB	140805	4.32	529432	5.37	317869	6.90	540431	8.18	612964	10.79	620142	12.51
OP39607-BS	138143	4.32	524470	5.38	313939	6.90	542635	8.19	614635	10.80	624627	12.51
OP39607-MS	149357	4.32	550483	5.38	329633	6.90	559314	8.18	629624	10.80	640227	12.51
OP39607-MSD	139046	4.32	523654	5.38	315661	6.90	541501	8.19	597747	10.80	615661	12.51
MC33201-1	144239	4.32	538080	5.37	325093	6.90	550225	8.18	617017	10.79	636201	12.51
MC33201-2	128558	4.32	496220	5.37	299758	6.90	521440	8.18	610899	10.79	634411	12.51
ZZZZZZ	152897	4.32	564097	5.38	341128	6.90	587932	8.18	662412	10.79	682968	12.52
ZZZZZZ	129860	4.32	483114	5.37	298400	6.90	498152	8.18	587561	10.79	612965	12.51
ZZZZZZ	155635	4.32	578083	5.37	346976	6.90	584786	8.19	640898	10.79	685139	12.52
MC33192-1	160214	4.32	606304	5.37	361806	6.90	623830	8.18	796994	10.80	872889	12.53
ZZZZZZ	115227	4.32	445969	5.38	268901	6.90	457339	8.19	559684	10.80	617773	12.52

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: MC33201
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Check Std:	MSI3408-CC3386	Injection Date:	09/02/14
Lab File ID:	I91421.D	Injection Time:	08:10
Instrument ID:	GCMSI	Method:	SW846 8270D BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	429049	3.83	936028	4.87	497156	6.40	852703	7.75	612602	10.52	1513434	11.98
Upper Limit [a]	858098	4.33	1872056	5.37	994312	6.90	1705406	8.25	1225204	11.02	3026868	12.48
Lower Limit [b]	214525	3.33	468014	4.37	248578	5.90	426352	7.25	306301	10.02	756717	11.48
Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP39589-MB	465113	3.83	1058081	4.87	565613	6.39	949427	7.74	675138	10.52	1686036	11.98
OP39589-BS	470780	3.83	1072872	4.87	569970	6.39	964377	7.74	729952	10.52	1727816	11.98
OP39589-MS	457127	3.83	1046152	4.87	561021	6.39	960165	7.74	718010	10.52	1703955	11.98
OP39589-MSD	465322	3.83	1071721	4.87	569982	6.39	967633	7.74	725015	10.52	1716499	11.98
MC33000-14	450149	3.83	1034614	4.87	557392	6.39	930967	7.74	659629	10.51	1636462	11.98
ZZZZZZ	495848	3.83	1139983	4.87	613275	6.39	1040603	7.74	741952	10.52	1840427	11.98
OP39608-MB	492924	3.83	1107682	4.87	584614	6.39	973636	7.74	671706	10.51	1667856	11.98
OP39608-BS	492747	3.83	1091854	4.87	585843	6.39	973488	7.75	705592	10.52	1669130	11.98
OP39608-MS	490570	3.83	1094113	4.87	581472	6.39	968206	7.75	695124	10.52	1623781	11.98
OP39608-MSD	476173	3.83	1064891	4.87	563693	6.39	942881	7.74	669296	10.52	1564352	11.98
MC33201-1	491417	3.83	1106934	4.87	586171	6.39	976504	7.74	664844	10.51	1635330	11.98
MC33201-2	438038	3.83	994371	4.87	525668	6.39	874666	7.74	602785	10.51	1498964	11.97
ZZZZZZ	430665	3.85	1138780	4.89	592812	6.39	961149	7.74	684956	10.53	1659068	12.01
ZZZZZZ	432434	3.83	984180	4.87	520940	6.39	866166	7.74	576162	10.51	1420512	11.98
MSI3408-ECC3386	410394	3.83	920190	4.87	490085	6.39	829670	7.74	587094	10.52	1430590	11.98

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Surrogate Recovery Summary

Job Number: MC33201
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Method: SW846 8270D **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
MC33201-1	F75749.D	49	47	61	45	51	79
MC33201-2	F75750.D	47	50	60	41	47	83
OP39607-BS	F75746.D	62	64	80	62	70	83
OP39607-MB	F75745.D	58	55	64	55	59	81
OP39607-MS	F75747.D	52	53	81	55	64	85
OP39607-MSD	F75748.D	59	59	79	59	68	85

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorophenol	30-130%
S2 = Phenol-d5	30-130%
S3 = 2,4,6-Tribromophenol	30-130%
S4 = Nitrobenzene-d5	30-130%
S5 = 2-Fluorobiphenyl	30-130%
S6 = Terphenyl-d14	30-130%

Semivolatile Surrogate Recovery Summary

Job Number: MC33201
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Method: SW846 8270D BY SIM **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
MC33201-1	I91432.D	55	54	106
MC33201-2	I91433.D	50	50	112
OP39608-BS	I91429.D	73	72	106
OP39608-MB	I91428.D	65	63	108
OP39608-MS	I91430.D	64	67	107
OP39608-MSD	I91431.D	69	70	108

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	30-130%
S2 = 2-Fluorobiphenyl	30-130%
S3 = Terphenyl-d14	30-130%

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries

Method Blank Summary

Job Number: MC33201
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP39625-MB	YZ91596.D	1	09/02/14	NK	08/29/14	OP39625	GYZ7634

The QC reported here applies to the following samples: **Method:** SW846 8011

MC33201-1, MC33201-2

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.73	ug/kg	
106-93-4	1,2-Dibromoethane	ND	2.5	0.61	ug/kg	

CAS No.	Surrogate Recoveries		Limits
460-00-4	Bromofluorobenzene (S)	153%	61-167%
460-00-4	Bromofluorobenzene (S)	130%	61-167%

Method Blank Summary

Job Number: MC33201
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP39646-MB	YZ91624.D	1	09/03/14	NK	09/02/14	OP39646	GYZ7636

The QC reported here applies to the following samples: **Method:** SW846 8011

MC33201-4

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.015	0.0061	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.015	0.0061	ug/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	Bromofluorobenzene (S)	80%	36-173%
460-00-4	Bromofluorobenzene (S)	74%	36-173%

Method Blank Summary

Job Number: MC33201
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GWX3653-MB	WX75006.D	1	08/29/14	TB	n/a	n/a	GWX3653

The QC reported here applies to the following samples: **Method:** SW846 8015

MC33201-1, MC33201-2

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (VOA)	ND	5.0	0.74	mg/kg	

CAS No.	Surrogate Recoveries		Limits
	2,3,4-Trifluorotoluene	100%	61-116%

Blank Spike Summary

Job Number: MC33201
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP39646-BS	YZ91625.D	1	09/03/14	NK	09/02/14	OP39646	GYZ7636

The QC reported here applies to the following samples: **Method:** SW846 8011

MC33201-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
96-12-8	1,2-Dibromo-3-chloropropane	0.071	0.058	82	60-140
106-93-4	1,2-Dibromoethane	0.071	0.063	89	60-140

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	Bromofluorobenzene (S)	81%	36-173%
460-00-4	Bromofluorobenzene (S)	76%	36-173%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC33201
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP39625-BS	YZ91597.D	1	09/02/14	NK	08/29/14	OP39625	GYZ7634
OP39625-BSD	YZ91598.D	1	09/02/14	NK	08/29/14	OP39625	GYZ7634

The QC reported here applies to the following samples: **Method:** SW846 8011

MC33201-1, MC33201-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
96-12-8	1,2-Dibromo-3-chloropropane	33.2	30.7	92	31.3	97	2	59-142/30
106-93-4	1,2-Dibromoethane	33.2	32.2	97	32.8	102	2	56-140/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
460-00-4	Bromofluorobenzene (S)	164%	150%	61-167%
460-00-4	Bromofluorobenzene (S)	151%	134%	61-167%

* = Outside of Control Limits.

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Blank Spike/Blank Spike Duplicate Summary

Job Number: MC33201
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GWX3653-BSP	WX75007.D	1	08/29/14	TB	n/a	n/a	GWX3653
GWX3653-BSD	WX75008.D	1	08/29/14	TB	n/a	n/a	GWX3653

The QC reported here applies to the following samples: **Method:** SW846 8015

MC33201-1, MC33201-2

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH-GRO (VOA)	32.5	31.8	98	31.8	98	0	66-126/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
	2,3,4-Trifluorotoluene	103%	103%	61-116%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC33201
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP39625-MS	YZ91602.D	1	09/02/14	NK	08/29/14	OP39625	GYZ7634
OP39625-MSD	YZ91603.D	1	09/02/14	NK	08/29/14	OP39625	GYZ7634
MC33265-1	YZ91604.D	1	09/02/14	NK	08/29/14	OP39625	GYZ7634

The QC reported here applies to the following samples: **Method:** SW846 8011

MC33201-1, MC33201-2

CAS No.	Compound	MC33265-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
96-12-8	1,2-Dibromo-3-chloropropane	ND		42.3	44.9	106	42.2	45.6	108	2	40-156/27
106-93-4	1,2-Dibromoethane	ND		42.3	41.7	98	42.2	43.6	103	4	48-141/27

CAS No.	Surrogate Recoveries	MS	MSD	MC33265-1	Limits
460-00-4	Bromofluorobenzene (S)	161%	157%	149%	61-167%
460-00-4	Bromofluorobenzene (S)	115%	110%	98%	61-167%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC33201
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP39646-MS	YZ91626.D	1	09/03/14	NK	09/02/14	OP39646	GYZ7636
OP39646-MSD	YZ91627.D	1	09/03/14	NK	09/02/14	OP39646	GYZ7636
MC33200-2	YZ91628.D	1	09/03/14	NK	09/02/14	OP39646	GYZ7636

The QC reported here applies to the following samples: **Method:** SW846 8011

MC33201-4

CAS No.	Compound	MC33200-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
96-12-8	1,2-Dibromo-3-chloropropane	ND		0.071	0.049	69	0.071	0.045	63* [a]	9	64-141/29
106-93-4	1,2-Dibromoethane	ND		0.071	0.055	77	0.071	0.052	73	6	63-163/27

CAS No.	Surrogate Recoveries	MS	MSD	MC33200-2	Limits
460-00-4	Bromofluorobenzene (S)	77%	66%	67%	36-173%
460-00-4	Bromofluorobenzene (S)	64%	60%	72%	36-173%

(a) Outside control limits due to possible matrix interference.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC33201
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC33201-1MS	WX75012.D	1	08/29/14	TB	n/a	n/a	GWX3653
MC33201-1MSD	WX75013.D	1	08/29/14	TB	n/a	n/a	GWX3653
MC33201-1	WX75011.D	1	08/29/14	TB	n/a	n/a	GWX3653

The QC reported here applies to the following samples: **Method:** SW846 8015

MC33201-1, MC33201-2

CAS No.	Compound	MC33201-1 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	Spike mg/kg	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (VOA)	5.09	J	76.3	75.9	93	76.3	75.9	93	0	41-150/20

CAS No.	Surrogate Recoveries	MS	MSD	MC33201-1	Limits
	2,3,4-Trifluorotoluene	104%	104%	98%	61-116%

* = Outside of Control Limits.

Volatile Surrogate Recovery Summary

Job Number: MC33201
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Method: SW846 8011 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]
MC33201-4	YZ91631.D	65	70
OP39646-BS	YZ91625.D	81	76
OP39646-MB	YZ91624.D	80	74
OP39646-MS	YZ91626.D	77	64
OP39646-MSD	YZ91627.D	66	60

Surrogate Compounds	Recovery Limits
S1 = Bromofluorobenzene (S)	36-173%

(a) Recovery from GC signal #2
(b) Recovery from GC signal #1

Volatile Surrogate Recovery Summary

Job Number: MC33201
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Method: SW846 8011 **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]
MC33201-1	YZ91608.D	196* [c]	145
MC33201-2	YZ91609.D	194* [c]	139
OP39625-BS	YZ91597.D	164	151
OP39625-BSD	YZ91598.D	150	134
OP39625-MB	YZ91596.D	153	130
OP39625-MS	YZ91602.D	161	115
OP39625-MSD	YZ91603.D	157	110

Surrogate Compounds	Recovery Limits
S1 = Bromofluorobenzene (S)	61-167%

(a) Recovery from GC signal #2
(b) Recovery from GC signal #1
(c) Outside control limits due to possible matrix interference.

Volatile Surrogate Recovery Summary

Job Number: MC33201
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Method: SW846 8015 **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
MC33201-1	WX75011.D	98
MC33201-2	WX75014.D	98
GWX3653-BSD	WX75008.D	103
GWX3653-BSP	WX75007.D	103
GWX3653-MB	WX75006.D	100
MC33201-1MS	WX75012.D	104
MC33201-1MSD	WX75013.D	104

Surrogate Compounds	Recovery Limits
S1 = 2,3,4-Trifluorotoluene	61-116%

(a) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: MC33201
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Check Std:	GWX3654-CC3234	**Injection Date:**	08/29/14
Lab File ID:	WX75005A.D	**Injection Time:**	09:35
Instrument ID:	GCWX	**Method:**	SW846 8015

	S1 [a] RT	S2 [a] RT	S2 [b] RT
Check Std		19.95	19.95

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT	S2 [b] RT
GWX3653-MB	WX75006.D	08/29/14	10:13			19.94
GWX3655-MB	WX75006B.D	08/29/14	10:13	14.79	19.94	
GWX3654-MB	WX75006A.D	08/29/14	10:13		19.94	19.94
GWX3655-BSP	WX75007B.D	08/29/14	10:50	14.79	19.95	
GWX3654-BSP	WX75007A.D	08/29/14	10:50		19.95	19.94
GWX3653-BSP	WX75007.D	08/29/14	10:50			19.94
GWX3655-BSD	WX75008B.D	08/29/14	11:27	14.79	19.94	
GWX3653-BSD	WX75008.D	08/29/14	11:27			19.95
GWX3654-BSD	WX75008A.D	08/29/14	11:27		19.94	19.95
MC33201-1	WX75011.D	08/29/14	13:20			19.95
MC33201-1MS	WX75012.D	08/29/14	13:57			19.95
MC33201-1MSD	WX75013.D	08/29/14	14:34			19.95
MC33201-2	WX75014.D	08/29/14	15:12			19.95
ZZZZZZ	WX75015.D	08/29/14	15:49			19.95

Surrogate Compounds

S1 = Fluorobenzene
S2 = 2,3,4-Trifluorotoluene

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: MC33201
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Check Std:	GYZ7634-CC7620	**Injection Date:**	09/02/14
Lab File ID:	YZ91595.D	**Injection Time:**	13:09
Instrument ID:	GCYZ	**Method:**	SW846 8011

	S1 [a] RT	S1 [b] RT
Check Std	3.29	3.51

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
OP39625-MB	YZ91596.D	09/02/14	13:29	3.30	3.51
OP39625-BS	YZ91597.D	09/02/14	13:49	3.30	3.51
OP39625-BSD	YZ91598.D	09/02/14	14:08	3.30	3.51
ZZZZZZ	YZ91599.D	09/02/14	14:28	3.30	3.51
ZZZZZZ	YZ91600.D	09/02/14	14:47	3.30	3.51
ZZZZZZ	YZ91601.D	09/02/14	15:07	3.30	3.51
OP39625-MS	YZ91602.D	09/02/14	15:26	3.30	3.51
OP39625-MSD	YZ91603.D	09/02/14	15:46	3.30	3.51
MC33265-1	YZ91604.D	09/02/14	16:05	3.30	3.51
ZZZZZZ	YZ91605.D	09/02/14	16:25	3.30	3.51

Surrogate Compounds

S1 = Bromofluorobenzene (S)

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: MC33201
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Check Std:	GYZ7634-CC7620	**Injection Date:**	09/02/14
Lab File ID:	YZ91606.D	**Injection Time:**	16:44
Instrument ID:	GCYZ	**Method:**	SW846 8011

	S1 [a] RT	S1 [b] RT
Check Std	3.30	3.51

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
ZZZZZZ	YZ91607.D	09/02/14	17:04	3.30	3.51
MC33201-1	YZ91608.D	09/02/14	17:23	3.30	3.51
MC33201-2	YZ91609.D	09/02/14	17:43	3.30	3.51
GYZ7634-ECC762	YZ91610.D	09/02/14	18:03	3.30	3.51

Surrogate Compounds

S1 = Bromofluorobenzene (S)

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: MC33201
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Check Std:	GYZ7636-ICC7636	**Injection Date:**	09/03/14
Lab File ID:	YZ91620.D	**Injection Time:**	17:51
Instrument ID:	GCYZ	**Method:**	SW846 8011

	S1 [a] RT	S1 [b] RT
Check Std	3.30	3.51

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
OP39646-MB	YZ91624.D	09/03/14	19:08	3.29	3.51
OP39646-BS	YZ91625.D	09/03/14	19:27	3.30	3.51
OP39646-MS	YZ91626.D	09/03/14	19:47	3.29	3.51
OP39646-MSD	YZ91627.D	09/03/14	20:06	3.30	3.51
MC33200-2	YZ91628.D	09/03/14	20:25	3.29	3.51
ZZZZZZ	YZ91629.D	09/03/14	20:44	3.30	3.51
ZZZZZZ	YZ91630.D	09/03/14	21:03	3.30	3.51
MC33201-4	YZ91631.D	09/03/14	21:22	3.29	3.51
ZZZZZZ	YZ91632.D	09/03/14	21:42	3.30	3.51
GYZ7636-ECC7636	YZ91633.D	09/03/14	22:01	3.30	3.51

Surrogate Compounds

S1 = Bromofluorobenzene (S)

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: MC33201
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Check Std:	GWX3653-CC3510	**Injection Date:**	08/29/14
Lab File ID:	WX75005.D	**Injection Time:**	09:35
Instrument ID:	GCWX	**Method:**	SW846 8015

	S1 [a] RT	S2 [a] RT	S2 [b] RT
Check Std			19.95

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT	S2 [b] RT
GWX3653-MB	WX75006.D	08/29/14	10:13			19.94
GWX3655-MB	WX75006B.D	08/29/14	10:13	14.79	19.94	
GWX3654-MB	WX75006A.D	08/29/14	10:13		19.94	19.94
GWX3655-BSP	WX75007B.D	08/29/14	10:50	14.79	19.95	
GWX3654-BSP	WX75007A.D	08/29/14	10:50		19.95	19.94
GWX3653-BSP	WX75007.D	08/29/14	10:50			19.94
GWX3655-BSD	WX75008B.D	08/29/14	11:27	14.79	19.94	
GWX3653-BSD	WX75008.D	08/29/14	11:27			19.95
GWX3654-BSD	WX75008A.D	08/29/14	11:27		19.94	19.95
MC33201-1	WX75011.D	08/29/14	13:20			19.95
MC33201-1MS	WX75012.D	08/29/14	13:57			19.95
MC33201-1MSD	WX75013.D	08/29/14	14:34			19.95
MC33201-2	WX75014.D	08/29/14	15:12			19.95
ZZZZZZ	WX75015.D	08/29/14	15:49			19.95

Surrogate Compounds

S1 = Fluorobenzene
S2 = 2,3,4-Trifluorotoluene

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: MC33201
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Check Std:	GWX3655-CC3358	**Injection Date:**	08/29/14
Lab File ID:	WX75005B.D	**Injection Time:**	09:35
Instrument ID:	GCWX	**Method:**	SW846 8015

	S1 [a] RT	S2 [a] RT	S2 [b] RT
Check Std	14.80	19.95	

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT	S2 [b] RT
GWX3653-MB	WX75006.D	08/29/14	10:13			19.94
GWX3655-MB	WX75006B.D	08/29/14	10:13	14.79	19.94	
GWX3654-MB	WX75006A.D	08/29/14	10:13		19.94	19.94
GWX3655-BSP	WX75007B.D	08/29/14	10:50	14.79	19.95	
GWX3654-BSP	WX75007A.D	08/29/14	10:50		19.95	19.94
GWX3653-BSP	WX75007.D	08/29/14	10:50			19.94
GWX3655-BSD	WX75008B.D	08/29/14	11:27	14.79	19.94	
GWX3653-BSD	WX75008.D	08/29/14	11:27			19.95
GWX3654-BSD	WX75008A.D	08/29/14	11:27		19.94	19.95
MC33201-1	WX75011.D	08/29/14	13:20			19.95
MC33201-1MS	WX75012.D	08/29/14	13:57			19.95
MC33201-1MSD	WX75013.D	08/29/14	14:34			19.95
MC33201-2	WX75014.D	08/29/14	15:12			19.95
ZZZZZZ	WX75015.D	08/29/14	15:49			19.95

Surrogate Compounds

S1 = Fluorobenzene
S2 = 2,3,4-Trifluorotoluene

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

8.9.6

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Percent Solids Raw Data Summary

Percent Solids Raw Data Summary

Job Number: MC33201
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample: MC33201-1 **Analyzed:** 28-AUG-14 by CF **Method:** SM21 2540 B MOD.
ClientID: MW26-082714 (38-40')

Wet Weight (Total)	36.741	g
Tare Weight	27.831	g
Dry Weight (Total)	35.944	g
Solids, Percent	91.1	%

Sample: MC33201-2 **Analyzed:** 28-AUG-14 by CF **Method:** SM21 2540 B MOD.
ClientID: MW26-082714 (46-48')

Wet Weight (Total)	29.102	g
Tare Weight	18.914	g
Dry Weight (Total)	27.355	g
Solids, Percent	82.9	%

SGS ACCUTEST IS PART OF SGS, THE WORLD'S LEADING INSPECTION, VERIFICATION, TESTING AND CERTIFICATION COMPANY.

e-Hardcopy 2.0
Automated Report

Technical Report for

Shell Oil

URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

21562973.15000

SGS Accutest Job Number: MC33265



Sampling Date: 08/28/14

Report to:

AECOM, INC.

Melissa.mansker@aecom.com

ATTN: Melissa Mansker

Total number of pages in report: 154

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

H. (Brad) Madadian
Lab Director

Client Service contact: Jeremy Vienneau 508-481-6200

Certifications: MA (M-MA136,SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) FL (E87579) NY (11791) NJ (MA926) PA (6801121) ND (R-188) CO (MA00136) MN (11546AA) NC (653) IL (002337) WI (399080220) DoD ELAP (L-A-B L2235)

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Test results relate only to samples analyzed.

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Unauthorized modification of this report is strictly prohibited.

SGS ACCUTEST

October 27, 2016

AECOM
1001 Highlands Plaza Drive West Suite 300
St. Louis, MO 63110

RE: SGS Accutest Job # MC33265

Dear Elizabeth Kunkel

As you are aware, SGS Accutest Inc. - Marlborough has been conducting an extensive review of data associated with some historical Gas Chromatography-Mass Spectroscopy volatiles analyses. As a result of this review it was determined that some revisions of the original test report for this job were needed. These corrections have been incorporated into the revised report.

Please be assured that corrective actions have been put in place to address this matter and prevent a recurrence.

We apologize for any inconvenience that this issue may have caused. Please don't hesitate to contact us if we can be of further assistance.

Sincerely,

H. (Brad) Madadian

Regional Laboratory Director
SGS Accutest Inc. - Marlborough

SGS ACCUTEST IS PART OF SGS, THE WORLD'S LEADING INSPECTION, VERIFICATION, TESTING AND CERTIFICATION COMPANY.

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Sample Summary

Shell Oil

Job No: MC33265

URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL
Project No: 21562973.15000

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
MC33265-1	08/28/14	14:15	EA	08/29/14	SO	Soil	MW25-082814(36'-38')
MC33265-2	08/28/14	14:30	EA	08/29/14	SO	Soil	MW25-082814(44'-46')
MC33265-3	08/28/14	14:30	EA	08/29/14	SO	Soil	MW25-082814(44'-46')-DUP
MC33265-4	08/28/14	00:00	EA	08/29/14	AQ	Trip Blank Water	TB-082814-HCL
MC33265-5	08/28/14	00:00	EA	08/29/14	AQ	Trip Blank Water	TB-082814-ST

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: She O **Job No** MC33265

Site: URSMOSTL: Roxana Add t ona Character zat on, 900 South Centr **Report Date** 0/27/20 6 3:38:53 P

3 Samp e(s), 2 Tr p B ank(s) were co ected on 08/28/20 4 and were rece ved at SGS Accutest New Eng and on 08/29/20 4 proper y preserved, at 0 6 Deg C and ntact These Samp es rece ved a job number of MC33265 A st ng of the Laborato y Samp e ID, C ent Samp e ID and dates of co ect on are presented n the Resu ts Summary Sect on of th s report -Ch orohexane, Benzeneth o ,
D benz(a,h)acr d ne, Indene, and Qu no ne were searched n the brary search and repo ted on y f detect ons were found

Except as noted be ow, a method spec f ed ca brat ons and qua ty contro performance cr ter a were met for th s job For more nformat on, p ease refer to QC summary pages

Volatiles by GCMS By Method SW846 8260C

Matrix: AQ **Batch ID:** MSV 255

- A samp es were ana yzed w th n the recommended method ho d ng t me
- Samp e(s) MC33290-28MS, MC33290-28MSD were used as the QC samp es nd cated
- A method b anks for th s batch meet method spec f c cr ter a
- MSV 255-BSD Recovery(s) for Ch oroethane, Naphtha ene are outs de contro m ts
- B ank Sp ke Recovery(s) for Ch oroethane are outs de contro m ts
- MC33290-28MS/MSD Recovery(s) for 2-Butanone (MEK), 2-Ch oroethy v ny ether, 2-Hexanone, Acetone are outs de contro m ts Outs de contro m ts due to poss b e matr x nterference
- MC33265-4 for 1,4-Dioxane: Continuing Ca brat on outs de of acceptance cr ter a Samp e resu t may be b ased ow

Matrix: SO **Batch ID:** MSK2592

- A samp es were ana yzed w th n the recommended method ho d ng t me
- Samp e(s) MC33320- MS, MC33320- MSD were used as the QC samp es nd cated
- A method b anks for th s batch meet method spec f c cr ter a
- B ank Sp ke Recovery(s) for V ny Acetate are outs de contro m ts
- MC33320- MS/MSD Recovery(s) for 2-Butanone (MEK), Acetone are outs de contro m ts Outs de contro m ts due to poss b e matr x nte ference
- MSK2592-BSD Recovery(s) for 2-Butanone (MEK), V ny Acetate are outs de contro m t
- MC33265-3 for Ch oroform: Suspected aboratory background
- MC33265-3 for Methy ene ch or de: Suspected aboratory background
- MC33265-2,3 for ,4-D oxane: In t a Ca brat on Ver f cat on outs de of acceptance cr ter a Samp e resu t may be b ased ow
- MC33265-2 for Ch oroform: Suspected aboratory background
- MC33265-2 for Methy ene ch or de: Suspected aboratory background

Matrix: SO **Batch ID:** MSM2406

- A samp es were ana yzed w th n the recommended method ho d ng t me
- Samp e(s) MC33290- 8MS, MC33290- 8MSD were used as the QC samp es nd cated
- A method b anks for th s batch meet method spec f c cr ter a

Volatiles by GCMS By Method SW846 8260C

Matrix: SO **Batch ID:** MSM2406

- Matr x Sp ke Recovery(s) for , , ,2-Tetrach oroethane, , , -Tr ch oroethane, , -D ch oroethane, , -D ch oroethene, , -D ch oropropene, ,2,3-Tr ch orobenzene, ,2,4-Tr ch orobenzene, ,2,4-Tr methy benzene, ,2-D ch orobenzene, ,2-D ch oroethane, ,2-D ch oropropane, ,3,5-Tr methy benzene, ,3-D ch orobenzene, ,3-D ch oropropane, ,4-D ch orobenzene, 2,2-D ch oropropane, 2-Butanone (MEK), 2-Ch oroethy v ny ether, 2-Hexanone, Acetone, Benzene, Bromobenzene, Bromoch oromethane, Bromod ch oromethane, Bromoform, Bromomethane, Carbon d su f de, Carbon tetrach or de, Ch orobenzene, Ch oroform, Ch oromethane, c s- ,2-D ch oroethene, c s- ,3-D ch oropropene, D bromoch oromethane, D ch orod f uoromethane, Ethy benzene, Hexach orobutad ene, Isopropy benzene, m,p-Xy ene, Methy ene brom de, Methy ene ch or de, n-Buty benzene, n-Propy benzene, Naphtha ene, o-Ch oroto uene, o-Xy ene, p-Ch oroto uene, p-Isopropy to uene, sec-Buty benzene, Styrene, tert-Buty benzene, Tetrach oroethene, To uene, trans- ,2-D ch oroethene, trans- ,3-D ch oropropene, Tr ch oroethene, Tr ch orof uoromethane, V ny Acetate, V ny ch or de, Xy ene (tota) are outs de contro m ts Outs de contro m ts due to poss b e matr x nterference
- Matr x Sp ke Dup cate Recovery(s) for , , ,2-Tetrach oroethane, , , -Tr ch oroethane, , -D ch oroethene, , -D ch oropropene, ,2,3-Tr ch orobenzene, ,2,4-Tr ch orobenzene, ,2,4-Tr methy benzene, ,2-D ch orobenzene, ,3,5-Tr methy benzene, ,3-D ch orobenzene, ,4-D ch orobenzene, ,4-D oxane, 2,2-D ch oropropane, 2-Ch oroethy v ny ether, Benzene, Bromobenzene, Bromomethane, Carbon d su f de, Carbon tetrach or de, Ch orobenzene, Ch oromethane, D ch orod f uoromethane, Ethy benzene, Hexach orobutad ene, Isopropy benzene, m,p-Xy ene, n-Buty benzene, n-Propy benzene, Naphtha ene, o-Ch oroto uene, o-Xy ene, p-Ch oroto uene, p-Isopropy to uene, sec-Buty benzene, Styrene, tert-Buty benzene, Tetrach oroethene, To uene, trans- ,2-D ch oroethene, Tr ch oroethene, Tr ch orof uoromethane, V ny Acetate, V ny ch or de, Xy ene (tota) are outs de contro m ts Outs de contro m ts due to poss b e matr x nterference
- RPD(s) for MSD for 2-Butanone (MEK), 2-Hexanone, Acetone, Acry on tr e, Methy Tert Buty Ether are outs de contro m ts for samp e MC33290- 8MSD H gh RPD due to poss b e matr x nterference and/or samp e non-homogene ty
- MC33265- for V ny ch or de: Cont nu ng Ca brat on Ver f cat on outs de of acceptance cr ter a Samp e resu t may be b ased ow
- MC33265- for V ny Acetate: Cont nu ng Ca brat on Ver f cat on outs de of acceptance cr ter a Samp e resu t may be b ased ow
- MC33265- for Tr ch orof uoromethane: Cont nu ng Ca brat on Ver f cat on outs de of acceptance cr ter a Samp e resu t may be b ased ow
- MC33265- for D ch orod f uoromethane: Cont nu ng Ca brat on Ver f cat on outs de of acceptance cr ter a Samp e resu t may be b ased ow
- MC33265- for Ch oromethane: Cont nu ng Ca brat on Ver f cat on outs de of acceptance cr ter a Samp e resu t may be b ased ow
- MC33265- for Bromomethane: Cont nu ng Ca brat on Ver f cat on outs de of acceptance cr ter a Samp e resu t may be b ased ow
- MC33265- for 2-Ch oroethy v ny ether: Cont nu ng Ca brat on Ver f cat on outs de of acceptance cr ter a Samp e resu t may be b ased ow
- MSM2406-BS for ,4-D oxane: Outs de contro m ts Assoc ated samp es are non-detect for th s compound
- MSM2406-BS for D ch orod f uoromethane, Tr ch orof uoromethane: Outs de contro m ts Assoc ated samp es may be b ased ow

Extractables by GCMS By Method SW846 8270D

Matrix: SO **Batch ID:** OP39630

- A samp es were extracted w th n the recommended method ho d ng t me
- A samp es were ana yzed w th n the recommended method ho d ng t me
- A method b anks for th s batch meet method spec f c cr ter a
- Samp e(s) MC33262-4MS, MC33262-4MSD were used as the QC samp es nd cated
- B ank Sp ke Recovery(s) for 2,4-D n tropheno are outs de contro m ts
- Matr x Sp ke Recovery(s) for An ne, Benzo c ac d are outs de contro m ts Outs de contro m ts due to poss b e matr x nterference
- Matr x Sp ke Dup cate Recovery(s) for An ne, Hexach orocyc opentad ene,4,6-D n tro-o-creso , Benzo c ac d are outs de contro m ts Outs de contro m ts due to poss b e matr x nterference
- RPD(s) for MSD for 2,4-D n tropheno , 4,6-D n tro-o-creso , Benzo c ac d are outs de contro m ts for samp e OP39630-MSD H gh RPD due to poss b e matr x nterference and/or samp e heterogene ty
- OP39630-MS/MSD for 2,4-D n tropheno : Outs de contro m ts

Extractables by GCMS By Method SW846 8270D BY SIM

Matrix: SO **Batch ID:** OP3963

- A samp es were extracted w th n the recommended method ho d ng t me
- A samp es were ana yzed w th n the recommended method ho d ng t me
- Samp e(s) MC33265- MS, MC33265- MSD were used as the QC samp es nd cated
- A method b anks for th s batch meet method spec f c cr ter a

Volatiles by GC By Method SW846 8011

Matrix: AQ **Batch ID:** OP39646

- A samp es were extracted w th n the recommended method ho d ng t me
- A samp es were ana yzed w th n the recommended method ho d ng t me
- A method b anks for th s batch meet method spec f c cr ter a
- Samp e(s) MC33200-2MS, MC33200-2MSD were used as the QC samp es nd cated
- Matr x Sp ke Dup cate Recovery(s) for ,2-D bromo-3-ch oropropane are outs de contro m ts Outs de contro m ts due to poss b e matr x nte ference

Matrix: SO **Batch ID:** OP39625

- A samp es were extracted w th n the recommended method ho d ng t me
- A samp es were ana yzed w th n the recommended method ho d ng t me
- A method b anks for th s batch meet method spec f c cr ter a
- Samp e(s) MC33265- MS, MC33265- MSD were used as the QC samp es nd cated
- MC33265-3 for Bromof uorobenzene (S): Outs de contro m ts due to poss b e matr x nterference
- MC33265-2 for Bromof uorobenzene (S): Outs de contro m ts due to poss b e matr x nterference

Volatiles by GC By Method SW846 8015

Matrix: SO **Batch ID:** GAB4567

- A samp es were ana yzed w th n the recommended method ho d ng t me
- Samp e(s) MC33265-3MS, MC33265-3MSD were used as the QC samp es nd cated
- A method b anks for th s batch meet method spec f c cr ter a

Wet Chemistry By Method SM21 2540 B MOD.

Matrix: SO **Batch ID:** GN48 47

- Samp e(s) MC33265- DUP were used as the QC samp es for So ds, Percent

SGS Accutest New Eng and cert f es that a ana ys s were performed w th n method spec f cat on It s further recommended that th s report to be used n ts ent rety The Laborato y D rector for SGS Accutest New Eng and or ass gnee as ver f ed by the s gnature on the cover page has author zed the re ease of th s repo t(MC33265)

Summary of Hits

Job Number: MC33265
Account: Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL
Collected: 08/28/14

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
MC33265-1	**MW25-082814(36'-38')**					
Benzene		0.0102	0.00057	0.00039	mg/kg	SW846 8260C
Methyl Tert Butyl Ether		0.00055 J	0.0023	0.00021	mg/kg	SW846 8260C
Toluene		0.0012 J	0.0057	0.00024	mg/kg	SW846 8260C
Total TIC, Volatile		0.0375 J			mg/kg	
MC33265-2	**MW25-082814(44'-46')**					
Benzene		3.63	0.072	0.049	mg/kg	SW846 8260C
Chloroform [a]		0.126 J	0.29	0.024	mg/kg	SW846 8260C
Methylene chloride [a]		0.153 J	0.29	0.077	mg/kg	SW846 8260C
Phenol		0.116 J	0.29	0.017	mg/kg	SW846 8270D
1-Methylnaphthalene		0.0022 J	0.012	0.0013	mg/kg	SW846 8270D BY SIM
2-Methylnaphthalene		0.0021 J	0.012	0.0011	mg/kg	SW846 8270D BY SIM
TPH-GRO (VOA)		3.55 J	13	1.9	mg/kg	SW846 8015
MC33265-3	**MW25-082814(44'-46')-DUP**					
Benzene		1.75	0.064	0.043	mg/kg	SW846 8260C
Chloroform [a]		0.124 J	0.25	0.021	mg/kg	SW846 8260C
Methylene chloride [a]		0.132 J	0.25	0.067	mg/kg	SW846 8260C
Phenol		0.0969 J	0.29	0.016	mg/kg	SW846 8270D
1-Methylnaphthalene		0.0019 J	0.012	0.0013	mg/kg	SW846 8270D BY SIM
2-Methylnaphthalene		0.0018 J	0.012	0.0011	mg/kg	SW846 8270D BY SIM
TPH-GRO (VOA)		4.70 J	13	2.0	mg/kg	SW846 8015
MC33265-4	**TB-082814-HCL**					
No hits reported in this sample.						
MC33265-5	**TB-082814-ST**					
No hits reported in this sample.						

(a) Suspected laboratory background.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW25-082814(36'-38')		
Lab Sample ID:	MC33265-1	**Date Sampled:**	08/28/14
Matrix:	SO - Soil	**Date Received:**	08/29/14
Method:	SW846 8260C	**Percent Solids:**	88.1
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M68000.D	1	09/05/14	KD	n/a	n/a	MSM2406
Run #2							

	Initial Weight	Final Volume
Run #1	4.96 g	5.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	0.011	0.0032	mg/kg	
107-02-8	Acrolein	ND	0.029	0.010	mg/kg	
107-13-1	Acrylonitrile	ND	0.029	0.0031	mg/kg	
71-43-2	Benzene	0.0102	0.00057	0.00039	mg/kg	
108-86-1	Bromobenzene	ND	0.0057	0.00029	mg/kg	
74-97-5	Bromochloromethane	ND	0.0057	0.00039	mg/kg	
75-27-4	Bromodichloromethane	ND	0.0023	0.00024	mg/kg	
75-25-2	Bromoform	ND	0.0023	0.00041	mg/kg	
74-83-9	Bromomethane [a]	ND	0.0023	0.00069	mg/kg	
78-93-3	2-Butanone (MEK)	ND	0.011	0.0035	mg/kg	
104-51-8	n-Butylbenzene	ND	0.0057	0.00028	mg/kg	
135-98-8	sec-Butylbenzene	ND	0.0057	0.00085	mg/kg	
98-06-6	tert-Butylbenzene	ND	0.0057	0.00024	mg/kg	
75-15-0	Carbon disulfide	ND	0.0057	0.00015	mg/kg	
56-23-5	Carbon tetrachloride	ND	0.0023	0.00025	mg/kg	
108-90-7	Chlorobenzene	ND	0.0023	0.00018	mg/kg	
75-00-3	Chloroethane	ND	0.0057	0.00086	mg/kg	
110-75-8	2-Chloroethyl vinyl ether [a]	ND	0.0057	0.0014	mg/kg	
67-66-3	Chloroform	ND	0.0023	0.00019	mg/kg	
74-87-3	Chloromethane [a]	ND	0.0057	0.00065	mg/kg	
95-49-8	o-Chlorotoluene	ND	0.0057	0.00022	mg/kg	
106-43-4	p-Chlorotoluene	ND	0.0057	0.00030	mg/kg	
124-48-1	Dibromochloromethane	ND	0.0023	0.00037	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0023	0.00024	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.0023	0.00035	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.0023	0.00039	mg/kg	
75-71-8	Dichlorodifluoromethane [a]	ND	0.0023	0.00093	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0023	0.00031	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0023	0.00037	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0023	0.00047	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0023	0.00052	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0023	0.00048	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW25-082814(36'-38')		
Lab Sample ID:	MC33265-1	**Date Sampled:**	08/28/14
Matrix:	SO - Soil	**Date Received:**	08/29/14
Method:	SW846 8260C	**Percent Solids:**	88.1
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	0.0023	0.00048	mg/kg	
142-28-9	1,3-Dichloropropane	ND	0.0057	0.00037	mg/kg	
594-20-7	2,2-Dichloropropane	ND	0.0057	0.00065	mg/kg	
563-58-6	1,1-Dichloropropene	ND	0.0057	0.00030	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0023	0.00026	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	0.0023	0.00030	mg/kg	
123-91-1	1,4-Dioxane	ND	0.029	0.023	mg/kg	
97-63-2	Ethyl methacrylate	ND	0.0057	0.00041	mg/kg	
100-41-4	Ethylbenzene	ND	0.0023	0.00079	mg/kg	
87-68-3	Hexachlorobutadiene	ND	0.0057	0.00066	mg/kg	
591-78-6	2-Hexanone	ND	0.011	0.00087	mg/kg	
98-82-8	Isopropylbenzene	ND	0.0057	0.00019	mg/kg	
99-87-6	p-Isopropyltoluene	ND	0.0057	0.00020	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	0.00055	0.0023	0.00021	mg/kg	J
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	0.0057	0.00062	mg/kg	
74-95-3	Methylene bromide	ND	0.0057	0.00052	mg/kg	
75-09-2	Methylene chloride	ND	0.0023	0.00061	mg/kg	
91-20-3	Naphthalene	ND	0.0057	0.00045	mg/kg	
103-65-1	n-Propylbenzene	ND	0.0057	0.00017	mg/kg	
100-42-5	Styrene	ND	0.0057	0.00019	mg/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.0057	0.00046	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.0023	0.00045	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0023	0.00036	mg/kg	
108-88-3	Toluene	0.0012	0.0057	0.00024	mg/kg	J
87-61-6	1,2,3-Trichlorobenzene	ND	0.0057	0.00049	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.0057	0.00059	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0023	0.00025	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	0.0023	0.00066	mg/kg	
79-01-6	Trichloroethene	ND	0.0023	0.00028	mg/kg	
75-69-4	Trichlorofluoromethane [a]	ND	0.0023	0.00045	mg/kg	
96-18-4	1,2,3-Trichloropropane	ND	0.0057	0.00033	mg/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	0.0057	0.0016	mg/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	0.0057	0.0017	mg/kg	
108-05-4	Vinyl Acetate [a]	ND	0.0057	0.0018	mg/kg	
75-01-4	Vinyl chloride [a]	ND	0.0023	0.0010	mg/kg	
	m,p-Xylene	ND	0.0023	0.00050	mg/kg	
95-47-6	o-Xylene	ND	0.0023	0.00032	mg/kg	
1330-20-7	Xylene (total)	ND	0.0023	0.00025	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW25-082814(36'-38')		
Lab Sample ID:	MC33265-1	**Date Sampled:**	08/28/14
Matrix:	SO - Soil	**Date Received:**	08/29/14
Method:	SW846 8260C	**Percent Solids:**	88.1
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		70-130%
2037-26-5	Toluene-D8	88%		70-130%
460-00-4	4-Bromofluorobenzene	86%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
75-28-5	Isobutane	4.76	.016	mg/kg	JN
78-78-4	Butane, 2-methyl-	6.06	.014	mg/kg	JN
109-66-0	Pentane	6.48	.0075	mg/kg	JN
	Total TIC, Volatile		.0375	mg/kg	J

(a) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW25-082814(36'-38')		
Lab Sample ID:	MC33265-1	**Date Sampled:**	08/28/14
Matrix:	SO - Soil	**Date Received:**	08/29/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	88.1
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F75961.D	1	09/09/14	WK	08/30/14	OP39630	MSF3336
Run #2							

	Initial Weight	Final Volume
Run #1	20.2 g	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	0.56	0.070	mg/kg	
95-57-8	2-Chlorophenol	ND	0.28	0.013	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	0.56	0.014	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	0.56	0.016	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	0.56	0.092	mg/kg	
51-28-5	2,4-Dinitrophenol	ND	1.1	0.14	mg/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	0.56	0.070	mg/kg	
95-48-7	2-Methylphenol	ND	0.56	0.022	mg/kg	
	3&4-Methylphenol	ND	0.56	0.027	mg/kg	
88-75-5	2-Nitrophenol	ND	0.56	0.015	mg/kg	
100-02-7	4-Nitrophenol	ND	1.1	0.11	mg/kg	
87-86-5	Pentachlorophenol	ND	0.56	0.040	mg/kg	
108-95-2	Phenol	ND	0.28	0.016	mg/kg	
95-95-4	2,4,5-Trichlorophenol	ND	0.56	0.014	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	0.56	0.014	mg/kg	
62-53-3	Aniline	ND	0.56	0.028	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	0.28	0.014	mg/kg	
85-68-7	Butyl benzyl phthalate	ND	0.28	0.011	mg/kg	
100-51-6	Benzyl Alcohol	ND	0.56	0.028	mg/kg	
91-58-7	2-Chloronaphthalene	ND	0.28	0.015	mg/kg	
106-47-8	4-Chloroaniline	ND	0.56	0.014	mg/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	0.28	0.013	mg/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	0.28	0.017	mg/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	0.28	0.020	mg/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	0.28	0.017	mg/kg	
122-66-7	1,2-Diphenylhydrazine	ND	0.28	0.013	mg/kg	
121-14-2	2,4-Dinitrotoluene	ND	0.56	0.038	mg/kg	
606-20-2	2,6-Dinitrotoluene	ND	0.56	0.014	mg/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	0.28	0.028	mg/kg	
132-64-9	Dibenzofuran	ND	0.11	0.016	mg/kg	
84-74-2	Di-n-butyl phthalate	ND	0.28	0.030	mg/kg	
117-84-0	Di-n-octyl phthalate	ND	0.28	0.0088	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW25-082814(36'-38')		
Lab Sample ID:	MC33265-1	**Date Sampled:**	08/28/14
Matrix:	SO - Soil	**Date Received:**	08/29/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	88.1
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	0.28	0.014	mg/kg	
131-11-3	Dimethyl phthalate	ND	0.28	0.016	mg/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	0.28	0.010	mg/kg	
118-74-1	Hexachlorobenzene	ND	0.28	0.018	mg/kg	
77-47-4	Hexachlorocyclopentadiene	ND	0.56	0.14	mg/kg	
67-72-1	Hexachloroethane	ND	0.28	0.014	mg/kg	
78-59-1	Isophorone	ND	0.28	0.013	mg/kg	
88-74-4	2-Nitroaniline	ND	0.56	0.014	mg/kg	
99-09-2	3-Nitroaniline	ND	0.56	0.031	mg/kg	
100-01-6	4-Nitroaniline	ND	0.56	0.014	mg/kg	
98-95-3	Nitrobenzene	ND	0.28	0.015	mg/kg	
62-75-9	n-Nitrosodimethylamine	ND	0.28	0.013	mg/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	0.28	0.016	mg/kg	
86-30-6	N-Nitrosodiphenylamine	ND	0.28	0.017	mg/kg	
110-86-1	Pyridine	ND	0.56	0.028	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	53%		30-130%
4165-62-2	Phenol-d5	47%		30-130%
118-79-6	2,4,6-Tribromophenol	60%		30-130%
4165-60-0	Nitrobenzene-d5	51%		30-130%
321-60-8	2-Fluorobiphenyl	57%		30-130%
1718-51-0	Terphenyl-d14	69%		30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW25-082814(36'-38')		
Lab Sample ID:	MC33265-1	**Date Sampled:**	08/28/14
Matrix:	SO - Soil	**Date Received:**	08/29/14
Method:	SW846 8270D BY SIM SW846 3546	**Percent Solids:**	88.1
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I91499.D	1	09/08/14	WK	08/30/14	OP39631	MSI3410
Run #2							

	Initial Weight	Final Volume
Run #1	20.2 g	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.0056	0.00097	mg/kg	
208-96-8	Acenaphthylene	ND	0.0056	0.00085	mg/kg	
120-12-7	Anthracene	ND	0.0056	0.0012	mg/kg	
56-55-3	Benzo(a)anthracene	ND	0.0056	0.0026	mg/kg	
50-32-8	Benzo(a)pyrene	ND	0.0056	0.0022	mg/kg	
205-99-2	Benzo(b)fluoranthene	ND	0.0056	0.0025	mg/kg	
191-24-2	Benzo(g,h,i)perylene	ND	0.0056	0.0015	mg/kg	
207-08-9	Benzo(k)fluoranthene	ND	0.0056	0.0017	mg/kg	
218-01-9	Chrysene	ND	0.0056	0.0015	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	0.0056	0.0016	mg/kg	
206-44-0	Fluoranthene	ND	0.0056	0.0017	mg/kg	
86-73-7	Fluorene	ND	0.0056	0.0011	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.0056	0.0014	mg/kg	
90-12-0	1-Methylnaphthalene	ND	0.011	0.0012	mg/kg	
91-57-6	2-Methylnaphthalene	ND	0.011	0.0010	mg/kg	
85-01-8	Phenanthrene	ND	0.0056	0.0012	mg/kg	
129-00-0	Pyrene	ND	0.0056	0.0017	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	58%		30-130%
321-60-8	2-Fluorobiphenyl	55%		30-130%
1718-51-0	Terphenyl-d14	88%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW25-082814(36'-38')		
Lab Sample ID:	MC33265-1	**Date Sampled:**	08/28/14
Matrix:	SO - Soil	**Date Received:**	08/29/14
Method:	SW846 8011 SW846 3550B	**Percent Solids:**	88.1
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ91604.D	1	09/02/14	NK	08/29/14	OP39625	GYZ7634
Run #2							

	Initial Weight	Final Volume
Run #1	30.4 g	75.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.0042	0.0012	mg/kg	
106-93-4	1,2-Dibromoethane	ND	0.0042	0.0010	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	149%		61-167%
460-00-4	Bromofluorobenzene (S)	98%		61-167%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW25-082814(36'-38')		
Lab Sample ID:	MC33265-1	**Date Sampled:**	08/28/14
Matrix:	SO - Soil	**Date Received:**	08/29/14
Method:	SW846 8015	**Percent Solids:**	88.1
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB85718.D	1	09/02/14	AF	n/a	n/a	GAB4567
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.57 g	10.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (VOA)	ND	13	1.9	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	2,3,4-Trifluorotoluene	95%		61-116%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW25-082814(44'-46')		
Lab Sample ID:	MC33265-2	**Date Sampled:**	08/28/14
Matrix:	SO - Soil	**Date Received:**	08/29/14
Method:	SW846 8260C	**Percent Solids:**	84.0
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	K81927.D	1	09/10/14	JM	n/a	n/a	MSK2592
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.40 g	10.0 ml	100 ul
Run #2			

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	1.4	0.41	mg/kg	
107-02-8	Acrolein	ND	3.6	1.3	mg/kg	
107-13-1	Acrylonitrile	ND	3.6	0.40	mg/kg	
71-43-2	Benzene	3.63	0.072	0.049	mg/kg	
108-86-1	Bromobenzene	ND	0.72	0.036	mg/kg	
74-97-5	Bromochloromethane	ND	0.72	0.050	mg/kg	
75-27-4	Bromodichloromethane	ND	0.29	0.030	mg/kg	
75-25-2	Bromoform	ND	0.29	0.051	mg/kg	
74-83-9	Bromomethane	ND	0.29	0.087	mg/kg	
78-93-3	2-Butanone (MEK)	ND	1.4	0.44	mg/kg	
104-51-8	n-Butylbenzene	ND	0.72	0.035	mg/kg	
135-98-8	sec-Butylbenzene	ND	0.72	0.11	mg/kg	
98-06-6	tert-Butylbenzene	ND	0.72	0.031	mg/kg	
75-15-0	Carbon disulfide	ND	0.72	0.019	mg/kg	
56-23-5	Carbon tetrachloride	ND	0.29	0.032	mg/kg	
108-90-7	Chlorobenzene	ND	0.29	0.023	mg/kg	
75-00-3	Chloroethane	ND	0.72	0.11	mg/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	0.72	0.18	mg/kg	
67-66-3	Chloroform [a]	0.126	0.29	0.024	mg/kg	J
74-87-3	Chloromethane	ND	0.72	0.082	mg/kg	
95-49-8	o-Chlorotoluene	ND	0.72	0.028	mg/kg	
106-43-4	p-Chlorotoluene	ND	0.72	0.039	mg/kg	
124-48-1	Dibromochloromethane	ND	0.29	0.047	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.29	0.031	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.29	0.044	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.29	0.050	mg/kg	
75-71-8	Dichlorodifluoromethane	ND	0.29	0.12	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.29	0.039	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.29	0.047	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.29	0.060	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.29	0.065	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.29	0.060	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW25-082814(44'-46')		
Lab Sample ID:	MC33265-2	**Date Sampled:**	08/28/14
Matrix:	SO - Soil	**Date Received:**	08/29/14
Method:	SW846 8260C	**Percent Solids:**	84.0
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	0.29	0.061	mg/kg	
142-28-9	1,3-Dichloropropane	ND	0.72	0.047	mg/kg	
594-20-7	2,2-Dichloropropane	ND	0.72	0.082	mg/kg	
563-58-6	1,1-Dichloropropene	ND	0.72	0.038	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	0.29	0.033	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	0.29	0.038	mg/kg	
123-91-1	1,4-Dioxane [b]	ND	3.6	2.9	mg/kg	
97-63-2	Ethyl methacrylate	ND	0.72	0.052	mg/kg	
100-41-4	Ethylbenzene	ND	0.29	0.10	mg/kg	
87-68-3	Hexachlorobutadiene	ND	0.72	0.083	mg/kg	
591-78-6	2-Hexanone	ND	1.4	0.11	mg/kg	
98-82-8	Isopropylbenzene	ND	0.72	0.024	mg/kg	
99-87-6	p-Isopropyltoluene	ND	0.72	0.025	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.29	0.026	mg/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	0.72	0.078	mg/kg	
74-95-3	Methylene bromide	ND	0.72	0.066	mg/kg	
75-09-2	Methylene chloride [a]	0.153	0.29	0.077	mg/kg	J
91-20-3	Naphthalene	ND	0.72	0.057	mg/kg	
103-65-1	n-Propylbenzene	ND	0.72	0.022	mg/kg	
100-42-5	Styrene	ND	0.72	0.025	mg/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.72	0.058	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.29	0.057	mg/kg	
127-18-4	Tetrachloroethene	ND	0.29	0.045	mg/kg	
108-88-3	Toluene	ND	0.72	0.030	mg/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	0.72	0.062	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.72	0.074	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.29	0.031	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	0.29	0.083	mg/kg	
79-01-6	Trichloroethene	ND	0.29	0.035	mg/kg	
75-69-4	Trichlorofluoromethane	ND	0.29	0.058	mg/kg	
96-18-4	1,2,3-Trichloropropane	ND	0.72	0.042	mg/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	0.72	0.21	mg/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	0.72	0.22	mg/kg	
108-05-4	Vinyl Acetate	ND	0.72	0.22	mg/kg	
75-01-4	Vinyl chloride	ND	0.29	0.13	mg/kg	
	m,p-Xylene	ND	0.29	0.063	mg/kg	
95-47-6	o-Xylene	ND	0.29	0.041	mg/kg	
1330-20-7	Xylene (total)	ND	0.29	0.032	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW25-082814(44'-46')		
Lab Sample ID:	MC33265-2	**Date Sampled:**	08/28/14
Matrix:	SO - Soil	**Date Received:**	08/29/14
Method:	SW846 8260C	**Percent Solids:**	84.0
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	110%		70-130%
2037-26-5	Toluene-D8	109%		70-130%
460-00-4	4-Bromofluorobenzene	103%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	mg/kg	

(a) Suspected laboratory background.
(b) Initial Calibration Verification outside of acceptance criteria. Sample result may be biased low.

Report of Analysis

Client Sample ID:	MW25-082814(44'-46')		
Lab Sample ID:	MC33265-2	**Date Sampled:**	08/28/14
Matrix:	SO - Soil	**Date Received:**	08/29/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	84.0
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F75962.D	1	09/09/14	WK	08/30/14	OP39630	MSF3336
Run #2							

	Initial Weight	Final Volume
Run #1	20.3 g	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	0.59	0.073	mg/kg	
95-57-8	2-Chlorophenol	ND	0.29	0.013	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	0.59	0.015	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	0.59	0.017	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	0.59	0.096	mg/kg	
51-28-5	2,4-Dinitrophenol	ND	1.2	0.15	mg/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	0.59	0.073	mg/kg	
95-48-7	2-Methylphenol	ND	0.59	0.023	mg/kg	
	3&4-Methylphenol	ND	0.59	0.029	mg/kg	
88-75-5	2-Nitrophenol	ND	0.59	0.016	mg/kg	
100-02-7	4-Nitrophenol	ND	1.2	0.11	mg/kg	
87-86-5	Pentachlorophenol	ND	0.59	0.041	mg/kg	
108-95-2	Phenol	0.116	0.29	0.017	mg/kg	J
95-95-4	2,4,5-Trichlorophenol	ND	0.59	0.015	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	0.59	0.014	mg/kg	
62-53-3	Aniline	ND	0.59	0.029	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	0.29	0.015	mg/kg	
85-68-7	Butyl benzyl phthalate	ND	0.29	0.012	mg/kg	
100-51-6	Benzyl Alcohol	ND	0.59	0.030	mg/kg	
91-58-7	2-Chloronaphthalene	ND	0.29	0.016	mg/kg	
106-47-8	4-Chloroaniline	ND	0.59	0.015	mg/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	0.29	0.014	mg/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	0.29	0.018	mg/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	0.29	0.021	mg/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	0.29	0.018	mg/kg	
122-66-7	1,2-Diphenylhydrazine	ND	0.29	0.013	mg/kg	
121-14-2	2,4-Dinitrotoluene	ND	0.59	0.039	mg/kg	
606-20-2	2,6-Dinitrotoluene	ND	0.59	0.015	mg/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	0.29	0.029	mg/kg	
132-64-9	Dibenzofuran	ND	0.12	0.016	mg/kg	
84-74-2	Di-n-butyl phthalate	ND	0.29	0.031	mg/kg	
117-84-0	Di-n-octyl phthalate	ND	0.29	0.0092	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW25-082814(44'-46')		
Lab Sample ID:	MC33265-2	**Date Sampled:**	08/28/14
Matrix:	SO - Soil	**Date Received:**	08/29/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	84.0
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	0.29	0.015	mg/kg	
131-11-3	Dimethyl phthalate	ND	0.29	0.017	mg/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	0.29	0.011	mg/kg	
118-74-1	Hexachlorobenzene	ND	0.29	0.018	mg/kg	
77-47-4	Hexachlorocyclopentadiene	ND	0.59	0.15	mg/kg	
67-72-1	Hexachloroethane	ND	0.29	0.014	mg/kg	
78-59-1	Isophorone	ND	0.29	0.014	mg/kg	
88-74-4	2-Nitroaniline	ND	0.59	0.015	mg/kg	
99-09-2	3-Nitroaniline	ND	0.59	0.032	mg/kg	
100-01-6	4-Nitroaniline	ND	0.59	0.015	mg/kg	
98-95-3	Nitrobenzene	ND	0.29	0.016	mg/kg	
62-75-9	n-Nitrosodimethylamine	ND	0.29	0.014	mg/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	0.29	0.017	mg/kg	
86-30-6	N-Nitrosodiphenylamine	ND	0.29	0.018	mg/kg	
110-86-1	Pyridine	ND	0.59	0.029	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	61%		30-130%
4165-62-2	Phenol-d5	55%		30-130%
118-79-6	2,4,6-Tribromophenol	65%		30-130%
4165-60-0	Nitrobenzene-d5	61%		30-130%
321-60-8	2-Fluorobiphenyl	68%		30-130%
1718-51-0	Terphenyl-d14	81%		30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW25-082814(44'-46')		
Lab Sample ID:	MC33265-2	**Date Sampled:**	08/28/14
Matrix:	SO - Soil	**Date Received:**	08/29/14
Method:	SW846 8270D BY SIM SW846 3546	**Percent Solids:**	84.0
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I91500.D	1	09/08/14	WK	08/30/14	OP39631	MSI3410
Run #2							

	Initial Weight	Final Volume
Run #1	20.3 g	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.0059	0.0010	mg/kg	
208-96-8	Acenaphthylene	ND	0.0059	0.00089	mg/kg	
120-12-7	Anthracene	ND	0.0059	0.0013	mg/kg	
56-55-3	Benzo(a)anthracene	ND	0.0059	0.0027	mg/kg	
50-32-8	Benzo(a)pyrene	ND	0.0059	0.0023	mg/kg	
205-99-2	Benzo(b)fluoranthene	ND	0.0059	0.0026	mg/kg	
191-24-2	Benzo(g,h,i)perylene	ND	0.0059	0.0016	mg/kg	
207-08-9	Benzo(k)fluoranthene	ND	0.0059	0.0018	mg/kg	
218-01-9	Chrysene	ND	0.0059	0.0016	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	0.0059	0.0017	mg/kg	
206-44-0	Fluoranthene	ND	0.0059	0.0017	mg/kg	
86-73-7	Fluorene	ND	0.0059	0.0012	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.0059	0.0015	mg/kg	
90-12-0	1-Methylnaphthalene	0.0022	0.012	0.0013	mg/kg	J
91-57-6	2-Methylnaphthalene	0.0021	0.012	0.0011	mg/kg	J
85-01-8	Phenanthrene	ND	0.0059	0.0012	mg/kg	
129-00-0	Pyrene	ND	0.0059	0.0018	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	68%		30-130%
321-60-8	2-Fluorobiphenyl	66%		30-130%
1718-51-0	Terphenyl-d14	103%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW25-082814(44'-46')		
Lab Sample ID:	MC33265-2	**Date Sampled:**	08/28/14
Matrix:	SO - Soil	**Date Received:**	08/29/14
Method:	SW846 8011 SW846 3550B	**Percent Solids:**	84.0
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ91605.D	1	09/02/14	NK	08/29/14	OP39625	GYZ7634
Run #2							

	Initial Weight	Final Volume
Run #1	30.2 g	100 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.0059	0.0017	mg/kg	
106-93-4	1,2-Dibromoethane	ND	0.0059	0.0014	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	185% [a]		61-167%
460-00-4	Bromofluorobenzene (S)	125%		61-167%

(a) Outside control limits due to possible matrix interference.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW25-082814(44'-46')		
Lab Sample ID:	MC33265-2	**Date Sampled:**	08/28/14
Matrix:	SO - Soil	**Date Received:**	08/29/14
Method:	SW846 8015	**Percent Solids:**	84.0
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB85719.D	1	09/02/14	AF	n/a	n/a	GAB4567
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.01 g	10.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (VOA)	3.55	13	1.9	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	2,3,4-Trifluorotoluene	94%		61-116%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW25-082814(44'-46')-DUP		
Lab Sample ID:	MC33265-3	**Date Sampled:**	08/28/14
Matrix:	SO - Soil	**Date Received:**	08/29/14
Method:	SW846 8260C	**Percent Solids:**	84.6
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	K81928.D	1	09/10/14	JM	n/a	n/a	MSK2592
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.01 g	10.0 ml	100 ul
Run #2			

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	1.3	0.36	mg/kg	
107-02-8	Acrolein	ND	3.2	1.1	mg/kg	
107-13-1	Acrylonitrile	ND	3.2	0.35	mg/kg	
71-43-2	Benzene	1.75	0.064	0.043	mg/kg	
108-86-1	Bromobenzene	ND	0.64	0.032	mg/kg	
74-97-5	Bromochloromethane	ND	0.64	0.044	mg/kg	
75-27-4	Bromodichloromethane	ND	0.25	0.027	mg/kg	
75-25-2	Bromoform	ND	0.25	0.045	mg/kg	
74-83-9	Bromomethane	ND	0.25	0.076	mg/kg	
78-93-3	2-Butanone (MEK)	ND	1.3	0.39	mg/kg	
104-51-8	n-Butylbenzene	ND	0.64	0.031	mg/kg	
135-98-8	sec-Butylbenzene	ND	0.64	0.095	mg/kg	
98-06-6	tert-Butylbenzene	ND	0.64	0.027	mg/kg	
75-15-0	Carbon disulfide	ND	0.64	0.017	mg/kg	
56-23-5	Carbon tetrachloride	ND	0.25	0.028	mg/kg	
108-90-7	Chlorobenzene	ND	0.25	0.020	mg/kg	
75-00-3	Chloroethane	ND	0.64	0.096	mg/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	0.64	0.16	mg/kg	
67-66-3	Chloroform [a]	0.124	0.25	0.021	mg/kg	J
74-87-3	Chloromethane	ND	0.64	0.072	mg/kg	
95-49-8	o-Chlorotoluene	ND	0.64	0.024	mg/kg	
106-43-4	p-Chlorotoluene	ND	0.64	0.034	mg/kg	
124-48-1	Dibromochloromethane	ND	0.25	0.041	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.25	0.027	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.25	0.038	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.25	0.044	mg/kg	
75-71-8	Dichlorodifluoromethane	ND	0.25	0.10	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.25	0.034	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.25	0.041	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.25	0.053	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.25	0.057	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.25	0.053	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW25-082814(44'-46')-DUP		
Lab Sample ID:	MC33265-3	**Date Sampled:**	08/28/14
Matrix:	SO - Soil	**Date Received:**	08/29/14
Method:	SW846 8260C	**Percent Solids:**	84.6
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	0.25	0.053	mg/kg	
142-28-9	1,3-Dichloropropane	ND	0.64	0.042	mg/kg	
594-20-7	2,2-Dichloropropane	ND	0.64	0.072	mg/kg	
563-58-6	1,1-Dichloropropene	ND	0.64	0.034	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	0.25	0.029	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	0.25	0.033	mg/kg	
123-91-1	1,4-Dioxane [b]	ND	3.2	2.5	mg/kg	
97-63-2	Ethyl methacrylate	ND	0.64	0.045	mg/kg	
100-41-4	Ethylbenzene	ND	0.25	0.088	mg/kg	
87-68-3	Hexachlorobutadiene	ND	0.64	0.073	mg/kg	
591-78-6	2-Hexanone	ND	1.3	0.096	mg/kg	
98-82-8	Isopropylbenzene	ND	0.64	0.021	mg/kg	
99-87-6	p-Isopropyltoluene	ND	0.64	0.022	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.25	0.023	mg/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	0.64	0.069	mg/kg	
74-95-3	Methylene bromide	ND	0.64	0.058	mg/kg	
75-09-2	Methylene chloride [a]	0.132	0.25	0.067	mg/kg	J
91-20-3	Naphthalene	ND	0.64	0.050	mg/kg	
103-65-1	n-Propylbenzene	ND	0.64	0.019	mg/kg	
100-42-5	Styrene	ND	0.64	0.022	mg/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.64	0.051	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.25	0.050	mg/kg	
127-18-4	Tetrachloroethene	ND	0.25	0.040	mg/kg	
108-88-3	Toluene	ND	0.64	0.026	mg/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	0.64	0.054	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.64	0.065	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.25	0.028	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	0.25	0.073	mg/kg	
79-01-6	Trichloroethene	ND	0.25	0.031	mg/kg	
75-69-4	Trichlorofluoromethane	ND	0.25	0.051	mg/kg	
96-18-4	1,2,3-Trichloropropane	ND	0.64	0.037	mg/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	0.64	0.18	mg/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	0.64	0.19	mg/kg	
108-05-4	Vinyl Acetate	ND	0.64	0.20	mg/kg	
75-01-4	Vinyl chloride	ND	0.25	0.12	mg/kg	
	m,p-Xylene	ND	0.25	0.056	mg/kg	
95-47-6	o-Xylene	ND	0.25	0.036	mg/kg	
1330-20-7	Xylene (total)	ND	0.25	0.028	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW25-082814(44'-46')-DUP		
Lab Sample ID:	MC33265-3	**Date Sampled:**	08/28/14
Matrix:	SO - Soil	**Date Received:**	08/29/14
Method:	SW846 8260C	**Percent Solids:**	84.6
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	113%		70-130%
2037-26-5	Toluene-D8	104%		70-130%
460-00-4	4-Bromofluorobenzene	108%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	mg/kg	

(a) Suspected laboratory background.
(b) Initial Calibration Verification outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW25-082814(44'-46')-DUP		
Lab Sample ID:	MC33265-3	**Date Sampled:**	08/28/14
Matrix:	SO - Soil	**Date Received:**	08/29/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	84.6
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F75963.D	1	09/10/14	WK	08/30/14	OP39630	MSF3336
Run #2							

	Initial Weight	Final Volume
Run #1	20.4 g	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	0.58	0.072	mg/kg	
95-57-8	2-Chlorophenol	ND	0.29	0.013	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	0.58	0.015	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	0.58	0.017	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	0.58	0.095	mg/kg	
51-28-5	2,4-Dinitrophenol	ND	1.2	0.14	mg/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	0.58	0.072	mg/kg	
95-48-7	2-Methylphenol	ND	0.58	0.023	mg/kg	
	3&4-Methylphenol	ND	0.58	0.028	mg/kg	
88-75-5	2-Nitrophenol	ND	0.58	0.015	mg/kg	
100-02-7	4-Nitrophenol	ND	1.2	0.11	mg/kg	
87-86-5	Pentachlorophenol	ND	0.58	0.041	mg/kg	
108-95-2	Phenol	0.0969	0.29	0.016	mg/kg	J
95-95-4	2,4,5-Trichlorophenol	ND	0.58	0.014	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	0.58	0.014	mg/kg	
62-53-3	Aniline	ND	0.58	0.029	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	0.29	0.015	mg/kg	
85-68-7	Butyl benzyl phthalate	ND	0.29	0.012	mg/kg	
100-51-6	Benzyl Alcohol	ND	0.58	0.029	mg/kg	
91-58-7	2-Chloronaphthalene	ND	0.29	0.016	mg/kg	
106-47-8	4-Chloroaniline	ND	0.58	0.014	mg/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	0.29	0.014	mg/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	0.29	0.018	mg/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	0.29	0.021	mg/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	0.29	0.018	mg/kg	
122-66-7	1,2-Diphenylhydrazine	ND	0.29	0.013	mg/kg	
121-14-2	2,4-Dinitrotoluene	ND	0.58	0.039	mg/kg	
606-20-2	2,6-Dinitrotoluene	ND	0.58	0.014	mg/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	0.29	0.029	mg/kg	
132-64-9	Dibenzofuran	ND	0.12	0.016	mg/kg	
84-74-2	Di-n-butyl phthalate	ND	0.29	0.031	mg/kg	
117-84-0	Di-n-octyl phthalate	ND	0.29	0.0091	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW25-082814(44'-46')-DUP		
Lab Sample ID:	MC33265-3	**Date Sampled:**	08/28/14
Matrix:	SO - Soil	**Date Received:**	08/29/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	84.6
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	0.29	0.014	mg/kg	
131-11-3	Dimethyl phthalate	ND	0.29	0.017	mg/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	0.29	0.011	mg/kg	
118-74-1	Hexachlorobenzene	ND	0.29	0.018	mg/kg	
77-47-4	Hexachlorocyclopentadiene	ND	0.58	0.14	mg/kg	
67-72-1	Hexachloroethane	ND	0.29	0.014	mg/kg	
78-59-1	Isophorone	ND	0.29	0.013	mg/kg	
88-74-4	2-Nitroaniline	ND	0.58	0.014	mg/kg	
99-09-2	3-Nitroaniline	ND	0.58	0.032	mg/kg	
100-01-6	4-Nitroaniline	ND	0.58	0.014	mg/kg	
98-95-3	Nitrobenzene	ND	0.29	0.016	mg/kg	
62-75-9	n-Nitrosodimethylamine	ND	0.29	0.014	mg/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	0.29	0.017	mg/kg	
86-30-6	N-Nitrosodiphenylamine	ND	0.29	0.018	mg/kg	
110-86-1	Pyridine	ND	0.58	0.029	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	54%		30-130%
4165-62-2	Phenol-d5	52%		30-130%
118-79-6	2,4,6-Tribromophenol	49%		30-130%
4165-60-0	Nitrobenzene-d5	54%		30-130%
321-60-8	2-Fluorobiphenyl	61%		30-130%
1718-51-0	Terphenyl-d14	68%		30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	mg/kg	

ND = Not detected MDL = Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW25-082814(44'-46')-DUP		
Lab Sample ID:	MC33265-3	**Date Sampled:**	08/28/14
Matrix:	SO - Soil	**Date Received:**	08/29/14
Method:	SW846 8270D BY SIM SW846 3546	**Percent Solids:**	84.6
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I91501.D	1	09/08/14	WK	08/30/14	OP39631	MSI3410
Run #2							

	Initial Weight	Final Volume
Run #1	20.4 g	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.0058	0.0010	mg/kg	
208-96-8	Acenaphthylene	ND	0.0058	0.00088	mg/kg	
120-12-7	Anthracene	ND	0.0058	0.0013	mg/kg	
56-55-3	Benzo(a)anthracene	ND	0.0058	0.0027	mg/kg	
50-32-8	Benzo(a)pyrene	ND	0.0058	0.0023	mg/kg	
205-99-2	Benzo(b)fluoranthene	ND	0.0058	0.0026	mg/kg	
191-24-2	Benzo(g,h,i)perylene	ND	0.0058	0.0016	mg/kg	
207-08-9	Benzo(k)fluoranthene	ND	0.0058	0.0018	mg/kg	
218-01-9	Chrysene	ND	0.0058	0.0016	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	0.0058	0.0017	mg/kg	
206-44-0	Fluoranthene	ND	0.0058	0.0017	mg/kg	
86-73-7	Fluorene	ND	0.0058	0.0011	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.0058	0.0014	mg/kg	
90-12-0	1-Methylnaphthalene	0.0019	0.012	0.0013	mg/kg	J
91-57-6	2-Methylnaphthalene	0.0018	0.012	0.0011	mg/kg	J
85-01-8	Phenanthrene	ND	0.0058	0.0012	mg/kg	
129-00-0	Pyrene	ND	0.0058	0.0018	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	61%		30-130%
321-60-8	2-Fluorobiphenyl	59%		30-130%
1718-51-0	Terphenyl-d14	90%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW25-082814(44'-46')-DUP		
Lab Sample ID:	MC33265-3	**Date Sampled:**	08/28/14
Matrix:	SO - Soil	**Date Received:**	08/29/14
Method:	SW846 8011 SW846 3550B	**Percent Solids:**	84.6
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ91607.D	1	09/02/14	NK	08/29/14	OP39625	GYZ7634
Run #2							

	Initial Weight	Final Volume
Run #1	30.6 g	100 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.0058	0.0017	mg/kg	
106-93-4	1,2-Dibromoethane	ND	0.0058	0.0014	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	185% [a]		61-167%
460-00-4	Bromofluorobenzene (S)	125%		61-167%

(a) Outside control limits due to possible matrix interference.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW25-082814(44'-46')-DUP		
Lab Sample ID:	MC33265-3	**Date Sampled:**	08/28/14
Matrix:	SO - Soil	**Date Received:**	08/29/14
Method:	SW846 8015	**Percent Solids:**	84.6
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB85720.D	1	09/02/14	AF	n/a	n/a	GAB4567
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.77 g	10.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (VOA)	4.70	13	2.0	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	2,3,4-Trifluorotoluene	94%		61-116%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-082814-HCL		
Lab Sample ID:	MC33265-4	**Date Sampled:**	08/28/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	08/29/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V34462.D	1	09/10/14	AMY	n/a	n/a	MSV1255
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	

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E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-082814-HCL		
Lab Sample ID:	MC33265-4	**Date Sampled:**	08/28/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	08/29/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
123-91-1	1,4-Dioxane [a]	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

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E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-082814-HCL		
Lab Sample ID:	MC33265-4	**Date Sampled:**	08/28/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	08/29/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		70-130%
2037-26-5	Toluene-D8	104%		70-130%
460-00-4	4-Bromofluorobenzene	97%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Continuing Calibration outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-082814-ST		
Lab Sample ID:	MC33265-5	**Date Sampled:**	08/28/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	08/29/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ91632.D	1	09/03/14	NK	09/02/14	OP39646	GYZ7636
Run #2							

	Initial Volume	Final Volume
Run #1	36.6 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.014	0.0058	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.014	0.0058	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	68%		36-173%
460-00-4	Bromofluorobenzene (S)	73%		36-173%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

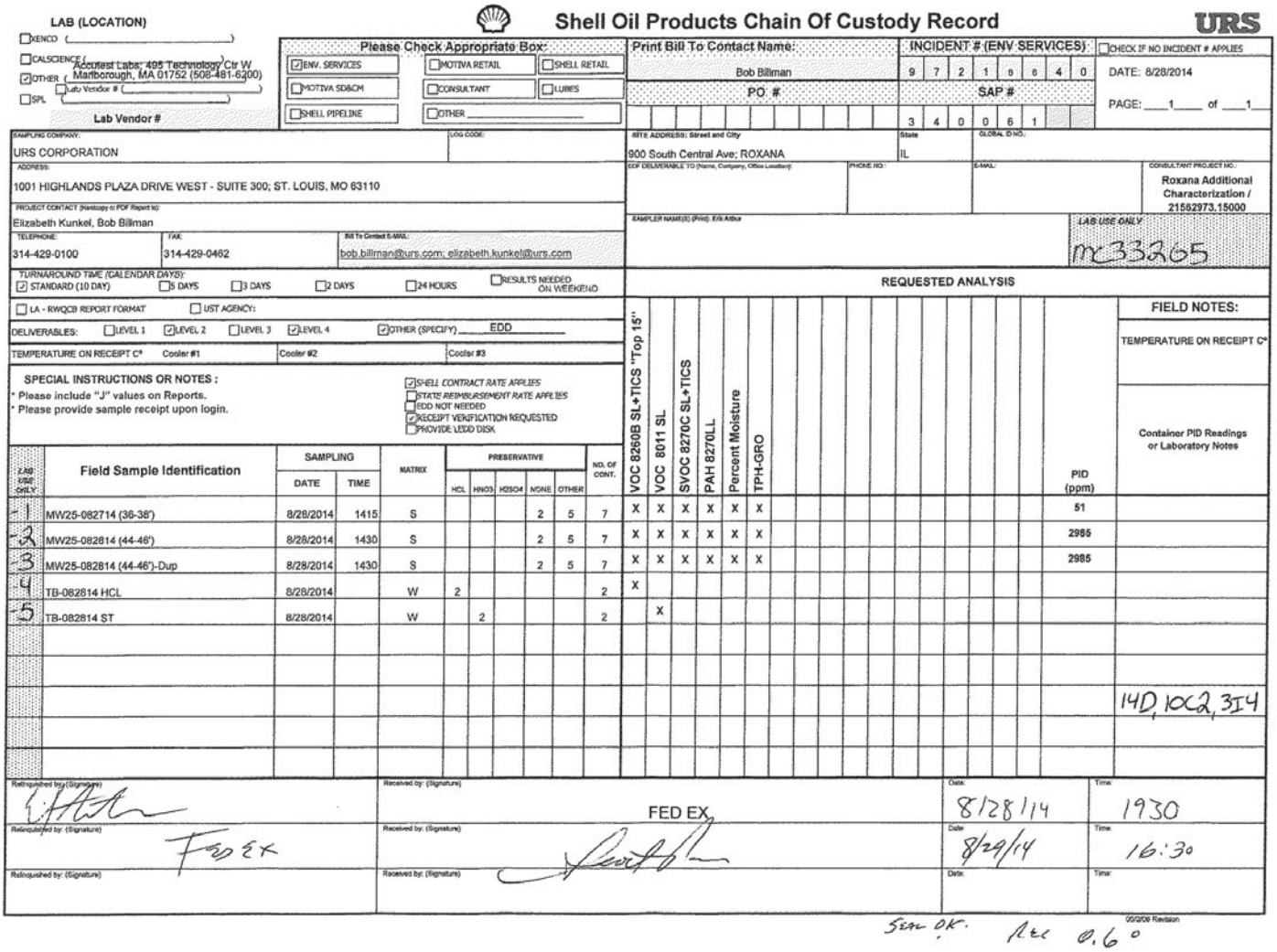
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- REPROC Form: Reprocessed/Corrected Data
- Sample Tracking Chronicle
- Internal Chain of Custody



LAB (LOCATION)

☐ XENCO ( )
☐ CALSCIENCE ( )
☑ OTHER (Accutest Labs; 495 Technology Ctr W Marlborough, MA 01752 (508-481-6200))
☐ Lab Vendor # ( )
☐ SPL

Lab Vendor #

Shell Oil Products Chain Of Custody Record

URS

Please Check Appropriate Box:
☑ ENV. SERVICES ☐ MOTIVA RETAIL ☐ SHELL RETAIL
☐ MOTIVA SD&CM ☐ CONSULTANT ☐ LUBES
☐ SHELL PIPELINE ☐ OTHER

Print Bill To Contact Name: Bob Billman

INCIDENT # (ENV SERVICES): 9 7 2 1 6 6 4 0

☐ CHECK IF NO INCIDENT # APPLIES

DATE: 8/28/2014

PO. #

SAP # 3 4 0 0 6 1

PAGE: 1 of 1

SAMPLING COMPANY: URS CORPORATION

LOG CODE:

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA

State: IL

GLOBAL ID NO.:

ADDRESS: 1001 HIGHLANDS PLAZA DRIVE WEST - SUITE 300; ST. LOUIS, MO 63110

EDF DELIVERABLE TO (Name, Company, Office Location):

PHONE NO.:

E-MAIL:

CONSULTANT PROJECT NO.: Roxana Additional Characterization / 21562973.15000

PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Bob Billman

TELEPHONE: 314-429-0100

FAX: 314-429-0462

Bill To Contact E-MAIL: bob.billman@urs.com; elizabeth.kunkel@urs.com

SAMPLER NAME(S) (Print): Erik Arthur

LAB USE ONLY: MC33265

TURNAROUND TIME (CALENDAR DAYS):
☑ STANDARD (10 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT ☐ UST AGENCY:

DELIVERABLES: ☐ LEVEL 1 ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) EDD

TEMPERATURE ON RECEIPT C° Cooler #1 Cooler #2 Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :
* Please include "J" values on Reports.
* Please provide sample receipt upon login.

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS

FIELD NOTES:

TEMPERATURE ON RECEIPT C°

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260B SL+TICS "Top 15"	VOC 8011 SL	SVOC 8270C SL+TICS	PAH 8270LL	Percent Moisture	TPH-GRO	PID (ppm)	Container PID Readings or Laboratory Notes
-1	MW25-082714 (36-38')	8/28/2014	1415	S				2	5	7	X	X	X	X	X	X	51	
-2	MW25-082814 (44-46')	8/28/2014	1430	S				2	5	7	X	X	X	X	X	X	2985	
-3	MW25-082814 (44-46')-Dup	8/28/2014	1430	S				2	5	7	X	X	X	X	X	X	2985	
-4	TB-082814 HCL	8/28/2014		W	2					2	X							
-5	TB-082814 ST	8/28/2014		W		2				2		X						
																		14D, 10C2, 3I4

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
[signature]	FED EX	8/28/14	1930
FED EX	[signature]	8/29/14	16:30

SEAL OK. REC 0.6°

05/2/08 Revision

MC33265: Chain of Custody
Page 1 of 2

5.1 5

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SGS ACCUTEST MC33265

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: MC33265 **Client:** URS **Immediate Client Services Action Required:** No

Date / Time Received: 8/29/2014 **Delivery Method:** **Client Service Action Required at Login:** No

Project: 900 SOUTH CENTRAL AVE **No. Coolers:** 1 **Airbill #'s:**

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	Infared gun		
3. Cooler media:	Ice (bag)		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☑		☐	☐
2. Trip Blank listed on COC:	☑		☐	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

Accutest Laboratories
V:508.481.6200

495 Technology Center West, Bldg One
F: 508.481.7753

Marlborough, MA
www/accutest.com

MC33265: Chain of Custody
Page 2 of 2

Initial Calibration Summary

Job Number: MC33265 **Sample:** MSV1255-ICC1255
Account: SHELLWIC Shell Oil **Lab FileID:** V34445.D
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Response Factor Report MSV

Method : O:\msv\1\methods\v140909wx.m (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Thu Oct 08 17:03:24 2015
Response via : Initial Calibration

Calibration Files
2 =v34441.d 0.25=v34438.d 1 =v34440.d 25 =v34444.d
5 =v34442.d 10 =v34443.d 50 =v34445.d 100 =v34446.d
200 =v34447.d 400 =v34448.d = =

Compound

	2	0.25	1	25	5	10	50	100	200	400	Avg	%RSD
1) I 1,4-difluorobenzene	----------ISTD----------											
2) benzene	1.153	2.017	1.381	1.057	1.096	1.111	1.015	1.039	1.086	1.004	1.196	25.74

---- Linear regression ---- Coefficient = 0.9988
Response Ratio = 0.00562 + 1.03091 *A

(#) = Out of Range ### Number of calibration levels exceeded format ###

v140909wx.m Thu Oct 08 17:04:30 2015

Initial Calibration Verification

Job Number: MC33265 **Sample:** MSV1255-ICV1255
Account: SHELLWIC Shell Oil **Lab FileID:** V34451.D
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Evaluate Continuing Calibration Report

Data File : O:\msv\1\databackup\v140909\v34451.d Vial: 21
Acq On : 9 Sep 2014 6:53 pm Operator: amym
Sample : icv1255-50 Inst : MSV
Misc : MS32663,MSV1255,,,,5,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : O:\msv\1\methods\v140909wx.m (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Thu Oct 08 17:03:24 2015
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	1,4-difluorobenzene	1.000	1.000	0.0	96	0.00	7.74
		Amount	Calc.	%Drift			
2 p	benzene	50.000	52.902	-5.8	104	0.00	7.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
v34445.d v140909wx.m Thu Oct 08 17:04:22 2015

Continuing Calibration Summary

Job Number: MC33265 **Sample:** MSV1255-CC1255
Account: SHELLWIC Shell Oil **Lab FileID:** V34457.D
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Evaluate Continuing Calibration Report

Data File : O:\msv\1\databackup\v140909\v34457.d Vial: 3
Acq On : 10 Sep 2014 1:06 pm Operator: amym
Sample : cc1255-50 Inst : MSV
Misc : MS32663,MSV1255,,,,5,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : O:\msv\1\methods\v140909wx.m (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Thu Oct 08 17:03:24 2015
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	1,4-difluorobenzene	1.000	1.000	0.0	88	0.00	7.74
		Amount	Calc.	%Drift			
2 p	benzene	50.000	50.999	-2.0	92	0.01	7.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
v34445.d v140909wx.m Wed Oct 28 16:11:38 2015

Quantitation Report (QT Reviewed)

Data Path : O:\msv\1\databackup\v140909\
Data File : v34438.d
Acq On : 9 Sep 2014 1:09 pm
Operator : amym
Sample : ic1255-0.25
Misc : MS32663,MSV1255,,,,5,1
ALS Vial : 8 Sample Multiplier: 1

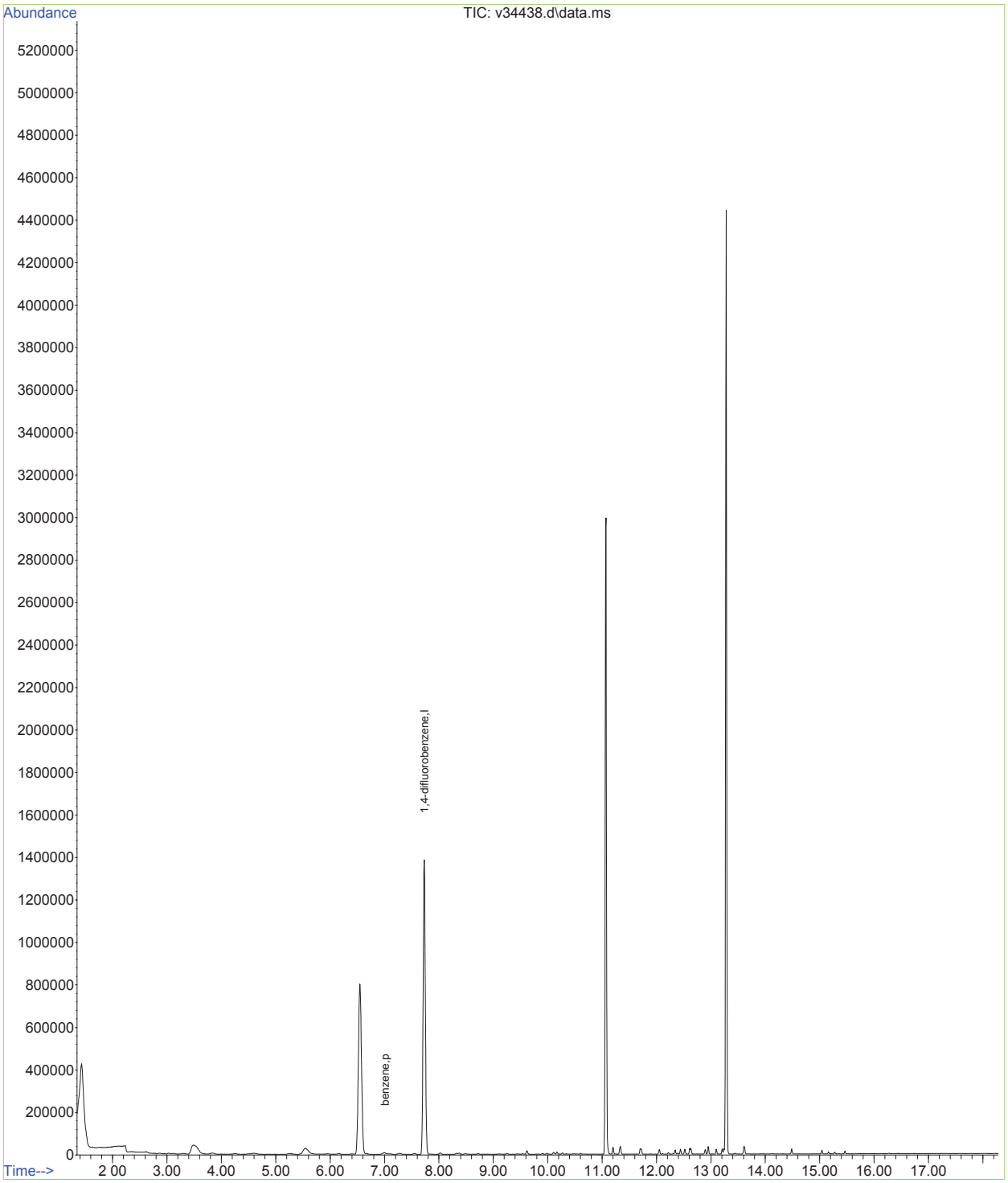
Quant Time: Oct 08 14:43:26 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Wed Sep 10 12:31:25 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-difluorobenzene	7.730	114	1807711	50.00	ug/L	0.00
Target Compounds						Qvalue
2) benzene	7.010	78	18231	0.44	ug/L	91

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : O:\msv\1\databackup\v140909\
Data File : v34438.d
Acq On : 9 Sep 2014 1:09 pm
Operator : amym
Sample : ic1255-0.25
Misc : MS32663,MSV1255,,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 08 14:43:26 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Wed Sep 10 12:31:25 2014
Response via : Initial Calibration



Data Path : O:\msv\1\databackup\v140909\
Data File : v34440.d
Acq On : 9 Sep 2014 2:02 pm
Operator : amym
Sample : ic1255-1
Misc : MS32663,MSV1255,,,,5,1
ALS Vial : 10 Sample Multiplier: 1

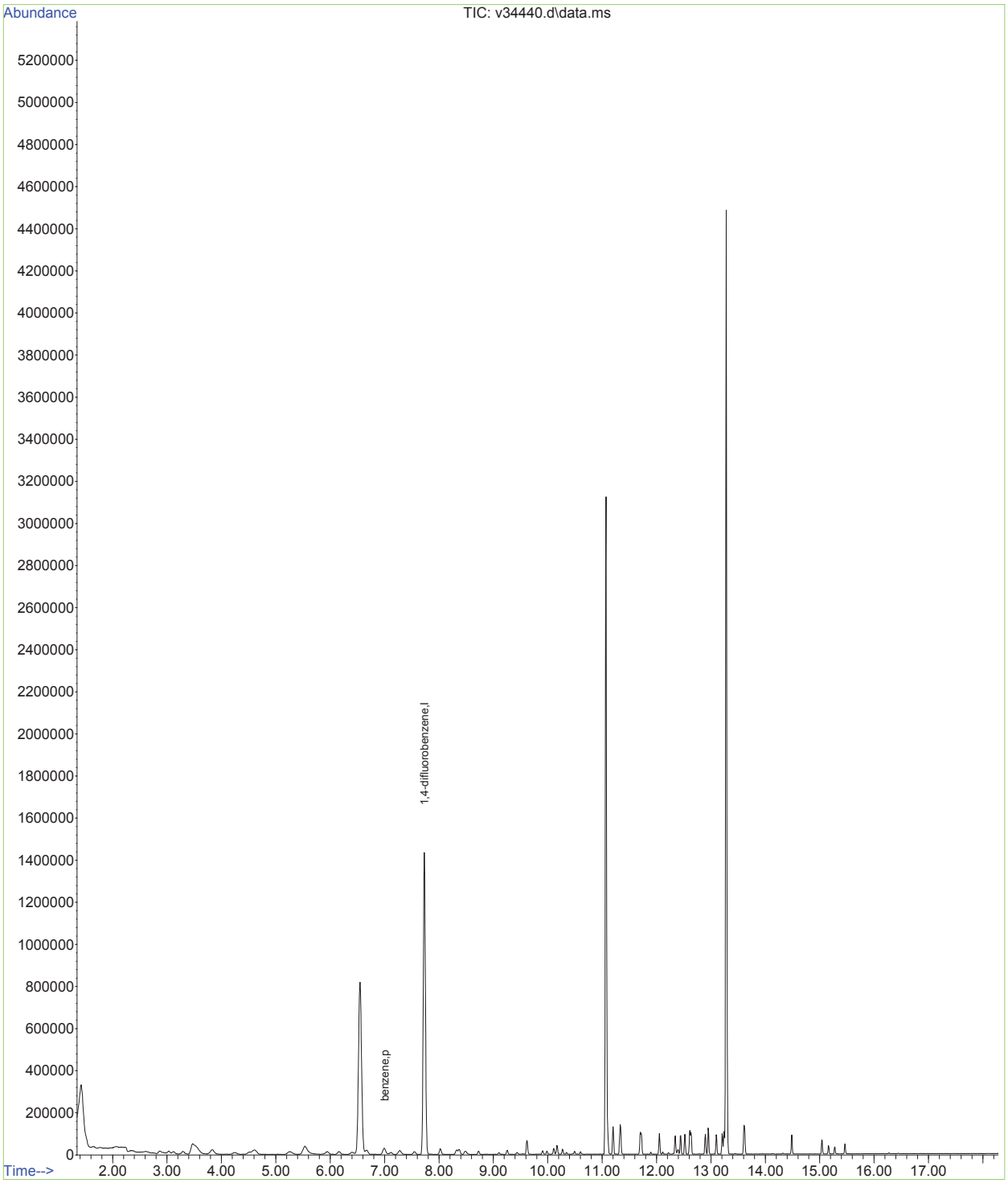
Quant Time: Oct 08 14:43:30 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Wed Sep 10 12:31:25 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-difluorobenzene	7.732	114	1836991	50.00	ug/L	0.00
Target Compounds						Qvalue
2) benzene	6.999	78	50743	1.22	ug/L	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : O:\msv\1\databackup\v140909\
Data File : v34440.d
Acq On : 9 Sep 2014 2:02 pm
Operator : amym
Sample : ic1255-1
Misc : MS32663,MSV1255,,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 08 14:43:30 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Wed Sep 10 12:31:25 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msv\1\databackup\v140909\
Data File : v34441.d
Acq On : 9 Sep 2014 2:29 pm
Operator : amym
Sample : ic1255-2
Misc : MS32663,MSV1255,,,,5,1
ALS Vial : 11 Sample Multiplier: 1

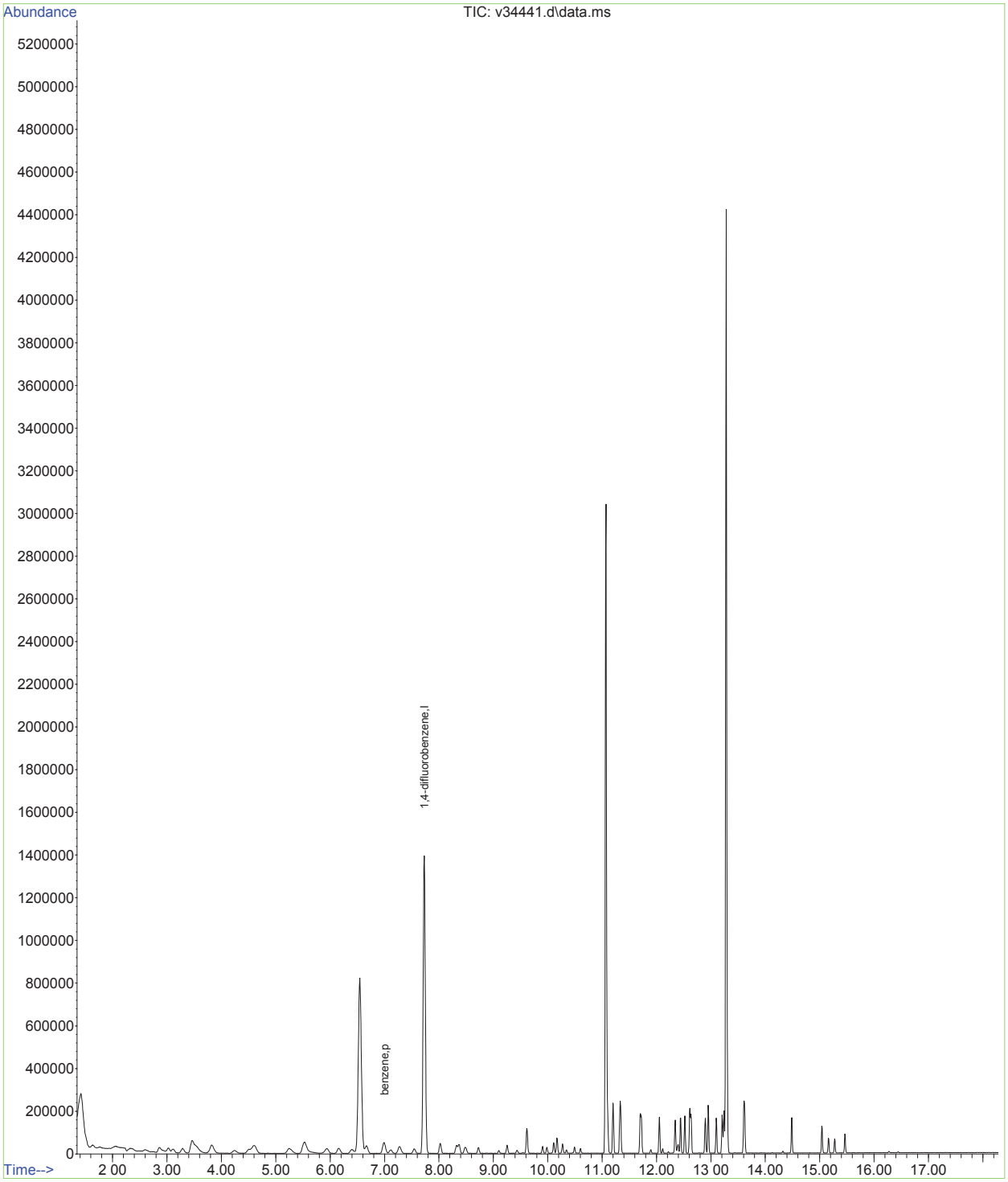
Quant Time: Oct 08 14:43:32 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Wed Sep 10 12:31:25 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-difluorobenzene	7.730	114	1818243	50.00	ug/L	0.00
Target Compounds						Qvalue
2) benzene	6.993	78	83883	2.03	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : O:\msv\1\databackup\v140909\
Data File : v34441.d
Acq On : 9 Sep 2014 2:29 pm
Operator : amym
Sample : ic1255-2
Misc : MS32663,MSV1255,,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 08 14:43:32 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Wed Sep 10 12:31:25 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msv\1\databackup\v140909\
Data File : v34442.d
Acq On : 9 Sep 2014 2:55 pm
Operator : amym
Sample : ic1255-5
Misc : MS32663,MSV1255,,,,5,1
ALS Vial : 12 Sample Multiplier: 1

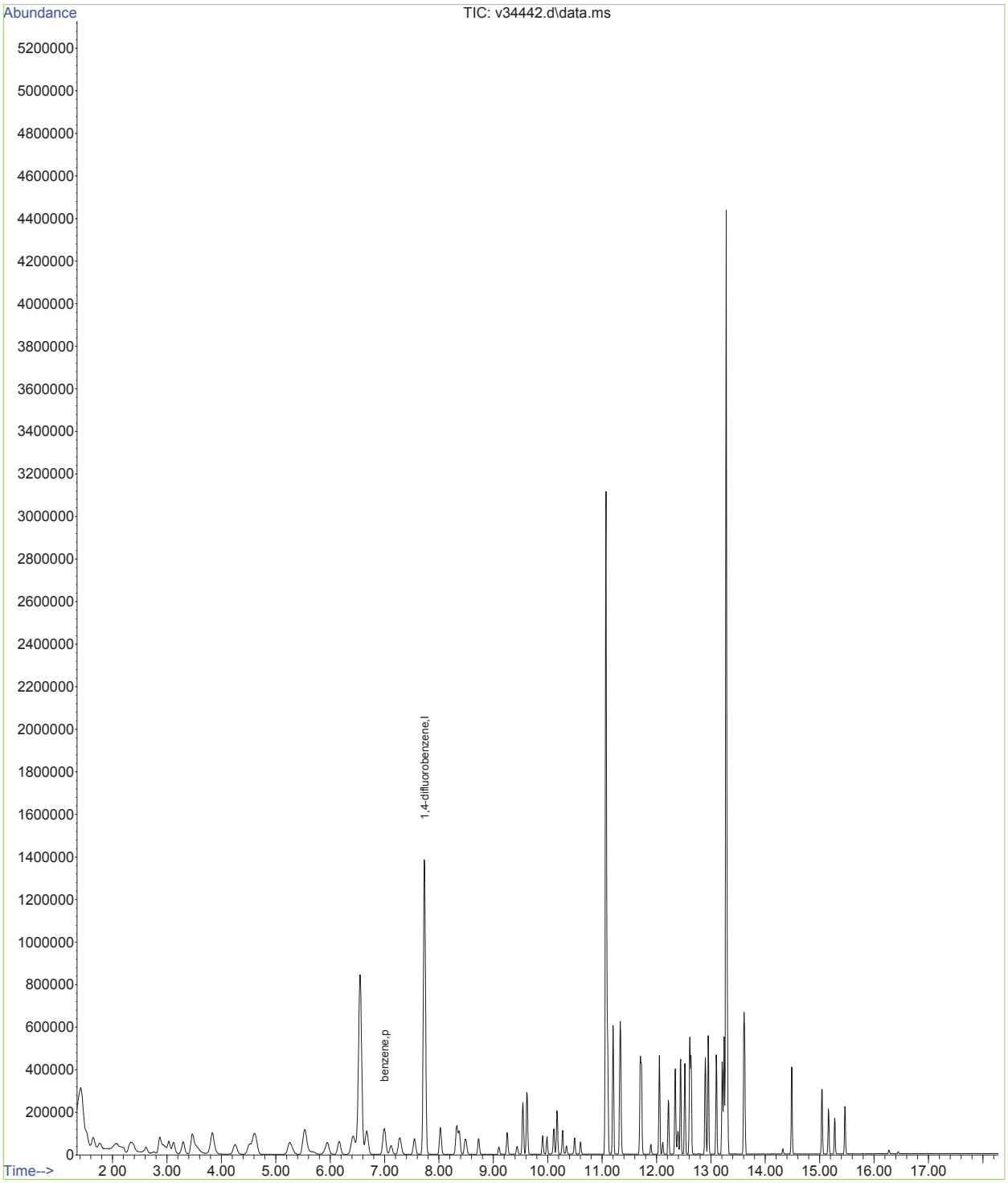
Quant Time: Oct 08 14:43:34 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Wed Sep 10 12:31:25 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-difluorobenzene	7.734	114	1848938	50.00	ug/L	0.00
Target Compounds						Qvalue
2) benzene	6.997	78	202708	4.83	ug/L	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : O:\msv\1\databackup\v140909\
Data File : v34442.d
Acq On : 9 Sep 2014 2:55 pm
Operator : amym
Sample : ic1255-5
Misc : MS32663,MSV1255,,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Oct 08 14:43:34 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Wed Sep 10 12:31:25 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msv\1\databackup\v140909\
Data File : v34443.d
Acq On : 9 Sep 2014 3:22 pm
Operator : amym
Sample : ic1255-10
Misc : MS32663,MSV1255,,,,5,1
ALS Vial : 13 Sample Multiplier: 1

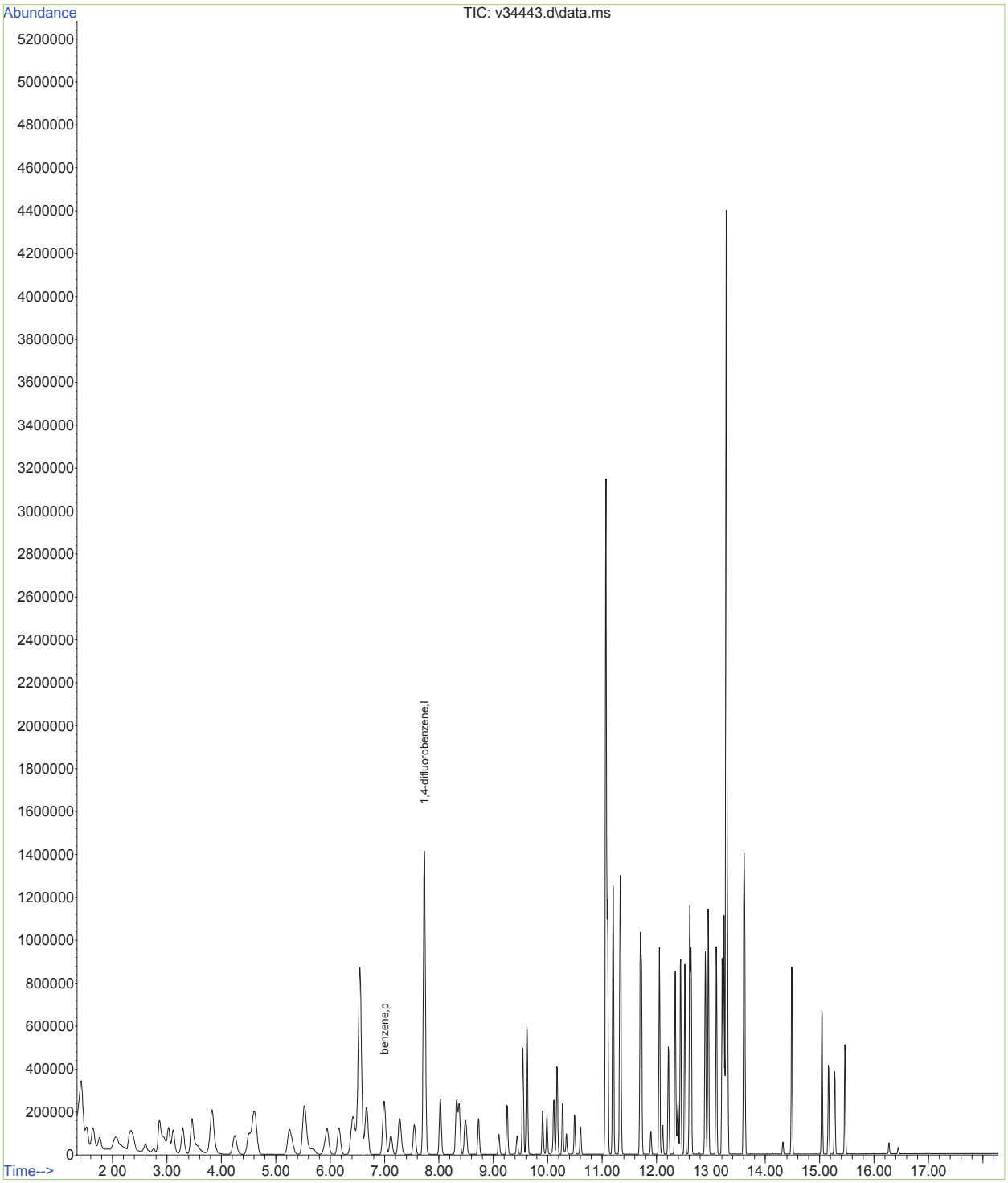
Quant Time: Oct 08 14:43:36 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Wed Sep 10 12:31:25 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-difluorobenzene	7.733	114	1833061	50.00	ug/L	0.00
Target Compounds						Qvalue
2) benzene	6.994	78	407337	9.79	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : O:\msv\1\databackup\v140909\
Data File : v34443.d
Acq On : 9 Sep 2014 3:22 pm
Operator : amym
Sample : ic1255-10
Misc : MS32663,MSV1255,,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Oct 08 14:43:36 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Wed Sep 10 12:31:25 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msv\1\databackup\v140909\
Data File : v34444.d
Acq On : 9 Sep 2014 3:48 pm
Operator : amym
Sample : ic1255-25
Misc : MS32663,MSV1255,,,,5,1
ALS Vial : 14 Sample Multiplier: 1

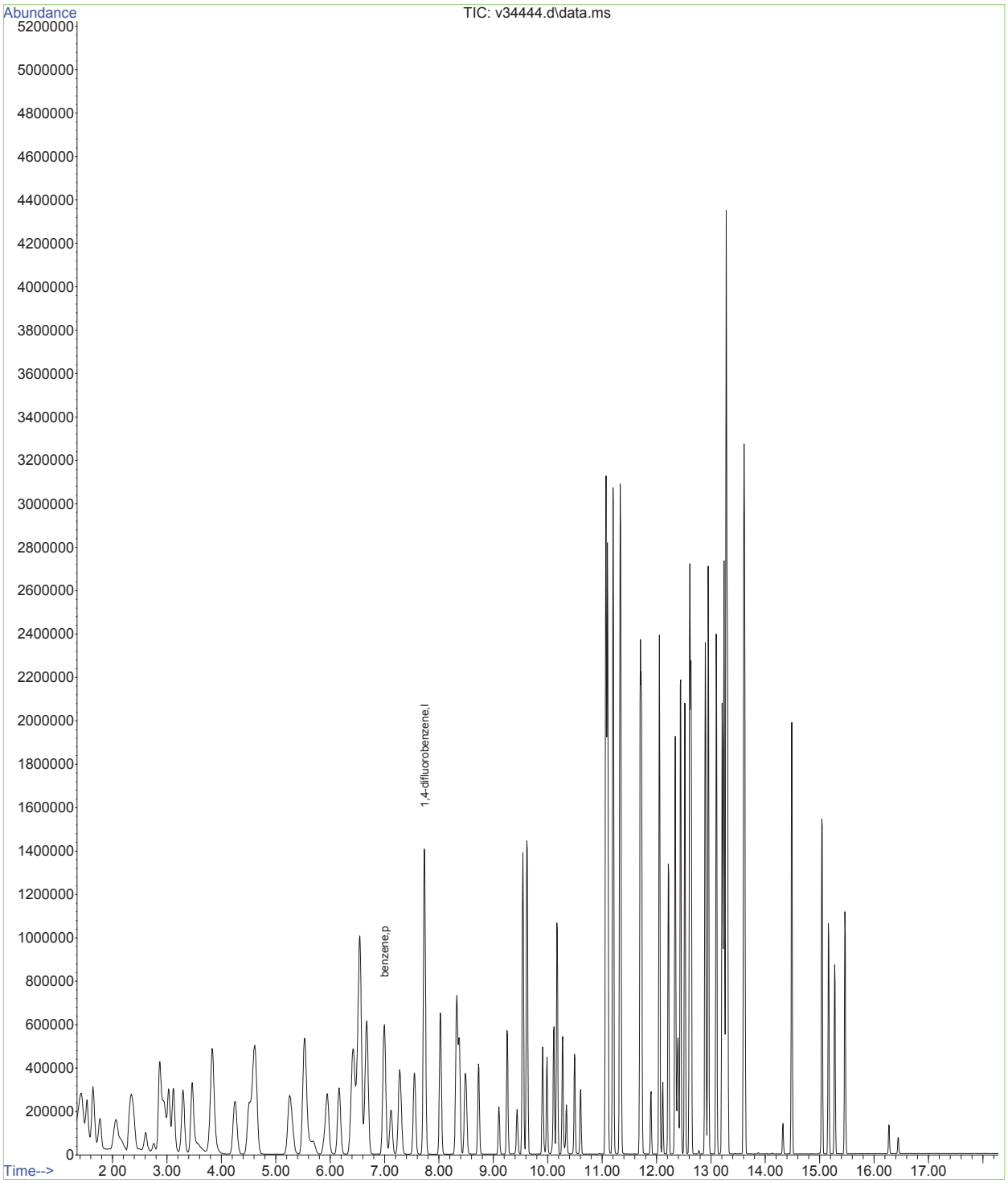
Quant Time: Oct 08 14:43:38 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Wed Sep 10 12:31:25 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-difluorobenzene	7.734	114	1842895	50.00	ug/L	0.00
Target Compounds						Qvalue
2) benzene	6.996	78	974101	23.28	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : O:\msv\1\databackup\v140909\
Data File : v34444.d
Acq On : 9 Sep 2014 3:48 pm
Operator : amym
Sample : ic1255-25
Misc : MS32663,MSV1255,,,,5,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 08 14:43:38 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Wed Sep 10 12:31:25 2014
Response via : Initial Calibration



Data Path : O:\msv\1\databackup\v140909\
Data File : v34445.d
Acq On : 9 Sep 2014 4:14 pm
Operator : amym
Sample : icc1255-50
Misc : MS32663,MSV1255,,,,5,1
ALS Vial : 15 Sample Multiplier: 1

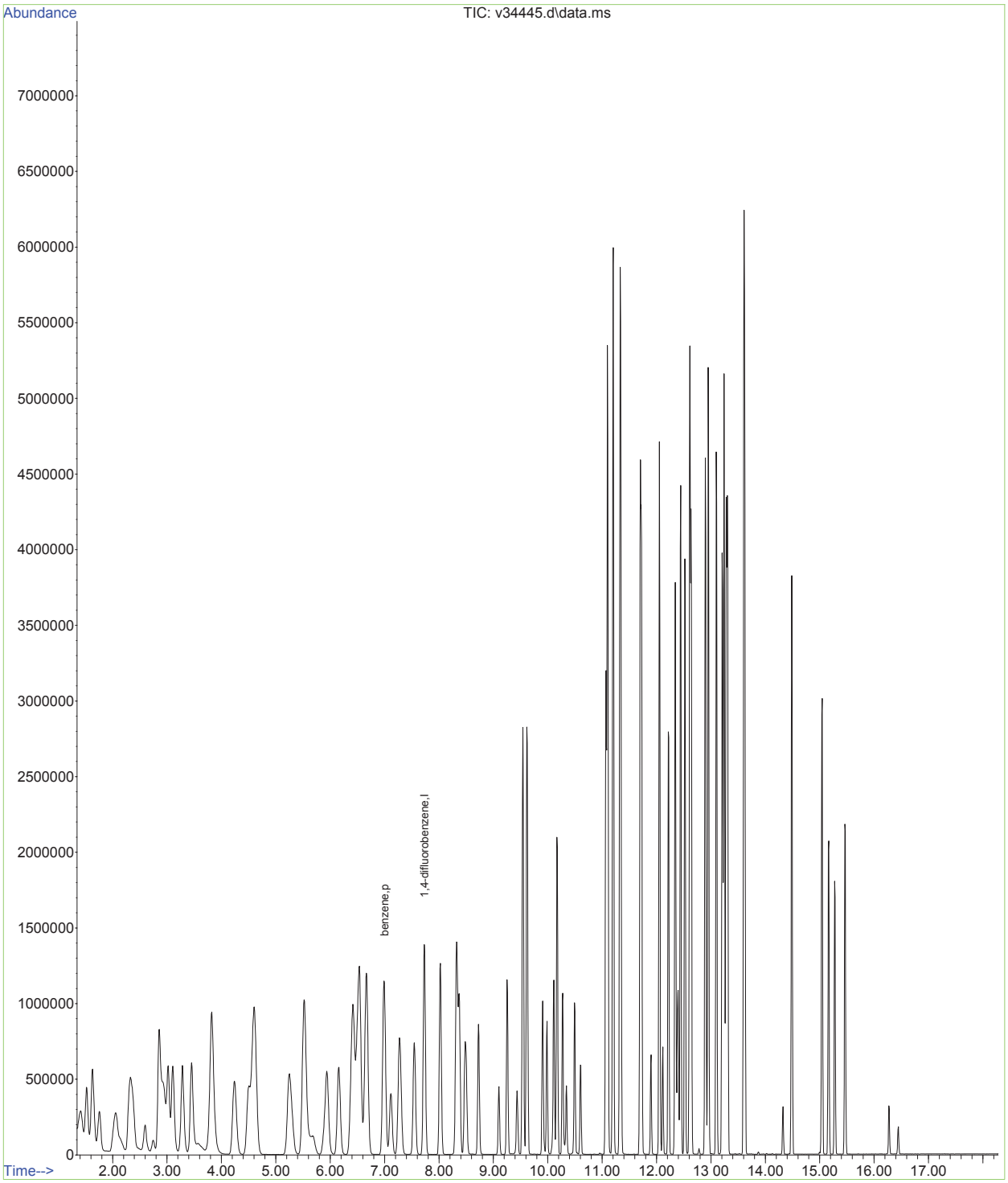
Quant Time: Oct 08 14:43:40 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Wed Sep 10 12:31:25 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-difluorobenzene	7.732	114	1838034	50.00	ug/L	0.00
Target Compounds						Qvalue
2) benzene	6.992	78	1865665	44.70	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : O:\msv\1\databackup\v140909\
Data File : v34445.d
Acq On : 9 Sep 2014 4:14 pm
Operator : amym
Sample : icc1255-50
Misc : MS32663,MSV1255,,,,5,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 08 14:43:40 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Wed Sep 10 12:31:25 2014
Response via : Initial Calibration



Data Path : O:\msv\1\databackup\v140909\
Data File : v34446.d
Acq On : 9 Sep 2014 4:41 pm
Operator : amym
Sample : ic1255-100
Misc : MS32663,MSV1255,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

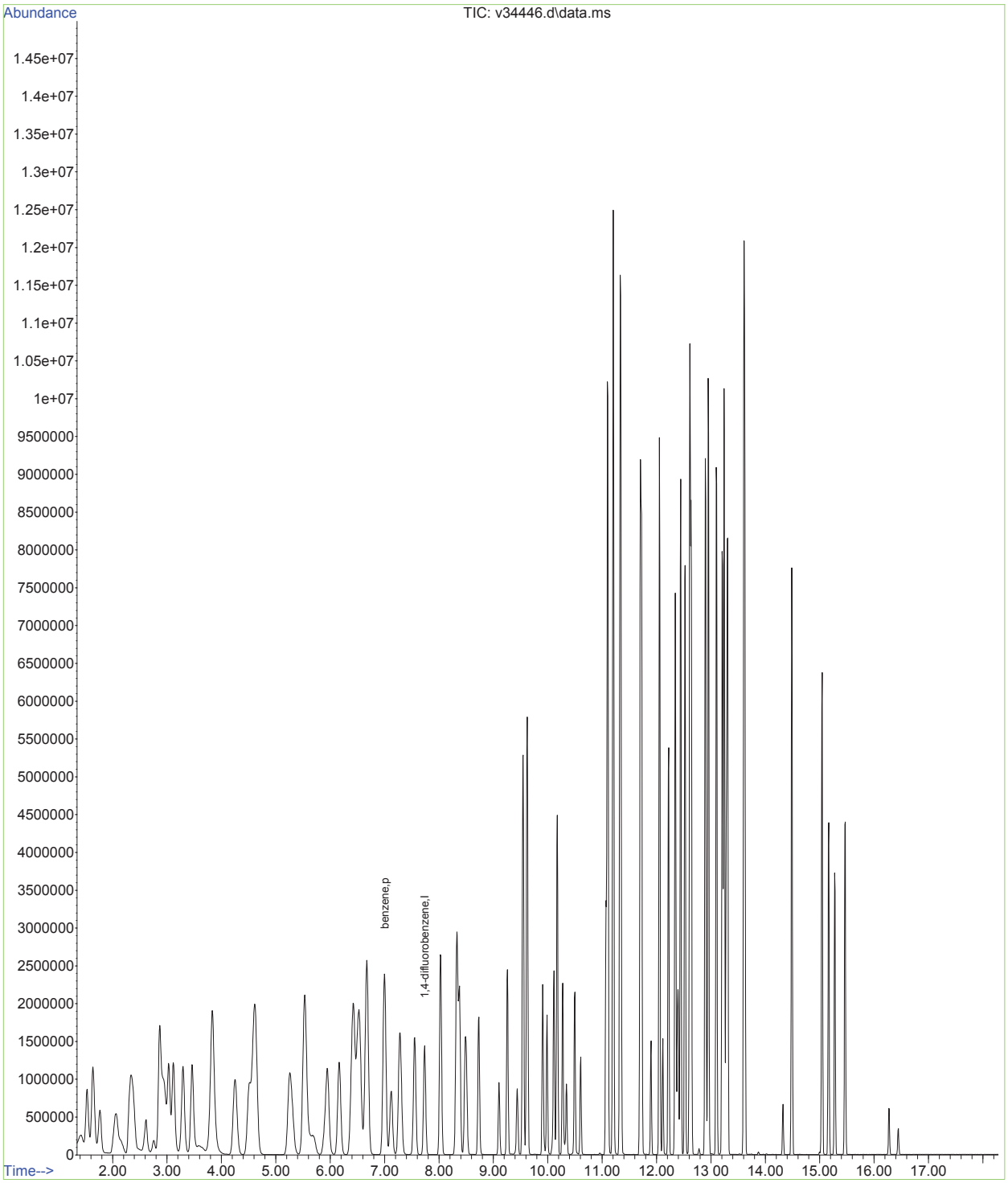
Quant Time: Oct 08 14:43:42 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Wed Sep 10 12:31:25 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-difluorobenzene	7.737	114	1890547	50.00	ug/L	0.00
Target Compounds						Qvalue
2) benzene	6.999	78	3927798	91.50	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : O:\msv\1\databackup\v140909\
Data File : v34446.d
Acq On : 9 Sep 2014 4:41 pm
Operator : amym
Sample : ic1255-100
Misc : MS32663,MSV1255,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Oct 08 14:43:42 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Wed Sep 10 12:31:25 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msv\1\databackup\v140909\
Data File : v34447.d
Acq On : 9 Sep 2014 5:07 pm
Operator : amym
Sample : ic1255-200
Misc : MS32663,MSV1255,,,,5,1
ALS Vial : 17 Sample Multiplier: 1

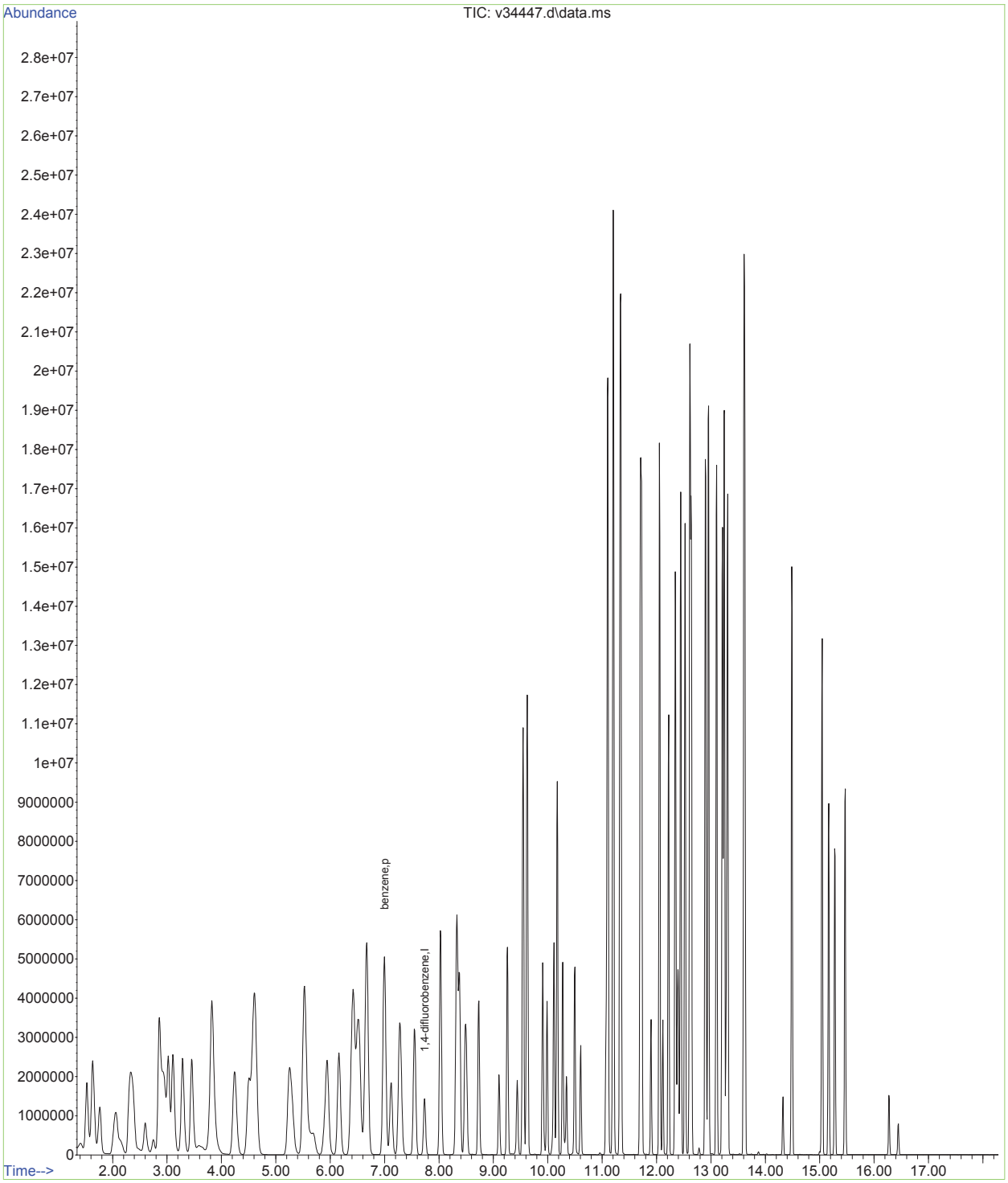
Quant Time: Oct 08 14:43:44 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Wed Sep 10 12:31:25 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-difluorobenzene	7.736	114	1897379	50.00	ug/L	0.00
Target Compounds						Qvalue
2) benzene	6.997	78	8245638	191.39	ug/L	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : O:\msv\1\databackup\v140909\
Data File : v34447.d
Acq On : 9 Sep 2014 5:07 pm
Operator : amym
Sample : ic1255-200
Misc : MS32663,MSV1255,,,,5,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Oct 08 14:43:44 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Wed Sep 10 12:31:25 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msv\1\databackup\v140909\
Data File : v34448.d
Acq On : 9 Sep 2014 5:34 pm
Operator : amym
Sample : ic1255-400
Misc : MS32663,MSV1255,,,,5,1
ALS Vial : 18 Sample Multiplier: 1

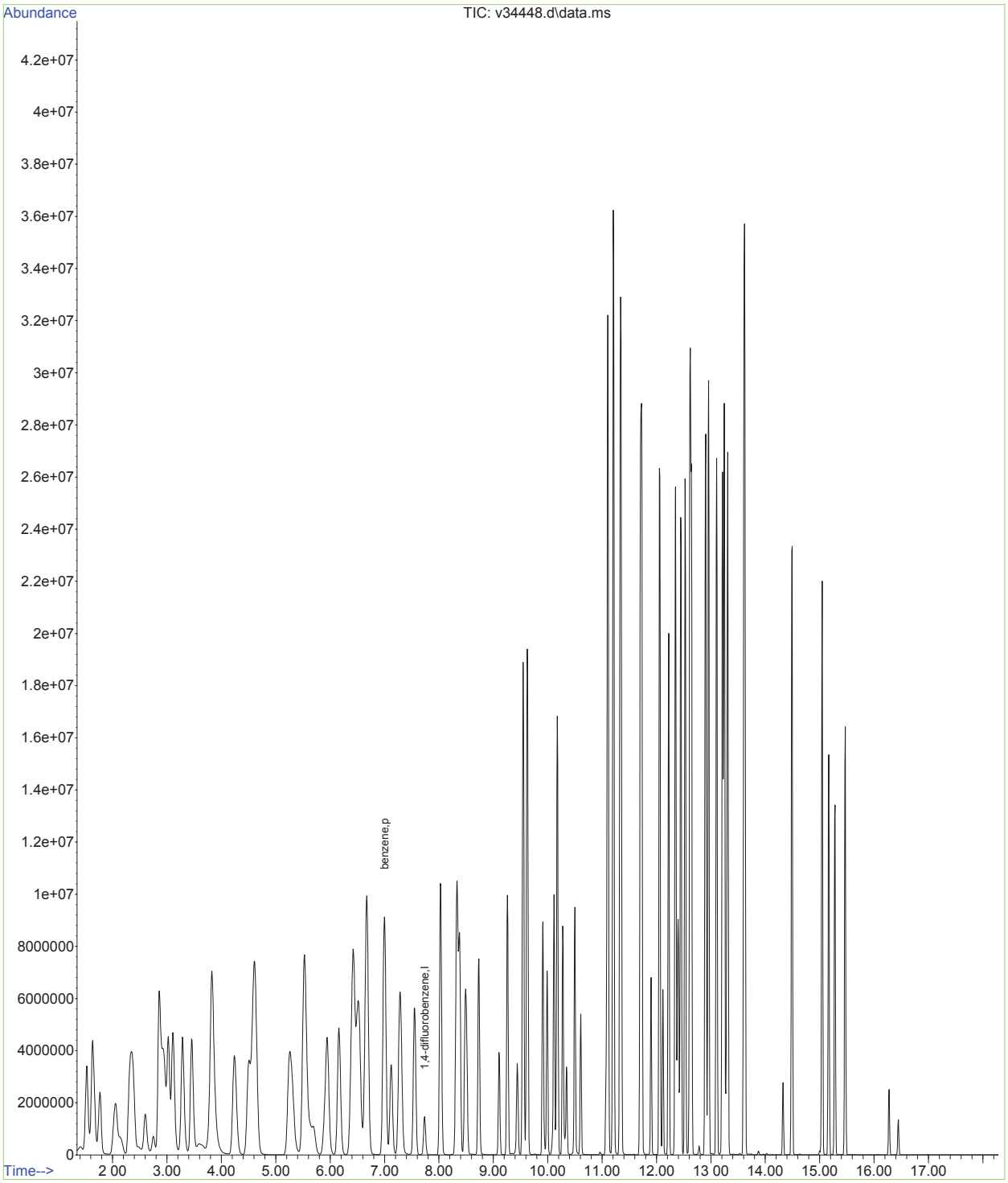
Quant Time: Oct 08 14:43:46 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Wed Sep 10 12:31:25 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-difluorobenzene	7.737	114	1891434	50.00	ug/L	0.00
Target Compounds						Qvalue
2) benzene	6.999	78	15186035	353.59	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : O:\msv\1\databackup\v140909\
Data File : v34448.d
Acq On : 9 Sep 2014 5:34 pm
Operator : amym
Sample : ic1255-400
Misc : MS32663,MSV1255,,,,5,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Oct 08 14:43:46 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Wed Sep 10 12:31:25 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msv\1\databackup\v140909\
Data File : v34451.d
Acq On : 9 Sep 2014 6:53 pm
Operator : amym
Sample : icv1255-50
Misc : MS32663,MSV1255,,,,5,1
ALS Vial : 21 Sample Multiplier: 1

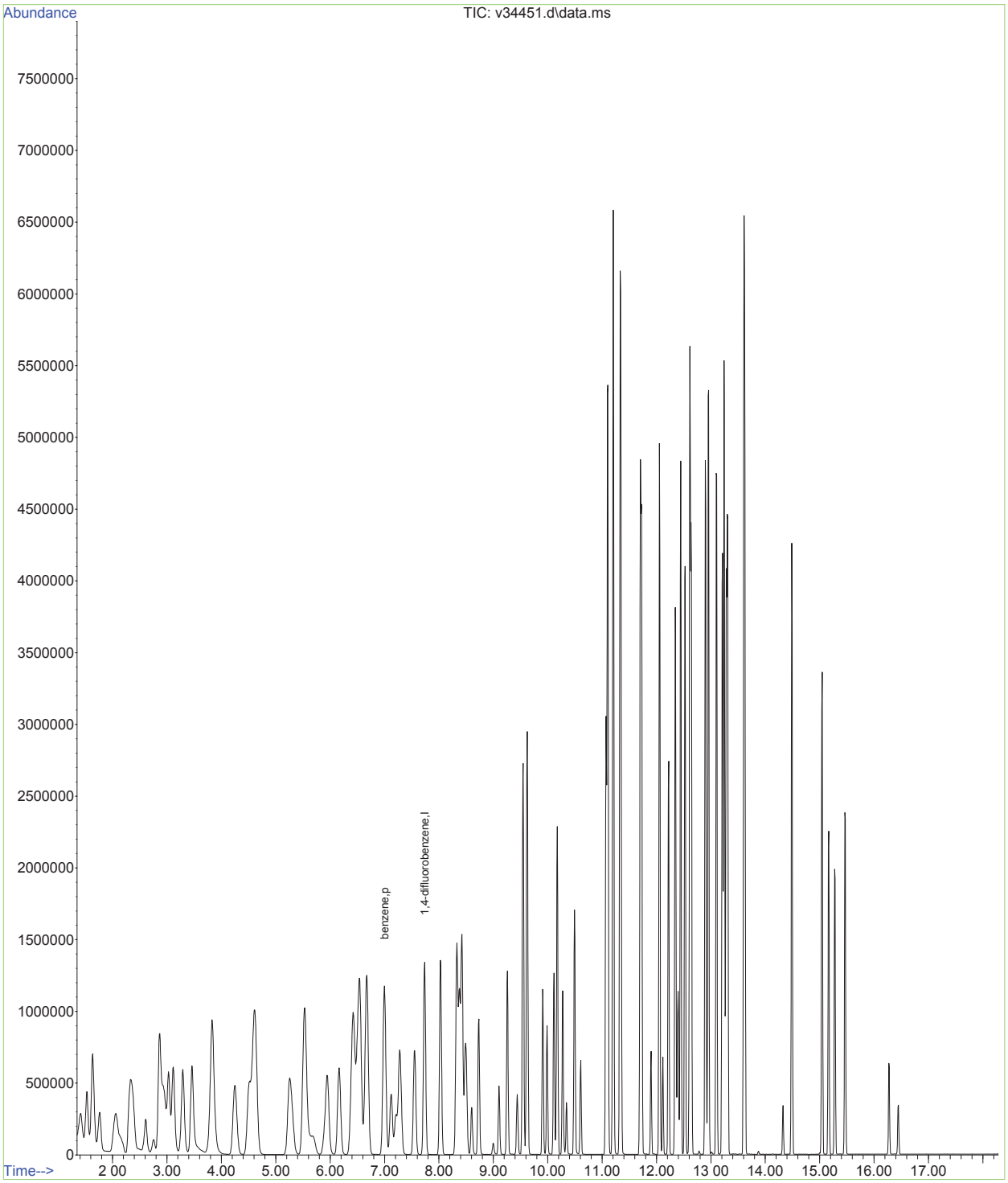
Quant Time: Oct 08 17:03:39 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Oct 08 17:03:24 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-difluorobenzene	7.736	114	1766860	50.00	ug/L	0.00
Target Compounds						Qvalue
2) benzene	6.998	78	1937126	52.90	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : O:\msv\1\databackup\v140909\
Data File : v34451.d
Acq On : 9 Sep 2014 6:53 pm
Operator : amym
Sample : icv1255-50
Misc : MS32663,MSV1255,,,,5,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Oct 08 17:03:39 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Oct 08 17:03:24 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msv\1\databackup\v140909\
Data File : v34457.d
Acq On : 10 Sep 2014 1:06 pm
Operator : amym
Sample : cc1255-50
Misc : MS32663,MSV1255,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 28 16:05:36 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Oct 08 17:03:24 2015
Response via : Initial Calibration

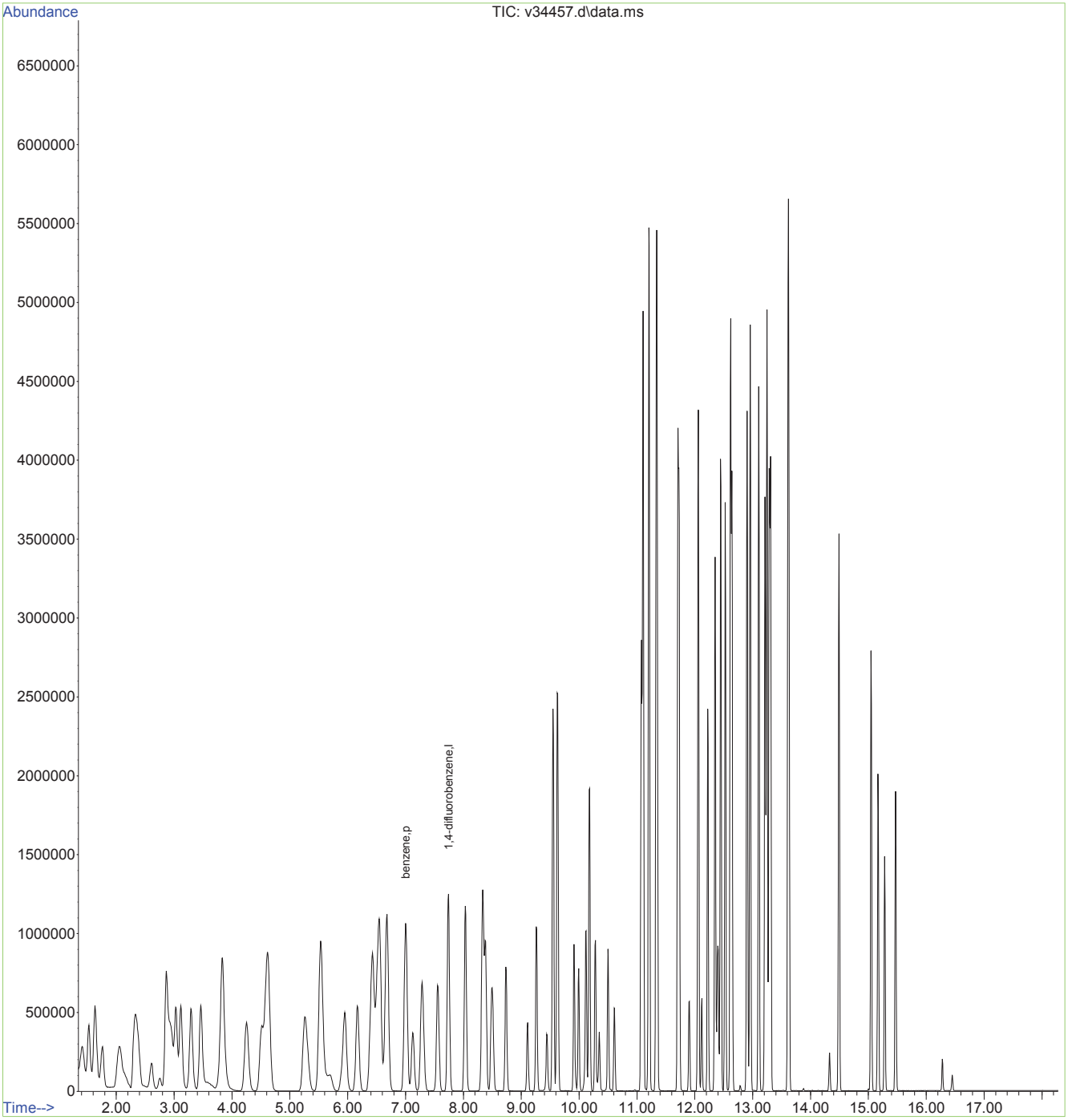
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-difluorobenzene	7.742	114	1615348	50.00	ug/L	0.00
Target Compounds						Qvalue
2) benzene	7.003	78	1707619	51.00	ug/L	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\msv\1\databackup\v140909\
Data File : v34457.d
Acq On : 10 Sep 2014 1:06 pm
Operator : amym
Sample : cc1255-50
Misc : MS32663,MSV1255,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 28 16:05:36 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Oct 08 17:03:24 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msv\1\databackup\v140909\
Data File : v34462.d
Acq On : 10 Sep 2014 3:19 pm
Operator : amym
Sample : mc33265-4
Misc : MS32700,MSV1255,,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 28 16:05:45 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Oct 08 17:03:24 2015
Response via : Initial Calibration

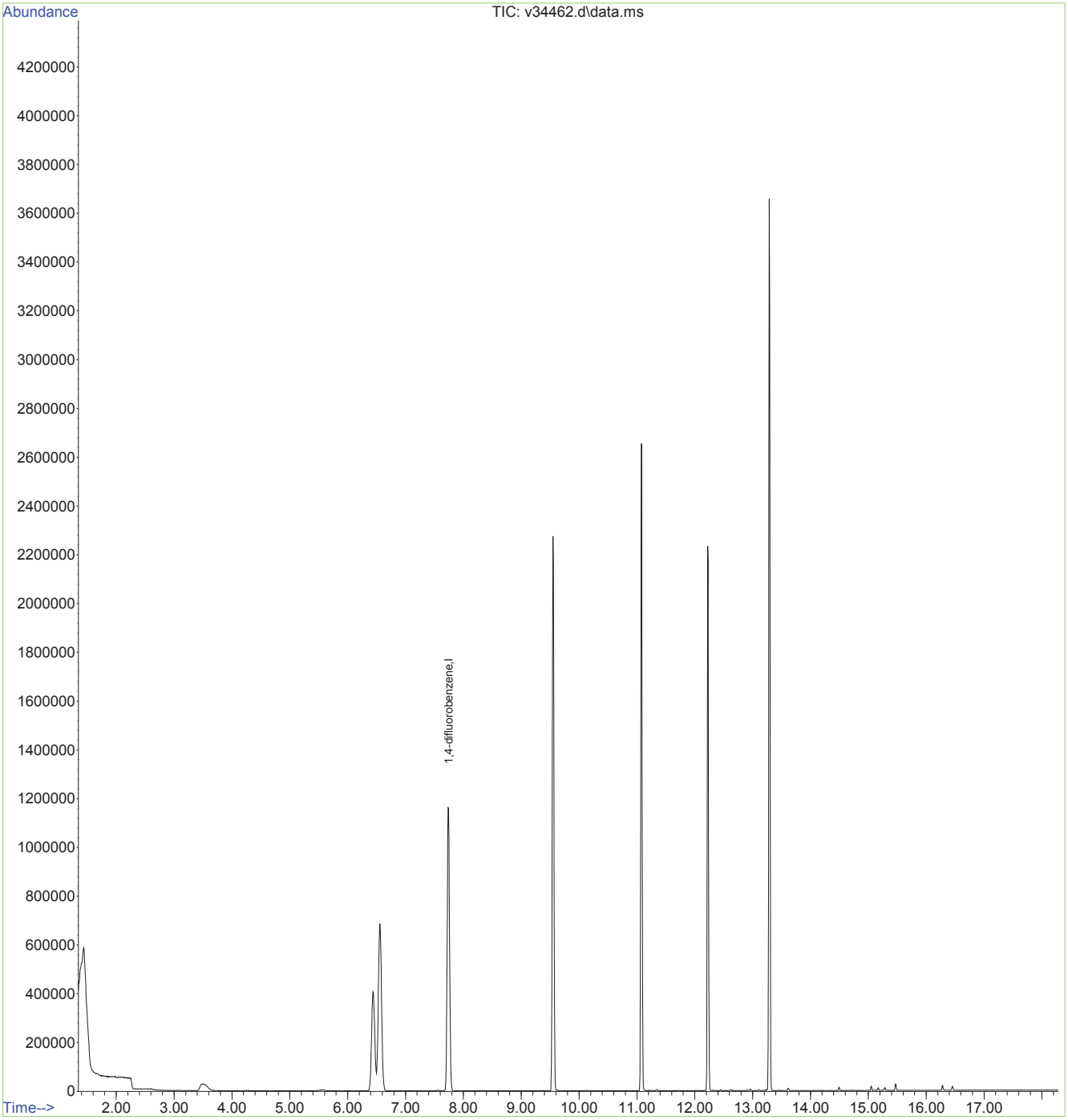
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-difluorobenzene	7.742	114	1542015	50.00	ug/L	0.00
Target Compounds						Qvalue
2) benzene	7.035	78	3021	Below Cal		52

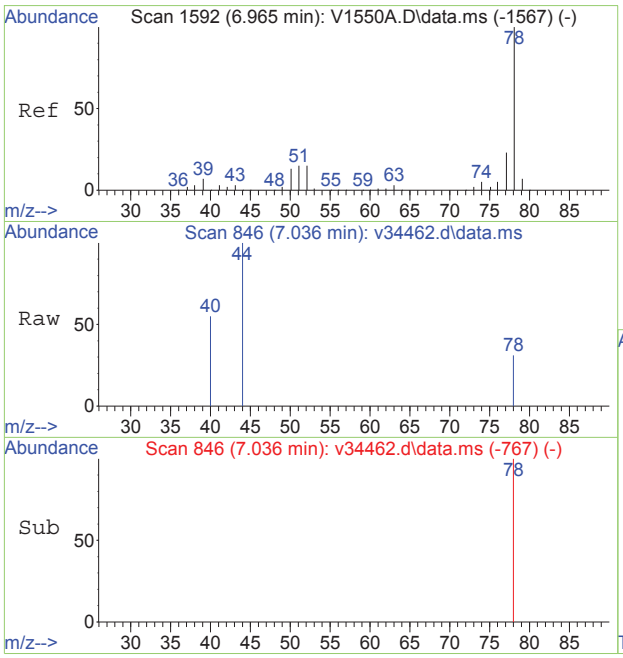
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\msv\1\databackup\v140909\
Data File : v34462.d
Acq On : 10 Sep 2014 3:19 pm
Operator : amym
Sample : mc33265-4
Misc : MS32700,MSV1255,,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 28 16:05:45 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Oct 08 17:03:24 2015
Response via : Initial Calibration

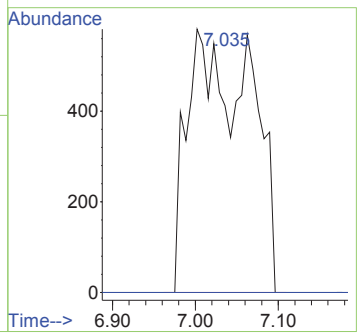




#2
benzene
Concen: Below Cal
RT: 7.035 min Scan# 846
Delta R.T. 0.043 min
Lab File: v34462.d
Acq: 10 Sep 2014 3:19 pm

Tgt Ion: 78 Resp: 3021

Ion	Ratio	Lower	Upper
78	100		
77	0.0	0.0	53.3



Quantitation Report (QT Reviewed)

Data Path : O:\msv\1\databackup\v140909\
Data File : v34458.d
Acq On : 10 Sep 2014 1:33 pm
Operator : amym
Sample : bs
Misc : MS32663,MSV1255,,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 28 16:05:39 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Oct 08 17:03:24 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-difluorobenzene	7.745	114	1652109	50.00	ug/L	0.01
Target Compounds						Qvalue
2) benzene	7.009	78	1846592	53.94	ug/L	100

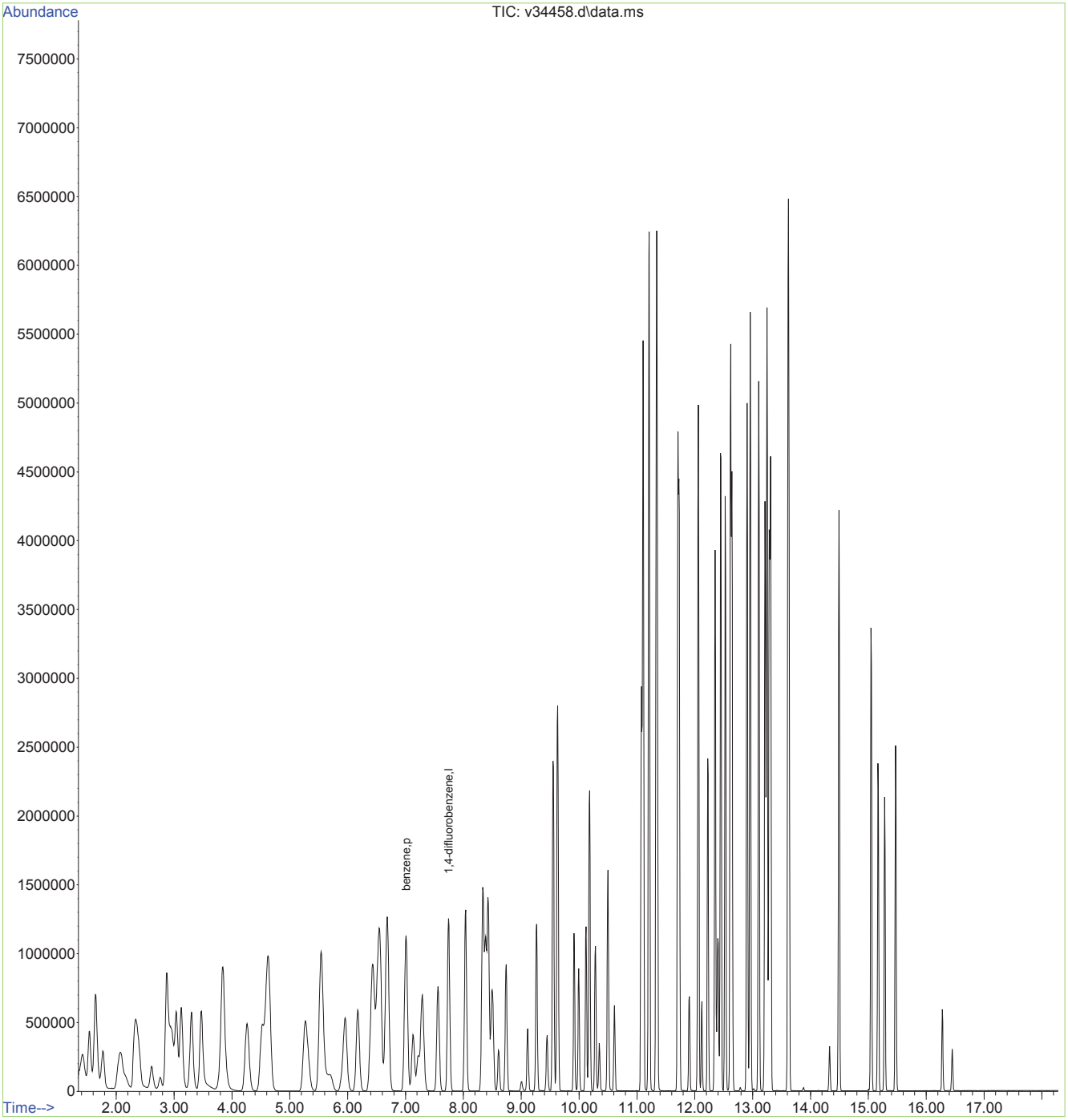
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST MC33265

Quantitation Report (QT Reviewed)

Data Path : O:\msv\1\databackup\v140909\
Data File : v34458.d
Acq On : 10 Sep 2014 1:33 pm
Operator : amym
Sample : bs
Misc : MS32663,MSV1255,,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 28 16:05:39 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Oct 08 17:03:24 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msv\1\databackup\v140909\
Data File : v34459.d
Acq On : 10 Sep 2014 1:59 pm
Operator : amym
Sample : bsd
Misc : MS32663,MSV1255,,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 28 16:05:41 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Oct 08 17:03:24 2015
Response via : Initial Calibration

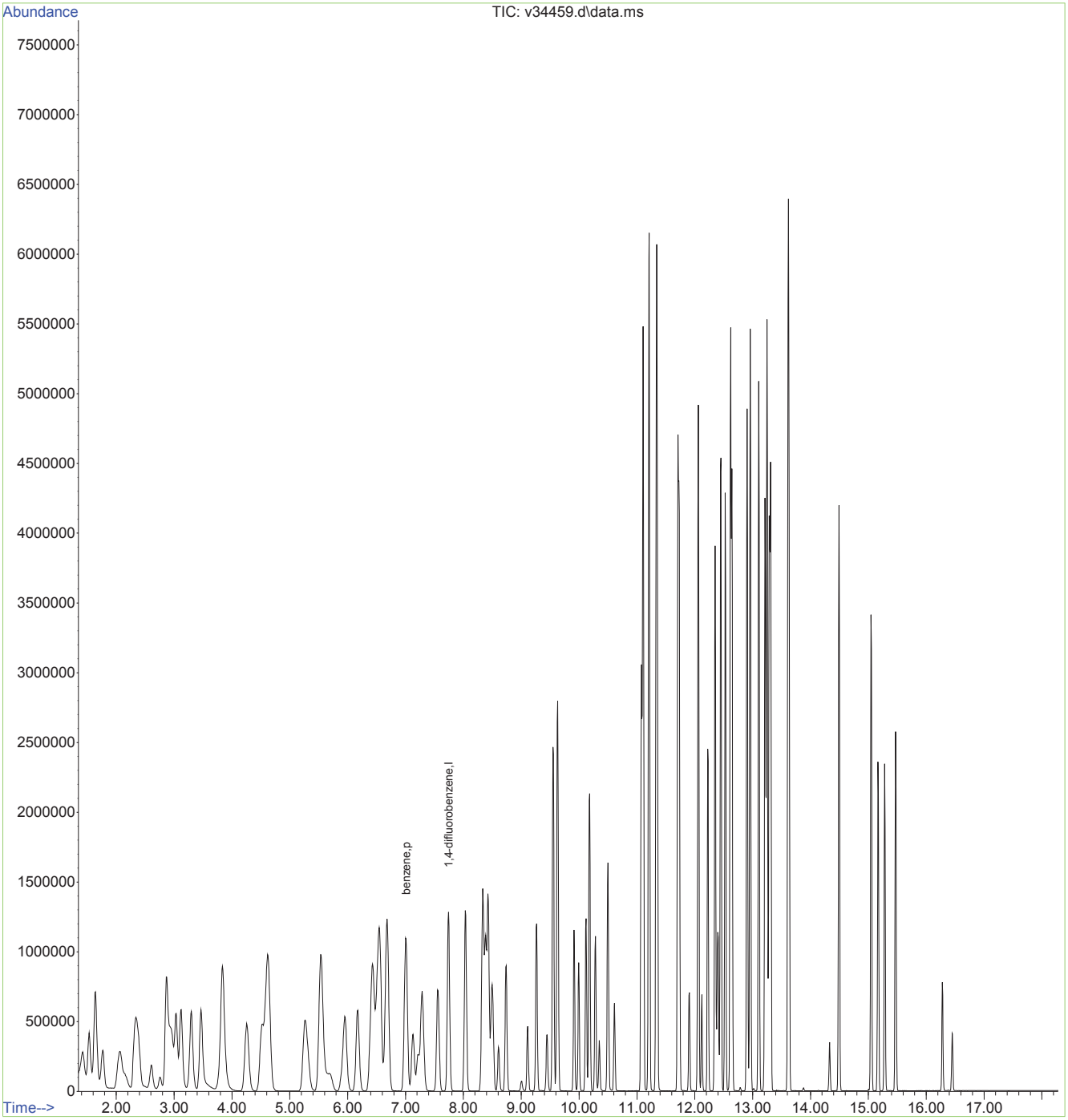
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-difluorobenzene	7.743	114	1677937	50.00	ug/L	0.01
Target Compounds						Qvalue
2) benzene	7.006	78	1819327	52.32	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\msv\1\databackup\v140909\
Data File : v34459.d
Acq On : 10 Sep 2014 1:59 pm
Operator : amym
Sample : bsd
Misc : MS32663,MSV1255,,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 28 16:05:41 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Oct 08 17:03:24 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msv\1\databackup\v140909\
Data File : v34461.d
Acq On : 10 Sep 2014 2:52 pm
Operator : amym
Sample : mb
Misc : MS32700,MSV1255,,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 28 16:05:43 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Oct 08 17:03:24 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-difluorobenzene	7.747	114	1616486	50.00 ug/L	0.01
Target Compounds					Qvalue
2) benzene	7.043	78	3648	Below Cal	52

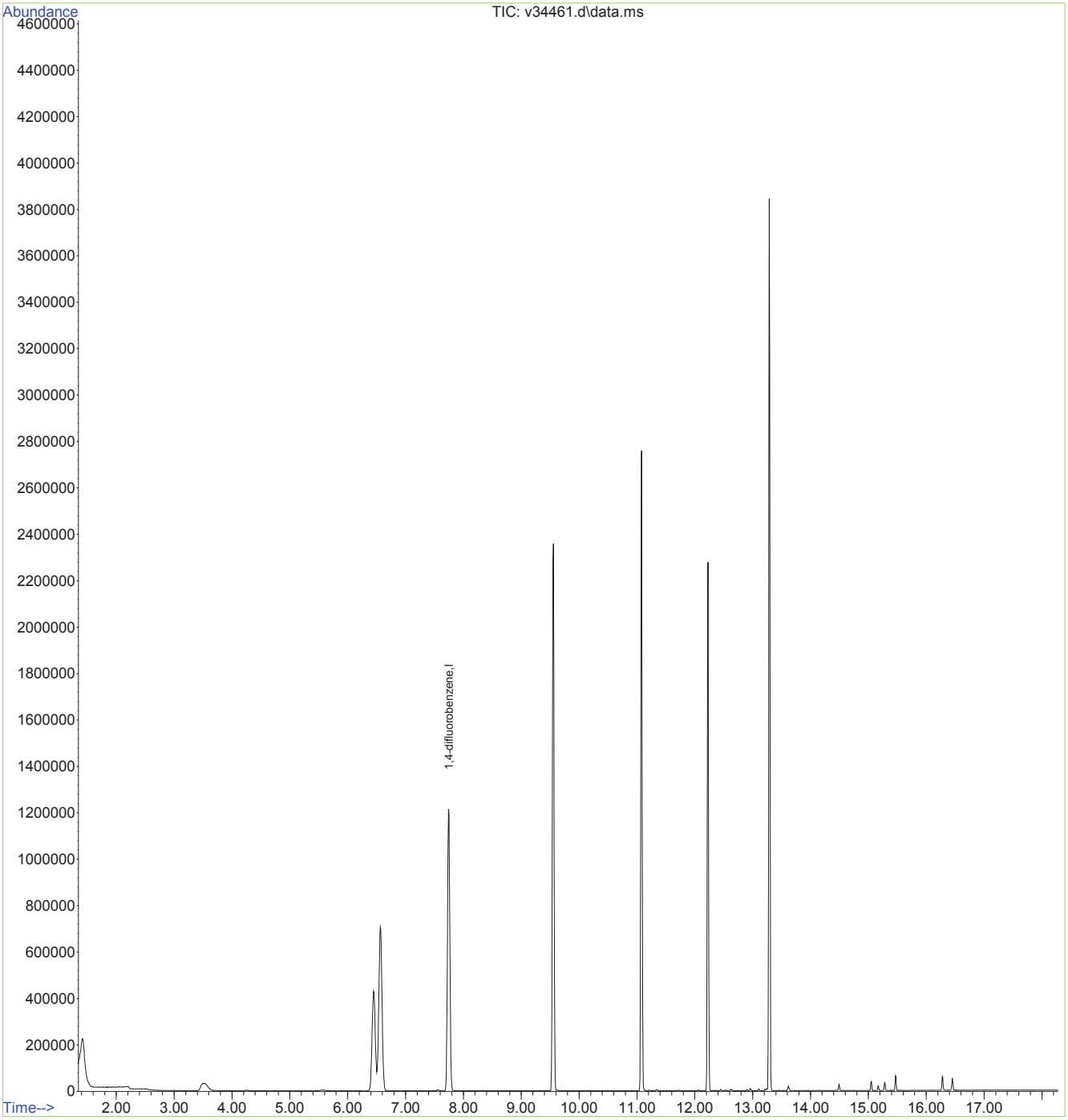
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST MC33265

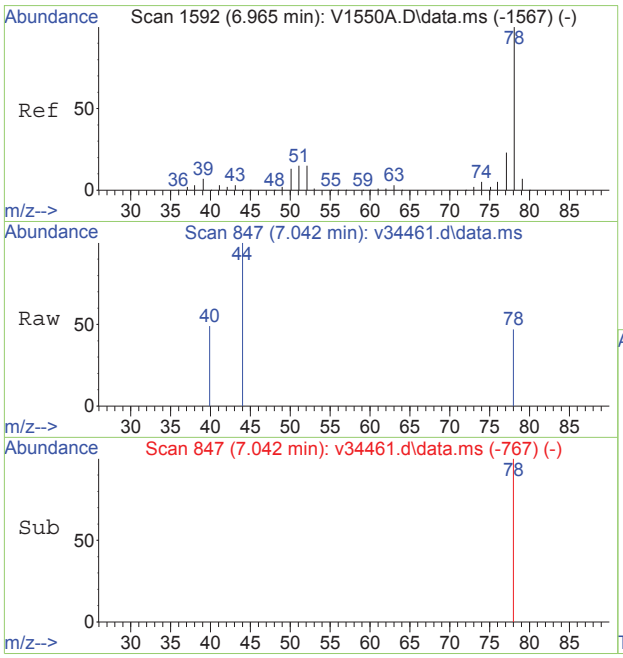
Quantitation Report (QT Reviewed)

Data Path : O:\msv\1\databackup\v140909\
Data File : v34461.d
Acq On : 10 Sep 2014 2:52 pm
Operator : amym
Sample : mb
Misc : MS32700,MSV1255,,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 28 16:05:43 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Oct 08 17:03:24 2015
Response via : Initial Calibration



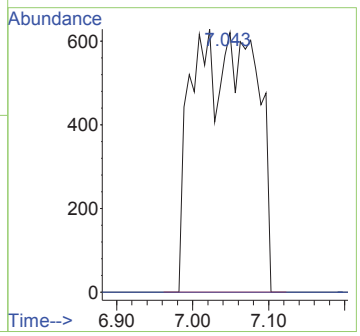
SGS ACCUTEST MC33265



#2
benzene
Concen: Below Cal
RT: 7.043 min Scan# 847
Delta R.T. 0.051 min
Lab File: v34461.d
Acq: 10 Sep 2014 2:52 pm

Tgt Ion: 78 Resp: 3648

Ion	Ratio	Lower	Upper
78	100		
77	0.0	0.0	53.3



Quantitation Report (QT Reviewed)

Data Path : O:\msv\1\databackup\v140909\
Data File : v34473.d
Acq On : 10 Sep 2014 8:38 pm
Operator : amym
Sample : mc33290-28ms
Misc : MS32700,MSV1255,,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Oct 28 16:06:05 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Oct 08 17:03:24 2015
Response via : Initial Calibration

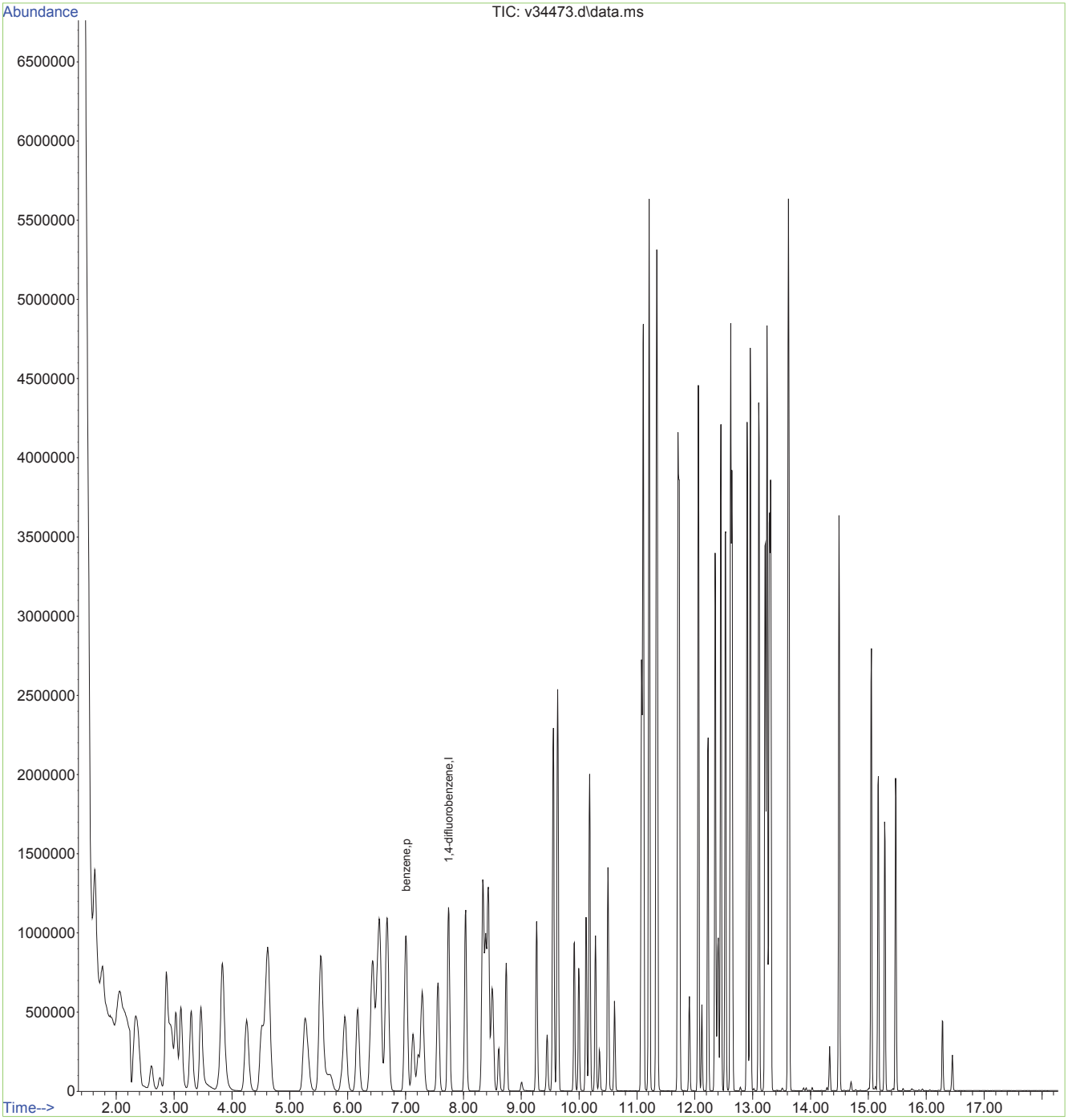
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-difluorobenzene	7.745	114	1501895	50.00	ug/L	0.01
Target Compounds						Qvalue
2) benzene	7.007	78	1585078	50.91	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\msv\1\databackup\v140909\
Data File : v34473.d
Acq On : 10 Sep 2014 8:38 pm
Operator : amym
Sample : mc33290-28ms
Misc : MS32700,MSV1255,,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Oct 28 16:06:05 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Oct 08 17:03:24 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msv\1\databackup\v140909\
Data File : v34474.d
Acq On : 10 Sep 2014 9:04 pm
Operator : amym
Sample : mc33290-28msd
Misc : MS32700,MSV1255,,,,5,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Oct 28 16:06:07 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Oct 08 17:03:24 2015
Response via : Initial Calibration

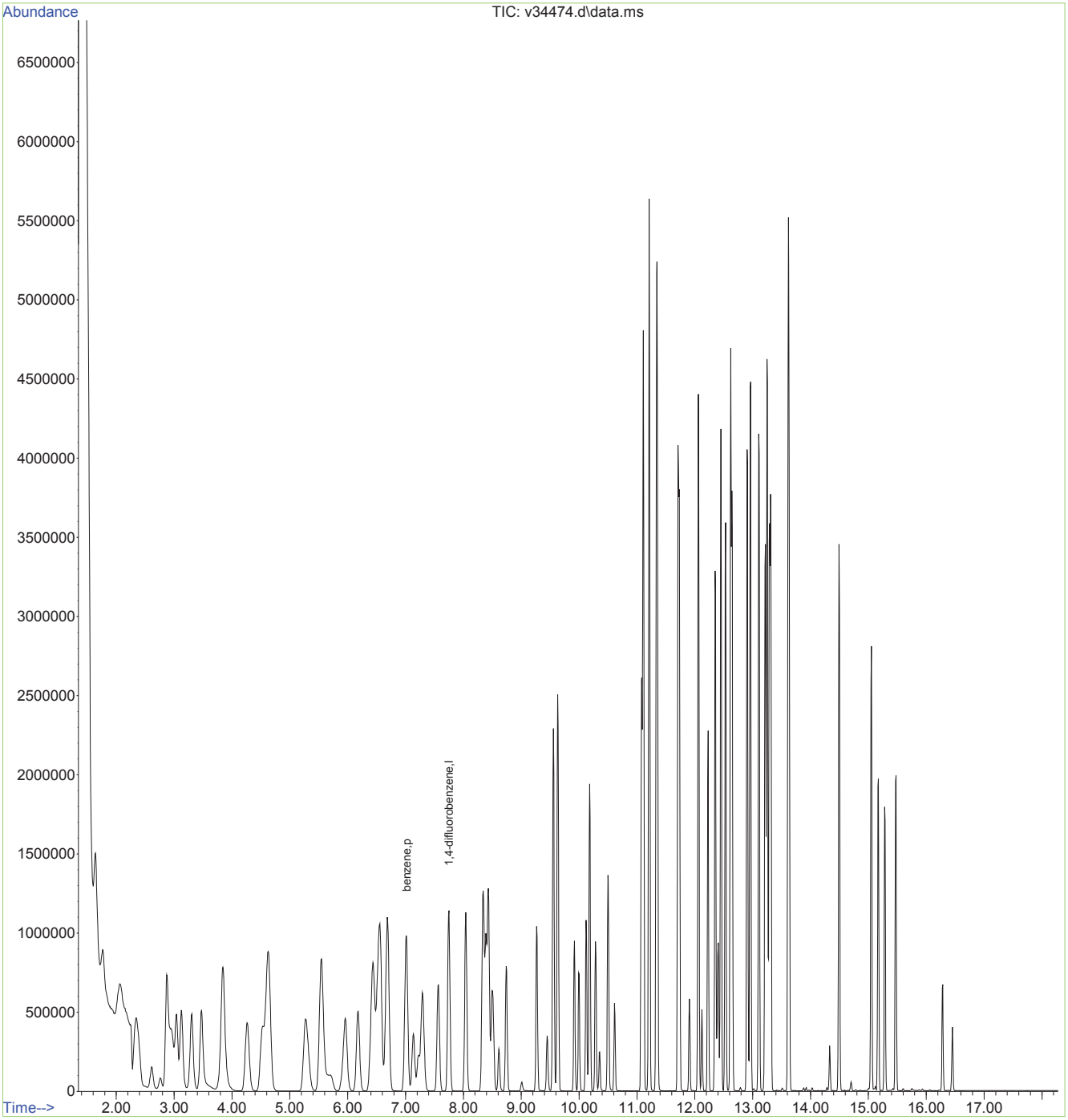
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-difluorobenzene	7.749	114	1483451	50.00	ug/L	0.02
Target Compounds						Qvalue
2) benzene	7.012	78	1563340	50.84	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\msv\1\databackup\v140909\
Data File : v34474.d
Acq On : 10 Sep 2014 9:04 pm
Operator : amym
Sample : mc33290-28msd
Misc : MS32700,MSV1255,,,,5,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Oct 28 16:06:07 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Oct 08 17:03:24 2015
Response via : Initial Calibration



Internal Sample Tracking Chronicle

Shell Oil

Job No: MC33265

URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL
Project No: 21562973.15000

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC33265-1 Collected: 28-AUG-14 14:15 By: EA MW25-082814(36'-38')			Received: 29-AUG-14 By:			
MC33265-1	SM21 2540 B MOD.	02-SEP-14	HS			%SOL
MC33265-1	SW846 8015	02-SEP-14 14:22	AF			V8015GRO
MC33265-1	SW846 8011	02-SEP-14 16:05	NK	29-AUG-14	PA	V8011SL
MC33265-1	SW846 8260C	05-SEP-14 18:35	KD			V8260SL+
MC33265-1	SW846 8270D BY SIM	08-SEP-14 17:37	WK	30-AUG-14	FC	B8270SIMSL
MC33265-1	SW846 8270D	09-SEP-14 23:34	WK	30-AUG-14	AZ	AB8270SL+
MC33265-2 Collected: 28-AUG-14 14:30 By: EA MW25-082814(44'-46')			Received: 29-AUG-14 By:			
MC33265-2	SM21 2540 B MOD.	02-SEP-14	HS			%SOL
MC33265-2	SW846 8015	02-SEP-14 15:02	AF			V8015GRO
MC33265-2	SW846 8011	02-SEP-14 16:25	NK	29-AUG-14	PA	V8011SL
MC33265-2	SW846 8270D BY SIM	08-SEP-14 17:59	WK	30-AUG-14	FC	B8270SIMSL
MC33265-2	SW846 8270D	09-SEP-14 23:57	WK	30-AUG-14	AZ	AB8270SL+
MC33265-2	SW846 8260C	10-SEP-14 15:10	JM			V8260SL+
MC33265-3 Collected: 28-AUG-14 14:30 By: EA MW25-082814(44'-46')-DUP			Received: 29-AUG-14 By:			
MC33265-3	SM21 2540 B MOD.	02-SEP-14	HS			%SOL
MC33265-3	SW846 8015	02-SEP-14 15:41	AF			V8015GRO
MC33265-3	SW846 8011	02-SEP-14 17:04	NK	29-AUG-14	PA	V8011SL
MC33265-3	SW846 8270D BY SIM	08-SEP-14 18:22	WK	30-AUG-14	FC	B8270SIMSL
MC33265-3	SW846 8270D	10-SEP-14 00:21	WK	30-AUG-14	AZ	AB8270SL+
MC33265-3	SW846 8260C	10-SEP-14 15:37	JM			V8260SL+
MC33265-4 Collected: 28-AUG-14 00:00 By: EA TB-082814-HCL			Received: 29-AUG-14 By:			
MC33265-4	SW846 8260C	10-SEP-14 15:19	AMY			V8260SL+
MC33265-5 Collected: 28-AUG-14 00:00 By: EA TB-082814-ST			Received: 29-AUG-14 By:			
MC33265-5	SW846 8011	03-SEP-14 21:42	NK	02-SEP-14	MT	V8011SL

SGS Accutest Internal Chain of Custody

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL
Received: 08/29/14

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC33265-1.1	Walk In Ref #9	Alireza Zeighami	08/30/14 07:56	Retrieve from Storage
MC33265-1.1	Alireza Zeighami	Walk In Ref #9	08/30/14 10:52	Return to Storage
MC33265-1.1	Walk In Ref #9	Mehdi Abdolrahim	09/02/14 16:28	Retrieve from Storage
MC33265-1.1	Mehdi Abdolrahim	Walk In Ref #9	09/03/14 08:06	Return to Storage
MC33265-1.1	Scott Parsick		10/27/14 14:48	Disposed
MC33265-1.2	Walk In Ref #9	Nicole Estey	08/29/14 20:36	Retrieve from Storage
MC33265-1.2	Nicole Estey	Walk In Ref #9	08/29/14 22:19	Return to Storage
MC33265-1.2	Scott Parsick		10/27/14 14:48	Disposed
MC33265-1.3	VOC Ref #10	Krysten Dufort	09/05/14 11:25	Retrieve from Storage
MC33265-1.3	Krysten Dufort	GCMSM	09/05/14 11:25	Load on Instrument
MC33265-1.3	GCMSM	Krysten Dufort	09/08/14 08:21	Unload from Instrument
MC33265-1.3	Krysten Dufort	VOC Ref #10	09/08/14 08:21	Return to Storage
MC33265-1.3	Scott Parsick		10/27/14 14:48	Disposed
MC33265-1.5	VOC Ref #10	Anthony Franciosa	09/02/14 08:07	Retrieve from Storage
MC33265-1.5	Anthony Franciosa	GCAB	09/02/14 08:07	Load on Instrument
MC33265-1.5	GCAB	Anthony Franciosa	09/02/14 08:53	Unload from Instrument
MC33265-1.5	Anthony Franciosa	VOC Ref #10	09/02/14 08:53	Return to Storage
MC33265-1.5	Scott Parsick		10/27/14 14:48	Disposed
MC33265-1.7	VOC Ref #10	Jaime Maslowski	09/02/14 15:38	Retrieve from Storage
MC33265-1.7	Jaime Maslowski	VOC Ref #10	09/03/14 09:12	Return to Storage
MC33265-1.7	Scott Parsick		10/27/14 14:48	Disposed
MC33265-2.1	Walk In Ref #9	Alireza Zeighami	08/30/14 07:56	Retrieve from Storage
MC33265-2.1	Alireza Zeighami	Walk In Ref #9	08/30/14 10:52	Return to Storage
MC33265-2.1	Walk In Ref #9	Mehdi Abdolrahim	09/02/14 16:28	Retrieve from Storage
MC33265-2.1	Mehdi Abdolrahim	Walk In Ref #9	09/03/14 08:06	Return to Storage
MC33265-2.1	Scott Parsick		10/27/14 14:48	Disposed
MC33265-2.2	Walk In Ref #9	Nicole Estey	08/29/14 20:36	Retrieve from Storage
MC33265-2.2	Nicole Estey	Walk In Ref #9	08/29/14 22:19	Return to Storage
MC33265-2.2	Scott Parsick		10/27/14 14:48	Disposed
MC33265-2.5	VOC Ref #10	Jaime Maslowski	09/02/14 15:38	Retrieve from Storage
MC33265-2.5	Jaime Maslowski	VOC Ref #10	09/03/14 09:12	Return to Storage
MC33265-2.5	VOC Ref #10	Jaime Maslowski	09/10/14 13:08	Retrieve from Storage
MC33265-2.5	Jaime Maslowski	VOC Ref #10	09/11/14 11:15	Return to Storage
MC33265-2.5	Scott Parsick		10/27/14 14:48	Disposed
MC33265-2.7	VOC Ref #10	Anthony Franciosa	09/02/14 08:07	Retrieve from Storage
MC33265-2.7	Anthony Franciosa	GCAB	09/02/14 08:07	Load on Instrument

SGS Accutest Internal Chain of Custody

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL
Received: 08/29/14

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC33265-2.7	GCAB	Anthony Franciosa	09/02/14 08:53	Unload from Instrument
MC33265-2.7	Anthony Franciosa	VOC Ref #10	09/02/14 08:53	Return to Storage
MC33265-2.7	Scott Parsick		10/27/14 14:48	Disposed
MC33265-3.1	Walk In Ref #9	Alireza Zeighami	08/30/14 07:56	Retrieve from Storage
MC33265-3.1	Alireza Zeighami	Walk In Ref #9	08/30/14 10:52	Return to Storage
MC33265-3.1	Walk In Ref #9	Mehdi Abdolrahim	09/02/14 16:28	Retrieve from Storage
MC33265-3.1	Mehdi Abdolrahim	Walk In Ref #9	09/03/14 08:06	Return to Storage
MC33265-3.1	Scott Parsick		10/27/14 14:48	Disposed
MC33265-3.2	Walk In Ref #9	Nicole Estey	08/29/14 20:36	Retrieve from Storage
MC33265-3.2	Nicole Estey	Walk In Ref #9	08/29/14 22:19	Return to Storage
MC33265-3.2	Scott Parsick		10/27/14 14:48	Disposed
MC33265-3.5	VOC Ref #10	Anthony Franciosa	09/02/14 08:07	Retrieve from Storage
MC33265-3.5	Anthony Franciosa	GCAB	09/02/14 08:07	Load on Instrument
MC33265-3.5	GCAB	Anthony Franciosa	09/02/14 08:53	Unload from Instrument
MC33265-3.5	Anthony Franciosa	VOC Ref #10	09/02/14 08:53	Return to Storage
MC33265-3.5	Scott Parsick		10/27/14 14:48	Disposed
MC33265-3.6	VOC Ref #10	Jaime Maslowski	09/02/14 15:38	Retrieve from Storage
MC33265-3.6	Jaime Maslowski	VOC Ref #10	09/03/14 09:12	Return to Storage
MC33265-3.6	VOC Ref #10	Jaime Maslowski	09/10/14 13:08	Retrieve from Storage
MC33265-3.6	Jaime Maslowski	VOC Ref #10	09/11/14 11:15	Return to Storage
MC33265-3.6	Scott Parsick		10/27/14 14:48	Disposed
MC33265-4.1	VOC Ref #3	Amy Min Yang	09/10/14 13:55	Retrieve from Storage
MC33265-4.1	Amy Min Yang	GCMSV	09/10/14 13:55	Load on Instrument
MC33265-4.1	GCMSV	Amy Min Yang	09/11/14 09:34	Unload from Instrument
MC33265-4.1	Amy Min Yang	VOC Ref #3	09/11/14 09:34	Return to Storage
MC33265-4.1	Scott Parsick		10/27/14 14:48	Disposed
MC33265-5.2	VOC Ref #3	Marc Tahtamoni	09/02/14 14:46	Retrieve from Storage
MC33265-5.2	Scott Parsick		10/27/14 14:48	Disposed

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSM2406-MB	M67986.D	1	09/05/14	KD	n/a	n/a	MSM2406

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33265-1

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.8	ug/kg	
107-02-8	Acrolein	ND	25	8.8	ug/kg	
107-13-1	Acrylonitrile	ND	25	2.7	ug/kg	
71-43-2	Benzene	ND	0.50	0.34	ug/kg	
108-86-1	Bromobenzene	ND	5.0	0.25	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	0.35	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	0.21	ug/kg	
75-25-2	Bromoform	ND	2.0	0.35	ug/kg	
74-83-9	Bromomethane	ND	2.0	0.60	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	3.1	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	0.24	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	0.75	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	0.21	ug/kg	
75-15-0	Carbon disulfide	ND	5.0	0.13	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	0.22	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	0.16	ug/kg	
75-00-3	Chloroethane	ND	5.0	0.76	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/kg	
67-66-3	Chloroform	ND	2.0	0.17	ug/kg	
74-87-3	Chloromethane	ND	5.0	0.56	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	0.19	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	0.27	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	0.32	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	2.0	0.21	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	2.0	0.30	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	2.0	0.35	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.81	ug/kg	
75-34-3	1,1-Dichloroethane	ND	2.0	0.27	ug/kg	
107-06-2	1,2-Dichloroethane	ND	2.0	0.32	ug/kg	
75-35-4	1,1-Dichloroethene	ND	2.0	0.41	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	2.0	0.45	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	2.0	0.42	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	0.42	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	0.33	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	0.56	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	0.26	ug/kg	

Method Blank Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSM2406-MB	M67986.D	1	09/05/14	KD	n/a	n/a	MSM2406

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33265-1

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.23	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.26	ug/kg	
123-91-1	1,4-Dioxane	ND	25	20	ug/kg	
97-63-2	Ethyl methacrylate	ND	5.0	0.36	ug/kg	
100-41-4	Ethylbenzene	ND	2.0	0.69	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.0	0.57	ug/kg	
591-78-6	2-Hexanone	ND	10	0.76	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	0.17	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	0.17	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	2.0	0.18	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.54	ug/kg	
74-95-3	Methylene bromide	ND	5.0	0.46	ug/kg	
75-09-2	Methylene chloride	ND	2.0	0.53	ug/kg	
91-20-3	Naphthalene	ND	5.0	0.40	ug/kg	
103-65-1	n-Propylbenzene	ND	5.0	0.15	ug/kg	
100-42-5	Styrene	ND	5.0	0.17	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.40	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.39	ug/kg	
127-18-4	Tetrachloroethene	ND	2.0	0.31	ug/kg	
108-88-3	Toluene	ND	5.0	0.21	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.43	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.51	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.22	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.57	ug/kg	
79-01-6	Trichloroethene	ND	2.0	0.24	ug/kg	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.29	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	1.4	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.5	ug/kg	
108-05-4	Vinyl Acetate	ND	5.0	1.5	ug/kg	
75-01-4	Vinyl chloride	ND	2.0	0.91	ug/kg	
	m,p-Xylene	ND	2.0	0.44	ug/kg	
95-47-6	o-Xylene	ND	2.0	0.28	ug/kg	
1330-20-7	Xylene (total)	ND	2.0	0.22	ug/kg	

Method Blank Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSM2406-MB	M67986.D	1	09/05/14	KD	n/a	n/a	MSM2406

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33265-1

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	93%	70-130%
2037-26-5	Toluene-D8	92%	70-130%
460-00-4	4-Bromofluorobenzene	87%	70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

Method Blank Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSK2592-MB	K81924.D	1	09/10/14	JM	n/a	n/a	MSK2592

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33265-2, MC33265-3

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	500	140	ug/kg	
107-02-8	Acrolein	ND	1300	440	ug/kg	
107-13-1	Acrylonitrile	ND	1300	140	ug/kg	
71-43-2	Benzene	ND	25	17	ug/kg	
108-86-1	Bromobenzene	ND	250	13	ug/kg	
74-97-5	Bromochloromethane	ND	250	17	ug/kg	
75-27-4	Bromodichloromethane	ND	100	10	ug/kg	
75-25-2	Bromoform	ND	100	18	ug/kg	
74-83-9	Bromomethane	ND	100	30	ug/kg	
78-93-3	2-Butanone (MEK)	ND	500	150	ug/kg	
104-51-8	n-Butylbenzene	ND	250	12	ug/kg	
135-98-8	sec-Butylbenzene	ND	250	37	ug/kg	
98-06-6	tert-Butylbenzene	ND	250	11	ug/kg	
75-15-0	Carbon disulfide	ND	250	6.5	ug/kg	
56-23-5	Carbon tetrachloride	ND	100	11	ug/kg	
108-90-7	Chlorobenzene	ND	100	7.9	ug/kg	
75-00-3	Chloroethane	ND	250	38	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	250	63	ug/kg	
67-66-3	Chloroform	ND	100	8.5	ug/kg	
74-87-3	Chloromethane	ND	250	28	ug/kg	
95-49-8	o-Chlorotoluene	ND	250	9.6	ug/kg	
106-43-4	p-Chlorotoluene	ND	250	13	ug/kg	
124-48-1	Dibromochloromethane	ND	100	16	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	100	11	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	100	15	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	100	17	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	100	40	ug/kg	
75-34-3	1,1-Dichloroethane	ND	100	13	ug/kg	
107-06-2	1,2-Dichloroethane	ND	100	16	ug/kg	
75-35-4	1,1-Dichloroethene	ND	100	21	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	100	23	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	100	21	ug/kg	
78-87-5	1,2-Dichloropropane	ND	100	21	ug/kg	
142-28-9	1,3-Dichloropropane	ND	250	16	ug/kg	
594-20-7	2,2-Dichloropropane	ND	250	28	ug/kg	
563-58-6	1,1-Dichloropropene	ND	250	13	ug/kg	

Method Blank Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSK2592-MB	K81924.D	1	09/10/14	JM	n/a	n/a	MSK2592

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33265-2, MC33265-3

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-01-5	cis-1,3-Dichloropropene	ND	100	11	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	100	13	ug/kg	
123-91-1	1,4-Dioxane	ND	1300	1000	ug/kg	
97-63-2	Ethyl methacrylate	ND	250	18	ug/kg	
100-41-4	Ethylbenzene	ND	100	34	ug/kg	
87-68-3	Hexachlorobutadiene	ND	250	29	ug/kg	
591-78-6	2-Hexanone	ND	500	38	ug/kg	
98-82-8	Isopropylbenzene	ND	250	8.4	ug/kg	
99-87-6	p-Isopropyltoluene	ND	250	8.7	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	100	9.1	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	250	27	ug/kg	
74-95-3	Methylene bromide	ND	250	23	ug/kg	
75-09-2	Methylene chloride	ND	100	27	ug/kg	
91-20-3	Naphthalene	ND	250	20	ug/kg	
103-65-1	n-Propylbenzene	ND	250	7.6	ug/kg	
100-42-5	Styrene	ND	250	8.5	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	250	20	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	100	20	ug/kg	
127-18-4	Tetrachloroethene	ND	100	16	ug/kg	
108-88-3	Toluene	ND	250	10	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	250	21	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	250	26	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	100	11	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	100	29	ug/kg	
79-01-6	Trichloroethene	ND	100	12	ug/kg	
75-69-4	Trichlorofluoromethane	ND	100	20	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	250	14	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	250	72	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	250	76	ug/kg	
108-05-4	Vinyl Acetate	ND	250	77	ug/kg	
75-01-4	Vinyl chloride	ND	100	45	ug/kg	
	m,p-Xylene	ND	100	22	ug/kg	
95-47-6	o-Xylene	ND	100	14	ug/kg	
1330-20-7	Xylene (total)	ND	100	11	ug/kg	

Method Blank Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSK2592-MB	K81924.D	1	09/10/14	JM	n/a	n/a	MSK2592

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33265-2, MC33265-3

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	87%	70-130%
2037-26-5	Toluene-D8	81%	70-130%
460-00-4	4-Bromofluorobenzene	81%	70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

Method Blank Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSV1255-MB	V34461.D	1	09/10/14	AMY	n/a	n/a	MSV1255

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33265-4

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	

Method Blank Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSV1255-MB	V34461.D	1	09/10/14	AMY	n/a	n/a	MSV1255

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33265-4

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

Method Blank Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSV1255-MB	V34461.D	1	09/10/14	AMY	n/a	n/a	MSV1255

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33265-4

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	99%	70-130%
2037-26-5	Toluene-D8	103%	70-130%
460-00-4	4-Bromofluorobenzene	97%	70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Blank Spike Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSM2406-BS	M67984.D	1	09/05/14	KD	n/a	n/a	MSM2406

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33265-1

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	50	48.8	98	70-130
107-02-8	Acrolein	250	242	97	70-130
107-13-1	Acrylonitrile	50	59.4	119	70-130
71-43-2	Benzene	50	56.5	113	70-130
108-86-1	Bromobenzene	50	57.0	114	70-130
74-97-5	Bromochloromethane	50	57.4	115	70-130
75-27-4	Bromodichloromethane	50	60.5	121	70-130
75-25-2	Bromoform	50	53.9	108	70-130
74-83-9	Bromomethane	50	35.2	70	70-130
78-93-3	2-Butanone (MEK)	50	50.0	100	70-130
104-51-8	n-Butylbenzene	50	53.8	108	70-130
135-98-8	sec-Butylbenzene	50	54.2	108	70-130
98-06-6	tert-Butylbenzene	50	54.5	109	70-130
75-15-0	Carbon disulfide	50	60.4	121	70-130
56-23-5	Carbon tetrachloride	50	52.7	105	70-130
108-90-7	Chlorobenzene	50	52.8	106	70-130
75-00-3	Chloroethane	50	42.7	85	70-130
110-75-8	2-Chloroethyl vinyl ether	50	37.4	75	10-160
67-66-3	Chloroform	50	57.5	115	70-130
74-87-3	Chloromethane	50	35.9	72	70-130
95-49-8	o-Chlorotoluene	50	55.1	110	70-130
106-43-4	p-Chlorotoluene	50	54.2	108	70-130
124-48-1	Dibromochloromethane	50	54.7	109	70-130
95-50-1	1,2-Dichlorobenzene	50	55.6	111	70-130
541-73-1	1,3-Dichlorobenzene	50	54.9	110	70-130
106-46-7	1,4-Dichlorobenzene	50	54.3	109	70-130
75-71-8	Dichlorodifluoromethane	50	32.6	65* [a]	70-130
75-34-3	1,1-Dichloroethane	50	59.7	119	70-130
107-06-2	1,2-Dichloroethane	50	56.7	113	70-130
75-35-4	1,1-Dichloroethene	50	55.8	112	70-130
156-59-2	cis-1,2-Dichloroethene	50	57.6	115	70-130
156-60-5	trans-1,2-Dichloroethene	50	55.8	112	70-130
78-87-5	1,2-Dichloropropane	50	57.8	116	70-130
142-28-9	1,3-Dichloropropane	50	53.9	108	70-130
594-20-7	2,2-Dichloropropane	50	56.3	113	70-130
563-58-6	1,1-Dichloropropene	50	55.9	112	70-130

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSM2406-BS	M67984.D	1	09/05/14	KD	n/a	n/a	MSM2406

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33265-1

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
10061-01-5	cis-1,3-Dichloropropene	50	59.2	118	70-130
10061-02-6	trans-1,3-Dichloropropene	50	61.2	122	70-130
123-91-1	1,4-Dioxane	125	168	134* [b]	70-130
97-63-2	Ethyl methacrylate	50	60.4	121	76-141
100-41-4	Ethylbenzene	50	51.9	104	70-130
87-68-3	Hexachlorobutadiene	50	50.2	100	70-130
591-78-6	2-Hexanone	50	40.7	81	70-130
98-82-8	Isopropylbenzene	50	57.2	114	70-130
99-87-6	p-Isopropyltoluene	50	53.9	108	70-130
1634-04-4	Methyl Tert Butyl Ether	50	44.1	88	70-130
108-10-1	4-Methyl-2-pentanone (MIBK)	50	52.2	104	70-130
74-95-3	Methylene bromide	50	56.5	113	70-130
75-09-2	Methylene chloride	50	58.5	117	70-130
91-20-3	Naphthalene	50	55.1	110	70-130
103-65-1	n-Propylbenzene	50	56.2	112	70-130
100-42-5	Styrene	50	55.3	111	70-130
630-20-6	1,1,1,2-Tetrachloroethane	50	52.4	105	70-130
79-34-5	1,1,2,2-Tetrachloroethane	50	56.0	112	70-130
127-18-4	Tetrachloroethene	50	49.2	98	70-130
108-88-3	Toluene	50	56.7	113	70-130
87-61-6	1,2,3-Trichlorobenzene	50	54.9	110	70-130
120-82-1	1,2,4-Trichlorobenzene	50	54.3	109	70-130
71-55-6	1,1,1-Trichloroethane	50	55.6	111	70-130
79-00-5	1,1,2-Trichloroethane	50	58.6	117	70-130
79-01-6	Trichloroethene	50	53.6	107	70-130
75-69-4	Trichlorofluoromethane	50	33.6	67* [a]	70-130
96-18-4	1,2,3-Trichloropropane	50	55.9	112	70-130
95-63-6	1,2,4-Trimethylbenzene	50	56.1	112	70-130
108-67-8	1,3,5-Trimethylbenzene	50	53.1	106	70-130
108-05-4	Vinyl Acetate	50	39.4	79	70-130
75-01-4	Vinyl chloride	50	35.1	70	70-130
	m,p-Xylene	100	108	108	70-130
95-47-6	o-Xylene	50	55.6	111	70-130
1330-20-7	Xylene (total)	150	163	109	70-130

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSM2406-BS	M67984.D	1	09/05/14	KD	n/a	n/a	MSM2406

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33265-1

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	92%	70-130%
2037-26-5	Toluene-D8	89%	70-130%
460-00-4	4-Bromofluorobenzene	89%	70-130%

(a) Outside control limits. Associated samples may be biased low.
(b) Outside control limits. Associated samples are non-detect for this compound.

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSK2592-BS	K81921.D	1	09/10/14	JM	n/a	n/a	MSK2592
MSK2592-BSD	K81922.D	1	09/10/14	JM	n/a	n/a	MSK2592

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33265-2, MC33265-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	2500	3200	128	3250	130	2	70-130/25
107-02-8	Acrolein	12500	15700	126	16000	128	2	70-130/25
107-13-1	Acrylonitrile	2500	2200	88	2160	86	2	70-130/25
71-43-2	Benzene	2500	2370	95	2320	93	2	70-130/25
108-86-1	Bromobenzene	2500	2360	94	2390	96	1	70-130/25
74-97-5	Bromochloromethane	2500	2340	94	2280	91	3	70-130/25
75-27-4	Bromodichloromethane	2500	2570	103	2540	102	1	70-130/25
75-25-2	Bromoform	2500	2740	110	2760	110	1	70-130/25
74-83-9	Bromomethane	2500	2290	92	2230	89	3	70-130/25
78-93-3	2-Butanone (MEK)	2500	3210	128	3270	131* [a]	2	70-130/25
104-51-8	n-Butylbenzene	2500	2510	100	2470	99	2	70-130/25
135-98-8	sec-Butylbenzene	2500	2450	98	2430	97	1	70-130/25
98-06-6	tert-Butylbenzene	2500	2290	92	2340	94	2	70-130/25
75-15-0	Carbon disulfide	2500	2410	96	2390	96	1	70-130/25
56-23-5	Carbon tetrachloride	2500	2390	96	2300	92	4	70-130/25
108-90-7	Chlorobenzene	2500	2430	97	2440	98	0	70-130/25
75-00-3	Chloroethane	2500	2760	110	2820	113	2	70-130/25
110-75-8	2-Chloroethyl vinyl ether	2500	2390	96	2330	93	3	10-160/25
67-66-3	Chloroform	2500	2250	90	2220	89	1	70-130/25
74-87-3	Chloromethane	2500	2910	116	2750	110	6	70-130/25
95-49-8	o-Chlorotoluene	2500	2460	98	2450	98	0	70-130/25
106-43-4	p-Chlorotoluene	2500	2350	94	2410	96	3	70-130/25
124-48-1	Dibromochloromethane	2500	2650	106	2680	107	1	70-130/25
95-50-1	1,2-Dichlorobenzene	2500	2440	98	2410	96	1	70-130/25
541-73-1	1,3-Dichlorobenzene	2500	2360	94	2370	95	0	70-130/25
106-46-7	1,4-Dichlorobenzene	2500	2330	93	2340	94	0	70-130/25
75-71-8	Dichlorodifluoromethane	2500	2320	93	2290	92	1	70-130/25
75-34-3	1,1-Dichloroethane	2500	2270	91	2270	91	0	70-130/25
107-06-2	1,2-Dichloroethane	2500	2120	85	2130	85	0	70-130/25
75-35-4	1,1-Dichloroethene	2500	2170	87	2230	89	3	70-130/25
156-59-2	cis-1,2-Dichloroethene	2500	2250	90	2210	88	2	70-130/25
156-60-5	trans-1,2-Dichloroethene	2500	2280	91	2280	91	0	70-130/25
78-87-5	1,2-Dichloropropane	2500	2480	99	2420	97	2	70-130/25
142-28-9	1,3-Dichloropropane	2500	2340	94	2370	95	1	70-130/25
594-20-7	2,2-Dichloropropane	2500	2450	98	2310	92	6	70-130/25
563-58-6	1,1-Dichloropropene	2500	2290	92	2300	92	0	70-130/25

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSK2592-BS	K81921.D	1	09/10/14	JM	n/a	n/a	MSK2592
MSK2592-BSD	K81922.D	1	09/10/14	JM	n/a	n/a	MSK2592

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33265-2, MC33265-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
10061-01-5	cis-1,3-Dichloropropene	2500	2530	101	2540	102	0	70-130/25
10061-02-6	trans-1,3-Dichloropropene	2500	2670	107	2690	108	1	70-130/25
123-91-1	1,4-Dioxane	6250	5800	93	5250	84	10	70-130/25
97-63-2	Ethyl methacrylate	2500	2520	101	2440	98	3	76-141/25
100-41-4	Ethylbenzene	2500	2470	99	2400	96	3	70-130/25
87-68-3	Hexachlorobutadiene	2500	2420	97	2440	98	1	70-130/25
591-78-6	2-Hexanone	2500	2720	109	2830	113	4	70-130/25
98-82-8	Isopropylbenzene	2500	2460	98	2430	97	1	70-130/25
99-87-6	p-Isopropyltoluene	2500	2460	98	2440	98	1	70-130/25
1634-04-4	Methyl Tert Butyl Ether	2500	2170	87	2100	84	3	70-130/25
108-10-1	4-Methyl-2-pentanone (MIBK)	2500	2340	94	2260	90	3	70-130/25
74-95-3	Methylene bromide	2500	2370	95	2310	92	3	70-130/25
75-09-2	Methylene chloride	2500	2140	86	2140	86	0	70-130/25
91-20-3	Naphthalene	2500	2510	100	2550	102	2	70-130/25
103-65-1	n-Propylbenzene	2500	2530	101	2510	100	1	70-130/25
100-42-5	Styrene	2500	2530	101	2530	101	0	70-130/25
630-20-6	1,1,1,2-Tetrachloroethane	2500	2700	108	2610	104	3	70-130/25
79-34-5	1,1,2,2-Tetrachloroethane	2500	2430	97	2440	98	0	70-130/25
127-18-4	Tetrachloroethene	2500	2290	92	2350	94	3	70-130/25
108-88-3	Toluene	2500	2410	96	2330	93	3	70-130/25
87-61-6	1,2,3-Trichlorobenzene	2500	2320	93	2340	94	1	70-130/25
120-82-1	1,2,4-Trichlorobenzene	2500	2450	98	2450	98	0	70-130/25
71-55-6	1,1,1-Trichloroethane	2500	2290	92	2200	88	4	70-130/25
79-00-5	1,1,2-Trichloroethane	2500	2470	99	2430	97	2	70-130/25
79-01-6	Trichloroethene	2500	2380	95	2330	93	2	70-130/25
75-69-4	Trichlorofluoromethane	2500	2320	93	2260	90	3	70-130/25
96-18-4	1,2,3-Trichloropropane	2500	2420	97	2470	99	2	70-130/25
95-63-6	1,2,4-Trimethylbenzene	2500	2440	98	2390	96	2	70-130/25
108-67-8	1,3,5-Trimethylbenzene	2500	2320	93	2300	92	1	70-130/25
108-05-4	Vinyl Acetate	2500	3840	154* [a]	3680	147* [a]	4	70-130/25
75-01-4	Vinyl chloride	2500	3180	127	2620	105	19	70-130/25
	m,p-Xylene	5000	5070	101	4940	99	3	70-130/25
95-47-6	o-Xylene	2500	2530	101	2430	97	4	70-130/25
1330-20-7	Xylene (total)	7500	7600	101	7370	98	3	70-130/25

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSK2592-BS	K81921.D	1	09/10/14	JM	n/a	n/a	MSK2592
MSK2592-BSD	K81922.D	1	09/10/14	JM	n/a	n/a	MSK2592

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33265-2, MC33265-3

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	96%	96%	70-130%
2037-26-5	Toluene-D8	101%	99%	70-130%
460-00-4	4-Bromofluorobenzene	93%	95%	70-130%

(a) Outside control limits. Blank Spike meets program technical requirements.

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSV1255-BS	V34458.D	1	09/10/14	AMY	n/a	n/a	MSV1255
MSV1255-BSD	V34459.D	1	09/10/14	AMY	n/a	n/a	MSV1255

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33265-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	50	36.8	74	37.8	76	3	70-130/25
107-02-8	Acrolein	250	300	120	279	112	7	70-130/25
107-13-1	Acrylonitrile	50	49.3	99	50.2	100	2	70-130/25
71-43-2	Benzene	50	53.9	108	52.3	105	3	70-130/25
108-86-1	Bromobenzene	50	54.2	108	53.4	107	1	70-130/25
74-97-5	Bromochloromethane	50	52.4	105	51.4	103	2	70-130/25
75-27-4	Bromodichloromethane	50	60.1	120	59.4	119	1	70-130/25
75-25-2	Bromoform	50	60.7	121	60.6	121	0	70-130/25
74-83-9	Bromomethane	50	59.0	118	57.3	115	3	70-130/25
78-93-3	2-Butanone (MEK)	50	43.1	86	42.4	85	2	70-130/25
104-51-8	n-Butylbenzene	50	60.4	121	58.0	116	4	70-130/25
135-98-8	sec-Butylbenzene	50	62.7	125	60.7	121	3	70-130/25
98-06-6	tert-Butylbenzene	50	60.5	121	58.4	117	4	70-130/25
75-15-0	Carbon disulfide	50	58.3	117	56.0	112	4	70-130/25
56-23-5	Carbon tetrachloride	50	53.7	107	51.4	103	4	70-130/25
108-90-7	Chlorobenzene	50	55.1	110	53.2	106	4	70-130/25
75-00-3	Chloroethane	50	67.6	135* [a]	66.4	133* [a]	2	70-130/25
110-75-8	2-Chloroethyl vinyl ether	50	55.3	111	55.7	111	1	70-130/25
67-66-3	Chloroform	50	53.3	107	52.0	104	2	70-130/25
74-87-3	Chloromethane	50	61.1	122	59.7	119	2	70-130/25
95-49-8	o-Chlorotoluene	50	56.2	112	54.4	109	3	70-130/25
106-43-4	p-Chlorotoluene	50	55.1	110	53.8	108	2	70-130/25
124-48-1	Dibromochloromethane	50	62.6	125	62.4	125	0	70-130/25
95-50-1	1,2-Dichlorobenzene	50	55.4	111	54.7	109	1	70-130/25
541-73-1	1,3-Dichlorobenzene	50	54.6	109	53.7	107	2	70-130/25
106-46-7	1,4-Dichlorobenzene	50	54.9	110	53.7	107	2	70-130/25
75-71-8	Dichlorodifluoromethane	50	53.7	107	49.1	98	9	70-130/25
75-34-3	1,1-Dichloroethane	50	54.1	108	52.3	105	3	70-130/25
107-06-2	1,2-Dichloroethane	50	53.6	107	53.1	106	1	70-130/25
75-35-4	1,1-Dichloroethene	50	59.8	120	57.1	114	5	70-130/25
156-59-2	cis-1,2-Dichloroethene	50	51.8	104	50.0	100	4	70-130/25
156-60-5	trans-1,2-Dichloroethene	50	53.8	108	51.8	104	4	70-130/25
78-87-5	1,2-Dichloropropane	50	54.7	109	53.9	108	1	70-130/25
142-28-9	1,3-Dichloropropane	50	52.5	105	52.0	104	1	70-130/25
594-20-7	2,2-Dichloropropane	50	56.1	112	52.9	106	6	70-130/25
563-58-6	1,1-Dichloropropene	50	59.4	119	57.4	115	3	70-130/25

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSV1255-BS	V34458.D	1	09/10/14	AMY	n/a	n/a	MSV1255
MSV1255-BSD	V34459.D	1	09/10/14	AMY	n/a	n/a	MSV1255

The QC reported here applies to the following samples: Method: SW846 8260C

MC33265-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
10061-01-5	cis-1,3-Dichloropropene	50	59.7	119	59.4	119	1	70-130/25
10061-02-6	trans-1,3-Dichloropropene	50	63.3	127	63.5	127	0	70-130/25
123-91-1	1,4-Dioxane	125	119	95	113	90	5	70-130/25
97-63-2	Ethyl methacrylate	50	54.4	109	55.4	111	2	77-137/25
100-41-4	Ethylbenzene	50	55.8	112	53.7	107	4	70-130/25
87-68-3	Hexachlorobutadiene	50	61.9	124	59.5	119	4	70-130/25
591-78-6	2-Hexanone	50	40.3	81	40.4	81	0	70-130/25
98-82-8	Isopropylbenzene	50	60.6	121	58.5	117	4	70-130/25
99-87-6	p-Isopropyltoluene	50	61.4	123	59.1	118	4	70-130/25
1634-04-4	Methyl Tert Butyl Ether	50	47.8	96	47.9	96	0	70-130/25
108-10-1	4-Methyl-2-pentanone (MIBK)	50	50.7	101	51.4	103	1	70-130/25
74-95-3	Methylene bromide	50	53.3	107	53.3	107	0	70-130/25
75-09-2	Methylene chloride	50	50.4	101	49.0	98	3	70-130/25
91-20-3	Naphthalene	50	63.5	127	67.9	136* [a]	7	70-130/25
103-65-1	n-Propylbenzene	50	61.0	122	59.3	119	3	70-130/25
100-42-5	Styrene	50	56.7	113	54.4	109	4	70-130/25
630-20-6	1,1,1,2-Tetrachloroethane	50	62.5	125	60.1	120	4	70-130/25
79-34-5	1,1,2,2-Tetrachloroethane	50	55.1	110	55.9	112	1	70-130/25
127-18-4	Tetrachloroethene	50	58.3	117	55.4	111	5	70-130/25
108-88-3	Toluene	50	54.5	109	53.4	107	2	70-130/25
87-61-6	1,2,3-Trichlorobenzene	50	57.7	115	59.6	119	3	70-130/25
120-82-1	1,2,4-Trichlorobenzene	50	57.8	116	58.3	117	1	70-130/25
71-55-6	1,1,1-Trichloroethane	50	60.0	120	57.4	115	4	70-130/25
79-00-5	1,1,2-Trichloroethane	50	54.3	109	55.3	111	2	70-130/25
79-01-6	Trichloroethene	50	55.8	112	54.2	108	3	70-130/25
75-69-4	Trichlorofluoromethane	50	55.6	111	54.7	109	2	70-130/25
96-18-4	1,2,3-Trichloropropane	50	57.8	116	58.4	117	1	70-130/25
95-63-6	1,2,4-Trimethylbenzene	50	58.0	116	56.4	113	3	70-130/25
108-67-8	1,3,5-Trimethylbenzene	50	57.6	115	56.0	112	3	70-130/25
108-05-4	Vinyl Acetate	50	57.0	114	56.2	112	1	70-130/25
75-01-4	Vinyl chloride	50	56.0	112	54.5	109	3	70-130/25
	m,p-Xylene	100	110	110	105	105	5	70-130/25
95-47-6	o-Xylene	50	55.4	111	53.2	106	4	70-130/25
1330-20-7	Xylene (total)	150	166	111	159	106	4	70-130/25

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSV1255-BS	V34458.D	1	09/10/14	AMY	n/a	n/a	MSV1255
MSV1255-BSD	V34459.D	1	09/10/14	AMY	n/a	n/a	MSV1255

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33265-4

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	100%	100%	70-130%
2037-26-5	Toluene-D8	105%	106%	70-130%
460-00-4	4-Bromofluorobenzene	99%	100%	70-130%

(a) Outside control limits. Blank Spike meets program technical requirements.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC33290-18MS	M67993.D	1	09/05/14	KD	n/a	n/a	MSM2406
MC33290-18MSD	M67994.D	1	09/05/14	KD	n/a	n/a	MSM2406
MC33290-18	M67992.D	1	09/05/14	KD	n/a	n/a	MSM2406

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33265-1

CAS No.	Compound	MC33290-18 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		51.5	26.3	51* [a]	50.4	36.4	72	32* [b]	70-130/30
107-02-8	Acrolein	ND		257	305	118	252	259	103	16	70-130/30
107-13-1	Acrylonitrile	ND		51.5	45.2	88	50.4	63.7	126	34* [b]	70-130/30
71-43-2	Benzene	ND		51.5	27.3	53* [a]	50.4	31.2	62* [a]	13	70-130/30
108-86-1	Bromobenzene	ND		51.5	25.4	49* [a]	50.4	30.5	61* [a]	18	70-130/30
74-97-5	Bromochloromethane	ND		51.5	33.8	66* [a]	50.4	42.7	85	23	70-130/30
75-27-4	Bromodichloromethane	ND		51.5	33.6	65* [a]	50.4	38.1	76	13	70-130/30
75-25-2	Bromoform	ND		51.5	34.1	66* [a]	50.4	46.1	91	30	70-130/30
74-83-9	Bromomethane	ND		51.5	33.7	65* [a]	50.4	32.5	64* [a]	4	70-130/30
78-93-3	2-Butanone (MEK)	ND		51.5	32.2	63* [a]	50.4	45.9	91	35* [b]	70-130/30
104-51-8	n-Butylbenzene	ND		51.5	19.3	37* [a]	50.4	20.0	40* [a]	4	70-130/30
135-98-8	sec-Butylbenzene	ND		51.5	22.2	43* [a]	50.4	22.5	45* [a]	1	70-130/30
98-06-6	tert-Butylbenzene	ND		51.5	23.1	45* [a]	50.4	24.3	48* [a]	5	70-130/30
75-15-0	Carbon disulfide	0.38		51.5	28.2	54* [a]	50.4	33.5	66* [a]	17	70-130/30
56-23-5	Carbon tetrachloride	ND		51.5	25.6	50* [a]	50.4	27.3	54* [a]	6	70-130/30
108-90-7	Chlorobenzene	ND		51.5	25.2	49* [a]	50.4	30.2	60* [a]	18	70-130/30
75-00-3	Chloroethane	ND		51.5	40.3	78	50.4	38.8	77	4	70-130/30
110-75-8	2-Chloroethyl vinyl ether	ND		51.5	ND	0* [a]	50.4	ND	0* [a]	nc	10-160/30
67-66-3	Chloroform	ND		51.5	29.8	58* [a]	50.4	36.0	71	19	70-130/30
74-87-3	Chloromethane	ND		51.5	32.2	63* [a]	50.4	30.9	61* [a]	4	70-130/30
95-49-8	o-Chlorotoluene	ND		51.5	22.9	44* [a]	50.4	25.5	51* [a]	11	70-130/30
106-43-4	p-Chlorotoluene	ND		51.5	22.4	43* [a]	50.4	26.4	52* [a]	16	70-130/30
124-48-1	Dibromochloromethane	ND		51.5	34.0	66* [a]	50.4	43.9	87	25	70-130/30
95-50-1	1,2-Dichlorobenzene	ND		51.5	24.7	48* [a]	50.4	28.0	56* [a]	13	70-130/30
541-73-1	1,3-Dichlorobenzene	ND		51.5	23.4	45* [a]	50.4	25.5	51* [a]	9	70-130/30
106-46-7	1,4-Dichlorobenzene	ND		51.5	22.9	44* [a]	50.4	25.9	51* [a]	12	70-130/30
75-71-8	Dichlorodifluoromethane	ND		51.5	31.0	60* [a]	50.4	30.5	61* [a]	2	70-130/30
75-34-3	1,1-Dichloroethane	ND		51.5	30.1	58* [a]	50.4	36.4	72	19	70-130/30
107-06-2	1,2-Dichloroethane	ND		51.5	33.4	65* [a]	50.4	40.2	80	18	70-130/30
75-35-4	1,1-Dichloroethene	ND		51.5	27.2	53* [a]	50.4	32.1	64* [a]	17	70-130/30
156-59-2	cis-1,2-Dichloroethene	ND		51.5	28.7	56* [a]	50.4	35.2	70	20	70-130/30
156-60-5	trans-1,2-Dichloroethene	ND		51.5	26.1	51* [a]	50.4	31.7	63* [a]	19	70-130/30
78-87-5	1,2-Dichloropropane	ND		51.5	30.1	58* [a]	50.4	35.6	71	17	70-130/30
142-28-9	1,3-Dichloropropane	ND		51.5	33.2	64* [a]	50.4	42.7	85	25	70-130/30
594-20-7	2,2-Dichloropropane	ND		51.5	27.0	52* [a]	50.4	30.2	60* [a]	11	70-130/30
563-58-6	1,1-Dichloropropene	ND		51.5	25.1	49* [a]	50.4	28.3	56* [a]	12	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC33290-18MS	M67993.D	1	09/05/14	KD	n/a	n/a	MSM2406
MC33290-18MSD	M67994.D	1	09/05/14	KD	n/a	n/a	MSM2406
MC33290-18	M67992.D	1	09/05/14	KD	n/a	n/a	MSM2406

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33265-1

CAS No.	Compound	MC33290-18 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
10061-01-5	cis-1,3-Dichloropropene	ND		51.5	31.1	60* a	50.4	36.7	73	17	70-130/30
10061-02-6	trans-1,3-Dichloropropene	ND		51.5	34.5	67* a	50.4	41.3	82	18	70-130/30
123-91-1	1,4-Dioxane	ND		129	141	110	126	179	142* a	24	70-130/30
97-63-2	Ethyl methacrylate	ND		51.5	41.4	80	50.4	50.9	101	21	41-160/30
100-41-4	Ethylbenzene	ND		51.5	23.6	46* a	50.4	27.4	54* a	15	70-130/30
87-68-3	Hexachlorobutadiene	ND		51.5	16.3	32* a	50.4	15.5	31* a	5	70-130/30
591-78-6	2-Hexanone	ND		51.5	32.8	64* a	50.4	45.3	90	32* b	70-130/30
98-82-8	Isopropylbenzene	ND		51.5	23.4	45* a	50.4	25.1	50* a	7	70-130/30
99-87-6	p-Isopropyltoluene	ND		51.5	21.4	42* a	50.4	22.5	45* a	5	70-130/30
1634-04-4	Methyl Tert Butyl Ether	ND		51.5	42.0	82	50.4	58.8	117	33* b	70-130/30
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		51.5	45.5	88	50.4	58.8	117	26	70-130/30
74-95-3	Methylene bromide	ND		51.5	35.7	69* a	50.4	44.2	88	21	70-130/30
75-09-2	Methylene chloride	ND		51.5	31.1	60* a	50.4	38.2	76	20	70-130/30
91-20-3	Naphthalene	ND		51.5	29.1	57* a	50.4	33.4	66* a	14	70-130/30
103-65-1	n-Propylbenzene	ND		51.5	21.8	42* a	50.4	24.3	48* a	11	70-130/30
100-42-5	Styrene	ND		51.5	25.4	49* a	50.4	29.9	59* a	16	70-130/30
630-20-6	1,1,1,2-Tetrachloroethane	ND		51.5	27.4	53* a	50.4	32.6	65* a	17	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	ND		51.5	37.1	72	50.4	47.1	93	24	70-130/30
127-18-4	Tetrachloroethene	ND		51.5	22.4	43* a	50.4	26.0	52* a	15	70-130/30
108-88-3	Toluene	ND		51.5	27.0	52* a	50.4	29.9	59* a	10	70-130/30
87-61-6	1,2,3-Trichlorobenzene	ND		51.5	21.7	42* a	50.4	22.4	44* a	3	70-130/30
120-82-1	1,2,4-Trichlorobenzene	ND		51.5	20.1	39* a	50.4	20.1	40* a	0	70-130/30
71-55-6	1,1,1-Trichloroethane	ND		51.5	27.6	54* a	50.4	31.5	63* a	13	70-130/30
79-00-5	1,1,2-Trichloroethane	ND		51.5	36.1	70	50.4	43.8	87	19	70-130/30
79-01-6	Trichloroethene	ND		51.5	25.3	49* a	50.4	28.3	56* a	11	70-130/30
75-69-4	Trichlorofluoromethane	ND		51.5	31.9	62* a	50.4	31.0	62* a	3	70-130/30
96-18-4	1,2,3-Trichloropropane	ND		51.5	37.4	73	50.4	48.6	96	26	70-130/30
95-63-6	1,2,4-Trimethylbenzene	ND		51.5	23.7	46* a	50.4	25.9	51* a	9	70-130/30
108-67-8	1,3,5-Trimethylbenzene	ND		51.5	21.3	41* a	50.4	24.0	48* a	12	70-130/30
108-05-4	Vinyl Acetate	ND		51.5	20.2	39* a	50.4	24.7	49* a	20	70-130/30
75-01-4	Vinyl chloride	ND		51.5	31.7	62* a	50.4	32.7	65* a	3	70-130/30
	m,p-Xylene	ND		103	48.2	47* a	101	55.2	55* a	14	70-130/30
95-47-6	o-Xylene	ND		51.5	25.4	49* a	50.4	29.2	58* a	14	70-130/30
1330-20-7	Xylene (total)	ND		154	73.5	48* a	151	84.3	56* a	14	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC33290-18MS	M67993.D	1	09/05/14	KD	n/a	n/a	MSM2406
MC33290-18MSD	M67994.D	1	09/05/14	KD	n/a	n/a	MSM2406
MC33290-18	M67992.D	1	09/05/14	KD	n/a	n/a	MSM2406

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33265-1

CAS No.	Surrogate Recoveries	MS	MSD	MC33290-18	Limits
1868-53-7	Dibromofluoromethane	101%	99%	100%	70-130%
2037-26-5	Toluene-D8	89%	84%	90%	70-130%
460-00-4	4-Bromofluorobenzene	85%	83%	86%	70-130%

(a) Outside control limits due to possible matrix interference. Refer to Blank Spike.
(b) High RPD due to possible matrix interference and/or sample non-homogeneity.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC33290-28MS	V34473.D	1	09/10/14	AMY	n/a	n/a	MSV1255
MC33290-28MSD	V34474.D	1	09/10/14	AMY	n/a	n/a	MSV1255
MC33290-28	V34467.D	1	09/10/14	AMY	n/a	n/a	MSV1255

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33265-4

CAS No.	Compound	MC33290-28 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		50	23.6	47* [a]	50	23.7	47* [a]	0	70-130/30
107-02-8	Acrolein	ND		250	279	112	250	274	110	2	70-130/30
107-13-1	Acrylonitrile	ND		50	48.9	98	50	47.4	95	3	70-130/30
71-43-2	Benzene	ND		50	50.9	102	50	50.8	102	0	70-130/30
108-86-1	Bromobenzene	ND		50	51.8	104	50	52.0	104	0	70-130/30
74-97-5	Bromochloromethane	ND		50	49.4	99	50	48.8	98	1	70-130/30
75-27-4	Bromodichloromethane	ND		50	57.1	114	50	57.4	115	1	70-130/30
75-25-2	Bromoform	ND		50	54.0	108	50	53.9	108	0	70-130/30
74-83-9	Bromomethane	ND		50	55.4	111	50	54.5	109	2	70-130/30
78-93-3	2-Butanone (MEK)	ND		50	33.5	67* [a]	50	33.3	67* [a]	1	70-130/30
104-51-8	n-Butylbenzene	ND		50	56.9	114	50	57.3	115	1	70-130/30
135-98-8	sec-Butylbenzene	ND		50	59.7	119	50	59.9	120	0	70-130/30
98-06-6	tert-Butylbenzene	ND		50	57.1	114	50	57.6	115	1	70-130/30
75-15-0	Carbon disulfide	ND		50	55.0	110	50	53.7	107	2	70-130/30
56-23-5	Carbon tetrachloride	ND		50	50.2	100	50	49.6	99	1	70-130/30
108-90-7	Chlorobenzene	ND		50	51.6	103	50	51.7	103	0	70-130/30
75-00-3	Chloroethane	ND		50	64.4	129	50	63.4	127	2	70-130/30
110-75-8	2-Chloroethyl vinyl ether	ND		50	ND	0* [a]	50	ND	0* [a]	nc	70-130/30
67-66-3	Chloroform	ND		50	51.0	102	50	50.7	101	1	70-130/30
74-87-3	Chloromethane	ND		50	56.7	113	50	56.2	112	1	70-130/30
95-49-8	o-Chlorotoluene	ND		50	53.9	108	50	54.3	109	1	70-130/30
106-43-4	p-Chlorotoluene	ND		50	52.9	106	50	53.3	107	1	70-130/30
124-48-1	Dibromochloromethane	ND		50	57.9	116	50	58.0	116	0	70-130/30
95-50-1	1,2-Dichlorobenzene	ND		50	52.1	104	50	52.6	105	1	70-130/30
541-73-1	1,3-Dichlorobenzene	ND		50	52.0	104	50	52.0	104	0	70-130/30
106-46-7	1,4-Dichlorobenzene	ND		50	51.4	103	50	52.2	104	2	70-130/30
75-71-8	Dichlorodifluoromethane	ND		50	49.2	98	50	46.1	92	7	70-130/30
75-34-3	1,1-Dichloroethane	ND		50	51.5	103	50	51.0	102	1	70-130/30
107-06-2	1,2-Dichloroethane	ND		50	51.8	104	50	51.9	104	0	70-130/30
75-35-4	1,1-Dichloroethene	ND		50	57.2	114	50	56.6	113	1	70-130/30
156-59-2	cis-1,2-Dichloroethene	ND		50	49.0	98	50	48.5	97	1	70-130/30
156-60-5	trans-1,2-Dichloroethene	ND		50	51.4	103	50	50.7	101	1	70-130/30
78-87-5	1,2-Dichloropropane	ND		50	52.3	105	50	53.0	106	1	70-130/30
142-28-9	1,3-Dichloropropane	ND		50	48.9	98	50	49.3	99	1	70-130/30
594-20-7	2,2-Dichloropropane	ND		50	48.1	96	50	47.5	95	1	70-130/30
563-58-6	1,1-Dichloropropene	ND		50	56.3	113	50	56.4	113	0	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC33290-28MS	V34473.D	1	09/10/14	AMY	n/a	n/a	MSV1255
MC33290-28MSD	V34474.D	1	09/10/14	AMY	n/a	n/a	MSV1255
MC33290-28	V34467.D	1	09/10/14	AMY	n/a	n/a	MSV1255

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33265-4

CAS No.	Compound	MC33290-28 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-01-5	cis-1,3-Dichloropropene	ND		50	56.2	112	50	56.1	112	0	70-130/30
10061-02-6	trans-1,3-Dichloropropene	ND		50	59.4	119	50	58.9	118	1	70-130/30
123-91-1	1,4-Dioxane	ND		125	93.2	75	125	98.6	79	6	70-130/30
97-63-2	Ethyl methacrylate	ND		50	52.8	106	50	52.7	105	0	72-139/30
100-41-4	Ethylbenzene	ND		50	52.2	104	50	52.3	105	0	70-130/30
87-68-3	Hexachlorobutadiene	ND		50	57.5	115	50	58.1	116	1	70-130/30
591-78-6	2-Hexanone	ND		50	32.8	66* [a]	50	32.7	65* [a]	0	70-130/30
98-82-8	Isopropylbenzene	ND		50	58.2	116	50	58.6	117	1	70-130/30
99-87-6	p-Isopropyltoluene	ND		50	58.4	117	50	59.0	118	1	70-130/30
1634-04-4	Methyl Tert Butyl Ether	ND		50	46.2	92	50	46.0	92	0	70-130/30
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		50	49.5	99	50	49.1	98	1	70-130/30
74-95-3	Methylene bromide	ND		50	51.4	103	50	51.5	103	0	70-130/30
75-09-2	Methylene chloride	ND		50	48.1	96	50	47.6	95	1	70-130/30
91-20-3	Naphthalene	ND		50	57.0	114	50	62.9	126	10	70-130/30
103-65-1	n-Propylbenzene	ND		50	58.6	117	50	58.8	118	0	70-130/30
100-42-5	Styrene	ND		50	52.2	104	50	51.7	103	1	70-130/30
630-20-6	1,1,1,2-Tetrachloroethane	ND		50	55.4	111	50	56.1	112	1	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	ND		50	52.9	106	50	53.5	107	1	70-130/30
127-18-4	Tetrachloroethene	ND		50	53.7	107	50	53.6	107	0	70-130/30
108-88-3	Toluene	ND		50	52.6	105	50	52.6	105	0	70-130/30
87-61-6	1,2,3-Trichlorobenzene	ND		50	51.2	102	50	55.5	111	8	70-130/30
120-82-1	1,2,4-Trichlorobenzene	ND		50	52.6	105	50	54.5	109	4	70-130/30
71-55-6	1,1,1-Trichloroethane	ND		50	56.2	112	50	55.8	112	1	70-130/30
79-00-5	1,1,2-Trichloroethane	ND		50	53.4	107	50	52.5	105	2	70-130/30
79-01-6	Trichloroethene	ND		50	52.6	105	50	52.7	105	0	70-130/30
75-69-4	Trichlorofluoromethane	ND		50	53.3	107	50	52.6	105	1	70-130/30
96-18-4	1,2,3-Trichloropropane	ND		50	53.9	108	50	53.8	108	0	70-130/30
95-63-6	1,2,4-Trimethylbenzene	ND		50	55.3	111	50	55.8	112	1	70-130/30
108-67-8	1,3,5-Trimethylbenzene	ND		50	55.1	110	50	55.2	110	0	70-130/30
108-05-4	Vinyl Acetate	ND		50	56.5	113	50	56.4	113	0	70-130/30
75-01-4	Vinyl chloride	ND		50	52.0	104	50	50.8	102	2	70-130/30
	m,p-Xylene	ND		100	102	102	100	102	102	0	70-130/30
95-47-6	o-Xylene	ND		50	50.2	100	50	50.7	101	1	70-130/30
1330-20-7	Xylene (total)	ND		150	153	102	150	153	102	0	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC33290-28MS	V34473.D	1	09/10/14	AMY	n/a	n/a	MSV1255
MC33290-28MSD	V34474.D	1	09/10/14	AMY	n/a	n/a	MSV1255
MC33290-28	V34467.D	1	09/10/14	AMY	n/a	n/a	MSV1255

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33265-4

CAS No.	Surrogate Recoveries	MS	MSD	MC33290-28	Limits
1868-53-7	Dibromofluoromethane	100%	99%	98%	70-130%
2037-26-5	Toluene-D8	108%	107%	104%	70-130%
460-00-4	4-Bromofluorobenzene	101%	101%	98%	70-130%

(a) Outside control limits due to possible matrix interference. Refer to Blank Spike.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC33320-1MS	K81942.D	1	09/10/14	JM	n/a	n/a	MSK2592
MC33320-1MSD	K81943.D	1	09/10/14	JM	n/a	n/a	MSK2592
MC33320-1	K81929.D	1	09/10/14	JM	n/a	n/a	MSK2592

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33265-2, MC33265-3

CAS No.	Compound	MC33320-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		4450	6940	156* [a]	4450	7170	161* [a]	3	70-130/30
107-02-8	Acrolein	ND		22300	24100	108	22300	25100	113	4	70-130/30
107-13-1	Acrylonitrile	ND		4450	3880	87	4450	3820	86	2	70-130/30
71-43-2	Benzene	ND		4450	4300	97	4450	4250	95	1	70-130/30
108-86-1	Bromobenzene	ND		4450	4290	96	4450	4230	95	1	70-130/30
74-97-5	Bromochloromethane	ND		4450	4170	94	4450	4210	95	1	70-130/30
75-27-4	Bromodichloromethane	ND		4450	4670	105	4450	4640	104	1	70-130/30
75-25-2	Bromoform	ND		4450	4750	107	4450	4620	104	3	70-130/30
74-83-9	Bromomethane	ND		4450	4190	94	4450	4140	93	1	70-130/30
78-93-3	2-Butanone (MEK)	ND		4450	5860	132* [a]	4450	5940	133* [a]	1	70-130/30
104-51-8	n-Butylbenzene	ND		4450	4350	98	4450	4170	94	4	70-130/30
135-98-8	sec-Butylbenzene	ND		4450	4330	97	4450	4250	95	2	70-130/30
98-06-6	tert-Butylbenzene	ND		4450	4090	92	4450	3990	90	2	70-130/30
75-15-0	Carbon disulfide	ND		4450	4320	97	4450	4370	98	1	70-130/30
56-23-5	Carbon tetrachloride	ND		4450	4450	100	4450	4370	98	2	70-130/30
108-90-7	Chlorobenzene	ND		4450	4220	95	4450	4150	93	2	70-130/30
75-00-3	Chloroethane	ND		4450	5370	121	4450	5380	121	0	70-130/30
110-75-8	2-Chloroethyl vinyl ether	ND		4450	4210	95	4450	4210	95	0	10-160/30
67-66-3	Chloroform	94.7		4450	4110	90	4450	4070	89	1	70-130/30
74-87-3	Chloromethane	ND		4450	4840	109	4450	4900	110	1	70-130/30
95-49-8	o-Chlorotoluene	ND		4450	4230	95	4450	4130	93	2	70-130/30
106-43-4	p-Chlorotoluene	ND		4450	4070	91	4450	3960	89	3	70-130/30
124-48-1	Dibromochloromethane	ND		4450	4790	108	4450	4580	103	4	70-130/30
95-50-1	1,2-Dichlorobenzene	ND		4450	4210	95	4450	4100	92	3	70-130/30
541-73-1	1,3-Dichlorobenzene	ND		4450	4050	91	4450	3960	89	2	70-130/30
106-46-7	1,4-Dichlorobenzene	ND		4450	3980	89	4450	3900	88	2	70-130/30
75-71-8	Dichlorodifluoromethane	ND		4450	3870	87	4450	3920	88	1	70-130/30
75-34-3	1,1-Dichloroethane	ND		4450	4130	93	4450	4130	93	0	70-130/30
107-06-2	1,2-Dichloroethane	ND		4450	3780	85	4450	3810	86	1	70-130/30
75-35-4	1,1-Dichloroethene	ND		4450	4100	92	4450	4060	91	1	70-130/30
156-59-2	cis-1,2-Dichloroethene	ND		4450	4000	90	4450	4010	90	0	70-130/30
156-60-5	trans-1,2-Dichloroethene	ND		4450	4110	92	4450	4050	91	1	70-130/30
78-87-5	1,2-Dichloropropane	ND		4450	4400	99	4450	4480	101	2	70-130/30
142-28-9	1,3-Dichloropropane	ND		4450	4130	93	4450	4030	91	2	70-130/30
594-20-7	2,2-Dichloropropane	ND		4450	3920	88	4450	3870	87	1	70-130/30
563-58-6	1,1-Dichloropropene	ND		4450	4370	98	4450	4260	96	3	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC33320-1MS	K81942.D	1	09/10/14	JM	n/a	n/a	MSK2592
MC33320-1MSD	K81943.D	1	09/10/14	JM	n/a	n/a	MSK2592
MC33320-1	K81929.D	1	09/10/14	JM	n/a	n/a	MSK2592

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33265-2, MC33265-3

CAS No.	Compound	MC33320-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
10061-01-5	cis-1,3-Dichloropropene	ND		4450	4460	100	4450	4420	99	1	70-130/30
10061-02-6	trans-1,3-Dichloropropene	ND		4450	4620	104	4450	4670	105	1	70-130/30
123-91-1	1,4-Dioxane	ND		11100	11400	102	11100	12400	111	8	70-130/30
97-63-2	Ethyl methacrylate	ND		4450	4400	99	4450	4410	99	0	41-160/30
100-41-4	Ethylbenzene	ND		4450	4320	97	4450	4220	95	2	70-130/30
87-68-3	Hexachlorobutadiene	ND		4450	4350	98	4450	4250	95	2	70-130/30
591-78-6	2-Hexanone	ND		4450	4920	111	4450	4930	111	0	70-130/30
98-82-8	Isopropylbenzene	ND		4450	4300	97	4450	4220	95	2	70-130/30
99-87-6	p-Isopropyltoluene	ND		4450	4320	97	4450	4210	95	3	70-130/30
1634-04-4	Methyl Tert Butyl Ether	ND		4450	3750	84	4450	3760	84	0	70-130/30
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		4450	4190	94	4450	4380	98	4	70-130/30
74-95-3	Methylene bromide	ND		4450	4200	94	4450	4190	94	0	70-130/30
75-09-2	Methylene chloride	112		4450	3900	85	4450	3910	85	0	70-130/30
91-20-3	Naphthalene	405		4450	4680	96	4450	4720	97	1	70-130/30
103-65-1	n-Propylbenzene	ND		4450	4420	99	4450	4280	96	3	70-130/30
100-42-5	Styrene	ND		4450	4450	100	4450	4350	98	2	70-130/30
630-20-6	1,1,1,2-Tetrachloroethane	ND		4450	4610	104	4450	4510	101	2	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	ND		4450	4050	91	4450	3940	89	3	70-130/30
127-18-4	Tetrachloroethene	ND		4450	4170	94	4450	4050	91	3	70-130/30
108-88-3	Toluene	ND		4450	4350	98	4450	4310	97	1	70-130/30
87-61-6	1,2,3-Trichlorobenzene	ND		4450	3650	82	4450	3740	84	2	70-130/30
120-82-1	1,2,4-Trichlorobenzene	ND		4450	4060	91	4450	4030	91	1	70-130/30
71-55-6	1,1,1-Trichloroethane	ND		4450	4150	93	4450	4140	93	0	70-130/30
79-00-5	1,1,2-Trichloroethane	ND		4450	4400	99	4450	4420	99	0	70-130/30
79-01-6	Trichloroethene	ND		4450	4620	104	4450	4490	101	3	70-130/30
75-69-4	Trichlorofluoromethane	ND		4450	3900	88	4450	4010	90	3	70-130/30
96-18-4	1,2,3-Trichloropropane	ND		4450	4140	93	4450	4090	92	1	70-130/30
95-63-6	1,2,4-Trimethylbenzene	ND		4450	4320	97	4450	4200	94	3	70-130/30
108-67-8	1,3,5-Trimethylbenzene	ND		4450	4040	91	4450	3980	89	1	70-130/30
108-05-4	Vinyl Acetate	ND		4450	3380	76	4450	3710	83	9	70-130/30
75-01-4	Vinyl chloride	ND		4450	5510	124	4450	5570	125	1	70-130/30
	m,p-Xylene	ND		8900	8940	100	8900	8660	97	3	70-130/30
95-47-6	o-Xylene	ND		4450	4430	100	4450	4300	97	3	70-130/30
1330-20-7	Xylene (total)	ND		13400	13400	100	13400	13000	97	3	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC33320-1MS	K81942.D	1	09/10/14	JM	n/a	n/a	MSK2592
MC33320-1MSD	K81943.D	1	09/10/14	JM	n/a	n/a	MSK2592
MC33320-1	K81929.D	1	09/10/14	JM	n/a	n/a	MSK2592

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33265-2, MC33265-3

CAS No.	Surrogate Recoveries	MS	MSD	MC33320-1	Limits
1868-53-7	Dibromofluoromethane	101%	101%	110%	70-130%
2037-26-5	Toluene-D8	107%	107%	99%	70-130%
460-00-4	4-Bromofluorobenzene	96%	93%	101%	70-130%

(a) Outside control limits due to possible matrix interference. Refer to Blank Spike.

* = Outside of Control Limits.

Volatile Internal Standard Area Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Check Std:	MSK2592-CC2589	**Injection Date:**	09/10/14
Lab File ID:	K81920.D	**Injection Time:**	11:58
Instrument ID:	GCMSK	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	254281	8.78	362483	9.63	166813	12.88	183989	15.44	122799	6.42
Upper Limit [a]	508562	9.28	724966	10.13	333626	13.38	367978	15.94	245598	6.92
Lower Limit [b]	127141	8.28	181242	9.13	83407	12.38	91995	14.94	61400	5.92

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSK2592-BS	250356	8.78	366517	9.63	176809	12.89	194480	15.44	125757	6.43
MSK2592-BSD	271632	8.78	395716	9.63	185646	12.89	198366	15.44	133664	6.44
MSK2592-MB	255423	8.78	374412	9.63	163270	12.89	190402	15.44	121818	6.42
ZZZZZZ	249825	8.78	375938	9.63	168089	12.89	203483	15.44	135883	6.48
ZZZZZZ	237354	8.78	350494	9.63	159863	12.89	197760	15.44	101528	6.43
MC33265-2	231587	8.78	335886	9.63	156031	12.89	190394	15.44	107628	6.44
MC33265-3	250105	8.78	368249	9.63	161590	12.89	186245	15.44	118942	6.43
MC33320-1	237744	8.78	353355	9.63	150453	12.89	173532	15.44	110947	6.42
ZZZZZZ	232141	8.78	342428	9.63	152346	12.89	179542	15.44	102537	6.42
ZZZZZZ	224482	8.78	333683	9.63	152924	12.89	185113	15.44	112632	6.43
ZZZZZZ	232473	8.78	349251	9.63	153328	12.89	178580	15.44	120969	6.43
ZZZZZZ	215327	8.78	316962	9.63	137680	12.89	159796	15.44	107173	6.41
ZZZZZZ	250024	8.78	375473	9.63	170078	12.89	184290	15.44	121909	6.40
ZZZZZZ	242052	8.78	353307	9.63	153498	12.89	176328	15.44	118780	6.42
ZZZZZZ	236884	8.78	355492	9.63	161328	12.89	189900	15.44	131385	6.43
ZZZZZZ	247258	8.78	374383	9.63	164129	12.89	193508	15.44	128456	6.43
ZZZZZZ	238320	8.78	363560	9.63	159297	12.89	200523	15.44	130286	6.43
ZZZZZZ	264995	8.78	387446	9.63	169062	12.89	210061	15.44	132700	6.40
ZZZZZZ	254961	8.78	366509	9.63	160580	12.89	200316	15.44	127125	6.40
MC33320-1MS	268417	8.78	388147	9.63	189049	12.89	206843	15.44	130103	6.43
MC33320-1MSD	260842	8.78	381689	9.63	189824	12.89	207412	15.44	130529	6.43

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Internal Standard Area Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Check Std:	MSM2406-CC2378	**Injection Date:**	09/05/14
Lab File ID:	M67984.D	**Injection Time:**	10:44
Instrument ID:	GCMSM	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	283628	9.35	473846	10.23	209518	13.50	264261	16.07	99723	6.84
Upper Limit [a]	567256	9.85	947692	10.73	419036	14.00	528522	16.57	199446	7.34
Lower Limit [b]	141814	8.85	236923	9.73	104759	13.00	132131	15.57	49862	6.34

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSM2406-BS	287395	9.35	473846	10.23	209518	13.50	264261	16.07	99723	6.84
MSM2406-MB	255043	9.35	407867	10.22	176902	13.50	234993	16.07	92435	6.84
ZZZZZZ	242594	9.35	401290	10.23	180127	13.50	246364	16.07	170776	6.84
ZZZZZZ	271545	9.35	446979	10.22	201040	13.51	276409	16.07	151024	6.84
ZZZZZZ	281425	9.35	458308	10.23	196475	13.51	218690	16.07	157574	6.84
ZZZZZZ	285348	9.35	471472	10.23	205255	13.51	276529	16.07	147494	6.85
ZZZZZZ	289856	9.35	457520	10.23	201922	13.50	268014	16.07	155860	6.84
MC33290-18	289719	9.35	473901	10.23	208759	13.50	281596	16.07	155801	6.85
MC33290-18MS	276055	9.35	462144	10.22	204068	13.50	278340	16.07	144537	6.84
MC33290-18MSD	296383	9.35	521255	10.23	216973	13.51	301221	16.07	161626	6.86
ZZZZZZ	263324	9.35	426719	10.23	183104	13.50	243454	16.07	101379	6.86
ZZZZZZ	247116	9.35	403024	10.23	172660	13.50	234066	16.07	98128	6.85
ZZZZZZ	282543	9.35	457973	10.23	194515	13.51	262865	16.07	104892	6.85
ZZZZZZ	285265	9.35	482141	10.23	202357	13.51	268720	16.07	102400	6.86
ZZZZZZ	274486	9.35	443411	10.22	194419	13.50	262875	16.07	107919	6.86
MC33265-1	275282	9.35	463584	10.23	199466	13.50	270182	16.07	162915	6.85
ZZZZZZ	258115	9.35	424474	10.23	204287	13.50	267465	16.07	174033	6.84
ZZZZZZ	274298	9.35	445058	10.23	200781	13.51	283423	16.07	172450	6.85
ZZZZZZ	263409	9.34	441779	10.22	198410	13.51	269265	16.07	172859	6.84
ZZZZZZ	273671	9.34	432352	10.23	206391	13.50	269023	16.07	166742	6.85
ZZZZZZ	274386	9.35	436891	10.23	186021	13.51	249512	16.07	104442	6.86

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Internal Standard Area Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Check Std:	MSV1255-CC1255	**Injection Date:**	09/10/14
Lab File ID:	V34457.D	**Injection Time:**	13:06
Instrument ID:	GCMSV	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	998315	6.56	1615348	7.74	728632	11.08	896361	13.29	138446	3.52
Upper Limit [a]	1996630	7.06	3230696	8.24	1457264	11.58	1792722	13.79	276892	4.02
Lower Limit [b]	499158	6.06	807674	7.24	364316	10.58	448181	12.79	69223	3.02

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSV1255-BS	1018822	6.56	1652109	7.75	741880	11.08	929020	13.29	147624	3.54
MSV1255-BSD	1033614	6.56	1677937	7.74	764679	11.08	941109	13.29	154397	3.53
MSV1255-MB	1013029	6.57	1616486	7.75	715838	11.08	910026	13.29	133350	3.53
MC33265-4	976761	6.56	1542015	7.74	683710	11.08	881801	13.29	119043	3.53
ZZZZZZ	990190	6.57	1569781	7.75	705451	11.08	927061	13.29	143174	3.54
ZZZZZZ	1007780	6.56	1606514	7.74	717921	11.08	924918	13.29	140472	3.53
ZZZZZZ	978954	6.57	1558383	7.75	692760	11.08	873983	13.29	122136	3.54
ZZZZZZ	960000	6.56	1534467	7.74	682440	11.08	869356	13.29	116696	3.53
MC33290-28	970953	6.56	1546934	7.75	703340	11.08	892712	13.29	133964	3.53
ZZZZZZ	988951	6.56	1600003	7.74	722553	11.08	906090	13.29	131382	3.53
ZZZZZZ	970105	6.57	1542118	7.75	690136	11.08	853606	13.29	100961	3.54
ZZZZZZ	968419	6.57	1535226	7.75	697317	11.08	885613	13.29	123752	3.54
ZZZZZZ	979985	6.57	1569978	7.75	706173	11.08	881241	13.29	113314	3.54
ZZZZZZ	971484	6.57	1563482	7.75	695708	11.08	898700	13.29	121580	3.54
ZZZZZZ	994358	6.56	1604555	7.74	733907	11.08	941850	13.29	124117	3.53
MC33290-28MS	927169	6.56	1501895	7.75	706236	11.08	843630	13.29	123527	3.53
MC33290-28MSD	911293	6.57	1483451	7.75	692414	11.08	821646	13.29	119300	3.54
ZZZZZZ	918144	6.57	1477554	7.75	660909	11.08	841412	13.29	112346	3.53
ZZZZZZ	956707	6.57	1547970	7.75	688822	11.08	852373	13.29	114902	3.54
ZZZZZZ	930436	6.57	1500885	7.75	675357	11.08	838014	13.29	112268	3.54
ZZZZZZ	891038	6.56	1436492	7.75	649909	11.08	807602	13.29	100891	3.53
ZZZZZZ	918011	6.57	1468611	7.75	659352	11.08	815857	13.29	101585	3.54
ZZZZZZ	885809	6.57	1443439	7.75	646083	11.08	794230	13.29	97188	3.53
ZZZZZZ	896959	6.57	1476239	7.75	638255	11.08	770467	13.29	102019	3.54
ZZZZZZ	883553	6.57	1456223	7.75	637675	11.08	770567	13.29	103888	3.54

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Method: SW846 8260C **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
MC33265-4	V34462.D	97	104	97
MC33290-28MS	V34473.D	100	108	101
MC33290-28MSD	V34474.D	99	107	101
MSV1255-BS	V34458.D	100	105	99
MSV1255-BSD	V34459.D	100	106	100
MSV1255-MB	V34461.D	99	103	97

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	70-130%
S2 = Toluene-D8	70-130%
S3 = 4-Bromofluorobenzene	70-130%

Volatile Surrogate Recovery Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Method: SW846 8260C **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
MC33265-1	M68000.D	99	88	86
MC33265-2	K81927.D	110	109	103
MC33265-3	K81928.D	113	104	108
MC33290-18MS	M67993.D	101	89	85
MC33290-18MSD	M67994.D	99	84	83
MC33320-1MS	K81942.D	101	107	96
MC33320-1MSD	K81943.D	101	107	93
MSK2592-BS	K81921.D	96	101	93
MSK2592-BSD	K81922.D	96	99	95
MSK2592-MB	K81924.D	87	81	81
MSM2406-BS	M67984.D	92	89	89
MSM2406-MB	M67986.D	93	92	87

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	70-130%
S2 = Toluene-D8	70-130%
S3 = 4-Bromofluorobenzene	70-130%

GC/MS Semi-volatiles

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QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP39630-MB	F75951.D	1	09/09/14	WK	08/30/14	OP39630	MSF3336

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC33265-1, MC33265-2, MC33265-3

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	480	60	ug/kg	
95-57-8	2-Chlorophenol	ND	240	11	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	480	12	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	480	14	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	480	79	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	960	120	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	480	60	ug/kg	
95-48-7	2-Methylphenol	ND	480	19	ug/kg	
	3&4-Methylphenol	ND	480	23	ug/kg	
88-75-5	2-Nitrophenol	ND	480	13	ug/kg	
100-02-7	4-Nitrophenol	ND	960	90	ug/kg	
87-86-5	Pentachlorophenol	ND	480	34	ug/kg	
108-95-2	Phenol	ND	240	14	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	480	12	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	480	12	ug/kg	
62-53-3	Aniline	ND	480	24	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	240	12	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	240	9.8	ug/kg	
100-51-6	Benzyl Alcohol	ND	480	24	ug/kg	
91-58-7	2-Chloronaphthalene	ND	240	13	ug/kg	
106-47-8	4-Chloroaniline	ND	480	12	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	240	11	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	240	15	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	240	17	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	240	15	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	240	11	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	480	32	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	480	12	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	240	24	ug/kg	
132-64-9	Dibenzofuran	ND	96	13	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	240	26	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	240	7.5	ug/kg	
84-66-2	Diethyl phthalate	ND	240	12	ug/kg	
131-11-3	Dimethyl phthalate	ND	240	14	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	240	8.9	ug/kg	
118-74-1	Hexachlorobenzene	ND	240	15	ug/kg	

Method Blank Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP39630-MB	F75951.D	1	09/09/14	WK	08/30/14	OP39630	MSF3336

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC33265-1, MC33265-2, MC33265-3

CAS No.	Compound	Result	RL	MDL	Units	Q
77-47-4	Hexachlorocyclopentadiene	ND	480	120	ug/kg	
67-72-1	Hexachloroethane	ND	240	12	ug/kg	
78-59-1	Isophorone	ND	240	11	ug/kg	
88-74-4	2-Nitroaniline	ND	480	12	ug/kg	
99-09-2	3-Nitroaniline	ND	480	26	ug/kg	
100-01-6	4-Nitroaniline	ND	480	12	ug/kg	
98-95-3	Nitrobenzene	ND	240	13	ug/kg	
62-75-9	n-Nitrosodimethylamine	ND	240	11	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	240	14	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	240	15	ug/kg	
110-86-1	Pyridine	ND	480	24	ug/kg	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	62%	30-130%
4165-62-2	Phenol-d5	60%	30-130%
118-79-6	2,4,6-Tribromophenol	65%	30-130%
4165-60-0	Nitrobenzene-d5	61%	30-130%
321-60-8	2-Fluorobiphenyl	68%	30-130%
1718-51-0	Terphenyl-d14	80%	30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/kg	

Method Blank Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP39631-MB	I91495.D	1	09/08/14	WK	08/30/14	OP39631	MSI3410

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

MC33265-1, MC33265-2, MC33265-3

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	4.8	0.83	ug/kg	
208-96-8	Acenaphthylene	ND	4.8	0.73	ug/kg	
120-12-7	Anthracene	ND	4.8	1.1	ug/kg	
56-55-3	Benzo(a)anthracene	ND	4.8	2.2	ug/kg	
50-32-8	Benzo(a)pyrene	ND	4.8	1.9	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	4.8	2.1	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	1.3	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	4.8	1.5	ug/kg	
218-01-9	Chrysene	ND	4.8	1.3	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	1.4	ug/kg	
206-44-0	Fluoranthene	ND	4.8	1.4	ug/kg	
86-73-7	Fluorene	ND	4.8	0.95	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	1.2	ug/kg	
90-12-0	1-Methylnaphthalene	ND	9.6	1.1	ug/kg	
91-57-6	2-Methylnaphthalene	ND	9.6	0.90	ug/kg	
85-01-8	Phenanthrene	ND	4.8	1.0	ug/kg	
129-00-0	Pyrene	ND	4.8	1.5	ug/kg	

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	68%	30-130%
321-60-8	2-Fluorobiphenyl	66%	30-130%
1718-51-0	Terphenyl-d14	101%	30-130%

Blank Spike Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP39630-BS	F75952.D	1	09/09/14	WK	08/30/14	OP39630	MSF3336

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC33265-1, MC33265-2, MC33265-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
65-85-0	Benzoic acid	2400	862	36	30-130
95-57-8	2-Chlorophenol	2400	1520	63	30-130
59-50-7	4-Chloro-3-methyl phenol	2400	1480	62	30-130
120-83-2	2,4-Dichlorophenol	2400	1590	66	30-130
105-67-9	2,4-Dimethylphenol	2400	1480	62	30-130
51-28-5	2,4-Dinitrophenol	2400	483	20* [a]	30-130
534-52-1	4,6-Dinitro-o-cresol	2400	993	41	30-130
95-48-7	2-Methylphenol	2400	1430	60	30-130
	3&4-Methylphenol	4800	2980	62	30-130
88-75-5	2-Nitrophenol	2400	1550	65	30-130
100-02-7	4-Nitrophenol	2400	1130	47	30-130
87-86-5	Pentachlorophenol	2400	1100	46	30-130
108-95-2	Phenol	2400	1410	59	30-130
95-95-4	2,4,5-Trichlorophenol	2400	1520	63	30-130
88-06-2	2,4,6-Trichlorophenol	2400	1630	68	30-130
62-53-3	Aniline	2400	1200	50	40-140
101-55-3	4-Bromophenyl phenyl ether	2400	2020	84	40-140
85-68-7	Butyl benzyl phthalate	2400	2010	84	40-140
100-51-6	Benzyl Alcohol	2400	1390	58	40-140
91-58-7	2-Chloronaphthalene	2400	1920	80	40-140
106-47-8	4-Chloroaniline	2400	1370	57	40-140
111-91-1	bis(2-Chloroethoxy)methane	2400	1660	69	40-140
111-44-4	bis(2-Chloroethyl)ether	2400	1660	69	40-140
108-60-1	bis(2-Chloroisopropyl)ether	2400	1710	71	40-140
7005-72-3	4-Chlorophenyl phenyl ether	2400	1840	77	40-140
122-66-7	1,2-Diphenylhydrazine	2400	1760	73	40-140
121-14-2	2,4-Dinitrotoluene	2400	1820	76	40-140
606-20-2	2,6-Dinitrotoluene	2400	1840	77	40-140
91-94-1	3,3'-Dichlorobenzidine	2400	1910	80	40-140
132-64-9	Dibenzofuran	2400	1750	73	40-140
84-74-2	Di-n-butyl phthalate	2400	1890	79	40-140
117-84-0	Di-n-octyl phthalate	2400	2010	84	40-140
84-66-2	Diethyl phthalate	2400	1840	77	40-140
131-11-3	Dimethyl phthalate	2400	1830	76	40-140
117-81-7	bis(2-Ethylhexyl)phthalate	2400	2030	85	40-140
118-74-1	Hexachlorobenzene	2400	2020	84	40-140

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP39630-BS	F75952.D	1	09/09/14	WK	08/30/14	OP39630	MSF3336

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC33265-1, MC33265-2, MC33265-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
77-47-4	Hexachlorocyclopentadiene	2400	1320	55	40-140
67-72-1	Hexachloroethane	2400	1600	67	40-140
78-59-1	Isophorone	2400	1560	65	40-140
88-74-4	2-Nitroaniline	2400	1850	77	40-140
99-09-2	3-Nitroaniline	2400	1660	69	40-140
100-01-6	4-Nitroaniline	2400	1670	70	40-140
98-95-3	Nitrobenzene	2400	1600	67	40-140
62-75-9	n-Nitrosodimethylamine	2400	1450	60	40-140
621-64-7	N-Nitroso-di-n-propylamine	2400	1740	72	40-140
86-30-6	N-Nitrosodiphenylamine	2400	1750	73	40-140
110-86-1	Pyridine	2400	1200	50	40-140

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	63%	30-130%
4165-62-2	Phenol-d5	63%	30-130%
118-79-6	2,4,6-Tribromophenol	79%	30-130%
4165-60-0	Nitrobenzene-d5	65%	30-130%
321-60-8	2-Fluorobiphenyl	72%	30-130%
1718-51-0	Terphenyl-d14	78%	30-130%

(a) Outside control limits. Blank Spike meets program technical requirements.

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP39631-BS	I91496.D	1	09/08/14	WK	08/30/14	OP39631	MSI3410

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

MC33265-1, MC33265-2, MC33265-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
83-32-9	Acenaphthene	2400	1700	71	40-140
208-96-8	Acenaphthylene	2400	1680	70	40-140
120-12-7	Anthracene	2400	1810	75	40-140
56-55-3	Benzo(a)anthracene	2400	2200	92	40-140
50-32-8	Benzo(a)pyrene	2400	2150	90	40-140
205-99-2	Benzo(b)fluoranthene	2400	2340	97	40-140
191-24-2	Benzo(g,h,i)perylene	2400	1960	82	40-140
207-08-9	Benzo(k)fluoranthene	2400	1960	82	40-140
218-01-9	Chrysene	2400	1850	77	40-140
53-70-3	Dibenzo(a,h)anthracene	2400	2100	87	40-140
206-44-0	Fluoranthene	2400	2170	90	40-140
86-73-7	Fluorene	2400	1830	76	40-140
193-39-5	Indeno(1,2,3-cd)pyrene	2400	2040	85	40-140
90-12-0	1-Methylnaphthalene	2400	1690	70	40-140
91-57-6	2-Methylnaphthalene	2400	1730	72	40-140
85-01-8	Phenanthrene	2400	1770	74	40-140
129-00-0	Pyrene	2400	2250	94	40-140

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	70%	30-130%
321-60-8	2-Fluorobiphenyl	68%	30-130%
1718-51-0	Terphenyl-d14	97%	30-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP39630-MS	F75953.D	1	09/09/14	WK	08/30/14	OP39630	MSF3336
OP39630-MSD	F75954.D	1	09/09/14	WK	08/30/14	OP39630	MSF3336
MC33262-4	F75955.D	1	09/09/14	WK	08/30/14	OP39630	MSF3336

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC33265-1, MC33265-2, MC33265-3

CAS No.	Compound	MC33262-4 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic acid	ND		3210	136	4* [a]	3160	89.1	3* [a]	42* [b]	30-130/30
95-57-8	2-Chlorophenol	ND		3210	1800	56	3160	1860	59	3	30-130/30
59-50-7	4-Chloro-3-methyl phenol	ND		3210	1930	60	3160	1820	58	6	30-130/30
120-83-2	2,4-Dichlorophenol	ND		3210	1890	59	3160	1910	60	1	30-130/30
105-67-9	2,4-Dimethylphenol	ND		3210	1840	57	3160	1770	56	4	30-130/30
51-28-5	2,4-Dinitrophenol	ND		3210	384	12* [c]	3160	166	5* [c]	79* [b]	30-130/30
534-52-1	4,6-Dinitro-o-cresol	ND		3210	1050	33	3160	765	24* [a]	31* [b]	30-130/30
95-48-7	2-Methylphenol	ND		3210	1690	53	3160	1740	55	3	30-130/30
	3&4-Methylphenol	ND		6420	3490	54	6330	3550	56	2	30-130/30
88-75-5	2-Nitrophenol	ND		3210	1730	54	3160	1720	54	1	30-130/30
100-02-7	4-Nitrophenol	ND		3210	1470	46	3160	1350	43	9	30-130/30
87-86-5	Pentachlorophenol	ND		3210	1450	45	3160	1230	39	16	30-130/30
108-95-2	Phenol	ND		3210	1620	50	3160	1700	54	5	30-130/30
95-95-4	2,4,5-Trichlorophenol	ND		3210	1980	62	3160	1910	60	4	30-130/30
88-06-2	2,4,6-Trichlorophenol	ND		3210	1990	62	3160	1910	60	4	30-130/30
62-53-3	Aniline	ND		3210	1220	38* [a]	3160	1240	39* [a]	2	40-140/30
101-55-3	4-Bromophenyl phenyl ether	ND		3210	2530	79	3160	2310	73	9	40-140/30
85-68-7	Butyl benzyl phthalate	ND		3210	2600	81	3160	2300	73	12	40-140/30
100-51-6	Benzyl Alcohol	ND		3210	1480	46	3160	1450	46	2	40-140/30
91-58-7	2-Chloronaphthalene	ND		3210	2330	73	3160	2220	70	5	40-140/30
106-47-8	4-Chloroaniline	ND		3210	1650	51	3160	1570	50	5	40-140/30
111-91-1	bis(2-Chloroethoxy)methane	ND		3210	1940	60	3160	1920	61	1	40-140/30
111-44-4	bis(2-Chloroethyl)ether	ND		3210	1890	59	3160	2030	64	7	40-140/30
108-60-1	bis(2-Chloroisopropyl)ether	ND		3210	1950	61	3160	2070	65	6	40-140/30
7005-72-3	4-Chlorophenyl phenyl ether	ND		3210	2350	73	3160	2160	68	8	40-140/30
122-66-7	1,2-Diphenylhydrazine	ND		3210	2290	71	3160	2110	67	8	40-140/30
121-14-2	2,4-Dinitrotoluene	ND		3210	2390	74	3160	2110	67	12	40-140/30
606-20-2	2,6-Dinitrotoluene	ND		3210	2310	72	3160	2120	67	9	40-140/30
91-94-1	3,3'-Dichlorobenzidine	ND		3210	2430	76	3160	2030	64	18	40-140/30
132-64-9	Dibenzofuran	ND		3210	2200	69	3160	2070	65	6	40-140/30
84-74-2	Di-n-butyl phthalate	ND		3210	2450	76	3160	2180	69	12	40-140/30
117-84-0	Di-n-octyl phthalate	ND		3210	2590	81	3160	2350	74	10	40-140/30
84-66-2	Diethyl phthalate	ND		3210	2410	75	3160	2150	68	11	40-140/30
131-11-3	Dimethyl phthalate	ND		3210	2400	75	3160	2150	68	11	40-140/30
117-81-7	bis(2-Ethylhexyl)phthalate	ND		3210	2710	84	3160	2370	75	13	40-140/30
118-74-1	Hexachlorobenzene	ND		3210	2710	84	3160	2460	78	10	40-140/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP39630-MS	F75953.D	1	09/09/14	WK	08/30/14	OP39630	MSF3336
OP39630-MSD	F75954.D	1	09/09/14	WK	08/30/14	OP39630	MSF3336
MC33262-4	F75955.D	1	09/09/14	WK	08/30/14	OP39630	MSF3336

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC33265-1, MC33265-2, MC33265-3

CAS No.	Compound	MC33262-4 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
77-47-4	Hexachlorocyclopentadiene	ND		3210	1340	42	3160	1130	36* [a]	17	40-140/30
67-72-1	Hexachloroethane	ND		3210	1900	59	3160	2000	63	5	40-140/30
78-59-1	Isophorone	ND		3210	1900	59	3160	1860	59	2	40-140/30
88-74-4	2-Nitroaniline	ND		3210	2310	72	3160	2070	65	11	40-140/30
99-09-2	3-Nitroaniline	ND		3210	2160	67	3160	1820	58	17	40-140/30
100-01-6	4-Nitroaniline	ND		3210	2110	66	3160	1940	61	8	40-140/30
98-95-3	Nitrobenzene	ND		3210	1870	58	3160	1860	59	1	40-140/30
62-75-9	n-Nitrosodimethylamine	ND		3210	1600	50	3160	1680	53	5	40-140/30
621-64-7	N-Nitroso-di-n-propylamine	ND		3210	2030	63	3160	2060	65	1	40-140/30
86-30-6	N-Nitrosodiphenylamine	ND		3210	2300	72	3160	2090	66	10	40-140/30
110-86-1	Pyridine	ND		3210	1360	42	3160	1370	43	1	40-140/30

CAS No.	Surrogate Recoveries	MS	MSD	MC33262-4	Limits
367-12-4	2-Fluorophenol	56%	59%	64%	30-130%
4165-62-2	Phenol-d5	56%	59%	58%	30-130%
118-79-6	2,4,6-Tribromophenol	76%	69%	74%	30-130%
4165-60-0	Nitrobenzene-d5	58%	59%	63%	30-130%
321-60-8	2-Fluorobiphenyl	64%	64%	71%	30-130%
1718-51-0	Terphenyl-d14	80%	71%	80%	30-130%

(a) Outside control limits due to possible matrix interference. Refer to Blank Spike.
(b) High RPD due to possible matrix interference and/or sample heterogeneity.
(c) Outside control limits. Blank Spike meets program technical requirements.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP39631-MS	I91497.D	1	09/08/14	WK	08/30/14	OP39631	MSI3410
OP39631-MSD	I91498.D	1	09/08/14	WK	08/30/14	OP39631	MSI3410
MC33265-1	I91499.D	1	09/08/14	WK	08/30/14	OP39631	MSI3410

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

MC33265-1, MC33265-2, MC33265-3

CAS No.	Compound	MC33265-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	ND		2770	1900	69	2770	1730	62	9	40-140/30
208-96-8	Acenaphthylene	ND		2770	1870	68	2770	1700	61	10	40-140/30
120-12-7	Anthracene	ND		2770	2030	73	2770	1910	69	6	40-140/30
56-55-3	Benzo(a)anthracene	ND		2770	2440	88	2770	2290	83	6	40-140/30
50-32-8	Benzo(a)pyrene	ND		2770	2410	87	2770	2260	82	6	40-140/30
205-99-2	Benzo(b)fluoranthene	ND		2770	2630	95	2770	2520	91	4	40-140/30
191-24-2	Benzo(g,h,i)perylene	ND		2770	2190	79	2770	2060	74	6	40-140/30
207-08-9	Benzo(k)fluoranthene	ND		2770	2200	79	2770	2040	74	8	40-140/30
218-01-9	Chrysene	ND		2770	2030	73	2770	1920	69	6	40-140/30
53-70-3	Dibenzo(a,h)anthracene	ND		2770	2340	85	2770	2190	79	7	40-140/30
206-44-0	Fluoranthene	ND		2770	2390	86	2770	2290	83	4	40-140/30
86-73-7	Fluorene	ND		2770	2080	75	2770	1910	69	9	40-140/30
193-39-5	Indeno(1,2,3-cd)pyrene	ND		2770	2290	83	2770	2150	78	6	40-140/30
90-12-0	1-Methylnaphthalene	ND		2770	1850	67	2770	1670	60	10	40-140/30
91-57-6	2-Methylnaphthalene	ND		2770	1890	68	2770	1720	62	9	40-140/30
85-01-8	Phenanthrene	ND		2770	2010	73	2770	1870	67	7	40-140/30
129-00-0	Pyrene	ND		2770	2500	90	2770	2390	86	4	40-140/30

CAS No.	Surrogate Recoveries	MS	MSD	MC33265-1	Limits
4165-60-0	Nitrobenzene-d5	68%	62%	58%	30-130%
321-60-8	2-Fluorobiphenyl	67%	61%	55%	30-130%
1718-51-0	Terphenyl-d14	96%	91%	88%	30-130%

* = Outside of Control Limits.

Semivolatile Internal Standard Area Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Check Std:	MSF3336-CC3320	**Injection Date:**	09/09/14
Lab File ID:	F75941.D	**Injection Time:**	15:54
Instrument ID:	GCMSF	**Method:**	SW846 8270D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	183034	4.08	695940	5.13	424519	6.65	728461	7.93	817276	10.47	788543	12.15
Upper Limit [a]	366068	4.58	1391880	5.63	849038	7.15	1456922	8.43	1634552	10.97	1577086	12.65
Lower Limit [b]	91517	3.58	347970	4.63	212260	6.15	364231	7.43	408638	9.97	394272	11.65

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
MC33200-9	152997	4.09	599034	5.13	365482	6.65	612576	7.93	689472	10.47	678260	12.15
ZZZZZZ	164993	4.08	634277	5.13	387527	6.65	662531	7.93	762884	10.47	740637	12.15
OP39675-MB	176596	4.09	665711	5.13	404476	6.65	699178	7.93	783415	10.47	779936	12.15
OP39675-BS	173698	4.08	676977	5.13	413906	6.65	719319	7.93	821483	10.47	781461	12.15
OP39675-MS	176099	4.08	687527	5.13	416523	6.65	712247	7.93	812333	10.47	795992	12.15
OP39675-MSD	176231	4.08	680016	5.13	413818	6.65	718468	7.93	814267	10.47	802361	12.15
MC33200-5	177668	4.09	690379	5.13	409217	6.65	716539	7.93	820574	10.47	811910	12.15
ZZZZZZ	163617	4.08	640132	5.13	394351	6.65	676216	7.93	784392	10.47	774860	12.15
ZZZZZZ	170542	4.09	665599	5.13	410275	6.65	699227	7.93	815718	10.47	821225	12.14
OP39630-MB	196059	4.08	728112	5.13	436483	6.65	711581	7.93	769424	10.47	775024	12.14
OP39630-BS	198286	4.09	733508	5.13	431833	6.65	718916	7.93	781077	10.47	772429	12.15
OP39630-MS	177368	4.09	654484	5.13	386730	6.65	642949	7.93	684803	10.47	696732	12.15
OP39630-MSD	194229	4.09	735392	5.13	429265	6.65	704630	7.93	761072	10.47	751997	12.15
MC33262-4	194615	4.09	703620	5.13	418566	6.65	677043	7.93	722442	10.47	728012	12.14
ZZZZZZ	183197	4.09	669318	5.13	398384	6.65	656033	7.93	715810	10.46	727106	12.15
ZZZZZZ	185789	4.08	703749	5.13	422626	6.65	708968	7.93	787153	10.47	812999	12.14
ZZZZZZ	194690	4.08	728450	5.13	425528	6.65	702330	7.93	763725	10.47	762478	12.15
ZZZZZZ	193940	4.09	709942	5.13	422926	6.65	692637	7.93	748011	10.46	744874	12.14
ZZZZZZ	219393	4.08	784756	5.13	461197	6.65	741085	7.93	784659	10.46	763393	12.14
MC33265-1	190799	4.08	710449	5.13	429515	6.65	722177	7.93	822234	10.46	818827	12.14
MC33265-2	194979	4.08	703656	5.13	423913	6.65	701215	7.93	768853	10.46	765365	12.14
MC33265-3	194764	4.08	710688	5.13	421177	6.65	688355	7.93	765260	10.46	761962	12.15
ZZZZZZ	179526	4.08	684594	5.13	417886	6.65	687844	7.93	762941	10.46	759284	12.14
ZZZZZZ	195996	4.08	743432	5.13	447524	6.65	713112	7.93	777997	10.46	777097	12.15
ZZZZZZ	201195	4.09	746843	5.14	433509	6.66	709887	7.93	761067	10.47	764731	12.14
ZZZZZZ	181989	4.09	666084	5.13	397632	6.65	663776	7.93	742854	10.46	740337	12.14

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Check Std:	MSF3336-CC3320	**Injection Date:**	09/09/14
Lab File ID:	F75941.D	**Injection Time:**	15:54
Instrument ID:	GCMSF	**Method:**	SW846 8270D

Lab Sample ID	IS 1 AREA	IS 1 RT	IS 2 AREA	IS 2 RT	IS 3 AREA	IS 3 RT	IS 4 AREA	IS 4 RT	IS 5 AREA	IS 5 RT	IS 6 AREA	IS 6 RT

(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Check Std:	MSI3410-CC3386	**Injection Date:**	09/08/14
Lab File ID:	I91473.D	**Injection Time:**	08:12
Instrument ID:	GCMSI	**Method:**	SW846 8270D BY SIM

	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Check Std	436590	3.74	972868	4.79	519018	6.31	879299	7.64	611427	10.42	1491674	11.86
Upper Limit [a]	873180	4.24	1945736	5.29	1038036	6.81	1758598	8.14	1222854	10.92	2983348	12.36
Lower Limit [b]	218295	3.24	486434	4.29	259509	5.81	439650	7.14	305714	9.92	745837	11.36

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP39676-MB	438722	3.74	989430	4.78	527637	6.30	882367	7.64	611594	10.41	1548845	11.86
OP39676-BS	413823	3.74	942476	4.79	504975	6.31	856903	7.64	620394	10.42	1502750	11.87
OP39676-MS	420642	3.74	948882	4.79	500961	6.31	839245	7.64	603304	10.42	1464252	11.87
OP39676-MSD	427105	3.74	958152	4.79	503322	6.31	846957	7.64	589867	10.42	1418180	11.87
MC33316-6	422378	3.74	950999	4.78	502905	6.30	844054	7.64	591132	10.41	1481979	11.86
ZZZZZZ	418802	3.74	945648	4.78	503628	6.30	835605	7.64	588093	10.41	1470737	11.86
ZZZZZZ	424851	3.74	954584	4.78	505709	6.30	849247	7.64	593848	10.41	1487395	11.86
ZZZZZZ	435204	3.74	980413	4.78	518511	6.30	857021	7.64	586330	10.41	1447145	11.86
ZZZZZZ	419716	3.74	945125	4.78	498125	6.30	821417	7.64	565218	10.41	1401917	11.86
ZZZZZZ	415495	3.74	929135	4.78	489827	6.30	805518	7.64	559899	10.41	1380726	11.86
ZZZZZZ	431472	3.74	968784	4.78	515959	6.30	851501	7.64	600298	10.41	1482805	11.86
ZZZZZZ	427504	3.74	965229	4.78	511015	6.30	847415	7.64	594547	10.41	1462095	11.86
ZZZZZZ	434608	3.74	976224	4.78	517145	6.30	851417	7.64	588586	10.41	1451883	11.86
ZZZZZZ	419837	3.74	937872	4.78	491309	6.30	814530	7.64	568341	10.41	1410918	11.86
OP39693-MB	391610	3.74	878737	4.78	467565	6.30	770413	7.64	540860	10.41	1304896	11.86
OP39693-BS	375346	3.74	843246	4.78	442998	6.30	743365	7.64	525400	10.41	1273610	11.86
OP39693-BSD	391556	3.74	874023	4.78	463550	6.30	772316	7.64	543258	10.42	1332533	11.86
ZZZZZZ	362621	3.74	816692	4.78	433460	6.30	718775	7.64	493711	10.41	1216354	11.86
ZZZZZZ	401546	3.74	894710	4.78	474546	6.30	783440	7.64	536748	10.41	1320482	11.86
ZZZZZZ	393657	3.74	887831	4.78	472638	6.30	791530	7.64	551081	10.41	1372033	11.86
OP39631-MB	544382	3.74	1207337	4.78	625446	6.30	1016433	7.64	661351	10.41	1560022	11.86
OP39631-BS	522738	3.74	1155251	4.79	599596	6.31	974843	7.64	651906	10.42	1510045	11.87
OP39631-MS	559511	3.74	1237740	4.79	640601	6.31	1047938	7.64	703780	10.42	1605147	11.87
OP39631-MSD	517906	3.74	1150486	4.79	595300	6.31	970479	7.64	643423	10.42	1468963	11.87
MC33265-1	479417	3.74	1068084	4.78	556781	6.30	902697	7.64	604310	10.41	1407399	11.86
MC33265-2	482758	3.74	1073864	4.78	556022	6.30	905147	7.64	598274	10.41	1403984	11.86
MC33265-3	505497	3.74	1124961	4.78	585245	6.30	950588	7.64	614602	10.41	1433198	11.86

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

Semivolatile Internal Standard Area Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Check Std:	MSI3410-CC3386	**Injection Date:**	09/08/14
Lab File ID:	I91473.D	**Injection Time:**	08:12
Instrument ID:	GCMSI	**Method:**	SW846 8270D BY SIM

Lab	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
Sample ID	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Surrogate Recovery Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Method: SW846 8270D **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
MC33265-1	F75961.D	53	47	60	51	57	69
MC33265-2	F75962.D	61	55	65	61	68	81
MC33265-3	F75963.D	54	52	49	54	61	68
OP39630-BS	F75952.D	63	63	79	65	72	78
OP39630-MB	F75951.D	62	60	65	61	68	80
OP39630-MS	F75953.D	56	56	76	58	64	80
OP39630-MSD	F75954.D	59	59	69	59	64	71

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorophenol	30-130%
S2 = Phenol-d5	30-130%
S3 = 2,4,6-Tribromophenol	30-130%
S4 = Nitrobenzene-d5	30-130%
S5 = 2-Fluorobiphenyl	30-130%
S6 = Terphenyl-d14	30-130%

Semivolatile Surrogate Recovery Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Method: SW846 8270D BY SIM **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
MC33265-1	I91499.D	58	55	88
MC33265-2	I91500.D	68	66	103
MC33265-3	I91501.D	61	59	90
OP39631-BS	I91496.D	70	68	97
OP39631-MB	I91495.D	68	66	101
OP39631-MS	I91497.D	68	67	96
OP39631-MSD	I91498.D	62	61	91

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	30-130%
S2 = 2-Fluorobiphenyl	30-130%
S3 = Terphenyl-d14	30-130%

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries

Method Blank Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP39625-MB	YZ91596.D	1	09/02/14	NK	08/29/14	OP39625	GYZ7634

The QC reported here applies to the following samples: **Method:** SW846 8011

MC33265-1, MC33265-2, MC33265-3

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.73	ug/kg	
106-93-4	1,2-Dibromoethane	ND	2.5	0.61	ug/kg	

CAS No.	Surrogate Recoveries		Limits
460-00-4	Bromofluorobenzene (S)	153%	61-167%
460-00-4	Bromofluorobenzene (S)	130%	61-167%

Method Blank Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP39646-MB	YZ91624.D	1	09/03/14	NK	09/02/14	OP39646	GYZ7636

The QC reported here applies to the following samples: **Method:** SW846 8011

MC33265-5

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.015	0.0061	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.015	0.0061	ug/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	Bromofluorobenzene (S)	80%	36-173%
460-00-4	Bromofluorobenzene (S)	74%	36-173%

Method Blank Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GAB4567-MB	AB85709.D	1	09/02/14	AF	n/a	n/a	GAB4567

The QC reported here applies to the following samples: **Method:** SW846 8015

MC33265-1, MC33265-2, MC33265-3

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (VOA)	ND	5.0	0.74	mg/kg	

CAS No.	Surrogate Recoveries		Limits
	2,3,4-Trifluorotoluene	90%	61-116%

Blank Spike Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP39646-BS	YZ91625.D	1	09/03/14	NK	09/02/14	OP39646	GYZ7636

The QC reported here applies to the following samples: **Method:** SW846 8011

MC33265-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
96-12-8	1,2-Dibromo-3-chloropropane	0.071	0.058	82	60-140
106-93-4	1,2-Dibromoethane	0.071	0.063	89	60-140

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	Bromofluorobenzene (S)	81%	36-173%
460-00-4	Bromofluorobenzene (S)	76%	36-173%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP39625-BS	YZ91597.D	1	09/02/14	NK	08/29/14	OP39625	GYZ7634
OP39625-BSD	YZ91598.D	1	09/02/14	NK	08/29/14	OP39625	GYZ7634

The QC reported here applies to the following samples: **Method:** SW846 8011

MC33265-1, MC33265-2, MC33265-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
96-12-8	1,2-Dibromo-3-chloropropane	33.2	30.7	92	31.3	97	2	59-142/30
106-93-4	1,2-Dibromoethane	33.2	32.2	97	32.8	102	2	56-140/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
460-00-4	Bromofluorobenzene (S)	164%	150%	61-167%
460-00-4	Bromofluorobenzene (S)	151%	134%	61-167%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GAB4567-BSP	AB85710.D	1	09/02/14	AF	n/a	n/a	GAB4567
GAB4567-BSD	AB85711.D	1	09/02/14	AF	n/a	n/a	GAB4567

The QC reported here applies to the following samples: **Method:** SW846 8015

MC33265-1, MC33265-2, MC33265-3

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH-GRO (VOA)	32.5	32.4	100	32.0	98	1	66-126/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
	2,3,4-Trifluorotoluene	100%	98%	61-116%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP39625-MS	YZ91602.D	1	09/02/14	NK	08/29/14	OP39625	GYZ7634
OP39625-MSD	YZ91603.D	1	09/02/14	NK	08/29/14	OP39625	GYZ7634
MC33265-1	YZ91604.D	1	09/02/14	NK	08/29/14	OP39625	GYZ7634

The QC reported here applies to the following samples: **Method:** SW846 8011

MC33265-1, MC33265-2, MC33265-3

CAS No.	Compound	MC33265-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
96-12-8	1,2-Dibromo-3-chloropropane	ND		42.3	44.9	106	42.2	45.6	108	2	40-156/27
106-93-4	1,2-Dibromoethane	ND		42.3	41.7	98	42.2	43.6	103	4	48-141/27

CAS No.	Surrogate Recoveries	MS	MSD	MC33265-1	Limits
460-00-4	Bromofluorobenzene (S)	161%	157%	149%	61-167%
460-00-4	Bromofluorobenzene (S)	115%	110%	98%	61-167%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP39646-MS	YZ91626.D	1	09/03/14	NK	09/02/14	OP39646	GYZ7636
OP39646-MSD	YZ91627.D	1	09/03/14	NK	09/02/14	OP39646	GYZ7636
MC33200-2	YZ91628.D	1	09/03/14	NK	09/02/14	OP39646	GYZ7636

The QC reported here applies to the following samples: **Method:** SW846 8011

MC33265-5

CAS No.	Compound	MC33200-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
96-12-8	1,2-Dibromo-3-chloropropane	ND		0.071	0.049	69	0.071	0.045	63* [a]	9	64-141/29
106-93-4	1,2-Dibromoethane	ND		0.071	0.055	77	0.071	0.052	73	6	63-163/27

CAS No.	Surrogate Recoveries	MS	MSD	MC33200-2	Limits
460-00-4	Bromofluorobenzene (S)	77%	66%	67%	36-173%
460-00-4	Bromofluorobenzene (S)	64%	60%	72%	36-173%

(a) Outside control limits due to possible matrix interference.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC33265-3MS	AB85721.D	1	09/02/14	AF	n/a	n/a	GAB4567
MC33265-3MSD	AB85722.D	1	09/02/14	AF	n/a	n/a	GAB4567
MC33265-3	AB85720.D	1	09/02/14	AF	n/a	n/a	GAB4567

The QC reported here applies to the following samples: **Method:** SW846 8015

MC33265-1, MC33265-2, MC33265-3

CAS No.	Compound	MC33265-3 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	Spike mg/kg	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (VOA)	4.70	J	86.5	90.3	99	86.5	89.3	98	1	41-150/20

CAS No.	Surrogate Recoveries	MS	MSD	MC33265-3	Limits
	2,3,4-Trifluorotoluene	100%	98%	94%	61-116%

* = Outside of Control Limits.

Volatile Surrogate Recovery Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Method: SW846 8011 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]
MC33265-5	YZ91632.D	68	73
OP39646-BS	YZ91625.D	81	76
OP39646-MB	YZ91624.D	80	74
OP39646-MS	YZ91626.D	77	64
OP39646-MSD	YZ91627.D	66	60

Surrogate Compounds	Recovery Limits
S1 = Bromofluorobenzene (S)	36-173%

(a) Recovery from GC signal #2
(b) Recovery from GC signal #1

Volatile Surrogate Recovery Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Method: SW846 8011 **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]
MC33265-1	YZ91604.D	149	98
MC33265-2	YZ91605.D	185* [c]	125
MC33265-3	YZ91607.D	185* [c]	125
OP39625-BS	YZ91597.D	164	151
OP39625-BSD	YZ91598.D	150	134
OP39625-MB	YZ91596.D	153	130
OP39625-MS	YZ91602.D	161	115
OP39625-MSD	YZ91603.D	157	110

Surrogate Compounds	Recovery Limits
S1 = Bromofluorobenzene (S)	61-167%

(a) Recovery from GC signal #2
(b) Recovery from GC signal #1
(c) Outside control limits due to possible matrix interference.

Volatile Surrogate Recovery Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Method: SW846 8015 **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
MC33265-1	AB85718.D	95
MC33265-2	AB85719.D	94
MC33265-3	AB85720.D	94
GAB4567-BSD	AB85711.D	98
GAB4567-BSP	AB85710.D	100
GAB4567-MB	AB85709.D	90
MC33265-3MS	AB85721.D	100
MC33265-3MSD	AB85722.D	98

Surrogate Compounds	Recovery Limits
S1 = 2,3,4-Trifluorotoluene	61-116%

(a) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Check Std:	GYZ7634-CC7620	**Injection Date:**	09/02/14
Lab File ID:	YZ91595.D	**Injection Time:**	13:09
Instrument ID:	GCYZ	**Method:**	SW846 8011

	S1 [a] RT	S1 [b] RT
Check Std	3.29	3.51

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
OP39625-MB	YZ91596.D	09/02/14	13:29	3.30	3.51
OP39625-BS	YZ91597.D	09/02/14	13:49	3.30	3.51
OP39625-BSD	YZ91598.D	09/02/14	14:08	3.30	3.51
ZZZZZZ	YZ91599.D	09/02/14	14:28	3.30	3.51
ZZZZZZ	YZ91600.D	09/02/14	14:47	3.30	3.51
ZZZZZZ	YZ91601.D	09/02/14	15:07	3.30	3.51
OP39625-MS	YZ91602.D	09/02/14	15:26	3.30	3.51
OP39625-MSD	YZ91603.D	09/02/14	15:46	3.30	3.51
MC33265-1	YZ91604.D	09/02/14	16:05	3.30	3.51
MC33265-2	YZ91605.D	09/02/14	16:25	3.30	3.51

Surrogate Compounds

S1 = Bromofluorobenzene (S)

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Check Std:	GYZ7634-CC7620	**Injection Date:**	09/02/14
Lab File ID:	YZ91606.D	**Injection Time:**	16:44
Instrument ID:	GCYZ	**Method:**	SW846 8011

	S1 [a] RT	S1 [b] RT
Check Std	3.30	3.51

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
MC33265-3	YZ91607.D	09/02/14	17:04	3.30	3.51
ZZZZZZ	YZ91608.D	09/02/14	17:23	3.30	3.51
ZZZZZZ	YZ91609.D	09/02/14	17:43	3.30	3.51
GYZ7634-ECC762	YZ91610.D	09/02/14	18:03	3.30	3.51

Surrogate Compounds

S1 = Bromofluorobenzene (S)

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Check Std:	GYZ7636-ICC7636	**Injection Date:**	09/03/14
Lab File ID:	YZ91620.D	**Injection Time:**	17:51
Instrument ID:	GCYZ	**Method:**	SW846 8011

	S1 [a] RT	S1 [b] RT
Check Std	3.30	3.51

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
OP39646-MB	YZ91624.D	09/03/14	19:08	3.29	3.51
OP39646-BS	YZ91625.D	09/03/14	19:27	3.30	3.51
OP39646-MS	YZ91626.D	09/03/14	19:47	3.29	3.51
OP39646-MSD	YZ91627.D	09/03/14	20:06	3.30	3.51
MC33200-2	YZ91628.D	09/03/14	20:25	3.29	3.51
ZZZZZZ	YZ91629.D	09/03/14	20:44	3.30	3.51
ZZZZZZ	YZ91630.D	09/03/14	21:03	3.30	3.51
ZZZZZZ	YZ91631.D	09/03/14	21:22	3.29	3.51
MC33265-5	YZ91632.D	09/03/14	21:42	3.30	3.51
GYZ7636-ECC7636	YZ91633.D	09/03/14	22:01	3.30	3.51

Surrogate Compounds

S1 = Bromofluorobenzene (S)

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Check Std:	GAB4567-CC4488	**Injection Date:**	09/02/14
Lab File ID:	AB85708.D	**Injection Time:**	07:50
Instrument ID:	GCAB	**Method:**	SW846 8015

	S1 [a] RT
Check Std	20.32

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT
GAB4567-MB	AB85709.D	09/02/14	08:28	20.32
GAB4567-BSP	AB85710.D	09/02/14	09:07	20.32
GAB4567-BSD	AB85711.D	09/02/14	09:45	20.32
ZZZZZZ	AB85712.D	09/02/14	10:24	20.32
ZZZZZZ	AB85715.D	09/02/14	12:23	20.32
ZZZZZZ	AB85716.D	09/02/14	13:03	20.33

Surrogate Compounds

S1 = 2,3,4-Trifluorotoluene

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Check Std:	GAB4567-CC4488	**Injection Date:**	09/02/14
Lab File ID:	AB85717.D	**Injection Time:**	13:42
Instrument ID:	GCAB	**Method:**	SW846 8015

	S1 [a] RT
Check Std	20.32

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT
MC33265-1	AB85718.D	09/02/14	14:22	20.32
MC33265-2	AB85719.D	09/02/14	15:02	20.32
MC33265-3	AB85720.D	09/02/14	15:41	20.32
MC33265-3MS	AB85721.D	09/02/14	16:20	20.32
MC33265-3MSD	AB85722.D	09/02/14	16:59	20.32

Surrogate Compounds

S1 = 2,3,4-Trifluorotoluene

(a) Retention time from GC signal #1

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Percent Solids Raw Data Summary

Percent Solids Raw Data Summary

Job Number: MC33265
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample: MC33265-1 **Analyzed:** 02-SEP-14 by HS **Method:** SM21 2540 B MOD.
ClientID: MW25-082814(36'-38')

Wet Weight (Total)	36.934	g
Tare Weight	27.041	g
Dry Weight (Total)	35.761	g
Solids, Percent	88.1	%

Sample: MC33265-2 **Analyzed:** 02-SEP-14 by HS **Method:** SM21 2540 B MOD.
ClientID: MW25-082814(44'-46')

Wet Weight (Total)	34.154	g
Tare Weight	20.545	g
Dry Weight (Total)	31.974	g
Solids, Percent	84	%

Sample: MC33265-3 **Analyzed:** 02-SEP-14 by HS **Method:** SM21 2540 B MOD.
ClientID: MW25-082814(44'-46')-DUP

Wet Weight (Total)	40.432	g
Tare Weight	26.22	g
Dry Weight (Total)	38.24	g
Solids, Percent	84.6	%

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Automated Report

Technical Report for

Shell Oil

URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

21562973.15000

SGS Accutest Job Number: MC33299



Sampling Date: 09/02/14

Report to:

AECOM, INC.

Melissa.mansker@aecom.com

ATTN: Melissa Mansker

Total number of pages in report: 133

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

H. (Brad) Madadian
Lab Director

Client Service contact: Jeremy Vienneau 508-481-6200

Certifications: MA (M-MA136,SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) FL (E87579) NY (11791) NJ (MA926) PA (6801121) ND (R-188) CO (MA00136) MN (11546AA) NC (653) IL (002337) WI (399080220) DoD ELAP (L-A-B L2235)

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SGS ACCUTEST

October 27, 2016

AECOM
1001 Highlands Plaza Drive West Suite 300
St. Louis, MO 63110

RE: SGS Accutest Job # MC33299

Dear Elizabeth Kunkel

As you are aware, SGS Accutest Inc. - Marlborough has been conducting an extensive review of data associated with some historical Gas Chromatography-Mass Spectroscopy volatiles analyses. As a result of this review it was determined that some revisions of the original test report for this job were needed. These corrections have been incorporated into the revised report.

Please be assured that corrective actions have been put in place to address this matter and prevent a recurrence.

We apologize for any inconvenience that this issue may have caused. Please don't hesitate to contact us if we can be of further assistance.

Sincerely,

H. (Brad) Madadian

Regional Laboratory Director
SGS Accutest Inc. - Marlborough

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Sample Summary

Shell Oil

Job No: MC33299

URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL
Project No: 21562973.15000

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
MC33299-1	09/02/14	16:30	EA	09/03/14	SO	Soil	MW28-090214 (32-34')
MC33299-2	09/02/14	16:45	EA	09/03/14	SO	Soil	MW28-090214 (36-40')
MC33299-2D	09/02/14	16:45	EA	09/03/14	SO	Soil Dup/MSD	MW28-090214 (36-40')
MC33299-2S	09/02/14	16:45	EA	09/03/14	SO	Soil Matrix Spike	MW28-090214 (36-40')
MC33299-3	09/02/14	00:00	EA	09/03/14	AQ	Trip Blank Water	TB-090214-HCL
MC33299-4	09/02/14	00:00	EA	09/03/14	AQ	Trip Blank Water	TB-090214-ST

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: She O **Job No** MC33299

Site: URSMOSTL: Roxana Add t ona Character zat on, 900 South Centr **Report Date** 0/27/20 6 3:50:03 P

2 Samp e(s), 2 Tr p B ank(s) were co ected on 09/02/20 4 and were rece ved at SGS Accutest New Eng and on 09/03/20 4 proper y preserved, at 3 Deg C and ntact These Samp es rece ved a job number of MC33299 A st ng of the Laborato y Samp e ID, C ent Samp e ID and dates of co ect on are presented n the Resu ts Summary Sect on of th s report -Ch orohexane, Benzeneth o ,
D benz(a,h)acr d ne, Indene, and Qu no ne were searched n the brary search and repo ted on y f detect ons were found

Except as noted be ow, a method spec f ed ca brat ons and qua ty contro performance cr ter a were met for th s job For more nformat on, p ease refer to QC summary pages

Volatiles by GCMS By Method SW846 8260C

Matrix: AQ **Batch ID:** MSV 255

- A samp es were ana yzed w th n the recommended method ho d ng t me
- Samp e(s) MC33290-28MS, MC33290-28MSD were used as the QC samp es nd cated
- A method b anks for th s batch meet method spec f c cr ter a
- MSV 255-BSD Recovery(s) for Ch oroethane, Naphtha ene are outs de contro m ts
- B ank Sp ke Recovery(s) for Ch oroethane are outs de contro m ts
- MC33290-28MS/MSD Recovery(s) for 2-Butanone (MEK), 2-Ch oroethy v ny ether, 2-Hexanone, Acetone are outs de contro m ts Outs de contro m ts due to poss b e matr x nterference
- MC33299-3 for ,4-D oxane: Cont nu ng Ca brat on outs de of acceptance cr ter a Samp e resu t may be b ased ow

Matrix: SO **Batch ID:** MSM24

- A samp es were ana yzed w th n the recommended method ho d ng t me
- Samp e(s) MC33299-2MS, MC33299-2MSD were used as the QC samp es nd cated
- A method b anks for th s batch meet method spec f c cr ter a
- B ank Sp ke Recovery(s) for Acetone, V ny Acetate are outs de contro m ts
- Matr x Sp ke Recovery(s) for , ,2,2-Tetrach oroethane, ,2,3-Tr ch orobenzene, ,2,3-Tr ch oropropane, ,2,4-Tr ch orobenzene, ,2-D ch orobenzene, ,3-D ch orobenzene, ,4-D ch orobenzene, ,4-D oxane, Acro e n, Bromobenzene, Bromoform, Hexach orobutad ene, n-Buty benzene, Naphtha ene, o-Ch oroto uene, p-Ch oroto uene, V ny Acetate are outs de contro m ts Outs de contro m ts due to poss b e matr x nterference
- Matr x Sp ke Dup cate Recove y(s) for ,2,3-Tr ch orobenzene, ,2,4-Tr ch orobenzene, ,2-D ch orobenzene, ,3-D ch orobenzene, ,4-D ch orobenzene, ,4-D oxane, Bromobenzene, Bromoform, Hexach orobutad ene, n-Buty benzene, Naphtha ene, p-Ch oroto uene, Acro e n are outs de contro m ts Outs de contro m ts due to poss b e matr x nte ference
- RPD(s) for MSD for 2-Ch oroethy v ny ether, Acro e n are outs de contro m ts for samp e MC33299-2MSD H gh RPD due to poss b e matr x nterference and/or samp e non-homogene ty
- Acro e n: Cont nu ng Ca brat on Ver f cat on outs de of acceptance cr ter a Samp e resu t may be b ased ow
- Acetone: Cont nu ng Ca brat on Ver f cat on outs de of acceptance cr ter a Samp e resu t may be b ased ow
- 2-Hexanone: Cont nu ng Ca brat on Ver f cat on outs de of acceptance cr ter a Samp e resu t may be b ased ow
- Carbon d su f de: Cont nu ng Ca brat on Ver f cat on outs de of acceptance cr ter a Samp e resu t may be b ased ow

Extractables by GCMS By Method SW846 8270D

Matrix: SO **Batch ID:** OP39669

- A samp es were extracted w th n the recommended method ho d ng t me
- A samp es were ana yzed w th n the recommended method ho d ng t me
- Samp e(s) MC33299-2MS, MC33299-2MSD were used as the QC samp es nd cated
- A method b anks for th s batch meet method spec f c cr ter a
- Matr x Sp ke Recovery(s) for 2,4-D n tropheno , 4,6-D n tro-o-creso , Benzo c ac d, Hexach orocyc opentad ene, Pentach oropheno are outs de contro m ts Outs de contro m ts due to poss b e matr x nterference
- Matr x Sp ke Dup cate Recove y(s) for 2,4-D n tropheno , 4,6-D n tro-o-creso , Benzo c ac d, Hexach orocyc opentad ene are outs de contro m ts Outs de contro m ts due to poss b e matr x nterference

Extractables by GCMS By Method SW846 8270D BY SIM

Matrix: SO **Batch ID:** OP39670

- A samp es were extracted w th n the recommended method ho d ng t me
- A samp es were ana yzed w th n the recommended method ho d ng t me
- Samp e(s) MC33299-2MS, MC33299-2MSD were used as the QC samp es nd cated
- A method b anks for th s batch meet method spec f c cr ter a

Volatiles by GC By Method SW846 8011

Matrix: AQ **Batch ID:** OP398 3

- A samp es were ana yzed w th n the recommended method ho d ng t me
- Samp e(s) MC33579-3MS, MC33579-3MSD were used as the QC samp es nd cated
- A method b anks for th s batch meet method spec f c cr ter a

Matrix: SO **Batch ID:** OP39668

- A samp es were extracted w th n the recommended method ho d ng t me
- A samp es were ana yzed w th n the recommended method ho d ng t me
- Samp e(s) MC33299-2MS, MC33299-2MSD were used as the QC samp es nd cated
- A method b anks for th s batch meet method spec f c cr ter a

Volatiles by GC By Method SW846 8015

Matrix: SO **Batch ID:** GAB4570

- A samp es were ana yzed w th n the recommended method ho d ng t me
- Samp e(s) MC33299-2MS, MC33299-2MSD were used as the QC samp es nd cated
- A method b anks for th s batch meet method spec f c cr ter a

Wet Chemistry By Method SM21 2540 B MOD.

Matrix: SO **Batch ID:** GN48 59

- Samp e(s) MC33299-2DUP were used as the QC samp es for So ds, Percent

SGS Accutest New Eng and cert f es that a ana ys s were performed w th n method spec f cat on It s further recommended that th s report to be used n ts ent rety The Laborato y D rector for SGS Accutest New Eng and or ass gnee as ver f ed by the s gnature on the cover page has author zed the re ease of th s repo t(MC33299)

Summary of Hits

Job Number: MC33299
Account: Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL
Collected: 09/02/14

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
MC33299-1	MW28-090214 (32-34')					
Benzene		0.00072	0.00066	0.00045	mg/kg	SW846 8260C
Carbon disulfide [a]		0.00071 J	0.0066	0.00017	mg/kg	SW846 8260C
Ethylbenzene		0.0012 J	0.0026	0.00091	mg/kg	SW846 8260C
Toluene		0.0012 J	0.0066	0.00027	mg/kg	SW846 8260C
Total TIC, Volatile		1.207 J			mg/kg	
Di-n-butyl phthalate		0.0325 J	0.30	0.032	mg/kg	SW846 8270D
Benzo(b)fluoranthene		0.0032 J	0.0060	0.0027	mg/kg	SW846 8270D BY SIM
Benzo(g,h,i)perylene		0.0032 J	0.0060	0.0016	mg/kg	SW846 8270D BY SIM
Fluoranthene		0.0025 J	0.0060	0.0018	mg/kg	SW846 8270D BY SIM
Indeno(1,2,3-cd)pyrene		0.0017 J	0.0060	0.0015	mg/kg	SW846 8270D BY SIM
Phenanthrene		0.0022 J	0.0060	0.0013	mg/kg	SW846 8270D BY SIM
Pyrene		0.0028 J	0.0060	0.0019	mg/kg	SW846 8270D BY SIM
TPH-GRO (VOA)		2.86 J	15	2.2	mg/kg	SW846 8015
MC33299-2	MW28-090214 (36-40')					
Benzene		0.00098	0.00058	0.00039	mg/kg	SW846 8260C
Ethylbenzene		0.0011 J	0.0023	0.00081	mg/kg	SW846 8260C
Toluene		0.0013 J	0.0058	0.00024	mg/kg	SW846 8260C
Total TIC, Volatile		5.055 J			mg/kg	
TPH-GRO (VOA)		7.70 J	14	2.0	mg/kg	SW846 8015
MC33299-3	TB-090214-HCL					
No hits reported in this sample.						
MC33299-4	TB-090214-ST					
No hits reported in this sample.						

(a) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW28-090214 (32-34')		
Lab Sample ID:	MC33299-1	**Date Sampled:**	09/02/14
Matrix:	SO - Soil	**Date Received:**	09/03/14
Method:	SW846 8260C	**Percent Solids:**	82.1
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M68099.D	1	09/11/14	KD	n/a	n/a	MSM2411
Run #2							

	Initial Weight	Final Volume
Run #1	4.61 g	5.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	0.013	0.0037	mg/kg	
107-02-8	Acrolein [a]	ND	0.033	0.012	mg/kg	
107-13-1	Acrylonitrile	ND	0.033	0.0036	mg/kg	
71-43-2	Benzene	0.00072	0.00066	0.00045	mg/kg	
108-86-1	Bromobenzene	ND	0.0066	0.00033	mg/kg	
74-97-5	Bromochloromethane	ND	0.0066	0.00046	mg/kg	
75-27-4	Bromodichloromethane	ND	0.0026	0.00028	mg/kg	
75-25-2	Bromoform	ND	0.0026	0.00047	mg/kg	
74-83-9	Bromomethane	ND	0.0026	0.00079	mg/kg	
78-93-3	2-Butanone (MEK)	ND	0.013	0.0041	mg/kg	
104-51-8	n-Butylbenzene	ND	0.0066	0.00032	mg/kg	
135-98-8	sec-Butylbenzene	ND	0.0066	0.00099	mg/kg	
98-06-6	tert-Butylbenzene	ND	0.0066	0.00028	mg/kg	
75-15-0	Carbon disulfide [a]	0.00071	0.0066	0.00017	mg/kg	J
56-23-5	Carbon tetrachloride	ND	0.0026	0.00029	mg/kg	
108-90-7	Chlorobenzene	ND	0.0026	0.00021	mg/kg	
75-00-3	Chloroethane	ND	0.0066	0.0010	mg/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	0.0066	0.0017	mg/kg	
67-66-3	Chloroform	ND	0.0026	0.00022	mg/kg	
74-87-3	Chloromethane	ND	0.0066	0.00075	mg/kg	
95-49-8	o-Chlorotoluene	ND	0.0066	0.00025	mg/kg	
106-43-4	p-Chlorotoluene	ND	0.0066	0.00035	mg/kg	
124-48-1	Dibromochloromethane	ND	0.0026	0.00043	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0026	0.00028	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.0026	0.00040	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.0026	0.00046	mg/kg	
75-71-8	Dichlorodifluoromethane	ND	0.0026	0.0011	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0026	0.00035	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0026	0.00042	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0026	0.00055	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0026	0.00060	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0026	0.00055	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW28-090214 (32-34')		
Lab Sample ID:	MC33299-1	**Date Sampled:**	09/02/14
Matrix:	SO - Soil	**Date Received:**	09/03/14
Method:	SW846 8260C	**Percent Solids:**	82.1
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	0.0026	0.00055	mg/kg	
142-28-9	1,3-Dichloropropane	ND	0.0066	0.00043	mg/kg	
594-20-7	2,2-Dichloropropane	ND	0.0066	0.00074	mg/kg	
563-58-6	1,1-Dichloropropene	ND	0.0066	0.00035	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0026	0.00030	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	0.0026	0.00035	mg/kg	
123-91-1	1,4-Dioxane	ND	0.033	0.026	mg/kg	
97-63-2	Ethyl methacrylate	ND	0.0066	0.00047	mg/kg	
100-41-4	Ethylbenzene	0.0012	0.0026	0.00091	mg/kg	J
87-68-3	Hexachlorobutadiene	ND	0.0066	0.00076	mg/kg	
591-78-6	2-Hexanone [a]	ND	0.013	0.0010	mg/kg	
98-82-8	Isopropylbenzene	ND	0.0066	0.00022	mg/kg	
99-87-6	p-Isopropyltoluene	ND	0.0066	0.00023	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.0026	0.00024	mg/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	0.0066	0.00071	mg/kg	
74-95-3	Methylene bromide	ND	0.0066	0.00060	mg/kg	
75-09-2	Methylene chloride	ND	0.0026	0.00070	mg/kg	
91-20-3	Naphthalene	ND	0.0066	0.00052	mg/kg	
103-65-1	n-Propylbenzene	ND	0.0066	0.00020	mg/kg	
100-42-5	Styrene	ND	0.0066	0.00023	mg/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.0066	0.00053	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.0026	0.00052	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0026	0.00041	mg/kg	
108-88-3	Toluene	0.0012	0.0066	0.00027	mg/kg	J
87-61-6	1,2,3-Trichlorobenzene	ND	0.0066	0.00056	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.0066	0.00068	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0026	0.00029	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	0.0026	0.00076	mg/kg	
79-01-6	Trichloroethene	ND	0.0026	0.00032	mg/kg	
75-69-4	Trichlorofluoromethane	ND	0.0026	0.00053	mg/kg	
96-18-4	1,2,3-Trichloropropane	ND	0.0066	0.00038	mg/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	0.0066	0.0019	mg/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	0.0066	0.0020	mg/kg	
108-05-4	Vinyl Acetate	ND	0.0066	0.0020	mg/kg	
75-01-4	Vinyl chloride	ND	0.0026	0.0012	mg/kg	
	m,p-Xylene	ND	0.0026	0.00058	mg/kg	
95-47-6	o-Xylene	ND	0.0026	0.00037	mg/kg	
1330-20-7	Xylene (total)	ND	0.0026	0.00029	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW28-090214 (32-34')		
Lab Sample ID:	MC33299-1	**Date Sampled:**	09/02/14
Matrix:	SO - Soil	**Date Received:**	09/03/14
Method:	SW846 8260C	**Percent Solids:**	82.1
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	93%		70-130%
2037-26-5	Toluene-D8	86%		70-130%
460-00-4	4-Bromofluorobenzene	89%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
75-28-5	Isobutane	4.76	.036	mg/kg	JN
106-97-8	Butane	5.08	.021	mg/kg	JN
78-78-4	Butane, 2-methyl-	6.08	.43	mg/kg	JN
109-66-0	Pentane	6.47	.012	mg/kg	JN
75-83-2	Butane, 2,2-dimethyl-	7.23	.039	mg/kg	JN
79-29-8	Butane, 2,3-dimethyl-	7.80	.24	mg/kg	JN
96-14-0	Pentane, 3-methyl-	8.14	.2	mg/kg	JN
108-08-7	Pentane, 2,4-dimethyl-	9.13	.14	mg/kg	JN
594-82-1	Butane, 2,2,3,3-tetramethyl-	10.41	.089	mg/kg	JN
	Total TIC, Volatile		1.207	mg/kg	J

(a) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW28-090214 (32-34')		
Lab Sample ID:	MC33299-1	**Date Sampled:**	09/02/14
Matrix:	SO - Soil	**Date Received:**	09/03/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	82.1
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F76027.D	1	09/11/14	WK	09/04/14	OP39669	MSF3339
Run #2							

	Initial Weight	Final Volume
Run #1	20.2 g	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	0.60	0.076	mg/kg	
95-57-8	2-Chlorophenol	ND	0.30	0.014	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	0.60	0.015	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	0.60	0.017	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	0.60	0.099	mg/kg	
51-28-5	2,4-Dinitrophenol	ND	1.2	0.15	mg/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	0.60	0.076	mg/kg	
95-48-7	2-Methylphenol	ND	0.60	0.024	mg/kg	
	3&4-Methylphenol	ND	0.60	0.029	mg/kg	
88-75-5	2-Nitrophenol	ND	0.60	0.016	mg/kg	
100-02-7	4-Nitrophenol	ND	1.2	0.11	mg/kg	
87-86-5	Pentachlorophenol	ND	0.60	0.043	mg/kg	
108-95-2	Phenol	ND	0.30	0.017	mg/kg	
95-95-4	2,4,5-Trichlorophenol	ND	0.60	0.015	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	0.60	0.015	mg/kg	
62-53-3	Aniline	ND	0.60	0.030	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	0.30	0.015	mg/kg	
85-68-7	Butyl benzyl phthalate	ND	0.30	0.012	mg/kg	
100-51-6	Benzyl Alcohol	ND	0.60	0.030	mg/kg	
91-58-7	2-Chloronaphthalene	ND	0.30	0.016	mg/kg	
106-47-8	4-Chloroaniline	ND	0.60	0.015	mg/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	0.30	0.014	mg/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	0.30	0.018	mg/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	0.30	0.022	mg/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	0.30	0.019	mg/kg	
122-66-7	1,2-Diphenylhydrazine	ND	0.30	0.014	mg/kg	
121-14-2	2,4-Dinitrotoluene	ND	0.60	0.040	mg/kg	
606-20-2	2,6-Dinitrotoluene	ND	0.60	0.015	mg/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	0.30	0.030	mg/kg	
132-64-9	Dibenzofuran	ND	0.12	0.017	mg/kg	
84-74-2	Di-n-butyl phthalate	0.0325	0.30	0.032	mg/kg	J
117-84-0	Di-n-octyl phthalate	ND	0.30	0.0094	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW28-090214 (32-34')		
Lab Sample ID:	MC33299-1	**Date Sampled:**	09/02/14
Matrix:	SO - Soil	**Date Received:**	09/03/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	82.1
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	0.30	0.015	mg/kg	
131-11-3	Dimethyl phthalate	ND	0.30	0.017	mg/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	0.30	0.011	mg/kg	
118-74-1	Hexachlorobenzene	ND	0.30	0.019	mg/kg	
77-47-4	Hexachlorocyclopentadiene	ND	0.60	0.15	mg/kg	
67-72-1	Hexachloroethane	ND	0.30	0.015	mg/kg	
78-59-1	Isophorone	ND	0.30	0.014	mg/kg	
88-74-4	2-Nitroaniline	ND	0.60	0.015	mg/kg	
99-09-2	3-Nitroaniline	ND	0.60	0.033	mg/kg	
100-01-6	4-Nitroaniline	ND	0.60	0.015	mg/kg	
98-95-3	Nitrobenzene	ND	0.30	0.016	mg/kg	
62-75-9	n-Nitrosodimethylamine	ND	0.30	0.014	mg/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	0.30	0.017	mg/kg	
86-30-6	N-Nitrosodiphenylamine	ND	0.30	0.018	mg/kg	
110-86-1	Pyridine	ND	0.60	0.030	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	66%		30-130%
4165-62-2	Phenol-d5	63%		30-130%
118-79-6	2,4,6-Tribromophenol	67%		30-130%
4165-60-0	Nitrobenzene-d5	64%		30-130%
321-60-8	2-Fluorobiphenyl	71%		30-130%
1718-51-0	Terphenyl-d14	83%		30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW28-090214 (32-34')		
Lab Sample ID:	MC33299-1	**Date Sampled:**	09/02/14
Matrix:	SO - Soil	**Date Received:**	09/03/14
Method:	SW846 8270D BY SIM SW846 3546	**Percent Solids:**	82.1
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I91521.D	1	09/09/14	WK	09/04/14	OP39670	MSI3411
Run #2							

	Initial Weight	Final Volume
Run #1	20.2 g	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.0060	0.0010	mg/kg	
208-96-8	Acenaphthylene	ND	0.0060	0.00092	mg/kg	
120-12-7	Anthracene	ND	0.0060	0.0013	mg/kg	
56-55-3	Benzo(a)anthracene	ND	0.0060	0.0028	mg/kg	
50-32-8	Benzo(a)pyrene	ND	0.0060	0.0024	mg/kg	
205-99-2	Benzo(b)fluoranthene	0.0032	0.0060	0.0027	mg/kg	J
191-24-2	Benzo(g,h,i)perylene	0.0032	0.0060	0.0016	mg/kg	J
207-08-9	Benzo(k)fluoranthene	ND	0.0060	0.0019	mg/kg	
218-01-9	Chrysene	ND	0.0060	0.0016	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	0.0060	0.0017	mg/kg	
206-44-0	Fluoranthene	0.0025	0.0060	0.0018	mg/kg	J
86-73-7	Fluorene	ND	0.0060	0.0012	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	0.0017	0.0060	0.0015	mg/kg	J
90-12-0	1-Methylnaphthalene	ND	0.012	0.0013	mg/kg	
91-57-6	2-Methylnaphthalene	ND	0.012	0.0011	mg/kg	
85-01-8	Phenanthrene	0.0022	0.0060	0.0013	mg/kg	J
129-00-0	Pyrene	0.0028	0.0060	0.0019	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	34%		15-110%
4165-62-2	Phenol-d5	33%		15-110%
118-79-6	2,4,6-Tribromophenol	33%		15-110%
4165-60-0	Nitrobenzene-d5	69%		30-130%
321-60-8	2-Fluorobiphenyl	68%		30-130%
1718-51-0	Terphenyl-d14	102%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW28-090214 (32-34')		
Lab Sample ID:	MC33299-1	**Date Sampled:**	09/02/14
Matrix:	SO - Soil	**Date Received:**	09/03/14
Method:	SW846 8011 SW846 3550B	**Percent Solids:**	82.1
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB59685.D	1	09/05/14	NK	09/04/14	OP39668	GBB3323
Run #2							

	Initial Weight	Final Volume
Run #1	30.3 g	50.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.0030	0.00089	mg/kg	
106-93-4	1,2-Dibromoethane	ND	0.0030	0.00074	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	125%		61-167%
460-00-4	Bromofluorobenzene (S)	128%		61-167%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW28-090214 (32-34')		
Lab Sample ID:	MC33299-1	**Date Sampled:**	09/02/14
Matrix:	SO - Soil	**Date Received:**	09/03/14
Method:	SW846 8015	**Percent Solids:**	82.1
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB85758.D	1	09/04/14	AF	n/a	n/a	GAB4570
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.37 g	10.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (VOA)	2.86	15	2.2	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	2,3,4-Trifluorotoluene	90%		61-116%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW28-090214 (36-40')		
Lab Sample ID:	MC33299-2	**Date Sampled:**	09/02/14
Matrix:	SO - Soil	**Date Received:**	09/03/14
Method:	SW846 8260C	**Percent Solids:**	78.0
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M68100.D	1	09/11/14	KD	n/a	n/a	MSM2411
Run #2							

	Initial Weight	Final Volume
Run #1	5.48 g	5.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	0.012	0.0033	mg/kg	
107-02-8	Acrolein [a]	ND	0.029	0.010	mg/kg	
107-13-1	Acrylonitrile	ND	0.029	0.0032	mg/kg	
71-43-2	Benzene	0.00098	0.00058	0.00039	mg/kg	
108-86-1	Bromobenzene	ND	0.0058	0.00029	mg/kg	
74-97-5	Bromochloromethane	ND	0.0058	0.00040	mg/kg	
75-27-4	Bromodichloromethane	ND	0.0023	0.00024	mg/kg	
75-25-2	Bromoform	ND	0.0023	0.00042	mg/kg	
74-83-9	Bromomethane	ND	0.0023	0.00070	mg/kg	
78-93-3	2-Butanone (MEK)	ND	0.012	0.0036	mg/kg	
104-51-8	n-Butylbenzene	ND	0.0058	0.00028	mg/kg	
135-98-8	sec-Butylbenzene	ND	0.0058	0.00087	mg/kg	
98-06-6	tert-Butylbenzene	ND	0.0058	0.00025	mg/kg	
75-15-0	Carbon disulfide [a]	ND	0.0058	0.00015	mg/kg	
56-23-5	Carbon tetrachloride	ND	0.0023	0.00026	mg/kg	
108-90-7	Chlorobenzene	ND	0.0023	0.00018	mg/kg	
75-00-3	Chloroethane	ND	0.0058	0.00088	mg/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	0.0058	0.0015	mg/kg	
67-66-3	Chloroform	ND	0.0023	0.00020	mg/kg	
74-87-3	Chloromethane	ND	0.0058	0.00066	mg/kg	
95-49-8	o-Chlorotoluene	ND	0.0058	0.00022	mg/kg	
106-43-4	p-Chlorotoluene	ND	0.0058	0.00031	mg/kg	
124-48-1	Dibromochloromethane	ND	0.0023	0.00038	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0023	0.00025	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.0023	0.00035	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.0023	0.00040	mg/kg	
75-71-8	Dichlorodifluoromethane	ND	0.0023	0.00095	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0023	0.00031	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0023	0.00038	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0023	0.00048	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0023	0.00053	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0023	0.00049	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW28-090214 (36-40')		
Lab Sample ID:	MC33299-2	**Date Sampled:**	09/02/14
Matrix:	SO - Soil	**Date Received:**	09/03/14
Method:	SW846 8260C	**Percent Solids:**	78.0
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	0.0023	0.00049	mg/kg	
142-28-9	1,3-Dichloropropane	ND	0.0058	0.00038	mg/kg	
594-20-7	2,2-Dichloropropane	ND	0.0058	0.00066	mg/kg	
563-58-6	1,1-Dichloropropene	ND	0.0058	0.00031	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0023	0.00027	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	0.0023	0.00031	mg/kg	
123-91-1	1,4-Dioxane	ND	0.029	0.023	mg/kg	
97-63-2	Ethyl methacrylate	ND	0.0058	0.00042	mg/kg	
100-41-4	Ethylbenzene	0.0011	0.0023	0.00081	mg/kg	J
87-68-3	Hexachlorobutadiene	ND	0.0058	0.00067	mg/kg	
591-78-6	2-Hexanone [a]	ND	0.012	0.00089	mg/kg	
98-82-8	Isopropylbenzene	ND	0.0058	0.00020	mg/kg	
99-87-6	p-Isopropyltoluene	ND	0.0058	0.00020	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.0023	0.00021	mg/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	0.0058	0.00063	mg/kg	
74-95-3	Methylene bromide	ND	0.0058	0.00053	mg/kg	
75-09-2	Methylene chloride	ND	0.0023	0.00062	mg/kg	
91-20-3	Naphthalene	ND	0.0058	0.00046	mg/kg	
103-65-1	n-Propylbenzene	ND	0.0058	0.00018	mg/kg	
100-42-5	Styrene	ND	0.0058	0.00020	mg/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.0058	0.00047	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.0023	0.00046	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0023	0.00037	mg/kg	
108-88-3	Toluene	0.0013	0.0058	0.00024	mg/kg	J
87-61-6	1,2,3-Trichlorobenzene	ND	0.0058	0.00050	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.0058	0.00060	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0023	0.00025	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	0.0023	0.00067	mg/kg	
79-01-6	Trichloroethene	ND	0.0023	0.00029	mg/kg	
75-69-4	Trichlorofluoromethane	ND	0.0023	0.00047	mg/kg	
96-18-4	1,2,3-Trichloropropane	ND	0.0058	0.00034	mg/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	0.0058	0.0017	mg/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	0.0058	0.0018	mg/kg	
108-05-4	Vinyl Acetate	ND	0.0058	0.0018	mg/kg	
75-01-4	Vinyl chloride	ND	0.0023	0.0011	mg/kg	
	m,p-Xylene	ND	0.0023	0.00051	mg/kg	
95-47-6	o-Xylene	ND	0.0023	0.00033	mg/kg	
1330-20-7	Xylene (total)	ND	0.0023	0.00026	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW28-090214 (36-40')		
Lab Sample ID:	MC33299-2	**Date Sampled:**	09/02/14
Matrix:	SO - Soil	**Date Received:**	09/03/14
Method:	SW846 8260C	**Percent Solids:**	78.0
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	87%		70-130%
2037-26-5	Toluene-D8	88%		70-130%
460-00-4	4-Bromofluorobenzene	87%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
75-28-5	Isobutane	4.76	.083	mg/kg	JN
106-97-8	Butane	5.08	.47	mg/kg	JN
78-78-4	Butane, 2-methyl-	6.06	1.4	mg/kg	JN
109-66-0	Pentane	6.47	.18	mg/kg	JN
75-83-2	Butane, 2,2-dimethyl-	7.21	.078	mg/kg	JN
79-29-8	Butane, 2,3-dimethyl-	7.81	.72	mg/kg	JN
16747-25-4	Hexane, 2,2,3-trimethyl-	8.14	.48	mg/kg	JN
96-37-7	Cyclopentane, methyl-	9.16	.41	mg/kg	JN
110-82-7	Cyclohexane	9.92	.13	mg/kg	JN
565-59-3	Pentane, 2,3-dimethyl-	9.98	.36	mg/kg	JN
2453-00-1	Cyclopentane, 1,3-dimethyl-	10.31	.094	mg/kg	JN
540-84-1	Pentane, 2,2,4-trimethyl-	10.41	.3	mg/kg	JN
108-87-2	Cyclohexane, methyl-	11.17	.25	mg/kg	JN
560-21-4	Pentane, 2,3,3-trimethyl-	11.77	.1	mg/kg	JN
	Total TIC, Volatile		5.055	mg/kg	J

(a) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW28-090214 (36-40')		
Lab Sample ID:	MC33299-2	**Date Sampled:**	09/02/14
Matrix:	SO - Soil	**Date Received:**	09/03/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	78.0
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F76019.D	1	09/11/14	WK	09/04/14	OP39669	MSF3338
Run #2							

	Initial Weight	Final Volume
Run #1	20.9 g	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	0.61	0.077	mg/kg	
95-57-8	2-Chlorophenol	ND	0.31	0.014	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	0.61	0.016	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	0.61	0.018	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	0.61	0.10	mg/kg	
51-28-5	2,4-Dinitrophenol	ND	1.2	0.15	mg/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	0.61	0.077	mg/kg	
95-48-7	2-Methylphenol	ND	0.61	0.024	mg/kg	
	3&4-Methylphenol	ND	0.61	0.030	mg/kg	
88-75-5	2-Nitrophenol	ND	0.61	0.016	mg/kg	
100-02-7	4-Nitrophenol	ND	1.2	0.12	mg/kg	
87-86-5	Pentachlorophenol	ND	0.61	0.043	mg/kg	
108-95-2	Phenol	ND	0.31	0.017	mg/kg	
95-95-4	2,4,5-Trichlorophenol	ND	0.61	0.015	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	0.61	0.015	mg/kg	
62-53-3	Aniline	ND	0.61	0.031	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	0.31	0.016	mg/kg	
85-68-7	Butyl benzyl phthalate	ND	0.31	0.013	mg/kg	
100-51-6	Benzyl Alcohol	ND	0.61	0.031	mg/kg	
91-58-7	2-Chloronaphthalene	ND	0.31	0.017	mg/kg	
106-47-8	4-Chloroaniline	ND	0.61	0.015	mg/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	0.31	0.014	mg/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	0.31	0.019	mg/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	0.31	0.022	mg/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	0.31	0.019	mg/kg	
122-66-7	1,2-Diphenylhydrazine	ND	0.31	0.014	mg/kg	
121-14-2	2,4-Dinitrotoluene	ND	0.61	0.041	mg/kg	
606-20-2	2,6-Dinitrotoluene	ND	0.61	0.015	mg/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	0.31	0.031	mg/kg	
132-64-9	Dibenzofuran	ND	0.12	0.017	mg/kg	
84-74-2	Di-n-butyl phthalate	ND	0.31	0.033	mg/kg	
117-84-0	Di-n-octyl phthalate	ND	0.31	0.0096	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW28-090214 (36-40')		
Lab Sample ID:	MC33299-2	**Date Sampled:**	09/02/14
Matrix:	SO - Soil	**Date Received:**	09/03/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	78.0
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	0.31	0.015	mg/kg	
131-11-3	Dimethyl phthalate	ND	0.31	0.018	mg/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	0.31	0.011	mg/kg	
118-74-1	Hexachlorobenzene	ND	0.31	0.019	mg/kg	
77-47-4	Hexachlorocyclopentadiene	ND	0.61	0.15	mg/kg	
67-72-1	Hexachloroethane	ND	0.31	0.015	mg/kg	
78-59-1	Isophorone	ND	0.31	0.014	mg/kg	
88-74-4	2-Nitroaniline	ND	0.61	0.015	mg/kg	
99-09-2	3-Nitroaniline	ND	0.61	0.034	mg/kg	
100-01-6	4-Nitroaniline	ND	0.61	0.015	mg/kg	
98-95-3	Nitrobenzene	ND	0.31	0.017	mg/kg	
62-75-9	n-Nitrosodimethylamine	ND	0.31	0.015	mg/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	0.31	0.018	mg/kg	
86-30-6	N-Nitrosodiphenylamine	ND	0.31	0.019	mg/kg	
110-86-1	Pyridine	ND	0.61	0.031	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	71%		30-130%
4165-62-2	Phenol-d5	67%		30-130%
118-79-6	2,4,6-Tribromophenol	66%		30-130%
4165-60-0	Nitrobenzene-d5	72%		30-130%
321-60-8	2-Fluorobiphenyl	80%		30-130%
1718-51-0	Terphenyl-d14	91%		30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW28-090214 (36-40')		
Lab Sample ID:	MC33299-2	**Date Sampled:**	09/02/14
Matrix:	SO - Soil	**Date Received:**	09/03/14
Method:	SW846 8270D BY SIM SW846 3546	**Percent Solids:**	78.0
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I91520.D	1	09/09/14	WK	09/04/14	OP39670	MSI3411
Run #2							

	Initial Weight	Final Volume
Run #1	20.9 g	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.0061	0.0011	mg/kg	
208-96-8	Acenaphthylene	ND	0.0061	0.00093	mg/kg	
120-12-7	Anthracene	ND	0.0061	0.0014	mg/kg	
56-55-3	Benzo(a)anthracene	ND	0.0061	0.0028	mg/kg	
50-32-8	Benzo(a)pyrene	ND	0.0061	0.0024	mg/kg	
205-99-2	Benzo(b)fluoranthene	ND	0.0061	0.0027	mg/kg	
191-24-2	Benzo(g,h,i)perylene	ND	0.0061	0.0017	mg/kg	
207-08-9	Benzo(k)fluoranthene	ND	0.0061	0.0019	mg/kg	
218-01-9	Chrysene	ND	0.0061	0.0017	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	0.0061	0.0018	mg/kg	
206-44-0	Fluoranthene	ND	0.0061	0.0018	mg/kg	
86-73-7	Fluorene	ND	0.0061	0.0012	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.0061	0.0015	mg/kg	
90-12-0	1-Methylnaphthalene	ND	0.012	0.0013	mg/kg	
91-57-6	2-Methylnaphthalene	ND	0.012	0.0011	mg/kg	
85-01-8	Phenanthrene	ND	0.0061	0.0013	mg/kg	
129-00-0	Pyrene	ND	0.0061	0.0019	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	38%		15-110%
4165-62-2	Phenol-d5	37%		15-110%
118-79-6	2,4,6-Tribromophenol	33%		15-110%
4165-60-0	Nitrobenzene-d5	77%		30-130%
321-60-8	2-Fluorobiphenyl	75%		30-130%
1718-51-0	Terphenyl-d14	110%		30-130%

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW28-090214 (36-40')		
Lab Sample ID:	MC33299-2	**Date Sampled:**	09/02/14
Matrix:	SO - Soil	**Date Received:**	09/03/14
Method:	SW846 8011 SW846 3550B	**Percent Solids:**	78.0
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB59684.D	1	09/05/14	NK	09/04/14	OP39668	GBB3323
Run #2							

	Initial Weight	Final Volume
Run #1	30.7 g	50.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.0031	0.00092	mg/kg	
106-93-4	1,2-Dibromoethane	ND	0.0031	0.00077	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	127%		61-167%
460-00-4	Bromofluorobenzene (S)	133%		61-167%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW28-090214 (36-40')		
Lab Sample ID:	MC33299-2	**Date Sampled:**	09/02/14
Matrix:	SO - Soil	**Date Received:**	09/03/14
Method:	SW846 8015	**Percent Solids:**	78.0
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB85754.D	1	09/04/14	AF	n/a	n/a	GAB4570
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.27 g	10.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (VOA)	7.70	14	2.0	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	2,3,4-Trifluorotoluene	93%		61-116%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-090214-HCL		
Lab Sample ID:	MC33299-3	**Date Sampled:**	09/02/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	09/03/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V34463.D	1	09/10/14	AMY	n/a	n/a	MSV1255
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-090214-HCL		
Lab Sample ID:	MC33299-3	**Date Sampled:**	09/02/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	09/03/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
123-91-1	1,4-Dioxane [a]	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-090214-HCL		
Lab Sample ID:	MC33299-3	**Date Sampled:**	09/02/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	09/03/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		70-130%
2037-26-5	Toluene-D8	103%		70-130%
460-00-4	4-Bromofluorobenzene	96%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Continuing Calibration outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-090214-ST		
Lab Sample ID:	MC33299-4	**Date Sampled:**	09/02/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	09/03/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB59735.D	1	09/16/14	NK	09/15/14	OP39813	GBB3326
Run #2							

	Initial Volume	Final Volume
Run #1	36.2 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.015	0.0059	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.015	0.0059	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	126%		36-173%
460-00-4	Bromofluorobenzene (S)	130%		36-173%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

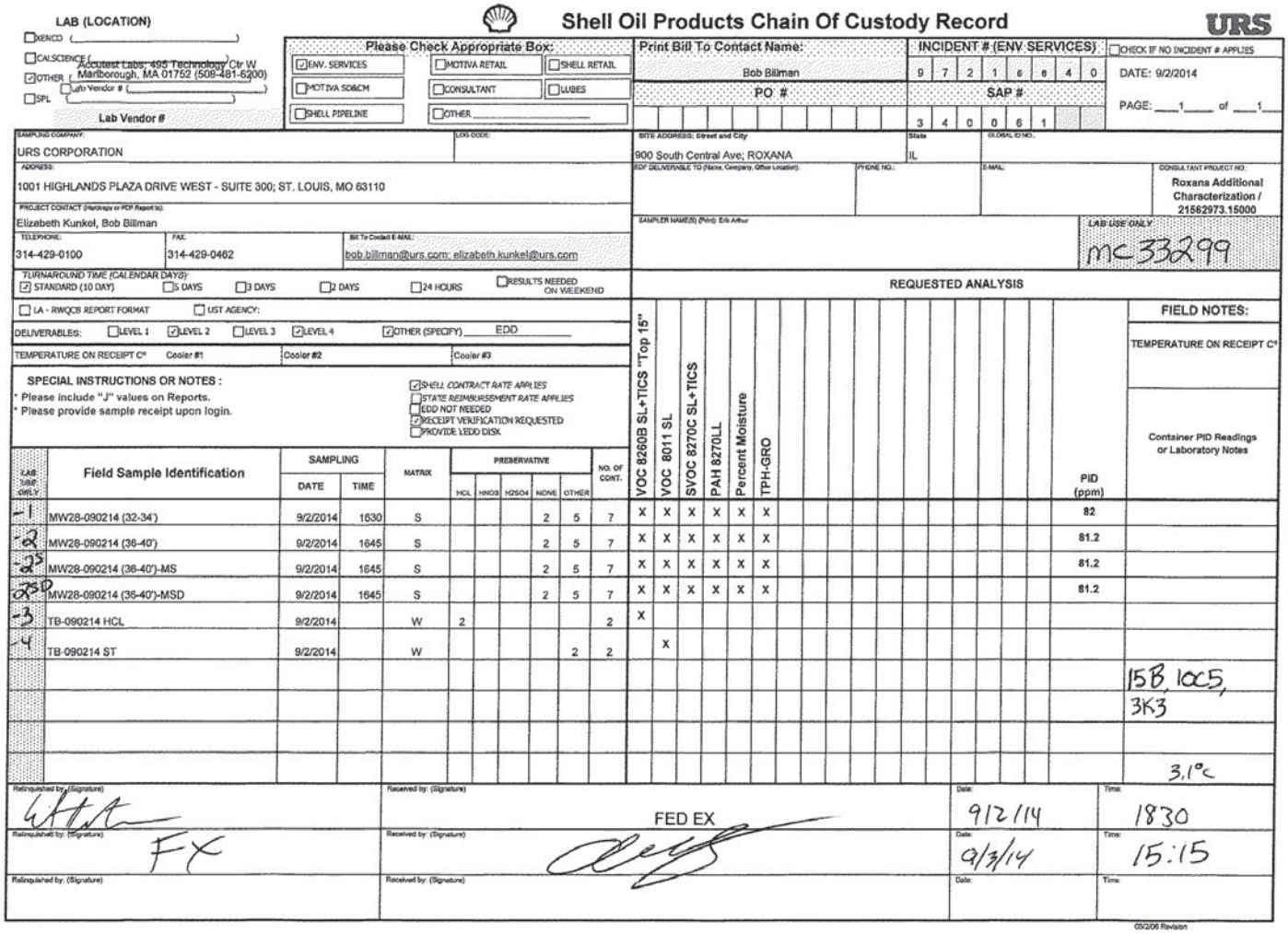
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- REPROC Form: Reprocessed/Corrected Data
- Sample Tracking Chronicle
- Internal Chain of Custody



Shell Oil Products Chain Of Custody Record

URS

LAB (LOCATION)
☐ KENCO (_____)
☐ CALSCIENCE (_____)
☑ OTHER (Accutest Labs; 495 Technology Ctr W Marlborough, MA 01752 (508-481-6200))
☐ SPL (_____)
Lab Vendor #

Please Check Appropriate Box:
☑ ENV. SERVICES ☐ MOTIVA RETAIL ☐ SHELL RETAIL
☐ MOTIVA SD&CM ☐ CONSULTANT ☐ LUBES
☐ SHELL PIPELINE ☐ OTHER

Print Bill To Contact Name: Bob Billman
INCIDENT # (ENV SERVICES): 9 7 2 1 8 8 4 0
☐ CHECK IF NO INCIDENT # APPLIES
DATE: 9/2/2014
PO #:
SAP #: 3 4 0 0 6 1
PAGE: 1 of 1

SAMPLING COMPANY: URS CORPORATION
LOG CODE:
SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA
State: IL
GLOBAL ID NO.:
ADDRESS: 1001 HIGHLANDS PLAZA DRIVE WEST - SUITE 300; ST. LOUIS, MO 63110
EDF DELIVERABLE TO (Name, Company, Office Location):
PHONE NO.:
E-MAIL:
CONSULTANT PROJECT NO.: Roxana Additional Characterization / 21562973.15000
PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Bob Billman
SAMPLER NAME(S) (Print): Eric Arthur
LAB USE ONLY: MC33299
TELEPHONE: 314-429-0100
FAX: 314-429-0462
Bill To Contact E-MAIL: bob.billman@urs.com; elizabeth.kunkel@urs.com

TURNAROUND TIME (CALENDAR DAYS):
☑ STANDARD (10 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT ☐ UST AGENCY:

DELIVERABLES: ☐ LEVEL 1 ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) EDD

TEMPERATURE ON RECEIPT C°: Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES:
* Please include "J" values on Reports.
* Please provide sample receipt upon login.

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS

LAB SAM. ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260B SL+TICS "Top 15"	VOC 8011 SL	SVOC 8270C SL+TICS	PAH 8270LL	Percent Moisture	TPH-GRO	PID (ppm)	Container PID Readings or Laboratory Notes
1	MW28-090214 (32-34')	9/2/2014	1630	S				2	5	7	X	X	X	X	X	X	82	
2	MW28-090214 (36-40')	9/2/2014	1645	S				2	5	7	X	X	X	X	X	X	81.2	
2S	MW28-090214 (36-40')-MS	9/2/2014	1645	S				2	5	7	X	X	X	X	X	X	81.2	
2SD	MW28-090214 (36-40')-MSD	9/2/2014	1645	S				2	5	7	X	X	X	X	X	X	81.2	
3	TB-090214 HCL	9/2/2014		W	2					2	X							
4	TB-090214 ST	9/2/2014		W					2	2		X						
																		15B, 10C5, 3K3
																		3.1°c

FIELD NOTES:
TEMPERATURE ON RECEIPT C°

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
[signature]	FED EX	9/2/14	1830
FX	[signature]	9/3/14	15:15

05/2/06 Revision

5.1 5

MC33299: Chain of Custody
Page 1 of 2

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: MC33299 **Client:** URS **Immediate Client Services Action Required:** No

Date / Time Received: 9/3/2014 **Delivery Method:** **Client Service Action Required at Login:** No

Project: 900 SOUTH CENTRAL **No. Coolers:** 1 **Airbill #'s:**

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	Infared gun		
3. Cooler media:	Ice (bag)		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☑		☐	☐
2. Trip Blank listed on COC:	☑		☐	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

Accutest Laboratories
V:508.481.6200

495 Technology Center West, Bldg One
F: 508.481.7753

Marlborough, MA
www/accutest.com

Initial Calibration Summary

Job Number: MC33299 **Sample:** MSV1255-ICC1255
Account: SHELLWIC Shell Oil **Lab FileID:** V34445.D
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Response Factor Report MSV

Method : O:\msv\1\methods\v140909wx.m (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Thu Oct 08 17:03:24 2015
Response via : Initial Calibration

Calibration Files
2 =v34441.d 0.25=v34438.d 1 =v34440.d 25 =v34444.d
5 =v34442.d 10 =v34443.d 50 =v34445.d 100 =v34446.d
200 =v34447.d 400 =v34448.d = =

Compound

	2	0.25	1	25	5	10	50	100	200	400	Avg	%RSD
1) I 1,4-difluorobenzene	----------ISTD----------											
2) benzene	1.153	2.017	1.381	1.057	1.096	1.111	1.015	1.039	1.086	1.004	1.196	25.74

---- Linear regression ---- Coefficient = 0.9988
Response Ratio = 0.00562 + 1.03091 *A

(#) = Out of Range ### Number of calibration levels exceeded format ###

v140909wx.m Thu Oct 08 17:04:30 2015

Initial Calibration Verification

Job Number: MC33299 **Sample:** MSV1255-ICV1255
Account: SHELLWIC Shell Oil **Lab FileID:** V34451.D
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Evaluate Continuing Calibration Report

Data File : O:\msv\1\databackup\v140909\v34451.d Vial: 21
Acq On : 9 Sep 2014 6:53 pm Operator: amym
Sample : icv1255-50 Inst : MSV
Misc : MS32663,MSV1255,,,,5,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : O:\msv\1\methods\v140909wx.m (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Thu Oct 08 17:03:24 2015
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	1,4-difluorobenzene	1.000	1.000	0.0	96	0.00	7.74
		Amount	Calc.	%Drift			
2 p	benzene	50.000	52.902	-5.8	104	0.00	7.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
v34445.d v140909wx.m Thu Oct 08 17:04:22 2015

Continuing Calibration Summary

Job Number: MC33299 **Sample:** MSV1255-CC1255
Account: SHELLWIC Shell Oil **Lab FileID:** V34457.D
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Evaluate Continuing Calibration Report

Data File : O:\msv\1\databackup\v140909\v34457.d Vial: 3
Acq On : 10 Sep 2014 1:06 pm Operator: amym
Sample : cc1255-50 Inst : MSV
Misc : MS32663,MSV1255,,,,5,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : O:\msv\1\methods\v140909wx.m (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Thu Oct 08 17:03:24 2015
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	1,4-difluorobenzene	1.000	1.000	0.0	88	0.00	7.74
		Amount	Calc.	%Drift			
2 p	benzene	50.000	50.999	-2.0	92	0.01	7.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
v34445.d v140909wx.m Wed Oct 28 16:11:38 2015

Quantitation Report (QT Reviewed)

Data Path : O:\msv\1\databackup\v140909\
Data File : v34438.d
Acq On : 9 Sep 2014 1:09 pm
Operator : amym
Sample : ic1255-0.25
Misc : MS32663,MSV1255,,,,5,1
ALS Vial : 8 Sample Multiplier: 1

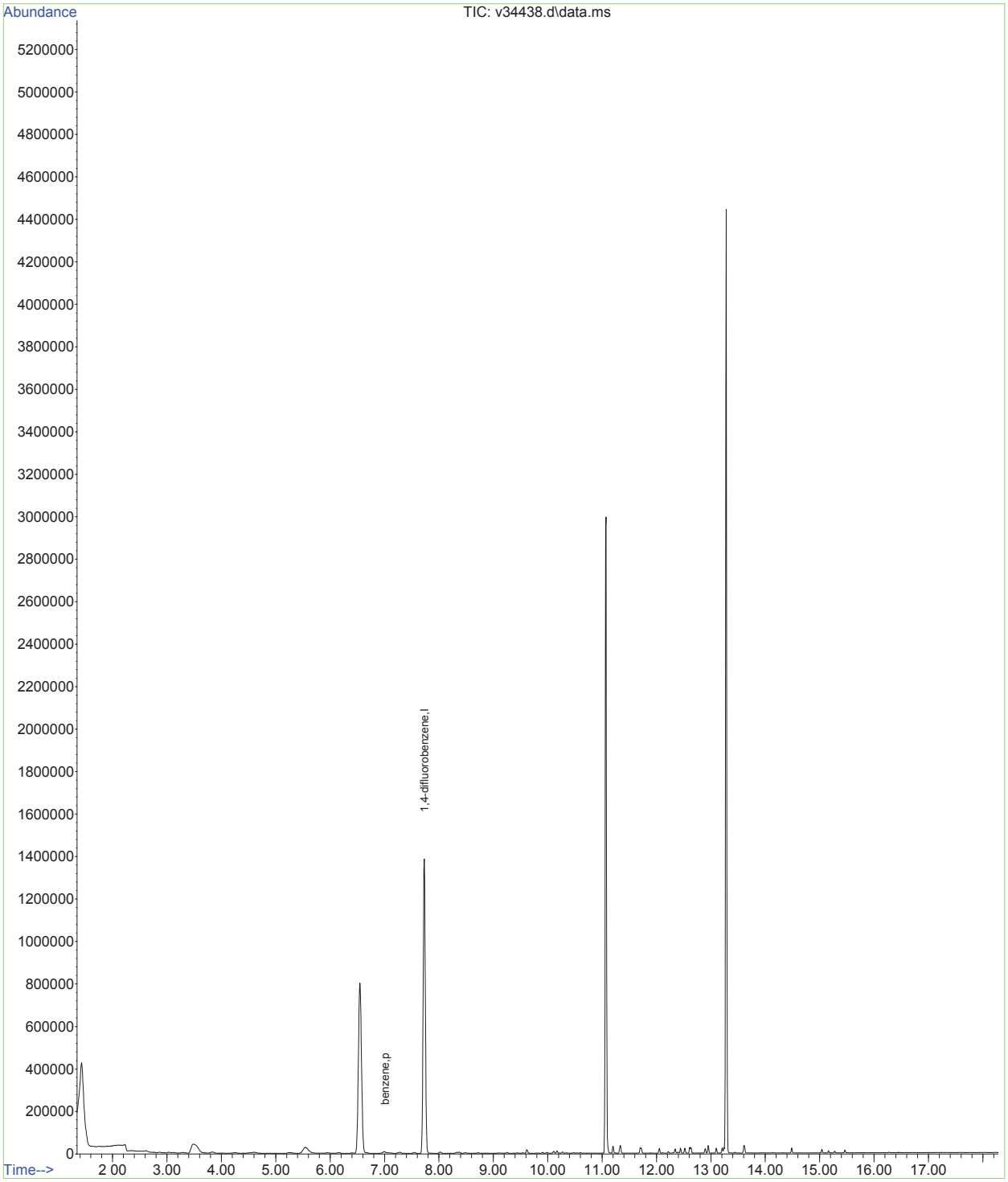
Quant Time: Oct 08 14:43:26 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Wed Sep 10 12:31:25 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-difluorobenzene	7.730	114	1807711	50.00	ug/L	0.00
Target Compounds						Qvalue
2) benzene	7.010	78	18231	0.44	ug/L	91

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : O:\msv\1\databackup\v140909\
Data File : v34438.d
Acq On : 9 Sep 2014 1:09 pm
Operator : amym
Sample : ic1255-0.25
Misc : MS32663,MSV1255,,,,5,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 08 14:43:26 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Wed Sep 10 12:31:25 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msv\1\databackup\v140909\
Data File : v34440.d
Acq On : 9 Sep 2014 2:02 pm
Operator : amym
Sample : ic1255-1
Misc : MS32663,MSV1255,,,,5,1
ALS Vial : 10 Sample Multiplier: 1

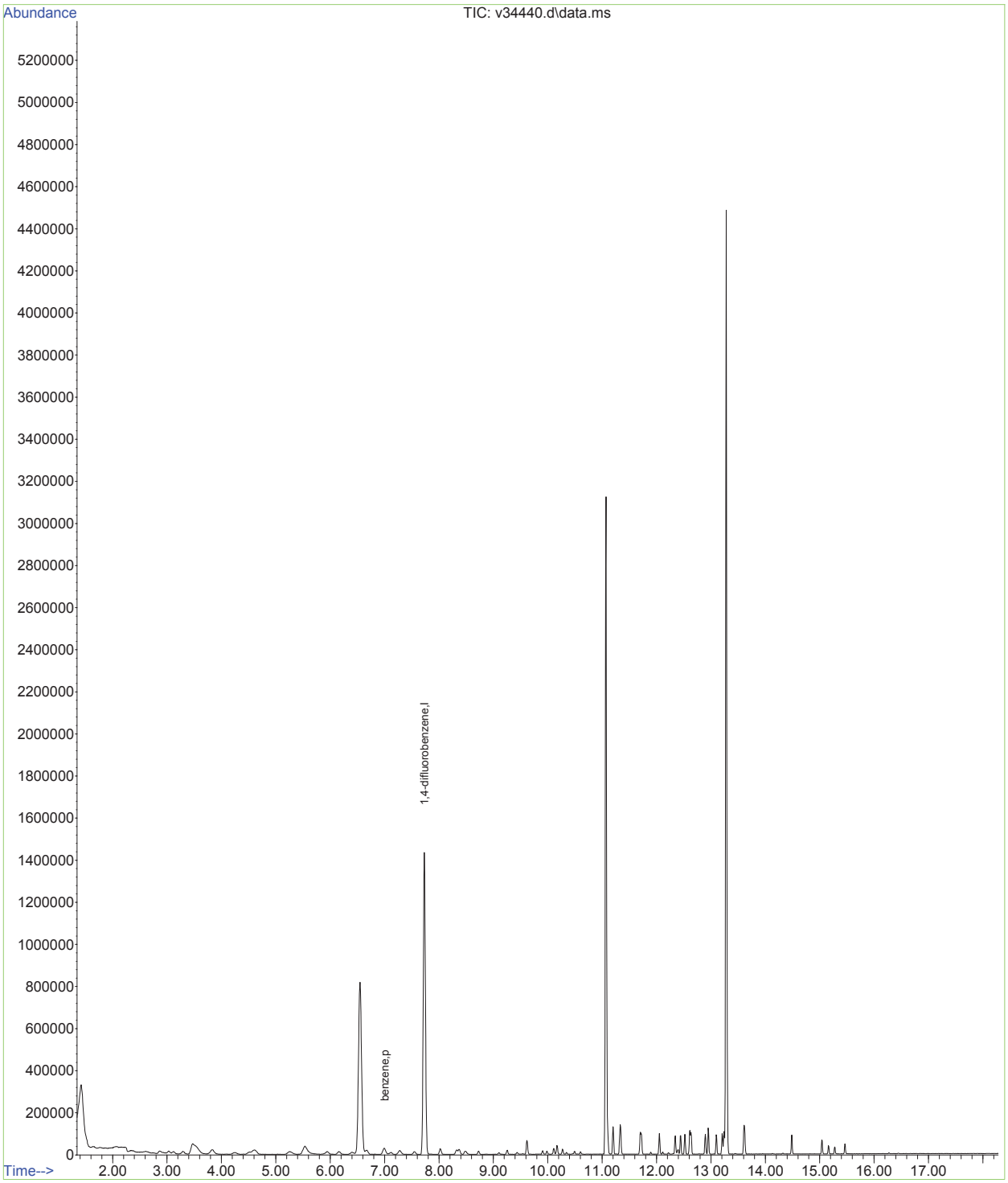
Quant Time: Oct 08 14:43:30 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Wed Sep 10 12:31:25 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-difluorobenzene	7.732	114	1836991	50.00	ug/L	0.00
Target Compounds						Qvalue
2) benzene	6.999	78	50743	1.22	ug/L	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : O:\msv\1\databackup\v140909\
Data File : v34440.d
Acq On : 9 Sep 2014 2:02 pm
Operator : amym
Sample : ic1255-1
Misc : MS32663,MSV1255,,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 08 14:43:30 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Wed Sep 10 12:31:25 2014
Response via : Initial Calibration



Data Path : O:\msv\1\databackup\v140909\
Data File : v34441.d
Acq On : 9 Sep 2014 2:29 pm
Operator : amym
Sample : ic1255-2
Misc : MS32663,MSV1255,,,,5,1
ALS Vial : 11 Sample Multiplier: 1

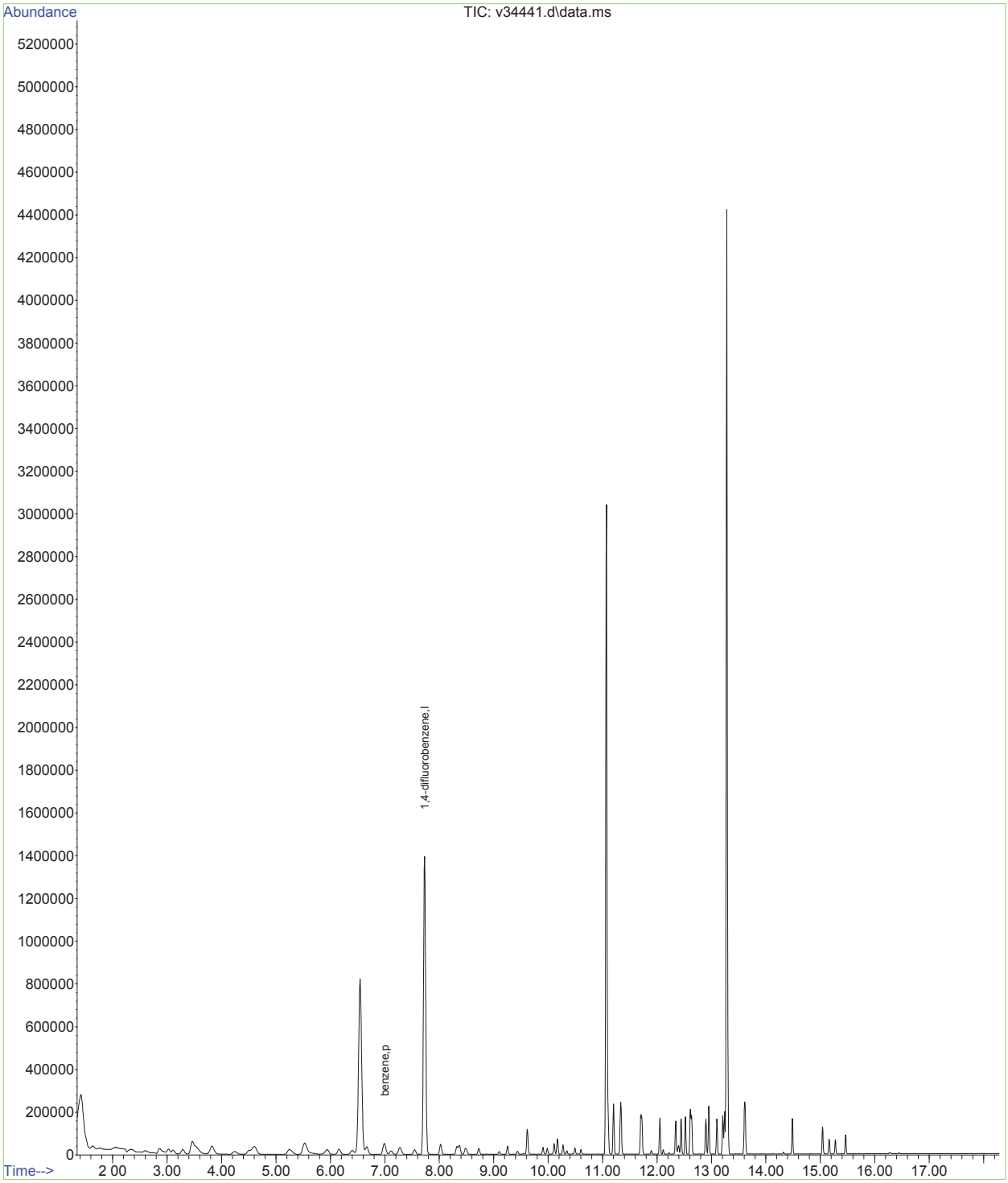
Quant Time: Oct 08 14:43:32 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Wed Sep 10 12:31:25 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-difluorobenzene	7.730	114	1818243	50.00	ug/L	0.00
Target Compounds						Qvalue
2) benzene	6.993	78	83883	2.03	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : O:\msv\1\databackup\v140909\
Data File : v34441.d
Acq On : 9 Sep 2014 2:29 pm
Operator : amym
Sample : ic1255-2
Misc : MS32663,MSV1255,,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 08 14:43:32 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Wed Sep 10 12:31:25 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msv\1\databackup\v140909\
Data File : v34442.d
Acq On : 9 Sep 2014 2:55 pm
Operator : amym
Sample : ic1255-5
Misc : MS32663,MSV1255,,,,5,1
ALS Vial : 12 Sample Multiplier: 1

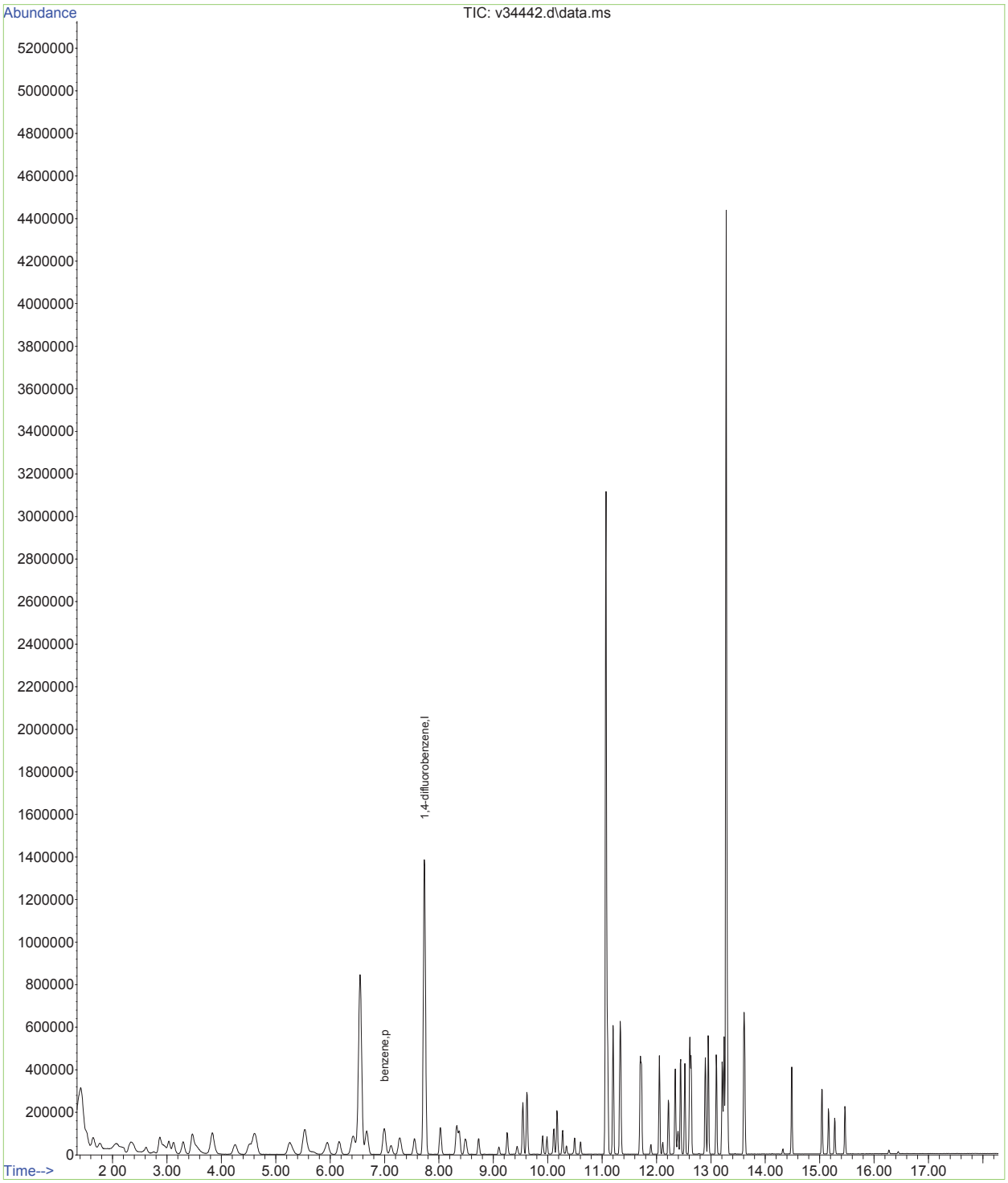
Quant Time: Oct 08 14:43:34 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Wed Sep 10 12:31:25 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-difluorobenzene	7.734	114	1848938	50.00	ug/L	0.00
Target Compounds						Qvalue
2) benzene	6.997	78	202708	4.83	ug/L	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : O:\msv\1\databackup\v140909\
Data File : v34442.d
Acq On : 9 Sep 2014 2:55 pm
Operator : amym
Sample : ic1255-5
Misc : MS32663,MSV1255,,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Oct 08 14:43:34 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Wed Sep 10 12:31:25 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msv\1\databackup\v140909\
Data File : v34443.d
Acq On : 9 Sep 2014 3:22 pm
Operator : amym
Sample : ic1255-10
Misc : MS32663,MSV1255,,,,5,1
ALS Vial : 13 Sample Multiplier: 1

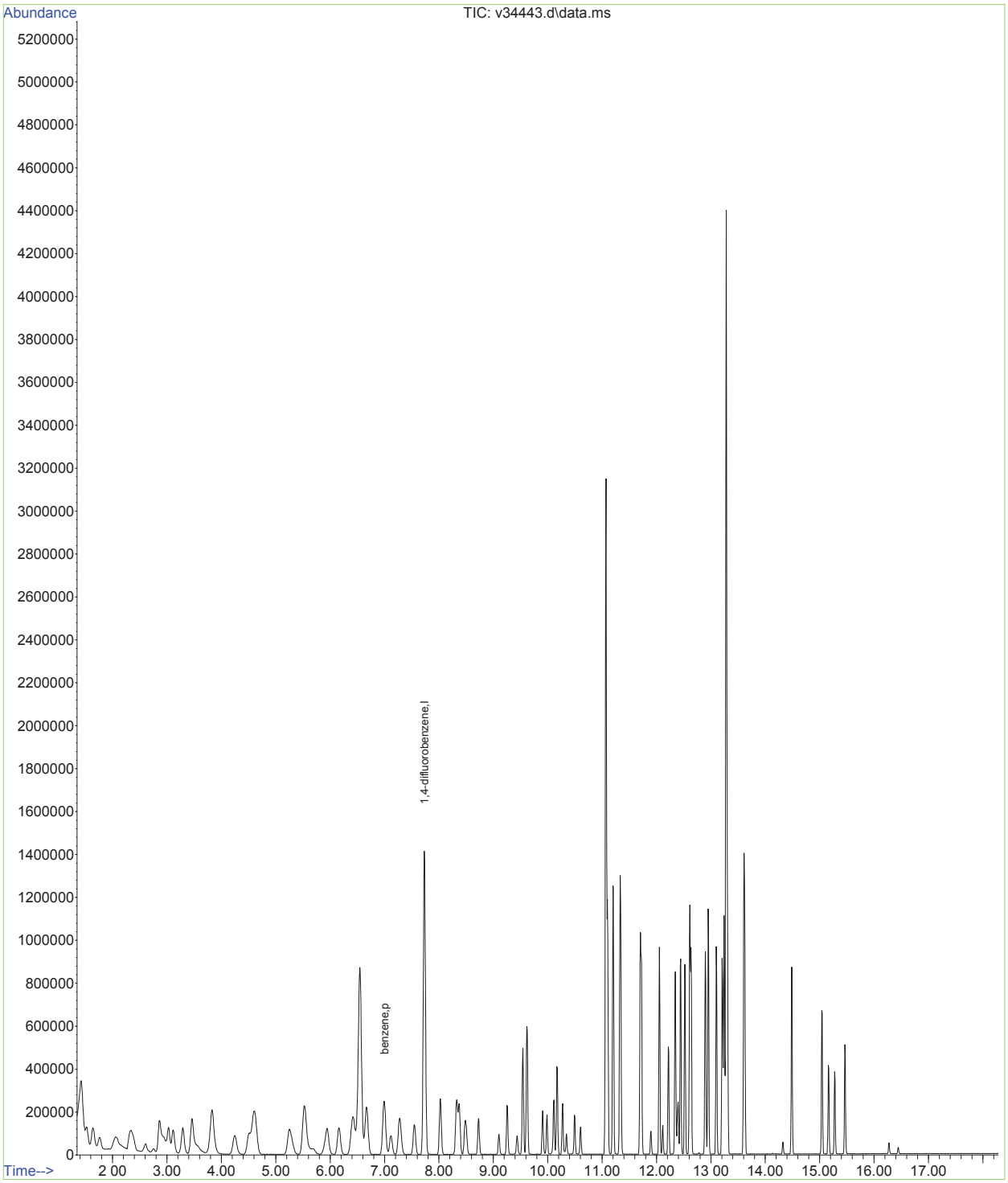
Quant Time: Oct 08 14:43:36 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Wed Sep 10 12:31:25 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-difluorobenzene	7.733	114	1833061	50.00	ug/L	0.00
Target Compounds						Qvalue
2) benzene	6.994	78	407337	9.79	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : O:\msv\1\databackup\v140909\
Data File : v34443.d
Acq On : 9 Sep 2014 3:22 pm
Operator : amym
Sample : ic1255-10
Misc : MS32663,MSV1255,,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Oct 08 14:43:36 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Wed Sep 10 12:31:25 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msv\1\databackup\v140909\
Data File : v34444.d
Acq On : 9 Sep 2014 3:48 pm
Operator : amym
Sample : ic1255-25
Misc : MS32663,MSV1255,,,,5,1
ALS Vial : 14 Sample Multiplier: 1

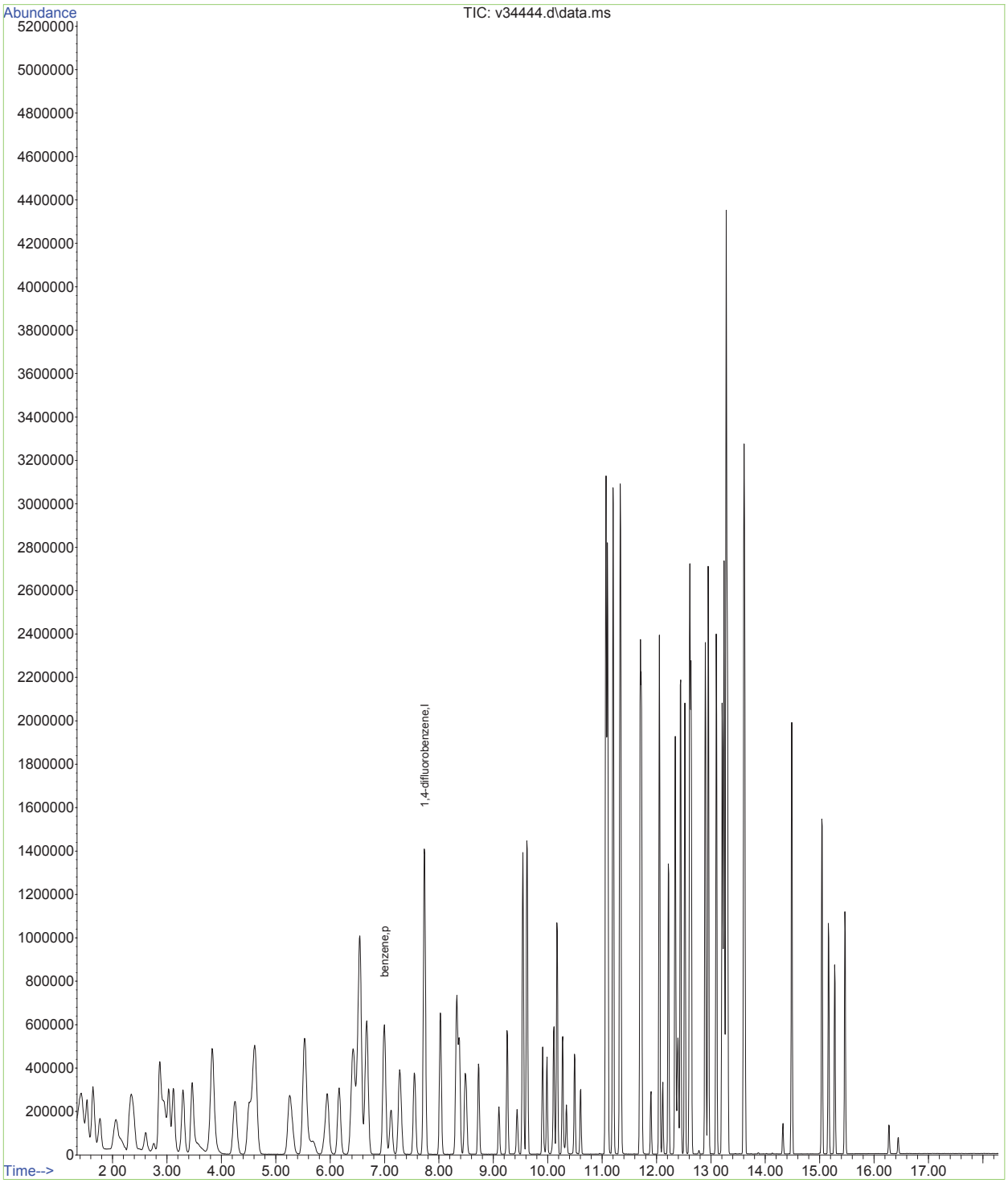
Quant Time: Oct 08 14:43:38 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Wed Sep 10 12:31:25 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-difluorobenzene	7.734	114	1842895	50.00	ug/L	0.00
Target Compounds						Qvalue
2) benzene	6.996	78	974101	23.28	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : O:\msv\1\databackup\v140909\
Data File : v34444.d
Acq On : 9 Sep 2014 3:48 pm
Operator : amym
Sample : ic1255-25
Misc : MS32663,MSV1255,,,,5,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 08 14:43:38 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Wed Sep 10 12:31:25 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msv\1\databackup\v140909\
Data File : v34445.d
Acq On : 9 Sep 2014 4:14 pm
Operator : amym
Sample : icc1255-50
Misc : MS32663,MSV1255,,,,5,1
ALS Vial : 15 Sample Multiplier: 1

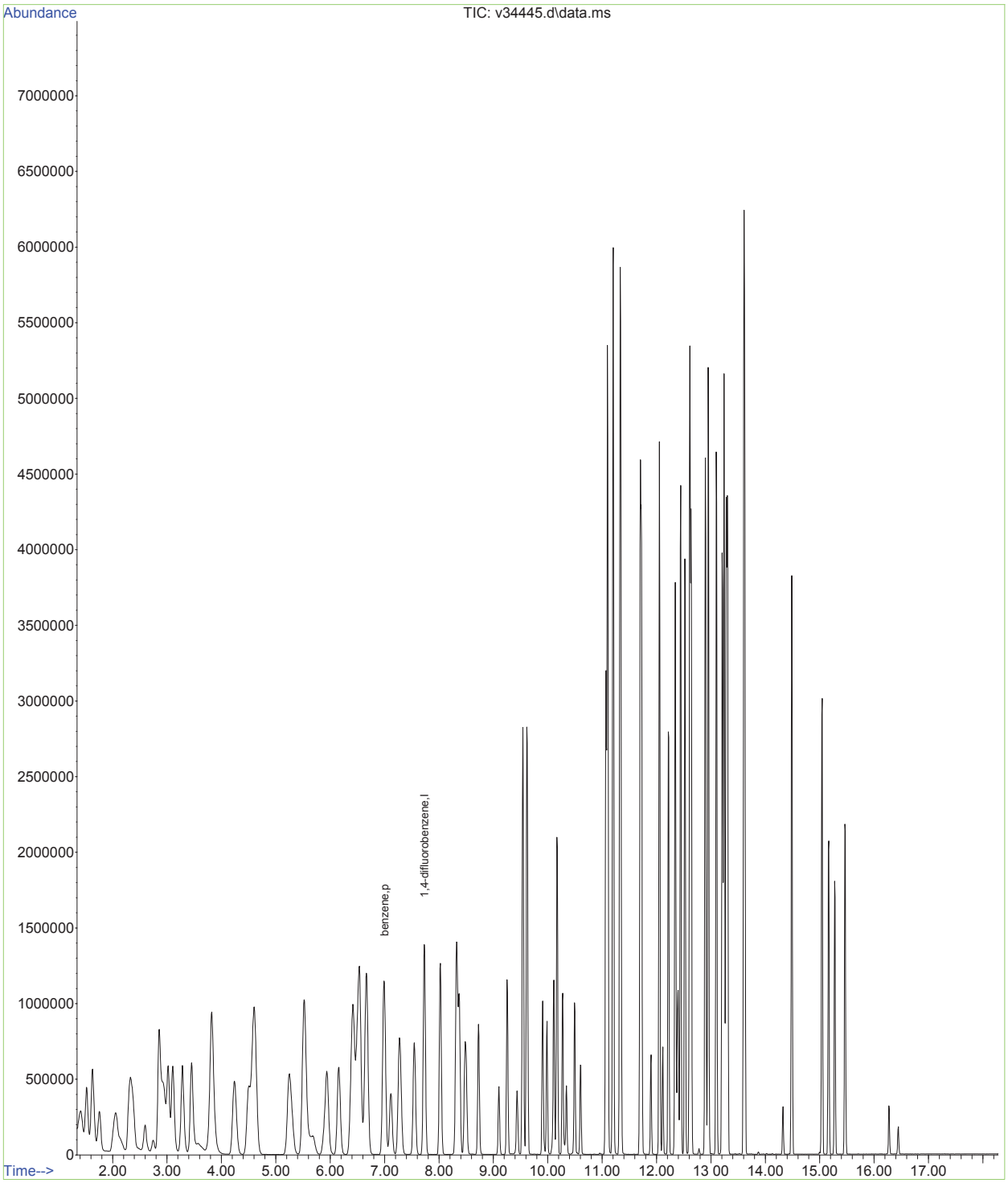
Quant Time: Oct 08 14:43:40 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Wed Sep 10 12:31:25 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-difluorobenzene	7.732	114	1838034	50.00	ug/L	0.00
Target Compounds						Qvalue
2) benzene	6.992	78	1865665	44.70	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : O:\msv\1\databackup\v140909\
Data File : v34445.d
Acq On : 9 Sep 2014 4:14 pm
Operator : amym
Sample : icc1255-50
Misc : MS32663,MSV1255,,,,5,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 08 14:43:40 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Wed Sep 10 12:31:25 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msv\1\databackup\v140909\
Data File : v34446.d
Acq On : 9 Sep 2014 4:41 pm
Operator : amym
Sample : ic1255-100
Misc : MS32663,MSV1255,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Oct 08 14:43:42 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Wed Sep 10 12:31:25 2014
Response via : Initial Calibration

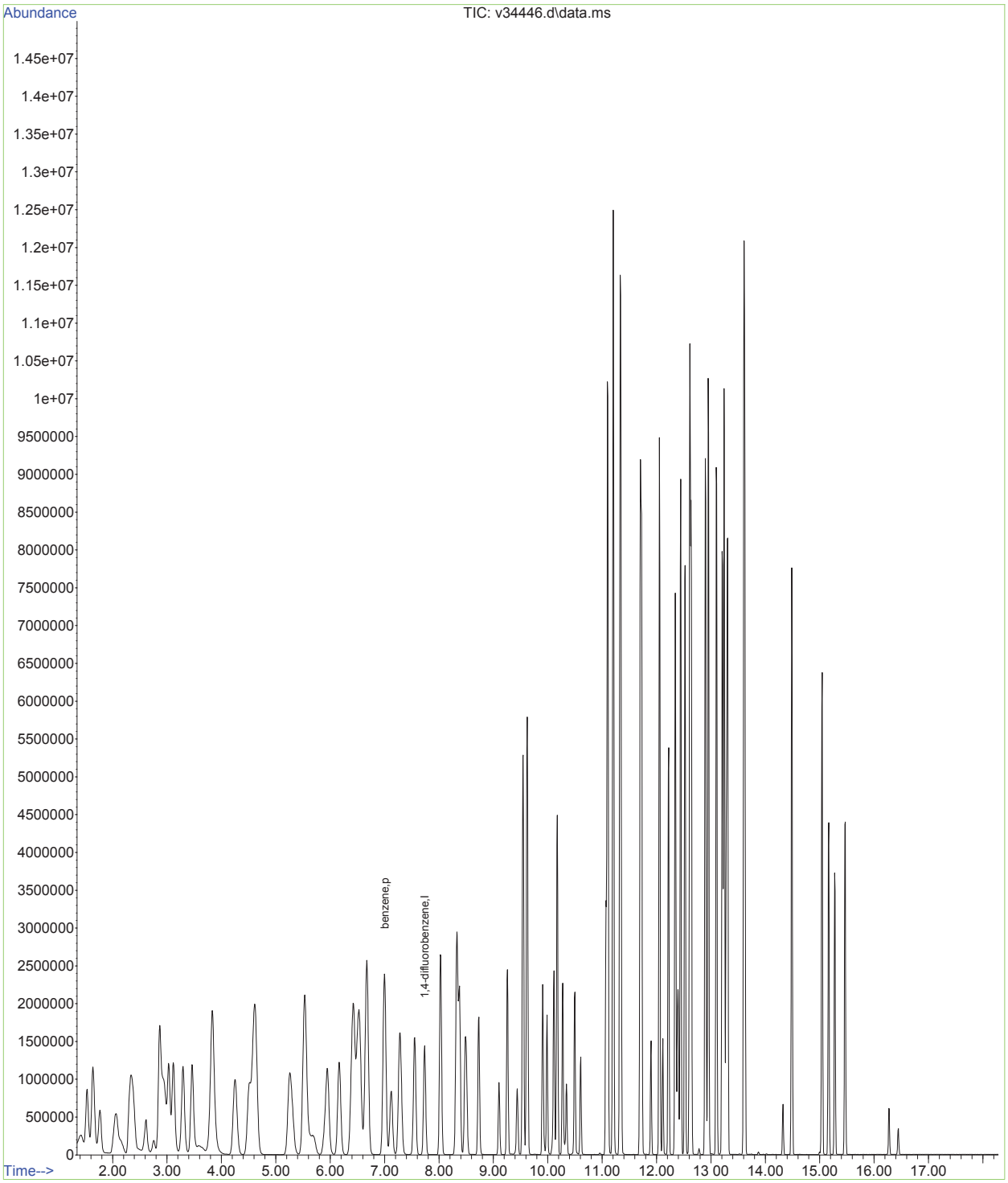
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-difluorobenzene	7.737	114	1890547	50.00	ug/L	0.00
Target Compounds						Qvalue
2) benzene	6.999	78	3927798	91.50	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST MC33299

Data Path : O:\msv\1\databackup\v140909\
Data File : v34446.d
Acq On : 9 Sep 2014 4:41 pm
Operator : amym
Sample : ic1255-100
Misc : MS32663,MSV1255,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Oct 08 14:43:42 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Wed Sep 10 12:31:25 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msv\1\databackup\v140909\
Data File : v34447.d
Acq On : 9 Sep 2014 5:07 pm
Operator : amym
Sample : ic1255-200
Misc : MS32663,MSV1255,,,,5,1
ALS Vial : 17 Sample Multiplier: 1

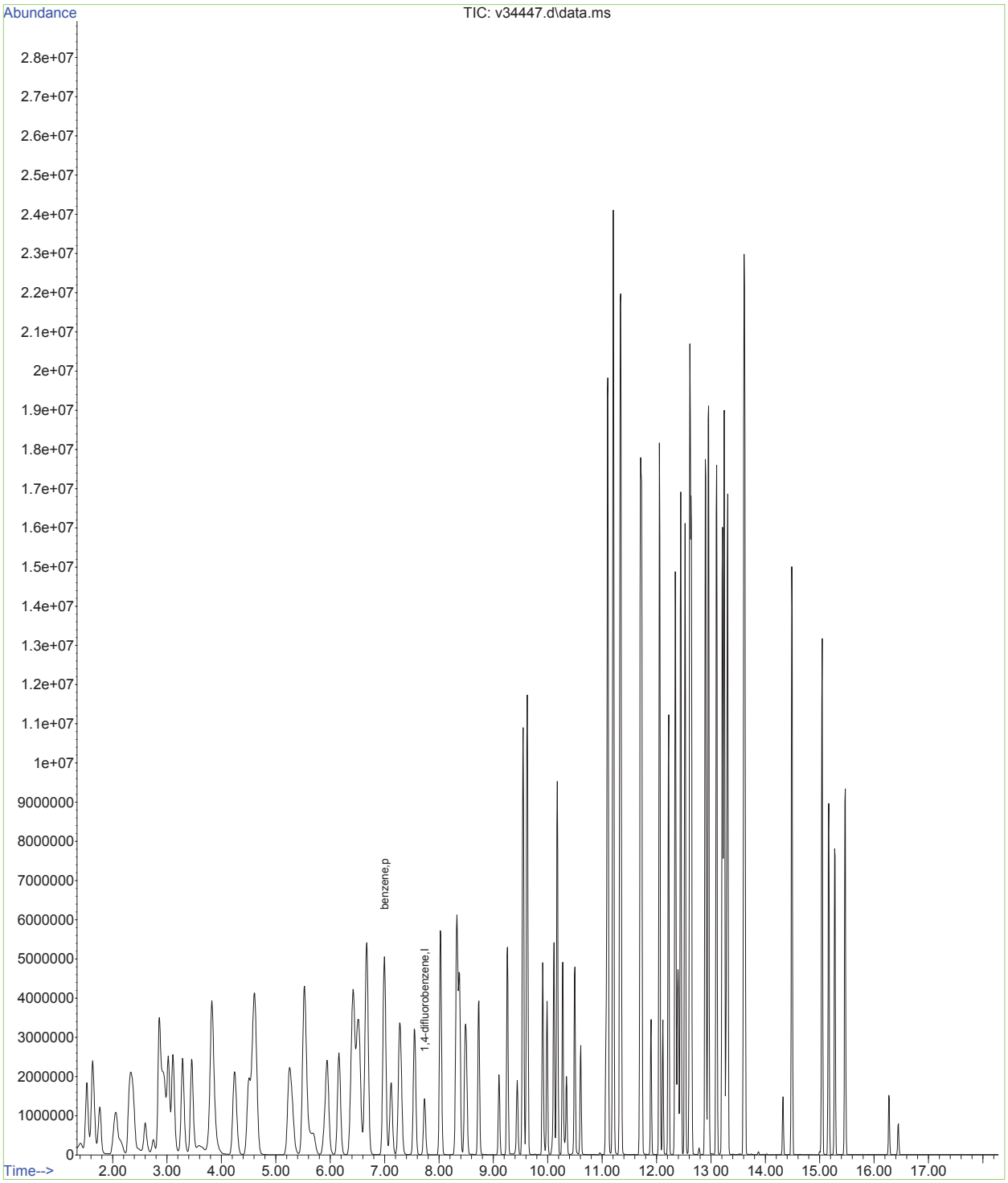
Quant Time: Oct 08 14:43:44 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Wed Sep 10 12:31:25 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-difluorobenzene	7.736	114	1897379	50.00	ug/L	0.00
Target Compounds						Qvalue
2) benzene	6.997	78	8245638	191.39	ug/L	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : O:\msv\1\databackup\v140909\
Data File : v34447.d
Acq On : 9 Sep 2014 5:07 pm
Operator : amym
Sample : ic1255-200
Misc : MS32663,MSV1255,,,,5,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Oct 08 14:43:44 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Wed Sep 10 12:31:25 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msv\1\databackup\v140909\
Data File : v34448.d
Acq On : 9 Sep 2014 5:34 pm
Operator : amym
Sample : ic1255-400
Misc : MS32663,MSV1255,,,,5,1
ALS Vial : 18 Sample Multiplier: 1

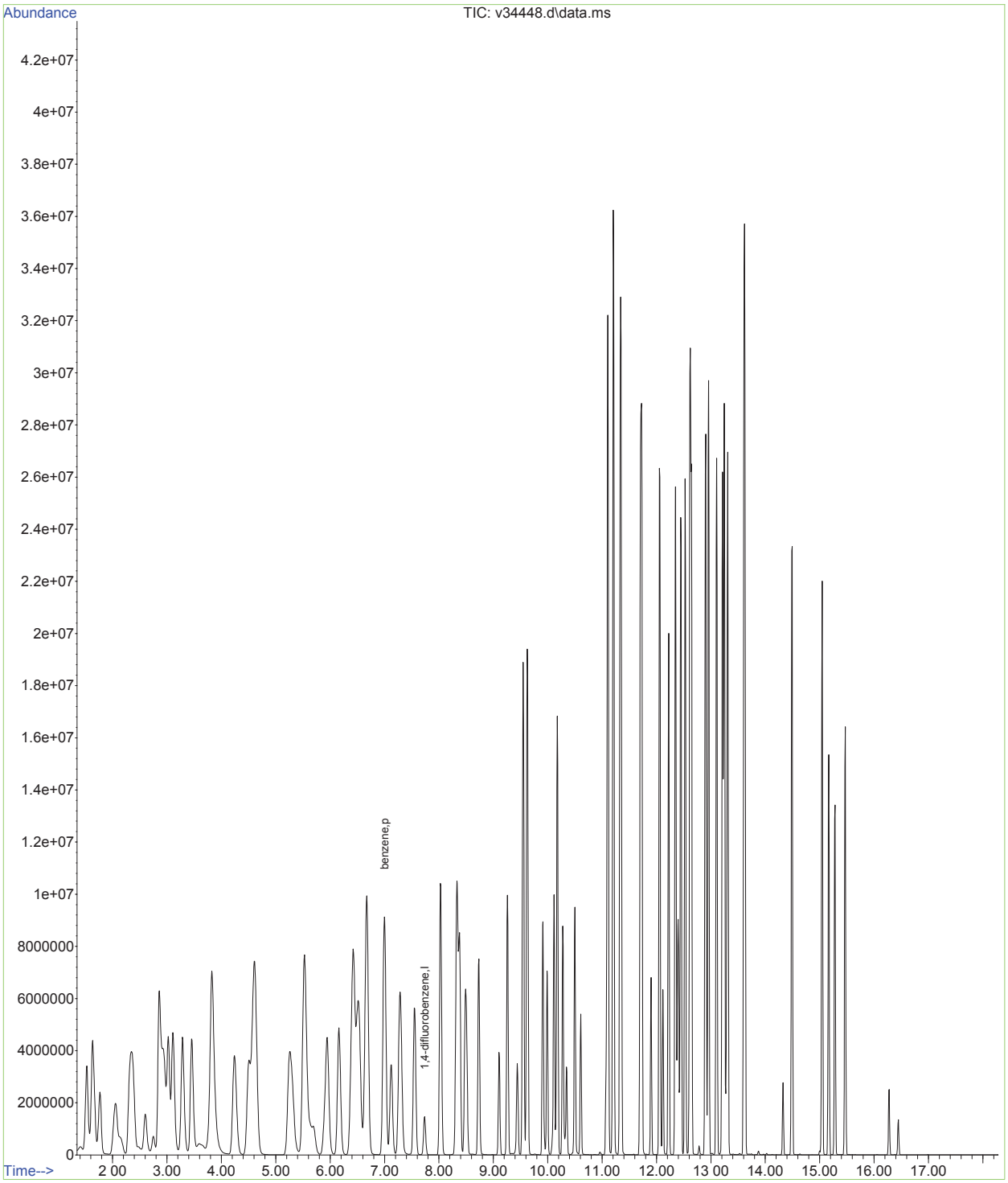
Quant Time: Oct 08 14:43:46 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Wed Sep 10 12:31:25 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-difluorobenzene	7.737	114	1891434	50.00	ug/L	0.00
Target Compounds						Qvalue
2) benzene	6.999	78	15186035	353.59	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : O:\msv\1\databackup\v140909\
Data File : v34448.d
Acq On : 9 Sep 2014 5:34 pm
Operator : amym
Sample : ic1255-400
Misc : MS32663,MSV1255,,,,5,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Oct 08 14:43:46 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Wed Sep 10 12:31:25 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msv\1\databackup\v140909\
Data File : v34451.d
Acq On : 9 Sep 2014 6:53 pm
Operator : amym
Sample : icv1255-50
Misc : MS32663,MSV1255,,,,5,1
ALS Vial : 21 Sample Multiplier: 1

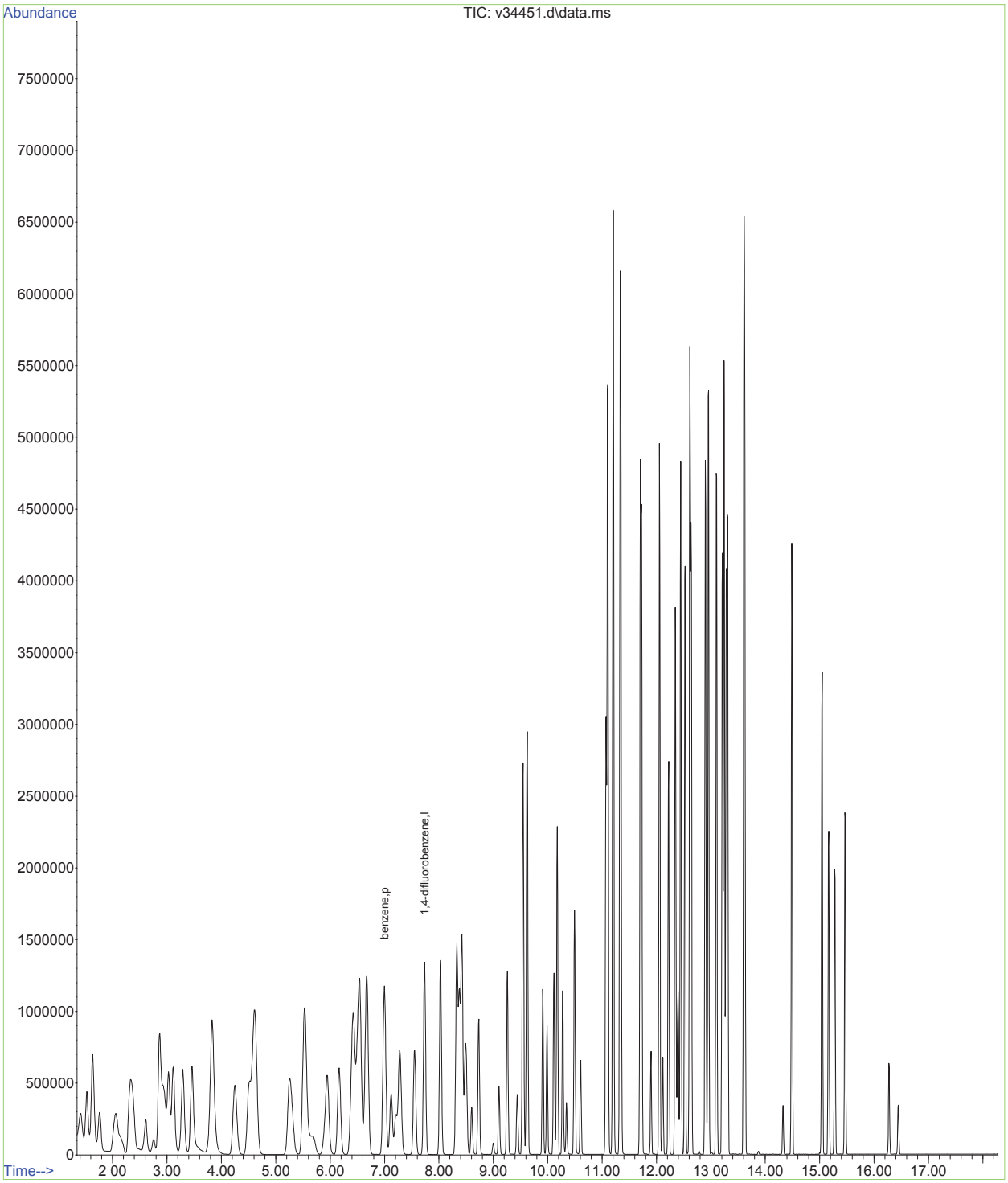
Quant Time: Oct 08 17:03:39 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Oct 08 17:03:24 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-difluorobenzene	7.736	114	1766860	50.00	ug/L	0.00
Target Compounds						Qvalue
2) benzene	6.998	78	1937126	52.90	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : O:\msv\1\databackup\v140909\
Data File : v34451.d
Acq On : 9 Sep 2014 6:53 pm
Operator : amym
Sample : icv1255-50
Misc : MS32663,MSV1255,,,,5,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Oct 08 17:03:39 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Oct 08 17:03:24 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msv\1\databackup\v140909\
Data File : v34457.d
Acq On : 10 Sep 2014 1:06 pm
Operator : amym
Sample : cc1255-50
Misc : MS32663,MSV1255,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 28 16:05:36 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Oct 08 17:03:24 2015
Response via : Initial Calibration

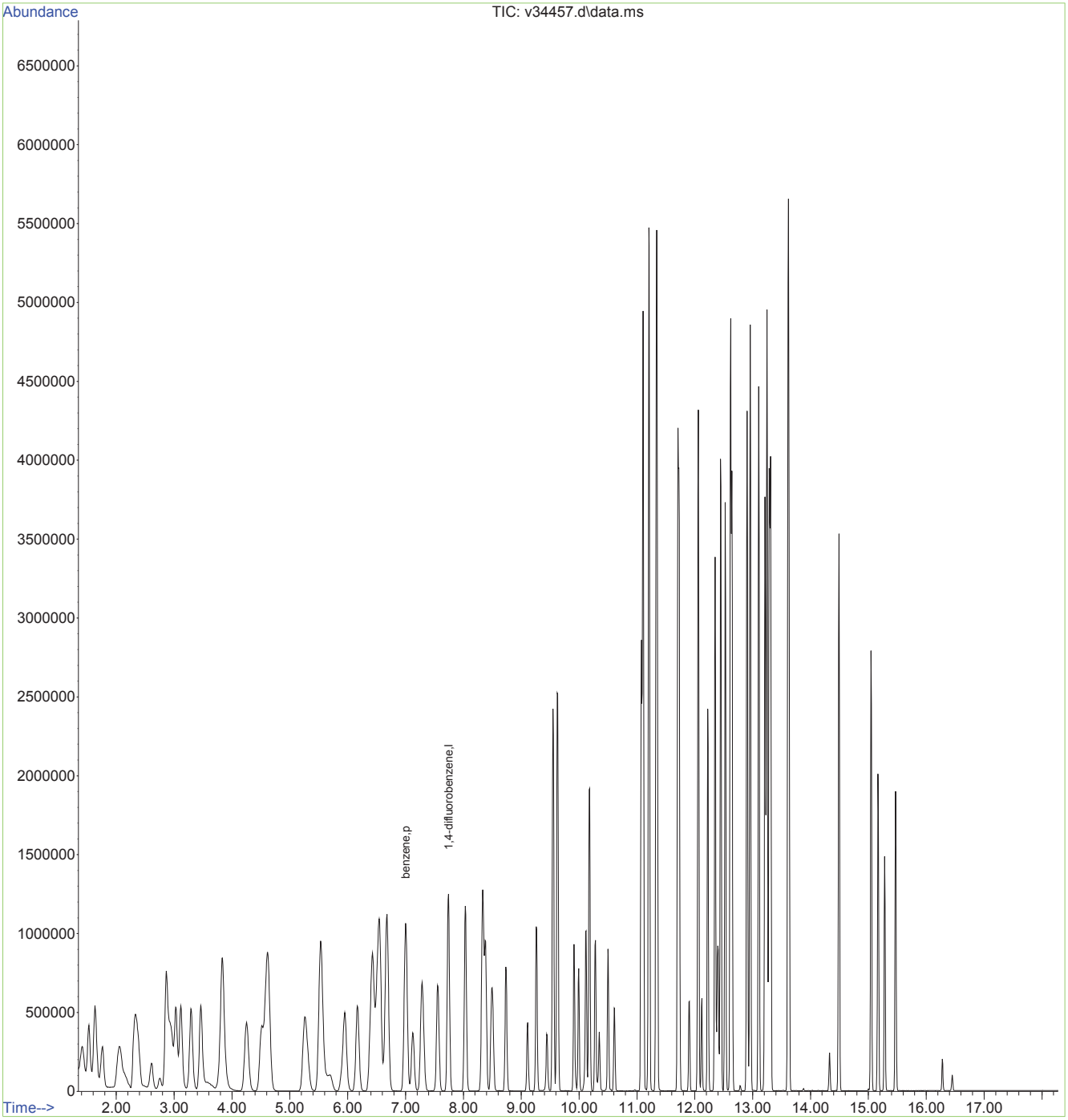
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-difluorobenzene	7.742	114	1615348	50.00	ug/L	0.00
Target Compounds						Qvalue
2) benzene	7.003	78	1707619	51.00	ug/L	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\msv\1\databackup\v140909\
Data File : v34457.d
Acq On : 10 Sep 2014 1:06 pm
Operator : amym
Sample : cc1255-50
Misc : MS32663,MSV1255,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 28 16:05:36 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Oct 08 17:03:24 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msv\1\databackup\v140909\
Data File : v34463.d
Acq On : 10 Sep 2014 3:45 pm
Operator : amym
Sample : mc33299-3
Misc : MS32700,MSV1255,,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 28 16:05:47 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Oct 08 17:03:24 2015
Response via : Initial Calibration

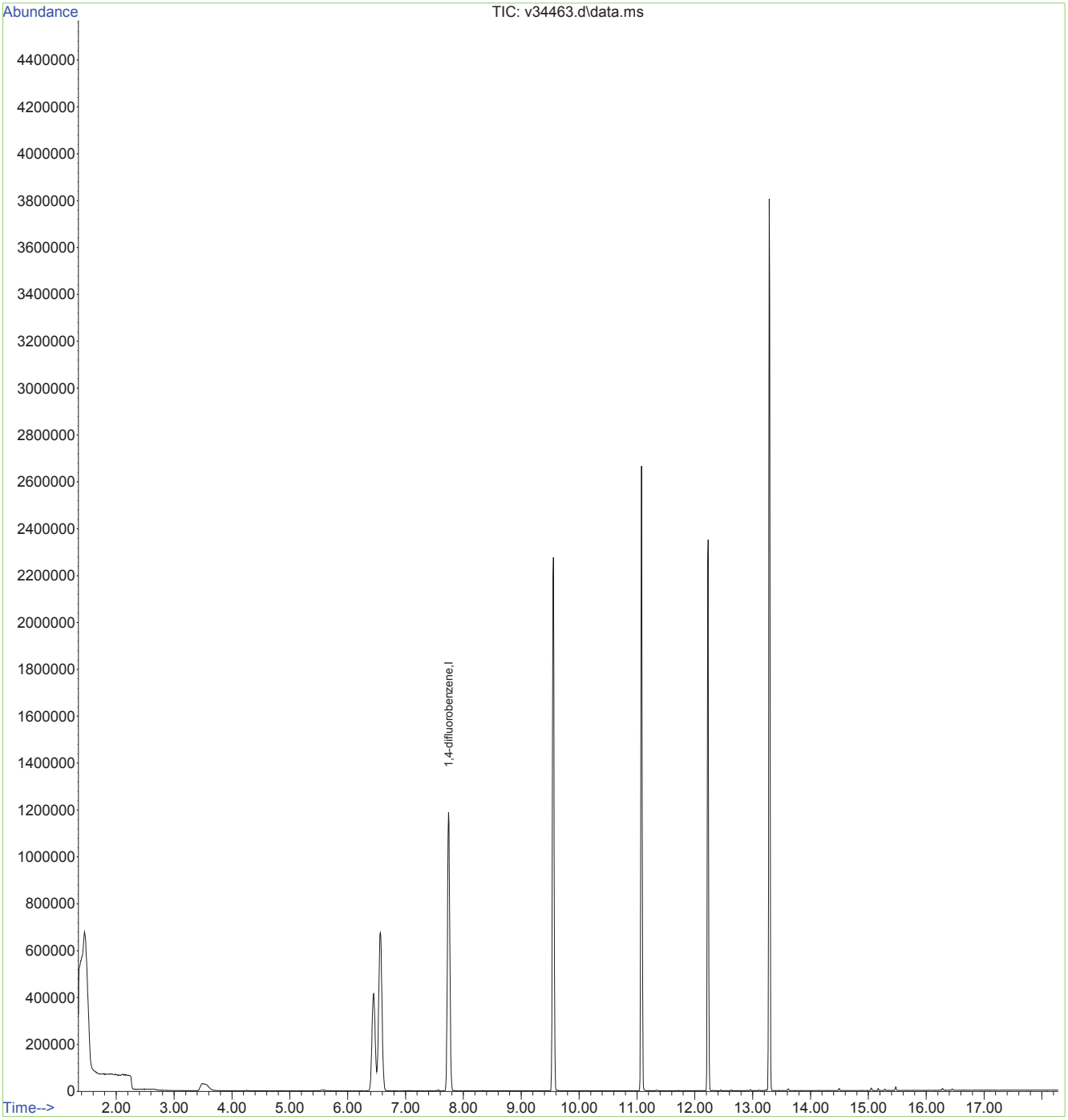
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-difluorobenzene	7.746	114	1569781	50.00 ug/L	0.01
Target Compounds					Qvalue
2) benzene	7.016	78	1771	Below Cal	52

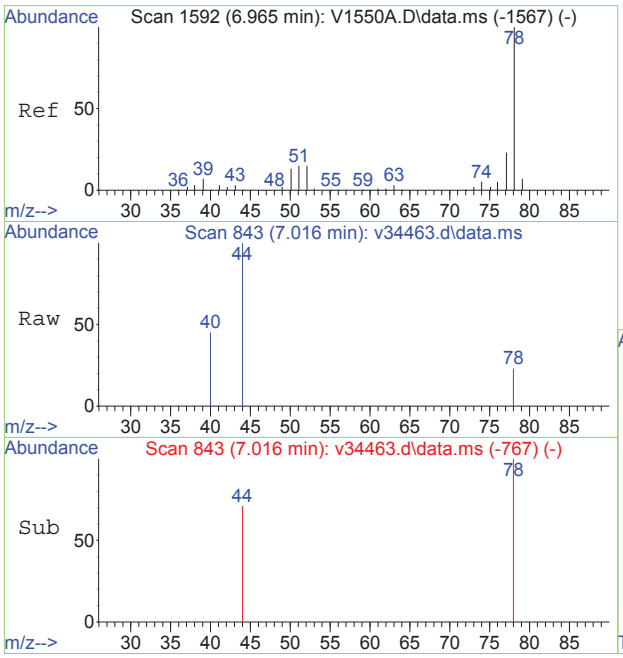
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\msv\1\databackup\v140909\
Data File : v34463.d
Acq On : 10 Sep 2014 3:45 pm
Operator : amym
Sample : mc33299-3
Misc : MS32700,MSV1255,,,,5,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 28 16:05:47 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Oct 08 17:03:24 2015
Response via : Initial Calibration

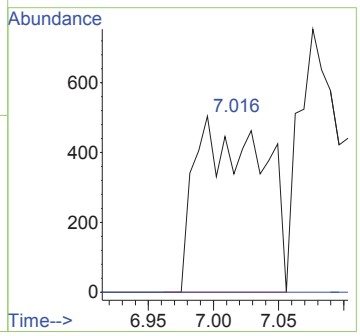




#2
benzene
Concen: Below Cal
RT: 7.016 min Scan# 843
Delta R.T. 0.024 min
Lab File: v34463.d
Acq: 10 Sep 2014 3:45 pm

Tgt Ion: 78 Resp: 1771

Ion	Ratio	Lower	Upper
78	100		
77	0.0	0.0	53.3



Quantitation Report (QT Reviewed)

Data Path : O:\msv\1\databackup\v140909\
Data File : v34458.d
Acq On : 10 Sep 2014 1:33 pm
Operator : amym
Sample : bs
Misc : MS32663,MSV1255,,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 28 16:05:39 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Oct 08 17:03:24 2015
Response via : Initial Calibration

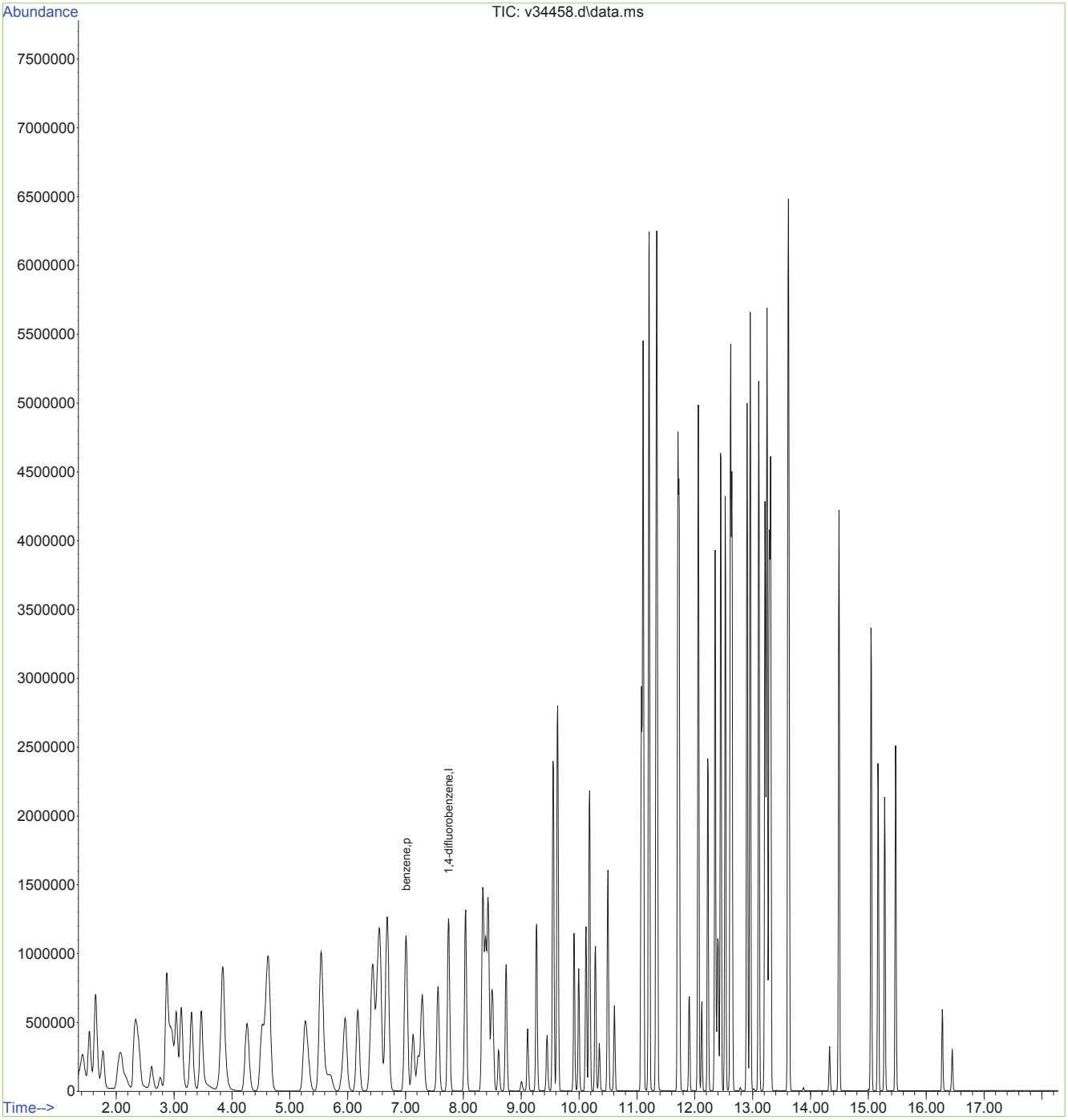
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-difluorobenzene	7.745	114	1652109	50.00	ug/L	0.01
Target Compounds						Qvalue
2) benzene	7.009	78	1846592	53.94	ug/L	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\msv\1\databackup\v140909\
Data File : v34458.d
Acq On : 10 Sep 2014 1:33 pm
Operator : amym
Sample : bs
Misc : MS32663,MSV1255,,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 28 16:05:39 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Oct 08 17:03:24 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msv\1\databackup\v140909\
Data File : v34459.d
Acq On : 10 Sep 2014 1:59 pm
Operator : amym
Sample : bsd
Misc : MS32663,MSV1255,,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 28 16:05:41 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Oct 08 17:03:24 2015
Response via : Initial Calibration

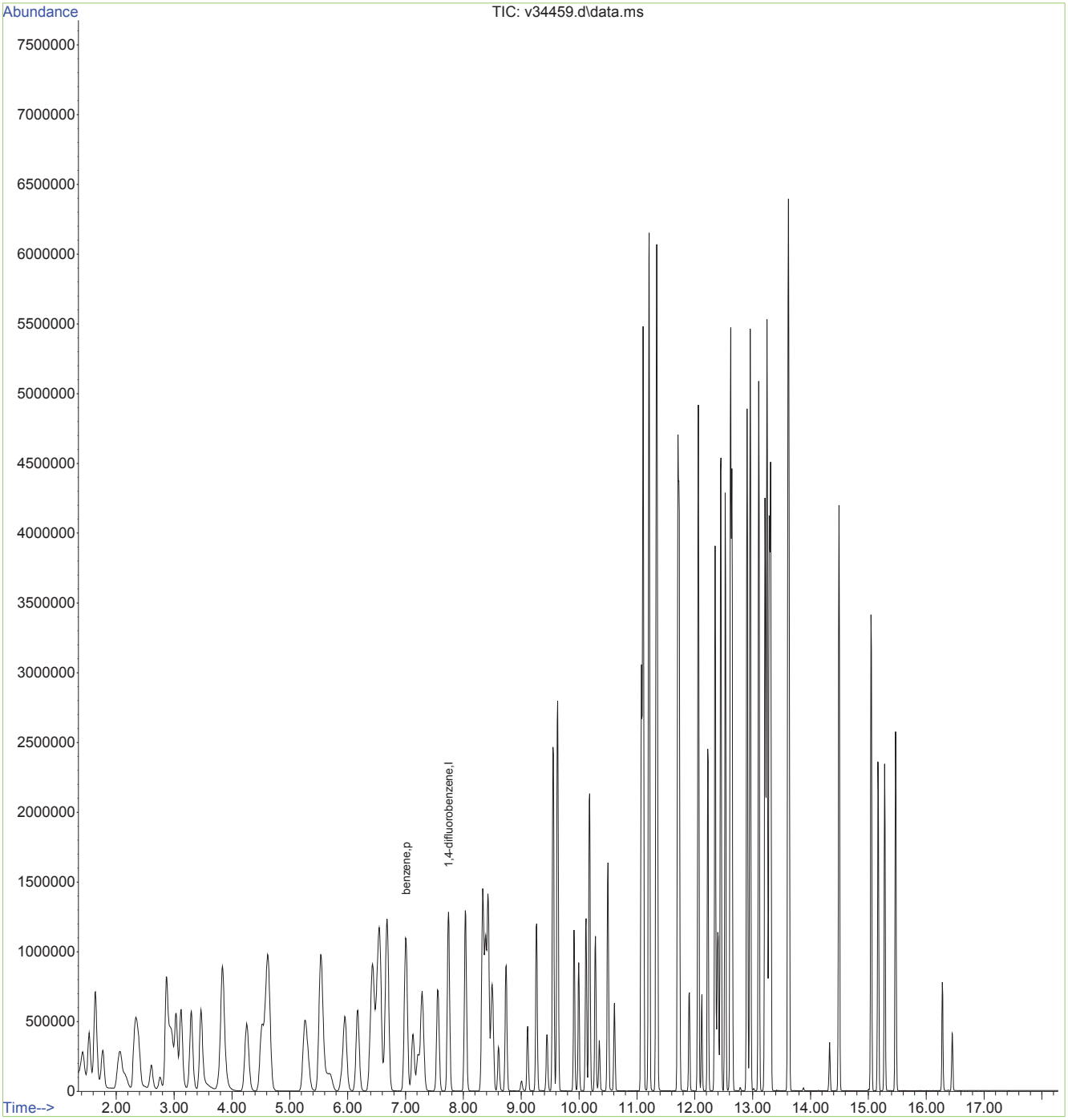
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-difluorobenzene	7.743	114	1677937	50.00	ug/L	0.01
Target Compounds						Qvalue
2) benzene	7.006	78	1819327	52.32	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\msv\1\databackup\v140909\
Data File : v34459.d
Acq On : 10 Sep 2014 1:59 pm
Operator : amym
Sample : bsd
Misc : MS32663,MSV1255,,,,5,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 28 16:05:41 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Oct 08 17:03:24 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msv\1\databackup\v140909\
Data File : v34461.d
Acq On : 10 Sep 2014 2:52 pm
Operator : amym
Sample : mb
Misc : MS32700,MSV1255,,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 28 16:05:43 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Oct 08 17:03:24 2015
Response via : Initial Calibration

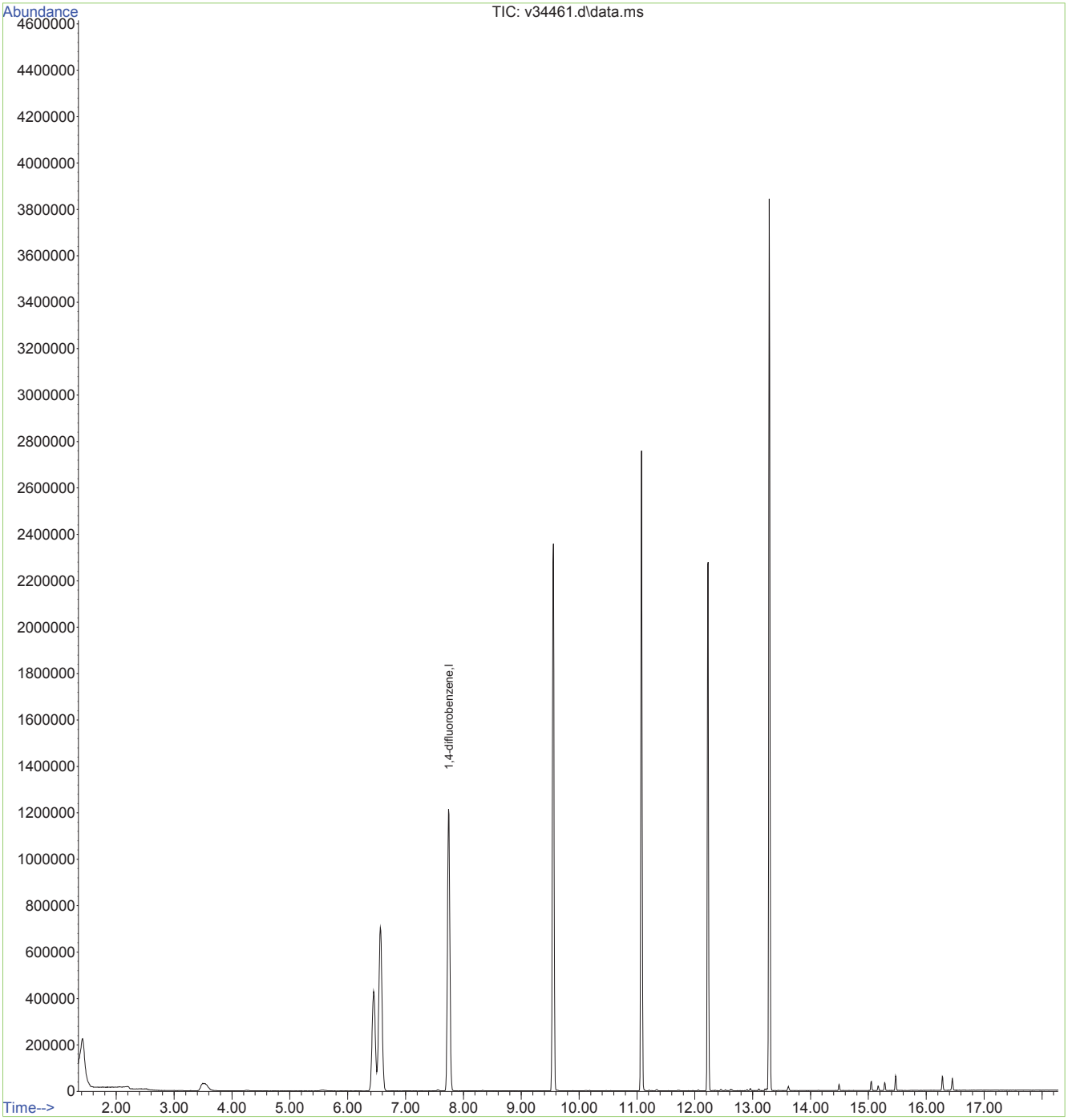
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-difluorobenzene	7.747	114	1616486	50.00 ug/L	0.01
Target Compounds					Qvalue
2) benzene	7.043	78	3648	Below Cal	52

(#) = qualifier out of range (m) = manual integration (+) = signals summed

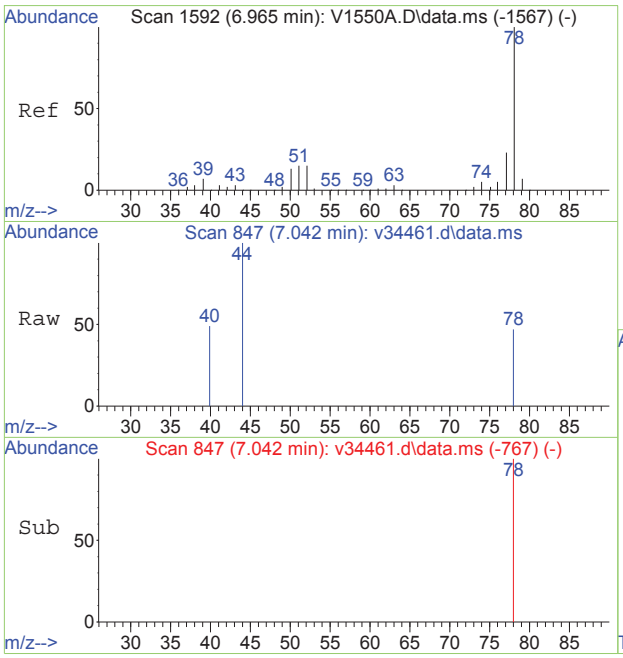
Quantitation Report (QT Reviewed)

Data Path : O:\msv\1\databackup\v140909\
Data File : v34461.d
Acq On : 10 Sep 2014 2:52 pm
Operator : amym
Sample : mb
Misc : MS32700,MSV1255,,,,5,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 28 16:05:43 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Oct 08 17:03:24 2015
Response via : Initial Calibration



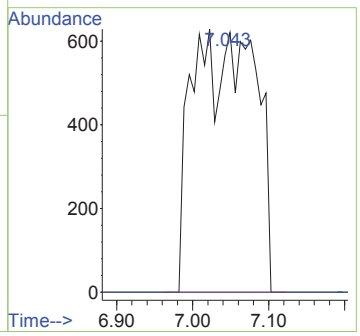
SGS ACCUTEST
MC33299



#2
benzene
Concen: Below Cal
RT: 7.043 min Scan# 847
Delta R.T. 0.051 min
Lab File: v34461.d
Acq: 10 Sep 2014 2:52 pm

Tgt Ion: 78 Resp: 3648

Ion	Ratio	Lower	Upper
78	100		
77	0.0	0.0	53.3



Quantitation Report (QT Reviewed)

Data Path : O:\msv\1\databackup\v140909\
Data File : v34473.d
Acq On : 10 Sep 2014 8:38 pm
Operator : amym
Sample : mc33290-28ms
Misc : MS32700,MSV1255,,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Oct 28 16:06:05 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Oct 08 17:03:24 2015
Response via : Initial Calibration

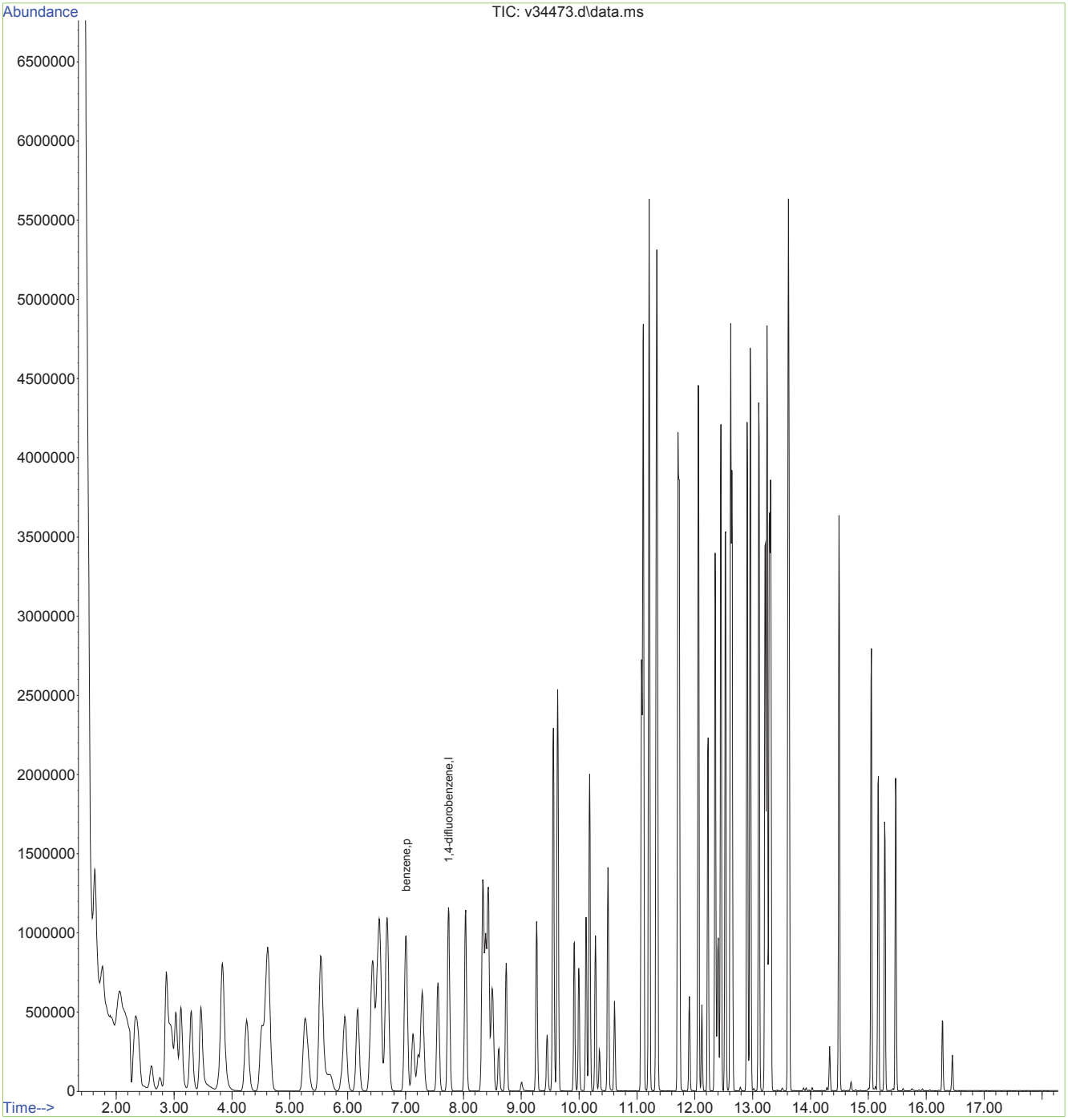
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-difluorobenzene	7.745	114	1501895	50.00	ug/L	0.01
Target Compounds						Qvalue
2) benzene	7.007	78	1585078	50.91	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\msv\1\databackup\v140909\
Data File : v34473.d
Acq On : 10 Sep 2014 8:38 pm
Operator : amym
Sample : mc33290-28ms
Misc : MS32700,MSV1255,,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Oct 28 16:06:05 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Oct 08 17:03:24 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msv\1\databackup\v140909\
Data File : v34474.d
Acq On : 10 Sep 2014 9:04 pm
Operator : amym
Sample : mc33290-28msd
Misc : MS32700,MSV1255,,,,5,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Oct 28 16:06:07 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Oct 08 17:03:24 2015
Response via : Initial Calibration

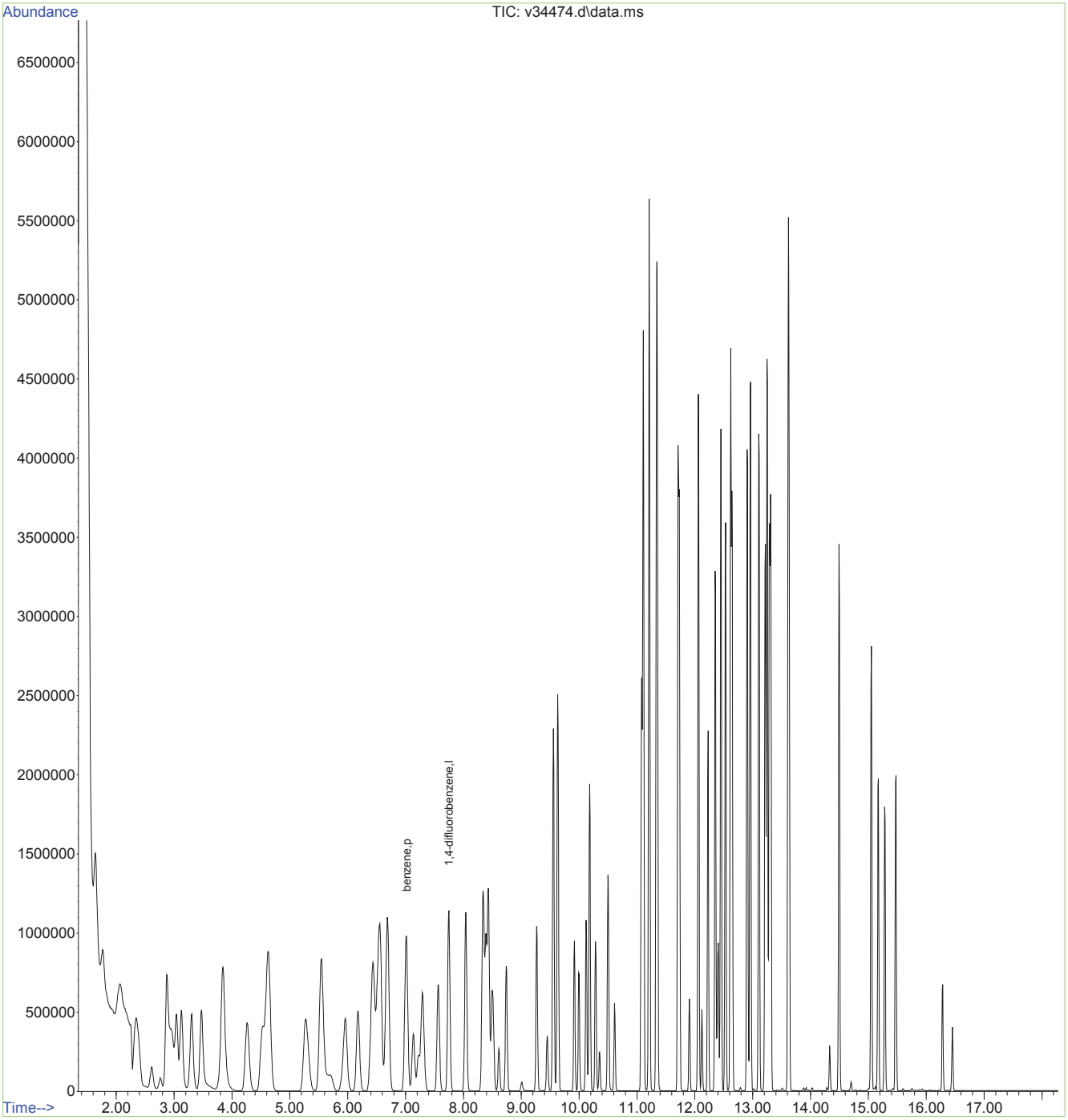
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-difluorobenzene	7.749	114	1483451	50.00	ug/L	0.02
Target Compounds						Qvalue
2) benzene	7.012	78	1563340	50.84	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\msv\1\databackup\v140909\
Data File : v34474.d
Acq On : 10 Sep 2014 9:04 pm
Operator : amym
Sample : mc33290-28msd
Misc : MS32700,MSV1255,,,,5,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Oct 28 16:06:07 2015
Quant Method : O:\msv\1\methods\v140909wx.m
Quant Title : SW-846 Method 8260
QLast Update : Thu Oct 08 17:03:24 2015
Response via : Initial Calibration



Internal Sample Tracking Chronicle

Shell Oil

Job No: MC33299

URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL
Project No: 21562973.15000

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC33299-1 Collected: 02-SEP-14 16:30 By: EA MW28-090214 (32-34')			Received: 03-SEP-14 By:			
MC33299-1	SM21 2540 B MOD.	04-SEP-14	BF			%SOL
MC33299-1	SW846 8015	04-SEP-14 12:02	AF			V8015GRO
MC33299-1	SW846 8011	05-SEP-14 13:12	NK	04-SEP-14	AZ	V8011SL
MC33299-1	SW846 8270D BY SIM	09-SEP-14 14:20	WK	04-SEP-14	AJ	B8270SIMSL
MC33299-1	SW846 8270D	11-SEP-14 09:27	WK	04-SEP-14	AJ	AB8270SL+
MC33299-1	SW846 8260C	11-SEP-14 14:21	KD			V8260SL+
MC33299-2 Collected: 02-SEP-14 16:45 By: EA MW28-090214 (36-40')			Received: 03-SEP-14 By:			
MC33299-2	SM21 2540 B MOD.	04-SEP-14	BF			%SOL
MC33299-2	SW846 8015	04-SEP-14 09:30	AF			V8015GRO
MC33299-2	SW846 8011	05-SEP-14 12:51	NK	04-SEP-14	AZ	V8011SL
MC33299-2	SW846 8270D BY SIM	09-SEP-14 13:58	WK	04-SEP-14	AJ	B8270SIMSL
MC33299-2	SW846 8270D	11-SEP-14 02:56	WK	04-SEP-14	AJ	AB8270SL+
MC33299-2	SW846 8260C	11-SEP-14 14:51	KD			V8260SL+
MC33299-3 Collected: 02-SEP-14 00:00 By: EA TB-090214-HCL			Received: 03-SEP-14 By:			
MC33299-3	SW846 8260C	10-SEP-14 15:45	AMY			V8260SL+
MC33299-4 Collected: 02-SEP-14 00:00 By: EA TB-090214-ST			Received: 03-SEP-14 By:			
MC33299-4	SW846 8011	16-SEP-14 19:33	NK	15-SEP-14	MT	V8011SL

SGS Accutest Internal Chain of Custody

Job Number: MC33299
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL
Received: 09/03/14

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC33299-1.1	Walk In Ref #9	Alireza Zeighami	09/04/14 07:44	Retrieve from Storage
MC33299-1.1	Alireza Zeighami	Walk In Ref #9	09/04/14 08:39	Return to Storage
MC33299-1.1	Scott Parsick		10/27/14 14:48	Disposed
MC33299-1.2	Walk In Ref #9	Bijan Firowznin	09/04/14 08:12	Retrieve from Storage
MC33299-1.2	Bijan Firowznin	Walk In Ref #9	09/04/14 09:08	Return to Storage
MC33299-1.2	Scott Parsick		10/27/14 14:48	Disposed
MC33299-1.3	VOC Ref #10	Krysten Dufort	09/11/14 11:55	Retrieve from Storage
MC33299-1.3	Krysten Dufort	GCMSM	09/11/14 11:55	Load on Instrument
MC33299-1.3	GCMSM	Krysten Dufort	09/12/14 09:11	Unload from Instrument
MC33299-1.3	Krysten Dufort	VOC Ref #10	09/12/14 09:11	Return to Storage
MC33299-1.3	Scott Parsick		10/27/14 14:48	Disposed
MC33299-1.5	VOC Ref #10	Anthony Franciosa	09/04/14 07:28	Retrieve from Storage
MC33299-1.5	Anthony Franciosa	GCAB	09/04/14 07:28	Load on Instrument
MC33299-1.5	GCAB	Anthony Franciosa	09/04/14 09:16	Unload from Instrument
MC33299-1.5	Anthony Franciosa	VOC Ref #10	09/04/14 09:16	Return to Storage
MC33299-1.5	Scott Parsick		10/27/14 14:48	Disposed
MC33299-1.7	VOC Ref #10	Jaime Maslowski	09/04/14 14:57	Retrieve from Storage
MC33299-1.7	Jaime Maslowski	VOC Ref #10	09/05/14 09:10	Return to Storage
MC33299-1.7	Scott Parsick		10/27/14 14:48	Disposed
MC33299-2.1	Walk In Ref #9	Alireza Zeighami	09/04/14 07:44	Retrieve from Storage
MC33299-2.1	Alireza Zeighami	Walk In Ref #9	09/04/14 08:39	Return to Storage
MC33299-2.1	Scott Parsick		10/27/14 14:48	Disposed
MC33299-2.2	Walk In Ref #9	Bijan Firowznin	09/04/14 08:12	Retrieve from Storage
MC33299-2.2	Bijan Firowznin	Walk In Ref #9	09/04/14 09:08	Return to Storage
MC33299-2.2	Scott Parsick		10/27/14 14:48	Disposed
MC33299-2.7	VOC Ref #10	Krysten Dufort	09/11/14 11:55	Retrieve from Storage
MC33299-2.7	Krysten Dufort	GCMSM	09/11/14 11:55	Load on Instrument
MC33299-2.7	GCMSM	Krysten Dufort	09/12/14 09:11	Unload from Instrument
MC33299-2.7	Krysten Dufort	VOC Ref #10	09/12/14 09:11	Return to Storage
MC33299-2.7	Scott Parsick		10/27/14 14:48	Disposed
MC33299-2.11	VOC Ref #10	Krysten Dufort	09/11/14 11:55	Retrieve from Storage
MC33299-2.11	Krysten Dufort	GCMSM	09/11/14 11:55	Load on Instrument
MC33299-2.11	GCMSM	Krysten Dufort	09/12/14 09:11	Unload from Instrument
MC33299-2.11	Krysten Dufort	VOC Ref #10	09/12/14 09:11	Return to Storage
MC33299-2.11	Scott Parsick		10/27/14 14:48	Disposed

SGS Accutest Internal Chain of Custody

Job Number: MC33299
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL
Received: 09/03/14

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC33299-2.12	VOC Ref #10	Krysten Dufort	09/11/14 11:55	Retrieve from Storage
MC33299-2.12	Krysten Dufort	GCMSM	09/11/14 11:55	Load on Instrument
MC33299-2.12	GCMSM	Krysten Dufort	09/12/14 09:11	Unload from Instrument
MC33299-2.12	Krysten Dufort	VOC Ref #10	09/12/14 09:11	Return to Storage
MC33299-2.12	Scott Parsick		10/27/14 14:48	Disposed
MC33299-2.19	VOC Ref #10	Jaime Maslowski	09/04/14 14:57	Retrieve from Storage
MC33299-2.19	Jaime Maslowski	VOC Ref #10	09/05/14 09:10	Return to Storage
MC33299-2.19	Scott Parsick		10/27/14 14:48	Disposed
MC33299-2.21	VOC Ref #10	Anthony Franciosa	09/04/14 07:28	Retrieve from Storage
MC33299-2.21	Anthony Franciosa	GCAB	09/04/14 07:28	Load on Instrument
MC33299-2.21	GCAB	Anthony Franciosa	09/04/14 09:16	Unload from Instrument
MC33299-2.21	Anthony Franciosa	VOC Ref #10	09/04/14 09:16	Return to Storage
MC33299-2.21	Scott Parsick		10/27/14 14:48	Disposed
MC33299-3.1	VOC Ref #3	Amy Min Yang	09/10/14 13:55	Retrieve from Storage
MC33299-3.1	Amy Min Yang	GCMSV	09/10/14 13:55	Load on Instrument
MC33299-3.1	GCMSV	Amy Min Yang	09/11/14 09:34	Unload from Instrument
MC33299-3.1	Amy Min Yang	VOC Ref #3	09/11/14 09:34	Return to Storage
MC33299-3.1	Scott Parsick		10/27/14 14:48	Disposed
MC33299-4.2	Walk In Ref #22	Marc Tahtamoni	09/15/14 14:24	Retrieve from Storage
MC33299-4.2	Scott Parsick		10/27/14 14:48	Disposed

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: MC33299
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSV1255-MB	V34461.D	1	09/10/14	AMY	n/a	n/a	MSV1255

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33299-3

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	

Method Blank Summary

Job Number: MC33299
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSV1255-MB	V34461.D	1	09/10/14	AMY	n/a	n/a	MSV1255

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33299-3

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

Method Blank Summary

Job Number: MC33299
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSV1255-MB	V34461.D	1	09/10/14	AMY	n/a	n/a	MSV1255

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33299-3

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	99%	70-130%
2037-26-5	Toluene-D8	103%	70-130%
460-00-4	4-Bromofluorobenzene	97%	70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Method Blank Summary

Job Number: MC33299
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSM2411-MB	M68096.D	1	09/11/14	KD	n/a	n/a	MSM2411

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33299-1, MC33299-2

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.8	ug/kg	
107-02-8	Acrolein	ND	25	8.8	ug/kg	
107-13-1	Acrylonitrile	ND	25	2.7	ug/kg	
71-43-2	Benzene	ND	0.50	0.34	ug/kg	
108-86-1	Bromobenzene	ND	5.0	0.25	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	0.35	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	0.21	ug/kg	
75-25-2	Bromoform	ND	2.0	0.35	ug/kg	
74-83-9	Bromomethane	ND	2.0	0.60	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	3.1	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	0.24	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	0.75	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	0.21	ug/kg	
75-15-0	Carbon disulfide	ND	5.0	0.13	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	0.22	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	0.16	ug/kg	
75-00-3	Chloroethane	ND	5.0	0.76	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/kg	
67-66-3	Chloroform	ND	2.0	0.17	ug/kg	
74-87-3	Chloromethane	ND	5.0	0.56	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	0.19	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	0.27	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	0.32	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	2.0	0.21	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	2.0	0.30	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	2.0	0.35	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.81	ug/kg	
75-34-3	1,1-Dichloroethane	ND	2.0	0.27	ug/kg	
107-06-2	1,2-Dichloroethane	ND	2.0	0.32	ug/kg	
75-35-4	1,1-Dichloroethene	ND	2.0	0.41	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	2.0	0.45	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	2.0	0.42	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	0.42	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	0.33	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	0.56	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	0.26	ug/kg	

Method Blank Summary

Job Number: MC33299
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSM2411-MB	M68096.D	1	09/11/14	KD	n/a	n/a	MSM2411

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33299-1, MC33299-2

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.23	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.26	ug/kg	
123-91-1	1,4-Dioxane	ND	25	20	ug/kg	
97-63-2	Ethyl methacrylate	ND	5.0	0.36	ug/kg	
100-41-4	Ethylbenzene	ND	2.0	0.69	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.0	0.57	ug/kg	
591-78-6	2-Hexanone	ND	10	0.76	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	0.17	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	0.17	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	2.0	0.18	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.54	ug/kg	
74-95-3	Methylene bromide	ND	5.0	0.46	ug/kg	
75-09-2	Methylene chloride	ND	2.0	0.53	ug/kg	
91-20-3	Naphthalene	ND	5.0	0.40	ug/kg	
103-65-1	n-Propylbenzene	ND	5.0	0.15	ug/kg	
100-42-5	Styrene	ND	5.0	0.17	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.40	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.39	ug/kg	
127-18-4	Tetrachloroethene	ND	2.0	0.31	ug/kg	
108-88-3	Toluene	ND	5.0	0.21	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.43	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.51	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.22	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.57	ug/kg	
79-01-6	Trichloroethene	ND	2.0	0.24	ug/kg	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.29	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	1.4	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.5	ug/kg	
108-05-4	Vinyl Acetate	ND	5.0	1.5	ug/kg	
75-01-4	Vinyl chloride	ND	2.0	0.91	ug/kg	
	m,p-Xylene	ND	2.0	0.44	ug/kg	
95-47-6	o-Xylene	ND	2.0	0.28	ug/kg	
1330-20-7	Xylene (total)	ND	2.0	0.22	ug/kg	

Method Blank Summary

Job Number: MC33299
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSM2411-MB	M68096.D	1	09/11/14	KD	n/a	n/a	MSM2411

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33299-1, MC33299-2

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	84%	70-130%
2037-26-5	Toluene-D8	87%	70-130%
460-00-4	4-Bromofluorobenzene	82%	70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

Blank Spike Summary

Job Number: MC33299
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSM2411-BS	M68093.D	1	09/11/14	KD	n/a	n/a	MSM2411

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33299-1, MC33299-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	50	33.0	66* [a]	70-130
107-02-8	Acrolein	250	196	78	70-130
107-13-1	Acrylonitrile	50	43.8	88	70-130
71-43-2	Benzene	50	40.9	82	70-130
108-86-1	Bromobenzene	50	48.5	97	70-130
74-97-5	Bromochloromethane	50	46.5	93	70-130
75-27-4	Bromodichloromethane	50	50.7	101	70-130
75-25-2	Bromoform	50	55.8	112	70-130
74-83-9	Bromomethane	50	41.6	83	70-130
78-93-3	2-Butanone (MEK)	50	44.2	88	70-130
104-51-8	n-Butylbenzene	50	47.4	95	70-130
135-98-8	sec-Butylbenzene	50	47.0	94	70-130
98-06-6	tert-Butylbenzene	50	46.8	94	70-130
75-15-0	Carbon disulfide	50	38.7	77	70-130
56-23-5	Carbon tetrachloride	50	46.8	94	70-130
108-90-7	Chlorobenzene	50	47.5	95	70-130
75-00-3	Chloroethane	50	46.2	92	70-130
110-75-8	2-Chloroethyl vinyl ether	50	44.5	89	10-160
67-66-3	Chloroform	50	44.5	89	70-130
74-87-3	Chloromethane	50	42.4	85	70-130
95-49-8	o-Chlorotoluene	50	45.7	91	70-130
106-43-4	p-Chlorotoluene	50	45.6	91	70-130
124-48-1	Dibromochloromethane	50	52.2	104	70-130
95-50-1	1,2-Dichlorobenzene	50	50.5	101	70-130
541-73-1	1,3-Dichlorobenzene	50	47.7	95	70-130
106-46-7	1,4-Dichlorobenzene	50	48.4	97	70-130
75-71-8	Dichlorodifluoromethane	50	46.5	93	70-130
75-34-3	1,1-Dichloroethane	50	42.9	86	70-130
107-06-2	1,2-Dichloroethane	50	48.4	97	70-130
75-35-4	1,1-Dichloroethene	50	42.9	86	70-130
156-59-2	cis-1,2-Dichloroethene	50	43.6	87	70-130
156-60-5	trans-1,2-Dichloroethene	50	42.0	84	70-130
78-87-5	1,2-Dichloropropane	50	43.9	88	70-130
142-28-9	1,3-Dichloropropane	50	46.9	94	70-130
594-20-7	2,2-Dichloropropane	50	45.7	91	70-130
563-58-6	1,1-Dichloropropene	50	45.8	92	70-130

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC33299
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSM2411-BS	M68093.D	1	09/11/14	KD	n/a	n/a	MSM2411

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33299-1, MC33299-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
10061-01-5	cis-1,3-Dichloropropene	50	47.9	96	70-130
10061-02-6	trans-1,3-Dichloropropene	50	52.9	106	70-130
123-91-1	1,4-Dioxane	125	136	109	70-130
97-63-2	Ethyl methacrylate	50	50.6	101	76-141
100-41-4	Ethylbenzene	50	46.2	92	70-130
87-68-3	Hexachlorobutadiene	50	50.7	101	70-130
591-78-6	2-Hexanone	50	39.2	78	70-130
98-82-8	Isopropylbenzene	50	47.2	94	70-130
99-87-6	p-Isopropyltoluene	50	48.3	97	70-130
1634-04-4	Methyl Tert Butyl Ether	50	59.7	119	70-130
108-10-1	4-Methyl-2-pentanone (MIBK)	50	46.5	93	70-130
74-95-3	Methylene bromide	50	48.7	97	70-130
75-09-2	Methylene chloride	50	43.6	87	70-130
91-20-3	Naphthalene	50	60.6	121	70-130
103-65-1	n-Propylbenzene	50	46.2	92	70-130
100-42-5	Styrene	50	48.3	97	70-130
630-20-6	1,1,1,2-Tetrachloroethane	50	51.0	102	70-130
79-34-5	1,1,2,2-Tetrachloroethane	50	48.8	98	70-130
127-18-4	Tetrachloroethene	50	48.0	96	70-130
108-88-3	Toluene	50	44.0	88	70-130
87-61-6	1,2,3-Trichlorobenzene	50	55.1	110	70-130
120-82-1	1,2,4-Trichlorobenzene	50	54.0	108	70-130
71-55-6	1,1,1-Trichloroethane	50	45.8	92	70-130
79-00-5	1,1,2-Trichloroethane	50	48.9	98	70-130
79-01-6	Trichloroethene	50	43.7	87	70-130
75-69-4	Trichlorofluoromethane	50	43.1	86	70-130
96-18-4	1,2,3-Trichloropropane	50	50.1	100	70-130
95-63-6	1,2,4-Trimethylbenzene	50	48.0	96	70-130
108-67-8	1,3,5-Trimethylbenzene	50	46.8	94	70-130
108-05-4	Vinyl Acetate	50	66.1	132* [a]	70-130
75-01-4	Vinyl chloride	50	42.3	85	70-130
	m,p-Xylene	100	95.6	96	70-130
95-47-6	o-Xylene	50	47.8	96	70-130
1330-20-7	Xylene (total)	150	143	95	70-130

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC33299
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSM2411-BS	M68093.D	1	09/11/14	KD	n/a	n/a	MSM2411

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33299-1, MC33299-2

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	82%	70-130%
2037-26-5	Toluene-D8	87%	70-130%
460-00-4	4-Bromofluorobenzene	82%	70-130%

(a) Outside control limits. Blank Spike meets program technical requirements.

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC33299
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSV1255-BS	V34458.D	1	09/10/14	AMY	n/a	n/a	MSV1255
MSV1255-BSD	V34459.D	1	09/10/14	AMY	n/a	n/a	MSV1255

The QC reported here applies to the following samples: Method: SW846 8260C

MC33299-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	50	36.8	74	37.8	76	3	70-130/25
107-02-8	Acrolein	250	300	120	279	112	7	70-130/25
107-13-1	Acrylonitrile	50	49.3	99	50.2	100	2	70-130/25
71-43-2	Benzene	50	53.9	108	52.3	105	3	70-130/25
108-86-1	Bromobenzene	50	54.2	108	53.4	107	1	70-130/25
74-97-5	Bromochloromethane	50	52.4	105	51.4	103	2	70-130/25
75-27-4	Bromodichloromethane	50	60.1	120	59.4	119	1	70-130/25
75-25-2	Bromoform	50	60.7	121	60.6	121	0	70-130/25
74-83-9	Bromomethane	50	59.0	118	57.3	115	3	70-130/25
78-93-3	2-Butanone (MEK)	50	43.1	86	42.4	85	2	70-130/25
104-51-8	n-Butylbenzene	50	60.4	121	58.0	116	4	70-130/25
135-98-8	sec-Butylbenzene	50	62.7	125	60.7	121	3	70-130/25
98-06-6	tert-Butylbenzene	50	60.5	121	58.4	117	4	70-130/25
75-15-0	Carbon disulfide	50	58.3	117	56.0	112	4	70-130/25
56-23-5	Carbon tetrachloride	50	53.7	107	51.4	103	4	70-130/25
108-90-7	Chlorobenzene	50	55.1	110	53.2	106	4	70-130/25
75-00-3	Chloroethane	50	67.6	135* [a]	66.4	133* [a]	2	70-130/25
110-75-8	2-Chloroethyl vinyl ether	50	55.3	111	55.7	111	1	70-130/25
67-66-3	Chloroform	50	53.3	107	52.0	104	2	70-130/25
74-87-3	Chloromethane	50	61.1	122	59.7	119	2	70-130/25
95-49-8	o-Chlorotoluene	50	56.2	112	54.4	109	3	70-130/25
106-43-4	p-Chlorotoluene	50	55.1	110	53.8	108	2	70-130/25
124-48-1	Dibromochloromethane	50	62.6	125	62.4	125	0	70-130/25
95-50-1	1,2-Dichlorobenzene	50	55.4	111	54.7	109	1	70-130/25
541-73-1	1,3-Dichlorobenzene	50	54.6	109	53.7	107	2	70-130/25
106-46-7	1,4-Dichlorobenzene	50	54.9	110	53.7	107	2	70-130/25
75-71-8	Dichlorodifluoromethane	50	53.7	107	49.1	98	9	70-130/25
75-34-3	1,1-Dichloroethane	50	54.1	108	52.3	105	3	70-130/25
107-06-2	1,2-Dichloroethane	50	53.6	107	53.1	106	1	70-130/25
75-35-4	1,1-Dichloroethene	50	59.8	120	57.1	114	5	70-130/25
156-59-2	cis-1,2-Dichloroethene	50	51.8	104	50.0	100	4	70-130/25
156-60-5	trans-1,2-Dichloroethene	50	53.8	108	51.8	104	4	70-130/25
78-87-5	1,2-Dichloropropane	50	54.7	109	53.9	108	1	70-130/25
142-28-9	1,3-Dichloropropane	50	52.5	105	52.0	104	1	70-130/25
594-20-7	2,2-Dichloropropane	50	56.1	112	52.9	106	6	70-130/25
563-58-6	1,1-Dichloropropene	50	59.4	119	57.4	115	3	70-130/25

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC33299
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSV1255-BS	V34458.D	1	09/10/14	AMY	n/a	n/a	MSV1255
MSV1255-BSD	V34459.D	1	09/10/14	AMY	n/a	n/a	MSV1255

The QC reported here applies to the following samples: Method: SW846 8260C

MC33299-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
10061-01-5	cis-1,3-Dichloropropene	50	59.7	119	59.4	119	1	70-130/25
10061-02-6	trans-1,3-Dichloropropene	50	63.3	127	63.5	127	0	70-130/25
123-91-1	1,4-Dioxane	125	119	95	113	90	5	70-130/25
97-63-2	Ethyl methacrylate	50	54.4	109	55.4	111	2	77-137/25
100-41-4	Ethylbenzene	50	55.8	112	53.7	107	4	70-130/25
87-68-3	Hexachlorobutadiene	50	61.9	124	59.5	119	4	70-130/25
591-78-6	2-Hexanone	50	40.3	81	40.4	81	0	70-130/25
98-82-8	Isopropylbenzene	50	60.6	121	58.5	117	4	70-130/25
99-87-6	p-Isopropyltoluene	50	61.4	123	59.1	118	4	70-130/25
1634-04-4	Methyl Tert Butyl Ether	50	47.8	96	47.9	96	0	70-130/25
108-10-1	4-Methyl-2-pentanone (MIBK)	50	50.7	101	51.4	103	1	70-130/25
74-95-3	Methylene bromide	50	53.3	107	53.3	107	0	70-130/25
75-09-2	Methylene chloride	50	50.4	101	49.0	98	3	70-130/25
91-20-3	Naphthalene	50	63.5	127	67.9	136* [a]	7	70-130/25
103-65-1	n-Propylbenzene	50	61.0	122	59.3	119	3	70-130/25
100-42-5	Styrene	50	56.7	113	54.4	109	4	70-130/25
630-20-6	1,1,1,2-Tetrachloroethane	50	62.5	125	60.1	120	4	70-130/25
79-34-5	1,1,2,2-Tetrachloroethane	50	55.1	110	55.9	112	1	70-130/25
127-18-4	Tetrachloroethene	50	58.3	117	55.4	111	5	70-130/25
108-88-3	Toluene	50	54.5	109	53.4	107	2	70-130/25
87-61-6	1,2,3-Trichlorobenzene	50	57.7	115	59.6	119	3	70-130/25
120-82-1	1,2,4-Trichlorobenzene	50	57.8	116	58.3	117	1	70-130/25
71-55-6	1,1,1-Trichloroethane	50	60.0	120	57.4	115	4	70-130/25
79-00-5	1,1,2-Trichloroethane	50	54.3	109	55.3	111	2	70-130/25
79-01-6	Trichloroethene	50	55.8	112	54.2	108	3	70-130/25
75-69-4	Trichlorofluoromethane	50	55.6	111	54.7	109	2	70-130/25
96-18-4	1,2,3-Trichloropropane	50	57.8	116	58.4	117	1	70-130/25
95-63-6	1,2,4-Trimethylbenzene	50	58.0	116	56.4	113	3	70-130/25
108-67-8	1,3,5-Trimethylbenzene	50	57.6	115	56.0	112	3	70-130/25
108-05-4	Vinyl Acetate	50	57.0	114	56.2	112	1	70-130/25
75-01-4	Vinyl chloride	50	56.0	112	54.5	109	3	70-130/25
	m,p-Xylene	100	110	110	105	105	5	70-130/25
95-47-6	o-Xylene	50	55.4	111	53.2	106	4	70-130/25
1330-20-7	Xylene (total)	150	166	111	159	106	4	70-130/25

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC33299
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSV1255-BS	V34458.D	1	09/10/14	AMY	n/a	n/a	MSV1255
MSV1255-BSD	V34459.D	1	09/10/14	AMY	n/a	n/a	MSV1255

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33299-3

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	100%	100%	70-130%
2037-26-5	Toluene-D8	105%	106%	70-130%
460-00-4	4-Bromofluorobenzene	99%	100%	70-130%

(a) Outside control limits. Blank Spike meets program technical requirements.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC33299
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC33290-28MS	V34473.D	1	09/10/14	AMY	n/a	n/a	MSV1255
MC33290-28MSD	V34474.D	1	09/10/14	AMY	n/a	n/a	MSV1255
MC33290-28	V34467.D	1	09/10/14	AMY	n/a	n/a	MSV1255

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33299-3

CAS No.	Compound	MC33290-28 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		50	23.6	47* [a]	50	23.7	47* [a]	0	70-130/30
107-02-8	Acrolein	ND		250	279	112	250	274	110	2	70-130/30
107-13-1	Acrylonitrile	ND		50	48.9	98	50	47.4	95	3	70-130/30
71-43-2	Benzene	ND		50	50.9	102	50	50.8	102	0	70-130/30
108-86-1	Bromobenzene	ND		50	51.8	104	50	52.0	104	0	70-130/30
74-97-5	Bromochloromethane	ND		50	49.4	99	50	48.8	98	1	70-130/30
75-27-4	Bromodichloromethane	ND		50	57.1	114	50	57.4	115	1	70-130/30
75-25-2	Bromoform	ND		50	54.0	108	50	53.9	108	0	70-130/30
74-83-9	Bromomethane	ND		50	55.4	111	50	54.5	109	2	70-130/30
78-93-3	2-Butanone (MEK)	ND		50	33.5	67* [a]	50	33.3	67* [a]	1	70-130/30
104-51-8	n-Butylbenzene	ND		50	56.9	114	50	57.3	115	1	70-130/30
135-98-8	sec-Butylbenzene	ND		50	59.7	119	50	59.9	120	0	70-130/30
98-06-6	tert-Butylbenzene	ND		50	57.1	114	50	57.6	115	1	70-130/30
75-15-0	Carbon disulfide	ND		50	55.0	110	50	53.7	107	2	70-130/30
56-23-5	Carbon tetrachloride	ND		50	50.2	100	50	49.6	99	1	70-130/30
108-90-7	Chlorobenzene	ND		50	51.6	103	50	51.7	103	0	70-130/30
75-00-3	Chloroethane	ND		50	64.4	129	50	63.4	127	2	70-130/30
110-75-8	2-Chloroethyl vinyl ether	ND		50	ND	0* [a]	50	ND	0* [a]	nc	70-130/30
67-66-3	Chloroform	ND		50	51.0	102	50	50.7	101	1	70-130/30
74-87-3	Chloromethane	ND		50	56.7	113	50	56.2	112	1	70-130/30
95-49-8	o-Chlorotoluene	ND		50	53.9	108	50	54.3	109	1	70-130/30
106-43-4	p-Chlorotoluene	ND		50	52.9	106	50	53.3	107	1	70-130/30
124-48-1	Dibromochloromethane	ND		50	57.9	116	50	58.0	116	0	70-130/30
95-50-1	1,2-Dichlorobenzene	ND		50	52.1	104	50	52.6	105	1	70-130/30
541-73-1	1,3-Dichlorobenzene	ND		50	52.0	104	50	52.0	104	0	70-130/30
106-46-7	1,4-Dichlorobenzene	ND		50	51.4	103	50	52.2	104	2	70-130/30
75-71-8	Dichlorodifluoromethane	ND		50	49.2	98	50	46.1	92	7	70-130/30
75-34-3	1,1-Dichloroethane	ND		50	51.5	103	50	51.0	102	1	70-130/30
107-06-2	1,2-Dichloroethane	ND		50	51.8	104	50	51.9	104	0	70-130/30
75-35-4	1,1-Dichloroethene	ND		50	57.2	114	50	56.6	113	1	70-130/30
156-59-2	cis-1,2-Dichloroethene	ND		50	49.0	98	50	48.5	97	1	70-130/30
156-60-5	trans-1,2-Dichloroethene	ND		50	51.4	103	50	50.7	101	1	70-130/30
78-87-5	1,2-Dichloropropane	ND		50	52.3	105	50	53.0	106	1	70-130/30
142-28-9	1,3-Dichloropropane	ND		50	48.9	98	50	49.3	99	1	70-130/30
594-20-7	2,2-Dichloropropane	ND		50	48.1	96	50	47.5	95	1	70-130/30
563-58-6	1,1-Dichloropropene	ND		50	56.3	113	50	56.4	113	0	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC33299
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC33290-28MS	V34473.D	1	09/10/14	AMY	n/a	n/a	MSV1255
MC33290-28MSD	V34474.D	1	09/10/14	AMY	n/a	n/a	MSV1255
MC33290-28	V34467.D	1	09/10/14	AMY	n/a	n/a	MSV1255

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33299-3

CAS No.	Compound	MC33290-28 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-01-5	cis-1,3-Dichloropropene	ND		50	56.2	112	50	56.1	112	0	70-130/30
10061-02-6	trans-1,3-Dichloropropene	ND		50	59.4	119	50	58.9	118	1	70-130/30
123-91-1	1,4-Dioxane	ND		125	93.2	75	125	98.6	79	6	70-130/30
97-63-2	Ethyl methacrylate	ND		50	52.8	106	50	52.7	105	0	72-139/30
100-41-4	Ethylbenzene	ND		50	52.2	104	50	52.3	105	0	70-130/30
87-68-3	Hexachlorobutadiene	ND		50	57.5	115	50	58.1	116	1	70-130/30
591-78-6	2-Hexanone	ND		50	32.8	66* [a]	50	32.7	65* [a]	0	70-130/30
98-82-8	Isopropylbenzene	ND		50	58.2	116	50	58.6	117	1	70-130/30
99-87-6	p-Isopropyltoluene	ND		50	58.4	117	50	59.0	118	1	70-130/30
1634-04-4	Methyl Tert Butyl Ether	ND		50	46.2	92	50	46.0	92	0	70-130/30
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		50	49.5	99	50	49.1	98	1	70-130/30
74-95-3	Methylene bromide	ND		50	51.4	103	50	51.5	103	0	70-130/30
75-09-2	Methylene chloride	ND		50	48.1	96	50	47.6	95	1	70-130/30
91-20-3	Naphthalene	ND		50	57.0	114	50	62.9	126	10	70-130/30
103-65-1	n-Propylbenzene	ND		50	58.6	117	50	58.8	118	0	70-130/30
100-42-5	Styrene	ND		50	52.2	104	50	51.7	103	1	70-130/30
630-20-6	1,1,1,2-Tetrachloroethane	ND		50	55.4	111	50	56.1	112	1	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	ND		50	52.9	106	50	53.5	107	1	70-130/30
127-18-4	Tetrachloroethene	ND		50	53.7	107	50	53.6	107	0	70-130/30
108-88-3	Toluene	ND		50	52.6	105	50	52.6	105	0	70-130/30
87-61-6	1,2,3-Trichlorobenzene	ND		50	51.2	102	50	55.5	111	8	70-130/30
120-82-1	1,2,4-Trichlorobenzene	ND		50	52.6	105	50	54.5	109	4	70-130/30
71-55-6	1,1,1-Trichloroethane	ND		50	56.2	112	50	55.8	112	1	70-130/30
79-00-5	1,1,2-Trichloroethane	ND		50	53.4	107	50	52.5	105	2	70-130/30
79-01-6	Trichloroethene	ND		50	52.6	105	50	52.7	105	0	70-130/30
75-69-4	Trichlorofluoromethane	ND		50	53.3	107	50	52.6	105	1	70-130/30
96-18-4	1,2,3-Trichloropropane	ND		50	53.9	108	50	53.8	108	0	70-130/30
95-63-6	1,2,4-Trimethylbenzene	ND		50	55.3	111	50	55.8	112	1	70-130/30
108-67-8	1,3,5-Trimethylbenzene	ND		50	55.1	110	50	55.2	110	0	70-130/30
108-05-4	Vinyl Acetate	ND		50	56.5	113	50	56.4	113	0	70-130/30
75-01-4	Vinyl chloride	ND		50	52.0	104	50	50.8	102	2	70-130/30
	m,p-Xylene	ND		100	102	102	100	102	102	0	70-130/30
95-47-6	o-Xylene	ND		50	50.2	100	50	50.7	101	1	70-130/30
1330-20-7	Xylene (total)	ND		150	153	102	150	153	102	0	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC33299
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC33290-28MS	V34473.D	1	09/10/14	AMY	n/a	n/a	MSV1255
MC33290-28MSD	V34474.D	1	09/10/14	AMY	n/a	n/a	MSV1255
MC33290-28	V34467.D	1	09/10/14	AMY	n/a	n/a	MSV1255

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33299-3

CAS No.	Surrogate Recoveries	MS	MSD	MC33290-28	Limits
1868-53-7	Dibromofluoromethane	100%	99%	98%	70-130%
2037-26-5	Toluene-D8	108%	107%	104%	70-130%
460-00-4	4-Bromofluorobenzene	101%	101%	98%	70-130%

(a) Outside control limits due to possible matrix interference. Refer to Blank Spike.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC33299
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC33299-2MS	M68107.D	1	09/11/14	KD	n/a	n/a	MSM2411
MC33299-2MSD	M68108.D	1	09/11/14	KD	n/a	n/a	MSM2411
MC33299-2	M68100.D	1	09/11/14	KD	n/a	n/a	MSM2411

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33299-1, MC33299-2

CAS No.	Compound	MC33299-2 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		62.4	73.1	117	67.3	79.4	118	8	70-130/30
107-02-8	Acrolein	ND		312	101	32* a	337	69.4	21* a	37* b	70-130/30
107-13-1	Acrylonitrile	ND		62.4	62.8	101	67.3	63.2	94	1	70-130/30
71-43-2	Benzene	0.98		62.4	54.0	85	67.3	60.5	88	11	70-130/30
108-86-1	Bromobenzene	ND		62.4	42.8	69* a	67.3	46.4	69* a	8	70-130/30
74-97-5	Bromochloromethane	ND		62.4	64.0	103	67.3	66.1	98	3	70-130/30
75-27-4	Bromodichloromethane	ND		62.4	59.5	95	67.3	61.5	91	3	70-130/30
75-25-2	Bromoform	ND		62.4	42.3	68* a	67.3	45.7	68* a	8	70-130/30
74-83-9	Bromomethane	ND		62.4	44.6	72	67.3	50.1	74	12	70-130/30
78-93-3	2-Butanone (MEK)	ND		62.4	62.5	100	67.3	72.5	108	15	70-130/30
104-51-8	n-Butylbenzene	ND		62.4	38.0	61* a	67.3	43.7	65* a	14	70-130/30
135-98-8	sec-Butylbenzene	ND		62.4	45.1	72	67.3	53.4	79	17	70-130/30
98-06-6	tert-Butylbenzene	ND		62.4	47.4	76	67.3	55.5	82	16	70-130/30
75-15-0	Carbon disulfide	ND		62.4	57.7	93	67.3	65.7	98	13	70-130/30
56-23-5	Carbon tetrachloride	ND		62.4	59.5	95	67.3	68.3	101	14	70-130/30
108-90-7	Chlorobenzene	ND		62.4	49.7	80	67.3	54.0	80	8	70-130/30
75-00-3	Chloroethane	ND		62.4	49.8	80	67.3	57.6	86	15	70-130/30
110-75-8	2-Chloroethyl vinyl ether	ND		62.4	44.5	71	67.3	32.6	48	31* b	10-160/30
67-66-3	Chloroform	ND		62.4	59.4	95	67.3	64.6	96	8	70-130/30
74-87-3	Chloromethane	ND		62.4	43.5	70	67.3	52.3	78	18	70-130/30
95-49-8	o-Chlorotoluene	ND		62.4	43.1	69* a	67.3	48.3	72	11	70-130/30
106-43-4	p-Chlorotoluene	ND		62.4	40.9	66* a	67.3	44.4	66* a	8	70-130/30
124-48-1	Dibromochloromethane	ND		62.4	53.2	85	67.3	53.9	80	1	70-130/30
95-50-1	1,2-Dichlorobenzene	ND		62.4	31.0	50* a	67.3	34.6	51* a	11	70-130/30
541-73-1	1,3-Dichlorobenzene	ND		62.4	34.9	56* a	67.3	37.1	55* a	6	70-130/30
106-46-7	1,4-Dichlorobenzene	ND		62.4	33.9	54* a	67.3	35.6	53* a	5	70-130/30
75-71-8	Dichlorodifluoromethane	ND		62.4	50.9	82	67.3	58.7	87	14	70-130/30
75-34-3	1,1-Dichloroethane	ND		62.4	59.0	95	67.3	65.4	97	10	70-130/30
107-06-2	1,2-Dichloroethane	ND		62.4	66.6	107	67.3	67.5	100	1	70-130/30
75-35-4	1,1-Dichloroethene	ND		62.4	62.6	100	67.3	70.9	105	12	70-130/30
156-59-2	cis-1,2-Dichloroethene	ND		62.4	57.2	92	67.3	60.8	90	6	70-130/30
156-60-5	trans-1,2-Dichloroethene	ND		62.4	58.5	94	67.3	65.1	97	11	70-130/30
78-87-5	1,2-Dichloropropane	ND		62.4	52.0	83	67.3	56.1	83	8	70-130/30
142-28-9	1,3-Dichloropropane	ND		62.4	52.9	85	67.3	55.7	83	5	70-130/30
594-20-7	2,2-Dichloropropane	ND		62.4	60.3	97	67.3	71.2	106	17	70-130/30
563-58-6	1,1-Dichloropropene	ND		62.4	62.1	100	67.3	69.8	104	12	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC33299
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC33299-2MS	M68107.D	1	09/11/14	KD	n/a	n/a	MSM2411
MC33299-2MSD	M68108.D	1	09/11/14	KD	n/a	n/a	MSM2411
MC33299-2	M68100.D	1	09/11/14	KD	n/a	n/a	MSM2411

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33299-1, MC33299-2

CAS No.	Compound	MC33299-2 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
10061-01-5	cis-1,3-Dichloropropene	ND		62.4	54.1	87	67.3	56.9	85	5	70-130/30
10061-02-6	trans-1,3-Dichloropropene	ND		62.4	55.3	89	67.3	56.5	84	2	70-130/30
123-91-1	1,4-Dioxane	ND		156	274	176* a	168	284	169* a	4	70-130/30
97-63-2	Ethyl methacrylate	ND		62.4	58.9	94	67.3	63.3	94	7	41-160/30
100-41-4	Ethylbenzene	1.1	J	62.4	53.0	83	67.3	58.5	85	10	70-130/30
87-68-3	Hexachlorobutadiene	ND		62.4	30.1	48* a	67.3	37.0	55* a	21	70-130/30
591-78-6	2-Hexanone	ND		62.4	50.7	81	67.3	67.8	101	29	70-130/30
98-82-8	Isopropylbenzene	ND		62.4	51.9	83	67.3	60.9	90	16	70-130/30
99-87-6	p-Isopropyltoluene	ND		62.4	43.6	70	67.3	50.7	75	15	70-130/30
1634-04-4	Methyl Tert Butyl Ether	ND		62.4	69.3	111	67.3	73.2	109	5	70-130/30
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		62.4	63.9	102	67.3	75.6	112	17	70-130/30
74-95-3	Methylene bromide	ND		62.4	61.2	98	67.3	64.5	96	5	70-130/30
75-09-2	Methylene chloride	ND		62.4	60.3	97	67.3	64.6	96	7	70-130/30
91-20-3	Naphthalene	ND		62.4	17.7	28* a	67.3	23.6	35* a	29	70-130/30
103-65-1	n-Propylbenzene	ND		62.4	47.4	76	67.3	55.4	82	16	70-130/30
100-42-5	Styrene	ND		62.4	44.5	71	67.3	47.6	71	7	70-130/30
630-20-6	1,1,1,2-Tetrachloroethane	ND		62.4	50.6	81	67.3	53.4	79	5	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	ND		62.4	37.3	60* a	67.3	50.1	74	29	70-130/30
127-18-4	Tetrachloroethene	ND		62.4	59.2	95	67.3	66.4	99	11	70-130/30
108-88-3	Toluene	1.3	J	62.4	53.5	84	67.3	60.7	88	13	70-130/30
87-61-6	1,2,3-Trichlorobenzene	ND		62.4	13.0	21* a	67.3	16.0	24* a	21	70-130/30
120-82-1	1,2,4-Trichlorobenzene	ND		62.4	16.5	26* a	67.3	18.8	28* a	13	70-130/30
71-55-6	1,1,1-Trichloroethane	ND		62.4	61.9	99	67.3	70.4	105	13	70-130/30
79-00-5	1,1,2-Trichloroethane	ND		62.4	56.8	91	67.3	60.3	90	6	70-130/30
79-01-6	Trichloroethene	ND		62.4	53.3	85	67.3	63.2	94	17	70-130/30
75-69-4	Trichlorofluoromethane	ND		62.4	49.5	79	67.3	54.5	81	10	70-130/30
96-18-4	1,2,3-Trichloropropane	ND		62.4	40.8	65* a	67.3	50.9	76	22	70-130/30
95-63-6	1,2,4-Trimethylbenzene	ND		62.4	43.9	70	67.3	48.4	72	10	70-130/30
108-67-8	1,3,5-Trimethylbenzene	ND		62.4	45.2	72	67.3	51.4	76	13	70-130/30
108-05-4	Vinyl Acetate	ND		62.4	356	571* a	67.3	426	633* a	18	70-130/30
75-01-4	Vinyl chloride	ND		62.4	44.2	71	67.3	53.2	79	18	70-130/30
	m,p-Xylene	ND		125	106	85	135	116	86	9	70-130/30
95-47-6	o-Xylene	ND		62.4	51.0	82	67.3	54.7	81	7	70-130/30
1330-20-7	Xylene (total)	ND		187	157	84	202	171	85	9	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC33299
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC33299-2MS	M68107.D	1	09/11/14	KD	n/a	n/a	MSM2411
MC33299-2MSD	M68108.D	1	09/11/14	KD	n/a	n/a	MSM2411
MC33299-2	M68100.D	1	09/11/14	KD	n/a	n/a	MSM2411

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC33299-1, MC33299-2

CAS No.	Surrogate Recoveries	MS	MSD	MC33299-2	Limits
1868-53-7	Dibromofluoromethane	91%	87%	87%	70-130%
2037-26-5	Toluene-D8	85%	86%	88%	70-130%
460-00-4	4-Bromofluorobenzene	88%	91%	87%	70-130%

(a) Outside control limits due to possible matrix interference. Refer to Blank Spike.
(b) High RPD due to possible matrix interference and/or sample non-homogeneity.

* = Outside of Control Limits.

Volatile Internal Standard Area Summary

Job Number: MC33299
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Check Std:	MSM2411-CC2408	**Injection Date:**	09/11/14
Lab File ID:	M68093.D	**Injection Time:**	11:24
Instrument ID:	GCMSM	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	227414	9.35	357291	10.22	148967	13.50	211246	16.07	67997	6.85
Upper Limit [a]	454828	9.85	714582	10.72	297934	14.00	422492	16.57	135994	7.35
Lower Limit [b]	113707	8.85	178646	9.72	74484	13.00	105623	15.57	33999	6.35

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSM2411-BS	227414	9.35	357291	10.22	148967	13.50	211246	16.07	67997	6.85
MSM2411-MB	227915	9.35	351222	10.23	143033	13.51	209390	16.07	70091	6.85
ZZZZZZ	201084	9.35	319365	10.23	136699	13.50	208651	16.07	131351	6.85
ZZZZZZ	193621	9.34	305045	10.23	130363	13.51	203786	16.07	130815	6.86
MC33299-1	207506	9.35	330343	10.23	134041	13.50	181254	16.07	131743	6.86
MC33299-2	99852[c]	9.35	153806[c]	10.23	63982[c]	13.51	89587[c]	16.07	70489	6.84
ZZZZZZ	212297	9.35	338375	10.23	143666	13.50	219117	16.07	128694	6.84
ZZZZZZ	211639	9.35	334047	10.22	142594	13.50	217264	16.07	116281	6.84
ZZZZZZ	214617	9.35	343643	10.23	144535	13.50	220682	16.07	120588	6.85
ZZZZZZ	205309	9.35	330118	10.22	141042	13.51	217954	16.07	138719[d]	6.85
ZZZZZZ	206919	9.35	328743	10.23	140144	13.51	217003	16.07	117661	6.84
ZZZZZZ	212858	9.35	339165	10.23	142133	13.50	218692	16.07	123931	6.85
MC33299-2MS	201184	9.35	324307	10.23	132187	13.50	178890	16.07	123838	6.86
MC33299-2MSD	153614	9.35	242185	10.23	99167	13.51	128464	16.07	97346	6.85
ZZZZZZ	211925	9.35	327516	10.23	138152	13.51	207651	16.07	71854	6.86
ZZZZZZ	187338	9.34	292587	10.22	124851	13.50	188554	16.07	74860	6.85
ZZZZZZ	204645	9.35	318243	10.22	128159	13.50	194212	16.07	71892	6.84
ZZZZZZ	214183	9.35	326979	10.23	133729	13.51	198089	16.07	68521	6.86
ZZZZZZ	199944	9.35	305183	10.23	125336	13.51	188595	16.07	70614	6.86

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Outside control limits due to possible matrix interference. Confirmed by MS/MSD.
(d) Outside control limits. Target analytes not associated with this internal standard.

Volatile Internal Standard Area Summary

Job Number: MC33299
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Check Std:	MSV1255-CC1255	**Injection Date:**	09/10/14
Lab File ID:	V34457.D	**Injection Time:**	13:06
Instrument ID:	GCMSV	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	998315	6.56	1615348	7.74	728632	11.08	896361	13.29	138446	3.52
Upper Limit [a]	1996630	7.06	3230696	8.24	1457264	11.58	1792722	13.79	276892	4.02
Lower Limit [b]	499158	6.06	807674	7.24	364316	10.58	448181	12.79	69223	3.02

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSV1255-BS	1018822	6.56	1652109	7.75	741880	11.08	929020	13.29	147624	3.54
MSV1255-BSD	1033614	6.56	1677937	7.74	764679	11.08	941109	13.29	154397	3.53
MSV1255-MB	1013029	6.57	1616486	7.75	715838	11.08	910026	13.29	133350	3.53
ZZZZZZ	976761	6.56	1542015	7.74	683710	11.08	881801	13.29	119043	3.53
MC33299-3	990190	6.57	1569781	7.75	705451	11.08	927061	13.29	143174	3.54
ZZZZZZ	1007780	6.56	1606514	7.74	717921	11.08	924918	13.29	140472	3.53
ZZZZZZ	978954	6.57	1558383	7.75	692760	11.08	873983	13.29	122136	3.54
ZZZZZZ	960000	6.56	1534467	7.74	682440	11.08	869356	13.29	116696	3.53
MC33290-28	970953	6.56	1546934	7.75	703340	11.08	892712	13.29	133964	3.53
ZZZZZZ	988951	6.56	1600003	7.74	722553	11.08	906090	13.29	131382	3.53
ZZZZZZ	970105	6.57	1542118	7.75	690136	11.08	853606	13.29	100961	3.54
ZZZZZZ	968419	6.57	1535226	7.75	697317	11.08	885613	13.29	123752	3.54
ZZZZZZ	979985	6.57	1569978	7.75	706173	11.08	881241	13.29	113314	3.54
ZZZZZZ	971484	6.57	1563482	7.75	695708	11.08	898700	13.29	121580	3.54
ZZZZZZ	994358	6.56	1604555	7.74	733907	11.08	941850	13.29	124117	3.53
MC33290-28MS	927169	6.56	1501895	7.75	706236	11.08	843630	13.29	123527	3.53
MC33290-28MSD	911293	6.57	1483451	7.75	692414	11.08	821646	13.29	119300	3.54
ZZZZZZ	918144	6.57	1477554	7.75	660909	11.08	841412	13.29	112346	3.53
ZZZZZZ	956707	6.57	1547970	7.75	688822	11.08	852373	13.29	114902	3.54
ZZZZZZ	930436	6.57	1500885	7.75	675357	11.08	838014	13.29	112268	3.54
ZZZZZZ	891038	6.56	1436492	7.75	649909	11.08	807602	13.29	100891	3.53
ZZZZZZ	918011	6.57	1468611	7.75	659352	11.08	815857	13.29	101585	3.54
ZZZZZZ	885809	6.57	1443439	7.75	646083	11.08	794230	13.29	97188	3.53
ZZZZZZ	896959	6.57	1476239	7.75	638255	11.08	770467	13.29	102019	3.54
ZZZZZZ	883553	6.57	1456223	7.75	637675	11.08	770567	13.29	103888	3.54

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary

Job Number: MC33299
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Method: SW846 8260C **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
MC33299-3	V34463.D	99	103	96
MC33290-28MS	V34473.D	100	108	101
MC33290-28MSD	V34474.D	99	107	101
MSV1255-BS	V34458.D	100	105	99
MSV1255-BSD	V34459.D	100	106	100
MSV1255-MB	V34461.D	99	103	97

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	70-130%
S2 = Toluene-D8	70-130%
S3 = 4-Bromofluorobenzene	70-130%

Volatile Surrogate Recovery Summary

Job Number: MC33299
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Method: SW846 8260C **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
MC33299-1	M68099.D	93	86	89
MC33299-2	M68100.D	87	88	87
MC33299-2MS	M68107.D	91	85	88
MC33299-2MSD	M68108.D	87	86	91
MSM2411-BS	M68093.D	82	87	82
MSM2411-MB	M68096.D	84	87	82

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	70-130%
S2 = Toluene-D8	70-130%
S3 = 4-Bromofluorobenzene	70-130%

GC/MS Semi-volatiles

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QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: MC33299
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP39669-MB	F76015.D	1	09/11/14	WK	09/04/14	OP39669	MSF3338

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC33299-1, MC33299-2

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	480	60	ug/kg	
95-57-8	2-Chlorophenol	ND	240	11	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	480	12	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	480	14	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	480	78	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	960	120	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	480	60	ug/kg	
95-48-7	2-Methylphenol	ND	480	19	ug/kg	
	3&4-Methylphenol	ND	480	23	ug/kg	
88-75-5	2-Nitrophenol	ND	480	13	ug/kg	
100-02-7	4-Nitrophenol	ND	960	90	ug/kg	
87-86-5	Pentachlorophenol	ND	480	34	ug/kg	
108-95-2	Phenol	ND	240	14	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	480	12	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	480	12	ug/kg	
62-53-3	Aniline	ND	480	24	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	240	12	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	240	9.8	ug/kg	
100-51-6	Benzyl Alcohol	ND	480	24	ug/kg	
91-58-7	2-Chloronaphthalene	ND	240	13	ug/kg	
106-47-8	4-Chloroaniline	ND	480	12	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	240	11	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	240	15	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	240	17	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	240	15	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	240	11	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	480	32	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	480	12	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	240	24	ug/kg	
132-64-9	Dibenzofuran	ND	96	13	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	240	25	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	240	7.5	ug/kg	
84-66-2	Diethyl phthalate	ND	240	12	ug/kg	
131-11-3	Dimethyl phthalate	ND	240	14	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	240	8.9	ug/kg	
118-74-1	Hexachlorobenzene	ND	240	15	ug/kg	

Method Blank Summary

Job Number: MC33299
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP39669-MB	F76015.D	1	09/11/14	WK	09/04/14	OP39669	MSF3338

The QC reported here applies to the following samples: Method: SW846 8270D

MC33299-1, MC33299-2

CAS No.	Compound	Result	RL	MDL	Units	Q
77-47-4	Hexachlorocyclopentadiene	ND	480	120	ug/kg	
67-72-1	Hexachloroethane	ND	240	12	ug/kg	
78-59-1	Isophorone	ND	240	11	ug/kg	
88-74-4	2-Nitroaniline	ND	480	12	ug/kg	
99-09-2	3-Nitroaniline	ND	480	26	ug/kg	
100-01-6	4-Nitroaniline	ND	480	12	ug/kg	
98-95-3	Nitrobenzene	ND	240	13	ug/kg	
62-75-9	n-Nitrosodimethylamine	ND	240	11	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	240	14	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	240	14	ug/kg	
110-86-1	Pyridine	ND	480	24	ug/kg	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	69%	30-130%
4165-62-2	Phenol-d5	66%	30-130%
118-79-6	2,4,6-Tribromophenol	69%	30-130%
4165-60-0	Nitrobenzene-d5	70%	30-130%
321-60-8	2-Fluorobiphenyl	78%	30-130%
1718-51-0	Terphenyl-d14	88%	30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/kg	

Method Blank Summary

Job Number: MC33299
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP39670-MB	I91516.D	1	09/09/14	WK	09/04/14	OP39670	MSI3411

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

MC33299-1, MC33299-2

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	4.8	0.83	ug/kg	
208-96-8	Acenaphthylene	ND	4.8	0.73	ug/kg	
120-12-7	Anthracene	ND	4.8	1.1	ug/kg	
56-55-3	Benzo(a)anthracene	ND	4.8	2.2	ug/kg	
50-32-8	Benzo(a)pyrene	ND	4.8	1.9	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	4.8	2.1	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	1.3	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	4.8	1.5	ug/kg	
218-01-9	Chrysene	ND	4.8	1.3	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	1.4	ug/kg	
206-44-0	Fluoranthene	ND	4.8	1.4	ug/kg	
86-73-7	Fluorene	ND	4.8	0.95	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	1.2	ug/kg	
90-12-0	1-Methylnaphthalene	ND	9.6	1.0	ug/kg	
91-57-6	2-Methylnaphthalene	ND	9.6	0.89	ug/kg	
85-01-8	Phenanthrene	ND	4.8	1.0	ug/kg	
129-00-0	Pyrene	ND	4.8	1.5	ug/kg	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	37%	15-110%
4165-62-2	Phenol-d5	38%	15-110%
118-79-6	2,4,6-Tribromophenol	36%	15-110%
4165-60-0	Nitrobenzene-d5	74%	30-130%
321-60-8	2-Fluorobiphenyl	72%	30-130%
1718-51-0	Terphenyl-d14	103%	30-130%

Blank Spike Summary

Job Number: MC33299
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP39669-BS	F76016.D	1	09/11/14	WK	09/04/14	OP39669	MSF3338

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC33299-1, MC33299-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
65-85-0	Benzoic acid	2420	1300	54	30-130
95-57-8	2-Chlorophenol	2420	1730	71	30-130
59-50-7	4-Chloro-3-methyl phenol	2420	1680	69	30-130
120-83-2	2,4-Dichlorophenol	2420	1850	76	30-130
105-67-9	2,4-Dimethylphenol	2420	1670	69	30-130
51-28-5	2,4-Dinitrophenol	2420	885	37	30-130
534-52-1	4,6-Dinitro-o-cresol	2420	1520	63	30-130
95-48-7	2-Methylphenol	2420	1640	68	30-130
	3&4-Methylphenol	4840	3240	67	30-130
88-75-5	2-Nitrophenol	2420	1800	74	30-130
100-02-7	4-Nitrophenol	2420	1270	52	30-130
87-86-5	Pentachlorophenol	2420	1260	52	30-130
108-95-2	Phenol	2420	1590	66	30-130
95-95-4	2,4,5-Trichlorophenol	2420	1840	76	30-130
88-06-2	2,4,6-Trichlorophenol	2420	1880	78	30-130
62-53-3	Aniline	2420	1310	54	40-140
101-55-3	4-Bromophenyl phenyl ether	2420	2350	97	40-140
85-68-7	Butyl benzyl phthalate	2420	2290	95	40-140
100-51-6	Benzyl Alcohol	2420	1550	64	40-140
91-58-7	2-Chloronaphthalene	2420	2220	92	40-140
106-47-8	4-Chloroaniline	2420	1610	67	40-140
111-91-1	bis(2-Chloroethoxy)methane	2420	1920	79	40-140
111-44-4	bis(2-Chloroethyl)ether	2420	1870	77	40-140
108-60-1	bis(2-Chloroisopropyl)ether	2420	1960	81	40-140
7005-72-3	4-Chlorophenyl phenyl ether	2420	2130	88	40-140
122-66-7	1,2-Diphenylhydrazine	2420	2130	88	40-140
121-14-2	2,4-Dinitrotoluene	2420	2120	88	40-140
606-20-2	2,6-Dinitrotoluene	2420	2050	85	40-140
91-94-1	3,3'-Dichlorobenzidine	2420	2120	88	40-140
132-64-9	Dibenzofuran	2420	2000	83	40-140
84-74-2	Di-n-butyl phthalate	2420	2100	87	40-140
117-84-0	Di-n-octyl phthalate	2420	2470	102	40-140
84-66-2	Diethyl phthalate	2420	2040	84	40-140
131-11-3	Dimethyl phthalate	2420	2130	88	40-140
117-81-7	bis(2-Ethylhexyl)phthalate	2420	2360	98	40-140
118-74-1	Hexachlorobenzene	2420	2340	97	40-140

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC33299
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP39669-BS	F76016.D	1	09/11/14	WK	09/04/14	OP39669	MSF3338

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC33299-1, MC33299-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
77-47-4	Hexachlorocyclopentadiene	2420	1540	64	40-140
67-72-1	Hexachloroethane	2420	1840	76	40-140
78-59-1	Isophorone	2420	1820	75	40-140
88-74-4	2-Nitroaniline	2420	2140	88	40-140
99-09-2	3-Nitroaniline	2420	1810	75	40-140
100-01-6	4-Nitroaniline	2420	1830	76	40-140
98-95-3	Nitrobenzene	2420	1910	79	40-140
62-75-9	n-Nitrosodimethylamine	2420	1690	70	40-140
621-64-7	N-Nitroso-di-n-propylamine	2420	1950	81	40-140
86-30-6	N-Nitrosodiphenylamine	2420	2040	84	40-140
110-86-1	Pyridine	2420	1370	57	40-140

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	75%	30-130%
4165-62-2	Phenol-d5	74%	30-130%
118-79-6	2,4,6-Tribromophenol	98%	30-130%
4165-60-0	Nitrobenzene-d5	79%	30-130%
321-60-8	2-Fluorobiphenyl	85%	30-130%
1718-51-0	Terphenyl-d14	99%	30-130%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC33299
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP39670-BS	I91517.D	1	09/09/14	WK	09/04/14	OP39670	MSI3411

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

MC33299-1, MC33299-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
83-32-9	Acenaphthene	2420	1980	82	40-140
208-96-8	Acenaphthylene	2420	1960	81	40-140
120-12-7	Anthracene	2420	2060	85	40-140
56-55-3	Benzo(a)anthracene	2420	2410	100	40-140
50-32-8	Benzo(a)pyrene	2420	2480	102	40-140
205-99-2	Benzo(b)fluoranthene	2420	2640	109	40-140
191-24-2	Benzo(g,h,i)perylene	2420	2310	95	40-140
207-08-9	Benzo(k)fluoranthene	2420	2190	90	40-140
218-01-9	Chrysene	2420	2050	85	40-140
53-70-3	Dibenzo(a,h)anthracene	2420	2460	102	40-140
206-44-0	Fluoranthene	2420	2360	98	40-140
86-73-7	Fluorene	2420	2070	86	40-140
193-39-5	Indeno(1,2,3-cd)pyrene	2420	2400	99	40-140
90-12-0	1-Methylnaphthalene	2420	1970	81	40-140
91-57-6	2-Methylnaphthalene	2420	2010	83	40-140
85-01-8	Phenanthrene	2420	2030	84	40-140
129-00-0	Pyrene	2420	2480	102	40-140

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	40%	15-110%
4165-62-2	Phenol-d5	40%	15-110%
118-79-6	2,4,6-Tribromophenol	46%	15-110%
4165-60-0	Nitrobenzene-d5	83%	30-130%
321-60-8	2-Fluorobiphenyl	81%	30-130%
1718-51-0	Terphenyl-d14	115%	30-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC33299
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP39669-MS	F76017.D	1	09/11/14	WK	09/04/14	OP39669	MSF3338
OP39669-MSD	F76018.D	1	09/11/14	WK	09/04/14	OP39669	MSF3338
MC33299-2	F76019.D	1	09/11/14	WK	09/04/14	OP39669	MSF3338

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC33299-1, MC33299-2

CAS No.	Compound	MC33299-2 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic acid	ND		3180	112	4* a	3080	105	3* a	6	30-130/30
95-57-8	2-Chlorophenol	ND		3180	2280	72	3080	2120	69	7	30-130/30
59-50-7	4-Chloro-3-methyl phenol	ND		3180	2300	72	3080	2100	68	9	30-130/30
120-83-2	2,4-Dichlorophenol	ND		3180	2340	74	3080	2170	70	8	30-130/30
105-67-9	2,4-Dimethylphenol	ND		3180	2300	72	3080	2110	68	9	30-130/30
51-28-5	2,4-Dinitrophenol	ND		3180	ND	0* a	3080	ND	0* a	nc	30-130/30
534-52-1	4,6-Dinitro-o-cresol	ND		3180	532	17* a	3080	708	23* a	28	30-130/30
95-48-7	2-Methylphenol	ND		3180	2180	69	3080	2000	65	9	30-130/30
	3&4-Methylphenol	ND		6360	4440	70	6160	4160	68	7	30-130/30
88-75-5	2-Nitrophenol	ND		3180	1930	61	3080	2060	67	7	30-130/30
100-02-7	4-Nitrophenol	ND		3180	1540	48	3080	1390	45	10	30-130/30
87-86-5	Pentachlorophenol	ND		3180	876	28* a	3080	945	31	8	30-130/30
108-95-2	Phenol	ND		3180	2140	67	3080	2010	65	6	30-130/30
95-95-4	2,4,5-Trichlorophenol	ND		3180	2270	71	3080	2160	70	5	30-130/30
88-06-2	2,4,6-Trichlorophenol	ND		3180	2300	72	3080	2140	69	7	30-130/30
62-53-3	Aniline	ND		3180	1580	50	3080	1410	46	11	40-140/30
101-55-3	4-Bromophenyl phenyl ether	ND		3180	2960	93	3080	2970	96	0	40-140/30
85-68-7	Butyl benzyl phthalate	ND		3180	2880	91	3080	2960	96	3	40-140/30
100-51-6	Benzyl Alcohol	ND		3180	1950	61	3080	1650	54	17	40-140/30
91-58-7	2-Chloronaphthalene	ND		3180	2940	93	3080	2780	90	6	40-140/30
106-47-8	4-Chloroaniline	ND		3180	1940	61	3080	1870	61	4	40-140/30
111-91-1	bis(2-Chloroethoxy)methane	ND		3180	2520	79	3080	2410	78	4	40-140/30
111-44-4	bis(2-Chloroethyl)ether	ND		3180	2470	78	3080	2400	78	3	40-140/30
108-60-1	bis(2-Chloroisopropyl)ether	ND		3180	2550	80	3080	2450	80	4	40-140/30
7005-72-3	4-Chlorophenyl phenyl ether	ND		3180	2700	85	3080	2680	87	1	40-140/30
122-66-7	1,2-Diphenylhydrazine	ND		3180	2700	85	3080	2670	87	1	40-140/30
121-14-2	2,4-Dinitrotoluene	ND		3180	2520	79	3080	2580	84	2	40-140/30
606-20-2	2,6-Dinitrotoluene	ND		3180	2540	80	3080	2670	87	5	40-140/30
91-94-1	3,3'-Dichlorobenzidine	ND		3180	2740	86	3080	2620	85	4	40-140/30
132-64-9	Dibenzofuran	ND		3180	2610	82	3080	2560	83	2	40-140/30
84-74-2	Di-n-butyl phthalate	ND		3180	2610	82	3080	2690	87	3	40-140/30
117-84-0	Di-n-octyl phthalate	ND		3180	2980	94	3080	3120	101	5	40-140/30
84-66-2	Diethyl phthalate	ND		3180	2720	86	3080	2640	86	3	40-140/30
131-11-3	Dimethyl phthalate	ND		3180	2820	89	3080	2720	88	4	40-140/30
117-81-7	bis(2-Ethylhexyl)phthalate	ND		3180	2860	90	3080	3050	99	6	40-140/30
118-74-1	Hexachlorobenzene	ND		3180	2960	93	3080	3040	99	3	40-140/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC33299
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP39669-MS	F76017.D	1	09/11/14	WK	09/04/14	OP39669	MSF3338
OP39669-MSD	F76018.D	1	09/11/14	WK	09/04/14	OP39669	MSF3338
MC33299-2	F76019.D	1	09/11/14	WK	09/04/14	OP39669	MSF3338

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC33299-1, MC33299-2

CAS No.	Compound	MC33299-2 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
77-47-4	Hexachlorocyclopentadiene	ND		3180	741	23* [a]	3080	943	31* [a]	24	40-140/30
67-72-1	Hexachloroethane	ND		3180	1990	63	3080	2130	69	7	40-140/30
78-59-1	Isophorone	ND		3180	2360	74	3080	2290	74	3	40-140/30
88-74-4	2-Nitroaniline	ND		3180	2700	85	3080	2670	87	1	40-140/30
99-09-2	3-Nitroaniline	ND		3180	2270	71	3080	2270	74	0	40-140/30
100-01-6	4-Nitroaniline	ND		3180	2330	73	3080	2320	75	0	40-140/30
98-95-3	Nitrobenzene	ND		3180	2350	74	3080	2330	76	1	40-140/30
62-75-9	n-Nitrosodimethylamine	ND		3180	1920	60	3080	1830	59	5	40-140/30
621-64-7	N-Nitroso-di-n-propylamine	ND		3180	2570	81	3080	2490	81	3	40-140/30
86-30-6	N-Nitrosodiphenylamine	ND		3180	2630	83	3080	2590	84	2	40-140/30
110-86-1	Pyridine	ND		3180	1580	50	3080	1490	48	6	40-140/30

CAS No.	Surrogate Recoveries	MS	MSD	MC33299-2	Limits
367-12-4	2-Fluorophenol	74%	74%	71%	30-130%
4165-62-2	Phenol-d5	75%	73%	67%	30-130%
118-79-6	2,4,6-Tribromophenol	86%	81%	66%	30-130%
4165-60-0	Nitrobenzene-d5	74%	77%	72%	30-130%
321-60-8	2-Fluorobiphenyl	85%	84%	80%	30-130%
1718-51-0	Terphenyl-d14	93%	99%	91%	30-130%

(a) Outside control limits due to possible matrix interference. Refer to Blank Spike.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC33299
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP39670-MS	I91518.D	1	09/09/14	WK	09/04/14	OP39670	MSI3411
OP39670-MSD	I91519.D	1	09/09/14	WK	09/04/14	OP39670	MSI3411
MC33299-2	I91520.D	1	09/09/14	WK	09/04/14	OP39670	MSI3411

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

MC33299-1, MC33299-2

CAS No.	Compound	MC33299-2 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	ND		3180	2610	82	3080	2500	81	4	40-140/30
208-96-8	Acenaphthylene	ND		3180	2580	81	3080	2480	81	4	40-140/30
120-12-7	Anthracene	ND		3180	2620	82	3080	2620	85	0	40-140/30
56-55-3	Benzo(a)anthracene	ND		3180	2950	93	3080	3090	100	5	40-140/30
50-32-8	Benzo(a)pyrene	ND		3180	2900	91	3080	3090	100	6	40-140/30
205-99-2	Benzo(b)fluoranthene	ND		3180	3280	103	3080	3380	110	3	40-140/30
191-24-2	Benzo(g,h,i)perylene	ND		3180	2650	83	3080	2810	91	6	40-140/30
207-08-9	Benzo(k)fluoranthene	ND		3180	2510	79	3080	2760	90	9	40-140/30
218-01-9	Chrysene	ND		3180	2510	79	3080	2610	85	4	40-140/30
53-70-3	Dibenzo(a,h)anthracene	ND		3180	2870	90	3080	3040	99	6	40-140/30
206-44-0	Fluoranthene	ND		3180	2970	93	3080	3100	101	4	40-140/30
86-73-7	Fluorene	ND		3180	2720	86	3080	2650	86	3	40-140/30
193-39-5	Indeno(1,2,3-cd)pyrene	ND		3180	2770	87	3080	2970	96	7	40-140/30
90-12-0	1-Methylnaphthalene	ND		3180	2560	81	3080	2470	80	4	40-140/30
91-57-6	2-Methylnaphthalene	ND		3180	2630	83	3080	2500	81	5	40-140/30
85-01-8	Phenanthrene	ND		3180	2590	81	3080	2590	84	0	40-140/30
129-00-0	Pyrene	ND		3180	3120	98	3080	3230	105	3	40-140/30

CAS No.	Surrogate Recoveries	MS	MSD	MC33299-2	Limits
367-12-4	2-Fluorophenol	40%	39%	38%	15-110%
4165-62-2	Phenol-d5	41%	39%	37%	15-110%
118-79-6	2,4,6-Tribromophenol	41%	41%	33%	15-110%
4165-60-0	Nitrobenzene-d5	80%	81%	77%	30-130%
321-60-8	2-Fluorobiphenyl	81%	81%	75%	30-130%
1718-51-0	Terphenyl-d14	106%	117%	110%	30-130%

* = Outside of Control Limits.

Semivolatile Internal Standard Area Summary

Job Number: MC33299
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Check Std:	MSF3338-CC3320	**Injection Date:**	09/10/14
Lab File ID:	F75990.D	**Injection Time:**	15:42
Instrument ID:	GCMSF	**Method:**	SW846 8270D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	198912	4.04	754331	5.08	443283	6.60	747879	7.88	803916	10.41	794838	12.08
Upper Limit [a]	397824	4.54	1508662	5.58	886566	7.10	1495758	8.38	1607832	10.91	1589676	12.58
Lower Limit [b]	99456	3.54	377166	4.58	221642	6.10	373940	7.38	401958	9.91	397419	11.58

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP39624-MS	221577	4.03	820819	5.08	491643	6.60	800401	7.88	859569	10.40	819341	12.07
OP39624-MSD	210714	4.03	791392	5.08	462420	6.60	771066	7.88	815442	10.40	792524	12.07
MC33000-20	209130	4.03	773733	5.08	457922	6.60	764836	7.88	831539	10.40	806155	12.07
ZZZZZZ	192155	4.03	723825	5.08	441373	6.60	766433	7.88	887008	10.40	884839	12.08
ZZZZZZ	239538	4.03	871626	5.08	493805	6.60	809592	7.88	868114	10.40	839580	12.08
ZZZZZZ	218559	4.03	800260	5.08	484407	6.60	795977	7.87	858548	10.40	814020	12.07
ZZZZZZ	191422	4.03	715182	5.08	440718	6.60	742770	7.87	838076	10.40	829282	12.07
ZZZZZZ	240993	4.03	895343	5.08	554376	6.60	933732	7.88	1046143	10.40	1028425	12.07
ZZZZZZ	207460	4.03	788409	5.08	468754	6.60	790245	7.87	851067	10.40	790631	12.07
OP39639-MB	210533	4.03	753579	5.08	451947	6.60	753159	7.87	779217	10.40	750749	12.07
OP39639-BS	200405	4.03	745241	5.08	442252	6.60	758798	7.88	825098	10.40	808274	12.07
OP39639-MS	218969	4.03	815701	5.08	470890	6.60	776437	7.88	827526	10.40	795227	12.07
OP39639-MSD	187525	4.03	710500	5.08	425668	6.60	728702	7.88	778767	10.40	761946	12.07
MC33000-23	200362	4.03	729475	5.08	429483	6.60	700905	7.87	745187	10.40	722498	12.07
ZZZZZZ	210947	4.03	792894	5.08	463402	6.60	756571	7.87	802430	10.40	782314	12.07
ZZZZZZ	201733	4.03	761710	5.08	464130	6.60	778202	7.87	860759	10.40	844127	12.07
ZZZZZZ	203220	4.03	762750	5.08	450423	6.60	763391	7.87	825262	10.39	810740	12.07
ZZZZZZ	206475	4.03	766102	5.08	454354	6.60	738040	7.87	788838	10.39	758964	12.07
ZZZZZZ	193532	4.03	716133	5.08	417880	6.60	681382	7.87	740328	10.39	710358	12.07
ZZZZZZ	181382	4.03	664935	5.08	395660	6.60	657364	7.87	702651	10.40	694299	12.07
ZZZZZZ	178532	4.03	675659	5.08	397378	6.60	665634	7.87	728192	10.40	697723	12.07
ZZZZZZ	191272	4.04	715558	5.09	426647	6.60	700598	7.87	740826	10.40	733839	12.07
ZZZZZZ	182047	4.03	662001	5.08	400379	6.60	650816	7.88	705391	10.40	696005	12.07
ZZZZZZ	178863	4.03	692583	5.08	412443	6.60	687380	7.87	755266	10.40	752048	12.07
OP39669-MB	229255	4.03	820337	5.08	463454	6.60	737613	7.88	718763	10.40	666539	12.07
OP39669-BS	234733	4.03	834863	5.08	475493	6.60	753154	7.88	738185	10.40	678008	12.07
OP39669-MS	215727	4.03	774562	5.08	443231	6.60	705632	7.88	697147	10.40	643135	12.07
OP39669-MSD	213533	4.04	774277	5.08	441641	6.60	702085	7.88	691848	10.40	647216	12.07
MC33299-2	236988	4.03	849400	5.08	481320	6.60	763078	7.88	750674	10.40	708142	12.07

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12

Semivolatile Internal Standard Area Summary

Job Number: MC33299
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Check Std:	MSF3338-CC3320	**Injection Date:**	09/10/14
Lab File ID:	F75990.D	**Injection Time:**	15:42
Instrument ID:	GCMSF	**Method:**	SW846 8270D

Lab Sample ID	IS 1 AREA	IS 1 RT	IS 2 AREA	IS 2 RT	IS 3 AREA	IS 3 RT	IS 4 AREA	IS 4 RT	IS 5 AREA	IS 5 RT	IS 6 AREA	IS 6 RT

IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: MC33299
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Check Std:	MSF3339-CC3320	**Injection Date:**	09/11/14
Lab File ID:	F76023.D	**Injection Time:**	07:54
Instrument ID:	GCMSF	**Method:**	SW846 8270D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	205564	4.01	761349	5.05	450489	6.57	755632	7.85	838029	10.36	817241	12.03
Upper Limit [a]	411128	4.51	1522698	5.55	900978	7.07	1511264	8.35	1676058	10.86	1634482	12.53
Lower Limit [b]	102782	3.51	380675	4.55	225245	6.07	377816	7.35	419015	9.86	408621	11.53
Lab Sample ID	**IS 1 AREA**	**RT**	**IS 2 AREA**	**RT**	**IS 3 AREA**	**RT**	**IS 4 AREA**	**RT**	**IS 5 AREA**	**RT**	**IS 6 AREA**	**RT**
OP39716-MB	232723	4.00	874036	5.05	514957	6.57	826072	7.84	844802	10.36	752717	12.02
OP39716-BS	231866	4.01	852596	5.05	488926	6.57	796048	7.85	810341	10.36	733498	12.03
ZZZZZZ	245740	4.00	911754	5.05	522692	6.57	849829	7.84	846047	10.36	774563	12.02
MC33299-1	225161	4.01	837483	5.05	479656	6.57	761720	7.85	758621	10.36	704891	12.02
ZZZZZZ	181483	4.01	683407	5.06	405658	6.57	658836	7.84	725164	10.36	655953	12.02
ZZZZZZ	231405	4.00	864650	5.05	494275	6.57	808554	7.85	821686	10.36	751044	12.02
ZZZZZZ	230024	4.01	633733	5.07	425750	6.60	774037	7.85	819816	10.36	754336	12.02
ZZZZZZ	233061	4.01	620989	5.08	435040	6.61	779202	7.85	847340	10.36	770407	12.02
ZZZZZZ	201784	4.00	757334	5.05	444572	6.57	718046	7.84	730940	10.36	678549	12.02
OP39718-MB	179250	4.00	666215	5.05	389791	6.57	635109	7.84	690329	10.36	669163	12.02
OP39718-BS	176909	4.01	667500	5.05	386565	6.57	640127	7.85	711341	10.36	682791	12.02
OP39718-MS	180096	4.01	660231	5.05	389423	6.57	641582	7.85	706983	10.36	675167	12.02
OP39718-MSD	178828	4.00	660008	5.05	385105	6.57	648643	7.85	721029	10.36	702412	12.02
MC33200-16	174231	4.01	645642	5.05	376145	6.57	633369	7.84	672939	10.36	662585	12.02
ZZZZZZ	175331	4.00	658513	5.05	381116	6.57	639304	7.84	684015	10.36	660985	12.02
ZZZZZZ	175937	4.01	637883	5.06	374548	6.57	633729	7.84	680085	10.35	670256	12.02

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: MC33299
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Check Std:	MSI3411-CC3386	**Injection Date:**	09/09/14
Lab File ID:	I91505.D	**Injection Time:**	08:18
Instrument ID:	GCMSI	**Method:**	SW846 8270D BY SIM

	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Check Std	424738	3.72	941465	4.76	504403	6.27	865525	7.61	616879	10.38	1518371	11.83
Upper Limit [a]	849476	4.22	1882930	5.26	1008806	6.77	1731050	8.11	1233758	10.88	3036742	12.33
Lower Limit [b]	212369	3.22	470733	4.26	252202	5.77	432763	7.11	308440	9.88	759186	11.33
Lab Sample ID	**IS 1 AREA**	**RT**	**IS 2 AREA**	**RT**	**IS 3 AREA**	**RT**	**IS 4 AREA**	**RT**	**IS 5 AREA**	**RT**	**IS 6 AREA**	**RT**
OP39690-MB	488530	3.72	1118351	4.76	606003	6.27	1031465	7.61	750674	10.38	1833901	11.83
OP39690-BS	471720	3.72	1072520	4.76	573690	6.28	976146	7.61	717713	10.38	1690664	11.83
ZZZZZZ	394242	3.72	894307	4.76	482410	6.27	818451	7.61	579942	10.38	1454194	11.82
ZZZZZZ	374360	3.72	844479	4.76	454968	6.27	769584	7.61	547058	10.38	1381163	11.83
OP39695-MB	389021	3.72	889954	4.76	478853	6.27	810138	7.61	576192	10.38	1452520	11.83
OP39695-BS	383322	3.72	868662	4.76	462592	6.28	778193	7.61	574037	10.38	1369067	11.83
OP39695-MS	390718	3.72	890745	4.76	471899	6.28	796404	7.61	582175	10.38	1401865	11.83
OP39695-MSD	381940	3.72	869609	4.76	466056	6.27	791100	7.61	573389	10.38	1369442	11.83
MC33200-10	366211	3.72	839148	4.76	456079	6.27	771840	7.61	543978	10.38	1363464	11.82
ZZZZZZ	385533	3.72	879284	4.76	472859	6.27	790333	7.61	558218	10.38	1402926	11.83
OP39670-MB	419345	3.72	947037	4.76	504185	6.27	838337	7.61	572479	10.38	1395392	11.83
OP39670-BS	440317	3.72	983240	4.76	517761	6.28	870117	7.61	613418	10.38	1434285	11.83
OP39670-MS	421165	3.72	948223	4.76	495877	6.27	822746	7.61	570459	10.38	1352411	11.83
OP39670-MSD	433968	3.72	974205	4.76	508268	6.28	836117	7.61	561716	10.38	1317621	11.83
MC33299-2	458102	3.72	1033025	4.76	551908	6.27	908038	7.61	595737	10.38	1436533	11.83
MC33299-1	436763	3.72	982081	4.76	520721	6.27	857461	7.61	557250	10.38	1352171	11.83

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Surrogate Recovery Summary

Job Number: MC33299
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Method: SW846 8270D **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
MC33299-1	F76027.D	66	63	67	64	71	83
MC33299-2	F76019.D	71	67	66	72	80	91
OP39669-BS	F76016.D	75	74	98	79	85	99
OP39669-MB	F76015.D	69	66	69	70	78	88
OP39669-MS	F76017.D	74	75	86	74	85	93
OP39669-MSD	F76018.D	74	73	81	77	84	99

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorophenol	30-130%
S2 = Phenol-d5	30-130%
S3 = 2,4,6-Tribromophenol	30-130%
S4 = Nitrobenzene-d5	30-130%
S5 = 2-Fluorobiphenyl	30-130%
S6 = Terphenyl-d14	30-130%

Semivolatile Surrogate Recovery Summary

Job Number: MC33299
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Method: SW846 8270D BY SIM **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
MC33299-1	I91521.D	34	33	33	69	68	102
MC33299-2	I91520.D	38	37	33	77	75	110
OP39670-BS	I91517.D	40	40	46	83	81	115
OP39670-MB	I91516.D	37	38	36	74	72	103
OP39670-MS	I91518.D	40	41	41	80	81	106
OP39670-MSD	I91519.D	39	39	41	81	81	117

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorophenol	15-110%
S2 = Phenol-d5	15-110%
S3 = 2,4,6-Tribromophenol	15-110%
S4 = Nitrobenzene-d5	30-130%
S5 = 2-Fluorobiphenyl	30-130%
S6 = Terphenyl-d14	30-130%

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries

Method Blank Summary

Job Number: MC33299
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP39668-MB	BB59680.D	1	09/05/14	NK	09/04/14	OP39668	GBB3323

The QC reported here applies to the following samples: **Method:** SW846 8011

MC33299-1, MC33299-2

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.73	ug/kg	
106-93-4	1,2-Dibromoethane	ND	2.5	0.61	ug/kg	

CAS No.	Surrogate Recoveries		Limits
460-00-4	Bromofluorobenzene (S)	116%	61-167%
460-00-4	Bromofluorobenzene (S)	121%	61-167%

Method Blank Summary

Job Number: MC33299
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP39813-MB	BB59732.D	1	09/16/14	NK	09/15/14	OP39813	GBB3326

The QC reported here applies to the following samples: **Method:** SW846 8011

MC33299-4

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.015	0.0061	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.015	0.0061	ug/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	Bromofluorobenzene (S)	126%	36-173%
460-00-4	Bromofluorobenzene (S)	132%	36-173%

Method Blank Summary

Job Number: MC33299
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GAB4570-MB	AB85751.D	1	09/04/14	AF	n/a	n/a	GAB4570

The QC reported here applies to the following samples: **Method:** SW846 8015

MC33299-1, MC33299-2

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (VOA)	ND	5.0	0.74	mg/kg	

CAS No.	Surrogate Recoveries		Limits
	2,3,4-Trifluorotoluene	91%	61-116%

Blank Spike Summary

Job Number: MC33299
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP39668-BS	BB59681.D	1	09/05/14	NK	09/04/14	OP39668	GBB3323

The QC reported here applies to the following samples: **Method:** SW846 8011

MC33299-1, MC33299-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
96-12-8	1,2-Dibromo-3-chloropropane	33.2	33.7	102	59-142
106-93-4	1,2-Dibromoethane	33.2	33.4	101	56-140

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	Bromofluorobenzene (S)	95%	61-167%
460-00-4	Bromofluorobenzene (S)	108%	61-167%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC33299
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP39813-BS	BB59733.D	1	09/16/14	NK	09/15/14	OP39813	GBB3326

The QC reported here applies to the following samples: **Method:** SW846 8011

MC33299-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
96-12-8	1,2-Dibromo-3-chloropropane	0.071	0.085	120	60-140
106-93-4	1,2-Dibromoethane	0.071	0.082	115	60-140

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	Bromofluorobenzene (S)	109%	36-173%
460-00-4	Bromofluorobenzene (S)	114%	36-173%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC33299
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GAB4570-BSP	AB85752.D	1	09/04/14	AF	n/a	n/a	GAB4570
GAB4570-BSD	AB85753.D	1	09/04/14	AF	n/a	n/a	GAB4570

The QC reported here applies to the following samples: **Method:** SW846 8015

MC33299-1, MC33299-2

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH-GRO (VOA)	32.5	31.9	98	32.0	98	0	66-126/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
	2,3,4-Trifluorotoluene	98%	97%	61-116%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC33299
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP39668-MS	BB59682.D	1	09/05/14	NK	09/04/14	OP39668	GBB3323
OP39668-MSD	BB59683.D	1	09/05/14	NK	09/04/14	OP39668	GBB3323
MC33299-2	BB59684.D	1	09/05/14	NK	09/04/14	OP39668	GBB3323

The QC reported here applies to the following samples: **Method:** SW846 8011

MC33299-1, MC33299-2

CAS No.	Compound	MC33299-2 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
96-12-8	1,2-Dibromo-3-chloropropane	ND		41.6	58.9	141	41.4	54.5	132	8	40-156/27
106-93-4	1,2-Dibromoethane	ND		41.6	49.1	118	41.4	47.1	114	4	48-141/27

CAS No.	Surrogate Recoveries	MS	MSD	MC33299-2	Limits
460-00-4	Bromofluorobenzene (S)	127%	130%	127%	61-167%
460-00-4	Bromofluorobenzene (S)	125%	131%	133%	61-167%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC33299
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP39813-MS	BB59740.D	1	09/16/14	NK	09/15/14	OP39813	GBB3326
OP39813-MSD	BB59741.D	1	09/16/14	NK	09/15/14	OP39813	GBB3326
MC33579-3	BB59734.D	1	09/16/14	NK	09/15/14	OP39813	GBB3326

The QC reported here applies to the following samples: **Method:** SW846 8011

MC33299-4

CAS No.	Compound	MC33579-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
96-12-8	1,2-Dibromo-3-chloropropane	ND		0.071	0.10	141	0.071	0.10	141	0	64-141/29
106-93-4	1,2-Dibromoethane	ND		0.071	0.086	121	0.071	0.077	108	11	63-163/27

CAS No.	Surrogate Recoveries	MS	MSD	MC33579-3	Limits
460-00-4	Bromofluorobenzene (S)	124%	126%	125%	36-173%
460-00-4	Bromofluorobenzene (S)	129%	130%	126%	36-173%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC33299
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC33299-2MS	AB85755.D	1	09/04/14	AF	n/a	n/a	GAB4570
MC33299-2MSD	AB85756.D	1	09/04/14	AF	n/a	n/a	GAB4570
MC33299-2	AB85754.D	1	09/04/14	AF	n/a	n/a	GAB4570

The QC reported here applies to the following samples: **Method:** SW846 8015

MC33299-1, MC33299-2

CAS No.	Compound	MC33299-2 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	Spike mg/kg	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (VOA)	7.70	J	88.2	92.5	96	88.2	92.3	96	0	41-150/20

CAS No.	Surrogate Recoveries	MS	MSD	MC33299-2	Limits
	2,3,4-Trifluorotoluene	97%	97%	93%	61-116%

* = Outside of Control Limits.

Volatile Surrogate Recovery Summary

Job Number: MC33299
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Method: SW846 8011 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]
MC33299-4	BB59735.D	126	130
OP39813-BS	BB59733.D	109	114
OP39813-MB	BB59732.D	126	132
OP39813-MS	BB59740.D	124	129
OP39813-MSD	BB59741.D	126	130

Surrogate Compounds	Recovery Limits
S1 = Bromofluorobenzene (S)	36-173%

(a) Recovery from GC signal #2
(b) Recovery from GC signal #1

Volatile Surrogate Recovery Summary

Job Number: MC33299
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Method: SW846 8011 **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]
MC33299-1	BB59685.D	125	128
MC33299-2	BB59684.D	127	133
OP39668-BS	BB59681.D	95	108
OP39668-MB	BB59680.D	116	121
OP39668-MS	BB59682.D	127	125
OP39668-MSD	BB59683.D	130	131

Surrogate Compounds	Recovery Limits
S1 = Bromofluorobenzene (S)	61-167%

(a) Recovery from GC signal #2
(b) Recovery from GC signal #1

Volatile Surrogate Recovery Summary

Job Number: MC33299
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Method: SW846 8015 **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
MC33299-1	AB85758.D	90
MC33299-2	AB85754.D	93
GAB4570-BSD	AB85753.D	97
GAB4570-BSP	AB85752.D	98
GAB4570-MB	AB85751.D	91
MC33299-2MS	AB85755.D	97
MC33299-2MSD	AB85756.D	97

Surrogate Compounds	Recovery Limits
S1 = 2,3,4-Trifluorotoluene	61-116%

(a) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: MC33299
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Check Std:	GBB3323-ICC3323	**Injection Date:**	09/05/14
Lab File ID:	BB59674.D	**Injection Time:**	09:28
Instrument ID:	GCBB	**Method:**	SW846 8011

	S1 [a] RT	S1 [b] RT
Check Std	3.31	3.33

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
OP39668-MB	BB59680.D	09/05/14	11:30	3.31	3.33
OP39668-BS	BB59681.D	09/05/14	11:50	3.31	3.33
OP39668-MS	BB59682.D	09/05/14	12:10	3.31	3.33
OP39668-MSD	BB59683.D	09/05/14	12:31	3.31	3.33
MC33299-2	BB59684.D	09/05/14	12:51	3.31	3.33
MC33299-1	BB59685.D	09/05/14	13:12	3.31	3.33
GBB3323-ECC3323	BB59686.D	09/05/14	13:32	3.31	3.33

Surrogate Compounds

S1 = Bromofluorobenzene (S)

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: MC33299
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Check Std:	GBB3326-ICC3326	**Injection Date:**	09/16/14
Lab File ID:	BB59728.D	**Injection Time:**	17:25
Instrument ID:	GCBB	**Method:**	SW846 8011

	S1 [a] RT	S1 [b] RT
Check Std	3.50	3.52

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
OP39813-MB	BB59732.D	09/16/14	18:38	3.50	3.51
OP39813-BS	BB59733.D	09/16/14	18:57	3.50	3.51
MC33579-3	BB59734.D	09/16/14	19:15	3.50	3.51
MC33299-4	BB59735.D	09/16/14	19:33	3.50	3.51
ZZZZZZ	BB59736.D	09/16/14	19:51	3.50	3.51
ZZZZZZ	BB59737.D	09/16/14	20:09	3.50	3.51
ZZZZZZ	BB59738.D	09/16/14	20:28	3.50	3.51
ZZZZZZ	BB59739.D	09/16/14	20:46	3.50	3.51
OP39813-MS	BB59740.D	09/16/14	21:04	3.50	3.51
OP39813-MSD	BB59741.D	09/16/14	21:23	3.50	3.51
GBB3326-ECC332B	BB59742.D	09/16/14	21:41	3.50	3.51

Surrogate Compounds

S1 = Bromofluorobenzene (S)

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: MC33299
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Check Std:	GAB4570-CC4488	**Injection Date:**	09/04/14
Lab File ID:	AB85750.D	**Injection Time:**	07:01
Instrument ID:	GCAB	**Method:**	SW846 8015

	S1 [a] RT
Check Std	20.31

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT
GAB4570-MB	AB85751.D	09/04/14	07:38	20.31
GAB4570-BSP	AB85752.D	09/04/14	08:16	20.31
GAB4570-BSD	AB85753.D	09/04/14	08:53	20.31
MC33299-2	AB85754.D	09/04/14	09:30	20.32
MC33299-2MS	AB85755.D	09/04/14	10:08	20.32
MC33299-2MSD	AB85756.D	09/04/14	10:46	20.32

Surrogate Compounds

S1 = 2,3,4-Trifluorotoluene

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: MC33299
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Check Std:	GAB4570-CC4488	**Injection Date:**	09/04/14
Lab File ID:	AB85757.D	**Injection Time:**	11:24
Instrument ID:	GCAB	**Method:**	SW846 8015

	S1 [a] RT
Check Std	20.31

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT
MC33299-1	AB85758.D	09/04/14	12:02	20.32
ZZZZZZ	AB85759.D	09/04/14	12:40	20.32
ZZZZZZ	AB85760.D	09/04/14	13:18	20.32
ZZZZZZ	AB85761.D	09/04/14	13:56	20.32
ZZZZZZ	AB85762.D	09/04/14	14:34	20.32
ZZZZZZ	AB85763.D	09/04/14	15:12	20.32
ZZZZZZ	AB85764.D	09/04/14	15:50	20.32
ZZZZZZ	AB85765.D	09/04/14	16:28	20.32
ZZZZZZ	AB85766.D	09/04/14	17:06	20.32
ZZZZZZ	AB85767.D	09/04/14	17:44	20.32

Surrogate Compounds

S1 = 2,3,4-Trifluorotoluene

(a) Retention time from GC signal #1

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Percent Solids Raw Data Summary

Percent Solids Raw Data Summary

Job Number: MC33299
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample: MC33299-1 **Analyzed:** 04-SEP-14 by BF **Method:** SM21 2540 B MOD.
ClientID: MW28-090214 (32-34')

Wet Weight (Total)	34.173	g
Tare Weight	21.963	g
Dry Weight (Total)	31.985	g
Solids, Percent	82.1	%

Sample: MC33299-2 **Analyzed:** 04-SEP-14 by BF **Method:** SM21 2540 B MOD.
ClientID: MW28-090214 (36-40')

Wet Weight (Total)	32.018	g
Tare Weight	19.679	g
Dry Weight (Total)	29.308	g
Solids, Percent	78	%

SGS ACCUTEST IS PART OF SGS, THE WORLD'S LEADING INSPECTION, VERIFICATION, TESTING AND CERTIFICATION COMPANY.

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Automated Report

Technical Report for

Shell Oil

URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana,

SGS Accutest Job Number: MC34126

Sampling Date: 10/06/14



Report to:

AECOM, INC.

Melissa.mansker@aecom.com

ATTN: Melissa Mansker

Total number of pages in report: 66

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

H. (Brad) Madadian
Lab Director

Client Service contact: Jeremy Vienneau 508-481-6200

Certifications: MA (M-MA136,SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) FL (E87579) NY (11791) NJ (MA926) PA (6801121) ND (R-188) CO (MA00136) MN (11546AA) NC (653) IL (002337) WI (399080220) DoD ELAP (L-A-B L2235)

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Test results relate only to samples analyzed.

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Unauthorized modification of this report is strictly prohibited.

SGS ACCUTEST

November 03, 2016

AECOM
1001 Highlands Plaza Drive West Suite 300
St. Louis, MO 63110

RE: SGS Accutest Job # MC34126

Dear Elizabeth Kunkel

As you are aware, SGS Accutest Inc. - Marlborough has been conducting an extensive review of data associated with some historical Gas Chromatography-Mass Spectroscopy volatiles analyses. As a result of this review it was determined that some revisions of the original test report for this job were needed. These corrections have been incorporated into the revised report.

Please be assured that corrective actions have been put in place to address this matter and prevent a recurrence.

We apologize for any inconvenience that this issue may have caused. Please don't hesitate to contact us if we can be of further assistance.

Sincerely,

H. (Brad) Madadian

Regional Laboratory Director
SGS Accutest Inc. - Marlborough

SGS ACCUTEST IS PART OF SGS, THE WORLD'S LEADING INSPECTION, VERIFICATION, TESTING AND CERTIFICATION COMPANY.

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Sample Summary

Shell Oil

Job No: MC34126

URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
MC34126-1	10/06/14	10:50	MMSV	10/07/14	AQ	Ground Water	MW1-ROX-100614
MC34126-1D	10/06/14	10:50	MMSV	10/07/14	AQ	Water Dup/MSD	MW1-ROX-100614
MC34126-1S	10/06/14	10:50	MMSV	10/07/14	AQ	Water Matrix Spike	MW1-ROX-100614
MC34126-2	10/06/14	15:45	MMSV	10/07/14	AQ	Ground Water	MW12-ROX-100614
MC34126-3	10/06/14	00:00	MMSV	10/07/14	AQ	Trip Blank Water	TB-ROX-100614-HCL
MC34126-4	10/06/14	00:00	MMSV	10/07/14	AQ	Trip Blank Water	TB-ROX-100614-ST

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: She O **Job No** MC34 26

Site: URSMOSTL:Roxana 4Q 4 GW/ 2 562973 03004 900 South Centra **Report Date** /3/20 6 :59: 4 PM

2 Samp e(s), 2 Tr p B ank(s) were co ected on 0/06/20 4 and were rece ved at SGS Accutest New Eng and on 0/07/20 4 proper y preserved, at 9 Deg C and ntact These Samp es rece ved a job number of MC34 26 A st ng of the Laboratory Samp e ID, C ent Samp e ID and dates of co ect on are presented n the Resu ts Summary Sect on of th s report -Ch orohexane, Benzeneth o ,
D benz(a,h)acr d ne, Indene, and Qu no ne were searched n the brary search and repo ted on y f detect ons were found

Except as noted be ow, a method spec f ed ca brat ons and qua ty contro performance cr ter a were met for th s job For more nformat on, p ease refer to QC summary pages

Volatiles by GCMS By Method SW846 8260C

Matrix: AQ **Batch ID:** MSV 293

- A samp es were ana yzed w th n the recommended method ho d ng t me
- Samp e(s) MC34 26- MS, MC34 26- MSD were used as the QC samp es nd cated
- A method b anks for th s batch meet method spec f c cr ter a
- B ank Sp ke Recovery(s) for Acetone, Acro e n, Acry on tr e, Ch oroethane, V ny Acetate are outs de contro m ts
- Matr x Sp ke Recovery(s) for , , ,2-Tetrach oroethane, ,4-D oxane, 2-Butanone (MEK), 2-Ch oroethy v ny ether, 2-Hexanone, Acetone, Acry on tr e, Hexach orobutad ene, p-Isopropy to uene, sec-Buty benzene, Tetrach oroethene are outs de contro m ts Outs de contro m ts due to poss b e matr x nterference
- Matr x Sp ke Dup cate Recove y(s) for 2-Butanone (MEK), 2-Ch oroethy v ny ether, 2-Hexanone, Acetone, Acry on tr e, Hexach orobutad ene, ,4-D oxane are outs de contro m ts Outs de contro m ts due to poss b e matr x nterference
- RPD(s) for MSD for ,4-D oxane are outs de contro m ts for samp e MC34 26- MSD H gh RPD due to poss b e matr x nterference and/or samp e non-homogene ty
- Acetone, Acro e n, Acry on tr e, 2-Ch oroethy v ny ether, 4-Methy -2-pentanone (MIBK), V ny Acetate: Cont nu ng Ca brat on Ver f cat on outs de of acceptance cr ter a Samp e resu t may be b ased ow

Extractables by GCMS By Method SW846 8270D

Matrix: AQ **Batch ID:** OP40 08

- A samp es were extracted w th n the recommended method ho d ng t me
- A samp es were ana yzed w th n the recommended method ho d ng t me
- A method b anks for th s batch meet method spec f c cr ter a
- Samp e(s) MC34 26- MS, MC34 26- MSD were used as the QC samp es nd cated
- In t a ca brat on ver f cat on MSF336 -ICV336 for 4-Ch oroan ne exceed 30% D fference 4-Ch oroan ne s w th n cr ter a n cont nu ng ca brat on check standard MSF3364-CC336
- OP40 08-BS/MS/MSD Recovery(s) for 4-N tropheno , Pheno are outs de contro m t

Extractables by GCMS By Method SW846 8270D BY SIM

Matrix: AQ **Batch ID:** OP40 09

- A samp es were extracted w th n the recommended method ho d ng t me
- A samp es were ana yzed w th n the recommended method ho d ng t me
- Samp e(s) MC34 26- MS, MC34 26- MSD were used as the QC samp es nd cated
- A method b anks for th s batch meet method spec f c cr ter a

Volatiles by GC By Method SW846 8011

Matrix: AQ **Batch ID:** OP40

- A samp es were extracted w th n the recommended method ho d ng t me
- A samp es were ana yzed w th n the recommended method ho d ng t me
- Samp e(s) MC34 26- MS, MC34 26- MSD were used as the QC samp es nd cated
- A method b anks for th s batch meet method spec f c cr ter a
- OP40 -MS/MSD Recovery(s) for ,2-D bromo-3-ch oropropane are outs de contro m ts Outs de contro m ts due to poss b e matr x nterference

SGS Accutest New Eng and cert f es that a ana ys s were performed w th n method spec f cat on It s further recommended that th s report to be used n ts ent rety The Laborato y D rector for SGS Accutest New Eng and or ass gnee as ver f ed by the s gnature on the cover page has author zed the re ease of th s repo t(MC34 26)

Summary of Hits

Job Number: MC34126
Account: Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL
Collected: 10/06/14

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
MC34126-1	MW1-ROX-100614					
Methyl Tert Butyl Ether		0.82 J	1.0	0.51	ug/l	SW846 8260C
MC34126-2	MW12-ROX-100614					
No hits reported in this sample.						
MC34126-3	TB-ROX-100614-HCL					
No hits reported in this sample.						
MC34126-4	TB-ROX-100614-ST					
No hits reported in this sample.						

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW1-ROX-100614		
Lab Sample ID:	MC34126-1	**Date Sampled:**	10/06/14
Matrix:	AQ - Ground Water	**Date Received:**	10/07/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V35622.D	1	10/16/14	AMY	n/a	n/a	MSV1293
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	10	2.5	ug/l	
107-02-8	Acrolein [a]	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile [a]	ND	5.0	2.1	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
110-75-8	2-Chloroethyl vinyl ether [a]	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW1-ROX-100614		
Lab Sample ID:	MC34126-1	**Date Sampled:**	10/06/14
Matrix:	AQ - Ground Water	**Date Received:**	10/07/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.82	1.0	0.51	ug/l	J
108-10-1	4-Methyl-2-pentanone (MIB [a]	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate [a]	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW1-ROX-100614		
Lab Sample ID:	MC34126-1	**Date Sampled:**	10/06/14
Matrix:	AQ - Ground Water	**Date Received:**	10/07/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		70-130%
2037-26-5	Toluene-D8	97%		70-130%
460-00-4	4-Bromofluorobenzene	91%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW1-ROX-100614		
Lab Sample ID:	MC34126-1	**Date Sampled:**	10/06/14
Matrix:	AQ - Ground Water	**Date Received:**	10/07/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F76767.D	1	10/10/14	WK	10/07/14	OP40108	MSF3364
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	11	2.6	ug/l	
95-57-8	2-Chlorophenol	ND	5.3	0.33	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	11	0.87	ug/l	
120-83-2	2,4-Dichlorophenol	ND	11	0.42	ug/l	
105-67-9	2,4-Dimethylphenol	ND	11	0.59	ug/l	
51-28-5	2,4-Dinitrophenol	ND	21	2.6	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	2.0	ug/l	
95-48-7	2-Methylphenol	ND	11	0.24	ug/l	
	3&4-Methylphenol	ND	11	0.49	ug/l	
88-75-5	2-Nitrophenol	ND	11	3.0	ug/l	
100-02-7	4-Nitrophenol	ND	21	0.56	ug/l	
87-86-5	Pentachlorophenol	ND	11	1.2	ug/l	
108-95-2	Phenol	ND	5.3	0.32	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	11	0.39	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	11	0.18	ug/l	
62-53-3	Aniline	ND	11	0.67	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.3	0.50	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.3	0.56	ug/l	
100-51-6	Benzyl Alcohol	ND	11	2.4	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.3	0.33	ug/l	
106-47-8	4-Chloroaniline	ND	11	0.59	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.3	0.30	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.3	0.37	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.3	0.35	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.3	0.26	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.3	0.25	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	11	0.48	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	11	0.32	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.3	0.28	ug/l	
132-64-9	Dibenzofuran	ND	2.1	0.27	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.3	0.18	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.3	0.30	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW1-ROX-100614		
Lab Sample ID:	MC34126-1	**Date Sampled:**	10/06/14
Matrix:	AQ - Ground Water	**Date Received:**	10/07/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	5.3	0.21	ug/l	
131-11-3	Dimethyl phthalate	ND	5.3	0.36	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.1	0.35	ug/l	
118-74-1	Hexachlorobenzene	ND	5.3	0.30	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	11	1.4	ug/l	
67-72-1	Hexachloroethane	ND	5.3	0.32	ug/l	
78-59-1	Isophorone	ND	5.3	0.47	ug/l	
88-74-4	2-Nitroaniline	ND	11	0.42	ug/l	
99-09-2	3-Nitroaniline	ND	11	1.4	ug/l	
100-01-6	4-Nitroaniline	ND	11	2.3	ug/l	
98-95-3	Nitrobenzene	ND	5.3	0.41	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.3	1.1	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.3	0.42	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.3	0.20	ug/l	
110-86-1	Pyridine	ND	11	0.54	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	38%		15-110%
4165-62-2	Phenol-d5	23%		15-110%
118-79-6	2,4,6-Tribromophenol	98%		15-110%
4165-60-0	Nitrobenzene-d5	64%		30-130%
321-60-8	2-Fluorobiphenyl	70%		30-130%
1718-51-0	Terphenyl-d14	91%		30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW1-ROX-100614		
Lab Sample ID:	MC34126-1	**Date Sampled:**	10/06/14
Matrix:	AQ - Ground Water	**Date Received:**	10/07/14
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I92172.D	1	10/13/14	WK	10/07/14	OP40109	MSI3435
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.11	0.073	ug/l	
208-96-8	Acenaphthylene	ND	0.11	0.052	ug/l	
120-12-7	Anthracene	ND	0.11	0.097	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.053	0.021	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.11	0.030	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.053	0.033	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.11	0.028	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.11	0.041	ug/l	
218-01-9	Chrysene	ND	0.11	0.025	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.11	0.034	ug/l	
206-44-0	Fluoranthene	ND	0.11	0.043	ug/l	
86-73-7	Fluorene	ND	0.11	0.10	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.11	0.032	ug/l	
90-12-0	1-Methylnaphthalene	ND	2.1	0.53	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.1	0.53	ug/l	
85-01-8	Phenanthrene	ND	0.053	0.013	ug/l	
129-00-0	Pyrene	ND	0.11	0.040	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	76%		30-130%
321-60-8	2-Fluorobiphenyl	71%		30-130%
1718-51-0	Terphenyl-d14	88%		30-130%

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW1-ROX-100614		
Lab Sample ID:	MC34126-1	**Date Sampled:**	10/06/14
Matrix:	AQ - Ground Water	**Date Received:**	10/07/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB59860.D	1	10/08/14	NK	10/07/14	OP40111	GBB3331
Run #2							

	Initial Volume	Final Volume
Run #1	35.9 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.015	0.0060	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.015	0.0059	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	115%		36-173%
460-00-4	Bromofluorobenzene (S)	106%		36-173%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW12-ROX-100614		
Lab Sample ID:	MC34126-2	**Date Sampled:**	10/06/14
Matrix:	AQ - Ground Water	**Date Received:**	10/07/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V35623.D	1	10/16/14	AMY	n/a	n/a	MSV1293
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	10	2.5	ug/l	
107-02-8	Acrolein [a]	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile [a]	ND	5.0	2.1	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
110-75-8	2-Chloroethyl vinyl ether [a]	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	

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Report of Analysis

Client Sample ID:	MW12-ROX-100614		
Lab Sample ID:	MC34126-2	**Date Sampled:**	10/06/14
Matrix:	AQ - Ground Water	**Date Received:**	10/07/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIB [a]	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate [a]	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW12-ROX-100614		
Lab Sample ID:	MC34126-2	**Date Sampled:**	10/06/14
Matrix:	AQ - Ground Water	**Date Received:**	10/07/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		70-130%
2037-26-5	Toluene-D8	101%		70-130%
460-00-4	4-Bromofluorobenzene	94%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.

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E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW12-ROX-100614		
Lab Sample ID:	MC34126-2	**Date Sampled:**	10/06/14
Matrix:	AQ - Ground Water	**Date Received:**	10/07/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F76768.D	1	10/10/14	WK	10/07/14	OP40108	MSF3364
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	11	2.6	ug/l	
95-57-8	2-Chlorophenol	ND	5.3	0.33	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	11	0.87	ug/l	
120-83-2	2,4-Dichlorophenol	ND	11	0.42	ug/l	
105-67-9	2,4-Dimethylphenol	ND	11	0.59	ug/l	
51-28-5	2,4-Dinitrophenol	ND	21	2.6	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	2.0	ug/l	
95-48-7	2-Methylphenol	ND	11	0.24	ug/l	
	3&4-Methylphenol	ND	11	0.49	ug/l	
88-75-5	2-Nitrophenol	ND	11	3.0	ug/l	
100-02-7	4-Nitrophenol	ND	21	0.56	ug/l	
87-86-5	Pentachlorophenol	ND	11	1.2	ug/l	
108-95-2	Phenol	ND	5.3	0.32	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	11	0.39	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	11	0.18	ug/l	
62-53-3	Aniline	ND	11	0.67	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.3	0.50	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.3	0.56	ug/l	
100-51-6	Benzyl Alcohol	ND	11	2.4	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.3	0.33	ug/l	
106-47-8	4-Chloroaniline	ND	11	0.59	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.3	0.30	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.3	0.37	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.3	0.35	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.3	0.26	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.3	0.25	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	11	0.48	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	11	0.32	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.3	0.28	ug/l	
132-64-9	Dibenzofuran	ND	2.1	0.27	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.3	0.18	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.3	0.30	ug/l	

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Report of Analysis

Client Sample ID:	MW12-ROX-100614		
Lab Sample ID:	MC34126-2	**Date Sampled:**	10/06/14
Matrix:	AQ - Ground Water	**Date Received:**	10/07/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	5.3	0.21	ug/l	
131-11-3	Dimethyl phthalate	ND	5.3	0.36	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.1	0.35	ug/l	
118-74-1	Hexachlorobenzene	ND	5.3	0.30	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	11	1.4	ug/l	
67-72-1	Hexachloroethane	ND	5.3	0.32	ug/l	
78-59-1	Isophorone	ND	5.3	0.47	ug/l	
88-74-4	2-Nitroaniline	ND	11	0.42	ug/l	
99-09-2	3-Nitroaniline	ND	11	1.4	ug/l	
100-01-6	4-Nitroaniline	ND	11	2.3	ug/l	
98-95-3	Nitrobenzene	ND	5.3	0.41	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.3	1.1	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.3	0.42	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.3	0.20	ug/l	
110-86-1	Pyridine	ND	11	0.54	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	40%		15-110%
4165-62-2	Phenol-d5	24%		15-110%
118-79-6	2,4,6-Tribromophenol	94%		15-110%
4165-60-0	Nitrobenzene-d5	71%		30-130%
321-60-8	2-Fluorobiphenyl	74%		30-130%
1718-51-0	Terphenyl-d14	91%		30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW12-ROX-100614		
Lab Sample ID:	MC34126-2	**Date Sampled:**	10/06/14
Matrix:	AQ - Ground Water	**Date Received:**	10/07/14
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I92173.D	1	10/13/14	WK	10/07/14	OP40109	MSI3435
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.11	0.073	ug/l	
208-96-8	Acenaphthylene	ND	0.11	0.052	ug/l	
120-12-7	Anthracene	ND	0.11	0.097	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.053	0.021	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.11	0.030	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.053	0.033	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.11	0.028	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.11	0.041	ug/l	
218-01-9	Chrysene	ND	0.11	0.025	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.11	0.034	ug/l	
206-44-0	Fluoranthene	ND	0.11	0.043	ug/l	
86-73-7	Fluorene	ND	0.11	0.10	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.11	0.032	ug/l	
90-12-0	1-Methylnaphthalene	ND	2.1	0.53	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.1	0.53	ug/l	
85-01-8	Phenanthrene	ND	0.053	0.013	ug/l	
129-00-0	Pyrene	ND	0.11	0.040	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	84%		30-130%
321-60-8	2-Fluorobiphenyl	76%		30-130%
1718-51-0	Terphenyl-d14	88%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW12-ROX-100614		
Lab Sample ID:	MC34126-2	**Date Sampled:**	10/06/14
Matrix:	AQ - Ground Water	**Date Received:**	10/07/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB59861.D	1	10/08/14	NK	10/07/14	OP40111	GBB3331
Run #2							

	Initial Volume	Final Volume
Run #1	36.8 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.014	0.0058	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.014	0.0058	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	154%		36-173%
460-00-4	Bromofluorobenzene (S)	138%		36-173%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-ROX-100614-HCL		
Lab Sample ID:	MC34126-3	**Date Sampled:**	10/06/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/07/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V35619.D	1	10/16/14	AMY	n/a	n/a	MSV1293
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	10	2.5	ug/l	
107-02-8	Acrolein [a]	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile [a]	ND	5.0	2.1	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
110-75-8	2-Chloroethyl vinyl ether [a]	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-ROX-100614-HCL		
Lab Sample ID:	MC34126-3	**Date Sampled:**	10/06/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/07/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIB [a]	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate [a]	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-ROX-100614-HCL		
Lab Sample ID:	MC34126-3	**Date Sampled:**	10/06/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/07/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		70-130%
2037-26-5	Toluene-D8	99%		70-130%
460-00-4	4-Bromofluorobenzene	92%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-ROX-100614-ST		
Lab Sample ID:	MC34126-4	**Date Sampled:**	10/06/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/07/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB59862.D	1	10/08/14	NK	10/07/14	OP40111	GBB3331
Run #2							

	Initial Volume	Final Volume
Run #1	35.6 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.015	0.0060	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.015	0.0060	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	119%		36-173%
460-00-4	Bromofluorobenzene (S)	111%		36-173%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

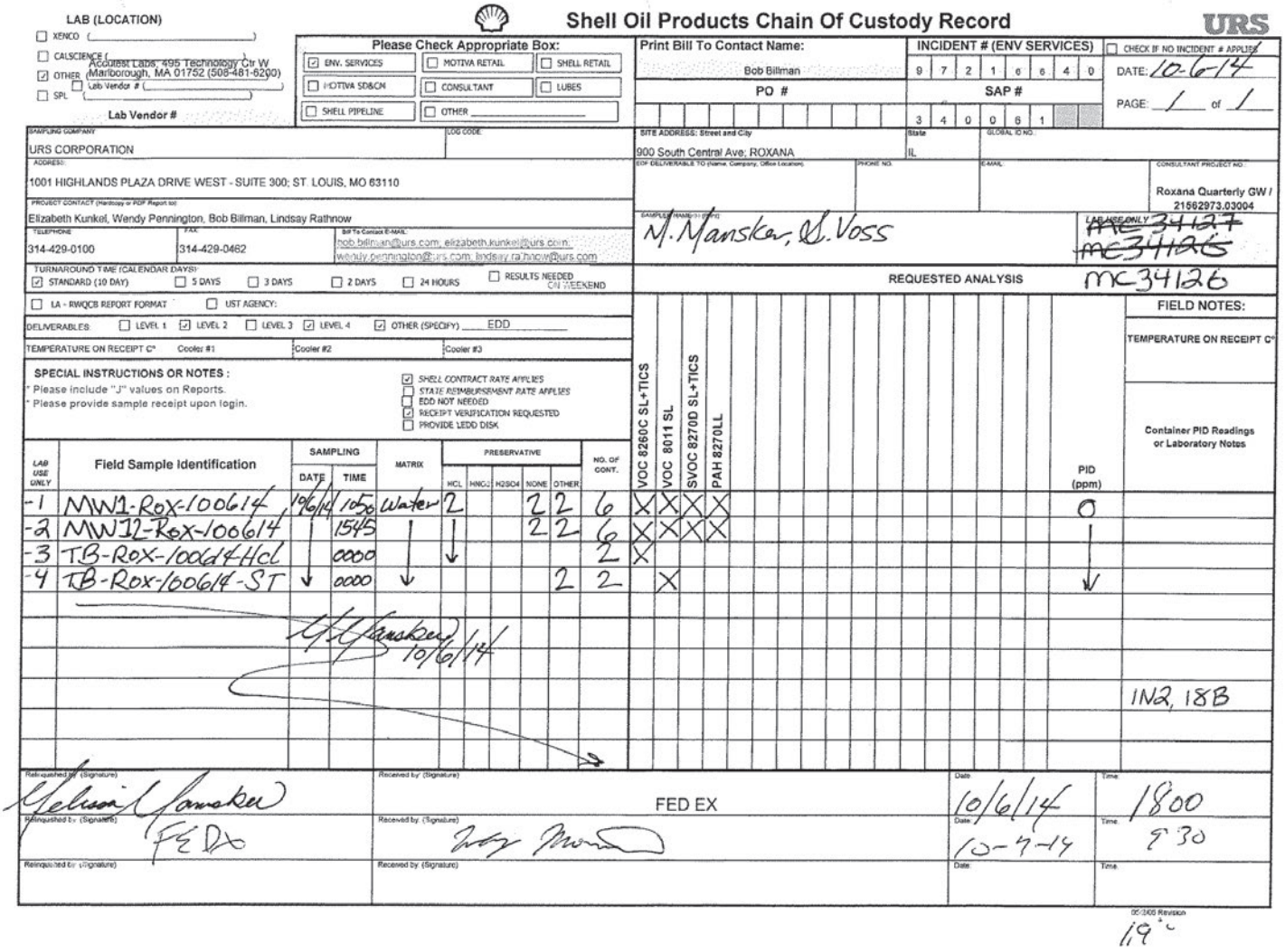
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody



Shell Oil Products Chain Of Custody Record

URS

LAB (LOCATION)
- ☐ XENCO ( )
- ☐ CALSCIENCE ( )
- ☑ OTHER Accutest Labs, 495 Technology Ctr W Marlborough, MA 01752 (508-481-6200)
- ☐ SPL ☐ Lab Vendor # ( )

Lab Vendor #

Please Check Appropriate Box:
- ☑ ENV. SERVICES
- ☐ MOTIVA RETAIL
- ☐ SHELL RETAIL
- ☐ MOTIVA SD&CM
- ☐ CONSULTANT
- ☐ LUBES
- ☐ SHELL PIPELINE
- ☐ OTHER

Print Bill To Contact Name: Bob Billman

PO #

INCIDENT # (ENV SERVICES): 9 7 2 1 6 6 4 0

SAP #: 3 4 0 0 6 1

☐ CHECK IF NO INCIDENT # APPLIES

DATE: 10-6-14

PAGE: 1 of 1

SAMPLING COMPANY: URS CORPORATION

LOG CODE:

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA

State: IL

GLOBAL ID NO.:

ADDRESS: 1001 HIGHLANDS PLAZA DRIVE WEST - SUITE 300; ST. LOUIS, MO 63110

EDF DELIVERABLE TO (Name, Company, Office Location):

PHONE NO.:

E-MAIL:

CONSULTANT PROJECT NO.: Roxana Quarterly GW / 21562973.03004

PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Wendy Pennington, Bob Billman, Lindsay Rathnow

TELEPHONE: 314-429-0100

FAX: 314-429-0462

Bill To Contact E-MAIL: bob.billman@urs.com; elizabeth.kunkel@urs.com; wendy.pennington@urs.com; lindsay.rathnow@urs.com

SAMPLER NAME(S) (PRINT): M. Mansker, S. Voss

LAB USE ONLY: ~~MC34127~~ ~~MC34126~~ MC34126

TURNAROUND TIME (CALENDAR DAYS): ☑ STANDARD (10 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT ☐ UST AGENCY:

DELIVERABLES: ☐ LEVEL 1 ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) EDD

TEMPERATURE ON RECEIPT C°: Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES:
- Please include "J" values on Reports.
- Please provide sample receipt upon login.

- ☑ SHELL CONTRACT RATE APPLIES
- ☐ STATE REIMBURSEMENT RATE APPLIES
- ☐ EDD NOT NEEDED
- ☑ RECEIPT VERIFICATION REQUESTED
- ☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS

FIELD NOTES:

TEMPERATURE ON RECEIPT C°

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260C SL+TICS	VOC 8011 SL	SVOC 8270D SL+TICS	PAH 8270LL	PID (ppm)	Container PID Readings or Laboratory Notes
-1	MW1-Rox-100614	10/6/14	1050	Water	2			2	2	6	X	X	X	X	0	
-2	MW12-Rox-100614	↓	1545	↓	↓			2	2	6	X	X	X	X	↓	
-3	TB-Rox-100614-Hcl	↓	0000	↓	↓					2	X				↓	
-4	TB-Rox-100614-ST	↓	0000	↓					2	2		X			↓	
																1N2, 18B

M. Mansker 10/6/14

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
Melissa Mansker	FED EX	10/6/14	1800
FEDX	[signature]	10-7-14	930

05/3/06 Revision

1.9°C

MC34126: Chain of Custody
Page 1 of 3

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: MC34126 **Client:** URS **Immediate Client Services Action Required:** No

Date / Time Received: 10/7/2014 9:30:00 AM **Delivery Method:**

Project: 900 SOUTH CENTRAL AVE **No. Coolers:** 1 **Airbill #'s:**

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	Infared Gun		
3. Cooler media:	Ice (Bag)		

Quality Control ,Preservation	Y	N	N/A
1. Trip Blank present / cooler:	☑	☐	
2. Trip Blank listed on COC:	☑	☐	
3. Samples preserved properly:	☑	☐	
4. VOCs headspace free:	☑	☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample rec'd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	N	N/A
1. Analysis requested is clear:	☑	☐	
2. Bottles received for unspecified tests	☐	☑	
3. Sufficient volume rec'd for analysis:	☑	☐	
4. Compositing instructions clear:	☐	☐	☑
5. Filtering instructions clear:	☐	☐	☑

Comments

-1 we received volume for MS/MSD, but its not listed on the coc. 6 amber 950's, 6 HCL40ml vials, and 6 SOD THIO vials rec in total.

Accutest Laboratories
V:508.481.6200

495 Technology Center West, Bldg One
F: 508.481.7753

Marlborough, MA
www/accutest.com

Sample Receipt Summary - Problem Resolution

Accutest Job Number: MC34126

CSR: mattm **Response Date:** 10/7/2014

Response: See notes

Accutest Laboratories
V:508.481.6200

495 Technology Center West, Bldg One
F: 508.481.7753

Marlborough, MA
www/accutest.com

MC34126: Chain of Custody
Page 3 of 3

Internal Sample Tracking Chronicle

Shell Oil

Job No: MC34126

URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC34126-1 Collected: 06-OCT-14 10:50 By: MMSV Received: 07-OCT-14 By: AF MW1-ROX-100614						
MC34126-1	SW846 8011	08-OCT-14 14:08	NK	07-OCT-14	NE	V8011SL
MC34126-1	SW846 8270D	10-OCT-14 01:10	WK	07-OCT-14	MD	AB8270SL+
MC34126-1	SW846 8270D BY SIM	13-OCT-14 13:44	WK	07-OCT-14	MD	B8270SIMSL
MC34126-1	SW846 8260C	16-OCT-14 13:19	AMY			V8260SL+
MC34126-2 Collected: 06-OCT-14 15:45 By: MMSV Received: 07-OCT-14 By: AF MW12-ROX-100614						
MC34126-2	SW846 8011	08-OCT-14 14:25	NK	07-OCT-14	NE	V8011SL
MC34126-2	SW846 8270D	10-OCT-14 01:33	WK	07-OCT-14	MD	AB8270SL+
MC34126-2	SW846 8270D BY SIM	13-OCT-14 14:07	WK	07-OCT-14	MD	B8270SIMSL
MC34126-2	SW846 8260C	16-OCT-14 13:45	AMY			V8260SL+
MC34126-3 Collected: 06-OCT-14 00:00 By: MMSV Received: 07-OCT-14 By: AF TB-ROX-100614-HCL						
MC34126-3	SW846 8260C	16-OCT-14 12:00	AMY			V8260SL+
MC34126-4 Collected: 06-OCT-14 00:00 By: MMSV Received: 07-OCT-14 By: AF TB-ROX-100614-ST						
MC34126-4	SW846 8011	08-OCT-14 14:43	NK	07-OCT-14	NE	V8011SL

SGS Accutest Internal Chain of Custody

Job Number: MC34126
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL
Received: 10/07/14

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC34126-1.1	Walk In Ref #22	Marc Tahtamoni	10/07/14 17:08	Retrieve from Storage
MC34126-1.1	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34126-1.4	VOC Ref #1	Amy Min Yang	10/16/14 10:52	Retrieve from Storage
MC34126-1.4	Amy Min Yang	GCMSV	10/16/14 10:52	Load on Instrument
MC34126-1.4	GCMSV	Amy Min Yang	10/17/14 15:39	Unload from Instrument
MC34126-1.4	Amy Min Yang	VOC Ref #1	10/17/14 15:39	Return to Storage
MC34126-1.4	Scott Parsick		12/18/14 12:16	Disposed
MC34126-1.6	Walk In Ref #22	Marc Tahtamoni	10/07/14 19:33	Retrieve from Storage
MC34126-1.6	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34126-1.7	Walk In Ref #22	Alireza Zeighami	10/07/14 15:48	Retrieve from Storage
MC34126-1.7	Alireza Zeighami		10/14/14 07:27	Depleted
MC34126-1.9	VOC Ref #1	Amy Min Yang	10/16/14 10:52	Retrieve from Storage
MC34126-1.9	Amy Min Yang	GCMSV	10/16/14 10:52	Load on Instrument
MC34126-1.9	GCMSV	Amy Min Yang	10/17/14 15:39	Unload from Instrument
MC34126-1.9	Amy Min Yang	VOC Ref #1	10/17/14 15:39	Return to Storage
MC34126-1.9	Scott Parsick		12/18/14 12:16	Disposed
MC34126-1.10	VOC Ref #1	Amy Min Yang	10/16/14 10:52	Retrieve from Storage
MC34126-1.10	Amy Min Yang	GCMSV	10/16/14 10:52	Load on Instrument
MC34126-1.10	GCMSV	Amy Min Yang	10/17/14 15:39	Unload from Instrument
MC34126-1.10	Amy Min Yang	VOC Ref #1	10/17/14 15:39	Return to Storage
MC34126-1.10	Scott Parsick		12/18/14 12:16	Disposed
MC34126-1.11	Walk In Ref #22	Marc Tahtamoni	10/07/14 19:33	Retrieve from Storage
MC34126-1.11	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34126-1.13	Walk In Ref #22	Marc Tahtamoni	10/07/14 17:08	Retrieve from Storage
MC34126-1.13	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34126-1.15	VOC Ref #1	Amy Min Yang	10/16/14 10:52	Retrieve from Storage
MC34126-1.15	Amy Min Yang	GCMSV	10/16/14 10:52	Load on Instrument
MC34126-1.15	GCMSV	Amy Min Yang	10/17/14 15:39	Unload from Instrument
MC34126-1.15	Amy Min Yang	VOC Ref #1	10/17/14 15:39	Return to Storage
MC34126-1.15	Scott Parsick		12/18/14 12:16	Disposed
MC34126-1.17	Walk In Ref #22	Marc Tahtamoni	10/07/14 19:33	Retrieve from Storage
MC34126-1.17	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34126-2.1	Walk In Ref #22	Alireza Zeighami	10/07/14 15:48	Retrieve from Storage
MC34126-2.1	Alireza Zeighami		10/14/14 07:27	Depleted

SGS Accutest Internal Chain of Custody

Job Number: MC34126
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL
Received: 10/07/14

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC34126-2.3	VOC Ref #1	Amy Min Yang	10/16/14 10:52	Retrieve from Storage
MC34126-2.3	Amy Min Yang	GCMSV	10/16/14 10:52	Load on Instrument
MC34126-2.3	GCMSV	Amy Min Yang	10/17/14 15:39	Unload from Instrument
MC34126-2.3	Amy Min Yang	VOC Ref #1	10/17/14 15:39	Return to Storage
MC34126-2.3	Scott Parsick		12/18/14 12:16	Disposed
MC34126-2.5	Walk In Ref #22	Marc Tahtamoni	10/07/14 19:33	Retrieve from Storage
MC34126-2.5	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34126-3.1	VOC Ref #1	Amy Min Yang	10/16/14 10:52	Retrieve from Storage
MC34126-3.1	Amy Min Yang	GCMSV	10/16/14 10:52	Load on Instrument
MC34126-3.1	GCMSV	Amy Min Yang	10/17/14 15:39	Unload from Instrument
MC34126-3.1	Amy Min Yang	VOC Ref #1	10/17/14 15:39	Return to Storage
MC34126-3.1	Scott Parsick		12/18/14 12:16	Disposed
MC34126-4.2	Walk In Ref #22	Marc Tahtamoni	10/07/14 19:33	Retrieve from Storage
MC34126-4.2	Marc Tahtamoni		11/11/14 17:36	Depleted

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: MC34126
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSV1293-MB	V35617.D	1	10/16/14	AMY	n/a	n/a	MSV1293

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34126-1, MC34126-2, MC34126-3

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	

Method Blank Summary

Job Number: MC34126
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSV1293-MB	V35617.D	1	10/16/14	AMY	n/a	n/a	MSV1293

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34126-1, MC34126-2, MC34126-3

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

Method Blank Summary

Job Number: MC34126
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSV1293-MB	V35617.D	1	10/16/14	AMY	n/a	n/a	MSV1293

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34126-1, MC34126-2, MC34126-3

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	94%	70-130%
2037-26-5	Toluene-D8	96%	70-130%
460-00-4	4-Bromofluorobenzene	92%	70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Blank Spike Summary

Job Number: MC34126
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSV1293-BS	V35614.D	1	10/16/14	AMY	n/a	n/a	MSV1293

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34126-1, MC34126-2, MC34126-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	34.5	69* [a]	70-130
107-02-8	Acrolein	250	168	67* [a]	70-130
107-13-1	Acrylonitrile	50	33.5	67* [a]	70-130
71-43-2	Benzene	50	45.1	90	70-130
108-86-1	Bromobenzene	50	54.2	108	70-130
74-97-5	Bromochloromethane	50	45.7	91	70-130
75-27-4	Bromodichloromethane	50	53.4	107	70-130
75-25-2	Bromoform	50	51.8	104	70-130
74-83-9	Bromomethane	50	54.7	109	70-130
78-93-3	2-Butanone (MEK)	50	38.2	76	70-130
104-51-8	n-Butylbenzene	50	52.3	105	70-130
135-98-8	sec-Butylbenzene	50	55.6	111	70-130
98-06-6	tert-Butylbenzene	50	51.4	103	70-130
75-15-0	Carbon disulfide	50	46.1	92	70-130
56-23-5	Carbon tetrachloride	50	55.2	110	70-130
108-90-7	Chlorobenzene	50	56.9	114	70-130
75-00-3	Chloroethane	50	68.7	137* [a]	70-130
110-75-8	2-Chloroethyl vinyl ether	50	40.3	81	70-130
67-66-3	Chloroform	50	45.6	91	70-130
74-87-3	Chloromethane	50	48.5	97	70-130
95-49-8	o-Chlorotoluene	50	53.3	107	70-130
106-43-4	p-Chlorotoluene	50	52.8	106	70-130
124-48-1	Dibromochloromethane	50	56.2	112	70-130
95-50-1	1,2-Dichlorobenzene	50	51.9	104	70-130
541-73-1	1,3-Dichlorobenzene	50	53.2	106	70-130
106-46-7	1,4-Dichlorobenzene	50	51.4	103	70-130
75-71-8	Dichlorodifluoromethane	50	43.6	87	70-130
75-34-3	1,1-Dichloroethane	50	42.7	85	70-130
107-06-2	1,2-Dichloroethane	50	49.1	98	70-130
75-35-4	1,1-Dichloroethene	50	51.6	103	70-130
156-59-2	cis-1,2-Dichloroethene	50	44.8	90	70-130
156-60-5	trans-1,2-Dichloroethene	50	46.5	93	70-130
78-87-5	1,2-Dichloropropane	50	47.5	95	70-130
142-28-9	1,3-Dichloropropane	50	48.0	96	70-130
594-20-7	2,2-Dichloropropane	50	46.5	93	70-130
563-58-6	1,1-Dichloropropene	50	51.9	104	70-130

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34126
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSV1293-BS	V35614.D	1	10/16/14	AMY	n/a	n/a	MSV1293

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34126-1, MC34126-2, MC34126-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-01-5	cis-1,3-Dichloropropene	50	55.6	111	70-130
10061-02-6	trans-1,3-Dichloropropene	50	55.9	112	70-130
123-91-1	1,4-Dioxane	125	114	91	70-130
97-63-2	Ethyl methacrylate	50	43.5	87	77-137
100-41-4	Ethylbenzene	50	58.1	116	70-130
87-68-3	Hexachlorobutadiene	50	61.6	123	70-130
591-78-6	2-Hexanone	50	41.1	82	70-130
98-82-8	Isopropylbenzene	50	55.1	110	70-130
99-87-6	p-Isopropyltoluene	50	57.8	116	70-130
1634-04-4	Methyl Tert Butyl Ether	50	41.6	83	70-130
108-10-1	4-Methyl-2-pentanone (MIBK)	50	37.3	75	70-130
74-95-3	Methylene bromide	50	50.1	100	70-130
75-09-2	Methylene chloride	50	43.4	87	70-130
91-20-3	Naphthalene	50	49.0	98	70-130
103-65-1	n-Propylbenzene	50	55.1	110	70-130
100-42-5	Styrene	50	56.6	113	70-130
630-20-6	1,1,1,2-Tetrachloroethane	50	57.1	114	70-130
79-34-5	1,1,2,2-Tetrachloroethane	50	41.9	84	70-130
127-18-4	Tetrachloroethene	50	60.5	121	70-130
108-88-3	Toluene	50	54.5	109	70-130
87-61-6	1,2,3-Trichlorobenzene	50	53.5	107	70-130
120-82-1	1,2,4-Trichlorobenzene	50	52.9	106	70-130
71-55-6	1,1,1-Trichloroethane	50	52.4	105	70-130
79-00-5	1,1,2-Trichloroethane	50	50.7	101	70-130
79-01-6	Trichloroethene	50	50.9	102	70-130
75-69-4	Trichlorofluoromethane	50	60.7	121	70-130
96-18-4	1,2,3-Trichloropropane	50	46.6	93	70-130
95-63-6	1,2,4-Trimethylbenzene	50	54.6	109	70-130
108-67-8	1,3,5-Trimethylbenzene	50	53.2	106	70-130
108-05-4	Vinyl Acetate	50	34.1	68* [a]	70-130
75-01-4	Vinyl chloride	50	50.2	100	70-130
	m,p-Xylene	100	116	116	70-130
95-47-6	o-Xylene	50	55.3	111	70-130
1330-20-7	Xylene (total)	150	171	114	70-130

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34126
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSV1293-BS	V35614.D	1	10/16/14	AMY	n/a	n/a	MSV1293

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34126-1, MC34126-2, MC34126-3

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	87%	70-130%
2037-26-5	Toluene-D8	106%	70-130%
460-00-4	4-Bromofluorobenzene	93%	70-130%

(a) Outside control limits. Blank Spike meets program technical requirements.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34126
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34126-1MS	V35627.D	1	10/16/14	AMY	n/a	n/a	MSV1293
MC34126-1MSD	V35628.D	1	10/16/14	AMY	n/a	n/a	MSV1293
MC34126-1	V35622.D	1	10/16/14	AMY	n/a	n/a	MSV1293

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34126-1, MC34126-2, MC34126-3

CAS No.	Compound	MC34126-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		50	18.2	36* [a]	50	18.6	37* [a]	2	70-130/30
107-02-8	Acrolein	ND		250	216	86	250	236	94	9	70-130/30
107-13-1	Acrylonitrile	ND		50	31.6	63* [a]	50	32.6	65* [a]	3	70-130/30
71-43-2	Benzene	ND		50	50.0	100	50	48.7	97	3	70-130/30
108-86-1	Bromobenzene	ND		50	58.8	118	50	56.7	113	4	70-130/30
74-97-5	Bromochloromethane	ND		50	46.8	94	50	46.1	92	2	70-130/30
75-27-4	Bromodichloromethane	ND		50	57.3	115	50	54.1	108	6	70-130/30
75-25-2	Bromoform	ND		50	53.8	108	50	52.6	105	2	70-130/30
74-83-9	Bromomethane	ND		50	56.9	114	50	53.7	107	6	70-130/30
78-93-3	2-Butanone (MEK)	ND		50	31.9	64* [a]	50	30.6	61* [a]	4	70-130/30
104-51-8	n-Butylbenzene	ND		50	59.4	119	50	58.2	116	2	70-130/30
135-98-8	sec-Butylbenzene	ND		50	65.4	131* [a]	50	60.9	122	7	70-130/30
98-06-6	tert-Butylbenzene	ND		50	63.1	126	50	57.9	116	9	70-130/30
75-15-0	Carbon disulfide	ND		50	40.8	82	50	41.7	83	2	70-130/30
56-23-5	Carbon tetrachloride	ND		50	57.1	114	50	57.9	116	1	70-130/30
108-90-7	Chlorobenzene	ND		50	62.2	124	50	60.2	120	3	70-130/30
75-00-3	Chloroethane	ND		50	64.8	130	50	59.3	119	9	70-130/30
110-75-8	2-Chloroethyl vinyl ether	ND		50	ND	0* [a]	50	ND	0* [a]	nc	70-130/30
67-66-3	Chloroform	ND		50	50.0	100	50	48.6	97	3	70-130/30
74-87-3	Chloromethane	ND		50	50.8	102	50	50.0	100	2	70-130/30
95-49-8	o-Chlorotoluene	ND		50	60.0	120	50	56.6	113	6	70-130/30
106-43-4	p-Chlorotoluene	ND		50	58.4	117	50	55.9	112	4	70-130/30
124-48-1	Dibromochloromethane	ND		50	60.2	120	50	57.0	114	5	70-130/30
95-50-1	1,2-Dichlorobenzene	ND		50	56.5	113	50	55.8	112	1	70-130/30
541-73-1	1,3-Dichlorobenzene	ND		50	58.4	117	50	57.4	115	2	70-130/30
106-46-7	1,4-Dichlorobenzene	ND		50	56.8	114	50	55.5	111	2	70-130/30
75-71-8	Dichlorodifluoromethane	ND		50	46.0	92	50	44.7	89	3	70-130/30
75-34-3	1,1-Dichloroethane	ND		50	44.6	89	50	45.6	91	2	70-130/30
107-06-2	1,2-Dichloroethane	ND		50	51.6	103	50	48.6	97	6	70-130/30
75-35-4	1,1-Dichloroethene	ND		50	51.1	102	50	52.7	105	3	70-130/30
156-59-2	cis-1,2-Dichloroethene	ND		50	47.5	95	50	47.3	95	0	70-130/30
156-60-5	trans-1,2-Dichloroethene	ND		50	45.0	90	50	47.8	96	6	70-130/30
78-87-5	1,2-Dichloropropane	ND		50	51.5	103	50	49.7	99	4	70-130/30
142-28-9	1,3-Dichloropropane	ND		50	51.8	104	50	49.8	100	4	70-130/30
594-20-7	2,2-Dichloropropane	ND		50	48.2	96	50	49.3	99	2	70-130/30
563-58-6	1,1-Dichloropropene	ND		50	59.3	119	50	57.1	114	4	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34126
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34126-1MS	V35627.D	1	10/16/14	AMY	n/a	n/a	MSV1293
MC34126-1MSD	V35628.D	1	10/16/14	AMY	n/a	n/a	MSV1293
MC34126-1	V35622.D	1	10/16/14	AMY	n/a	n/a	MSV1293

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34126-1, MC34126-2, MC34126-3

CAS No.	Compound	MC34126-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-01-5	cis-1,3-Dichloropropene	ND		50	55.0	110	50	53.4	107	3	70-130/30
10061-02-6	trans-1,3-Dichloropropene	ND		50	55.3	111	50	53.6	107	3	70-130/30
123-91-1	1,4-Dioxane	ND		125	56.9	46* [a]	125	86.3	69* [a]	41* [b]	70-130/30
97-63-2	Ethyl methacrylate	ND		50	44.3	89	50	42.8	86	3	72-139/30
100-41-4	Ethylbenzene	ND		50	64.5	129	50	62.8	126	3	70-130/30
87-68-3	Hexachlorobutadiene	ND		50	69.4	139* [a]	50	68.9	138* [a]	1	70-130/30
591-78-6	2-Hexanone	ND		50	30.6	61* [a]	50	29.1	58* [a]	5	70-130/30
98-82-8	Isopropylbenzene	ND		50	63.8	128	50	59.6	119	7	70-130/30
99-87-6	p-Isopropyltoluene	ND		50	65.9	132* [a]	50	63.2	126	4	70-130/30
1634-04-4	Methyl Tert Butyl Ether	0.82	J	50	42.2	83	50	43.9	86	4	70-130/30
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		50	37.0	74	50	35.1	70	5	70-130/30
74-95-3	Methylene bromide	ND		50	50.6	101	50	48.4	97	4	70-130/30
75-09-2	Methylene chloride	ND		50	42.2	84	50	44.0	88	4	70-130/30
91-20-3	Naphthalene	ND		50	48.5	97	50	51.4	103	6	70-130/30
103-65-1	n-Propylbenzene	ND		50	63.2	126	50	59.7	119	6	70-130/30
100-42-5	Styrene	ND		50	62.3	125	50	61.4	123	1	70-130/30
630-20-6	1,1,1,2-Tetrachloroethane	ND		50	65.8	132* [a]	50	63.0	126	4	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	ND		50	47.4	95	50	44.4	89	7	70-130/30
127-18-4	Tetrachloroethene	ND		50	67.4	135* [a]	50	64.5	129	4	70-130/30
108-88-3	Toluene	ND		50	57.6	115	50	55.6	111	4	70-130/30
87-61-6	1,2,3-Trichlorobenzene	ND		50	50.6	101	50	55.7	111	10	70-130/30
120-82-1	1,2,4-Trichlorobenzene	ND		50	54.8	110	50	56.1	112	2	70-130/30
71-55-6	1,1,1-Trichloroethane	ND		50	55.6	111	50	56.2	112	1	70-130/30
79-00-5	1,1,2-Trichloroethane	ND		50	52.1	104	50	49.8	100	5	70-130/30
79-01-6	Trichloroethene	ND		50	55.7	111	50	53.6	107	4	70-130/30
75-69-4	Trichlorofluoromethane	ND		50	61.9	124	50	60.8	122	2	70-130/30
96-18-4	1,2,3-Trichloropropane	ND		50	40.3	81	50	37.8	76	6	70-130/30
95-63-6	1,2,4-Trimethylbenzene	ND		50	62.0	124	50	58.6	117	6	70-130/30
108-67-8	1,3,5-Trimethylbenzene	ND		50	60.2	120	50	56.9	114	6	70-130/30
108-05-4	Vinyl Acetate	ND		50	35.9	72	50	35.3	71	2	70-130/30
75-01-4	Vinyl chloride	ND		50	52.6	105	50	52.8	106	0	70-130/30
	m,p-Xylene	ND		100	129	129	100	125	125	3	70-130/30
95-47-6	o-Xylene	ND		50	61.7	123	50	60.2	120	2	70-130/30
1330-20-7	Xylene (total)	ND		150	191	127	150	185	123	3	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34126
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34126-1MS	V35627.D	1	10/16/14	AMY	n/a	n/a	MSV1293
MC34126-1MSD	V35628.D	1	10/16/14	AMY	n/a	n/a	MSV1293
MC34126-1	V35622.D	1	10/16/14	AMY	n/a	n/a	MSV1293

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34126-1, MC34126-2, MC34126-3

CAS No.	Surrogate Recoveries	MS	MSD	MC34126-1	Limits
1868-53-7	Dibromofluoromethane	88%	87%	95%	70-130%
2037-26-5	Toluene-D8	102%	101%	97%	70-130%
460-00-4	4-Bromofluorobenzene	94%	91%	91%	70-130%

(a) Outside control limits due to possible matrix interference. Refer to Blank Spike.
(b) High RPD due to possible matrix interference and/or sample non-homogeneity.

* = Outside of Control Limits.

Volatile Internal Standard Area Summary

Job Number: MC34126
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSV1293-CC1262	**Injection Date:**	10/16/14
Lab File ID:	V35613.D	**Injection Time:**	09:20
Instrument ID:	GCMSV	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	854110	6.58	1337122	7.76	658368	11.09	851584	13.30	75329	3.55
Upper Limit [a]	1708220	7.08	2674244	8.26	1316736	11.59	1703168	13.80	150658	4.05
Lower Limit [b]	427055	6.08	668561	7.26	329184	10.59	425792	12.80	37665	3.05

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSV1293-BS	806861	6.57	1252990	7.76	648481	11.09	805361	13.30	76243	3.54
MSV1293-MB	721766	6.58	1170792	7.76	532741	11.09	649529	13.30	66150	3.54
ZZZZZZ	636572	6.58	969415	7.76	471655	11.09	598753	13.30	58698	3.54
MC34126-3	620861	6.58	1005591	7.76	486222	11.09	595091	13.30	59149	3.54
ZZZZZZ	635801	6.58	1051685	7.76	528042	11.09	619724	13.30	83715	3.54
ZZZZZZ	654491	6.58	1044003	7.76	483759	11.09	615543	13.30	56467	3.54
MC34126-1	636253	6.58	1046526	7.76	486909	11.09	597717	13.30	53394	3.54
MC34126-2	627926	6.58	1077050	7.76	519522	11.09	597728	13.30	51360	3.54
ZZZZZZ	660711	6.59	1107621	7.77	508454	11.09	608813	13.30	56420	3.55
ZZZZZZ	753272	6.59	1195573	7.77	553235	11.09	656551	13.30	59281	3.55
ZZZZZZ	692075	6.58	1048071	7.76	547867	11.09	689651	13.30	83129	3.54
MC34126-1MS	828603	6.58	1310161	7.77	637343	11.09	779152	13.30	69301	3.54
MC34126-1MSD	830011	6.59	1293118	7.77	627826	11.09	802372	13.30	71899	3.55
ZZZZZZ	745845	6.59	1152628	7.76	536111	11.09	661945	13.30	64122	3.55
ZZZZZZ	885777	6.59	1435518	7.77	719297	11.10	856674	13.30	229221[c]	3.55
ZZZZZZ	1036186	6.59	1627918	7.77	768189	11.09	967968	13.30	232305[c]	3.56
ZZZZZZ	1159832	6.59	1910679	7.77	860637	11.09	985644	13.30	124826	3.55
ZZZZZZ	1129443	6.59	1637591	7.76	704257	11.09	944206	13.30	112260	3.55
ZZZZZZ	1107108	6.59	1652561	7.76	696094	11.09	906672	13.30	95523	3.55
ZZZZZZ	1059111	6.59	1589892	7.76	717721	11.09	917031	13.30	88394	3.55
ZZZZZZ	1079909	6.59	1765438	7.77	752718	11.10	869265	13.30	73826	3.55

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Outside control limits. Target analytes not associated with this internal standard.

Volatile Surrogate Recovery Summary

Job Number: MC34126
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Method: SW846 8260C **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
MC34126-1	V35622.D	95	97	91
MC34126-2	V35623.D	96	101	94
MC34126-3	V35619.D	97	99	92
MC34126-1MS	V35627.D	88	102	94
MC34126-1MSD	V35628.D	87	101	91
MSV1293-BS	V35614.D	87	106	93
MSV1293-MB	V35617.D	94	96	92

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	70-130%
S2 = Toluene-D8	70-130%
S3 = 4-Bromofluorobenzene	70-130%

GC/MS Semi-volatiles

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QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: MC34126
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40108-MB	F76763.D	1	10/09/14	WK	10/07/14	OP40108	MSF3364

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34126-1, MC34126-2

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	10	2.5	ug/l	
95-57-8	2-Chlorophenol	ND	5.0	0.31	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	10	0.83	ug/l	
120-83-2	2,4-Dichlorophenol	ND	10	0.40	ug/l	
105-67-9	2,4-Dimethylphenol	ND	10	0.56	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	2.5	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.9	ug/l	
95-48-7	2-Methylphenol	ND	10	0.23	ug/l	
	3&4-Methylphenol	ND	10	0.47	ug/l	
88-75-5	2-Nitrophenol	ND	10	2.9	ug/l	
100-02-7	4-Nitrophenol	ND	20	0.53	ug/l	
87-86-5	Pentachlorophenol	ND	10	1.1	ug/l	
108-95-2	Phenol	ND	5.0	0.30	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	10	0.37	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	10	0.18	ug/l	
62-53-3	Aniline	ND	10	0.64	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.0	0.47	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.0	0.53	ug/l	
100-51-6	Benzyl Alcohol	ND	10	2.3	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.31	ug/l	
106-47-8	4-Chloroaniline	ND	10	0.56	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.0	0.29	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.0	0.35	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.0	0.33	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.0	0.25	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.0	0.24	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	10	0.46	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	10	0.30	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.27	ug/l	
132-64-9	Dibenzofuran	ND	2.0	0.26	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.0	0.17	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.0	0.28	ug/l	
84-66-2	Diethyl phthalate	ND	5.0	0.20	ug/l	
131-11-3	Dimethyl phthalate	ND	5.0	0.34	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
118-74-1	Hexachlorobenzene	ND	5.0	0.29	ug/l	

Method Blank Summary

Job Number: MC34126
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40108-MB	F76763.D	1	10/09/14	WK	10/07/14	OP40108	MSF3364

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34126-1, MC34126-2

CAS No.	Compound	Result	RL	MDL	Units	Q
77-47-4	Hexachlorocyclopentadiene	ND	10	1.3	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.30	ug/l	
78-59-1	Isophorone	ND	5.0	0.45	ug/l	
88-74-4	2-Nitroaniline	ND	10	0.40	ug/l	
99-09-2	3-Nitroaniline	ND	10	1.4	ug/l	
100-01-6	4-Nitroaniline	ND	10	2.2	ug/l	
98-95-3	Nitrobenzene	ND	5.0	0.39	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.0	1.0	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.0	0.40	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.19	ug/l	
110-86-1	Pyridine	ND	10	0.52	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	44%	15-110%
4165-62-2	Phenol-d5	29%	15-110%
118-79-6	2,4,6-Tribromophenol	98%	15-110%
4165-60-0	Nitrobenzene-d5	73%	30-130%
321-60-8	2-Fluorobiphenyl	70%	30-130%
1718-51-0	Terphenyl-d14	89%	30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

Method Blank Summary

Job Number: MC34126
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40109-MB	I92168.D	1	10/13/14	WK	10/07/14	OP40109	MSI3435

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

MC34126-1, MC34126-2

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.069	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.050	ug/l	
120-12-7	Anthracene	ND	0.10	0.092	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.050	0.020	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.029	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.050	0.032	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.027	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.039	ug/l	
218-01-9	Chrysene	ND	0.10	0.024	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.032	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.041	ug/l	
86-73-7	Fluorene	ND	0.10	0.099	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.031	ug/l	
90-12-0	1-Methylnaphthalene	ND	2.0	0.50	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.0	0.50	ug/l	
85-01-8	Phenanthrene	ND	0.050	0.013	ug/l	
129-00-0	Pyrene	ND	0.10	0.038	ug/l	

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	85%	30-130%
321-60-8	2-Fluorobiphenyl	73%	30-130%
1718-51-0	Terphenyl-d14	88%	30-130%

Blank Spike Summary

Job Number: MC34126
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40108-BS	F76764.D	1	10/10/14	WK	10/07/14	OP40108	MSF3364

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34126-1, MC34126-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
65-85-0	Benzoic Acid	50	18.9	38	30-130
95-57-8	2-Chlorophenol	50	34.5	69	30-130
59-50-7	4-Chloro-3-methyl phenol	50	36.8	74	30-130
120-83-2	2,4-Dichlorophenol	50	43.9	88	30-130
105-67-9	2,4-Dimethylphenol	50	32.8	66	30-130
51-28-5	2,4-Dinitrophenol	50	50.5	101	30-130
534-52-1	4,6-Dinitro-o-cresol	50	52.2	104	30-130
95-48-7	2-Methylphenol	50	28.7	57	30-130
	3&4-Methylphenol	100	52.4	52	30-130
88-75-5	2-Nitrophenol	50	42.2	84	30-130
100-02-7	4-Nitrophenol	50	12.3	25* [a]	30-130
87-86-5	Pentachlorophenol	50	42.4	85	30-130
108-95-2	Phenol	50	13.3	27* [a]	30-130
95-95-4	2,4,5-Trichlorophenol	50	41.0	82	30-130
88-06-2	2,4,6-Trichlorophenol	50	44.0	88	30-130
62-53-3	Aniline	50	25.8	52	40-140
101-55-3	4-Bromophenyl phenyl ether	50	46.7	93	40-140
85-68-7	Butyl benzyl phthalate	50	40.6	81	40-140
100-51-6	Benzyl Alcohol	50	28.2	56	40-140
91-58-7	2-Chloronaphthalene	50	43.7	87	40-140
106-47-8	4-Chloroaniline	50	34.2	68	40-140
111-91-1	bis(2-Chloroethoxy)methane	50	38.1	76	40-140
111-44-4	bis(2-Chloroethyl)ether	50	35.8	72	40-140
108-60-1	bis(2-Chloroisopropyl)ether	50	30.4	61	40-140
7005-72-3	4-Chlorophenyl phenyl ether	50	44.6	89	40-140
122-66-7	1,2-Diphenylhydrazine	50	32.8	66	40-140
121-14-2	2,4-Dinitrotoluene	50	47.7	95	40-140
606-20-2	2,6-Dinitrotoluene	50	46.2	92	40-140
91-94-1	3,3'-Dichlorobenzidine	50	43.1	86	40-140
132-64-9	Dibenzofuran	50	41.3	83	40-140
84-74-2	Di-n-butyl phthalate	50	38.4	77	40-140
117-84-0	Di-n-octyl phthalate	50	34.5	69	40-140
84-66-2	Diethyl phthalate	50	41.5	83	40-140
131-11-3	Dimethyl phthalate	50	45.4	91	40-140
117-81-7	bis(2-Ethylhexyl)phthalate	50	40.8	82	40-140
118-74-1	Hexachlorobenzene	50	46.6	93	40-140

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34126
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40108-BS	F76764.D	1	10/10/14	WK	10/07/14	OP40108	MSF3364

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34126-1, MC34126-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
77-47-4	Hexachlorocyclopentadiene	50	26.6	53	40-140
67-72-1	Hexachloroethane	50	23.5	47	40-140
78-59-1	Isophorone	50	34.1	68	40-140
88-74-4	2-Nitroaniline	50	41.5	83	40-140
99-09-2	3-Nitroaniline	50	37.9	76	40-140
100-01-6	4-Nitroaniline	50	38.7	77	40-140
98-95-3	Nitrobenzene	50	35.7	71	40-140
62-75-9	n-Nitrosodimethylamine	50	22.1	44	40-140
621-64-7	N-Nitroso-di-n-propylamine	50	36.1	72	40-140
86-30-6	N-Nitrosodiphenylamine	50	38.9	78	40-140
110-86-1	Pyridine	50	21.4	43	40-140

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	43%	15-110%
4165-62-2	Phenol-d5	27%	15-110%
118-79-6	2,4,6-Tribromophenol	103%	15-110%
4165-60-0	Nitrobenzene-d5	73%	30-130%
321-60-8	2-Fluorobiphenyl	74%	30-130%
1718-51-0	Terphenyl-d14	87%	30-130%

(a) Outside control limits. Blank Spike meets program technical requirements.

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34126
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40109-BS	I92169.D	1	10/13/14	WK	10/07/14	OP40109	MSI3435

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

MC34126-1, MC34126-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
83-32-9	Acenaphthene	50	43.9	88	40-140
208-96-8	Acenaphthylene	50	39.5	79	40-140
120-12-7	Anthracene	50	42.5	85	40-140
56-55-3	Benzo(a)anthracene	50	48.2	96	40-140
50-32-8	Benzo(a)pyrene	50	45.9	92	40-140
205-99-2	Benzo(b)fluoranthene	50	45.6	91	40-140
191-24-2	Benzo(g,h,i)perylene	50	46.2	92	40-140
207-08-9	Benzo(k)fluoranthene	50	42.0	84	40-140
218-01-9	Chrysene	50	45.6	91	40-140
53-70-3	Dibenzo(a,h)anthracene	50	46.9	94	40-140
206-44-0	Fluoranthene	50	44.8	90	40-140
86-73-7	Fluorene	50	43.9	88	40-140
193-39-5	Indeno(1,2,3-cd)pyrene	50	46.2	92	40-140
90-12-0	1-Methylnaphthalene	50	39.2	78	40-140
91-57-6	2-Methylnaphthalene	50	39.4	79	40-140
85-01-8	Phenanthrene	50	44.5	89	40-140
129-00-0	Pyrene	50	43.3	87	40-140

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	84%	30-130%
321-60-8	2-Fluorobiphenyl	76%	30-130%
1718-51-0	Terphenyl-d14	85%	30-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34126
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40108-MS	F76765.D	1	10/10/14	WK	10/07/14	OP40108	MSF3364
OP40108-MSD	F76766.D	1	10/10/14	WK	10/07/14	OP40108	MSF3364
MC34126-1	F76767.D	1	10/10/14	WK	10/07/14	OP40108	MSF3364

The QC reported here applies to the following samples: Method: SW846 8270D

MC34126-1, MC34126-2

CAS No.	Compound	MC34126-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic Acid	ND		62.5	25.9	41	54.3	22.6	42	14	30-130/20
95-57-8	2-Chlorophenol	ND		62.5	44.0	70	54.3	41.8	77	5	30-130/20
59-50-7	4-Chloro-3-methyl phenol	ND		62.5	45.1	72	54.3	42.6	78	6	30-130/20
120-83-2	2,4-Dichlorophenol	ND		62.5	53.2	85	54.3	51.6	95	3	30-130/20
105-67-9	2,4-Dimethylphenol	ND		62.5	41.6	67	54.3	40.1	74	4	30-130/20
51-28-5	2,4-Dinitrophenol	ND		62.5	67.3	108	54.3	65.5	121	3	30-130/20
534-52-1	4,6-Dinitro-o-cresol	ND		62.5	65.8	105	54.3	62.8	116	5	30-130/20
95-48-7	2-Methylphenol	ND		62.5	37.1	59	54.3	33.6	62	10	30-130/20
	3&4-Methylphenol	ND		125	67.5	54	109	62.0	57	8	30-130/20
88-75-5	2-Nitrophenol	ND		62.5	52.4	84	54.3	51.8	95	1	30-130/20
100-02-7	4-Nitrophenol	ND		62.5	17.1	27* [a]	54.3	14.9	27* [a]	14	30-130/20
87-86-5	Pentachlorophenol	ND		62.5	52.5	84	54.3	50.0	92	5	30-130/20
108-95-2	Phenol	ND		62.5	18.2	29* [a]	54.3	15.9	29* [a]	13	30-130/20
95-95-4	2,4,5-Trichlorophenol	ND		62.5	51.6	83	54.3	48.1	89	7	30-130/20
88-06-2	2,4,6-Trichlorophenol	ND		62.5	53.0	85	54.3	51.0	94	4	30-130/20
62-53-3	Aniline	ND		62.5	32.9	53	54.3	31.3	58	5	40-140/20
101-55-3	4-Bromophenyl phenyl ether	ND		62.5	55.7	89	54.3	53.2	98	5	40-140/20
85-68-7	Butyl benzyl phthalate	ND		62.5	48.3	77	54.3	46.9	86	3	40-140/20
100-51-6	Benzyl Alcohol	ND		62.5	37.2	60	54.3	34.6	64	7	40-140/20
91-58-7	2-Chloronaphthalene	ND		62.5	54.9	88	54.3	52.3	96	5	40-140/20
106-47-8	4-Chloroaniline	ND		62.5	41.7	67	54.3	39.8	73	5	40-140/20
111-91-1	bis(2-Chloroethoxy)methane	ND		62.5	46.2	74	54.3	44.9	83	3	40-140/20
111-44-4	bis(2-Chloroethyl)ether	ND		62.5	46.2	74	54.3	45.8	84	1	40-140/20
108-60-1	bis(2-Chloroisopropyl)ether	ND		62.5	39.1	63	54.3	39.9	73	2	40-140/20
7005-72-3	4-Chlorophenyl phenyl ether	ND		62.5	53.0	85	54.3	51.9	95	2	40-140/20
122-66-7	1,2-Diphenylhydrazine	ND		62.5	39.1	63	54.3	37.8	70	3	40-140/20
121-14-2	2,4-Dinitrotoluene	ND		62.5	58.1	93	54.3	56.8	105	2	40-140/20
606-20-2	2,6-Dinitrotoluene	ND		62.5	55.9	89	54.3	53.8	99	4	40-140/20
91-94-1	3,3'-Dichlorobenzidine	ND		62.5	42.6	68	54.3	41.6	77	2	40-140/20
132-64-9	Dibenzofuran	ND		62.5	50.5	81	54.3	48.9	90	3	40-140/20
84-74-2	Di-n-butyl phthalate	ND		62.5	46.9	75	54.3	46.1	85	2	40-140/20
117-84-0	Di-n-octyl phthalate	ND		62.5	41.7	67	54.3	40.4	74	3	40-140/20
84-66-2	Diethyl phthalate	ND		62.5	50.7	81	54.3	48.8	90	4	40-140/20
131-11-3	Dimethyl phthalate	ND		62.5	54.1	87	54.3	51.8	95	4	40-140/20
117-81-7	bis(2-Ethylhexyl)phthalate	ND		62.5	48.5	78	54.3	47.4	87	2	40-140/20
118-74-1	Hexachlorobenzene	ND		62.5	55.6	89	54.3	53.7	99	3	40-140/20

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34126
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40108-MS	F76765.D	1	10/10/14	WK	10/07/14	OP40108	MSF3364
OP40108-MSD	F76766.D	1	10/10/14	WK	10/07/14	OP40108	MSF3364
MC34126-1	F76767.D	1	10/10/14	WK	10/07/14	OP40108	MSF3364

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34126-1, MC34126-2

CAS No.	Compound	MC34126-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
77-47-4	Hexachlorocyclopentadiene	ND		62.5	35.3	56	54.3	34.3	63	3	40-140/20
67-72-1	Hexachloroethane	ND		62.5	41.1	66	54.3	37.8	70	8	40-140/20
78-59-1	Isophorone	ND		62.5	40.8	65	54.3	40.1	74	2	40-140/20
88-74-4	2-Nitroaniline	ND		62.5	49.8	80	54.3	49.2	91	1	40-140/20
99-09-2	3-Nitroaniline	ND		62.5	46.4	74	54.3	44.3	82	5	40-140/20
100-01-6	4-Nitroaniline	ND		62.5	47.9	77	54.3	45.8	84	4	40-140/20
98-95-3	Nitrobenzene	ND		62.5	44.0	70	54.3	43.1	79	2	40-140/20
62-75-9	n-Nitrosodimethylamine	ND		62.5	31.7	51	54.3	28.9	53	9	40-140/20
621-64-7	N-Nitroso-di-n-propylamine	ND		62.5	45.2	72	54.3	45.3	83	0	40-140/20
86-30-6	N-Nitrosodiphenylamine	ND		62.5	46.0	74	54.3	45.5	84	1	40-140/20
110-86-1	Pyridine	ND		62.5	28.4	45	54.3	24.6	45	14	40-140/20

CAS No.	Surrogate Recoveries	MS	MSD	MC34126-1	Limits
367-12-4	2-Fluorophenol	43%	45%	38%	15-110%
4165-62-2	Phenol-d5	28%	29%	23%	15-110%
118-79-6	2,4,6-Tribromophenol	99%	110%	98%	15-110%
4165-60-0	Nitrobenzene-d5	70%	80%	64%	30-130%
321-60-8	2-Fluorobiphenyl	77%	86%	70%	30-130%
1718-51-0	Terphenyl-d14	83%	92%	91%	30-130%

(a) Outside control limits. Blank Spike meets program technical requirements.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34126
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40109-MS	I92170.D	1	10/13/14	WK	10/07/14	OP40109	MSI3435
OP40109-MSD	I92171.D	1	10/13/14	WK	10/07/14	OP40109	MSI3435
MC34126-1	I92172.D	1	10/13/14	WK	10/07/14	OP40109	MSI3435

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

MC34126-1, MC34126-2

CAS No.	Compound	MC34126-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	ND		62.5	54.3	87	54.3	51.8	95	5	40-140/20
208-96-8	Acenaphthylene	ND		62.5	49.2	79	54.3	46.7	86	5	40-140/20
120-12-7	Anthracene	ND		62.5	51.5	82	54.3	50.2	92	3	40-140/20
56-55-3	Benzo(a)anthracene	ND		62.5	59.6	95	54.3	57.0	105	4	40-140/20
50-32-8	Benzo(a)pyrene	ND		62.5	56.1	90	54.3	54.0	99	4	40-140/20
205-99-2	Benzo(b)fluoranthene	ND		62.5	59.0	94	54.3	55.7	102	6	40-140/20
191-24-2	Benzo(g,h,i)perylene	ND		62.5	56.1	90	54.3	54.3	100	3	40-140/20
207-08-9	Benzo(k)fluoranthene	ND		62.5	54.5	87	54.3	45.7	84	18	40-140/20
218-01-9	Chrysene	ND		62.5	56.4	90	54.3	53.6	99	5	40-140/20
53-70-3	Dibenzo(a,h)anthracene	ND		62.5	57.0	91	54.3	54.7	101	4	40-140/20
206-44-0	Fluoranthene	ND		62.5	55.0	88	54.3	52.8	97	4	40-140/20
86-73-7	Fluorene	ND		62.5	54.0	86	54.3	51.4	95	5	40-140/20
193-39-5	Indeno(1,2,3-cd)pyrene	ND		62.5	55.9	89	54.3	53.8	99	4	40-140/20
90-12-0	1-Methylnaphthalene	ND		62.5	50.3	80	54.3	48.3	89	4	40-140/20
91-57-6	2-Methylnaphthalene	ND		62.5	51.3	82	54.3	49.4	91	4	40-140/20
85-01-8	Phenanthrene	ND		62.5	53.7	86	54.3	51.5	95	4	40-140/20
129-00-0	Pyrene	ND		62.5	53.5	86	54.3	51.2	94	4	40-140/20

CAS No.	Surrogate Recoveries	MS	MSD	MC34126-1	Limits
4165-60-0	Nitrobenzene-d5	82%	92%	76%	30-130%
321-60-8	2-Fluorobiphenyl	80%	87%	71%	30-130%
1718-51-0	Terphenyl-d14	85%	94%	88%	30-130%

* = Outside of Control Limits.

Semivolatile Internal Standard Area Summary

Job Number: MC34126
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSF3364-CC3361	**Injection Date:**	10/09/14
Lab File ID:	F76743.D	**Injection Time:**	15:54
Instrument ID:	GCMSF	**Method:**	SW846 8270D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	76329	4.38	243879	5.44	172197	6.97	339252	8.26	446691	10.90	411346	12.64
Upper Limit [a]	152658	4.88	487758	5.94	344394	7.47	678504	8.76	893382	11.40	822692	13.14
Lower Limit [b]	38165	3.88	121940	4.94	86099	6.47	169626	7.76	223346	10.40	205673	12.14
Lab Sample ID	**IS 1 AREA**	**RT**	**IS 2 AREA**	**RT**	**IS 3 AREA**	**RT**	**IS 4 AREA**	**RT**	**IS 5 AREA**	**RT**	**IS 6 AREA**	**RT**
ZZZZZZ	92470	4.38	316387	5.44	218821	6.97	439246	8.26	529772	10.90	487829	12.64
ZZZZZZ	79075	4.38	247049	5.44	180945	6.97	397389	8.26	458577	10.90	434677	12.64
ZZZZZZ	83850	4.38	271108	5.44	192332	6.97	389984	8.26	474272	10.90	426890	12.64
OP40071-MB	90496	4.38	298576	5.43	215725	6.97	451009	8.26	555030	10.90	525582	12.64
OP40071-BS	94814	4.38	309314	5.44	222188	6.97	446232	8.26	581392	10.90	546151	12.64
OP40071-MS	101647	4.38	318016	5.44	223217	6.97	440016	8.26	559077	10.90	519550	12.64
OP40071-MSD	98770	4.38	316990	5.44	221132	6.97	435815	8.26	544546	10.90	515597	12.64
MC34064-2	98227	4.38	319698	5.44	226361	6.97	453866	8.26	550968	10.90	496119	12.64
ZZZZZZ	96480	4.38	319314	5.44	228864	6.97	455778	8.26	558178	10.90	525903	12.64
ZZZZZZ	78538	4.38	262507	5.44	188659	6.97	397822	8.26	522590	10.90	508285	12.64
ZZZZZZ	79343	4.38	259393	5.44	190951	6.97	405928	8.26	532231	10.90	524042	12.64
ZZZZZZ	79965	4.38	258973	5.44	192671	6.97	410760	8.26	547436	10.90	533286	12.64
ZZZZZZ	86342	4.38	280099	5.44	203750	6.97	433526	8.26	543083	10.90	527299	12.64
ZZZZZZ	81169	4.38	267763	5.44	197553	6.97	427203	8.26	587354	10.89	570672	12.64
ZZZZZZ	73153	4.38	238093	5.44	174016	6.97	370810	8.26	492302	10.90	472758	12.64
OP40108-MB	71187	4.38	233117	5.44	172964	6.97	372746	8.26	499593	10.89	502758	12.64
OP40108-BS	78426	4.38	248775	5.44	180794	6.97	374203	8.26	498226	10.90	483062	12.64
OP40108-MS	69920	4.38	229577	5.44	167016	6.97	351470	8.26	483854	10.90	471928	12.64
OP40108-MSD	67308	4.38	222049	5.44	162056	6.97	340153	8.26	477575	10.90	472944	12.64
MC34126-1	82325	4.38	260278	5.43	187972	6.97	383638	8.26	476120	10.90	470732	12.64
MC34126-2	71582	4.38	227792	5.44	168409	6.97	352453	8.26	454973	10.89	451807	12.63

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: MC34126
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSI3435-CC3427	**Injection Date:**	10/13/14
Lab File ID:	I92158.D	**Injection Time:**	08:26
Instrument ID:	GCMSI	**Method:**	SW846 8270D BY SIM

	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Check Std	322638	3.11	740819	4.13	420821	5.63	749255	6.89	597041	9.62	1218211	11.01
Upper Limit [a]	645276	3.61	1481638	4.63	841642	6.13	1498510	7.39	1194082	10.12	2436422	11.51
Lower Limit [b]	161319	2.61	370410	3.63	210411	5.13	374628	6.39	298521	9.12	609106	10.51

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP40135-MB	310083	3.11	701895	4.13	409055	5.63	728477	6.89	574975	9.62	1189225	11.00
OP40135-BS	327008	3.11	753426	4.14	427053	5.63	761396	6.89	607407	9.63	1250544	11.01
OP40135-BSD	320537	3.11	743340	4.14	418873	5.63	744702	6.89	596635	9.63	1206899	11.01
ZZZZZZ	306875	3.11	697950	4.13	402831	5.63	709847	6.89	577570	9.62	1192890	11.00
ZZZZZZ	322148	3.11	722472	4.13	403362	5.63	710845	6.89	574544	9.62	1175578	11.01
ZZZZZZ	304162	3.11	693482	4.13	401471	5.63	699733	6.89	571724	9.62	1192333	11.00
ZZZZZZ	321443	3.11	725235	4.13	420988	5.63	727851	6.89	592570	9.62	1207639	11.00
ZZZZZZ	296778	3.11	674034	4.13	393169	5.63	694242	6.89	564890	9.61	1167148	11.00
ZZZZZZ	308122	3.11	702418	4.13	394628	5.63	695701	6.89	577370	9.61	1193124	11.00
OP40109-MB	356739	3.11	804504	4.13	471323	5.63	837133	6.89	684537	9.62	1410660	11.00
OP40109-BS	366193	3.11	847108	4.14	483947	5.63	862333	6.89	702519	9.63	1427769	11.01
OP40109-MS	373568	3.11	870346	4.14	487522	5.63	874968	6.89	695004	9.63	1414925	11.01
OP40109-MSD	345364	3.11	794131	4.14	448945	5.63	798608	6.90	641521	9.63	1300876	11.01
MC34126-1	357756	3.11	809069	4.13	470138	5.63	828107	6.89	677389	9.62	1397751	11.01
MC34126-2	331160	3.11	752405	4.13	435341	5.63	754747	6.89	629580	9.62	1289616	11.00
ZZZZZZ	354941	3.11	800970	4.13	462338	5.63	813256	6.89	663948	9.62	1316043	11.01
ZZZZZZ	333613	3.11	763393	4.13	441796	5.63	769445	6.89	637058	9.62	1287083	11.00
ZZZZZZ	336956	3.11	774741	4.13	439613	5.63	784138	6.89	671767	9.62	1303734	11.00
OP40117-MB	345397	3.11	787066	4.13	450130	5.63	790308	6.89	646728	9.62	1302774	11.00
OP40117-BS	342159	3.11	791205	4.14	447355	5.63	799252	6.89	640824	9.63	1272783	11.01
OP40117-MS	324350	3.11	754043	4.14	427967	5.63	765002	6.89	617888	9.63	1218301	11.01
OP40117-MSD	357832	3.11	836876	4.14	472748	5.63	839555	6.89	670922	9.63	1328757	11.01
MC33900-18	343314	3.11	775895	4.13	449021	5.63	779394	6.89	646491	9.62	1293578	11.00
ZZZZZZ	350335	3.11	794585	4.13	458875	5.63	810004	6.89	657881	9.62	1309904	11.00
ZZZZZZ	334727	3.11	756252	4.13	441980	5.63	763573	6.89	625805	9.62	1249581	11.00
ZZZZZZ	346274	3.11	782104	4.13	456055	5.63	793348	6.89	659235	9.62	1315986	11.00
ZZZZZZ	335813	3.11	760896	4.13	440068	5.63	766103	6.89	629202	9.62	1256793	11.00
ZZZZZZ	334054	3.11	755650	4.13	436368	5.63	765818	6.89	623348	9.62	1241247	11.00

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

Semivolatile Internal Standard Area Summary

Job Number: MC34126
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSI3435-CC3427	**Injection Date:**	10/13/14
Lab File ID:	I92158.D	**Injection Time:**	08:26
Instrument ID:	GCMSI	**Method:**	SW846 8270D BY SIM

Lab	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
Sample ID	**AREA**	**RT**	**AREA**	**RT**	**AREA**	**RT**	**AREA**	**RT**	**AREA**	**RT**	**AREA**	**RT**

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Surrogate Recovery Summary

Job Number: MC34126
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Method: SW846 8270D **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
MC34126-1	F76767.D	38	23	98	64	70	91
MC34126-2	F76768.D	40	24	94	71	74	91
OP40108-BS	F76764.D	43	27	103	73	74	87
OP40108-MB	F76763.D	44	29	98	73	70	89
OP40108-MS	F76765.D	43	28	99	70	77	83
OP40108-MSD	F76766.D	45	29	110	80	86	92

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorophenol	15-110%
S2 = Phenol-d5	15-110%
S3 = 2,4,6-Tribromophenol	15-110%
S4 = Nitrobenzene-d5	30-130%
S5 = 2-Fluorobiphenyl	30-130%
S6 = Terphenyl-d14	30-130%

Semivolatile Surrogate Recovery Summary

Job Number: MC34126
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Method: SW846 8270D BY SIM **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
MC34126-1	I92172.D	76	71	88
MC34126-2	I92173.D	84	76	88
OP40109-BS	I92169.D	84	76	85
OP40109-MB	I92168.D	85	73	88
OP40109-MS	I92170.D	82	80	85
OP40109-MSD	I92171.D	92	87	94

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	30-130%
S2 = 2-Fluorobiphenyl	30-130%
S3 = Terphenyl-d14	30-130%

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries

Method Blank Summary

Job Number: MC34126
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40111-MB	BB59853.D	1	10/08/14	NK	10/07/14	OP40111	GBB3331

The QC reported here applies to the following samples: **Method:** SW846 8011

MC34126-1, MC34126-2, MC34126-4

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.015	0.0061	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.015	0.0061	ug/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	Bromofluorobenzene (S)	131%	36-173%
460-00-4	Bromofluorobenzene (S)	119%	36-173%

Blank Spike Summary

Job Number: MC34126
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40111-BS	BB59854.D	1	10/08/14	NK	10/07/14	OP40111	GBB3331

The QC reported here applies to the following samples: **Method:** SW846 8011

MC34126-1, MC34126-2, MC34126-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
96-12-8	1,2-Dibromo-3-chloropropane	0.071	0.075	106	60-140
106-93-4	1,2-Dibromoethane	0.071	0.087	123	60-140

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	Bromofluorobenzene (S)	113%	36-173%
460-00-4	Bromofluorobenzene (S)	100%	36-173%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34126
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40111-MS	BB59858.D	1	10/08/14	NK	10/07/14	OP40111	GBB3331
OP40111-MSD	BB59859.D	1	10/08/14	NK	10/07/14	OP40111	GBB3331
MC34126-1	BB59860.D	1	10/08/14	NK	10/07/14	OP40111	GBB3331

The QC reported here applies to the following samples: **Method:** SW846 8011

MC34126-1, MC34126-2, MC34126-4

CAS No.	Compound	MC34126-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
96-12-8	1,2-Dibromo-3-chloropropane	ND		0.0683	0.10	146* [a]	0.0675	0.11	163* [a]	10	64-141/29
106-93-4	1,2-Dibromoethane	ND		0.0683	0.11	161	0.0675	0.11	163	0	63-163/27

CAS No.	Surrogate Recoveries	MS	MSD	MC34126-1	Limits
460-00-4	Bromofluorobenzene (S)	109%	140%	115%	36-173%
460-00-4	Bromofluorobenzene (S)	98%	128%	106%	36-173%

(a) Outside control limits due to possible matrix interference.

* = Outside of Control Limits.

Volatile Surrogate Recovery Summary

Job Number: MC34126
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Method: SW846 8011 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]
MC34126-1	BB59860.D	115	106
MC34126-2	BB59861.D	154	138
MC34126-4	BB59862.D	119	111
OP40111-BS	BB59854.D	113	100
OP40111-MB	BB59853.D	131	119
OP40111-MS	BB59858.D	109	98
OP40111-MSD	BB59859.D	140	128

Surrogate Compounds	Recovery Limits
S1 = Bromofluorobenzene (S)	36-173%

(a) Recovery from GC signal #2
(b) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: MC34126
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	GBB3331-ICC3331	**Injection Date:**	10/08/14
Lab File ID:	BB59849.D	**Injection Time:**	10:41
Instrument ID:	GCBB	**Method:**	SW846 8011

	S1 [a] RT	S1 [b] RT
Check Std	3.49	3.50

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
OP40121-MB	BB59853A.D	10/08/14	12:02	3.49	3.50
OP40111-MB	BB59853.D	10/08/14	12:02	3.49	3.50
OP40111-BS	BB59854.D	10/08/14	12:20	3.49	3.50
OP40121-BS1	BB59855.D	10/08/14	12:38	3.49	3.50
OP40121-BS2	BB59856.D	10/08/14	12:56	3.49	3.50
OP40121-BS3	BB59857.D	10/08/14	13:14	3.49	3.50
OP40111-MS	BB59858.D	10/08/14	13:32	3.49	3.50
OP40111-MSD	BB59859.D	10/08/14	13:50	3.49	3.50
MC34126-1	BB59860.D	10/08/14	14:08	3.49	3.50
MC34126-2	BB59861.D	10/08/14	14:25	3.49	3.50
MC34126-4	BB59862.D	10/08/14	14:43	3.49	3.50

Surrogate Compounds

S1 = Bromofluorobenzene (S)

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

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Automated Report

Technical Report for

Shell Oil

URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana,

SGS Accutest Job Number: MC34156

Sampling Date: 10/07/14



Report to:

AECOM, INC.

Melissa.mansker@aecom.com

ATTN: Melissa Mansker

Total number of pages in report: 88

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

H. (Brad) Madadian
Lab Director

Client Service contact: Jeremy Vienneau 508-481-6200

Certifications: MA (M-MA136,SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) FL (E87579) NY (11791) NJ (MA926) PA (6801121) ND (R-188) CO (MA00136) MN (11546AA) NC (653) IL (002337) WI (399080220) DoD ELAP (L-A-B L2235)

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Test results relate only to samples analyzed.

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SGS ACCUTEST

November 03, 2016

AECOM
1001 Highlands Plaza Drive West Suite 300
St. Louis, MO 63110

RE: SGS Accutest Job # MC34156

Dear Elizabeth Kunkel

As you are aware, SGS Accutest Inc. - Marlborough has been conducting an extensive review of data associated with some historical Gas Chromatography-Mass Spectroscopy volatiles analyses. As a result of this review it was determined that some revisions of the original test report for this job were needed. These corrections have been incorporated into the revised report.

Please be assured that corrective actions have been put in place to address this matter and prevent a recurrence.

We apologize for any inconvenience that this issue may have caused. Please don't hesitate to contact us if we can be of further assistance.

Sincerely,

H. (Brad) Madadian

Regional Laboratory Director
SGS Accutest Inc. - Marlborough

SGS ACCUTEST IS PART OF SGS, THE WORLD'S LEADING INSPECTION, VERIFICATION, TESTING AND CERTIFICATION COMPANY.

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Sample Summary

Shell Oil

Job No: MC34156

URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
MC34156-1	10/07/14	08:40	MMSV	10/08/14	AQ	Ground Water	MW11-ROX-100714 EB
MC34156-2	10/07/14	10:00	MMSV	10/08/14	AQ	Ground Water	MW11-ROX-100714
MC34156-3	10/07/14	11:35	MMSV	10/08/14	AQ	Ground Water	MW10-ROX-100714
MC34156-4	10/07/14	13:30	MMSV	10/08/14	AQ	Ground Water	MW9-ROX-100714
MC34156-5	10/07/14	15:15	MMSV	10/08/14	AQ	Ground Water	MW16-ROX-100714
MC34156-6	10/07/14	00:00	MMSV	10/08/14	AQ	Trip Blank Water	TB-ROX-100714-HCL
MC34156-7	10/07/14	00:00	MMSV	10/08/14	AQ	Trip Blank Water	TB-ROX-100714-ST

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: She O **Job No** MC34 56

Site: URSMOSTL:Roxana 4Q 4 GW/ 2 562973 03004 900 South Centra **Report Date** /3/20 6 2: 4:58 PM

5 Samp e(s), 2 Tr p B ank(s) were co ected on 0/07/20 4 and were rece ved at SGS Accutest New Eng and on 0/08/20 4 proper y preserved, at 0 5 Deg C and ntact These Samp es rece ved a job number of MC34 56 A st ng of the Laboratory Samp e ID, C ent Samp e ID and dates of co ect on are presented n the Resu ts Summary Sect on of th s report -Ch orohexane, Benzeneth o , D benz(a,h)acr d ne, Indene, and Qu no ne were searched n the bra y search and reported on y f detect ons were found

Except as noted be ow, a method spec f ed ca brat ons and qua ty contro performance cr ter a were met for th s job For more nformat on, p ease refer to QC summary pages

Volatiles by GCMS By Method SW846 8260C

Matrix: AQ **Batch ID:** MSP2636

- A samp es were ana yzed w th n the recommended method ho d ng t me
- Samp e(s) MC34 66-2MS, MC34 66-2MSD were used as the QC samp es nd cated
- A method b anks for th s batch meet method spec f c cr ter a
- B ank Sp ke Recovery(s) for V ny Acetate are outs de contro m ts
- Matr x Sp ke Recovery(s) for ,2,3-Tr ch orobenzene, 2-Butanone (MEK), Acetone, Bromomethane, V ny Acetate are outs de contro m ts Outs de contro m ts due to poss b e matr x nterference
- Matr x Sp ke Dup cate Recove y(s) for 2-Butanone (MEK), 2-Hexanone, Acetone, V ny Acetate, ,4-D oxane are outs de contro m ts Outs de contro m ts due to poss b e matr x nterference
- RPD(s) for MSD for ,4-D oxane, Bromomethane are outs de contro m ts for samp e MC34 66-2MSD H gh RPD due to poss b e matr x nterference and/or samp e non-homogene ty
- V ny Acetate: Cont nu ng Ca brat on Ver f cat on outs de of acceptance cr ter a Samp e resu t may be b ased ow
- MSP2636-BS, MC34 66-2MS/MSD for ,2,4-Tr ch orobenzene: Outs de contro m ts Assoc ated samp es are non-detect for th s compound

Extractables by GCMS By Method SW846 8270D

Matrix: AQ **Batch ID:** OP40 6

- A samp es were extracted w th n the recommended method ho d ng t me
- A samp es were ana yzed w th n the recommended method ho d ng t me
- A method b anks for th s batch meet method spec f c cr ter a
- Samp e(s) MC33900- 7MS, MC33900- 7MSD were used as the QC samp es nd cated
- RPD(s) for MSD for 2,4-D methy pheno , Hexach oroethane are outs de contro m ts for samp e OP40 6-MSD H gh RPD due to poss b e matr x nterference and/or samp e heterogene ty

Extractables by GCMS By Method SW846 8270D BY SIM

Matrix: AQ **Batch ID:** OP40 7

- A samp es were extracted w th n the recommended method ho d ng t me
- A samp es were ana yzed w th n the recommended method ho d ng t me
- A method b anks for th s batch meet method spec f c cr ter a
- Samp e(s) MC33900- 8MS, MC33900- 8MSD were used as the QC samp es nd cated

Volatiles by GC By Method SW846 8011

Matrix: AQ **Batch ID:** OP40

- A samp es were extracted w th n the recommended method ho d ng t me
- A samp es were ana yzed w th n the recommended method ho d ng t me
- Samp e(s) MC34 26- MS, MC34 26- MSD were used as the QC samp es nd cated
- A method b anks for th s batch meet method spec f c cr ter a
- OP40 -MS/MSD Recovery(s) for ,2-D bromo-3-ch oropropane are outs de contro m ts Outs de contro m ts due to poss b e matr x nterference

SGS Accutest New Eng and cert f es that a ana ys s were performed w th n method spec f cat on It s further recommended that th s report to be used n ts ent rety The Laborato y D rector for SGS Accutest New Eng and or ass gnee as ver f ed by the s gnature on the cover page has author zed the re ease of th s repo t(MC34 56)

Summary of Hits

Job Number: MC34156
Account: Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL
Collected: 10/07/14

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
MC34156-1	MW11-ROX-100714 EB					
m,p-Xylene		0.94 J	1.0	0.93	ug/l	SW846 8260C
o-Xylene		0.99 J	1.0	0.36	ug/l	SW846 8260C
Xylene (total)		1.9	1.0	0.36	ug/l	SW846 8260C
Di-n-butyl phthalate		0.60 J	6.1	0.21	ug/l	SW846 8270D
MC34156-2	MW11-ROX-100714					
No hits reported in this sample.						
MC34156-3	MW10-ROX-100714					
No hits reported in this sample.						
MC34156-4	MW9-ROX-100714					
No hits reported in this sample.						
MC34156-5	MW16-ROX-100714					
No hits reported in this sample.						
MC34156-6	TB-ROX-100714-HCL					
No hits reported in this sample.						
MC34156-7	TB-ROX-100714-ST					
No hits reported in this sample.						

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW11-ROX-100714 EB		
Lab Sample ID:	MC34156-1	**Date Sampled:**	10/07/14
Matrix:	AQ - Ground Water	**Date Received:**	10/08/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P80580.D	1	10/16/14	JB	n/a	n/a	MSP2636
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW11-ROX-100714 EB		
Lab Sample ID:	MC34156-1	**Date Sampled:**	10/07/14
Matrix:	AQ - Ground Water	**Date Received:**	10/08/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate [a]	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	0.94	1.0	0.93	ug/l	J
95-47-6	o-Xylene	0.99	1.0	0.36	ug/l	J
1330-20-7	Xylene (total)	1.9	1.0	0.36	ug/l	

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW11-ROX-100714 EB		
Lab Sample ID:	MC34156-1	**Date Sampled:**	10/07/14
Matrix:	AQ - Ground Water	**Date Received:**	10/08/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		70-130%
2037-26-5	Toluene-D8	102%		70-130%
460-00-4	4-Bromofluorobenzene	87%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
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J = Indicates an estimated value
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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW11-ROX-100714 EB		
Lab Sample ID:	MC34156-1	**Date Sampled:**	10/07/14
Matrix:	AQ - Ground Water	**Date Received:**	10/08/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F76849.D	1	10/14/14	WK	10/08/14	OP40116	MSF3367
Run #2							

	Initial Volume	Final Volume
Run #1	820 ml	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	12	3.0	ug/l	
95-57-8	2-Chlorophenol	ND	6.1	0.38	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	12	1.0	ug/l	
120-83-2	2,4-Dichlorophenol	ND	12	0.48	ug/l	
105-67-9	2,4-Dimethylphenol	ND	12	0.68	ug/l	
51-28-5	2,4-Dinitrophenol	ND	24	3.0	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	12	2.4	ug/l	
95-48-7	2-Methylphenol	ND	12	0.27	ug/l	
	3&4-Methylphenol	ND	12	0.57	ug/l	
88-75-5	2-Nitrophenol	ND	12	3.5	ug/l	
100-02-7	4-Nitrophenol	ND	24	0.65	ug/l	
87-86-5	Pentachlorophenol	ND	12	1.4	ug/l	
108-95-2	Phenol	ND	6.1	0.37	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	12	0.45	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	12	0.21	ug/l	
62-53-3	Aniline	ND	12	0.78	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	6.1	0.57	ug/l	
85-68-7	Butyl benzyl phthalate	ND	6.1	0.65	ug/l	
100-51-6	Benzyl Alcohol	ND	12	2.8	ug/l	
91-58-7	2-Chloronaphthalene	ND	6.1	0.38	ug/l	
106-47-8	4-Chloroaniline	ND	12	0.68	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	6.1	0.35	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	6.1	0.43	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	6.1	0.40	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	6.1	0.31	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	6.1	0.29	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	12	0.56	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	12	0.37	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	6.1	0.33	ug/l	
132-64-9	Dibenzofuran	ND	2.4	0.32	ug/l	
84-74-2	Di-n-butyl phthalate	0.60	6.1	0.21	ug/l	J
117-84-0	Di-n-octyl phthalate	ND	6.1	0.34	ug/l	

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Report of Analysis

Client Sample ID:	MW11-ROX-100714 EB		
Lab Sample ID:	MC34156-1	**Date Sampled:**	10/07/14
Matrix:	AQ - Ground Water	**Date Received:**	10/08/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	6.1	0.24	ug/l	
131-11-3	Dimethyl phthalate	ND	6.1	0.41	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.4	0.41	ug/l	
118-74-1	Hexachlorobenzene	ND	6.1	0.35	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	12	1.6	ug/l	
67-72-1	Hexachloroethane	ND	6.1	0.37	ug/l	
78-59-1	Isophorone	ND	6.1	0.55	ug/l	
88-74-4	2-Nitroaniline	ND	12	0.48	ug/l	
99-09-2	3-Nitroaniline	ND	12	1.7	ug/l	
100-01-6	4-Nitroaniline	ND	12	2.6	ug/l	
98-95-3	Nitrobenzene	ND	6.1	0.48	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	6.1	1.2	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	6.1	0.49	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	6.1	0.24	ug/l	
110-86-1	Pyridine	ND	12	0.63	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	39%		15-110%
4165-62-2	Phenol-d5	26%		15-110%
118-79-6	2,4,6-Tribromophenol	78%		15-110%
4165-60-0	Nitrobenzene-d5	57%		30-130%
321-60-8	2-Fluorobiphenyl	58%		30-130%
1718-51-0	Terphenyl-d14	93%		30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW11-ROX-100714 EB		
Lab Sample ID:	MC34156-1	**Date Sampled:**	10/07/14
Matrix:	AQ - Ground Water	**Date Received:**	10/08/14
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I92182.D	1	10/13/14	WK	10/08/14	OP40117	MSI3435
Run #2							

	Initial Volume	Final Volume
Run #1	820 ml	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.12	0.084	ug/l	
208-96-8	Acenaphthylene	ND	0.12	0.060	ug/l	
120-12-7	Anthracene	ND	0.12	0.11	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.061	0.024	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.12	0.035	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.061	0.039	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.12	0.033	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.12	0.047	ug/l	
218-01-9	Chrysene	ND	0.12	0.029	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.12	0.039	ug/l	
206-44-0	Fluoranthene	ND	0.12	0.050	ug/l	
86-73-7	Fluorene	ND	0.12	0.12	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.12	0.037	ug/l	
90-12-0	1-Methylnaphthalene	ND	2.4	0.61	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.4	0.61	ug/l	
85-01-8	Phenanthrene	ND	0.061	0.015	ug/l	
129-00-0	Pyrene	ND	0.12	0.047	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	66%		30-130%
321-60-8	2-Fluorobiphenyl	64%		30-130%
1718-51-0	Terphenyl-d14	91%		30-130%

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW11-ROX-100714 EB		
Lab Sample ID:	MC34156-1	**Date Sampled:**	10/07/14
Matrix:	AQ - Ground Water	**Date Received:**	10/08/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB59867.D	1	10/09/14	NK	10/08/14	OP40111	GBB3332
Run #2							

	Initial Volume	Final Volume
Run #1	36.6 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.014	0.0058	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.014	0.0058	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	77%		36-173%
460-00-4	Bromofluorobenzene (S)	66%		36-173%

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW11-ROX-100714		
Lab Sample ID:	MC34156-2	**Date Sampled:**	10/07/14
Matrix:	AQ - Ground Water	**Date Received:**	10/08/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P80582.D	1	10/16/14	JB	n/a	n/a	MSP2636
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	

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Report of Analysis

Client Sample ID:	MW11-ROX-100714		
Lab Sample ID:	MC34156-2	**Date Sampled:**	10/07/14
Matrix:	AQ - Ground Water	**Date Received:**	10/08/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate [a]	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW11-ROX-100714		
Lab Sample ID:	MC34156-2	**Date Sampled:**	10/07/14
Matrix:	AQ - Ground Water	**Date Received:**	10/08/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	93%		70-130%
2037-26-5	Toluene-D8	102%		70-130%
460-00-4	4-Bromofluorobenzene	87%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW11-ROX-100714		
Lab Sample ID:	MC34156-2	**Date Sampled:**	10/07/14
Matrix:	AQ - Ground Water	**Date Received:**	10/08/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F76850.D	1	10/14/14	WK	10/08/14	OP40116	MSF3367
Run #2							

	Initial Volume	Final Volume
Run #1	970 ml	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	10	2.6	ug/l	
95-57-8	2-Chlorophenol	ND	5.2	0.32	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	10	0.85	ug/l	
120-83-2	2,4-Dichlorophenol	ND	10	0.41	ug/l	
105-67-9	2,4-Dimethylphenol	ND	10	0.58	ug/l	
51-28-5	2,4-Dinitrophenol	ND	21	2.6	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	2.0	ug/l	
95-48-7	2-Methylphenol	ND	10	0.23	ug/l	
	3&4-Methylphenol	ND	10	0.48	ug/l	
88-75-5	2-Nitrophenol	ND	10	3.0	ug/l	
100-02-7	4-Nitrophenol	ND	21	0.55	ug/l	
87-86-5	Pentachlorophenol	ND	10	1.2	ug/l	
108-95-2	Phenol	ND	5.2	0.31	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	10	0.38	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	10	0.18	ug/l	
62-53-3	Aniline	ND	10	0.66	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.2	0.49	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.2	0.55	ug/l	
100-51-6	Benzyl Alcohol	ND	10	2.3	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.2	0.32	ug/l	
106-47-8	4-Chloroaniline	ND	10	0.57	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.2	0.30	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.2	0.36	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.2	0.34	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.2	0.26	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.2	0.25	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	10	0.47	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	10	0.31	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.2	0.28	ug/l	
132-64-9	Dibenzofuran	ND	2.1	0.27	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.2	0.18	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.2	0.29	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW11-ROX-100714		
Lab Sample ID:	MC34156-2	**Date Sampled:**	10/07/14
Matrix:	AQ - Ground Water	**Date Received:**	10/08/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	5.2	0.21	ug/l	
131-11-3	Dimethyl phthalate	ND	5.2	0.35	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.1	0.34	ug/l	
118-74-1	Hexachlorobenzene	ND	5.2	0.30	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	1.3	ug/l	
67-72-1	Hexachloroethane	ND	5.2	0.31	ug/l	
78-59-1	Isophorone	ND	5.2	0.46	ug/l	
88-74-4	2-Nitroaniline	ND	10	0.41	ug/l	
99-09-2	3-Nitroaniline	ND	10	1.4	ug/l	
100-01-6	4-Nitroaniline	ND	10	2.2	ug/l	
98-95-3	Nitrobenzene	ND	5.2	0.40	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.2	1.0	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.2	0.42	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.2	0.20	ug/l	
110-86-1	Pyridine	ND	10	0.53	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	48%		15-110%
4165-62-2	Phenol-d5	31%		15-110%
118-79-6	2,4,6-Tribromophenol	96%		15-110%
4165-60-0	Nitrobenzene-d5	77%		30-130%
321-60-8	2-Fluorobiphenyl	77%		30-130%
1718-51-0	Terphenyl-d14	91%		30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW11-ROX-100714		
Lab Sample ID:	MC34156-2	**Date Sampled:**	10/07/14
Matrix:	AQ - Ground Water	**Date Received:**	10/08/14
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I92183.D	1	10/13/14	WK	10/08/14	OP40117	MSI3435
Run #2							

	Initial Volume	Final Volume
Run #1	970 ml	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.071	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.051	ug/l	
120-12-7	Anthracene	ND	0.10	0.095	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.052	0.020	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.030	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.052	0.033	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.028	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.040	ug/l	
218-01-9	Chrysene	ND	0.10	0.025	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.033	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.042	ug/l	
86-73-7	Fluorene	ND	0.10	0.10	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.032	ug/l	
90-12-0	1-Methylnaphthalene	ND	2.1	0.52	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.1	0.52	ug/l	
85-01-8	Phenanthrene	ND	0.052	0.013	ug/l	
129-00-0	Pyrene	ND	0.10	0.040	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	87%		30-130%
321-60-8	2-Fluorobiphenyl	82%		30-130%
1718-51-0	Terphenyl-d14	90%		30-130%

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW11-ROX-100714		
Lab Sample ID:	MC34156-2	**Date Sampled:**	10/07/14
Matrix:	AQ - Ground Water	**Date Received:**	10/08/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB59868.D	1	10/09/14	NK	10/08/14	OP40111	GBB3332
Run #2							

	Initial Volume	Final Volume
Run #1	37.1 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.014	0.0058	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.014	0.0058	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	87%		36-173%
460-00-4	Bromofluorobenzene (S)	72%		36-173%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW10-ROX-100714		
Lab Sample ID:	MC34156-3	**Date Sampled:**	10/07/14
Matrix:	AQ - Ground Water	**Date Received:**	10/08/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P80583.D	1	10/16/14	JB	n/a	n/a	MSP2636
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW10-ROX-100714		
Lab Sample ID:	MC34156-3	**Date Sampled:**	10/07/14
Matrix:	AQ - Ground Water	**Date Received:**	10/08/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate [a]	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW10-ROX-100714		
Lab Sample ID:	MC34156-3	**Date Sampled:**	10/07/14
Matrix:	AQ - Ground Water	**Date Received:**	10/08/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	93%		70-130%
2037-26-5	Toluene-D8	103%		70-130%
460-00-4	4-Bromofluorobenzene	88%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
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Report of Analysis

Client Sample ID:	MW10-ROX-100714		
Lab Sample ID:	MC34156-3	**Date Sampled:**	10/07/14
Matrix:	AQ - Ground Water	**Date Received:**	10/08/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F76851.D	1	10/14/14	WK	10/08/14	OP40116	MSF3367
Run #2							

	Initial Volume	Final Volume
Run #1	870 ml	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	11	2.9	ug/l	
95-57-8	2-Chlorophenol	ND	5.7	0.36	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	11	0.95	ug/l	
120-83-2	2,4-Dichlorophenol	ND	11	0.46	ug/l	
105-67-9	2,4-Dimethylphenol	ND	11	0.64	ug/l	
51-28-5	2,4-Dinitrophenol	ND	23	2.9	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	2.2	ug/l	
95-48-7	2-Methylphenol	ND	11	0.26	ug/l	
	3&4-Methylphenol	ND	11	0.54	ug/l	
88-75-5	2-Nitrophenol	ND	11	3.3	ug/l	
100-02-7	4-Nitrophenol	ND	23	0.61	ug/l	
87-86-5	Pentachlorophenol	ND	11	1.3	ug/l	
108-95-2	Phenol	ND	5.7	0.35	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	11	0.43	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	11	0.20	ug/l	
62-53-3	Aniline	ND	11	0.73	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.7	0.54	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.7	0.61	ug/l	
100-51-6	Benzyl Alcohol	ND	11	2.6	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.7	0.36	ug/l	
106-47-8	4-Chloroaniline	ND	11	0.64	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.7	0.33	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.7	0.40	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.7	0.38	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.7	0.29	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.7	0.28	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	11	0.52	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	11	0.35	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.7	0.31	ug/l	
132-64-9	Dibenzofuran	ND	2.3	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.7	0.20	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.7	0.32	ug/l	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW10-ROX-100714		
Lab Sample ID:	MC34156-3	**Date Sampled:**	10/07/14
Matrix:	AQ - Ground Water	**Date Received:**	10/08/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	5.7	0.23	ug/l	
131-11-3	Dimethyl phthalate	ND	5.7	0.39	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.3	0.38	ug/l	
118-74-1	Hexachlorobenzene	ND	5.7	0.33	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	11	1.5	ug/l	
67-72-1	Hexachloroethane	ND	5.7	0.35	ug/l	
78-59-1	Isophorone	ND	5.7	0.52	ug/l	
88-74-4	2-Nitroaniline	ND	11	0.46	ug/l	
99-09-2	3-Nitroaniline	ND	11	1.6	ug/l	
100-01-6	4-Nitroaniline	ND	11	2.5	ug/l	
98-95-3	Nitrobenzene	ND	5.7	0.45	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.7	1.2	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.7	0.46	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.7	0.22	ug/l	
110-86-1	Pyridine	ND	11	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	47%		15-110%
4165-62-2	Phenol-d5	32%		15-110%
118-79-6	2,4,6-Tribromophenol	95%		15-110%
4165-60-0	Nitrobenzene-d5	72%		30-130%
321-60-8	2-Fluorobiphenyl	75%		30-130%
1718-51-0	Terphenyl-d14	94%		30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW10-ROX-100714		
Lab Sample ID:	MC34156-3	**Date Sampled:**	10/07/14
Matrix:	AQ - Ground Water	**Date Received:**	10/08/14
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I92184.D	1	10/13/14	WK	10/08/14	OP40117	MSI3435
Run #2							

	Initial Volume	Final Volume
Run #1	870 ml	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.11	0.079	ug/l	
208-96-8	Acenaphthylene	ND	0.11	0.057	ug/l	
120-12-7	Anthracene	ND	0.11	0.11	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.057	0.022	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.11	0.033	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.057	0.036	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.11	0.031	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.11	0.044	ug/l	
218-01-9	Chrysene	ND	0.11	0.027	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.11	0.037	ug/l	
206-44-0	Fluoranthene	ND	0.11	0.047	ug/l	
86-73-7	Fluorene	ND	0.11	0.11	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.11	0.035	ug/l	
90-12-0	1-Methylnaphthalene	ND	2.3	0.57	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.3	0.57	ug/l	
85-01-8	Phenanthrene	ND	0.057	0.014	ug/l	
129-00-0	Pyrene	ND	0.11	0.044	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	82%		30-130%
321-60-8	2-Fluorobiphenyl	80%		30-130%
1718-51-0	Terphenyl-d14	92%		30-130%

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW10-ROX-100714		
Lab Sample ID:	MC34156-3	**Date Sampled:**	10/07/14
Matrix:	AQ - Ground Water	**Date Received:**	10/08/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB59869.D	1	10/09/14	NK	10/08/14	OP40111	GBB3332
Run #2							

	Initial Volume	Final Volume
Run #1	35.7 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.015	0.0060	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.015	0.0060	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	81%		36-173%
460-00-4	Bromofluorobenzene (S)	69%		36-173%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW9-ROX-100714		
Lab Sample ID:	MC34156-4	**Date Sampled:**	10/07/14
Matrix:	AQ - Ground Water	**Date Received:**	10/08/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P80584.D	1	10/16/14	JB	n/a	n/a	MSP2636
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW9-ROX-100714		
Lab Sample ID:	MC34156-4	**Date Sampled:**	10/07/14
Matrix:	AQ - Ground Water	**Date Received:**	10/08/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate [a]	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW9-ROX-100714		
Lab Sample ID:	MC34156-4	**Date Sampled:**	10/07/14
Matrix:	AQ - Ground Water	**Date Received:**	10/08/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		70-130%
2037-26-5	Toluene-D8	104%		70-130%
460-00-4	4-Bromofluorobenzene	88%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW9-ROX-100714		
Lab Sample ID:	MC34156-4	**Date Sampled:**	10/07/14
Matrix:	AQ - Ground Water	**Date Received:**	10/08/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F76852.D	1	10/14/14	WK	10/08/14	OP40116	MSF3367
Run #2							

	Initial Volume	Final Volume
Run #1	850 ml	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	12	2.9	ug/l	
95-57-8	2-Chlorophenol	ND	5.9	0.36	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	12	0.97	ug/l	
120-83-2	2,4-Dichlorophenol	ND	12	0.47	ug/l	
105-67-9	2,4-Dimethylphenol	ND	12	0.66	ug/l	
51-28-5	2,4-Dinitrophenol	ND	24	2.9	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	12	2.3	ug/l	
95-48-7	2-Methylphenol	ND	12	0.27	ug/l	
	3&4-Methylphenol	ND	12	0.55	ug/l	
88-75-5	2-Nitrophenol	ND	12	3.4	ug/l	
100-02-7	4-Nitrophenol	ND	24	0.63	ug/l	
87-86-5	Pentachlorophenol	ND	12	1.3	ug/l	
108-95-2	Phenol	ND	5.9	0.36	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	12	0.44	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	12	0.21	ug/l	
62-53-3	Aniline	ND	12	0.75	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.9	0.55	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.9	0.62	ug/l	
100-51-6	Benzyl Alcohol	ND	12	2.7	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.9	0.37	ug/l	
106-47-8	4-Chloroaniline	ND	12	0.66	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.9	0.34	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.9	0.41	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.9	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.9	0.30	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.9	0.28	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	12	0.54	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	12	0.35	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.9	0.31	ug/l	
132-64-9	Dibenzofuran	ND	2.4	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.9	0.20	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.9	0.33	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW9-ROX-100714		
Lab Sample ID:	MC34156-4	**Date Sampled:**	10/07/14
Matrix:	AQ - Ground Water	**Date Received:**	10/08/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	5.9	0.24	ug/l	
131-11-3	Dimethyl phthalate	ND	5.9	0.40	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.4	0.39	ug/l	
118-74-1	Hexachlorobenzene	ND	5.9	0.34	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	12	1.5	ug/l	
67-72-1	Hexachloroethane	ND	5.9	0.36	ug/l	
78-59-1	Isophorone	ND	5.9	0.53	ug/l	
88-74-4	2-Nitroaniline	ND	12	0.47	ug/l	
99-09-2	3-Nitroaniline	ND	12	1.6	ug/l	
100-01-6	4-Nitroaniline	ND	12	2.5	ug/l	
98-95-3	Nitrobenzene	ND	5.9	0.46	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.9	1.2	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.9	0.47	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.9	0.23	ug/l	
110-86-1	Pyridine	ND	12	0.61	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	49%		15-110%
4165-62-2	Phenol-d5	32%		15-110%
118-79-6	2,4,6-Tribromophenol	90%		15-110%
4165-60-0	Nitrobenzene-d5	70%		30-130%
321-60-8	2-Fluorobiphenyl	71%		30-130%
1718-51-0	Terphenyl-d14	88%		30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW9-ROX-100714		
Lab Sample ID:	MC34156-4	**Date Sampled:**	10/07/14
Matrix:	AQ - Ground Water	**Date Received:**	10/08/14
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I92185.D	1	10/13/14	WK	10/08/14	OP40117	MSI3435
Run #2							

	Initial Volume	Final Volume
Run #1	850 ml	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.12	0.081	ug/l	
208-96-8	Acenaphthylene	ND	0.12	0.058	ug/l	
120-12-7	Anthracene	ND	0.12	0.11	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.059	0.023	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.12	0.034	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.059	0.037	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.12	0.032	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.12	0.045	ug/l	
218-01-9	Chrysene	ND	0.12	0.028	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.12	0.038	ug/l	
206-44-0	Fluoranthene	ND	0.12	0.048	ug/l	
86-73-7	Fluorene	ND	0.12	0.12	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.12	0.036	ug/l	
90-12-0	1-Methylnaphthalene	ND	2.4	0.59	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.4	0.59	ug/l	
85-01-8	Phenanthrene	ND	0.059	0.015	ug/l	
129-00-0	Pyrene	ND	0.12	0.045	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	81%		30-130%
321-60-8	2-Fluorobiphenyl	76%		30-130%
1718-51-0	Terphenyl-d14	86%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW9-ROX-100714		
Lab Sample ID:	MC34156-4	**Date Sampled:**	10/07/14
Matrix:	AQ - Ground Water	**Date Received:**	10/08/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB59870.D	1	10/09/14	NK	10/08/14	OP40111	GBB3332
Run #2							

	Initial Volume	Final Volume
Run #1	36.6 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.014	0.0058	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.014	0.0058	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	86%		36-173%
460-00-4	Bromofluorobenzene (S)	72%		36-173%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW16-ROX-100714		
Lab Sample ID:	MC34156-5	**Date Sampled:**	10/07/14
Matrix:	AQ - Ground Water	**Date Received:**	10/08/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P80585.D	1	10/16/14	JB	n/a	n/a	MSP2636
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW16-ROX-100714		
Lab Sample ID:	MC34156-5	**Date Sampled:**	10/07/14
Matrix:	AQ - Ground Water	**Date Received:**	10/08/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate [a]	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

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Report of Analysis

Client Sample ID:	MW16-ROX-100714		
Lab Sample ID:	MC34156-5	**Date Sampled:**	10/07/14
Matrix:	AQ - Ground Water	**Date Received:**	10/08/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	92%		70-130%
2037-26-5	Toluene-D8	102%		70-130%
460-00-4	4-Bromofluorobenzene	89%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.

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Report of Analysis

Client Sample ID:	MW16-ROX-100714		
Lab Sample ID:	MC34156-5	**Date Sampled:**	10/07/14
Matrix:	AQ - Ground Water	**Date Received:**	10/08/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F76853.D	1	10/14/14	WK	10/08/14	OP40116	MSF3367
Run #2							

	Initial Volume	Final Volume
Run #1	840 ml	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	12	3.0	ug/l	
95-57-8	2-Chlorophenol	ND	6.0	0.37	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	12	0.98	ug/l	
120-83-2	2,4-Dichlorophenol	ND	12	0.47	ug/l	
105-67-9	2,4-Dimethylphenol	ND	12	0.67	ug/l	
51-28-5	2,4-Dinitrophenol	ND	24	3.0	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	12	2.3	ug/l	
95-48-7	2-Methylphenol	ND	12	0.27	ug/l	
	3&4-Methylphenol	ND	12	0.56	ug/l	
88-75-5	2-Nitrophenol	ND	12	3.4	ug/l	
100-02-7	4-Nitrophenol	ND	24	0.64	ug/l	
87-86-5	Pentachlorophenol	ND	12	1.3	ug/l	
108-95-2	Phenol	ND	6.0	0.36	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	12	0.44	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	12	0.21	ug/l	
62-53-3	Aniline	ND	12	0.76	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	6.0	0.56	ug/l	
85-68-7	Butyl benzyl phthalate	ND	6.0	0.63	ug/l	
100-51-6	Benzyl Alcohol	ND	12	2.7	ug/l	
91-58-7	2-Chloronaphthalene	ND	6.0	0.37	ug/l	
106-47-8	4-Chloroaniline	ND	12	0.66	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	6.0	0.34	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	6.0	0.42	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	6.0	0.40	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	6.0	0.30	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	6.0	0.29	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	12	0.54	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	12	0.36	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	6.0	0.32	ug/l	
132-64-9	Dibenzofuran	ND	2.4	0.31	ug/l	
84-74-2	Di-n-butyl phthalate	ND	6.0	0.21	ug/l	
117-84-0	Di-n-octyl phthalate	ND	6.0	0.33	ug/l	

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Report of Analysis

Client Sample ID:	MW16-ROX-100714		
Lab Sample ID:	MC34156-5	**Date Sampled:**	10/07/14
Matrix:	AQ - Ground Water	**Date Received:**	10/08/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	6.0	0.24	ug/l	
131-11-3	Dimethyl phthalate	ND	6.0	0.40	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.4	0.40	ug/l	
118-74-1	Hexachlorobenzene	ND	6.0	0.34	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	12	1.5	ug/l	
67-72-1	Hexachloroethane	ND	6.0	0.36	ug/l	
78-59-1	Isophorone	ND	6.0	0.53	ug/l	
88-74-4	2-Nitroaniline	ND	12	0.47	ug/l	
99-09-2	3-Nitroaniline	ND	12	1.6	ug/l	
100-01-6	4-Nitroaniline	ND	12	2.6	ug/l	
98-95-3	Nitrobenzene	ND	6.0	0.47	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	6.0	1.2	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	6.0	0.48	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	6.0	0.23	ug/l	
110-86-1	Pyridine	ND	12	0.61	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	42%		15-110%
4165-62-2	Phenol-d5	28%		15-110%
118-79-6	2,4,6-Tribromophenol	86%		15-110%
4165-60-0	Nitrobenzene-d5	62%		30-130%
321-60-8	2-Fluorobiphenyl	65%		30-130%
1718-51-0	Terphenyl-d14	81%		30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW16-ROX-100714		
Lab Sample ID:	MC34156-5	**Date Sampled:**	10/07/14
Matrix:	AQ - Ground Water	**Date Received:**	10/08/14
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I92186.D	1	10/13/14	WK	10/08/14	OP40117	MSI3435
Run #2							

	Initial Volume	Final Volume
Run #1	840 ml	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.12	0.082	ug/l	
208-96-8	Acenaphthylene	ND	0.12	0.059	ug/l	
120-12-7	Anthracene	ND	0.12	0.11	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.060	0.023	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.12	0.034	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.060	0.038	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.12	0.032	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.12	0.046	ug/l	
218-01-9	Chrysene	ND	0.12	0.028	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.12	0.038	ug/l	
206-44-0	Fluoranthene	ND	0.12	0.048	ug/l	
86-73-7	Fluorene	ND	0.12	0.12	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.12	0.036	ug/l	
90-12-0	1-Methylnaphthalene	ND	2.4	0.60	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.4	0.60	ug/l	
85-01-8	Phenanthrene	ND	0.060	0.015	ug/l	
129-00-0	Pyrene	ND	0.12	0.046	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	72%		30-130%
321-60-8	2-Fluorobiphenyl	70%		30-130%
1718-51-0	Terphenyl-d14	79%		30-130%

ND = Not detected MDL = Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW16-ROX-100714		
Lab Sample ID:	MC34156-5	**Date Sampled:**	10/07/14
Matrix:	AQ - Ground Water	**Date Received:**	10/08/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB59871.D	1	10/09/14	NK	10/08/14	OP40111	GBB3332
Run #2							

	Initial Volume	Final Volume
Run #1	35.3 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.015	0.0061	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.015	0.0060	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	109%		36-173%
460-00-4	Bromofluorobenzene (S)	95%		36-173%

ND = Not detected MDL = Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-ROX-100714-HCL		
Lab Sample ID:	MC34156-6	**Date Sampled:**	10/07/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/08/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P80578.D	1	10/16/14	JB	n/a	n/a	MSP2636
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-ROX-100714-HCL		
Lab Sample ID:	MC34156-6	**Date Sampled:**	10/07/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/08/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate [a]	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-ROX-100714-HCL		
Lab Sample ID:	MC34156-6	**Date Sampled:**	10/07/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/08/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	92%		70-130%
2037-26-5	Toluene-D8	104%		70-130%
460-00-4	4-Bromofluorobenzene	86%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-ROX-100714-ST		
Lab Sample ID:	MC34156-7	**Date Sampled:**	10/07/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/08/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB59872.D	1	10/09/14	NK	10/08/14	OP40111	GBB3332
Run #2							

	Initial Volume	Final Volume
Run #1	36.0 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.015	0.0059	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.015	0.0059	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	96%		36-173%
460-00-4	Bromofluorobenzene (S)	85%		36-173%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

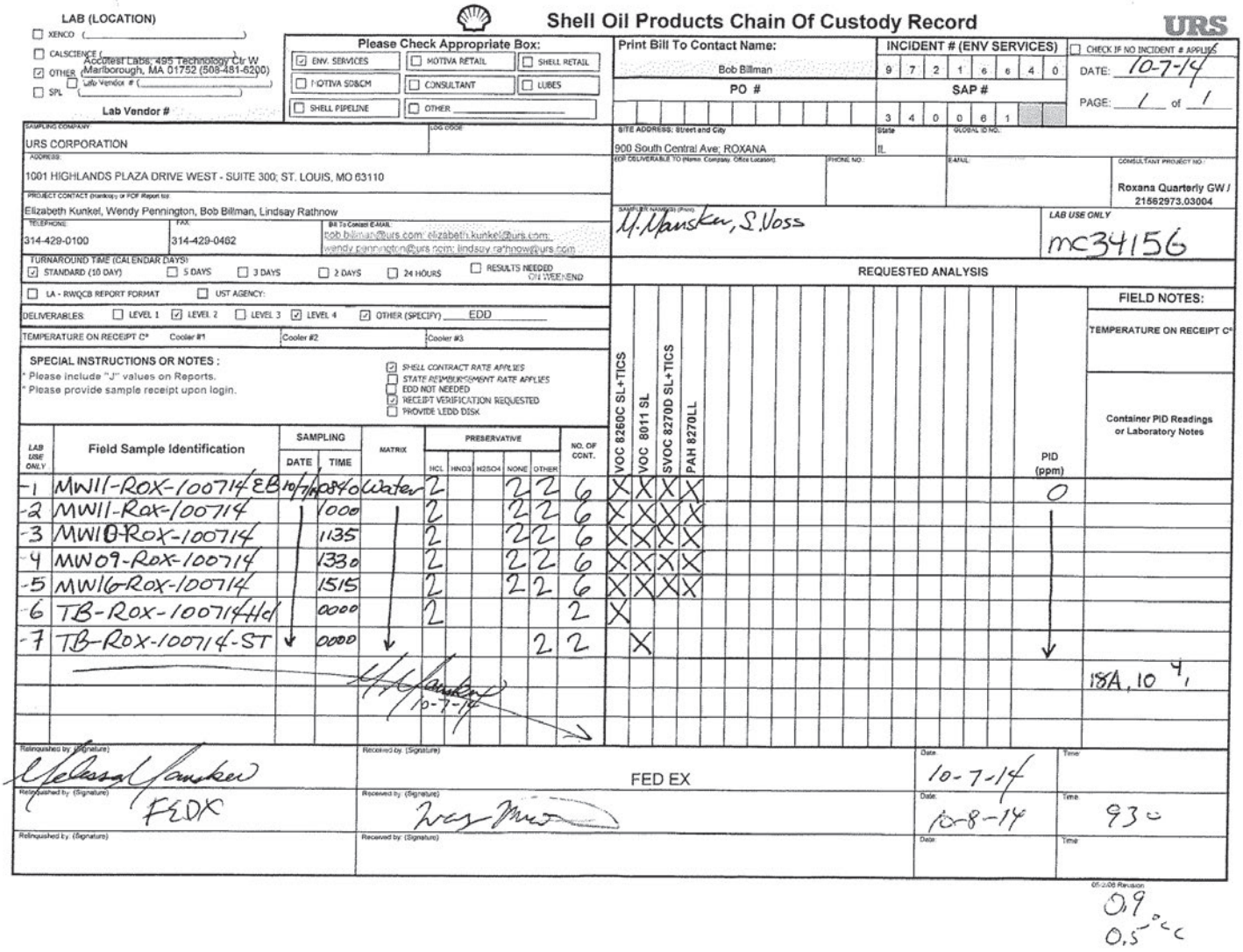
Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody

Shell Oil Products Chain Of Custody Record

URS



LAB (LOCATION)
- ☐ XENCO ( )
- ☐ CALSCIENCE ( )
- ☑ OTHER (Accutest Labs, 495 Technology Ctr W Marlborough, MA 01752 (508-481-6200))
- ☐ Lab Vendor # ( )
- ☐ SPL ( )

Lab Vendor #

Please Check Appropriate Box:
- ☑ ENV. SERVICES
- ☐ MOTIVA RETAIL
- ☐ SHELL RETAIL
- ☐ MOTIVA SD&CM
- ☐ CONSULTANT
- ☐ LUBES
- ☐ SHELL PIPELINE
- ☐ OTHER

Print Bill To Contact Name: Bob Billman

PO #

INCIDENT # (ENV SERVICES) 9 7 2 1 6 6 4 0

SAP # 3 4 0 0 6 1

☐ CHECK IF NO INCIDENT # APPLIES

DATE: 10-7-14

PAGE: 1 of 1

SAMPLING COMPANY: URS CORPORATION

LOG CODE:

ADDRESS: 1001 HIGHLANDS PLAZA DRIVE WEST - SUITE 300; ST. LOUIS, MO 63110

PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Wendy Pennington, Bob Billman, Lindsay Rathnow

TELEPHONE: 314-429-0100

FAX: 314-429-0462

Bill To Contact E-MAIL: bob.billman@urs.com; elizabeth.kunkel@urs.com; wendy.pennington@urs.com; lindsay.rathnow@urs.com

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA

State: IL

GLOBAL ID NO.:

EDF DELIVERABLE TO (Name, Company, Office Location):

PHONE NO.:

E-MAIL:

CONSULTANT PROJECT NO.: Roxana Quarterly GW / 21562973.03004

SAMPLER NAME(S) (Print): M. Hansker, S. Voss

LAB USE ONLY: mc34156

TURNAROUND TIME (CALENDAR DAYS): ☑ STANDARD (10 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT ☐ UST AGENCY:

DELIVERABLES: ☐ LEVEL 1 ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) EDD

TEMPERATURE ON RECEIPT C°: Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :
- Please include "J" values on Reports.
- Please provide sample receipt upon login.

- ☑ SHELL CONTRACT RATE APPLIES
- ☐ STATE REIMBURSEMENT RATE APPLIES
- ☐ EDD NOT NEEDED
- ☑ RECEIPT VERIFICATION REQUESTED
- ☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS

FIELD NOTES:

TEMPERATURE ON RECEIPT C°

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260C SL+TICS	VOC 8011 SL	SVOC 8270D SL+TICS	PAH 8270LL	PID (ppm)	Container PID Readings or Laboratory Notes
-1	MW11-ROX-100714EB	10/7/14	0840	Water	2			2	2	6	X	X	X	X	0	
-2	MW11-ROX-100714	↓	1000	↓	2			2	2	6	X	X	X	X	↓	
-3	MW10-ROX-100714	↓	1135	↓	2			2	2	6	X	X	X	X	↓	
-4	MW09-ROX-100714	↓	1330	↓	2			2	2	6	X	X	X	X	↓	
-5	MW16-ROX-100714	↓	1515	↓	2			2	2	6	X	X	X	X	↓	
-6	TB-ROX-100714Hcl	↓	0000	↓	2					2	X				↓	
-7	TB-ROX-100714-ST	↓	0000	↓					2	2		X			↓	
																18A, 10 4,

M. Hansker 10-7-14

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
Melissa Hansker	FED EX	10-7-14	
FEDX	[signature]	10-8-14	930

05-2/06 Revision

0.9
0.5 °C

MC34156: Chain of Custody
Page 1 of 2

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: MC34156 **Client:** URS **Project:** 900 SOUTH CENTRAL AVE

Date / Time Received: 10/8/2014 9 30 00 AM **Delivery Method:** **Airbill #'s:**

Cooler Temps (Initial/Adjusted): #1 (0 5/0 5) #2 (0 9/0 9)

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Thermometer D:	G1;		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	2		

Quality Control_Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☑		☐	☐
2. Trip Blank listed on COC:	☑		☐	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

Accutest Laboratories
V:(508) 481-6200

495 Technology Center West, Bldg One
F: (508) 481-7753

Marlborough, MA 01752
www/accutest.com

MC34156: Chain of Custody
Page 2 of 2

Internal Sample Tracking Chronicle

Shell Oil

Job No: MC34156

URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC34156-1 Collected: 07-OCT-14 08:40 By: MMSV Received: 08-OCT-14 By: MW11-ROX-100714 EB						
MC34156-1	SW846 8011	09-OCT-14 09:30	NK	08-OCT-14	MT	V8011SL
MC34156-1	SW846 8270D BY SIM	13-OCT-14 17:35	WK	08-OCT-14	MD	B8270SIMSL
MC34156-1	SW846 8270D	14-OCT-14 14:14	WK	08-OCT-14	MD	AB8270SL+
MC34156-1	SW846 8260C	16-OCT-14 12:53	JB			V8260SL+
MC34156-2 Collected: 07-OCT-14 10:00 By: MMSV Received: 08-OCT-14 By: MW11-ROX-100714						
MC34156-2	SW846 8011	09-OCT-14 09:48	NK	08-OCT-14	MT	V8011SL
MC34156-2	SW846 8270D BY SIM	13-OCT-14 17:59	WK	08-OCT-14	MD	B8270SIMSL
MC34156-2	SW846 8270D	14-OCT-14 14:37	WK	08-OCT-14	MD	AB8270SL+
MC34156-2	SW846 8260C	16-OCT-14 13:52	JB			V8260SL+
MC34156-3 Collected: 07-OCT-14 11:35 By: MMSV Received: 08-OCT-14 By: MW10-ROX-100714						
MC34156-3	SW846 8011	09-OCT-14 10:06	NK	08-OCT-14	MT	V8011SL
MC34156-3	SW846 8270D BY SIM	13-OCT-14 18:22	WK	08-OCT-14	MD	B8270SIMSL
MC34156-3	SW846 8270D	14-OCT-14 15:00	WK	08-OCT-14	MD	AB8270SL+
MC34156-3	SW846 8260C	16-OCT-14 14:22	JB			V8260SL+
MC34156-4 Collected: 07-OCT-14 13:30 By: MMSV Received: 08-OCT-14 By: MW9-ROX-100714						
MC34156-4	SW846 8011	09-OCT-14 10:24	NK	08-OCT-14	MT	V8011SL
MC34156-4	SW846 8270D BY SIM	13-OCT-14 18:45	WK	08-OCT-14	MD	B8270SIMSL
MC34156-4	SW846 8270D	14-OCT-14 15:23	WK	08-OCT-14	MD	AB8270SL+
MC34156-4	SW846 8260C	16-OCT-14 14:51	JB			V8260SL+
MC34156-5 Collected: 07-OCT-14 15:15 By: MMSV Received: 08-OCT-14 By: MW16-ROX-100714						
MC34156-5	SW846 8011	09-OCT-14 10:43	NK	08-OCT-14	MT	V8011SL
MC34156-5	SW846 8270D BY SIM	13-OCT-14 19:08	WK	08-OCT-14	MD	B8270SIMSL
MC34156-5	SW846 8270D	14-OCT-14 15:46	WK	08-OCT-14	MD	AB8270SL+
MC34156-5	SW846 8260C	16-OCT-14 15:21	JB			V8260SL+

Internal Sample Tracking Chronicle

Shell Oil

Job No: MC34156

URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC34156-6 Collected: 07-OCT-14 00:00 By: MMSV Received: 08-OCT-14 By: TB-ROX-100714-HCL						
MC34156-6	SW846 8260C	16-OCT-14 11:54	JB			V8260SL+
MC34156-7 Collected: 07-OCT-14 00:00 By: MMSV Received: 08-OCT-14 By: TB-ROX-100714-ST						
MC34156-7	SW846 8011	09-OCT-14 11:01	NK	08-OCT-14	MT	V8011SL

SGS Accutest Internal Chain of Custody

Job Number: MC34156
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL
Received: 10/08/14

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC34156-1.2	Walk In Ref #22	Thomas Abruzzise	10/08/14 14:27	Retrieve from Storage
MC34156-1.2	Thomas Abruzzise		10/23/14 15:08	Depleted
MC34156-1.3	VOC Ref #1	Jaclyn Bergeron	10/16/14 11:20	Retrieve from Storage
MC34156-1.3	Jaclyn Bergeron	GCMSP	10/16/14 11:20	Load on Instrument
MC34156-1.3	GCMSP	Jaclyn Bergeron	10/17/14 12:04	Unload from Instrument
MC34156-1.3	Jaclyn Bergeron	VOC Ref #1	10/17/14 12:04	Return to Storage
MC34156-1.3	Scott Parsick		12/18/14 12:16	Disposed
MC34156-1.5	Walk In Ref #22	Marc Tahtamoni	10/08/14 16:10	Retrieve from Storage
MC34156-1.5	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34156-2.2	Walk In Ref #22	Thomas Abruzzise	10/08/14 14:27	Retrieve from Storage
MC34156-2.2	Thomas Abruzzise		10/23/14 15:08	Depleted
MC34156-2.4	VOC Ref #1	Jaclyn Bergeron	10/16/14 11:20	Retrieve from Storage
MC34156-2.4	Jaclyn Bergeron	GCMSP	10/16/14 11:20	Load on Instrument
MC34156-2.4	GCMSP	Jaclyn Bergeron	10/17/14 12:04	Unload from Instrument
MC34156-2.4	Jaclyn Bergeron	VOC Ref #1	10/17/14 12:04	Return to Storage
MC34156-2.4	Scott Parsick		12/18/14 12:16	Disposed
MC34156-2.5	Walk In Ref #22	Marc Tahtamoni	10/08/14 16:10	Retrieve from Storage
MC34156-2.5	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34156-3.1	Walk In Ref #22	Thomas Abruzzise	10/08/14 14:27	Retrieve from Storage
MC34156-3.1	Thomas Abruzzise		10/23/14 15:08	Depleted
MC34156-3.3	VOC Ref #1	Jaclyn Bergeron	10/16/14 11:20	Retrieve from Storage
MC34156-3.3	Jaclyn Bergeron	GCMSP	10/16/14 11:20	Load on Instrument
MC34156-3.3	GCMSP	Jaclyn Bergeron	10/17/14 12:04	Unload from Instrument
MC34156-3.3	Jaclyn Bergeron	VOC Ref #1	10/17/14 12:04	Return to Storage
MC34156-3.3	Scott Parsick		12/18/14 12:16	Disposed
MC34156-3.6	Walk In Ref #22	Marc Tahtamoni	10/08/14 16:10	Retrieve from Storage
MC34156-3.6	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34156-4.2	Walk In Ref #22	Thomas Abruzzise	10/08/14 14:27	Retrieve from Storage
MC34156-4.2	Thomas Abruzzise		10/23/14 15:08	Depleted
MC34156-4.3	VOC Ref #1	Jaclyn Bergeron	10/16/14 11:20	Retrieve from Storage
MC34156-4.3	Jaclyn Bergeron	GCMSP	10/16/14 11:20	Load on Instrument
MC34156-4.3	GCMSP	Jaclyn Bergeron	10/17/14 12:04	Unload from Instrument
MC34156-4.3	Jaclyn Bergeron	VOC Ref #1	10/17/14 12:04	Return to Storage
MC34156-4.3	Scott Parsick		12/18/14 12:16	Disposed

SGS Accutest Internal Chain of Custody

Job Number: MC34156
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL
Received: 10/08/14

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC34156-4.5	Walk In Ref #22	Marc Tahtamoni	10/08/14 16:10	Retrieve from Storage
MC34156-4.5	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34156-5.2	Walk In Ref #22	Thomas Abruzzise	10/08/14 14:27	Retrieve from Storage
MC34156-5.2	Thomas Abruzzise		10/23/14 15:08	Depleted
MC34156-5.4	VOC Ref #1	Jaclyn Bergeron	10/16/14 11:20	Retrieve from Storage
MC34156-5.4	Jaclyn Bergeron	GCMSP	10/16/14 11:20	Load on Instrument
MC34156-5.4	GCMSP	Jaclyn Bergeron	10/17/14 12:04	Unload from Instrument
MC34156-5.4	Jaclyn Bergeron	VOC Ref #1	10/17/14 12:04	Return to Storage
MC34156-5.4	Scott Parsick		12/18/14 12:16	Disposed
MC34156-5.6	Walk In Ref #22	Marc Tahtamoni	10/08/14 16:10	Retrieve from Storage
MC34156-5.6	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34156-6.2	VOC Ref #1	Jaclyn Bergeron	10/16/14 11:20	Retrieve from Storage
MC34156-6.2	Jaclyn Bergeron	GCMSP	10/16/14 11:20	Load on Instrument
MC34156-6.2	GCMSP	Jaclyn Bergeron	10/17/14 12:04	Unload from Instrument
MC34156-6.2	Jaclyn Bergeron	VOC Ref #1	10/17/14 12:04	Return to Storage
MC34156-6.2	Scott Parsick		12/18/14 12:16	Disposed
MC34156-7.2	Walk In Ref #22	Marc Tahtamoni	10/08/14 16:10	Retrieve from Storage
MC34156-7.2	Marc Tahtamoni		11/11/14 17:36	Depleted

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: MC34156
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSP2636-MB	P80577.D	1	10/16/14	JB	n/a	n/a	MSP2636

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34156-1, MC34156-2, MC34156-3, MC34156-4, MC34156-5, MC34156-6

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	

Method Blank Summary

Job Number: MC34156
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSP2636-MB	P80577.D	1	10/16/14	JB	n/a	n/a	MSP2636

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34156-1, MC34156-2, MC34156-3, MC34156-4, MC34156-5, MC34156-6

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

Method Blank Summary

Job Number: MC34156
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSP2636-MB	P80577.D	1	10/16/14	JB	n/a	n/a	MSP2636

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34156-1, MC34156-2, MC34156-3, MC34156-4, MC34156-5, MC34156-6

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	93%	70-130%
2037-26-5	Toluene-D8	102%	70-130%
460-00-4	4-Bromofluorobenzene	87%	70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Blank Spike Summary

Job Number: MC34156
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSP2636-BS	P80574.D	1	10/16/14	JB	n/a	n/a	MSP2636

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34156-1, MC34156-2, MC34156-3, MC34156-4, MC34156-5, MC34156-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	53.4	107	70-130
107-02-8	Acrolein	250	228	91	70-130
107-13-1	Acrylonitrile	50	45.7	91	70-130
71-43-2	Benzene	50	48.6	97	70-130
108-86-1	Bromobenzene	50	48.8	98	70-130
74-97-5	Bromochloromethane	50	53.2	106	70-130
75-27-4	Bromodichloromethane	50	54.2	108	70-130
75-25-2	Bromoform	50	55.4	111	70-130
74-83-9	Bromomethane	50	44.0	88	70-130
78-93-3	2-Butanone (MEK)	50	41.6	83	70-130
104-51-8	n-Butylbenzene	50	47.1	94	70-130
135-98-8	sec-Butylbenzene	50	52.5	105	70-130
98-06-6	tert-Butylbenzene	50	47.3	95	70-130
75-15-0	Carbon disulfide	50	44.3	89	70-130
56-23-5	Carbon tetrachloride	50	54.6	109	70-130
108-90-7	Chlorobenzene	50	51.7	103	70-130
75-00-3	Chloroethane	50	51.4	103	70-130
110-75-8	2-Chloroethyl vinyl ether	50	55.3	111	70-130
67-66-3	Chloroform	50	47.7	95	70-130
74-87-3	Chloromethane	50	44.2	88	70-130
95-49-8	o-Chlorotoluene	50	46.3	93	70-130
106-43-4	p-Chlorotoluene	50	46.0	92	70-130
124-48-1	Dibromochloromethane	50	54.4	109	70-130
95-50-1	1,2-Dichlorobenzene	50	52.0	104	70-130
541-73-1	1,3-Dichlorobenzene	50	52.6	105	70-130
106-46-7	1,4-Dichlorobenzene	50	51.6	103	70-130
75-71-8	Dichlorodifluoromethane	50	40.9	82	70-130
75-34-3	1,1-Dichloroethane	50	51.1	102	70-130
107-06-2	1,2-Dichloroethane	50	50.0	100	70-130
75-35-4	1,1-Dichloroethene	50	48.4	97	70-130
156-59-2	cis-1,2-Dichloroethene	50	47.4	95	70-130
156-60-5	trans-1,2-Dichloroethene	50	47.1	94	70-130
78-87-5	1,2-Dichloropropane	50	50.4	101	70-130
142-28-9	1,3-Dichloropropane	50	51.5	103	70-130
594-20-7	2,2-Dichloropropane	50	47.5	95	70-130
563-58-6	1,1-Dichloropropene	50	53.3	107	70-130

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34156
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSP2636-BS	P80574.D	1	10/16/14	JB	n/a	n/a	MSP2636

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34156-1, MC34156-2, MC34156-3, MC34156-4, MC34156-5, MC34156-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-01-5	cis-1,3-Dichloropropene	50	46.8	94	70-130
10061-02-6	trans-1,3-Dichloropropene	50	53.4	107	70-130
123-91-1	1,4-Dioxane	125	146	117	70-130
97-63-2	Ethyl methacrylate	50	47.0	94	77-137
100-41-4	Ethylbenzene	50	51.1	102	70-130
87-68-3	Hexachlorobutadiene	50	63.1	126	70-130
591-78-6	2-Hexanone	50	51.8	104	70-130
98-82-8	Isopropylbenzene	50	47.8	96	70-130
99-87-6	p-Isopropyltoluene	50	52.2	104	70-130
1634-04-4	Methyl Tert Butyl Ether	50	44.4	89	70-130
108-10-1	4-Methyl-2-pentanone (MIBK)	50	47.8	96	70-130
74-95-3	Methylene bromide	50	50.4	101	70-130
75-09-2	Methylene chloride	50	44.4	89	70-130
91-20-3	Naphthalene	50	58.1	116	70-130
103-65-1	n-Propylbenzene	50	49.9	100	70-130
100-42-5	Styrene	50	53.2	106	70-130
630-20-6	1,1,1,2-Tetrachloroethane	50	54.2	108	70-130
79-34-5	1,1,2,2-Tetrachloroethane	50	47.4	95	70-130
127-18-4	Tetrachloroethene	50	58.9	118	70-130
108-88-3	Toluene	50	49.1	98	70-130
87-61-6	1,2,3-Trichlorobenzene	50	64.7	129	70-130
120-82-1	1,2,4-Trichlorobenzene	50	70.1	140* [a]	70-130
71-55-6	1,1,1-Trichloroethane	50	52.3	105	70-130
79-00-5	1,1,2-Trichloroethane	50	53.0	106	70-130
79-01-6	Trichloroethene	50	50.8	102	70-130
75-69-4	Trichlorofluoromethane	50	42.3	85	70-130
96-18-4	1,2,3-Trichloropropane	50	47.4	95	70-130
95-63-6	1,2,4-Trimethylbenzene	50	49.3	99	70-130
108-67-8	1,3,5-Trimethylbenzene	50	48.2	96	70-130
108-05-4	Vinyl Acetate	50	29.6	59* [b]	70-130
75-01-4	Vinyl chloride	50	42.9	86	70-130
	m,p-Xylene	100	103	103	70-130
95-47-6	o-Xylene	50	50.9	102	70-130
1330-20-7	Xylene (total)	150	153	102	70-130

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34156
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSP2636-BS	P80574.D	1	10/16/14	JB	n/a	n/a	MSP2636

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34156-1, MC34156-2, MC34156-3, MC34156-4, MC34156-5, MC34156-6

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	94%	70-130%
2037-26-5	Toluene-D8	100%	70-130%
460-00-4	4-Bromofluorobenzene	78%	70-130%

(a) Outside control limits. Associated samples are non-detect for this compound.
(b) Outside control limits. Blank Spike meets program technical requirements.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34156
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34166-2MS	P80595.D	1	10/16/14	JB	n/a	n/a	MSP2636
MC34166-2MSD	P80596.D	1	10/16/14	JB	n/a	n/a	MSP2636
MC34166-2	P80581.D	1	10/16/14	JB	n/a	n/a	MSP2636

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34156-1, MC34156-2, MC34156-3, MC34156-4, MC34156-5, MC34156-6

CAS No.	Compound	MC34166-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		50	20.5	41* [a]	50	19.2	38* [a]	7	70-130/30
107-02-8	Acrolein	ND		250	215	86	250	202	81	6	70-130/30
107-13-1	Acrylonitrile	ND		50	46.2	92	50	39.0	78	17	70-130/30
71-43-2	Benzene	36.1		50	92.7	113	50	87.2	102	6	70-130/30
108-86-1	Bromobenzene	ND		50	50.1	100	50	48.3	97	4	70-130/30
74-97-5	Bromochloromethane	ND		50	57.1	114	50	53.9	108	6	70-130/30
75-27-4	Bromodichloromethane	ND		50	58.0	116	50	55.8	112	4	70-130/30
75-25-2	Bromoform	ND		50	60.3	121	50	56.6	113	6	70-130/30
74-83-9	Bromomethane	ND		50	33.6	67* [a]	50	49.4	99	38* [b]	70-130/30
78-93-3	2-Butanone (MEK)	ND		50	32.9	66* [a]	50	28.6	57* [a]	14	70-130/30
104-51-8	n-Butylbenzene	ND		50	47.1	94	50	46.0	92	2	70-130/30
135-98-8	sec-Butylbenzene	ND		50	54.0	108	50	51.8	104	4	70-130/30
98-06-6	tert-Butylbenzene	ND		50	48.5	97	50	46.6	93	4	70-130/30
75-15-0	Carbon disulfide	ND		50	46.4	93	50	45.2	90	3	70-130/30
56-23-5	Carbon tetrachloride	ND		50	59.1	118	50	58.0	116	2	70-130/30
108-90-7	Chlorobenzene	ND		50	54.2	108	50	51.5	103	5	70-130/30
75-00-3	Chloroethane	ND		50	55.3	111	50	53.5	107	3	70-130/30
110-75-8	2-Chloroethyl vinyl ether	ND		50	52.9	106	50	53.6	107	1	70-130/30
67-66-3	Chloroform	ND		50	50.5	101	50	48.2	96	5	70-130/30
74-87-3	Chloromethane	ND		50	43.5	87	50	48.2	96	10	70-130/30
95-49-8	o-Chlorotoluene	ND		50	47.4	95	50	45.8	92	3	70-130/30
106-43-4	p-Chlorotoluene	ND		50	47.5	95	50	45.8	92	4	70-130/30
124-48-1	Dibromochloromethane	ND		50	59.0	118	50	55.6	111	6	70-130/30
95-50-1	1,2-Dichlorobenzene	ND		50	52.9	106	50	50.6	101	4	70-130/30
541-73-1	1,3-Dichlorobenzene	ND		50	53.9	108	50	51.6	103	4	70-130/30
106-46-7	1,4-Dichlorobenzene	ND		50	53.1	106	50	50.9	102	4	70-130/30
75-71-8	Dichlorodifluoromethane	ND		50	44.7	89	50	43.9	88	2	70-130/30
75-34-3	1,1-Dichloroethane	ND		50	53.5	107	50	51.4	103	4	70-130/30
107-06-2	1,2-Dichloroethane	ND		50	51.4	103	50	48.7	97	5	70-130/30
75-35-4	1,1-Dichloroethene	ND		50	51.2	102	50	48.7	97	5	70-130/30
156-59-2	cis-1,2-Dichloroethene	ND		50	49.2	98	50	47.2	94	4	70-130/30
156-60-5	trans-1,2-Dichloroethene	ND		50	50.5	101	50	47.4	95	6	70-130/30
78-87-5	1,2-Dichloropropane	ND		50	53.0	106	50	51.1	102	4	70-130/30
142-28-9	1,3-Dichloropropane	ND		50	52.9	106	50	49.8	100	6	70-130/30
594-20-7	2,2-Dichloropropane	ND		50	62.1	124	50	59.1	118	5	70-130/30
563-58-6	1,1-Dichloropropene	ND		50	56.2	112	50	53.8	108	4	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34156
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34166-2MS	P80595.D	1	10/16/14	JB	n/a	n/a	MSP2636
MC34166-2MSD	P80596.D	1	10/16/14	JB	n/a	n/a	MSP2636
MC34166-2	P80581.D	1	10/16/14	JB	n/a	n/a	MSP2636

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34156-1, MC34156-2, MC34156-3, MC34156-4, MC34156-5, MC34156-6

CAS No.	Compound	MC34166-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-01-5	cis-1,3-Dichloropropene	ND		50	49.8	100	50	47.0	94	6	70-130/30
10061-02-6	trans-1,3-Dichloropropene	ND		50	56.0	112	50	52.4	105	7	70-130/30
123-91-1	1,4-Dioxane	ND		125	126	101	125	286	229* a	78* b	70-130/30
97-63-2	Ethyl methacrylate	ND		50	48.2	96	50	44.9	90	7	72-139/30
100-41-4	Ethylbenzene	ND		50	54.2	108	50	50.5	101	7	70-130/30
87-68-3	Hexachlorobutadiene	ND		50	62.5	125	50	59.4	119	5	70-130/30
591-78-6	2-Hexanone	ND		50	36.9	74	50	33.5	67* a	10	70-130/30
98-82-8	Isopropylbenzene	ND		50	49.8	100	50	47.9	96	4	70-130/30
99-87-6	p-Isopropyltoluene	ND		50	54.2	108	50	52.1	104	4	70-130/30
1634-04-4	Methyl Tert Butyl Ether	15.6		50	61.2	91	50	56.9	83	7	70-130/30
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		50	46.6	93	50	41.8	84	11	70-130/30
74-95-3	Methylene bromide	ND		50	52.2	104	50	49.0	98	6	70-130/30
75-09-2	Methylene chloride	ND		50	46.5	93	50	44.7	89	4	70-130/30
91-20-3	Naphthalene	ND		50	51.1	102	50	48.6	97	5	70-130/30
103-65-1	n-Propylbenzene	ND		50	51.4	103	50	49.2	98	4	70-130/30
100-42-5	Styrene	ND		50	54.2	108	50	51.4	103	5	70-130/30
630-20-6	1,1,1,2-Tetrachloroethane	ND		50	58.8	118	50	54.8	110	7	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	ND		50	46.4	93	50	42.9	86	8	70-130/30
127-18-4	Tetrachloroethene	ND		50	61.5	123	50	58.6	117	5	70-130/30
108-88-3	Toluene	ND		50	52.2	104	50	49.4	99	6	70-130/30
87-61-6	1,2,3-Trichlorobenzene	ND		50	65.7	131* a	50	59.9	120	9	70-130/30
120-82-1	1,2,4-Trichlorobenzene	ND		50	70.9	142* c	50	67.0	134* c	6	70-130/30
71-55-6	1,1,1-Trichloroethane	ND		50	56.7	113	50	55.0	110	3	70-130/30
79-00-5	1,1,2-Trichloroethane	ND		50	54.7	109	50	50.8	102	7	70-130/30
79-01-6	Trichloroethene	ND		50	53.9	108	50	51.4	103	5	70-130/30
75-69-4	Trichlorofluoromethane	ND		50	44.4	89	50	43.2	86	3	70-130/30
96-18-4	1,2,3-Trichloropropane	ND		50	46.4	93	50	42.4	85	9	70-130/30
95-63-6	1,2,4-Trimethylbenzene	ND		50	52.0	104	50	50.0	100	4	70-130/30
108-67-8	1,3,5-Trimethylbenzene	ND		50	50.1	100	50	48.1	96	4	70-130/30
108-05-4	Vinyl Acetate	ND		50	30.2	60* a	50	28.6	57* a	5	70-130/30
75-01-4	Vinyl chloride	ND		50	43.5	87	50	42.8	86	2	70-130/30
	m,p-Xylene	ND		100	108	108	100	102	102	6	70-130/30
95-47-6	o-Xylene	ND		50	53.8	108	50	51.0	102	5	70-130/30
1330-20-7	Xylene (total)	ND		150	162	108	150	153	102	6	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34156
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34166-2MS	P80595.D	1	10/16/14	JB	n/a	n/a	MSP2636
MC34166-2MSD	P80596.D	1	10/16/14	JB	n/a	n/a	MSP2636
MC34166-2	P80581.D	1	10/16/14	JB	n/a	n/a	MSP2636

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34156-1, MC34156-2, MC34156-3, MC34156-4, MC34156-5, MC34156-6

CAS No.	Surrogate Recoveries	MS	MSD	MC34166-2	Limits
1868-53-7	Dibromofluoromethane	94%	95%	94%	70-130%
2037-26-5	Toluene-D8	101%	101%	102%	70-130%
460-00-4	4-Bromofluorobenzene	76%	77%	87%	70-130%

(a) Outside control limits due to possible matrix interference. Refer to Blank Spike.
(b) High RPD due to possible matrix interference and/or sample non-homogeneity.
(c) Outside control limits. Associated samples are non-detect for this compound.

* = Outside of Control Limits.

Volatile Internal Standard Area Summary

Job Number: MC34156
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSP2636-CC2633	**Injection Date:**	10/16/14
Lab File ID:	P80573.D	**Injection Time:**	09:26
Instrument ID:	GCMSP	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	868989	8.48	1067551	9.32	515624	12.52	541408	15.08	188613	6.16
Upper Limit [a]	1737978	8.98	2135102	9.82	1031248	13.02	1082816	15.58	377226	6.66
Lower Limit [b]	434495	7.98	533776	8.82	257812	12.02	270704	14.58	94307	5.66

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSP2636-BS	897326	8.48	1104037	9.32	536666	12.53	545996	15.08	215120	6.16
MSP2636-MB	813476	8.48	998556	9.33	490316	12.52	449191	15.08	182612	6.19
MC34156-6	818499	8.48	996228	9.33	489184	12.53	453286	15.08	203756	6.18
ZZZZZZ	806569	8.48	992871	9.33	486388	12.53	438818	15.08	217424	6.19
MC34156-1	713983	8.48	886920	9.33	440894	12.53	396564	15.08	122715	6.20
MC34166-2	767052	8.48	952536	9.33	460839	12.53	423127	15.08	150172	6.19
MC34156-2	657094	8.48	814284	9.33	401506	12.53	356973	15.08	146943	6.20
MC34156-3	803829	8.48	989275	9.33	482782	12.52	436639	15.08	183660	6.19
MC34156-4	734474	8.48	898952	9.33	448060	12.53	393276	15.09	173152	6.20
MC34156-5	776595	8.48	957784	9.33	471268	12.53	413599	15.08	169963	6.19
ZZZZZZ	784496	8.48	970441	9.33	473617	12.53	417156	15.08	177161	6.19
ZZZZZZ	758116	8.48	930624	9.33	462652	12.53	399526	15.09	158340	6.19
ZZZZZZ	762656	8.48	945613	9.33	463611	12.52	419049	15.08	142287	6.19
ZZZZZZ	813164	8.48	993219	9.32	481111	12.52	458312	15.08	175715	6.18
ZZZZZZ	846445	8.48	1034163	9.32	481068	12.53	548519	15.08	190106	6.17
ZZZZZZ	846027	8.48	1041483	9.32	493604	12.53	494761	15.08	167250	6.19
MC34166-2MS	875545	8.48	1070992	9.32	524487	12.53	540381	15.08	158404	6.16
MC34166-2MSD	896404	8.48	1105657	9.32	540459	12.52	549642	15.08	140664	6.16

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary

Job Number: MC34156
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Method: SW846 8260C **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
MC34156-1	P80580.D	94	102	87
MC34156-2	P80582.D	93	102	87
MC34156-3	P80583.D	93	103	88
MC34156-4	P80584.D	94	104	88
MC34156-5	P80585.D	92	102	89
MC34156-6	P80578.D	92	104	86
MC34166-2MS	P80595.D	94	101	76
MC34166-2MSD	P80596.D	95	101	77
MSP2636-BS	P80574.D	94	100	78
MSP2636-MB	P80577.D	93	102	87

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	70-130%
S2 = Toluene-D8	70-130%
S3 = 4-Bromofluorobenzene	70-130%

GC/MS Semi-volatiles

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QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: MC34156
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40116-MB	F76844.D	1	10/14/14	WK	10/08/14	OP40116	MSF3367

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34156-1, MC34156-2, MC34156-3, MC34156-4, MC34156-5

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	10	2.5	ug/l	
95-57-8	2-Chlorophenol	ND	5.0	0.31	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	10	0.83	ug/l	
120-83-2	2,4-Dichlorophenol	ND	10	0.40	ug/l	
105-67-9	2,4-Dimethylphenol	ND	10	0.56	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	2.5	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.9	ug/l	
95-48-7	2-Methylphenol	ND	10	0.23	ug/l	
	3&4-Methylphenol	ND	10	0.47	ug/l	
88-75-5	2-Nitrophenol	ND	10	2.9	ug/l	
100-02-7	4-Nitrophenol	ND	20	0.53	ug/l	
87-86-5	Pentachlorophenol	ND	10	1.1	ug/l	
108-95-2	Phenol	ND	5.0	0.30	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	10	0.37	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	10	0.18	ug/l	
62-53-3	Aniline	ND	10	0.64	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.0	0.47	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.0	0.53	ug/l	
100-51-6	Benzyl Alcohol	ND	10	2.3	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.31	ug/l	
106-47-8	4-Chloroaniline	ND	10	0.56	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.0	0.29	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.0	0.35	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.0	0.33	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.0	0.25	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.0	0.24	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	10	0.46	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	10	0.30	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.27	ug/l	
132-64-9	Dibenzofuran	ND	2.0	0.26	ug/l	
84-74-2	Di-n-butyl phthalate	0.75	5.0	0.17	ug/l	J
117-84-0	Di-n-octyl phthalate	ND	5.0	0.28	ug/l	
84-66-2	Diethyl phthalate	ND	5.0	0.20	ug/l	
131-11-3	Dimethyl phthalate	ND	5.0	0.34	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	0.85	2.0	0.33	ug/l	J
118-74-1	Hexachlorobenzene	ND	5.0	0.29	ug/l	

Method Blank Summary

Job Number: MC34156
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40116-MB	F76844.D	1	10/14/14	WK	10/08/14	OP40116	MSF3367

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34156-1, MC34156-2, MC34156-3, MC34156-4, MC34156-5

CAS No.	Compound	Result	RL	MDL	Units	Q
77-47-4	Hexachlorocyclopentadiene	ND	10	1.3	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.30	ug/l	
78-59-1	Isophorone	ND	5.0	0.45	ug/l	
88-74-4	2-Nitroaniline	ND	10	0.40	ug/l	
99-09-2	3-Nitroaniline	ND	10	1.4	ug/l	
100-01-6	4-Nitroaniline	ND	10	2.2	ug/l	
98-95-3	Nitrobenzene	ND	5.0	0.39	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.0	1.0	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.0	0.40	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.19	ug/l	
110-86-1	Pyridine	ND	10	0.52	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	48%	15-110%
4165-62-2	Phenol-d5	30%	15-110%
118-79-6	2,4,6-Tribromophenol	91%	15-110%
4165-60-0	Nitrobenzene-d5	71%	30-130%
321-60-8	2-Fluorobiphenyl	68%	30-130%
1718-51-0	Terphenyl-d14	87%	30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

Method Blank Summary

Job Number: MC34156
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40117-MB	I92177.D	1	10/13/14	WK	10/08/14	OP40117	MSI3435

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

MC34156-1, MC34156-2, MC34156-3, MC34156-4, MC34156-5

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.069	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.050	ug/l	
120-12-7	Anthracene	ND	0.10	0.092	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.050	0.020	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.029	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.050	0.032	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.027	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.039	ug/l	
218-01-9	Chrysene	ND	0.10	0.024	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.032	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.041	ug/l	
86-73-7	Fluorene	ND	0.10	0.099	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.031	ug/l	
90-12-0	1-Methylnaphthalene	ND	2.0	0.50	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.0	0.50	ug/l	
85-01-8	Phenanthrene	ND	0.050	0.013	ug/l	
129-00-0	Pyrene	ND	0.10	0.038	ug/l	

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	80%	30-130%
321-60-8	2-Fluorobiphenyl	74%	30-130%
1718-51-0	Terphenyl-d14	86%	30-130%

Blank Spike Summary

Job Number: MC34156
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40116-BS	F76845.D	1	10/14/14	WK	10/08/14	OP40116	MSF3367

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34156-1, MC34156-2, MC34156-3, MC34156-4, MC34156-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
65-85-0	Benzoic Acid	50	19.1	38	30-130
95-57-8	2-Chlorophenol	50	38.4	77	30-130
59-50-7	4-Chloro-3-methyl phenol	50	39.9	80	30-130
120-83-2	2,4-Dichlorophenol	50	40.2	80	30-130
105-67-9	2,4-Dimethylphenol	50	29.3	59	30-130
51-28-5	2,4-Dinitrophenol	50	49.6	99	30-130
534-52-1	4,6-Dinitro-o-cresol	50	51.3	103	30-130
95-48-7	2-Methylphenol	50	33.9	68	30-130
	3&4-Methylphenol	100	65.8	66	30-130
88-75-5	2-Nitrophenol	50	41.9	84	30-130
100-02-7	4-Nitrophenol	50	16.2	32	30-130
87-86-5	Pentachlorophenol	50	41.1	82	30-130
108-95-2	Phenol	50	16.5	33	30-130
95-95-4	2,4,5-Trichlorophenol	50	38.2	76	30-130
88-06-2	2,4,6-Trichlorophenol	50	39.1	78	30-130
62-53-3	Aniline	50	28.6	57	40-140
101-55-3	4-Bromophenyl phenyl ether	50	42.4	85	40-140
85-68-7	Butyl benzyl phthalate	50	48.7	97	40-140
100-51-6	Benzyl Alcohol	50	35.6	71	40-140
91-58-7	2-Chloronaphthalene	50	41.3	83	40-140
106-47-8	4-Chloroaniline	50	33.8	68	40-140
111-91-1	bis(2-Chloroethoxy)methane	50	37.6	75	40-140
111-44-4	bis(2-Chloroethyl)ether	50	40.1	80	40-140
108-60-1	bis(2-Chloroisopropyl)ether	50	45.5	91	40-140
7005-72-3	4-Chlorophenyl phenyl ether	50	38.6	77	40-140
122-66-7	1,2-Diphenylhydrazine	50	37.0	74	40-140
121-14-2	2,4-Dinitrotoluene	50	48.5	97	40-140
606-20-2	2,6-Dinitrotoluene	50	46.8	94	40-140
91-94-1	3,3'-Dichlorobenzidine	50	53.8	108	40-140
132-64-9	Dibenzofuran	50	38.6	77	40-140
84-74-2	Di-n-butyl phthalate	50	45.2	90	40-140
117-84-0	Di-n-octyl phthalate	50	42.6	85	40-140
84-66-2	Diethyl phthalate	50	42.0	84	40-140
131-11-3	Dimethyl phthalate	50	43.3	87	40-140
117-81-7	bis(2-Ethylhexyl)phthalate	50	49.2	98	40-140
118-74-1	Hexachlorobenzene	50	42.4	85	40-140

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34156
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40116-BS	F76845.D	1	10/14/14	WK	10/08/14	OP40116	MSF3367

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34156-1, MC34156-2, MC34156-3, MC34156-4, MC34156-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
77-47-4	Hexachlorocyclopentadiene	50	21.2	42	40-140
67-72-1	Hexachloroethane	50	28.3	57	40-140
78-59-1	Isophorone	50	35.1	70	40-140
88-74-4	2-Nitroaniline	50	44.3	89	40-140
99-09-2	3-Nitroaniline	50	41.0	82	40-140
100-01-6	4-Nitroaniline	50	42.5	85	40-140
98-95-3	Nitrobenzene	50	36.2	72	40-140
62-75-9	n-Nitrosodimethylamine	50	28.4	57	40-140
621-64-7	N-Nitroso-di-n-propylamine	50	41.3	83	40-140
86-30-6	N-Nitrosodiphenylamine	50	40.5	81	40-140
110-86-1	Pyridine	50	24.7	49	40-140

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	49%	15-110%
4165-62-2	Phenol-d5	34%	15-110%
118-79-6	2,4,6-Tribromophenol	98%	15-110%
4165-60-0	Nitrobenzene-d5	74%	30-130%
321-60-8	2-Fluorobiphenyl	72%	30-130%
1718-51-0	Terphenyl-d14	89%	30-130%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34156
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40117-BS	I92178.D	1	10/13/14	WK	10/08/14	OP40117	MSI3435

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

MC34156-1, MC34156-2, MC34156-3, MC34156-4, MC34156-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
83-32-9	Acenaphthene	50	43.0	86	40-140
208-96-8	Acenaphthylene	50	38.5	77	40-140
120-12-7	Anthracene	50	42.6	85	40-140
56-55-3	Benzo(a)anthracene	50	49.2	98	40-140
50-32-8	Benzo(a)pyrene	50	47.8	96	40-140
205-99-2	Benzo(b)fluoranthene	50	51.5	103	40-140
191-24-2	Benzo(g,h,i)perylene	50	47.6	95	40-140
207-08-9	Benzo(k)fluoranthene	50	45.2	90	40-140
218-01-9	Chrysene	50	46.4	93	40-140
53-70-3	Dibenzo(a,h)anthracene	50	48.4	97	40-140
206-44-0	Fluoranthene	50	46.1	92	40-140
86-73-7	Fluorene	50	43.0	86	40-140
193-39-5	Indeno(1,2,3-cd)pyrene	50	47.4	95	40-140
90-12-0	1-Methylnaphthalene	50	38.0	76	40-140
91-57-6	2-Methylnaphthalene	50	38.5	77	40-140
85-01-8	Phenanthrene	50	44.3	89	40-140
129-00-0	Pyrene	50	44.5	89	40-140

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	84%	30-130%
321-60-8	2-Fluorobiphenyl	78%	30-130%
1718-51-0	Terphenyl-d14	89%	30-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34156
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40116-MS	F76846.D	1	10/14/14	WK	10/08/14	OP40116	MSF3367
OP40116-MSD	F76847.D	1	10/14/14	WK	10/08/14	OP40116	MSF3367
MC33900-17	F76848.D	1	10/14/14	WK	10/08/14	OP40116	MSF3367

The QC reported here applies to the following samples: Method: SW846 8270D

MC34156-1, MC34156-2, MC34156-3, MC34156-4, MC34156-5

CAS No.	Compound	MC33900-17 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic Acid	ND		50	19.2	38	50	18.4	37	4	30-130/20
95-57-8	2-Chlorophenol	ND		50	37.6	75	50	37.5	75	0	30-130/20
59-50-7	4-Chloro-3-methyl phenol	ND		50	38.8	78	50	38.2	76	2	30-130/20
120-83-2	2,4-Dichlorophenol	ND		50	40.7	81	50	39.2	78	4	30-130/20
105-67-9	2,4-Dimethylphenol	ND		50	29.4	59	50	21.0	42	33* [a]	30-130/20
51-28-5	2,4-Dinitrophenol	ND		50	49.5	99	50	51.9	104	5	30-130/20
534-52-1	4,6-Dinitro-o-cresol	ND		50	50.4	101	50	52.0	104	3	30-130/20
95-48-7	2-Methylphenol	ND		50	33.2	66	50	32.3	65	3	30-130/20
	3&4-Methylphenol	ND		100	62.8	63	100	60.9	61	3	30-130/20
88-75-5	2-Nitrophenol	ND		50	42.8	86	50	41.0	82	4	30-130/20
100-02-7	4-Nitrophenol	ND		50	15.3	31	50	16.1	32	5	30-130/20
87-86-5	Pentachlorophenol	ND		50	40.5	81	50	40.4	81	0	30-130/20
108-95-2	Phenol	ND		50	16.4	33	50	15.7	31	4	30-130/20
95-95-4	2,4,5-Trichlorophenol	ND		50	37.7	75	50	37.4	75	1	30-130/20
88-06-2	2,4,6-Trichlorophenol	ND		50	38.0	76	50	39.1	78	3	30-130/20
62-53-3	Aniline	ND		50	28.1	56	50	26.5	53	6	40-140/20
101-55-3	4-Bromophenyl phenyl ether	ND		50	44.4	89	50	42.9	86	3	40-140/20
85-68-7	Butyl benzyl phthalate	ND		50	49.6	99	50	47.6	95	4	40-140/20
100-51-6	Benzyl Alcohol	ND		50	33.7	67	50	33.7	67	0	40-140/20
91-58-7	2-Chloronaphthalene	ND		50	41.7	83	50	42.0	84	1	40-140/20
106-47-8	4-Chloroaniline	ND		50	34.8	70	50	33.2	66	5	40-140/20
111-91-1	bis(2-Chloroethoxy)methane	ND		50	38.9	78	50	36.6	73	6	40-140/20
111-44-4	bis(2-Chloroethyl)ether	ND		50	40.1	80	50	39.2	78	2	40-140/20
108-60-1	bis(2-Chloroisopropyl)ether	ND		50	45.7	91	50	46.0	92	1	40-140/20
7005-72-3	4-Chlorophenyl phenyl ether	ND		50	39.3	79	50	39.5	79	1	40-140/20
122-66-7	1,2-Diphenylhydrazine	ND		50	37.9	76	50	37.1	74	2	40-140/20
121-14-2	2,4-Dinitrotoluene	ND		50	50.0	100	50	48.2	96	4	40-140/20
606-20-2	2,6-Dinitrotoluene	ND		50	47.2	94	50	46.6	93	1	40-140/20
91-94-1	3,3'-Dichlorobenzidine	ND		50	58.8	118	50	57.4	115	2	40-140/20
132-64-9	Dibenzofuran	ND		50	38.9	78	50	38.5	77	1	40-140/20
84-74-2	Di-n-butyl phthalate	0.68	J	50	46.1	91	50	45.0	89	2	40-140/20
117-84-0	Di-n-octyl phthalate	ND		50	42.7	85	50	42.5	85	0	40-140/20
84-66-2	Diethyl phthalate	ND		50	42.9	86	50	42.4	85	1	40-140/20
131-11-3	Dimethyl phthalate	ND		50	43.6	87	50	43.0	86	1	40-140/20
117-81-7	bis(2-Ethylhexyl)phthalate	ND		50	50.3	101	50	49.4	99	2	40-140/20
118-74-1	Hexachlorobenzene	ND		50	42.8	86	50	42.2	84	1	40-140/20

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34156
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40116-MS	F76846.D	1	10/14/14	WK	10/08/14	OP40116	MSF3367
OP40116-MSD	F76847.D	1	10/14/14	WK	10/08/14	OP40116	MSF3367
MC33900-17	F76848.D	1	10/14/14	WK	10/08/14	OP40116	MSF3367

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34156-1, MC34156-2, MC34156-3, MC34156-4, MC34156-5

CAS No.	Compound	MC33900-17 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
77-47-4	Hexachlorocyclopentadiene	ND		50	21.0	42	50	24.0	48	13	40-140/20
67-72-1	Hexachloroethane	ND		50	28.0	56	50	35.0	70	22* [a]	40-140/20
78-59-1	Isophorone	ND		50	35.6	71	50	34.3	69	4	40-140/20
88-74-4	2-Nitroaniline	ND		50	43.9	88	50	42.9	86	2	40-140/20
99-09-2	3-Nitroaniline	ND		50	40.3	81	50	40.5	81	0	40-140/20
100-01-6	4-Nitroaniline	ND		50	43.1	86	50	42.3	85	2	40-140/20
98-95-3	Nitrobenzene	ND		50	37.8	76	50	36.5	73	3	40-140/20
62-75-9	n-Nitrosodimethylamine	ND		50	27.3	55	50	27.4	55	0	40-140/20
621-64-7	N-Nitroso-di-n-propylamine	ND		50	41.1	82	50	40.0	80	3	40-140/20
86-30-6	N-Nitrosodiphenylamine	ND		50	41.5	83	50	40.7	81	2	40-140/20
110-86-1	Pyridine	ND		50	24.9	50	50	24.1	48	3	40-140/20

CAS No.	Surrogate Recoveries	MS	MSD	MC33900-17	Limits
367-12-4	2-Fluorophenol	49%	48%	49%	15-110%
4165-62-2	Phenol-d5	33%	32%	33%	15-110%
118-79-6	2,4,6-Tribromophenol	98%	97%	96%	15-110%
4165-60-0	Nitrobenzene-d5	75%	72%	75%	30-130%
321-60-8	2-Fluorobiphenyl	73%	69%	70%	30-130%
1718-51-0	Terphenyl-d14	90%	90%	93%	30-130%

(a) High RPD due to possible matrix interference and/or sample heterogeneity.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34156
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40117-MS	I92179.D	1	10/13/14	WK	10/08/14	OP40117	MSI3435
OP40117-MSD	I92180.D	1	10/13/14	WK	10/08/14	OP40117	MSI3435
MC33900-18	I92181.D	1	10/13/14	WK	10/08/14	OP40117	MSI3435

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

MC34156-1, MC34156-2, MC34156-3, MC34156-4, MC34156-5

CAS No.	Compound	MC33900-18 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	ND		50	42.9	86	50	42.8	86	0	40-140/20
208-96-8	Acenaphthylene	ND		50	38.7	77	50	38.4	77	1	40-140/20
120-12-7	Anthracene	ND		50	43.9	88	50	42.5	85	3	40-140/20
56-55-3	Benzo(a)anthracene	ND		50	50.2	100	50	49.3	99	2	40-140/20
50-32-8	Benzo(a)pyrene	ND		50	48.3	97	50	47.2	94	2	40-140/20
205-99-2	Benzo(b)fluoranthene	ND		50	52.2	104	50	50.6	101	3	40-140/20
191-24-2	Benzo(g,h,i)perylene	ND		50	47.6	95	50	46.8	94	2	40-140/20
207-08-9	Benzo(k)fluoranthene	ND		50	45.5	91	50	45.2	90	1	40-140/20
218-01-9	Chrysene	ND		50	47.1	94	50	46.5	93	1	40-140/20
53-70-3	Dibenzo(a,h)anthracene	ND		50	48.8	98	50	47.6	95	2	40-140/20
206-44-0	Fluoranthene	ND		50	46.6	93	50	45.7	91	2	40-140/20
86-73-7	Fluorene	ND		50	44.0	88	50	42.3	85	4	40-140/20
193-39-5	Indeno(1,2,3-cd)pyrene	ND		50	47.7	95	50	46.7	93	2	40-140/20
90-12-0	1-Methylnaphthalene	ND		50	38.4	77	50	39.5	79	3	40-140/20
91-57-6	2-Methylnaphthalene	ND		50	38.8	78	50	40.0	80	3	40-140/20
85-01-8	Phenanthrene	ND		50	45.2	90	50	44.1	88	2	40-140/20
129-00-0	Pyrene	ND		50	44.9	90	50	44.6	89	1	40-140/20

CAS No.	Surrogate Recoveries	MS	MSD	MC33900-18	Limits
4165-60-0	Nitrobenzene-d5	85%	81%	86%	30-130%
321-60-8	2-Fluorobiphenyl	79%	75%	76%	30-130%
1718-51-0	Terphenyl-d14	90%	90%	89%	30-130%

* = Outside of Control Limits.

Semivolatile Internal Standard Area Summary

Job Number: MC34156
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSF3367-CC3361	**Injection Date:**	10/14/14
Lab File ID:	F76834.D	**Injection Time:**	08:26
Instrument ID:	GCMSF	**Method:**	SW846 8270D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	68307	4.31	241298	5.36	166272	6.89	327265	8.18	444258	10.80	455860	12.53
Upper Limit [a]	136614	4.81	482596	5.86	332544	7.39	654530	8.68	888516	11.30	911720	13.03
Lower Limit [b]	34154	3.81	120649	4.86	83136	6.39	163633	7.68	222129	10.30	227930	12.03

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP40134-MB	70996	4.31	241442	5.36	164978	6.89	330677	8.18	444869	10.80	463076	12.53
OP40134-BS	75792	4.31	269309	5.36	181873	6.89	363147	8.18	484236	10.80	499922	12.53
OP40134-MS	68539	4.31	240771	5.36	161769	6.89	322622	8.18	427020	10.80	435138	12.53
OP40134-MSD	70818	4.31	249003	5.36	170289	6.89	334806	8.18	450336	10.80	453881	12.53
MC33900-22	68633	4.30	235726	5.36	161903	6.89	332764	8.18	434938	10.80	455980	12.52
ZZZZZZ	70559	4.31	260837	5.36	183280	6.89	359073	8.18	489761	10.80	518144	12.54
ZZZZZZ	70152	4.30	251797	5.36	169375	6.89	342184	8.18	447864	10.80	465557	12.53
ZZZZZZ	68878	4.30	242889	5.36	164949	6.89	341116	8.18	447155	10.80	470017	12.53
ZZZZZZ	71573	4.31	257105	5.36	181203	6.89	355683	8.18	479932	10.80	486180	12.53
OP40116-MB	79556	4.30	275075	5.36	192100	6.89	393413	8.18	516404	10.79	533438	12.53
OP40116-BS	78124	4.30	280535	5.36	190621	6.89	378194	8.18	510162	10.80	508834	12.53
OP40116-MS	74089	4.30	259119	5.36	177532	6.89	351873	8.18	467879	10.80	472619	12.53
OP40116-MSD	79991	4.30	282810	5.36	192421	6.89	384049	8.18	522431	10.80	517855	12.53
MC33900-17	77504	4.30	267251	5.36	189047	6.89	380119	8.18	492954	10.79	517308	12.52
MC34156-1	75912	4.30	261801	5.36	183476	6.89	372843	8.18	487597	10.79	507102	12.52
MC34156-2	71330	4.30	250798	5.36	176593	6.89	352975	8.18	466631	10.79	478464	12.52
MC34156-3	76739	4.30	268024	5.36	184772	6.89	376238	8.17	491205	10.79	506117	12.52
MC34156-4	73869	4.30	258970	5.35	178609	6.89	363036	8.18	478144	10.79	483508	12.52
MC34156-5	73613	4.30	255091	5.35	176476	6.89	357293	8.18	465047	10.79	472940	12.52
OP40145-MB	72253	4.30	251796	5.35	174567	6.89	349291	8.18	454870	10.79	475234	12.52
OP40145-BS	69934	4.30	248610	5.36	169527	6.89	331339	8.18	445679	10.80	457193	12.53
OP40145-MS	67820	4.30	236949	5.36	161259	6.89	317254	8.18	431232	10.80	436739	12.52
OP40145-MSD	63602	4.30	224771	5.36	151388	6.89	298990	8.18	401736	10.79	411271	12.52
MC34000-1	67993	4.30	235683	5.35	164577	6.89	329096	8.17	426703	10.79	448268	12.52

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: MC34156
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSI3435-CC3427	**Injection Date:**	10/13/14
Lab File ID:	I92158.D	**Injection Time:**	08:26
Instrument ID:	GCMSI	**Method:**	SW846 8270D BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	322638	3.11	740819	4.13	420821	5.63	749255	6.89	597041	9.62	1218211	11.01
Upper Limit [a]	645276	3.61	1481638	4.63	841642	6.13	1498510	7.39	1194082	10.12	2436422	11.51
Lower Limit [b]	161319	2.61	370410	3.63	210411	5.13	374628	6.39	298521	9.12	609106	10.51

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP40135-MB	310083	3.11	701895	4.13	409055	5.63	728477	6.89	574975	9.62	1189225	11.00
OP40135-BS	327008	3.11	753426	4.14	427053	5.63	761396	6.89	607407	9.63	1250544	11.01
OP40135-BSD	320537	3.11	743340	4.14	418873	5.63	744702	6.89	596635	9.63	1206899	11.01
ZZZZZZ	306875	3.11	697950	4.13	402831	5.63	709847	6.89	577570	9.62	1192890	11.00
ZZZZZZ	322148	3.11	722472	4.13	403362	5.63	710845	6.89	574544	9.62	1175578	11.01
ZZZZZZ	304162	3.11	693482	4.13	401471	5.63	699733	6.89	571724	9.62	1192333	11.00
ZZZZZZ	321443	3.11	725235	4.13	420988	5.63	727851	6.89	592570	9.62	1207639	11.00
ZZZZZZ	296778	3.11	674034	4.13	393169	5.63	694242	6.89	564890	9.61	1167148	11.00
ZZZZZZ	308122	3.11	702418	4.13	394628	5.63	695701	6.89	577370	9.61	1193124	11.00
OP40109-MB	356739	3.11	804504	4.13	471323	5.63	837133	6.89	684537	9.62	1410660	11.00
OP40109-BS	366193	3.11	847108	4.14	483947	5.63	862333	6.89	702519	9.63	1427769	11.01
OP40109-MS	373568	3.11	870346	4.14	487522	5.63	874968	6.89	695004	9.63	1414925	11.01
OP40109-MSD	345364	3.11	794131	4.14	448945	5.63	798608	6.90	641521	9.63	1300876	11.01
MC34126-1	357756	3.11	809069	4.13	470138	5.63	828107	6.89	677389	9.62	1397751	11.01
ZZZZZZ	331160	3.11	752405	4.13	435341	5.63	754747	6.89	629580	9.62	1289616	11.00
ZZZZZZ	354941	3.11	800970	4.13	462338	5.63	813256	6.89	663948	9.62	1316043	11.01
ZZZZZZ	333613	3.11	763393	4.13	441796	5.63	769445	6.89	637058	9.62	1287083	11.00
ZZZZZZ	336956	3.11	774741	4.13	439613	5.63	784138	6.89	671767	9.62	1303734	11.00
OP40117-MB	345397	3.11	787066	4.13	450130	5.63	790308	6.89	646728	9.62	1302774	11.00
OP40117-BS	342159	3.11	791205	4.14	447355	5.63	799252	6.89	640824	9.63	1272783	11.01
OP40117-MS	324350	3.11	754043	4.14	427967	5.63	765002	6.89	617888	9.63	1218301	11.01
OP40117-MSD	357832	3.11	836876	4.14	472748	5.63	839555	6.89	670922	9.63	1328757	11.01
MC33900-18	343314	3.11	775895	4.13	449021	5.63	779394	6.89	646491	9.62	1293578	11.00
MC34156-1	350335	3.11	794585	4.13	458875	5.63	810004	6.89	657881	9.62	1309904	11.00
MC34156-2	334727	3.11	756252	4.13	441980	5.63	763573	6.89	625805	9.62	1249581	11.00
MC34156-3	346274	3.11	782104	4.13	456055	5.63	793348	6.89	659235	9.62	1315986	11.00
MC34156-4	335813	3.11	760896	4.13	440068	5.63	766103	6.89	629202	9.62	1256793	11.00
MC34156-5	334054	3.11	755650	4.13	436368	5.63	765818	6.89	623348	9.62	1241247	11.00

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

Semivolatile Internal Standard Area Summary

Job Number: MC34156
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSI3435-CC3427	**Injection Date:**	10/13/14
Lab File ID:	I92158.D	**Injection Time:**	08:26
Instrument ID:	GCMSI	**Method:**	SW846 8270D BY SIM

Lab	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
Sample ID	**AREA**	**RT**	**AREA**	**RT**	**AREA**	**RT**	**AREA**	**RT**	**AREA**	**RT**	**AREA**	**RT**

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Surrogate Recovery Summary

Job Number: MC34156
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Method: SW846 8270D **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
MC34156-1	F76849.D	39	26	78	57	58	93
MC34156-2	F76850.D	48	31	96	77	77	91
MC34156-3	F76851.D	47	32	95	72	75	94
MC34156-4	F76852.D	49	32	90	70	71	88
MC34156-5	F76853.D	42	28	86	62	65	81
OP40116-BS	F76845.D	49	34	98	74	72	89
OP40116-MB	F76844.D	48	30	91	71	68	87
OP40116-MS	F76846.D	49	33	98	75	73	90
OP40116-MSD	F76847.D	48	32	97	72	69	90

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorophenol	15-110%
S2 = Phenol-d5	15-110%
S3 = 2,4,6-Tribromophenol	15-110%
S4 = Nitrobenzene-d5	30-130%
S5 = 2-Fluorobiphenyl	30-130%
S6 = Terphenyl-d14	30-130%

Semivolatile Surrogate Recovery Summary

Job Number: MC34156
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Method: SW846 8270D BY SIM **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
MC34156-1	I92182.D	66	64	91
MC34156-2	I92183.D	87	82	90
MC34156-3	I92184.D	82	80	92
MC34156-4	I92185.D	81	76	86
MC34156-5	I92186.D	72	70	79
OP40117-BS	I92178.D	84	78	89
OP40117-MB	I92177.D	80	74	86
OP40117-MS	I92179.D	85	79	90
OP40117-MSD	I92180.D	81	75	90

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	30-130%
S2 = 2-Fluorobiphenyl	30-130%
S3 = Terphenyl-d14	30-130%

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries

Method Blank Summary

Job Number: MC34156
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40111-MB	BB59853.D	1	10/08/14	NK	10/07/14	OP40111	GBB3331

The QC reported here applies to the following samples: **Method:** SW846 8011

MC34156-1, MC34156-2, MC34156-3, MC34156-4, MC34156-5, MC34156-7

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.015	0.0061	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.015	0.0061	ug/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	Bromofluorobenzene (S)	131%	36-173%
460-00-4	Bromofluorobenzene (S)	119%	36-173%

Blank Spike Summary

Job Number: MC34156
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40111-BS	BB59854.D	1	10/08/14	NK	10/07/14	OP40111	GBB3331

The QC reported here applies to the following samples: **Method:** SW846 8011

MC34156-1, MC34156-2, MC34156-3, MC34156-4, MC34156-5, MC34156-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
96-12-8	1,2-Dibromo-3-chloropropane	0.071	0.075	106	60-140
106-93-4	1,2-Dibromoethane	0.071	0.087	123	60-140

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	Bromofluorobenzene (S)	113%	36-173%
460-00-4	Bromofluorobenzene (S)	100%	36-173%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34156
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40111-MS	BB59858.D	1	10/08/14	NK	10/07/14	OP40111	GBB3331
OP40111-MSD	BB59859.D	1	10/08/14	NK	10/07/14	OP40111	GBB3331
MC34126-1	BB59860.D	1	10/08/14	NK	10/07/14	OP40111	GBB3331

The QC reported here applies to the following samples: **Method:** SW846 8011

MC34156-1, MC34156-2, MC34156-3, MC34156-4, MC34156-5, MC34156-7

CAS No.	Compound	MC34126-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
96-12-8	1,2-Dibromo-3-chloropropane	ND		0.0683	0.10	146* [a]	0.0675	0.11	163* [a]	10	64-141/29
106-93-4	1,2-Dibromoethane	ND		0.0683	0.11	161	0.0675	0.11	163	0	63-163/27

CAS No.	Surrogate Recoveries	MS	MSD	MC34126-1	Limits
460-00-4	Bromofluorobenzene (S)	109%	140%	115%	36-173%
460-00-4	Bromofluorobenzene (S)	98%	128%	106%	36-173%

(a) Outside control limits due to possible matrix interference.

* = Outside of Control Limits.

Volatile Surrogate Recovery Summary

Job Number: MC34156
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Method: SW846 8011 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]
MC34156-1	BB59867.D	77	66
MC34156-2	BB59868.D	87	72
MC34156-3	BB59869.D	81	69
MC34156-4	BB59870.D	86	72
MC34156-5	BB59871.D	109	95
MC34156-7	BB59872.D	96	85
OP40111-BS	BB59854.D	113	100
OP40111-MB	BB59853.D	131	119
OP40111-MS	BB59858.D	109	98
OP40111-MSD	BB59859.D	140	128

Surrogate Compounds	Recovery Limits
S1 = Bromofluorobenzene (S)	36-173%

(a) Recovery from GC signal #2
(b) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: MC34156
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	GBB3331-ICC3331	**Injection Date:**	10/08/14
Lab File ID:	BB59849.D	**Injection Time:**	10:41
Instrument ID:	GCBB	**Method:**	SW846 8011

	S1 [a] RT	S1 [b] RT
Check Std	3.49	3.50

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
OP40121-MB	BB59853A.D	10/08/14	12:02	3.49	3.50
OP40111-MB	BB59853.D	10/08/14	12:02	3.49	3.50
OP40111-BS	BB59854.D	10/08/14	12:20	3.49	3.50
OP40121-BS1	BB59855.D	10/08/14	12:38	3.49	3.50
OP40121-BS2	BB59856.D	10/08/14	12:56	3.49	3.50
OP40121-BS3	BB59857.D	10/08/14	13:14	3.49	3.50
OP40111-MS	BB59858.D	10/08/14	13:32	3.49	3.50
OP40111-MSD	BB59859.D	10/08/14	13:50	3.49	3.50
MC34126-1	BB59860.D	10/08/14	14:08	3.49	3.50
ZZZZZZ	BB59861.D	10/08/14	14:25	3.49	3.50
ZZZZZZ	BB59862.D	10/08/14	14:43	3.49	3.50

Surrogate Compounds

S1 = Bromofluorobenzene (S)

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: MC34156
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	GBB3332-CC3331	**Injection Date:**	10/09/14
Lab File ID:	BB59866.D	**Injection Time:**	08:58
Instrument ID:	GCBB	**Method:**	SW846 8011

	S1 [a] RT	S1 [b] RT
Check Std	3.49	3.50

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
MC34156-1	BB59867.D	10/09/14	09:30	3.49	3.50
MC34156-2	BB59868.D	10/09/14	09:48	3.49	3.50
MC34156-3	BB59869.D	10/09/14	10:06	3.49	3.50
MC34156-4	BB59870.D	10/09/14	10:24	3.49	3.50
MC34156-5	BB59871.D	10/09/14	10:43	3.49	3.50
MC34156-7	BB59872.D	10/09/14	11:01	3.49	3.50
GBB3332-ECC333B	BB59873.D	10/09/14	11:19	3.49	3.50

Surrogate Compounds

S1 = Bromofluorobenzene (S)

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

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Automated Report

Technical Report for

Shell Oil

URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana,



SGS Accutest Job Number: MC34198

Sampling Date: 10/08/14

Report to:

AECOM, INC.

Melissa.mansker@aecom.com

ATTN: Melissa Mansker

Total number of pages in report: 173

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

H. (Brad) Madadian
Lab Director

Client Service contact: Jeremy Vienneau 508-481-6200

Certifications: MA (M-MA136,SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) FL (E87579) NY (11791) NJ (MA926) PA (6801121) ND (R-188) CO (MA00136) MN (11546AA) NC (653) IL (002337) WI (399080220) DoD ELAP (L-A-B L2235)

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Test results relate only to samples analyzed.

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SGS ACCUTEST

October 8, 2016

Elizabeth Kunkel
AECOM, INC.
1001 Highlands Plaza Drive West Suite 300
St. Louis, MO 63110
Elizabeth.Kunkel@URS.com; bob.billman@urs.com;
Melissa.Mansker@urs.com

RE: SGS Accutest Job # MC34198

Dear Elizabeth Kunkel,

As you are aware, SGS Accutest Inc. - Marlborough has been conducting an extensive review of data associated with some historical Gas Chromatography-Mass Spectroscopy volatiles analyses. As a result of this review it was determined that some revisions of the original test report for this job were needed. These corrections have been incorporated into the revised report.

Please be assured that corrective actions have been put in place to address this matter and prevent a recurrence.

We apologize for any inconvenience that this issue may have caused. Please don't hesitate to contact us if we can be of further assistance.

Sincerely,

H. (Brad) Madadian

Regional Laboratory Director
SGS Accutest Inc. - Marlborough

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Sample Summary

Shell Oil

Job No: MC34198

URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
MC34198-1	10/08/14	09:45	MMSV	10/09/14	AQ	Ground Water	MW6D-ROX-100814
MC34198-2	10/08/14	09:45	MMSV	10/09/14	AQ	Ground Water	MW6D-ROX-100814-DUP
MC34198-3	10/08/14	10:50	MMSV	10/09/14	AQ	Ground Water	MW6C-ROX-100814
MC34198-4	10/08/14	11:40	MMSV	10/09/14	AQ	Ground Water	MW6B-ROX-100814
MC34198-5	10/08/14	12:05	MMSV	10/09/14	AQ	Equipment Blank	MW6A-ROX-100814-EB
MC34198-6	10/08/14	12:55	MMSV	10/09/14	AQ	Ground Water	MW6A-ROX-100814
MC34198-7	10/08/14	14:55	MMSV	10/09/14	AQ	Ground Water	MW24-ROX-100814
MC34198-8	10/08/14	00:00	MMSV	10/09/14	AQ	Ground Water	P54-ROX-100814
MC34198-9	10/08/14	00:00	MMSV	10/09/14	AQ	Trip Blank Water	TB-ROX-100814-HCL
MC34198-10	10/08/14	00:00	MMSV	10/09/14	AQ	Trip Blank Water	TB-ROX-100814-ST

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Shell Oil **Job No** MC34198

Site: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Centra **Report Date** 10/8/2016 3:02:46 PM

8 Sample(s) and 2 Trip Blank(s) were collected on 10/08/2014 and were received at SGS Accutest New England on 10/09/2014 properly preserved, at 1.3 Deg. C and intact. These Samples received a job number of MC34198. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.1-Chlorohexane, Benzenethiol, Dibenz(a,h)acridine, Indene, Quinoline were searched in the library search and reported only if detections were found.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260C

Matrix: AQ **Batch ID:** MSN3380

- All samples were analyzed within the recommended method holding time.
- Sample(s) MC34192-9MS, MC34192-9MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Blank Spike Recovery(s) for Naphthalene are outside control limits. Blank Spike meets program technical requirements.
- MC34192-9MS/MSD Recovery(s) for Acetone, Naphthalene are outside control limits. Outside control limits due to possible matrix interference. Refer to Blank Spike.
- MSN3380-BSD Recovery(s) for Naphthalene, 1,2,3-Trichlorobenzene, 1,2,4Trichlorobenzene are outside control limits. Blank Spike meets program technical requirements.
- Continuing calibration check standard MSN3380-CC3345 for dichlorodifluoromethane, vinyl chloride, vinyl acetate, 2-butanone, 2-hexanone exceeds 20% Difference (biased high). Associated samples are non-detect for this compound.
- Continuing Calibration MSN3380-CC3345 for Methyl Tert Butyl Ether exceeds 20% Difference (biased low). Sample result may be biased low.

Extractables by GCMS By Method SW846 8270D

Matrix: AQ **Batch ID:** OP40145

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) MC34000-1MS, MC34000-1MSD were used as the QC samples indicated.
- OP40145-BS/MS Recovery(s) for Pyridine are outside control limits. Blank Spike meets program technical requirements.
- Matrix Spike Recovery(s) for Aniline are outside control limits. Outside control limits due to possible matrix interference. Refer to Blank Spike.
- RPD(s) for MSD for Aniline, Pyridine are outside control limits for sample OP40145-MSD. High RPD due to possible matrix interference and/or sample heterogeneity.

Extractables by GCMS By Method SW846 8270D BY SIM

Matrix: AQ **Batch ID:** OP40146

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) MC34000-2MS, MC34000-2MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Volatiles by GC By Method SW846 8011

Matrix: AQ **Batch ID:** OP40168

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) MC34231-7MS, MC34231-7MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

SGS Accutest New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety.The Laboratory Director for SGS Accutest New England or assignee as verified by the signature on the cover page has authorized the release of this report(MC34198).

Summary of Hits

Job Number: MC34198
Account: Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL
Collected: 10/08/14

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
MC34198-1	MW6D-ROX-100814					
Benzoic Acid		16.0	11		ug/l	SW846 8270D
MC34198-2	MW6D-ROX-100814-DUP					
Methyl Tert Butyl Ether [a]		0.57 J	1.0	0.51	ug/l	SW846 8260C
MC34198-3	MW6C-ROX-100814					
Methyl Tert Butyl Ether [a]		0.52 J	1.0	0.51	ug/l	SW846 8260C
MC34198-4	MW6B-ROX-100814					
Methyl Tert Butyl Ether [a]		3.0	1.0	0.51	ug/l	SW846 8260C
MC34198-5	MW6A-ROX-100814-EB					
o-Xylene		0.63 J	1.0	0.36	ug/l	SW846 8260C
Xylene (total)		1.1	1.0	0.36	ug/l	SW846 8260C
MC34198-6	MW6A-ROX-100814					
Methyl Tert Butyl Ether [a]		8.2	1.0	0.51	ug/l	SW846 8260C
MC34198-7	MW24-ROX-100814					
No hits reported in this sample.						
MC34198-8	P54-ROX-100814					
No hits reported in this sample.						
MC34198-9	TB-ROX-100814-HCL					
No hits reported in this sample.						
MC34198-10	TB-ROX-100814-ST					
No hits reported in this sample.						

(a) Continuing Calibration outside of acceptance criteria. Sample result may be biased low.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW6D-ROX-100814		
Lab Sample ID:	MC34198-1	**Date Sampled:**	10/08/14
Matrix:	AQ - Ground Water	**Date Received:**	10/09/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N91400.D	1	10/20/14	TT	n/a	n/a	MSN3380
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW6D-ROX-100814		
Lab Sample ID:	MC34198-1	**Date Sampled:**	10/08/14
Matrix:	AQ - Ground Water	**Date Received:**	10/09/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether [a]	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW6D-ROX-100814		
Lab Sample ID:	MC34198-1	**Date Sampled:**	10/08/14
Matrix:	AQ - Ground Water	**Date Received:**	10/09/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		70-130%
2037-26-5	Toluene-D8	102%		70-130%
460-00-4	4-Bromofluorobenzene	98%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Continuing Calibration outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW6D-ROX-100814		
Lab Sample ID:	MC34198-1	**Date Sampled:**	10/08/14
Matrix:	AQ - Ground Water	**Date Received:**	10/09/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F76862.D	1	10/15/14	WK	10/10/14	OP40145	MSF3368
Run #2							

	Initial Volume	Final Volume
Run #1	920 ml	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	Units	Q
65-85-0	Benzoic Acid	16.0	11	ug/l	
95-57-8	2-Chlorophenol	ND	5.4	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	11	ug/l	
120-83-2	2,4-Dichlorophenol	ND	11	ug/l	
105-67-9	2,4-Dimethylphenol	ND	11	ug/l	
51-28-5	2,4-Dinitrophenol	ND	22	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	ug/l	
95-48-7	2-Methylphenol	ND	11	ug/l	
	3&4-Methylphenol	ND	11	ug/l	
88-75-5	2-Nitrophenol	ND	11	ug/l	
100-02-7	4-Nitrophenol	ND	22	ug/l	
87-86-5	Pentachlorophenol	ND	11	ug/l	
108-95-2	Phenol	ND	5.4	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	11	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	11	ug/l	
62-53-3	Aniline	ND	11	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.4	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.4	ug/l	
100-51-6	Benzyl Alcohol	ND	11	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.4	ug/l	
106-47-8	4-Chloroaniline	ND	11	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.4	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.4	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.4	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.4	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.4	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	11	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	11	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.4	ug/l	
132-64-9	Dibenzofuran	ND	2.2	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.4	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.4	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW6D-ROX-100814		
Lab Sample ID:	MC34198-1	**Date Sampled:**	10/08/14
Matrix:	AQ - Ground Water	**Date Received:**	10/09/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

ABN Special List

CAS No.	Compound	Result	RL	Units	Q
84-66-2	Diethyl phthalate	ND	5.4	ug/l	
131-11-3	Dimethyl phthalate	ND	5.4	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.2	ug/l	
118-74-1	Hexachlorobenzene	ND	5.4	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	11	ug/l	
67-72-1	Hexachloroethane	ND	5.4	ug/l	
78-59-1	Isophorone	ND	5.4	ug/l	
88-74-4	2-Nitroaniline	ND	11	ug/l	
99-09-2	3-Nitroaniline	ND	11	ug/l	
100-01-6	4-Nitroaniline	ND	11	ug/l	
98-95-3	Nitrobenzene	ND	5.4	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.4	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.4	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.4	ug/l	
110-86-1	Pyridine	ND	11	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	49%		15-110%
4165-62-2	Phenol-d5	33%		15-110%
118-79-6	2,4,6-Tribromophenol	99%		15-110%
4165-60-0	Nitrobenzene-d5	77%		30-130%
321-60-8	2-Fluorobiphenyl	77%		30-130%
1718-51-0	Terphenyl-d14	103%		30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW6D-ROX-100814		
Lab Sample ID:	MC34198-1	**Date Sampled:**	10/08/14
Matrix:	AQ - Ground Water	**Date Received:**	10/09/14
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I92198.D	1	10/14/14	WK	10/11/14	OP40146	MSI3436
Run #2							

	Initial Volume	Final Volume
Run #1	920 ml	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	0.11	ug/l	
208-96-8	Acenaphthylene	ND	0.11	ug/l	
120-12-7	Anthracene	ND	0.11	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.054	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.11	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.054	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.11	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.11	ug/l	
218-01-9	Chrysene	ND	0.11	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.11	ug/l	
206-44-0	Fluoranthene	ND	0.11	ug/l	
86-73-7	Fluorene	ND	0.11	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.11	ug/l	
90-12-0	1-Methylnaphthalene	ND	2.2	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.2	ug/l	
85-01-8	Phenanthrene	ND	0.054	ug/l	
129-00-0	Pyrene	ND	0.11	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	54%		15-110%
4165-62-2	Phenol-d5	37%		15-110%
118-79-6	2,4,6-Tribromophenol	101%		15-110%
4165-60-0	Nitrobenzene-d5	88%		30-130%
321-60-8	2-Fluorobiphenyl	81%		30-130%
1718-51-0	Terphenyl-d14	98%		30-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW6D-ROX-100814		
Lab Sample ID:	MC34198-1	**Date Sampled:**	10/08/14
Matrix:	AQ - Ground Water	**Date Received:**	10/09/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB59896.D	1	10/13/14	NK	10/12/14	OP40168	GBB3333
Run #2							

	Initial Volume	Final Volume
Run #1	36.6 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.014	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.014	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	86%		36-173%
460-00-4	Bromofluorobenzene (S)	105%		36-173%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW6D-ROX-100814-DUP		
Lab Sample ID:	MC34198-2	**Date Sampled:**	10/08/14
Matrix:	AQ - Ground Water	**Date Received:**	10/09/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N91401.D	1	10/20/14	TT	n/a	n/a	MSN3380
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW6D-ROX-100814-DUP		
Lab Sample ID:	MC34198-2	**Date Sampled:**	10/08/14
Matrix:	AQ - Ground Water	**Date Received:**	10/09/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether [a]	0.57	1.0	0.51	ug/l	J
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW6D-ROX-100814-DUP		
Lab Sample ID:	MC34198-2	**Date Sampled:**	10/08/14
Matrix:	AQ - Ground Water	**Date Received:**	10/09/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		70-130%
2037-26-5	Toluene-D8	102%		70-130%
460-00-4	4-Bromofluorobenzene	100%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Continuing Calibration outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW6D-ROX-100814-DUP		
Lab Sample ID:	MC34198-2	**Date Sampled:**	10/08/14
Matrix:	AQ - Ground Water	**Date Received:**	10/09/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F76863.D	1	10/15/14	WK	10/10/14	OP40145	MSF3368
Run #2							

	Initial Volume	Final Volume
Run #1	900 ml	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	Units	Q
65-85-0	Benzoic Acid	ND	11	ug/l	
95-57-8	2-Chlorophenol	ND	5.6	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	11	ug/l	
120-83-2	2,4-Dichlorophenol	ND	11	ug/l	
105-67-9	2,4-Dimethylphenol	ND	11	ug/l	
51-28-5	2,4-Dinitrophenol	ND	22	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	ug/l	
95-48-7	2-Methylphenol	ND	11	ug/l	
	3&4-Methylphenol	ND	11	ug/l	
88-75-5	2-Nitrophenol	ND	11	ug/l	
100-02-7	4-Nitrophenol	ND	22	ug/l	
87-86-5	Pentachlorophenol	ND	11	ug/l	
108-95-2	Phenol	ND	5.6	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	11	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	11	ug/l	
62-53-3	Aniline	ND	11	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.6	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.6	ug/l	
100-51-6	Benzyl Alcohol	ND	11	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.6	ug/l	
106-47-8	4-Chloroaniline	ND	11	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.6	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.6	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.6	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.6	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.6	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	11	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	11	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.6	ug/l	
132-64-9	Dibenzofuran	ND	2.2	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.6	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.6	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW6D-ROX-100814-DUP		
Lab Sample ID:	MC34198-2	**Date Sampled:**	10/08/14
Matrix:	AQ - Ground Water	**Date Received:**	10/09/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

ABN Special List

CAS No.	Compound	Result	RL	Units	Q
84-66-2	Diethyl phthalate	ND	5.6	ug/l	
131-11-3	Dimethyl phthalate	ND	5.6	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.2	ug/l	
118-74-1	Hexachlorobenzene	ND	5.6	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	11	ug/l	
67-72-1	Hexachloroethane	ND	5.6	ug/l	
78-59-1	Isophorone	ND	5.6	ug/l	
88-74-4	2-Nitroaniline	ND	11	ug/l	
99-09-2	3-Nitroaniline	ND	11	ug/l	
100-01-6	4-Nitroaniline	ND	11	ug/l	
98-95-3	Nitrobenzene	ND	5.6	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.6	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.6	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.6	ug/l	
110-86-1	Pyridine	ND	11	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	40%		15-110%
4165-62-2	Phenol-d5	28%		15-110%
118-79-6	2,4,6-Tribromophenol	95%		15-110%
4165-60-0	Nitrobenzene-d5	64%		30-130%
321-60-8	2-Fluorobiphenyl	62%		30-130%
1718-51-0	Terphenyl-d14	100%		30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW6D-ROX-100814-DUP		
Lab Sample ID:	MC34198-2	**Date Sampled:**	10/08/14
Matrix:	AQ - Ground Water	**Date Received:**	10/09/14
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I92199.D	1	10/14/14	WK	10/11/14	OP40146	MSI3436
Run #2							

	Initial Volume	Final Volume
Run #1	900 ml	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	0.11	ug/l	
208-96-8	Acenaphthylene	ND	0.11	ug/l	
120-12-7	Anthracene	ND	0.11	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.056	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.11	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.056	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.11	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.11	ug/l	
218-01-9	Chrysene	ND	0.11	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.11	ug/l	
206-44-0	Fluoranthene	ND	0.11	ug/l	
86-73-7	Fluorene	ND	0.11	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.11	ug/l	
90-12-0	1-Methylnaphthalene	ND	2.2	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.2	ug/l	
85-01-8	Phenanthrene	ND	0.056	ug/l	
129-00-0	Pyrene	ND	0.11	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	45%		15-110%
4165-62-2	Phenol-d5	31%		15-110%
118-79-6	2,4,6-Tribromophenol	97%		15-110%
4165-60-0	Nitrobenzene-d5	72%		30-130%
321-60-8	2-Fluorobiphenyl	68%		30-130%
1718-51-0	Terphenyl-d14	95%		30-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW6D-ROX-100814-DUP		
Lab Sample ID:	MC34198-2	**Date Sampled:**	10/08/14
Matrix:	AQ - Ground Water	**Date Received:**	10/09/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB59897.D	1	10/13/14	NK	10/12/14	OP40168	GBB3333
Run #2							

	Initial Volume	Final Volume
Run #1	36.2 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.015	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.015	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	90%		36-173%
460-00-4	Bromofluorobenzene (S)	106%		36-173%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW6C-ROX-100814		
Lab Sample ID:	MC34198-3	**Date Sampled:**	10/08/14
Matrix:	AQ - Ground Water	**Date Received:**	10/09/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N91402.D	1	10/20/14	TT	n/a	n/a	MSN3380
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW6C-ROX-100814		
Lab Sample ID:	MC34198-3	**Date Sampled:**	10/08/14
Matrix:	AQ - Ground Water	**Date Received:**	10/09/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether [a]	0.52	1.0	0.51	ug/l	J
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW6C-ROX-100814		
Lab Sample ID:	MC34198-3	**Date Sampled:**	10/08/14
Matrix:	AQ - Ground Water	**Date Received:**	10/09/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		70-130%
2037-26-5	Toluene-D8	101%		70-130%
460-00-4	4-Bromofluorobenzene	99%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Continuing Calibration outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW6C-ROX-100814		
Lab Sample ID:	MC34198-3	**Date Sampled:**	10/08/14
Matrix:	AQ - Ground Water	**Date Received:**	10/09/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F76864.D	1	10/15/14	WK	10/10/14	OP40145	MSF3368
Run #2							

	Initial Volume	Final Volume
Run #1	900 ml	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	Units	Q
65-85-0	Benzoic Acid	ND	11	ug/l	
95-57-8	2-Chlorophenol	ND	5.6	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	11	ug/l	
120-83-2	2,4-Dichlorophenol	ND	11	ug/l	
105-67-9	2,4-Dimethylphenol	ND	11	ug/l	
51-28-5	2,4-Dinitrophenol	ND	22	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	ug/l	
95-48-7	2-Methylphenol	ND	11	ug/l	
	3&4-Methylphenol	ND	11	ug/l	
88-75-5	2-Nitrophenol	ND	11	ug/l	
100-02-7	4-Nitrophenol	ND	22	ug/l	
87-86-5	Pentachlorophenol	ND	11	ug/l	
108-95-2	Phenol	ND	5.6	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	11	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	11	ug/l	
62-53-3	Aniline	ND	11	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.6	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.6	ug/l	
100-51-6	Benzyl Alcohol	ND	11	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.6	ug/l	
106-47-8	4-Chloroaniline	ND	11	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.6	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.6	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.6	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.6	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.6	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	11	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	11	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.6	ug/l	
132-64-9	Dibenzofuran	ND	2.2	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.6	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.6	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW6C-ROX-100814		
Lab Sample ID:	MC34198-3	**Date Sampled:**	10/08/14
Matrix:	AQ - Ground Water	**Date Received:**	10/09/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

ABN Special List

CAS No.	Compound	Result	RL	Units	Q
84-66-2	Diethyl phthalate	ND	5.6	ug/l	
131-11-3	Dimethyl phthalate	ND	5.6	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.2	ug/l	
118-74-1	Hexachlorobenzene	ND	5.6	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	11	ug/l	
67-72-1	Hexachloroethane	ND	5.6	ug/l	
78-59-1	Isophorone	ND	5.6	ug/l	
88-74-4	2-Nitroaniline	ND	11	ug/l	
99-09-2	3-Nitroaniline	ND	11	ug/l	
100-01-6	4-Nitroaniline	ND	11	ug/l	
98-95-3	Nitrobenzene	ND	5.6	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.6	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.6	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.6	ug/l	
110-86-1	Pyridine	ND	11	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	45%		15-110%
4165-62-2	Phenol-d5	30%		15-110%
118-79-6	2,4,6-Tribromophenol	94%		15-110%
4165-60-0	Nitrobenzene-d5	69%		30-130%
321-60-8	2-Fluorobiphenyl	68%		30-130%
1718-51-0	Terphenyl-d14	93%		30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW6C-ROX-100814		
Lab Sample ID:	MC34198-3	**Date Sampled:**	10/08/14
Matrix:	AQ - Ground Water	**Date Received:**	10/09/14
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I92200.D	1	10/14/14	WK	10/11/14	OP40146	MSI3436
Run #2							

	Initial Volume	Final Volume
Run #1	900 ml	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	0.11	ug/l	
208-96-8	Acenaphthylene	ND	0.11	ug/l	
120-12-7	Anthracene	ND	0.11	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.056	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.11	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.056	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.11	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.11	ug/l	
218-01-9	Chrysene	ND	0.11	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.11	ug/l	
206-44-0	Fluoranthene	ND	0.11	ug/l	
86-73-7	Fluorene	ND	0.11	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.11	ug/l	
90-12-0	1-Methylnaphthalene	ND	2.2	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.2	ug/l	
85-01-8	Phenanthrene	ND	0.056	ug/l	
129-00-0	Pyrene	ND	0.11	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	49%		15-110%
4165-62-2	Phenol-d5	33%		15-110%
118-79-6	2,4,6-Tribromophenol	94%		15-110%
4165-60-0	Nitrobenzene-d5	79%		30-130%
321-60-8	2-Fluorobiphenyl	74%		30-130%
1718-51-0	Terphenyl-d14	90%		30-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW6C-ROX-100814		
Lab Sample ID:	MC34198-3	**Date Sampled:**	10/08/14
Matrix:	AQ - Ground Water	**Date Received:**	10/09/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB59898.D	1	10/13/14	NK	10/12/14	OP40168	GBB3333
Run #2							

	Initial Volume	Final Volume
Run #1	36.5 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.014	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.014	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	85%		36-173%
460-00-4	Bromofluorobenzene (S)	95%		36-173%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW6B-ROX-100814		
Lab Sample ID:	MC34198-4	**Date Sampled:**	10/08/14
Matrix:	AQ - Ground Water	**Date Received:**	10/09/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N91403.D	1	10/20/14	TT	n/a	n/a	MSN3380
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW6B-ROX-100814		
Lab Sample ID:	MC34198-4	**Date Sampled:**	10/08/14
Matrix:	AQ - Ground Water	**Date Received:**	10/09/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether [a]	3.0	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW6B-ROX-100814		
Lab Sample ID:	MC34198-4	**Date Sampled:**	10/08/14
Matrix:	AQ - Ground Water	**Date Received:**	10/09/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		70-130%
2037-26-5	Toluene-D8	101%		70-130%
460-00-4	4-Bromofluorobenzene	99%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Continuing Calibration outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW6B-ROX-100814		
Lab Sample ID:	MC34198-4	**Date Sampled:**	10/08/14
Matrix:	AQ - Ground Water	**Date Received:**	10/09/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F76865.D	1	10/15/14	WK	10/10/14	OP40145	MSF3368
Run #2							

	Initial Volume	Final Volume
Run #1	940 ml	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	Units	Q
65-85-0	Benzoic Acid	ND	11	ug/l	
95-57-8	2-Chlorophenol	ND	5.3	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	11	ug/l	
120-83-2	2,4-Dichlorophenol	ND	11	ug/l	
105-67-9	2,4-Dimethylphenol	ND	11	ug/l	
51-28-5	2,4-Dinitrophenol	ND	21	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	ug/l	
95-48-7	2-Methylphenol	ND	11	ug/l	
	3&4-Methylphenol	ND	11	ug/l	
88-75-5	2-Nitrophenol	ND	11	ug/l	
100-02-7	4-Nitrophenol	ND	21	ug/l	
87-86-5	Pentachlorophenol	ND	11	ug/l	
108-95-2	Phenol	ND	5.3	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	11	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	11	ug/l	
62-53-3	Aniline	ND	11	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.3	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.3	ug/l	
100-51-6	Benzyl Alcohol	ND	11	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.3	ug/l	
106-47-8	4-Chloroaniline	ND	11	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.3	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.3	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.3	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.3	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.3	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	11	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	11	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.3	ug/l	
132-64-9	Dibenzofuran	ND	2.1	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.3	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.3	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW6B-ROX-100814		
Lab Sample ID:	MC34198-4	**Date Sampled:**	10/08/14
Matrix:	AQ - Ground Water	**Date Received:**	10/09/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

ABN Special List

CAS No.	Compound	Result	RL	Units	Q
84-66-2	Diethyl phthalate	ND	5.3	ug/l	
131-11-3	Dimethyl phthalate	ND	5.3	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.1	ug/l	
118-74-1	Hexachlorobenzene	ND	5.3	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	11	ug/l	
67-72-1	Hexachloroethane	ND	5.3	ug/l	
78-59-1	Isophorone	ND	5.3	ug/l	
88-74-4	2-Nitroaniline	ND	11	ug/l	
99-09-2	3-Nitroaniline	ND	11	ug/l	
100-01-6	4-Nitroaniline	ND	11	ug/l	
98-95-3	Nitrobenzene	ND	5.3	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.3	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.3	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.3	ug/l	
110-86-1	Pyridine	ND	11	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	44%		15-110%
4165-62-2	Phenol-d5	30%		15-110%
118-79-6	2,4,6-Tribromophenol	98%		15-110%
4165-60-0	Nitrobenzene-d5	72%		30-130%
321-60-8	2-Fluorobiphenyl	70%		30-130%
1718-51-0	Terphenyl-d14	98%		30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW6B-ROX-100814		
Lab Sample ID:	MC34198-4	**Date Sampled:**	10/08/14
Matrix:	AQ - Ground Water	**Date Received:**	10/09/14
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I92201.D	1	10/14/14	WK	10/11/14	OP40146	MSI3436
Run #2							

	Initial Volume	Final Volume
Run #1	940 ml	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	0.11	ug/l	
208-96-8	Acenaphthylene	ND	0.11	ug/l	
120-12-7	Anthracene	ND	0.11	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.053	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.11	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.053	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.11	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.11	ug/l	
218-01-9	Chrysene	ND	0.11	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.11	ug/l	
206-44-0	Fluoranthene	ND	0.11	ug/l	
86-73-7	Fluorene	ND	0.11	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.11	ug/l	
90-12-0	1-Methylnaphthalene	ND	2.1	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.1	ug/l	
85-01-8	Phenanthrene	ND	0.053	ug/l	
129-00-0	Pyrene	ND	0.11	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	49%		15-110%
4165-62-2	Phenol-d5	32%		15-110%
118-79-6	2,4,6-Tribromophenol	97%		15-110%
4165-60-0	Nitrobenzene-d5	81%		30-130%
321-60-8	2-Fluorobiphenyl	76%		30-130%
1718-51-0	Terphenyl-d14	95%		30-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW6B-ROX-100814		
Lab Sample ID:	MC34198-4	**Date Sampled:**	10/08/14
Matrix:	AQ - Ground Water	**Date Received:**	10/09/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB59899.D	1	10/13/14	NK	10/12/14	OP40168	GBB3333
Run #2							

	Initial Volume	Final Volume
Run #1	36.5 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.014	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.014	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	82%		36-173%
460-00-4	Bromofluorobenzene (S)	89%		36-173%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW6A-ROX-100814-EB		
Lab Sample ID:	MC34198-5	**Date Sampled:**	10/08/14
Matrix:	AQ - Equipment Blank	**Date Received:**	10/09/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N91404.D	1	10/20/14	TT	n/a	n/a	MSN3380
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW6A-ROX-100814-EB		
Lab Sample ID:	MC34198-5	**Date Sampled:**	10/08/14
Matrix:	AQ - Equipment Blank	**Date Received:**	10/09/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether [a]	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	0.63	1.0	0.36	ug/l	J
1330-20-7	Xylene (total)	1.1	1.0	0.36	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW6A-ROX-100814-EB		
Lab Sample ID:	MC34198-5	**Date Sampled:**	10/08/14
Matrix:	AQ - Equipment Blank	**Date Received:**	10/09/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		70-130%
2037-26-5	Toluene-D8	99%		70-130%
460-00-4	4-Bromofluorobenzene	102%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Continuing Calibration outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW6A-ROX-100814-EB		
Lab Sample ID:	MC34198-5	**Date Sampled:**	10/08/14
Matrix:	AQ - Equipment Blank	**Date Received:**	10/09/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F76866.D	1	10/15/14	WK	10/10/14	OP40145	MSF3368
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	Units	Q
65-85-0	Benzoic Acid	ND	11	ug/l	
95-57-8	2-Chlorophenol	ND	5.3	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	11	ug/l	
120-83-2	2,4-Dichlorophenol	ND	11	ug/l	
105-67-9	2,4-Dimethylphenol	ND	11	ug/l	
51-28-5	2,4-Dinitrophenol	ND	21	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	ug/l	
95-48-7	2-Methylphenol	ND	11	ug/l	
	3&4-Methylphenol	ND	11	ug/l	
88-75-5	2-Nitrophenol	ND	11	ug/l	
100-02-7	4-Nitrophenol	ND	21	ug/l	
87-86-5	Pentachlorophenol	ND	11	ug/l	
108-95-2	Phenol	ND	5.3	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	11	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	11	ug/l	
62-53-3	Aniline	ND	11	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.3	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.3	ug/l	
100-51-6	Benzyl Alcohol	ND	11	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.3	ug/l	
106-47-8	4-Chloroaniline	ND	11	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.3	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.3	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.3	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.3	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.3	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	11	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	11	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.3	ug/l	
132-64-9	Dibenzofuran	ND	2.1	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.3	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.3	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW6A-ROX-100814-EB		
Lab Sample ID:	MC34198-5	**Date Sampled:**	10/08/14
Matrix:	AQ - Equipment Blank	**Date Received:**	10/09/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

ABN Special List

CAS No.	Compound	Result	RL	Units	Q
84-66-2	Diethyl phthalate	ND	5.3	ug/l	
131-11-3	Dimethyl phthalate	ND	5.3	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.1	ug/l	
118-74-1	Hexachlorobenzene	ND	5.3	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	11	ug/l	
67-72-1	Hexachloroethane	ND	5.3	ug/l	
78-59-1	Isophorone	ND	5.3	ug/l	
88-74-4	2-Nitroaniline	ND	11	ug/l	
99-09-2	3-Nitroaniline	ND	11	ug/l	
100-01-6	4-Nitroaniline	ND	11	ug/l	
98-95-3	Nitrobenzene	ND	5.3	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.3	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.3	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.3	ug/l	
110-86-1	Pyridine	ND	11	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	35%		15-110%
4165-62-2	Phenol-d5	24%		15-110%
118-79-6	2,4,6-Tribromophenol	85%		15-110%
4165-60-0	Nitrobenzene-d5	56%		30-130%
321-60-8	2-Fluorobiphenyl	55%		30-130%
1718-51-0	Terphenyl-d14	102%		30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW6A-ROX-100814-EB		
Lab Sample ID:	MC34198-5	**Date Sampled:**	10/08/14
Matrix:	AQ - Equipment Blank	**Date Received:**	10/09/14
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I92202.D	1	10/14/14	WK	10/11/14	OP40146	MSI3436
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	0.11	ug/l	
208-96-8	Acenaphthylene	ND	0.11	ug/l	
120-12-7	Anthracene	ND	0.11	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.053	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.11	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.053	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.11	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.11	ug/l	
218-01-9	Chrysene	ND	0.11	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.11	ug/l	
206-44-0	Fluoranthene	ND	0.11	ug/l	
86-73-7	Fluorene	ND	0.11	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.11	ug/l	
90-12-0	1-Methylnaphthalene	ND	2.1	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.1	ug/l	
85-01-8	Phenanthrene	ND	0.053	ug/l	
129-00-0	Pyrene	ND	0.11	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	40%		15-110%
4165-62-2	Phenol-d5	27%		15-110%
118-79-6	2,4,6-Tribromophenol	83%		15-110%
4165-60-0	Nitrobenzene-d5	64%		30-130%
321-60-8	2-Fluorobiphenyl	60%		30-130%
1718-51-0	Terphenyl-d14	99%		30-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW6A-ROX-100814-EB		
Lab Sample ID:	MC34198-5	**Date Sampled:**	10/08/14
Matrix:	AQ - Equipment Blank	**Date Received:**	10/09/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB59900.D	1	10/13/14	NK	10/12/14	OP40168	GBB3333
Run #2							

	Initial Volume	Final Volume
Run #1	36.8 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.014	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.014	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	93%		36-173%
460-00-4	Bromofluorobenzene (S)	103%		36-173%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW6A-ROX-100814		
Lab Sample ID:	MC34198-6	**Date Sampled:**	10/08/14
Matrix:	AQ - Ground Water	**Date Received:**	10/09/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N91405.D	1	10/20/14	TT	n/a	n/a	MSN3380
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW6A-ROX-100814		
Lab Sample ID:	MC34198-6	**Date Sampled:**	10/08/14
Matrix:	AQ - Ground Water	**Date Received:**	10/09/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether [a]	8.2	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW6A-ROX-100814		
Lab Sample ID:	MC34198-6	**Date Sampled:**	10/08/14
Matrix:	AQ - Ground Water	**Date Received:**	10/09/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		70-130%
2037-26-5	Toluene-D8	100%		70-130%
460-00-4	4-Bromofluorobenzene	101%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Continuing Calibration outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW6A-ROX-100814		
Lab Sample ID:	MC34198-6	**Date Sampled:**	10/08/14
Matrix:	AQ - Ground Water	**Date Received:**	10/09/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F76867.D	1	10/15/14	WK	10/10/14	OP40145	MSF3368
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	Units	Q
65-85-0	Benzoic Acid	ND	11	ug/l	
95-57-8	2-Chlorophenol	ND	5.3	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	11	ug/l	
120-83-2	2,4-Dichlorophenol	ND	11	ug/l	
105-67-9	2,4-Dimethylphenol	ND	11	ug/l	
51-28-5	2,4-Dinitrophenol	ND	21	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	ug/l	
95-48-7	2-Methylphenol	ND	11	ug/l	
	3&4-Methylphenol	ND	11	ug/l	
88-75-5	2-Nitrophenol	ND	11	ug/l	
100-02-7	4-Nitrophenol	ND	21	ug/l	
87-86-5	Pentachlorophenol	ND	11	ug/l	
108-95-2	Phenol	ND	5.3	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	11	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	11	ug/l	
62-53-3	Aniline	ND	11	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.3	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.3	ug/l	
100-51-6	Benzyl Alcohol	ND	11	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.3	ug/l	
106-47-8	4-Chloroaniline	ND	11	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.3	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.3	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.3	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.3	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.3	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	11	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	11	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.3	ug/l	
132-64-9	Dibenzofuran	ND	2.1	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.3	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.3	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW6A-ROX-100814		
Lab Sample ID:	MC34198-6	**Date Sampled:**	10/08/14
Matrix:	AQ - Ground Water	**Date Received:**	10/09/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

ABN Special List

CAS No.	Compound	Result	RL	Units	Q
84-66-2	Diethyl phthalate	ND	5.3	ug/l	
131-11-3	Dimethyl phthalate	ND	5.3	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.1	ug/l	
118-74-1	Hexachlorobenzene	ND	5.3	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	11	ug/l	
67-72-1	Hexachloroethane	ND	5.3	ug/l	
78-59-1	Isophorone	ND	5.3	ug/l	
88-74-4	2-Nitroaniline	ND	11	ug/l	
99-09-2	3-Nitroaniline	ND	11	ug/l	
100-01-6	4-Nitroaniline	ND	11	ug/l	
98-95-3	Nitrobenzene	ND	5.3	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.3	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.3	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.3	ug/l	
110-86-1	Pyridine	ND	11	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	48%		15-110%
4165-62-2	Phenol-d5	32%		15-110%
118-79-6	2,4,6-Tribromophenol	102%		15-110%
4165-60-0	Nitrobenzene-d5	79%		30-130%
321-60-8	2-Fluorobiphenyl	78%		30-130%
1718-51-0	Terphenyl-d14	91%		30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW6A-ROX-100814		
Lab Sample ID:	MC34198-6	**Date Sampled:**	10/08/14
Matrix:	AQ - Ground Water	**Date Received:**	10/09/14
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I92203.D	1	10/14/14	WK	10/11/14	OP40146	MSI3436
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	0.11	ug/l	
208-96-8	Acenaphthylene	ND	0.11	ug/l	
120-12-7	Anthracene	ND	0.11	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.053	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.11	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.053	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.11	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.11	ug/l	
218-01-9	Chrysene	ND	0.11	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.11	ug/l	
206-44-0	Fluoranthene	ND	0.11	ug/l	
86-73-7	Fluorene	ND	0.11	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.11	ug/l	
90-12-0	1-Methylnaphthalene	ND	2.1	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.1	ug/l	
85-01-8	Phenanthrene	ND	0.053	ug/l	
129-00-0	Pyrene	ND	0.11	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	54%		15-110%
4165-62-2	Phenol-d5	36%		15-110%
118-79-6	2,4,6-Tribromophenol	101%		15-110%
4165-60-0	Nitrobenzene-d5	89%		30-130%
321-60-8	2-Fluorobiphenyl	83%		30-130%
1718-51-0	Terphenyl-d14	93%		30-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW6A-ROX-100814		
Lab Sample ID:	MC34198-6	**Date Sampled:**	10/08/14
Matrix:	AQ - Ground Water	**Date Received:**	10/09/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB59901.D	1	10/13/14	NK	10/12/14	OP40168	GBB3333
Run #2							

	Initial Volume	Final Volume
Run #1	36.8 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.014	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.014	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	90%		36-173%
460-00-4	Bromofluorobenzene (S)	143%		36-173%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW24-ROX-100814		
Lab Sample ID:	MC34198-7	**Date Sampled:**	10/08/14
Matrix:	AQ - Ground Water	**Date Received:**	10/09/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N91406.D	1	10/20/14	TT	n/a	n/a	MSN3380
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW24-ROX-100814		
Lab Sample ID:	MC34198-7	**Date Sampled:**	10/08/14
Matrix:	AQ - Ground Water	**Date Received:**	10/09/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether [a]	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW24-ROX-100814		
Lab Sample ID:	MC34198-7	**Date Sampled:**	10/08/14
Matrix:	AQ - Ground Water	**Date Received:**	10/09/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		70-130%
2037-26-5	Toluene-D8	101%		70-130%
460-00-4	4-Bromofluorobenzene	100%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Continuing Calibration outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW24-ROX-100814		
Lab Sample ID:	MC34198-7	**Date Sampled:**	10/08/14
Matrix:	AQ - Ground Water	**Date Received:**	10/09/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F76868.D	1	10/15/14	WK	10/10/14	OP40145	MSF3368
Run #2							

	Initial Volume	Final Volume
Run #1	920 ml	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	Units	Q
65-85-0	Benzoic Acid	ND	11	ug/l	
95-57-8	2-Chlorophenol	ND	5.4	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	11	ug/l	
120-83-2	2,4-Dichlorophenol	ND	11	ug/l	
105-67-9	2,4-Dimethylphenol	ND	11	ug/l	
51-28-5	2,4-Dinitrophenol	ND	22	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	ug/l	
95-48-7	2-Methylphenol	ND	11	ug/l	
	3&4-Methylphenol	ND	11	ug/l	
88-75-5	2-Nitrophenol	ND	11	ug/l	
100-02-7	4-Nitrophenol	ND	22	ug/l	
87-86-5	Pentachlorophenol	ND	11	ug/l	
108-95-2	Phenol	ND	5.4	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	11	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	11	ug/l	
62-53-3	Aniline	ND	11	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.4	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.4	ug/l	
100-51-6	Benzyl Alcohol	ND	11	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.4	ug/l	
106-47-8	4-Chloroaniline	ND	11	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.4	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.4	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.4	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.4	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.4	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	11	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	11	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.4	ug/l	
132-64-9	Dibenzofuran	ND	2.2	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.4	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.4	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW24-ROX-100814		
Lab Sample ID:	MC34198-7	**Date Sampled:**	10/08/14
Matrix:	AQ - Ground Water	**Date Received:**	10/09/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

ABN Special List

CAS No.	Compound	Result	RL	Units	Q
84-66-2	Diethyl phthalate	ND	5.4	ug/l	
131-11-3	Dimethyl phthalate	ND	5.4	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.2	ug/l	
118-74-1	Hexachlorobenzene	ND	5.4	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	11	ug/l	
67-72-1	Hexachloroethane	ND	5.4	ug/l	
78-59-1	Isophorone	ND	5.4	ug/l	
88-74-4	2-Nitroaniline	ND	11	ug/l	
99-09-2	3-Nitroaniline	ND	11	ug/l	
100-01-6	4-Nitroaniline	ND	11	ug/l	
98-95-3	Nitrobenzene	ND	5.4	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.4	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.4	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.4	ug/l	
110-86-1	Pyridine	ND	11	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	49%		15-110%
4165-62-2	Phenol-d5	32%		15-110%
118-79-6	2,4,6-Tribromophenol	96%		15-110%
4165-60-0	Nitrobenzene-d5	78%		30-130%
321-60-8	2-Fluorobiphenyl	75%		30-130%
1718-51-0	Terphenyl-d14	99%		30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW24-ROX-100814		
Lab Sample ID:	MC34198-7	**Date Sampled:**	10/08/14
Matrix:	AQ - Ground Water	**Date Received:**	10/09/14
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I92204.D	1	10/14/14	WK	10/11/14	OP40146	MSI3436
Run #2							

	Initial Volume	Final Volume
Run #1	920 ml	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	0.11	ug/l	
208-96-8	Acenaphthylene	ND	0.11	ug/l	
120-12-7	Anthracene	ND	0.11	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.054	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.11	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.054	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.11	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.11	ug/l	
218-01-9	Chrysene	ND	0.11	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.11	ug/l	
206-44-0	Fluoranthene	ND	0.11	ug/l	
86-73-7	Fluorene	ND	0.11	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.11	ug/l	
90-12-0	1-Methylnaphthalene	ND	2.2	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.2	ug/l	
85-01-8	Phenanthrene	ND	0.054	ug/l	
129-00-0	Pyrene	ND	0.11	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	53%		15-110%
4165-62-2	Phenol-d5	35%		15-110%
118-79-6	2,4,6-Tribromophenol	97%		15-110%
4165-60-0	Nitrobenzene-d5	87%		30-130%
321-60-8	2-Fluorobiphenyl	80%		30-130%
1718-51-0	Terphenyl-d14	94%		30-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW24-ROX-100814		
Lab Sample ID:	MC34198-7	**Date Sampled:**	10/08/14
Matrix:	AQ - Ground Water	**Date Received:**	10/09/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB59903.D	1	10/13/14	NK	10/12/14	OP40168	GBB3333
Run #2							

	Initial Volume	Final Volume
Run #1	36.4 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.014	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.014	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	87%		36-173%
460-00-4	Bromofluorobenzene (S)	95%		36-173%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P54-ROX-100814		
Lab Sample ID:	MC34198-8	**Date Sampled:**	10/08/14
Matrix:	AQ - Ground Water	**Date Received:**	10/09/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N91407.D	1	10/20/14	TT	n/a	n/a	MSN3380
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P54-ROX-100814		
Lab Sample ID:	MC34198-8	**Date Sampled:**	10/08/14
Matrix:	AQ - Ground Water	**Date Received:**	10/09/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether [a]	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P54-ROX-100814		
Lab Sample ID:	MC34198-8	**Date Sampled:**	10/08/14
Matrix:	AQ - Ground Water	**Date Received:**	10/09/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		70-130%
2037-26-5	Toluene-D8	102%		70-130%
460-00-4	4-Bromofluorobenzene	101%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Continuing Calibration outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P54-ROX-100814		
Lab Sample ID:	MC34198-8	**Date Sampled:**	10/08/14
Matrix:	AQ - Ground Water	**Date Received:**	10/09/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F76869.D	1	10/15/14	WK	10/10/14	OP40145	MSF3368
Run #2							

	Initial Volume	Final Volume
Run #1	900 ml	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	Units	Q
65-85-0	Benzoic Acid	ND	11	ug/l	
95-57-8	2-Chlorophenol	ND	5.6	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	11	ug/l	
120-83-2	2,4-Dichlorophenol	ND	11	ug/l	
105-67-9	2,4-Dimethylphenol	ND	11	ug/l	
51-28-5	2,4-Dinitrophenol	ND	22	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	ug/l	
95-48-7	2-Methylphenol	ND	11	ug/l	
	3&4-Methylphenol	ND	11	ug/l	
88-75-5	2-Nitrophenol	ND	11	ug/l	
100-02-7	4-Nitrophenol	ND	22	ug/l	
87-86-5	Pentachlorophenol	ND	11	ug/l	
108-95-2	Phenol	ND	5.6	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	11	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	11	ug/l	
62-53-3	Aniline	ND	11	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.6	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.6	ug/l	
100-51-6	Benzyl Alcohol	ND	11	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.6	ug/l	
106-47-8	4-Chloroaniline	ND	11	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.6	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.6	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.6	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.6	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.6	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	11	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	11	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.6	ug/l	
132-64-9	Dibenzofuran	ND	2.2	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.6	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.6	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P54-ROX-100814		
Lab Sample ID:	MC34198-8	**Date Sampled:**	10/08/14
Matrix:	AQ - Ground Water	**Date Received:**	10/09/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

ABN Special List

CAS No.	Compound	Result	RL	Units	Q
84-66-2	Diethyl phthalate	ND	5.6	ug/l	
131-11-3	Dimethyl phthalate	ND	5.6	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.2	ug/l	
118-74-1	Hexachlorobenzene	ND	5.6	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	11	ug/l	
67-72-1	Hexachloroethane	ND	5.6	ug/l	
78-59-1	Isophorone	ND	5.6	ug/l	
88-74-4	2-Nitroaniline	ND	11	ug/l	
99-09-2	3-Nitroaniline	ND	11	ug/l	
100-01-6	4-Nitroaniline	ND	11	ug/l	
98-95-3	Nitrobenzene	ND	5.6	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.6	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.6	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.6	ug/l	
110-86-1	Pyridine	ND	11	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	51%		15-110%
4165-62-2	Phenol-d5	34%		15-110%
118-79-6	2,4,6-Tribromophenol	98%		15-110%
4165-60-0	Nitrobenzene-d5	83%		30-130%
321-60-8	2-Fluorobiphenyl	79%		30-130%
1718-51-0	Terphenyl-d14	103%		30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P54-ROX-100814		
Lab Sample ID:	MC34198-8	**Date Sampled:**	10/08/14
Matrix:	AQ - Ground Water	**Date Received:**	10/09/14
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I92205.D	1	10/14/14	WK	10/11/14	OP40146	MSI3436
Run #2							

	Initial Volume	Final Volume
Run #1	900 ml	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	0.11	ug/l	
208-96-8	Acenaphthylene	ND	0.11	ug/l	
120-12-7	Anthracene	ND	0.11	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.056	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.11	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.056	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.11	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.11	ug/l	
218-01-9	Chrysene	ND	0.11	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.11	ug/l	
206-44-0	Fluoranthene	ND	0.11	ug/l	
86-73-7	Fluorene	ND	0.11	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.11	ug/l	
90-12-0	1-Methylnaphthalene	ND	2.2	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.2	ug/l	
85-01-8	Phenanthrene	ND	0.056	ug/l	
129-00-0	Pyrene	ND	0.11	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	57%		15-110%
4165-62-2	Phenol-d5	38%		15-110%
118-79-6	2,4,6-Tribromophenol	99%		15-110%
4165-60-0	Nitrobenzene-d5	92%		30-130%
321-60-8	2-Fluorobiphenyl	84%		30-130%
1718-51-0	Terphenyl-d14	98%		30-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P54-ROX-100814		
Lab Sample ID:	MC34198-8	**Date Sampled:**	10/08/14
Matrix:	AQ - Ground Water	**Date Received:**	10/09/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB59904.D	1	10/13/14	NK	10/12/14	OP40168	GBB3333
Run #2							

	Initial Volume	Final Volume
Run #1	36.6 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.014	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.014	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	83%		36-173%
460-00-4	Bromofluorobenzene (S)	91%		36-173%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-ROX-100814-HCL		
Lab Sample ID:	MC34198-9	**Date Sampled:**	10/08/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/09/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N91396.D	1	10/20/14	TT	n/a	n/a	MSN3380
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-ROX-100814-HCL		
Lab Sample ID:	MC34198-9	**Date Sampled:**	10/08/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/09/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether [a]	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-ROX-100814-HCL		
Lab Sample ID:	MC34198-9	**Date Sampled:**	10/08/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/09/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		70-130%
2037-26-5	Toluene-D8	102%		70-130%
460-00-4	4-Bromofluorobenzene	100%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Continuing Calibration outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-ROX-100814-ST		
Lab Sample ID:	MC34198-10	**Date Sampled:**	10/08/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/09/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB59905.D	1	10/13/14	NK	10/12/14	OP40168	GBB3333
Run #2							

	Initial Volume	Final Volume
Run #1	36.2 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.015	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.015	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	84%		36-173%
460-00-4	Bromofluorobenzene (S)	93%		36-173%

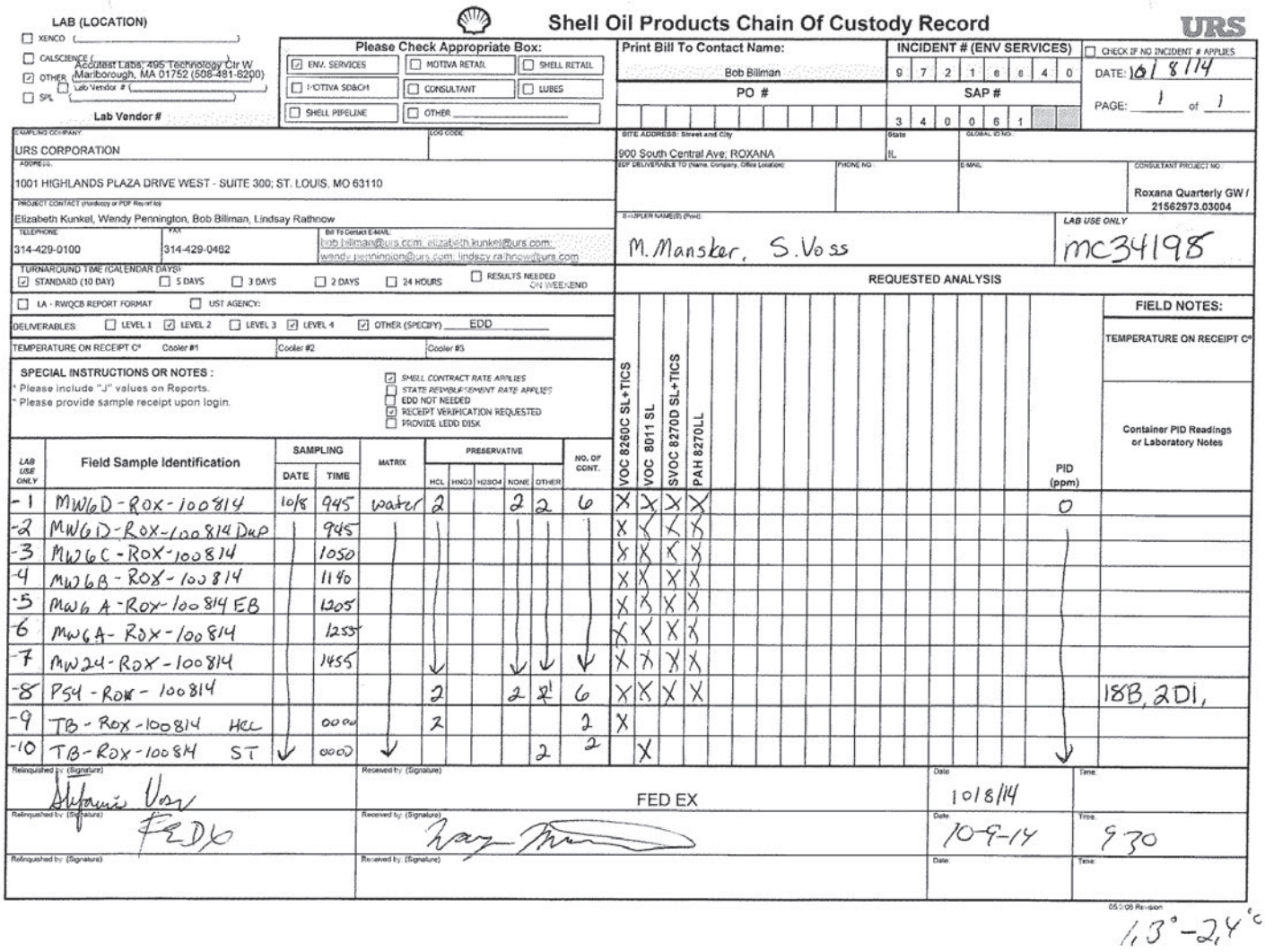
ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- REPROC Form: Reprocessed/Corrected Data
- Sample Tracking Chronicle
- Internal Chain of Custody



Shell Oil Products Chain Of Custody Record

URS

LAB (LOCATION)
☐ XENCO (_____)
☐ CALSCIENCE (_____)
☑ OTHER Accutest Labs, 495 Technology Ctr W (Marlborough, MA 01752 (508-481-8200))
☐ SPL ☐ Lab Vendor # (_____)
Lab Vendor #

Please Check Appropriate Box:
☑ ENV. SERVICES ☐ MOTIVA RETAIL ☐ SHELL RETAIL
☐ MOTIVA SD&CH ☐ CONSULTANT ☐ LUBES
☐ SHELL PIPELINE ☐ OTHER _____

Print Bill To Contact Name: Bob Billman
PO #
INCIDENT # (ENV SERVICES): 9 7 2 1 6 6 4 0
SAP #: 3 4 0 0 6 1
☐ CHECK IF NO INCIDENT # APPLIES
DATE: 10/8/14
PAGE: 1 of 1

SAMPLING COMPANY: URS CORPORATION
LOG CODE:
SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA
State: IL
GLOBAL ID NO.:
ADDRESS: 1001 HIGHLANDS PLAZA DRIVE WEST - SUITE 300; ST. LOUIS, MO 63110
EDF DELIVERABLE TO (Name, Company, Office Location):
PHONE NO.:
E-MAIL:
CONSULTANT PROJECT NO.: Roxana Quarterly GW / 21562973.03004
PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Wendy Pennington, Bob Billman, Lindsay Rathnow
TELEPHONE: 314-429-0100
FAX: 314-429-0462
Bill To Contact E-MAIL: bob.billman@urs.com; elizabeth.kunkel@urs.com; wendy.pennington@urs.com; lindsay.rathnow@urs.com
SAMPLER NAME(S) (Print): M. Manskar, S. Voss
LAB USE ONLY: MC34198

TURNAROUND TIME (CALENDAR DAYS):
☑ STANDARD (10 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT ☐ UST AGENCY:

DELIVERABLES: ☐ LEVEL 1 ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) EDD

TEMPERATURE ON RECEIPT C°: Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES:
* Please include "J" values on Reports.
* Please provide sample receipt upon login.

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260C SL+TICS	VOC 8011 SL	SVOC 8270D SL+TICS	PAH 8270LL	PID (ppm)	FIELD NOTES: Container PID Readings or Laboratory Notes
-1	MW6D-ROX-100814	10/8	945	water	2			2	2	6	X	X	X	X	0	
-2	MW6D-ROX-100814DUP		945								X	X	X	X		
-3	MW6C-ROX-100814		1050								X	X	X	X		
-4	MW6B-ROX-100814		1140								X	X	X	X		
-5	MW6A-ROX-100814EB		1205								X	X	X	X		
-6	MW6A-ROX-100814		1255								X	X	X	X		
-7	MW24-ROX-100814		1455								X	X	X	X		
-8	PS4-ROX-100814				2			2	2	6	X	X	X	X		18B, 2D1,
-9	TB-ROX-100814 HCL		0000		2					2	X					
-10	TB-ROX-100814 ST		0000						2	2		X				

Relinquished by: (Signature) Stefanie Voss — Received by: (Signature) FED EX — Date: 10/8/14 — Time:
Relinquished by: (Signature) FEDX — Received by: (Signature) — Date: 10-9-14 — Time: 930
Relinquished by: (Signature) — Received by: (Signature) — Date: — Time:

05/08 Revision

1.3°-2.4°C

5.1 5

MC34198: Chain of Custody
Page 1 of 2

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: MC34198 **Client:** URS **Project:** 900 SOUTH CENTRAL

Date / Time Received: 10/9/2014 9 30 00 AM **Delivery Method:** **Airbill #'s:**

Cooler Temps (Initial/Adjusted): #1 (1 3/1 3) #2 (2 4/2 4)

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Thermometer D:	G1;		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	2		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☑		☐	☐
2. Trip Blank listed on COC:	☑		☐	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

Accutest Laboratories
V:(508) 481-6200

495 Technology Center West, Bldg One
F: (508) 481-7753

Marlborough, MA 01752
www/accutest.com

Initial Calibration Summary

Job Number: MC34198 **Sample:** MSN3345-ICC3345
Account: SHELLWIC Shell Oil **Lab FileID:** N90397.D
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Response Factor Report MSN

Method : O:\msn\1\methods\n140918wx.m (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration

Calibration Files
0.5 =n90391.d 1 =n90392.d 2 =n90393.d 5 =n90394.d
10 =n90395.d 25 =n90396.d 50 =n90397.d 100 =n90398.d
200 =n90399.d 400 =n90400.d = =

Compound

	0.5	1	2	5	10	25	50	100	200	400	Avg	%RSD
1) I pentafluorobenzene	----------ISTD----------											
2) methyl tert butyl ether	1.122	1.215	0.906	0.695	0.592	1.488	1.263	1.271	1.294	1.197	1.104	25.73

---- Linear regression ---- Coefficient = 0.9929
Response Ratio = -0.00683 + 1.23664 *A

(#) = Out of Range ### Number of calibration levels exceeded format ###

n140918wx.m Fri Oct 16 13:20:48 2015

Initial Calibration Verification

Job Number: MC34198 **Sample:** MSN3345-ICV3345
Account: SHELLWIC Shell Oil **Lab FileID:** N90407.D
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Evaluate Continuing Calibration Report

Data File : O:\msn\1\data backup\n140919\n90407.d Vial: 16
Acq On : 19 Sep 2014 1:04 pm Operator: krystend
Sample : cc3345-50 Inst : MSN
Misc : ms32746,MSN3345,,,,5,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : O:\msn\1\methods\n140918wx.m (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Fri Oct 16 13:19:49 2015
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	pentafluorobenzene	1.000	1.000	0.0	108	0.00	9.12
		Amount	Calc.	%Drift			
2 p	methyl tert butyl ether	50.000	54.861	-9.7	115	-0.01	7.70

(#) = Out of Range SPCC's out = 0 CCC's out = 0
n90397.d n140918wx.m Thu Oct 22 14:46:51 2015

Continuing Calibration Summary

Job Number: MC34198 **Sample:** MSN3380-CC3345
Account: SHELLWIC Shell Oil **Lab FileID:** N91389.D
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Evaluate Continuing Calibration Report

```
Data File : O:\msn\1\data backup\n141020\n91389.d        Vial: 2
Acq On    : 20 Oct 2014   8:39 am                    Operator: tomaszt
Sample    : cc3345-50                                Inst    : MSN
Misc      : ms32987,MSN3380,,,,5,1                   Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : O:\msn\1\methods\n140918wx.m (RTE Integrator)
Title        : SW-846 Method 8260
Last Update  : Fri Oct 16 13:19:49 2015
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 200%

       Compound                   AvgRF   CCRF      %Dev Area%  Dev(min)R.T.
-------------------------------------------------------------------------------
1 I   pentafluorobenzene          1.000   1.000      0.0  103   0.00    9.12

          ----------------------- Amount  Calc.    %Drift   -------------
2 p   methyl tert butyl ether    50.000  33.367     33.3#  67  -0.01    7.70
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------

   (#) = Out of Range              SPCC's out = 0  CCC's out = 0
    n90397.d   n140918wx.m       Tue Oct 27 12:45:37 2015
```

5.2
5
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SGS ACCUTEST
MC34198

Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n140918\
Data File : n90391.d
Acq On : 18 Sep 2014 4:07 pm
Operator : krystend
Sample : IC3345-0.5
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 21 Sample Multiplier: 1

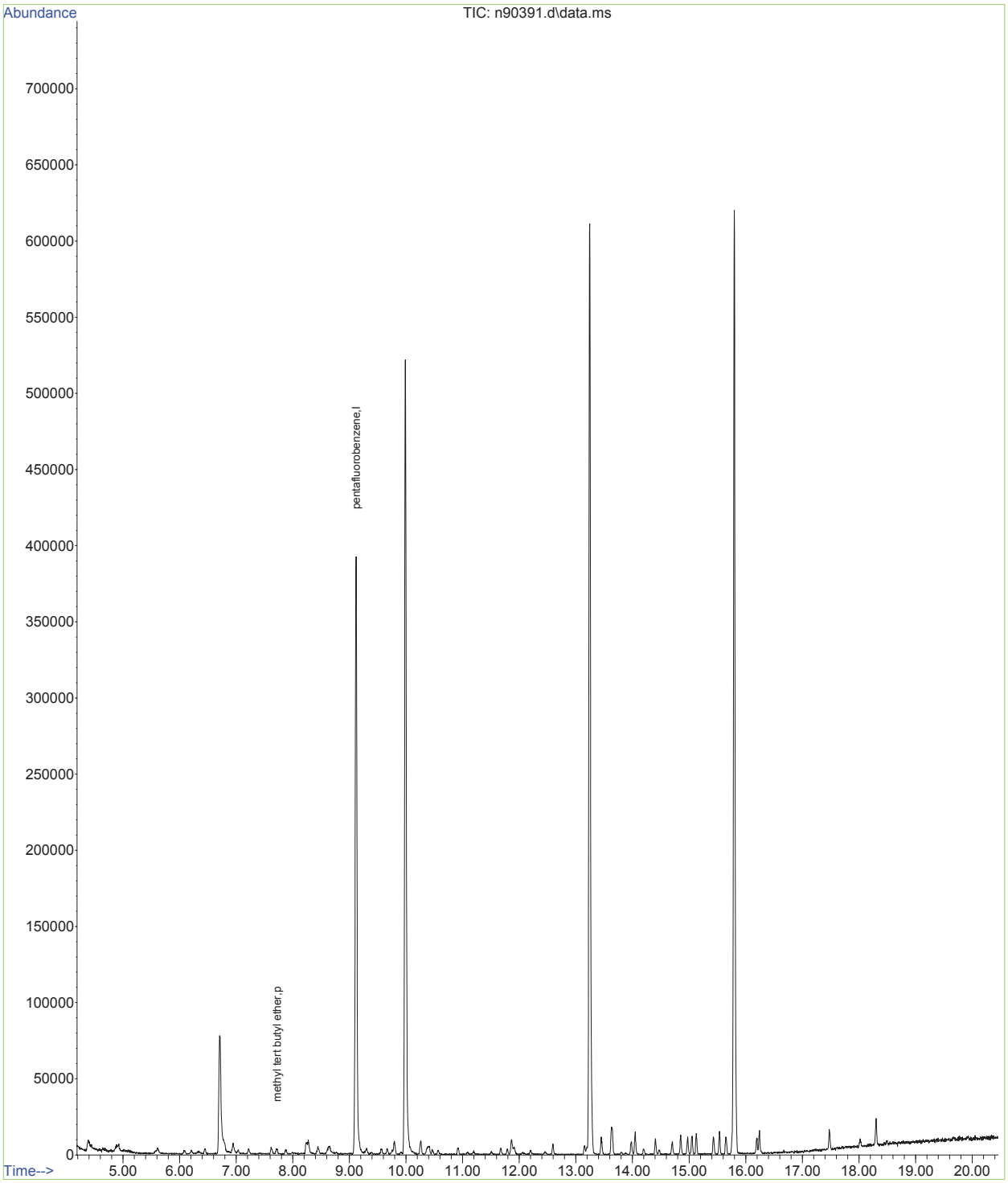
Quant Time: Oct 16 13:14:40 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.119	168	275131	50.00	ug/L	0.00
Target Compounds						Qvalue
2) methyl tert butyl ether	7.719	73	3086	0.44	ug/L	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : O:\msn\1\data backup\n140918\
Data File : n90391.d
Acq On : 18 Sep 2014 4:07 pm
Operator : krystend
Sample : IC3345-0.5
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Oct 16 13:14:40 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n140918\
Data File : n90392.d
Acq On : 18 Sep 2014 4:35 pm
Operator : krystend
Sample : IC3345-1
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Oct 16 13:14:42 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration

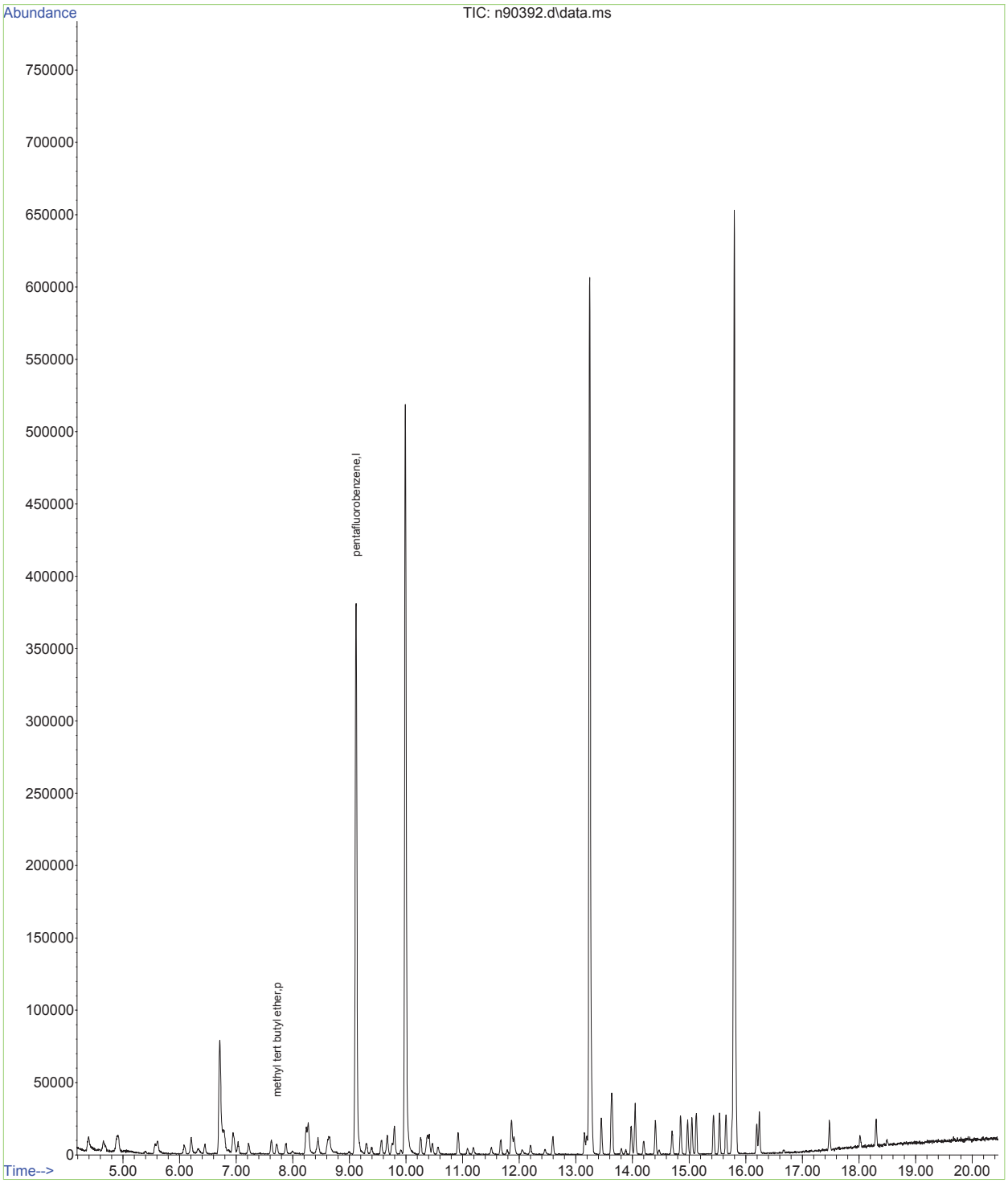
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.119	168	271362	50.00	ug/L	0.00
Target Compounds						Qvalue
2) methyl tert butyl ether	7.719	73	6594	0.96	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST
MC34198

Data Path : O:\msn\1\data backup\n140918\
Data File : n90392.d
Acq On : 18 Sep 2014 4:35 pm
Operator : krystend
Sample : IC3345-1
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Oct 16 13:14:42 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n140918\
Data File : n90393.d
Acq On : 18 Sep 2014 5:03 pm
Operator : krystend
Sample : IC3345-2
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 23 Sample Multiplier: 1

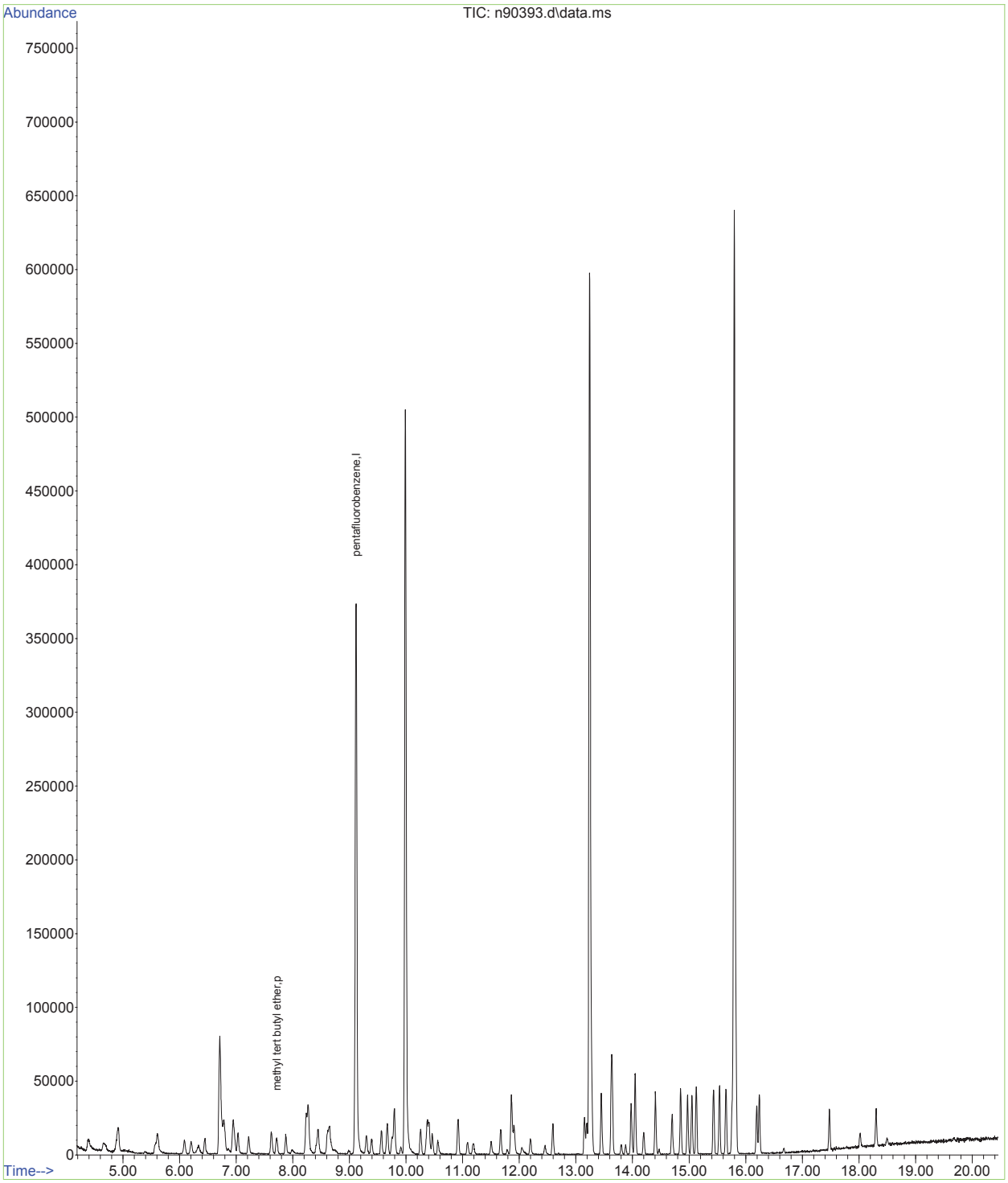
Quant Time: Oct 16 13:14:44 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.119	168	263657	50.00	ug/L	0.00
Target Compounds						Qvalue
2) methyl tert butyl ether	7.715	73	9559	1.43	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : O:\msn\1\data backup\n140918\
Data File : n90393.d
Acq On : 18 Sep 2014 5:03 pm
Operator : krystend
Sample : IC3345-2
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Oct 16 13:14:44 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n140918\
Data File : n90394.d
Acq On : 18 Sep 2014 5:32 pm
Operator : krystend
Sample : IC3345-5
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Oct 16 13:14:46 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration

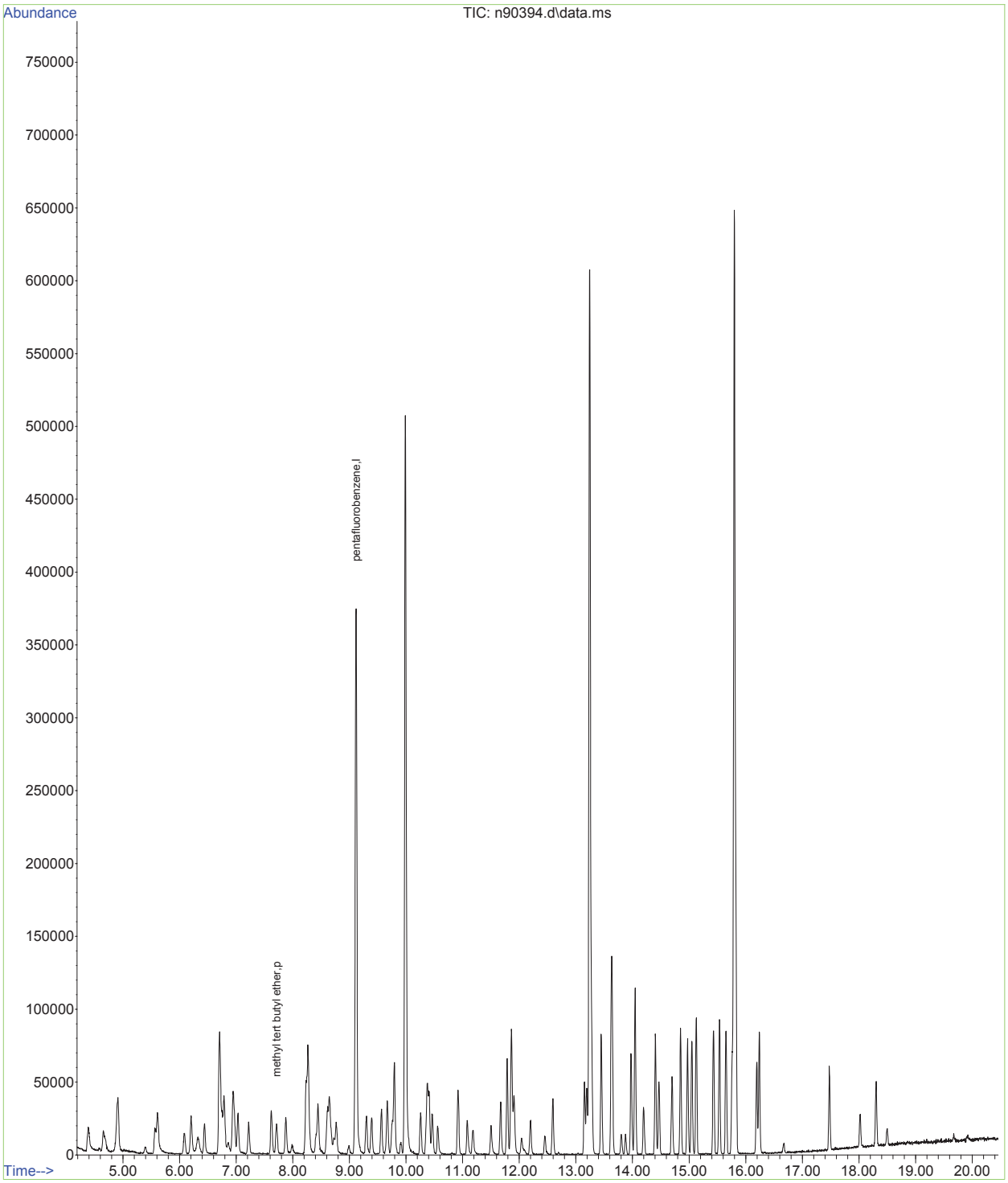
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.118	168	257045	50.00	ug/L	0.00
Target Compounds						Qvalue
2) methyl tert butyl ether	7.711	73	17856	2.75	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST MC34198

Data Path : O:\msn\1\data backup\n140918\
Data File : n90394.d
Acq On : 18 Sep 2014 5:32 pm
Operator : krystend
Sample : IC3345-5
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Oct 16 13:14:46 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n140918\
Data File : n90395.d
Acq On : 18 Sep 2014 6:00 pm
Operator : krystend
Sample : IC3345-10
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Oct 16 13:14:48 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration

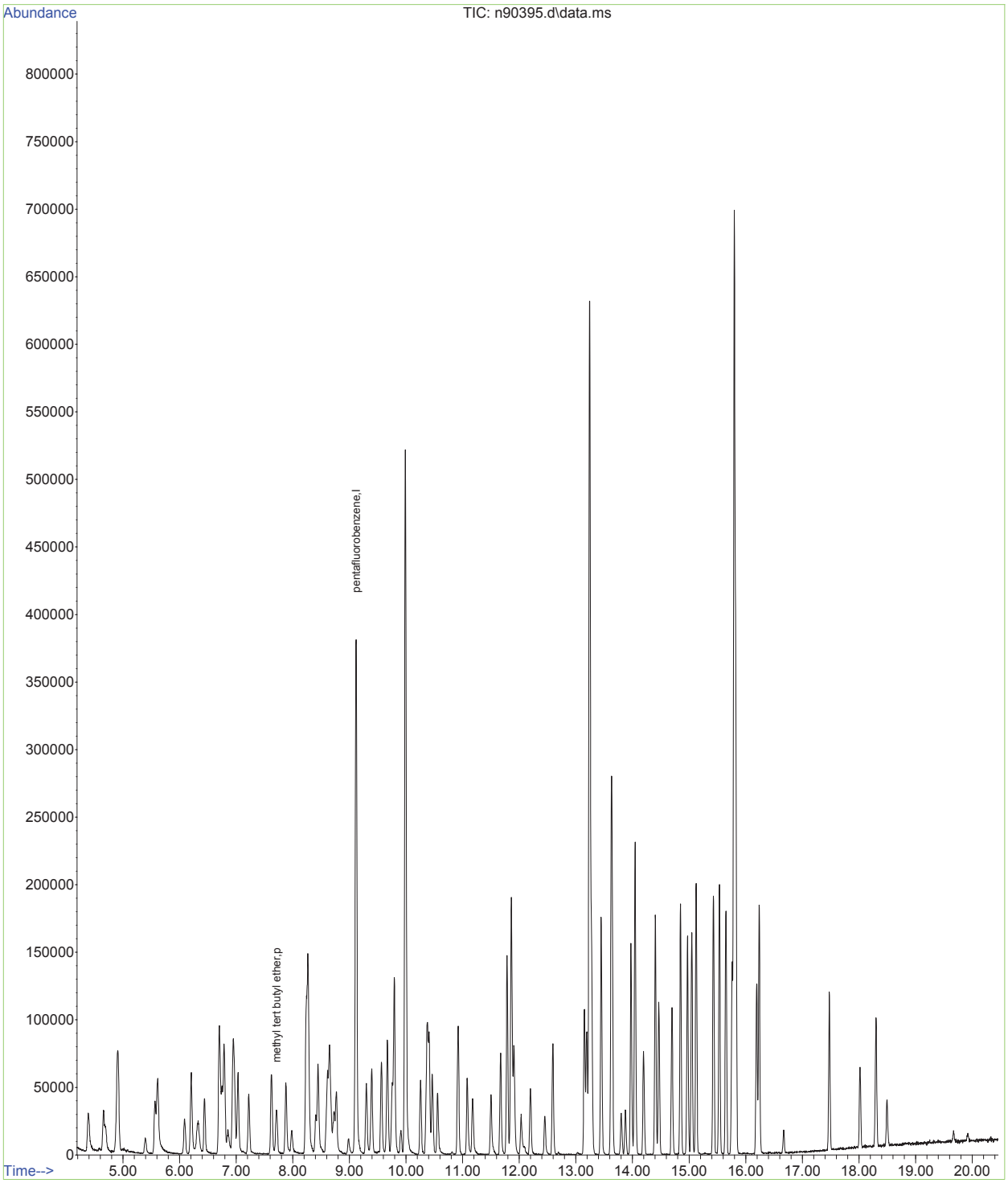
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.119	168	259103	50.00	ug/L	0.00
Target Compounds						Qvalue
2) methyl tert butyl ether	7.712	73	30689	4.69	ug/L	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST
MC34198

Data Path : O:\msn\1\data backup\n140918\
Data File : n90395.d
Acq On : 18 Sep 2014 6:00 pm
Operator : krystend
Sample : IC3345-10
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Oct 16 13:14:48 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n140918\
Data File : n90396.d
Acq On : 18 Sep 2014 6:30 pm
Operator : krystend
Sample : IC3345-25
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Oct 16 13:14:50 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration

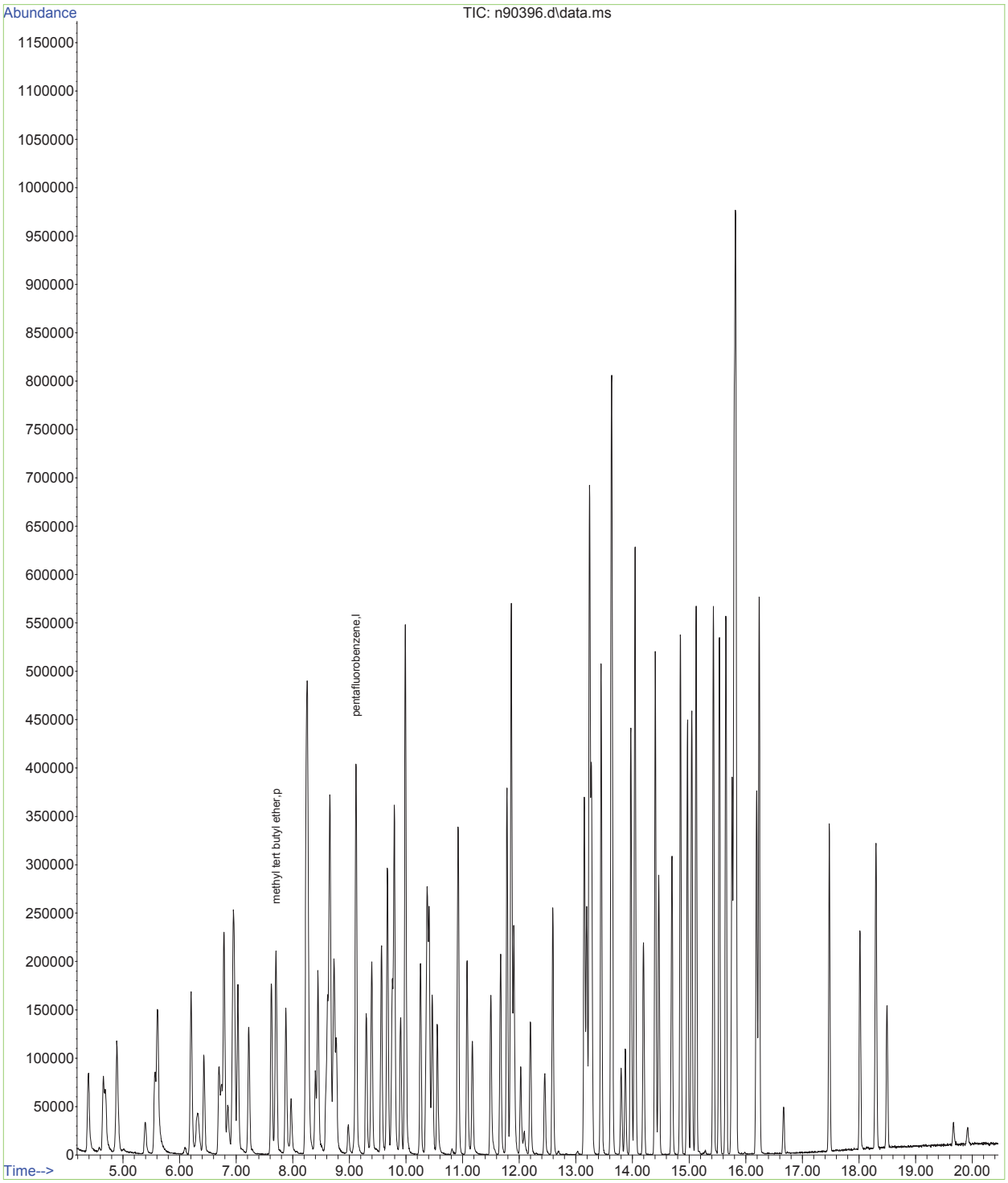
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.115	168	269555	50.00	ug/L	0.00
Target Compounds						Qvalue
2) methyl tert butyl ether	7.705	73	200518	29.43	ug/L	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST
MC34198

Data Path : O:\msn\1\data backup\n140918\
Data File : n90396.d
Acq On : 18 Sep 2014 6:30 pm
Operator : krystend
Sample : IC3345-25
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Oct 16 13:14:50 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n140918\
Data File : n90397.d
Acq On : 18 Sep 2014 6:59 pm
Operator : krystend
Sample : ICC3345-50
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 27 Sample Multiplier: 1

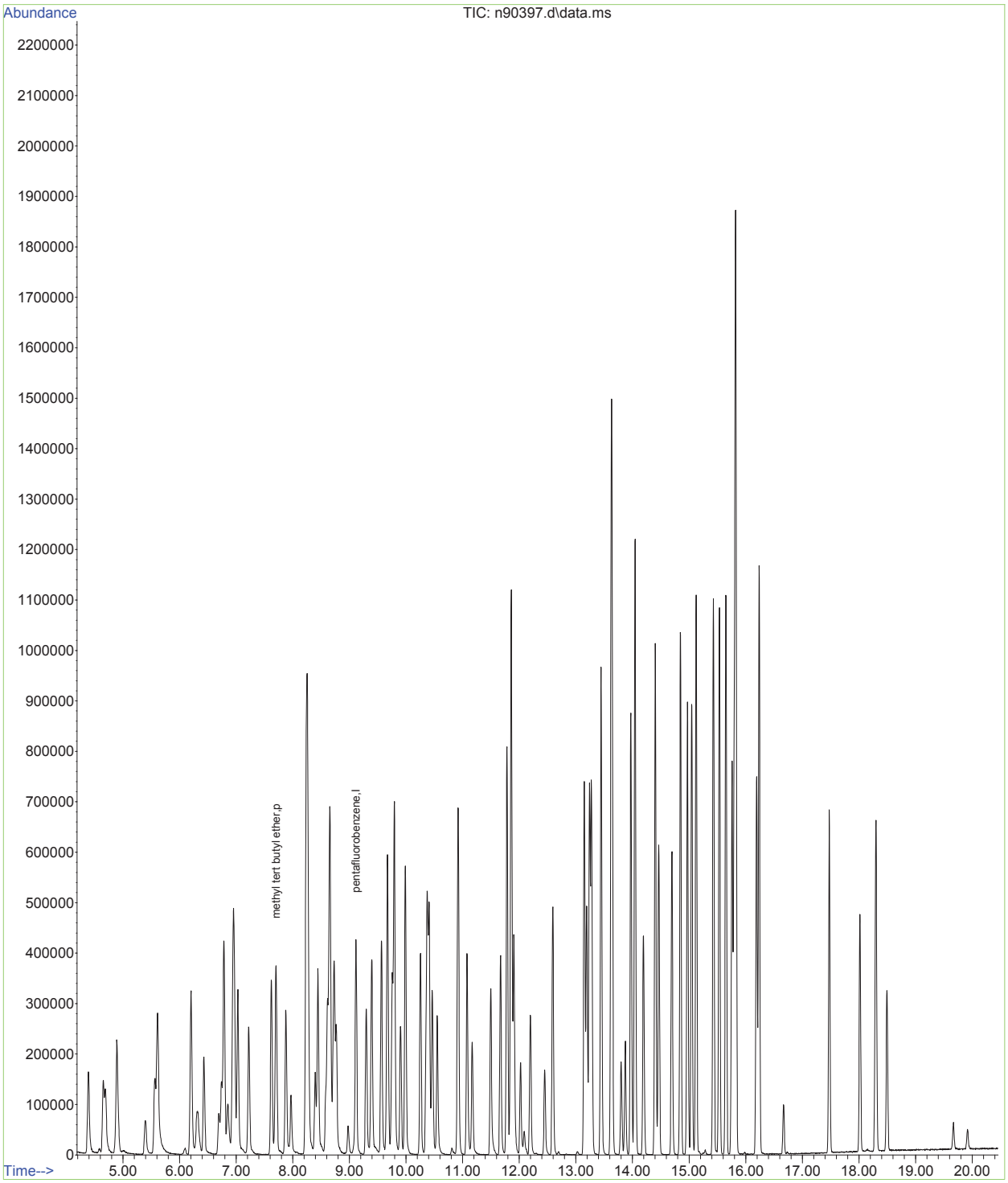
Quant Time: Oct 16 13:14:52 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.115	168	281476	50.00	ug/L	0.00
Target Compounds						Qvalue
2) methyl tert butyl ether	7.704	73	355515	49.97	ug/L	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : O:\msn\1\data backup\n140918\
Data File : n90397.d
Acq On : 18 Sep 2014 6:59 pm
Operator : krystend
Sample : ICC3345-50
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Oct 16 13:14:52 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n140918\
Data File : n90398.d
Acq On : 18 Sep 2014 7:27 pm
Operator : krystend
Sample : IC3345-100
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 28 Sample Multiplier: 1

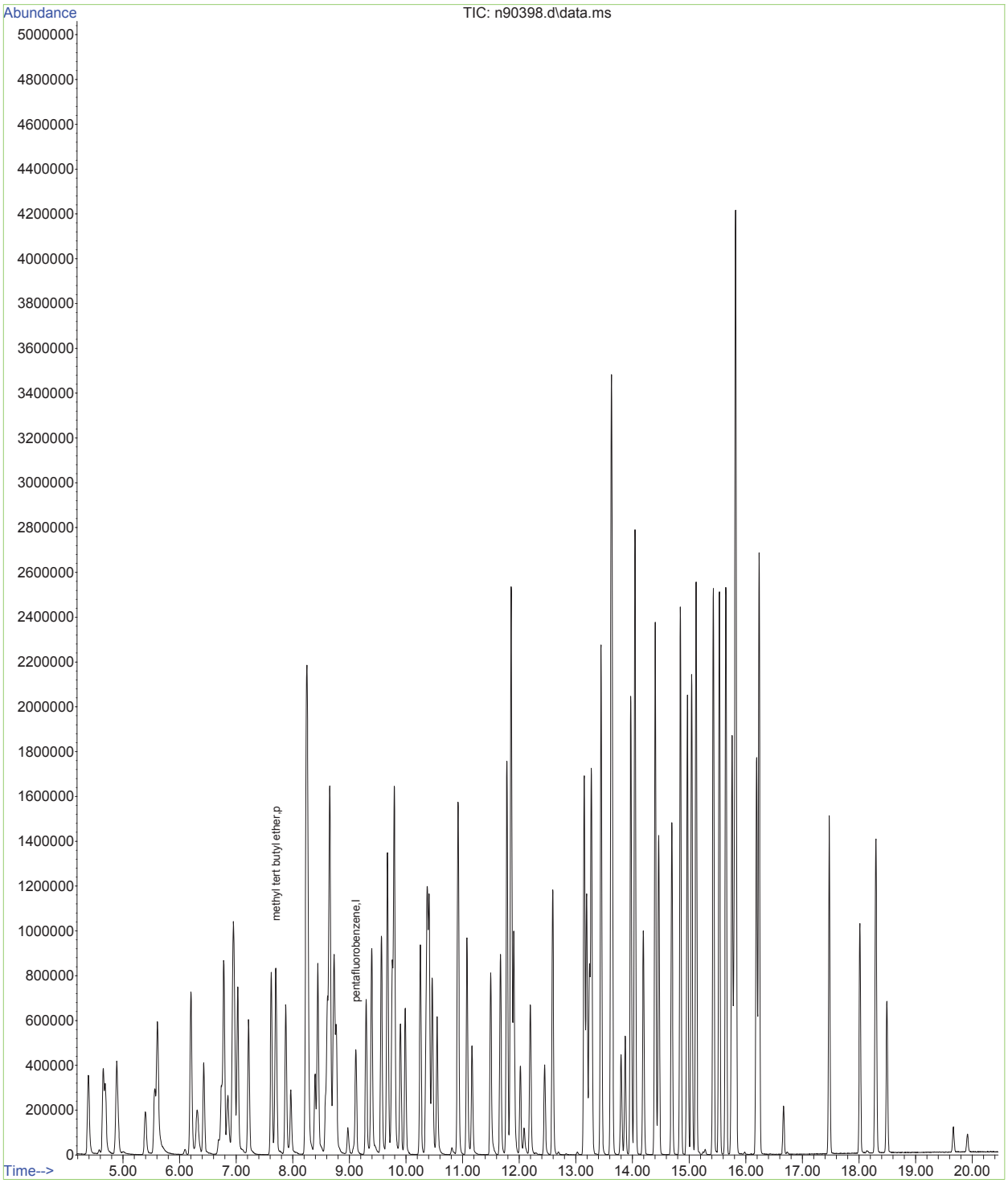
Quant Time: Oct 16 13:14:54 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.111	168	321164	50.00	ug/L	0.00
Target Compounds						Qvalue
2) methyl tert butyl ether	7.701	73	816619	100.59	ug/L	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : O:\msn\1\data backup\n140918\
Data File : n90398.d
Acq On : 18 Sep 2014 7:27 pm
Operator : krystend
Sample : IC3345-100
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Oct 16 13:14:54 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n140918\
Data File : n90399.d
Acq On : 18 Sep 2014 7:55 pm
Operator : krystend
Sample : IC3345-200
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 29 Sample Multiplier: 1

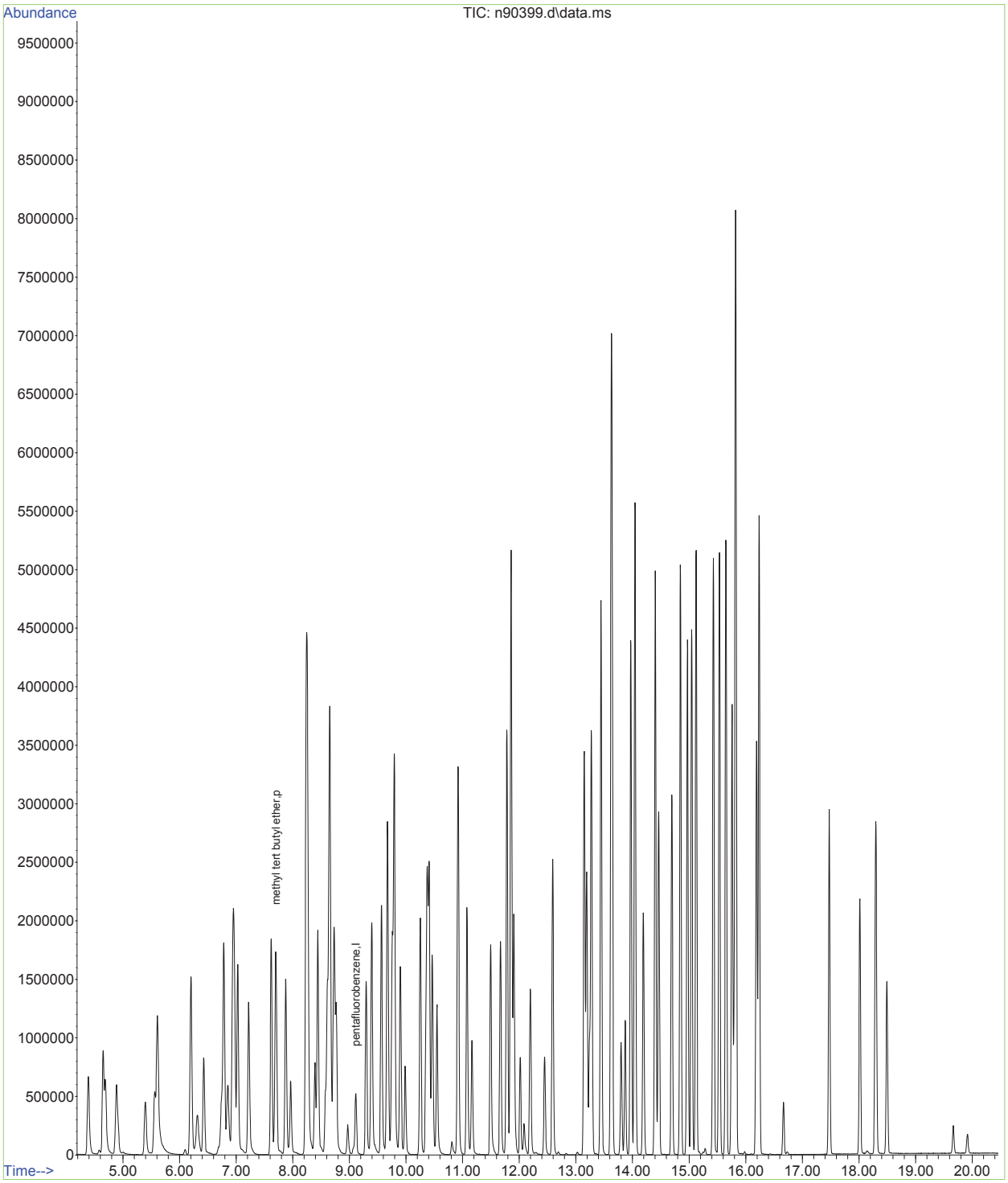
Quant Time: Oct 16 13:14:57 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.115	168	355344	50.00	ug/L	0.00
Target Compounds						Qvalue
2) methyl tert butyl ether	7.701	73	1838735	204.71	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : O:\msn\1\data backup\n140918\
Data File : n90399.d
Acq On : 18 Sep 2014 7:55 pm
Operator : krystend
Sample : IC3345-200
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Oct 16 13:14:57 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n140918\
Data File : n90400.d
Acq On : 18 Sep 2014 8:23 pm
Operator : krystend
Sample : IC3345-400
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Oct 16 13:14:58 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration

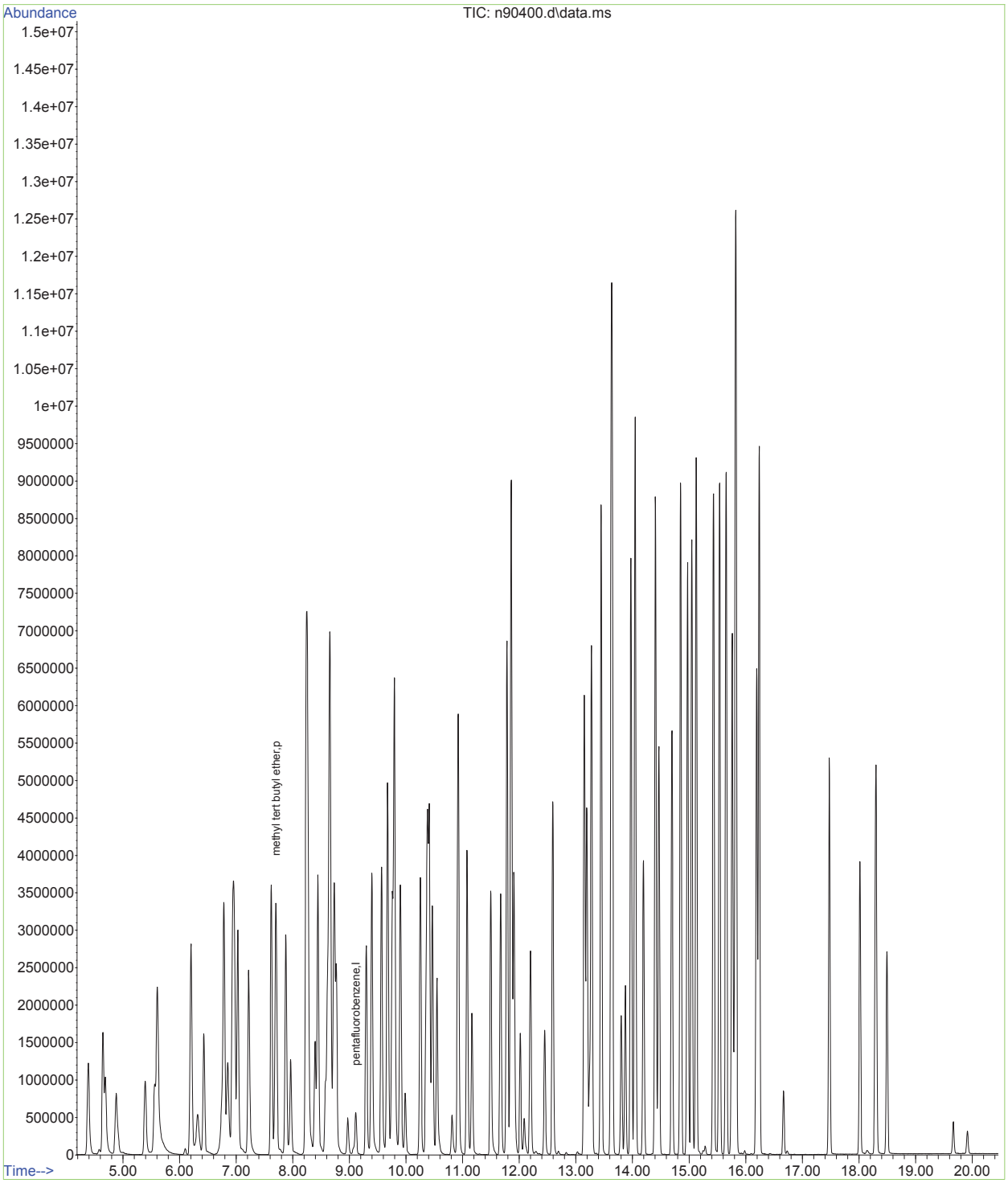
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.111	168	394186	50.00	ug/L	0.00
Target Compounds						Qvalue
2) methyl tert butyl ether	7.701	73	3773711	378.74	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST MC34198

Data Path : O:\msn\1\data backup\n140918\
Data File : n90400.d
Acq On : 18 Sep 2014 8:23 pm
Operator : krystend
Sample : IC3345-400
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Oct 16 13:14:58 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n140919\
Data File : n90407.d
Acq On : 19 Sep 2014 1:04 pm
Operator : krystend
Sample : ICV3345-50
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Oct 16 13:20:29 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration

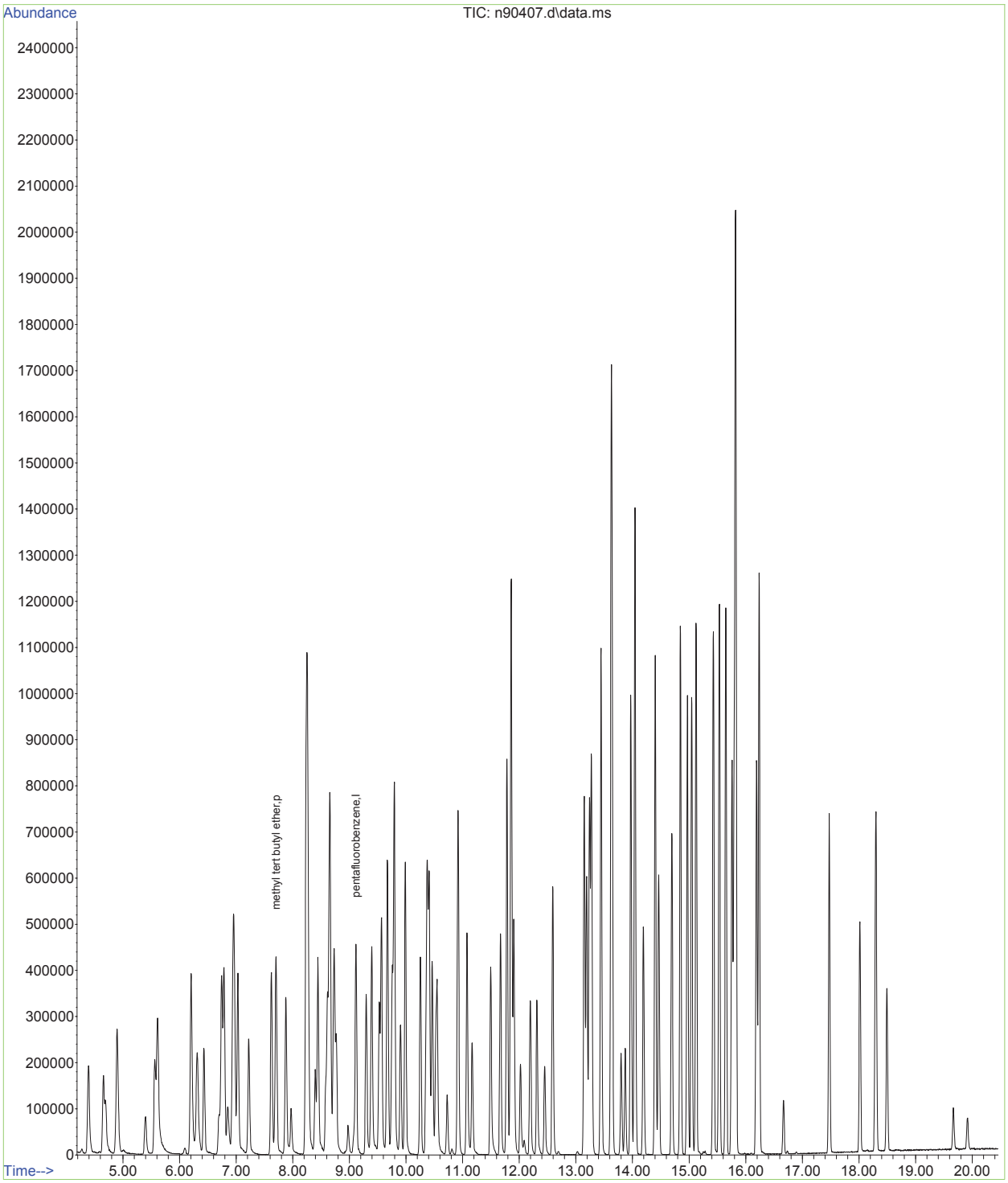
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.115	168	303678	50.00	ug/L	0.00
Target Compounds						Qvalue
2) methyl tert butyl ether	7.705	73	409974	54.86	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST
MC34198

Data Path : O:\msn\1\data backup\n140919\
Data File : n90407.d
Acq On : 19 Sep 2014 1:04 pm
Operator : krystend
Sample : ICV3345-50
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Oct 16 13:20:29 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141020\
Data File : n91389.d
Acq On : 20 Oct 2014 8:39 am
Operator : tomaszt
Sample : cc3345-50
Misc : ms32987,MSN3380,,,,5,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 27 12:42:40 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration

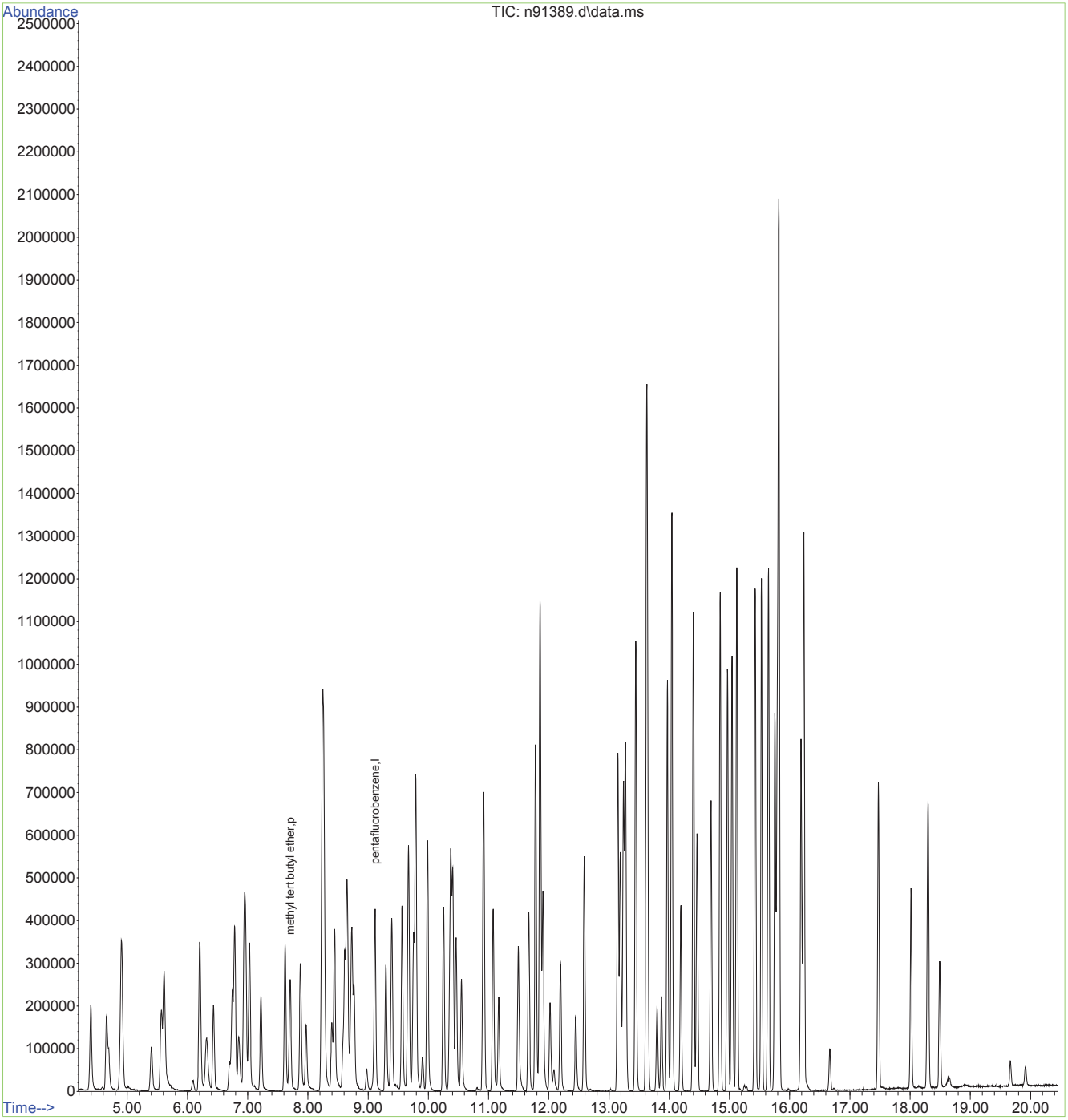
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.115	168	290845	50.00	ug/L	0.00
Target Compounds						Qvalue
2) methyl tert butyl ether	7.704	73	238036	33.37	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141020\
Data File : n91389.d
Acq On : 20 Oct 2014 8:39 am
Operator : tomaszt
Sample : cc3345-50
Misc : ms32987,MSN3380,,,,5,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 27 12:42:40 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141020\
Data File : n91396.d
Acq On : 20 Oct 2014 11:57 am
Operator : tomaszt
Sample : mc34198-9
Misc : ms33003,MSN3380,,,,5,1
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Oct 27 12:42:52 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration

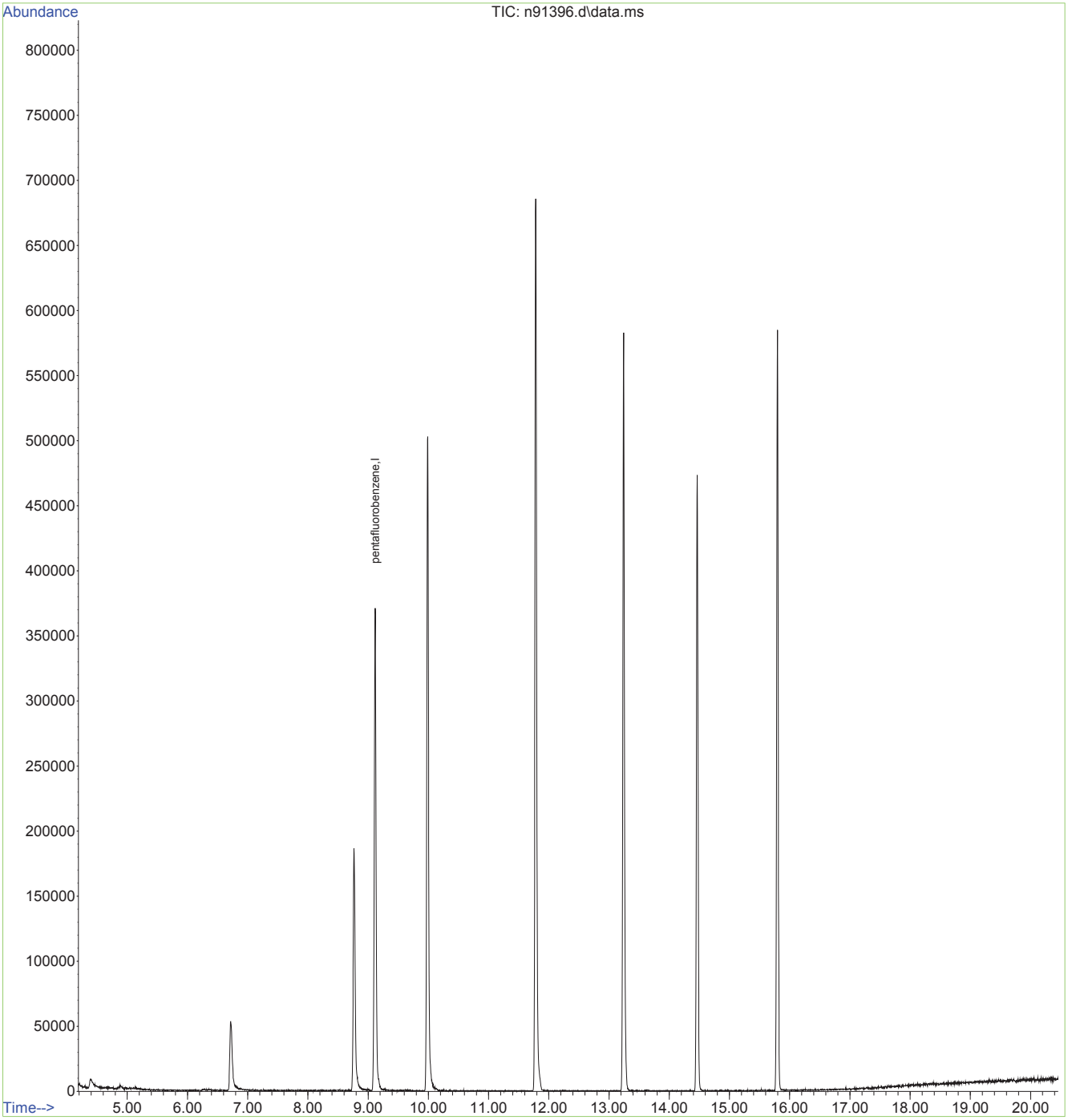
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.115	168	264715	50.00	ug/L	0.00
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141020\
Data File : n91396.d
Acq On : 20 Oct 2014 11:57 am
Operator : tomaszt
Sample : mc34198-9
Misc : ms33003,MSN3380,,,,5,1
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Oct 27 12:42:52 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141020\
Data File : n91400.d
Acq On : 20 Oct 2014 1:51 pm
Operator : tomaszt
Sample : mc34198-1
Misc : ms33003,MSN3380,,,,5,1
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Oct 27 12:43:01 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration

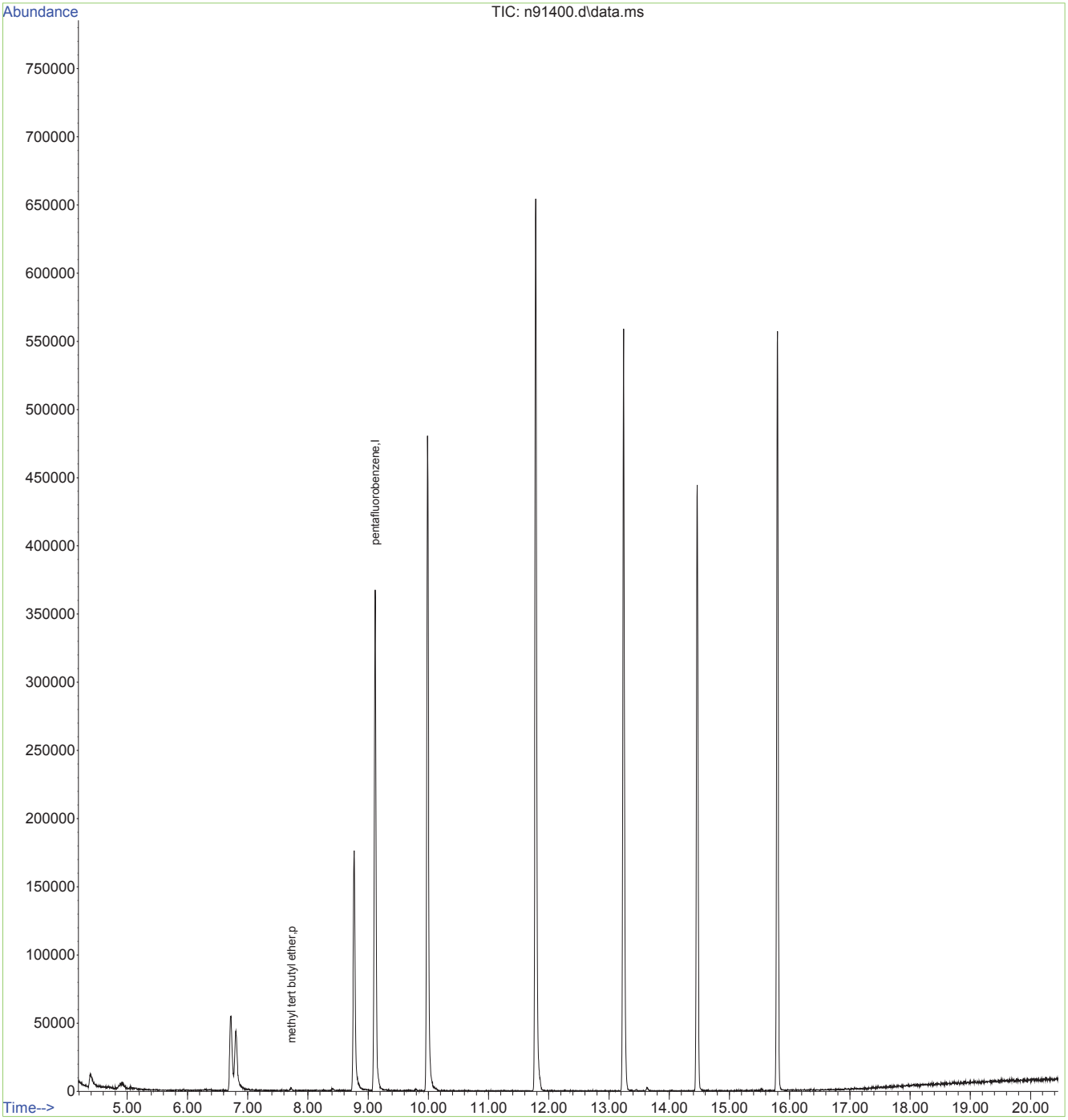
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.115	168	252448	50.00	ug/L	0.00
Target Compounds						Qvalue
2) methyl tert butyl ether	7.726	73	1344	0.49	ug/L	96

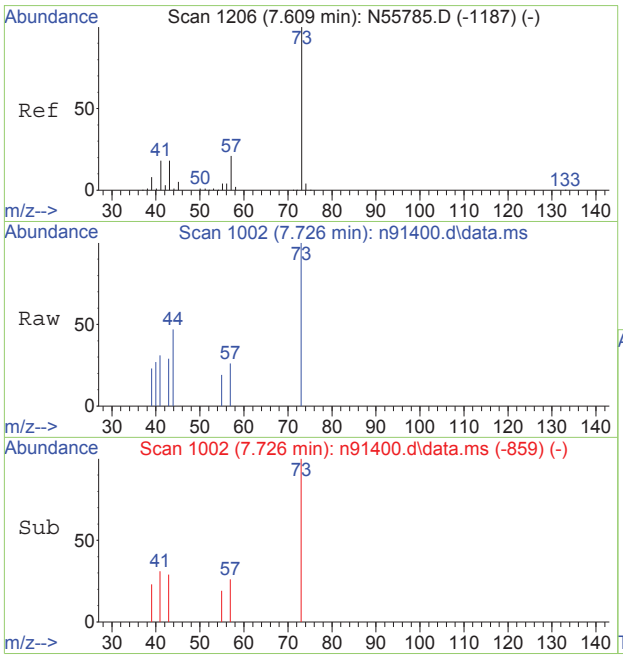
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141020\
Data File : n91400.d
Acq On : 20 Oct 2014 1:51 pm
Operator : tomaszt
Sample : mc34198-1
Misc : ms33003,MSN3380,,,,5,1
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Oct 27 12:43:01 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration

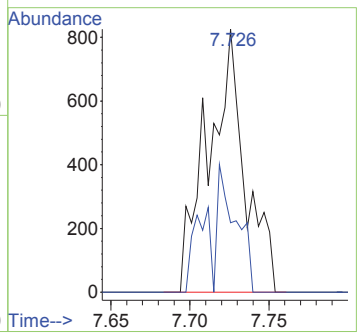




#2
methyl tert butyl ether
Concen: 0.49 ug/L
RT: 7.726 min Scan# 1002
Delta R.T. 0.007 min
Lab File: n91400.d
Acq: 20 Oct 2014 1:51 pm

Tgt Ion: 73 Resp: 1344

Ion	Ratio	Lower	Upper
73	100		
57	26.4	0.0	58.4



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141020\
Data File : n91401.d
Acq On : 20 Oct 2014 2:19 pm
Operator : tomaszt
Sample : mc34198-2
Misc : ms33003,MSN3380,,,,5,1
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Oct 27 12:43:03 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration

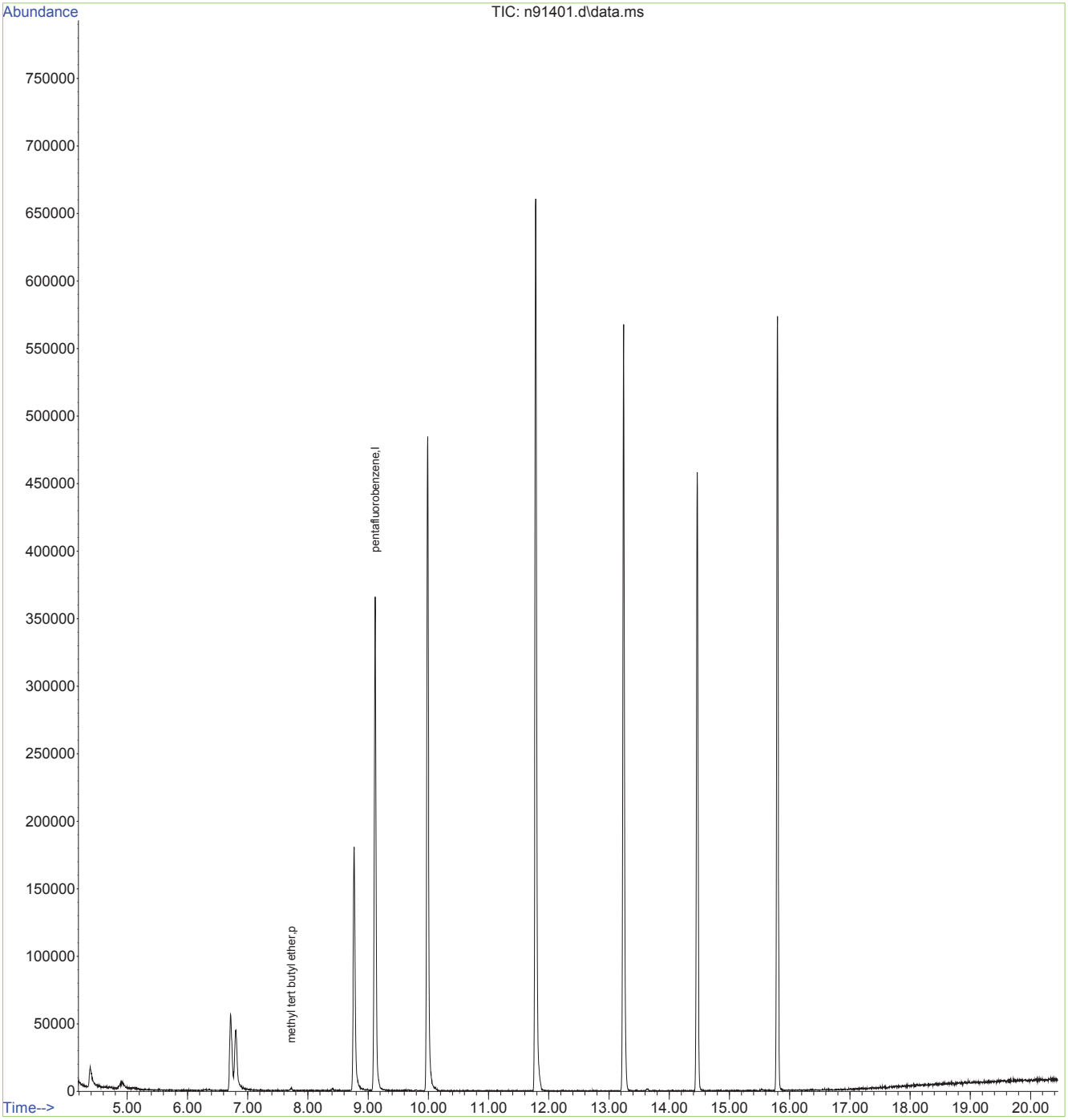
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.115	168	251696	50.00	ug/L	0.00
Target Compounds						Qvalue
2) methyl tert butyl ether	7.719	73	1835	0.57	ug/L	88

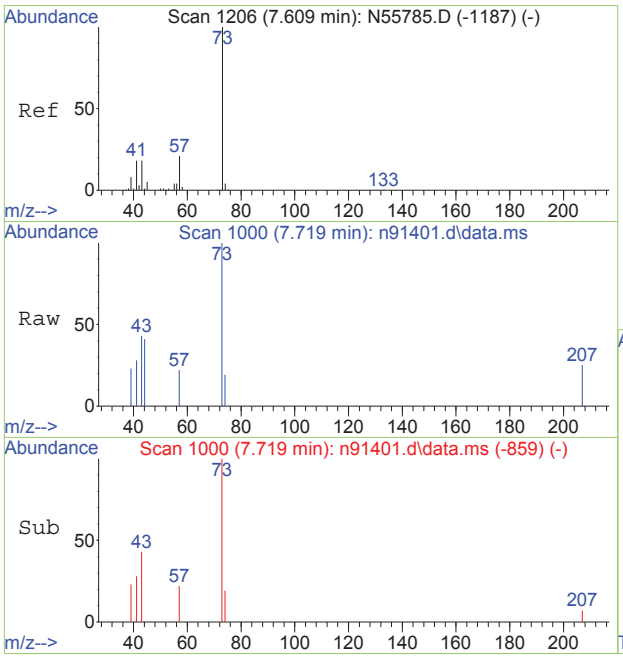
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141020\
Data File : n91401.d
Acq On : 20 Oct 2014 2:19 pm
Operator : tomaszt
Sample : mc34198-2
Misc : ms33003,MSN3380,,,,5,1
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Oct 27 12:43:03 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration

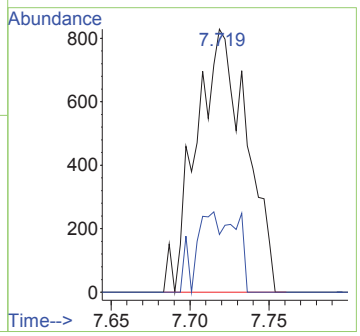




#2
methyl tert butyl ether
Concen: 0.57 ug/L
RT: 7.719 min Scan# 1000
Delta R.T. -0.000 min
Lab File: n91401.d
Acq: 20 Oct 2014 2:19 pm

Tgt Ion: 73 Resp: 1835

Ion	Ratio	Lower	Upper
73	100		
57	22.0	0.0	58.4



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141020\
Data File : n91402.d
Acq On : 20 Oct 2014 2:47 pm
Operator : tomaszt
Sample : mc34198-3
Misc : ms33003,MSN3380,,,,5,1
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Oct 27 12:43:05 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration

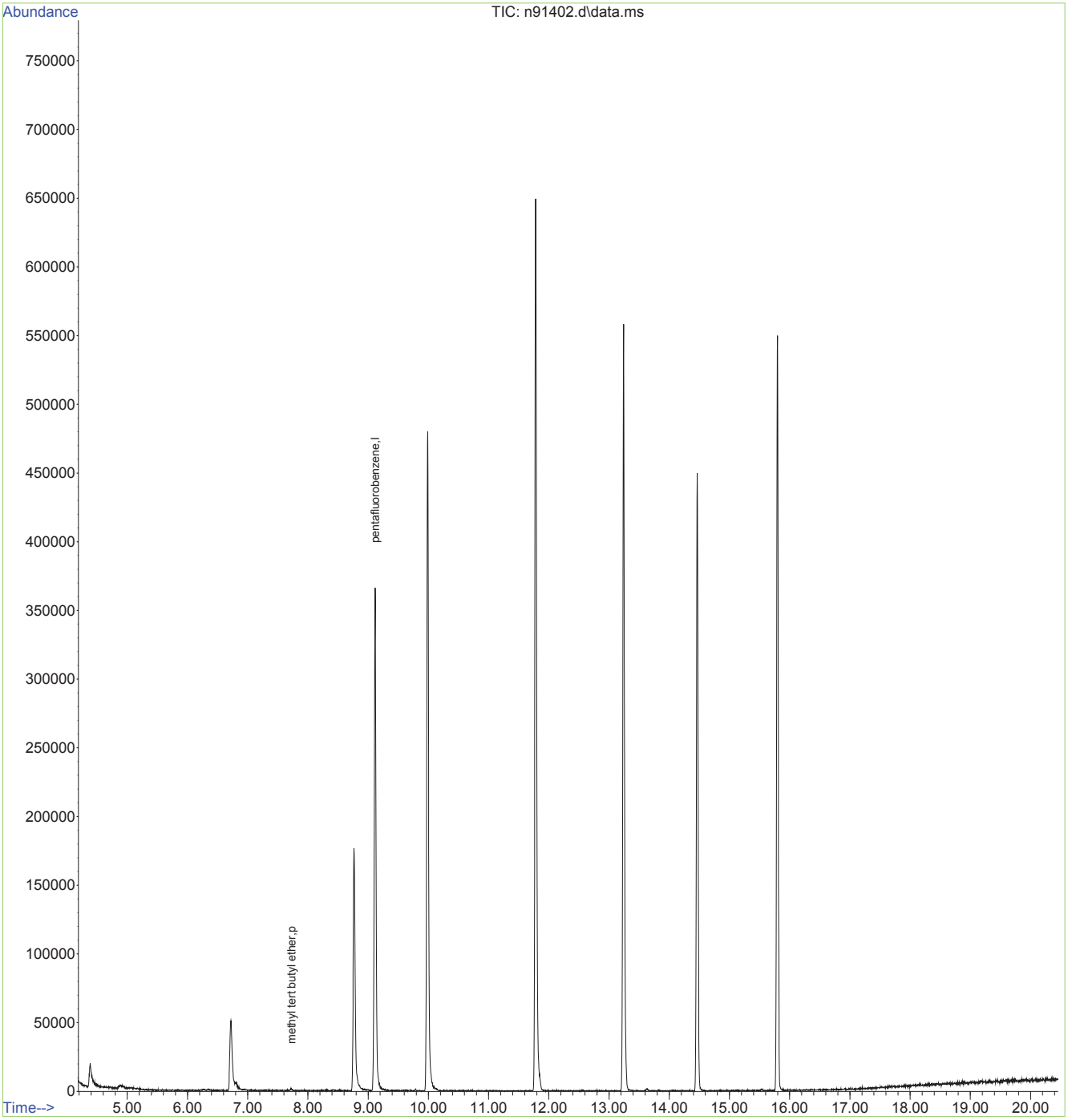
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.115	168	252351	50.00	ug/L	0.00
Target Compounds						Qvalue
2) methyl tert butyl ether	7.726	73	1493	0.52	ug/L	92

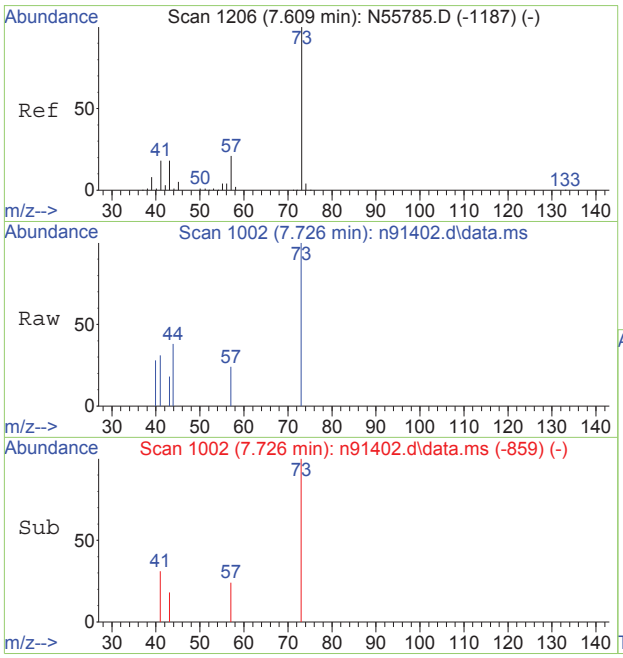
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141020\
Data File : n91402.d
Acq On : 20 Oct 2014 2:47 pm
Operator : tomaszt
Sample : mc34198-3
Misc : ms33003,MSN3380,,,,5,1
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Oct 27 12:43:05 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration

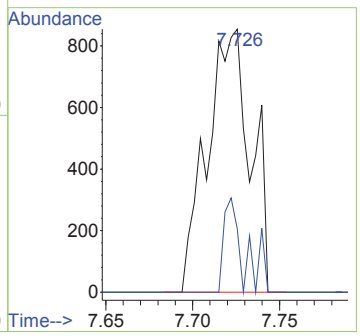




#2
methyl tert butyl ether
Concen: 0.52 ug/L
RT: 7.726 min Scan# 1002
Delta R.T. 0.007 min
Lab File: n91402.d
Acq: 20 Oct 2014 2:47 pm

Tgt Ion: 73 Resp: 1493

Ion	Ratio	Lower	Upper
73	100		
57	24.1	0.0	58.4



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141020\
Data File : n91403.d
Acq On : 20 Oct 2014 3:15 pm
Operator : tomaszt
Sample : mc34198-4
Misc : ms33003,MSN3380,,,,5,1
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Oct 27 12:43:07 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration

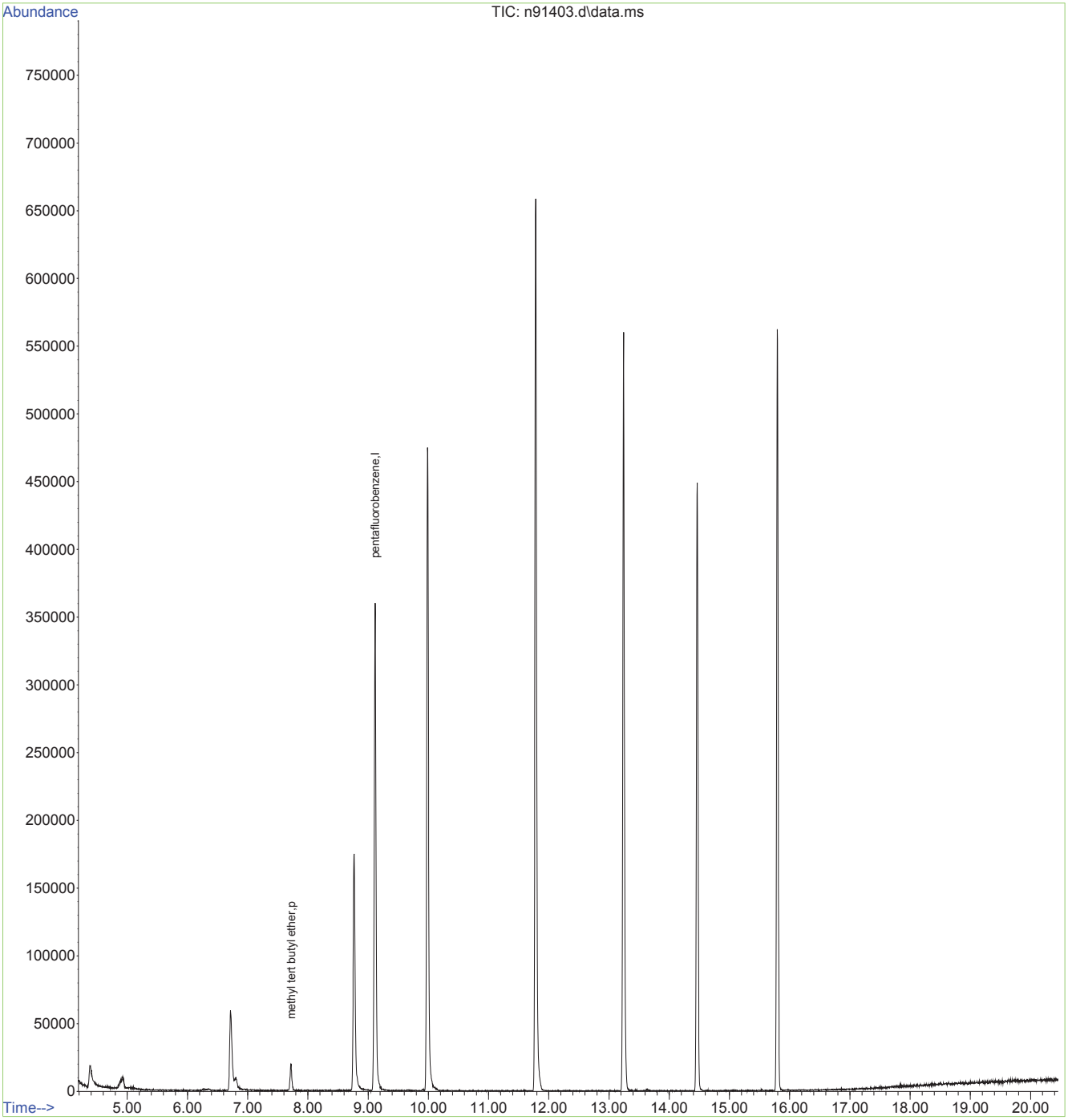
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.115	168	251062	50.00	ug/L	0.00
Target Compounds						Qvalue
2) methyl tert butyl ether	7.719	73	17018	3.02	ug/L	93

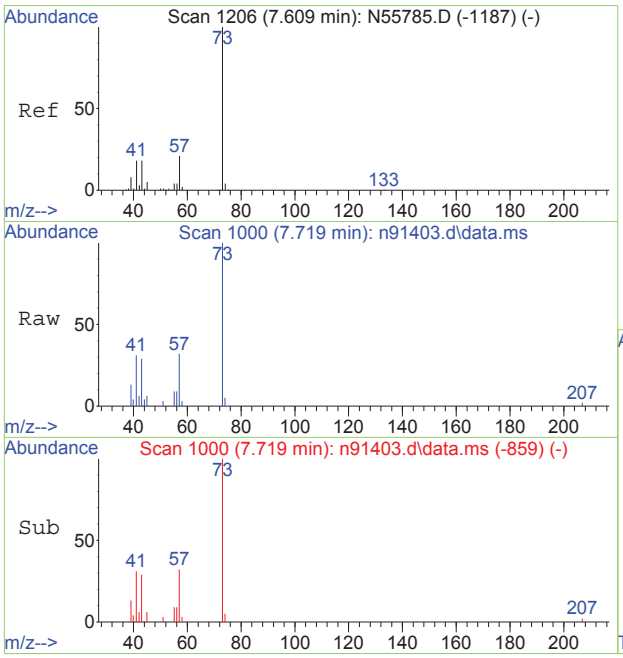
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141020\
Data File : n91403.d
Acq On : 20 Oct 2014 3:15 pm
Operator : tomaszt
Sample : mc34198-4
Misc : ms33003,MSN3380,,,,5,1
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Oct 27 12:43:07 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration

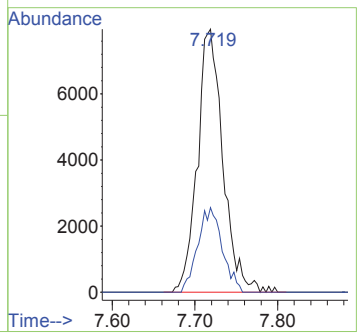




#2
methyl tert butyl ether
Concen: 3.02 ug/L
RT: 7.719 min Scan# 1000
Delta R.T. -0.000 min
Lab File: n91403.d
Acq: 20 Oct 2014 3:15 pm

Tgt Ion: 73 Resp: 17018

Ion	Ratio	Lower	Upper
73	100		
57	32.2	0.0	58.4



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141020\
Data File : n91404.d
Acq On : 20 Oct 2014 3:44 pm
Operator : tomaszt
Sample : mc34198-5
Misc : ms33003,MSN3380,,,,5,1
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Oct 27 12:43:09 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration

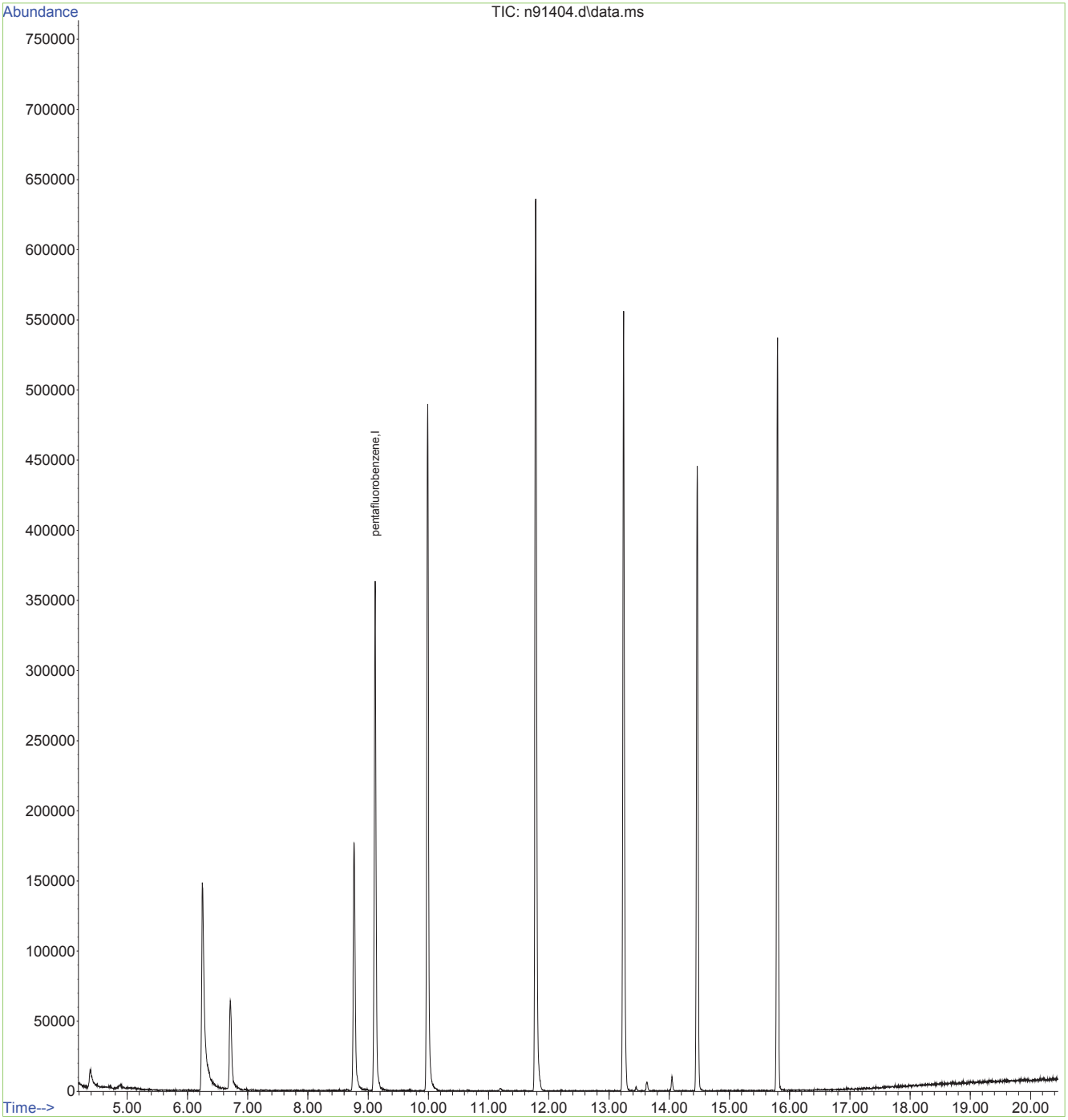
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.115	168	255375	50.00	ug/L	0.00
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141020\
Data File : n91404.d
Acq On : 20 Oct 2014 3:44 pm
Operator : tomaszt
Sample : mc34198-5
Misc : ms33003,MSN3380,,,,5,1
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Oct 27 12:43:09 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141020\
Data File : n91405.d
Acq On : 20 Oct 2014 4:12 pm
Operator : tomaszt
Sample : mc34198-6
Misc : ms33003,MSN3380,,,,5,1
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Oct 27 12:43:11 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration

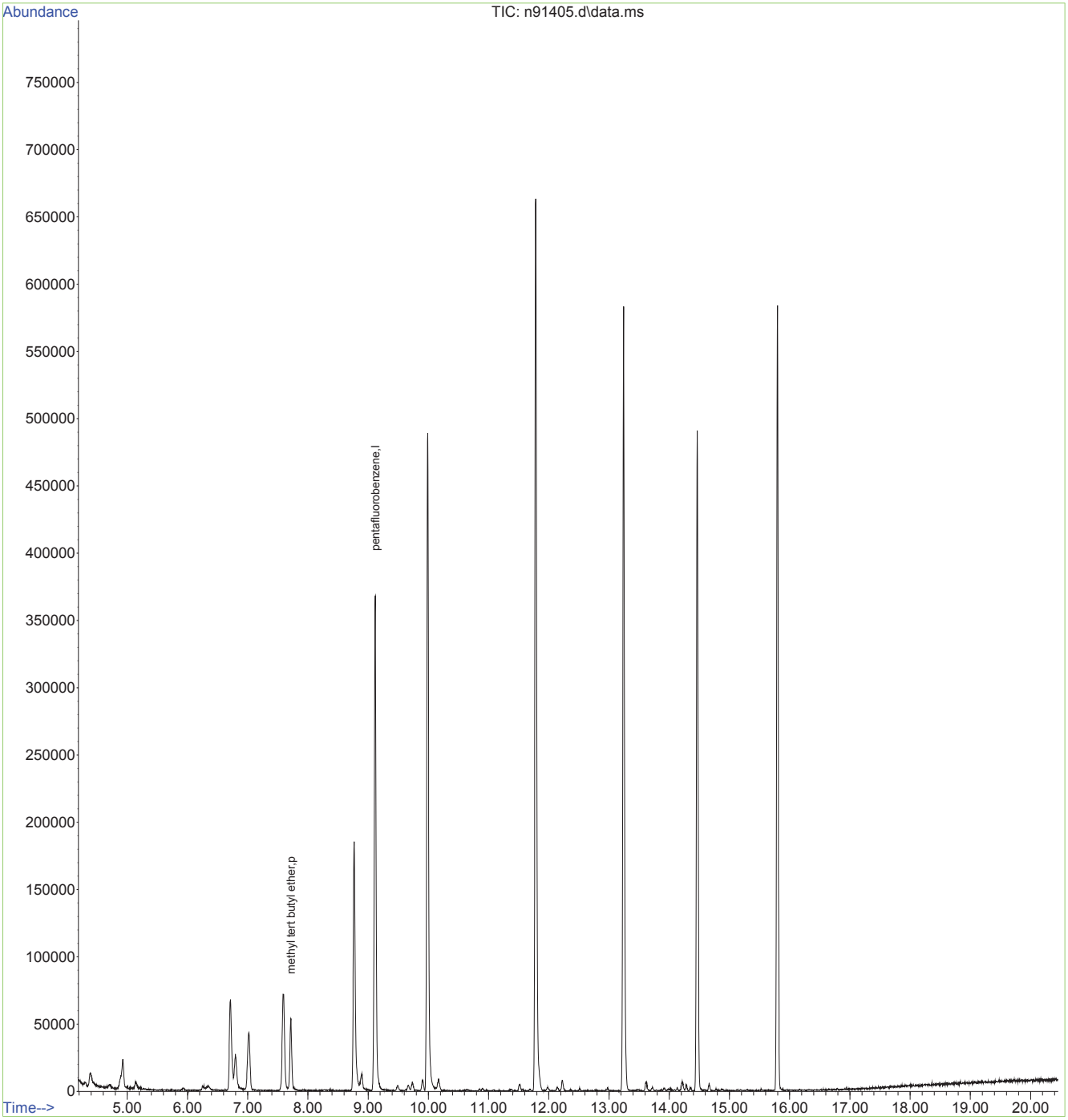
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.118	168	252657	50.00	ug/L	0.00
Target Compounds						Qvalue
2) methyl tert butyl ether	7.715	73	49440	8.19	ug/L	97

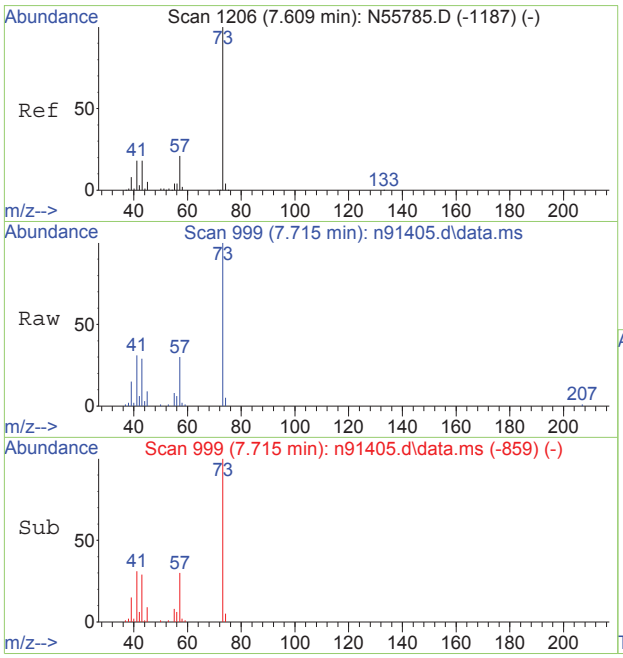
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141020\
Data File : n91405.d
Acq On : 20 Oct 2014 4:12 pm
Operator : tomaszt
Sample : mc34198-6
Misc : ms33003,MSN3380,,,,5,1
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Oct 27 12:43:11 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration

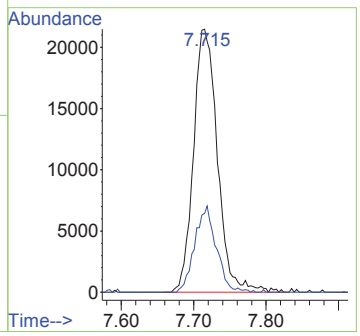




#2
methyl tert butyl ether
Concen: 8.19 ug/L
RT: 7.715 min Scan# 999
Delta R.T. -0.004 min
Lab File: n91405.d
Acq: 20 Oct 2014 4:12 pm

Tgt Ion: 73 Resp: 49440

Ion	Ratio	Lower	Upper
73	100		
57	30.0	0.0	58.4



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141020\
Data File : n91406.d
Acq On : 20 Oct 2014 4:40 pm
Operator : tomaszt
Sample : mc34198-7
Misc : ms33003,MSN3380,,,,5,1
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Oct 27 12:43:13 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration

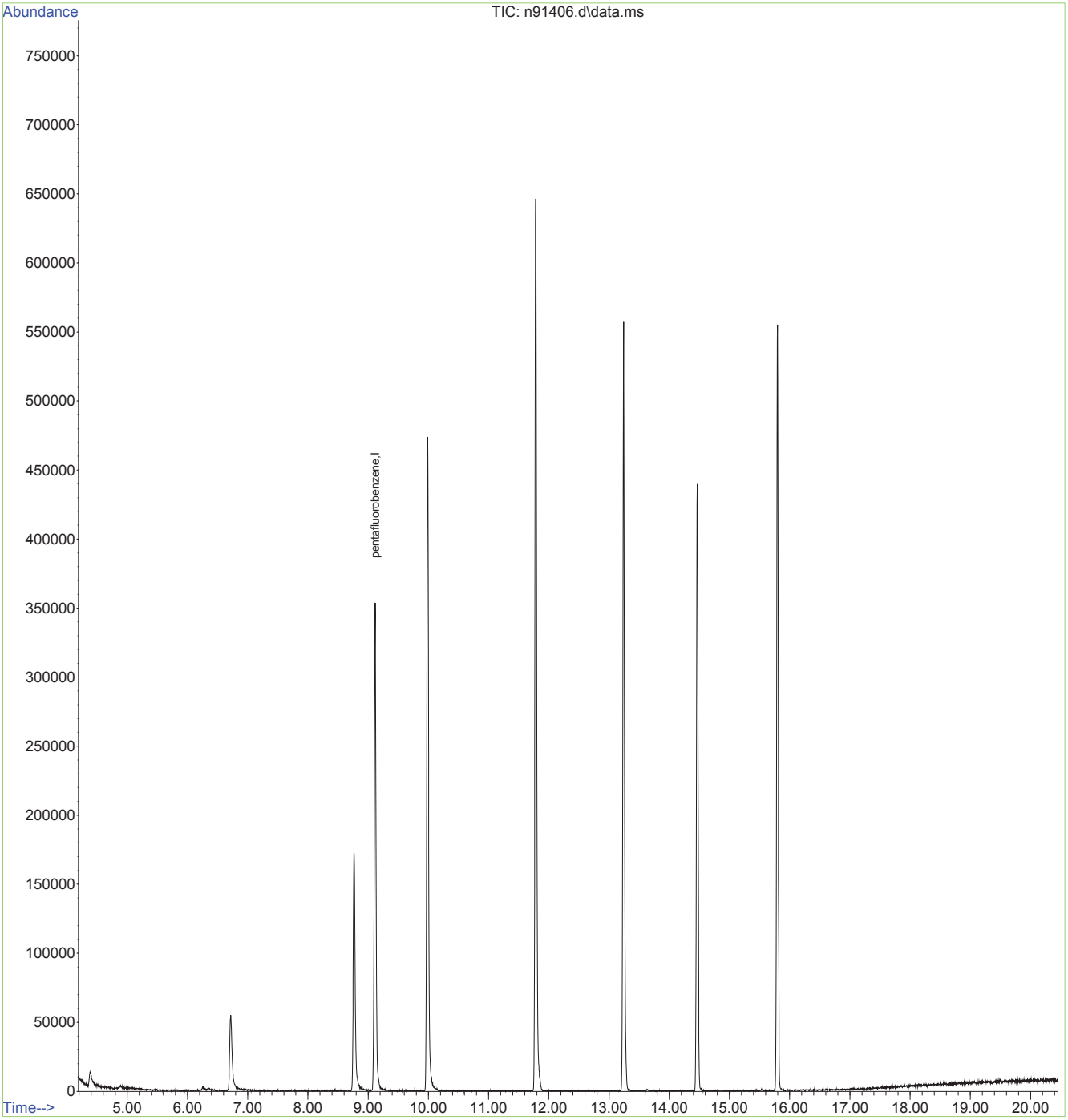
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.115	168	241685	50.00	ug/L	0.00
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141020\
Data File : n91406.d
Acq On : 20 Oct 2014 4:40 pm
Operator : tomaszt
Sample : mc34198-7
Misc : ms33003,MSN3380,,,,5,1
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Oct 27 12:43:13 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141020\
Data File : n91407.d
Acq On : 20 Oct 2014 5:08 pm
Operator : tomaszt
Sample : mc34198-8
Misc : ms33003,MSN3380,,,,5,1
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Oct 27 12:43:15 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration

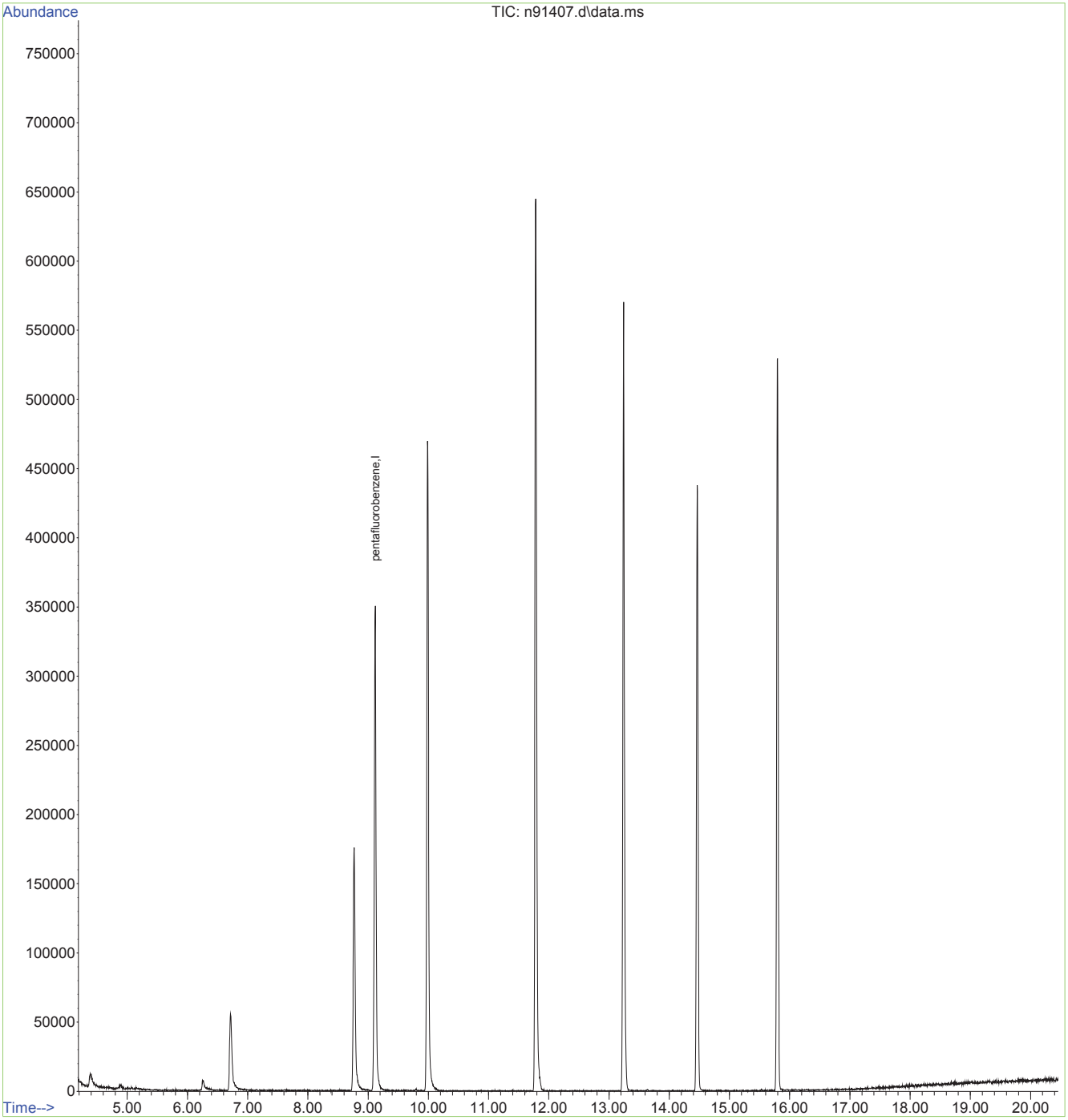
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.118	168	247471	50.00	ug/L	0.00
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141020\
Data File : n91407.d
Acq On : 20 Oct 2014 5:08 pm
Operator : tomaszt
Sample : mc34198-8
Misc : ms33003,MSN3380,,,,5,1
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Oct 27 12:43:15 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141020\
Data File : n91390.d
Acq On : 20 Oct 2014 9:08 am
Operator : tomaszt
Sample : bs
Misc : ms32987,MSN3380,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 27 12:42:42 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.115	168	303643	50.00	ug/L	0.00
Target Compounds						Qvalue
2) methyl tert butyl ether	7.704	73	296024	39.69	ug/L	97

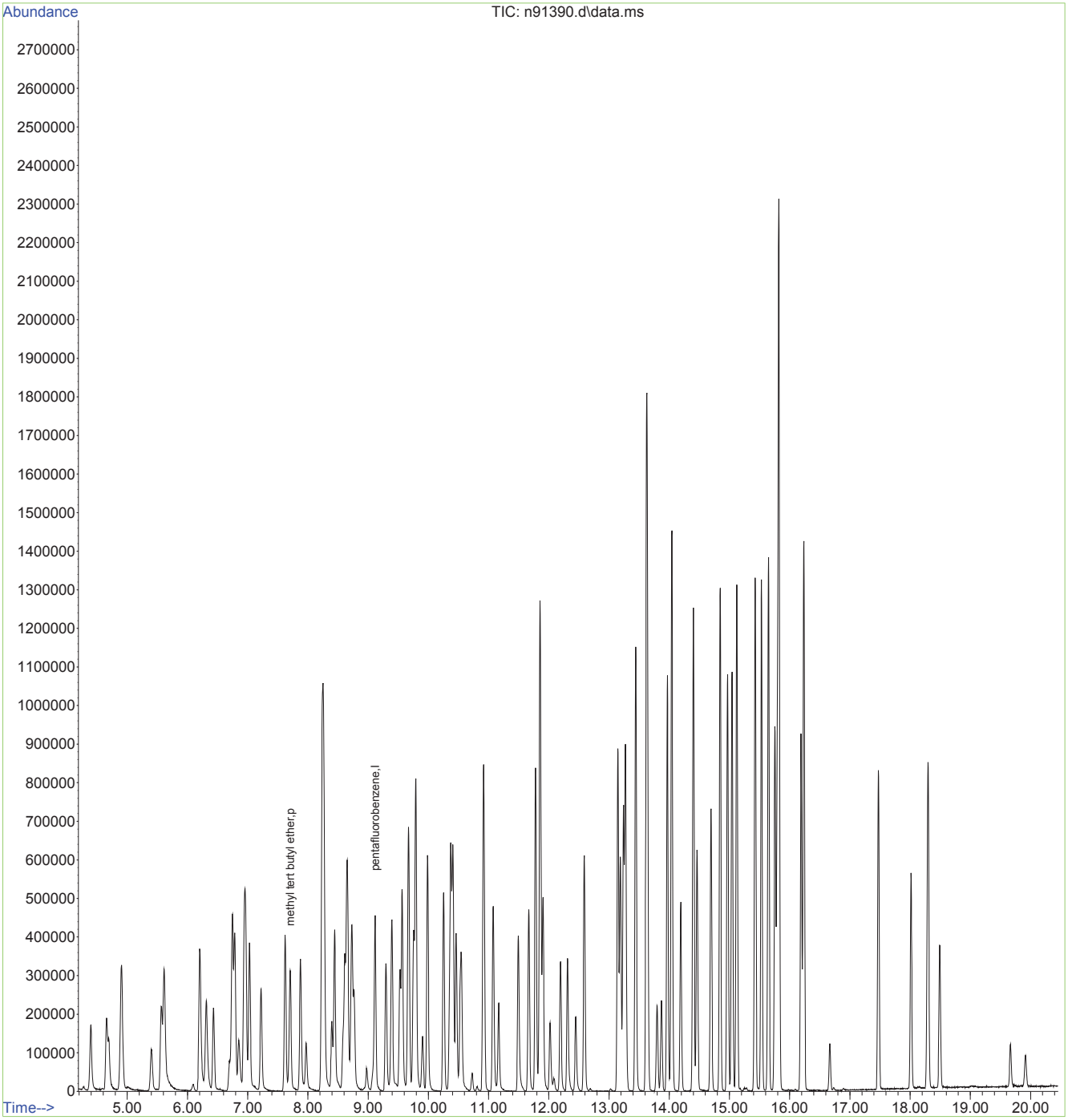
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST MC34198

Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141020\
Data File : n91390.d
Acq On : 20 Oct 2014 9:08 am
Operator : tomaszt
Sample : bs
Misc : ms32987,MSN3380,,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 27 12:42:42 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141020\
Data File : n91391.d
Acq On : 20 Oct 2014 9:36 am
Operator : tomaszt
Sample : bsd
Misc : ms32987,MSN3380,,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 27 12:42:44 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration

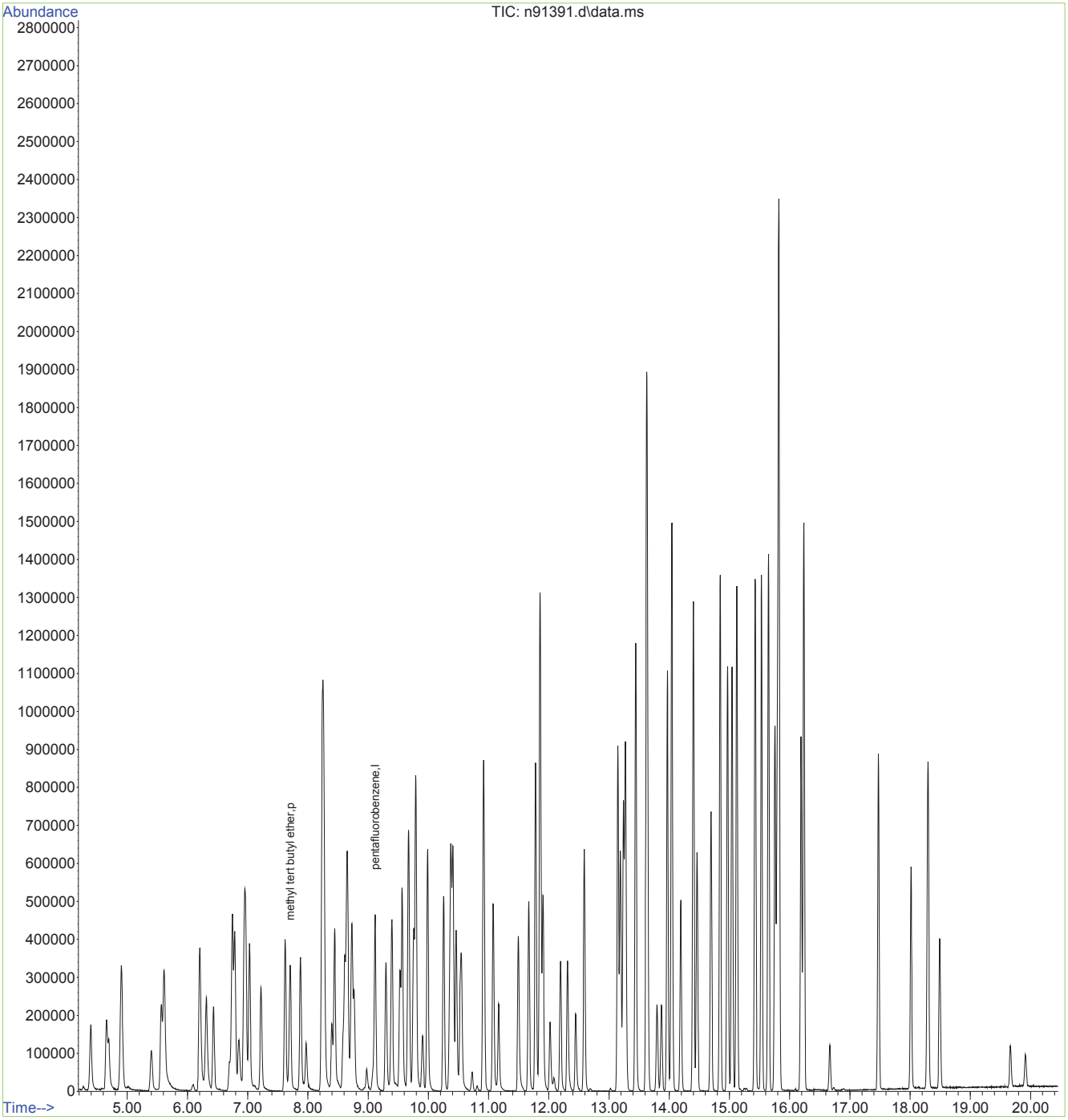
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.115	168	310801	50.00	ug/L	0.00
Target Compounds						Qvalue
2) methyl tert butyl ether	7.704	73	314439	41.18	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141020\
Data File : n91391.d
Acq On : 20 Oct 2014 9:36 am
Operator : tomaszt
Sample : bsd
Misc : ms32987,MSN3380,,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 27 12:42:44 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141020\
Data File : n91393.d
Acq On : 20 Oct 2014 10:32 am
Operator : tomaszt
Sample : mb
Misc : ms33003,MSN3380,,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Oct 27 12:42:46 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration

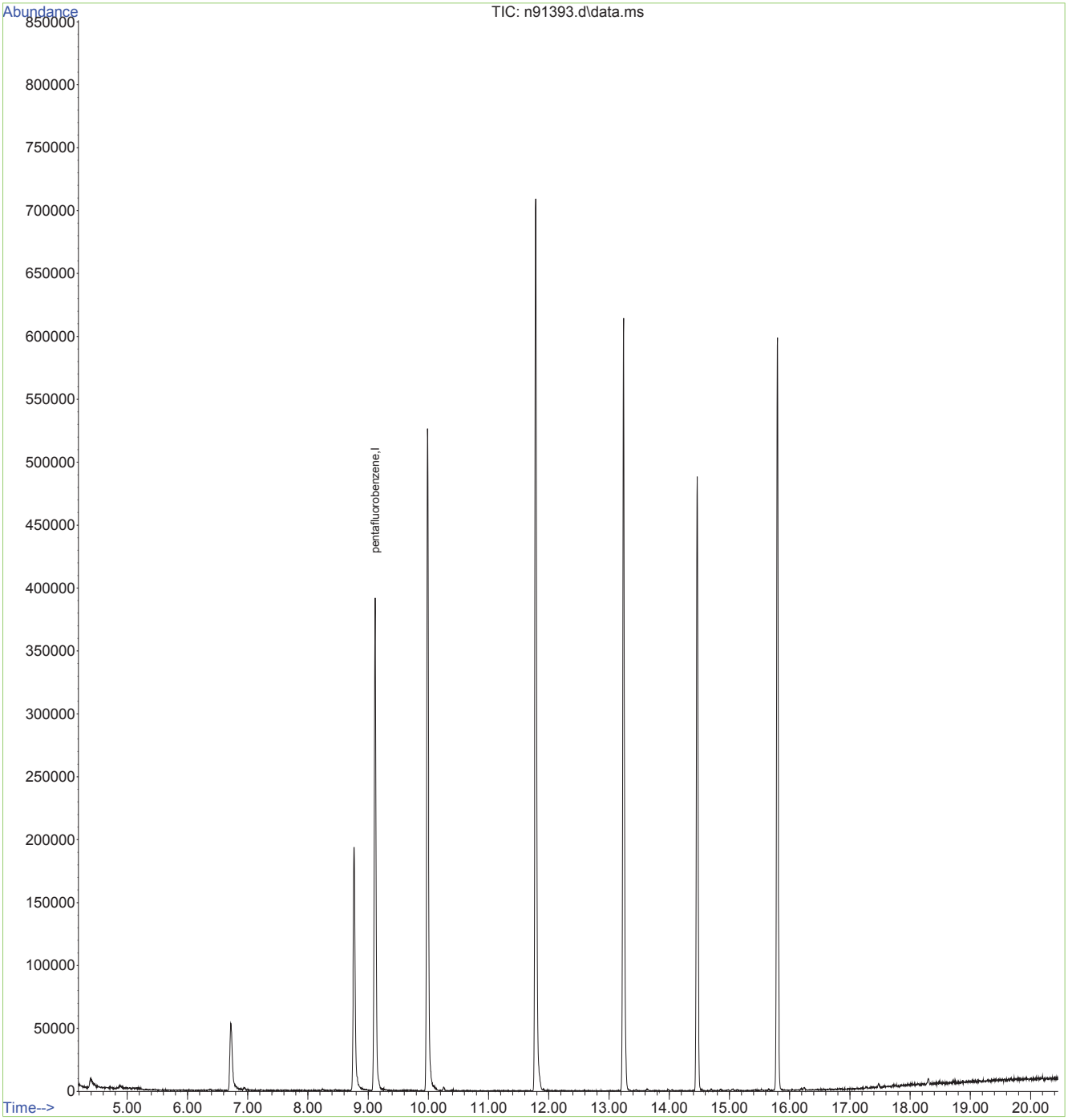
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.115	168	274809	50.00	ug/L	0.00
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141020\
Data File : n91393.d
Acq On : 20 Oct 2014 10:32 am
Operator : tomaszt
Sample : mb
Misc : ms33003,MSN3380,,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Oct 27 12:42:46 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141020\
Data File : n91412.d
Acq On : 20 Oct 2014 7:30 pm
Operator : tomaszt
Sample : mc34192-9ms
Misc : ms33003,MSN3380,,,,5,5
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Oct 27 12:43:25 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration

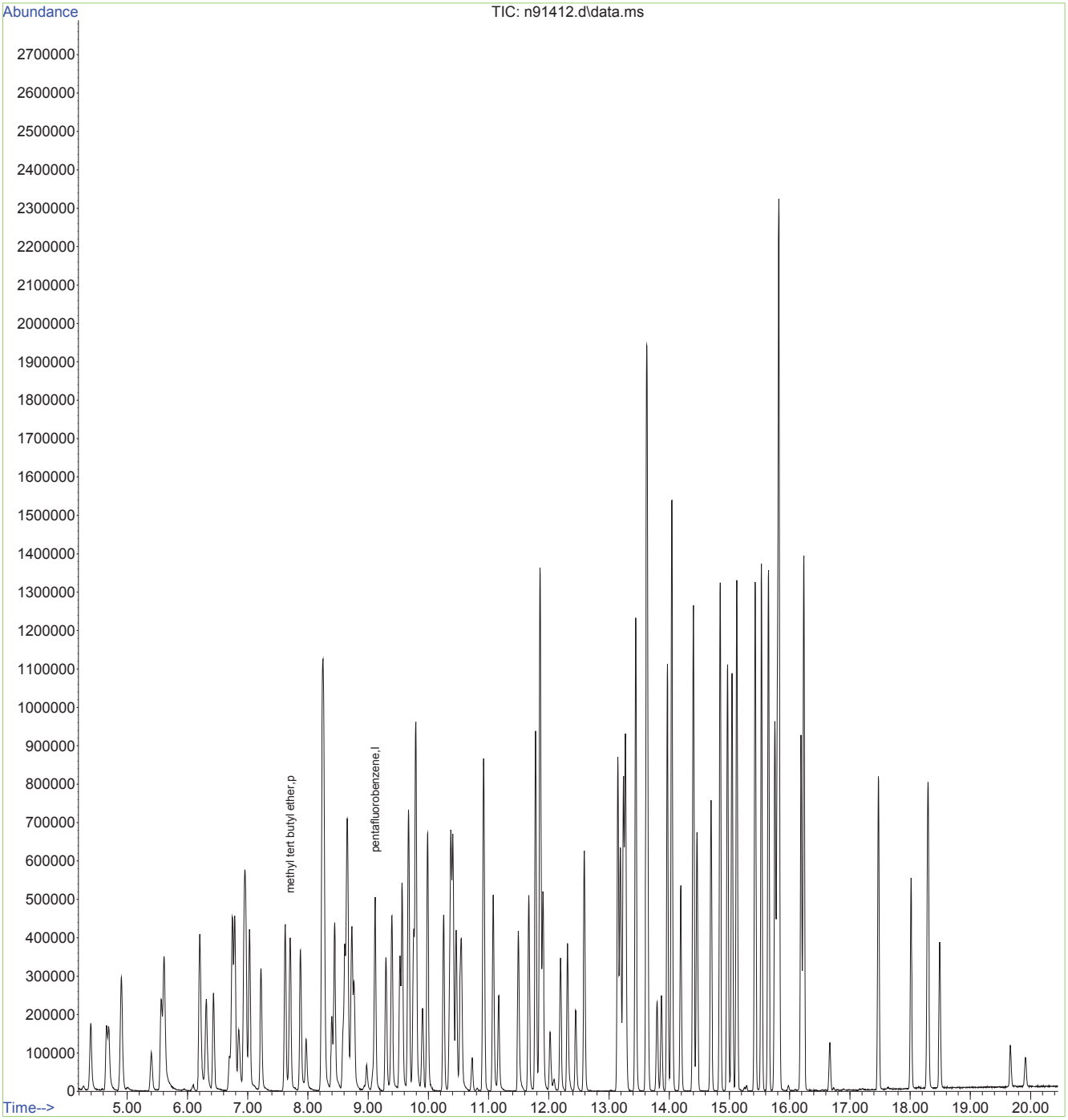
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.115	168	346065	50.00	ug/L	0.00
Target Compounds						Qvalue
2) methyl tert butyl ether	7.705	73	389258	45.75	ug/L	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141020\
Data File : n91412.d
Acq On : 20 Oct 2014 7:30 pm
Operator : tomaszt
Sample : mc34192-9ms
Misc : ms33003,MSN3380,,,,5,5
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Oct 27 12:43:25 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141020\
Data File : n91413.d
Acq On : 20 Oct 2014 7:58 pm
Operator : tomaszt
Sample : mc34192-9msd
Misc : ms33003,MSN3380,,,,5,5
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Oct 27 12:43:27 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration

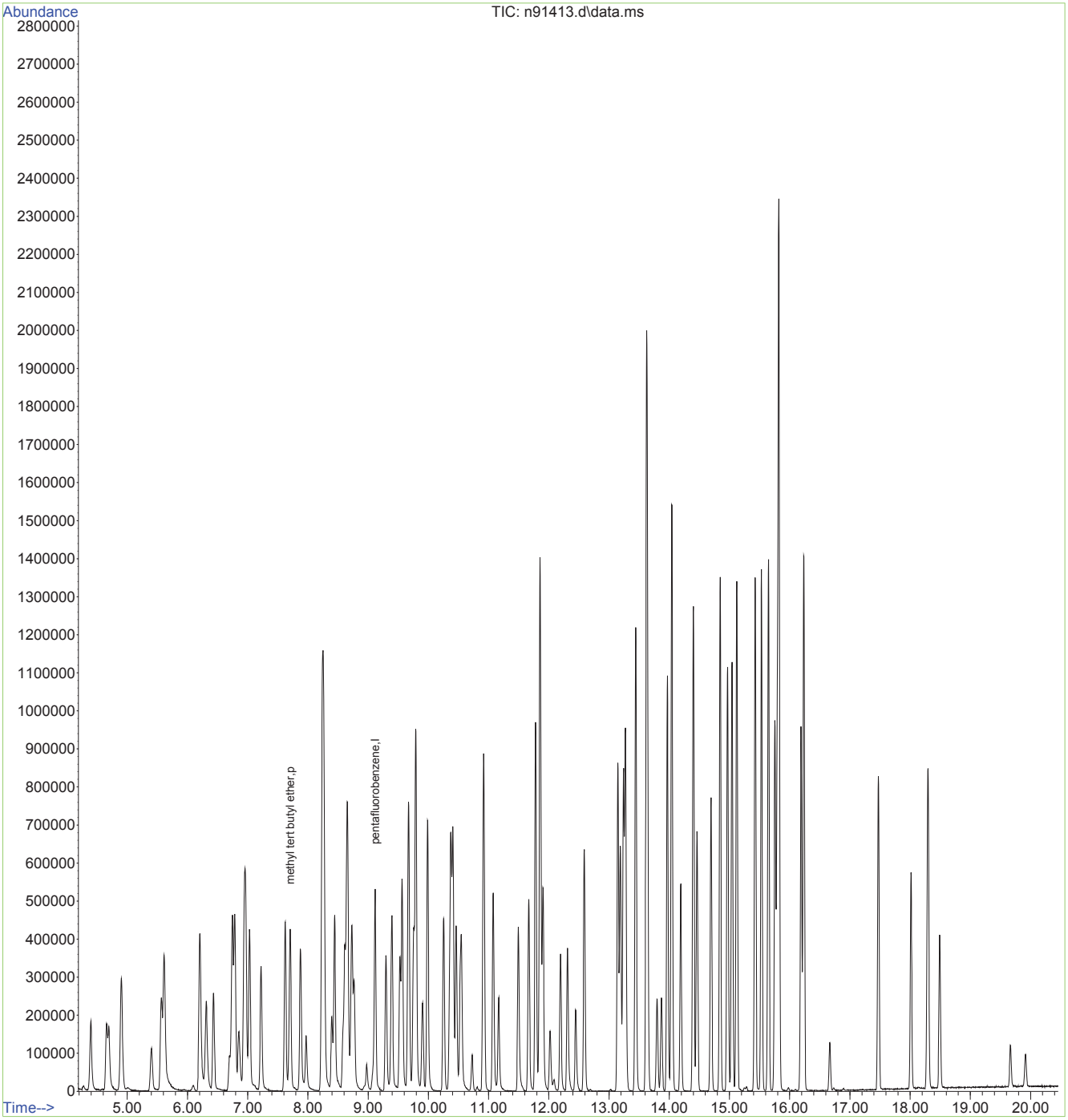
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.115	168	364543	50.00	ug/L	0.00
Target Compounds						Qvalue
2) methyl tert butyl ether	7.705	73	416209	46.44	ug/L	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141020\
Data File : n91413.d
Acq On : 20 Oct 2014 7:58 pm
Operator : tomaszt
Sample : mc34192-9msd
Misc : ms33003,MSN3380,,,,5,5
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Oct 27 12:43:27 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration



Internal Sample Tracking Chronicle

Shell Oil

Job No: MC34198

URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC34198-1 Collected: 08-OCT-14 09:45 By: MMSV Received: 09-OCT-14 By: MW6D-ROX-100814						
MC34198-1	SW846 8011	13-OCT-14 14:19	NK	12-OCT-14	MT	V8011SL
MC34198-1	SW846 8270D BY SIM	14-OCT-14 11:13	WK	11-OCT-14	PA	B8270SIMSL
MC34198-1	SW846 8270D	15-OCT-14 08:26	WK	10-OCT-14	PA	AB8270SL+
MC34198-1	SW846 8260C	20-OCT-14 13:51	TT			V8260SL+
MC34198-2 Collected: 08-OCT-14 09:45 By: MMSV Received: 09-OCT-14 By: MW6D-ROX-100814-DUP						
MC34198-2	SW846 8011	13-OCT-14 14:37	NK	12-OCT-14	MT	V8011SL
MC34198-2	SW846 8270D BY SIM	14-OCT-14 11:36	WK	11-OCT-14	PA	B8270SIMSL
MC34198-2	SW846 8270D	15-OCT-14 08:50	WK	10-OCT-14	PA	AB8270SL+
MC34198-2	SW846 8260C	20-OCT-14 14:19	TT			V8260SL+
MC34198-3 Collected: 08-OCT-14 10:50 By: MMSV Received: 09-OCT-14 By: MW6C-ROX-100814						
MC34198-3	SW846 8011	13-OCT-14 14:55	NK	12-OCT-14	MT	V8011SL
MC34198-3	SW846 8270D BY SIM	14-OCT-14 11:59	WK	11-OCT-14	PA	B8270SIMSL
MC34198-3	SW846 8270D	15-OCT-14 09:13	WK	10-OCT-14	PA	AB8270SL+
MC34198-3	SW846 8260C	20-OCT-14 14:47	TT			V8260SL+
MC34198-4 Collected: 08-OCT-14 11:40 By: MMSV Received: 09-OCT-14 By: MW6B-ROX-100814						
MC34198-4	SW846 8011	13-OCT-14 15:14	NK	12-OCT-14	MT	V8011SL
MC34198-4	SW846 8270D BY SIM	14-OCT-14 12:21	WK	11-OCT-14	PA	B8270SIMSL
MC34198-4	SW846 8270D	15-OCT-14 09:36	WK	10-OCT-14	PA	AB8270SL+
MC34198-4	SW846 8260C	20-OCT-14 15:15	TT			V8260SL+
MC34198-5 Collected: 08-OCT-14 12:05 By: MMSV Received: 09-OCT-14 By: MW6A-ROX-100814-EB						
MC34198-5	SW846 8011	13-OCT-14 15:32	NK	12-OCT-14	MT	V8011SL
MC34198-5	SW846 8270D BY SIM	14-OCT-14 12:44	WK	11-OCT-14	PA	B8270SIMSL
MC34198-5	SW846 8270D	15-OCT-14 09:59	WK	10-OCT-14	PA	AB8270SL+
MC34198-5	SW846 8260C	20-OCT-14 15:44	TT			V8260SL+

Internal Sample Tracking Chronicle

Shell Oil

Job No: MC34198

URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC34198-6 Collected: 08-OCT-14 12:55 By: MMSV Received: 09-OCT-14 By: MW6A-ROX-100814						
MC34198-6	SW846 8011	13-OCT-14 15:50	NK	12-OCT-14	MT	V8011SL
MC34198-6	SW846 8270D BY SIM	14-OCT-14 13:07	WK	11-OCT-14	PA	B8270SIMSL
MC34198-6	SW846 8270D	15-OCT-14 10:22	WK	10-OCT-14	PA	AB8270SL+
MC34198-6	SW846 8260C	20-OCT-14 16:12	TT			V8260SL+
MC34198-7 Collected: 08-OCT-14 14:55 By: MMSV Received: 09-OCT-14 By: MW24-ROX-100814						
MC34198-7	SW846 8011	13-OCT-14 16:27	NK	12-OCT-14	MT	V8011SL
MC34198-7	SW846 8270D BY SIM	14-OCT-14 13:29	WK	11-OCT-14	PA	B8270SIMSL
MC34198-7	SW846 8270D	15-OCT-14 10:46	WK	10-OCT-14	PA	AB8270SL+
MC34198-7	SW846 8260C	20-OCT-14 16:40	TT			V8260SL+
MC34198-8 Collected: 08-OCT-14 00:00 By: MMSV Received: 09-OCT-14 By: P54-ROX-100814						
MC34198-8	SW846 8011	13-OCT-14 16:46	NK	12-OCT-14	MT	V8011SL
MC34198-8	SW846 8270D BY SIM	14-OCT-14 13:52	WK	11-OCT-14	PA	B8270SIMSL
MC34198-8	SW846 8270D	15-OCT-14 11:09	WK	10-OCT-14	PA	AB8270SL+
MC34198-8	SW846 8260C	20-OCT-14 17:08	TT			V8260SL+
MC34198-9 Collected: 08-OCT-14 00:00 By: MMSV Received: 09-OCT-14 By: TB-ROX-100814-HCL						
MC34198-9	SW846 8260C	20-OCT-14 11:57	TT			V8260SL+
MC34198-10 Collected: 08-OCT-14 00:00 By: MMSV Received: 09-OCT-14 By: TB-ROX-100814-ST						
MC34198-10	SW846 8011	13-OCT-14 17:04	NK	12-OCT-14	MT	V8011SL

SGS Accutest Internal Chain of Custody

Job Number: MC34198
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL
Received: 10/09/14

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC34198-1.1	Walk In Ref #22	Thomas Abruzzise	10/09/14 19:27	Retrieve from Storage
MC34198-1.1	Thomas Abruzzise	Walk In Ref #22	10/09/14 19:39	Return to Storage
MC34198-1.1	Walk In Ref #22	Alireza Zeighami	10/10/14 07:08	Retrieve from Storage
MC34198-1.1	Alireza Zeighami		10/14/14 07:27	Depleted
MC34198-1.4	VOC Ref #2	Tomasz Torski	10/20/14 09:51	Retrieve from Storage
MC34198-1.4	Tomasz Torski	GCMSN	10/20/14 09:51	Load on Instrument
MC34198-1.4	GCMSN	Jaclyn Bergeron	10/21/14 09:31	Unload from Instrument
MC34198-1.4	Jaclyn Bergeron	VOC Ref #2	10/21/14 09:31	Return to Storage
MC34198-1.4	Scott Parsick		12/18/14 12:16	Disposed
MC34198-1.6	VOC Ref #2	Marc Tahtamoni	10/12/14 18:46	Retrieve from Storage
MC34198-1.6	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34198-2.1	Walk In Ref #22	Alireza Zeighami	10/10/14 07:08	Retrieve from Storage
MC34198-2.1	Alireza Zeighami		10/14/14 07:27	Depleted
MC34198-2.2	Walk In Ref #22	Thomas Abruzzise	10/09/14 19:27	Retrieve from Storage
MC34198-2.2	Thomas Abruzzise	Walk In Ref #22	10/09/14 19:39	Return to Storage
MC34198-2.2	Scott Parsick		12/18/14 12:16	Disposed
MC34198-2.3	VOC Ref #2	Tomasz Torski	10/20/14 09:51	Retrieve from Storage
MC34198-2.3	Tomasz Torski	GCMSN	10/20/14 09:51	Load on Instrument
MC34198-2.3	GCMSN	Jaclyn Bergeron	10/21/14 09:31	Unload from Instrument
MC34198-2.3	Jaclyn Bergeron	VOC Ref #2	10/21/14 09:31	Return to Storage
MC34198-2.3	Scott Parsick		12/18/14 12:16	Disposed
MC34198-2.6	VOC Ref #2	Marc Tahtamoni	10/12/14 18:46	Retrieve from Storage
MC34198-2.6	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34198-3.1	Walk In Ref #22	Thomas Abruzzise	10/09/14 19:27	Retrieve from Storage
MC34198-3.1	Thomas Abruzzise	Walk In Ref #22	10/09/14 19:39	Return to Storage
MC34198-3.1	Walk In Ref #22	Alireza Zeighami	10/10/14 07:08	Retrieve from Storage
MC34198-3.1	Alireza Zeighami		10/14/14 07:27	Depleted
MC34198-3.4	VOC Ref #2	Tomasz Torski	10/20/14 09:51	Retrieve from Storage
MC34198-3.4	Tomasz Torski	GCMSN	10/20/14 09:51	Load on Instrument
MC34198-3.4	GCMSN	Jaclyn Bergeron	10/21/14 09:31	Unload from Instrument
MC34198-3.4	Jaclyn Bergeron	VOC Ref #2	10/21/14 09:31	Return to Storage
MC34198-3.4	Scott Parsick		12/18/14 12:16	Disposed
MC34198-3.5	VOC Ref #2	Marc Tahtamoni	10/12/14 18:46	Retrieve from Storage
MC34198-3.5	Marc Tahtamoni		11/11/14 17:36	Depleted

SGS Accutest Internal Chain of Custody

Job Number: MC34198
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL
Received: 10/09/14

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC34198-4.1	Walk In Ref #22	Alireza Zeighami	10/10/14 07:08	Retrieve from Storage
MC34198-4.1	Alireza Zeighami		10/14/14 07:27	Depleted
MC34198-4.2	Walk In Ref #22	Thomas Abruzzise	10/09/14 19:27	Retrieve from Storage
MC34198-4.2	Thomas Abruzzise	Walk In Ref #22	10/09/14 19:39	Return to Storage
MC34198-4.2	Scott Parsick		12/18/14 12:16	Disposed
MC34198-4.3	VOC Ref #2	Tomasz Torski	10/20/14 09:51	Retrieve from Storage
MC34198-4.3	Tomasz Torski	GCMSN	10/20/14 09:51	Load on Instrument
MC34198-4.3	GCMSN	Jaclyn Bergeron	10/21/14 09:31	Unload from Instrument
MC34198-4.3	Jaclyn Bergeron	VOC Ref #2	10/21/14 09:31	Return to Storage
MC34198-4.3	Scott Parsick		12/18/14 12:16	Disposed
MC34198-4.5	VOC Ref #2	Marc Tahtamoni	10/12/14 18:46	Retrieve from Storage
MC34198-4.5	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34198-5.1	Walk In Ref #22	Alireza Zeighami	10/10/14 07:08	Retrieve from Storage
MC34198-5.1	Alireza Zeighami		10/14/14 07:27	Depleted
MC34198-5.2	Walk In Ref #22	Thomas Abruzzise	10/09/14 19:27	Retrieve from Storage
MC34198-5.2	Thomas Abruzzise	Walk In Ref #22	10/09/14 19:39	Return to Storage
MC34198-5.2	Scott Parsick		12/18/14 12:16	Disposed
MC34198-5.3	VOC Ref #2	Tomasz Torski	10/20/14 09:51	Retrieve from Storage
MC34198-5.3	Tomasz Torski	GCMSN	10/20/14 09:51	Load on Instrument
MC34198-5.3	GCMSN	Jaclyn Bergeron	10/21/14 09:31	Unload from Instrument
MC34198-5.3	Jaclyn Bergeron	VOC Ref #2	10/21/14 09:31	Return to Storage
MC34198-5.3	Scott Parsick		12/18/14 12:16	Disposed
MC34198-5.6	VOC Ref #2	Marc Tahtamoni	10/12/14 18:46	Retrieve from Storage
MC34198-5.6	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34198-6.1	Walk In Ref #22	Alireza Zeighami	10/10/14 07:08	Retrieve from Storage
MC34198-6.1	Alireza Zeighami		10/14/14 07:27	Depleted
MC34198-6.2	Walk In Ref #22	Thomas Abruzzise	10/09/14 19:27	Retrieve from Storage
MC34198-6.2	Thomas Abruzzise	Walk In Ref #22	10/09/14 19:39	Return to Storage
MC34198-6.2	Scott Parsick		12/18/14 12:16	Disposed
MC34198-6.3	VOC Ref #2	Tomasz Torski	10/20/14 09:51	Retrieve from Storage
MC34198-6.3	Tomasz Torski	GCMSN	10/20/14 09:51	Load on Instrument
MC34198-6.3	GCMSN	Jaclyn Bergeron	10/21/14 09:31	Unload from Instrument
MC34198-6.3	Jaclyn Bergeron	VOC Ref #2	10/21/14 09:31	Return to Storage
MC34198-6.3	Scott Parsick		12/18/14 12:16	Disposed

SGS Accutest Internal Chain of Custody

Job Number: MC34198
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL
Received: 10/09/14

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC34198-6.5	VOC Ref #2	Marc Tahtamoni	10/12/14 18:46	Retrieve from Storage
MC34198-6.5	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34198-7.1	Walk In Ref #22	Alireza Zeighami	10/10/14 07:08	Retrieve from Storage
MC34198-7.1	Alireza Zeighami		10/14/14 07:27	Depleted
MC34198-7.2	Walk In Ref #22	Thomas Abruzzise	10/09/14 19:27	Retrieve from Storage
MC34198-7.2	Thomas Abruzzise	Walk In Ref #22	10/09/14 19:39	Return to Storage
MC34198-7.2	Scott Parsick		12/18/14 12:16	Disposed
MC34198-7.4	VOC Ref #2	Tomasz Torski	10/20/14 09:51	Retrieve from Storage
MC34198-7.4	Tomasz Torski	GCMSN	10/20/14 09:51	Load on Instrument
MC34198-7.4	GCMSN	Jaclyn Bergeron	10/21/14 09:31	Unload from Instrument
MC34198-7.4	Jaclyn Bergeron	VOC Ref #2	10/21/14 09:31	Return to Storage
MC34198-7.4	Scott Parsick		12/18/14 12:16	Disposed
MC34198-7.6	VOC Ref #2	Marc Tahtamoni	10/12/14 18:46	Retrieve from Storage
MC34198-7.6	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34198-8.1	Walk In Ref #22	Thomas Abruzzise	10/09/14 19:27	Retrieve from Storage
MC34198-8.1	Thomas Abruzzise	Walk In Ref #22	10/09/14 19:39	Return to Storage
MC34198-8.1	Walk In Ref #22	Alireza Zeighami	10/10/14 07:08	Retrieve from Storage
MC34198-8.1	Alireza Zeighami		10/14/14 07:27	Depleted
MC34198-8.3	VOC Ref #2	Tomasz Torski	10/20/14 09:51	Retrieve from Storage
MC34198-8.3	Tomasz Torski	GCMSN	10/20/14 09:51	Load on Instrument
MC34198-8.3	GCMSN	Jaclyn Bergeron	10/21/14 09:31	Unload from Instrument
MC34198-8.3	Jaclyn Bergeron	VOC Ref #2	10/21/14 09:31	Return to Storage
MC34198-8.3	Scott Parsick		12/18/14 12:16	Disposed
MC34198-8.5	VOC Ref #2	Marc Tahtamoni	10/12/14 18:46	Retrieve from Storage
MC34198-8.5	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34198-9.2	VOC Ref #2	Tomasz Torski	10/20/14 09:51	Retrieve from Storage
MC34198-9.2	Tomasz Torski	GCMSN	10/20/14 09:51	Load on Instrument
MC34198-9.2	GCMSN	Jaclyn Bergeron	10/21/14 09:31	Unload from Instrument
MC34198-9.2	Jaclyn Bergeron	VOC Ref #2	10/21/14 09:31	Return to Storage
MC34198-9.2	Scott Parsick		12/18/14 12:16	Disposed
MC34198-10.1	VOC Ref #2	Marc Tahtamoni	10/12/14 18:46	Retrieve from Storage
MC34198-10.1	Marc Tahtamoni		11/11/14 17:36	Depleted

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: MC34198
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN3380-MB	N91393.D	1	10/20/14	TT	n/a	n/a	MSN3380

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34198-1, MC34198-2, MC34198-3, MC34198-4, MC34198-5, MC34198-6, MC34198-7, MC34198-8, MC34198-9

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	10	ug/l	
107-02-8	Acrolein	ND	25	ug/l	
107-13-1	Acrylonitrile	ND	5.0	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
74-97-5	Bromochloromethane	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	

Method Blank Summary

Job Number: MC34198
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN3380-MB	N91393.D	1	10/20/14	TT	n/a	n/a	MSN3380

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34198-1, MC34198-2, MC34198-3, MC34198-4, MC34198-5, MC34198-6, MC34198-7, MC34198-8, MC34198-9

CAS No.	Compound	Result	RL	Units	Q
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	1.0	ug/l	

Method Blank Summary

Job Number: MC34198
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN3380-MB	N91393.D	1	10/20/14	TT	n/a	n/a	MSN3380

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34198-1, MC34198-2, MC34198-3, MC34198-4, MC34198-5, MC34198-6, MC34198-7, MC34198-8, MC34198-9

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	97%	70-130%
2037-26-5	Toluene-D8	100%	70-130%
460-00-4	4-Bromofluorobenzene	99%	70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC34198
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN3380-BS	N91390.D	1	10/20/14	TT	n/a	n/a	MSN3380
MSN3380-BSD	N91391.D	1	10/20/14	TT	n/a	n/a	MSN3380

The QC reported here applies to the following samples: Method: SW846 8260C

MC34198-1, MC34198-2, MC34198-3, MC34198-4, MC34198-5, MC34198-6, MC34198-7, MC34198-8, MC34198-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	50	42.7	85	40.7	81	5	70-130/20
107-02-8	Acrolein	250	285	114	280	112	2	70-130/20
107-13-1	Acrylonitrile	50	53.2	106	49.9	100	6	70-130/20
71-43-2	Benzene	50	48.4	97	47.8	96	1	70-130/20
108-86-1	Bromobenzene	50	57.1	114	56.0	112	2	70-130/20
74-97-5	Bromochloromethane	50	53.6	107	55.1	110	3	70-130/20
75-27-4	Bromodichloromethane	50	55.0	110	54.6	109	1	70-130/20
75-25-2	Bromoform	50	57.3	115	57.8	116	1	70-130/20
74-83-9	Bromomethane	50	63.3	127	62.9	126	1	70-130/20
78-93-3	2-Butanone (MEK)	50	51.8	104	51.5	103	1	70-130/20
104-51-8	n-Butylbenzene	50	62.9	126	62.4	125	1	70-130/20
135-98-8	sec-Butylbenzene	50	60.4	121	60.4	121	0	70-130/20
98-06-6	tert-Butylbenzene	50	58.5	117	58.1	116	1	70-130/20
75-15-0	Carbon disulfide	50	48.5	97	49.1	98	1	70-130/20
56-23-5	Carbon tetrachloride	50	55.4	111	55.2	110	0	70-130/20
108-90-7	Chlorobenzene	50	53.1	106	54.0	108	2	70-130/20
75-00-3	Chloroethane	50	63.5	127	64.1	128	1	70-130/20
110-75-8	2-Chloroethyl vinyl ether	50	59.6	119	58.3	117	2	70-130/20
67-66-3	Chloroform	50	50.1	100	49.9	100	0	70-130/20
74-87-3	Chloromethane	50	56.1	112	53.1	106	5	70-130/20
95-49-8	o-Chlorotoluene	50	55.9	112	56.5	113	1	70-130/20
106-43-4	p-Chlorotoluene	50	55.4	111	55.8	112	1	70-130/20
124-48-1	Dibromochloromethane	50	58.9	118	58.5	117	1	70-130/20
95-50-1	1,2-Dichlorobenzene	50	59.9	120	59.8	120	0	70-130/20
541-73-1	1,3-Dichlorobenzene	50	58.2	116	57.4	115	1	70-130/20
106-46-7	1,4-Dichlorobenzene	50	61.2	122	62.4	125	2	70-130/20
75-71-8	Dichlorodifluoromethane	50	51.2	102	52.2	104	2	70-130/20
75-34-3	1,1-Dichloroethane	50	50.3	101	50.9	102	1	70-130/20
107-06-2	1,2-Dichloroethane	50	48.4	97	47.4	95	2	70-130/20
75-35-4	1,1-Dichloroethene	50	54.3	109	53.6	107	1	70-130/20
156-59-2	cis-1,2-Dichloroethene	50	50.2	100	50.8	102	1	70-130/20
156-60-5	trans-1,2-Dichloroethene	50	50.0	100	49.5	99	1	70-130/20
78-87-5	1,2-Dichloropropane	50	58.8	118	57.6	115	2	70-130/20
142-28-9	1,3-Dichloropropane	50	57.9	116	57.9	116	0	70-130/20
594-20-7	2,2-Dichloropropane	50	56.4	113	56.8	114	1	70-130/20
563-58-6	1,1-Dichloropropene	50	60.2	120	59.3	119	2	70-130/20

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC34198
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN3380-BS	N91390.D	1	10/20/14	TT	n/a	n/a	MSN3380
MSN3380-BSD	N91391.D	1	10/20/14	TT	n/a	n/a	MSN3380

The QC reported here applies to the following samples: Method: SW846 8260C

MC34198-1, MC34198-2, MC34198-3, MC34198-4, MC34198-5, MC34198-6, MC34198-7, MC34198-8, MC34198-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
10061-01-5	cis-1,3-Dichloropropene	50	59.1	118	58.3	117	1	70-130/20
10061-02-6	trans-1,3-Dichloropropene	50	61.1	122	60.8	122	0	70-130/20
123-91-1	1,4-Dioxane	125	126	101	131	105	4	70-130/20
97-63-2	Ethyl methacrylate	50	53.3	107	54.1	108	1	77-137/20
100-41-4	Ethylbenzene	50	55.5	111	55.1	110	1	70-130/20
87-68-3	Hexachlorobutadiene	50	64.0	128	63.5	127	1	70-130/20
591-78-6	2-Hexanone	50	53.3	107	50.9	102	5	70-130/20
98-82-8	Isopropylbenzene	50	57.8	116	58.4	117	1	70-130/20
99-87-6	p-Isopropyltoluene	50	60.8	122	61.2	122	1	70-130/20
1634-04-4	Methyl Tert Butyl Ether	50	39.7	79	41.2	82	1	70-130/20
108-10-1	4-Methyl-2-pentanone (MIBK)	50	50.4	101	49.3	99	2	70-130/20
74-95-3	Methylene bromide	50	54.0	108	53.5	107	1	70-130/20
75-09-2	Methylene chloride	50	49.2	98	49.2	98	0	70-130/20
91-20-3	Naphthalene	50	65.6	131* [a]	67.6	135* [a]	3	70-130/20
103-65-1	n-Propylbenzene	50	59.8	120	59.7	119	0	70-130/20
100-42-5	Styrene	50	61.9	124	61.5	123	1	70-130/20
630-20-6	1,1,1,2-Tetrachloroethane	50	57.8	116	56.8	114	2	70-130/20
79-34-5	1,1,2,2-Tetrachloroethane	50	59.7	119	58.7	117	2	70-130/20
127-18-4	Tetrachloroethene	50	56.5	113	55.3	111	2	70-130/20
108-88-3	Toluene	50	52.5	105	52.3	105	0	70-130/20
87-61-6	1,2,3-Trichlorobenzene	50	62.4	125	65.5	131* [a]	5	70-130/25
120-82-1	1,2,4-Trichlorobenzene	50	64.6	129	66.2	132* [a]	2	70-130/20
71-55-6	1,1,1-Trichloroethane	50	58.5	117	59.2	118	1	70-130/20
79-00-5	1,1,2-Trichloroethane	50	51.0	102	51.1	102	0	70-130/20
79-01-6	Trichloroethene	50	49.2	98	48.3	97	2	70-130/20
75-69-4	Trichlorofluoromethane	50	48.1	96	48.7	97	1	70-130/20
96-18-4	1,2,3-Trichloropropane	50	55.6	111	56.0	112	1	70-130/20
95-63-6	1,2,4-Trimethylbenzene	50	52.8	106	53.4	107	1	70-130/20
108-67-8	1,3,5-Trimethylbenzene	50	51.1	102	51.5	103	1	70-130/20
108-05-4	Vinyl Acetate	50	51.8	104	50.6	101	2	70-130/20
75-01-4	Vinyl chloride	50	59.3	119	60.1	120	1	70-130/20
	m,p-Xylene	100	106	106	105	105	1	70-130/20
95-47-6	o-Xylene	50	54.4	109	53.9	108	1	70-130/20
1330-20-7	Xylene (total)	150	160	107	159	106	1	70-130/20

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC34198
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN3380-BS	N91390.D	1	10/20/14	TT	n/a	n/a	MSN3380
MSN3380-BSD	N91391.D	1	10/20/14	TT	n/a	n/a	MSN3380

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34198-1, MC34198-2, MC34198-3, MC34198-4, MC34198-5, MC34198-6, MC34198-7, MC34198-8, MC34198-9

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	97%	96%	70-130%
2037-26-5	Toluene-D8	105%	103%	70-130%
460-00-4	4-Bromofluorobenzene	93%	93%	70-130%

(a) Outside control limits. Blank Spike meets program technical requirements.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34198
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34192-9MS	N91412.D	5	10/20/14	TT	n/a	n/a	MSN3380
MC34192-9MSD	N91413.D	5	10/20/14	TT	n/a	n/a	MSN3380
MC34192-9	N91399.D	1	10/20/14	TT	n/a	n/a	MSN3380

The QC reported here applies to the following samples: Method: SW846 8260C

MC34198-1, MC34198-2, MC34198-3, MC34198-4, MC34198-5, MC34198-6, MC34198-7, MC34198-8, MC34198-9

CAS No.	Compound	MC34192-9 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		250	109	44* [a]	250	120	48* [a]	10	70-130/30
107-02-8	Acrolein	ND		1250	1350	108	1250	1330	106	1	70-130/30
107-13-1	Acrylonitrile	ND		250	254	102	250	240	96	6	70-130/30
71-43-2	Benzene	10.9		250	266	102	250	245	94	8	70-130/30
108-86-1	Bromobenzene	ND		250	265	106	250	260	104	2	70-130/30
74-97-5	Bromochloromethane	ND		250	261	104	250	261	104	0	70-130/30
75-27-4	Bromodichloromethane	ND		250	252	101	250	245	98	3	70-130/30
75-25-2	Bromoform	ND		250	261	104	250	272	109	4	70-130/30
74-83-9	Bromomethane	ND		250	256	102	250	284	114	10	70-130/30
78-93-3	2-Butanone (MEK)	ND		250	213	85	250	213	85	0	70-130/30
104-51-8	n-Butylbenzene	ND		250	269	108	250	272	109	1	70-130/30
135-98-8	sec-Butylbenzene	ND		250	273	109	250	271	108	1	70-130/30
98-06-6	tert-Butylbenzene	ND		250	258	103	250	258	103	0	70-130/30
75-15-0	Carbon disulfide	ND		250	259	104	250	252	101	3	70-130/30
56-23-5	Carbon tetrachloride	ND		250	249	100	250	243	97	2	70-130/30
108-90-7	Chlorobenzene	ND		250	244	98	250	249	100	2	70-130/30
75-00-3	Chloroethane	ND		250	314	126	250	305	122	3	70-130/30
110-75-8	2-Chloroethyl vinyl ether	ND		250	278	111	250	273	109	2	70-130/30
67-66-3	Chloroform	ND		250	230	92	250	224	90	3	70-130/30
74-87-3	Chloromethane	ND		250	218	87	250	217	87	0	70-130/30
95-49-8	o-Chlorotoluene	ND		250	259	104	250	255	102	2	70-130/30
106-43-4	p-Chlorotoluene	ND		250	254	102	250	253	101	0	70-130/30
124-48-1	Dibromochloromethane	ND		250	259	104	250	270	108	4	70-130/30
95-50-1	1,2-Dichlorobenzene	ND		250	280	112	250	278	111	1	70-130/30
541-73-1	1,3-Dichlorobenzene	ND		250	266	106	250	265	106	0	70-130/30
106-46-7	1,4-Dichlorobenzene	ND		250	287	115	250	287	115	0	70-130/30
75-71-8	Dichlorodifluoromethane	ND		250	243	97	250	232	93	5	70-130/30
75-34-3	1,1-Dichloroethane	ND		250	238	95	250	234	94	2	70-130/30
107-06-2	1,2-Dichloroethane	ND		250	226	90	250	215	86	5	70-130/30
75-35-4	1,1-Dichloroethene	ND		250	266	106	250	273	109	3	70-130/30
156-59-2	cis-1,2-Dichloroethene	ND		250	241	96	250	237	95	2	70-130/30
156-60-5	trans-1,2-Dichloroethene	ND		250	243	97	250	241	96	1	70-130/30
78-87-5	1,2-Dichloropropane	ND		250	275	110	250	269	108	2	70-130/30
142-28-9	1,3-Dichloropropane	ND		250	260	104	250	272	109	5	70-130/30
594-20-7	2,2-Dichloropropane	ND		250	248	99	250	242	97	2	70-130/30
563-58-6	1,1-Dichloropropene	ND		250	275	110	250	273	109	1	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34198
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34192-9MS	N91412.D	5	10/20/14	TT	n/a	n/a	MSN3380
MC34192-9MSD	N91413.D	5	10/20/14	TT	n/a	n/a	MSN3380
MC34192-9	N91399.D	1	10/20/14	TT	n/a	n/a	MSN3380

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34198-1, MC34198-2, MC34198-3, MC34198-4, MC34198-5, MC34198-6, MC34198-7, MC34198-8, MC34198-9

CAS No.	Compound	MC34192-9 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-01-5	cis-1,3-Dichloropropene	ND		250	280	112	250	269	108	4	70-130/30
10061-02-6	trans-1,3-Dichloropropene	ND		250	291	116	250	279	112	4	70-130/30
123-91-1	1,4-Dioxane	ND		625	649	104	625	630	101	3	70-130/30
97-63-2	Ethyl methacrylate	ND		250	274	110	250	264	106	4	72-139/30
100-41-4	Ethylbenzene	5.8		250	249	97	250	252	98	1	70-130/30
87-68-3	Hexachlorobutadiene	ND		250	261	104	250	275	110	5	70-130/30
591-78-6	2-Hexanone	ND		250	194	78	250	203	81	5	70-130/30
98-82-8	Isopropylbenzene	0.45		250	270	108	250	266	106	1	70-130/30
99-87-6	p-Isopropyltoluene	ND		250	274	110	250	272	109	1	70-130/30
1634-04-4	Methyl Tert Butyl Ether	ND		250	229	92	250	232	93	1	70-130/30
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		250	242	97	250	232	93	4	70-130/30
74-95-3	Methylene bromide	ND		250	259	104	250	252	101	3	70-130/30
75-09-2	Methylene chloride	ND		250	249	100	250	237	95	5	70-130/30
91-20-3	Naphthalene	ND		250	329	132* [a]	250	331	132* [a]	1	70-130/30
103-65-1	n-Propylbenzene	ND		250	269	108	250	266	106	1	70-130/30
100-42-5	Styrene	ND		250	275	110	250	279	112	1	70-130/30
630-20-6	1,1,1,2-Tetrachloroethane	ND		250	254	102	250	261	104	3	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	293	117	250	290	116	1	70-130/30
127-18-4	Tetrachloroethene	ND		250	245	98	250	254	102	4	70-130/30
108-88-3	Toluene	ND		250	251	100	250	243	97	3	70-130/30
87-61-6	1,2,3-Trichlorobenzene	ND		250	283	113	250	296	118	4	70-130/30
120-82-1	1,2,4-Trichlorobenzene	ND		250	285	114	250	302	121	6	70-130/30
71-55-6	1,1,1-Trichloroethane	ND		250	272	109	250	262	105	4	70-130/30
79-00-5	1,1,2-Trichloroethane	ND		250	246	98	250	233	93	5	70-130/30
79-01-6	Trichloroethene	ND		250	234	94	250	226	90	3	70-130/30
75-69-4	Trichlorofluoromethane	ND		250	242	97	250	233	93	4	70-130/30
96-18-4	1,2,3-Trichloropropane	ND		250	272	109	250	273	109	0	70-130/30
95-63-6	1,2,4-Trimethylbenzene	1.5		250	249	99	250	245	97	2	70-130/30
108-67-8	1,3,5-Trimethylbenzene	0.77		250	235	94	250	236	94	0	70-130/30
108-05-4	Vinyl Acetate	ND		250	244	98	250	242	97	1	70-130/30
75-01-4	Vinyl chloride	ND		250	269	108	250	260	104	3	70-130/30
	m,p-Xylene	20.6		500	487	93	500	496	95	2	70-130/30
95-47-6	o-Xylene	ND		250	243	97	250	248	99	2	70-130/30
1330-20-7	Xylene (total)	20.6		750	730	95	750	744	96	2	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34198
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34192-9MS	N91412.D	5	10/20/14	TT	n/a	n/a	MSN3380
MC34192-9MSD	N91413.D	5	10/20/14	TT	n/a	n/a	MSN3380
MC34192-9	N91399.D	1	10/20/14	TT	n/a	n/a	MSN3380

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34198-1, MC34198-2, MC34198-3, MC34198-4, MC34198-5, MC34198-6, MC34198-7, MC34198-8, MC34198-9

CAS No.	Surrogate Recoveries	MS	MSD	MC34192-9	Limits
1868-53-7	Dibromofluoromethane	94%	93%	96%	70-130%
2037-26-5	Toluene-D8	103%	102%	100%	70-130%
460-00-4	4-Bromofluorobenzene	94%	94%	100%	70-130%

(a) Outside control limits due to possible matrix interference. Refer to Blank Spike.

* = Outside of Control Limits.

Volatile Internal Standard Area Summary

Job Number: MC34198
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSN3380-CC3345	**Injection Date:**	10/20/14
Lab File ID:	N91389.D	**Injection Time:**	08:39
Instrument ID:	GCMSN	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	290845	9.12	452768	9.98	243487	13.24	197114	15.79	84089	6.70
Upper Limit [a]	581690	9.62	905536	10.48	486974	13.74	394228	16.29	168178	7.20
Lower Limit [b]	145423	8.62	226384	9.48	121744	12.74	98557	15.29	42045	6.20

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSN3380-BS	303643	9.12	473980	9.98	246725	13.24	205358	15.79	96971	6.70
MSN3380-BSD	310801	9.11	492920	9.99	255067	13.24	210537	15.79	95843	6.70
MSN3380-MB	274809	9.12	433757	9.98	216809	13.24	158587	15.80	86083	6.72
ZZZZZZ	274106	9.11	428903	9.99	217333	13.24	157266	15.80	96726	6.72
ZZZZZZ	269783	9.12	413787	9.98	212643	13.24	152898	15.80	80047	6.72
MC34198-9	264715	9.12	407371	9.99	205989	13.24	149700	15.80	84231	6.72
ZZZZZZ	260380	9.11	404456	9.99	205158	13.24	147139	15.80	88423	6.71
ZZZZZZ	257944	9.12	393921	9.99	200765	13.24	143581	15.80	90509	6.72
MC34192-9	254439	9.12	397176	9.99	201467	13.24	148518	15.79	82305	6.72
MC34198-1	252448	9.12	391249	9.98	198385	13.24	144958	15.80	83192	6.71
MC34198-2	251696	9.12	392611	9.99	201447	13.24	145377	15.80	84242	6.71
MC34198-3	252351	9.12	387766	9.99	196406	13.24	142467	15.80	80581	6.72
MC34198-4	251062	9.12	390490	9.99	196492	13.24	145497	15.79	86309	6.71
MC34198-5	255375	9.11	391621	9.99	197899	13.24	142524	15.80	93025	6.71
MC34198-6	252657	9.12	397501	9.99	201158	13.24	149066	15.80	97913	6.71
MC34198-7	241685	9.12	382450	9.98	193768	13.24	140573	15.80	82235	6.72
MC34198-8	247471	9.12	384374	9.99	194449	13.24	139337	15.80	83512	6.71
ZZZZZZ	249443	9.11	535302	9.99	233174	13.24	161530	15.80	83062	6.71
ZZZZZZ	276323	9.12	575485	9.99	252440	13.24	175191	15.80	96846	6.71
ZZZZZZ	308968	9.11	523063	9.98	251319	13.24	218980	15.79	116792	6.71
ZZZZZZ	325646	9.12	589218	9.99	265517	13.24	220108	15.80	119968	6.71
MC34192-9MS	346065	9.12	535252	9.98	291078	13.24	229604	15.79	122003	6.70
MC34192-9MSD	364543	9.12	566062	9.99	289927	13.24	234786	15.79	124118	6.69

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary

Job Number: MC34198
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Method: SW846 8260C **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
MC34198-1	N91400.D	97	102	98
MC34198-2	N91401.D	99	102	100
MC34198-3	N91402.D	95	101	99
MC34198-4	N91403.D	97	101	99
MC34198-5	N91404.D	97	99	102
MC34198-6	N91405.D	100	100	101
MC34198-7	N91406.D	98	101	100
MC34198-8	N91407.D	99	102	101
MC34198-9	N91396.D	98	102	100
MC34192-9MS	N91412.D	94	103	94
MC34192-9MSD	N91413.D	93	102	94
MSN3380-BS	N91390.D	97	105	93
MSN3380-BSD	N91391.D	96	103	93
MSN3380-MB	N91393.D	97	100	99

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	70-130%
S2 = Toluene-D8	70-130%
S3 = 4-Bromofluorobenzene	70-130%

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: MC34198
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40145-MB	F76854.D	1	10/14/14	WK	10/10/14	OP40145	MSF3367

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34198-1, MC34198-2, MC34198-3, MC34198-4, MC34198-5, MC34198-6, MC34198-7, MC34198-8

CAS No.	Compound	Result	RL	Units	Q
65-85-0	Benzoic Acid	ND	10	ug/l	
95-57-8	2-Chlorophenol	ND	5.0	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	10	ug/l	
120-83-2	2,4-Dichlorophenol	ND	10	ug/l	
105-67-9	2,4-Dimethylphenol	ND	10	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	ug/l	
95-48-7	2-Methylphenol	ND	10	ug/l	
	3&4-Methylphenol	ND	10	ug/l	
88-75-5	2-Nitrophenol	ND	10	ug/l	
100-02-7	4-Nitrophenol	ND	20	ug/l	
87-86-5	Pentachlorophenol	ND	10	ug/l	
108-95-2	Phenol	ND	5.0	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	10	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	10	ug/l	
62-53-3	Aniline	ND	10	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.0	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.0	ug/l	
100-51-6	Benzyl Alcohol	ND	10	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	ug/l	
106-47-8	4-Chloroaniline	ND	10	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.0	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.0	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.0	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.0	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.0	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	10	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	10	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	ug/l	
132-64-9	Dibenzofuran	ND	2.0	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.0	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.0	ug/l	
84-66-2	Diethyl phthalate	ND	5.0	ug/l	
131-11-3	Dimethyl phthalate	ND	5.0	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	ug/l	
118-74-1	Hexachlorobenzene	ND	5.0	ug/l	

Method Blank Summary

Job Number: MC34198
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40145-MB	F76854.D	1	10/14/14	WK	10/10/14	OP40145	MSF3367

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34198-1, MC34198-2, MC34198-3, MC34198-4, MC34198-5, MC34198-6, MC34198-7, MC34198-8

CAS No.	Compound	Result	RL	Units	Q
77-47-4	Hexachlorocyclopentadiene	ND	10	ug/l	
67-72-1	Hexachloroethane	ND	5.0	ug/l	
78-59-1	Isophorone	ND	5.0	ug/l	
88-74-4	2-Nitroaniline	ND	10	ug/l	
99-09-2	3-Nitroaniline	ND	10	ug/l	
100-01-6	4-Nitroaniline	ND	10	ug/l	
98-95-3	Nitrobenzene	ND	5.0	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.0	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.0	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	ug/l	
110-86-1	Pyridine	ND	10	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	49%	15-110%
4165-62-2	Phenol-d5	32%	15-110%
118-79-6	2,4,6-Tribromophenol	97%	15-110%
4165-60-0	Nitrobenzene-d5	76%	30-130%
321-60-8	2-Fluorobiphenyl	77%	30-130%
1718-51-0	Terphenyl-d14	97%	30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

Method Blank Summary

Job Number: MC34198
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40146-MB	I92193.D	1	10/14/14	WK	10/11/14	OP40146	MSI3436

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

MC34198-1, MC34198-2, MC34198-3, MC34198-4, MC34198-5, MC34198-6, MC34198-7, MC34198-8

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	0.10	ug/l	
208-96-8	Acenaphthylene	ND	0.10	ug/l	
120-12-7	Anthracene	ND	0.10	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.050	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.050	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	ug/l	
218-01-9	Chrysene	ND	0.10	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	ug/l	
206-44-0	Fluoranthene	ND	0.10	ug/l	
86-73-7	Fluorene	ND	0.10	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	ug/l	
90-12-0	1-Methylnaphthalene	ND	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.0	ug/l	
85-01-8	Phenanthrene	ND	0.050	ug/l	
129-00-0	Pyrene	ND	0.10	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	54%	15-110%
4165-62-2	Phenol-d5	36%	15-110%
118-79-6	2,4,6-Tribromophenol	92%	15-110%
4165-60-0	Nitrobenzene-d5	87%	30-130%
321-60-8	2-Fluorobiphenyl	83%	30-130%
1718-51-0	Terphenyl-d14	95%	30-130%

Blank Spike Summary

Job Number: MC34198
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40145-BS	F76855.D	1	10/14/14	WK	10/10/14	OP40145	MSF3367

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34198-1, MC34198-2, MC34198-3, MC34198-4, MC34198-5, MC34198-6, MC34198-7, MC34198-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
65-85-0	Benzoic Acid	50	18.7	37	30-130
95-57-8	2-Chlorophenol	50	40.4	81	30-130
59-50-7	4-Chloro-3-methyl phenol	50	40.5	81	30-130
120-83-2	2,4-Dichlorophenol	50	42.4	85	30-130
105-67-9	2,4-Dimethylphenol	50	35.9	72	30-130
51-28-5	2,4-Dinitrophenol	50	52.3	105	30-130
534-52-1	4,6-Dinitro-o-cresol	50	54.7	109	30-130
95-48-7	2-Methylphenol	50	34.8	70	30-130
	3&4-Methylphenol	100	65.6	66	30-130
88-75-5	2-Nitrophenol	50	44.2	88	30-130
100-02-7	4-Nitrophenol	50	16.4	33	30-130
87-86-5	Pentachlorophenol	50	42.5	85	30-130
108-95-2	Phenol	50	16.2	32	30-130
95-95-4	2,4,5-Trichlorophenol	50	39.5	79	30-130
88-06-2	2,4,6-Trichlorophenol	50	40.4	81	30-130
62-53-3	Aniline	50	24.3	49	40-140
101-55-3	4-Bromophenyl phenyl ether	50	45.8	92	40-140
85-68-7	Butyl benzyl phthalate	50	52.8	106	40-140
100-51-6	Benzyl Alcohol	50	36.4	73	40-140
91-58-7	2-Chloronaphthalene	50	45.5	91	40-140
106-47-8	4-Chloroaniline	50	35.7	71	40-140
111-91-1	bis(2-Chloroethoxy)methane	50	40.8	82	40-140
111-44-4	bis(2-Chloroethyl)ether	50	42.7	85	40-140
108-60-1	bis(2-Chloroisopropyl)ether	50	51.2	102	40-140
7005-72-3	4-Chlorophenyl phenyl ether	50	42.0	84	40-140
122-66-7	1,2-Diphenylhydrazine	50	41.3	83	40-140
121-14-2	2,4-Dinitrotoluene	50	52.1	104	40-140
606-20-2	2,6-Dinitrotoluene	50	49.7	99	40-140
91-94-1	3,3'-Dichlorobenzidine	50	60.0	120	40-140
132-64-9	Dibenzofuran	50	41.4	83	40-140
84-74-2	Di-n-butyl phthalate	50	48.3	97	40-140
117-84-0	Di-n-octyl phthalate	50	45.0	90	40-140
84-66-2	Diethyl phthalate	50	45.9	92	40-140
131-11-3	Dimethyl phthalate	50	46.3	93	40-140
117-81-7	bis(2-Ethylhexyl)phthalate	50	54.2	108	40-140
118-74-1	Hexachlorobenzene	50	45.3	91	40-140

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34198
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40145-BS	F76855.D	1	10/14/14	WK	10/10/14	OP40145	MSF3367

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34198-1, MC34198-2, MC34198-3, MC34198-4, MC34198-5, MC34198-6, MC34198-7, MC34198-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
77-47-4	Hexachlorocyclopentadiene	50	28.0	56	40-140
67-72-1	Hexachloroethane	50	38.6	77	40-140
78-59-1	Isophorone	50	37.8	76	40-140
88-74-4	2-Nitroaniline	50	46.3	93	40-140
99-09-2	3-Nitroaniline	50	42.9	86	40-140
100-01-6	4-Nitroaniline	50	46.4	93	40-140
98-95-3	Nitrobenzene	50	39.8	80	40-140
62-75-9	n-Nitrosodimethylamine	50	29.6	59	40-140
621-64-7	N-Nitroso-di-n-propylamine	50	43.9	88	40-140
86-30-6	N-Nitrosodiphenylamine	50	44.1	88	40-140
110-86-1	Pyridine	50	15.1	30* [a]	40-140

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	50%	15-110%
4165-62-2	Phenol-d5	34%	15-110%
118-79-6	2,4,6-Tribromophenol	102%	15-110%
4165-60-0	Nitrobenzene-d5	79%	30-130%
321-60-8	2-Fluorobiphenyl	79%	30-130%
1718-51-0	Terphenyl-d14	96%	30-130%

(a) Outside control limits. Blank Spike meets program technical requirements.

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34198
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40146-BS	I92194.D	1	10/14/14	WK	10/11/14	OP40146	MSI3436

The QC reported here applies to the following samples: Method: SW846 8270D BY SIM

MC34198-1, MC34198-2, MC34198-3, MC34198-4, MC34198-5, MC34198-6, MC34198-7, MC34198-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
83-32-9	Acenaphthene	50	45.2	90	40-140
208-96-8	Acenaphthylene	50	40.6	81	40-140
120-12-7	Anthracene	50	45.8	92	40-140
56-55-3	Benzo(a)anthracene	50	53.8	108	40-140
50-32-8	Benzo(a)pyrene	50	51.1	102	40-140
205-99-2	Benzo(b)fluoranthene	50	51.0	102	40-140
191-24-2	Benzo(g,h,i)perylene	50	51.0	102	40-140
207-08-9	Benzo(k)fluoranthene	50	45.8	92	40-140
218-01-9	Chrysene	50	50.3	101	40-140
53-70-3	Dibenzo(a,h)anthracene	50	51.5	103	40-140
206-44-0	Fluoranthene	50	50.2	100	40-140
86-73-7	Fluorene	50	44.6	89	40-140
193-39-5	Indeno(1,2,3-cd)pyrene	50	50.7	101	40-140
90-12-0	1-Methylnaphthalene	50	43.1	86	40-140
91-57-6	2-Methylnaphthalene	50	43.5	87	40-140
85-01-8	Phenanthrene	50	47.6	95	40-140
129-00-0	Pyrene	50	48.6	97	40-140

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	55%	15-110%
4165-62-2	Phenol-d5	36%	15-110%
118-79-6	2,4,6-Tribromophenol	97%	15-110%
4165-60-0	Nitrobenzene-d5	89%	30-130%
321-60-8	2-Fluorobiphenyl	84%	30-130%
1718-51-0	Terphenyl-d14	97%	30-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34198
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40145-MS	F76856.D	1	10/14/14	WK	10/10/14	OP40145	MSF3367
OP40145-MSD	F76857.D	1	10/14/14	WK	10/10/14	OP40145	MSF3367
MC34000-1	F76858.D	1	10/14/14	WK	10/10/14	OP40145	MSF3367

The QC reported here applies to the following samples: Method: SW846 8270D

MC34198-1, MC34198-2, MC34198-3, MC34198-4, MC34198-5, MC34198-6, MC34198-7, MC34198-8

CAS No.	Compound	MC34000-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic Acid	ND		50	19.2	38	50	19.8	40	3	30-130/20
95-57-8	2-Chlorophenol	ND		50	39.8	80	50	43.0	86	8	30-130/20
59-50-7	4-Chloro-3-methyl phenol	ND		50	40.4	81	50	43.4	87	7	30-130/20
120-83-2	2,4-Dichlorophenol	ND		50	42.2	84	50	45.4	91	7	30-130/20
105-67-9	2,4-Dimethylphenol	ND		50	35.5	71	50	39.1	78	10	30-130/20
51-28-5	2,4-Dinitrophenol	ND		50	56.3	113	50	58.8	118	4	30-130/20
534-52-1	4,6-Dinitro-o-cresol	ND		50	57.6	115	50	59.5	119	3	30-130/20
95-48-7	2-Methylphenol	ND		50	35.0	70	50	37.5	75	7	30-130/20
	3&4-Methylphenol	ND		100	64.6	65	100	70.0	70	8	30-130/20
88-75-5	2-Nitrophenol	ND		50	44.6	89	50	48.5	97	8	30-130/20
100-02-7	4-Nitrophenol	ND		50	17.2	34	50	17.8	36	3	30-130/20
87-86-5	Pentachlorophenol	ND		50	43.6	87	50	45.3	91	4	30-130/20
108-95-2	Phenol	ND		50	16.0	32	50	16.8	34	5	30-130/20
95-95-4	2,4,5-Trichlorophenol	ND		50	40.2	80	50	43.4	87	8	30-130/20
88-06-2	2,4,6-Trichlorophenol	ND		50	40.8	82	50	44.0	88	8	30-130/20
62-53-3	Aniline	ND		50	18.9	38* [a]	50	29.6	59	44* [b]	40-140/20
101-55-3	4-Bromophenyl phenyl ether	ND		50	46.5	93	50	49.7	99	7	40-140/20
85-68-7	Butyl benzyl phthalate	ND		50	52.7	105	50	56.0	112	6	40-140/20
100-51-6	Benzyl Alcohol	ND		50	34.6	69	50	38.0	76	9	40-140/20
91-58-7	2-Chloronaphthalene	ND		50	45.1	90	50	50.2	100	11	40-140/20
106-47-8	4-Chloroaniline	ND		50	33.1	66	50	38.7	77	16	40-140/20
111-91-1	bis(2-Chloroethoxy)methane	ND		50	39.8	80	50	43.7	87	9	40-140/20
111-44-4	bis(2-Chloroethyl)ether	ND		50	41.5	83	50	45.1	90	8	40-140/20
108-60-1	bis(2-Chloroisopropyl)ether	ND		50	50.0	100	50	54.7	109	9	40-140/20
7005-72-3	4-Chlorophenyl phenyl ether	ND		50	41.7	83	50	45.7	91	9	40-140/20
122-66-7	1,2-Diphenylhydrazine	ND		50	41.4	83	50	45.5	91	9	40-140/20
121-14-2	2,4-Dinitrotoluene	ND		50	52.2	104	50	56.1	112	7	40-140/20
606-20-2	2,6-Dinitrotoluene	ND		50	49.8	100	50	52.9	106	6	40-140/20
91-94-1	3,3'-Dichlorobenzidine	ND		50	55.1	110	50	62.5	125	13	40-140/20
132-64-9	Dibenzofuran	ND		50	41.4	83	50	45.0	90	8	40-140/20
84-74-2	Di-n-butyl phthalate	ND		50	48.5	97	50	50.9	102	5	40-140/20
117-84-0	Di-n-octyl phthalate	ND		50	45.0	90	50	47.7	95	6	40-140/20
84-66-2	Diethyl phthalate	ND		50	46.2	92	50	49.3	99	6	40-140/20
131-11-3	Dimethyl phthalate	ND		50	47.1	94	50	51.0	102	8	40-140/20
117-81-7	bis(2-Ethylhexyl)phthalate	ND		50	53.9	108	50	56.8	114	5	40-140/20
118-74-1	Hexachlorobenzene	ND		50	46.1	92	50	49.1	98	6	40-140/20

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34198
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40145-MS	F76856.D	1	10/14/14	WK	10/10/14	OP40145	MSF3367
OP40145-MSD	F76857.D	1	10/14/14	WK	10/10/14	OP40145	MSF3367
MC34000-1	F76858.D	1	10/14/14	WK	10/10/14	OP40145	MSF3367

The QC reported here applies to the following samples: Method: SW846 8270D

MC34198-1, MC34198-2, MC34198-3, MC34198-4, MC34198-5, MC34198-6, MC34198-7, MC34198-8

CAS No.	Compound	MC34000-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
77-47-4	Hexachlorocyclopentadiene	ND		50	25.8	52	50	29.9	60	15	40-140/20
67-72-1	Hexachloroethane	ND		50	37.2	74	50	40.6	81	9	40-140/20
78-59-1	Isophorone	ND		50	37.4	75	50	40.9	82	9	40-140/20
88-74-4	2-Nitroaniline	ND		50	46.2	92	50	50.4	101	9	40-140/20
99-09-2	3-Nitroaniline	ND		50	43.7	87	50	48.2	96	10	40-140/20
100-01-6	4-Nitroaniline	ND		50	44.7	89	50	49.5	99	10	40-140/20
98-95-3	Nitrobenzene	ND		50	39.9	80	50	43.5	87	9	40-140/20
62-75-9	n-Nitrosodimethylamine	ND		50	28.7	57	50	31.6	63	10	40-140/20
621-64-7	N-Nitroso-di-n-propylamine	ND		50	43.2	86	50	48.9	98	12	40-140/20
86-30-6	N-Nitrosodiphenylamine	ND		50	44.9	90	50	48.9	98	9	40-140/20
110-86-1	Pyridine	ND		50	11.9	24* c	50	20.1	40	51* b	40-140/20

CAS No.	Surrogate Recoveries	MS	MSD	MC34000-1	Limits
367-12-4	2-Fluorophenol	48%	50%	44%	15-110%
4165-62-2	Phenol-d5	32%	35%	30%	15-110%
118-79-6	2,4,6-Tribromophenol	102%	108%	93%	15-110%
4165-60-0	Nitrobenzene-d5	77%	84%	72%	30-130%
321-60-8	2-Fluorobiphenyl	77%	85%	71%	30-130%
1718-51-0	Terphenyl-d14	96%	102%	98%	30-130%

(a) Outside control limits due to possible matrix interference. Refer to Blank Spike.
(b) High RPD due to possible matrix interference and/or sample heterogeneity.
(c) Outside control limits. Blank Spike meets program technical requirements.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34198
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40146-MS	I92195.D	1	10/14/14	WK	10/11/14	OP40146	MSI3436
OP40146-MSD	I92196.D	1	10/14/14	WK	10/11/14	OP40146	MSI3436
MC34000-2	I92197.D	1	10/14/14	WK	10/11/14	OP40146	MSI3436

The QC reported here applies to the following samples: Method: SW846 8270D BY SIM

MC34198-1, MC34198-2, MC34198-3, MC34198-4, MC34198-5, MC34198-6, MC34198-7, MC34198-8

CAS No.	Compound	MC34000-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	ND		50	44.8	90	50	48.6	97	8	40-140/20
208-96-8	Acenaphthylene	ND		50	40.0	80	50	43.7	87	9	40-140/20
120-12-7	Anthracene	ND		50	47.0	94	50	49.1	98	4	40-140/20
56-55-3	Benzo(a)anthracene	ND		50	54.0	108	50	56.4	113	4	40-140/20
50-32-8	Benzo(a)pyrene	ND		50	51.0	102	50	53.6	107	5	40-140/20
205-99-2	Benzo(b)fluoranthene	ND		50	52.4	105	50	56.3	113	7	40-140/20
191-24-2	Benzo(g,h,i)perylene	ND		50	51.8	104	50	53.5	107	3	40-140/20
207-08-9	Benzo(k)fluoranthene	ND		50	50.7	101	50	51.9	104	2	40-140/20
218-01-9	Chrysene	ND		50	50.7	101	50	52.9	106	4	40-140/20
53-70-3	Dibenzo(a,h)anthracene	ND		50	52.4	105	50	54.1	108	3	40-140/20
206-44-0	Fluoranthene	ND		50	49.6	99	50	52.6	105	6	40-140/20
86-73-7	Fluorene	ND		50	45.1	90	50	47.6	95	5	40-140/20
193-39-5	Indeno(1,2,3-cd)pyrene	ND		50	51.4	103	50	53.2	106	3	40-140/20
90-12-0	1-Methylnaphthalene	ND		50	42.2	84	50	45.7	91	8	40-140/20
91-57-6	2-Methylnaphthalene	ND		50	43.0	86	50	46.4	93	8	40-140/20
85-01-8	Phenanthrene	ND		50	48.2	96	50	50.3	101	4	40-140/20
129-00-0	Pyrene	ND		50	47.9	96	50	50.7	101	6	40-140/20

CAS No.	Surrogate Recoveries	MS	MSD	MC34000-2	Limits
367-12-4	2-Fluorophenol	54%	56%	49%	15-110%
4165-62-2	Phenol-d5	36%	37%	33%	15-110%
118-79-6	2,4,6-Tribromophenol	98%	103%	90%	15-110%
4165-60-0	Nitrobenzene-d5	87%	93%	81%	30-130%
321-60-8	2-Fluorobiphenyl	83%	90%	77%	30-130%
1718-51-0	Terphenyl-d14	97%	101%	96%	30-130%

* = Outside of Control Limits.

Semivolatile Internal Standard Area Summary

Job Number: MC34198
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSF3367-CC3361	**Injection Date:**	10/14/14
Lab File ID:	F76834.D	**Injection Time:**	08:26
Instrument ID:	GCMSF	**Method:**	SW846 8270D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	68307	4.31	241298	5.36	166272	6.89	327265	8.18	444258	10.80	455860	12.53
Upper Limit [a]	136614	4.81	482596	5.86	332544	7.39	654530	8.68	888516	11.30	911720	13.03
Lower Limit [b]	34154	3.81	120649	4.86	83136	6.39	163633	7.68	222129	10.30	227930	12.03

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP40134-MB	70996	4.31	241442	5.36	164978	6.89	330677	8.18	444869	10.80	463076	12.53
OP40134-BS	75792	4.31	269309	5.36	181873	6.89	363147	8.18	484236	10.80	499922	12.53
OP40134-MS	68539	4.31	240771	5.36	161769	6.89	322622	8.18	427020	10.80	435138	12.53
OP40134-MSD	70818	4.31	249003	5.36	170289	6.89	334806	8.18	450336	10.80	453881	12.53
MC33900-22	68633	4.30	235726	5.36	161903	6.89	332764	8.18	434938	10.80	455980	12.52
ZZZZZZ	70559	4.31	260837	5.36	183280	6.89	359073	8.18	489761	10.80	518144	12.54
ZZZZZZ	70152	4.30	251797	5.36	169375	6.89	342184	8.18	447864	10.80	465557	12.53
ZZZZZZ	68878	4.30	242889	5.36	164949	6.89	341116	8.18	447155	10.80	470017	12.53
ZZZZZZ	71573	4.31	257105	5.36	181203	6.89	355683	8.18	479932	10.80	486180	12.53
OP40116-MB	79556	4.30	275075	5.36	192100	6.89	393413	8.18	516404	10.79	533438	12.53
OP40116-BS	78124	4.30	280535	5.36	190621	6.89	378194	8.18	510162	10.80	508834	12.53
OP40116-MS	74089	4.30	259119	5.36	177532	6.89	351873	8.18	467879	10.80	472619	12.53
OP40116-MSD	79991	4.30	282810	5.36	192421	6.89	384049	8.18	522431	10.80	517855	12.53
MC33900-17	77504	4.30	267251	5.36	189047	6.89	380119	8.18	492954	10.79	517308	12.52
ZZZZZZ	75912	4.30	261801	5.36	183476	6.89	372843	8.18	487597	10.79	507102	12.52
ZZZZZZ	71330	4.30	250798	5.36	176593	6.89	352975	8.18	466631	10.79	478464	12.52
ZZZZZZ	76739	4.30	268024	5.36	184772	6.89	376238	8.17	491205	10.79	506117	12.52
ZZZZZZ	73869	4.30	258970	5.35	178609	6.89	363036	8.18	478144	10.79	483508	12.52
ZZZZZZ	73613	4.30	255091	5.35	176476	6.89	357293	8.18	465047	10.79	472940	12.52
OP40145-MB	72253	4.30	251796	5.35	174567	6.89	349291	8.18	454870	10.79	475234	12.52
OP40145-BS	69934	4.30	248610	5.36	169527	6.89	331339	8.18	445679	10.80	457193	12.53
OP40145-MS	67820	4.30	236949	5.36	161259	6.89	317254	8.18	431232	10.80	436739	12.52
OP40145-MSD	63602	4.30	224771	5.36	151388	6.89	298990	8.18	401736	10.79	411271	12.52
MC34000-1	67993	4.30	235683	5.35	164577	6.89	329096	8.17	426703	10.79	448268	12.52

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: MC34198
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSF3368-CC3361	**Injection Date:**	10/15/14
Lab File ID:	F76861.D	**Injection Time:**	08:03
Instrument ID:	GCMSF	**Method:**	SW846 8270D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	57384	4.28	197693	5.33	134143	6.86	258606	8.15	345651	10.76	332367	12.48
Upper Limit [a]	114768	4.78	395386	5.83	268286	7.36	517212	8.65	691302	11.26	664734	12.98
Lower Limit [b]	28692	3.78	98847	4.83	67072	6.36	129303	7.65	172826	10.26	166184	11.98

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
MC34198-1	71665	4.28	246385	5.33	167113	6.86	325680	8.15	402373	10.76	392931	12.48
MC34198-2	69939	4.28	243337	5.33	165599	6.86	321743	8.15	398837	10.76	396894	12.48
MC34198-3	74647	4.28	263865	5.33	180720	6.86	354191	8.15	440678	10.75	427673	12.48
MC34198-4	74003	4.28	262556	5.33	180755	6.86	355107	8.15	446471	10.75	436502	12.48
MC34198-5	75438	4.28	262637	5.33	177433	6.86	345308	8.14	433375	10.75	422218	12.48
MC34198-6	72889	4.28	253755	5.33	176721	6.86	354658	8.15	474758	10.76	461866	12.48
MC34198-7	75845	4.28	258734	5.33	174739	6.86	340112	8.15	428577	10.75	423170	12.48
MC34198-8	69757	4.28	238519	5.33	164749	6.86	327277	8.14	413982	10.75	413611	12.47
OP40171-MB	70761	4.28	244248	5.33	162690	6.86	306689	8.14	368555	10.75	334803	12.47
OP40171-BS	73499	4.28	249690	5.33	162664	6.86	306043	8.14	375768	10.75	350384	12.47
ZZZZZZ	69623	4.28	238520	5.33	159514	6.86	302652	8.14	357078	10.75	337561	12.47
ZZZZZZ	72179	4.28	248752	5.33	164796	6.86	316512	8.14	375106	10.75	355677	12.47
OP40179-MB	66740	4.28	234406	5.33	162893	6.86	326327	8.14	425832	10.75	416353	12.47
OP40179-BS	66356	4.28	236002	5.33	159795	6.86	306699	8.14	412674	10.75	398064	12.47
OP40179-MS	67759	4.28	233134	5.33	154275	6.86	294111	8.14	380377	10.75	372789	12.47
OP40179-MSD	66607	4.28	233440	5.33	155801	6.86	299697	8.14	384513	10.75	374380	12.47
MC34000-10	65921	4.28	227306	5.33	152260	6.86	298225	8.14	364025	10.75	364457	12.47
ZZZZZZ	67599	4.28	240203	5.33	172815	6.86	339608	8.14	469336	10.76	504661	12.49
ZZZZZZ	76196	4.28	260271	5.33	189518	6.86	356497	8.14	437708	10.75	425482	12.47
ZZZZZZ	70308	4.28	251615	5.33	167733	6.86	327804	8.14	404871	10.75	405864	12.47
OP40178-MB	67752	4.27	230475	5.33	148304	6.86	289753	8.14	336590	10.75	333829	12.47
OP40178-BS	66330	4.28	228868	5.33	147311	6.86	273264	8.14	325835	10.75	312580	12.47
OP40178-MS	61027	4.27	205535	5.33	142595	6.86	288847	8.14	483695	10.76	617804	12.50
OP40178-MSD	64169	4.28	220697	5.33	153650	6.86	313593	8.14	604303	10.77	647198	12.53
MC34232-6	68378	4.28	235273	5.33	160665	6.86	326479	8.15	601888	10.77	656262	12.52
OP40210-MB	83338	4.28	288296	5.33	194903	6.86	385184	8.14	517420	10.75	565205	12.48
OP40210-LB	83338	4.28	288296	5.33	194903	6.86	385184	8.14	517420	10.75	565205	12.48
OP40210-BS	80711	4.28	279186	5.33	185298	6.86	357137	8.15	477505	10.76	517400	12.48
OP40210-MS	78813	4.28	273149	5.33	177454	6.86	345532	8.15	450674	10.75	485538	12.48
OP40210-MSD	75124	4.28	256926	5.33	173898	6.86	331957	8.15	440305	10.75	464855	12.48

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10

Semivolatile Internal Standard Area Summary

Job Number: MC34198
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSF3368-CC3361	**Injection Date:**	10/15/14
Lab File ID:	F76861.D	**Injection Time:**	08:03
Instrument ID:	GCMSF	**Method:**	SW846 8270D

Lab Sample ID	IS 1 AREA	IS 1 RT	IS 2 AREA	IS 2 RT	IS 3 AREA	IS 3 RT	IS 4 AREA	IS 4 RT	IS 5 AREA	IS 5 RT	IS 6 AREA	IS 6 RT

IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: MC34198
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSI3436-CC3427	**Injection Date:**	10/14/14
Lab File ID:	I92191.D	**Injection Time:**	08:34
Instrument ID:	GCMSI	**Method:**	SW846 8270D BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	336604	3.08	744130	4.11	426551	5.60	751521	6.86	600563	9.59	1177704	10.98
Upper Limit [a]	673208	3.58	1488260	4.61	853102	6.10	1503042	7.36	1201126	10.09	2355408	11.48
Lower Limit [b]	168302	2.58	372065	3.61	213276	5.10	375761	6.36	300282	9.09	588852	10.48

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
ZZZZZZ	327252	3.08	727869	4.11	411958	5.60	715382	6.86	581369	9.59	1167878	10.98
OP40146-MB	378539	3.08	847726	4.11	484702	5.60	835683	6.86	688819	9.59	1399448	10.98
OP40146-BS	374481	3.08	845802	4.11	481262	5.61	850006	6.87	669308	9.60	1327297	10.98
OP40146-MS	331510	3.08	752028	4.11	432936	5.60	769260	6.87	629274	9.60	1275081	10.98
OP40146-MSD	345605	3.08	786284	4.11	443935	5.60	782733	6.87	616606	9.60	1218422	10.98
MC34000-2	379502	3.08	845027	4.11	480803	5.60	835370	6.86	678867	9.59	1365604	10.98
MC34198-1	344797	3.08	767505	4.11	438849	5.60	766014	6.86	621430	9.59	1261360	10.98
MC34198-2	325548	3.08	725494	4.11	424556	5.60	738283	6.86	619892	9.59	1274969	10.98
MC34198-3	384730	3.08	847049	4.11	482863	5.60	839214	6.86	683729	9.59	1366128	10.98
MC34198-4	376835	3.08	832994	4.11	477776	5.60	833845	6.86	663391	9.59	1340907	10.98
MC34198-5	373050	3.08	830897	4.11	478969	5.60	835282	6.86	671750	9.59	1337260	10.98
MC34198-6	364561	3.08	805162	4.11	456343	5.60	794829	6.87	655996	9.61	1280385	11.00
MC34198-7	370484	3.08	825563	4.11	475082	5.60	823744	6.86	676933	9.59	1346951	10.98
MC34198-8	368064	3.08	813650	4.11	470091	5.60	816936	6.86	671039	9.59	1339960	10.98
OP40163-MB	385087	3.08	852123	4.11	493764	5.60	855079	6.86	693664	9.59	1375848	10.98
OP40163-BS	357647	3.08	808566	4.11	463308	5.61	810800	6.87	640283	9.60	1260126	10.98
OP40163-MS	369446	3.08	838224	4.11	471494	5.61	833313	6.87	650745	9.60	1281147	10.99
OP40163-MSD	371272	3.08	842475	4.11	478535	5.61	837950	6.87	670167	9.61	1310738	10.99
MC34231-7	348168	3.08	779448	4.11	444784	5.60	776719	6.86	627423	9.60	1248813	10.98
ZZZZZZ	355714	3.08	794008	4.11	457600	5.60	788590	6.86	645075	9.59	1280163	10.98
ZZZZZZ	354932	3.08	790348	4.11	455611	5.60	793195	6.86	638051	9.60	1280618	10.98
ZZZZZZ	382034	3.08	849910	4.11	487162	5.60	851147	6.86	689211	9.59	1375423	10.98
ZZZZZZ	362243	3.08	804538	4.11	463495	5.60	812196	6.86	656774	9.59	1323812	10.98
ZZZZZZ	362288	3.08	766417	4.11	456863	5.61	803095	6.86	653577	9.59	1300643	10.98
ZZZZZZ	354350	3.08	780334	4.11	448177	5.60	786614	6.86	643369	9.59	1247254	10.98
ZZZZZZ	376221	3.08	825613	4.11	472160	5.61	820164	6.86	644947	9.59	1213946	10.98
ZZZZZZ	360638	3.08	808074	4.11	471880	5.60	827045	6.86	680167	9.59	1349896	10.98

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

Semivolatile Internal Standard Area Summary

Job Number: MC34198
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSI3436-CC3427	**Injection Date:**	10/14/14
Lab File ID:	I92191.D	**Injection Time:**	08:34
Instrument ID:	GCMSI	**Method:**	SW846 8270D BY SIM

Lab	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
Sample ID	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Surrogate Recovery Summary

Job Number: MC34198
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Method: SW846 8270D **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
MC34198-1	F76862.D	49	33	99	77	77	103
MC34198-2	F76863.D	40	28	95	64	62	100
MC34198-3	F76864.D	45	30	94	69	68	93
MC34198-4	F76865.D	44	30	98	72	70	98
MC34198-5	F76866.D	35	24	85	56	55	102
MC34198-6	F76867.D	48	32	102	79	78	91
MC34198-7	F76868.D	49	32	96	78	75	99
MC34198-8	F76869.D	51	34	98	83	79	103
OP40145-BS	F76855.D	50	34	102	79	79	96
OP40145-MB	F76854.D	49	32	97	76	77	97
OP40145-MS	F76856.D	48	32	102	77	77	96
OP40145-MSD	F76857.D	50	35	108	84	85	102

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorophenol	15-110%
S2 = Phenol-d5	15-110%
S3 = 2,4,6-Tribromophenol	15-110%
S4 = Nitrobenzene-d5	30-130%
S5 = 2-Fluorobiphenyl	30-130%
S6 = Terphenyl-d14	30-130%

Semivolatile Surrogate Recovery Summary

Job Number: MC34198
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Method: SW846 8270D BY SIM **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
MC34198-1	I92198.D	54	37	101	88	81	98
MC34198-2	I92199.D	45	31	97	72	68	95
MC34198-3	I92200.D	49	33	94	79	74	90
MC34198-4	I92201.D	49	32	97	81	76	95
MC34198-5	I92202.D	40	27	83	64	60	99
MC34198-6	I92203.D	54	36	101	89	83	93
MC34198-7	I92204.D	53	35	97	87	80	94
MC34198-8	I92205.D	57	38	99	92	84	98
OP40146-BS	I92194.D	55	36	97	89	84	97
OP40146-MB	I92193.D	54	36	92	87	83	95
OP40146-MS	I92195.D	54	36	98	87	83	97
OP40146-MSD	I92196.D	56	37	103	93	90	101

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorophenol	15-110%
S2 = Phenol-d5	15-110%
S3 = 2,4,6-Tribromophenol	15-110%
S4 = Nitrobenzene-d5	30-130%
S5 = 2-Fluorobiphenyl	30-130%
S6 = Terphenyl-d14	30-130%

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries

Method Blank Summary

Job Number: MC34198
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40168-MB	BB59881.D	1	10/13/14	NK	10/12/14	OP40168	GBB3333

The QC reported here applies to the following samples: **Method:** SW846 8011

MC34198-1, MC34198-2, MC34198-3, MC34198-4, MC34198-5, MC34198-6, MC34198-7, MC34198-8, MC34198-10

CAS No.	Compound	Result	RL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.015	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.015	ug/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	Bromofluorobenzene (S)	98%	36-173%
460-00-4	Bromofluorobenzene (S)	100%	36-173%

Blank Spike Summary

Job Number: MC34198
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40168-BS	BB59882.D	1	10/13/14	NK	10/12/14	OP40168	GBB3333

The QC reported here applies to the following samples: **Method:** SW846 8011

MC34198-1, MC34198-2, MC34198-3, MC34198-4, MC34198-5, MC34198-6, MC34198-7, MC34198-8, MC34198-10

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
96-12-8	1,2-Dibromo-3-chloropropane	0.071	0.093	131	60-140
106-93-4	1,2-Dibromoethane	0.071	0.077	108	60-140

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	Bromofluorobenzene (S)	102%	36-173%
460-00-4	Bromofluorobenzene (S)	101%	36-173%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34198
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40168-MS	BB59883.D	1	10/13/14	NK	10/12/14	OP40168	GBB3333
OP40168-MSD	BB59884.D	1	10/13/14	NK	10/12/14	OP40168	GBB3333
MC34231-7	BB59885.D	1	10/13/14	NK	10/12/14	OP40168	GBB3333

The QC reported here applies to the following samples: **Method:** SW846 8011

MC34198-1, MC34198-2, MC34198-3, MC34198-4, MC34198-5, MC34198-6, MC34198-7, MC34198-8, MC34198-10

CAS No.	Compound	MC34231-7 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
96-12-8	1,2-Dibromo-3-chloropropane	ND		0.0677	0.081	120	0.0688	0.079	115	3	64-141/29
106-93-4	1,2-Dibromoethane	ND		0.0677	0.082	121	0.0688	0.083	121	1	63-163/27

CAS No.	Surrogate Recoveries	MS	MSD	MC34231-7	Limits
460-00-4	Bromofluorobenzene (S)	78%	80%	89%	36-173%
460-00-4	Bromofluorobenzene (S)	123%	122%	121%	36-173%

* = Outside of Control Limits.

Volatile Surrogate Recovery Summary

Job Number: MC34198
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Method: SW846 8011 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]
MC34198-1	BB59896.D	86	105
MC34198-2	BB59897.D	90	106
MC34198-3	BB59898.D	85	95
MC34198-4	BB59899.D	82	89
MC34198-5	BB59900.D	93	103
MC34198-6	BB59901.D	90	143
MC34198-7	BB59903.D	87	95
MC34198-8	BB59904.D	83	91
MC34198-10	BB59905.D	84	93
OP40168-BS	BB59882.D	102	101
OP40168-MB	BB59881.D	98	100
OP40168-MS	BB59883.D	78	123
OP40168-MSD	BB59884.D	80	122

Surrogate Compounds	Recovery Limits
S1 = Bromofluorobenzene (S)	36-173%

(a) Recovery from GC signal #2
(b) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: MC34198
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	GBB3333-ICC3333	**Injection Date:**	10/13/14
Lab File ID:	BB59877.D	**Injection Time:**	08:37
Instrument ID:	GCBB	**Method:**	SW846 8011

	S1 [a] RT	S1 [b] RT
Check Std	3.45	3.46

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
OP40168-MB	BB59881.D	10/13/14	09:49	3.45	3.46
OP40168-BS	BB59882.D	10/13/14	10:07	3.45	3.46
OP40168-MS	BB59883.D	10/13/14	10:24	3.45	3.46
OP40168-MSD	BB59884.D	10/13/14	10:42	3.45	3.46
MC34231-7	BB59885.D	10/13/14	11:00	3.45	3.46
ZZZZZZ	BB59886.D	10/13/14	11:18	3.45	3.46
ZZZZZZ	BB59887.D	10/13/14	11:36	3.45	3.46
ZZZZZZ	BB59888.D	10/13/14	11:54	3.45	3.46
ZZZZZZ	BB59889.D	10/13/14	12:12	3.45	3.46
ZZZZZZ	BB59890.D	10/13/14	12:30	3.45	3.46

Surrogate Compounds

S1 = Bromofluorobenzene (S)

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: MC34198
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	GBB3333-CC3333	**Injection Date:**	10/13/14
Lab File ID:	BB59891.D	**Injection Time:**	12:48
Instrument ID:	GCBB	**Method:**	SW846 8011

	S1 [a] RT	S1 [b] RT
Check Std	3.45	3.46

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
ZZZZZZ	BB59892.D	10/13/14	13:06	3.45	3.46
ZZZZZZ	BB59893.D	10/13/14	13:24	3.45	3.46
ZZZZZZ	BB59894.D	10/13/14	13:42	3.45	3.46
ZZZZZZ	BB59895.D	10/13/14	14:01	3.45	3.46
MC34198-1	BB59896.D	10/13/14	14:19	3.45	3.46
MC34198-2	BB59897.D	10/13/14	14:37	3.45	3.46
MC34198-3	BB59898.D	10/13/14	14:55	3.45	3.46
MC34198-4	BB59899.D	10/13/14	15:14	3.45	3.46
MC34198-5	BB59900.D	10/13/14	15:32	3.45	3.46
MC34198-6	BB59901.D	10/13/14	15:50	3.45	3.46

Surrogate Compounds

S1 = Bromofluorobenzene (S)

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: MC34198
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	GBB3333-CC3333	**Injection Date:**	10/13/14
Lab File ID:	BB59902.D	**Injection Time:**	16:09
Instrument ID:	GCBB	**Method:**	SW846 8011

	S1 [a] RT	S1 [b] RT
Check Std	3.45	3.46

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
MC34198-7	BB59903.D	10/13/14	16:27	3.45	3.46
MC34198-8	BB59904.D	10/13/14	16:46	3.45	3.46
MC34198-10	BB59905.D	10/13/14	17:04	3.45	3.46
GBB3333-ECC333B	BB59906.D	10/13/14	17:23	3.45	3.46

Surrogate Compounds

S1 = Bromofluorobenzene (S)

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

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Automated Report

Technical Report for

Shell Oil

URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana,

SGS Accutest Job Number: MC34231

Sampling Date: 10/09/14



Report to:

AECOM, INC.

Melissa.mansker@aecom.com

ATTN: Melissa Mansker

Total number of pages in report: 152

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

H. (Brad) Madadian
Lab Director

Client Service contact: Jeremy Vienneau 508-481-6200

Certifications: MA (M-MA136,SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) FL (E87579) NY (11791) NJ (MA926) PA (6801121) ND (R-188) CO (MA00136) MN (11546AA) NC (653) IL (002337) WI (399080220) DoD ELAP (L-A-B L2235)

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Test results relate only to samples analyzed.

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SGS ACCUTEST

October 8, 2016

Elizabeth Kunkel
AECOM, INC.
1001 Highlands Plaza Drive West Suite 300
St. Louis, MO 63110
Elizabeth.Kunkel@URS.com; bob.billman@urs.com;
Melissa.Mansker@urs.com

RE: SGS Accutest Job # MC34231

Dear Elizabeth Kunkel,

As you are aware, SGS Accutest Inc. - Marlborough has been conducting an extensive review of data associated with some historical Gas Chromatography-Mass Spectroscopy volatiles analyses. As a result of this review it was determined that some revisions of the original test report for this job were needed. These corrections have been incorporated into the revised report.

Please be assured that corrective actions have been put in place to address this matter and prevent a recurrence.

We apologize for any inconvenience that this issue may have caused. Please don't hesitate to contact us if we can be of further assistance.

Sincerely,

H. (Brad) Madadian

Regional Laboratory Director
SGS Accutest Inc. - Marlborough

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Sample Summary

Shell Oil

Job No: MC34231

URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
MC34231-1	10/09/14	09:20	MMSV	10/10/14	AQ	Equipment Blank	MW3-ROX-100914-EB
MC34231-2	10/09/14	09:55	MMSV	10/10/14	AQ	Ground Water	MW3-ROX-100914
MC34231-3	10/09/14	11:05	MMSV	10/10/14	AQ	Ground Water	ROST3MW-ROX-100914
MC34231-4	10/09/14	12:45	MMSV	10/10/14	AQ	Ground Water	ROST4PZC-ROX-100914
MC34231-5	10/09/14	00:00	MMSV	10/10/14	AQ	Trip Blank Water	TB-ROX-100914-HCL
MC34231-6	10/09/14	00:00	MMSV	10/10/14	AQ	Trip Blank Water	TB-ROX-100914-ST
MC34231-7	10/09/14	14:50	MMSV	10/10/14	AQ	Ground Water	MW-5-ROX-100914
MC34231-7D	10/09/14	14:50	MMSV	10/10/14	AQ	Water Dup/MSD	MW-5-ROX-100914
MC34231-7S	10/09/14	14:50	MMSV	10/10/14	AQ	Water Matrix Spike	MW-5-ROX-100914

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: She O **Job No** MC3423

Site: URSMOSTL:Roxana 4Q 4 GW/ 2 562973 03004 900 South Centra **Report Date** 0/8/20 6 4:00:4 PM

5 Samp e(s), 2 Tr p B ank(s) were co ected on 0/09/20 4 and were rece ved at SGS Accutest New Eng and on 0/ 0/20 4 proper y preserved, at 0 6 Deg C and ntact These Samp es rece ved a job number of MC3423 A st ng of the Laborato y Samp e ID, C ent Samp e ID and dates of co ect on are presented n the Resu ts Summary Sect on of th s report 1-Chlorohexane, Benzenethiol, Dibenz(a,h)acridine, Indene, Quinoline were searched in the library search and reported only if detections were found.

Except as noted be ow, a method spec f ed ca brat ons and qua ty contro performance cr ter a were met for th s job For more nformat on, p ease refer to QC summary pages

Volatiles by GCMS By Method SW846 8260C

Matrix: AQ **Batch ID:** MSL39 6

- A samp es were ana yzed w th n the recommended method ho d ng t me
- A method b anks for th s batch meet method spec f c cr ter a
- Samp e(s) MC3423 -7MS, MC3423 -7MSD were used as the QC samp es nd cated
- In t a ca brat on ver f cat on standard MSL3872-ICV3872 for v ny acetate exceed 30% d fference (response b ased h gh) Assoc ated samp es are non-detect for th s compound
- B ank Sp ke Recovery(s) for 2-Hexanone, Acetone, D ch orod f uoromethane are outs de contro m ts B ank Sp ke meets program techn ca requ rements
- Matr x Sp ke Recovery(s) for 2,2-D ch oropropane, 2-Ch oroethy v ny ether, 2-Hexanone, Acetone, Ch oroethane are outs de contro m ts Outs de contro m ts due to poss b e matr x nterference Refer to B ank Sp ke
- Matr x Sp ke Dup cate Recovery(s) for 2-Hexanone, 4-Methy -2-pentanone (MIBK), Acetone, m,p-Xy ene, Tetrach oroethene, 2-Butanone (MEK), Acro e n, D ch orod f uoromethane, Tr ch orof uoromethane, V ny ch or de are outs de contro m ts Outs de contro m ts due to poss b e matr x nterference Refer to B ank Sp ke
- RPD(s) for MSD for 2-Butanone (MEK), 2-Ch oroethy v ny ether, Acro e n, Bromomethane, Ch oroethane, Ch oromethane, D ch orod f uoromethane, Tr ch orof uoromethane, V ny ch or de are outs de contro m ts for samp e MC3423 -7MSD H gh RPD due to poss b e matr x nterference and/or samp e non-homogene ty
- Cont nu ng a brat on standard MSL39 6-CC3872 for v ny acetate, 2,2-d ch oropropane exceed 20% d fference (response b ased h gh) Assoc ated samp es are non-detect for th s compound
- MC3423 -7MS/MSD: E evated detect on m t due to m ted samp e vo ume
- MC3423 -7MS/MSD for V ny Acetate: Outs de contro m ts Assoc ated samp es are non-detect for th s compound
- MSL39 6-BS for ,4-D oxane, V ny Acetate: Outs de contro m ts Assoc ated samp es are non-detect for th s compound
- Cont nu ng Ca brat on MSL39 6-CC3872 for v ny ch or de, acry on tr e, carbon d su f de, acetone, Methy ene brom de, 2-ch oroethy v ny ether, 4-methy -2-pentanone, ,3-d ch oropropane, 2-hexanone, ch orobenzene, ethy benzene, m,p-xy ene, bromoform exceed 20% D fference (b ased ow) Samp e resu t may be b ased ow
- In t a & Cont nu ng Ca brat on Ver f cat on for Acro e n, D ch orod f uoromethane: Outs de of acceptance cr ter a (b ased ow) Samp e resu t may be b ased ow

Matrix: AQ **Batch ID:** MSN338

- A samp es were ana yzed w th n the recommended method ho d ng t me
- Samp e(s) MC34436-4MS, MC34436-4MSD were used as the QC samp es nd cated
- A method b anks for th s batch meet method spec f c cr ter a
- B ank Sp ke Recovery(s) for Acetone are outs de contro m ts B ank Sp ke meets program techn ca requ rements
- Matr x Sp ke Recovery(s) for 2-Hexanone, Acetone, Ch oromethane, Naphtha ene, Tr ch oroethene, V ny Acetate are outs de contro m ts Outs de contro m ts due to poss b e matr x nterference Refer to B ank Sp ke
- Matr x Sp ke Dup cate Recovery(s) for 2-Hexanone, Acetone, Ch oromethane, Naphtha ene, V ny Acetate are outs de contro m ts Outs de contro m ts due to poss b e matr x nterference Refer to B ank Sp ke
- MC34436-4MS/MSD Recovery(s) for Tetrach oroethene are outs de contro m ts Outs de contro m ts due to h gh eve n samp e re at ve to sp ke amount
- Ca brat on check standard MSN3385-CC3345, f e N9 530 for v ny acetate exceed 40% d fference (response b ased ow) Report ng m t response ver f ed by RL ver f cat on standard Assoc ated samp es are non-detect for th s compound

Volatiles by GCMS By Method SW846 8260C

Matrix: AQ **Batch ID:** MSN338

- Cont nu ng Ca brat on MSN338 -CC3345 for Methy Tert Buty Ether exceeds 20% D fference (b ased ow) Samp e resu t may be b ased ow
- Cont nu ng Ca brat on MSN338 -CC3345 for d ch orod f uoromethane exceeds 20% D fference (b ased h gh) Assoc ated samp es are non-detect for th s compound

Extractables by GCMS By Method SW846 8270D

Matrix: AQ **Batch ID:** OP40 62

- A samp es were extracted w th n the recommended method ho d ng t me
- A samp es were ana yzed w th n the recommended method ho d ng t me
- Samp e(s) MC3423 -7MS, MC3423 -7MSD were used as the QC samp es nd cated
- Samp e(s) MC3423 -2, MC3423 -3, MC3423 -4, MC3423 -7 have compound(s) repo ted w th a “B” qua f er, nd cat ng ana yte s found n the assoc ated method b ank
- OP40 62-BS/MSD Recovery(s) for Pyr d ne are outs de contro m ts B ank Sp ke meets program techn ca requ rements
- OP40 62-MS/MSD Recovery(s) for 3,3'-D ch orobenz d ne are outs de contro m ts Outs de contro m ts due to poss b e matr x nterference Refer to B ank Sp ke
- RPD(s) for MSD for 3,3'-D ch orobenz d ne are outs de contro m ts for samp e OP40 62-MSD H gh RPD due to poss b e matr x nterference and/or samp e heterogene ty

Extractables by GCMS By Method SW846 8270D BY SIM

Matrix: AQ **Batch ID:** OP40 63

- A samp es were extracted w th n the recommended method ho d ng t me
- A samp es were ana yzed w th n the recommended method ho d ng t me
- Samp e(s) MC3423 -7MS, MC3423 -7MSD were used as the QC samp es nd cated
- Samp e(s) MC3423 -3, MC3423 -4 have compound(s) reported w th a “B” qua f er, nd cat ng ana yte s found n the assoc ated method b ank

Volatiles by GC By Method SW846 8011

Matrix: AQ **Batch ID:** OP40 68

- A samp es were extracted w th n the recommended method ho d ng t me
- A samp es were ana yzed w th n the recommended method ho d ng t me
- Samp e(s) MC3423 -7MS, MC3423 -7MSD were used as the QC samp es nd cated
- A method b anks for th s batch meet method spec f c cr ter a

SGS Accutest New Eng and cert f es that a ana ys s were performed w th n method spec f cat on It s further recommended that th s report to be used n ts ent rety The Laborato y D rector for SGS Accutest New Eng and or ass gnee as ver f ed by the s gnature on the cover page has author zed the re ease of th s repo t(MC3423)

Summary of Hits

Job Number: MC34231
Account: Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL
Collected: 10/09/14

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
MC34231-1	MW3-ROX-100914-EB					
o-Xylene		0.76 J	1.0	0.36	ug/l	SW846 8260C
Xylene (total)		0.76 J	1.0	0.36	ug/l	SW846 8260C
MC34231-2	MW3-ROX-100914					
Benzene		0.50	0.50	0.32	ug/l	SW846 8260C
tert-Butylbenzene		0.83 J	5.0	0.39	ug/l	SW846 8260C
Isopropylbenzene		0.40 J	5.0	0.35	ug/l	SW846 8260C
Methyl Tert Butyl Ether [a]		3.0	1.0	0.51	ug/l	SW846 8260C
n-Propylbenzene		0.53 J	5.0	0.49	ug/l	SW846 8260C
Toluene		0.46 J	1.0	0.33	ug/l	SW846 8260C
1,2,4-Trimethylbenzene		1.2 J	5.0	0.32	ug/l	SW846 8260C
m,p-Xylene		0.95 J	1.0	0.93	ug/l	SW846 8260C
Xylene (total)		0.95 J	1.0	0.36	ug/l	SW846 8260C
Di-n-butyl phthalate		0.23 JB	5.6	0.19	ug/l	SW846 8270D
MC34231-3	ROST3MW-ROX-100914					
Benzene		3.0	0.50	0.32	ug/l	SW846 8260C
Ethylbenzene		39.8	1.0	0.38	ug/l	SW846 8260C
Isopropylbenzene		2.1 J	5.0	0.35	ug/l	SW846 8260C
Naphthalene		6.1	5.0	0.69	ug/l	SW846 8260C
n-Propylbenzene		2.8 J	5.0	0.49	ug/l	SW846 8260C
Toluene		3.2	1.0	0.33	ug/l	SW846 8260C
1,2,4-Trimethylbenzene		18.0	5.0	0.32	ug/l	SW846 8260C
1,3,5-Trimethylbenzene		5.0	5.0	0.38	ug/l	SW846 8260C
m,p-Xylene		65.1	1.0	0.93	ug/l	SW846 8260C
o-Xylene		20.5	1.0	0.36	ug/l	SW846 8260C
Xylene (total)		85.6	1.0	0.36	ug/l	SW846 8260C
Di-n-butyl phthalate		0.26 JB	5.6	0.19	ug/l	SW846 8270D
bis(2-Ethylhexyl)phthalate		0.46 J	2.2	0.37	ug/l	SW846 8270D
1-Methylnaphthalene		0.75 J	2.2	0.56	ug/l	SW846 8270D BY SIM
2-Methylnaphthalene		0.57 J	2.2	0.56	ug/l	SW846 8270D BY SIM
Phenanthrene		0.14 B	0.056	0.014	ug/l	SW846 8270D BY SIM
MC34231-4	ROST4PZC-ROX-100914					
Benzene		39.0	0.50	0.32	ug/l	SW846 8260C
Ethylbenzene		68.8	1.0	0.38	ug/l	SW846 8260C
Isopropylbenzene		1.1 J	5.0	0.35	ug/l	SW846 8260C
Naphthalene		16.9	5.0	0.69	ug/l	SW846 8260C
n-Propylbenzene		1.1 J	5.0	0.49	ug/l	SW846 8260C
Toluene		19.6	1.0	0.33	ug/l	SW846 8260C

Summary of Hits

Job Number: MC34231
Account: Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL
Collected: 10/09/14

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
1,2,4-Trimethylbenzene		4.6 J	5.0	0.32	ug/l	SW846 8260C
1,3,5-Trimethylbenzene		0.47 J	5.0	0.38	ug/l	SW846 8260C
m,p-Xylene		112	1.0	0.93	ug/l	SW846 8260C
o-Xylene		63.4	1.0	0.36	ug/l	SW846 8260C
Xylene (total)		176	1.0	0.36	ug/l	SW846 8260C
3&4-Methylphenol		0.71 J	11	0.52	ug/l	SW846 8270D
Phenol		0.88 J	5.6	0.34	ug/l	SW846 8270D
Di-n-butyl phthalate		0.32 JB	5.6	0.19	ug/l	SW846 8270D
Phenanthrene		0.088 B	0.056	0.014	ug/l	SW846 8270D BY SIM
MC34231-5	**TB-ROX-100914-HCL**					
No hits reported in this sample.						
MC34231-6	**TB-ROX-100914-ST**					
No hits reported in this sample.						
MC34231-7	**MW-5-ROX-100914**					
Benzene		28.0	0.50	0.32	ug/l	SW846 8260C
sec-Butylbenzene		0.83 J	5.0	0.42	ug/l	SW846 8260C
tert-Butylbenzene		4.9 J	5.0	0.39	ug/l	SW846 8260C
Isopropylbenzene		1.2 J	5.0	0.35	ug/l	SW846 8260C
Methyl Tert Butyl Ether		19.0	1.0	0.51	ug/l	SW846 8260C
Toluene		1.5	1.0	0.33	ug/l	SW846 8260C
1,2,4-Trimethylbenzene		0.58 J	5.0	0.32	ug/l	SW846 8260C
m,p-Xylene [b]		2.7	1.0	0.93	ug/l	SW846 8260C
o-Xylene		1.2	1.0	0.36	ug/l	SW846 8260C
Xylene (total) [b]		3.9	1.0	0.36	ug/l	SW846 8260C
Phenol		0.72 J	5.4	0.33	ug/l	SW846 8270D
Di-n-butyl phthalate		0.23 JB	5.4	0.19	ug/l	SW846 8270D
1-Methylnaphthalene		0.99 J	2.2	0.54	ug/l	SW846 8270D BY SIM
Phenanthrene		0.030 J	0.054	0.014	ug/l	SW846 8270D BY SIM

(a) Continuing Calibration outside of acceptance criteria. Sample result may be biased low.
(b) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW3-ROX-100914-EB		
Lab Sample ID:	MC34231-1	**Date Sampled:**	10/09/14
Matrix:	AQ - Equipment Blank	**Date Received:**	10/10/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N91424.D	1	10/21/14	TT	n/a	n/a	MSN3381
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW3-ROX-100914-EB		
Lab Sample ID:	MC34231-1	**Date Sampled:**	10/09/14
Matrix:	AQ - Equipment Blank	**Date Received:**	10/10/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether [a]	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	0.76	1.0	0.36	ug/l	J
1330-20-7	Xylene (total)	0.76	1.0	0.36	ug/l	J

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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW3-ROX-100914-EB		
Lab Sample ID:	MC34231-1	**Date Sampled:**	10/09/14
Matrix:	AQ - Equipment Blank	**Date Received:**	10/10/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		70-130%
2037-26-5	Toluene-D8	101%		70-130%
460-00-4	4-Bromofluorobenzene	102%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Continuing Calibration outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW3-ROX-100914-EB		
Lab Sample ID:	MC34231-1	**Date Sampled:**	10/09/14
Matrix:	AQ - Equipment Blank	**Date Received:**	10/10/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R40300.D	1	10/14/14	WK	10/11/14	OP40162	MSR1483
Run #2							

	Initial Volume	Final Volume
Run #1	900 ml	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	11	2.8	ug/l	
95-57-8	2-Chlorophenol	ND	5.6	0.34	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	11	0.92	ug/l	
120-83-2	2,4-Dichlorophenol	ND	11	0.44	ug/l	
105-67-9	2,4-Dimethylphenol	ND	11	0.62	ug/l	
51-28-5	2,4-Dinitrophenol	ND	22	2.8	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	2.1	ug/l	
95-48-7	2-Methylphenol	ND	11	0.25	ug/l	
	3&4-Methylphenol	ND	11	0.52	ug/l	
88-75-5	2-Nitrophenol	ND	11	3.2	ug/l	
100-02-7	4-Nitrophenol	ND	22	0.59	ug/l	
87-86-5	Pentachlorophenol	ND	11	1.2	ug/l	
108-95-2	Phenol	ND	5.6	0.34	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	11	0.41	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	11	0.19	ug/l	
62-53-3	Aniline	ND	11	0.71	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.6	0.52	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.6	0.59	ug/l	
100-51-6	Benzyl Alcohol	ND	11	2.5	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.6	0.35	ug/l	
106-47-8	4-Chloroaniline	ND	11	0.62	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.6	0.32	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.6	0.39	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.6	0.37	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.6	0.28	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.6	0.27	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	11	0.51	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	11	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.6	0.30	ug/l	
132-64-9	Dibenzofuran	ND	2.2	0.29	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.6	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.6	0.31	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW3-ROX-100914-EB		
Lab Sample ID:	MC34231-1	**Date Sampled:**	10/09/14
Matrix:	AQ - Equipment Blank	**Date Received:**	10/10/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	5.6	0.22	ug/l	
131-11-3	Dimethyl phthalate	ND	5.6	0.38	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.2	0.37	ug/l	
118-74-1	Hexachlorobenzene	ND	5.6	0.32	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	11	1.4	ug/l	
67-72-1	Hexachloroethane	ND	5.6	0.34	ug/l	
78-59-1	Isophorone	ND	5.6	0.50	ug/l	
88-74-4	2-Nitroaniline	ND	11	0.44	ug/l	
99-09-2	3-Nitroaniline	ND	11	1.5	ug/l	
100-01-6	4-Nitroaniline	ND	11	2.4	ug/l	
98-95-3	Nitrobenzene	ND	5.6	0.43	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.6	1.1	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.6	0.45	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.6	0.21	ug/l	
110-86-1	Pyridine	ND	11	0.57	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	42%		15-110%
4165-62-2	Phenol-d5	28%		15-110%
118-79-6	2,4,6-Tribromophenol	81%		15-110%
4165-60-0	Nitrobenzene-d5	71%		30-130%
321-60-8	2-Fluorobiphenyl	71%		30-130%
1718-51-0	Terphenyl-d14	102%		30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW3-ROX-100914-EB		
Lab Sample ID:	MC34231-1	**Date Sampled:**	10/09/14
Matrix:	AQ - Equipment Blank	**Date Received:**	10/10/14
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I92211.D	1	10/14/14	WK	10/11/14	OP40163	MSI3436
Run #2							

	Initial Volume	Final Volume
Run #1	900 ml	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.11	0.077	ug/l	
208-96-8	Acenaphthylene	ND	0.11	0.055	ug/l	
120-12-7	Anthracene	ND	0.11	0.10	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.056	0.022	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.11	0.032	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.056	0.035	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.11	0.030	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.11	0.043	ug/l	
218-01-9	Chrysene	ND	0.11	0.026	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.11	0.035	ug/l	
206-44-0	Fluoranthene	ND	0.11	0.045	ug/l	
86-73-7	Fluorene	ND	0.11	0.11	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.11	0.034	ug/l	
90-12-0	1-Methylnaphthalene	ND	2.2	0.56	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.2	0.56	ug/l	
85-01-8	Phenanthrene	ND	0.056	0.014	ug/l	
129-00-0	Pyrene	ND	0.11	0.043	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	73%		30-130%
321-60-8	2-Fluorobiphenyl	70%		30-130%
1718-51-0	Terphenyl-d14	96%		30-130%

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW3-ROX-100914-EB		
Lab Sample ID:	MC34231-1	**Date Sampled:**	10/09/14
Matrix:	AQ - Equipment Blank	**Date Received:**	10/10/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB59890.D	1	10/13/14	NK	10/12/14	OP40168	GBB3333
Run #2							

	Initial Volume	Final Volume
Run #1	36.4 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.014	0.0059	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.014	0.0059	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	97%		36-173%
460-00-4	Bromofluorobenzene (S)	107%		36-173%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW3-ROX-100914		
Lab Sample ID:	MC34231-2	**Date Sampled:**	10/09/14
Matrix:	AQ - Ground Water	**Date Received:**	10/10/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N91426.D	1	10/21/14	TT	n/a	n/a	MSN3381
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	0.50	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	0.83	5.0	0.39	ug/l	J
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW3-ROX-100914		
Lab Sample ID:	MC34231-2	**Date Sampled:**	10/09/14
Matrix:	AQ - Ground Water	**Date Received:**	10/10/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	0.40	5.0	0.35	ug/l	J
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether [a]	3.0	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	0.53	5.0	0.49	ug/l	J
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	0.46	1.0	0.33	ug/l	J
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	1.2	5.0	0.32	ug/l	J
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	0.95	1.0	0.93	ug/l	J
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	0.95	1.0	0.36	ug/l	J

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E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW3-ROX-100914		
Lab Sample ID:	MC34231-2	**Date Sampled:**	10/09/14
Matrix:	AQ - Ground Water	**Date Received:**	10/10/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	90%		70-130%
2037-26-5	Toluene-D8	99%		70-130%
460-00-4	4-Bromofluorobenzene	98%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Continuing Calibration outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW3-ROX-100914		
Lab Sample ID:	MC34231-2	**Date Sampled:**	10/09/14
Matrix:	AQ - Ground Water	**Date Received:**	10/10/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R40301.D	1	10/14/14	WK	10/11/14	OP40162	MSR1483
Run #2							

	Initial Volume	Final Volume
Run #1	890 ml	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	11	2.8	ug/l	
95-57-8	2-Chlorophenol	ND	5.6	0.35	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	11	0.93	ug/l	
120-83-2	2,4-Dichlorophenol	ND	11	0.45	ug/l	
105-67-9	2,4-Dimethylphenol	ND	11	0.63	ug/l	
51-28-5	2,4-Dinitrophenol	ND	22	2.8	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	2.2	ug/l	
95-48-7	2-Methylphenol	ND	11	0.25	ug/l	
	3&4-Methylphenol	ND	11	0.52	ug/l	
88-75-5	2-Nitrophenol	ND	11	3.2	ug/l	
100-02-7	4-Nitrophenol	ND	22	0.60	ug/l	
87-86-5	Pentachlorophenol	ND	11	1.3	ug/l	
108-95-2	Phenol	ND	5.6	0.34	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	11	0.42	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	11	0.20	ug/l	
62-53-3	Aniline	ND	11	0.72	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.6	0.53	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.6	0.60	ug/l	
100-51-6	Benzyl Alcohol	ND	11	2.5	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.6	0.35	ug/l	
106-47-8	4-Chloroaniline	ND	11	0.63	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.6	0.32	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.6	0.39	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.6	0.37	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.6	0.28	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.6	0.27	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	11	0.51	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	11	0.34	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.6	0.30	ug/l	
132-64-9	Dibenzofuran	ND	2.2	0.29	ug/l	
84-74-2	Di-n-butyl phthalate	0.23	5.6	0.19	ug/l	JB
117-84-0	Di-n-octyl phthalate	ND	5.6	0.32	ug/l	

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J = Indicates an estimated value
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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW3-ROX-100914		
Lab Sample ID:	MC34231-2	**Date Sampled:**	10/09/14
Matrix:	AQ - Ground Water	**Date Received:**	10/10/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	5.6	0.23	ug/l	
131-11-3	Dimethyl phthalate	ND	5.6	0.38	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.2	0.37	ug/l	
118-74-1	Hexachlorobenzene	ND	5.6	0.33	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	11	1.4	ug/l	
67-72-1	Hexachloroethane	ND	5.6	0.34	ug/l	
78-59-1	Isophorone	ND	5.6	0.50	ug/l	
88-74-4	2-Nitroaniline	ND	11	0.45	ug/l	
99-09-2	3-Nitroaniline	ND	11	1.5	ug/l	
100-01-6	4-Nitroaniline	ND	11	2.4	ug/l	
98-95-3	Nitrobenzene	ND	5.6	0.44	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.6	1.1	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.6	0.45	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.6	0.22	ug/l	
110-86-1	Pyridine	ND	11	0.58	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	57%		15-110%
4165-62-2	Phenol-d5	37%		15-110%
118-79-6	2,4,6-Tribromophenol	99%		15-110%
4165-60-0	Nitrobenzene-d5	91%		30-130%
321-60-8	2-Fluorobiphenyl	86%		30-130%
1718-51-0	Terphenyl-d14	103%		30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW3-ROX-100914		
Lab Sample ID:	MC34231-2	**Date Sampled:**	10/09/14
Matrix:	AQ - Ground Water	**Date Received:**	10/10/14
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I92212.D	1	10/14/14	WK	10/11/14	OP40163	MSI3436
Run #2							

	Initial Volume	Final Volume
Run #1	890 ml	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.11	0.077	ug/l	
208-96-8	Acenaphthylene	ND	0.11	0.056	ug/l	
120-12-7	Anthracene	ND	0.11	0.10	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.056	0.022	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.11	0.032	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.056	0.036	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.11	0.030	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.11	0.043	ug/l	
218-01-9	Chrysene	ND	0.11	0.027	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.11	0.036	ug/l	
206-44-0	Fluoranthene	ND	0.11	0.046	ug/l	
86-73-7	Fluorene	ND	0.11	0.11	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.11	0.034	ug/l	
90-12-0	1-Methylnaphthalene	ND	2.2	0.56	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.2	0.56	ug/l	
85-01-8	Phenanthrene	ND	0.056	0.014	ug/l	
129-00-0	Pyrene	ND	0.11	0.043	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	95%		30-130%
321-60-8	2-Fluorobiphenyl	83%		30-130%
1718-51-0	Terphenyl-d14	98%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW3-ROX-100914		
Lab Sample ID:	MC34231-2	**Date Sampled:**	10/09/14
Matrix:	AQ - Ground Water	**Date Received:**	10/10/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB59889.D	1	10/13/14	NK	10/12/14	OP40168	GBB3333
Run #2							

	Initial Volume	Final Volume
Run #1	36.4 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.014	0.0059	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.014	0.0059	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	89%		36-173%
460-00-4	Bromofluorobenzene (S)	110%		36-173%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	ROST3MW-ROX-100914		
Lab Sample ID:	MC34231-3	**Date Sampled:**	10/09/14
Matrix:	AQ - Ground Water	**Date Received:**	10/10/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N91427.D	1	10/21/14	TT	n/a	n/a	MSN3381
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	3.0	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	ROST3MW-ROX-100914		
Lab Sample ID:	MC34231-3	**Date Sampled:**	10/09/14
Matrix:	AQ - Ground Water	**Date Received:**	10/10/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	39.8	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	2.1	5.0	0.35	ug/l	J
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether [a]	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	6.1	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	2.8	5.0	0.49	ug/l	J
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	3.2	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	18.0	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	5.0	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	65.1	1.0	0.93	ug/l	
95-47-6	o-Xylene	20.5	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	85.6	1.0	0.36	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	ROST3MW-ROX-100914		
Lab Sample ID:	MC34231-3	**Date Sampled:**	10/09/14
Matrix:	AQ - Ground Water	**Date Received:**	10/10/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		70-130%
2037-26-5	Toluene-D8	104%		70-130%
460-00-4	4-Bromofluorobenzene	99%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Continuing Calibration outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	ROST3MW-ROX-100914		
Lab Sample ID:	MC34231-3	**Date Sampled:**	10/09/14
Matrix:	AQ - Ground Water	**Date Received:**	10/10/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R40302.D	1	10/14/14	WK	10/11/14	OP40162	MSR1483
Run #2							

	Initial Volume	Final Volume
Run #1	900 ml	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	11	2.8	ug/l	
95-57-8	2-Chlorophenol	ND	5.6	0.34	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	11	0.92	ug/l	
120-83-2	2,4-Dichlorophenol	ND	11	0.44	ug/l	
105-67-9	2,4-Dimethylphenol	ND	11	0.62	ug/l	
51-28-5	2,4-Dinitrophenol	ND	22	2.8	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	2.1	ug/l	
95-48-7	2-Methylphenol	ND	11	0.25	ug/l	
	3&4-Methylphenol	ND	11	0.52	ug/l	
88-75-5	2-Nitrophenol	ND	11	3.2	ug/l	
100-02-7	4-Nitrophenol	ND	22	0.59	ug/l	
87-86-5	Pentachlorophenol	ND	11	1.2	ug/l	
108-95-2	Phenol	ND	5.6	0.34	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	11	0.41	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	11	0.19	ug/l	
62-53-3	Aniline	ND	11	0.71	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.6	0.52	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.6	0.59	ug/l	
100-51-6	Benzyl Alcohol	ND	11	2.5	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.6	0.35	ug/l	
106-47-8	4-Chloroaniline	ND	11	0.62	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.6	0.32	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.6	0.39	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.6	0.37	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.6	0.28	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.6	0.27	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	11	0.51	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	11	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.6	0.30	ug/l	
132-64-9	Dibenzofuran	ND	2.2	0.29	ug/l	
84-74-2	Di-n-butyl phthalate	0.26	5.6	0.19	ug/l	JB
117-84-0	Di-n-octyl phthalate	ND	5.6	0.31	ug/l	

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	ROST3MW-ROX-100914		
Lab Sample ID:	MC34231-3	**Date Sampled:**	10/09/14
Matrix:	AQ - Ground Water	**Date Received:**	10/10/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	5.6	0.22	ug/l	
131-11-3	Dimethyl phthalate	ND	5.6	0.38	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	0.46	2.2	0.37	ug/l	J
118-74-1	Hexachlorobenzene	ND	5.6	0.32	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	11	1.4	ug/l	
67-72-1	Hexachloroethane	ND	5.6	0.34	ug/l	
78-59-1	Isophorone	ND	5.6	0.50	ug/l	
88-74-4	2-Nitroaniline	ND	11	0.44	ug/l	
99-09-2	3-Nitroaniline	ND	11	1.5	ug/l	
100-01-6	4-Nitroaniline	ND	11	2.4	ug/l	
98-95-3	Nitrobenzene	ND	5.6	0.43	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.6	1.1	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.6	0.45	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.6	0.21	ug/l	
110-86-1	Pyridine	ND	11	0.57	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	45%		15-110%
4165-62-2	Phenol-d5	30%		15-110%
118-79-6	2,4,6-Tribromophenol	92%		15-110%
4165-60-0	Nitrobenzene-d5	71%		30-130%
321-60-8	2-Fluorobiphenyl	69%		30-130%
1718-51-0	Terphenyl-d14	104%		30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	ROST3MW-ROX-100914		
Lab Sample ID:	MC34231-3	**Date Sampled:**	10/09/14
Matrix:	AQ - Ground Water	**Date Received:**	10/10/14
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I92213.D	1	10/14/14	WK	10/11/14	OP40163	MSI3436
Run #2							

	Initial Volume	Final Volume
Run #1	900 ml	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.11	0.077	ug/l	
208-96-8	Acenaphthylene	ND	0.11	0.055	ug/l	
120-12-7	Anthracene	ND	0.11	0.10	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.056	0.022	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.11	0.032	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.056	0.035	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.11	0.030	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.11	0.043	ug/l	
218-01-9	Chrysene	ND	0.11	0.026	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.11	0.035	ug/l	
206-44-0	Fluoranthene	ND	0.11	0.045	ug/l	
86-73-7	Fluorene	ND	0.11	0.11	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.11	0.034	ug/l	
90-12-0	1-Methylnaphthalene	0.75	2.2	0.56	ug/l	J
91-57-6	2-Methylnaphthalene	0.57	2.2	0.56	ug/l	J
85-01-8	Phenanthrene	0.14	0.056	0.014	ug/l	B
129-00-0	Pyrene	ND	0.11	0.043	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	75%		30-130%
321-60-8	2-Fluorobiphenyl	68%		30-130%
1718-51-0	Terphenyl-d14	99%		30-130%

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	ROST3MW-ROX-100914		
Lab Sample ID:	MC34231-3	**Date Sampled:**	10/09/14
Matrix:	AQ - Ground Water	**Date Received:**	10/10/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB59888.D	1	10/13/14	NK	10/12/14	OP40168	GBB3333
Run #2							

	Initial Volume	Final Volume
Run #1	36.5 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.014	0.0059	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.014	0.0058	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	86%		36-173%
460-00-4	Bromofluorobenzene (S)	118%		36-173%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	ROST4PZC-ROX-100914		
Lab Sample ID:	MC34231-4	**Date Sampled:**	10/09/14
Matrix:	AQ - Ground Water	**Date Received:**	10/10/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N91428.D	1	10/21/14	TT	n/a	n/a	MSN3381
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	39.0	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	ROST4PZC-ROX-100914		
Lab Sample ID:	MC34231-4	**Date Sampled:**	10/09/14
Matrix:	AQ - Ground Water	**Date Received:**	10/10/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	68.8	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	1.1	5.0	0.35	ug/l	J
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether [a]	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	16.9	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	1.1	5.0	0.49	ug/l	J
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	19.6	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	4.6	5.0	0.32	ug/l	J
108-67-8	1,3,5-Trimethylbenzene	0.47	5.0	0.38	ug/l	J
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	112	1.0	0.93	ug/l	
95-47-6	o-Xylene	63.4	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	176	1.0	0.36	ug/l	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	ROST4PZC-ROX-100914		
Lab Sample ID:	MC34231-4	**Date Sampled:**	10/09/14
Matrix:	AQ - Ground Water	**Date Received:**	10/10/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	92%		70-130%
2037-26-5	Toluene-D8	101%		70-130%
460-00-4	4-Bromofluorobenzene	96%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Continuing Calibration outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	ROST4PZC-ROX-100914		
Lab Sample ID:	MC34231-4	**Date Sampled:**	10/09/14
Matrix:	AQ - Ground Water	**Date Received:**	10/10/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R40307.D	1	10/14/14	WK	10/11/14	OP40162	MSR1483
Run #2							

	Initial Volume	Final Volume
Run #1	900 ml	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	11	2.8	ug/l	
95-57-8	2-Chlorophenol	ND	5.6	0.34	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	11	0.92	ug/l	
120-83-2	2,4-Dichlorophenol	ND	11	0.44	ug/l	
105-67-9	2,4-Dimethylphenol	ND	11	0.62	ug/l	
51-28-5	2,4-Dinitrophenol	ND	22	2.8	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	2.1	ug/l	
95-48-7	2-Methylphenol	ND	11	0.25	ug/l	
	3&4-Methylphenol	0.71	11	0.52	ug/l	J
88-75-5	2-Nitrophenol	ND	11	3.2	ug/l	
100-02-7	4-Nitrophenol	ND	22	0.59	ug/l	
87-86-5	Pentachlorophenol	ND	11	1.2	ug/l	
108-95-2	Phenol	0.88	5.6	0.34	ug/l	J
95-95-4	2,4,5-Trichlorophenol	ND	11	0.41	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	11	0.19	ug/l	
62-53-3	Aniline	ND	11	0.71	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.6	0.52	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.6	0.59	ug/l	
100-51-6	Benzyl Alcohol	ND	11	2.5	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.6	0.35	ug/l	
106-47-8	4-Chloroaniline	ND	11	0.62	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.6	0.32	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.6	0.39	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.6	0.37	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.6	0.28	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.6	0.27	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	11	0.51	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	11	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.6	0.30	ug/l	
132-64-9	Dibenzofuran	ND	2.2	0.29	ug/l	
84-74-2	Di-n-butyl phthalate	0.32	5.6	0.19	ug/l	JB
117-84-0	Di-n-octyl phthalate	ND	5.6	0.31	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	ROST4PZC-ROX-100914		
Lab Sample ID:	MC34231-4	**Date Sampled:**	10/09/14
Matrix:	AQ - Ground Water	**Date Received:**	10/10/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	5.6	0.22	ug/l	
131-11-3	Dimethyl phthalate	ND	5.6	0.38	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.2	0.37	ug/l	
118-74-1	Hexachlorobenzene	ND	5.6	0.32	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	11	1.4	ug/l	
67-72-1	Hexachloroethane	ND	5.6	0.34	ug/l	
78-59-1	Isophorone	ND	5.6	0.50	ug/l	
88-74-4	2-Nitroaniline	ND	11	0.44	ug/l	
99-09-2	3-Nitroaniline	ND	11	1.5	ug/l	
100-01-6	4-Nitroaniline	ND	11	2.4	ug/l	
98-95-3	Nitrobenzene	ND	5.6	0.43	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.6	1.1	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.6	0.45	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.6	0.21	ug/l	
110-86-1	Pyridine	ND	11	0.57	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	52%		15-110%
4165-62-2	Phenol-d5	34%		15-110%
118-79-6	2,4,6-Tribromophenol	95%		15-110%
4165-60-0	Nitrobenzene-d5	82%		30-130%
321-60-8	2-Fluorobiphenyl	78%		30-130%
1718-51-0	Terphenyl-d14	108%		30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	ROST4PZC-ROX-100914		
Lab Sample ID:	MC34231-4	**Date Sampled:**	10/09/14
Matrix:	AQ - Ground Water	**Date Received:**	10/10/14
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I92214.D	1	10/14/14	WK	10/11/14	OP40163	MSI3436
Run #2							

	Initial Volume	Final Volume
Run #1	900 ml	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.11	0.077	ug/l	
208-96-8	Acenaphthylene	ND	0.11	0.055	ug/l	
120-12-7	Anthracene	ND	0.11	0.10	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.056	0.022	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.11	0.032	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.056	0.035	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.11	0.030	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.11	0.043	ug/l	
218-01-9	Chrysene	ND	0.11	0.026	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.11	0.035	ug/l	
206-44-0	Fluoranthene	ND	0.11	0.045	ug/l	
86-73-7	Fluorene	ND	0.11	0.11	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.11	0.034	ug/l	
90-12-0	1-Methylnaphthalene	ND	2.2	0.56	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.2	0.56	ug/l	
85-01-8	Phenanthrene	0.088	0.056	0.014	ug/l	B
129-00-0	Pyrene	ND	0.11	0.043	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	87%		30-130%
321-60-8	2-Fluorobiphenyl	77%		30-130%
1718-51-0	Terphenyl-d14	102%		30-130%

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	ROST4PZC-ROX-100914		
Lab Sample ID:	MC34231-4	**Date Sampled:**	10/09/14
Matrix:	AQ - Ground Water	**Date Received:**	10/10/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB59887.D	1	10/13/14	NK	10/12/14	OP40168	GBB3333
Run #2							

	Initial Volume	Final Volume
Run #1	36.5 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.014	0.0059	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.014	0.0058	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	90%		36-173%
460-00-4	Bromofluorobenzene (S)	116%		36-173%

ND = Not detected MDL = Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-ROX-100914-HCL		
Lab Sample ID:	MC34231-5	**Date Sampled:**	10/09/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/10/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N91423.D	1	10/21/14	TT	n/a	n/a	MSN3381
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-ROX-100914-HCL		
Lab Sample ID:	MC34231-5	**Date Sampled:**	10/09/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/10/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether [a]	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-ROX-100914-HCL		
Lab Sample ID:	MC34231-5	**Date Sampled:**	10/09/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/10/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		70-130%
2037-26-5	Toluene-D8	101%		70-130%
460-00-4	4-Bromofluorobenzene	99%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Continuing Calibration outside of acceptance criteria. Sample result may be biased low.

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-ROX-100914-ST		
Lab Sample ID:	MC34231-6	**Date Sampled:**	10/09/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/10/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB59886.D	1	10/13/14	NK	10/12/14	OP40168	GBB3333
Run #2							

	Initial Volume	Final Volume
Run #1	35.3 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.015	0.0061	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.015	0.0060	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	98%		36-173%
460-00-4	Bromofluorobenzene (S)	107%		36-173%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-5-ROX-100914		
Lab Sample ID:	MC34231-7	**Date Sampled:**	10/09/14
Matrix:	AQ - Ground Water	**Date Received:**	10/10/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L87843.D	1	10/23/14	GK	n/a	n/a	MSL3916
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	10	2.5	ug/l	
107-02-8	Acrolein [b]	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile [a]	ND	5.0	2.1	ug/l	
71-43-2	Benzene	28.0	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform [a]	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	0.83	5.0	0.42	ug/l	J
98-06-6	tert-Butylbenzene	4.9	5.0	0.39	ug/l	J
75-15-0	Carbon disulfide [a]	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene [a]	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
110-75-8	2-Chloroethyl vinyl ether [a]	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane [b]	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-5-ROX-100914		
Lab Sample ID:	MC34231-7	**Date Sampled:**	10/09/14
Matrix:	AQ - Ground Water	**Date Received:**	10/10/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane [a]	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene [a]	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone [a]	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	1.2	5.0	0.35	ug/l	J
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	19.0	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIB [a]	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide [a]	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	1.5	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	0.58	5.0	0.32	ug/l	J
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride [a]	ND	1.0	0.58	ug/l	
	m,p-Xylene [a]	2.7	1.0	0.93	ug/l	
95-47-6	o-Xylene	1.2	1.0	0.36	ug/l	
1330-20-7	Xylene (total) [a]	3.9	1.0	0.36	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-5-ROX-100914		
Lab Sample ID:	MC34231-7	**Date Sampled:**	10/09/14
Matrix:	AQ - Ground Water	**Date Received:**	10/10/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		70-130%
2037-26-5	Toluene-D8	105%		70-130%
460-00-4	4-Bromofluorobenzene	121%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.
(b) Initial & Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-5-ROX-100914		
Lab Sample ID:	MC34231-7	**Date Sampled:**	10/09/14
Matrix:	AQ - Ground Water	**Date Received:**	10/10/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R40299.D	1	10/14/14	WK	10/11/14	OP40162	MSR1483
Run #2							

	Initial Volume	Final Volume
Run #1	920 ml	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	11	2.7	ug/l	
95-57-8	2-Chlorophenol	ND	5.4	0.34	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	11	0.90	ug/l	
120-83-2	2,4-Dichlorophenol	ND	11	0.43	ug/l	
105-67-9	2,4-Dimethylphenol	ND	11	0.61	ug/l	
51-28-5	2,4-Dinitrophenol	ND	22	2.7	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	2.1	ug/l	
95-48-7	2-Methylphenol	ND	11	0.25	ug/l	
	3&4-Methylphenol	ND	11	0.51	ug/l	
88-75-5	2-Nitrophenol	ND	11	3.1	ug/l	
100-02-7	4-Nitrophenol	ND	22	0.58	ug/l	
87-86-5	Pentachlorophenol	ND	11	1.2	ug/l	
108-95-2	Phenol	0.72	5.4	0.33	ug/l	J
95-95-4	2,4,5-Trichlorophenol	ND	11	0.40	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	11	0.19	ug/l	
62-53-3	Aniline	ND	11	0.69	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.4	0.51	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.4	0.58	ug/l	
100-51-6	Benzyl Alcohol	ND	11	2.5	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.4	0.34	ug/l	
106-47-8	4-Chloroaniline	ND	11	0.61	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.4	0.31	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.4	0.38	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.4	0.36	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.4	0.27	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.4	0.26	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	11	0.50	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	11	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.4	0.29	ug/l	
132-64-9	Dibenzofuran	ND	2.2	0.28	ug/l	
84-74-2	Di-n-butyl phthalate	0.23	5.4	0.19	ug/l	JB
117-84-0	Di-n-octyl phthalate	ND	5.4	0.31	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-5-ROX-100914		
Lab Sample ID:	MC34231-7	**Date Sampled:**	10/09/14
Matrix:	AQ - Ground Water	**Date Received:**	10/10/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	5.4	0.22	ug/l	
131-11-3	Dimethyl phthalate	ND	5.4	0.37	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.2	0.36	ug/l	
118-74-1	Hexachlorobenzene	ND	5.4	0.31	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	11	1.4	ug/l	
67-72-1	Hexachloroethane	ND	5.4	0.33	ug/l	
78-59-1	Isophorone	ND	5.4	0.49	ug/l	
88-74-4	2-Nitroaniline	ND	11	0.43	ug/l	
99-09-2	3-Nitroaniline	ND	11	1.5	ug/l	
100-01-6	4-Nitroaniline	ND	11	2.3	ug/l	
98-95-3	Nitrobenzene	ND	5.4	0.43	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.4	1.1	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.4	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.4	0.21	ug/l	
110-86-1	Pyridine	ND	11	0.56	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	51%		15-110%
4165-62-2	Phenol-d5	32%		15-110%
118-79-6	2,4,6-Tribromophenol	98%		15-110%
4165-60-0	Nitrobenzene-d5	82%		30-130%
321-60-8	2-Fluorobiphenyl	78%		30-130%
1718-51-0	Terphenyl-d14	101%		30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-5-ROX-100914		
Lab Sample ID:	MC34231-7	**Date Sampled:**	10/09/14
Matrix:	AQ - Ground Water	**Date Received:**	10/10/14
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I92210.D	1	10/14/14	WK	10/11/14	OP40163	MSI3436
Run #2							

	Initial Volume	Final Volume
Run #1	920 ml	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.11	0.075	ug/l	
208-96-8	Acenaphthylene	ND	0.11	0.054	ug/l	
120-12-7	Anthracene	ND	0.11	0.10	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.054	0.021	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.11	0.031	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.054	0.034	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.11	0.029	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.11	0.042	ug/l	
218-01-9	Chrysene	ND	0.11	0.026	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.11	0.035	ug/l	
206-44-0	Fluoranthene	ND	0.11	0.044	ug/l	
86-73-7	Fluorene	ND	0.11	0.11	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.11	0.033	ug/l	
90-12-0	1-Methylnaphthalene	0.99	2.2	0.54	ug/l	J
91-57-6	2-Methylnaphthalene	ND	2.2	0.54	ug/l	
85-01-8	Phenanthrene	0.030	0.054	0.014	ug/l	J
129-00-0	Pyrene	ND	0.11	0.042	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	85%		30-130%
321-60-8	2-Fluorobiphenyl	77%		30-130%
1718-51-0	Terphenyl-d14	95%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-5-ROX-100914		
Lab Sample ID:	MC34231-7	**Date Sampled:**	10/09/14
Matrix:	AQ - Ground Water	**Date Received:**	10/10/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB59885.D	1	10/13/14	NK	10/12/14	OP40168	GBB3333
Run #2							

	Initial Volume	Final Volume
Run #1	36.2 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.015	0.0059	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.015	0.0059	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	89%		36-173%
460-00-4	Bromofluorobenzene (S)	121%		36-173%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- REPROC Form: Reprocessed/Corrected Data
- Sample Tracking Chronicle
- Internal Chain of Custody

Shell Oil Products Chain Of Custody Record

URS

LAB (LOCATION)
☐ XENCO (_____)
☐ CALSCIENCE (_____)
☑ OTHER Accutest Labs, 495 Technology Ctr W Marlborough, MA 01752 (508-481-6200)
☐ SPL ☐ Lab Vendor # (_____)
Lab Vendor #

Please Check Appropriate Box:
☑ ENV. SERVICES ☐ MOTIVA RETAIL ☐ SHELL RETAIL
☐ MOTIVA SD&CM ☐ CONSULTANT ☐ LUBES
☐ SHELL PIPELINE ☐ OTHER _____

Print Bill To Contact Name: Bob Billman
PO #
INCIDENT # (ENV SERVICES): 9 7 2 1 6 6 4 0
SAP #: 3 4 0 0 6 1
☐ CHECK IF NO INCIDENT # APPLIES
DATE: 10-9-14
PAGE: 1 of 1

SAMPLING COMPANY: URS CORPORATION
LOG CODE:
ADDRESS: 1001 HIGHLANDS PLAZA DRIVE WEST - SUITE 300; ST. LOUIS, MO 63110
PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Wendy Pennington, Bob Billman, Lindsay Rathnow
TELEPHONE: 314-429-0100
FAX: 314-429-0462
Bill To Contact E-MAIL: bob.billman@urs.com; elizabeth.kunkel@urs.com; wendy.pennington@urs.com; lindsay.rathnow@urs.com

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA
State: IL
GLOBAL ID NO.:
EDF DELIVERABLE TO (Name, Company, Office Location):
PHONE NO.:
E-MAIL:
CONSULTANT PROJECT NO.: Roxana Quarterly GW / 21562973.03004
SAMPLER NAME(S) (Print): Melissa Manster, Stefanie Voss
LAB USE ONLY: MC34231

TURNAROUND TIME (CALENDAR DAYS):
☑ STANDARD (10 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND
☐ LA - RWQCB REPORT FORMAT ☐ UST AGENCY:
DELIVERABLES: ☐ LEVEL 1 ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) EDD
TEMPERATURE ON RECEIPT C°: Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :
* Please include "J" values on Reports.
* Please provide sample receipt upon login.
☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260C SL+TICS	VOC 8011 SL	SVOC 8270D SL+TICS	PAH 8270LL	PID (ppm)	FIELD NOTES: Container PID Readings or Laboratory Notes
-1	MW3-ROX-100914 EB	10/9/14	0920	water	2			2	2	6	X	X	X	X	0.0	
-2	MW 3-ROX-100914		0955		2			2	2	6	X	X	X	X		
-3	ROST3MW-ROX-100914		1105		2			2	2	6	X	X	X	X		
-4	ROST4P2C-ROX-100914		1245		2			2	2	6	X	X	X	X		
-5	TB-ROX-100914 HCL		0000		2					2	X					
-6	TB-ROX-100914 ST		0000						2	2		X				
-7	MW5-ROX-100914		1450		2			2	2	6	X	X	X	X		18B, 2E1,
-7S	MW5-ROX-1000914 MS		1450		2			2	2	6	X	X	X	X		
-7D	MW5-ROX-100914 MSD		1450		2			2	2	6	X	X	X	X		

Relinquished by (Signature)	Received by (Signature)	Date	Time
Stefanie Voss	FED EX	10-9-14	1800
FEDX		10-10-14	930

05-D06 Revision

0.6 °C -0.9 °C

MC34231: Chain of Custody
Page 1 of 2

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: MC34231 **Client:** URS **Project:** 900 SOUTH CENTRAL

Date / Time Received: 10/10/2014 9 30 00 AM **Delivery Method:** **Airbill #'s:**

Cooler Temps (Initial/Adjusted): #1 (0 6/0 6) #2 (0 9/0 9)

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Thermometer D:	G1;		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	2		

Quality Control_Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☑		☐	☐
2. Trip Blank listed on COC:	☑		☐	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

Accutest Laboratories
V:(508) 481-6200

495 Technology Center West, Bldg One
F: (508) 481-7753

Marlborough, MA 01752
www/accutest.com

Initial Calibration Summary

Job Number: MC34231 **Sample:** MSN3345-ICC3345
Account: SHELLWIC Shell Oil **Lab FileID:** N90397.D
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Response Factor Report MSN

Method : O:\msn\1\methods\n140918wx.m (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration

Calibration Files
0.5 =n90391.d 1 =n90392.d 2 =n90393.d 5 =n90394.d
10 =n90395.d 25 =n90396.d 50 =n90397.d 100 =n90398.d
200 =n90399.d 400 =n90400.d = =

Compound

	0.5	1	2	5	10	25	50	100	200	400	Avg	%RSD
1) I pentafluorobenzene	----------ISTD----------											
2) methyl tert butyl ether	1.122	1.215	0.906	0.695	0.592	1.488	1.263	1.271	1.294	1.197	1.104	25.73

---- Linear regression ---- Coefficient = 0.9929
Response Ratio = -0.00683 + 1.23664 *A

(#) = Out of Range ### Number of calibration levels exceeded format ###

n140918wx.m Fri Oct 16 13:20:48 2015

Initial Calibration Verification

Job Number: MC34231 **Sample:** MSN3345-ICV3345
Account: SHELLWIC Shell Oil **Lab FileID:** N90407.D
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Evaluate Continuing Calibration Report

```
Data File : O:\msn\1\data backup\n140919\n90407.d        Vial: 16
Acq On    : 19 Sep 2014   1:04 pm                    Operator: krystend
Sample    : cc3345-50                                Inst    : MSN
Misc      : ms32746,MSN3345,,,,5,1                   Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : O:\msn\1\methods\n140918wx.m (RTE Integrator)
Title        : SW-846 Method 8260
Last Update  : Fri Oct 16 13:19:49 2015
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 200%

       Compound                   AvgRF   CCRF      %Dev Area%  Dev(min)R.T.
-------------------------------------------------------------------------------
1 I   pentafluorobenzene          1.000   1.000      0.0  108   0.00    9.12

          ----------------------- Amount  Calc.    %Drift   -------------
2 p   methyl tert butyl ether    50.000  54.861     -9.7  115  -0.01    7.70
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------

   (#) = Out of Range              SPCC's out = 0  CCC's out = 0
    n90397.d   n140918wx.m       Thu Oct 22 14:46:51 2015
```

5.2
5
53 of 152
SGS ACCUTEST
MC34231

Continuing Calibration Summary

Job Number: MC34231 **Sample:** MSN3381-CC3345
Account: SHELLWIC Shell Oil **Lab FileID:** N91418.D
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Evaluate Continuing Calibration Report

Data File : O:\msn\1\data backup\n141021\n91418.d Vial: 16
Acq On : 21 Oct 2014 8:19 am Operator: tomaszt
Sample : cc3345-50 Inst : MSN
Misc : ms33003,MSN3381,,,,5,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : O:\msn\1\methods\n140918wx.m (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Fri Oct 16 13:19:49 2015
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	pentafluorobenzene	1.000	1.000	0.0	114	0.00	9.12
		Amount	Calc.	%Drift			
2 p	methyl tert butyl ether	50.000	36.695	26.6#	82	-0.01	7.70

(#) = Out of Range SPCC's out = 0 CCC's out = 0
n90397.d n140918wx.m Tue Oct 27 13:57:47 2015

Continuing Calibration Summary

Job Number: MC34231 **Sample:** MSN3385-CC3345
Account: SHELLWIC Shell Oil **Lab FileID:** N91530.D
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Evaluate Continuing Calibration Report

Data File : O:\msn\1\data backup\n141024\n91530.d Vial: 17
Acq On : 24 Oct 2014 9:01 am Operator: jaclynb
Sample : cc3345-50 Inst : MSN
Misc : ms33017,MSN3385,,,,5,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : O:\msn\1\methods\n140918wx.m (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Fri Oct 16 13:19:49 2015
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	pentafluorobenzene	1.000	1.000	0.0	154	0.00	9.12
		Amount	Calc.	%Drift			
2 p	methyl tert butyl ether	50.000	31.687	36.6#	95	0.00	7.71

(#) = Out of Range SPCC's out = 0 CCC's out = 0
n90397.d n140918wx.m Tue Oct 27 15:29:33 2015

Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n140918\
Data File : n90391.d
Acq On : 18 Sep 2014 4:07 pm
Operator : krystend
Sample : IC3345-0.5
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 21 Sample Multiplier: 1

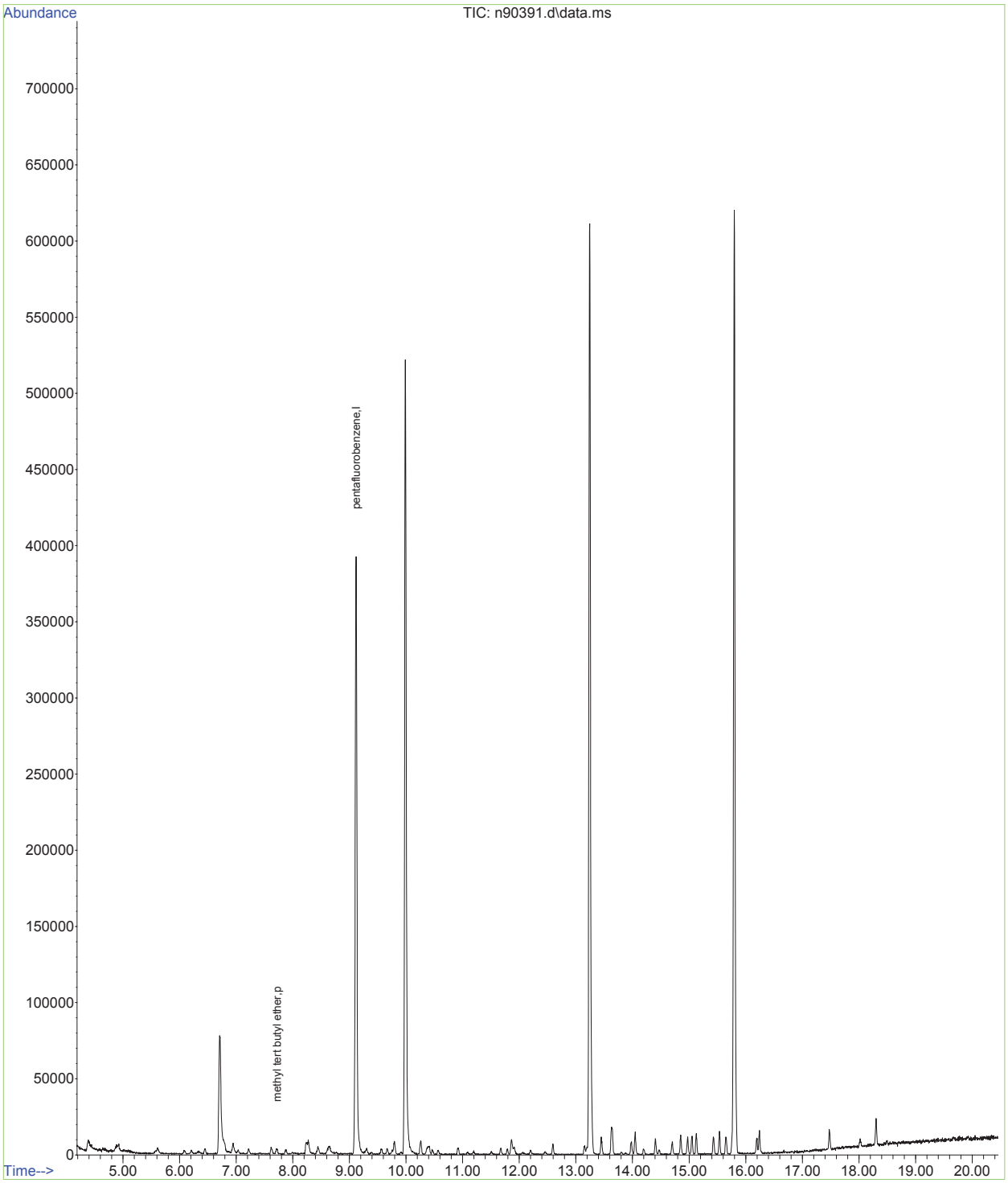
Quant Time: Oct 16 13:14:40 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.119	168	275131	50.00	ug/L	0.00
Target Compounds						Qvalue
2) methyl tert butyl ether	7.719	73	3086	0.44	ug/L	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : O:\msn\1\data backup\n140918\
Data File : n90391.d
Acq On : 18 Sep 2014 4:07 pm
Operator : krystend
Sample : IC3345-0.5
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Oct 16 13:14:40 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n140918\
Data File : n90392.d
Acq On : 18 Sep 2014 4:35 pm
Operator : krystend
Sample : IC3345-1
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 22 Sample Multiplier: 1

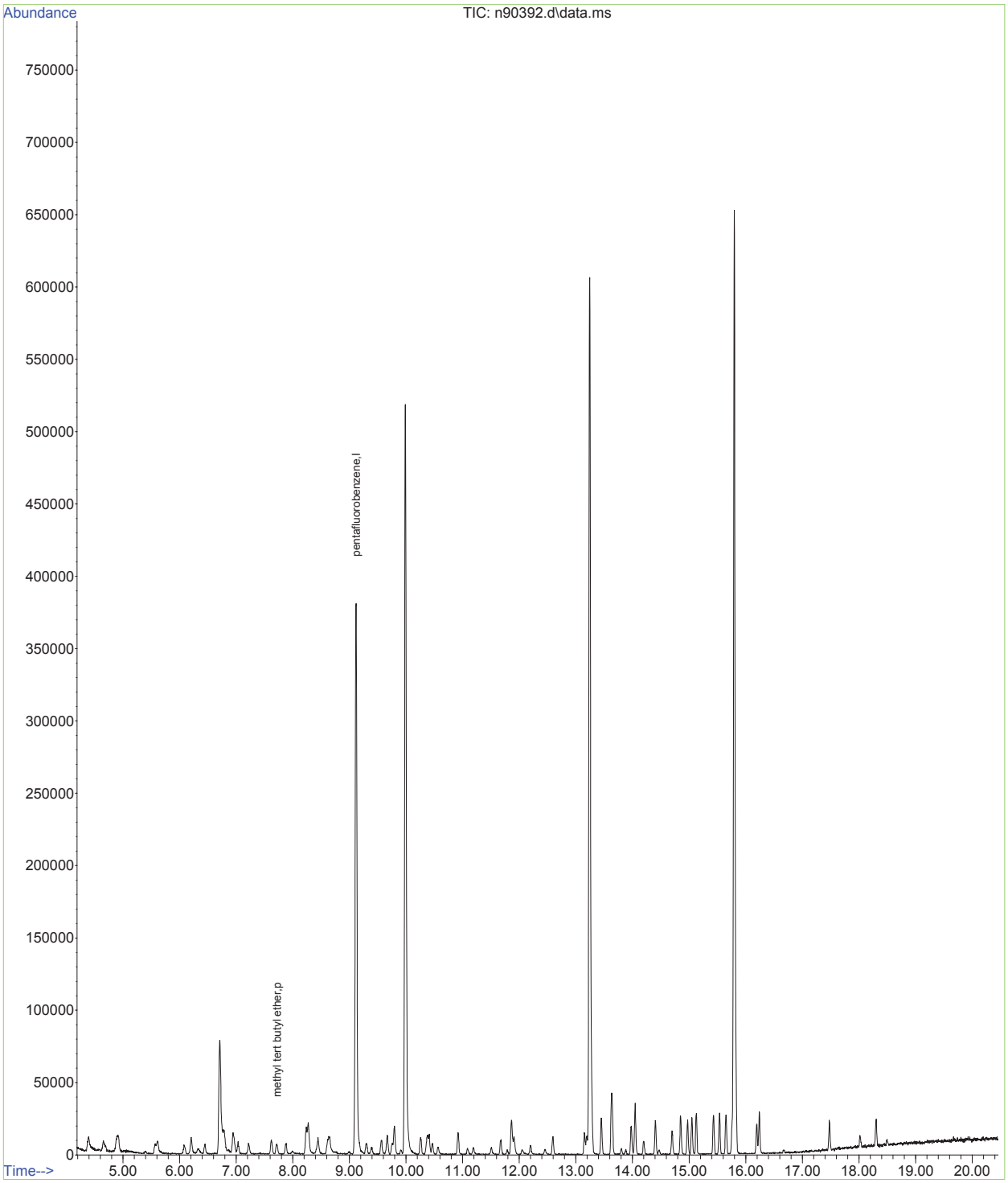
Quant Time: Oct 16 13:14:42 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.119	168	271362	50.00	ug/L	0.00
Target Compounds						Qvalue
2) methyl tert butyl ether	7.719	73	6594	0.96	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : O:\msn\1\data backup\n140918\
Data File : n90392.d
Acq On : 18 Sep 2014 4:35 pm
Operator : krystend
Sample : IC3345-1
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Oct 16 13:14:42 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n140918\
Data File : n90393.d
Acq On : 18 Sep 2014 5:03 pm
Operator : krystend
Sample : IC3345-2
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 23 Sample Multiplier: 1

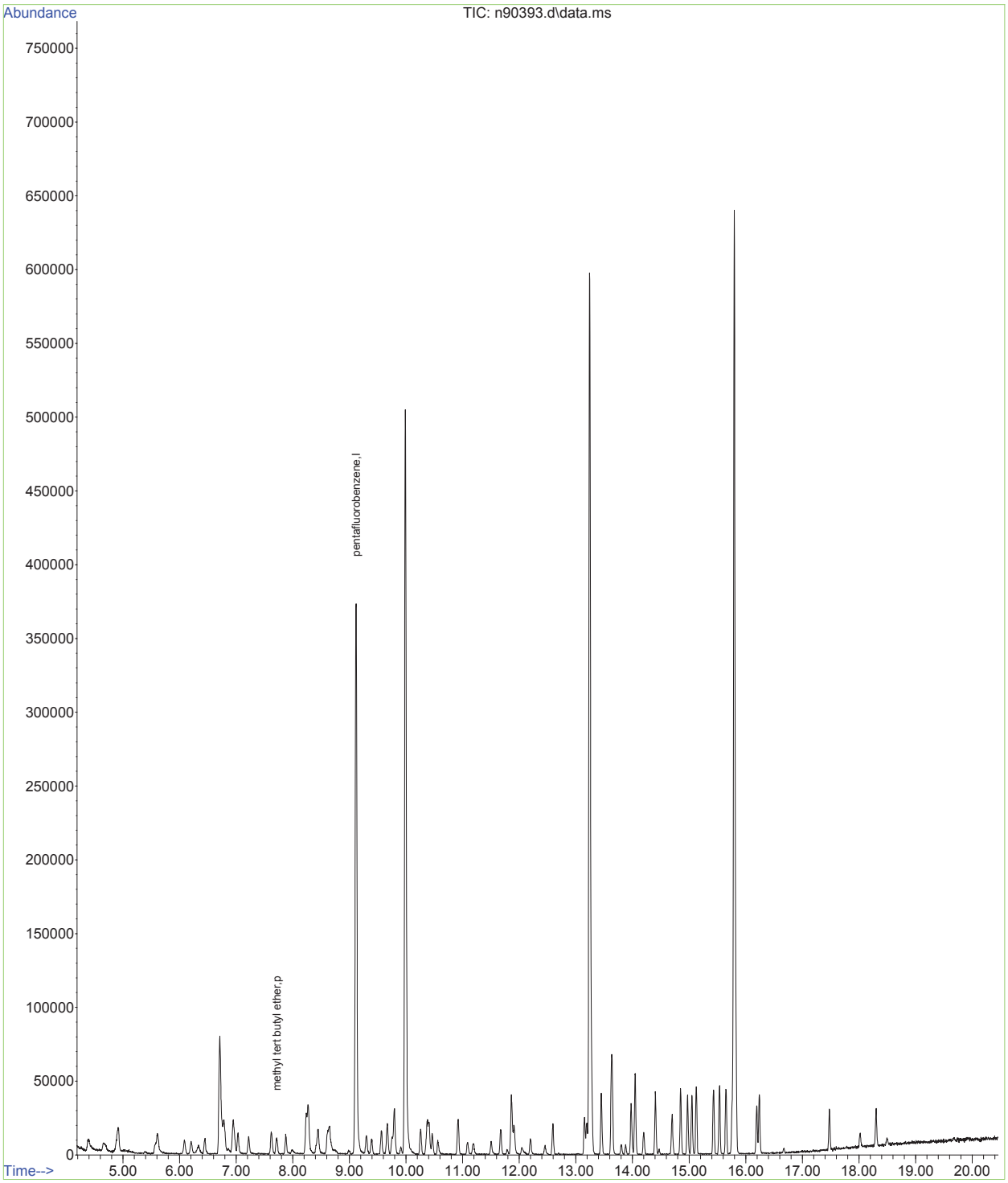
Quant Time: Oct 16 13:14:44 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.119	168	263657	50.00	ug/L	0.00
Target Compounds						Qvalue
2) methyl tert butyl ether	7.715	73	9559	1.43	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : O:\msn\1\data backup\n140918\
Data File : n90393.d
Acq On : 18 Sep 2014 5:03 pm
Operator : krystend
Sample : IC3345-2
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Oct 16 13:14:44 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n140918\
Data File : n90394.d
Acq On : 18 Sep 2014 5:32 pm
Operator : krystend
Sample : IC3345-5
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 24 Sample Multiplier: 1

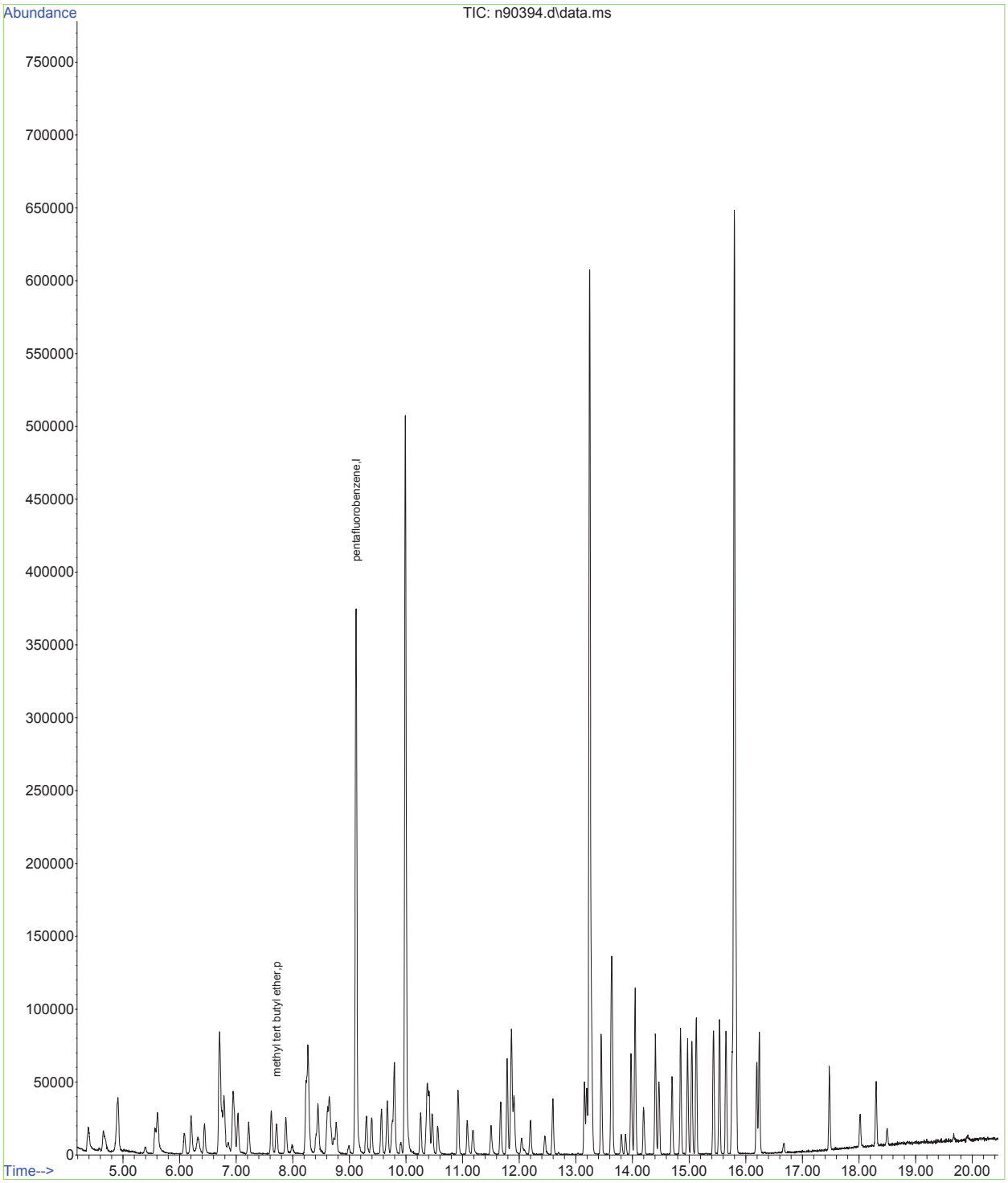
Quant Time: Oct 16 13:14:46 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.118	168	257045	50.00	ug/L	0.00
Target Compounds						Qvalue
2) methyl tert butyl ether	7.711	73	17856	2.75	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : O:\msn\1\data backup\n140918\
Data File : n90394.d
Acq On : 18 Sep 2014 5:32 pm
Operator : krystend
Sample : IC3345-5
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Oct 16 13:14:46 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n140918\
Data File : n90395.d
Acq On : 18 Sep 2014 6:00 pm
Operator : krystend
Sample : IC3345-10
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 25 Sample Multiplier: 1

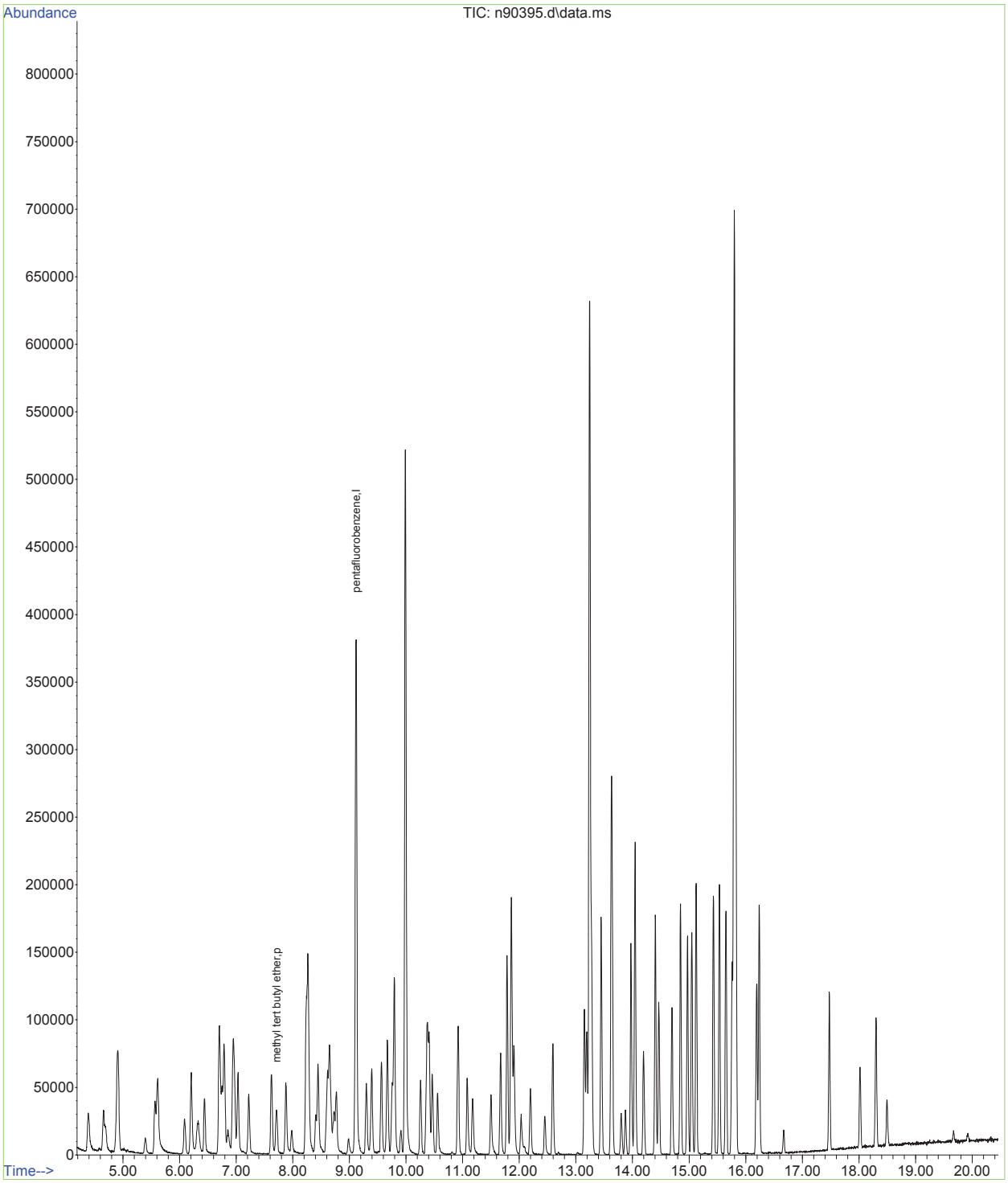
Quant Time: Oct 16 13:14:48 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.119	168	259103	50.00	ug/L	0.00
Target Compounds						Qvalue
2) methyl tert butyl ether	7.712	73	30689	4.69	ug/L	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : O:\msn\1\data backup\n140918\
Data File : n90395.d
Acq On : 18 Sep 2014 6:00 pm
Operator : krystend
Sample : IC3345-10
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Oct 16 13:14:48 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n140918\
Data File : n90396.d
Acq On : 18 Sep 2014 6:30 pm
Operator : krystend
Sample : IC3345-25
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Oct 16 13:14:50 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.115	168	269555	50.00	ug/L	0.00
Target Compounds						Qvalue
2) methyl tert butyl ether	7.705	73	200518	29.43	ug/L	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

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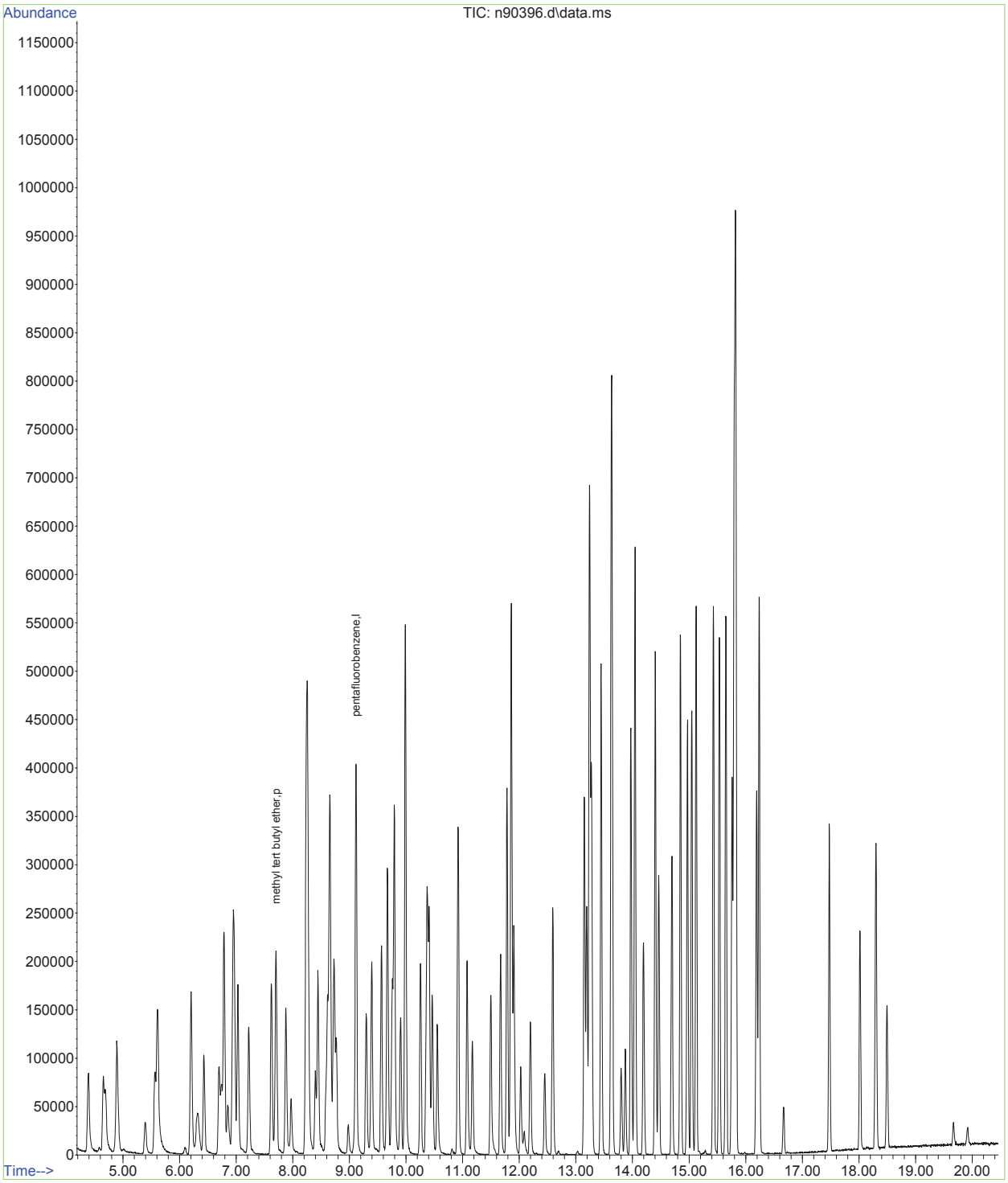
Data Path : O:\msn\1\data backup\n140918\
Data File : n90396.d
Acq On : 18 Sep 2014 6:30 pm
Operator : krystend
Sample : IC3345-25
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Oct 16 13:14:50 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n140918\
Data File : n90397.d
Acq On : 18 Sep 2014 6:59 pm
Operator : krystend
Sample : ICC3345-50
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 27 Sample Multiplier: 1

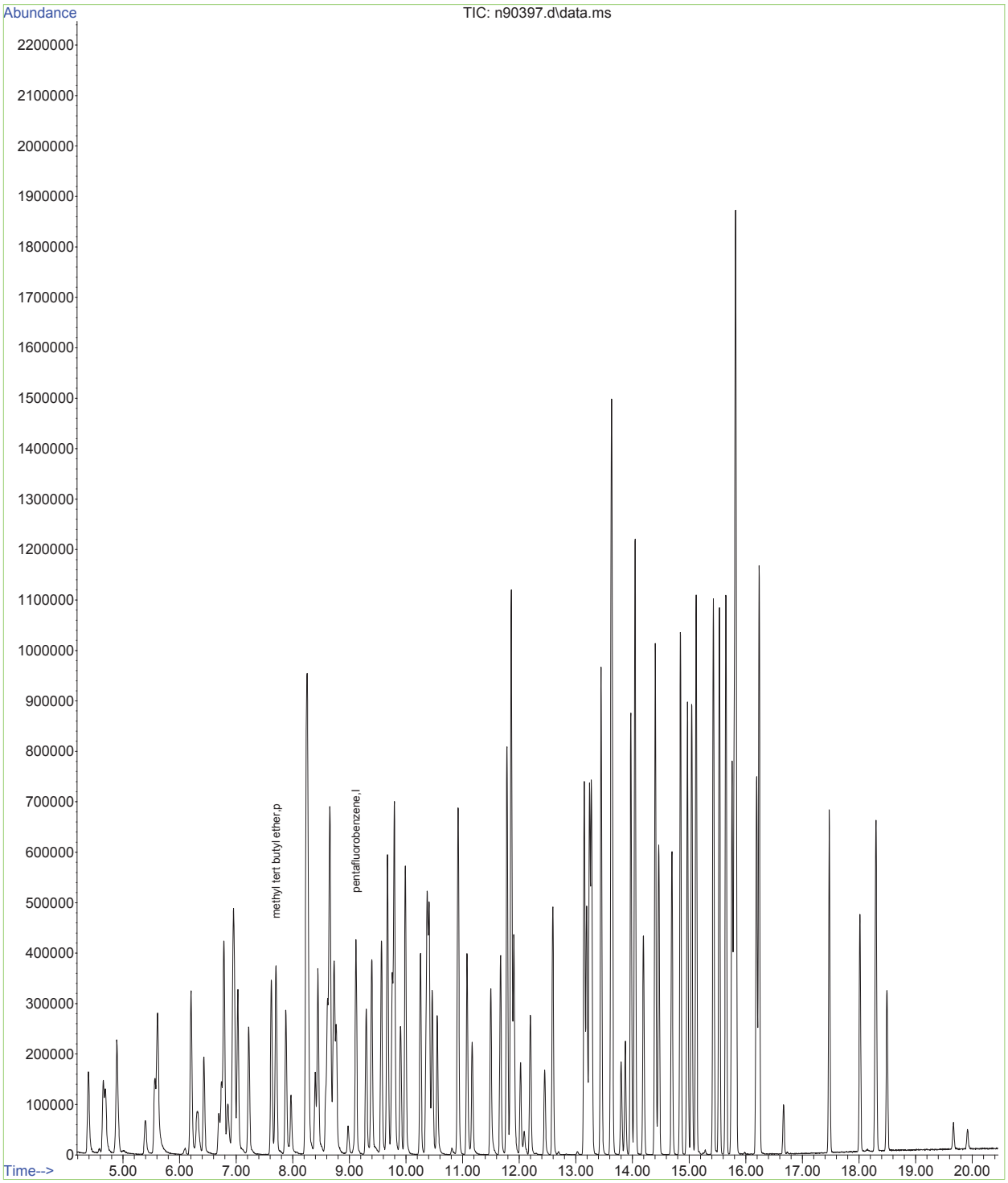
Quant Time: Oct 16 13:14:52 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.115	168	281476	50.00	ug/L	0.00
Target Compounds						Qvalue
2) methyl tert butyl ether	7.704	73	355515	49.97	ug/L	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : O:\msn\1\data backup\n140918\
Data File : n90397.d
Acq On : 18 Sep 2014 6:59 pm
Operator : krystend
Sample : ICC3345-50
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Oct 16 13:14:52 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n140918\
Data File : n90398.d
Acq On : 18 Sep 2014 7:27 pm
Operator : krystend
Sample : IC3345-100
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 28 Sample Multiplier: 1

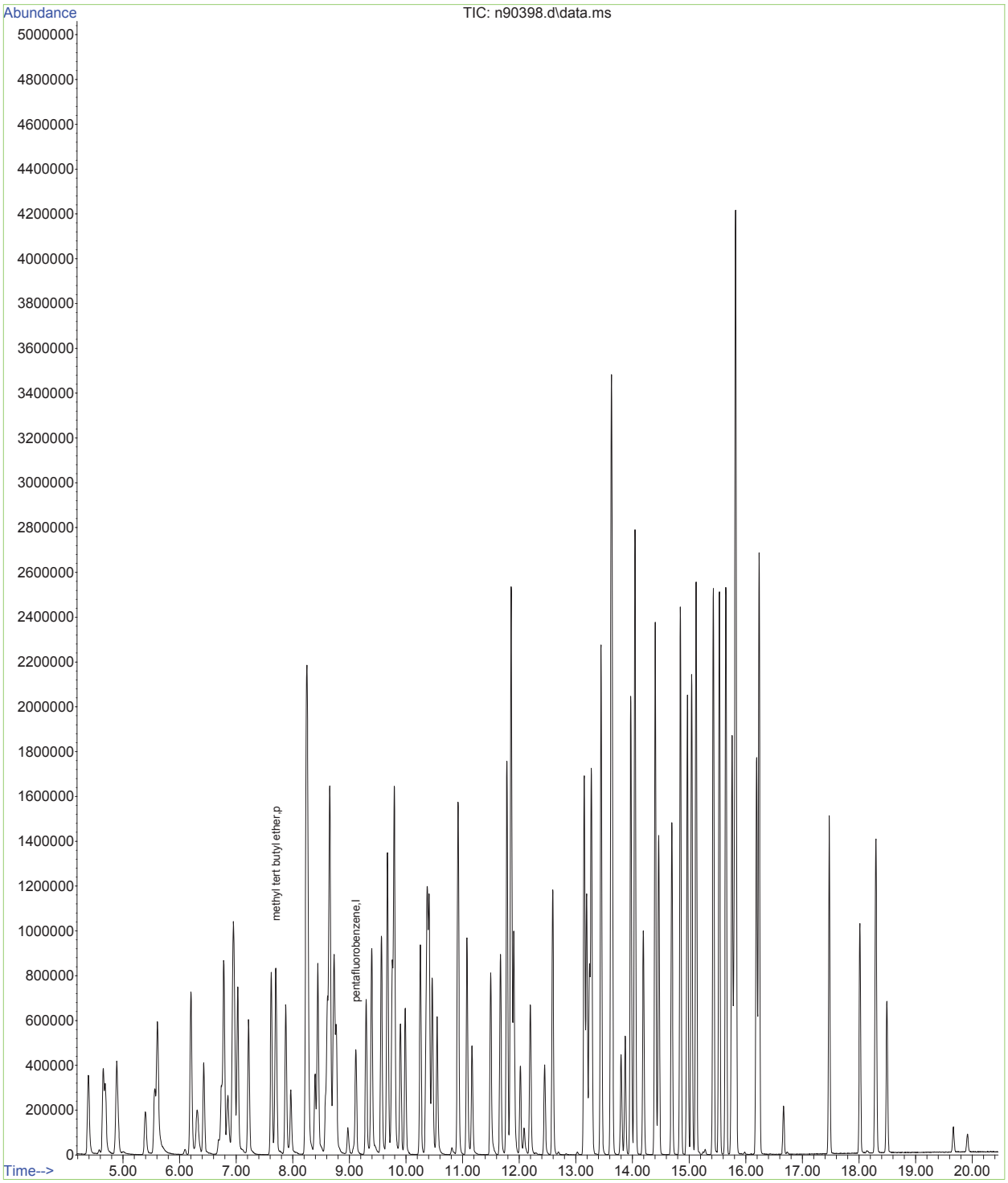
Quant Time: Oct 16 13:14:54 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.111	168	321164	50.00	ug/L	0.00
Target Compounds						Qvalue
2) methyl tert butyl ether	7.701	73	816619	100.59	ug/L	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : O:\msn\1\data backup\n140918\
Data File : n90398.d
Acq On : 18 Sep 2014 7:27 pm
Operator : krystend
Sample : IC3345-100
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Oct 16 13:14:54 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n140918\
Data File : n90399.d
Acq On : 18 Sep 2014 7:55 pm
Operator : krystend
Sample : IC3345-200
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 29 Sample Multiplier: 1

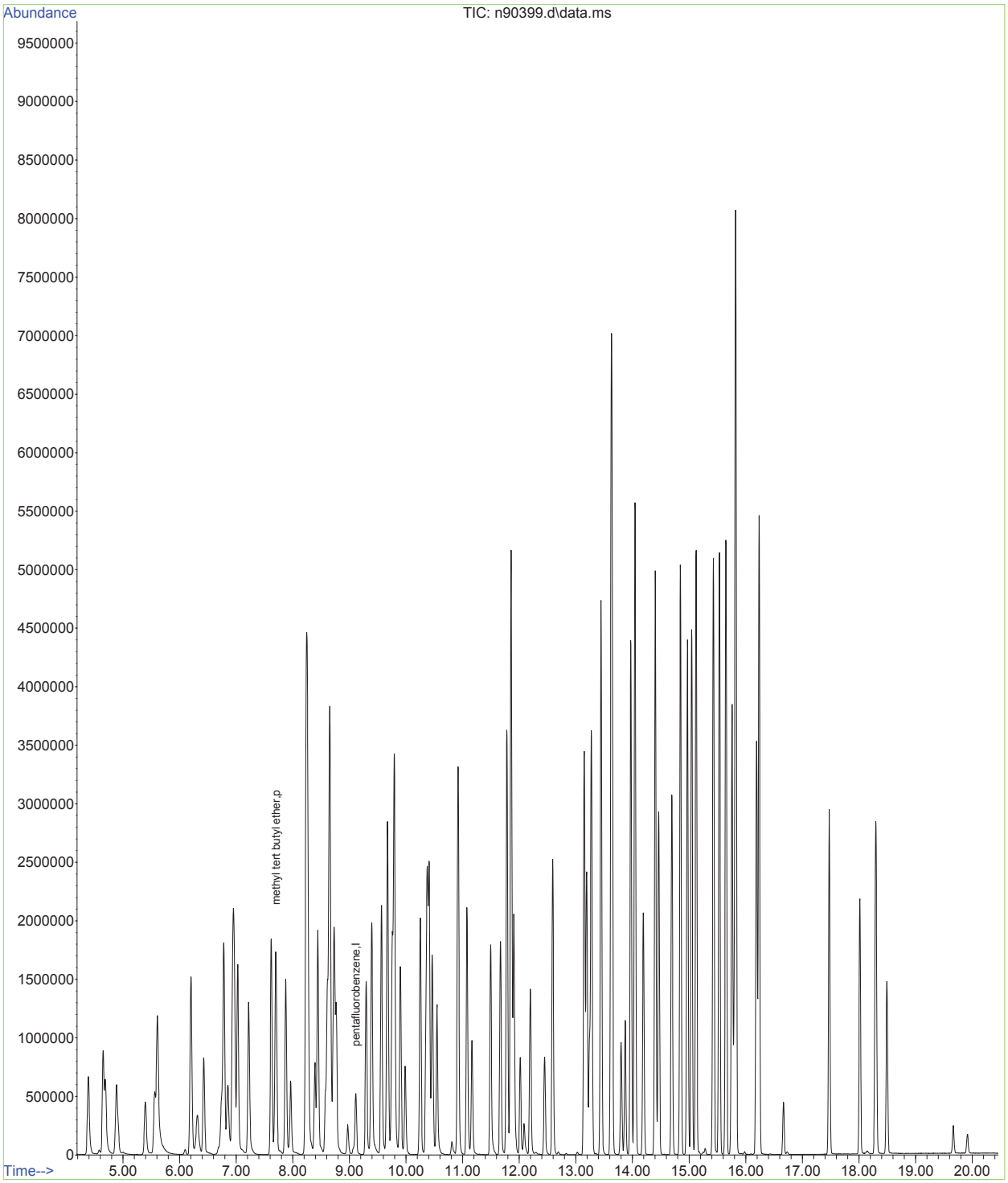
Quant Time: Oct 16 13:14:57 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.115	168	355344	50.00	ug/L	0.00
Target Compounds						Qvalue
2) methyl tert butyl ether	7.701	73	1838735	204.71	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : O:\msn\1\data backup\n140918\
Data File : n90399.d
Acq On : 18 Sep 2014 7:55 pm
Operator : krystend
Sample : IC3345-200
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Oct 16 13:14:57 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n140918\
Data File : n90400.d
Acq On : 18 Sep 2014 8:23 pm
Operator : krystend
Sample : IC3345-400
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Oct 16 13:14:58 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration

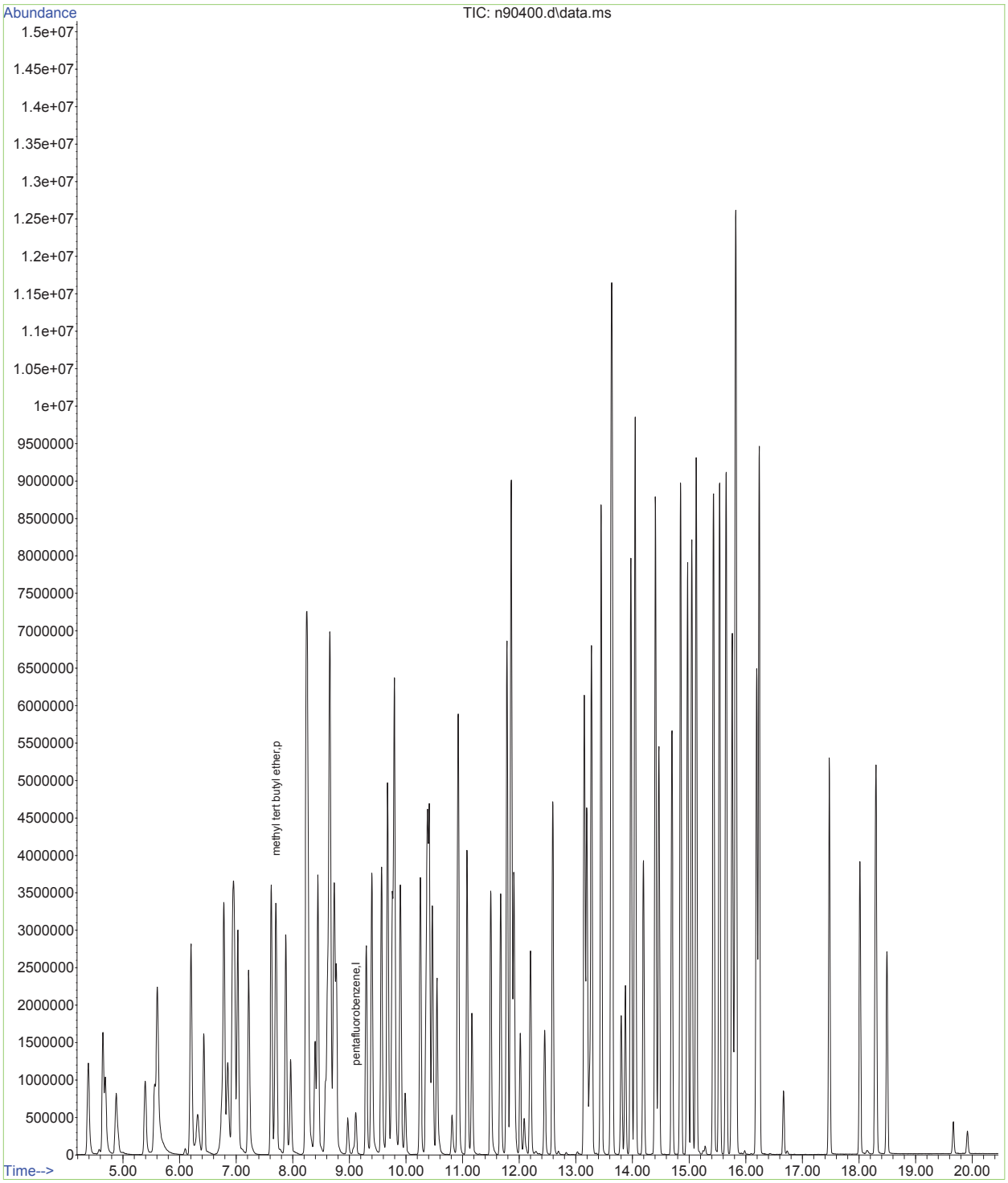
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.111	168	394186	50.00	ug/L	0.00
Target Compounds						Qvalue
2) methyl tert butyl ether	7.701	73	3773711	378.74	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST MC34231

Data Path : O:\msn\1\data backup\n140918\
Data File : n90400.d
Acq On : 18 Sep 2014 8:23 pm
Operator : krystend
Sample : IC3345-400
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Oct 16 13:14:58 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n140919\
Data File : n90407.d
Acq On : 19 Sep 2014 1:04 pm
Operator : krystend
Sample : ICV3345-50
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Oct 16 13:20:29 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.115	168	303678	50.00	ug/L	0.00
Target Compounds						Qvalue
2) methyl tert butyl ether	7.705	73	409974	54.86	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

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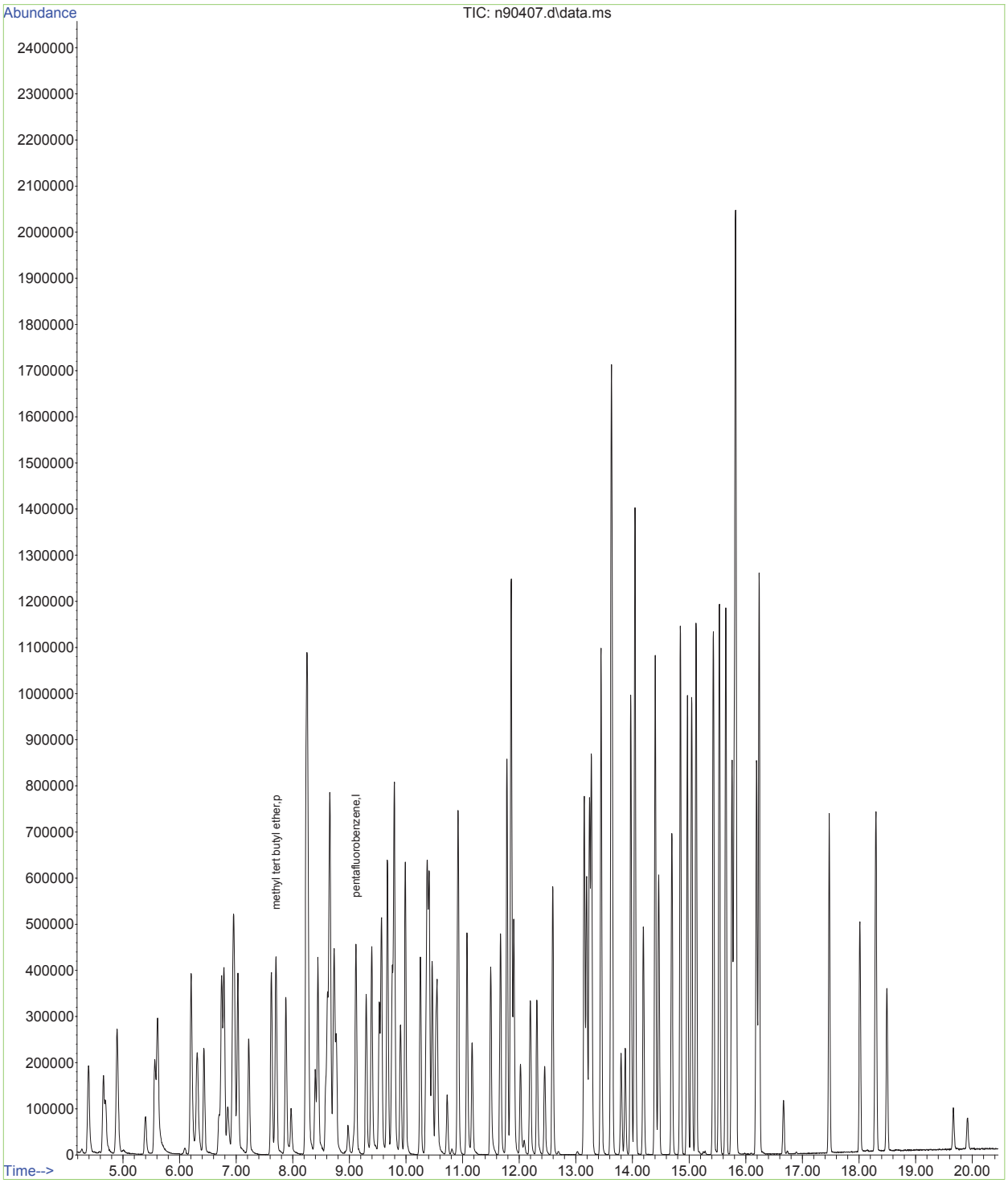
MC34231

Data Path : O:\msn\1\data backup\n140919\
Data File : n90407.d
Acq On : 19 Sep 2014 1:04 pm
Operator : krystend
Sample : ICV3345-50
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Oct 16 13:20:29 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141021\
Data File : n91418.d
Acq On : 21 Oct 2014 8:19 am
Operator : tomaszt
Sample : cc3345-50
Misc : ms33003,MSN3381,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Oct 27 13:56:20 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration

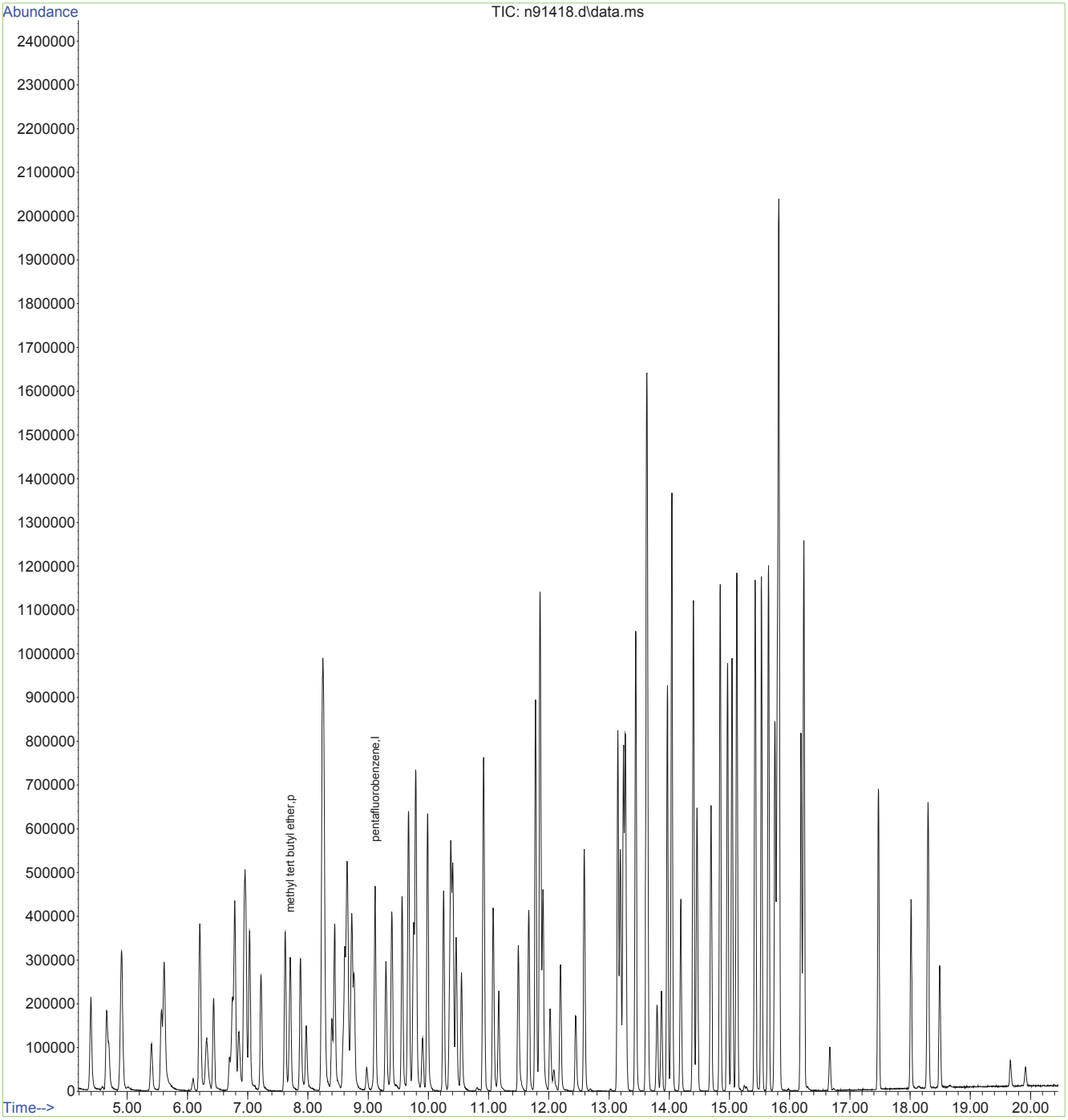
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.115	168	321689	50.00	ug/L	0.00
Target Compounds						Qvalue
2) methyl tert butyl ether	7.704	73	289758	36.69	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141021\
Data File : n91418.d
Acq On : 21 Oct 2014 8:19 am
Operator : tomaszt
Sample : cc3345-50
Misc : ms33003,MSN3381,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Oct 27 13:56:20 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration



SGS ACCUTEST
MC34231

Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141024\
Data File : n91530.d
Acq On : 24 Oct 2014 9:01 am
Operator : jaclynb
Sample : bs
Misc : ms33058,MSN3385,,,,5,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Oct 27 14:03:38 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration

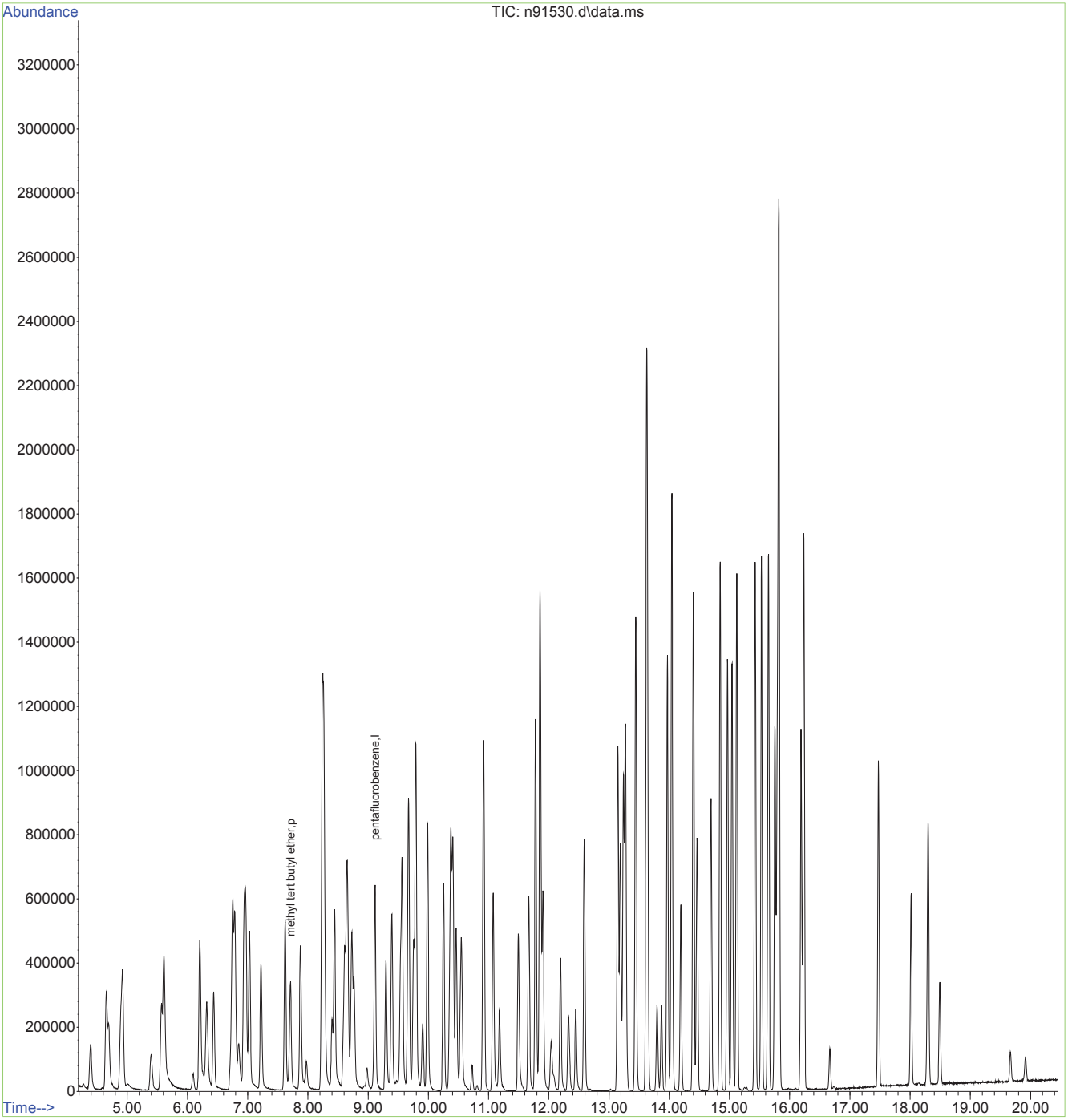
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.115	168	433892	50.00	ug/L	0.00
Target Compounds						Qvalue
2) methyl tert butyl ether	7.712	73	337083	31.69	ug/L	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141024\
Data File : n91530.d
Acq On : 24 Oct 2014 9:01 am
Operator : jaclynb
Sample : bs
Misc : ms33058,MSN3385,,,,5,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Oct 27 14:03:38 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141021\
Data File : n91423.d
Acq On : 21 Oct 2014 10:43 am
Operator : tomaszt
Sample : mc34231-5
Misc : ms33017,MSN3381,,,,5,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Oct 27 13:59:02 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration

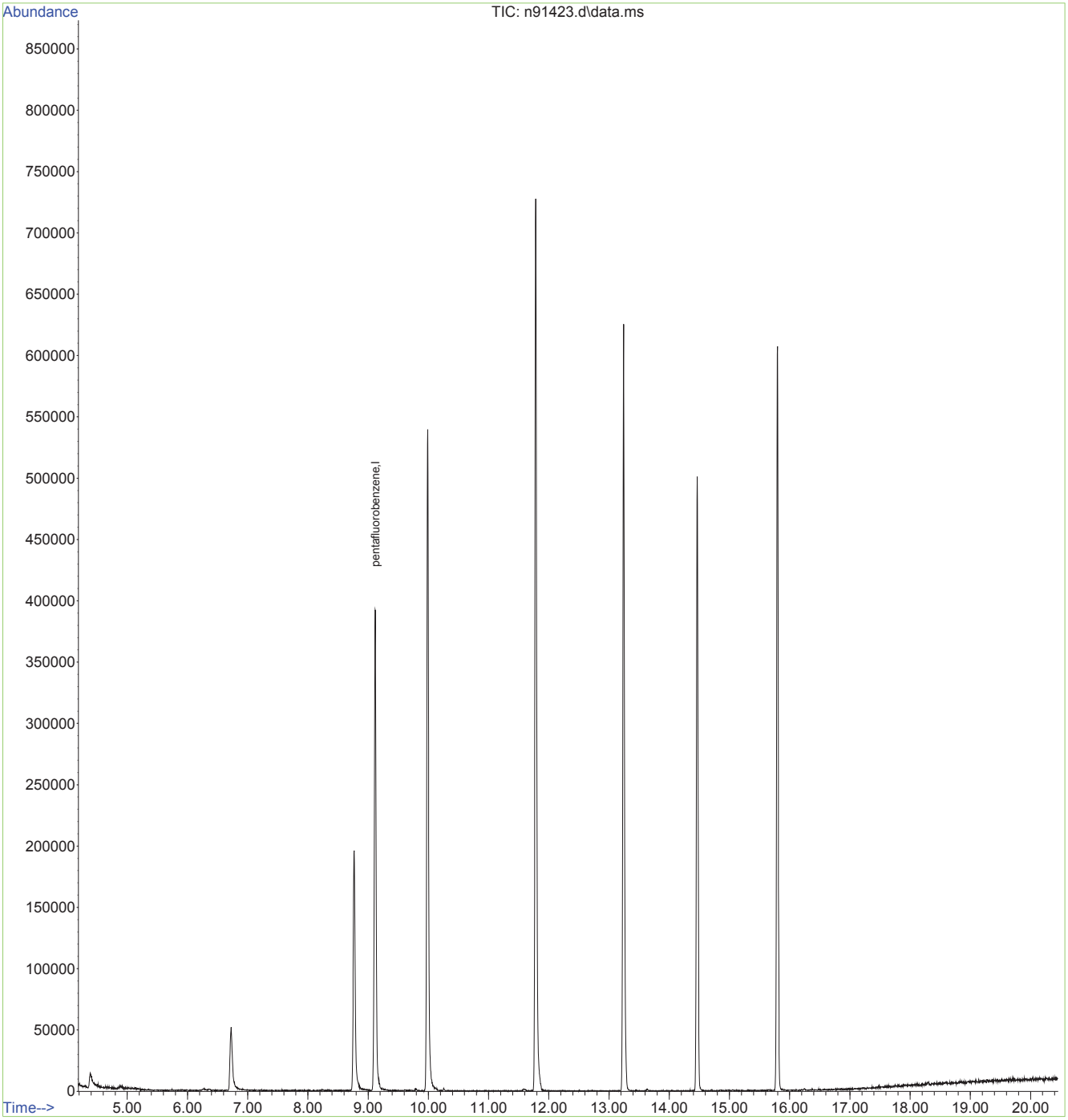
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.119	168	281736	50.00	ug/L	0.00
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141021\
Data File : n91423.d
Acq On : 21 Oct 2014 10:43 am
Operator : tomaszt
Sample : mc34231-5
Misc : ms33017,MSN3381,,,,5,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Oct 27 13:59:02 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141021\
Data File : n91424.d
Acq On : 21 Oct 2014 11:12 am
Operator : tomaszt
Sample : mc34231-1
Misc : ms33017,MSN3381,,,,5,1
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Oct 27 13:59:05 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration

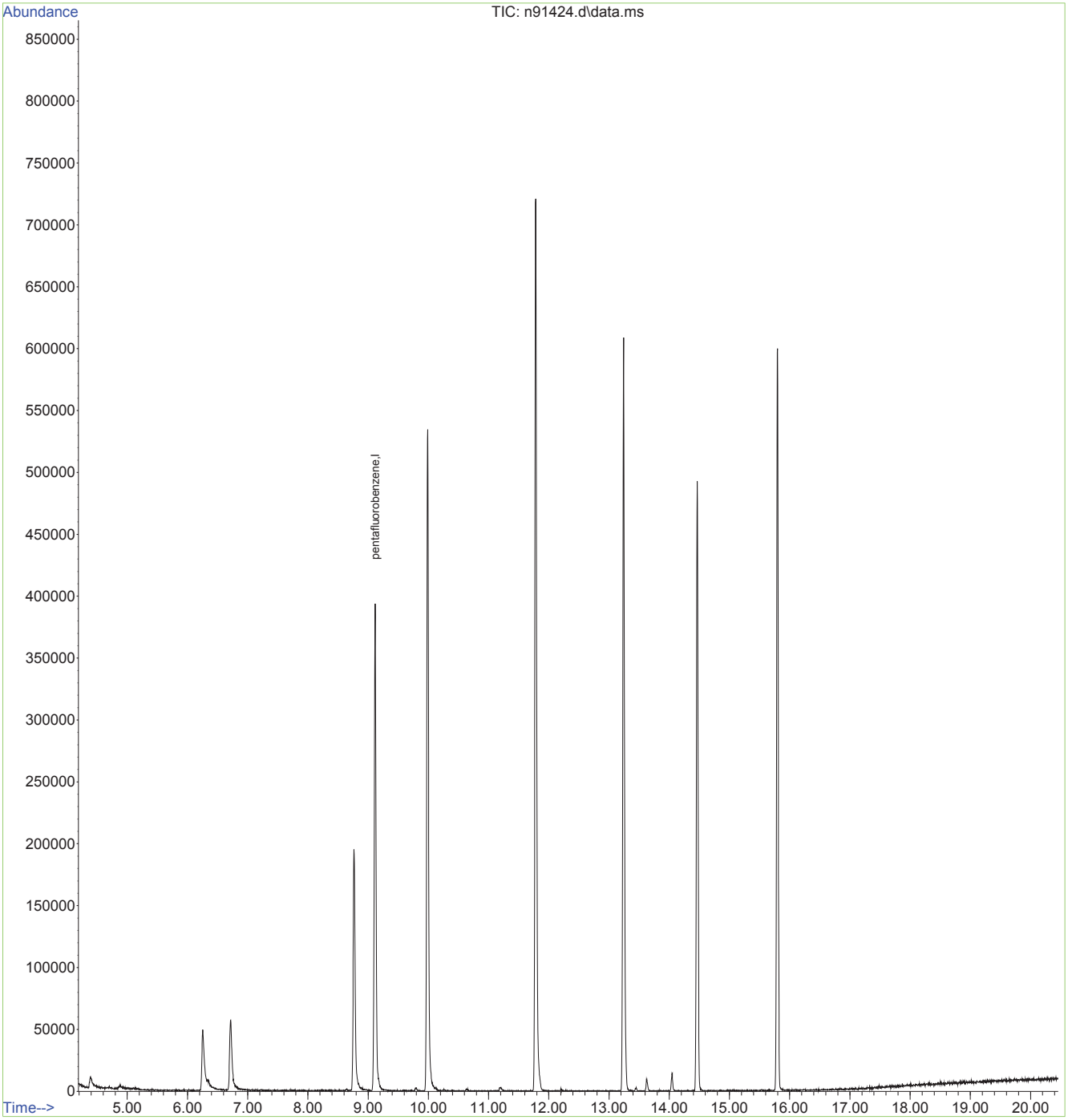
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.115	168	282987	50.00	ug/L	0.00
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141021\
Data File : n91424.d
Acq On : 21 Oct 2014 11:12 am
Operator : tomaszt
Sample : mc34231-1
Misc : ms33017,MSN3381,,,,5,1
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Oct 27 13:59:05 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141021\
Data File : n91426.d
Acq On : 21 Oct 2014 12:08 pm
Operator : tomaszt
Sample : mc34231-2
Misc : ms33017,MSN3381,,,,5,1
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Oct 27 13:59:07 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration

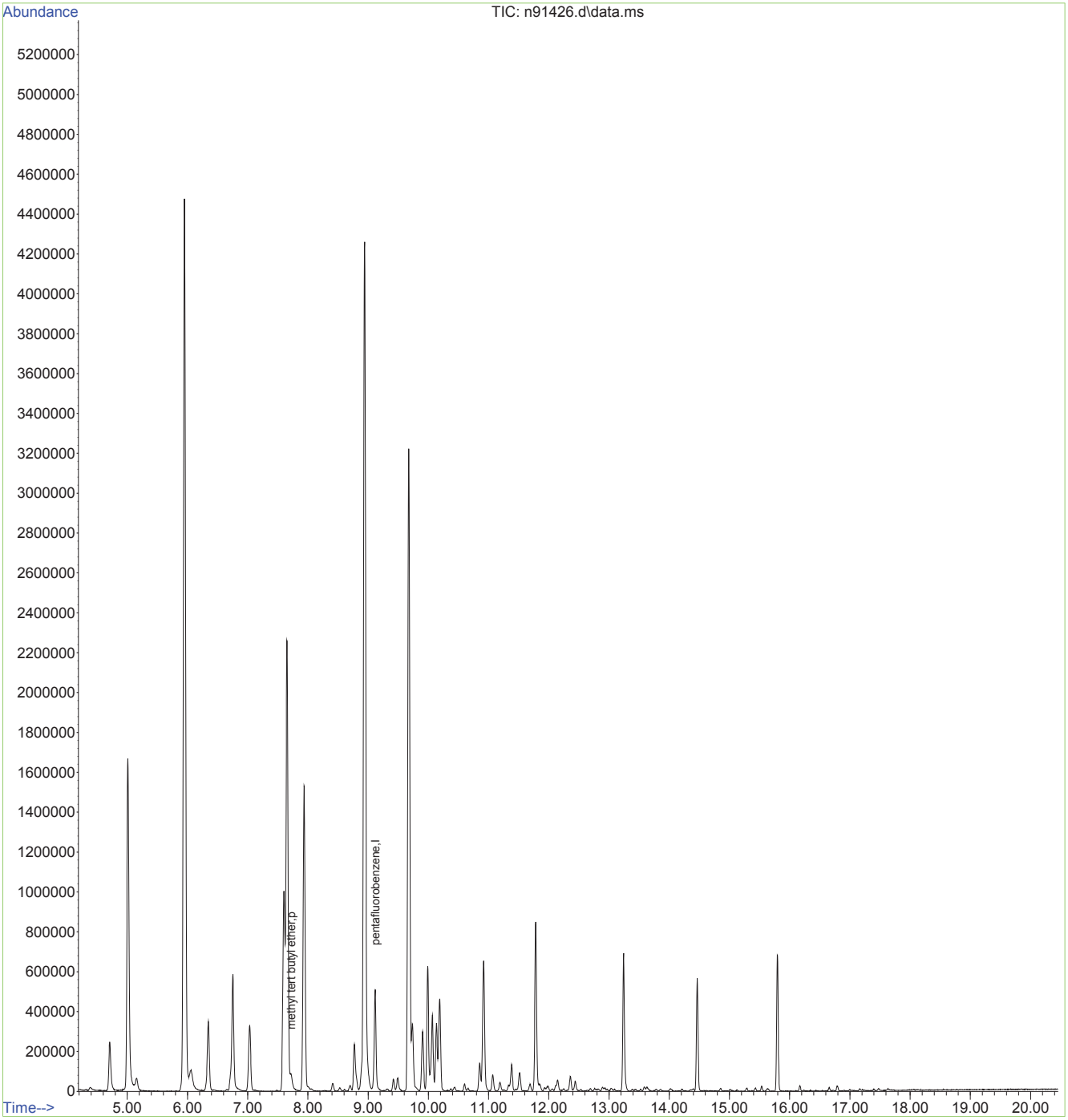
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.118	168	331500	50.00	ug/L	0.00
Target Compounds						Qvalue
2) methyl tert butyl ether	7.719	73	22517	3.02	ug/L	98

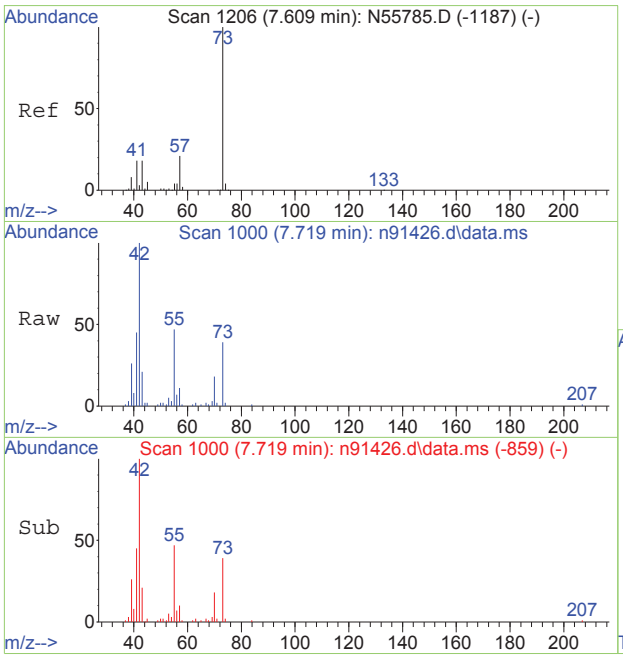
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141021\
Data File : n91426.d
Acq On : 21 Oct 2014 12:08 pm
Operator : tomaszt
Sample : mc34231-2
Misc : ms33017,MSN3381,,,,5,1
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Oct 27 13:59:07 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration

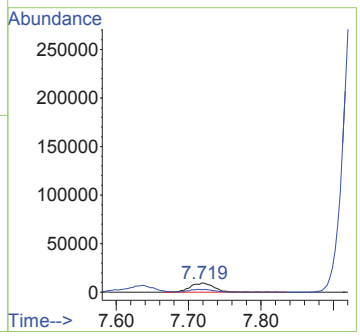




#2
methyl tert butyl ether
Concen: 3.02 ug/L
RT: 7.719 min Scan# 1000
Delta R.T. -0.000 min
Lab File: n91426.d
Acq: 21 Oct 2014 12:08 pm

Tgt Ion: 73 Resp: 22517

Ion	Ratio	Lower	Upper
73	100		
57	27.3	0.0	58.4



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141021\
Data File : n91427.d
Acq On : 21 Oct 2014 12:36 pm
Operator : tomaszt
Sample : mc34231-3
Misc : ms33017,MSN3381,,,,5,1
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Oct 27 13:59:09 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration

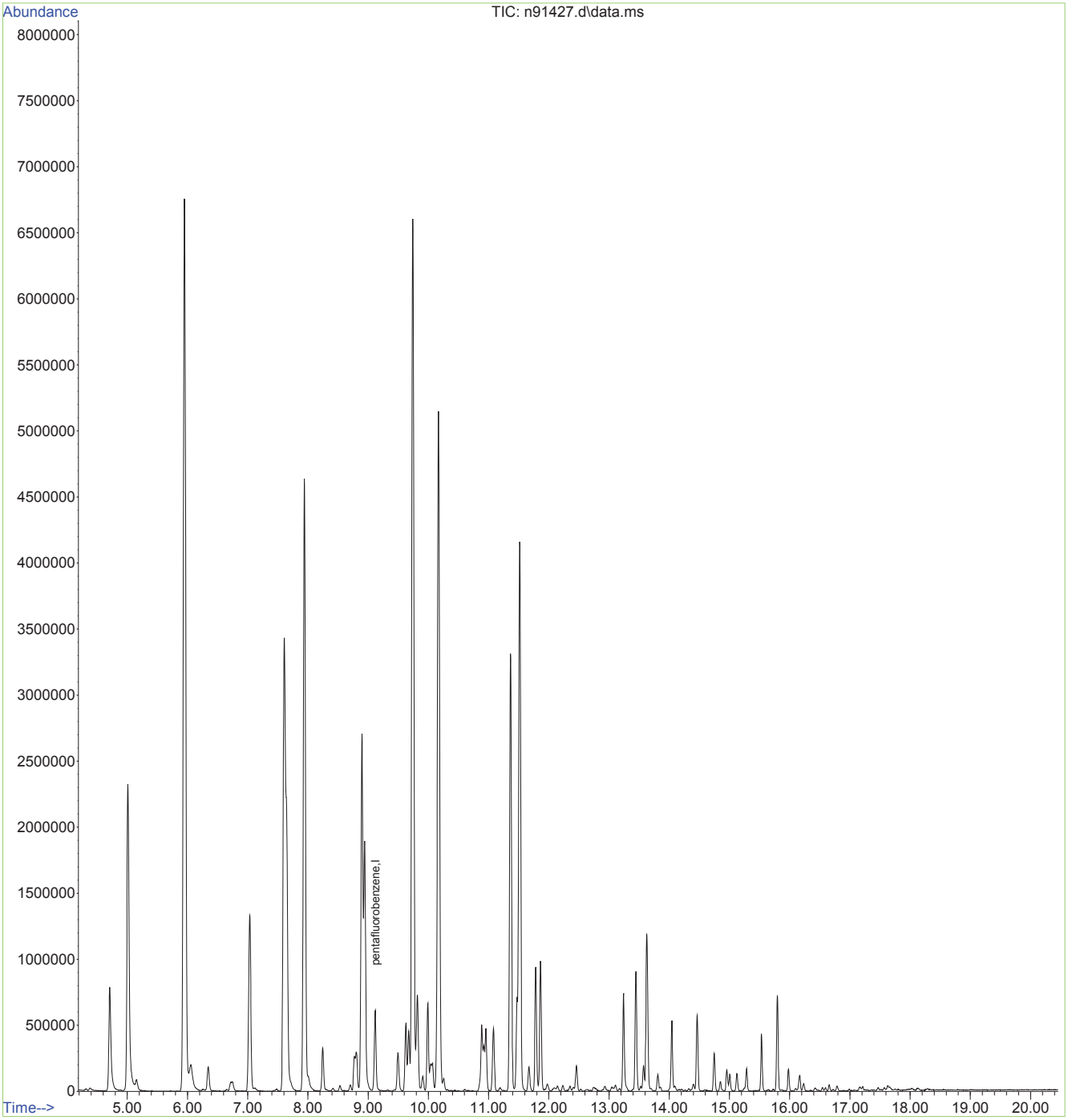
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.119	168	339006	50.00	ug/L	0.00
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141021\
Data File : n91427.d
Acq On : 21 Oct 2014 12:36 pm
Operator : tomaszt
Sample : mc34231-3
Misc : ms33017,MSN3381,,,,5,1
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Oct 27 13:59:09 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141021\
Data File : n91428.d
Acq On : 21 Oct 2014 1:05 pm
Operator : tomaszt
Sample : mc34231-4
Misc : ms33017,MSN3381,,,,5,1
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Oct 27 13:59:12 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration

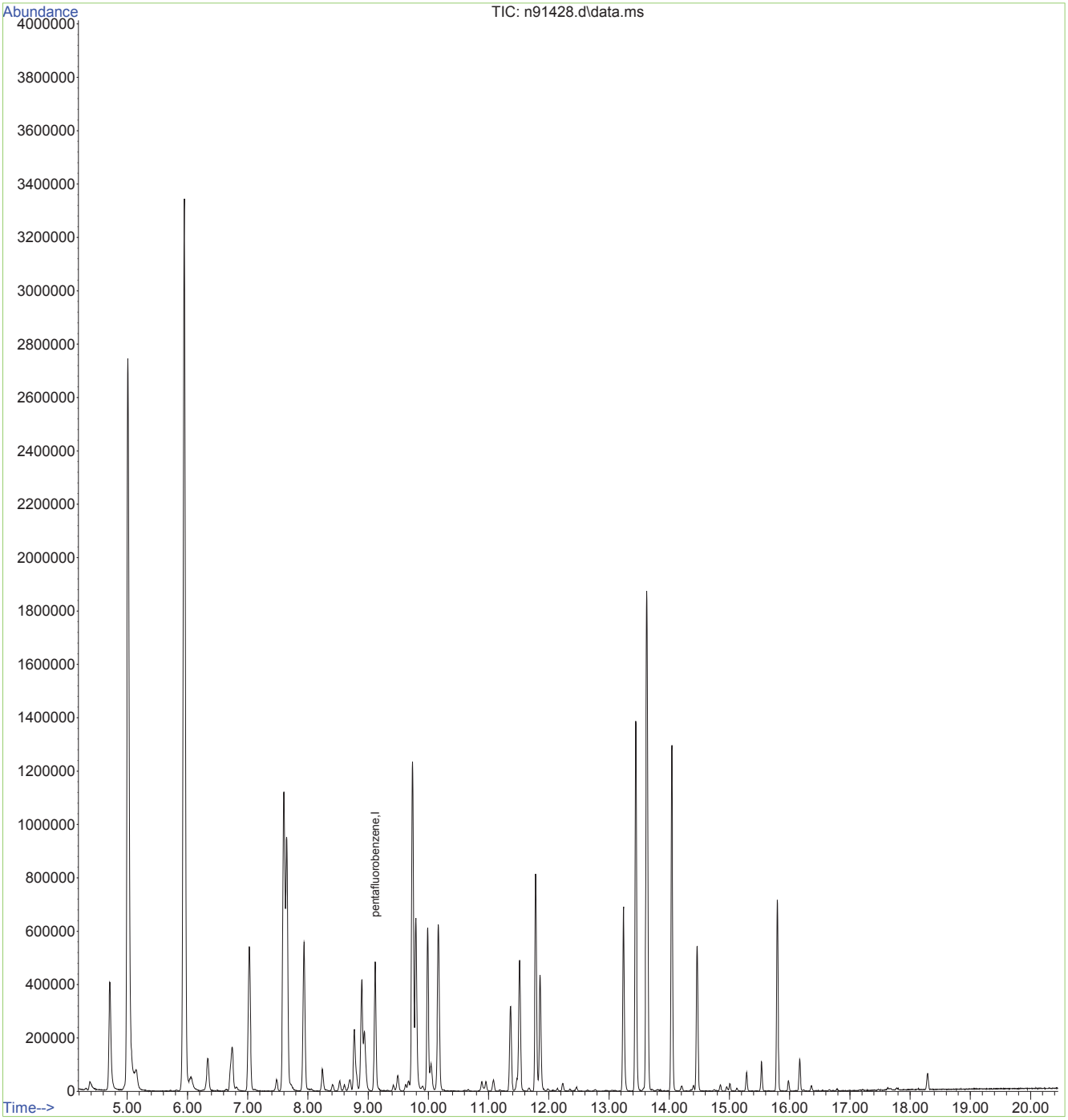
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.115	168	320970	50.00	ug/L	0.00
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141021\
Data File : n91428.d
Acq On : 21 Oct 2014 1:05 pm
Operator : tomaszt
Sample : mc34231-4
Misc : ms33017,MSN3381,,,,5,1
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Oct 27 13:59:12 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141021\
Data File : n91419.d
Acq On : 21 Oct 2014 8:48 am
Operator : tomaszt
Sample : bs
Misc : ms33003,MSN3380,,,,5,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Oct 27 12:51:19 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.119	168	334543	50.00	ug/L	0.00
Target Compounds						Qvalue
2) methyl tert butyl ether	7.704	73	336077	40.89	ug/L	99

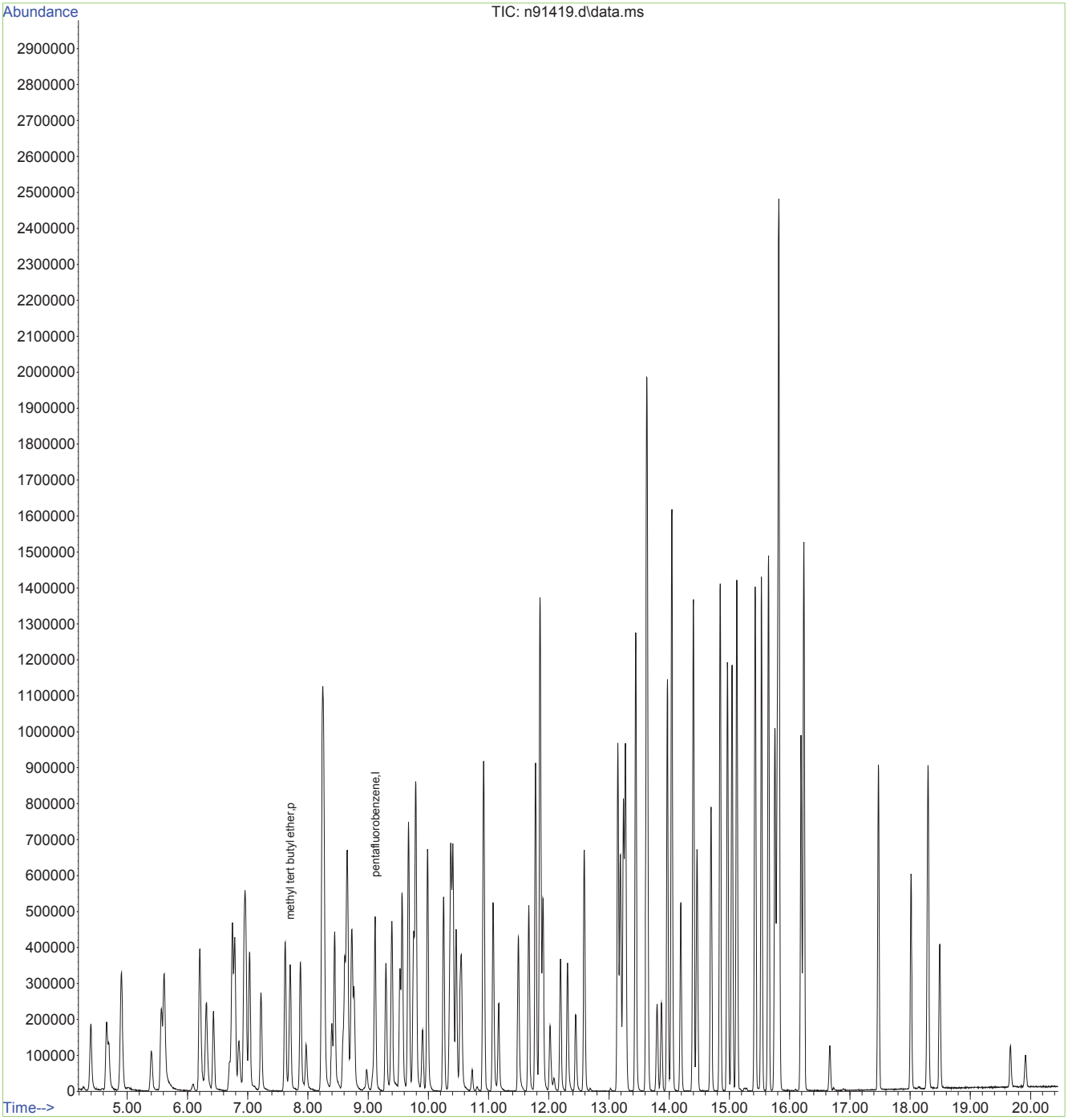
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST MC34231

Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141021\
Data File : n91419.d
Acq On : 21 Oct 2014 8:48 am
Operator : tomaszt
Sample : bs
Misc : ms33003,MSN3380,,,,5,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Oct 27 12:51:19 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration



SGS ACCUTEST
MC34231

Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141021\
Data File : n91422.d
Acq On : 21 Oct 2014 10:15 am
Operator : tomaszt
Sample : mb
Misc : ms33017,MSN3380,,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Oct 27 13:44:33 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration

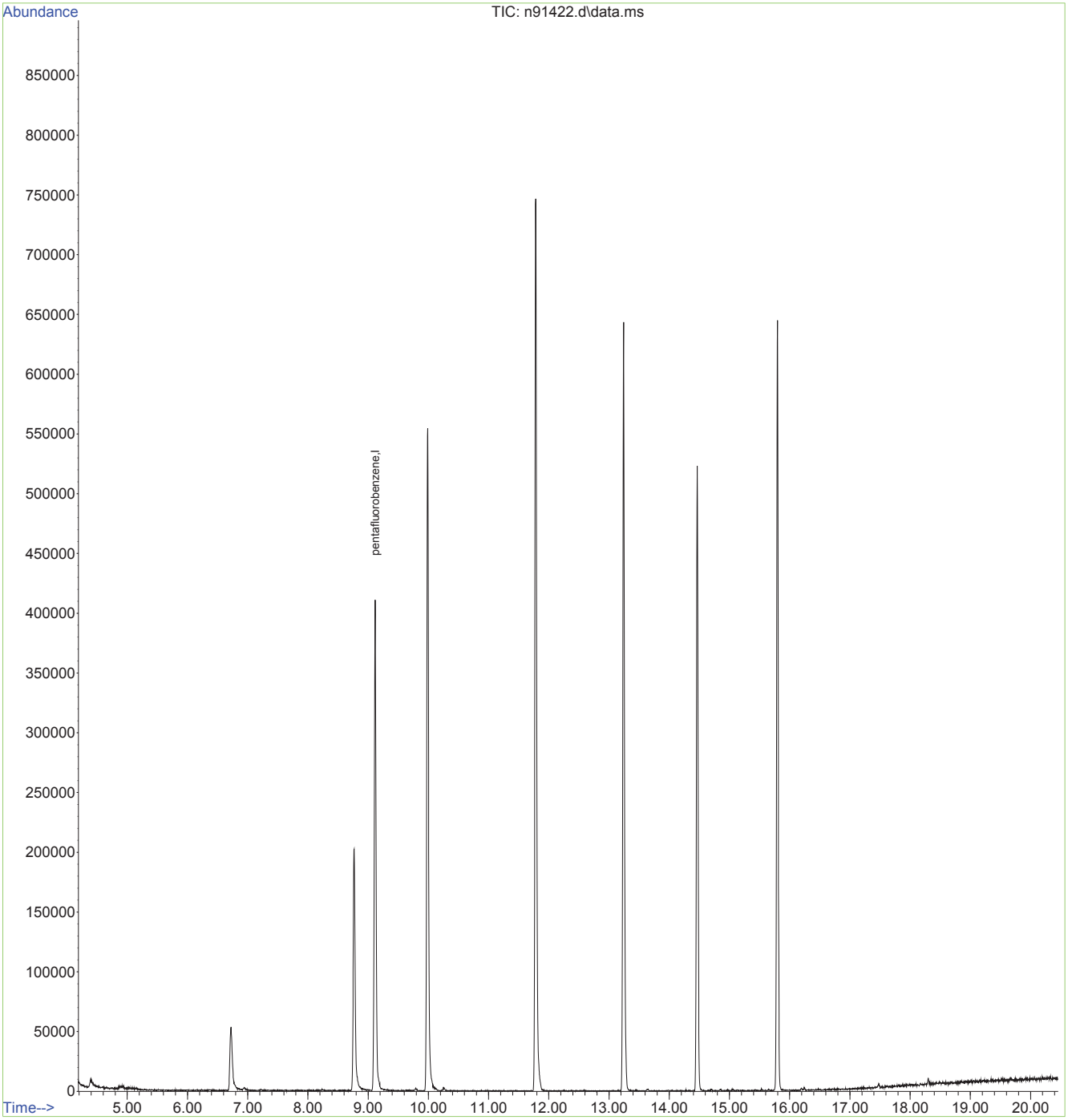
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.115	168	295772	50.00	ug/L	0.00
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141021\
Data File : n91422.d
Acq On : 21 Oct 2014 10:15 am
Operator : tomaszt
Sample : mb
Misc : ms33017,MSN3380,,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Oct 27 13:44:33 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141024\
Data File : n91537.d
Acq On : 24 Oct 2014 12:22 pm
Operator : jaclynb
Sample : mc34436-4ms
Misc : ms33017,MSN3381,,,,5,5
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Oct 27 14:04:38 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration

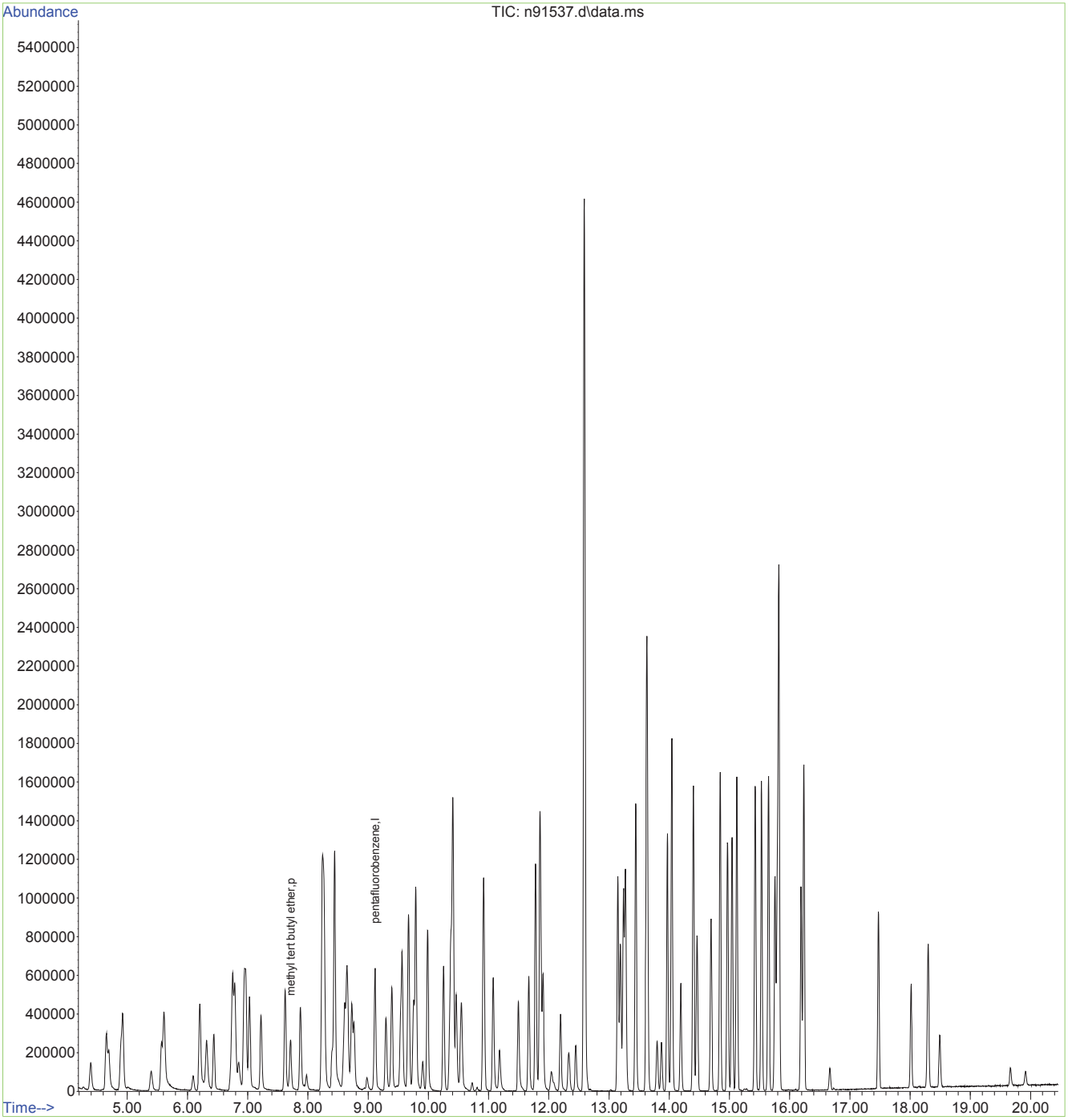
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.115	168	431038	50.00	ug/L	0.00
Target Compounds						Qvalue
2) methyl tert butyl ether	7.712	73	258889	24.56	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141024\
Data File : n91537.d
Acq On : 24 Oct 2014 12:22 pm
Operator : jaclynb
Sample : mc34436-4ms
Misc : ms33017,MSN3381,,,,5,5
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Oct 27 14:04:38 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141024\
Data File : n91538.d
Acq On : 24 Oct 2014 12:50 pm
Operator : jaclynb
Sample : mc34436-4msd
Misc : ms33017,MSN3381,,,,5,5
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Oct 27 14:05:07 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration

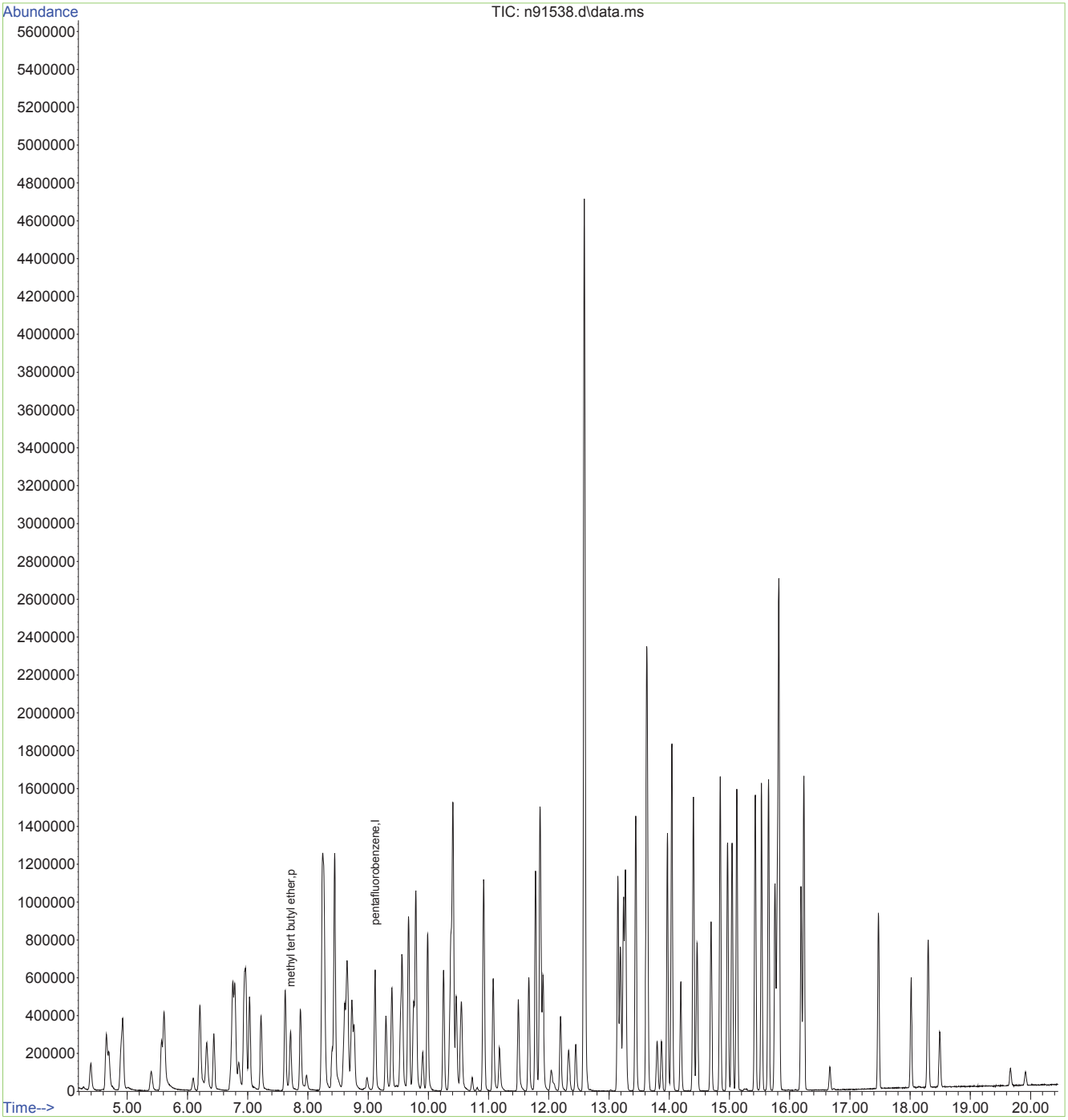
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.115	168	427729	50.00	ug/L	0.00
Target Compounds						Qvalue
2) methyl tert butyl ether	7.712	73	309459	29.53	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141024\
Data File : n91538.d
Acq On : 24 Oct 2014 12:50 pm
Operator : jaclynb
Sample : mc34436-4msd
Misc : ms33017,MSN3381,,,,5,5
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Oct 27 14:05:07 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration



Internal Sample Tracking Chronicle

Shell Oil

Job No: MC34231

URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC34231-1 Collected: 09-OCT-14 09:20 By: MMSV Received: 10-OCT-14 By: MW3-ROX-100914-EB						
MC34231-1	SW846 8011	13-OCT-14 12:30	NK	12-OCT-14	MT	V8011SL
MC34231-1	SW846 8270D	14-OCT-14 11:16	WK	11-OCT-14	PA	AB8270SL+
MC34231-1	SW846 8270D BY SIM	14-OCT-14 16:08	WK	11-OCT-14	PA	B8270SIMSL
MC34231-1	SW846 8260C	21-OCT-14 11:12	TT			V8260SL+
MC34231-2 Collected: 09-OCT-14 09:55 By: MMSV Received: 10-OCT-14 By: MW3-ROX-100914						
MC34231-2	SW846 8011	13-OCT-14 12:12	NK	12-OCT-14	MT	V8011SL
MC34231-2	SW846 8270D	14-OCT-14 11:40	WK	11-OCT-14	PA	AB8270SL+
MC34231-2	SW846 8270D BY SIM	14-OCT-14 16:31	WK	11-OCT-14	PA	B8270SIMSL
MC34231-2	SW846 8260C	21-OCT-14 12:08	TT			V8260SL+
MC34231-3 Collected: 09-OCT-14 11:05 By: MMSV Received: 10-OCT-14 By: ROST3MW-ROX-100914						
MC34231-3	SW846 8011	13-OCT-14 11:54	NK	12-OCT-14	MT	V8011SL
MC34231-3	SW846 8270D	14-OCT-14 12:05	WK	11-OCT-14	PA	AB8270SL+
MC34231-3	SW846 8270D BY SIM	14-OCT-14 16:53	WK	11-OCT-14	PA	B8270SIMSL
MC34231-3	SW846 8260C	21-OCT-14 12:36	TT			V8260SL+
MC34231-4 Collected: 09-OCT-14 12:45 By: MMSV Received: 10-OCT-14 By: ROST4PZC-ROX-100914						
MC34231-4	SW846 8011	13-OCT-14 11:36	NK	12-OCT-14	MT	V8011SL
MC34231-4	SW846 8270D	14-OCT-14 14:07	WK	11-OCT-14	PA	AB8270SL+
MC34231-4	SW846 8270D BY SIM	14-OCT-14 17:16	WK	11-OCT-14	PA	B8270SIMSL
MC34231-4	SW846 8260C	21-OCT-14 13:05	TT			V8260SL+
MC34231-5 Collected: 09-OCT-14 00:00 By: MMSV Received: 10-OCT-14 By: TB-ROX-100914-HCL						
MC34231-5	SW846 8260C	21-OCT-14 10:43	TT			V8260SL+
MC34231-6 Collected: 09-OCT-14 00:00 By: MMSV Received: 10-OCT-14 By: TB-ROX-100914-ST						

Internal Sample Tracking Chronicle

Shell Oil

Job No: MC34231

URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC34231-6	SW846 8011	13-OCT-14 11:18	NK	12-OCT-14	MT	V8011SL
MC34231-7 Collected: 09-OCT-14 14:50 By: MMSV Received: 10-OCT-14 By: MW-5-ROX-100914						
MC34231-7	SW846 8011	13-OCT-14 11:00	NK	12-OCT-14	MT	V8011SL
MC34231-7	SW846 8270D	14-OCT-14 10:51	WK	11-OCT-14	PA	AB8270SL+
MC34231-7	SW846 8270D BY SIM	14-OCT-14 15:46	WK	11-OCT-14	PA	B8270SIMSL
MC34231-7	SW846 8260C	23-OCT-14 16:16	GK			V8260SL+

SGS Accutest Internal Chain of Custody

Job Number: MC34231
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL
Received: 10/10/14

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC34231-1.2	Walk In Ref #22	Alireza Zeighami	10/11/14 07:59	Retrieve from Storage
MC34231-1.2	Alireza Zeighami		10/14/14 07:27	Depleted
MC34231-1.4	VOC Ref #2	Marc Tahtamoni	10/12/14 18:46	Retrieve from Storage
MC34231-1.4	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34231-1.6	VOC Ref #2	Jaclyn Bergeron	10/21/14 09:32	Retrieve from Storage
MC34231-1.6	Jaclyn Bergeron	GCMSN	10/21/14 09:32	Load on Instrument
MC34231-1.6	GCMSN	Jaclyn Bergeron	10/22/14 09:48	Unload from Instrument
MC34231-1.6	Jaclyn Bergeron	VOC Ref #2	10/22/14 09:48	Return to Storage
MC34231-1.6	Scott Parsick		12/18/14 12:16	Disposed
MC34231-2.2	Walk In Ref #22	Alireza Zeighami	10/11/14 07:59	Retrieve from Storage
MC34231-2.2	Alireza Zeighami		10/14/14 07:27	Depleted
MC34231-2.3	VOC Ref #2	Marc Tahtamoni	10/12/14 18:46	Retrieve from Storage
MC34231-2.3	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34231-2.5	VOC Ref #2	Jaclyn Bergeron	10/21/14 09:32	Retrieve from Storage
MC34231-2.5	Jaclyn Bergeron	GCMSN	10/21/14 09:32	Load on Instrument
MC34231-2.5	GCMSN	Jaclyn Bergeron	10/22/14 09:48	Unload from Instrument
MC34231-2.5	Jaclyn Bergeron	VOC Ref #2	10/22/14 09:48	Return to Storage
MC34231-2.5	Scott Parsick		12/18/14 12:16	Disposed
MC34231-3.1	Walk In Ref #22	Alireza Zeighami	10/11/14 07:59	Retrieve from Storage
MC34231-3.1	Alireza Zeighami		10/14/14 07:27	Depleted
MC34231-3.3	VOC Ref #2	Marc Tahtamoni	10/12/14 18:46	Retrieve from Storage
MC34231-3.3	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34231-3.5	VOC Ref #2	Jaclyn Bergeron	10/21/14 09:32	Retrieve from Storage
MC34231-3.5	Jaclyn Bergeron	GCMSN	10/21/14 09:32	Load on Instrument
MC34231-3.5	GCMSN	Jaclyn Bergeron	10/22/14 09:48	Unload from Instrument
MC34231-3.5	Jaclyn Bergeron	VOC Ref #2	10/22/14 09:48	Return to Storage
MC34231-3.5	Scott Parsick		12/18/14 12:16	Disposed
MC34231-4.1	Walk In Ref #22	Alireza Zeighami	10/11/14 07:59	Retrieve from Storage
MC34231-4.1	Alireza Zeighami		10/14/14 07:27	Depleted
MC34231-4.3	VOC Ref #2	Marc Tahtamoni	10/12/14 18:46	Retrieve from Storage
MC34231-4.3	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34231-4.5	VOC Ref #2	Jaclyn Bergeron	10/21/14 09:32	Retrieve from Storage
MC34231-4.5	Jaclyn Bergeron	GCMSN	10/21/14 09:32	Load on Instrument

SGS Accutest Internal Chain of Custody

Job Number: MC34231
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL
Received: 10/10/14

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC34231-4.5	GCMSN	Jaclyn Bergeron	10/22/14 09:48	Unload from Instrument
MC34231-4.5	Jaclyn Bergeron	VOC Ref #2	10/22/14 09:48	Return to Storage
MC34231-4.5	Scott Parsick		12/18/14 12:16	Disposed
MC34231-5.1	VOC Ref #2	Jaclyn Bergeron	10/21/14 09:32	Retrieve from Storage
MC34231-5.1	Jaclyn Bergeron	GCMSN	10/21/14 09:32	Load on Instrument
MC34231-5.1	GCMSN	Jaclyn Bergeron	10/22/14 09:48	Unload from Instrument
MC34231-5.1	Jaclyn Bergeron	VOC Ref #2	10/22/14 09:48	Return to Storage
MC34231-5.1	Scott Parsick		12/18/14 12:16	Disposed
MC34231-6.1	VOC Ref #2	Marc Tahtamoni	10/12/14 18:46	Retrieve from Storage
MC34231-6.1	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34231-7.1	Walk In Ref #22	Alireza Zeighami	10/11/14 07:59	Retrieve from Storage
MC34231-7.1	Alireza Zeighami		10/14/14 07:27	Depleted
MC34231-7.4	Walk In Ref #22	Alireza Zeighami	10/11/14 07:59	Retrieve from Storage
MC34231-7.4	Alireza Zeighami		10/14/14 07:27	Depleted
MC34231-7.6	Walk In Ref #22	Alireza Zeighami	10/11/14 07:59	Retrieve from Storage
MC34231-7.6	Alireza Zeighami		10/14/14 07:27	Depleted
MC34231-7.7	VOC Ref #2	Marc Tahtamoni	10/12/14 18:46	Retrieve from Storage
MC34231-7.7	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34231-7.8	VOC Ref #2	Marc Tahtamoni	10/12/14 18:46	Retrieve from Storage
MC34231-7.8	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34231-7.12	VOC Ref #2	Marc Tahtamoni	10/12/14 18:46	Retrieve from Storage
MC34231-7.12	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34231-7.13	VOC Ref #2	Gary Krasinski	10/23/14 14:44	Retrieve from Storage
MC34231-7.13	Gary Krasinski	GCMSL	10/23/14 14:44	Load on Instrument
MC34231-7.13	GCMSL	Gary Krasinski	10/24/14 10:33	Unload from Instrument
MC34231-7.13	Gary Krasinski	VOC Ref #2	10/24/14 10:33	Return to Storage
MC34231-7.13	Scott Parsick		12/18/14 12:16	Disposed
MC34231-7.14	VOC Ref #2	Gary Krasinski	10/23/14 14:44	Retrieve from Storage
MC34231-7.14	Gary Krasinski	GCMSL	10/23/14 14:44	Load on Instrument
MC34231-7.14	GCMSL	Gary Krasinski	10/24/14 10:33	Unload from Instrument
MC34231-7.14	Gary Krasinski	VOC Ref #2	10/24/14 10:33	Return to Storage
MC34231-7.14	Scott Parsick		12/18/14 12:16	Disposed
MC34231-7.15	VOC Ref #2	Jaclyn Bergeron	10/21/14 09:32	Retrieve from Storage

SGS Accutest Internal Chain of Custody

Job Number: MC34231
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL
Received: 10/10/14

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC34231-7.15	Jaclyn Bergeron	GCMSN	10/21/14 09:32	Load on Instrument
MC34231-7.15	GCMSN	Jaclyn Bergeron	10/22/14 09:48	Unload from Instrument
MC34231-7.15	Jaclyn Bergeron	VOC Ref #2	10/22/14 09:48	Return to Storage
MC34231-7.15	Scott Parsick		12/18/14 12:16	Disposed
MC34231-7.16	VOC Ref #2	Jaclyn Bergeron	10/21/14 09:33	Retrieve from Storage
MC34231-7.16	Jaclyn Bergeron	GCMSN	10/21/14 09:33	Load on Instrument
MC34231-7.16	GCMSN	Jaclyn Bergeron	10/22/14 09:48	Unload from Instrument
MC34231-7.16	Jaclyn Bergeron	VOC Ref #2	10/22/14 09:48	Return to Storage
MC34231-7.16	Scott Parsick		12/18/14 12:16	Disposed
MC34231-7.17	VOC Ref #2	Jaclyn Bergeron	10/21/14 09:33	Retrieve from Storage
MC34231-7.17	Jaclyn Bergeron	GCMSN	10/21/14 09:33	Load on Instrument
MC34231-7.17	GCMSN	Jaclyn Bergeron	10/22/14 09:48	Unload from Instrument
MC34231-7.17	Jaclyn Bergeron	VOC Ref #2	10/22/14 09:48	Return to Storage
MC34231-7.17	Scott Parsick		12/18/14 12:16	Disposed
MC34231-7.18	VOC Ref #2	Jaclyn Bergeron	10/21/14 09:33	Retrieve from Storage
MC34231-7.18	Jaclyn Bergeron	GCMSN	10/21/14 09:33	Load on Instrument
MC34231-7.18	GCMSN	Jaclyn Bergeron	10/22/14 09:48	Unload from Instrument
MC34231-7.18	Jaclyn Bergeron	VOC Ref #2	10/22/14 09:48	Return to Storage
MC34231-7.18	Scott Parsick		12/18/14 12:16	Disposed

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: MC34231
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN3381-MB	N91422.D	1	10/21/14	TT	n/a	n/a	MSN3381

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34231-1, MC34231-2, MC34231-3, MC34231-4, MC34231-5

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	

Method Blank Summary

Job Number: MC34231
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN3381-MB	N91422.D	1	10/21/14	TT	n/a	n/a	MSN3381

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34231-1, MC34231-2, MC34231-3, MC34231-4, MC34231-5

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

Method Blank Summary

Job Number: MC34231
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN3381-MB	N91422.D	1	10/21/14	TT	n/a	n/a	MSN3381

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34231-1, MC34231-2, MC34231-3, MC34231-4, MC34231-5

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	95%	70-130%
2037-26-5	Toluene-D8	101%	70-130%
460-00-4	4-Bromofluorobenzene	100%	70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Method Blank Summary

Job Number: MC34231
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSL3916-MB	L87840.D	1	10/23/14	GK	n/a	n/a	MSL3916

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34231-7

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	

Method Blank Summary

Job Number: MC34231
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSL3916-MB	L87840.D	1	10/23/14	GK	n/a	n/a	MSL3916

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34231-7

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

Method Blank Summary

Job Number: MC34231
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSL3916-MB	L87840.D	1	10/23/14	GK	n/a	n/a	MSL3916

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34231-7

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	102%	70-130%
2037-26-5	Toluene-D8	100%	70-130%
460-00-4	4-Bromofluorobenzene	117%	70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Method Blank Summary

Job Number: MC34231
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN3381-MB1	N91533.D	1	10/24/14	TT	n/a	n/a	MSN3381

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34436-4MS, MC34436-4MSD

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	2.0	0.34	ug/l	
75-25-2	Bromoform	ND	2.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	2.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	2.0	0.43	ug/l	
75-00-3	Chloroethane	ND	5.0	0.53	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	2.0	0.41	ug/l	
74-87-3	Chloromethane	ND	5.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	2.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	2.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	2.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	2.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	2.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	2.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	2.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	2.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	

Method Blank Summary

Job Number: MC34231
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN3381-MB1	N91533.D	1	10/24/14	TT	n/a	n/a	MSN3381

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34436-4MS, MC34436-4MSD

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	2.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	2.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	2.0	0.59	ug/l	
108-88-3	Toluene	ND	2.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	2.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	2.0	0.58	ug/l	
	m,p-Xylene	ND	2.0	0.93	ug/l	
95-47-6	o-Xylene	ND	2.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.36	ug/l	

Method Blank Summary

Job Number: MC34231
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN3381-MB1	N91533.D	1	10/24/14	TT	n/a	n/a	MSN3381

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34436-4MS, MC34436-4MSD

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	93%	70-130%
2037-26-5	Toluene-D8	101%	70-130%
460-00-4	4-Bromofluorobenzene	103%	70-130%

Blank Spike Summary

Job Number: MC34231
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN3381-BS	N91419.D	1	10/21/14	TT	n/a	n/a	MSN3381

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34231-1, MC34231-2, MC34231-3, MC34231-4, MC34231-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	33.9	68* [a]	70-130
107-02-8	Acrolein	250	254	102	70-130
107-13-1	Acrylonitrile	50	49.0	98	70-130
71-43-2	Benzene	50	47.8	96	70-130
108-86-1	Bromobenzene	50	56.1	112	70-130
74-97-5	Bromochloromethane	50	53.2	106	70-130
75-27-4	Bromodichloromethane	50	54.3	109	70-130
75-25-2	Bromoform	50	57.8	116	70-130
74-83-9	Bromomethane	50	58.8	118	70-130
78-93-3	2-Butanone (MEK)	50	47.9	96	70-130
104-51-8	n-Butylbenzene	50	61.1	122	70-130
135-98-8	sec-Butylbenzene	50	59.3	119	70-130
98-06-6	tert-Butylbenzene	50	56.9	114	70-130
75-15-0	Carbon disulfide	50	45.4	91	70-130
56-23-5	Carbon tetrachloride	50	54.6	109	70-130
108-90-7	Chlorobenzene	50	53.6	107	70-130
75-00-3	Chloroethane	50	60.9	122	70-130
110-75-8	2-Chloroethyl vinyl ether	50	58.1	116	70-130
67-66-3	Chloroform	50	48.5	97	70-130
74-87-3	Chloromethane	50	50.2	100	70-130
95-49-8	o-Chlorotoluene	50	55.7	111	70-130
106-43-4	p-Chlorotoluene	50	55.3	111	70-130
124-48-1	Dibromochloromethane	50	57.9	116	70-130
95-50-1	1,2-Dichlorobenzene	50	59.7	119	70-130
541-73-1	1,3-Dichlorobenzene	50	57.0	114	70-130
106-46-7	1,4-Dichlorobenzene	50	60.7	121	70-130
75-71-8	Dichlorodifluoromethane	50	52.0	104	70-130
75-34-3	1,1-Dichloroethane	50	48.8	98	70-130
107-06-2	1,2-Dichloroethane	50	46.4	93	70-130
75-35-4	1,1-Dichloroethene	50	52.4	105	70-130
156-59-2	cis-1,2-Dichloroethene	50	49.7	99	70-130
156-60-5	trans-1,2-Dichloroethene	50	49.0	98	70-130
78-87-5	1,2-Dichloropropane	50	57.3	115	70-130
142-28-9	1,3-Dichloropropane	50	57.5	115	70-130
594-20-7	2,2-Dichloropropane	50	54.6	109	70-130
563-58-6	1,1-Dichloropropene	50	58.5	117	70-130

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34231
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN3381-BS	N91419.D	1	10/21/14	TT	n/a	n/a	MSN3381

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34231-1, MC34231-2, MC34231-3, MC34231-4, MC34231-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-01-5	cis-1,3-Dichloropropene	50	58.4	117	70-130
10061-02-6	trans-1,3-Dichloropropene	50	60.4	121	70-130
123-91-1	1,4-Dioxane	125	138	110	70-130
97-63-2	Ethyl methacrylate	50	52.9	106	77-137
100-41-4	Ethylbenzene	50	55.2	110	70-130
87-68-3	Hexachlorobutadiene	50	62.4	125	70-130
591-78-6	2-Hexanone	50	48.9	98	70-130
98-82-8	Isopropylbenzene	50	57.6	115	70-130
99-87-6	p-Isopropyltoluene	50	60.4	121	70-130
1634-04-4	Methyl Tert Butyl Ether	50	40.9	82	70-130
108-10-1	4-Methyl-2-pentanone (MIBK)	50	48.7	97	70-130
74-95-3	Methylene bromide	50	52.7	105	70-130
75-09-2	Methylene chloride	50	47.5	95	70-130
91-20-3	Naphthalene	50	62.8	126	70-130
103-65-1	n-Propylbenzene	50	58.4	117	70-130
100-42-5	Styrene	50	61.6	123	70-130
630-20-6	1,1,1,2-Tetrachloroethane	50	57.4	115	70-130
79-34-5	1,1,2,2-Tetrachloroethane	50	59.0	118	70-130
127-18-4	Tetrachloroethene	50	56.3	113	70-130
108-88-3	Toluene	50	51.2	102	70-130
87-61-6	1,2,3-Trichlorobenzene	50	60.6	121	70-130
120-82-1	1,2,4-Trichlorobenzene	50	63.0	126	70-130
71-55-6	1,1,1-Trichloroethane	50	57.8	116	70-130
79-00-5	1,1,2-Trichloroethane	50	50.6	101	70-130
79-01-6	Trichloroethene	50	48.2	96	70-130
75-69-4	Trichlorofluoromethane	50	48.4	97	70-130
96-18-4	1,2,3-Trichloropropane	50	54.4	109	70-130
95-63-6	1,2,4-Trimethylbenzene	50	52.0	104	70-130
108-67-8	1,3,5-Trimethylbenzene	50	50.6	101	70-130
108-05-4	Vinyl Acetate	50	47.5	95	70-130
75-01-4	Vinyl chloride	50	57.6	115	70-130
	m,p-Xylene	100	105	105	70-130
95-47-6	o-Xylene	50	54.5	109	70-130
1330-20-7	Xylene (total)	150	160	107	70-130

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34231
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN3381-BS	N91419.D	1	10/21/14	TT	n/a	n/a	MSN3381

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34231-1, MC34231-2, MC34231-3, MC34231-4, MC34231-5

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	96%	70-130%
2037-26-5	Toluene-D8	104%	70-130%
460-00-4	4-Bromofluorobenzene	93%	70-130%

(a) Outside control limits. Blank Spike meets program technical requirements.

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34231
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSL3916-BS	L87837.D	1	10/23/14	GK	n/a	n/a	MSL3916

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34231-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	31.3	63* [a]	70-130
107-02-8	Acrolein	250	176	70	70-130
107-13-1	Acrylonitrile	50	38.5	77	70-130
71-43-2	Benzene	50	42.8	86	70-130
108-86-1	Bromobenzene	50	44.3	89	70-130
74-97-5	Bromochloromethane	50	41.8	84	70-130
75-27-4	Bromodichloromethane	50	46.3	93	70-130
75-25-2	Bromoform	50	38.5	77	70-130
74-83-9	Bromomethane	50	45.7	91	70-130
78-93-3	2-Butanone (MEK)	50	40.5	81	70-130
104-51-8	n-Butylbenzene	50	52.0	104	70-130
135-98-8	sec-Butylbenzene	50	48.7	97	70-130
98-06-6	tert-Butylbenzene	50	50.9	102	70-130
75-15-0	Carbon disulfide	50	39.8	80	70-130
56-23-5	Carbon tetrachloride	50	42.3	85	70-130
108-90-7	Chlorobenzene	50	39.3	79	70-130
75-00-3	Chloroethane	50	49.8	100	70-130
110-75-8	2-Chloroethyl vinyl ether	50	36.0	72	70-130
67-66-3	Chloroform	50	49.4	99	70-130
74-87-3	Chloromethane	50	50.8	102	70-130
95-49-8	o-Chlorotoluene	50	49.6	99	70-130
106-43-4	p-Chlorotoluene	50	48.0	96	70-130
124-48-1	Dibromochloromethane	50	45.2	90	70-130
95-50-1	1,2-Dichlorobenzene	50	43.1	86	70-130
541-73-1	1,3-Dichlorobenzene	50	42.8	86	70-130
106-46-7	1,4-Dichlorobenzene	50	41.2	82	70-130
75-71-8	Dichlorodifluoromethane	50	32.2	64* [a]	70-130
75-34-3	1,1-Dichloroethane	50	49.3	99	70-130
107-06-2	1,2-Dichloroethane	50	50.3	101	70-130
75-35-4	1,1-Dichloroethene	50	45.2	90	70-130
156-59-2	cis-1,2-Dichloroethene	50	45.8	92	70-130
156-60-5	trans-1,2-Dichloroethene	50	42.9	86	70-130
78-87-5	1,2-Dichloropropane	50	42.0	84	70-130
142-28-9	1,3-Dichloropropane	50	39.2	78	70-130
594-20-7	2,2-Dichloropropane	50	60.6	121	70-130
563-58-6	1,1-Dichloropropene	50	45.8	92	70-130

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34231
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSL3916-BS	L87837.D	1	10/23/14	GK	n/a	n/a	MSL3916

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34231-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-01-5	cis-1,3-Dichloropropene	50	44.2	88	70-130
10061-02-6	trans-1,3-Dichloropropene	50	43.6	87	70-130
123-91-1	1,4-Dioxane	125	238	190* [b]	70-130
97-63-2	Ethyl methacrylate	50	40.1	80	77-137
100-41-4	Ethylbenzene	50	39.8	80	70-130
87-68-3	Hexachlorobutadiene	50	41.3	83	70-130
591-78-6	2-Hexanone	50	31.7	63* [a]	70-130
98-82-8	Isopropylbenzene	50	49.2	98	70-130
99-87-6	p-Isopropyltoluene	50	46.0	92	70-130
1634-04-4	Methyl Tert Butyl Ether	50	44.2	88	70-130
108-10-1	4-Methyl-2-pentanone (MIBK)	50	36.4	73	70-130
74-95-3	Methylene bromide	50	39.6	79	70-130
75-09-2	Methylene chloride	50	42.5	85	70-130
91-20-3	Naphthalene	50	51.8	104	70-130
103-65-1	n-Propylbenzene	50	50.3	101	70-130
100-42-5	Styrene	50	42.4	85	70-130
630-20-6	1,1,1,2-Tetrachloroethane	50	41.7	83	70-130
79-34-5	1,1,2,2-Tetrachloroethane	50	43.6	87	70-130
127-18-4	Tetrachloroethene	50	40.4	81	70-130
108-88-3	Toluene	50	43.2	86	70-130
87-61-6	1,2,3-Trichlorobenzene	50	42.0	84	70-130
120-82-1	1,2,4-Trichlorobenzene	50	43.8	88	70-130
71-55-6	1,1,1-Trichloroethane	50	50.2	100	70-130
79-00-5	1,1,2-Trichloroethane	50	41.1	82	70-130
79-01-6	Trichloroethene	50	40.8	82	70-130
75-69-4	Trichlorofluoromethane	50	43.8	88	70-130
96-18-4	1,2,3-Trichloropropane	50	47.8	96	70-130
95-63-6	1,2,4-Trimethylbenzene	50	48.3	97	70-130
108-67-8	1,3,5-Trimethylbenzene	50	45.6	91	70-130
108-05-4	Vinyl Acetate	50	88.8	178* [b]	70-130
75-01-4	Vinyl chloride	50	37.8	76	70-130
	m,p-Xylene	100	78.0	78	70-130
95-47-6	o-Xylene	50	41.0	82	70-130
1330-20-7	Xylene (total)	150	119	79	70-130

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34231
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSL3916-BS	L87837.D	1	10/23/14	GK	n/a	n/a	MSL3916

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34231-7

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	106%	70-130%
2037-26-5	Toluene-D8	103%	70-130%
460-00-4	4-Bromofluorobenzene	122%	70-130%

(a) Outside control limits. Blank Spike meets program technical requirements.
(b) Outside control limits. Associated samples are non-detect for this compound.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34231
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34231-7MS [a]	L87844.D	5	10/23/14	GK	n/a	n/a	MSL3916
MC34231-7MSD [a]	L87845.D	5	10/23/14	GK	n/a	n/a	MSL3916
MC34231-7	L87843.D	1	10/23/14	GK	n/a	n/a	MSL3916

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34231-7

CAS No.	Compound	MC34231-7 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		250	78.1	31* [b]	250	68.6	27* [b]	13	70-130/30
107-02-8	Acrolein	ND		1250	1500	120	1250	748	60* [b]	67* [c]	70-130/30
107-13-1	Acrylonitrile	ND		250	217	87	250	177	71	20	70-130/30
71-43-2	Benzene	28.0		250	268	96	250	230	81	15	70-130/30
108-86-1	Bromobenzene	ND		250	259	104	250	212	85	20	70-130/30
74-97-5	Bromochloromethane	ND		250	246	98	250	213	85	14	70-130/30
75-27-4	Bromodichloromethane	ND		250	269	108	250	228	91	16	70-130/30
75-25-2	Bromoform	ND		250	211	84	250	179	72	16	70-130/30
74-83-9	Bromomethane	ND		250	326	130	250	210	84	43* [c]	70-130/30
78-93-3	2-Butanone (MEK)	ND		250	200	80	250	137	55* [b]	37* [c]	70-130/30
104-51-8	n-Butylbenzene	ND		250	283	113	250	237	95	18	70-130/30
135-98-8	sec-Butylbenzene	0.83	J	250	279	111	250	231	92	19	70-130/30
98-06-6	tert-Butylbenzene	4.9	J	250	294	116	250	247	97	17	70-130/30
75-15-0	Carbon disulfide	ND		250	222	89	250	185	74	18	70-130/30
56-23-5	Carbon tetrachloride	ND		250	241	96	250	193	77	22	70-130/30
108-90-7	Chlorobenzene	ND		250	207	83	250	175	70	17	70-130/30
75-00-3	Chloroethane	ND		250	350	140* [b]	250	180	72	64* [c]	70-130/30
110-75-8	2-Chloroethyl vinyl ether	ND		250	329	132* [b]	250	227	91	37* [c]	70-130/30
67-66-3	Chloroform	ND		250	285	114	250	228	91	22	70-130/30
74-87-3	Chloromethane	ND		250	318	127	250	196	78	47* [c]	70-130/30
95-49-8	o-Chlorotoluene	ND		250	287	115	250	231	92	22	70-130/30
106-43-4	p-Chlorotoluene	ND		250	282	113	250	228	91	21	70-130/30
124-48-1	Dibromochloromethane	ND		250	236	94	250	197	79	18	70-130/30
95-50-1	1,2-Dichlorobenzene	ND		250	244	98	250	195	78	22	70-130/30
541-73-1	1,3-Dichlorobenzene	ND		250	245	98	250	201	80	20	70-130/30
106-46-7	1,4-Dichlorobenzene	ND		250	239	96	250	199	80	18	70-130/30
75-71-8	Dichlorodifluoromethane	ND		250	218	87	250	115	46* [b]	62* [c]	70-130/30
75-34-3	1,1-Dichloroethane	ND		250	280	112	250	230	92	20	70-130/30
107-06-2	1,2-Dichloroethane	ND		250	283	113	250	248	99	13	70-130/30
75-35-4	1,1-Dichloroethene	ND		250	253	101	250	200	80	23	70-130/30
156-59-2	cis-1,2-Dichloroethene	ND		250	259	104	250	219	88	17	70-130/30
156-60-5	trans-1,2-Dichloroethene	ND		250	249	100	250	204	82	20	70-130/30
78-87-5	1,2-Dichloropropane	ND		250	245	98	250	208	83	16	70-130/30
142-28-9	1,3-Dichloropropane	ND		250	210	84	250	174	70	19	70-130/30
594-20-7	2,2-Dichloropropane	ND		250	338	135* [b]	250	261	104	26	70-130/30
563-58-6	1,1-Dichloropropene	ND		250	264	106	250	210	84	23	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34231
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34231-7MS [a]	L87844.D	5	10/23/14	GK	n/a	n/a	MSL3916
MC34231-7MSD [a]	L87845.D	5	10/23/14	GK	n/a	n/a	MSL3916
MC34231-7	L87843.D	1	10/23/14	GK	n/a	n/a	MSL3916

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34231-7

CAS No.	Compound	MC34231-7 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-01-5	cis-1,3-Dichloropropene	ND		250	255	102	250	212	85	18	70-130/30
10061-02-6	trans-1,3-Dichloropropene	ND		250	262	105	250	213	85	21	70-130/30
123-91-1	1,4-Dioxane	ND		625	561	90	625	492	79	13	70-130/30
97-63-2	Ethyl methacrylate	ND		250	241	96	250	195	78	21	72-139/30
100-41-4	Ethylbenzene	ND		250	214	86	250	176	70	19	70-130/30
87-68-3	Hexachlorobutadiene	ND		250	227	91	250	194	78	16	70-130/30
591-78-6	2-Hexanone	ND		250	129	52* [b]	250	105	42* [b]	21	70-130/30
98-82-8	Isopropylbenzene	1.2	J	250	283	113	250	231	92	20	70-130/30
99-87-6	p-Isopropyltoluene	ND		250	263	105	250	221	88	17	70-130/30
1634-04-4	Methyl Tert Butyl Ether	19.0		250	272	101	250	226	83	18	70-130/30
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		250	216	86	250	170	68* [b]	24	70-130/30
74-95-3	Methylene bromide	ND		250	235	94	250	194	78	19	70-130/30
75-09-2	Methylene chloride	ND		250	239	96	250	201	80	17	70-130/30
91-20-3	Naphthalene	ND		250	284	114	250	256	102	10	70-130/30
103-65-1	n-Propylbenzene	ND		250	289	116	250	240	96	19	70-130/30
100-42-5	Styrene	ND		250	223	89	250	191	76	15	70-130/30
630-20-6	1,1,1,2-Tetrachloroethane	ND		250	228	91	250	194	78	16	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	254	102	250	210	84	19	70-130/30
127-18-4	Tetrachloroethene	ND		250	210	84	250	172	69* [b]	20	70-130/30
108-88-3	Toluene	1.5		250	250	99	250	204	81	20	70-130/30
87-61-6	1,2,3-Trichlorobenzene	ND		250	234	94	250	202	81	15	70-130/30
120-82-1	1,2,4-Trichlorobenzene	ND		250	244	98	250	208	83	16	70-130/30
71-55-6	1,1,1-Trichloroethane	ND		250	284	114	250	223	89	24	70-130/30
79-00-5	1,1,2-Trichloroethane	ND		250	242	97	250	202	81	18	70-130/30
79-01-6	Trichloroethene	ND		250	225	90	250	191	76	16	70-130/30
75-69-4	Trichlorofluoromethane	ND		250	314	126	250	155	62* [b]	68* [c]	70-130/30
96-18-4	1,2,3-Trichloropropane	ND		250	281	112	250	229	92	20	70-130/30
95-63-6	1,2,4-Trimethylbenzene	0.58	J	250	273	109	250	225	90	19	70-130/30
108-67-8	1,3,5-Trimethylbenzene	ND		250	264	106	250	215	86	20	70-130/30
108-05-4	Vinyl Acetate	ND		250	599	240* [d]	250	501	200* [d]	18	70-130/30
75-01-4	Vinyl chloride	ND		250	268	107	250	139	56* [b]	63* [c]	70-130/30
	m,p-Xylene	2.7		500	414	82	500	344	68* [b]	18	70-130/30
95-47-6	o-Xylene	1.2		250	216	86	250	184	73	16	70-130/30
1330-20-7	Xylene (total)	3.9		750	630	83	750	528	70	18	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34231
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34231-7MS [a]	L87844.D	5	10/23/14	GK	n/a	n/a	MSL3916
MC34231-7MSD [a]	L87845.D	5	10/23/14	GK	n/a	n/a	MSL3916
MC34231-7	L87843.D	1	10/23/14	GK	n/a	n/a	MSL3916

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34231-7

CAS No.	Surrogate Recoveries	MS	MSD	MC34231-7	Limits
1868-53-7	Dibromofluoromethane	106%	110%	108%	70-130%
2037-26-5	Toluene-D8	103%	105%	105%	70-130%
460-00-4	4-Bromofluorobenzene	123%	122%	121%	70-130%

(a) Elevated detection limit due to limited sample volume.
(b) Outside control limits due to possible matrix interference. Refer to Blank Spike.
(c) High RPD due to possible matrix interference and/or sample non-homogeneity.
(d) Outside control limits. Associated samples are non-detect for this compound.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34231
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34436-4MS	N91537.D	5	10/24/14	TT	n/a	n/a	MSN3381
MC34436-4MSD	N91538.D	5	10/24/14	TT	n/a	n/a	MSN3381
MC34436-4	N91534.D	5	10/24/14	TT	n/a	n/a	MSN3381

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34231-1, MC34231-2, MC34231-3, MC34231-4, MC34231-5

CAS No.	Compound	MC34436-4 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		250	116	46* [a]	250	117	47* [a]	1	70-130/30
107-02-8	Acrolein	ND		1250	1270	102	1250	1310	105	3	70-130/30
107-13-1	Acrylonitrile	ND		250	222	89	250	229	92	3	70-130/30
71-43-2	Benzene	ND		250	231	92	250	237	95	3	70-130/30
108-86-1	Bromobenzene	ND		250	261	104	250	274	110	5	70-130/30
74-97-5	Bromochloromethane	ND		250	259	104	250	266	106	3	70-130/30
75-27-4	Bromodichloromethane	ND		250	229	92	250	236	94	3	70-130/30
75-25-2	Bromoform	ND		250	234	94	250	241	96	3	70-130/30
74-83-9	Bromomethane	ND		250	231	92	250	237	95	3	70-130/30
78-93-3	2-Butanone (MEK)	ND		250	185	74	250	200	80	8	70-130/30
104-51-8	n-Butylbenzene	ND		250	274	110	250	282	113	3	70-130/30
135-98-8	sec-Butylbenzene	ND		250	277	111	250	283	113	2	70-130/30
98-06-6	tert-Butylbenzene	ND		250	258	103	250	262	105	2	70-130/30
75-15-0	Carbon disulfide	ND		250	259	104	250	267	107	3	70-130/30
56-23-5	Carbon tetrachloride	ND		250	219	88	250	225	90	3	70-130/30
108-90-7	Chlorobenzene	ND		250	245	98	250	251	100	2	70-130/30
75-00-3	Chloroethane	ND		250	305	122	250	311	124	2	70-130/30
110-75-8	2-Chloroethyl vinyl ether	ND		250	271	108	250	278	111	3	70-130/30
67-66-3	Chloroform	ND		250	221	88	250	226	90	2	70-130/30
74-87-3	Chloromethane	ND		250	337	135* [a]	250	342	137* [a]	1	70-130/30
95-49-8	o-Chlorotoluene	ND		250	260	104	250	266	106	2	70-130/30
106-43-4	p-Chlorotoluene	ND		250	255	102	250	261	104	2	70-130/30
124-48-1	Dibromochloromethane	ND		250	235	94	250	245	98	4	70-130/30
95-50-1	1,2-Dichlorobenzene	ND		250	266	106	250	269	108	1	70-130/30
541-73-1	1,3-Dichlorobenzene	ND		250	259	104	250	267	107	3	70-130/30
106-46-7	1,4-Dichlorobenzene	ND		250	281	112	250	287	115	2	70-130/30
75-71-8	Dichlorodifluoromethane	ND		250	176	70	250	180	72	2	70-130/30
75-34-3	1,1-Dichloroethane	ND		250	233	93	250	237	95	2	70-130/30
107-06-2	1,2-Dichloroethane	ND		250	190	76	250	197	79	4	70-130/30
75-35-4	1,1-Dichloroethene	7.1		250	300	117	250	301	118	0	70-130/30
156-59-2	cis-1,2-Dichloroethene	390		250	590	80	250	597	83	1	70-130/30
156-60-5	trans-1,2-Dichloroethene	4.8		250	249	98	250	267	105	7	70-130/30
78-87-5	1,2-Dichloropropane	ND		250	268	107	250	274	110	2	70-130/30
142-28-9	1,3-Dichloropropane	ND		250	248	99	250	258	103	4	70-130/30
594-20-7	2,2-Dichloropropane	ND		250	210	84	250	225	90	7	70-130/30
563-58-6	1,1-Dichloropropene	ND		250	268	107	250	283	113	5	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34231
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34436-4MS	N91537.D	5	10/24/14	TT	n/a	n/a	MSN3381
MC34436-4MSD	N91538.D	5	10/24/14	TT	n/a	n/a	MSN3381
MC34436-4	N91534.D	5	10/24/14	TT	n/a	n/a	MSN3381

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34231-1, MC34231-2, MC34231-3, MC34231-4, MC34231-5

CAS No.	Compound	MC34436-4 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-01-5	cis-1,3-Dichloropropene	ND		250	266	106	250	272	109	2	70-130/30
10061-02-6	trans-1,3-Dichloropropene	ND		250	259	104	250	271	108	5	70-130/30
123-91-1	1,4-Dioxane	ND		625	538	86	625	580	93	8	70-130/30
97-63-2	Ethyl methacrylate	ND		250	217	87	250	229	92	5	72-139/30
100-41-4	Ethylbenzene	ND		250	246	98	250	249	100	1	70-130/30
87-68-3	Hexachlorobutadiene	ND		250	245	98	250	262	105	7	70-130/30
591-78-6	2-Hexanone	ND		250	129	52* [a]	250	140	56* [a]	8	70-130/30
98-82-8	Isopropylbenzene	ND		250	280	112	250	287	115	2	70-130/30
99-87-6	p-Isopropyltoluene	ND		250	277	111	250	280	112	1	70-130/30
1634-04-4	Methyl Tert Butyl Ether	ND		250	123	49* [b]	250	148	59* [b]	18	70-130/30
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		250	192	77	250	203	81	6	70-130/30
74-95-3	Methylene bromide	ND		250	232	93	250	244	98	5	70-130/30
75-09-2	Methylene chloride	ND		250	248	99	250	254	102	2	70-130/30
91-20-3	Naphthalene	ND		250	134	54* [a]	250	153	61* [a]	13	70-130/30
103-65-1	n-Propylbenzene	ND		250	284	114	250	288	115	1	70-130/30
100-42-5	Styrene	ND		250	271	108	250	280	112	3	70-130/30
630-20-6	1,1,1,2-Tetrachloroethane	ND		250	236	94	250	244	98	3	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	282	113	250	303	121	7	70-130/30
127-18-4	Tetrachloroethene	1680		250	1560	-48* [c]	250	1600	-32* [c]	3	70-130/30
108-88-3	Toluene	ND		250	247	99	250	254	102	3	70-130/30
87-61-6	1,2,3-Trichlorobenzene	ND		250	176	70	250	192	77	9	70-130/30
120-82-1	1,2,4-Trichlorobenzene	ND		250	235	94	250	255	102	8	70-130/30
71-55-6	1,1,1-Trichloroethane	ND		250	253	101	250	259	104	2	70-130/30
79-00-5	1,1,2-Trichloroethane	ND		250	234	94	250	245	98	5	70-130/30
79-01-6	Trichloroethene	301		250	468	67* [a]	250	490	76	5	70-130/30
75-69-4	Trichlorofluoromethane	ND		250	208	83	250	213	85	2	70-130/30
96-18-4	1,2,3-Trichloropropane	ND		250	250	100	250	267	107	7	70-130/30
95-63-6	1,2,4-Trimethylbenzene	ND		250	244	98	250	248	99	2	70-130/30
108-67-8	1,3,5-Trimethylbenzene	ND		250	236	94	250	243	97	3	70-130/30
108-05-4	Vinyl Acetate	ND		250	111	44* [a]	250	118	47* [a]	6	70-130/30
75-01-4	Vinyl chloride	ND		250	281	112	250	282	113	0	70-130/30
	m,p-Xylene	ND		500	473	95	500	487	97	3	70-130/30
95-47-6	o-Xylene	ND		250	242	97	250	247	99	2	70-130/30
1330-20-7	Xylene (total)	ND		750	714	95	750	735	98	3	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34231
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34436-4MS	N91537.D	5	10/24/14	TT	n/a	n/a	MSN3381
MC34436-4MSD	N91538.D	5	10/24/14	TT	n/a	n/a	MSN3381
MC34436-4	N91534.D	5	10/24/14	TT	n/a	n/a	MSN3381

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34231-1, MC34231-2, MC34231-3, MC34231-4, MC34231-5

CAS No.	Surrogate Recoveries	MS	MSD	MC34436-4	Limits
1868-53-7	Dibromofluoromethane	95%	95%	93%	70-130%
2037-26-5	Toluene-D8	102%	103%	102%	70-130%
460-00-4	4-Bromofluorobenzene	97%	96%	105%	70-130%

(a) Outside control limits due to possible matrix interference. Refer to Blank Spike.
(b) Outside control limits due to possible matrix interference.
(c) Outside control limits due to high level in sample relative to spike amount.

* = Outside of Control Limits.

Volatile Internal Standard Area Summary

Job Number: MC34231
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSL3916-CC3872	Injection Date:	10/23/14
Lab File ID:	L87837.D	Injection Time:	13:18
Instrument ID:	GCMSL	Method:	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	212272	8.11	292596	8.93	151806	12.12	155787	14.66	29857	5.85
Upper Limit [a]	424544	8.61	585192	9.43	303612	12.62	311574	15.16	59714	6.35
Lower Limit [b]	106136	7.61	146298	8.43	75903	11.62	77894	14.16	14929	5.35
Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSL3916-BS	212272	8.11	292596	8.93	151806	12.12	155787	14.66	29857	5.85
MSL3916-MB	190403	8.12	261904	8.93	128970	12.12	124846	14.66	22434	5.93
ZZZZZZ	182018	8.12	251932	8.93	124685	12.12	122961	14.66	24885	5.96
ZZZZZZ	208336	8.12	287887	8.93	138839	12.12	140551	14.66	31153	5.92
MC34231-7	200803	8.12	276986	8.93	141791	12.12	141148	14.66	33957	5.90
MC34231-7MS [c]	216131	8.11	292513	8.93	165287	12.11	155038	14.66	35230	5.86
MC34231-7MSD [c]	188322	8.12	254054	8.93	140069	12.12	133976	14.66	26554	5.86
ZZZZZZ	199173	8.12	283066	8.93	134920	12.12	133206	14.66	27509	5.92
ZZZZZZ	166637	8.12	236442	8.93	115318	12.12	110562	14.66	22910	5.93
ZZZZZZ	202444	8.12	282320	8.93	138421	12.12	134921	14.66	28563	5.95
ZZZZZZ	182268	8.12	260167	8.93	145036	12.12	129631	14.66	61731[d]	5.88
ZZZZZZ	232116	8.12	336132	8.93	185445	12.12	168626	14.66	61229[d]	5.90
ZZZZZZ	264232	8.11	374426	8.93	196834	12.12	183677	14.66	47890	5.91
ZZZZZZ	223455	8.12	311175	8.93	163831	12.12	158667	14.66	37675	5.90
ZZZZZZ	259470	8.12	355756	8.93	186647	12.12	170686	14.66	38344	5.93
ZZZZZZ	250215	8.12	347171	8.93	177440	12.12	166979	14.66	34567	5.91
ZZZZZZ	244818	8.12	337139	8.93	165096	12.12	161151	14.66	31202	5.91

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Elevated detection limit due to limited sample volume.
(d) Outside control limits. Target analytes not associated with this internal standard.

Volatile Internal Standard Area Summary

Job Number: MC34231
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSN3381-CC3345	**Injection Date:**	10/21/14
Lab File ID:	N91418.D	**Injection Time:**	08:19
Instrument ID:	GCMSN	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	321689	9.12	495960	9.98	272314	13.24	219602	15.79	103253	6.69
Upper Limit [a]	643378	9.62	991920	10.48	544628	13.74	439204	16.29	206506	7.19
Lower Limit [b]	160845	8.62	247980	9.48	136157	12.74	109801	15.29	51627	6.19

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSN3381-BS	334543	9.12	525597	9.98	272223	13.24	226267	15.79	101609	6.70
MSN3380-BS1	334543	9.12	525597	9.98	272223	13.24	226267	15.79	101609	6.70
MSN3380-MB1	295772	9.11	454163	9.99	230288	13.24	167754	15.80	84219	6.73
MSN3381-MB	295772	9.11	454163	9.99	230288	13.24	167754	15.80	84219	6.73
MC34231-5	281736	9.12	438374	9.99	221369	13.24	162283	15.80	80516	6.73
MC34231-1	282987	9.11	439648	9.99	220774	13.24	159501	15.80	91078	6.71
MC34231-2	331500	9.12	511393	9.99	247170	13.24	180829	15.79	113912	6.72
MC34231-3	339006	9.12	544253	9.99	264367	13.24	192128	15.79	105428	6.72
MC34231-4	320970	9.11	490125	9.99	242065	13.24	187043	15.79	115312	6.71
ZZZZZZ	288287	9.12	457013	9.99	225366	13.24	165018	15.80	99004	6.71
ZZZZZZ	286341	9.12	438388	9.99	218623	13.24	161098	15.80	91829	6.71
ZZZZZZ	368389	9.12	567238	9.99	300525	13.24	258928	15.80	130428	6.71
ZZZZZZ	343996	9.11	528928	9.98	300867	13.24	273538	15.80	80285	6.71
ZZZZZZ	334633	9.11	499880	9.98	245589	13.24	188418	15.80	76213	6.72
ZZZZZZ	324448	9.12	498390	9.99	243631	13.24	184859	15.79	77552	6.72
ZZZZZZ	386334	9.12	612365	9.99	328417	13.24	296998	15.80	120429	6.70
ZZZZZZ	350752	9.12	549681	9.99	265291	13.24	202181	15.79	136529	6.71
ZZZZZZ	340419	9.12	519424	9.99	255816	13.24	199594	15.80	120341	6.71

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Internal Standard Area Summary

Job Number: MC34231
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSN3385-CC3345	**Injection Date:**	10/24/14
Lab File ID:	N91530.D	**Injection Time:**	09:01
Instrument ID:	GCMSN	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	433892	9.12	672461	9.99	345844	13.24	263701	15.79	123045	6.72
Upper Limit [a]	867784	9.62	1344922	10.49	691688	13.74	527402	16.29	246090	7.22
Lower Limit [b]	216946	8.62	336231	9.49	172922	12.74	131851	15.29	61523	6.22

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSN3381-BS1	433892	9.12	672461	9.99	345844	13.24	263701	15.79	123045	6.72
MSN3385-BS	433892	9.12	672461	9.99	345844	13.24	263701	15.79	123045	6.72
MSN3381-MB1	393628	9.12	614259	9.99	306777	13.24	210099	15.80	106063	6.78
MSN3385-MB	393628	9.12	614259	9.99	306777	13.24	210099	15.80	106063	6.78
MC34436-4	389604	9.11	603590	9.99	307356	13.24	207782	15.80	104569	6.78
MC34436-4MS	431038	9.12	685561	9.99	368277	13.24	275686	15.79	121787	6.72
MC34436-4MSD	427729	9.12	674316	9.99	363692	13.24	270386	15.79	123030	6.72
ZZZZZZ	392733	9.12	623812	9.99	306825	13.24	213272	15.80	135187	6.77
ZZZZZZ	409662	9.12	643120	9.99	321704	13.24	212493	15.80	112668	6.78
ZZZZZZ	392290	9.12	626802	9.99	306113	13.24	203048	15.80	99788	6.80
ZZZZZZ	389405	9.11	629159	9.99	310785	13.24	208623	15.79	105326	6.78
ZZZZZZ	381653	9.12	606457	9.99	304028	13.24	211152	15.80	107705	6.78
ZZZZZZ	387218	9.12	612799	9.99	306621	13.24	218245	15.79	125633	6.78
ZZZZZZ	381605	9.11	612601	9.99	311688	13.24	217179	15.79	117173	6.78
ZZZZZZ	378640	9.12	616380	9.99	304314	13.24	213202	15.79	115363	6.77
ZZZZZZ	355234	9.12	568681	9.99	285479	13.24	189787	15.80	101852	6.79
ZZZZZZ	372259	9.12	597055	9.99	295721	13.24	201932	15.80	99984	6.80
ZZZZZZ	379927	9.12	604968	9.99	293494	13.24	199174	15.79	109026	6.78

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary

Job Number: MC34231
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Method: SW846 8260C **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
MC34231-1	N91424.D	97	101	102
MC34231-2	N91426.D	90	99	98
MC34231-3	N91427.D	94	104	99
MC34231-4	N91428.D	92	101	96
MC34231-5	N91423.D	97	101	99
MC34231-7	L87843.D	108	105	121
MC34231-7MS	L87844.D	106	103	123
MC34231-7MSD	L87845.D	110	105	122
MC34436-4MS	N91537.D	95	102	97
MC34436-4MSD	N91538.D	95	103	96
MSL3916-BS	L87837.D	106	103	122
MSL3916-MB	L87840.D	102	100	117
MSN3381-BS	N91419.D	96	104	93
MSN3381-MB	N91422.D	95	101	100
MSN3381-MB1	N91533.D	93	101	103

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	70-130%
S2 = Toluene-D8	70-130%
S3 = 4-Bromofluorobenzene	70-130%

GC/MS Semi-volatiles

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QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: MC34231
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40162-MB	R40295.D	1	10/14/14	WK	10/11/14	OP40162	MSR1483

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34231-1, MC34231-2, MC34231-3, MC34231-4, MC34231-7

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	10	2.5	ug/l	
95-57-8	2-Chlorophenol	ND	5.0	0.31	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	10	0.83	ug/l	
120-83-2	2,4-Dichlorophenol	ND	10	0.40	ug/l	
105-67-9	2,4-Dimethylphenol	ND	10	0.56	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	2.5	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.9	ug/l	
95-48-7	2-Methylphenol	ND	10	0.23	ug/l	
	3&4-Methylphenol	ND	10	0.47	ug/l	
88-75-5	2-Nitrophenol	ND	10	2.9	ug/l	
100-02-7	4-Nitrophenol	ND	20	0.53	ug/l	
87-86-5	Pentachlorophenol	ND	10	1.1	ug/l	
108-95-2	Phenol	ND	5.0	0.30	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	10	0.37	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	10	0.18	ug/l	
62-53-3	Aniline	ND	10	0.64	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.0	0.47	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.0	0.53	ug/l	
100-51-6	Benzyl Alcohol	ND	10	2.3	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.31	ug/l	
106-47-8	4-Chloroaniline	ND	10	0.56	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.0	0.29	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.0	0.35	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.0	0.33	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.0	0.25	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.0	0.24	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	10	0.46	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	10	0.30	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.27	ug/l	
132-64-9	Dibenzofuran	ND	2.0	0.26	ug/l	
84-74-2	Di-n-butyl phthalate	0.21	5.0	0.17	ug/l	J
117-84-0	Di-n-octyl phthalate	ND	5.0	0.28	ug/l	
84-66-2	Diethyl phthalate	ND	5.0	0.20	ug/l	
131-11-3	Dimethyl phthalate	ND	5.0	0.34	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
118-74-1	Hexachlorobenzene	ND	5.0	0.29	ug/l	

Method Blank Summary

Job Number: MC34231
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40162-MB	R40295.D	1	10/14/14	WK	10/11/14	OP40162	MSR1483

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34231-1, MC34231-2, MC34231-3, MC34231-4, MC34231-7

CAS No.	Compound	Result	RL	MDL	Units	Q
77-47-4	Hexachlorocyclopentadiene	ND	10	1.3	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.30	ug/l	
78-59-1	Isophorone	ND	5.0	0.45	ug/l	
88-74-4	2-Nitroaniline	ND	10	0.40	ug/l	
99-09-2	3-Nitroaniline	ND	10	1.4	ug/l	
100-01-6	4-Nitroaniline	ND	10	2.2	ug/l	
98-95-3	Nitrobenzene	ND	5.0	0.39	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.0	1.0	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.0	0.40	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.19	ug/l	
110-86-1	Pyridine	ND	10	0.52	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	56%	15-110%
4165-62-2	Phenol-d5	37%	15-110%
118-79-6	2,4,6-Tribromophenol	93%	15-110%
4165-60-0	Nitrobenzene-d5	89%	30-130%
321-60-8	2-Fluorobiphenyl	86%	30-130%
1718-51-0	Terphenyl-d14	108%	30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

Method Blank Summary

Job Number: MC34231
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40163-MB	I92206.D	1	10/14/14	WK	10/11/14	OP40163	MSI3436

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

MC34231-1, MC34231-2, MC34231-3, MC34231-4, MC34231-7

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.069	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.050	ug/l	
120-12-7	Anthracene	ND	0.10	0.092	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.050	0.020	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.029	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.050	0.032	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.027	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.039	ug/l	
218-01-9	Chrysene	ND	0.10	0.024	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.032	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.041	ug/l	
86-73-7	Fluorene	ND	0.10	0.099	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.031	ug/l	
90-12-0	1-Methylnaphthalene	ND	2.0	0.50	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.0	0.50	ug/l	
85-01-8	Phenanthrene	0.026	0.050	0.013	ug/l	J
129-00-0	Pyrene	ND	0.10	0.038	ug/l	

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	93%	30-130%
321-60-8	2-Fluorobiphenyl	85%	30-130%
1718-51-0	Terphenyl-d14	103%	30-130%

Blank Spike Summary

Job Number: MC34231
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40162-BS	R40296.D	1	10/14/14	WK	10/11/14	OP40162	MSR1483

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34231-1, MC34231-2, MC34231-3, MC34231-4, MC34231-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
65-85-0	Benzoic Acid	50	20.2	40	30-130
95-57-8	2-Chlorophenol	50	41.7	83	30-130
59-50-7	4-Chloro-3-methyl phenol	50	43.9	88	30-130
120-83-2	2,4-Dichlorophenol	50	45.8	92	30-130
105-67-9	2,4-Dimethylphenol	50	40.6	81	30-130
51-28-5	2,4-Dinitrophenol	50	48.1	96	30-130
534-52-1	4,6-Dinitro-o-cresol	50	51.6	103	30-130
95-48-7	2-Methylphenol	50	35.6	71	30-130
	3&4-Methylphenol	100	69.7	70	30-130
88-75-5	2-Nitrophenol	50	46.3	93	30-130
100-02-7	4-Nitrophenol	50	21.5	43	30-130
87-86-5	Pentachlorophenol	50	43.9	88	30-130
108-95-2	Phenol	50	19.0	38	30-130
95-95-4	2,4,5-Trichlorophenol	50	47.0	94	30-130
88-06-2	2,4,6-Trichlorophenol	50	47.7	95	30-130
62-53-3	Aniline	50	29.0	58	40-140
101-55-3	4-Bromophenyl phenyl ether	50	52.8	106	40-140
85-68-7	Butyl benzyl phthalate	50	53.3	107	40-140
100-51-6	Benzyl Alcohol	50	41.9	84	40-140
91-58-7	2-Chloronaphthalene	50	51.2	102	40-140
106-47-8	4-Chloroaniline	50	42.6	85	40-140
111-91-1	bis(2-Chloroethoxy)methane	50	46.7	93	40-140
111-44-4	bis(2-Chloroethyl)ether	50	44.8	90	40-140
108-60-1	bis(2-Chloroisopropyl)ether	50	62.3	125	40-140
7005-72-3	4-Chlorophenyl phenyl ether	50	50.0	100	40-140
122-66-7	1,2-Diphenylhydrazine	50	51.0	102	40-140
121-14-2	2,4-Dinitrotoluene	50	53.6	107	40-140
606-20-2	2,6-Dinitrotoluene	50	51.6	103	40-140
91-94-1	3,3'-Dichlorobenzidine	50	51.7	103	40-140
132-64-9	Dibenzofuran	50	47.4	95	40-140
84-74-2	Di-n-butyl phthalate	50	50.9	102	40-140
117-84-0	Di-n-octyl phthalate	50	54.4	109	40-140
84-66-2	Diethyl phthalate	50	50.8	102	40-140
131-11-3	Dimethyl phthalate	50	50.5	101	40-140
117-81-7	bis(2-Ethylhexyl)phthalate	50	54.1	108	40-140
118-74-1	Hexachlorobenzene	50	53.5	107	40-140

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34231
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40162-BS	R40296.D	1	10/14/14	WK	10/11/14	OP40162	MSR1483

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34231-1, MC34231-2, MC34231-3, MC34231-4, MC34231-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
77-47-4	Hexachlorocyclopentadiene	50	27.7	55	40-140
67-72-1	Hexachloroethane	50	39.5	79	40-140
78-59-1	Isophorone	50	42.9	86	40-140
88-74-4	2-Nitroaniline	50	49.6	99	40-140
99-09-2	3-Nitroaniline	50	46.4	93	40-140
100-01-6	4-Nitroaniline	50	47.3	95	40-140
98-95-3	Nitrobenzene	50	46.2	92	40-140
62-75-9	n-Nitrosodimethylamine	50	32.1	64	40-140
621-64-7	N-Nitroso-di-n-propylamine	50	45.5	91	40-140
86-30-6	N-Nitrosodiphenylamine	50	46.9	94	40-140
110-86-1	Pyridine	50	15.7	31* [a]	40-140

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	55%	15-110%
4165-62-2	Phenol-d5	37%	15-110%
118-79-6	2,4,6-Tribromophenol	102%	15-110%
4165-60-0	Nitrobenzene-d5	89%	30-130%
321-60-8	2-Fluorobiphenyl	89%	30-130%
1718-51-0	Terphenyl-d14	107%	30-130%

(a) Outside control limits. Blank Spike meets program technical requirements.

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34231
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40163-BS	I92207.D	1	10/14/14	WK	10/11/14	OP40163	MSI3436

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

MC34231-1, MC34231-2, MC34231-3, MC34231-4, MC34231-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
83-32-9	Acenaphthene	50	46.2	92	40-140
208-96-8	Acenaphthylene	50	41.9	84	40-140
120-12-7	Anthracene	50	47.6	95	40-140
56-55-3	Benzo(a)anthracene	50	55.2	110	40-140
50-32-8	Benzo(a)pyrene	50	52.5	105	40-140
205-99-2	Benzo(b)fluoranthene	50	53.2	106	40-140
191-24-2	Benzo(g,h,i)perylene	50	52.0	104	40-140
207-08-9	Benzo(k)fluoranthene	50	53.3	107	40-140
218-01-9	Chrysene	50	51.9	104	40-140
53-70-3	Dibenzo(a,h)anthracene	50	53.4	107	40-140
206-44-0	Fluoranthene	50	51.1	102	40-140
86-73-7	Fluorene	50	46.3	93	40-140
193-39-5	Indeno(1,2,3-cd)pyrene	50	52.4	105	40-140
90-12-0	1-Methylnaphthalene	50	43.2	86	40-140
91-57-6	2-Methylnaphthalene	50	43.6	87	40-140
85-01-8	Phenanthrene	50	49.1	98	40-140
129-00-0	Pyrene	50	49.4	99	40-140

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	93%	30-130%
321-60-8	2-Fluorobiphenyl	87%	30-130%
1718-51-0	Terphenyl-d14	105%	30-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34231
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40162-MS	R40297.D	1	10/14/14	WK	10/11/14	OP40162	MSR1483
OP40162-MSD	R40298.D	1	10/14/14	WK	10/11/14	OP40162	MSR1483
MC34231-7	R40299.D	1	10/14/14	WK	10/11/14	OP40162	MSR1483

The QC reported here applies to the following samples: Method: SW846 8270D

MC34231-1, MC34231-2, MC34231-3, MC34231-4, MC34231-7

CAS No.	Compound	MC34231-7 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic Acid	ND		55.6	25.0	45	54.3	24.7	45	1	30-130/20
95-57-8	2-Chlorophenol	ND		55.6	41.3	74	54.3	43.5	80	5	30-130/20
59-50-7	4-Chloro-3-methyl phenol	ND		55.6	46.2	83	54.3	48.1	89	4	30-130/20
120-83-2	2,4-Dichlorophenol	ND		55.6	46.2	83	54.3	49.3	91	6	30-130/20
105-67-9	2,4-Dimethylphenol	ND		55.6	43.9	79	54.3	46.5	86	6	30-130/20
51-28-5	2,4-Dinitrophenol	ND		55.6	61.8	111	54.3	62.9	116	2	30-130/20
534-52-1	4,6-Dinitro-o-cresol	ND		55.6	59.4	107	54.3	58.0	107	2	30-130/20
95-48-7	2-Methylphenol	ND		55.6	36.0	65	54.3	37.0	68	3	30-130/20
	3&4-Methylphenol	ND		111	70.2	63	109	71.7	66	2	30-130/20
88-75-5	2-Nitrophenol	ND		55.6	46.2	83	54.3	49.2	91	6	30-130/20
100-02-7	4-Nitrophenol	ND		55.6	28.9	52	54.3	30.7	56	6	30-130/20
87-86-5	Pentachlorophenol	ND		55.6	51.8	93	54.3	51.8	95	0	30-130/20
108-95-2	Phenol	0.72	J	55.6	19.3	33	54.3	19.6	35	2	30-130/20
95-95-4	2,4,5-Trichlorophenol	ND		55.6	49.9	90	54.3	51.2	94	3	30-130/20
88-06-2	2,4,6-Trichlorophenol	ND		55.6	49.4	89	54.3	53.1	98	7	30-130/20
62-53-3	Aniline	ND		55.6	26.1	47	54.3	25.3	47	3	40-140/20
101-55-3	4-Bromophenyl phenyl ether	ND		55.6	55.6	100	54.3	56.4	104	1	40-140/20
85-68-7	Butyl benzyl phthalate	ND		55.6	57.4	103	54.3	57.4	106	0	40-140/20
100-51-6	Benzyl Alcohol	ND		55.6	40.8	73	54.3	42.6	78	4	40-140/20
91-58-7	2-Chloronaphthalene	ND		55.6	52.3	94	54.3	54.9	101	5	40-140/20
106-47-8	4-Chloroaniline	ND		55.6	36.5	66	54.3	35.2	65	4	40-140/20
111-91-1	bis(2-Chloroethoxy)methane	ND		55.6	47.1	85	54.3	49.7	91	5	40-140/20
111-44-4	bis(2-Chloroethyl)ether	ND		55.6	44.8	81	54.3	47.4	87	6	40-140/20
108-60-1	bis(2-Chloroisopropyl)ether	ND		55.6	60.5	109	54.3	64.7	119	7	40-140/20
7005-72-3	4-Chlorophenyl phenyl ether	ND		55.6	51.8	93	54.3	53.6	99	3	40-140/20
122-66-7	1,2-Diphenylhydrazine	ND		55.6	52.5	95	54.3	52.3	96	0	40-140/20
121-14-2	2,4-Dinitrotoluene	ND		55.6	57.5	104	54.3	57.7	106	0	40-140/20
606-20-2	2,6-Dinitrotoluene	ND		55.6	54.0	97	54.3	54.7	101	1	40-140/20
91-94-1	3,3'-Dichlorobenzidine	ND		55.6	6.1	11* [a]	54.3	2.8	5* [a]	74* [b]	40-140/20
132-64-9	Dibenzofuran	ND		55.6	48.9	88	54.3	51.2	94	5	40-140/20
84-74-2	Di-n-butyl phthalate	0.23	JB	55.6	52.7	94	54.3	52.2	96	1	40-140/20
117-84-0	Di-n-octyl phthalate	ND		55.6	57.4	103	54.3	57.1	105	1	40-140/20
84-66-2	Diethyl phthalate	ND		55.6	54.0	97	54.3	54.3	100	1	40-140/20
131-11-3	Dimethyl phthalate	ND		55.6	52.6	95	54.3	53.8	99	2	40-140/20
117-81-7	bis(2-Ethylhexyl)phthalate	ND		55.6	58.2	105	54.3	58.0	107	0	40-140/20
118-74-1	Hexachlorobenzene	ND		55.6	57.0	103	54.3	56.8	105	0	40-140/20

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34231
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40162-MS	R40297.D	1	10/14/14	WK	10/11/14	OP40162	MSR1483
OP40162-MSD	R40298.D	1	10/14/14	WK	10/11/14	OP40162	MSR1483
MC34231-7	R40299.D	1	10/14/14	WK	10/11/14	OP40162	MSR1483

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34231-1, MC34231-2, MC34231-3, MC34231-4, MC34231-7

CAS No.	Compound	MC34231-7 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
77-47-4	Hexachlorocyclopentadiene	ND		55.6	27.5	50	54.3	30.0	55	9	40-140/20
67-72-1	Hexachloroethane	ND		55.6	33.7	61	54.3	34.4	63	2	40-140/20
78-59-1	Isophorone	ND		55.6	42.5	77	54.3	45.7	84	7	40-140/20
88-74-4	2-Nitroaniline	ND		55.6	52.2	94	54.3	52.8	97	1	40-140/20
99-09-2	3-Nitroaniline	ND		55.6	41.4	75	54.3	38.1	70	8	40-140/20
100-01-6	4-Nitroaniline	ND		55.6	44.1	79	54.3	39.7	73	11	40-140/20
98-95-3	Nitrobenzene	ND		55.6	47.9	86	54.3	51.3	94	7	40-140/20
62-75-9	n-Nitrosodimethylamine	ND		55.6	32.6	59	54.3	33.9	62	4	40-140/20
621-64-7	N-Nitroso-di-n-propylamine	ND		55.6	43.8	62	54.3	48.5	89	10	40-140/20
86-30-6	N-Nitrosodiphenylamine	ND		55.6	51.0	92	54.3	50.6	93	1	40-140/20
110-86-1	Pyridine	ND		55.6	22.4	40	54.3	19.0	35* c	16	40-140/20

CAS No.	Surrogate Recoveries	MS	MSD	MC34231-7	Limits
367-12-4	2-Fluorophenol	50%	53%	51%	15-110%
4165-62-2	Phenol-d5	33%	34%	32%	15-110%
118-79-6	2,4,6-Tribromophenol	98%	103%	98%	15-110%
4165-60-0	Nitrobenzene-d5	79%	84%	82%	30-130%
321-60-8	2-Fluorobiphenyl	78%	82%	78%	30-130%
1718-51-0	Terphenyl-d14	101%	104%	101%	30-130%

(a) Outside control limits due to possible matrix interference. Refer to Blank Spike.
(b) High RPD due to possible matrix interference and/or sample heterogeneity.
(c) Outside control limits. Blank Spike meets program technical requirements.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34231
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40163-MS	I92208.D	1	10/14/14	WK	10/11/14	OP40163	MSI3436
OP40163-MSD	I92209.D	1	10/14/14	WK	10/11/14	OP40163	MSI3436
MC34231-7	I92210.D	1	10/14/14	WK	10/11/14	OP40163	MSI3436

The QC reported here applies to the following samples: Method: SW846 8270D BY SIM

MC34231-1, MC34231-2, MC34231-3, MC34231-4, MC34231-7

CAS No.	Compound	MC34231-7 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	ND		55.6	47.6	86	54.3	49.1	90	3	40-140/20
208-96-8	Acenaphthylene	ND		55.6	42.5	77	54.3	44.3	82	4	40-140/20
120-12-7	Anthracene	ND		55.6	50.3	91	54.3	50.4	93	0	40-140/20
56-55-3	Benzo(a)anthracene	ND		55.6	58.3	105	54.3	57.8	106	1	40-140/20
50-32-8	Benzo(a)pyrene	ND		55.6	55.1	99	54.3	54.3	100	1	40-140/20
205-99-2	Benzo(b)fluoranthene	ND		55.6	64.5	116	54.3	65.3	120	1	40-140/20
191-24-2	Benzo(g,h,i)perylene	ND		55.6	55.0	99	54.3	54.5	100	1	40-140/20
207-08-9	Benzo(k)fluoranthene	ND		55.6	46.7	84	54.3	43.7	80	7	40-140/20
218-01-9	Chrysene	ND		55.6	54.7	98	54.3	53.1	98	3	40-140/20
53-70-3	Dibenzo(a,h)anthracene	ND		55.6	55.8	100	54.3	55.0	101	1	40-140/20
206-44-0	Fluoranthene	ND		55.6	54.5	98	54.3	52.9	97	3	40-140/20
86-73-7	Fluorene	ND		55.6	48.8	88	54.3	50.5	93	3	40-140/20
193-39-5	Indeno(1,2,3-cd)pyrene	ND		55.6	54.9	99	54.3	54.3	100	1	40-140/20
90-12-0	1-Methylnaphthalene	0.99	J	55.6	43.7	77	54.3	45.4	82	4	40-140/20
91-57-6	2-Methylnaphthalene	ND		55.6	42.8	77	54.3	44.9	83	5	40-140/20
85-01-8	Phenanthrene	0.030	J	55.6	52.2	94	54.3	51.8	95	1	40-140/20
129-00-0	Pyrene	ND		55.6	52.4	94	54.3	51.2	94	2	40-140/20

CAS No.	Surrogate Recoveries	MS	MSD	MC34231-7	Limits
4165-60-0	Nitrobenzene-d5	82%	89%	85%	30-130%
321-60-8	2-Fluorobiphenyl	76%	79%	77%	30-130%
1718-51-0	Terphenyl-d14	97%	99%	95%	30-130%

* = Outside of Control Limits.

Semivolatile Internal Standard Area Summary

Job Number: MC34231
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSI3436-CC3427	**Injection Date:**	10/14/14
Lab File ID:	I92191.D	**Injection Time:**	08:34
Instrument ID:	GCMSI	**Method:**	SW846 8270D BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	336604	3.08	744130	4.11	426551	5.60	751521	6.86	600563	9.59	1177704	10.98
Upper Limit [a]	673208	3.58	1488260	4.61	853102	6.10	1503042	7.36	1201126	10.09	2355408	11.48
Lower Limit [b]	168302	2.58	372065	3.61	213276	5.10	375761	6.36	300282	9.09	588852	10.48

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
ZZZZZZ	327252	3.08	727869	4.11	411958	5.60	715382	6.86	581369	9.59	1167878	10.98
OP40146-MB	378539	3.08	847726	4.11	484702	5.60	835683	6.86	688819	9.59	1399448	10.98
OP40146-BS	374481	3.08	845802	4.11	481262	5.61	850006	6.87	669308	9.60	1327297	10.98
OP40146-MS	331510	3.08	752028	4.11	432936	5.60	769260	6.87	629274	9.60	1275081	10.98
OP40146-MSD	345605	3.08	786284	4.11	443935	5.60	782733	6.87	616606	9.60	1218422	10.98
MC34000-2	379502	3.08	845027	4.11	480803	5.60	835370	6.86	678867	9.59	1365604	10.98
ZZZZZZ	344797	3.08	767505	4.11	438849	5.60	766014	6.86	621430	9.59	1261360	10.98
ZZZZZZ	325548	3.08	725494	4.11	424556	5.60	738283	6.86	619892	9.59	1274969	10.98
ZZZZZZ	384730	3.08	847049	4.11	482863	5.60	839214	6.86	683729	9.59	1366128	10.98
ZZZZZZ	376835	3.08	832994	4.11	477776	5.60	833845	6.86	663391	9.59	1340907	10.98
ZZZZZZ	373050	3.08	830897	4.11	478969	5.60	835282	6.86	671750	9.59	1337260	10.98
ZZZZZZ	364561	3.08	805162	4.11	456343	5.60	794829	6.87	655996	9.61	1280385	11.00
ZZZZZZ	370484	3.08	825563	4.11	475082	5.60	823744	6.86	676933	9.59	1346951	10.98
ZZZZZZ	368064	3.08	813650	4.11	470091	5.60	816936	6.86	671039	9.59	1339960	10.98
OP40163-MB	385087	3.08	852123	4.11	493764	5.60	855079	6.86	693664	9.59	1375848	10.98
OP40163-BS	357647	3.08	808566	4.11	463308	5.61	810800	6.87	640283	9.60	1260126	10.98
OP40163-MS	369446	3.08	838224	4.11	471494	5.61	833313	6.87	650745	9.60	1281147	10.99
OP40163-MSD	371272	3.08	842475	4.11	478535	5.61	837950	6.87	670167	9.61	1310738	10.99
MC34231-7	348168	3.08	779448	4.11	444784	5.60	776719	6.86	627423	9.60	1248813	10.98
MC34231-1	355714	3.08	794008	4.11	457600	5.60	788590	6.86	645075	9.59	1280163	10.98
MC34231-2	354932	3.08	790348	4.11	455611	5.60	793195	6.86	638051	9.60	1280618	10.98
MC34231-3	382034	3.08	849910	4.11	487162	5.60	851147	6.86	689211	9.59	1375423	10.98
MC34231-4	362243	3.08	804538	4.11	463495	5.60	812196	6.86	656774	9.59	1323812	10.98
ZZZZZZ	362288	3.08	766417	4.11	456863	5.61	803095	6.86	653577	9.59	1300643	10.98
ZZZZZZ	354350	3.08	780334	4.11	448177	5.60	786614	6.86	643369	9.59	1247254	10.98
ZZZZZZ	376221	3.08	825613	4.11	472160	5.61	820164	6.86	644947	9.59	1213946	10.98
ZZZZZZ	360638	3.08	808074	4.11	471880	5.60	827045	6.86	680167	9.59	1349896	10.98

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

Semivolatile Internal Standard Area Summary

Job Number: MC34231
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSI3436-CC3427	**Injection Date:**	10/14/14
Lab File ID:	I92191.D	**Injection Time:**	08:34
Instrument ID:	GCMSI	**Method:**	SW846 8270D BY SIM

Lab	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
Sample ID	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: MC34231
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSR1483-CC1481	**Injection Date:**	10/14/14
Lab File ID:	R40294.D	**Injection Time:**	08:49
Instrument ID:	GCMSR	**Method:**	SW846 8270D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	322327	4.24	1170015	5.34	691751	6.85	1185220	8.13	1243343	10.44	1132489	11.90
Upper Limit [a]	644654	4.74	2340030	5.84	1383502	7.35	2370440	8.63	2486686	10.94	2264978	12.40
Lower Limit [b]	161164	3.74	585008	4.84	345876	6.35	592610	7.63	621672	9.94	566245	11.40

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP40162-MB	365730	4.24	1330566	5.34	803435	6.85	1355664	8.12	1347902	10.43	1294236	11.89
OP40162-BS	366601	4.24	1325587	5.34	782071	6.85	1314307	8.12	1314064	10.44	1190193	11.90
OP40162-MS	377237	4.24	1342938	5.34	783524	6.85	1306164	8.12	1274357	10.44	1188073	11.90
OP40162-MSD	388268	4.24	1383739	5.34	816285	6.85	1368120	8.12	1320214	10.44	1230116	11.90
MC34231-7	365702	4.24	1306853	5.34	785730	6.85	1296212	8.12	1249677	10.43	1179249	11.90
MC34231-1	353679	4.24	1277478	5.33	766041	6.85	1297098	8.12	1283432	10.43	1215637	11.89
MC34231-2	360333	4.24	1289565	5.33	760265	6.85	1291097	8.12	1266812	10.43	1218376	11.90
MC34231-3	382354	4.24	1387734	5.34	822396	6.85	1391169	8.12	1371130	10.43	1313083	11.89
ZZZZZZ	386335	4.24	1378431	5.33	824512	6.85	1368693	8.12	1390262	10.44	1335580	11.90
ZZZZZZ	410321	4.24	1470126	5.34	872249	6.85	1471590	8.12	1429952	10.43	1334244	11.90
ZZZZZZ	405779	4.24	1458597	5.34	879367	6.85	1489115	8.12	1502243	10.43	1432530	11.90
ZZZZZZ	397945	4.24	1445649	5.33	877616	6.85	1499693	8.12	1530481	10.43	1448737	11.90
MC34231-4	375099	4.24	1345909	5.34	799600	6.85	1346571	8.12	1307155	10.43	1246056	11.89

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Surrogate Recovery Summary

Job Number: MC34231
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Method: SW846 8270D **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
MC34231-1	R40300.D	42	28	81	71	71	102
MC34231-2	R40301.D	57	37	99	91	86	103
MC34231-3	R40302.D	45	30	92	71	69	104
MC34231-4	R40307.D	52	34	95	82	78	108
MC34231-7	R40299.D	51	32	98	82	78	101
OP40162-BS	R40296.D	55	37	102	89	89	107
OP40162-MB	R40295.D	56	37	93	89	86	108
OP40162-MS	R40297.D	50	33	98	79	78	101
OP40162-MSD	R40298.D	53	34	103	84	82	104

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorophenol	15-110%
S2 = Phenol-d5	15-110%
S3 = 2,4,6-Tribromophenol	15-110%
S4 = Nitrobenzene-d5	30-130%
S5 = 2-Fluorobiphenyl	30-130%
S6 = Terphenyl-d14	30-130%

Semivolatile Surrogate Recovery Summary

Job Number: MC34231
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Method: SW846 8270D BY SIM **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
MC34231-1	I92211.D	73	70	96
MC34231-2	I92212.D	95	83	98
MC34231-3	I92213.D	75	68	99
MC34231-4	I92214.D	87	77	102
MC34231-7	I92210.D	85	77	95
OP40163-BS	I92207.D	93	87	105
OP40163-MB	I92206.D	93	85	103
OP40163-MS	I92208.D	82	76	97
OP40163-MSD	I92209.D	89	79	99

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	30-130%
S2 = 2-Fluorobiphenyl	30-130%
S3 = Terphenyl-d14	30-130%

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries

Method Blank Summary

Job Number: MC34231
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40168-MB	BB59881.D	1	10/13/14	NK	10/12/14	OP40168	GBB3333

The QC reported here applies to the following samples: **Method:** SW846 8011

MC34231-1, MC34231-2, MC34231-3, MC34231-4, MC34231-6, MC34231-7

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.015	0.0061	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.015	0.0061	ug/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	Bromofluorobenzene (S)	98%	36-173%
460-00-4	Bromofluorobenzene (S)	100%	36-173%

Blank Spike Summary

Job Number: MC34231
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40168-BS	BB59882.D	1	10/13/14	NK	10/12/14	OP40168	GBB3333

The QC reported here applies to the following samples: **Method:** SW846 8011

MC34231-1, MC34231-2, MC34231-3, MC34231-4, MC34231-6, MC34231-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
96-12-8	1,2-Dibromo-3-chloropropane	0.071	0.093	131	60-140
106-93-4	1,2-Dibromoethane	0.071	0.077	108	60-140

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	Bromofluorobenzene (S)	102%	36-173%
460-00-4	Bromofluorobenzene (S)	101%	36-173%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34231
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40168-MS	BB59883.D	1	10/13/14	NK	10/12/14	OP40168	GBB3333
OP40168-MSD	BB59884.D	1	10/13/14	NK	10/12/14	OP40168	GBB3333
MC34231-7	BB59885.D	1	10/13/14	NK	10/12/14	OP40168	GBB3333

The QC reported here applies to the following samples: **Method:** SW846 8011

MC34231-1, MC34231-2, MC34231-3, MC34231-4, MC34231-6, MC34231-7

CAS No.	Compound	MC34231-7 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
96-12-8	1,2-Dibromo-3-chloropropane	ND		0.0677	0.081	120	0.0688	0.079	115	3	64-141/29
106-93-4	1,2-Dibromoethane	ND		0.0677	0.082	121	0.0688	0.083	121	1	63-163/27

CAS No.	Surrogate Recoveries	MS	MSD	MC34231-7	Limits
460-00-4	Bromofluorobenzene (S)	78%	80%	89%	36-173%
460-00-4	Bromofluorobenzene (S)	123%	122%	121%	36-173%

* = Outside of Control Limits.

Volatile Surrogate Recovery Summary

Job Number: MC34231
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Method: SW846 8011 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]
MC34231-1	BB59890.D	97	107
MC34231-2	BB59889.D	89	110
MC34231-3	BB59888.D	86	118
MC34231-4	BB59887.D	90	116
MC34231-6	BB59886.D	98	107
MC34231-7	BB59885.D	89	121
OP40168-BS	BB59882.D	102	101
OP40168-MB	BB59881.D	98	100
OP40168-MS	BB59883.D	78	123
OP40168-MSD	BB59884.D	80	122

Surrogate Compounds	Recovery Limits
S1 = Bromofluorobenzene (S)	36-173%

(a) Recovery from GC signal #2
(b) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: MC34231
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	GBB3333-ICC3333	**Injection Date:**	10/13/14
Lab File ID:	BB59877.D	**Injection Time:**	08:37
Instrument ID:	GCBB	**Method:**	SW846 8011

	S1 [a] RT	S1 [b] RT
Check Std	3.45	3.46

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
OP40168-MB	BB59881.D	10/13/14	09:49	3.45	3.46
OP40168-BS	BB59882.D	10/13/14	10:07	3.45	3.46
OP40168-MS	BB59883.D	10/13/14	10:24	3.45	3.46
OP40168-MSD	BB59884.D	10/13/14	10:42	3.45	3.46
MC34231-7	BB59885.D	10/13/14	11:00	3.45	3.46
MC34231-6	BB59886.D	10/13/14	11:18	3.45	3.46
MC34231-4	BB59887.D	10/13/14	11:36	3.45	3.46
MC34231-3	BB59888.D	10/13/14	11:54	3.45	3.46
MC34231-2	BB59889.D	10/13/14	12:12	3.45	3.46
MC34231-1	BB59890.D	10/13/14	12:30	3.45	3.46

Surrogate Compounds

S1 = Bromofluorobenzene (S)

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

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Automated Report

Technical Report for

Shell Oil

URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana,

SGS Accutest Job Number: MC34267



Sampling Date: 10/10/14

Report to:

AECOM, INC.

Melissa.mansker@aecom.com

ATTN: Melissa Mansker

Total number of pages in report: 97

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

H. (Brad) Madadian
Lab Director

Client Service contact: Jeremy Vienneau 508-481-6200

Certifications: MA (M-MA136,SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) FL (E87579) NY (11791) NJ (MA926) PA (6801121) ND (R-188) CO (MA00136) MN (11546AA) NC (653) IL (002337) WI (399080220) DoD ELAP (L-A-B L2235)

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Test results relate only to samples analyzed.

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Unauthorized modification of this report is strictly prohibited.

November 03, 2016

AECOM
1001 Highlands Plaza Drive West Suite 300
St. Louis, MO 63110

RE: SGS Accutest Job # MC34267

Dear Elizabeth Kunkel

As you are aware, SGS Accutest Inc. - Marlborough has been conducting an extensive review of data associated with some historical Gas Chromatography-Mass Spectroscopy volatiles analyses. As a result of this review it was determined that some revisions of the original test report for this job were needed. These corrections have been incorporated into the revised report.

Please be assured that corrective actions have been put in place to address this matter and prevent a recurrence.

We apologize for any inconvenience that this issue may have caused. Please don't hesitate to contact us if we can be of further assistance.

Sincerely,

H. (Brad) Madadian

Regional Laboratory Director
SGS Accutest Inc. - Marlborough

SGS ACCUTEST IS PART OF SGS, THE WORLD'S LEADING INSPECTION, VERIFICATION, TESTING AND CERTIFICATION COMPANY.

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Sample Summary

Shell Oil

Job No: MC34267

URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
MC34267-1	10/10/14	09:25	MMSV	10/11/14	AQ	Ground Water	MW2-ROX-101014
MC34267-2	10/10/14	10:40	MMSV	10/11/14	AQ	Ground Water	MW22-ROX-101014
MC34267-3	10/10/14	15:20	MMSV	10/11/14	AQ	Ground Water	MW13-ROX-101014
MC34267-4	10/10/14	00:00	MMSV	10/11/14	AQ	Trip Blank Water	TB-ROX-101014-HCL
MC34267-5	10/10/14	00:00	MMSV	10/11/14	AQ	Trip Blank Water	TB-ROX-101014-ST

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Shell Oil **Job No** MC34267

Site: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Centra **Report Date** 11/3/2016 11:58:12 A

3 Sample(s), 2 Trip Blank(s) and 0 Field Blank(s) were collected on 10/10/2014 and were received at SGS Accutest New England on 10/11/2014 properly preserved, at 1.9 Deg. C and intact. These Samples received a job number of MC34267. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report. 1-Chlorohexane, Benzenethiol, Dibenz(a,h)acridine, Indene and Quinoline were searched in the library search and reported only if detections were found.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260C

Matrix: AQ **Batch ID:** MSL3916

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) MC34231-7MS, MC34231-7MSD were used as the QC samples indicated.
- Blank Spike Recovery(s) for 2-Hexanone, Acetone, Dichlorodifluoromethane are outside control limits.
- Matrix Spike Recovery(s) for 2,2-Dichloropropane, 2-Chloroethyl vinyl ether, 2-Hexanone, Acetone, Chloroethane are outs de contro m ts Outs de contro m ts due to poss b e matr x nterference Refer to B ank Sp ke
- Matrix Spike Duplicate Recovery(s) for 2-Hexanone, 4-Methyl-2-pentanone (MIBK), Acetone, m,p-Xylene, Tetrachloroethene, 2-Butanone (MEK), Acro e n, D ch orod f uoromethane, Tr ch orof uoromethane, V ny ch or de are outs de control limits due to poss b e matr x nterference
- RPD(s) for MSD for 2-Butanone (MEK), 2-Chloroethyl vinyl ether, Acrolein, Bromomethane, Chloroethane, Chloromethane, Dichlorodifluoromethane, Trichlorofluoromethane, Vinyl chloride are outside control limits for sample MC34231-7MSD. High RPD due to possible matrix interference and/or sample non-homogeneity.
- MC34231-7MS/MSD: Elevated detection limit due to limited sample volume.
- MC34231-7MS/MSD for Vinyl Acetate: Outside control limits. Associated samples are non-detect for this compound.
- MSL3916-BS for 1,4-Dioxane, Vinyl Acetate: Outside control limits. Associated samples are non-detect for this compound.
- Carbon disulfide, 1,3-Dichloropropane, Bromoform, Chlorobenzene, m,p-Xylene, Ethylbenzene, Acetone, Acrylonitrile, Methylene bromide, 4-Methyl-2-pentanone (MIBK), 2-Hexanone, 2-Chloroethyl vinyl ether, Dichlorodifluoromethane, Acrolein, Vinyl chloride: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.
- Dichlorodifluoromethane, Acrolein: Initial Calibration Verification outside of acceptance criteria. Sample result may be biased low.

Matrix: AQ **Batch ID:** MSL3917

- All samples were analyzed within the recommended method holding time.
- Sample(s) MC34338-3MS, MC34338-3MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Blank Spike Recovery(s) for 2,2-Dichloropropane, 2-Chloroethyl vinyl ether, 2-Hexanone, Acetone are outside control limits.
- Matrix Spike Recovery(s) for 1,4-Dioxane, 2-Butanone (MEK), 2-Hexanone, 4-Methyl-2-pentanone (MIBK), Acetone, Dichlorodifluoromethane, Vinyl Acetate are outside control limits. Outside control limits due to possible matrix interference.
- Matrix Spike Duplicate Recovery(s) for 2-Butanone (MEK), 2-Hexanone, Dichlorodifluoromethane, Vinyl Acetate, Acetone are outside control limits due to poss b e matr x nte ference
- RPD(s) for MSD for Acetone are outside control limits for sample MC34338-3MSD. High RPD due to possible matrix interference and/or sample non-homogeneity.
- Acrolein, Dichlorodifluoromethane: Initial Calibration Verification outside of acceptance criteria. Sample result may be biased low.
- 1,3-Dichloropropane, m,p-Xylene, Bromoform, Acrolein, 1,2,3-Trichlorobenzene, Chlorobenzene: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.
- MSL3917-BS for Vinyl Acetate: Outside control limits. Associated samples are non-detect for this compound.

Extractables by GCMS By Method SW846 8270D

Matrix: AQ **Batch ID:** OP40179

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) MC34000-10MS, MC34000-10MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Initial Calibration Verificationstandard MSF3361-ICV3361 for 4-Chloroaniline exceeded 30% Difference but within criteria in continuing calibration check standard MSF3368-CC3361, MSF3369-CC3361.

Matrix: AQ **Batch ID:** OP40190

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) MC34000-16MS, MC34000-16MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Blank Spike Recovery(s) for Hexachlorocyclopentadiene are outside control limits.
- Matrix Spike/Matrix Spike Duplicate Recovery(s) for Hexachlorocyclopentadiene are outside control limits. Probable cause due to matrix interference.

Extractables by GCMS By Method SW846 8270D BY SIM

Matrix: AQ **Batch ID:** OP40180

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) MC34000-11MS, MC34000-11MSD were used as the QC samples indicated.

Matrix: AQ **Batch ID:** OP40191

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) MC34000-17MS, MC34000-17MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Volatiles by GC By Method SW846 8011

Matrix: AQ **Batch ID:** OP40218

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) MC34000-20MS, MC34000-20MSD were used as the QC samples indicated.

SGS Accutest New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety.The Laboratory Director for SGS Accutest New England or assignee as verified by the signature on the cover page has authorized the release of this report(MC34267).

Summary of Hits

Job Number: MC34267
Account: Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL
Collected: 10/10/14

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
MC34267-1	MW2-ROX-101014					
Benzene		13.2	1.0	0.63	ug/l	SW846 8260C
n-Butylbenzene		14.5	10	2.2	ug/l	SW846 8260C
sec-Butylbenzene		5.7 J	10	0.84	ug/l	SW846 8260C
tert-Butylbenzene		1.1 J	10	0.78	ug/l	SW846 8260C
Ethylbenzene [a]		386	2.0	0.76	ug/l	SW846 8260C
Isopropylbenzene		67.5	10	0.70	ug/l	SW846 8260C
p-Isopropyltoluene		6.3 J	10	0.75	ug/l	SW846 8260C
Naphthalene		51.2	10	1.4	ug/l	SW846 8260C
n-Propylbenzene		86.7	10	0.98	ug/l	SW846 8260C
Toluene		6.0	2.0	0.66	ug/l	SW846 8260C
1,2,4-Trimethylbenzene		135	10	0.64	ug/l	SW846 8260C
1,3,5-Trimethylbenzene		90.1	10	0.77	ug/l	SW846 8260C
m,p-Xylene [a]		260	2.0	1.9	ug/l	SW846 8260C
o-Xylene		18.3	2.0	0.73	ug/l	SW846 8260C
Xylene (total) [a]		278	2.0	0.73	ug/l	SW846 8260C
1-Methylnaphthalene		10.0	2.0		ug/l	SW846 8270D BY SIM
2-Methylnaphthalene		21.4	2.0		ug/l	SW846 8270D BY SIM
MC34267-2	MW22-ROX-101014					
Benzene		1620	5.0	3.2	ug/l	SW846 8260C
n-Butylbenzene		16.5 J	50	11	ug/l	SW846 8260C
sec-Butylbenzene		6.6 J	50	4.2	ug/l	SW846 8260C
tert-Butylbenzene		9.6 J	50	3.9	ug/l	SW846 8260C
Ethylbenzene [a]		1880	10	3.8	ug/l	SW846 8260C
Isopropylbenzene		66.1	50	3.5	ug/l	SW846 8260C
p-Isopropyltoluene		4.5 J	50	3.7	ug/l	SW846 8260C
Naphthalene		202	50	6.9	ug/l	SW846 8260C
n-Propylbenzene		112	50	4.9	ug/l	SW846 8260C
Toluene		2300	10	3.3	ug/l	SW846 8260C
1,2,4-Trimethylbenzene		688	50	3.2	ug/l	SW846 8260C
1,3,5-Trimethylbenzene		207	50	3.8	ug/l	SW846 8260C
m,p-Xylene [a]		3080	10	9.3	ug/l	SW846 8260C
o-Xylene		1740	10	3.6	ug/l	SW846 8260C
Xylene (total) [a]		4820	10	3.6	ug/l	SW846 8260C
2-Methylphenol		6.4 J	13	0.28	ug/l	SW846 8270D
3&4-Methylphenol		11.0 J	13	0.58	ug/l	SW846 8270D
Phenol		7.9	6.3	0.38	ug/l	SW846 8270D
Acenaphthene		0.29	0.13		ug/l	SW846 8270D BY SIM
Acenaphthylene		0.19	0.13		ug/l	SW846 8270D BY SIM
Anthracene		0.19	0.13		ug/l	SW846 8270D BY SIM
Fluorene		0.14	0.13		ug/l	SW846 8270D BY SIM
1-Methylnaphthalene		19.3	2.5		ug/l	SW846 8270D BY SIM

Summary of Hits

Job Number: MC34267
Account: Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL
Collected: 10/10/14

Lab Sample ID / Client Sample ID / Analyte	Result/ Qual	RL	MDL	Units	Method
2-Methylnaphthalene	33.9	2.5		ug/l	SW846 8270D BY SIM
Phenanthrene	0.36	0.063		ug/l	SW846 8270D BY SIM
MC34267-3 MW13-ROX-101014					
Benzene	0.37 J	0.50	0.32	ug/l	SW846 8260C
Methyl Tert Butyl Ether	4.5	1.0	0.51	ug/l	SW846 8260C
Xylene (total) [a]	1.1	1.0	0.36	ug/l	SW846 8260C
Acenaphthylene	0.19	0.12	0.059	ug/l	SW846 8270D BY SIM
Phenanthrene	0.032 J	0.060	0.015	ug/l	SW846 8270D BY SIM
MC34267-4 TB-ROX-101014-HCL					
No hits reported in this sample.					
MC34267-5 TB-ROX-101014-ST					
No hits reported in this sample.					

(a) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW2-ROX-101014		
Lab Sample ID:	MC34267-1	**Date Sampled:**	10/10/14
Matrix:	AQ - Ground Water	**Date Received:**	10/11/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L87855.D	2	10/23/14	GK	n/a	n/a	MSL3916
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	20	5.0	ug/l	
107-02-8	Acrolein [b]	ND	50	12	ug/l	
107-13-1	Acrylonitrile [a]	ND	10	4.2	ug/l	
71-43-2	Benzene	13.2	1.0	0.63	ug/l	
108-86-1	Bromobenzene	ND	10	0.70	ug/l	
74-97-5	Bromochloromethane	ND	10	1.1	ug/l	
75-27-4	Bromodichloromethane	ND	2.0	0.68	ug/l	
75-25-2	Bromoform [a]	ND	2.0	1.2	ug/l	
74-83-9	Bromomethane	ND	4.0	3.5	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	5.0	ug/l	
104-51-8	n-Butylbenzene	14.5	10	2.2	ug/l	
135-98-8	sec-Butylbenzene	5.7	10	0.84	ug/l	J
98-06-6	tert-Butylbenzene	1.1	10	0.78	ug/l	J
75-15-0	Carbon disulfide [a]	ND	10	0.92	ug/l	
56-23-5	Carbon tetrachloride	ND	2.0	1.1	ug/l	
108-90-7	Chlorobenzene [a]	ND	2.0	0.86	ug/l	
75-00-3	Chloroethane	ND	4.0	1.1	ug/l	
110-75-8	2-Chloroethyl vinyl ether [a]	ND	10	6.6	ug/l	
67-66-3	Chloroform	ND	2.0	0.82	ug/l	
74-87-3	Chloromethane	ND	4.0	2.1	ug/l	
95-49-8	o-Chlorotoluene	ND	10	0.76	ug/l	
106-43-4	p-Chlorotoluene	ND	10	0.90	ug/l	
124-48-1	Dibromochloromethane	ND	2.0	0.76	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	2.0	0.63	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	2.0	1.1	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	2.0	0.71	ug/l	
75-71-8	Dichlorodifluoromethane [b]	ND	4.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	2.0	0.72	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.0	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	2.0	1.2	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	2.0	1.7	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	2.0	1.0	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW2-ROX-101014		
Lab Sample ID:	MC34267-1	**Date Sampled:**	10/10/14
Matrix:	AQ - Ground Water	**Date Received:**	10/11/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	4.0	1.0	ug/l	
142-28-9	1,3-Dichloropropane [a]	ND	10	1.8	ug/l	
594-20-7	2,2-Dichloropropane	ND	10	2.5	ug/l	
563-58-6	1,1-Dichloropropene	ND	10	0.95	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.84	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	1.0	ug/l	
123-91-1	1,4-Dioxane	ND	50	22	ug/l	
97-63-2	Ethyl methacrylate	ND	10	1.0	ug/l	
100-41-4	Ethylbenzene [a]	386	2.0	0.76	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	3.3	ug/l	
591-78-6	2-Hexanone [a]	ND	10	3.2	ug/l	
98-82-8	Isopropylbenzene	67.5	10	0.70	ug/l	
99-87-6	p-Isopropyltoluene	6.3	10	0.75	ug/l	J
1634-04-4	Methyl Tert Butyl Ether	ND	2.0	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIB [a]	ND	10	2.0	ug/l	
74-95-3	Methylene bromide [a]	ND	10	1.0	ug/l	
75-09-2	Methylene chloride	ND	4.0	0.56	ug/l	
91-20-3	Naphthalene	51.2	10	1.4	ug/l	
103-65-1	n-Propylbenzene	86.7	10	0.98	ug/l	
100-42-5	Styrene	ND	10	1.7	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.0	0.87	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.80	ug/l	
127-18-4	Tetrachloroethene	ND	2.0	1.2	ug/l	
108-88-3	Toluene	6.0	2.0	0.66	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	10	1.4	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	10	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.93	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.91	ug/l	
79-01-6	Trichloroethene	ND	2.0	0.94	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	1.1	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	1.6	ug/l	
95-63-6	1,2,4-Trimethylbenzene	135	10	0.64	ug/l	
108-67-8	1,3,5-Trimethylbenzene	90.1	10	0.77	ug/l	
108-05-4	Vinyl Acetate	ND	10	1.4	ug/l	
75-01-4	Vinyl chloride [a]	ND	2.0	1.2	ug/l	
	m,p-Xylene [a]	260	2.0	1.9	ug/l	
95-47-6	o-Xylene	18.3	2.0	0.73	ug/l	
1330-20-7	Xylene (total) [a]	278	2.0	0.73	ug/l	

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW2-ROX-101014		
Lab Sample ID:	MC34267-1	**Date Sampled:**	10/10/14
Matrix:	AQ - Ground Water	**Date Received:**	10/11/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		70-130%
2037-26-5	Toluene-D8	105%		70-130%
460-00-4	4-Bromofluorobenzene	128%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.
(b) Initial & Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW2-ROX-101014		
Lab Sample ID:	MC34267-1	**Date Sampled:**	10/10/14
Matrix:	AQ - Ground Water	**Date Received:**	10/11/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F76882.D	1	10/15/14	WK	10/13/14	OP40179	MSF3368
Run #2							

	Initial Volume	Final Volume
Run #1	980 ml	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	Units	Q
65-85-0	Benzoic Acid	ND	10	ug/l	
95-57-8	2-Chlorophenol	ND	5.1	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	10	ug/l	
120-83-2	2,4-Dichlorophenol	ND	10	ug/l	
105-67-9	2,4-Dimethylphenol	ND	10	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	ug/l	
95-48-7	2-Methylphenol	ND	10	ug/l	
	3&4-Methylphenol	ND	10	ug/l	
88-75-5	2-Nitrophenol	ND	10	ug/l	
100-02-7	4-Nitrophenol	ND	20	ug/l	
87-86-5	Pentachlorophenol	ND	10	ug/l	
108-95-2	Phenol	ND	5.1	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	10	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	10	ug/l	
62-53-3	Aniline	ND	10	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.1	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.1	ug/l	
100-51-6	Benzyl Alcohol	ND	10	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.1	ug/l	
106-47-8	4-Chloroaniline	ND	10	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.1	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.1	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.1	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.1	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.1	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	10	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	10	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.1	ug/l	
132-64-9	Dibenzofuran	ND	2.0	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.1	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.1	ug/l	

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Report of Analysis

Client Sample ID:	MW2-ROX-101014		
Lab Sample ID:	MC34267-1	**Date Sampled:**	10/10/14
Matrix:	AQ - Ground Water	**Date Received:**	10/11/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

ABN Special List

CAS No.	Compound	Result	RL	Units	Q
84-66-2	Diethyl phthalate	ND	5.1	ug/l	
131-11-3	Dimethyl phthalate	ND	5.1	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	ug/l	
118-74-1	Hexachlorobenzene	ND	5.1	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	ug/l	
67-72-1	Hexachloroethane	ND	5.1	ug/l	
78-59-1	Isophorone	ND	5.1	ug/l	
88-74-4	2-Nitroaniline	ND	10	ug/l	
99-09-2	3-Nitroaniline	ND	10	ug/l	
100-01-6	4-Nitroaniline	ND	10	ug/l	
98-95-3	Nitrobenzene	ND	5.1	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.1	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.1	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.1	ug/l	
110-86-1	Pyridine	ND	10	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	50%		15-110%
4165-62-2	Phenol-d5	33%		15-110%
118-79-6	2,4,6-Tribromophenol	106%		15-110%
4165-60-0	Nitrobenzene-d5	86%		30-130%
321-60-8	2-Fluorobiphenyl	68%		30-130%
1718-51-0	Terphenyl-d14	105%		30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW2-ROX-101014		
Lab Sample ID:	MC34267-1	**Date Sampled:**	10/10/14
Matrix:	AQ - Ground Water	**Date Received:**	10/11/14
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I92229.D	1	10/15/14	WK	10/13/14	OP40180	MSI3437
Run #2							

	Initial Volume	Final Volume
Run #1	980 ml	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	0.10	ug/l	
208-96-8	Acenaphthylene	ND	0.10	ug/l	
120-12-7	Anthracene	ND	0.10	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.051	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.051	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	ug/l	
218-01-9	Chrysene	ND	0.10	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	ug/l	
206-44-0	Fluoranthene	ND	0.10	ug/l	
86-73-7	Fluorene	ND	0.10	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	ug/l	
90-12-0	1-Methylnaphthalene	10.0	2.0	ug/l	
91-57-6	2-Methylnaphthalene	21.4	2.0	ug/l	
85-01-8	Phenanthrene	ND	0.051	ug/l	
129-00-0	Pyrene	ND	0.10	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	84%		30-130%
321-60-8	2-Fluorobiphenyl	72%		30-130%
1718-51-0	Terphenyl-d14	97%		30-130%

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW2-ROX-101014		
Lab Sample ID:	MC34267-1	**Date Sampled:**	10/10/14
Matrix:	AQ - Ground Water	**Date Received:**	10/11/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB59919.D	1	10/16/14	NK	10/15/14	OP40218	GBB3334
Run #2							

	Initial Volume	Final Volume
Run #1	36.4 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.014	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.014	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	70%		36-173%
460-00-4	Bromofluorobenzene (S)	78%		36-173%

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RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW22-ROX-101014		
Lab Sample ID:	MC34267-2	**Date Sampled:**	10/10/14
Matrix:	AQ - Ground Water	**Date Received:**	10/11/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L87856.D	10	10/23/14	GK	n/a	n/a	MSL3916
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	100	25	ug/l	
107-02-8	Acrolein [b]	ND	250	60	ug/l	
107-13-1	Acrylonitrile [a]	ND	50	21	ug/l	
71-43-2	Benzene	1620	5.0	3.2	ug/l	
108-86-1	Bromobenzene	ND	50	3.5	ug/l	
74-97-5	Bromochloromethane	ND	50	5.7	ug/l	
75-27-4	Bromodichloromethane	ND	10	3.4	ug/l	
75-25-2	Bromoform [a]	ND	10	6.1	ug/l	
74-83-9	Bromomethane	ND	20	18	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	25	ug/l	
104-51-8	n-Butylbenzene	16.5	50	11	ug/l	J
135-98-8	sec-Butylbenzene	6.6	50	4.2	ug/l	J
98-06-6	tert-Butylbenzene	9.6	50	3.9	ug/l	J
75-15-0	Carbon disulfide [a]	ND	50	4.6	ug/l	
56-23-5	Carbon tetrachloride	ND	10	5.3	ug/l	
108-90-7	Chlorobenzene [a]	ND	10	4.3	ug/l	
75-00-3	Chloroethane	ND	20	5.3	ug/l	
110-75-8	2-Chloroethyl vinyl ether [a]	ND	50	33	ug/l	
67-66-3	Chloroform	ND	10	4.1	ug/l	
74-87-3	Chloromethane	ND	20	11	ug/l	
95-49-8	o-Chlorotoluene	ND	50	3.8	ug/l	
106-43-4	p-Chlorotoluene	ND	50	4.5	ug/l	
124-48-1	Dibromochloromethane	ND	10	3.8	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	10	3.2	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	10	5.6	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	10	3.6	ug/l	
75-71-8	Dichlorodifluoromethane [b]	ND	20	7.1	ug/l	
75-34-3	1,1-Dichloroethane	ND	10	3.6	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	5.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	10	6.1	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	10	8.4	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	10	5.1	ug/l	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW22-ROX-101014		
Lab Sample ID:	MC34267-2	**Date Sampled:**	10/10/14
Matrix:	AQ - Ground Water	**Date Received:**	10/11/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	20	5.0	ug/l	
142-28-9	1,3-Dichloropropane [a]	ND	50	8.9	ug/l	
594-20-7	2,2-Dichloropropane	ND	50	13	ug/l	
563-58-6	1,1-Dichloropropene	ND	50	4.7	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	4.2	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	5.0	ug/l	
123-91-1	1,4-Dioxane	ND	250	110	ug/l	
97-63-2	Ethyl methacrylate	ND	50	5.0	ug/l	
100-41-4	Ethylbenzene [a]	1880	10	3.8	ug/l	
87-68-3	Hexachlorobutadiene	ND	50	17	ug/l	
591-78-6	2-Hexanone [a]	ND	50	16	ug/l	
98-82-8	Isopropylbenzene	66.1	50	3.5	ug/l	
99-87-6	p-Isopropyltoluene	4.5	50	3.7	ug/l	J
1634-04-4	Methyl Tert Butyl Ether	ND	10	5.1	ug/l	
108-10-1	4-Methyl-2-pentanone (MIB [a]	ND	50	9.9	ug/l	
74-95-3	Methylene bromide [a]	ND	50	5.2	ug/l	
75-09-2	Methylene chloride	ND	20	2.8	ug/l	
91-20-3	Naphthalene	202	50	6.9	ug/l	
103-65-1	n-Propylbenzene	112	50	4.9	ug/l	
100-42-5	Styrene	ND	50	8.5	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	10	4.3	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	4.0	ug/l	
127-18-4	Tetrachloroethene	ND	10	5.9	ug/l	
108-88-3	Toluene	2300	10	3.3	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	50	6.8	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	50	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	10	4.6	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	10	4.5	ug/l	
79-01-6	Trichloroethene	ND	10	4.7	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	5.5	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	50	8.1	ug/l	
95-63-6	1,2,4-Trimethylbenzene	688	50	3.2	ug/l	
108-67-8	1,3,5-Trimethylbenzene	207	50	3.8	ug/l	
108-05-4	Vinyl Acetate	ND	50	7.1	ug/l	
75-01-4	Vinyl chloride [a]	ND	10	5.8	ug/l	
	m,p-Xylene [a]	3080	10	9.3	ug/l	
95-47-6	o-Xylene	1740	10	3.6	ug/l	
1330-20-7	Xylene (total) [a]	4820	10	3.6	ug/l	

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RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW22-ROX-101014		
Lab Sample ID:	MC34267-2	**Date Sampled:**	10/10/14
Matrix:	AQ - Ground Water	**Date Received:**	10/11/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	111%		70-130%
2037-26-5	Toluene-D8	105%		70-130%
460-00-4	4-Bromofluorobenzene	127%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.
(b) Initial & Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW22-ROX-101014		
Lab Sample ID:	MC34267-2	**Date Sampled:**	10/10/14
Matrix:	AQ - Ground Water	**Date Received:**	10/11/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F76916.D	1	10/16/14	WK	10/14/14	OP40190	MSF3369
Run #2							

	Initial Volume	Final Volume
Run #1	800 ml	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	13	3.1	ug/l	
95-57-8	2-Chlorophenol	ND	6.3	0.39	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	13	1.0	ug/l	
120-83-2	2,4-Dichlorophenol	ND	13	0.50	ug/l	
105-67-9	2,4-Dimethylphenol	ND	13	0.70	ug/l	
51-28-5	2,4-Dinitrophenol	ND	25	3.1	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	13	2.4	ug/l	
95-48-7	2-Methylphenol	6.4	13	0.28	ug/l	J
	3&4-Methylphenol	11.0	13	0.58	ug/l	J
88-75-5	2-Nitrophenol	ND	13	3.6	ug/l	
100-02-7	4-Nitrophenol	ND	25	0.67	ug/l	
87-86-5	Pentachlorophenol	ND	13	1.4	ug/l	
108-95-2	Phenol	7.9	6.3	0.38	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	13	0.46	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	13	0.22	ug/l	
62-53-3	Aniline	ND	13	0.80	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	6.3	0.59	ug/l	
85-68-7	Butyl benzyl phthalate	ND	6.3	0.66	ug/l	
100-51-6	Benzyl Alcohol	ND	13	2.8	ug/l	
91-58-7	2-Chloronaphthalene	ND	6.3	0.39	ug/l	
106-47-8	4-Chloroaniline	ND	13	0.70	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	6.3	0.36	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	6.3	0.44	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	6.3	0.41	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	6.3	0.31	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	6.3	0.30	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	13	0.57	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	13	0.38	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	6.3	0.33	ug/l	
132-64-9	Dibenzofuran	ND	2.5	0.32	ug/l	
84-74-2	Di-n-butyl phthalate	ND	6.3	0.22	ug/l	
117-84-0	Di-n-octyl phthalate	ND	6.3	0.35	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW22-ROX-101014		
Lab Sample ID:	MC34267-2	**Date Sampled:**	10/10/14
Matrix:	AQ - Ground Water	**Date Received:**	10/11/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	6.3	0.25	ug/l	
131-11-3	Dimethyl phthalate	ND	6.3	0.43	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.5	0.42	ug/l	
118-74-1	Hexachlorobenzene	ND	6.3	0.36	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	13	1.6	ug/l	
67-72-1	Hexachloroethane	ND	6.3	0.38	ug/l	
78-59-1	Isophorone	ND	6.3	0.56	ug/l	
88-74-4	2-Nitroaniline	ND	13	0.50	ug/l	
99-09-2	3-Nitroaniline	ND	13	1.7	ug/l	
100-01-6	4-Nitroaniline	ND	13	2.7	ug/l	
98-95-3	Nitrobenzene	ND	6.3	0.49	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	6.3	1.3	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	6.3	0.50	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	6.3	0.24	ug/l	
110-86-1	Pyridine	ND	13	0.64	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	64%		15-110%
4165-62-2	Phenol-d5	38%		15-110%
118-79-6	2,4,6-Tribromophenol	100%		15-110%
4165-60-0	Nitrobenzene-d5	84%		30-130%
321-60-8	2-Fluorobiphenyl	71%		30-130%
1718-51-0	Terphenyl-d14	96%		30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW22-ROX-101014		
Lab Sample ID:	MC34267-2	**Date Sampled:**	10/10/14
Matrix:	AQ - Ground Water	**Date Received:**	10/11/14
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I92259.D	1	10/16/14	WK	10/14/14	OP40191	MSI3438
Run #2							

	Initial Volume	Final Volume
Run #1	800 ml	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	0.29	0.13	ug/l	
208-96-8	Acenaphthylene	0.19	0.13	ug/l	
120-12-7	Anthracene	0.19	0.13	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.063	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.13	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.063	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.13	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.13	ug/l	
218-01-9	Chrysene	ND	0.13	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.13	ug/l	
206-44-0	Fluoranthene	ND	0.13	ug/l	
86-73-7	Fluorene	0.14	0.13	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.13	ug/l	
90-12-0	1-Methylnaphthalene	19.3	2.5	ug/l	
91-57-6	2-Methylnaphthalene	33.9	2.5	ug/l	
85-01-8	Phenanthrene	0.36	0.063	ug/l	
129-00-0	Pyrene	ND	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	86%		30-130%
321-60-8	2-Fluorobiphenyl	76%		30-130%
1718-51-0	Terphenyl-d14	84%		30-130%

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW22-ROX-101014		
Lab Sample ID:	MC34267-2	**Date Sampled:**	10/10/14
Matrix:	AQ - Ground Water	**Date Received:**	10/11/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB59920.D	1	10/16/14	NK	10/15/14	OP40218	GBB3334
Run #2							

	Initial Volume	Final Volume
Run #1	36.4 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.014	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.014	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	53%		36-173%
460-00-4	Bromofluorobenzene (S)	86%		36-173%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW13-ROX-101014		
Lab Sample ID:	MC34267-3	**Date Sampled:**	10/10/14
Matrix:	AQ - Ground Water	**Date Received:**	10/11/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L87872.D	1	10/24/14	GK	n/a	n/a	MSL3917
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein [a]	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	0.37	0.50	0.32	ug/l	J
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform [b]	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene [b]	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane [c]	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW13-ROX-101014		
Lab Sample ID:	MC34267-3	**Date Sampled:**	10/10/14
Matrix:	AQ - Ground Water	**Date Received:**	10/11/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane [b]	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	4.5	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene [b]	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene [b]	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total) [b]	1.1	1.0	0.36	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW13-ROX-101014		
Lab Sample ID:	MC34267-3	**Date Sampled:**	10/10/14
Matrix:	AQ - Ground Water	**Date Received:**	10/11/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		70-130%
2037-26-5	Toluene-D8	102%		70-130%
460-00-4	4-Bromofluorobenzene	129%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Initial & Continuing Calibration outside of acceptance criteria. Sample result may be biased low.
(b) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.
(c) Initial Calibration Verification outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW13-ROX-101014		
Lab Sample ID:	MC34267-3	**Date Sampled:**	10/10/14
Matrix:	AQ - Ground Water	**Date Received:**	10/11/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F76917.D	1	10/16/14	WK	10/14/14	OP40190	MSF3369
Run #2							

	Initial Volume	Final Volume
Run #1	840 ml	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	Units	Q
65-85-0	Benzoic Acid	ND	12	ug/l	
95-57-8	2-Chlorophenol	ND	6.0	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	12	ug/l	
120-83-2	2,4-Dichlorophenol	ND	12	ug/l	
105-67-9	2,4-Dimethylphenol	ND	12	ug/l	
51-28-5	2,4-Dinitrophenol	ND	24	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	12	ug/l	
95-48-7	2-Methylphenol	ND	12	ug/l	
	3&4-Methylphenol	ND	12	ug/l	
88-75-5	2-Nitrophenol	ND	12	ug/l	
100-02-7	4-Nitrophenol	ND	24	ug/l	
87-86-5	Pentachlorophenol	ND	12	ug/l	
108-95-2	Phenol	ND	6.0	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	12	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	12	ug/l	
62-53-3	Aniline	ND	12	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	6.0	ug/l	
85-68-7	Butyl benzyl phthalate	ND	6.0	ug/l	
100-51-6	Benzyl Alcohol	ND	12	ug/l	
91-58-7	2-Chloronaphthalene	ND	6.0	ug/l	
106-47-8	4-Chloroaniline	ND	12	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	6.0	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	6.0	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	6.0	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	6.0	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	6.0	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	12	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	12	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	6.0	ug/l	
132-64-9	Dibenzofuran	ND	2.4	ug/l	
84-74-2	Di-n-butyl phthalate	ND	6.0	ug/l	
117-84-0	Di-n-octyl phthalate	ND	6.0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW13-ROX-101014		
Lab Sample ID:	MC34267-3	**Date Sampled:**	10/10/14
Matrix:	AQ - Ground Water	**Date Received:**	10/11/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

ABN Special List

CAS No.	Compound	Result	RL	Units	Q
84-66-2	Diethyl phthalate	ND	6.0	ug/l	
131-11-3	Dimethyl phthalate	ND	6.0	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.4	ug/l	
118-74-1	Hexachlorobenzene	ND	6.0	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	12	ug/l	
67-72-1	Hexachloroethane	ND	6.0	ug/l	
78-59-1	Isophorone	ND	6.0	ug/l	
88-74-4	2-Nitroaniline	ND	12	ug/l	
99-09-2	3-Nitroaniline	ND	12	ug/l	
100-01-6	4-Nitroaniline	ND	12	ug/l	
98-95-3	Nitrobenzene	ND	6.0	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	6.0	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	6.0	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	6.0	ug/l	
110-86-1	Pyridine	ND	12	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	52%		15-110%
4165-62-2	Phenol-d5	36%		15-110%
118-79-6	2,4,6-Tribromophenol	95%		15-110%
4165-60-0	Nitrobenzene-d5	78%		30-130%
321-60-8	2-Fluorobiphenyl	70%		30-130%
1718-51-0	Terphenyl-d14	93%		30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW13-ROX-101014		
Lab Sample ID:	MC34267-3	**Date Sampled:**	10/10/14
Matrix:	AQ - Ground Water	**Date Received:**	10/11/14
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I92260.D	1	10/16/14	WK	10/14/14	OP40191	MSI3438
Run #2							

	Initial Volume	Final Volume
Run #1	840 ml	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.12	0.082	ug/l	
208-96-8	Acenaphthylene	0.19	0.12	0.059	ug/l	
120-12-7	Anthracene	ND	0.12	0.11	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.060	0.023	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.12	0.034	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.060	0.038	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.12	0.032	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.12	0.046	ug/l	
218-01-9	Chrysene	ND	0.12	0.028	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.12	0.038	ug/l	
206-44-0	Fluoranthene	ND	0.12	0.048	ug/l	
86-73-7	Fluorene	ND	0.12	0.12	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.12	0.036	ug/l	
90-12-0	1-Methylnaphthalene	ND	2.4	0.60	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.4	0.60	ug/l	
85-01-8	Phenanthrene	0.032	0.060	0.015	ug/l	J
129-00-0	Pyrene	ND	0.12	0.046	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	84%		30-130%
321-60-8	2-Fluorobiphenyl	79%		30-130%
1718-51-0	Terphenyl-d14	82%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW13-ROX-101014		
Lab Sample ID:	MC34267-3	**Date Sampled:**	10/10/14
Matrix:	AQ - Ground Water	**Date Received:**	10/11/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB59921.D	1	10/16/14	NK	10/15/14	OP40218	GBB3334
Run #2							

	Initial Volume	Final Volume
Run #1	36.3 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.014	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.014	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	66%		36-173%
460-00-4	Bromofluorobenzene (S)	76%		36-173%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-ROX-101014-HCL		
Lab Sample ID:	MC34267-4	**Date Sampled:**	10/10/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/11/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L87842.D	1	10/23/14	GK	n/a	n/a	MSL3916
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	10	2.5	ug/l	
107-02-8	Acrolein [b]	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile [a]	ND	5.0	2.1	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform [a]	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide [a]	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene [a]	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
110-75-8	2-Chloroethyl vinyl ether [a]	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane [b]	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-ROX-101014-HCL		
Lab Sample ID:	MC34267-4	**Date Sampled:**	10/10/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/11/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane [a]	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene [a]	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone [a]	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIB [a]	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide [a]	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride [a]	ND	1.0	0.58	ug/l	
	m,p-Xylene [a]	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total) [a]	ND	1.0	0.36	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-ROX-101014-HCL		
Lab Sample ID:	MC34267-4	**Date Sampled:**	10/10/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/11/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		70-130%
2037-26-5	Toluene-D8	98%		70-130%
460-00-4	4-Bromofluorobenzene	122%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.
(b) Initial & Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-ROX-101014-ST		
Lab Sample ID:	MC34267-5	**Date Sampled:**	10/10/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/11/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB59922.D	1	10/16/14	NK	10/15/14	OP40218	GBB3334
Run #2							

	Initial Volume	Final Volume
Run #1	35.8 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.015	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.015	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	73%		36-173%
460-00-4	Bromofluorobenzene (S)	77%		36-173%

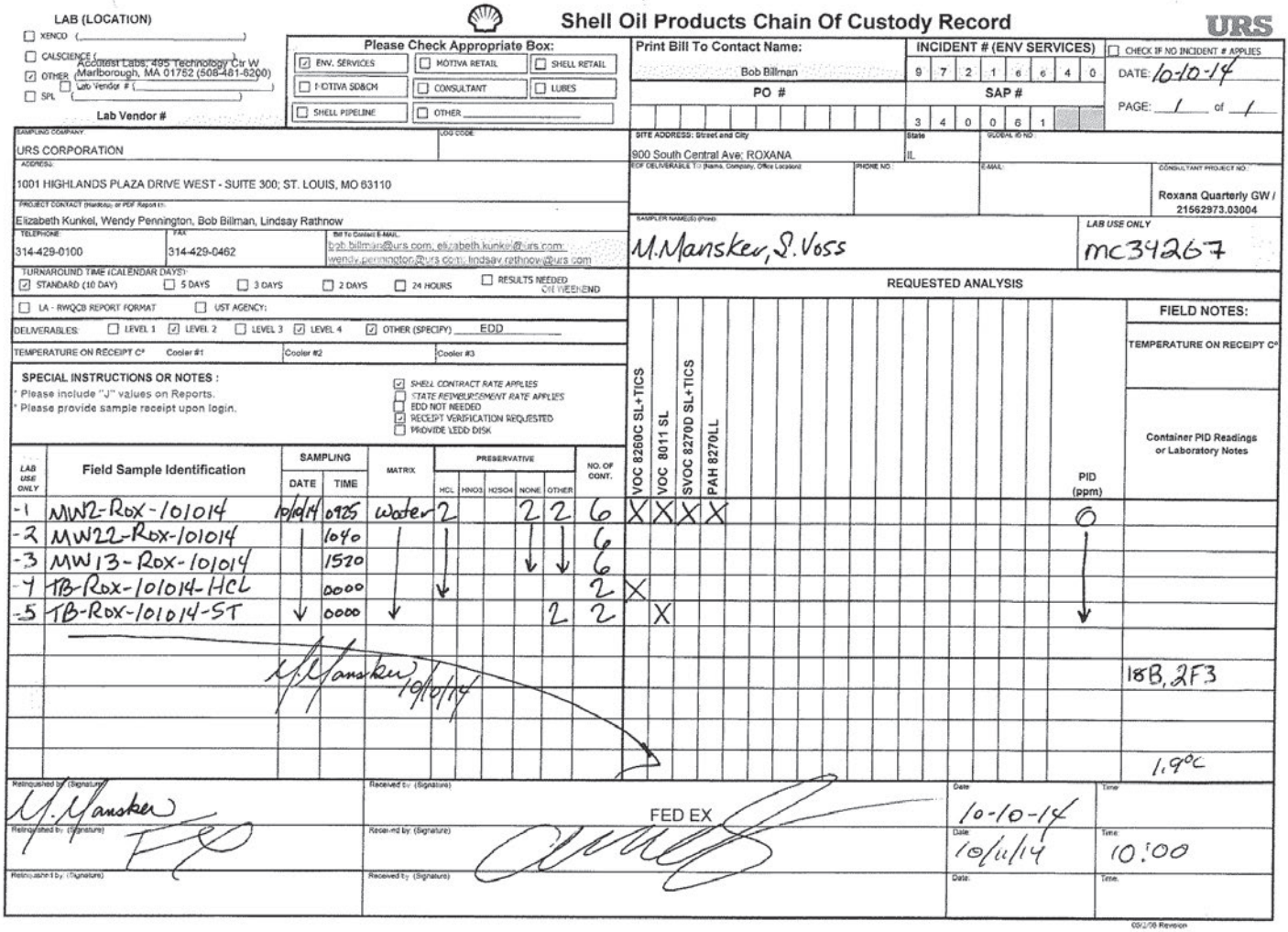
ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody



Shell Oil Products Chain Of Custody Record

URS

LAB (LOCATION)
- ☐ XENCO (_____)
- ☐ CALSCIENCE (_____)
- ☑ OTHER (Accutest Labs, 495 Technology Ctr W Marlborough, MA 01752 (508-481-6200))
- ☐ Lab Vendor # (_____)
- ☐ SPL (_____)

Lab Vendor #

Please Check Appropriate Box:
- ☑ ENV. SERVICES
- ☐ MOTIVA RETAIL
- ☐ SHELL RETAIL
- ☐ MOTIVA SD&CM
- ☐ CONSULTANT
- ☐ LUBES
- ☐ SHELL PIPELINE
- ☐ OTHER _____

Print Bill To Contact Name: Bob Billman

PO #

INCIDENT # (ENV SERVICES): 9 7 2 1 6 6 4 0

SAP #: 3 4 0 0 6 1

☐ CHECK IF NO INCIDENT # APPLIES

DATE: 10-10-14

PAGE: 1 of 1

SAMPLING COMPANY: URS CORPORATION

LOG CODE:

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA

State: IL

GLOBAL ID NO.:

ADDRESS: 1001 HIGHLANDS PLAZA DRIVE WEST - SUITE 300; ST. LOUIS, MO 63110

EDF DELIVERABLE TO (Name, Company, Office Location):

PHONE NO.:

E-MAIL:

CONSULTANT PROJECT NO.: Roxana Quarterly GW / 21562973.03004

PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Wendy Pennington, Bob Billman, Lindsay Rathnow

TELEPHONE: 314-429-0100

FAX: 314-429-0462

Bill To Contact E-MAIL: bob.billman@urs.com; elizabeth.kunkel@urs.com; wendy.pennington@urs.com; lindsay.rathnow@urs.com

SAMPLER NAME(S) (Print): M.Mansker, S.Voss

LAB USE ONLY: mc34267

TURNAROUND TIME (CALENDAR DAYS): ☑ STANDARD (10 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT ☐ UST AGENCY:

DELIVERABLES: ☐ LEVEL 1 ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) EDD

TEMPERATURE ON RECEIPT C° Cooler #1 Cooler #2 Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :
- Please include "J" values on Reports.
- Please provide sample receipt upon login.

- ☑ SHELL CONTRACT RATE APPLIES
- ☐ STATE REIMBURSEMENT RATE APPLIES
- ☐ EDD NOT NEEDED
- ☑ RECEIPT VERIFICATION REQUESTED
- ☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS

FIELD NOTES:

TEMPERATURE ON RECEIPT C°

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260C SL+TICS	VOC 8011 SL	SVOC 8270D SL+TICS	PAH 8270LL	PID (ppm)	Container PID Readings or Laboratory Notes
-1	MW2-Rox-101014	10/10/14	0925	Water	2			2	2	6	X	X	X	X	0	
-2	MW22-Rox-101014	↓	1040	↓	↓			↓	↓	6					↓	
-3	MW13-Rox-101014	↓	1520	↓	↓			↓	↓	6					↓	
-4	TB-Rox-101014-HCL	↓	0000	↓	↓					2	X				↓	
-5	TB-Rox-101014-ST	↓	0000	↓					2	2		X			↓	
																18B, 2F3
																1.9°C

M.Mansker 10/10/14

Relinquished by (Signature)	Received by (Signature)	Date	Time
M. Mansker	FED EX	10-10-14	
FED	[signature]	10/11/14	10:00

03/2/08 Revision

MC34267: Chain of Custody
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SGS ACCUTEST MC34267

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: MC34267 **Client:** URS **Immediate Client Services Action Required:** No

Date / Time Received: 10/11/2014 10:00:00 AM **Delivery Method:**

Project: 900 SOUTH CENTRAL **No. Coolers:** 1 **Airbill #'s:**

Cooler Security	Y	N		Y	N
1. Custody Seals Present:	☑	☐	3. COC Present:	☑	☐
2. Custody Seals Intact:	☑	☐	4. Smpl Dates/Time OK	☑	☐

Cooler Temperature	Y	N
1. Temp criteria achieved:	☑	☐
2. Cooler temp verification:	Glass Thermometer	
3. Cooler media:	Ice (Bag)	

Quality Control Preservation	Y	N	N/A
1. Trip Blank present / cooler:	☑	☐	
2. Trip Blank listed on COC:	☑	☐	
3. Samples preserved properly:	☑	☐	
4. VOCs headspace free:	☑	☐	☐

Sample Integrity - Documentation	Y	N
1. Sample labels present on bottles:	☑	☐
2. Container labeling complete:	☑	☐
3. Sample container label / COC agree:	☑	☐

Sample Integrity - Condition	Y	N
1. Sample rec'd within HT:	☑	☐
2. All containers accounted for:	☑	☐
3. Condition of sample:	Intact	

Sample Integrity - Instructions	Y	N	N/A
1. Analysis requested is clear:	☐	☑	
2. Bottles received for unspecified tests	☐	☑	
3. Sufficient volume rec'd for analysis:	☑	☐	
4. Compositing instructions clear:	☐	☐	☑
5. Filtering instructions clear:	☐	☐	☑

Comments

-2 AND -3 have no analysis checked off on the coc.

Accutest Laboratories
V:508.481.6200

495 Technology Center West, Bldg One
F: 508.481.7753

Marlborough, MA
www/accutest.com

5.1

5

MC34267: Chain of Custody
Page 2 of 3

Sample Receipt Summary - Problem Resolution

Accutest Job Number: MC34267

CSR: Jeremy Vienneau **Response Date:** 10/13/2014

Response: The client confirmed hat samples -2 and -3 should have been marked for all of the analyses. See email in file.

Accutest Laboratories
V:508.481.6200

495 Technology Center West, Bldg One
F: 508.481.7753

Marlborough, MA
www/accutest.com

MC34267: Chain of Custody
Page 3 of 3

Internal Sample Tracking Chronicle

Shell Oil

Job No: MC34267

URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC34267-1 Collected: 10-OCT-14 09:25 By: MMSV Received: 11-OCT-14 By: MW2-ROX-101014						
MC34267-1	SW846 8270D BY SIM	15-OCT-14 11:20	WK	13-OCT-14	MD	B8270SIMSL
MC34267-1	SW846 8270D	15-OCT-14 16:09	WK	13-OCT-14	MD	AB8270SL+
MC34267-1	SW846 8011	16-OCT-14 12:13	NK	15-OCT-14	NE	V8011SL
MC34267-1	SW846 8260C	23-OCT-14 22:21	GK			V8260SL+
MC34267-2 Collected: 10-OCT-14 10:40 By: MMSV Received: 11-OCT-14 By: MW22-ROX-101014						
MC34267-2	SW846 8270D BY SIM	16-OCT-14 10:49	WK	14-OCT-14	AZ	B8270SIMSL
MC34267-2	SW846 8011	16-OCT-14 12:30	NK	15-OCT-14	NE	V8011SL
MC34267-2	SW846 8270D	16-OCT-14 16:28	WK	14-OCT-14	AZ	AB8270SL+
MC34267-2	SW846 8260C	23-OCT-14 22:52	GK			V8260SL+
MC34267-3 Collected: 10-OCT-14 15:20 By: MMSV Received: 11-OCT-14 By: MW13-ROX-101014						
MC34267-3	SW846 8270D BY SIM	16-OCT-14 11:12	WK	14-OCT-14	AZ	B8270SIMSL
MC34267-3	SW846 8011	16-OCT-14 12:48	NK	15-OCT-14	NE	V8011SL
MC34267-3	SW846 8270D	16-OCT-14 16:51	WK	14-OCT-14	AZ	AB8270SL+
MC34267-3	SW846 8260C	24-OCT-14 11:00	GK			V8260SL+
MC34267-4 Collected: 10-OCT-14 00:00 By: MMSV Received: 11-OCT-14 By: TB-ROX-101014-HCL						
MC34267-4	SW846 8260C	23-OCT-14 15:47	GK			V8260SL+
MC34267-5 Collected: 10-OCT-14 00:00 By: MMSV Received: 11-OCT-14 By: TB-ROX-101014-ST						
MC34267-5	SW846 8011	16-OCT-14 13:06	NK	15-OCT-14	NE	V8011SL

SGS Accutest Internal Chain of Custody

Job Number: MC34267
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL
Received: 10/11/14

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC34267-1.2	Walk In Ref #22	Marc Tahtamoni	10/13/14 15:50	Retrieve from Storage
MC34267-1.2	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34267-1.3	VOC Ref #2	Gary Krasinski	10/23/14 14:44	Retrieve from Storage
MC34267-1.3	Gary Krasinski	GCMSL	10/23/14 14:44	Load on Instrument
MC34267-1.3	GCMSL	Gary Krasinski	10/24/14 10:33	Unload from Instrument
MC34267-1.3	Gary Krasinski	VOC Ref #2	10/24/14 10:33	Return to Storage
MC34267-1.3	Scott Parsick		12/18/14 12:16	Disposed
MC34267-1.4	VOC Ref #2	Gary Krasinski	10/22/14 11:56	Retrieve from Storage
MC34267-1.4	Gary Krasinski	GCMSL	10/22/14 11:56	Load on Instrument
MC34267-1.4	GCMSL	Gary Krasinski	10/23/14 12:33	Unload from Instrument
MC34267-1.4	Gary Krasinski	VOC Ref #2	10/23/14 12:34	Return to Storage
MC34267-1.4	Scott Parsick		12/18/14 12:16	Disposed
MC34267-1.6	VOC Ref #2	Marc Tahtamoni	10/15/14 14:33	Retrieve from Storage
MC34267-1.6	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34267-2.1	Walk In Ref #22	Michael DiBuono	10/14/14 08:33	Retrieve from Storage
MC34267-2.1	Michael DiBuono		11/16/14 12:43	Depleted
MC34267-2.2	Walk In Ref #22	Michael DiBuono	10/14/14 08:26	Retrieve from Storage
MC34267-2.2	Michael DiBuono	Walk In Ref #22	10/14/14 08:32	Return to Storage
MC34267-2.2	Scott Parsick		12/18/14 12:16	Disposed
MC34267-2.3	VOC Ref #2	Gary Krasinski	10/23/14 14:44	Retrieve from Storage
MC34267-2.3	Gary Krasinski	GCMSL	10/23/14 14:44	Load on Instrument
MC34267-2.3	GCMSL	Gary Krasinski	10/24/14 10:33	Unload from Instrument
MC34267-2.3	Gary Krasinski	VOC Ref #2	10/24/14 10:33	Return to Storage
MC34267-2.3	Scott Parsick		12/18/14 12:16	Disposed
MC34267-2.4	VOC Ref #2	Gary Krasinski	10/22/14 11:56	Retrieve from Storage
MC34267-2.4	Gary Krasinski	GCMSL	10/22/14 11:56	Load on Instrument
MC34267-2.4	GCMSL	Gary Krasinski	10/23/14 12:33	Unload from Instrument
MC34267-2.4	Gary Krasinski	VOC Ref #2	10/23/14 12:34	Return to Storage
MC34267-2.4	Scott Parsick		12/18/14 12:16	Disposed
MC34267-2.5	VOC Ref #2	Marc Tahtamoni	10/15/14 14:33	Retrieve from Storage
MC34267-2.5	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34267-3.2	Walk In Ref #22	Michael DiBuono	10/14/14 08:26	Retrieve from Storage
MC34267-3.2	Michael DiBuono		11/16/14 12:43	Depleted
MC34267-3.3	VOC Ref #2	Gary Krasinski	10/23/14 14:44	Retrieve from Storage

SGS Accutest Internal Chain of Custody

Job Number: MC34267
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL
Received: 10/11/14

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC34267-3.3	Gary Krasinski	GCMSL	10/23/14 14:44	Load on Instrument
MC34267-3.3	GCMSL	Gary Krasinski	10/24/14 10:33	Unload from Instrument
MC34267-3.3	Gary Krasinski	VOC Ref #2	10/24/14 10:33	Return to Storage
MC34267-3.3	VOC Ref #2	Gary Krasinski	10/24/14 10:34	Retrieve from Storage
MC34267-3.3	Gary Krasinski	GCMSL	10/24/14 10:34	Load on Instrument
MC34267-3.3	GCMSL	Gary Krasinski	10/27/14 09:07	Unload from Instrument
MC34267-3.3	Gary Krasinski	VOC Ref #2	10/27/14 09:08	Return to Storage
MC34267-3.3	Scott Parsick		12/18/14 12:16	Disposed
MC34267-3.4	VOC Ref #2	Gary Krasinski	10/22/14 11:56	Retrieve from Storage
MC34267-3.4	Gary Krasinski	GCMSL	10/22/14 11:56	Load on Instrument
MC34267-3.4	GCMSL	Gary Krasinski	10/23/14 12:33	Unload from Instrument
MC34267-3.4	Gary Krasinski	VOC Ref #2	10/23/14 12:34	Return to Storage
MC34267-3.4	Scott Parsick		12/18/14 12:16	Disposed
MC34267-3.6	VOC Ref #2	Marc Tahtamoni	10/15/14 14:33	Retrieve from Storage
MC34267-3.6	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34267-4.1	VOC Ref #2	Gary Krasinski	10/23/14 14:44	Retrieve from Storage
MC34267-4.1	Gary Krasinski	GCMSL	10/23/14 14:44	Load on Instrument
MC34267-4.1	GCMSL	Gary Krasinski	10/24/14 10:33	Unload from Instrument
MC34267-4.1	Gary Krasinski	VOC Ref #2	10/24/14 10:33	Return to Storage
MC34267-4.1	Scott Parsick		12/18/14 12:16	Disposed
MC34267-4.2	VOC Ref #2	Gary Krasinski	10/22/14 11:56	Retrieve from Storage
MC34267-4.2	Gary Krasinski	GCMSL	10/22/14 11:56	Load on Instrument
MC34267-4.2	GCMSL	Gary Krasinski	10/23/14 12:33	Unload from Instrument
MC34267-4.2	Gary Krasinski	VOC Ref #2	10/23/14 12:34	Return to Storage
MC34267-4.2	Scott Parsick		12/18/14 12:16	Disposed
MC34267-5.2	VOC Ref #2	Marc Tahtamoni	10/15/14 14:33	Retrieve from Storage
MC34267-5.2	Marc Tahtamoni		11/11/14 17:36	Depleted

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: MC34267
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSL3916-MB	L87840.D	1	10/23/14	GK	n/a	n/a	MSL3916

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34267-1, MC34267-2, MC34267-4

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	10	ug/l	
107-02-8	Acrolein	ND	25	ug/l	
107-13-1	Acrylonitrile	ND	5.0	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
74-97-5	Bromochloromethane	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	

Method Blank Summary

Job Number: MC34267
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSL3916-MB	L87840.D	1	10/23/14	GK	n/a	n/a	MSL3916

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34267-1, MC34267-2, MC34267-4

CAS No.	Compound	Result	RL	Units	Q
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	1.0	ug/l	

Method Blank Summary

Job Number: MC34267
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSL3916-MB	L87840.D	1	10/23/14	GK	n/a	n/a	MSL3916

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34267-1, MC34267-2, MC34267-4

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	102%	70-130%
2037-26-5	Toluene-D8	100%	70-130%
460-00-4	4-Bromofluorobenzene	117%	70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Method Blank Summary

Job Number: MC34267
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSL3917-MB	L87871.D	1	10/24/14	GK	n/a	n/a	MSL3917

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34267-3

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	10	ug/l	
107-02-8	Acrolein	ND	25	ug/l	
107-13-1	Acrylonitrile	ND	5.0	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
74-97-5	Bromochloromethane	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	

Method Blank Summary

Job Number: MC34267
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSL3917-MB	L87871.D	1	10/24/14	GK	n/a	n/a	MSL3917

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34267-3

CAS No.	Compound	Result	RL	Units	Q
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	1.0	ug/l	

Method Blank Summary

Job Number: MC34267
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSL3917-MB	L87871.D	1	10/24/14	GK	n/a	n/a	MSL3917

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34267-3

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	102%	70-130%
2037-26-5	Toluene-D8	101%	70-130%
460-00-4	4-Bromofluorobenzene	123%	70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Blank Spike Summary

Job Number: MC34267
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSL3916-BS	L87837.D	1	10/23/14	GK	n/a	n/a	MSL3916

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34267-1, MC34267-2, MC34267-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	31.3	63* [a]	70-130
107-02-8	Acrolein	250	176	70	70-130
107-13-1	Acrylonitrile	50	38.5	77	70-130
71-43-2	Benzene	50	42.8	86	70-130
108-86-1	Bromobenzene	50	44.3	89	70-130
74-97-5	Bromochloromethane	50	41.8	84	70-130
75-27-4	Bromodichloromethane	50	46.3	93	70-130
75-25-2	Bromoform	50	38.5	77	70-130
74-83-9	Bromomethane	50	45.7	91	70-130
78-93-3	2-Butanone (MEK)	50	40.5	81	70-130
104-51-8	n-Butylbenzene	50	52.0	104	70-130
135-98-8	sec-Butylbenzene	50	48.7	97	70-130
98-06-6	tert-Butylbenzene	50	50.9	102	70-130
75-15-0	Carbon disulfide	50	39.8	80	70-130
56-23-5	Carbon tetrachloride	50	42.3	85	70-130
108-90-7	Chlorobenzene	50	39.3	79	70-130
75-00-3	Chloroethane	50	49.8	100	70-130
110-75-8	2-Chloroethyl vinyl ether	50	36.0	72	70-130
67-66-3	Chloroform	50	49.4	99	70-130
74-87-3	Chloromethane	50	50.8	102	70-130
95-49-8	o-Chlorotoluene	50	49.6	99	70-130
106-43-4	p-Chlorotoluene	50	48.0	96	70-130
124-48-1	Dibromochloromethane	50	45.2	90	70-130
95-50-1	1,2-Dichlorobenzene	50	43.1	86	70-130
541-73-1	1,3-Dichlorobenzene	50	42.8	86	70-130
106-46-7	1,4-Dichlorobenzene	50	41.2	82	70-130
75-71-8	Dichlorodifluoromethane	50	32.2	64* [a]	70-130
75-34-3	1,1-Dichloroethane	50	49.3	99	70-130
107-06-2	1,2-Dichloroethane	50	50.3	101	70-130
75-35-4	1,1-Dichloroethene	50	45.2	90	70-130
156-59-2	cis-1,2-Dichloroethene	50	45.8	92	70-130
156-60-5	trans-1,2-Dichloroethene	50	42.9	86	70-130
78-87-5	1,2-Dichloropropane	50	42.0	84	70-130
142-28-9	1,3-Dichloropropane	50	39.2	78	70-130
594-20-7	2,2-Dichloropropane	50	60.6	121	70-130
563-58-6	1,1-Dichloropropene	50	45.8	92	70-130

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34267
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSL3916-BS	L87837.D	1	10/23/14	GK	n/a	n/a	MSL3916

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34267-1, MC34267-2, MC34267-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-01-5	cis-1,3-Dichloropropene	50	44.2	88	70-130
10061-02-6	trans-1,3-Dichloropropene	50	43.6	87	70-130
123-91-1	1,4-Dioxane	125	238	190* [b]	70-130
97-63-2	Ethyl methacrylate	50	40.1	80	77-137
100-41-4	Ethylbenzene	50	39.8	80	70-130
87-68-3	Hexachlorobutadiene	50	41.3	83	70-130
591-78-6	2-Hexanone	50	31.7	63* [a]	70-130
98-82-8	Isopropylbenzene	50	49.2	98	70-130
99-87-6	p-Isopropyltoluene	50	46.0	92	70-130
1634-04-4	Methyl Tert Butyl Ether	50	44.2	88	70-130
108-10-1	4-Methyl-2-pentanone (MIBK)	50	36.4	73	70-130
74-95-3	Methylene bromide	50	39.6	79	70-130
75-09-2	Methylene chloride	50	42.5	85	70-130
91-20-3	Naphthalene	50	51.8	104	70-130
103-65-1	n-Propylbenzene	50	50.3	101	70-130
100-42-5	Styrene	50	42.4	85	70-130
630-20-6	1,1,1,2-Tetrachloroethane	50	41.7	83	70-130
79-34-5	1,1,2,2-Tetrachloroethane	50	43.6	87	70-130
127-18-4	Tetrachloroethene	50	40.4	81	70-130
108-88-3	Toluene	50	43.2	86	70-130
87-61-6	1,2,3-Trichlorobenzene	50	42.0	84	70-130
120-82-1	1,2,4-Trichlorobenzene	50	43.8	88	70-130
71-55-6	1,1,1-Trichloroethane	50	50.2	100	70-130
79-00-5	1,1,2-Trichloroethane	50	41.1	82	70-130
79-01-6	Trichloroethene	50	40.8	82	70-130
75-69-4	Trichlorofluoromethane	50	43.8	88	70-130
96-18-4	1,2,3-Trichloropropane	50	47.8	96	70-130
95-63-6	1,2,4-Trimethylbenzene	50	48.3	97	70-130
108-67-8	1,3,5-Trimethylbenzene	50	45.6	91	70-130
108-05-4	Vinyl Acetate	50	88.8	178* [b]	70-130
75-01-4	Vinyl chloride	50	37.8	76	70-130
	m,p-Xylene	100	78.0	78	70-130
95-47-6	o-Xylene	50	41.0	82	70-130
1330-20-7	Xylene (total)	150	119	79	70-130

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34267
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSL3916-BS	L87837.D	1	10/23/14	GK	n/a	n/a	MSL3916

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34267-1, MC34267-2, MC34267-4

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	106%	70-130%
2037-26-5	Toluene-D8	103%	70-130%
460-00-4	4-Bromofluorobenzene	122%	70-130%

(a) Outside control limits. Blank Spike meets program technical requirements.
(b) Outside control limits. Associated samples are non-detect for this compound.

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34267
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSL3917-BS	L87869.D	1	10/24/14	GK	n/a	n/a	MSL3917

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34267-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	27.4	55* [a]	70-130
107-02-8	Acrolein	250	220	88	70-130
107-13-1	Acrylonitrile	50	45.4	91	70-130
71-43-2	Benzene	50	48.9	98	70-130
108-86-1	Bromobenzene	50	51.2	102	70-130
74-97-5	Bromochloromethane	50	51.2	102	70-130
75-27-4	Bromodichloromethane	50	53.4	107	70-130
75-25-2	Bromoform	50	41.9	84	70-130
74-83-9	Bromomethane	50	59.5	119	70-130
78-93-3	2-Butanone (MEK)	50	45.1	90	70-130
104-51-8	n-Butylbenzene	50	59.6	119	70-130
135-98-8	sec-Butylbenzene	50	56.2	112	70-130
98-06-6	tert-Butylbenzene	50	58.5	117	70-130
75-15-0	Carbon disulfide	50	47.1	94	70-130
56-23-5	Carbon tetrachloride	50	48.6	97	70-130
108-90-7	Chlorobenzene	50	42.3	85	70-130
75-00-3	Chloroethane	50	58.0	116	70-130
110-75-8	2-Chloroethyl vinyl ether	50	71.7	143* [a]	70-130
67-66-3	Chloroform	50	58.0	116	70-130
74-87-3	Chloromethane	50	59.0	118	70-130
95-49-8	o-Chlorotoluene	50	58.8	118	70-130
106-43-4	p-Chlorotoluene	50	56.1	112	70-130
124-48-1	Dibromochloromethane	50	46.9	94	70-130
95-50-1	1,2-Dichlorobenzene	50	48.9	98	70-130
541-73-1	1,3-Dichlorobenzene	50	49.8	100	70-130
106-46-7	1,4-Dichlorobenzene	50	48.0	96	70-130
75-71-8	Dichlorodifluoromethane	50	36.2	72	70-130
75-34-3	1,1-Dichloroethane	50	57.3	115	70-130
107-06-2	1,2-Dichloroethane	50	58.3	117	70-130
75-35-4	1,1-Dichloroethene	50	51.9	104	70-130
156-59-2	cis-1,2-Dichloroethene	50	52.7	105	70-130
156-60-5	trans-1,2-Dichloroethene	50	51.2	102	70-130
78-87-5	1,2-Dichloropropane	50	50.0	100	70-130
142-28-9	1,3-Dichloropropane	50	41.2	82	70-130
594-20-7	2,2-Dichloropropane	50	65.5	131* [a]	70-130
563-58-6	1,1-Dichloropropene	50	52.8	106	70-130

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34267
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSL3917-BS	L87869.D	1	10/24/14	GK	n/a	n/a	MSL3917

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34267-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-01-5	cis-1,3-Dichloropropene	50	49.8	100	70-130
10061-02-6	trans-1,3-Dichloropropene	50	50.9	102	70-130
123-91-1	1,4-Dioxane	125	95.2	76	70-130
97-63-2	Ethyl methacrylate	50	45.9	92	77-137
100-41-4	Ethylbenzene	50	42.5	85	70-130
87-68-3	Hexachlorobutadiene	50	48.6	97	70-130
591-78-6	2-Hexanone	50	32.5	65* [a]	70-130
98-82-8	Isopropylbenzene	50	57.4	115	70-130
99-87-6	p-Isopropyltoluene	50	53.7	107	70-130
1634-04-4	Methyl Tert Butyl Ether	50	49.0	98	70-130
108-10-1	4-Methyl-2-pentanone (MIBK)	50	37.8	76	70-130
74-95-3	Methylene bromide	50	47.0	94	70-130
75-09-2	Methylene chloride	50	48.1	96	70-130
91-20-3	Naphthalene	50	57.4	115	70-130
103-65-1	n-Propylbenzene	50	58.8	118	70-130
100-42-5	Styrene	50	45.9	92	70-130
630-20-6	1,1,1,2-Tetrachloroethane	50	44.7	89	70-130
79-34-5	1,1,2,2-Tetrachloroethane	50	49.9	100	70-130
127-18-4	Tetrachloroethene	50	44.6	89	70-130
108-88-3	Toluene	50	48.5	97	70-130
87-61-6	1,2,3-Trichlorobenzene	50	48.1	96	70-130
120-82-1	1,2,4-Trichlorobenzene	50	50.1	100	70-130
71-55-6	1,1,1-Trichloroethane	50	58.7	117	70-130
79-00-5	1,1,2-Trichloroethane	50	46.7	93	70-130
79-01-6	Trichloroethene	50	45.8	92	70-130
75-69-4	Trichlorofluoromethane	50	50.6	101	70-130
96-18-4	1,2,3-Trichloropropane	50	54.4	109	70-130
95-63-6	1,2,4-Trimethylbenzene	50	56.9	114	70-130
108-67-8	1,3,5-Trimethylbenzene	50	53.2	106	70-130
108-05-4	Vinyl Acetate	50	106	212* [b]	70-130
75-01-4	Vinyl chloride	50	44.0	88	70-130
	m,p-Xylene	100	83.8	84	70-130
95-47-6	o-Xylene	50	42.7	85	70-130
1330-20-7	Xylene (total)	150	127	85	70-130

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34267
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSL3917-BS	L87869.D	1	10/24/14	GK	n/a	n/a	MSL3917

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34267-3

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	113%	70-130%
2037-26-5	Toluene-D8	106%	70-130%
460-00-4	4-Bromofluorobenzene	122%	70-130%

(a) Outside control limits. Blank Spike meets program technical requirements.
(b) Outside control limits. Associated samples are non-detect for this compound.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34267
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34231-7MS [a]	L87844.D	5	10/23/14	GK	n/a	n/a	MSL3916
MC34231-7MSD [a]	L87845.D	5	10/23/14	GK	n/a	n/a	MSL3916
MC34231-7	L87843.D	1	10/23/14	GK	n/a	n/a	MSL3916

The QC reported here applies to the following samples: Method: SW846 8260C

MC34267-1, MC34267-2, MC34267-4

CAS No.	Compound	MC34231-7 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		250	78.1	31* [b]	250	68.6	27* [b]	13	70-130/30
107-02-8	Acrolein	ND		1250	1500	120	1250	748	60* [b]	67* [c]	70-130/30
107-13-1	Acrylonitrile	ND		250	217	87	250	177	71	20	70-130/30
71-43-2	Benzene	28.0		250	268	96	250	230	81	15	70-130/30
108-86-1	Bromobenzene	ND		250	259	104	250	212	85	20	70-130/30
74-97-5	Bromochloromethane	ND		250	246	98	250	213	85	14	70-130/30
75-27-4	Bromodichloromethane	ND		250	269	108	250	228	91	16	70-130/30
75-25-2	Bromoform	ND		250	211	84	250	179	72	16	70-130/30
74-83-9	Bromomethane	ND		250	326	130	250	210	84	43* [c]	70-130/30
78-93-3	2-Butanone (MEK)	ND		250	200	80	250	137	55* [b]	37* [c]	70-130/30
104-51-8	n-Butylbenzene	ND		250	283	113	250	237	95	18	70-130/30
135-98-8	sec-Butylbenzene	0.83	J	250	279	111	250	231	92	19	70-130/30
98-06-6	tert-Butylbenzene	4.9	J	250	294	116	250	247	97	17	70-130/30
75-15-0	Carbon disulfide	ND		250	222	89	250	185	74	18	70-130/30
56-23-5	Carbon tetrachloride	ND		250	241	96	250	193	77	22	70-130/30
108-90-7	Chlorobenzene	ND		250	207	83	250	175	70	17	70-130/30
75-00-3	Chloroethane	ND		250	350	140* [b]	250	180	72	64* [c]	70-130/30
110-75-8	2-Chloroethyl vinyl ether	ND		250	329	132* [b]	250	227	91	37* [c]	70-130/30
67-66-3	Chloroform	ND		250	285	114	250	228	91	22	70-130/30
74-87-3	Chloromethane	ND		250	318	127	250	196	78	47* [c]	70-130/30
95-49-8	o-Chlorotoluene	ND		250	287	115	250	231	92	22	70-130/30
106-43-4	p-Chlorotoluene	ND		250	282	113	250	228	91	21	70-130/30
124-48-1	Dibromochloromethane	ND		250	236	94	250	197	79	18	70-130/30
95-50-1	1,2-Dichlorobenzene	ND		250	244	98	250	195	78	22	70-130/30
541-73-1	1,3-Dichlorobenzene	ND		250	245	98	250	201	80	20	70-130/30
106-46-7	1,4-Dichlorobenzene	ND		250	239	96	250	199	80	18	70-130/30
75-71-8	Dichlorodifluoromethane	ND		250	218	87	250	115	46* [b]	62* [c]	70-130/30
75-34-3	1,1-Dichloroethane	ND		250	280	112	250	230	92	20	70-130/30
107-06-2	1,2-Dichloroethane	ND		250	283	113	250	248	99	13	70-130/30
75-35-4	1,1-Dichloroethene	ND		250	253	101	250	200	80	23	70-130/30
156-59-2	cis-1,2-Dichloroethene	ND		250	259	104	250	219	88	17	70-130/30
156-60-5	trans-1,2-Dichloroethene	ND		250	249	100	250	204	82	20	70-130/30
78-87-5	1,2-Dichloropropane	ND		250	245	98	250	208	83	16	70-130/30
142-28-9	1,3-Dichloropropane	ND		250	210	84	250	174	70	19	70-130/30
594-20-7	2,2-Dichloropropane	ND		250	338	135* [b]	250	261	104	26	70-130/30
563-58-6	1,1-Dichloropropene	ND		250	264	106	250	210	84	23	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34267
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34231-7MS [a]	L87844.D	5	10/23/14	GK	n/a	n/a	MSL3916
MC34231-7MSD [a]	L87845.D	5	10/23/14	GK	n/a	n/a	MSL3916
MC34231-7	L87843.D	1	10/23/14	GK	n/a	n/a	MSL3916

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34267-1, MC34267-2, MC34267-4

CAS No.	Compound	MC34231-7 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-01-5	cis-1,3-Dichloropropene	ND		250	255	102	250	212	85	18	70-130/30
10061-02-6	trans-1,3-Dichloropropene	ND		250	262	105	250	213	85	21	70-130/30
123-91-1	1,4-Dioxane	ND		625	561	90	625	492	79	13	70-130/30
97-63-2	Ethyl methacrylate	ND		250	241	96	250	195	78	21	72-139/30
100-41-4	Ethylbenzene	ND		250	214	86	250	176	70	19	70-130/30
87-68-3	Hexachlorobutadiene	ND		250	227	91	250	194	78	16	70-130/30
591-78-6	2-Hexanone	ND		250	129	52* [b]	250	105	42* [b]	21	70-130/30
98-82-8	Isopropylbenzene	1.2	J	250	283	113	250	231	92	20	70-130/30
99-87-6	p-Isopropyltoluene	ND		250	263	105	250	221	88	17	70-130/30
1634-04-4	Methyl Tert Butyl Ether	19.0		250	272	101	250	226	83	18	70-130/30
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		250	216	86	250	170	68* [b]	24	70-130/30
74-95-3	Methylene bromide	ND		250	235	94	250	194	78	19	70-130/30
75-09-2	Methylene chloride	ND		250	239	96	250	201	80	17	70-130/30
91-20-3	Naphthalene	ND		250	284	114	250	256	102	10	70-130/30
103-65-1	n-Propylbenzene	ND		250	289	116	250	240	96	19	70-130/30
100-42-5	Styrene	ND		250	223	89	250	191	76	15	70-130/30
630-20-6	1,1,1,2-Tetrachloroethane	ND		250	228	91	250	194	78	16	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	254	102	250	210	84	19	70-130/30
127-18-4	Tetrachloroethene	ND		250	210	84	250	172	69* [b]	20	70-130/30
108-88-3	Toluene	1.5		250	250	99	250	204	81	20	70-130/30
87-61-6	1,2,3-Trichlorobenzene	ND		250	234	94	250	202	81	15	70-130/30
120-82-1	1,2,4-Trichlorobenzene	ND		250	244	98	250	208	83	16	70-130/30
71-55-6	1,1,1-Trichloroethane	ND		250	284	114	250	223	89	24	70-130/30
79-00-5	1,1,2-Trichloroethane	ND		250	242	97	250	202	81	18	70-130/30
79-01-6	Trichloroethene	ND		250	225	90	250	191	76	16	70-130/30
75-69-4	Trichlorofluoromethane	ND		250	314	126	250	155	62* [b]	68* [c]	70-130/30
96-18-4	1,2,3-Trichloropropane	ND		250	281	112	250	229	92	20	70-130/30
95-63-6	1,2,4-Trimethylbenzene	0.58	J	250	273	109	250	225	90	19	70-130/30
108-67-8	1,3,5-Trimethylbenzene	ND		250	264	106	250	215	86	20	70-130/30
108-05-4	Vinyl Acetate	ND		250	599	240* [d]	250	501	200* [d]	18	70-130/30
75-01-4	Vinyl chloride	ND		250	268	107	250	139	56* [b]	63* [c]	70-130/30
	m,p-Xylene	2.7		500	414	82	500	344	68* [b]	18	70-130/30
95-47-6	o-Xylene	1.2		250	216	86	250	184	73	16	70-130/30
1330-20-7	Xylene (total)	3.9		750	630	83	750	528	70	18	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34267
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34231-7MS [a]	L87844.D	5	10/23/14	GK	n/a	n/a	MSL3916
MC34231-7MSD [a]	L87845.D	5	10/23/14	GK	n/a	n/a	MSL3916
MC34231-7	L87843.D	1	10/23/14	GK	n/a	n/a	MSL3916

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34267-1, MC34267-2, MC34267-4

CAS No.	Surrogate Recoveries	MS	MSD	MC34231-7	Limits
1868-53-7	Dibromofluoromethane	106%	110%	108%	70-130%
2037-26-5	Toluene-D8	103%	105%	105%	70-130%
460-00-4	4-Bromofluorobenzene	123%	122%	121%	70-130%

(a) Elevated detection limit due to limited sample volume.
(b) Outside control limits due to possible matrix interference. Refer to Blank Spike.
(c) High RPD due to possible matrix interference and/or sample non-homogeneity.
(d) Outside control limits. Associated samples are non-detect for this compound.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34267
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34338-3MS	L87879.D	5	10/24/14	GK	n/a	n/a	MSL3917
MC34338-3MSD	L87880.D	5	10/24/14	GK	n/a	n/a	MSL3917
MC34338-3	L87875.D	1	10/24/14	GK	n/a	n/a	MSL3917

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34267-3

CAS No.	Compound	MC34338-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		250	51.7	21* a	250	73.9	30* a	35* b	70-130/30
107-02-8	Acrolein	ND		1250	1080	86	1250	1050	84	3	70-130/30
107-13-1	Acrylonitrile	ND		250	200	80	250	187	75	7	70-130/30
71-43-2	Benzene	0.68		250	213	85	250	216	86	1	70-130/30
108-86-1	Bromobenzene	ND		250	214	86	250	221	88	3	70-130/30
74-97-5	Bromochloromethane	ND		250	202	81	250	215	86	6	70-130/30
75-27-4	Bromodichloromethane	ND		250	223	89	250	240	96	7	70-130/30
75-25-2	Bromoform	ND		250	179	72	250	191	76	6	70-130/30
74-83-9	Bromomethane	ND		250	201	80	250	243	97	19	70-130/30
78-93-3	2-Butanone (MEK)	ND		250	163	65* a	250	161	64* a	1	70-130/30
104-51-8	n-Butylbenzene	ND		250	242	97	250	252	101	4	70-130/30
135-98-8	sec-Butylbenzene	ND		250	236	94	250	245	98	4	70-130/30
98-06-6	tert-Butylbenzene	ND		250	242	97	250	247	99	2	70-130/30
75-15-0	Carbon disulfide	ND		250	196	78	250	193	77	2	70-130/30
56-23-5	Carbon tetrachloride	ND		250	211	84	250	213	85	1	70-130/30
108-90-7	Chlorobenzene	ND		250	178	71	250	187	75	5	70-130/30
75-00-3	Chloroethane	ND		250	249	100	250	246	98	1	70-130/30
110-75-8	2-Chloroethyl vinyl ether	ND		250	267	107	250	243	97	9	70-130/30
67-66-3	Chloroform	ND		250	247	99	250	249	100	1	70-130/30
74-87-3	Chloromethane	ND		250	223	89	250	254	102	13	70-130/30
95-49-8	o-Chlorotoluene	ND		250	247	99	250	244	98	1	70-130/30
106-43-4	p-Chlorotoluene	ND		250	237	95	250	240	96	1	70-130/30
124-48-1	Dibromochloromethane	ND		250	203	81	250	204	82	0	70-130/30
95-50-1	1,2-Dichlorobenzene	ND		250	200	80	250	205	82	2	70-130/30
541-73-1	1,3-Dichlorobenzene	ND		250	201	80	250	215	86	7	70-130/30
106-46-7	1,4-Dichlorobenzene	ND		250	199	80	250	202	81	1	70-130/30
75-71-8	Dichlorodifluoromethane	ND		250	161	64* a	250	166	66* a	3	70-130/30
75-34-3	1,1-Dichloroethane	ND		250	252	101	250	239	96	5	70-130/30
107-06-2	1,2-Dichloroethane	ND		250	249	100	250	253	101	2	70-130/30
75-35-4	1,1-Dichloroethene	ND		250	220	88	250	219	88	0	70-130/30
156-59-2	cis-1,2-Dichloroethene	ND		250	229	92	250	222	89	3	70-130/30
156-60-5	trans-1,2-Dichloroethene	ND		250	214	86	250	210	84	2	70-130/30
78-87-5	1,2-Dichloropropane	ND		250	212	85	250	215	86	1	70-130/30
142-28-9	1,3-Dichloropropane	ND		250	182	73	250	192	77	5	70-130/30
594-20-7	2,2-Dichloropropane	ND		250	310	124	250	299	120	4	70-130/30
563-58-6	1,1-Dichloropropene	ND		250	228	91	250	227	91	0	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34267
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34338-3MS	L87879.D	5	10/24/14	GK	n/a	n/a	MSL3917
MC34338-3MSD	L87880.D	5	10/24/14	GK	n/a	n/a	MSL3917
MC34338-3	L87875.D	1	10/24/14	GK	n/a	n/a	MSL3917

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34267-3

CAS No.	Compound	MC34338-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-01-5	cis-1,3-Dichloropropene	ND		250	220	88	250	227	91	3	70-130/30
10061-02-6	trans-1,3-Dichloropropene	ND		250	223	89	250	232	93	4	70-130/30
123-91-1	1,4-Dioxane	ND		625	422	68* a	625	554	89	27	70-130/30
97-63-2	Ethyl methacrylate	ND		250	201	80	250	206	82	2	72-139/30
100-41-4	Ethylbenzene	ND		250	185	74	250	189	76	2	70-130/30
87-68-3	Hexachlorobutadiene	ND		250	189	76	250	205	82	8	70-130/30
591-78-6	2-Hexanone	ND		250	109	44* a	250	110	44* a	1	70-130/30
98-82-8	Isopropylbenzene	ND		250	243	97	250	244	98	0	70-130/30
99-87-6	p-Isopropyltoluene	ND		250	223	89	250	228	91	2	70-130/30
1634-04-4	Methyl Tert Butyl Ether	ND		250	217	87	250	219	88	1	70-130/30
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		250	172	69* a	250	185	74	7	70-130/30
74-95-3	Methylene bromide	ND		250	199	80	250	202	81	1	70-130/30
75-09-2	Methylene chloride	ND		250	206	82	250	203	81	1	70-130/30
91-20-3	Naphthalene	ND		250	243	97	250	263	105	8	70-130/30
103-65-1	n-Propylbenzene	ND		250	244	98	250	250	100	2	70-130/30
100-42-5	Styrene	ND		250	197	79	250	198	79	1	70-130/30
630-20-6	1,1,1,2-Tetrachloroethane	ND		250	196	78	250	203	81	4	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	218	87	250	224	90	3	70-130/30
127-18-4	Tetrachloroethene	ND		250	189	76	250	188	75	1	70-130/30
108-88-3	Toluene	ND		250	208	83	250	215	86	3	70-130/30
87-61-6	1,2,3-Trichlorobenzene	ND		250	205	82	250	213	85	4	70-130/30
120-82-1	1,2,4-Trichlorobenzene	ND		250	204	82	250	223	89	9	70-130/30
71-55-6	1,1,1-Trichloroethane	ND		250	252	101	250	248	99	2	70-130/30
79-00-5	1,1,2-Trichloroethane	ND		250	208	83	250	208	83	0	70-130/30
79-01-6	Trichloroethene	ND		250	201	80	250	202	81	0	70-130/30
75-69-4	Trichlorofluoromethane	ND		250	222	89	250	227	91	2	70-130/30
96-18-4	1,2,3-Trichloropropane	ND		250	234	94	250	248	99	6	70-130/30
95-63-6	1,2,4-Trimethylbenzene	ND		250	226	90	250	239	96	6	70-130/30
108-67-8	1,3,5-Trimethylbenzene	ND		250	224	90	250	225	90	0	70-130/30
108-05-4	Vinyl Acetate	ND		250	484	194* a	250	484	194* a	0	70-130/30
75-01-4	Vinyl chloride	ND		250	190	76	250	190	76	0	70-130/30
	m,p-Xylene	ND		500	358	72	500	363	73	1	70-130/30
95-47-6	o-Xylene	ND		250	187	75	250	188	75	1	70-130/30
1330-20-7	Xylene (total)	0.43	J	750	545	73	750	551	73	1	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34267
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34338-3MS	L87879.D	5	10/24/14	GK	n/a	n/a	MSL3917
MC34338-3MSD	L87880.D	5	10/24/14	GK	n/a	n/a	MSL3917
MC34338-3	L87875.D	1	10/24/14	GK	n/a	n/a	MSL3917

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34267-3

CAS No.	Surrogate Recoveries	MS	MSD	MC34338-3	Limits
1868-53-7	Dibromofluoromethane	107%	105%	101%	70-130%
2037-26-5	Toluene-D8	105%	102%	100%	70-130%
460-00-4	4-Bromofluorobenzene	122%	117%	121%	70-130%

(a) Outside control limits due to possible matrix interference. Refer to Blank Spike.
(b) High RPD due to possible matrix interference and/or sample non-homogeneity.

* = Outside of Control Limits.

Volatile Internal Standard Area Summary

Job Number: MC34267
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSL3916-CC3872	Injection Date:	10/23/14
Lab File ID:	L87837.D	Injection Time:	13:18
Instrument ID:	GCMSL	Method:	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	212272	8.11	292596	8.93	151806	12.12	155787	14.66	29857	5.85
Upper Limit [a]	424544	8.61	585192	9.43	303612	12.62	311574	15.16	59714	6.35
Lower Limit [b]	106136	7.61	146298	8.43	75903	11.62	77894	14.16	14929	5.35
Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSL3916-BS	212272	8.11	292596	8.93	151806	12.12	155787	14.66	29857	5.85
MSL3916-MB	190403	8.12	261904	8.93	128970	12.12	124846	14.66	22434	5.93
ZZZZZZ	182018	8.12	251932	8.93	124685	12.12	122961	14.66	24885	5.96
MC34267-4	208336	8.12	287887	8.93	138839	12.12	140551	14.66	31153	5.92
MC34231-7	200803	8.12	276986	8.93	141791	12.12	141148	14.66	33957	5.90
MC34231-7MS [c]	216131	8.11	292513	8.93	165287	12.11	155038	14.66	35230	5.86
MC34231-7MSD [c]	188322	8.12	254054	8.93	140069	12.12	133976	14.66	26554	5.86
ZZZZZZ	199173	8.12	283066	8.93	134920	12.12	133206	14.66	27509	5.92
ZZZZZZ	166637	8.12	236442	8.93	115318	12.12	110562	14.66	22910	5.93
ZZZZZZ	202444	8.12	282320	8.93	138421	12.12	134921	14.66	28563	5.95
ZZZZZZ	182268	8.12	260167	8.93	145036	12.12	129631	14.66	61731 [d]	5.88
ZZZZZZ	232116	8.12	336132	8.93	185445	12.12	168626	14.66	61229 [d]	5.90
MC34267-1	264232	8.11	374426	8.93	196834	12.12	183677	14.66	47890	5.91
MC34267-2	223455	8.12	311175	8.93	163831	12.12	158667	14.66	37675	5.90
ZZZZZZ	259470	8.12	355756	8.93	186647	12.12	170686	14.66	38344	5.93
ZZZZZZ	250215	8.12	347171	8.93	177440	12.12	166979	14.66	34567	5.91
ZZZZZZ	244818	8.12	337139	8.93	165096	12.12	161151	14.66	31202	5.91

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Elevated detection limit due to limited sample volume.
(d) Outside control limits. Target analytes not associated with this internal standard.

Volatile Internal Standard Area Summary

Job Number: MC34267
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSL3917-CC3872	**Injection Date:**	10/24/14
Lab File ID:	L87867.D	**Injection Time:**	08:30
Instrument ID:	GCMSL	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	192143	8.12	261493	8.93	147676	12.12	140484	14.66	27949	5.87
Upper Limit [a]	384286	8.62	522986	9.43	295352	12.62	280968	15.16	55898	6.37
Lower Limit [b]	96072	7.62	130747	8.43	73838	11.62	70242	14.16	13975	5.37

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSL3917-BS	181124	8.12	253266	8.93	141879	12.12	132191	14.66	26497	5.87
MSL3917-MB	216954	8.12	296161	8.93	148354	12.12	143669	14.66	28394	5.90
MC34267-3	181150	8.12	240485	8.93	123969	12.12	121079	14.66	29806	5.91
ZZZZZZ	184428	8.12	259572	8.93	129776	12.12	130952	14.66	23920	5.89
ZZZZZZ	186868	8.12	260370	8.93	129671	12.12	129595	14.66	27977	5.90
MC34338-3	201341	8.12	278870	8.93	144112	12.12	138143	14.66	28384	5.93
ZZZZZZ	174659	8.12	237099	8.93	120360	12.12	120664	14.66	30089	5.89
ZZZZZZ	186263	8.12	254046	8.93	129025	12.12	126480	14.66	28090	5.88
ZZZZZZ	211344	8.12	299419	8.93	148670	12.12	141946	14.66	31223	5.91
MC34338-3MS	211187	8.11	293300	8.93	165846	12.12	158398	14.66	37072	5.87
MC34338-3MSD	209356	8.11	286056	8.93	159226	12.11	153429	14.66	35479	5.86
ZZZZZZ	209986	8.12	293439	8.93	148277	12.12	146633	14.66	28772	5.90
ZZZZZZ	194642	8.12	265209	8.93	135439	12.12	129987	14.66	26020	5.93
ZZZZZZ	188161	8.12	252387	8.93	124972	12.12	124288	14.66	24047	5.92
ZZZZZZ	188744	8.12	255860	8.93	130988	12.12	123443	14.66	26904	5.91
ZZZZZZ	173349	8.12	248039	8.93	126828	12.12	123533	14.66	24518	5.92
ZZZZZZ	149615	8.12	211885	8.93	103835	12.12	100173	14.66	22227	5.94
ZZZZZZ	149889	8.12	214942	8.93	105207	12.12	98671	14.66	21277	5.92
ZZZZZZ	161170	8.11	227527	8.93	112743	12.12	108727	14.66	22571	5.93
ZZZZZZ	167608	8.12	223341	8.93	110416	12.12	109925	14.66	24585	5.93
ZZZZZZ	165747	8.12	226529	8.93	118498	12.12	111656	14.66	28144	5.92

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary

Job Number: MC34267
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Method: SW846 8260C **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
MC34267-1	L87855.D	107	105	128
MC34267-2	L87856.D	111	105	127
MC34267-3	L87872.D	97	102	129
MC34267-4	L87842.D	99	98	122
MC34231-7MS	L87844.D	106	103	123
MC34231-7MSD	L87845.D	110	105	122
MC34338-3MS	L87879.D	107	105	122
MC34338-3MSD	L87880.D	105	102	117
MSL3916-BS	L87837.D	106	103	122
MSL3916-MB	L87840.D	102	100	117
MSL3917-BS	L87869.D	113	106	122
MSL3917-MB	L87871.D	102	101	123

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	70-130%
S2 = Toluene-D8	70-130%
S3 = 4-Bromofluorobenzene	70-130%

GC/MS Semi-volatiles

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QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: MC34267
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40179-MB	F76874.D	1	10/15/14	WK	10/13/14	OP40179	MSF3368

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34267-1

CAS No.	Compound	Result	RL	Units	Q
65-85-0	Benzoic Acid	ND	10	ug/l	
95-57-8	2-Chlorophenol	ND	5.0	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	10	ug/l	
120-83-2	2,4-Dichlorophenol	ND	10	ug/l	
105-67-9	2,4-Dimethylphenol	ND	10	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	ug/l	
95-48-7	2-Methylphenol	ND	10	ug/l	
	3&4-Methylphenol	ND	10	ug/l	
88-75-5	2-Nitrophenol	ND	10	ug/l	
100-02-7	4-Nitrophenol	ND	20	ug/l	
87-86-5	Pentachlorophenol	ND	10	ug/l	
108-95-2	Phenol	ND	5.0	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	10	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	10	ug/l	
62-53-3	Aniline	ND	10	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.0	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.0	ug/l	
100-51-6	Benzyl Alcohol	ND	10	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	ug/l	
106-47-8	4-Chloroaniline	ND	10	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.0	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.0	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.0	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.0	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.0	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	10	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	10	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	ug/l	
132-64-9	Dibenzofuran	ND	2.0	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.0	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.0	ug/l	
84-66-2	Diethyl phthalate	ND	5.0	ug/l	
131-11-3	Dimethyl phthalate	ND	5.0	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	ug/l	
118-74-1	Hexachlorobenzene	ND	5.0	ug/l	

Method Blank Summary

Job Number: MC34267
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40179-MB	F76874.D	1	10/15/14	WK	10/13/14	OP40179	MSF3368

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34267-1

CAS No.	Compound	Result	RL	Units	Q
77-47-4	Hexachlorocyclopentadiene	ND	10	ug/l	
67-72-1	Hexachloroethane	ND	5.0	ug/l	
78-59-1	Isophorone	ND	5.0	ug/l	
88-74-4	2-Nitroaniline	ND	10	ug/l	
99-09-2	3-Nitroaniline	ND	10	ug/l	
100-01-6	4-Nitroaniline	ND	10	ug/l	
98-95-3	Nitrobenzene	ND	5.0	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.0	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.0	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	ug/l	
110-86-1	Pyridine	ND	10	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	49%	15-110%
4165-62-2	Phenol-d5	32%	15-110%
118-79-6	2,4,6-Tribromophenol	98%	15-110%
4165-60-0	Nitrobenzene-d5	78%	30-130%
321-60-8	2-Fluorobiphenyl	57%	30-130%
1718-51-0	Terphenyl-d14	100%	30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

Method Blank Summary

Job Number: MC34267
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40190-MB	F76911.D	1	10/16/14	WK	10/14/14	OP40190	MSF3369

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34267-2, MC34267-3

CAS No.	Compound	Result	RL	Units	Q
65-85-0	Benzoic Acid	ND	10	ug/l	
95-57-8	2-Chlorophenol	ND	5.0	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	10	ug/l	
120-83-2	2,4-Dichlorophenol	ND	10	ug/l	
105-67-9	2,4-Dimethylphenol	ND	10	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	ug/l	
95-48-7	2-Methylphenol	ND	10	ug/l	
	3&4-Methylphenol	ND	10	ug/l	
88-75-5	2-Nitrophenol	ND	10	ug/l	
100-02-7	4-Nitrophenol	ND	20	ug/l	
87-86-5	Pentachlorophenol	ND	10	ug/l	
108-95-2	Phenol	ND	5.0	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	10	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	10	ug/l	
62-53-3	Aniline	ND	10	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.0	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.0	ug/l	
100-51-6	Benzyl Alcohol	ND	10	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	ug/l	
106-47-8	4-Chloroaniline	ND	10	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.0	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.0	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.0	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.0	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.0	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	10	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	10	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	ug/l	
132-64-9	Dibenzofuran	ND	2.0	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.0	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.0	ug/l	
84-66-2	Diethyl phthalate	ND	5.0	ug/l	
131-11-3	Dimethyl phthalate	ND	5.0	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	ug/l	
118-74-1	Hexachlorobenzene	ND	5.0	ug/l	

Method Blank Summary

Job Number: MC34267
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40190-MB	F76911.D	1	10/16/14	WK	10/14/14	OP40190	MSF3369

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34267-2, MC34267-3

CAS No.	Compound	Result	RL	Units	Q
77-47-4	Hexachlorocyclopentadiene	ND	10	ug/l	
67-72-1	Hexachloroethane	ND	5.0	ug/l	
78-59-1	Isophorone	ND	5.0	ug/l	
88-74-4	2-Nitroaniline	ND	10	ug/l	
99-09-2	3-Nitroaniline	ND	10	ug/l	
100-01-6	4-Nitroaniline	ND	10	ug/l	
98-95-3	Nitrobenzene	ND	5.0	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.0	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.0	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	ug/l	
110-86-1	Pyridine	ND	10	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	50%	15-110%
4165-62-2	Phenol-d5	34%	15-110%
118-79-6	2,4,6-Tribromophenol	88%	15-110%
4165-60-0	Nitrobenzene-d5	78%	30-130%
321-60-8	2-Fluorobiphenyl	71%	30-130%
1718-51-0	Terphenyl-d14	96%	30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

Method Blank Summary

Job Number: MC34267
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40180-MB	I92222.D	1	10/15/14	WK	10/13/14	OP40180	MSI3437

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

MC34267-1

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	0.10	ug/l	
208-96-8	Acenaphthylene	ND	0.10	ug/l	
120-12-7	Anthracene	ND	0.10	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.050	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.050	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	ug/l	
218-01-9	Chrysene	ND	0.10	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	ug/l	
206-44-0	Fluoranthene	ND	0.10	ug/l	
86-73-7	Fluorene	ND	0.10	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	ug/l	
90-12-0	1-Methylnaphthalene	ND	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.0	ug/l	
85-01-8	Phenanthrene	ND	0.050	ug/l	
129-00-0	Pyrene	ND	0.10	ug/l	

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	85%	30-130%
321-60-8	2-Fluorobiphenyl	63%	30-130%
1718-51-0	Terphenyl-d14	94%	30-130%

Method Blank Summary

Job Number: MC34267
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40191-MB	I92254.D	1	10/16/14	WK	10/14/14	OP40191	MSI3438

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

MC34267-2, MC34267-3

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	0.10	ug/l	
208-96-8	Acenaphthylene	ND	0.10	ug/l	
120-12-7	Anthracene	ND	0.10	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.050	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.050	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	ug/l	
218-01-9	Chrysene	ND	0.10	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	ug/l	
206-44-0	Fluoranthene	ND	0.10	ug/l	
86-73-7	Fluorene	ND	0.10	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	ug/l	
90-12-0	1-Methylnaphthalene	ND	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.0	ug/l	
85-01-8	Phenanthrene	ND	0.050	ug/l	
129-00-0	Pyrene	ND	0.10	ug/l	

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	85%	30-130%
321-60-8	2-Fluorobiphenyl	78%	30-130%
1718-51-0	Terphenyl-d14	85%	30-130%

Blank Spike Summary

Job Number: MC34267
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40179-BS	F76875.D	1	10/15/14	WK	10/13/14	OP40179	MSF3368

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34267-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
65-85-0	Benzoic Acid	50	18.2	36	30-130
95-57-8	2-Chlorophenol	50	41.6	83	30-130
59-50-7	4-Chloro-3-methyl phenol	50	42.9	86	30-130
120-83-2	2,4-Dichlorophenol	50	44.2	88	30-130
105-67-9	2,4-Dimethylphenol	50	39.4	79	30-130
51-28-5	2,4-Dinitrophenol	50	61.5	123	30-130
534-52-1	4,6-Dinitro-o-cresol	50	60.3	121	30-130
95-48-7	2-Methylphenol	50	37.1	74	30-130
	3&4-Methylphenol	100	70.7	71	30-130
88-75-5	2-Nitrophenol	50	45.8	92	30-130
100-02-7	4-Nitrophenol	50	17.0	34	30-130
87-86-5	Pentachlorophenol	50	41.8	84	30-130
108-95-2	Phenol	50	17.4	35	30-130
95-95-4	2,4,5-Trichlorophenol	50	41.1	82	30-130
88-06-2	2,4,6-Trichlorophenol	50	42.4	85	30-130
62-53-3	Aniline	50	30.6	61	40-140
101-55-3	4-Bromophenyl phenyl ether	50	48.9	98	40-140
85-68-7	Butyl benzyl phthalate	50	53.3	107	40-140
100-51-6	Benzyl Alcohol	50	38.3	77	40-140
91-58-7	2-Chloronaphthalene	50	46.2	92	40-140
106-47-8	4-Chloroaniline	50	39.6	79	40-140
111-91-1	bis(2-Chloroethoxy)methane	50	44.4	89	40-140
111-44-4	bis(2-Chloroethyl)ether	50	44.9	90	40-140
108-60-1	bis(2-Chloroisopropyl)ether	50	56.0	112	40-140
7005-72-3	4-Chlorophenyl phenyl ether	50	44.5	89	40-140
122-66-7	1,2-Diphenylhydrazine	50	46.6	93	40-140
121-14-2	2,4-Dinitrotoluene	50	52.5	105	40-140
606-20-2	2,6-Dinitrotoluene	50	50.9	102	40-140
91-94-1	3,3'-Dichlorobenzidine	50	49.7	99	40-140
132-64-9	Dibenzofuran	50	44.0	88	40-140
84-74-2	Di-n-butyl phthalate	50	50.4	101	40-140
117-84-0	Di-n-octyl phthalate	50	48.2	96	40-140
84-66-2	Diethyl phthalate	50	48.0	96	40-140
131-11-3	Dimethyl phthalate	50	48.8	98	40-140
117-81-7	bis(2-Ethylhexyl)phthalate	50	56.1	112	40-140
118-74-1	Hexachlorobenzene	50	47.7	95	40-140

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34267
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40179-BS	F76875.D	1	10/15/14	WK	10/13/14	OP40179	MSF3368

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34267-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
77-47-4	Hexachlorocyclopentadiene	50	25.0	50	40-140
67-72-1	Hexachloroethane	50	23.9	48	40-140
78-59-1	Isophorone	50	41.6	83	40-140
88-74-4	2-Nitroaniline	50	49.4	99	40-140
99-09-2	3-Nitroaniline	50	45.7	91	40-140
100-01-6	4-Nitroaniline	50	45.5	91	40-140
98-95-3	Nitrobenzene	50	43.1	86	40-140
62-75-9	n-Nitrosodimethylamine	50	31.5	63	40-140
621-64-7	N-Nitroso-di-n-propylamine	50	49.5	99	40-140
86-30-6	N-Nitrosodiphenylamine	50	47.1	94	40-140
110-86-1	Pyridine	50	27.3	55	40-140

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	51%	15-110%
4165-62-2	Phenol-d5	36%	15-110%
118-79-6	2,4,6-Tribromophenol	107%	15-110%
4165-60-0	Nitrobenzene-d5	83%	30-130%
321-60-8	2-Fluorobiphenyl	76%	30-130%
1718-51-0	Terphenyl-d14	101%	30-130%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34267
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40190-BS	F76912.D	1	10/16/14	WK	10/14/14	OP40190	MSF3369

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34267-2, MC34267-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
65-85-0	Benzoic Acid	50	18.5	37	30-130
95-57-8	2-Chlorophenol	50	40.9	82	30-130
59-50-7	4-Chloro-3-methyl phenol	50	44.1	88	30-130
120-83-2	2,4-Dichlorophenol	50	43.4	87	30-130
105-67-9	2,4-Dimethylphenol	50	38.9	78	30-130
51-28-5	2,4-Dinitrophenol	50	27.7	55	30-130
534-52-1	4,6-Dinitro-o-cresol	50	30.3	61	30-130
95-48-7	2-Methylphenol	50	36.3	73	30-130
	3&4-Methylphenol	100	70.0	70	30-130
88-75-5	2-Nitrophenol	50	42.9	86	30-130
100-02-7	4-Nitrophenol	50	17.9	36	30-130
87-86-5	Pentachlorophenol	50	43.0	86	30-130
108-95-2	Phenol	50	17.4	35	30-130
95-95-4	2,4,5-Trichlorophenol	50	42.3	85	30-130
88-06-2	2,4,6-Trichlorophenol	50	42.2	84	30-130
62-53-3	Aniline	50	27.2	54	40-140
101-55-3	4-Bromophenyl phenyl ether	50	46.2	92	40-140
85-68-7	Butyl benzyl phthalate	50	57.1	114	40-140
100-51-6	Benzyl Alcohol	50	36.9	74	40-140
91-58-7	2-Chloronaphthalene	50	43.9	88	40-140
106-47-8	4-Chloroaniline	50	35.7	71	40-140
111-91-1	bis(2-Chloroethoxy)methane	50	42.7	85	40-140
111-44-4	bis(2-Chloroethyl)ether	50	43.8	88	40-140
108-60-1	bis(2-Chloroisopropyl)ether	50	56.4	113	40-140
7005-72-3	4-Chlorophenyl phenyl ether	50	42.5	85	40-140
122-66-7	1,2-Diphenylhydrazine	50	43.8	88	40-140
121-14-2	2,4-Dinitrotoluene	50	48.8	98	40-140
606-20-2	2,6-Dinitrotoluene	50	49.3	99	40-140
91-94-1	3,3'-Dichlorobenzidine	50	35.0	70	40-140
132-64-9	Dibenzofuran	50	41.7	83	40-140
84-74-2	Di-n-butyl phthalate	50	49.3	99	40-140
117-84-0	Di-n-octyl phthalate	50	56.0	112	40-140
84-66-2	Diethyl phthalate	50	47.7	95	40-140
131-11-3	Dimethyl phthalate	50	47.8	96	40-140
117-81-7	bis(2-Ethylhexyl)phthalate	50	60.8	122	40-140
118-74-1	Hexachlorobenzene	50	44.0	88	40-140

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34267
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40190-BS	F76912.D	1	10/16/14	WK	10/14/14	OP40190	MSF3369

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34267-2, MC34267-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
77-47-4	Hexachlorocyclopentadiene	50	17.8	36* [a]	40-140
67-72-1	Hexachloroethane	50	30.4	61	40-140
78-59-1	Isophorone	50	40.0	80	40-140
88-74-4	2-Nitroaniline	50	48.3	97	40-140
99-09-2	3-Nitroaniline	50	47.1	94	40-140
100-01-6	4-Nitroaniline	50	47.1	94	40-140
98-95-3	Nitrobenzene	50	43.1	86	40-140
62-75-9	n-Nitrosodimethylamine	50	30.8	62	40-140
621-64-7	N-Nitroso-di-n-propylamine	50	47.2	94	40-140
86-30-6	N-Nitrosodiphenylamine	50	44.9	90	40-140
110-86-1	Pyridine	50	21.5	43	40-140

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	48%	15-110%
4165-62-2	Phenol-d5	34%	15-110%
118-79-6	2,4,6-Tribromophenol	94%	15-110%
4165-60-0	Nitrobenzene-d5	80%	30-130%
321-60-8	2-Fluorobiphenyl	69%	30-130%
1718-51-0	Terphenyl-d14	99%	30-130%

(a) Outside control limits. Blank Spike meets program technical requirements.

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34267
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40180-BS	I92223.D	1	10/15/14	WK	10/13/14	OP40180	MSI3437

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

MC34267-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
83-32-9	Acenaphthene	50	47.1	94	40-140
208-96-8	Acenaphthylene	50	42.5	85	40-140
120-12-7	Anthracene	50	47.5	95	40-140
56-55-3	Benzo(a)anthracene	50	53.2	106	40-140
50-32-8	Benzo(a)pyrene	50	50.7	101	40-140
205-99-2	Benzo(b)fluoranthene	50	52.3	105	40-140
191-24-2	Benzo(g,h,i)perylene	50	51.8	104	40-140
207-08-9	Benzo(k)fluoranthene	50	49.3	99	40-140
218-01-9	Chrysene	50	50.4	101	40-140
53-70-3	Dibenzo(a,h)anthracene	50	51.9	104	40-140
206-44-0	Fluoranthene	50	49.6	99	40-140
86-73-7	Fluorene	50	46.3	93	40-140
193-39-5	Indeno(1,2,3-cd)pyrene	50	51.3	103	40-140
90-12-0	1-Methylnaphthalene	50	41.2	82	40-140
91-57-6	2-Methylnaphthalene	50	41.3	83	40-140
85-01-8	Phenanthrene	50	49.2	98	40-140
129-00-0	Pyrene	50	47.1	94	40-140

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	92%	30-130%
321-60-8	2-Fluorobiphenyl	81%	30-130%
1718-51-0	Terphenyl-d14	97%	30-130%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34267
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40191-BS	I92255.D	1	10/16/14	WK	10/14/14	OP40191	MSI3438

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

MC34267-2, MC34267-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
83-32-9	Acenaphthene	50	45.5	91	40-140
208-96-8	Acenaphthylene	50	40.7	81	40-140
120-12-7	Anthracene	50	46.8	94	40-140
56-55-3	Benzo(a)anthracene	50	54.3	109	40-140
50-32-8	Benzo(a)pyrene	50	51.3	103	40-140
205-99-2	Benzo(b)fluoranthene	50	52.8	106	40-140
191-24-2	Benzo(g,h,i)perylene	50	53.1	106	40-140
207-08-9	Benzo(k)fluoranthene	50	51.1	102	40-140
218-01-9	Chrysene	50	50.6	101	40-140
53-70-3	Dibenzo(a,h)anthracene	50	53.5	107	40-140
206-44-0	Fluoranthene	50	48.9	98	40-140
86-73-7	Fluorene	50	38.6	77	40-140
193-39-5	Indeno(1,2,3-cd)pyrene	50	52.4	105	40-140
90-12-0	1-Methylnaphthalene	50	41.6	83	40-140
91-57-6	2-Methylnaphthalene	50	42.0	84	40-140
85-01-8	Phenanthrene	50	48.3	97	40-140
129-00-0	Pyrene	50	47.3	95	40-140

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	85%	30-130%
321-60-8	2-Fluorobiphenyl	78%	30-130%
1718-51-0	Terphenyl-d14	88%	30-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34267
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40179-MS	F76876.D	1	10/15/14	WK	10/13/14	OP40179	MSF3368
OP40179-MSD	F76877.D	1	10/15/14	WK	10/13/14	OP40179	MSF3368
MC34000-10	F76879.D	1	10/15/14	WK	10/13/14	OP40179	MSF3368

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34267-1

CAS No.	Compound	MC34000-10 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic Acid	ND		50	17.9	36	50	19.1	38	6	30-130/20
95-57-8	2-Chlorophenol	ND		50	42.4	85	50	40.9	82	4	30-130/20
59-50-7	4-Chloro-3-methyl phenol	ND		50	45.2	90	50	42.0	84	7	30-130/20
120-83-2	2,4-Dichlorophenol	ND		50	46.2	92	50	43.3	87	6	30-130/20
105-67-9	2,4-Dimethylphenol	ND		50	42.2	84	50	38.6	77	9	30-130/20
51-28-5	2,4-Dinitrophenol	ND		50	63.8	128	50	62.8	126	2	30-130/20
534-52-1	4,6-Dinitro-o-cresol	ND		50	63.1	126	50	60.4	121	4	30-130/20
95-48-7	2-Methylphenol	ND		50	38.3	77	50	36.0	72	6	30-130/20
	3&4-Methylphenol	ND		100	72.6	73	100	67.5	68	7	30-130/20
88-75-5	2-Nitrophenol	ND		50	47.9	96	50	44.4	89	8	30-130/20
100-02-7	4-Nitrophenol	ND		50	18.5	37	50	16.4	33	12	30-130/20
87-86-5	Pentachlorophenol	ND		50	43.5	87	50	41.7	83	4	30-130/20
108-95-2	Phenol	ND		50	17.6	35	50	16.4	33	7	30-130/20
95-95-4	2,4,5-Trichlorophenol	ND		50	44.1	88	50	40.5	81	9	30-130/20
88-06-2	2,4,6-Trichlorophenol	ND		50	44.8	90	50	41.6	83	7	30-130/20
62-53-3	Aniline	ND		50	30.8	62	50	29.8	60	3	40-140/20
101-55-3	4-Bromophenyl phenyl ether	ND		50	50.5	101	50	48.5	97	4	40-140/20
85-68-7	Butyl benzyl phthalate	ND		50	54.7	109	50	55.3	111	1	40-140/20
100-51-6	Benzyl Alcohol	ND		50	38.5	77	50	37.6	75	2	40-140/20
91-58-7	2-Chloronaphthalene	ND		50	47.8	96	50	46.4	93	3	40-140/20
106-47-8	4-Chloroaniline	ND		50	41.1	82	50	38.6	77	6	40-140/20
111-91-1	bis(2-Chloroethoxy)methane	ND		50	44.7	89	50	42.3	85	6	40-140/20
111-44-4	bis(2-Chloroethyl)ether	ND		50	44.1	88	50	44.6	89	1	40-140/20
108-60-1	bis(2-Chloroisopropyl)ether	ND		50	54.2	108	50	54.9	110	1	40-140/20
7005-72-3	4-Chlorophenyl phenyl ether	ND		50	45.2	90	50	43.5	87	4	40-140/20
122-66-7	1,2-Diphenylhydrazine	ND		50	49.2	98	50	46.4	93	6	40-140/20
121-14-2	2,4-Dinitrotoluene	ND		50	53.2	106	50	51.8	104	3	40-140/20
606-20-2	2,6-Dinitrotoluene	ND		50	52.4	105	50	51.2	102	2	40-140/20
91-94-1	3,3'-Dichlorobenzidine	ND		50	55.2	110	50	52.2	104	6	40-140/20
132-64-9	Dibenzofuran	ND		50	45.3	91	50	43.6	87	4	40-140/20
84-74-2	Di-n-butyl phthalate	ND		50	50.7	101	50	48.9	98	4	40-140/20
117-84-0	Di-n-octyl phthalate	ND		50	48.3	97	50	49.0	98	1	40-140/20
84-66-2	Diethyl phthalate	ND		50	48.8	98	50	47.1	94	4	40-140/20
131-11-3	Dimethyl phthalate	ND		50	50.0	100	50	49.1	98	2	40-140/20
117-81-7	bis(2-Ethylhexyl)phthalate	ND		50	58.0	116	50	57.0	114	2	40-140/20
118-74-1	Hexachlorobenzene	ND		50	48.1	96	50	46.1	92	4	40-140/20

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34267
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40179-MS	F76876.D	1	10/15/14	WK	10/13/14	OP40179	MSF3368
OP40179-MSD	F76877.D	1	10/15/14	WK	10/13/14	OP40179	MSF3368
MC34000-10	F76879.D	1	10/15/14	WK	10/13/14	OP40179	MSF3368

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34267-1

CAS No.	Compound	MC34000-10 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
77-47-4	Hexachlorocyclopentadiene	ND		50	27.0	54	50	26.1	52	3	40-140/20
67-72-1	Hexachloroethane	ND		50	24.2	48	50	27.2	54	12	40-140/20
78-59-1	Isophorone	ND		50	42.3	85	50	40.8	82	4	40-140/20
88-74-4	2-Nitroaniline	ND		50	50.4	101	50	48.9	98	3	40-140/20
99-09-2	3-Nitroaniline	ND		50	47.1	94	50	44.7	89	5	40-140/20
100-01-6	4-Nitroaniline	ND		50	45.6	91	50	45.0	90	1	40-140/20
98-95-3	Nitrobenzene	ND		50	43.6	87	50	43.4	87	0	40-140/20
62-75-9	n-Nitrosodimethylamine	ND		50	31.2	62	50	30.7	61	2	40-140/20
621-64-7	N-Nitroso-di-n-propylamine	ND		50	48.2	96	50	47.6	95	1	40-140/20
86-30-6	N-Nitrosodiphenylamine	ND		50	48.8	98	50	46.2	92	5	40-140/20
110-86-1	Pyridine	ND		50	27.3	55	50	27.3	55	0	40-140/20

CAS No.	Surrogate Recoveries	MS	MSD	MC34000-10	Limits
367-12-4	2-Fluorophenol	49%	51%	48%	15-110%
4165-62-2	Phenol-d5	34%	35%	32%	15-110%
118-79-6	2,4,6-Tribromophenol	107%	106%	94%	15-110%
4165-60-0	Nitrobenzene-d5	83%	85%	77%	30-130%
321-60-8	2-Fluorobiphenyl	75%	77%	61%	30-130%
1718-51-0	Terphenyl-d14	103%	105%	105%	30-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34267
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40190-MS	F76913.D	1	10/16/14	WK	10/14/14	OP40190	MSF3369
OP40190-MSD	F76914.D	1	10/16/14	WK	10/14/14	OP40190	MSF3369
MC34000-16	F76915.D	1	10/16/14	WK	10/14/14	OP40190	MSF3369

The QC reported here applies to the following samples: Method: SW846 8270D

MC34267-2, MC34267-3

CAS No.	Compound	MC34000-16 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic Acid	ND		50	19.2	38	50	20.1	40	5	30-130/20
95-57-8	2-Chlorophenol	ND		50	38.6	77	50	39.1	78	1	30-130/20
59-50-7	4-Chloro-3-methyl phenol	ND		50	41.4	83	50	42.5	85	3	30-130/20
120-83-2	2,4-Dichlorophenol	ND		50	40.8	82	50	42.2	84	3	30-130/20
105-67-9	2,4-Dimethylphenol	ND		50	36.4	73	50	37.3	75	2	30-130/20
51-28-5	2,4-Dinitrophenol	ND		50	22.4	45	50	21.2	42	6	30-130/20
534-52-1	4,6-Dinitro-o-cresol	ND		50	26.1	52	50	23.5	47	10	30-130/20
95-48-7	2-Methylphenol	ND		50	34.0	68	50	34.6	69	2	30-130/20
	3&4-Methylphenol	ND		100	66.2	66	100	67.2	67	1	30-130/20
88-75-5	2-Nitrophenol	ND		50	39.7	79	50	40.7	81	2	30-130/20
100-02-7	4-Nitrophenol	ND		50	16.9	34	50	16.9	34	0	30-130/20
87-86-5	Pentachlorophenol	ND		50	41.1	82	50	42.0	84	2	30-130/20
108-95-2	Phenol	ND		50	16.0	32	50	17.3	35	8	30-130/20
95-95-4	2,4,5-Trichlorophenol	ND		50	40.1	80	50	41.6	83	4	30-130/20
88-06-2	2,4,6-Trichlorophenol	ND		50	39.6	79	50	42.1	84	6	30-130/20
62-53-3	Aniline	ND		50	25.3	51	50	27.4	55	8	40-140/20
101-55-3	4-Bromophenyl phenyl ether	ND		50	43.0	86	50	44.3	89	3	40-140/20
85-68-7	Butyl benzyl phthalate	ND		50	53.9	108	50	57.1	114	6	40-140/20
100-51-6	Benzyl Alcohol	ND		50	35.0	70	50	36.5	73	4	40-140/20
91-58-7	2-Chloronaphthalene	ND		50	41.1	82	50	44.2	88	7	40-140/20
106-47-8	4-Chloroaniline	ND		50	33.8	68	50	36.7	73	8	40-140/20
111-91-1	bis(2-Chloroethoxy)methane	ND		50	40.3	81	50	42.1	84	4	40-140/20
111-44-4	bis(2-Chloroethyl)ether	ND		50	40.6	81	50	43.7	87	7	40-140/20
108-60-1	bis(2-Chloroisopropyl)ether	ND		50	53.0	106	50	56.6	113	7	40-140/20
7005-72-3	4-Chlorophenyl phenyl ether	ND		50	39.3	79	50	41.8	84	6	40-140/20
122-66-7	1,2-Diphenylhydrazine	ND		50	41.2	82	50	44.0	88	7	40-140/20
121-14-2	2,4-Dinitrotoluene	ND		50	45.2	90	50	48.2	96	6	40-140/20
606-20-2	2,6-Dinitrotoluene	ND		50	45.8	92	50	48.6	97	6	40-140/20
91-94-1	3,3'-Dichlorobenzidine	ND		50	35.6	71	50	38.1	76	7	40-140/20
132-64-9	Dibenzofuran	ND		50	38.3	77	50	42.4	85	10	40-140/20
84-74-2	Di-n-butyl phthalate	ND		50	46.7	93	50	48.1	96	3	40-140/20
117-84-0	Di-n-octyl phthalate	ND		50	51.6	103	50	53.7	107	4	40-140/20
84-66-2	Diethyl phthalate	ND		50	43.7	87	50	48.4	97	10	40-140/20
131-11-3	Dimethyl phthalate	ND		50	44.1	88	50	48.2	96	9	40-140/20
117-81-7	bis(2-Ethylhexyl)phthalate	ND		50	57.9	116	50	60.8	122	5	40-140/20
118-74-1	Hexachlorobenzene	ND		50	41.5	83	50	43.5	87	5	40-140/20

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34267
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40190-MS	F76913.D	1	10/16/14	WK	10/14/14	OP40190	MSF3369
OP40190-MSD	F76914.D	1	10/16/14	WK	10/14/14	OP40190	MSF3369
MC34000-16	F76915.D	1	10/16/14	WK	10/14/14	OP40190	MSF3369

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34267-2, MC34267-3

CAS No.	Compound	MC34000-16 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
77-47-4	Hexachlorocyclopentadiene	ND		50	16.0	32* [a]	50	14.8	30* [a]	8	40-140/20
67-72-1	Hexachloroethane	ND		50	28.0	56	50	26.1	52	7	40-140/20
78-59-1	Isophorone	ND		50	37.7	75	50	40.4	81	7	40-140/20
88-74-4	2-Nitroaniline	ND		50	45.0	90	50	49.0	98	9	40-140/20
99-09-2	3-Nitroaniline	ND		50	43.3	87	50	46.2	92	6	40-140/20
100-01-6	4-Nitroaniline	ND		50	44.8	90	50	48.0	96	7	40-140/20
98-95-3	Nitrobenzene	ND		50	40.3	81	50	42.7	85	6	40-140/20
62-75-9	n-Nitrosodimethylamine	ND		50	28.5	57	50	30.9	62	8	40-140/20
621-64-7	N-Nitroso-di-n-propylamine	ND		50	43.7	87	50	46.2	92	6	40-140/20
86-30-6	N-Nitrosodiphenylamine	ND		50	41.6	83	50	43.8	88	5	40-140/20
110-86-1	Pyridine	ND		50	20.3	41	50	22.9	46	12	40-140/20

CAS No.	Surrogate Recoveries	MS	MSD	MC34000-16	Limits
367-12-4	2-Fluorophenol	47%	49%	49%	15-110%
4165-62-2	Phenol-d5	31%	34%	34%	15-110%
118-79-6	2,4,6-Tribromophenol	92%	93%	87%	15-110%
4165-60-0	Nitrobenzene-d5	75%	80%	77%	30-130%
321-60-8	2-Fluorobiphenyl	66%	71%	71%	30-130%
1718-51-0	Terphenyl-d14	97%	98%	101%	30-130%

(a) Outside control limits. Blank Spike meets program technical requirements.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34267
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40180-MS	I92224.D	1	10/15/14	WK	10/13/14	OP40180	MSI3437
OP40180-MSD	I92225.D	1	10/15/14	WK	10/13/14	OP40180	MSI3437
MC34000-11	I92226.D	1	10/15/14	WK	10/13/14	OP40180	MSI3437

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

MC34267-1

CAS No.	Compound	MC34000-11 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	ND		50	48.0	96	50	46.8	94	3	40-140/20
208-96-8	Acenaphthylene	ND		50	42.9	86	50	42.3	85	1	40-140/20
120-12-7	Anthracene	ND		50	48.1	96	50	47.7	95	1	40-140/20
56-55-3	Benzo(a)anthracene	ND		50	54.3	109	50	54.1	108	0	40-140/20
50-32-8	Benzo(a)pyrene	ND		50	51.4	103	50	51.0	102	1	40-140/20
205-99-2	Benzo(b)fluoranthene	ND		50	53.1	106	50	53.7	107	1	40-140/20
191-24-2	Benzo(g,h,i)perylene	ND		50	53.0	106	50	52.0	104	2	40-140/20
207-08-9	Benzo(k)fluoranthene	ND		50	50.6	101	50	48.9	98	3	40-140/20
218-01-9	Chrysene	ND		50	51.1	102	50	51.0	102	0	40-140/20
53-70-3	Dibenzo(a,h)anthracene	ND		50	53.1	106	50	52.8	106	1	40-140/20
206-44-0	Fluoranthene	ND		50	49.2	98	50	50.3	101	2	40-140/20
86-73-7	Fluorene	ND		50	48.0	96	50	46.4	93	3	40-140/20
193-39-5	Indeno(1,2,3-cd)pyrene	ND		50	52.2	104	50	51.7	103	1	40-140/20
90-12-0	1-Methylnaphthalene	ND		50	42.8	86	50	43.1	86	1	40-140/20
91-57-6	2-Methylnaphthalene	ND		50	42.7	85	50	42.9	86	0	40-140/20
85-01-8	Phenanthrene	ND		50	50.4	101	50	49.0	98	3	40-140/20
129-00-0	Pyrene	ND		50	48.1	96	50	47.5	95	1	40-140/20

CAS No.	Surrogate Recoveries	MS	MSD	MC34000-11	Limits
4165-60-0	Nitrobenzene-d5	91%	93%	87%	30-130%
321-60-8	2-Fluorobiphenyl	79%	82%	67%	30-130%
1718-51-0	Terphenyl-d14	97%	100%	97%	30-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34267
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40191-MS	I92256.D	1	10/16/14	WK	10/14/14	OP40191	MSI3438
OP40191-MSD	I92257.D	1	10/16/14	WK	10/14/14	OP40191	MSI3438
MC34000-17	I92258.D	1	10/16/14	WK	10/14/14	OP40191	MSI3438

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

MC34267-2, MC34267-3

CAS No.	Compound	MC34000-17 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	ND		50	42.8	86	50	45.4	91	6	40-140/20
208-96-8	Acenaphthylene	ND		50	38.8	78	50	40.8	82	5	40-140/20
120-12-7	Anthracene	ND		50	44.5	89	50	46.4	93	4	40-140/20
56-55-3	Benzo(a)anthracene	ND		50	51.5	103	50	53.0	106	3	40-140/20
50-32-8	Benzo(a)pyrene	ND		50	48.0	96	50	50.0	100	4	40-140/20
205-99-2	Benzo(b)fluoranthene	ND		50	48.9	98	50	53.5	107	9	40-140/20
191-24-2	Benzo(g,h,i)perylene	ND		50	50.4	101	50	52.1	104	3	40-140/20
207-08-9	Benzo(k)fluoranthene	ND		50	49.3	99	50	47.5	95	4	40-140/20
218-01-9	Chrysene	ND		50	48.6	97	50	50.1	100	3	40-140/20
53-70-3	Dibenzo(a,h)anthracene	ND		50	51.1	102	50	52.6	105	3	40-140/20
206-44-0	Fluoranthene	ND		50	46.4	93	50	48.0	96	3	40-140/20
86-73-7	Fluorene	ND		50	35.6	71	50	37.3	75	5	40-140/20
193-39-5	Indeno(1,2,3-cd)pyrene	ND		50	49.9	100	50	51.4	103	3	40-140/20
90-12-0	1-Methylnaphthalene	ND		50	40.1	80	50	42.2	84	5	40-140/20
91-57-6	2-Methylnaphthalene	ND		50	39.9	80	50	42.6	85	7	40-140/20
85-01-8	Phenanthrene	ND		50	45.5	91	50	48.3	97	6	40-140/20
129-00-0	Pyrene	ND		50	45.1	90	50	46.4	93	3	40-140/20

CAS No.	Surrogate Recoveries	MS	MSD	MC34000-17	Limits
4165-60-0	Nitrobenzene-d5	82%	87%	85%	30-130%
321-60-8	2-Fluorobiphenyl	74%	78%	79%	30-130%
1718-51-0	Terphenyl-d14	85%	87%	87%	30-130%

* = Outside of Control Limits.

Semivolatile Internal Standard Area Summary

Job Number: MC34267
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSF3368-CC3361	**Injection Date:**	10/15/14
Lab File ID:	F76861.D	**Injection Time:**	08:03
Instrument ID:	GCMSF	**Method:**	SW846 8270D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	57384	4.28	197693	5.33	134143	6.86	258606	8.15	345651	10.76	332367	12.48
Upper Limit [a]	114768	4.78	395386	5.83	268286	7.36	517212	8.65	691302	11.26	664734	12.98
Lower Limit [b]	28692	3.78	98847	4.83	67072	6.36	129303	7.65	172826	10.26	166184	11.98

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
ZZZZZZ	71665	4.28	246385	5.33	167113	6.86	325680	8.15	402373	10.76	392931	12.48
ZZZZZZ	69939	4.28	243337	5.33	165599	6.86	321743	8.15	398837	10.76	396894	12.48
ZZZZZZ	74647	4.28	263865	5.33	180720	6.86	354191	8.15	440678	10.75	427673	12.48
ZZZZZZ	74003	4.28	262556	5.33	180755	6.86	355107	8.15	446471	10.75	436502	12.48
ZZZZZZ	75438	4.28	262637	5.33	177433	6.86	345308	8.14	433375	10.75	422218	12.48
ZZZZZZ	72889	4.28	253755	5.33	176721	6.86	354658	8.15	474758	10.76	461866	12.48
ZZZZZZ	75845	4.28	258734	5.33	174739	6.86	340112	8.15	428577	10.75	423170	12.48
ZZZZZZ	69757	4.28	238519	5.33	164749	6.86	327277	8.14	413982	10.75	413611	12.47
OP40171-MB	70761	4.28	244248	5.33	162690	6.86	306689	8.14	368555	10.75	334803	12.47
OP40171-BS	73499	4.28	249690	5.33	162664	6.86	306043	8.14	375768	10.75	350384	12.47
ZZZZZZ	69623	4.28	238520	5.33	159514	6.86	302652	8.14	357078	10.75	337561	12.47
ZZZZZZ	72179	4.28	248752	5.33	164796	6.86	316512	8.14	375106	10.75	355677	12.47
OP40179-MB	66740	4.28	234406	5.33	162893	6.86	326327	8.14	425832	10.75	416353	12.47
OP40179-BS	66356	4.28	236002	5.33	159795	6.86	306699	8.14	412674	10.75	398064	12.47
OP40179-MS	67759	4.28	233134	5.33	154275	6.86	294111	8.14	380377	10.75	372789	12.47
OP40179-MSD	66607	4.28	233440	5.33	155801	6.86	299697	8.14	384513	10.75	374380	12.47
MC34000-10	65921	4.28	227306	5.33	152260	6.86	298225	8.14	364025	10.75	364457	12.47
ZZZZZZ	67599	4.28	240203	5.33	172815	6.86	339608	8.14	469336	10.76	504661	12.49
ZZZZZZ	76196	4.28	260271	5.33	189518	6.86	356497	8.14	437708	10.75	425482	12.47
MC34267-1	70308	4.28	251615	5.33	167733	6.86	327804	8.14	404871	10.75	405864	12.47
OP40178-MB	67752	4.27	230475	5.33	148304	6.86	289753	8.14	336590	10.75	333829	12.47
OP40178-BS	66330	4.28	228868	5.33	147311	6.86	273264	8.14	325835	10.75	312580	12.47
OP40178-MS	61027	4.27	205535	5.33	142595	6.86	288847	8.14	483695	10.76	617804	12.50
OP40178-MSD	64169	4.28	220697	5.33	153650	6.86	313593	8.14	604303	10.77	647198	12.53
MC34232-6	68378	4.28	235273	5.33	160665	6.86	326479	8.15	601888	10.77	656262	12.52
OP40210-MB	83338	4.28	288296	5.33	194903	6.86	385184	8.14	517420	10.75	565205	12.48
OP40210-LB	83338	4.28	288296	5.33	194903	6.86	385184	8.14	517420	10.75	565205	12.48
OP40210-BS	80711	4.28	279186	5.33	185298	6.86	357137	8.15	477505	10.76	517400	12.48
OP40210-MS	78813	4.28	273149	5.33	177454	6.86	345532	8.15	450674	10.75	485538	12.48
OP40210-MSD	75124	4.28	256926	5.33	173898	6.86	331957	8.15	440305	10.75	464855	12.48

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10

Semivolatile Internal Standard Area Summary

Job Number: MC34267
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSF3368-CC3361	**Injection Date:**	10/15/14
Lab File ID:	F76861.D	**Injection Time:**	08:03
Instrument ID:	GCMSF	**Method:**	SW846 8270D

Lab Sample ID	IS 1 AREA	IS 1 RT	IS 2 AREA	IS 2 RT	IS 3 AREA	IS 3 RT	IS 4 AREA	IS 4 RT	IS 5 AREA	IS 5 RT	IS 6 AREA	IS 6 RT

IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: MC34267
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSF3369-CC3361	**Injection Date:**	10/16/14
Lab File ID:	F76894.D	**Injection Time:**	07:57
Instrument ID:	GCMSF	**Method:**	SW846 8270D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	65919	4.25	225264	5.30	149969	6.83	289158	8.12	378850	10.72	374006	12.44
Upper Limit [a]	131838	4.75	450528	5.80	299938	7.33	578316	8.62	757700	11.22	748012	12.94
Lower Limit [b]	32960	3.75	112632	4.80	74985	6.33	144579	7.62	189425	10.22	187003	11.94

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
MC34241-1	80745	4.25	281996	5.30	185634	6.83	359758	8.12	442397	10.72	447428	12.44
ZZZZZZ	74411	4.25	258750	5.30	176157	6.83	341870	8.12	407518	10.72	402680	12.44
OP40201-MB	85308	4.25	291223	5.30	197093	6.83	379951	8.12	437471	10.72	412231	12.44
OP40201-BS	85781	4.25	296313	5.31	191111	6.83	347712	8.12	409833	10.72	381091	12.44
ZZZZZZ	75575	4.25	265690	5.30	174323	6.83	332405	8.12	378720	10.72	354087	12.44
ZZZZZZ	83775	4.25	287614	5.30	187208	6.83	346970	8.12	388792	10.72	364614	12.44
ZZZZZZ	81194	4.25	278593	5.30	187596	6.83	354504	8.12	399009	10.72	367307	12.44
ZZZZZZ	98815	4.25	350980	5.30	227604	6.83	418094	8.12	444426	10.72	417355	12.44
ZZZZZZ	70191	4.25	238108	5.30	157061	6.83	292436	8.11	334661	10.71	315913	12.43
OP40195-MB	75377	4.25	258724	5.30	172817	6.83	334241	8.12	412893	10.72	405373	12.44
OP40195-BS	78321	4.25	272941	5.30	176842	6.83	332801	8.12	416966	10.72	412111	12.44
OP40195-MS	72461	4.25	247990	5.30	163751	6.83	306575	8.12	392081	10.72	383571	12.44
OP40195-MSD	72687	4.25	252249	5.30	165088	6.83	309189	8.12	389643	10.72	386394	12.44
MC34000-18	71416	4.25	245445	5.30	162024	6.83	313936	8.12	380446	10.71	386290	12.43
ZZZZZZ	66726	4.25	228618	5.30	154085	6.83	299473	8.12	410818	10.71	355925	12.43
ZZZZZZ	64027	4.25	224171	5.30	153278	6.83	320493	8.11	370582	10.71	317778	12.43
OP40190-MB	70793	4.25	245478	5.30	166314	6.83	342068	8.12	426152	10.71	376345	12.43
OP40190-BS	69821	4.25	241439	5.30	165138	6.83	331106	8.12	420090	10.72	361436	12.44
OP40190-MS	69257	4.25	243247	5.30	165756	6.83	330047	8.12	416474	10.72	366916	12.44
OP40190-MSD	66569	4.25	228946	5.30	153813	6.83	313717	8.12	390479	10.72	344567	12.43
MC34000-16	66267	4.25	227048	5.30	155684	6.83	321630	8.11	386873	10.72	347951	12.43
MC34267-2	73231	4.25	255537	5.30	182052	6.83	346601	8.12	422424	10.71	364132	12.43
MC34267-3	70724	4.25	246305	5.30	172624	6.83	362458	8.12	450140	10.72	392654	12.44
ZZZZZZ	70681	4.25	245039	5.30	169170	6.83	342391	8.11	414290	10.71	368255	12.43
ZZZZZZ	67905	4.25	227420	5.30	156720	6.83	326058	8.12	394885	10.71	350019	12.43
ZZZZZZ	62524	4.25	208008	5.30	132244	6.83	261201	8.12	343469	10.71	288014	12.43

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: MC34267
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSF3369-CC3361	**Injection Date:**	10/16/14
Lab File ID:	F76894.D	**Injection Time:**	07:57
Instrument ID:	GCMSF	**Method:**	SW846 8270D

Lab Sample ID	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT

(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: MC34267
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSI3437-CC3427	**Injection Date:**	10/15/14
Lab File ID:	I92221.D	**Injection Time:**	08:17
Instrument ID:	GCMSI	**Method:**	SW846 8270D BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	302439	3.05	681720	4.08	396102	5.57	695363	6.83	584680	9.54	1148329	10.93
Upper Limit [a]	604878	3.55	1363440	4.58	792204	6.07	1390726	7.33	1169360	10.04	2296658	11.43
Lower Limit [b]	151220	2.55	340860	3.58	198051	5.07	347682	6.33	292340	9.04	574165	10.43

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP40180-MB	361388	3.05	820038	4.08	473688	5.57	829692	6.83	704041	9.54	1400322	10.92
OP40180-BS	344631	3.05	790580	4.08	455736	5.57	801153	6.83	670782	9.55	1340127	10.93
OP40180-MS	328423	3.05	758183	4.08	437430	5.57	774902	6.83	646778	9.55	1288423	10.93
OP40180-MSD	330041	3.05	760335	4.08	440767	5.57	784373	6.83	648425	9.55	1287080	10.93
MC34000-11	309530	3.05	701829	4.08	403129	5.57	711259	6.83	590007	9.54	1200457	10.92
ZZZZZZ	303301	3.05	688694	4.08	391449	5.57	700868	6.83	605413	9.57	1208596	10.96
MC34267-1	308680	3.05	711463	4.08	409272	5.57	712684	6.83	599200	9.55	1204521	10.92
ZZZZZZ	327976	3.05	744192	4.08	431751	5.57	748584	6.83	624898	9.54	1236408	10.92
OP40183-MB	400115	3.05	919137	4.08	527813	5.57	907213	6.83	727740	9.54	1393689	10.92
OP40183-BS	305465	3.06	709078	4.08	407034	5.57	719770	6.83	570015	9.55	1077292	10.92
OP40183-MS	290269	3.05	658429	4.08	376353	5.57	655356	6.83	498616	9.57	882483	10.98
OP40183-MSD	295801	3.05	669199	4.08	383589	5.57	659167	6.83	435210	9.59	686665	11.03
MC34000-12	287286	3.05	657482	4.08	375173	5.57	652574	6.83	450289	9.59	752044	11.02
ZZZZZZ	338423	3.06	774241	4.08	439721	5.58	746697	6.83	574987	9.55	1105101	10.93
ZZZZZZ	370149	3.05	842271	4.08	479646	5.58	813990	6.83	629517	9.55	1200025	10.93
ZZZZZZ	373481	3.05	854806	4.08	483220	5.57	826380	6.83	620232	9.55	1157303	10.93
ZZZZZZ	383050	3.05	872772	4.08	495121	5.57	843351	6.83	623308	9.55	1129024	10.93
ZZZZZZ	402921	3.05	915688	4.08	518534	5.57	877428	6.83	642732	9.55	1170584	10.93
ZZZZZZ	302994	3.05	701371	4.08	406273	5.57	699206	6.83	583936	9.55	1103086	10.92
OP40014-MB	341685	3.05	787626	4.08	458124	5.57	807143	6.83	659770	9.55	1276961	10.93
OP40014-BS	348189	3.05	800365	4.08	463805	5.58	813729	6.83	650981	9.55	1241780	10.93
ZZZZZZ	353180	3.05	816773	4.08	473160	5.57	816425	6.83	679654	9.55	1314236	10.93
ZZZZZZ	338121	3.05	777909	4.08	447860	5.57	788966	6.83	645359	9.54	1243745	10.93
ZZZZZZ	333801	3.05	759837	4.08	440969	5.57	769460	6.83	639518	9.54	1230636	10.92
ZZZZZZ	358520	3.05	815833	4.08	468185	5.57	807386	6.83	684882	9.55	1302791	10.92
ZZZZZZ	340008	3.05	769741	4.08	445584	5.57	773362	6.83	645021	9.54	1245276	10.92
ZZZZZZ	366828	3.05	834960	4.08	483933	5.57	824726	6.83	683458	9.54	1314385	10.92

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

Semivolatile Internal Standard Area Summary

Job Number: MC34267
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSI3437-CC3427	**Injection Date:**	10/15/14
Lab File ID:	I92221.D	**Injection Time:**	08:17
Instrument ID:	GCMSI	**Method:**	SW846 8270D BY SIM

Lab	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
Sample ID	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: MC34267
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSI3438-CC3427	**Injection Date:**	10/16/14
Lab File ID:	I92253.D	**Injection Time:**	08:33
Instrument ID:	GCMSI	**Method:**	SW846 8270D BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	249729	3.03	572330	4.06	335443	5.55	595475	6.80	496452	9.52	976445	10.90
Upper Limit [a]	499458	3.53	1144660	4.56	670886	6.05	1190950	7.30	992904	10.02	1952890	11.40
Lower Limit [b]	124865	2.53	286165	3.56	167722	5.05	297738	6.30	248226	9.02	488223	10.40

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP40191-MB	271952	3.03	624568	4.05	365459	5.55	638115	6.80	554432	9.52	1110964	10.90
OP40191-BS	273974	3.03	640717	4.06	371423	5.55	663374	6.81	557111	9.52	1098695	10.90
OP40191-MS	224917	3.03	522792	4.06	305307	5.55	540149	6.81	454910	9.52	905006	10.90
OP40191-MSD	258408	3.03	601450	4.06	350996	5.55	620797	6.81	524141	9.52	1040353	10.90
MC34000-17	190722	3.03	435413	4.05	253441	5.55	452547	6.80	377148	9.51	762491	10.89
MC34267-2	158227	3.03	363307	4.06	205683	5.55	370379	6.81	307367	9.51	620573	10.89
MC34267-3	156957	3.03	361412	4.05	208362	5.55	365849	6.80	309330	9.51	625184	10.89
ZZZZZZ	182754	3.03	424270	4.05	245276	5.55	428013	6.80	361308	9.51	724867	10.89
ZZZZZZ	136137	3.03	312855	4.05	182667	5.55	319483	6.79	264862	9.51	533715	10.89
ZZZZZZ	174542	3.03	401341	4.05	235927	5.55	419955	6.80	364184	9.51	720680	10.89
ZZZZZZ	179327	3.03	411293	4.05	239087	5.55	421019	6.79	351942	9.51	702773	10.89
ZZZZZZ	173612	3.03	394101	4.05	230227	5.55	407006	6.79	339681	9.51	675902	10.89
ZZZZZZ	190277	3.03	438149	4.05	255581	5.55	452105	6.80	379992	9.51	759634	10.89
ZZZZZZ	141956	3.03	324613	4.05	189496	5.55	330118	6.79	274455	9.51	544258	10.89
ZZZZZZ	148754	3.03	338474	4.05	196567	5.55	347944	6.79	290971	9.51	574807	10.89
ZZZZZZ	161370	3.03	367871	4.05	217637	5.55	373513	6.79	324184	9.51	647294	10.89
OP40186-MB	252082	3.03	582190	4.05	341512	5.55	606012	6.80	501536	9.51	967990	10.89
MSI3438-BS1	153291	3.02	351245	4.05	205450	5.55	364899	6.79	303780	9.51	594991	10.89
MSI3438-BS2	145463	3.02	331021	4.05	194503	5.55	340247	6.79	285387	9.51	561080	10.89
MSI3438-BS3	156754	3.02	360333	4.05	210902	5.55	372904	6.79	316070	9.51	624341	10.89
MSI3438-BS4	159410	3.03	364672	4.05	211521	5.55	377816	6.79	313680	9.51	612033	10.89
MSI3438-BS5	178632	3.03	415565	4.05	243150	5.55	433842	6.79	375230	9.51	747717	10.89

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Surrogate Recovery Summary

Job Number: MC34267
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Method: SW846 8270D **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
MC34267-1	F76882.D	50	33	106	86	68	105
MC34267-2	F76916.D	64	38	100	84	71	96
MC34267-3	F76917.D	52	36	95	78	70	93
OP40179-BS	F76875.D	51	36	107	83	76	101
OP40179-MB	F76874.D	49	32	98	78	57	100
OP40179-MS	F76876.D	49	34	107	83	75	103
OP40179-MSD	F76877.D	51	35	106	85	77	105
OP40190-BS	F76912.D	48	34	94	80	69	99
OP40190-MB	F76911.D	50	34	88	78	71	96
OP40190-MS	F76913.D	47	31	92	75	66	97
OP40190-MSD	F76914.D	49	34	93	80	71	98

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorophenol	15-110%
S2 = Phenol-d5	15-110%
S3 = 2,4,6-Tribromophenol	15-110%
S4 = Nitrobenzene-d5	30-130%
S5 = 2-Fluorobiphenyl	30-130%
S6 = Terphenyl-d14	30-130%

Semivolatile Surrogate Recovery Summary

Job Number: MC34267
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Method: SW846 8270D BY SIM **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
MC34267-1	I92229.D	84	72	97
MC34267-2	I92259.D	86	76	84
MC34267-3	I92260.D	84	79	82
OP40180-BS	I92223.D	92	81	97
OP40180-MB	I92222.D	85	63	94
OP40180-MS	I92224.D	91	79	97
OP40180-MSD	I92225.D	93	82	100
OP40191-BS	I92255.D	85	78	88
OP40191-MB	I92254.D	85	78	85
OP40191-MS	I92256.D	82	74	85
OP40191-MSD	I92257.D	87	78	87

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	30-130%
S2 = 2-Fluorobiphenyl	30-130%
S3 = Terphenyl-d14	30-130%

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries

Method Blank Summary

Job Number: MC34267
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40218-MB	BB59914.D	1	10/16/14	NK	10/15/14	OP40218	GBB3334

The QC reported here applies to the following samples: **Method:** SW846 8011

MC34267-1, MC34267-2, MC34267-3, MC34267-5

CAS No.	Compound	Result	RL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.015	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.015	ug/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	Bromofluorobenzene (S)	100%	36-173%
460-00-4	Bromofluorobenzene (S)	101%	36-173%

Blank Spike Summary

Job Number: MC34267
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40218-BS	BB59915.D	1	10/16/14	NK	10/15/14	OP40218	GBB3334

The QC reported here applies to the following samples: **Method:** SW846 8011

MC34267-1, MC34267-2, MC34267-3, MC34267-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
96-12-8	1,2-Dibromo-3-chloropropane	0.071	0.078	110	60-140
106-93-4	1,2-Dibromoethane	0.071	0.068	96	60-140

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	Bromofluorobenzene (S)	90%	36-173%
460-00-4	Bromofluorobenzene (S)	93%	36-173%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34267
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40218-MS	BB59916.D	1	10/16/14	NK	10/15/14	OP40218	GBB3334
OP40218-MSD	BB59917.D	1	10/16/14	NK	10/15/14	OP40218	GBB3334
MC34000-20	BB59918.D	1	10/16/14	NK	10/15/14	OP40218	GBB3334

The QC reported here applies to the following samples: **Method:** SW846 8011

MC34267-1, MC34267-2, MC34267-3, MC34267-5

CAS No.	Compound	MC34000-20 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
96-12-8	1,2-Dibromo-3-chloropropane	ND		0.071	0.082	115	0.071	0.081	114	1	64-141/29
106-93-4	1,2-Dibromoethane	ND		0.071	0.074	104	0.071	0.072	101	3	63-163/27

CAS No.	Surrogate Recoveries	MS	MSD	MC34000-20	Limits
460-00-4	Bromofluorobenzene (S)	75%	70%	68%	36-173%
460-00-4	Bromofluorobenzene (S)	75%	71%	68%	36-173%

* = Outside of Control Limits.

Volatile Surrogate Recovery Summary

Job Number: MC34267
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Method: SW846 8011 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]
MC34267-1	BB59919.D	70	78
MC34267-2	BB59920.D	53	86
MC34267-3	BB59921.D	66	76
MC34267-5	BB59922.D	73	77
OP40218-BS	BB59915.D	90	93
OP40218-MB	BB59914.D	100	101
OP40218-MS	BB59916.D	75	75
OP40218-MSD	BB59917.D	70	71

Surrogate Compounds	Recovery Limits
S1 = Bromofluorobenzene (S)	36-173%

(a) Recovery from GC signal #2
(b) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: MC34267
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	GBB3334-ICC3334	**Injection Date:**	10/16/14
Lab File ID:	BB59910.D	**Injection Time:**	09:22
Instrument ID:	GCBB	**Method:**	SW846 8011

	S1 [a] RT	S1 [b] RT
Check Std	3.45	3.46

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
OP40218-MB	BB59914.D	10/16/14	10:43	3.45	3.47
OP40218-BS	BB59915.D	10/16/14	11:01	3.45	3.46
OP40218-MS	BB59916.D	10/16/14	11:19	3.45	3.46
OP40218-MSD	BB59917.D	10/16/14	11:37	3.45	3.46
MC34000-20	BB59918.D	10/16/14	11:55	3.45	3.46
MC34267-1	BB59919.D	10/16/14	12:13	3.45	3.46
MC34267-2	BB59920.D	10/16/14	12:30	3.45	3.46
MC34267-3	BB59921.D	10/16/14	12:48	3.45	3.46
MC34267-5	BB59922.D	10/16/14	13:06	3.45	3.46
ZZZZZZ	BB59923.D	10/16/14	13:24	3.45	3.46

Surrogate Compounds

S1 = Bromofluorobenzene (S)

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

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Automated Report

Technical Report for

Shell Oil

URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana,

SGS Accutest Job Number: MC34289

Sampling Date: 10/13/14



Report to:

AECOM, INC.

Melissa.mansker@aecom.com

ATTN: Melissa Mansker

Total number of pages in report: 67

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

H. (Brad) Madadian
Lab Director

Client Service contact: Jeremy Vienneau 508-481-6200

Certifications: MA (M-MA136,SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) FL (E87579) NY (11791) NJ (MA926) PA (6801121) ND (R-188) CO (MA00136) MN (11546AA) NC (653) IL (002337) WI (399080220) DoD ELAP (L-A-B L2235)

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Test results relate only to samples analyzed.

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Unauthorized modification of this report is strictly prohibited.

SGS ACCUTEST

November 04, 2016

AECOM
1001 Highlands Plaza Drive West Suite 300
St. Louis, MO 63110

RE: SGS Accutest Job # MC34289

Dear Elizabeth Kunkel

As you are aware, SGS Accutest Inc. - Marlborough has been conducting an extensive review of data associated with some historical Gas Chromatography-Mass Spectroscopy volatiles analyses. As a result of this review it was determined that some revisions of the original test report for this job were needed. These corrections have been incorporated into the revised report.

Please be assured that corrective actions have been put in place to address this matter and prevent a recurrence.

We apologize for any inconvenience that this issue may have caused. Please don't hesitate to contact us if we can be of further assistance.

Sincerely,

H. (Brad) Madadian

Regional Laboratory Director
SGS Accutest Inc. - Marlborough

SGS ACCUTEST IS PART OF SGS, THE WORLD'S LEADING INSPECTION, VERIFICATION, TESTING AND CERTIFICATION COMPANY.

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Sample Summary

Shell Oil

Job No: MC34289

URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
MC34289-1	10/13/14	09:50	MM	10/14/14	AQ	Ground Water	P56-ROX-101314
MC34289-2	10/13/14	00:00	MM	10/14/14	AQ	Trip Blank Water	TB-ROX-101314-HCL
MC34289-3	10/13/14	00:00	MM	10/14/14	AQ	Trip Blank Water	TB-ROX-101314-ST

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: She O **Job No** MC34289

Site: URSMOSTL:Roxana 4Q 4 GW/ 2 562973 03004 900 South Centra **Report Date** /3/20 6 :09:44 PM

Samp e(s), 2 Tr p B ank(s) and 0 F e d B ank(s) were co ected on 0/ 3/20 4 and were rece ved at SGS Accutest New Eng and on 0/ 4/20 4 proper y preserved, at 0 8 Deg C and ntact These Samp es rece ved a job number of MC34289 A st ng of the Laboratory Samp e ID, C ent Samp e ID and dates of co ect on are presented n the Resu ts Summary Sect on of th s repo t - Ch orohexane, Benzeneth o , D benz(a,h)acr d ne, Indene and Qu no ne were searched n the brary search and reported on y f detect ons were found

Except as noted be ow, a method spec f ed ca brat ons and qua ty contro performance cr ter a were met for th s job For more nformat on, p ease refer to QC summary pages

Volatiles by GCMS By Method SW846 8260C

Matrix: AQ **Batch ID:** MSL39 4

- A samp es were ana yzed w th n the recommended method ho d ng t me
- Samp e(s) MC34462-6MS, MC34462-6MSD were used as the QC samp es nd cated
- A method b anks for th s batch meet method spec f c cr ter a
- B ank Sp ke Recove y(s) for 2-Hexanone, Acetone, D ch orod f uoromethane are outs de contro m ts
- Matr x Sp ke Recovery(s) for , , -Tr ch oroethane, 2,2-D ch oropropane, 2-Ch oroethy v ny ether, 2-Hexanone, Acetone, n-Buty benzene, n-Propy benzene, sec-Buty benzene, tert-Buty benzene, V ny Acetate are outs de contro m ts Outs de contro m ts due to poss b e matr x nterference
- Matr x Sp ke Dup cate Recovery(s) for 2,2-D ch oropropane, 2-Butanone (MEK), 2-Hexanone, Acetone, V ny Acetate are outs de contro m ts Probab e cause due to matr x nterference
- RPD(s) for MSD for 2-Ch oroethy v ny ether are outs de contro m ts for samp e MC34462-6MSD H gh RPD due to poss b e matr x nterference and/or samp e non-homogene ty
- Acro e n, 2-Hexanone, Acetone, Hexach orobutad ene: Cont nu ng Ca brat on Ver f cat on outs de of acceptance cr ter a Samp e resu t may be b ased ow
- Acro e n, D ch orod f uoromethane: In t a Ca brat on Ver f cat on outs de of acceptance cr ter a Samp e resu t may be b ased ow

Matrix: AQ **Batch ID:** MSL39 6

- A samp es were ana yzed w th n the recommended method ho d ng t me
- Samp e(s) MC3423 -7MS, MC3423 -7MSD were used as the QC samp es nd cated
- A method b anks for th s batch meet method spec f c cr ter a
- B ank Sp ke Recove y(s) for ,4-D oxane, V ny Acetate, 2-Hexanone, Acetone, D ch orod f uoromethane are outs de contro m ts
- Matr x Sp ke Recovery(s) for 2,2-D ch oropropane, 2-Ch oroethy v ny ether, 2-Hexanone, Acetone, Ch oroethane, V ny Acetate are outs de contro m ts Outs de contro m ts due to poss b e matr x nterference
- Matr x Sp ke Dup cate Recovery(s) for 2-Hexanone, 4-Methy -2-pentanone (MIBK), Acetone, m,p-Xy ene, Tetrach oroethene, V ny Acetate, 2-Butanone (MEK), Acro e n, D ch orod f uoromethane, Tr ch orof uoromethane, V ny ch or de are outs de contro m ts H gh RPD due to poss b e matr x nterference and/or samp e non-homogene ty
- RPD(s) for MSD for 2-Butanone (MEK), 2-Ch oroethy v ny ether, Acro e n, Bromomethane, Ch oroethane, Ch oromethane, D ch orod f uoromethane, Tr ch orof uoromethane, V ny ch or de are outs de contro m ts for samp e MC3423 -7MSD H gh RPD due to poss b e matr x nterference and/or samp e non-homogene ty
- MC3423 -7MS/MSD: E evated detect on m t due to m ted samp e vo ume
- MC3423 -7MS/MSD for V ny Acetate: Outs de contro m ts Assoc ated samp es are non-detect for th s compound
- Acro e n, ,3 D ch oropropane, 2-Hexanone, Acetone, Ac y on tr e, Bromoform, Carbon d su f de, Ch orobenzene, Ethy benzene, m,p-Xy ene, Methy ene brom de, 4-Methy -2-pentanone (MIBK, V ny ch or de, 2-Ch oroethy v ny ether: Cont nu ng Ca brat on Ver f cat on outs de of acceptance cr ter a Samp e resu t may be b ased ow
- MSL39 6-BS for V ny acetate, ,4-D oxane: Outs de contro m ts Assoc ated samp es are non-detect for th s compound
- D ch orod f uoromethane, Acro e n: In t a Ca brat on Ver f cat on outs de of acceptance cr ter a Samp e resu t may be b ased ow

Extractables by GCMS By Method SW846 8270D

Matrix: AQ **Batch ID:** OP40208

- A samp es were extracted w th n the recommended method ho d ng t me
- A samp es were ana yzed w th n the recommended method ho d ng t me
- Samp e(s) MC34000-7MS, MC34000-7MSD were used as the QC samp es nd cated
- Samp e(s) MC34289- have compound(s) repo ted w th a "B" qua f er, nd cat ng ana yte s found n the assoc ated method b ank
- B ank Sp ke Recove y(s) for Hexach orocyc opentad ene, Pyr d ne are outs de contro m ts
- Matr x Sp ke Recovery(s) for Hexach orocyc opentad ene, Pyr d ne are outs de contro m ts Probab e cause due to matr x nterference
- Matr x Sp ke Dup cate Recovery(s) for Hexach orocyc opentad ene, Pyr d ne are outs de contro m ts H gh RPD due to poss b e matr x nterference and/or samp e heterogene ty
- RPD(s) for MSD for Pyr d ne are outs de contro m ts for samp e OP40208-MSD H gh RPD due to poss b e matr x nterference and/or samp e heterogene ty

Extractables by GCMS By Method SW846 8270D BY SIM

Matrix: AQ **Batch ID:** OP40209

- A samp es were extracted w th n the recommended method ho d ng t me
- A samp es were ana yzed w th n the recommended method ho d ng t me
- A method b anks for th s batch meet method spec f c cr ter a
- Samp e(s) MC34000- 9MS, MC34000- 9MSD were used as the QC samp es nd cated

Volatiles by GC By Method SW846 8011

Matrix: AQ **Batch ID:** OP402 8

- A samp es were extracted w th n the recommended method ho d ng t me
- A samp es were ana yzed w th n the recommended method ho d ng t me
- A method b anks for th s batch meet method spec f c cr ter a
- Samp e(s) MC34000-20MS, MC34000-20MSD were used as the QC samp es nd cated

SGS Accutest New Eng and ce t f es that a ana ys s were performed w th n method spec f cat on It s further recommended that th s report to be used n ts ent rety The Laborato y D rector for SGS Accutest New Eng and or ass gnee as ver f ed by the s gnature on the cover page has author zed the re ease of th s report(MC34289)

Summary of Hits

Job Number: MC34289
Account: Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL
Collected: 10/13/14

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
MC34289-1	**P56-ROX-101314**					
Benzene		107	0.50	0.32	ug/l	SW846 8260C
n-Butylbenzene		6.2	5.0	1.1	ug/l	SW846 8260C
sec-Butylbenzene		4.0 J	5.0	0.42	ug/l	SW846 8260C
tert-Butylbenzene		1.2 J	5.0	0.39	ug/l	SW846 8260C
Ethylbenzene [a]		164	1.0	0.38	ug/l	SW846 8260C
Isopropylbenzene		64.5	5.0	0.35	ug/l	SW846 8260C
p-Isopropyltoluene		3.5 J	5.0	0.37	ug/l	SW846 8260C
Naphthalene		67.9	5.0	0.69	ug/l	SW846 8260C
n-Propylbenzene		70.9	5.0	0.49	ug/l	SW846 8260C
Toluene		18.3	1.0	0.33	ug/l	SW846 8260C
1,2,4-Trimethylbenzene		65.7	5.0	0.32	ug/l	SW846 8260C
1,3,5-Trimethylbenzene		19.4	5.0	0.38	ug/l	SW846 8260C
m,p-Xylene [a]		170	1.0	0.93	ug/l	SW846 8260C
o-Xylene		6.6	1.0	0.36	ug/l	SW846 8260C
Xylene (total) [a]		176	1.0	0.36	ug/l	SW846 8260C
Dibenzofuran		0.55 J	2.2	0.28	ug/l	SW846 8270D
Di-n-butyl phthalate		0.35 JB	5.4	0.19	ug/l	SW846 8270D
bis(2-Ethylhexyl)phthalate		1.0 J	2.2	0.36	ug/l	SW846 8270D
Acenaphthene		0.57	0.11	0.074	ug/l	SW846 8270D BY SIM
Acenaphthylene		0.11	0.11	0.053	ug/l	SW846 8270D BY SIM
Anthracene		0.12	0.11	0.099	ug/l	SW846 8270D BY SIM
Fluorene		0.41	0.11	0.11	ug/l	SW846 8270D BY SIM
1-Methylnaphthalene		23.5	2.2	0.54	ug/l	SW846 8270D BY SIM
2-Methylnaphthalene		29.6	2.2	0.54	ug/l	SW846 8270D BY SIM
Phenanthrene		1.5	0.054	0.014	ug/l	SW846 8270D BY SIM

MC34289-2 **TB-ROX-101314-HCL**

No hits reported in this sample.

MC34289-3 **TB-ROX-101314-ST**

No hits reported in this sample.

(a) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	P56-ROX-101314		
Lab Sample ID:	MC34289-1	**Date Sampled:**	10/13/14
Matrix:	AQ - Ground Water	**Date Received:**	10/14/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L87853.D	1	10/23/14	GK	n/a	n/a	MSL3916
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	10	2.5	ug/l	
107-02-8	Acrolein [b]	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile [a]	ND	5.0	2.1	ug/l	
71-43-2	Benzene	107	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform [a]	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	6.2	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	4.0	5.0	0.42	ug/l	J
98-06-6	tert-Butylbenzene	1.2	5.0	0.39	ug/l	J
75-15-0	Carbon disulfide [a]	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene [a]	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
110-75-8	2-Chloroethyl vinyl ether [a]	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane [b]	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P56-ROX-101314		
Lab Sample ID:	MC34289-1	**Date Sampled:**	10/13/14
Matrix:	AQ - Ground Water	**Date Received:**	10/14/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane [a]	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene [a]	164	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone [a]	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	64.5	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	3.5	5.0	0.37	ug/l	J
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIB [a]	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide [a]	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	67.9	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	70.9	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	18.3	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	65.7	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	19.4	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride [a]	ND	1.0	0.58	ug/l	
	m,p-Xylene [a]	170	1.0	0.93	ug/l	
95-47-6	o-Xylene	6.6	1.0	0.36	ug/l	
1330-20-7	Xylene (total) [a]	176	1.0	0.36	ug/l	

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P56-ROX-101314		
Lab Sample ID:	MC34289-1	**Date Sampled:**	10/13/14
Matrix:	AQ - Ground Water	**Date Received:**	10/14/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	116%		70-130%
2037-26-5	Toluene-D8	104%		70-130%
460-00-4	4-Bromofluorobenzene	127%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.
(b) Initial & Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P56-ROX-101314		
Lab Sample ID:	MC34289-1	**Date Sampled:**	10/13/14
Matrix:	AQ - Ground Water	**Date Received:**	10/14/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R40381.D	1	10/17/14	WK	10/15/14	OP40208	MSR1486
Run #2							

	Initial Volume	Final Volume
Run #1	930 ml	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	11	2.7	ug/l	
95-57-8	2-Chlorophenol	ND	5.4	0.33	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	11	0.89	ug/l	
120-83-2	2,4-Dichlorophenol	ND	11	0.43	ug/l	
105-67-9	2,4-Dimethylphenol	ND	11	0.60	ug/l	
51-28-5	2,4-Dinitrophenol	ND	22	2.7	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	2.1	ug/l	
95-48-7	2-Methylphenol	ND	11	0.24	ug/l	
	3&4-Methylphenol	ND	11	0.50	ug/l	
88-75-5	2-Nitrophenol	ND	11	3.1	ug/l	
100-02-7	4-Nitrophenol	ND	22	0.57	ug/l	
87-86-5	Pentachlorophenol	ND	11	1.2	ug/l	
108-95-2	Phenol	ND	5.4	0.32	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	11	0.40	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	11	0.19	ug/l	
62-53-3	Aniline	ND	11	0.69	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.4	0.51	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.4	0.57	ug/l	
100-51-6	Benzyl Alcohol	ND	11	2.4	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.4	0.34	ug/l	
106-47-8	4-Chloroaniline	ND	11	0.60	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.4	0.31	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.4	0.38	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.4	0.36	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.4	0.27	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.4	0.26	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	11	0.49	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	11	0.32	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.4	0.29	ug/l	
132-64-9	Dibenzofuran	0.55	2.2	0.28	ug/l	J
84-74-2	Di-n-butyl phthalate	0.35	5.4	0.19	ug/l	JB
117-84-0	Di-n-octyl phthalate	ND	5.4	0.30	ug/l	

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Report of Analysis

Client Sample ID:	P56-ROX-101314		
Lab Sample ID:	MC34289-1	**Date Sampled:**	10/13/14
Matrix:	AQ - Ground Water	**Date Received:**	10/14/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	5.4	0.22	ug/l	
131-11-3	Dimethyl phthalate	ND	5.4	0.37	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	2.2	0.36	ug/l	J
118-74-1	Hexachlorobenzene	ND	5.4	0.31	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	11	1.4	ug/l	
67-72-1	Hexachloroethane	ND	5.4	0.32	ug/l	
78-59-1	Isophorone	ND	5.4	0.48	ug/l	
88-74-4	2-Nitroaniline	ND	11	0.43	ug/l	
99-09-2	3-Nitroaniline	ND	11	1.5	ug/l	
100-01-6	4-Nitroaniline	ND	11	2.3	ug/l	
98-95-3	Nitrobenzene	ND	5.4	0.42	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.4	1.1	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.4	0.43	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.4	0.21	ug/l	
110-86-1	Pyridine	ND	11	0.55	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	46%		15-110%
4165-62-2	Phenol-d5	31%		15-110%
118-79-6	2,4,6-Tribromophenol	89%		15-110%
4165-60-0	Nitrobenzene-d5	76%		30-130%
321-60-8	2-Fluorobiphenyl	78%		30-130%
1718-51-0	Terphenyl-d14	91%		30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P56-ROX-101314		
Lab Sample ID:	MC34289-1	**Date Sampled:**	10/13/14
Matrix:	AQ - Ground Water	**Date Received:**	10/14/14
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I92294.D	1	10/17/14	WK	10/15/14	OP40209	MSI3439
Run #2							

	Initial Volume	Final Volume
Run #1	930 ml	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.57	0.11	0.074	ug/l	
208-96-8	Acenaphthylene	0.11	0.11	0.053	ug/l	
120-12-7	Anthracene	0.12	0.11	0.099	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.054	0.021	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.11	0.031	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.054	0.034	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.11	0.029	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.11	0.042	ug/l	
218-01-9	Chrysene	ND	0.11	0.026	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.11	0.034	ug/l	
206-44-0	Fluoranthene	ND	0.11	0.044	ug/l	
86-73-7	Fluorene	0.41	0.11	0.11	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.11	0.033	ug/l	
90-12-0	1-Methylnaphthalene	23.5	2.2	0.54	ug/l	
91-57-6	2-Methylnaphthalene	29.6	2.2	0.54	ug/l	
85-01-8	Phenanthrene	1.5	0.054	0.014	ug/l	
129-00-0	Pyrene	ND	0.11	0.041	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	79%		30-130%
321-60-8	2-Fluorobiphenyl	73%		30-130%
1718-51-0	Terphenyl-d14	80%		30-130%

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P56-ROX-101314		
Lab Sample ID:	MC34289-1	**Date Sampled:**	10/13/14
Matrix:	AQ - Ground Water	**Date Received:**	10/14/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB59923.D	1	10/16/14	NK	10/15/14	OP40218	GBB3334
Run #2							

	Initial Volume	Final Volume
Run #1	36.5 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.014	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.014	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	68%		36-173%
460-00-4	Bromofluorobenzene (S)	95%		36-173%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-ROX-101314-HCL		
Lab Sample ID:	MC34289-2	**Date Sampled:**	10/13/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/14/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L87803.D	1	10/22/14	GK	n/a	n/a	MSL3914
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	10	2.5	ug/l	
107-02-8	Acrolein [b]	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane [c]	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	

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RL = Reporting Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-ROX-101314-HCL		
Lab Sample ID:	MC34289-2	**Date Sampled:**	10/13/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/14/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene [a]	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone [a]	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-ROX-101314-HCL		
Lab Sample ID:	MC34289-2	**Date Sampled:**	10/13/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/14/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		70-130%
2037-26-5	Toluene-D8	97%		70-130%
460-00-4	4-Bromofluorobenzene	123%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.
(b) Initial & Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.
(c) Initial Calibration Verification outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-ROX-101314-ST		
Lab Sample ID:	MC34289-3	**Date Sampled:**	10/13/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/14/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB59925.D	1	10/16/14	NK	10/15/14	OP40218	GBB3334
Run #2							

	Initial Volume	Final Volume
Run #1	36.4 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.014	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.014	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	68%		36-173%
460-00-4	Bromofluorobenzene (S)	74%		36-173%

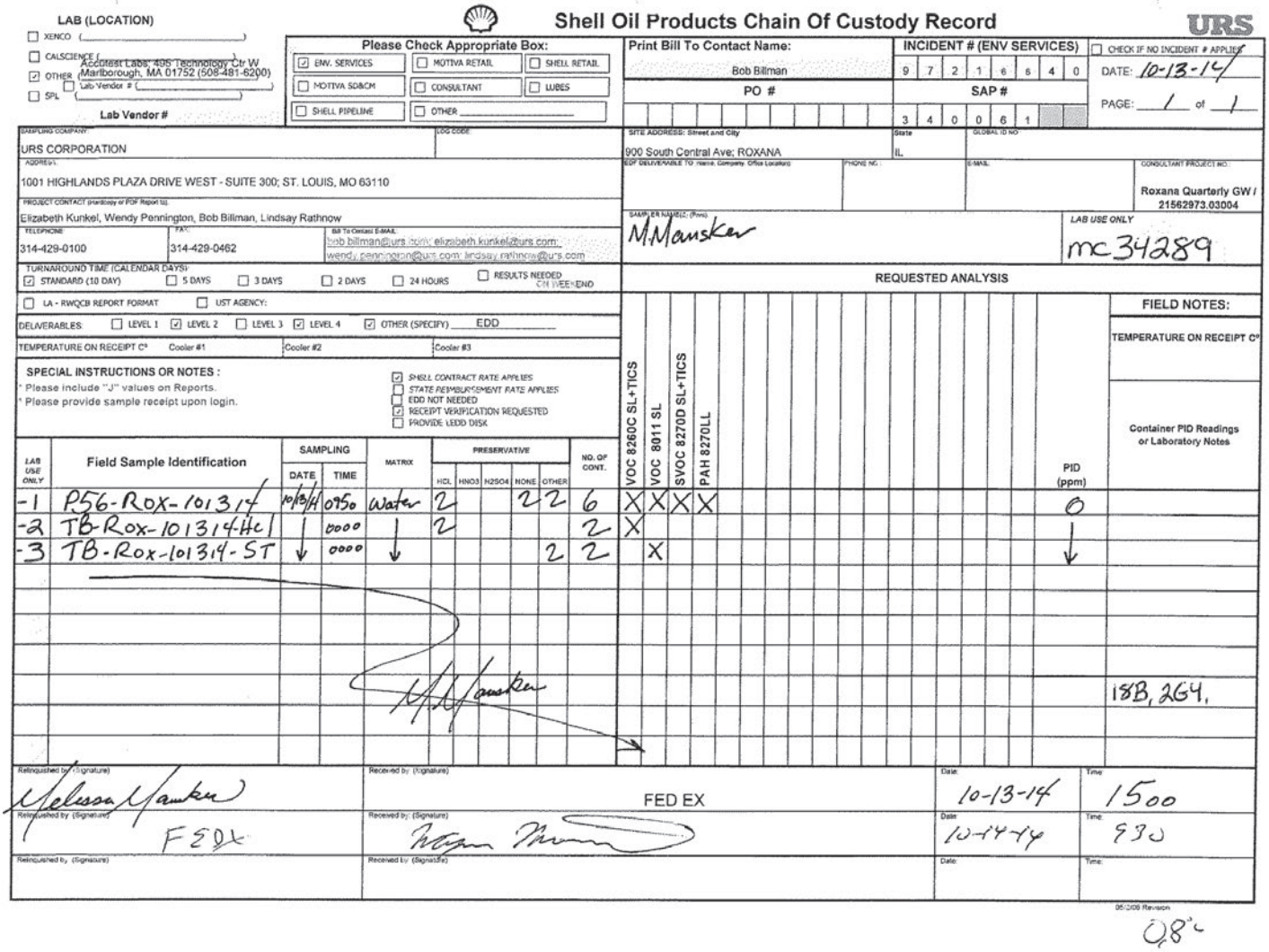
ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody



Shell Oil Products Chain Of Custody Record

URS

LAB (LOCATION)
- ☐ XENCO ( )
- ☐ CALSCIENCE ( )
- ☑ OTHER (Accutest Labs; 495 Technology Ctr W Marlborough, MA 01752 (508-481-6200))
- ☐ Lab Vendor # ( )
- ☐ SPL ( )

Lab Vendor #

Please Check Appropriate Box:
- ☑ ENV. SERVICES
- ☐ MOTIVA RETAIL
- ☐ SHELL RETAIL
- ☐ MOTIVA SD&CM
- ☐ CONSULTANT
- ☐ LUBES
- ☐ SHELL PIPELINE
- ☐ OTHER

Print Bill To Contact Name: Bob Billman

PO #

INCIDENT # (ENV SERVICES) 9 7 2 1 6 6 4 0

SAP # 3 4 0 0 6 1

☐ CHECK IF NO INCIDENT # APPLIES

DATE: 10-13-14

PAGE: 1 of 1

SAMPLING COMPANY: URS CORPORATION

LOG CODE:

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA

State: IL

GLOBAL ID NO:

ADDRESS: 1001 HIGHLANDS PLAZA DRIVE WEST - SUITE 300; ST. LOUIS, MO 63110

EDF DELIVERABLE TO: (name, Company, Office Location)

PHONE NO.:

E-MAIL:

CONSULTANT PROJECT NO.: Roxana Quarterly GW / 21562973.03004

PROJECT CONTACT (hardcopy or PDF Report to): Elizabeth Kunkel, Wendy Pennington, Bob Billman, Lindsay Rathnow

TELEPHONE: 314-429-0100

FAX: 314-429-0462

Bill To Contact E-MAIL: bob.billman@urs.com; elizabeth.kunkel@urs.com; wendy.pennington@urs.com; lindsay.rathnow@urs.com

SAMPLER NAME(S) (Print): M.Mansker

LAB USE ONLY: mc34289

TURNAROUND TIME (CALENDAR DAYS): ☑ STANDARD (10 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT ☐ UST AGENCY:

DELIVERABLES: ☐ LEVEL 1 ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) EDD

TEMPERATURE ON RECEIPT C° Cooler #1 Cooler #2 Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :
- Please include "J" values on Reports.
- Please provide sample receipt upon login.

- ☑ SHELL CONTRACT RATE APPLIES
- ☐ STATE REIMBURSEMENT RATE APPLIES
- ☐ EDD NOT NEEDED
- ☑ RECEIPT VERIFICATION REQUESTED
- ☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS

FIELD NOTES:

TEMPERATURE ON RECEIPT C°

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260C SL+TICS	VOC 8011 SL	SVOC 8270D SL+TICS	PAH 8270LL	PID (ppm)	Container PID Readings or Laboratory Notes
-1	P56-Rox-101314	10/13/14	0950	Water	2			2	2	6	X	X	X	X	0	
-2	TB-Rox-101314-HCl	↓	0000	↓	2					2	X				↓	
-3	TB-Rox-101314-ST	↓	0000	↓					2	2		X			↓	
																18B, 2G4,

M.Mansker

Relinquished by (Signature)	Received by (Signature)	Date	Time
Melissa Mansker	FED EX	10-13-14	1500
FEDX	[signature]	10-14-14	930

05/2/06 Revision

0.8°C

MC34289: Chain of Custody
Page 1 of 2

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: MC34289 **Client:** URS **Project:** 900 SOUTH CENTRAL

Date / Time Received: 10/14/2014 9:30:00 AM **Delivery Method:** **Airbill #'s:**

Cooler Temps (Initial/Adjusted): #1: (0.8/0.8);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Thermometer D:	G1;		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control_Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☑		☐	☐
2. Trip Blank listed on COC:	☑		☐	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

Accutest Laboratories
V:(508) 481-6200

495 Technology Center West, Bldg One
F: (508) 481-7753

Marlborough, MA 01752
www/accutest.com

Internal Sample Tracking Chronicle

Shell Oil

Job No: MC34289

URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC34289-1 Collected: 13-OCT-14 09:50 By: MM Received: 14-OCT-14 By: P56-ROX-101314						
MC34289-1	SW846 8011	16-OCT-14 13:24	NK	15-OCT-14	NE	V8011SL
MC34289-1	SW846 8270D BY SIM	17-OCT-14 10:24	WK	15-OCT-14	PA	B8270SIMSL
MC34289-1	SW846 8270D	17-OCT-14 14:33	WK	15-OCT-14	PA	AB8270SL+
MC34289-1	SW846 8260C	23-OCT-14 21:19	GK			V8260SL+
MC34289-2 Collected: 13-OCT-14 00:00 By: MM Received: 14-OCT-14 By: TB-ROX-101314-HCL						
MC34289-2	SW846 8260C	22-OCT-14 19:41	GK			V8260SL+
MC34289-3 Collected: 13-OCT-14 00:00 By: MM Received: 14-OCT-14 By: TB-ROX-101314-ST						
MC34289-3	SW846 8011	16-OCT-14 14:00	NK	15-OCT-14	NE	V8011SL

SGS Accutest Internal Chain of Custody

Job Number: MC34289
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL
Received: 10/14/14

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC34289-1.1	Walk In Ref #22	Alireza Zeighami	10/15/14 11:03	Retrieve from Storage
MC34289-1.1	Alireza Zeighami		10/15/14 11:04	Depleted
MC34289-1.3	VOC Ref #2	Gary Krasinski	10/22/14 11:56	Retrieve from Storage
MC34289-1.3	Gary Krasinski	GCMSL	10/22/14 11:56	Load on Instrument
MC34289-1.3	GCMSL	Gary Krasinski	10/23/14 12:33	Unload from Instrument
MC34289-1.3	Gary Krasinski	VOC Ref #2	10/23/14 12:34	Return to Storage
MC34289-1.3	Scott Parsick		12/18/14 12:16	Disposed
MC34289-1.4	VOC Ref #2	Gary Krasinski	10/23/14 14:44	Retrieve from Storage
MC34289-1.4	Gary Krasinski	GCMSL	10/23/14 14:44	Load on Instrument
MC34289-1.4	GCMSL	Gary Krasinski	10/24/14 10:33	Unload from Instrument
MC34289-1.4	Gary Krasinski	VOC Ref #2	10/24/14 10:33	Return to Storage
MC34289-1.4	Scott Parsick		12/18/14 12:16	Disposed
MC34289-1.5	VOC Ref #2	Marc Tahtamoni	10/15/14 14:33	Retrieve from Storage
MC34289-1.5	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34289-2.2	VOC Ref #2	Gary Krasinski	10/22/14 11:56	Retrieve from Storage
MC34289-2.2	Gary Krasinski	GCMSL	10/22/14 11:56	Load on Instrument
MC34289-2.2	GCMSL	Gary Krasinski	10/23/14 12:33	Unload from Instrument
MC34289-2.2	Gary Krasinski	VOC Ref #2	10/23/14 12:34	Return to Storage
MC34289-2.2	Scott Parsick		12/18/14 12:16	Disposed
MC34289-3.1	VOC Ref #2	Marc Tahtamoni	10/15/14 14:33	Retrieve from Storage
MC34289-3.1	Marc Tahtamoni		11/11/14 17:36	Depleted

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: MC34289
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSL3914-MB	L87788.D	1	10/22/14	GK	n/a	n/a	MSL3914

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34289-2

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	10	ug/l	
107-02-8	Acrolein	ND	25	ug/l	
107-13-1	Acrylonitrile	ND	5.0	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
74-97-5	Bromochloromethane	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	

Method Blank Summary

Job Number: MC34289
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSL3914-MB	L87788.D	1	10/22/14	GK	n/a	n/a	MSL3914

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34289-2

CAS No.	Compound	Result	RL	Units	Q
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	1.0	ug/l	

Method Blank Summary

Job Number: MC34289
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSL3914-MB	L87788.D	1	10/22/14	GK	n/a	n/a	MSL3914

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34289-2

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	102%	70-130%
2037-26-5	Toluene-D8	101%	70-130%
460-00-4	4-Bromofluorobenzene	124%	70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Method Blank Summary

Job Number: MC34289
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSL3916-MB	L87840.D	1	10/23/14	GK	n/a	n/a	MSL3916

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34289-1

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	10	ug/l	
107-02-8	Acrolein	ND	25	ug/l	
107-13-1	Acrylonitrile	ND	5.0	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
74-97-5	Bromochloromethane	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	

Method Blank Summary

Job Number: MC34289
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSL3916-MB	L87840.D	1	10/23/14	GK	n/a	n/a	MSL3916

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34289-1

CAS No.	Compound	Result	RL	Units	Q
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	1.0	ug/l	

Method Blank Summary

Job Number: MC34289
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSL3916-MB	L87840.D	1	10/23/14	GK	n/a	n/a	MSL3916

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34289-1

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	102%	70-130%
2037-26-5	Toluene-D8	100%	70-130%
460-00-4	4-Bromofluorobenzene	117%	70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Blank Spike Summary

Job Number: MC34289
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSL3914-BS	L87785.D	1	10/22/14	GK	n/a	n/a	MSL3914

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34289-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	30.3	61* [a]	70-130
107-02-8	Acrolein	250	184	74	70-130
107-13-1	Acrylonitrile	50	36.0	72	70-130
71-43-2	Benzene	50	46.5	93	70-130
108-86-1	Bromobenzene	50	51.5	103	70-130
74-97-5	Bromochloromethane	50	50.3	101	70-130
75-27-4	Bromodichloromethane	50	51.3	103	70-130
75-25-2	Bromoform	50	39.7	79	70-130
74-83-9	Bromomethane	50	53.2	106	70-130
78-93-3	2-Butanone (MEK)	50	40.0	80	70-130
104-51-8	n-Butylbenzene	50	56.0	112	70-130
135-98-8	sec-Butylbenzene	50	56.4	113	70-130
98-06-6	tert-Butylbenzene	50	57.5	115	70-130
75-15-0	Carbon disulfide	50	46.2	92	70-130
56-23-5	Carbon tetrachloride	50	46.2	92	70-130
108-90-7	Chlorobenzene	50	41.0	82	70-130
75-00-3	Chloroethane	50	56.9	114	70-130
110-75-8	2-Chloroethyl vinyl ether	50	50.6	101	70-130
67-66-3	Chloroform	50	56.8	114	70-130
74-87-3	Chloromethane	50	52.1	104	70-130
95-49-8	o-Chlorotoluene	50	58.0	116	70-130
106-43-4	p-Chlorotoluene	50	54.4	109	70-130
124-48-1	Dibromochloromethane	50	46.2	92	70-130
95-50-1	1,2-Dichlorobenzene	50	48.2	96	70-130
541-73-1	1,3-Dichlorobenzene	50	50.1	100	70-130
106-46-7	1,4-Dichlorobenzene	50	46.6	93	70-130
75-71-8	Dichlorodifluoromethane	50	34.0	68* [a]	70-130
75-34-3	1,1-Dichloroethane	50	56.2	112	70-130
107-06-2	1,2-Dichloroethane	50	54.3	109	70-130
75-35-4	1,1-Dichloroethene	50	51.1	102	70-130
156-59-2	cis-1,2-Dichloroethene	50	52.2	104	70-130
156-60-5	trans-1,2-Dichloroethene	50	49.8	100	70-130
78-87-5	1,2-Dichloropropane	50	47.5	95	70-130
142-28-9	1,3-Dichloropropane	50	41.5	83	70-130
594-20-7	2,2-Dichloropropane	50	48.7	97	70-130
563-58-6	1,1-Dichloropropene	50	49.5	99	70-130

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34289
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSL3914-BS	L87785.D	1	10/22/14	GK	n/a	n/a	MSL3914

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34289-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-01-5	cis-1,3-Dichloropropene	50	46.1	92	70-130
10061-02-6	trans-1,3-Dichloropropene	50	45.0	90	70-130
123-91-1	1,4-Dioxane	125	115	92	70-130
97-63-2	Ethyl methacrylate	50	41.1	82	77-137
100-41-4	Ethylbenzene	50	42.1	84	70-130
87-68-3	Hexachlorobutadiene	50	44.6	89	70-130
591-78-6	2-Hexanone	50	30.2	60* [a]	70-130
98-82-8	Isopropylbenzene	50	57.2	114	70-130
99-87-6	p-Isopropyltoluene	50	52.2	104	70-130
1634-04-4	Methyl Tert Butyl Ether	50	46.5	93	70-130
108-10-1	4-Methyl-2-pentanone (MIBK)	50	37.7	75	70-130
74-95-3	Methylene bromide	50	44.9	90	70-130
75-09-2	Methylene chloride	50	48.9	98	70-130
91-20-3	Naphthalene	50	56.9	114	70-130
103-65-1	n-Propylbenzene	50	57.9	116	70-130
100-42-5	Styrene	50	44.1	88	70-130
630-20-6	1,1,1,2-Tetrachloroethane	50	45.5	91	70-130
79-34-5	1,1,2,2-Tetrachloroethane	50	47.1	94	70-130
127-18-4	Tetrachloroethene	50	41.8	84	70-130
108-88-3	Toluene	50	46.0	92	70-130
87-61-6	1,2,3-Trichlorobenzene	50	48.0	96	70-130
120-82-1	1,2,4-Trichlorobenzene	50	46.6	93	70-130
71-55-6	1,1,1-Trichloroethane	50	56.7	113	70-130
79-00-5	1,1,2-Trichloroethane	50	46.0	92	70-130
79-01-6	Trichloroethene	50	45.9	92	70-130
75-69-4	Trichlorofluoromethane	50	46.3	93	70-130
96-18-4	1,2,3-Trichloropropane	50	51.1	102	70-130
95-63-6	1,2,4-Trimethylbenzene	50	55.3	111	70-130
108-67-8	1,3,5-Trimethylbenzene	50	52.4	105	70-130
108-05-4	Vinyl Acetate	50	65.1	130	70-130
75-01-4	Vinyl chloride	50	41.0	82	70-130
	m,p-Xylene	100	80.0	80	70-130
95-47-6	o-Xylene	50	42.3	85	70-130
1330-20-7	Xylene (total)	150	122	81	70-130

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34289
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSL3914-BS	L87785.D	1	10/22/14	GK	n/a	n/a	MSL3914

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34289-2

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	112%	70-130%
2037-26-5	Toluene-D8	100%	70-130%
460-00-4	4-Bromofluorobenzene	124%	70-130%

(a) Outside control limits. Blank Spike meets program technical requirements.

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34289
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSL3916-BS	L87837.D	1	10/23/14	GK	n/a	n/a	MSL3916

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34289-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	31.3	63* [a]	70-130
107-02-8	Acrolein	250	176	70	70-130
107-13-1	Acrylonitrile	50	38.5	77	70-130
71-43-2	Benzene	50	42.8	86	70-130
108-86-1	Bromobenzene	50	44.3	89	70-130
74-97-5	Bromochloromethane	50	41.8	84	70-130
75-27-4	Bromodichloromethane	50	46.3	93	70-130
75-25-2	Bromoform	50	38.5	77	70-130
74-83-9	Bromomethane	50	45.7	91	70-130
78-93-3	2-Butanone (MEK)	50	40.5	81	70-130
104-51-8	n-Butylbenzene	50	52.0	104	70-130
135-98-8	sec-Butylbenzene	50	48.7	97	70-130
98-06-6	tert-Butylbenzene	50	50.9	102	70-130
75-15-0	Carbon disulfide	50	39.8	80	70-130
56-23-5	Carbon tetrachloride	50	42.3	85	70-130
108-90-7	Chlorobenzene	50	39.3	79	70-130
75-00-3	Chloroethane	50	49.8	100	70-130
110-75-8	2-Chloroethyl vinyl ether	50	36.0	72	70-130
67-66-3	Chloroform	50	49.4	99	70-130
74-87-3	Chloromethane	50	50.8	102	70-130
95-49-8	o-Chlorotoluene	50	49.6	99	70-130
106-43-4	p-Chlorotoluene	50	48.0	96	70-130
124-48-1	Dibromochloromethane	50	45.2	90	70-130
95-50-1	1,2-Dichlorobenzene	50	43.1	86	70-130
541-73-1	1,3-Dichlorobenzene	50	42.8	86	70-130
106-46-7	1,4-Dichlorobenzene	50	41.2	82	70-130
75-71-8	Dichlorodifluoromethane	50	32.2	64* [a]	70-130
75-34-3	1,1-Dichloroethane	50	49.3	99	70-130
107-06-2	1,2-Dichloroethane	50	50.3	101	70-130
75-35-4	1,1-Dichloroethene	50	45.2	90	70-130
156-59-2	cis-1,2-Dichloroethene	50	45.8	92	70-130
156-60-5	trans-1,2-Dichloroethene	50	42.9	86	70-130
78-87-5	1,2-Dichloropropane	50	42.0	84	70-130
142-28-9	1,3-Dichloropropane	50	39.2	78	70-130
594-20-7	2,2-Dichloropropane	50	60.6	121	70-130
563-58-6	1,1-Dichloropropene	50	45.8	92	70-130

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34289
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSL3916-BS	L87837.D	1	10/23/14	GK	n/a	n/a	MSL3916

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34289-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-01-5	cis-1,3-Dichloropropene	50	44.2	88	70-130
10061-02-6	trans-1,3-Dichloropropene	50	43.6	87	70-130
123-91-1	1,4-Dioxane	125	238	190* [b]	70-130
97-63-2	Ethyl methacrylate	50	40.1	80	77-137
100-41-4	Ethylbenzene	50	39.8	80	70-130
87-68-3	Hexachlorobutadiene	50	41.3	83	70-130
591-78-6	2-Hexanone	50	31.7	63* [a]	70-130
98-82-8	Isopropylbenzene	50	49.2	98	70-130
99-87-6	p-Isopropyltoluene	50	46.0	92	70-130
1634-04-4	Methyl Tert Butyl Ether	50	44.2	88	70-130
108-10-1	4-Methyl-2-pentanone (MIBK)	50	36.4	73	70-130
74-95-3	Methylene bromide	50	39.6	79	70-130
75-09-2	Methylene chloride	50	42.5	85	70-130
91-20-3	Naphthalene	50	51.8	104	70-130
103-65-1	n-Propylbenzene	50	50.3	101	70-130
100-42-5	Styrene	50	42.4	85	70-130
630-20-6	1,1,1,2-Tetrachloroethane	50	41.7	83	70-130
79-34-5	1,1,2,2-Tetrachloroethane	50	43.6	87	70-130
127-18-4	Tetrachloroethene	50	40.4	81	70-130
108-88-3	Toluene	50	43.2	86	70-130
87-61-6	1,2,3-Trichlorobenzene	50	42.0	84	70-130
120-82-1	1,2,4-Trichlorobenzene	50	43.8	88	70-130
71-55-6	1,1,1-Trichloroethane	50	50.2	100	70-130
79-00-5	1,1,2-Trichloroethane	50	41.1	82	70-130
79-01-6	Trichloroethene	50	40.8	82	70-130
75-69-4	Trichlorofluoromethane	50	43.8	88	70-130
96-18-4	1,2,3-Trichloropropane	50	47.8	96	70-130
95-63-6	1,2,4-Trimethylbenzene	50	48.3	97	70-130
108-67-8	1,3,5-Trimethylbenzene	50	45.6	91	70-130
108-05-4	Vinyl Acetate	50	88.8	178* [b]	70-130
75-01-4	Vinyl chloride	50	37.8	76	70-130
	m,p-Xylene	100	78.0	78	70-130
95-47-6	o-Xylene	50	41.0	82	70-130
1330-20-7	Xylene (total)	150	119	79	70-130

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34289
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSL3916-BS	L87837.D	1	10/23/14	GK	n/a	n/a	MSL3916

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34289-1

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	106%	70-130%
2037-26-5	Toluene-D8	103%	70-130%
460-00-4	4-Bromofluorobenzene	122%	70-130%

(a) Outside control limits. Blank Spike meets program technical requirements.
(b) Outside control limits. Associated samples are non-detect for this compound.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34289
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34462-6MS	L87796.D	5	10/22/14	GK	n/a	n/a	MSL3914
MC34462-6MSD	L87797.D	5	10/22/14	GK	n/a	n/a	MSL3914
MC34462-6	L87792.D	1	10/22/14	GK	n/a	n/a	MSL3914

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34289-2

CAS No.	Compound	MC34462-6 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		250	104	42* [a]	250	76.8	31* [a]	30	70-130/30
107-02-8	Acrolein	ND		1250	1280	102	1250	1050	84	20	70-130/30
107-13-1	Acrylonitrile	ND		250	238	95	250	219	88	8	70-130/30
71-43-2	Benzene	0.38		250	278	111	250	261	104	6	70-130/30
108-86-1	Bromobenzene	ND		250	301	120	250	263	105	13	70-130/30
74-97-5	Bromochloromethane	ND		250	279	112	250	254	102	9	70-130/30
75-27-4	Bromodichloromethane	ND		250	303	121	250	274	110	10	70-130/30
75-25-2	Bromoform	ND		250	244	98	250	211	84	15	70-130/30
74-83-9	Bromomethane	ND		250	300	120	250	282	113	6	70-130/30
78-93-3	2-Butanone (MEK)	ND		250	204	82	250	158	63* [a]	25	70-130/30
104-51-8	n-Butylbenzene	ND		250	338	135* [a]	250	313	125	8	70-130/30
135-98-8	sec-Butylbenzene	ND		250	330	132* [a]	250	296	118	11	70-130/30
98-06-6	tert-Butylbenzene	ND		250	339	136* [a]	250	308	123	10	70-130/30
75-15-0	Carbon disulfide	ND		250	264	106	250	252	101	5	70-130/30
56-23-5	Carbon tetrachloride	ND		250	286	114	250	263	105	8	70-130/30
108-90-7	Chlorobenzene	ND		250	240	96	250	222	89	8	70-130/30
75-00-3	Chloroethane	ND		250	326	130	250	281	112	15	70-130/30
110-75-8	2-Chloroethyl vinyl ether	ND		250	355	142* [a]	250	217	87	48* [b]	70-130/30
67-66-3	Chloroform	ND		250	318	127	250	290	116	9	70-130/30
74-87-3	Chloromethane	ND		250	303	121	250	285	114	6	70-130/30
95-49-8	o-Chlorotoluene	ND		250	326	130	250	298	119	9	70-130/30
106-43-4	p-Chlorotoluene	ND		250	322	129	250	290	116	10	70-130/30
124-48-1	Dibromochloromethane	ND		250	261	104	250	239	96	9	70-130/30
95-50-1	1,2-Dichlorobenzene	ND		250	271	108	250	253	101	7	70-130/30
541-73-1	1,3-Dichlorobenzene	ND		250	286	114	250	253	101	12	70-130/30
106-46-7	1,4-Dichlorobenzene	ND		250	273	109	250	249	100	9	70-130/30
75-71-8	Dichlorodifluoromethane	ND		250	212	85	250	184	74	14	70-130/30
75-34-3	1,1-Dichloroethane	ND		250	312	125	250	289	116	8	70-130/30
107-06-2	1,2-Dichloroethane	ND		250	320	128	250	297	119	7	70-130/30
75-35-4	1,1-Dichloroethene	ND		250	298	119	250	274	110	8	70-130/30
156-59-2	cis-1,2-Dichloroethene	ND		250	297	119	250	270	108	10	70-130/30
156-60-5	trans-1,2-Dichloroethene	ND		250	285	114	250	264	106	8	70-130/30
78-87-5	1,2-Dichloropropane	ND		250	266	106	250	246	98	8	70-130/30
142-28-9	1,3-Dichloropropane	ND		250	242	97	250	216	86	11	70-130/30
594-20-7	2,2-Dichloropropane	ND		250	372	149* [a]	250	333	133* [a]	11	70-130/30
563-58-6	1,1-Dichloropropene	ND		250	301	120	250	281	112	7	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34289
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34462-6MS	L87796.D	5	10/22/14	GK	n/a	n/a	MSL3914
MC34462-6MSD	L87797.D	5	10/22/14	GK	n/a	n/a	MSL3914
MC34462-6	L87792.D	1	10/22/14	GK	n/a	n/a	MSL3914

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34289-2

CAS No.	Compound	MC34462-6 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-01-5	cis-1,3-Dichloropropene	ND		250	278	111	250	260	104	7	70-130/30
10061-02-6	trans-1,3-Dichloropropene	ND		250	277	111	250	255	102	8	70-130/30
123-91-1	1,4-Dioxane	ND		625	540	86	625	531	85	2	70-130/30
97-63-2	Ethyl methacrylate	ND		250	250	100	250	232	93	7	72-139/30
100-41-4	Ethylbenzene	ND		250	246	98	250	226	90	8	70-130/30
87-68-3	Hexachlorobutadiene	ND		250	264	106	250	251	100	5	70-130/30
591-78-6	2-Hexanone	ND		250	130	52* [a]	250	126	50* [a]	3	70-130/30
98-82-8	Isopropylbenzene	ND		250	322	129	250	298	119	8	70-130/30
99-87-6	p-Isopropyltoluene	ND		250	303	121	250	280	112	8	70-130/30
1634-04-4	Methyl Tert Butyl Ether	ND		250	274	110	250	236	94	15	70-130/30
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		250	224	90	250	203	81	10	70-130/30
74-95-3	Methylene bromide	ND		250	269	108	250	239	96	12	70-130/30
75-09-2	Methylene chloride	ND		250	267	107	250	243	97	9	70-130/30
91-20-3	Naphthalene	ND		250	322	129	250	297	119	8	70-130/30
103-65-1	n-Propylbenzene	ND		250	337	135* [a]	250	306	122	10	70-130/30
100-42-5	Styrene	ND		250	249	100	250	236	94	5	70-130/30
630-20-6	1,1,1,2-Tetrachloroethane	ND		250	259	104	250	233	93	11	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	278	111	250	263	105	6	70-130/30
127-18-4	Tetrachloroethene	ND		250	257	103	250	231	92	11	70-130/30
108-88-3	Toluene	0.66		250	273	109	250	253	101	8	70-130/30
87-61-6	1,2,3-Trichlorobenzene	ND		250	275	110	250	257	103	7	70-130/30
120-82-1	1,2,4-Trichlorobenzene	ND		250	276	110	250	258	103	7	70-130/30
71-55-6	1,1,1-Trichloroethane	ND		250	331	132* [a]	250	303	121	9	70-130/30
79-00-5	1,1,2-Trichloroethane	ND		250	257	103	250	239	96	7	70-130/30
79-01-6	Trichloroethene	ND		250	260	104	250	246	98	6	70-130/30
75-69-4	Trichlorofluoromethane	ND		250	299	120	250	249	100	18	70-130/30
96-18-4	1,2,3-Trichloropropane	ND		250	316	126	250	274	110	14	70-130/30
95-63-6	1,2,4-Trimethylbenzene	ND		250	317	127	250	287	115	10	70-130/30
108-67-8	1,3,5-Trimethylbenzene	ND		250	304	122	250	271	108	11	70-130/30
108-05-4	Vinyl Acetate	ND		250	575	230* [a]	250	540	216* [a]	6	70-130/30
75-01-4	Vinyl chloride	ND		250	242	97	250	216	86	11	70-130/30
	m,p-Xylene	ND		500	471	94	500	438	88	7	70-130/30
95-47-6	o-Xylene	ND		250	245	98	250	230	92	6	70-130/30
1330-20-7	Xylene (total)	ND		750	715	95	750	668	89	7	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34289
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34462-6MS	L87796.D	5	10/22/14	GK	n/a	n/a	MSL3914
MC34462-6MSD	L87797.D	5	10/22/14	GK	n/a	n/a	MSL3914
MC34462-6	L87792.D	1	10/22/14	GK	n/a	n/a	MSL3914

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34289-2

CAS No.	Surrogate Recoveries	MS	MSD	MC34462-6	Limits
1868-53-7	Dibromofluoromethane	108%	106%	102%	70-130%
2037-26-5	Toluene-D8	102%	103%	102%	70-130%
460-00-4	4-Bromofluorobenzene	124%	121%	121%	70-130%

(a) Outside control limits due to possible matrix interference. Refer to Blank Spike.
(b) High RPD due to possible matrix interference and/or sample non-homogeneity.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34289
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34231-7MS [a]	L87844.D	5	10/23/14	GK	n/a	n/a	MSL3916
MC34231-7MSD [a]	L87845.D	5	10/23/14	GK	n/a	n/a	MSL3916
MC34231-7	L87843.D	1	10/23/14	GK	n/a	n/a	MSL3916

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34289-1

CAS No.	Compound	MC34231-7 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		250	78.1	31* [b]	250	68.6	27* [b]	13	70-130/30
107-02-8	Acrolein	ND		1250	1500	120	1250	748	60* [b]	67* [c]	70-130/30
107-13-1	Acrylonitrile	ND		250	217	87	250	177	71	20	70-130/30
71-43-2	Benzene	28.0		250	268	96	250	230	81	15	70-130/30
108-86-1	Bromobenzene	ND		250	259	104	250	212	85	20	70-130/30
74-97-5	Bromochloromethane	ND		250	246	98	250	213	85	14	70-130/30
75-27-4	Bromodichloromethane	ND		250	269	108	250	228	91	16	70-130/30
75-25-2	Bromoform	ND		250	211	84	250	179	72	16	70-130/30
74-83-9	Bromomethane	ND		250	326	130	250	210	84	43* [c]	70-130/30
78-93-3	2-Butanone (MEK)	ND		250	200	80	250	137	55* [b]	37* [c]	70-130/30
104-51-8	n-Butylbenzene	ND		250	283	113	250	237	95	18	70-130/30
135-98-8	sec-Butylbenzene	0.83	J	250	279	111	250	231	92	19	70-130/30
98-06-6	tert-Butylbenzene	4.9	J	250	294	116	250	247	97	17	70-130/30
75-15-0	Carbon disulfide	ND		250	222	89	250	185	74	18	70-130/30
56-23-5	Carbon tetrachloride	ND		250	241	96	250	193	77	22	70-130/30
108-90-7	Chlorobenzene	ND		250	207	83	250	175	70	17	70-130/30
75-00-3	Chloroethane	ND		250	350	140* [b]	250	180	72	64* [c]	70-130/30
110-75-8	2-Chloroethyl vinyl ether	ND		250	329	132* [b]	250	227	91	37* [c]	70-130/30
67-66-3	Chloroform	ND		250	285	114	250	228	91	22	70-130/30
74-87-3	Chloromethane	ND		250	318	127	250	196	78	47* [c]	70-130/30
95-49-8	o-Chlorotoluene	ND		250	287	115	250	231	92	22	70-130/30
106-43-4	p-Chlorotoluene	ND		250	282	113	250	228	91	21	70-130/30
124-48-1	Dibromochloromethane	ND		250	236	94	250	197	79	18	70-130/30
95-50-1	1,2-Dichlorobenzene	ND		250	244	98	250	195	78	22	70-130/30
541-73-1	1,3-Dichlorobenzene	ND		250	245	98	250	201	80	20	70-130/30
106-46-7	1,4-Dichlorobenzene	ND		250	239	96	250	199	80	18	70-130/30
75-71-8	Dichlorodifluoromethane	ND		250	218	87	250	115	46* [b]	62* [c]	70-130/30
75-34-3	1,1-Dichloroethane	ND		250	280	112	250	230	92	20	70-130/30
107-06-2	1,2-Dichloroethane	ND		250	283	113	250	248	99	13	70-130/30
75-35-4	1,1-Dichloroethene	ND		250	253	101	250	200	80	23	70-130/30
156-59-2	cis-1,2-Dichloroethene	ND		250	259	104	250	219	88	17	70-130/30
156-60-5	trans-1,2-Dichloroethene	ND		250	249	100	250	204	82	20	70-130/30
78-87-5	1,2-Dichloropropane	ND		250	245	98	250	208	83	16	70-130/30
142-28-9	1,3-Dichloropropane	ND		250	210	84	250	174	70	19	70-130/30
594-20-7	2,2-Dichloropropane	ND		250	338	135* [b]	250	261	104	26	70-130/30
563-58-6	1,1-Dichloropropene	ND		250	264	106	250	210	84	23	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34289
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34231-7MS [a]	L87844.D	5	10/23/14	GK	n/a	n/a	MSL3916
MC34231-7MSD [a]	L87845.D	5	10/23/14	GK	n/a	n/a	MSL3916
MC34231-7	L87843.D	1	10/23/14	GK	n/a	n/a	MSL3916

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34289-1

CAS No.	Compound	MC34231-7 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-01-5	cis-1,3-Dichloropropene	ND		250	255	102	250	212	85	18	70-130/30
10061-02-6	trans-1,3-Dichloropropene	ND		250	262	105	250	213	85	21	70-130/30
123-91-1	1,4-Dioxane	ND		625	561	90	625	492	79	13	70-130/30
97-63-2	Ethyl methacrylate	ND		250	241	96	250	195	78	21	72-139/30
100-41-4	Ethylbenzene	ND		250	214	86	250	176	70	19	70-130/30
87-68-3	Hexachlorobutadiene	ND		250	227	91	250	194	78	16	70-130/30
591-78-6	2-Hexanone	ND		250	129	52* [b]	250	105	42* [b]	21	70-130/30
98-82-8	Isopropylbenzene	1.2	J	250	283	113	250	231	92	20	70-130/30
99-87-6	p-Isopropyltoluene	ND		250	263	105	250	221	88	17	70-130/30
1634-04-4	Methyl Tert Butyl Ether	19.0		250	272	101	250	226	83	18	70-130/30
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		250	216	86	250	170	68* [b]	24	70-130/30
74-95-3	Methylene bromide	ND		250	235	94	250	194	78	19	70-130/30
75-09-2	Methylene chloride	ND		250	239	96	250	201	80	17	70-130/30
91-20-3	Naphthalene	ND		250	284	114	250	256	102	10	70-130/30
103-65-1	n-Propylbenzene	ND		250	289	116	250	240	96	19	70-130/30
100-42-5	Styrene	ND		250	223	89	250	191	76	15	70-130/30
630-20-6	1,1,1,2-Tetrachloroethane	ND		250	228	91	250	194	78	16	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	254	102	250	210	84	19	70-130/30
127-18-4	Tetrachloroethene	ND		250	210	84	250	172	69* [b]	20	70-130/30
108-88-3	Toluene	1.5		250	250	99	250	204	81	20	70-130/30
87-61-6	1,2,3-Trichlorobenzene	ND		250	234	94	250	202	81	15	70-130/30
120-82-1	1,2,4-Trichlorobenzene	ND		250	244	98	250	208	83	16	70-130/30
71-55-6	1,1,1-Trichloroethane	ND		250	284	114	250	223	89	24	70-130/30
79-00-5	1,1,2-Trichloroethane	ND		250	242	97	250	202	81	18	70-130/30
79-01-6	Trichloroethene	ND		250	225	90	250	191	76	16	70-130/30
75-69-4	Trichlorofluoromethane	ND		250	314	126	250	155	62* [b]	68* [c]	70-130/30
96-18-4	1,2,3-Trichloropropane	ND		250	281	112	250	229	92	20	70-130/30
95-63-6	1,2,4-Trimethylbenzene	0.58	J	250	273	109	250	225	90	19	70-130/30
108-67-8	1,3,5-Trimethylbenzene	ND		250	264	106	250	215	86	20	70-130/30
108-05-4	Vinyl Acetate	ND		250	599	240* [d]	250	501	200* [d]	18	70-130/30
75-01-4	Vinyl chloride	ND		250	268	107	250	139	56* [b]	63* [c]	70-130/30
	m,p-Xylene	2.7		500	414	82	500	344	68* [b]	18	70-130/30
95-47-6	o-Xylene	1.2		250	216	86	250	184	73	16	70-130/30
1330-20-7	Xylene (total)	3.9		750	630	83	750	528	70	18	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34289
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34231-7MS [a]	L87844.D	5	10/23/14	GK	n/a	n/a	MSL3916
MC34231-7MSD [a]	L87845.D	5	10/23/14	GK	n/a	n/a	MSL3916
MC34231-7	L87843.D	1	10/23/14	GK	n/a	n/a	MSL3916

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34289-1

CAS No.	Surrogate Recoveries	MS	MSD	MC34231-7	Limits
1868-53-7	Dibromofluoromethane	106%	110%	108%	70-130%
2037-26-5	Toluene-D8	103%	105%	105%	70-130%
460-00-4	4-Bromofluorobenzene	123%	122%	121%	70-130%

(a) Elevated detection limit due to limited sample volume.
(b) Outside control limits due to possible matrix interference. Refer to Blank Spike.
(c) High RPD due to possible matrix interference and/or sample non-homogeneity.
(d) Outside control limits. Associated samples are non-detect for this compound.

* = Outside of Control Limits.

Volatile Internal Standard Area Summary

Job Number: MC34289
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSL3914-CC3872	**Injection Date:**	10/22/14
Lab File ID:	L87784.D	**Injection Time:**	10:03
Instrument ID:	GCMSL	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	184145	8.11	251662	8.92	136644	12.12	131177	14.66	27071	5.85
Upper Limit [a]	368290	8.61	503324	9.42	273288	12.62	262354	15.16	54142	6.35
Lower Limit [b]	92073	7.61	125831	8.42	68322	11.62	65589	14.16	13536	5.35

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSL3914-BS	186064	8.11	263288	8.93	141461	12.12	129622	14.66	26834	5.85
MSL3914-MB	177099	8.12	244637	8.93	117759	12.12	114127	14.66	23087	5.92
ZZZZZZ	177766	8.12	239163	8.93	114407	12.12	109963	14.66	21007	5.93
ZZZZZZ	166386	8.12	225839	8.93	109219	12.12	105316	14.66	21267	5.94
ZZZZZZ	163687	8.12	226621	8.93	111237	12.12	105475	14.66	19636	5.94
MC34462-6	161941	8.12	214838	8.93	106319	12.12	101387	14.66	22040	5.91
ZZZZZZ	190312	8.12	257763	8.93	125849	12.12	124115	14.66	23633	5.92
MC34462-6MS	157925	8.11	216351	8.92	117797	12.11	109841	14.66	24261	5.86
MC34462-6MSD	177513	8.11	235556	8.92	129424	12.11	123822	14.66	24610	5.85
ZZZZZZ	156133	8.11	206240	8.93	105551	12.12	98928	14.66	20349	5.91
ZZZZZZ	152205	8.12	213406	8.93	103617	12.12	99138	14.66	20192	5.95
ZZZZZZ	187598	8.11	253261	8.93	121758	12.12	120475	14.66	23183	5.93
ZZZZZZ	196204	8.11	273111	8.93	134460	12.12	127112	14.66	25405	5.92
MC34289-2	161424	8.11	223931	8.93	104963	12.12	101502	14.66	21786	5.95
ZZZZZZ	158406	8.12	217886	8.93	108282	12.12	105240	14.66	19688	5.95
ZZZZZZ	187748	8.11	263743	8.93	124948	12.12	119839	14.66	22294	5.87

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Internal Standard Area Summary

Job Number: MC34289
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSL3916-CC3872	Injection Date:	10/23/14
Lab File ID:	L87837.D	Injection Time:	13:18
Instrument ID:	GCMSL	Method:	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	212272	8.11	292596	8.93	151806	12.12	155787	14.66	29857	5.85
Upper Limit [a]	424544	8.61	585192	9.43	303612	12.62	311574	15.16	59714	6.35
Lower Limit [b]	106136	7.61	146298	8.43	75903	11.62	77894	14.16	14929	5.35
Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSL3916-BS	212272	8.11	292596	8.93	151806	12.12	155787	14.66	29857	5.85
MSL3916-MB	190403	8.12	261904	8.93	128970	12.12	124846	14.66	22434	5.93
ZZZZZZ	182018	8.12	251932	8.93	124685	12.12	122961	14.66	24885	5.96
ZZZZZZ	208336	8.12	287887	8.93	138839	12.12	140551	14.66	31153	5.92
MC34231-7	200803	8.12	276986	8.93	141791	12.12	141148	14.66	33957	5.90
MC34231-7MS [c]	216131	8.11	292513	8.93	165287	12.11	155038	14.66	35230	5.86
MC34231-7MSD [c]	188322	8.12	254054	8.93	140069	12.12	133976	14.66	26554	5.86
ZZZZZZ	199173	8.12	283066	8.93	134920	12.12	133206	14.66	27509	5.92
ZZZZZZ	166637	8.12	236442	8.93	115318	12.12	110562	14.66	22910	5.93
ZZZZZZ	202444	8.12	282320	8.93	138421	12.12	134921	14.66	28563	5.95
ZZZZZZ	182268	8.12	260167	8.93	145036	12.12	129631	14.66	61731[d]	5.88
MC34289-1	232116	8.12	336132	8.93	185445	12.12	168626	14.66	61229[d]	5.90
ZZZZZZ	264232	8.11	374426	8.93	196834	12.12	183677	14.66	47890	5.91
ZZZZZZ	223455	8.12	311175	8.93	163831	12.12	158667	14.66	37675	5.90
ZZZZZZ	259470	8.12	355756	8.93	186647	12.12	170686	14.66	38344	5.93
ZZZZZZ	250215	8.12	347171	8.93	177440	12.12	166979	14.66	34567	5.91
ZZZZZZ	244818	8.12	337139	8.93	165096	12.12	161151	14.66	31202	5.91

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Elevated detection limit due to limited sample volume.
(d) Outside control limits. Target analytes not associated with this internal standard.

Volatile Surrogate Recovery Summary

Job Number: MC34289
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Method: SW846 8260C **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
MC34289-1	L87853.D	116	104	127
MC34289-2	L87803.D	101	97	123
MC34231-7MS	L87844.D	106	103	123
MC34231-7MSD	L87845.D	110	105	122
MC34462-6MS	L87796.D	108	102	124
MC34462-6MSD	L87797.D	106	103	121
MSL3914-BS	L87785.D	112	100	124
MSL3914-MB	L87788.D	102	101	124
MSL3916-BS	L87837.D	106	103	122
MSL3916-MB	L87840.D	102	100	117

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	70-130%
S2 = Toluene-D8	70-130%
S3 = 4-Bromofluorobenzene	70-130%

GC/MS Semi-volatiles

7

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: MC34289
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40208-MB	R40376.D	1	10/17/14	WK	10/15/14	OP40208	MSR1486

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34289-1

CAS No.	Compound	Result	RL	Units	Q
65-85-0	Benzoic Acid	ND	10	ug/l	
95-57-8	2-Chlorophenol	ND	5.0	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	10	ug/l	
120-83-2	2,4-Dichlorophenol	ND	10	ug/l	
105-67-9	2,4-Dimethylphenol	ND	10	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	ug/l	
95-48-7	2-Methylphenol	ND	10	ug/l	
	3&4-Methylphenol	ND	10	ug/l	
88-75-5	2-Nitrophenol	ND	10	ug/l	
100-02-7	4-Nitrophenol	ND	20	ug/l	
87-86-5	Pentachlorophenol	ND	10	ug/l	
108-95-2	Phenol	ND	5.0	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	10	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	10	ug/l	
62-53-3	Aniline	ND	10	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.0	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.0	ug/l	
100-51-6	Benzyl Alcohol	ND	10	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	ug/l	
106-47-8	4-Chloroaniline	ND	10	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.0	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.0	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.0	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.0	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.0	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	10	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	10	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	ug/l	
132-64-9	Dibenzofuran	ND	2.0	ug/l	
84-74-2	Di-n-butyl phthalate	0.24	5.0	ug/l	J
117-84-0	Di-n-octyl phthalate	ND	5.0	ug/l	
84-66-2	Diethyl phthalate	ND	5.0	ug/l	
131-11-3	Dimethyl phthalate	ND	5.0	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	ug/l	
118-74-1	Hexachlorobenzene	ND	5.0	ug/l	

Method Blank Summary

Job Number: MC34289
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40208-MB	R40376.D	1	10/17/14	WK	10/15/14	OP40208	MSR1486

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34289-1

CAS No.	Compound	Result	RL	Units	Q
77-47-4	Hexachlorocyclopentadiene	ND	10	ug/l	
67-72-1	Hexachloroethane	ND	5.0	ug/l	
78-59-1	Isophorone	ND	5.0	ug/l	
88-74-4	2-Nitroaniline	ND	10	ug/l	
99-09-2	3-Nitroaniline	ND	10	ug/l	
100-01-6	4-Nitroaniline	ND	10	ug/l	
98-95-3	Nitrobenzene	ND	5.0	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.0	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.0	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	ug/l	
110-86-1	Pyridine	ND	10	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	48%	15-110%
4165-62-2	Phenol-d5	31%	15-110%
118-79-6	2,4,6-Tribromophenol	87%	15-110%
4165-60-0	Nitrobenzene-d5	74%	30-130%
321-60-8	2-Fluorobiphenyl	73%	30-130%
1718-51-0	Terphenyl-d14	92%	30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

Method Blank Summary

Job Number: MC34289
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40209-MB	I92289.D	1	10/17/14	WK	10/15/14	OP40209	MSI3439

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

MC34289-1

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	0.10	ug/l	
208-96-8	Acenaphthylene	ND	0.10	ug/l	
120-12-7	Anthracene	ND	0.10	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.050	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.050	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	ug/l	
218-01-9	Chrysene	ND	0.10	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	ug/l	
206-44-0	Fluoranthene	ND	0.10	ug/l	
86-73-7	Fluorene	ND	0.10	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	ug/l	
90-12-0	1-Methylnaphthalene	ND	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.0	ug/l	
85-01-8	Phenanthrene	ND	0.050	ug/l	
129-00-0	Pyrene	ND	0.10	ug/l	

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	83%	30-130%
321-60-8	2-Fluorobiphenyl	71%	30-130%
1718-51-0	Terphenyl-d14	82%	30-130%

Blank Spike Summary

Job Number: MC34289
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40208-BS	R40377.D	1	10/17/14	WK	10/15/14	OP40208	MSR1486

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34289-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
65-85-0	Benzoic Acid	50	20.8	42	30-130
95-57-8	2-Chlorophenol	50	41.2	82	30-130
59-50-7	4-Chloro-3-methyl phenol	50	42.2	84	30-130
120-83-2	2,4-Dichlorophenol	50	45.3	91	30-130
105-67-9	2,4-Dimethylphenol	50	40.0	80	30-130
51-28-5	2,4-Dinitrophenol	50	46.2	92	30-130
534-52-1	4,6-Dinitro-o-cresol	50	47.4	95	30-130
95-48-7	2-Methylphenol	50	35.5	71	30-130
	3&4-Methylphenol	100	67.6	68	30-130
88-75-5	2-Nitrophenol	50	45.9	92	30-130
100-02-7	4-Nitrophenol	50	21.6	43	30-130
87-86-5	Pentachlorophenol	50	42.9	86	30-130
108-95-2	Phenol	50	19.0	38	30-130
95-95-4	2,4,5-Trichlorophenol	50	46.8	94	30-130
88-06-2	2,4,6-Trichlorophenol	50	47.7	95	30-130
62-53-3	Aniline	50	24.7	49	40-140
101-55-3	4-Bromophenyl phenyl ether	50	53.3	107	40-140
85-68-7	Butyl benzyl phthalate	50	50.8	102	40-140
100-51-6	Benzyl Alcohol	50	40.1	80	40-140
91-58-7	2-Chloronaphthalene	50	51.2	102	40-140
106-47-8	4-Chloroaniline	50	41.7	83	40-140
111-91-1	bis(2-Chloroethoxy)methane	50	45.1	90	40-140
111-44-4	bis(2-Chloroethyl)ether	50	32.4	65	40-140
108-60-1	bis(2-Chloroisopropyl)ether	50	60.5	121	40-140
7005-72-3	4-Chlorophenyl phenyl ether	50	50.3	101	40-140
122-66-7	1,2-Diphenylhydrazine	50	49.5	99	40-140
121-14-2	2,4-Dinitrotoluene	50	53.4	107	40-140
606-20-2	2,6-Dinitrotoluene	50	50.6	101	40-140
91-94-1	3,3'-Dichlorobenzidine	50	51.7	103	40-140
132-64-9	Dibenzofuran	50	46.7	93	40-140
84-74-2	Di-n-butyl phthalate	50	47.7	95	40-140
117-84-0	Di-n-octyl phthalate	50	50.8	102	40-140
84-66-2	Diethyl phthalate	50	49.9	100	40-140
131-11-3	Dimethyl phthalate	50	49.5	99	40-140
117-81-7	bis(2-Ethylhexyl)phthalate	50	51.8	104	40-140
118-74-1	Hexachlorobenzene	50	54.1	108	40-140

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34289
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40208-BS	R40377.D	1	10/17/14	WK	10/15/14	OP40208	MSR1486

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34289-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
77-47-4	Hexachlorocyclopentadiene	50	13.5	27* [a]	40-140
67-72-1	Hexachloroethane	50	40.9	82	40-140
78-59-1	Isophorone	50	40.8	82	40-140
88-74-4	2-Nitroaniline	50	48.5	97	40-140
99-09-2	3-Nitroaniline	50	42.6	85	40-140
100-01-6	4-Nitroaniline	50	44.6	89	40-140
98-95-3	Nitrobenzene	50	43.8	88	40-140
62-75-9	n-Nitrosodimethylamine	50	29.5	59	40-140
621-64-7	N-Nitroso-di-n-propylamine	50	47.0	94	40-140
86-30-6	N-Nitrosodiphenylamine	50	46.0	92	40-140
110-86-1	Pyridine	50	10.5	21* [a]	40-140

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	51%	15-110%
4165-62-2	Phenol-d5	33%	15-110%
118-79-6	2,4,6-Tribromophenol	96%	15-110%
4165-60-0	Nitrobenzene-d5	79%	30-130%
321-60-8	2-Fluorobiphenyl	79%	30-130%
1718-51-0	Terphenyl-d14	94%	30-130%

(a) Outside control limits. Blank Spike meets program technical requirements.

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34289
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40209-BS	I92290.D	1	10/17/14	WK	10/15/14	OP40209	MSI3439

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

MC34289-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
83-32-9	Acenaphthene	50	45.0	90	40-140
208-96-8	Acenaphthylene	50	40.0	80	40-140
120-12-7	Anthracene	50	45.2	90	40-140
56-55-3	Benzo(a)anthracene	50	51.4	103	40-140
50-32-8	Benzo(a)pyrene	50	49.4	99	40-140
205-99-2	Benzo(b)fluoranthene	50	53.8	108	40-140
191-24-2	Benzo(g,h,i)perylene	50	50.2	100	40-140
207-08-9	Benzo(k)fluoranthene	50	45.0	90	40-140
218-01-9	Chrysene	50	47.3	95	40-140
53-70-3	Dibenzo(a,h)anthracene	50	50.3	101	40-140
206-44-0	Fluoranthene	50	46.0	92	40-140
86-73-7	Fluorene	50	49.3	99	40-140
193-39-5	Indeno(1,2,3-cd)pyrene	50	49.6	99	40-140
90-12-0	1-Methylnaphthalene	50	43.7	87	40-140
91-57-6	2-Methylnaphthalene	50	43.9	88	40-140
85-01-8	Phenanthrene	50	46.9	94	40-140
129-00-0	Pyrene	50	44.5	89	40-140

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	85%	30-130%
321-60-8	2-Fluorobiphenyl	75%	30-130%
1718-51-0	Terphenyl-d14	85%	30-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34289
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40208-MS	R40378.D	1	10/17/14	WK	10/15/14	OP40208	MSR1486
OP40208-MSD	R40379.D	1	10/17/14	WK	10/15/14	OP40208	MSR1486
MC34000-7	R40380.D	1	10/17/14	WK	10/15/14	OP40208	MSR1486

The QC reported here applies to the following samples: Method: SW846 8270D

MC34289-1

CAS No.	Compound	MC34000-7 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic Acid	ND		50	21.2	42	50	22.0	44	4	30-130/20
95-57-8	2-Chlorophenol	ND		50	41.2	82	50	42.4	85	3	30-130/20
59-50-7	4-Chloro-3-methyl phenol	ND		50	42.6	85	50	45.0	90	5	30-130/20
120-83-2	2,4-Dichlorophenol	ND		50	45.6	91	50	47.4	95	4	30-130/20
105-67-9	2,4-Dimethylphenol	ND		50	39.2	78	50	39.5	79	1	30-130/20
51-28-5	2,4-Dinitrophenol	ND		50	47.2	94	50	47.9	96	1	30-130/20
534-52-1	4,6-Dinitro-o-cresol	ND		50	47.3	95	50	48.0	96	1	30-130/20
95-48-7	2-Methylphenol	ND		50	35.4	71	50	36.7	73	4	30-130/20
	3&4-Methylphenol	ND		100	67.6	68	100	71.2	71	5	30-130/20
88-75-5	2-Nitrophenol	ND		50	46.3	93	50	47.3	95	2	30-130/20
100-02-7	4-Nitrophenol	ND		50	22.5	45	50	23.6	47	5	30-130/20
87-86-5	Pentachlorophenol	ND		50	42.5	85	50	44.4	89	4	30-130/20
108-95-2	Phenol	ND		50	19.1	38	50	19.8	40	4	30-130/20
95-95-4	2,4,5-Trichlorophenol	ND		50	47.5	95	50	48.6	97	2	30-130/20
88-06-2	2,4,6-Trichlorophenol	ND		50	47.8	96	50	49.0	98	2	30-130/20
62-53-3	Aniline	ND		50	27.5	55	50	29.9	60	8	40-140/20
101-55-3	4-Bromophenyl phenyl ether	ND		50	52.4	105	50	53.8	108	3	40-140/20
85-68-7	Butyl benzyl phthalate	ND		50	50.5	101	50	52.3	105	4	40-140/20
100-51-6	Benzyl Alcohol	ND		50	39.8	80	50	41.8	84	5	40-140/20
91-58-7	2-Chloronaphthalene	ND		50	51.3	103	50	52.9	106	3	40-140/20
106-47-8	4-Chloroaniline	ND		50	42.1	84	50	44.5	89	6	40-140/20
111-91-1	bis(2-Chloroethoxy)methane	ND		50	45.0	90	50	47.6	95	6	40-140/20
111-44-4	bis(2-Chloroethyl)ether	ND		50	32.6	65	50	33.8	68	4	40-140/20
108-60-1	bis(2-Chloroisopropyl)ether	ND		50	60.5	121	50	66.3	133	9	40-140/20
7005-72-3	4-Chlorophenyl phenyl ether	ND		50	49.6	99	50	51.6	103	4	40-140/20
122-66-7	1,2-Diphenylhydrazine	ND		50	45.6	91	50	48.0	96	5	40-140/20
121-14-2	2,4-Dinitrotoluene	ND		50	52.9	106	50	54.5	109	3	40-140/20
606-20-2	2,6-Dinitrotoluene	ND		50	50.0	100	50	52.2	104	4	40-140/20
91-94-1	3,3'-Dichlorobenzidine	ND		50	54.6	109	50	55.6	111	2	40-140/20
132-64-9	Dibenzofuran	ND		50	46.8	94	50	48.3	97	3	40-140/20
84-74-2	Di-n-butyl phthalate	ND		50	47.2	94	50	49.2	98	4	40-140/20
117-84-0	Di-n-octyl phthalate	ND		50	51.4	103	50	53.8	108	5	40-140/20
84-66-2	Diethyl phthalate	ND		50	49.5	99	50	51.2	102	3	40-140/20
131-11-3	Dimethyl phthalate	ND		50	49.2	98	50	51.1	102	4	40-140/20
117-81-7	bis(2-Ethylhexyl)phthalate	ND		50	51.6	103	50	52.8	106	2	40-140/20
118-74-1	Hexachlorobenzene	ND		50	53.8	108	50	55.5	111	3	40-140/20

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34289
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40208-MS	R40378.D	1	10/17/14	WK	10/15/14	OP40208	MSR1486
OP40208-MSD	R40379.D	1	10/17/14	WK	10/15/14	OP40208	MSR1486
MC34000-7	R40380.D	1	10/17/14	WK	10/15/14	OP40208	MSR1486

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34289-1

CAS No.	Compound	MC34000-7 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
77-47-4	Hexachlorocyclopentadiene	ND		50	12.9	26* [a]	50	12.1	24* [a]	6	40-140/20
67-72-1	Hexachloroethane	ND		50	41.3	83	50	44.0	88	6	40-140/20
78-59-1	Isophorone	ND		50	41.0	82	50	43.7	87	6	40-140/20
88-74-4	2-Nitroaniline	ND		50	47.9	96	50	49.7	99	4	40-140/20
99-09-2	3-Nitroaniline	ND		50	42.2	84	50	44.2	88	5	40-140/20
100-01-6	4-Nitroaniline	ND		50	43.8	88	50	46.0	92	5	40-140/20
98-95-3	Nitrobenzene	ND		50	43.8	88	50	46.4	93	6	40-140/20
62-75-9	n-Nitrosodimethylamine	ND		50	29.2	58	50	30.7	61	5	40-140/20
621-64-7	N-Nitroso-di-n-propylamine	ND		50	46.8	94	50	50.7	101	8	40-140/20
86-30-6	N-Nitrosodiphenylamine	ND		50	46.1	92	50	47.2	94	2	40-140/20
110-86-1	Pyridine	ND		50	12.9	26* [a]	50	16.8	34* [a]	26* [b]	40-140/20

CAS No.	Surrogate Recoveries	MS	MSD	MC34000-7	Limits
367-12-4	2-Fluorophenol	51%	52%	46%	15-110%
4165-62-2	Phenol-d5	33%	34%	30%	15-110%
118-79-6	2,4,6-Tribromophenol	94%	94%	77%	15-110%
4165-60-0	Nitrobenzene-d5	80%	83%	74%	30-130%
321-60-8	2-Fluorobiphenyl	82%	86%	74%	30-130%
1718-51-0	Terphenyl-d14	94%	94%	94%	30-130%

(a) Outside control limits. Blank Spike meets program technical requirements.
(b) High RPD due to possible matrix interference and/or sample heterogeneity.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34289
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40209-MS	I92291.D	1	10/17/14	WK	10/15/14	OP40209	MSI3439
OP40209-MSD	I92292.D	1	10/17/14	WK	10/15/14	OP40209	MSI3439
MC34000-19	I92293.D	1	10/17/14	WK	10/15/14	OP40209	MSI3439

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

MC34289-1

CAS No.	Compound	MC34000-19 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	ND		50	44.5	89	50	46.1	92	4	40-140/20
208-96-8	Acenaphthylene	ND		50	40.2	80	50	41.4	83	3	40-140/20
120-12-7	Anthracene	ND		50	44.8	90	50	46.2	92	3	40-140/20
56-55-3	Benzo(a)anthracene	ND		50	51.2	102	50	52.7	105	3	40-140/20
50-32-8	Benzo(a)pyrene	ND		50	48.6	97	50	50.3	101	3	40-140/20
205-99-2	Benzo(b)fluoranthene	ND		50	53.2	106	50	50.4	101	5	40-140/20
191-24-2	Benzo(g,h,i)perylene	ND		50	49.8	100	50	51.0	102	2	40-140/20
207-08-9	Benzo(k)fluoranthene	ND		50	44.8	90	50	44.4	89	1	40-140/20
218-01-9	Chrysene	ND		50	47.0	94	50	48.6	97	3	40-140/20
53-70-3	Dibenzo(a,h)anthracene	ND		50	50.0	100	50	51.8	104	4	40-140/20
206-44-0	Fluoranthene	ND		50	45.5	91	50	47.3	95	4	40-140/20
86-73-7	Fluorene	ND		50	49.3	99	50	50.7	101	3	40-140/20
193-39-5	Indeno(1,2,3-cd)pyrene	ND		50	49.3	99	50	50.9	102	3	40-140/20
90-12-0	1-Methylnaphthalene	ND		50	43.6	87	50	45.5	91	4	40-140/20
91-57-6	2-Methylnaphthalene	ND		50	44.1	88	50	46.3	93	5	40-140/20
85-01-8	Phenanthrene	ND		50	46.3	93	50	47.8	96	3	40-140/20
129-00-0	Pyrene	ND		50	44.4	89	50	45.7	91	3	40-140/20

CAS No.	Surrogate Recoveries	MS	MSD	MC34000-19	Limits
4165-60-0	Nitrobenzene-d5	85%	88%	77%	30-130%
321-60-8	2-Fluorobiphenyl	78%	82%	72%	30-130%
1718-51-0	Terphenyl-d14	85%	87%	85%	30-130%

* = Outside of Control Limits.

Semivolatile Internal Standard Area Summary

Job Number: MC34289
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSI3439-CC3427	**Injection Date:**	10/17/14
Lab File ID:	I92288.D	**Injection Time:**	08:06
Instrument ID:	GCMSI	**Method:**	SW846 8270D BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	313460	3.01	715103	4.03	422887	5.52	751181	6.78	631082	9.49	1193366	10.86
Upper Limit [a]	626920	3.51	1430206	4.53	845774	6.02	1502362	7.28	1262164	9.99	2386732	11.36
Lower Limit [b]	156730	2.51	357552	3.53	211444	5.02	375591	6.28	315541	8.99	596683	10.36

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP40209-MB	371811	3.01	852162	4.03	504913	5.52	886963	6.78	781541	9.49	1499262	10.86
OP40209-BS	372723	3.01	877479	4.03	507487	5.52	895065	6.78	749996	9.49	1420407	10.87
OP40209-MS	362660	3.01	854261	4.03	498092	5.53	885375	6.78	741390	9.49	1399462	10.88
OP40209-MSD	346506	3.01	814526	4.03	477685	5.53	841975	6.78	702096	9.49	1330362	10.87
MC34000-19	364313	3.01	852339	4.03	501806	5.52	884370	6.78	748865	9.49	1433657	10.86
MC34289-1	352616	3.01	816470	4.03	484068	5.52	844950	6.78	712961	9.49	1381100	10.87
ZZZZZZ	378631	3.00	856361	4.03	504048	5.52	885791	6.78	751918	9.49	1448239	10.86
ZZZZZZ	363398	3.00	845487	4.03	497033	5.52	877755	6.78	737160	9.49	1400179	10.86
ZZZZZZ	397152	3.00	905377	4.03	534775	5.52	935227	6.78	786439	9.49	1506161	10.87
ZZZZZZ	388293	3.00	892710	4.03	521195	5.52	920888	6.78	779686	9.49	1479510	10.87

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: MC34289
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSR1486-CC1481	**Injection Date:**	10/17/14
Lab File ID:	R40365.D	**Injection Time:**	07:58
Instrument ID:	GCMSR	**Method:**	SW846 8270D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	237368	4.11	850363	5.21	515530	6.72	897025	8.00	907996	10.29	882840	11.72
Upper Limit [a]	474736	4.61	1700726	5.71	1031060	7.22	1794050	8.50	1815992	10.79	1765680	12.22
Lower Limit [b]	118684	3.61	425182	4.71	257765	6.22	448513	7.50	453998	9.79	441420	11.22

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP40220-MB	612070[c]	4.11	2209293[c]	5.21	1347350[c]	6.72	2340586[c]	7.99	2519347[c]	10.29	2423169[c]	11.72
OP40220-BS	322238	4.11	1164153	5.21	700676	6.72	1230332	7.99	1226044	10.29	1177292	11.72
OP40220-MS	306950	4.11	1120057	5.21	687415	6.72	1201210	7.99	1169062	10.29	1166321	11.71
OP40220-MSD	356226	4.11	1289466	5.21	777974	6.72	1334919	7.99	1267339	10.29	1204480	11.71
MC34323-2A	347621	4.11	1257074	5.21	769986	6.72	1339939	7.98	1319171	10.28	1229811	11.71
ZZZZZZ	316656	4.10	1133291	5.21	679951	6.72	1152273	7.99	1066727	10.28	1029109	11.72
ZZZZZZ	345685	4.11	1237842	5.21	750921	6.72	1262375	7.99	1153233	10.28	1069262	11.71
ZZZZZZ	361215	4.11	1303024	5.21	794130	6.72	1345738	7.99	1258299	10.28	1107326	11.71
ZZZZZZ	359055	4.11	1288382	5.21	776332	6.72	1329822	7.99	1246621	10.28	1119348	11.71
OP40208-MB	378328	4.10	1353404	5.21	834216	6.72	1423182	7.99	1383348	10.28	1266499	11.71
OP40208-BS	377936	4.11	1377062	5.21	836516	6.72	1432310	7.99	1405865	10.29	1300250	11.71
OP40208-MS	388070	4.11	1396691	5.21	844750	6.72	1437705	7.99	1399854	10.28	1279013	11.71
OP40208-MSD	372042	4.11	1361121	5.21	834384	6.72	1436760	7.99	1411762	10.28	1264489	11.71
MC34000-7	415489	4.10	1500937	5.21	920649	6.72	1565499	7.98	1465263	10.28	1328770	11.70
MC34289-1	401498	4.10	1463695	5.21	877903	6.72	1503942	7.98	1374795	10.28	1268329	11.70
ZZZZZZ	367902	4.10	1314194	5.20	804605	6.71	1329201	7.98	1226086	10.27	1140896	11.70
ZZZZZZ	347898	4.10	1274701	5.21	795833	6.72	1298343	7.99	1243385	10.28	1171386	11.70
ZZZZZZ	347348	4.10	1272351	5.21	780025	6.72	1337928	7.99	1277962	10.28	1203133	11.70
ZZZZZZ	343479	4.10	1263052	5.21	772782	6.71	1328582	7.98	1244573	10.27	1183200	11.70
ZZZZZZ	355724	4.10	1292682	5.21	796338	6.72	1305012	7.99	1284997	10.28	1263044	11.70

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Internal standard spiked at 2x concentration.

Semivolatile Surrogate Recovery Summary

Job Number: MC34289
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Method: SW846 8270D **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
MC34289-1	R40381.D	46	31	89	76	78	91
OP40208-BS	R40377.D	51	33	96	79	79	94
OP40208-MB	R40376.D	48	31	87	74	73	92
OP40208-MS	R40378.D	51	33	94	80	82	94
OP40208-MSD	R40379.D	52	34	94	83	86	94

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorophenol	15-110%
S2 = Phenol-d5	15-110%
S3 = 2,4,6-Tribromophenol	15-110%
S4 = Nitrobenzene-d5	30-130%
S5 = 2-Fluorobiphenyl	30-130%
S6 = Terphenyl-d14	30-130%

Semivolatile Surrogate Recovery Summary

Job Number: MC34289
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Method: SW846 8270D BY SIM **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
MC34289-1	I92294.D	79	73	80
OP40209-BS	I92290.D	85	75	85
OP40209-MB	I92289.D	83	71	82
OP40209-MS	I92291.D	85	78	85
OP40209-MSD	I92292.D	88	82	87

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	30-130%
S2 = 2-Fluorobiphenyl	30-130%
S3 = Terphenyl-d14	30-130%

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries

Method Blank Summary

Job Number: MC34289
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40218-MB	BB59914.D	1	10/16/14	NK	10/15/14	OP40218	GBB3334

The QC reported here applies to the following samples: **Method:** SW846 8011

MC34289-1, MC34289-3

CAS No.	Compound	Result	RL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.015	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.015	ug/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	Bromofluorobenzene (S)	100%	36-173%
460-00-4	Bromofluorobenzene (S)	101%	36-173%

Blank Spike Summary

Job Number: MC34289
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40218-BS	BB59915.D	1	10/16/14	NK	10/15/14	OP40218	GBB3334

The QC reported here applies to the following samples: **Method:** SW846 8011

MC34289-1, MC34289-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
96-12-8	1,2-Dibromo-3-chloropropane	0.071	0.078	110	60-140
106-93-4	1,2-Dibromoethane	0.071	0.068	96	60-140

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	Bromofluorobenzene (S)	90%	36-173%
460-00-4	Bromofluorobenzene (S)	93%	36-173%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34289
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40218-MS	BB59916.D	1	10/16/14	NK	10/15/14	OP40218	GBB3334
OP40218-MSD	BB59917.D	1	10/16/14	NK	10/15/14	OP40218	GBB3334
MC34000-20	BB59918.D	1	10/16/14	NK	10/15/14	OP40218	GBB3334

The QC reported here applies to the following samples: **Method:** SW846 8011

MC34289-1, MC34289-3

CAS No.	Compound	MC34000-20 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
96-12-8	1,2-Dibromo-3-chloropropane	ND		0.071	0.082	115	0.071	0.081	114	1	64-141/29
106-93-4	1,2-Dibromoethane	ND		0.071	0.074	104	0.071	0.072	101	3	63-163/27

CAS No.	Surrogate Recoveries	MS	MSD	MC34000-20	Limits
460-00-4	Bromofluorobenzene (S)	75%	70%	68%	36-173%
460-00-4	Bromofluorobenzene (S)	75%	71%	68%	36-173%

* = Outside of Control Limits.

Volatile Surrogate Recovery Summary

Job Number: MC34289
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Method: SW846 8011 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]
MC34289-1	BB59923.D	68	95
MC34289-3	BB59925.D	68	74
OP40218-BS	BB59915.D	90	93
OP40218-MB	BB59914.D	100	101
OP40218-MS	BB59916.D	75	75
OP40218-MSD	BB59917.D	70	71

Surrogate Compounds	Recovery Limits
S1 = Bromofluorobenzene (S)	36-173%

(a) Recovery from GC signal #2
(b) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: MC34289
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	GBB3334-ICC3334	**Injection Date:**	10/16/14
Lab File ID:	BB59910.D	**Injection Time:**	09:22
Instrument ID:	GCBB	**Method:**	SW846 8011

	S1 [a] RT	S1 [b] RT
Check Std	3.45	3.46

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
OP40218-MB	BB59914.D	10/16/14	10:43	3.45	3.47
OP40218-BS	BB59915.D	10/16/14	11:01	3.45	3.46
OP40218-MS	BB59916.D	10/16/14	11:19	3.45	3.46
OP40218-MSD	BB59917.D	10/16/14	11:37	3.45	3.46
MC34000-20	BB59918.D	10/16/14	11:55	3.45	3.46
ZZZZZZ	BB59919.D	10/16/14	12:13	3.45	3.46
ZZZZZZ	BB59920.D	10/16/14	12:30	3.45	3.46
ZZZZZZ	BB59921.D	10/16/14	12:48	3.45	3.46
ZZZZZZ	BB59922.D	10/16/14	13:06	3.45	3.46
MC34289-1	BB59923.D	10/16/14	13:24	3.45	3.46

Surrogate Compounds

S1 = Bromofluorobenzene (S)

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: MC34289
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	GBB3334-CC3334	**Injection Date:**	10/16/14
Lab File ID:	BB59924.D	**Injection Time:**	13:42
Instrument ID:	GCBB	**Method:**	SW846 8011

	S1 [a] RT	S1 [b] RT
Check Std	3.45	3.46

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
MC34289-3	BB59925.D	10/16/14	14:00	3.45	3.46
ZZZZZZ	BB59926.D	10/16/14	14:18	3.45	3.46
ZZZZZZ	BB59927.D	10/16/14	14:36	3.45	3.46
ZZZZZZ	BB59928.D	10/16/14	14:54	3.45	3.46
ZZZZZZ	BB59929.D	10/16/14	15:12	3.45	3.46
ZZZZZZ	BB59930.D	10/16/14	15:30	3.45	3.46
ZZZZZZ	BB59931.D	10/16/14	15:48	3.45	3.46
ZZZZZZ	BB59932.D	10/16/14	16:06	3.45	3.46
ZZZZZZ	BB59933.D	10/16/14	16:24	3.45	3.46
GBB3334-ECC333B	BB59934.D	10/16/14	16:42	3.45	3.46

Surrogate Compounds

S1 = Bromofluorobenzene (S)

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

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e-Hardcopy 2.0
Automated Report

Technical Report for

Shell Oil

URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana,

SGS Accutest Job Number: MC34338

Sampling Date: 10/14/14



Report to:

AECOM, INC.

Melissa.mansker@aecom.com

ATTN: Melissa Mansker

Total number of pages in report: 119

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

H. (Brad) Madadian
Lab Director

Client Service contact: Jeremy Vienneau 508-481-6200

Certifications: MA (M-MA136,SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) FL (E87579) NY (11791) NJ (MA926) PA (6801121) ND (R-188) CO (MA00136) MN (11546AA) NC (653) IL (002337) WI (399080220) DoD ELAP (L-A-B L2235)

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Test results relate only to samples analyzed.

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SGS ACCUTEST

November 02, 2016

AECOM
1001 Highlands Plaza Drive West Suite 300
St. Louis, MO 63110

RE: SGS Accutest Job # MC34338

Dear Elizabeth Kunkel

As you are aware, SGS Accutest Inc. - Marlborough has been conducting an extensive review of data associated with some historical Gas Chromatography-Mass Spectroscopy volatiles analyses. As a result of this review it was determined that some revisions of the original test report for this job were needed. These corrections have been incorporated into the revised report.

Please be assured that corrective actions have been put in place to address this matter and prevent a recurrence.

We apologize for any inconvenience that this issue may have caused. Please don't hesitate to contact us if we can be of further assistance.

Sincerely,

H. (Brad) Madadian

Regional Laboratory Director
SGS Accutest Inc. - Marlborough

SGS ACCUTEST IS PART OF SGS, THE WORLD'S LEADING INSPECTION, VERIFICATION, TESTING AND CERTIFICATION COMPANY.

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Sample Summary

Shell Oil

Job No: MC34338

URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
MC34338-1	10/14/14	10:00	MMLR	10/15/14	AQ	Ground Water	MW14-ROX-101414
MC34338-2	10/14/14	10:50	MMLR	10/15/14	AQ	Ground Water	P66-ROX-101414
MC34338-3	10/14/14	11:45	MMLR	10/15/14	AQ	Ground Water	P74-ROX-101414
MC34338-4	10/14/14	13:25	MMLR	10/15/14	AQ	Equipment Blank	P59-ROX-101414-EB
MC34338-5	10/14/14	15:45	MMLR	10/15/14	AQ	Ground Water	P59-ROX-101414
MC34338-6	10/14/14	16:30	MMLR	10/15/14	AQ	Ground Water	P57-ROX-101414
MC34338-7	10/14/14	16:00	MMLR	10/15/14	AQ	Ground Water	P57-ROX-101414-DUP
MC34338-8	10/14/14	00:00	MMLR	10/15/14	AQ	Trip Blank Water	TB-ROX-101414-HCL
MC34338-9	10/14/14	00:00	MMLR	10/15/14	AQ	Trip Blank Water	TB-ROX-101414-ST

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: She O **Job No** MC34338

Site: URSMOSTL:Roxana 4Q 4 GW/ 2 562973 03004 900 South Centra **Report Date** /3/20 6 3:22:22 PM

7 Samp e(s), 2 Tr p B ank(s) and 0 F e d B ank(s) were co ected on 0/ 4/20 4 and were rece ved at SGS Accutest New Eng and on 0/ 5/20 4 proper y preserved, at 0 7 Deg C and ntact These Samp es rece ved a job number of MC34338 A st ng of the Laboratory Samp e ID, C ent Samp e ID and dates of co ect on are presented n the Resu ts Summary Sect on of th s repo t - Ch orohexane, Benzeneth o , D benz(a,h)acr d ne, Indene and Qu no ne were searched n the brary search and reported on y f detect ons were found

Except as noted be ow, a method spec f ed ca brat ons and qua ty contro performance cr ter a were met for th s job For more nformat on, p ease refer to QC summary pages

Volatiles by GCMS By Method SW846 8260C

Matrix: AQ **Batch ID:** MSL39 6

- A samp es were ana yzed w th n the recommended method ho d ng t me
- Samp e(s) MC3423 -7MS, MC3423 -7MSD were used as the QC samp es nd cated
- A method b anks for th s batch meet method spec f c cr ter a
- B ank Sp ke Recove y(s) for 2-Hexanone, Acetone, D ch orod f uoromethane are outs de contro m ts
- Matr x Sp ke Recovery(s) for 2,2-D ch oropropane, 2-Ch oroethy v ny ether, 2-Hexanone, Acetone, Ch oroethane are outs de contro m ts Outs de contro m ts due to poss b e matr x nterference Refer to B ank Sp ke
- Matr x Sp ke Dup cate Recovery(s) for 2-Hexanone, 4-Methy -2-pentanone (MIBK), Acetone, m,p-Xy ene, Tetrach oroethene, 2-Butanone (MEK), Acro e n, D ch orod f uoromethane, Tr ch orof uoromethane, V ny ch or de are outs de contro m ts H gh RPD due to poss b e matr x nterference and/or samp e non-homogene ty
- RPD(s) for MSD for 2-Butanone (MEK), 2-Ch oroethy v ny ether, Acro e n, Bromomethane, Ch oroethane, Ch oromethane, D ch orod f uoromethane, Tr ch orof uoromethane, V ny ch or de are outs de contro m ts for samp e MC3423 -7MSD H gh RPD due to poss b e matr x nterference and/or samp e non-homogene ty
- MC3423 -7MS/MSD: E evated detect on m t due to m ted samp e vo ume
- MC3423 -7MS/MSD for V ny Acetate: Outs de contro m ts Assoc ated samp es are non-detect for th s compound
- MSL39 6-BS for V ny Acetate, ,4-D oxane: Outs de contro m ts Assoc ated samp es are non-detect for th s compound
- D ch orod f uoromethane, Acro e n: In t a Ca brat on Ver f cat on outs de of acceptance cr ter a Samp e resu t may be b ased ow
- Acry on tr e, Bromoform, 2-Hexanone, m,p-Xy ene, Bromoform, Ethy benzene, Ch orobenzene, 4-Methy -2-pentanone (MIBK), Acetone, ,3-D ch oropropane, Carbon d su f de,V ny ch or de, 2-Ch oroethy v ny ethe, Methy ene brom de: Cont nu ng Ca brat on Ver f cat on outs de of acceptance cr ter a Samp e resu t may be b ased ow
- MC34338-5 for 4-Bromof uorobenzene: Outs de contro m ts due to poss b e matr x nterference Conf rmed by reana ys s

Matrix: AQ **Batch ID:** MSL39 7

- A samp es were ana yzed w th n the recommended method ho d ng t me
- A method b anks for th s batch meet method spec f c cr ter a
- Samp e(s) MC34338-3MS, MC34338-3MSD were used as the QC samp es nd cated
- B ank Sp ke Recove y(s) for 2,2-D ch oropropane, 2-Ch oroethy v ny ether, 2-Hexanone, Acetone are outs de contro m ts
- Matr x Sp ke Recovery(s) for ,4-D oxane, 2-Butanone (MEK), 2-Hexanone, 4-Methy -2-pentanone (MIBK), Acetone, D ch orod f uoromethane, V ny Acetate are outs de contro m ts Outs de contro m ts due to poss b e matr x nterference
- Matr x Sp ke Dup cate Recovery(s) for 2-Butanone (MEK), 2-Hexanone, D ch orod f uoromethane, V ny Acetate, Acetone are outs de contro m ts H gh RPD due to poss b e matr x nte ference and/or samp e non-homogene ty
- RPD(s) for MSD for Acetone are outs de contro m ts for samp e MC34338-3MSD H gh RPD due to poss b e matr x nterference and/or samp e non-homogene ty
- D ch orod f uoromethane, Acro e n: In t a Ca brat on outs de of acceptance cr ter a Samp e resu t may be b ased ow
- ,2,3-Tr ch orobenzene, m,p-Xy ene, ,3-D ch oropropane, Ch orobenzene, Acro e n, Bromoform: Cont nu ng Ca brat on Ver f cat on outs de of acceptance cr ter a Samp e resu t may be b ased ow

Volatiles by GCMS By Method SW846 8260C

Matrix: AQ **Batch ID:** MSL39 7

- MSL39 7-BS for V ny Acetate: Outs de contro m ts Assoc ated samp es are non-detect for th s compound

Extractables by GCMS By Method SW846 8270D

Matrix: AQ **Batch ID:** OP4023

- A samp es were extracted w th n the recommended method ho d ng t me
- A samp es were ana yzed w th n the recommended method ho d ng t me
- Samp e(s) MC34000-22MS, MC34000-22MSD were used as the QC samp es nd cated
- A method b anks for th s batch meet method spec f c cr ter a
- MC34338-6,7 for 2,4,6-Tr bromopheno : Outs de contro m ts due to d ut on

Extractables by GCMS By Method SW846 8270D BY SIM

Matrix: AQ **Batch ID:** OP40232

- A samp es were extracted w th n the recommended method ho d ng t me
- A samp es were ana yzed w th n the recommended method ho d ng t me
- Samp e(s) MC34000-23MS, MC34000-23MSD were used as the QC samp es nd cated
- Samp e(s) MC34338- have compound(s) repo ted w th a "B" qua f er, nd cat ng ana yte s found n the assoc ated method b ank

Volatiles by GC By Method SW846 8011

Matrix: AQ **Batch ID:** OP402 8

- A samp es were extracted w th n the recommended method ho d ng t me
- A samp es were ana yzed w th n the recommended method ho d ng t me
- Samp e(s) MC34000-20MS, MC34000-20MSD were used as the QC samp es nd cated
- A method b anks for th s batch meet method spec f c cr ter a

SGS Accutest New Eng and ce t f es that a ana ys s were performed w th n method spec f cat on It s further recommended that th s report to be used n ts ent rety The Laborato y D rector for SGS Accutest New Eng and or ass gnee as ver f ed by the s gnature on the cover page has author zed the re ease of th s report(MC34338)

Summary of Hits

Job Number: MC34338
Account: Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL
Collected: 10/14/14

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
MC34338-1	**MW14-ROX-101414**					
tert-Butylbenzene		0.63 J	5.0	0.39	ug/l	SW846 8260C
Isopropylbenzene		0.43 J	5.0	0.35	ug/l	SW846 8260C
Xylene (total) [a]		0.41 J	1.0	0.36	ug/l	SW846 8260C
Di-n-butyl phthalate		0.56 J	5.6	0.19	ug/l	SW846 8270D
Acenaphthene		0.54	0.11	0.077	ug/l	SW846 8270D BY SIM
Fluorene		0.24	0.11	0.11	ug/l	SW846 8270D BY SIM
1-Methylnaphthalene		1.4 J	2.2	0.56	ug/l	SW846 8270D BY SIM
Phenanthrene		0.021 JB	0.056	0.014	ug/l	SW846 8270D BY SIM
MC34338-2	**P66-ROX-101414**					
Benzene		21.2	0.50	0.32	ug/l	SW846 8260C
n-Butylbenzene		13.5	5.0	1.1	ug/l	SW846 8260C
sec-Butylbenzene		17.3	5.0	0.42	ug/l	SW846 8260C
tert-Butylbenzene		3.6 J	5.0	0.39	ug/l	SW846 8260C
Ethylbenzene		1.3	1.0	0.38	ug/l	SW846 8260C
Isopropylbenzene		129	5.0	0.35	ug/l	SW846 8260C
Methyl Tert Butyl Ether		11.1	1.0	0.51	ug/l	SW846 8260C
n-Propylbenzene		137	5.0	0.49	ug/l	SW846 8260C
Toluene		1.6	1.0	0.33	ug/l	SW846 8260C
o-Xylene		0.90 J	1.0	0.36	ug/l	SW846 8260C
Xylene (total) [a]		1.8	1.0	0.36	ug/l	SW846 8260C
Dibenzofuran		1.2 J	2.2	0.28	ug/l	SW846 8270D
Di-n-butyl phthalate		0.66 J	5.5	0.19	ug/l	SW846 8270D
Acenaphthene		0.45	0.11	0.076	ug/l	SW846 8270D BY SIM
Acenaphthylene		0.18	0.11	0.054	ug/l	SW846 8270D BY SIM
Fluorene		1.1	0.11	0.11	ug/l	SW846 8270D BY SIM
1-Methylnaphthalene		59.5	2.2	0.55	ug/l	SW846 8270D BY SIM
2-Methylnaphthalene		7.5	2.2	0.55	ug/l	SW846 8270D BY SIM
Phenanthrene		0.64	0.055	0.014	ug/l	SW846 8270D BY SIM
Pyrene		0.043 J	0.11	0.042	ug/l	SW846 8270D BY SIM
MC34338-3	**P74-ROX-101414**					
Benzene		0.68	0.50	0.32	ug/l	SW846 8260C
Xylene (total) [a]		0.43 J	1.0	0.36	ug/l	SW846 8260C
Butyl benzyl phthalate		0.96 J	5.0	0.53	ug/l	SW846 8270D
Di-n-butyl phthalate		1.9 J	5.0	0.17	ug/l	SW846 8270D
MC34338-4	**P59-ROX-101414-EB**					
Di-n-butyl phthalate		0.52 J	5.6	0.19	ug/l	SW846 8270D

Summary of Hits

Job Number: MC34338
Account: Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL
Collected: 10/14/14

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
MC34338-5	P59-ROX-101414					
Benzene		12000	25	16	ug/l	SW846 8260C
n-Butylbenzene		27.8	5.0	1.1	ug/l	SW846 8260C
sec-Butylbenzene		9.7	5.0	0.42	ug/l	SW846 8260C
tert-Butylbenzene		2.4 J	5.0	0.39	ug/l	SW846 8260C
Ethylbenzene		2330	50	19	ug/l	SW846 8260C
Isopropylbenzene		93.2	5.0	0.35	ug/l	SW846 8260C
p-Isopropyltoluene		4.3 J	5.0	0.37	ug/l	SW846 8260C
Methyl Tert Butyl Ether		4.1	1.0	0.51	ug/l	SW846 8260C
Naphthalene		380	5.0	0.69	ug/l	SW846 8260C
n-Propylbenzene		188	5.0	0.49	ug/l	SW846 8260C
Toluene		1130	50	17	ug/l	SW846 8260C
1,2,4-Trimethylbenzene		901	250	16	ug/l	SW846 8260C
1,3,5-Trimethylbenzene		260	5.0	0.38	ug/l	SW846 8260C
m,p-Xylene [a]		5140	50	47	ug/l	SW846 8260C
o-Xylene		1030	50	18	ug/l	SW846 8260C
Xylene (total) [a]		6170	50	18	ug/l	SW846 8260C
2,4-Dimethylphenol		49.2	11	0.61	ug/l	SW846 8270D
2-Methylphenol		38.7	11	0.25	ug/l	SW846 8270D
3&4-Methylphenol		9.2 J	11	0.51	ug/l	SW846 8270D
Phenol		36.1	5.4	0.33	ug/l	SW846 8270D
bis(2-Chloroethyl)ether		3.5 J	5.4	0.38	ug/l	SW846 8270D
Di-n-butyl phthalate		0.42 J	5.4	0.19	ug/l	SW846 8270D
Acenaphthene		0.45 J	0.54	0.37	ug/l	SW846 8270D BY SIM
Fluorene		0.87	0.54	0.54	ug/l	SW846 8270D BY SIM
1-Methylnaphthalene		26.8	11	2.7	ug/l	SW846 8270D BY SIM
2-Methylnaphthalene		42.5	11	2.7	ug/l	SW846 8270D BY SIM
Phenanthrene		1.5	0.27	0.068	ug/l	SW846 8270D BY SIM
MC34338-6	P57-ROX-101414					
Benzene		255000	1000	630	ug/l	SW846 8260C
Ethylbenzene [a]		3860	2000	760	ug/l	SW846 8260C
Naphthalene		2050 J	10000	1400	ug/l	SW846 8260C
Toluene		2650	2000	660	ug/l	SW846 8260C
1,2,4-Trimethylbenzene		2370 J	10000	640	ug/l	SW846 8260C
m,p-Xylene [a]		5790	2000	1900	ug/l	SW846 8260C
o-Xylene		2100	2000	730	ug/l	SW846 8260C
Xylene (total) [a]		7890	2000	730	ug/l	SW846 8260C
3&4-Methylphenol		15.2	11	0.52	ug/l	SW846 8270D
Phenol		274	28	1.7	ug/l	SW846 8270D
Di-n-butyl phthalate		0.86 J	5.6	0.19	ug/l	SW846 8270D
Acenaphthene		0.36	0.11	0.077	ug/l	SW846 8270D BY SIM
Fluorene		0.68	0.11	0.11	ug/l	SW846 8270D BY SIM

Summary of Hits

Job Number: MC34338
Account: Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL
Collected: 10/14/14

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
1-Methylnaphthalene		26.0	2.2	0.56	ug/l	SW846 8270D BY SIM
2-Methylnaphthalene		34.5	2.2	0.56	ug/l	SW846 8270D BY SIM
Phenanthrene		0.59	0.056	0.014	ug/l	SW846 8270D BY SIM
MC34338-7	**P57-ROX-101414-DUP**					
Benzene		220000	1000	630	ug/l	SW846 8260C
Ethylbenzene [a]		1770 J	2000	760	ug/l	SW846 8260C
Toluene		849 J	2000	660	ug/l	SW846 8260C
1,2,4-Trimethylbenzene		1180 J	10000	640	ug/l	SW846 8260C
m,p-Xylene [a]		2370	2000	1900	ug/l	SW846 8260C
o-Xylene		949 J	2000	730	ug/l	SW846 8260C
Xylene (total) [a]		3320	2000	730	ug/l	SW846 8260C
3&4-Methylphenol		13.8	12	0.54	ug/l	SW846 8270D
Phenol		271	29	1.8	ug/l	SW846 8270D
Di-n-butyl phthalate		0.82 J	5.8	0.20	ug/l	SW846 8270D
Acenaphthene		0.30	0.12	0.080	ug/l	SW846 8270D BY SIM
Fluorene		0.65	0.12	0.12	ug/l	SW846 8270D BY SIM
1-Methylnaphthalene		24.3	2.3	0.58	ug/l	SW846 8270D BY SIM
2-Methylnaphthalene		33.8	2.3	0.58	ug/l	SW846 8270D BY SIM
Phenanthrene		0.58	0.058	0.015	ug/l	SW846 8270D BY SIM
MC34338-8	**TB-ROX-101414-HCL**					
No hits reported in this sample.						
MC34338-9	**TB-ROX-101414-ST**					
No hits reported in this sample.						

(a) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW14-ROX-101414		
Lab Sample ID:	MC34338-1	**Date Sampled:**	10/14/14
Matrix:	AQ - Ground Water	**Date Received:**	10/15/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L87874.D	1	10/24/14	GK	n/a	n/a	MSL3917
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein [a]	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform [b]	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	0.63	5.0	0.39	ug/l	J
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene [b]	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane [c]	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW14-ROX-101414		
Lab Sample ID:	MC34338-1	**Date Sampled:**	10/14/14
Matrix:	AQ - Ground Water	**Date Received:**	10/15/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane [b]	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	0.43	5.0	0.35	ug/l	J
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene [b]	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene [b]	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total) [b]	0.41	1.0	0.36	ug/l	J

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW14-ROX-101414		
Lab Sample ID:	MC34338-1	**Date Sampled:**	10/14/14
Matrix:	AQ - Ground Water	**Date Received:**	10/15/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		70-130%
2037-26-5	Toluene-D8	101%		70-130%
460-00-4	4-Bromofluorobenzene	118%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Initial & Continuing Calibration outside of acceptance criteria. Sample result may be biased low.
(b) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.
(c) Initial Calibration Verification outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW14-ROX-101414		
Lab Sample ID:	MC34338-1	**Date Sampled:**	10/14/14
Matrix:	AQ - Ground Water	**Date Received:**	10/15/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R40400.D	1	10/20/14	KD	10/16/14	OP40231	MSR1487
Run #2							

	Initial Volume	Final Volume
Run #1	900 ml	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	11	2.8	ug/l	
95-57-8	2-Chlorophenol	ND	5.6	0.34	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	11	0.92	ug/l	
120-83-2	2,4-Dichlorophenol	ND	11	0.44	ug/l	
105-67-9	2,4-Dimethylphenol	ND	11	0.62	ug/l	
51-28-5	2,4-Dinitrophenol	ND	22	2.8	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	2.1	ug/l	
95-48-7	2-Methylphenol	ND	11	0.25	ug/l	
	3&4-Methylphenol	ND	11	0.52	ug/l	
88-75-5	2-Nitrophenol	ND	11	3.2	ug/l	
100-02-7	4-Nitrophenol	ND	22	0.59	ug/l	
87-86-5	Pentachlorophenol	ND	11	1.2	ug/l	
108-95-2	Phenol	ND	5.6	0.34	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	11	0.41	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	11	0.19	ug/l	
62-53-3	Aniline	ND	11	0.71	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.6	0.52	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.6	0.59	ug/l	
100-51-6	Benzyl Alcohol	ND	11	2.5	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.6	0.35	ug/l	
106-47-8	4-Chloroaniline	ND	11	0.62	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.6	0.32	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.6	0.39	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.6	0.37	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.6	0.28	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.6	0.27	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	11	0.51	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	11	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.6	0.30	ug/l	
132-64-9	Dibenzofuran	ND	2.2	0.29	ug/l	
84-74-2	Di-n-butyl phthalate	0.56	5.6	0.19	ug/l	J
117-84-0	Di-n-octyl phthalate	ND	5.6	0.31	ug/l	

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range
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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW14-ROX-101414		
Lab Sample ID:	MC34338-1	**Date Sampled:**	10/14/14
Matrix:	AQ - Ground Water	**Date Received:**	10/15/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	5.6	0.22	ug/l	
131-11-3	Dimethyl phthalate	ND	5.6	0.38	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.2	0.37	ug/l	
118-74-1	Hexachlorobenzene	ND	5.6	0.32	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	11	1.4	ug/l	
67-72-1	Hexachloroethane	ND	5.6	0.34	ug/l	
78-59-1	Isophorone	ND	5.6	0.50	ug/l	
88-74-4	2-Nitroaniline	ND	11	0.44	ug/l	
99-09-2	3-Nitroaniline	ND	11	1.5	ug/l	
100-01-6	4-Nitroaniline	ND	11	2.4	ug/l	
98-95-3	Nitrobenzene	ND	5.6	0.43	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.6	1.1	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.6	0.45	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.6	0.21	ug/l	
110-86-1	Pyridine	ND	11	0.57	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	48%		15-110%
4165-62-2	Phenol-d5	32%		15-110%
118-79-6	2,4,6-Tribromophenol	96%		15-110%
4165-60-0	Nitrobenzene-d5	72%		30-130%
321-60-8	2-Fluorobiphenyl	67%		30-130%
1718-51-0	Terphenyl-d14	95%		30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW14-ROX-101414		
Lab Sample ID:	MC34338-1	**Date Sampled:**	10/14/14
Matrix:	AQ - Ground Water	**Date Received:**	10/15/14
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I92416.D	1	10/23/14	WK	10/16/14	OP40232	MSI3445
Run #2							

	Initial Volume	Final Volume
Run #1	900 ml	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.54	0.11	0.077	ug/l	
208-96-8	Acenaphthylene	ND	0.11	0.055	ug/l	
120-12-7	Anthracene	ND	0.11	0.10	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.056	0.022	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.11	0.032	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.056	0.035	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.11	0.030	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.11	0.043	ug/l	
218-01-9	Chrysene	ND	0.11	0.026	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.11	0.035	ug/l	
206-44-0	Fluoranthene	ND	0.11	0.045	ug/l	
86-73-7	Fluorene	0.24	0.11	0.11	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.11	0.034	ug/l	
90-12-0	1-Methylnaphthalene	1.4	2.2	0.56	ug/l	J
91-57-6	2-Methylnaphthalene	ND	2.2	0.56	ug/l	
85-01-8	Phenanthrene	0.021	0.056	0.014	ug/l	JB
129-00-0	Pyrene	ND	0.11	0.043	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	77%		30-130%
321-60-8	2-Fluorobiphenyl	63%		30-130%
1718-51-0	Terphenyl-d14	83%		30-130%

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW14-ROX-101414		
Lab Sample ID:	MC34338-1	**Date Sampled:**	10/14/14
Matrix:	AQ - Ground Water	**Date Received:**	10/15/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB59926.D	1	10/16/14	NK	10/15/14	OP40218	GBB3334
Run #2							

	Initial Volume	Final Volume
Run #1	36.4 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.014	0.0059	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.014	0.0059	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	90%		36-173%
460-00-4	Bromofluorobenzene (S)	100%		36-173%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P66-ROX-101414		
Lab Sample ID:	MC34338-2	**Date Sampled:**	10/14/14
Matrix:	AQ - Ground Water	**Date Received:**	10/15/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L87876.D	1	10/24/14	GK	n/a	n/a	MSL3917
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein [a]	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	21.2	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform [b]	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	13.5	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	17.3	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	3.6	5.0	0.39	ug/l	J
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene [b]	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane [c]	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P66-ROX-101414		
Lab Sample ID:	MC34338-2	**Date Sampled:**	10/14/14
Matrix:	AQ - Ground Water	**Date Received:**	10/15/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane [b]	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	1.3	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	129	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	11.1	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	137	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	1.6	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene [b]	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene [b]	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	0.90	1.0	0.36	ug/l	J
1330-20-7	Xylene (total) [b]	1.8	1.0	0.36	ug/l	

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RL = Reporting Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P66-ROX-101414		
Lab Sample ID:	MC34338-2	**Date Sampled:**	10/14/14
Matrix:	AQ - Ground Water	**Date Received:**	10/15/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		70-130%
2037-26-5	Toluene-D8	101%		70-130%
460-00-4	4-Bromofluorobenzene	121%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Initial & Continuing Calibration outside of acceptance criteria. Sample result may be biased low.
(b) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.
(c) Initial Calibration Verification outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P66-ROX-101414		
Lab Sample ID:	MC34338-2	**Date Sampled:**	10/14/14
Matrix:	AQ - Ground Water	**Date Received:**	10/15/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R40401.D	1	10/20/14	KD	10/16/14	OP40231	MSR1487
Run #2							

	Initial Volume	Final Volume
Run #1	910 ml	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	11	2.7	ug/l	
95-57-8	2-Chlorophenol	ND	5.5	0.34	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	11	0.91	ug/l	
120-83-2	2,4-Dichlorophenol	ND	11	0.44	ug/l	
105-67-9	2,4-Dimethylphenol	ND	11	0.62	ug/l	
51-28-5	2,4-Dinitrophenol	ND	22	2.7	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	2.1	ug/l	
95-48-7	2-Methylphenol	ND	11	0.25	ug/l	
	3&4-Methylphenol	ND	11	0.51	ug/l	
88-75-5	2-Nitrophenol	ND	11	3.2	ug/l	
100-02-7	4-Nitrophenol	ND	22	0.59	ug/l	
87-86-5	Pentachlorophenol	ND	11	1.2	ug/l	
108-95-2	Phenol	ND	5.5	0.33	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	11	0.41	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	11	0.19	ug/l	
62-53-3	Aniline	ND	11	0.70	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.5	0.52	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.5	0.58	ug/l	
100-51-6	Benzyl Alcohol	ND	11	2.5	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.5	0.34	ug/l	
106-47-8	4-Chloroaniline	ND	11	0.61	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.5	0.31	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.5	0.38	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.5	0.36	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.5	0.28	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.5	0.26	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	11	0.50	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	11	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.5	0.29	ug/l	
132-64-9	Dibenzofuran	1.2	2.2	0.28	ug/l	J
84-74-2	Di-n-butyl phthalate	0.66	5.5	0.19	ug/l	J
117-84-0	Di-n-octyl phthalate	ND	5.5	0.31	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P66-ROX-101414		
Lab Sample ID:	MC34338-2	**Date Sampled:**	10/14/14
Matrix:	AQ - Ground Water	**Date Received:**	10/15/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	5.5	0.22	ug/l	
131-11-3	Dimethyl phthalate	ND	5.5	0.37	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.2	0.37	ug/l	
118-74-1	Hexachlorobenzene	ND	5.5	0.32	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	11	1.4	ug/l	
67-72-1	Hexachloroethane	ND	5.5	0.33	ug/l	
78-59-1	Isophorone	ND	5.5	0.49	ug/l	
88-74-4	2-Nitroaniline	ND	11	0.44	ug/l	
99-09-2	3-Nitroaniline	ND	11	1.5	ug/l	
100-01-6	4-Nitroaniline	ND	11	2.4	ug/l	
98-95-3	Nitrobenzene	ND	5.5	0.43	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.5	1.1	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.5	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.5	0.21	ug/l	
110-86-1	Pyridine	ND	11	0.57	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	47%		15-110%
4165-62-2	Phenol-d5	33%		15-110%
118-79-6	2,4,6-Tribromophenol	99%		15-110%
4165-60-0	Nitrobenzene-d5	70%		30-130%
321-60-8	2-Fluorobiphenyl	68%		30-130%
1718-51-0	Terphenyl-d14	92%		30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P66-ROX-101414		
Lab Sample ID:	MC34338-2	**Date Sampled:**	10/14/14
Matrix:	AQ - Ground Water	**Date Received:**	10/15/14
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I92417.D	1	10/23/14	WK	10/16/14	OP40232	MSI3445
Run #2							

	Initial Volume	Final Volume
Run #1	910 ml	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.45	0.11	0.076	ug/l	
208-96-8	Acenaphthylene	0.18	0.11	0.054	ug/l	
120-12-7	Anthracene	ND	0.11	0.10	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.055	0.021	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.11	0.032	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.055	0.035	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.11	0.030	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.11	0.042	ug/l	
218-01-9	Chrysene	ND	0.11	0.026	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.11	0.035	ug/l	
206-44-0	Fluoranthene	ND	0.11	0.045	ug/l	
86-73-7	Fluorene	1.1	0.11	0.11	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.11	0.034	ug/l	
90-12-0	1-Methylnaphthalene	59.5	2.2	0.55	ug/l	
91-57-6	2-Methylnaphthalene	7.5	2.2	0.55	ug/l	
85-01-8	Phenanthrene	0.64	0.055	0.014	ug/l	
129-00-0	Pyrene	0.043	0.11	0.042	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	72%		30-130%
321-60-8	2-Fluorobiphenyl	57%		30-130%
1718-51-0	Terphenyl-d14	81%		30-130%

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P66-ROX-101414		
Lab Sample ID:	MC34338-2	**Date Sampled:**	10/14/14
Matrix:	AQ - Ground Water	**Date Received:**	10/15/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB59927.D	1	10/16/14	NK	10/15/14	OP40218	GBB3334
Run #2							

	Initial Volume	Final Volume
Run #1	36.8 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.014	0.0058	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.014	0.0058	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	75%		36-173%
460-00-4	Bromofluorobenzene (S)	111%		36-173%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P74-ROX-101414		
Lab Sample ID:	MC34338-3	**Date Sampled:**	10/14/14
Matrix:	AQ - Ground Water	**Date Received:**	10/15/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L87875.D	1	10/24/14	GK	n/a	n/a	MSL3917
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein [a]	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	0.68	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform [b]	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene [b]	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane [c]	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P74-ROX-101414		
Lab Sample ID:	MC34338-3	**Date Sampled:**	10/14/14
Matrix:	AQ - Ground Water	**Date Received:**	10/15/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane [b]	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene [b]	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene [b]	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total) [b]	0.43	1.0	0.36	ug/l	J

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P74-ROX-101414		
Lab Sample ID:	MC34338-3	**Date Sampled:**	10/14/14
Matrix:	AQ - Ground Water	**Date Received:**	10/15/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		70-130%
2037-26-5	Toluene-D8	100%		70-130%
460-00-4	4-Bromofluorobenzene	121%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Initial & Continuing Calibration outside of acceptance criteria. Sample result may be biased low.
(b) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.
(c) Initial Calibration Verification outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P74-ROX-101414		
Lab Sample ID:	MC34338-3	**Date Sampled:**	10/14/14
Matrix:	AQ - Ground Water	**Date Received:**	10/15/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R40402.D	1	10/20/14	KD	10/16/14	OP40231	MSR1487
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	10	2.5	ug/l	
95-57-8	2-Chlorophenol	ND	5.0	0.31	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	10	0.83	ug/l	
120-83-2	2,4-Dichlorophenol	ND	10	0.40	ug/l	
105-67-9	2,4-Dimethylphenol	ND	10	0.56	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	2.5	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.9	ug/l	
95-48-7	2-Methylphenol	ND	10	0.23	ug/l	
	3&4-Methylphenol	ND	10	0.47	ug/l	
88-75-5	2-Nitrophenol	ND	10	2.9	ug/l	
100-02-7	4-Nitrophenol	ND	20	0.53	ug/l	
87-86-5	Pentachlorophenol	ND	10	1.1	ug/l	
108-95-2	Phenol	ND	5.0	0.30	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	10	0.37	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	10	0.18	ug/l	
62-53-3	Aniline	ND	10	0.64	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.0	0.47	ug/l	
85-68-7	Butyl benzyl phthalate	0.96	5.0	0.53	ug/l	J
100-51-6	Benzyl Alcohol	ND	10	2.3	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.31	ug/l	
106-47-8	4-Chloroaniline	ND	10	0.56	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.0	0.29	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.0	0.35	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.0	0.33	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.0	0.25	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.0	0.24	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	10	0.46	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	10	0.30	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.27	ug/l	
132-64-9	Dibenzofuran	ND	2.0	0.26	ug/l	
84-74-2	Di-n-butyl phthalate	1.9	5.0	0.17	ug/l	J
117-84-0	Di-n-octyl phthalate	ND	5.0	0.28	ug/l	

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Report of Analysis

Client Sample ID:	P74-ROX-101414		
Lab Sample ID:	MC34338-3	**Date Sampled:**	10/14/14
Matrix:	AQ - Ground Water	**Date Received:**	10/15/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	5.0	0.20	ug/l	
131-11-3	Dimethyl phthalate	ND	5.0	0.34	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
118-74-1	Hexachlorobenzene	ND	5.0	0.29	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	1.3	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.30	ug/l	
78-59-1	Isophorone	ND	5.0	0.45	ug/l	
88-74-4	2-Nitroaniline	ND	10	0.40	ug/l	
99-09-2	3-Nitroaniline	ND	10	1.4	ug/l	
100-01-6	4-Nitroaniline	ND	10	2.2	ug/l	
98-95-3	Nitrobenzene	ND	5.0	0.39	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.0	1.0	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.0	0.40	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.19	ug/l	
110-86-1	Pyridine	ND	10	0.52	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	38%		15-110%
4165-62-2	Phenol-d5	26%		15-110%
118-79-6	2,4,6-Tribromophenol	87%		15-110%
4165-60-0	Nitrobenzene-d5	64%		30-130%
321-60-8	2-Fluorobiphenyl	62%		30-130%
1718-51-0	Terphenyl-d14	91%		30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P74-ROX-101414		
Lab Sample ID:	MC34338-3	**Date Sampled:**	10/14/14
Matrix:	AQ - Ground Water	**Date Received:**	10/15/14
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I92418.D	1	10/23/14	WK	10/16/14	OP40232	MSI3445
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.069	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.050	ug/l	
120-12-7	Anthracene	ND	0.10	0.092	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.050	0.020	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.029	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.050	0.032	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.027	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.039	ug/l	
218-01-9	Chrysene	ND	0.10	0.024	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.032	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.041	ug/l	
86-73-7	Fluorene	ND	0.10	0.099	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.031	ug/l	
90-12-0	1-Methylnaphthalene	ND	2.0	0.50	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.0	0.50	ug/l	
85-01-8	Phenanthrene	ND	0.050	0.013	ug/l	
129-00-0	Pyrene	ND	0.10	0.038	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	67%		30-130%
321-60-8	2-Fluorobiphenyl	62%		30-130%
1718-51-0	Terphenyl-d14	80%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P74-ROX-101414		
Lab Sample ID:	MC34338-3	**Date Sampled:**	10/14/14
Matrix:	AQ - Ground Water	**Date Received:**	10/15/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB59928.D	1	10/16/14	NK	10/15/14	OP40218	GBB3334
Run #2							

	Initial Volume	Final Volume
Run #1	36.6 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.014	0.0058	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.014	0.0058	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	88%		36-173%
460-00-4	Bromofluorobenzene (S)	92%		36-173%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P59-ROX-101414-EB		
Lab Sample ID:	MC34338-4	**Date Sampled:**	10/14/14
Matrix:	AQ - Equipment Blank	**Date Received:**	10/15/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L87848.D	1	10/23/14	GK	n/a	n/a	MSL3916
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	10	2.5	ug/l	
107-02-8	Acrolein [b]	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile [a]	ND	5.0	2.1	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform [a]	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide [a]	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene [a]	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
110-75-8	2-Chloroethyl vinyl ether [a]	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane [b]	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P59-ROX-101414-EB		
Lab Sample ID:	MC34338-4	**Date Sampled:**	10/14/14
Matrix:	AQ - Equipment Blank	**Date Received:**	10/15/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane [a]	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene [a]	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone [a]	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIB [a]	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide [a]	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride [a]	ND	1.0	0.58	ug/l	
	m,p-Xylene [a]	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total) [a]	ND	1.0	0.36	ug/l	

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P59-ROX-101414-EB		
Lab Sample ID:	MC34338-4	**Date Sampled:**	10/14/14
Matrix:	AQ - Equipment Blank	**Date Received:**	10/15/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		70-130%
2037-26-5	Toluene-D8	100%		70-130%
460-00-4	4-Bromofluorobenzene	122%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.
(b) Initial & Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P59-ROX-101414-EB		
Lab Sample ID:	MC34338-4	**Date Sampled:**	10/14/14
Matrix:	AQ - Equipment Blank	**Date Received:**	10/15/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R40403.D	1	10/20/14	KD	10/16/14	OP40231	MSR1487
Run #2							

	Initial Volume	Final Volume
Run #1	890 ml	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	11	2.8	ug/l	
95-57-8	2-Chlorophenol	ND	5.6	0.35	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	11	0.93	ug/l	
120-83-2	2,4-Dichlorophenol	ND	11	0.45	ug/l	
105-67-9	2,4-Dimethylphenol	ND	11	0.63	ug/l	
51-28-5	2,4-Dinitrophenol	ND	22	2.8	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	2.2	ug/l	
95-48-7	2-Methylphenol	ND	11	0.25	ug/l	
	3&4-Methylphenol	ND	11	0.52	ug/l	
88-75-5	2-Nitrophenol	ND	11	3.2	ug/l	
100-02-7	4-Nitrophenol	ND	22	0.60	ug/l	
87-86-5	Pentachlorophenol	ND	11	1.3	ug/l	
108-95-2	Phenol	ND	5.6	0.34	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	11	0.42	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	11	0.20	ug/l	
62-53-3	Aniline	ND	11	0.72	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.6	0.53	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.6	0.60	ug/l	
100-51-6	Benzyl Alcohol	ND	11	2.5	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.6	0.35	ug/l	
106-47-8	4-Chloroaniline	ND	11	0.63	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.6	0.32	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.6	0.39	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.6	0.37	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.6	0.28	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.6	0.27	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	11	0.51	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	11	0.34	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.6	0.30	ug/l	
132-64-9	Dibenzofuran	ND	2.2	0.29	ug/l	
84-74-2	Di-n-butyl phthalate	0.52	5.6	0.19	ug/l	J
117-84-0	Di-n-octyl phthalate	ND	5.6	0.32	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P59-ROX-101414-EB		
Lab Sample ID:	MC34338-4	**Date Sampled:**	10/14/14
Matrix:	AQ - Equipment Blank	**Date Received:**	10/15/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	5.6	0.23	ug/l	
131-11-3	Dimethyl phthalate	ND	5.6	0.38	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.2	0.37	ug/l	
118-74-1	Hexachlorobenzene	ND	5.6	0.33	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	11	1.4	ug/l	
67-72-1	Hexachloroethane	ND	5.6	0.34	ug/l	
78-59-1	Isophorone	ND	5.6	0.50	ug/l	
88-74-4	2-Nitroaniline	ND	11	0.45	ug/l	
99-09-2	3-Nitroaniline	ND	11	1.5	ug/l	
100-01-6	4-Nitroaniline	ND	11	2.4	ug/l	
98-95-3	Nitrobenzene	ND	5.6	0.44	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.6	1.1	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.6	0.45	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.6	0.22	ug/l	
110-86-1	Pyridine	ND	11	0.58	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	41%		15-110%
4165-62-2	Phenol-d5	28%		15-110%
118-79-6	2,4,6-Tribromophenol	80%		15-110%
4165-60-0	Nitrobenzene-d5	66%		30-130%
321-60-8	2-Fluorobiphenyl	63%		30-130%
1718-51-0	Terphenyl-d14	95%		30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P59-ROX-101414-EB		
Lab Sample ID:	MC34338-4	**Date Sampled:**	10/14/14
Matrix:	AQ - Equipment Blank	**Date Received:**	10/15/14
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I92419.D	1	10/23/14	WK	10/16/14	OP40232	MSI3445
Run #2							

	Initial Volume	Final Volume
Run #1	890 ml	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.11	0.077	ug/l	
208-96-8	Acenaphthylene	ND	0.11	0.056	ug/l	
120-12-7	Anthracene	ND	0.11	0.10	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.056	0.022	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.11	0.032	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.056	0.036	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.11	0.030	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.11	0.043	ug/l	
218-01-9	Chrysene	ND	0.11	0.027	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.11	0.036	ug/l	
206-44-0	Fluoranthene	ND	0.11	0.046	ug/l	
86-73-7	Fluorene	ND	0.11	0.11	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.11	0.034	ug/l	
90-12-0	1-Methylnaphthalene	ND	2.2	0.56	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.2	0.56	ug/l	
85-01-8	Phenanthrene	ND	0.056	0.014	ug/l	
129-00-0	Pyrene	ND	0.11	0.043	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	69%		30-130%
321-60-8	2-Fluorobiphenyl	63%		30-130%
1718-51-0	Terphenyl-d14	83%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P59-ROX-101414-EB		
Lab Sample ID:	MC34338-4	**Date Sampled:**	10/14/14
Matrix:	AQ - Equipment Blank	**Date Received:**	10/15/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB59929.D	1	10/16/14	NK	10/15/14	OP40218	GBB3334
Run #2							

	Initial Volume	Final Volume
Run #1	37.0 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.014	0.0058	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.014	0.0058	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	90%		36-173%
460-00-4	Bromofluorobenzene (S)	96%		36-173%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P59-ROX-101414		
Lab Sample ID:	MC34338-5	**Date Sampled:**	10/14/14
Matrix:	AQ - Ground Water	**Date Received:**	10/15/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L87849.D	1	10/23/14	GK	n/a	n/a	MSL3916
Run #2	L87877.D	50	10/24/14	GK	n/a	n/a	MSL3917

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	10	2.5	ug/l	
107-02-8	Acrolein [b]	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile [a]	ND	5.0	2.1	ug/l	
71-43-2	Benzene	12000 [c]	25	16	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform [a]	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	27.8	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	9.7	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	2.4	5.0	0.39	ug/l	J
75-15-0	Carbon disulfide [a]	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene [a]	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
110-75-8	2-Chloroethyl vinyl ether [a]	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane [b]	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P59-ROX-101414		
Lab Sample ID:	MC34338-5	**Date Sampled:**	10/14/14
Matrix:	AQ - Ground Water	**Date Received:**	10/15/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane [a]	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	2330 [c]	50	19	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone [a]	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	93.2	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	4.3	5.0	0.37	ug/l	J
1634-04-4	Methyl Tert Butyl Ether	4.1	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIB [a]	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide [a]	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	380	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	188	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	1130 [c]	50	17	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	901 [c]	250	16	ug/l	
108-67-8	1,3,5-Trimethylbenzene	260	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride [a]	ND	1.0	0.58	ug/l	
	m,p-Xylene [a]	5140 [c]	50	47	ug/l	
95-47-6	o-Xylene	1030 [c]	50	18	ug/l	
1330-20-7	Xylene (total) [a]	6170 [c]	50	18	ug/l	

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P59-ROX-101414		
Lab Sample ID:	MC34338-5	**Date Sampled:**	10/14/14
Matrix:	AQ - Ground Water	**Date Received:**	10/15/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%	109%	70-130%
2037-26-5	Toluene-D8	104%	101%	70-130%
460-00-4	4-Bromofluorobenzene	131% [d]	124%	70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.
(b) Initial & Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.
(c) Result is from Run# 2
(d) Outside control limits due to possible matrix interference. Confirmed by reanalysis.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P59-ROX-101414		
Lab Sample ID:	MC34338-5	**Date Sampled:**	10/14/14
Matrix:	AQ - Ground Water	**Date Received:**	10/15/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R40404.D	1	10/20/14	KD	10/16/14	OP40231	MSR1487
Run #2							

	Initial Volume	Final Volume
Run #1	920 ml	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	11	2.7	ug/l	
95-57-8	2-Chlorophenol	ND	5.4	0.34	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	11	0.90	ug/l	
120-83-2	2,4-Dichlorophenol	ND	11	0.43	ug/l	
105-67-9	2,4-Dimethylphenol	49.2	11	0.61	ug/l	
51-28-5	2,4-Dinitrophenol	ND	22	2.7	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	2.1	ug/l	
95-48-7	2-Methylphenol	38.7	11	0.25	ug/l	
	3&4-Methylphenol	9.2	11	0.51	ug/l	J
88-75-5	2-Nitrophenol	ND	11	3.1	ug/l	
100-02-7	4-Nitrophenol	ND	22	0.58	ug/l	
87-86-5	Pentachlorophenol	ND	11	1.2	ug/l	
108-95-2	Phenol	36.1	5.4	0.33	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	11	0.40	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	11	0.19	ug/l	
62-53-3	Aniline	ND	11	0.69	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.4	0.51	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.4	0.58	ug/l	
100-51-6	Benzyl Alcohol	ND	11	2.5	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.4	0.34	ug/l	
106-47-8	4-Chloroaniline	ND	11	0.61	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.4	0.31	ug/l	
111-44-4	bis(2-Chloroethyl)ether	3.5	5.4	0.38	ug/l	J
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.4	0.36	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.4	0.27	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.4	0.26	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	11	0.50	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	11	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.4	0.29	ug/l	
132-64-9	Dibenzofuran	ND	2.2	0.28	ug/l	
84-74-2	Di-n-butyl phthalate	0.42	5.4	0.19	ug/l	J
117-84-0	Di-n-octyl phthalate	ND	5.4	0.31	ug/l	

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Report of Analysis

Client Sample ID:	P59-ROX-101414		
Lab Sample ID:	MC34338-5	**Date Sampled:**	10/14/14
Matrix:	AQ - Ground Water	**Date Received:**	10/15/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	5.4	0.22	ug/l	
131-11-3	Dimethyl phthalate	ND	5.4	0.37	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.2	0.36	ug/l	
118-74-1	Hexachlorobenzene	ND	5.4	0.31	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	11	1.4	ug/l	
67-72-1	Hexachloroethane	ND	5.4	0.33	ug/l	
78-59-1	Isophorone	ND	5.4	0.49	ug/l	
88-74-4	2-Nitroaniline	ND	11	0.43	ug/l	
99-09-2	3-Nitroaniline	ND	11	1.5	ug/l	
100-01-6	4-Nitroaniline	ND	11	2.3	ug/l	
98-95-3	Nitrobenzene	ND	5.4	0.43	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.4	1.1	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.4	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.4	0.21	ug/l	
110-86-1	Pyridine	ND	11	0.56	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	50%		15-110%
4165-62-2	Phenol-d5	27%		15-110%
118-79-6	2,4,6-Tribromophenol	99%		15-110%
4165-60-0	Nitrobenzene-d5	58%		30-130%
321-60-8	2-Fluorobiphenyl	69%		30-130%
1718-51-0	Terphenyl-d14	96%		30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P59-ROX-101414		
Lab Sample ID:	MC34338-5	**Date Sampled:**	10/14/14
Matrix:	AQ - Ground Water	**Date Received:**	10/15/14
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I92420.D	5	10/23/14	WK	10/16/14	OP40232	MSI3445
Run #2							

	Initial Volume	Final Volume
Run #1	920 ml	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.45	0.54	0.37	ug/l	J
208-96-8	Acenaphthylene	ND	0.54	0.27	ug/l	
120-12-7	Anthracene	ND	0.54	0.50	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.27	0.11	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.54	0.16	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.27	0.17	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.54	0.15	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.54	0.21	ug/l	
218-01-9	Chrysene	ND	0.54	0.13	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.54	0.17	ug/l	
206-44-0	Fluoranthene	ND	0.54	0.22	ug/l	
86-73-7	Fluorene	0.87	0.54	0.54	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.54	0.17	ug/l	
90-12-0	1-Methylnaphthalene	26.8	11	2.7	ug/l	
91-57-6	2-Methylnaphthalene	42.5	11	2.7	ug/l	
85-01-8	Phenanthrene	1.5	0.27	0.068	ug/l	
129-00-0	Pyrene	ND	0.54	0.21	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	75%		30-130%
321-60-8	2-Fluorobiphenyl	78%		30-130%
1718-51-0	Terphenyl-d14	102%		30-130%

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P59-ROX-101414		
Lab Sample ID:	MC34338-5	**Date Sampled:**	10/14/14
Matrix:	AQ - Ground Water	**Date Received:**	10/15/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB59930.D	1	10/16/14	NK	10/15/14	OP40218	GBB3334
Run #2							

	Initial Volume	Final Volume
Run #1	36.6 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.014	0.0058	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.014	0.0058	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	52%		36-173%
460-00-4	Bromofluorobenzene (S)	88%		36-173%

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P57-ROX-101414		
Lab Sample ID:	MC34338-6	**Date Sampled:**	10/14/14
Matrix:	AQ - Ground Water	**Date Received:**	10/15/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L87857.D	2000	10/23/14	GK	n/a	n/a	MSL3916
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	20000	5000	ug/l	
107-02-8	Acrolein [b]	ND	50000	12000	ug/l	
107-13-1	Acrylonitrile [a]	ND	10000	4200	ug/l	
71-43-2	Benzene	255000	1000	630	ug/l	
108-86-1	Bromobenzene	ND	10000	700	ug/l	
74-97-5	Bromochloromethane	ND	10000	1100	ug/l	
75-27-4	Bromodichloromethane	ND	2000	680	ug/l	
75-25-2	Bromoform [a]	ND	2000	1200	ug/l	
74-83-9	Bromomethane	ND	4000	3500	ug/l	
78-93-3	2-Butanone (MEK)	ND	10000	5000	ug/l	
104-51-8	n-Butylbenzene	ND	10000	2200	ug/l	
135-98-8	sec-Butylbenzene	ND	10000	840	ug/l	
98-06-6	tert-Butylbenzene	ND	10000	780	ug/l	
75-15-0	Carbon disulfide [a]	ND	10000	920	ug/l	
56-23-5	Carbon tetrachloride	ND	2000	1100	ug/l	
108-90-7	Chlorobenzene [a]	ND	2000	860	ug/l	
75-00-3	Chloroethane	ND	4000	1100	ug/l	
110-75-8	2-Chloroethyl vinyl ether [a]	ND	10000	6600	ug/l	
67-66-3	Chloroform	ND	2000	820	ug/l	
74-87-3	Chloromethane	ND	4000	2100	ug/l	
95-49-8	o-Chlorotoluene	ND	10000	760	ug/l	
106-43-4	p-Chlorotoluene	ND	10000	900	ug/l	
124-48-1	Dibromochloromethane	ND	2000	760	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	2000	630	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	2000	1100	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	2000	710	ug/l	
75-71-8	Dichlorodifluoromethane [b]	ND	4000	1400	ug/l	
75-34-3	1,1-Dichloroethane	ND	2000	720	ug/l	
107-06-2	1,2-Dichloroethane	ND	2000	1000	ug/l	
75-35-4	1,1-Dichloroethene	ND	2000	1200	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	2000	1700	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	2000	1000	ug/l	

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Report of Analysis

Client Sample ID:	P57-ROX-101414		
Lab Sample ID:	MC34338-6	**Date Sampled:**	10/14/14
Matrix:	AQ - Ground Water	**Date Received:**	10/15/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	4000	1000	ug/l	
142-28-9	1,3-Dichloropropane [a]	ND	10000	1800	ug/l	
594-20-7	2,2-Dichloropropane	ND	10000	2500	ug/l	
563-58-6	1,1-Dichloropropene	ND	10000	950	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1000	840	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1000	1000	ug/l	
123-91-1	1,4-Dioxane	ND	50000	22000	ug/l	
97-63-2	Ethyl methacrylate	ND	10000	1000	ug/l	
100-41-4	Ethylbenzene [a]	3860	2000	760	ug/l	
87-68-3	Hexachlorobutadiene	ND	10000	3300	ug/l	
591-78-6	2-Hexanone [a]	ND	10000	3200	ug/l	
98-82-8	Isopropylbenzene	ND	10000	700	ug/l	
99-87-6	p-Isopropyltoluene	ND	10000	750	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	2000	1000	ug/l	
108-10-1	4-Methyl-2-pentanone (MIB [a]	ND	10000	2000	ug/l	
74-95-3	Methylene bromide [a]	ND	10000	1000	ug/l	
75-09-2	Methylene chloride	ND	4000	560	ug/l	
91-20-3	Naphthalene	2050	10000	1400	ug/l	J
103-65-1	n-Propylbenzene	ND	10000	980	ug/l	
100-42-5	Styrene	ND	10000	1700	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	2000	870	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1000	800	ug/l	
127-18-4	Tetrachloroethene	ND	2000	1200	ug/l	
108-88-3	Toluene	2650	2000	660	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	10000	1400	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	10000	1000	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	2000	930	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	2000	910	ug/l	
79-01-6	Trichloroethene	ND	2000	940	ug/l	
75-69-4	Trichlorofluoromethane	ND	2000	1100	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10000	1600	ug/l	
95-63-6	1,2,4-Trimethylbenzene	2370	10000	640	ug/l	J
108-67-8	1,3,5-Trimethylbenzene	ND	10000	770	ug/l	
108-05-4	Vinyl Acetate	ND	10000	1400	ug/l	
75-01-4	Vinyl chloride [a]	ND	2000	1200	ug/l	
	m,p-Xylene [a]	5790	2000	1900	ug/l	
95-47-6	o-Xylene	2100	2000	730	ug/l	
1330-20-7	Xylene (total) [a]	7890	2000	730	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P57-ROX-101414		
Lab Sample ID:	MC34338-6	**Date Sampled:**	10/14/14
Matrix:	AQ - Ground Water	**Date Received:**	10/15/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		70-130%
2037-26-5	Toluene-D8	103%		70-130%
460-00-4	4-Bromofluorobenzene	126%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.
(b) Initial & Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P57-ROX-101414		
Lab Sample ID:	MC34338-6	**Date Sampled:**	10/14/14
Matrix:	AQ - Ground Water	**Date Received:**	10/15/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R40405.D	1	10/20/14	KD	10/16/14	OP40231	MSR1487
Run #2	F76979.D	5	10/21/14	WK	10/16/14	OP40231	MSF3371

	Initial Volume	Final Volume
Run #1	890 ml	1.0 ml
Run #2	890 ml	1.0 ml

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	11	2.8	ug/l	
95-57-8	2-Chlorophenol	ND	5.6	0.35	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	11	0.93	ug/l	
120-83-2	2,4-Dichlorophenol	ND	11	0.45	ug/l	
105-67-9	2,4-Dimethylphenol	ND	11	0.63	ug/l	
51-28-5	2,4-Dinitrophenol	ND	22	2.8	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	2.2	ug/l	
95-48-7	2-Methylphenol	ND	11	0.25	ug/l	
	3&4-Methylphenol	15.2	11	0.52	ug/l	
88-75-5	2-Nitrophenol	ND	11	3.2	ug/l	
100-02-7	4-Nitrophenol	ND	22	0.60	ug/l	
87-86-5	Pentachlorophenol	ND	11	1.3	ug/l	
108-95-2	Phenol	274 [a]	28	1.7	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	11	0.42	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	11	0.20	ug/l	
62-53-3	Aniline	ND	11	0.72	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.6	0.53	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.6	0.60	ug/l	
100-51-6	Benzyl Alcohol	ND	11	2.5	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.6	0.35	ug/l	
106-47-8	4-Chloroaniline	ND	11	0.63	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.6	0.32	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.6	0.39	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.6	0.37	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.6	0.28	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.6	0.27	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	11	0.51	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	11	0.34	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.6	0.30	ug/l	
132-64-9	Dibenzofuran	ND	2.2	0.29	ug/l	
84-74-2	Di-n-butyl phthalate	0.86	5.6	0.19	ug/l	J
117-84-0	Di-n-octyl phthalate	ND	5.6	0.32	ug/l	

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P57-ROX-101414		
Lab Sample ID:	MC34338-6	**Date Sampled:**	10/14/14
Matrix:	AQ - Ground Water	**Date Received:**	10/15/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	5.6	0.23	ug/l	
131-11-3	Dimethyl phthalate	ND	5.6	0.38	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.2	0.37	ug/l	
118-74-1	Hexachlorobenzene	ND	5.6	0.33	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	11	1.4	ug/l	
67-72-1	Hexachloroethane	ND	5.6	0.34	ug/l	
78-59-1	Isophorone	ND	5.6	0.50	ug/l	
88-74-4	2-Nitroaniline	ND	11	0.45	ug/l	
99-09-2	3-Nitroaniline	ND	11	1.5	ug/l	
100-01-6	4-Nitroaniline	ND	11	2.4	ug/l	
98-95-3	Nitrobenzene	ND	5.6	0.44	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.6	1.1	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.6	0.45	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.6	0.22	ug/l	
110-86-1	Pyridine	ND	11	0.58	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	49%	65%	15-110%
4165-62-2	Phenol-d5	34%	43%	15-110%
118-79-6	2,4,6-Tribromophenol	109%	140% [b]	15-110%
4165-60-0	Nitrobenzene-d5	77%	98%	30-130%
321-60-8	2-Fluorobiphenyl	44%	82%	30-130%
1718-51-0	Terphenyl-d14	100%	116%	30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

(a) Result is from Run# 2
(b) Outside control limits due to dilution.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P57-ROX-101414		
Lab Sample ID:	MC34338-6	**Date Sampled:**	10/14/14
Matrix:	AQ - Ground Water	**Date Received:**	10/15/14
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I92480.D	1	10/27/14	WK	10/16/14	OP40232	MSI3447
Run #2							

	Initial Volume	Final Volume
Run #1	890 ml	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.36	0.11	0.077	ug/l	
208-96-8	Acenaphthylene	ND	0.11	0.056	ug/l	
120-12-7	Anthracene	ND	0.11	0.10	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.056	0.022	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.11	0.032	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.056	0.036	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.11	0.030	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.11	0.043	ug/l	
218-01-9	Chrysene	ND	0.11	0.027	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.11	0.036	ug/l	
206-44-0	Fluoranthene	ND	0.11	0.046	ug/l	
86-73-7	Fluorene	0.68	0.11	0.11	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.11	0.034	ug/l	
90-12-0	1-Methylnaphthalene	26.0	2.2	0.56	ug/l	
91-57-6	2-Methylnaphthalene	34.5	2.2	0.56	ug/l	
85-01-8	Phenanthrene	0.59	0.056	0.014	ug/l	
129-00-0	Pyrene	ND	0.11	0.043	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	80%		30-130%
321-60-8	2-Fluorobiphenyl	66%		30-130%
1718-51-0	Terphenyl-d14	85%		30-130%

ND = Not detected MDL = Method Detection Limit
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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P57-ROX-101414		
Lab Sample ID:	MC34338-6	**Date Sampled:**	10/14/14
Matrix:	AQ - Ground Water	**Date Received:**	10/15/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB59931.D	1	10/16/14	NK	10/15/14	OP40218	GBB3334
Run #2							

	Initial Volume	Final Volume
Run #1	36.7 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.014	0.0058	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.014	0.0058	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	55%		36-173%
460-00-4	Bromofluorobenzene (S)	97%		36-173%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P57-ROX-101414-DUP		
Lab Sample ID:	MC34338-7	**Date Sampled:**	10/14/14
Matrix:	AQ - Ground Water	**Date Received:**	10/15/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L87858.D	2000	10/23/14	GK	n/a	n/a	MSL3916
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	20000	5000	ug/l	
107-02-8	Acrolein [b]	ND	50000	12000	ug/l	
107-13-1	Acrylonitrile [a]	ND	10000	4200	ug/l	
71-43-2	Benzene	220000	1000	630	ug/l	
108-86-1	Bromobenzene	ND	10000	700	ug/l	
74-97-5	Bromochloromethane	ND	10000	1100	ug/l	
75-27-4	Bromodichloromethane	ND	2000	680	ug/l	
75-25-2	Bromoform [a]	ND	2000	1200	ug/l	
74-83-9	Bromomethane	ND	4000	3500	ug/l	
78-93-3	2-Butanone (MEK)	ND	10000	5000	ug/l	
104-51-8	n-Butylbenzene	ND	10000	2200	ug/l	
135-98-8	sec-Butylbenzene	ND	10000	840	ug/l	
98-06-6	tert-Butylbenzene	ND	10000	780	ug/l	
75-15-0	Carbon disulfide [a]	ND	10000	920	ug/l	
56-23-5	Carbon tetrachloride	ND	2000	1100	ug/l	
108-90-7	Chlorobenzene [a]	ND	2000	860	ug/l	
75-00-3	Chloroethane	ND	4000	1100	ug/l	
110-75-8	2-Chloroethyl vinyl ether [a]	ND	10000	6600	ug/l	
67-66-3	Chloroform	ND	2000	820	ug/l	
74-87-3	Chloromethane	ND	4000	2100	ug/l	
95-49-8	o-Chlorotoluene	ND	10000	760	ug/l	
106-43-4	p-Chlorotoluene	ND	10000	900	ug/l	
124-48-1	Dibromochloromethane	ND	2000	760	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	2000	630	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	2000	1100	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	2000	710	ug/l	
75-71-8	Dichlorodifluoromethane [b]	ND	4000	1400	ug/l	
75-34-3	1,1-Dichloroethane	ND	2000	720	ug/l	
107-06-2	1,2-Dichloroethane	ND	2000	1000	ug/l	
75-35-4	1,1-Dichloroethene	ND	2000	1200	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	2000	1700	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	2000	1000	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P57-ROX-101414-DUP		
Lab Sample ID:	MC34338-7	**Date Sampled:**	10/14/14
Matrix:	AQ - Ground Water	**Date Received:**	10/15/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	4000	1000	ug/l	
142-28-9	1,3-Dichloropropane [a]	ND	10000	1800	ug/l	
594-20-7	2,2-Dichloropropane	ND	10000	2500	ug/l	
563-58-6	1,1-Dichloropropene	ND	10000	950	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1000	840	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1000	1000	ug/l	
123-91-1	1,4-Dioxane	ND	50000	22000	ug/l	
97-63-2	Ethyl methacrylate	ND	10000	1000	ug/l	
100-41-4	Ethylbenzene [a]	1770	2000	760	ug/l	J
87-68-3	Hexachlorobutadiene	ND	10000	3300	ug/l	
591-78-6	2-Hexanone [a]	ND	10000	3200	ug/l	
98-82-8	Isopropylbenzene	ND	10000	700	ug/l	
99-87-6	p-Isopropyltoluene	ND	10000	750	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	2000	1000	ug/l	
108-10-1	4-Methyl-2-pentanone (MIB [a]	ND	10000	2000	ug/l	
74-95-3	Methylene bromide [a]	ND	10000	1000	ug/l	
75-09-2	Methylene chloride	ND	4000	560	ug/l	
91-20-3	Naphthalene	ND	10000	1400	ug/l	
103-65-1	n-Propylbenzene	ND	10000	980	ug/l	
100-42-5	Styrene	ND	10000	1700	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	2000	870	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1000	800	ug/l	
127-18-4	Tetrachloroethene	ND	2000	1200	ug/l	
108-88-3	Toluene	849	2000	660	ug/l	J
87-61-6	1,2,3-Trichlorobenzene	ND	10000	1400	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	10000	1000	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	2000	930	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	2000	910	ug/l	
79-01-6	Trichloroethene	ND	2000	940	ug/l	
75-69-4	Trichlorofluoromethane	ND	2000	1100	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10000	1600	ug/l	
95-63-6	1,2,4-Trimethylbenzene	1180	10000	640	ug/l	J
108-67-8	1,3,5-Trimethylbenzene	ND	10000	770	ug/l	
108-05-4	Vinyl Acetate	ND	10000	1400	ug/l	
75-01-4	Vinyl chloride [a]	ND	2000	1200	ug/l	
	m,p-Xylene [a]	2370	2000	1900	ug/l	
95-47-6	o-Xylene	949	2000	730	ug/l	J
1330-20-7	Xylene (total) [a]	3320	2000	730	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P57-ROX-101414-DUP		
Lab Sample ID:	MC34338-7	**Date Sampled:**	10/14/14
Matrix:	AQ - Ground Water	**Date Received:**	10/15/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		70-130%
2037-26-5	Toluene-D8	102%		70-130%
460-00-4	4-Bromofluorobenzene	125%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.
(b) Initial & Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P57-ROX-101414-DUP		
Lab Sample ID:	MC34338-7	**Date Sampled:**	10/14/14
Matrix:	AQ - Ground Water	**Date Received:**	10/15/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R40406.D	1	10/20/14	KD	10/16/14	OP40231	MSR1487
Run #2	F76980.D	5	10/21/14	WK	10/16/14	OP40231	MSF3371

	Initial Volume	Final Volume
Run #1	860 ml	1.0 ml
Run #2	860 ml	1.0 ml

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	12	2.9	ug/l	
95-57-8	2-Chlorophenol	ND	5.8	0.36	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	12	0.96	ug/l	
120-83-2	2,4-Dichlorophenol	ND	12	0.46	ug/l	
105-67-9	2,4-Dimethylphenol	ND	12	0.65	ug/l	
51-28-5	2,4-Dinitrophenol	ND	23	2.9	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	12	2.2	ug/l	
95-48-7	2-Methylphenol	ND	12	0.26	ug/l	
	3&4-Methylphenol	13.8	12	0.54	ug/l	
88-75-5	2-Nitrophenol	ND	12	3.4	ug/l	
100-02-7	4-Nitrophenol	ND	23	0.62	ug/l	
87-86-5	Pentachlorophenol	ND	12	1.3	ug/l	
108-95-2	Phenol	271 [a]	29	1.8	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	12	0.43	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	12	0.20	ug/l	
62-53-3	Aniline	ND	12	0.74	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.8	0.55	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.8	0.62	ug/l	
100-51-6	Benzyl Alcohol	ND	12	2.6	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.8	0.36	ug/l	
106-47-8	4-Chloroaniline	ND	12	0.65	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.8	0.33	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.8	0.41	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.8	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.8	0.29	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.8	0.28	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	12	0.53	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	12	0.35	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.8	0.31	ug/l	
132-64-9	Dibenzofuran	ND	2.3	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	0.82	5.8	0.20	ug/l	J
117-84-0	Di-n-octyl phthalate	ND	5.8	0.33	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P57-ROX-101414-DUP		
Lab Sample ID:	MC34338-7	**Date Sampled:**	10/14/14
Matrix:	AQ - Ground Water	**Date Received:**	10/15/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	5.8	0.23	ug/l	
131-11-3	Dimethyl phthalate	ND	5.8	0.40	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.3	0.39	ug/l	
118-74-1	Hexachlorobenzene	ND	5.8	0.34	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	12	1.5	ug/l	
67-72-1	Hexachloroethane	ND	5.8	0.35	ug/l	
78-59-1	Isophorone	ND	5.8	0.52	ug/l	
88-74-4	2-Nitroaniline	ND	12	0.46	ug/l	
99-09-2	3-Nitroaniline	ND	12	1.6	ug/l	
100-01-6	4-Nitroaniline	ND	12	2.5	ug/l	
98-95-3	Nitrobenzene	ND	5.8	0.45	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.8	1.2	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.8	0.47	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.8	0.22	ug/l	
110-86-1	Pyridine	ND	12	0.60	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	48%	59%	15-110%
4165-62-2	Phenol-d5	33%	44%	15-110%
118-79-6	2,4,6-Tribromophenol	102%	135% [b]	15-110%
4165-60-0	Nitrobenzene-d5	75%	93%	30-130%
321-60-8	2-Fluorobiphenyl	49%	79%	30-130%
1718-51-0	Terphenyl-d14	98%	108%	30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

(a) Result is from Run# 2
(b) Outside control limits due to dilution.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P57-ROX-101414-DUP		
Lab Sample ID:	MC34338-7	**Date Sampled:**	10/14/14
Matrix:	AQ - Ground Water	**Date Received:**	10/15/14
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I92481.D	1	10/27/14	WK	10/16/14	OP40232	MSI3447
Run #2							

	Initial Volume	Final Volume
Run #1	860 ml	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.30	0.12	0.080	ug/l	
208-96-8	Acenaphthylene	ND	0.12	0.058	ug/l	
120-12-7	Anthracene	ND	0.12	0.11	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.058	0.023	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.12	0.033	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.058	0.037	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.12	0.031	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.12	0.045	ug/l	
218-01-9	Chrysene	ND	0.12	0.028	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.12	0.037	ug/l	
206-44-0	Fluoranthene	ND	0.12	0.047	ug/l	
86-73-7	Fluorene	0.65	0.12	0.12	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.12	0.036	ug/l	
90-12-0	1-Methylnaphthalene	24.3	2.3	0.58	ug/l	
91-57-6	2-Methylnaphthalene	33.8	2.3	0.58	ug/l	
85-01-8	Phenanthrene	0.58	0.058	0.015	ug/l	
129-00-0	Pyrene	ND	0.12	0.045	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	77%		30-130%
321-60-8	2-Fluorobiphenyl	66%		30-130%
1718-51-0	Terphenyl-d14	83%		30-130%

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P57-ROX-101414-DUP		
Lab Sample ID:	MC34338-7	**Date Sampled:**	10/14/14
Matrix:	AQ - Ground Water	**Date Received:**	10/15/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB59932.D	1	10/16/14	NK	10/15/14	OP40218	GBB3334
Run #2							

	Initial Volume	Final Volume
Run #1	37.2 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.014	0.0057	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.014	0.0057	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	52%		36-173%
460-00-4	Bromofluorobenzene (S)	96%		36-173%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-ROX-101414-HCL		
Lab Sample ID:	MC34338-8	**Date Sampled:**	10/14/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/15/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L87841.D	1	10/23/14	GK	n/a	n/a	MSL3916
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	10	2.5	ug/l	
107-02-8	Acrolein [b]	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile [a]	ND	5.0	2.1	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform [a]	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide [a]	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene [a]	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
110-75-8	2-Chloroethyl vinyl ether [a]	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane [b]	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-ROX-101414-HCL		
Lab Sample ID:	MC34338-8	**Date Sampled:**	10/14/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/15/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane [a]	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene [a]	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone [a]	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIB [a]	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide [a]	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride [a]	ND	1.0	0.58	ug/l	
	m,p-Xylene [a]	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total) [a]	ND	1.0	0.36	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-ROX-101414-HCL		
Lab Sample ID:	MC34338-8	**Date Sampled:**	10/14/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/15/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		70-130%
2037-26-5	Toluene-D8	99%		70-130%
460-00-4	4-Bromofluorobenzene	118%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.
(b) Initial & Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-ROX-101414-ST		
Lab Sample ID:	MC34338-9	**Date Sampled:**	10/14/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/15/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB59933.D	1	10/16/14	NK	10/15/14	OP40218	GBB3334
Run #2							

	Initial Volume	Final Volume
Run #1	35.5 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.015	0.0060	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.015	0.0060	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	86%		36-173%
460-00-4	Bromofluorobenzene (S)	89%		36-173%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

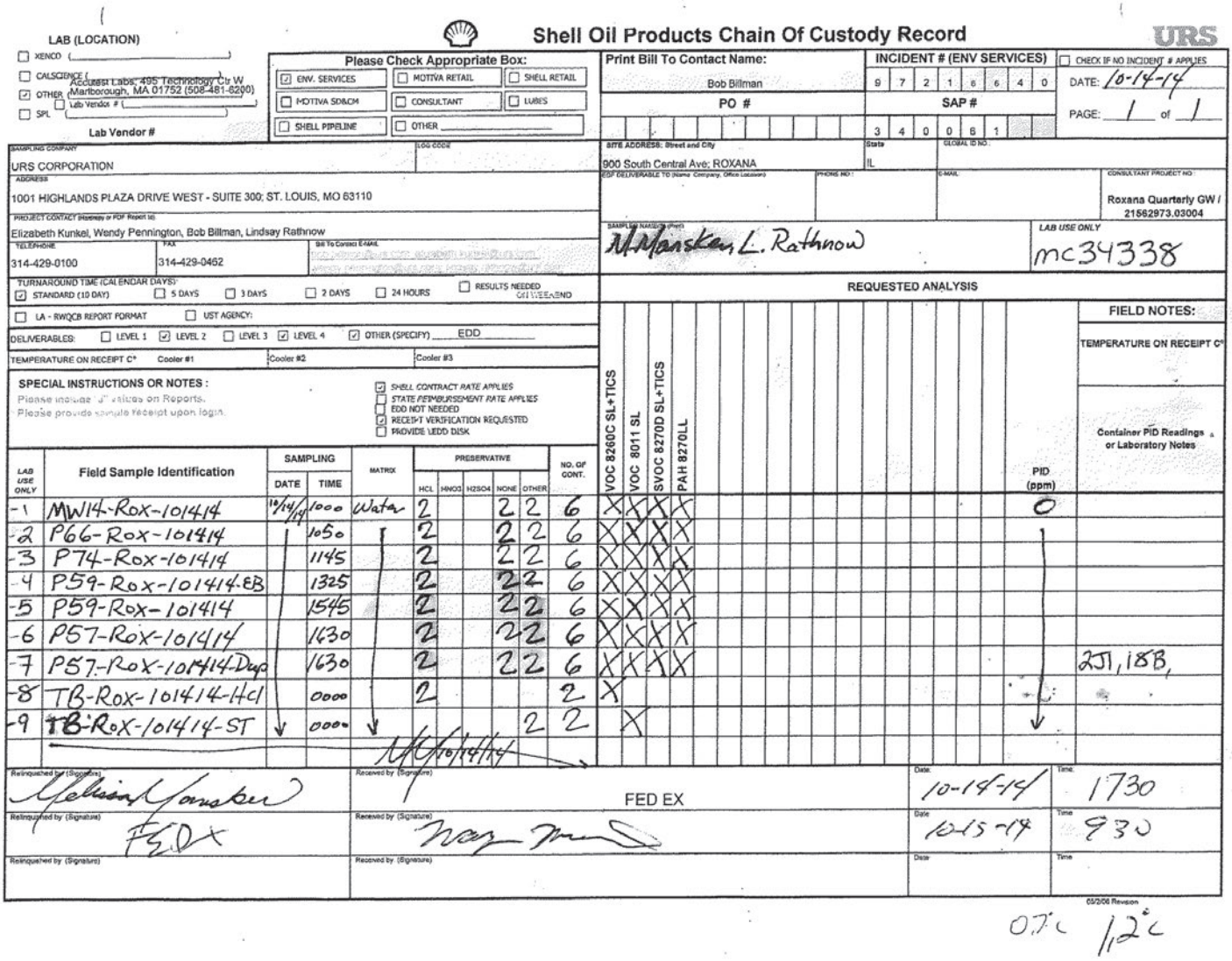
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody



Shell Oil Products Chain Of Custody Record

URS

LAB (LOCATION)
☐ XENCO ( )
☐ CALSCIENCE ( )
☑ OTHER ☐ Lab Vendor # (Accutest Labs; 495 Technology Ctr W Marlborough, MA 01752 (508-481-6200))
☐ SPL ( )
Lab Vendor #

Please Check Appropriate Box:
☑ ENV. SERVICES | ☐ MOTIVA RETAIL | ☐ SHELL RETAIL
☐ MOTIVA SD&CM | ☐ CONSULTANT | ☐ LUBES
☐ SHELL PIPELINE | ☐ OTHER

Print Bill To Contact Name: Bob Billman
PO #
INCIDENT # (ENV SERVICES): 9 7 2 1 6 6 4 0
SAP #: 3 4 0 0 8 1
☐ CHECK IF NO INCIDENT # APPLIES
DATE: 10-14-14
PAGE: 1 of 1

SAMPLING COMPANY: URS CORPORATION
LOG CODE:
ADDRESS: 1001 HIGHLANDS PLAZA DRIVE WEST - SUITE 300; ST. LOUIS, MO 63110
PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Wendy Pennington, Bob Billman, Lindsay Rathnow
TELEPHONE: 314-429-0100
FAX: 314-429-0462
Bill To Contact E-MAIL:

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA
State: IL
GLOBAL ID NO.:
EDF DELIVERABLE TO (Name, Company, Office Location):
PHONE NO.:
E-MAIL:
CONSULTANT PROJECT NO.: Roxana Quarterly GW / 21562973.03004
SAMPLER NAME(S) (Print): M. Marsden, L. Rathnow
LAB USE ONLY: mc34338

TURNAROUND TIME (CALENDAR DAYS):
☑ STANDARD (10 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND
☐ LA - RWQCB REPORT FORMAT ☐ UST AGENCY:
DELIVERABLES: ☐ LEVEL 1 ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) EDD
TEMPERATURE ON RECEIPT C°: Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES:
Please include "J" values on Reports.
Please provide sample receipt upon login.
☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260C SL+TICS	VOC 8011 SL	SVOC 8270D SL+TICS	PAH 8270LL	PID (ppm)	FIELD NOTES: Container PID Readings or Laboratory Notes
-1	MW14-ROX-101414	10/14/14	1000	Water	2			2	2	6	X	X	X	X	0	
-2	P66-ROX-101414		1050		2			2	2	6	X	X	X	X		
-3	P74-ROX-101414		1145		2			2	2	6	X	X	X	X		
-4	P59-ROX-101414-EB		1325		2			2	2	6	X	X	X	X		
-5	P59-ROX-101414		1545		2			2	2	6	X	X	X	X		
-6	P57-ROX-101414		1630		2			2	2	6	X	X	X	X		
-7	P57-ROX-101414-Dup		1630		2			2	2	6	X	X	X	X		2J1, 18B,
-8	TB-ROX-101414-HCl		0000		2					2	X					
-9	TB-ROX-101414-ST		0000						2	2		X				

TEMPERATURE ON RECEIPT C°

Relinquished by (Signature)	Received by (Signature)	Date	Time
Melissa Marsden	FED EX	10-14-14	1730
FEDX		10-15-14	930

05/2/06 Revision

0.7°C 1.2°C

MC34338: Chain of Custody
Page 1 of 2

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: MC34338 **Client:** URS **Project:** 900 SOUTH CENTRAL

Date / Time Received: 10/15/2014 9:30:00 AM **Delivery Method:** **Airbill #'s:**

Cooler Temps (Initial/Adjusted): #: (1.2/1.2); #1: (0.7/0.7);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Thermometer D:	G1;		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control_Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☑		☐	☐
2. Trip Blank listed on COC:	☑		☐	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

Accutest Laboratories
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495 Technology Center West, Bldg One
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Marlborough, MA 01752
www/accutest.com

Internal Sample Tracking Chronicle

Shell Oil

Job No: MC34338

URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC34338-1 Collected: 14-OCT-14 10:00 By: MMLR Received: 15-OCT-14 By: MW14-ROX-101414						
MC34338-1	SW846 8011	16-OCT-14 14:18	NK	15-OCT-14	NE	V8011SL
MC34338-1	SW846 8270D	20-OCT-14 13:10	KD	16-OCT-14	PA	AB8270SL+
MC34338-1	SW846 8270D BY SIM	23-OCT-14 17:33	WK	16-OCT-14	PA	B8270SIMSL
MC34338-1	SW846 8260C	24-OCT-14 12:00	GK			V8260SL+
MC34338-2 Collected: 14-OCT-14 10:50 By: MMLR Received: 15-OCT-14 By: P66-ROX-101414						
MC34338-2	SW846 8011	16-OCT-14 14:36	NK	15-OCT-14	NE	V8011SL
MC34338-2	SW846 8270D	20-OCT-14 13:34	KD	16-OCT-14	PA	AB8270SL+
MC34338-2	SW846 8270D BY SIM	23-OCT-14 17:56	WK	16-OCT-14	PA	B8270SIMSL
MC34338-2	SW846 8260C	24-OCT-14 12:59	GK			V8260SL+
MC34338-3 Collected: 14-OCT-14 11:45 By: MMLR Received: 15-OCT-14 By: P74-ROX-101414						
MC34338-3	SW846 8011	16-OCT-14 14:54	NK	15-OCT-14	NE	V8011SL
MC34338-3	SW846 8270D	20-OCT-14 13:59	KD	16-OCT-14	PA	AB8270SL+
MC34338-3	SW846 8270D BY SIM	23-OCT-14 18:18	WK	16-OCT-14	PA	B8270SIMSL
MC34338-3	SW846 8260C	24-OCT-14 12:29	GK			V8260SL+
MC34338-4 Collected: 14-OCT-14 13:25 By: MMLR Received: 15-OCT-14 By: P59-ROX-101414-EB						
MC34338-4	SW846 8011	16-OCT-14 15:12	NK	15-OCT-14	NE	V8011SL
MC34338-4	SW846 8270D	20-OCT-14 14:23	KD	16-OCT-14	PA	AB8270SL+
MC34338-4	SW846 8270D BY SIM	23-OCT-14 18:41	WK	16-OCT-14	PA	B8270SIMSL
MC34338-4	SW846 8260C	23-OCT-14 18:47	GK			V8260SL+
MC34338-5 Collected: 14-OCT-14 15:45 By: MMLR Received: 15-OCT-14 By: P59-ROX-101414						
MC34338-5	SW846 8011	16-OCT-14 15:30	NK	15-OCT-14	NE	V8011SL
MC34338-5	SW846 8270D	20-OCT-14 14:48	KD	16-OCT-14	PA	AB8270SL+
MC34338-5	SW846 8270D BY SIM	23-OCT-14 19:04	WK	16-OCT-14	PA	B8270SIMSL
MC34338-5	SW846 8260C	23-OCT-14 19:17	GK			V8260SL+
MC34338-5	SW846 8260C	24-OCT-14 13:28	GK			V8260SL+

Internal Sample Tracking Chronicle

Shell Oil

Job No: MC34338

URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC34338-6 Collected: 14-OCT-14 16:30 By: MMLR Received: 15-OCT-14 By: P57-ROX-101414						
MC34338-6	SW846 8011	16-OCT-14 15:48	NK	15-OCT-14	NE	V8011SL
MC34338-6	SW846 8270D	20-OCT-14 15:13	KD	16-OCT-14	PA	AB8270SL+
MC34338-6	SW846 8270D	21-OCT-14 18:00	WK	16-OCT-14	PA	AB8270SL+
MC34338-6	SW846 8260C	23-OCT-14 23:22	GK			V8260SL+
MC34338-6	SW846 8270D BY SIM	27-OCT-14 08:27	WK	16-OCT-14	PA	B8270SIMSL
MC34338-7 Collected: 14-OCT-14 16:00 By: MMLR Received: 15-OCT-14 By: P57-ROX-101414-DUP						
MC34338-7	SW846 8011	16-OCT-14 16:06	NK	15-OCT-14	NE	V8011SL
MC34338-7	SW846 8270D	20-OCT-14 15:37	KD	16-OCT-14	PA	AB8270SL+
MC34338-7	SW846 8270D	21-OCT-14 18:23	WK	16-OCT-14	PA	AB8270SL+
MC34338-7	SW846 8260C	23-OCT-14 23:51	GK			V8260SL+
MC34338-7	SW846 8270D BY SIM	27-OCT-14 08:49	WK	16-OCT-14	PA	B8270SIMSL
MC34338-8 Collected: 14-OCT-14 00:00 By: MMLR Received: 15-OCT-14 By: TB-ROX-101414-HCL						
MC34338-8	SW846 8260C	23-OCT-14 15:16	GK			V8260SL+
MC34338-9 Collected: 14-OCT-14 00:00 By: MMLR Received: 15-OCT-14 By: TB-ROX-101414-ST						
MC34338-9	SW846 8011	16-OCT-14 16:24	NK	15-OCT-14	NE	V8011SL

SGS Accutest Internal Chain of Custody

Job Number: MC34338
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL
Received: 10/15/14

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC34338-1.1	Walk In Ref #22	Michael DiBuono	10/16/14 08:44	Retrieve from Storage
MC34338-1.1	Michael DiBuono		11/16/14 12:43	Depleted
MC34338-1.3	VOC Ref #2	Gary Krasinski	10/23/14 14:44	Retrieve from Storage
MC34338-1.3	Gary Krasinski	GCMSL	10/23/14 14:44	Load on Instrument
MC34338-1.3	GCMSL	Gary Krasinski	10/24/14 10:33	Unload from Instrument
MC34338-1.3	Gary Krasinski	VOC Ref #2	10/24/14 10:33	Return to Storage
MC34338-1.3	Scott Parsick		12/18/14 12:16	Disposed
MC34338-1.4	VOC Ref #2	Gary Krasinski	10/24/14 10:34	Retrieve from Storage
MC34338-1.4	Gary Krasinski	GCMSL	10/24/14 10:34	Load on Instrument
MC34338-1.4	GCMSL	Gary Krasinski	10/27/14 09:07	Unload from Instrument
MC34338-1.4	Gary Krasinski	VOC Ref #2	10/27/14 09:08	Return to Storage
MC34338-1.4	Scott Parsick		12/18/14 12:16	Disposed
MC34338-1.5	Walk In Ref #22	Marc Tahtamoni	10/15/14 16:41	Retrieve from Storage
MC34338-1.5	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34338-2.1	Walk In Ref #22	Michael DiBuono	10/16/14 08:44	Retrieve from Storage
MC34338-2.1	Michael DiBuono		11/16/14 12:43	Depleted
MC34338-2.3	VOC Ref #2	Gary Krasinski	10/24/14 10:34	Retrieve from Storage
MC34338-2.3	Gary Krasinski	GCMSL	10/24/14 10:34	Load on Instrument
MC34338-2.3	GCMSL	Gary Krasinski	10/27/14 09:07	Unload from Instrument
MC34338-2.3	Gary Krasinski	VOC Ref #2	10/27/14 09:08	Return to Storage
MC34338-2.3	Scott Parsick		12/18/14 12:16	Disposed
MC34338-2.4	VOC Ref #2	Gary Krasinski	10/23/14 14:44	Retrieve from Storage
MC34338-2.4	Gary Krasinski	GCMSL	10/23/14 14:44	Load on Instrument
MC34338-2.4	GCMSL	Gary Krasinski	10/24/14 10:33	Unload from Instrument
MC34338-2.4	Gary Krasinski	VOC Ref #2	10/24/14 10:33	Return to Storage
MC34338-2.4	Scott Parsick		12/18/14 12:16	Disposed
MC34338-2.6	Walk In Ref #22	Marc Tahtamoni	10/15/14 16:41	Retrieve from Storage
MC34338-2.6	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34338-3.2	Walk In Ref #22	Michael DiBuono	10/16/14 08:44	Retrieve from Storage
MC34338-3.2	Michael DiBuono		11/16/14 12:43	Depleted
MC34338-3.3	VOC Ref #2	Gary Krasinski	10/23/14 14:44	Retrieve from Storage
MC34338-3.3	Gary Krasinski	GCMSL	10/23/14 14:44	Load on Instrument
MC34338-3.3	GCMSL	Gary Krasinski	10/24/14 10:33	Unload from Instrument
MC34338-3.3	Gary Krasinski	VOC Ref #2	10/24/14 10:33	Return to Storage
MC34338-3.3	Scott Parsick		12/18/14 12:16	Disposed

SGS Accutest Internal Chain of Custody

Job Number: MC34338
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL
Received: 10/15/14

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC34338-3.4	VOC Ref #2	Gary Krasinski	10/24/14 10:34	Retrieve from Storage
MC34338-3.4	Gary Krasinski	GCMSL	10/24/14 10:34	Load on Instrument
MC34338-3.4	GCMSL	Gary Krasinski	10/27/14 09:07	Unload from Instrument
MC34338-3.4	Gary Krasinski	VOC Ref #2	10/27/14 09:08	Return to Storage
MC34338-3.4	Scott Parsick		12/18/14 12:16	Disposed
MC34338-3.5	Walk In Ref #22	Marc Tahtamoni	10/15/14 16:41	Retrieve from Storage
MC34338-3.5	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34338-4.2	Walk In Ref #22	Michael DiBuono	10/16/14 08:44	Retrieve from Storage
MC34338-4.2	Michael DiBuono		11/16/14 12:43	Depleted
MC34338-4.3	VOC Ref #2	Gary Krasinski	10/23/14 14:44	Retrieve from Storage
MC34338-4.3	Gary Krasinski	GCMSL	10/23/14 14:44	Load on Instrument
MC34338-4.3	GCMSL	Gary Krasinski	10/24/14 10:33	Unload from Instrument
MC34338-4.3	Gary Krasinski	VOC Ref #2	10/24/14 10:33	Return to Storage
MC34338-4.3	Scott Parsick		12/18/14 12:16	Disposed
MC34338-4.6	Walk In Ref #22	Marc Tahtamoni	10/15/14 16:41	Retrieve from Storage
MC34338-4.6	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34338-5.1	Walk In Ref #22	Michael DiBuono	10/16/14 08:44	Retrieve from Storage
MC34338-5.1	Michael DiBuono		11/16/14 12:43	Depleted
MC34338-5.3	VOC Ref #2	Gary Krasinski	10/23/14 14:44	Retrieve from Storage
MC34338-5.3	Gary Krasinski	GCMSL	10/23/14 14:44	Load on Instrument
MC34338-5.3	GCMSL	Gary Krasinski	10/24/14 10:33	Unload from Instrument
MC34338-5.3	Gary Krasinski	VOC Ref #2	10/24/14 10:33	Return to Storage
MC34338-5.3	Scott Parsick		12/18/14 12:16	Disposed
MC34338-5.4	VOC Ref #2	Gary Krasinski	10/24/14 10:34	Retrieve from Storage
MC34338-5.4	Gary Krasinski	GCMSL	10/24/14 10:34	Load on Instrument
MC34338-5.4	GCMSL	Gary Krasinski	10/27/14 09:07	Unload from Instrument
MC34338-5.4	Gary Krasinski	VOC Ref #2	10/27/14 09:08	Return to Storage
MC34338-5.4	Scott Parsick		12/18/14 12:16	Disposed
MC34338-5.6	Walk In Ref #22	Marc Tahtamoni	10/15/14 16:41	Retrieve from Storage
MC34338-5.6	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34338-6.2	Walk In Ref #22	Michael DiBuono	10/16/14 08:44	Retrieve from Storage
MC34338-6.2	Michael DiBuono		11/16/14 12:43	Depleted
MC34338-6.3	VOC Ref #2	Gary Krasinski	10/23/14 14:44	Retrieve from Storage

SGS Accutest Internal Chain of Custody

Job Number: MC34338
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL
Received: 10/15/14

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC34338-6.3	Gary Krasinski	GCMSL	10/23/14 14:44	Load on Instrument
MC34338-6.3	GCMSL	Gary Krasinski	10/24/14 10:33	Unload from Instrument
MC34338-6.3	Gary Krasinski	VOC Ref #2	10/24/14 10:33	Return to Storage
MC34338-6.3	Scott Parsick		12/18/14 12:16	Disposed
MC34338-6.5	Walk In Ref #22	Marc Tahtamoni	10/15/14 16:41	Retrieve from Storage
MC34338-6.5	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34338-7.2	Walk In Ref #22	Michael DiBuono	10/16/14 08:44	Retrieve from Storage
MC34338-7.2	Michael DiBuono		11/16/14 12:43	Depleted
MC34338-7.3	VOC Ref #2	Gary Krasinski	10/23/14 14:44	Retrieve from Storage
MC34338-7.3	Gary Krasinski	GCMSL	10/23/14 14:44	Load on Instrument
MC34338-7.3	GCMSL	Gary Krasinski	10/24/14 10:33	Unload from Instrument
MC34338-7.3	Gary Krasinski	VOC Ref #2	10/24/14 10:33	Return to Storage
MC34338-7.3	Scott Parsick		12/18/14 12:16	Disposed
MC34338-7.5	Walk In Ref #22	Marc Tahtamoni	10/15/14 16:41	Retrieve from Storage
MC34338-7.5	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34338-8.2	VOC Ref #2	Gary Krasinski	10/23/14 14:44	Retrieve from Storage
MC34338-8.2	Gary Krasinski	GCMSL	10/23/14 14:44	Load on Instrument
MC34338-8.2	GCMSL	Gary Krasinski	10/24/14 10:33	Unload from Instrument
MC34338-8.2	Gary Krasinski	VOC Ref #2	10/24/14 10:33	Return to Storage
MC34338-8.2	Scott Parsick		12/18/14 12:16	Disposed
MC34338-9.1	Walk In Ref #22	Marc Tahtamoni	10/15/14 16:41	Retrieve from Storage
MC34338-9.1	Marc Tahtamoni		11/11/14 17:36	Depleted

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: MC34338
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSL3916-MB	L87840.D	1	10/23/14	GK	n/a	n/a	MSL3916

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34338-4, MC34338-5, MC34338-6, MC34338-7, MC34338-8

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	

Method Blank Summary

Job Number: MC34338
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSL3916-MB	L87840.D	1	10/23/14	GK	n/a	n/a	MSL3916

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34338-4, MC34338-5, MC34338-6, MC34338-7, MC34338-8

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

Method Blank Summary

Job Number: MC34338
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSL3916-MB	L87840.D	1	10/23/14	GK	n/a	n/a	MSL3916

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34338-4, MC34338-5, MC34338-6, MC34338-7, MC34338-8

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	102%	70-130%
2037-26-5	Toluene-D8	100%	70-130%
460-00-4	4-Bromofluorobenzene	117%	70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Method Blank Summary

Job Number: MC34338
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSL3917-MB	L87871.D	1	10/24/14	GK	n/a	n/a	MSL3917

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34338-1, MC34338-2, MC34338-3, MC34338-5

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	

Method Blank Summary

Job Number: MC34338
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSL3917-MB	L87871.D	1	10/24/14	GK	n/a	n/a	MSL3917

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34338-1, MC34338-2, MC34338-3, MC34338-5

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

Method Blank Summary

Job Number: MC34338
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSL3917-MB	L87871.D	1	10/24/14	GK	n/a	n/a	MSL3917

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34338-1, MC34338-2, MC34338-3, MC34338-5

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	102%	70-130%
2037-26-5	Toluene-D8	101%	70-130%
460-00-4	4-Bromofluorobenzene	123%	70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Blank Spike Summary

Job Number: MC34338
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSL3916-BS	L87837.D	1	10/23/14	GK	n/a	n/a	MSL3916

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34338-4, MC34338-5, MC34338-6, MC34338-7, MC34338-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	31.3	63* [a]	70-130
107-02-8	Acrolein	250	176	70	70-130
107-13-1	Acrylonitrile	50	38.5	77	70-130
71-43-2	Benzene	50	42.8	86	70-130
108-86-1	Bromobenzene	50	44.3	89	70-130
74-97-5	Bromochloromethane	50	41.8	84	70-130
75-27-4	Bromodichloromethane	50	46.3	93	70-130
75-25-2	Bromoform	50	38.5	77	70-130
74-83-9	Bromomethane	50	45.7	91	70-130
78-93-3	2-Butanone (MEK)	50	40.5	81	70-130
104-51-8	n-Butylbenzene	50	52.0	104	70-130
135-98-8	sec-Butylbenzene	50	48.7	97	70-130
98-06-6	tert-Butylbenzene	50	50.9	102	70-130
75-15-0	Carbon disulfide	50	39.8	80	70-130
56-23-5	Carbon tetrachloride	50	42.3	85	70-130
108-90-7	Chlorobenzene	50	39.3	79	70-130
75-00-3	Chloroethane	50	49.8	100	70-130
110-75-8	2-Chloroethyl vinyl ether	50	36.0	72	70-130
67-66-3	Chloroform	50	49.4	99	70-130
74-87-3	Chloromethane	50	50.8	102	70-130
95-49-8	o-Chlorotoluene	50	49.6	99	70-130
106-43-4	p-Chlorotoluene	50	48.0	96	70-130
124-48-1	Dibromochloromethane	50	45.2	90	70-130
95-50-1	1,2-Dichlorobenzene	50	43.1	86	70-130
541-73-1	1,3-Dichlorobenzene	50	42.8	86	70-130
106-46-7	1,4-Dichlorobenzene	50	41.2	82	70-130
75-71-8	Dichlorodifluoromethane	50	32.2	64* [a]	70-130
75-34-3	1,1-Dichloroethane	50	49.3	99	70-130
107-06-2	1,2-Dichloroethane	50	50.3	101	70-130
75-35-4	1,1-Dichloroethene	50	45.2	90	70-130
156-59-2	cis-1,2-Dichloroethene	50	45.8	92	70-130
156-60-5	trans-1,2-Dichloroethene	50	42.9	86	70-130
78-87-5	1,2-Dichloropropane	50	42.0	84	70-130
142-28-9	1,3-Dichloropropane	50	39.2	78	70-130
594-20-7	2,2-Dichloropropane	50	60.6	121	70-130
563-58-6	1,1-Dichloropropene	50	45.8	92	70-130

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34338
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSL3916-BS	L87837.D	1	10/23/14	GK	n/a	n/a	MSL3916

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34338-4, MC34338-5, MC34338-6, MC34338-7, MC34338-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-01-5	cis-1,3-Dichloropropene	50	44.2	88	70-130
10061-02-6	trans-1,3-Dichloropropene	50	43.6	87	70-130
123-91-1	1,4-Dioxane	125	238	190* [b]	70-130
97-63-2	Ethyl methacrylate	50	40.1	80	77-137
100-41-4	Ethylbenzene	50	39.8	80	70-130
87-68-3	Hexachlorobutadiene	50	41.3	83	70-130
591-78-6	2-Hexanone	50	31.7	63* [a]	70-130
98-82-8	Isopropylbenzene	50	49.2	98	70-130
99-87-6	p-Isopropyltoluene	50	46.0	92	70-130
1634-04-4	Methyl Tert Butyl Ether	50	44.2	88	70-130
108-10-1	4-Methyl-2-pentanone (MIBK)	50	36.4	73	70-130
74-95-3	Methylene bromide	50	39.6	79	70-130
75-09-2	Methylene chloride	50	42.5	85	70-130
91-20-3	Naphthalene	50	51.8	104	70-130
103-65-1	n-Propylbenzene	50	50.3	101	70-130
100-42-5	Styrene	50	42.4	85	70-130
630-20-6	1,1,1,2-Tetrachloroethane	50	41.7	83	70-130
79-34-5	1,1,2,2-Tetrachloroethane	50	43.6	87	70-130
127-18-4	Tetrachloroethene	50	40.4	81	70-130
108-88-3	Toluene	50	43.2	86	70-130
87-61-6	1,2,3-Trichlorobenzene	50	42.0	84	70-130
120-82-1	1,2,4-Trichlorobenzene	50	43.8	88	70-130
71-55-6	1,1,1-Trichloroethane	50	50.2	100	70-130
79-00-5	1,1,2-Trichloroethane	50	41.1	82	70-130
79-01-6	Trichloroethene	50	40.8	82	70-130
75-69-4	Trichlorofluoromethane	50	43.8	88	70-130
96-18-4	1,2,3-Trichloropropane	50	47.8	96	70-130
95-63-6	1,2,4-Trimethylbenzene	50	48.3	97	70-130
108-67-8	1,3,5-Trimethylbenzene	50	45.6	91	70-130
108-05-4	Vinyl Acetate	50	88.8	178* [b]	70-130
75-01-4	Vinyl chloride	50	37.8	76	70-130
	m,p-Xylene	100	78.0	78	70-130
95-47-6	o-Xylene	50	41.0	82	70-130
1330-20-7	Xylene (total)	150	119	79	70-130

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34338
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSL3916-BS	L87837.D	1	10/23/14	GK	n/a	n/a	MSL3916

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34338-4, MC34338-5, MC34338-6, MC34338-7, MC34338-8

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	106%	70-130%
2037-26-5	Toluene-D8	103%	70-130%
460-00-4	4-Bromofluorobenzene	122%	70-130%

(a) Outside control limits. Blank Spike meets program technical requirements.
(b) Outside control limits. Associated samples are non-detect for this compound.

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34338
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSL3917-BS	L87869.D	1	10/24/14	GK	n/a	n/a	MSL3917

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34338-1, MC34338-2, MC34338-3, MC34338-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	27.4	55* [a]	70-130
107-02-8	Acrolein	250	220	88	70-130
107-13-1	Acrylonitrile	50	45.4	91	70-130
71-43-2	Benzene	50	48.9	98	70-130
108-86-1	Bromobenzene	50	51.2	102	70-130
74-97-5	Bromochloromethane	50	51.2	102	70-130
75-27-4	Bromodichloromethane	50	53.4	107	70-130
75-25-2	Bromoform	50	41.9	84	70-130
74-83-9	Bromomethane	50	59.5	119	70-130
78-93-3	2-Butanone (MEK)	50	45.1	90	70-130
104-51-8	n-Butylbenzene	50	59.6	119	70-130
135-98-8	sec-Butylbenzene	50	56.2	112	70-130
98-06-6	tert-Butylbenzene	50	58.5	117	70-130
75-15-0	Carbon disulfide	50	47.1	94	70-130
56-23-5	Carbon tetrachloride	50	48.6	97	70-130
108-90-7	Chlorobenzene	50	42.3	85	70-130
75-00-3	Chloroethane	50	58.0	116	70-130
110-75-8	2-Chloroethyl vinyl ether	50	71.7	143* [a]	70-130
67-66-3	Chloroform	50	58.0	116	70-130
74-87-3	Chloromethane	50	59.0	118	70-130
95-49-8	o-Chlorotoluene	50	58.8	118	70-130
106-43-4	p-Chlorotoluene	50	56.1	112	70-130
124-48-1	Dibromochloromethane	50	46.9	94	70-130
95-50-1	1,2-Dichlorobenzene	50	48.9	98	70-130
541-73-1	1,3-Dichlorobenzene	50	49.8	100	70-130
106-46-7	1,4-Dichlorobenzene	50	48.0	96	70-130
75-71-8	Dichlorodifluoromethane	50	36.2	72	70-130
75-34-3	1,1-Dichloroethane	50	57.3	115	70-130
107-06-2	1,2-Dichloroethane	50	58.3	117	70-130
75-35-4	1,1-Dichloroethene	50	51.9	104	70-130
156-59-2	cis-1,2-Dichloroethene	50	52.7	105	70-130
156-60-5	trans-1,2-Dichloroethene	50	51.2	102	70-130
78-87-5	1,2-Dichloropropane	50	50.0	100	70-130
142-28-9	1,3-Dichloropropane	50	41.2	82	70-130
594-20-7	2,2-Dichloropropane	50	65.5	131* [a]	70-130
563-58-6	1,1-Dichloropropene	50	52.8	106	70-130

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34338
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSL3917-BS	L87869.D	1	10/24/14	GK	n/a	n/a	MSL3917

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34338-1, MC34338-2, MC34338-3, MC34338-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-01-5	cis-1,3-Dichloropropene	50	49.8	100	70-130
10061-02-6	trans-1,3-Dichloropropene	50	50.9	102	70-130
123-91-1	1,4-Dioxane	125	95.2	76	70-130
97-63-2	Ethyl methacrylate	50	45.9	92	77-137
100-41-4	Ethylbenzene	50	42.5	85	70-130
87-68-3	Hexachlorobutadiene	50	48.6	97	70-130
591-78-6	2-Hexanone	50	32.5	65* [a]	70-130
98-82-8	Isopropylbenzene	50	57.4	115	70-130
99-87-6	p-Isopropyltoluene	50	53.7	107	70-130
1634-04-4	Methyl Tert Butyl Ether	50	49.0	98	70-130
108-10-1	4-Methyl-2-pentanone (MIBK)	50	37.8	76	70-130
74-95-3	Methylene bromide	50	47.0	94	70-130
75-09-2	Methylene chloride	50	48.1	96	70-130
91-20-3	Naphthalene	50	57.4	115	70-130
103-65-1	n-Propylbenzene	50	58.8	118	70-130
100-42-5	Styrene	50	45.9	92	70-130
630-20-6	1,1,1,2-Tetrachloroethane	50	44.7	89	70-130
79-34-5	1,1,2,2-Tetrachloroethane	50	49.9	100	70-130
127-18-4	Tetrachloroethene	50	44.6	89	70-130
108-88-3	Toluene	50	48.5	97	70-130
87-61-6	1,2,3-Trichlorobenzene	50	48.1	96	70-130
120-82-1	1,2,4-Trichlorobenzene	50	50.1	100	70-130
71-55-6	1,1,1-Trichloroethane	50	58.7	117	70-130
79-00-5	1,1,2-Trichloroethane	50	46.7	93	70-130
79-01-6	Trichloroethene	50	45.8	92	70-130
75-69-4	Trichlorofluoromethane	50	50.6	101	70-130
96-18-4	1,2,3-Trichloropropane	50	54.4	109	70-130
95-63-6	1,2,4-Trimethylbenzene	50	56.9	114	70-130
108-67-8	1,3,5-Trimethylbenzene	50	53.2	106	70-130
108-05-4	Vinyl Acetate	50	106	212* [b]	70-130
75-01-4	Vinyl chloride	50	44.0	88	70-130
	m,p-Xylene	100	83.8	84	70-130
95-47-6	o-Xylene	50	42.7	85	70-130
1330-20-7	Xylene (total)	150	127	85	70-130

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34338
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSL3917-BS	L87869.D	1	10/24/14	GK	n/a	n/a	MSL3917

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34338-1, MC34338-2, MC34338-3, MC34338-5

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	113%	70-130%
2037-26-5	Toluene-D8	106%	70-130%
460-00-4	4-Bromofluorobenzene	122%	70-130%

(a) Outside control limits. Blank Spike meets program technical requirements.
(b) Outside control limits. Associated samples are non-detect for this compound.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34338
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34231-7MS [a]	L87844.D	5	10/23/14	GK	n/a	n/a	MSL3916
MC34231-7MSD [a]	L87845.D	5	10/23/14	GK	n/a	n/a	MSL3916
MC34231-7	L87843.D	1	10/23/14	GK	n/a	n/a	MSL3916

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34338-4, MC34338-5, MC34338-6, MC34338-7, MC34338-8

CAS No.	Compound	MC34231-7 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		250	78.1	31* [b]	250	68.6	27* [b]	13	70-130/30
107-02-8	Acrolein	ND		1250	1500	120	1250	748	60* [b]	67* [c]	70-130/30
107-13-1	Acrylonitrile	ND		250	217	87	250	177	71	20	70-130/30
71-43-2	Benzene	28.0		250	268	96	250	230	81	15	70-130/30
108-86-1	Bromobenzene	ND		250	259	104	250	212	85	20	70-130/30
74-97-5	Bromochloromethane	ND		250	246	98	250	213	85	14	70-130/30
75-27-4	Bromodichloromethane	ND		250	269	108	250	228	91	16	70-130/30
75-25-2	Bromoform	ND		250	211	84	250	179	72	16	70-130/30
74-83-9	Bromomethane	ND		250	326	130	250	210	84	43* [c]	70-130/30
78-93-3	2-Butanone (MEK)	ND		250	200	80	250	137	55* [b]	37* [c]	70-130/30
104-51-8	n-Butylbenzene	ND		250	283	113	250	237	95	18	70-130/30
135-98-8	sec-Butylbenzene	0.83	J	250	279	111	250	231	92	19	70-130/30
98-06-6	tert-Butylbenzene	4.9	J	250	294	116	250	247	97	17	70-130/30
75-15-0	Carbon disulfide	ND		250	222	89	250	185	74	18	70-130/30
56-23-5	Carbon tetrachloride	ND		250	241	96	250	193	77	22	70-130/30
108-90-7	Chlorobenzene	ND		250	207	83	250	175	70	17	70-130/30
75-00-3	Chloroethane	ND		250	350	140* [b]	250	180	72	64* [c]	70-130/30
110-75-8	2-Chloroethyl vinyl ether	ND		250	329	132* [b]	250	227	91	37* [c]	70-130/30
67-66-3	Chloroform	ND		250	285	114	250	228	91	22	70-130/30
74-87-3	Chloromethane	ND		250	318	127	250	196	78	47* [c]	70-130/30
95-49-8	o-Chlorotoluene	ND		250	287	115	250	231	92	22	70-130/30
106-43-4	p-Chlorotoluene	ND		250	282	113	250	228	91	21	70-130/30
124-48-1	Dibromochloromethane	ND		250	236	94	250	197	79	18	70-130/30
95-50-1	1,2-Dichlorobenzene	ND		250	244	98	250	195	78	22	70-130/30
541-73-1	1,3-Dichlorobenzene	ND		250	245	98	250	201	80	20	70-130/30
106-46-7	1,4-Dichlorobenzene	ND		250	239	96	250	199	80	18	70-130/30
75-71-8	Dichlorodifluoromethane	ND		250	218	87	250	115	46* [b]	62* [c]	70-130/30
75-34-3	1,1-Dichloroethane	ND		250	280	112	250	230	92	20	70-130/30
107-06-2	1,2-Dichloroethane	ND		250	283	113	250	248	99	13	70-130/30
75-35-4	1,1-Dichloroethene	ND		250	253	101	250	200	80	23	70-130/30
156-59-2	cis-1,2-Dichloroethene	ND		250	259	104	250	219	88	17	70-130/30
156-60-5	trans-1,2-Dichloroethene	ND		250	249	100	250	204	82	20	70-130/30
78-87-5	1,2-Dichloropropane	ND		250	245	98	250	208	83	16	70-130/30
142-28-9	1,3-Dichloropropane	ND		250	210	84	250	174	70	19	70-130/30
594-20-7	2,2-Dichloropropane	ND		250	338	135* [b]	250	261	104	26	70-130/30
563-58-6	1,1-Dichloropropene	ND		250	264	106	250	210	84	23	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34338
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34231-7MS [a]	L87844.D	5	10/23/14	GK	n/a	n/a	MSL3916
MC34231-7MSD [a]	L87845.D	5	10/23/14	GK	n/a	n/a	MSL3916
MC34231-7	L87843.D	1	10/23/14	GK	n/a	n/a	MSL3916

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34338-4, MC34338-5, MC34338-6, MC34338-7, MC34338-8

CAS No.	Compound	MC34231-7 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-01-5	cis-1,3-Dichloropropene	ND		250	255	102	250	212	85	18	70-130/30
10061-02-6	trans-1,3-Dichloropropene	ND		250	262	105	250	213	85	21	70-130/30
123-91-1	1,4-Dioxane	ND		625	561	90	625	492	79	13	70-130/30
97-63-2	Ethyl methacrylate	ND		250	241	96	250	195	78	21	72-139/30
100-41-4	Ethylbenzene	ND		250	214	86	250	176	70	19	70-130/30
87-68-3	Hexachlorobutadiene	ND		250	227	91	250	194	78	16	70-130/30
591-78-6	2-Hexanone	ND		250	129	52* [b]	250	105	42* [b]	21	70-130/30
98-82-8	Isopropylbenzene	1.2	J	250	283	113	250	231	92	20	70-130/30
99-87-6	p-Isopropyltoluene	ND		250	263	105	250	221	88	17	70-130/30
1634-04-4	Methyl Tert Butyl Ether	19.0		250	272	101	250	226	83	18	70-130/30
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		250	216	86	250	170	68* [b]	24	70-130/30
74-95-3	Methylene bromide	ND		250	235	94	250	194	78	19	70-130/30
75-09-2	Methylene chloride	ND		250	239	96	250	201	80	17	70-130/30
91-20-3	Naphthalene	ND		250	284	114	250	256	102	10	70-130/30
103-65-1	n-Propylbenzene	ND		250	289	116	250	240	96	19	70-130/30
100-42-5	Styrene	ND		250	223	89	250	191	76	15	70-130/30
630-20-6	1,1,1,2-Tetrachloroethane	ND		250	228	91	250	194	78	16	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	254	102	250	210	84	19	70-130/30
127-18-4	Tetrachloroethene	ND		250	210	84	250	172	69* [b]	20	70-130/30
108-88-3	Toluene	1.5		250	250	99	250	204	81	20	70-130/30
87-61-6	1,2,3-Trichlorobenzene	ND		250	234	94	250	202	81	15	70-130/30
120-82-1	1,2,4-Trichlorobenzene	ND		250	244	98	250	208	83	16	70-130/30
71-55-6	1,1,1-Trichloroethane	ND		250	284	114	250	223	89	24	70-130/30
79-00-5	1,1,2-Trichloroethane	ND		250	242	97	250	202	81	18	70-130/30
79-01-6	Trichloroethene	ND		250	225	90	250	191	76	16	70-130/30
75-69-4	Trichlorofluoromethane	ND		250	314	126	250	155	62* [b]	68* [c]	70-130/30
96-18-4	1,2,3-Trichloropropane	ND		250	281	112	250	229	92	20	70-130/30
95-63-6	1,2,4-Trimethylbenzene	0.58	J	250	273	109	250	225	90	19	70-130/30
108-67-8	1,3,5-Trimethylbenzene	ND		250	264	106	250	215	86	20	70-130/30
108-05-4	Vinyl Acetate	ND		250	599	240* [d]	250	501	200* [d]	18	70-130/30
75-01-4	Vinyl chloride	ND		250	268	107	250	139	56* [b]	63* [c]	70-130/30
	m,p-Xylene	2.7		500	414	82	500	344	68* [b]	18	70-130/30
95-47-6	o-Xylene	1.2		250	216	86	250	184	73	16	70-130/30
1330-20-7	Xylene (total)	3.9		750	630	83	750	528	70	18	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34338
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34231-7MS [a]	L87844.D	5	10/23/14	GK	n/a	n/a	MSL3916
MC34231-7MSD [a]	L87845.D	5	10/23/14	GK	n/a	n/a	MSL3916
MC34231-7	L87843.D	1	10/23/14	GK	n/a	n/a	MSL3916

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34338-4, MC34338-5, MC34338-6, MC34338-7, MC34338-8

CAS No.	Surrogate Recoveries	MS	MSD	MC34231-7	Limits
1868-53-7	Dibromofluoromethane	106%	110%	108%	70-130%
2037-26-5	Toluene-D8	103%	105%	105%	70-130%
460-00-4	4-Bromofluorobenzene	123%	122%	121%	70-130%

(a) Elevated detection limit due to limited sample volume.
(b) Outside control limits due to possible matrix interference. Refer to Blank Spike.
(c) High RPD due to possible matrix interference and/or sample non-homogeneity.
(d) Outside control limits. Associated samples are non-detect for this compound.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34338
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34338-3MS	L87879.D	5	10/24/14	GK	n/a	n/a	MSL3917
MC34338-3MSD	L87880.D	5	10/24/14	GK	n/a	n/a	MSL3917
MC34338-3	L87875.D	1	10/24/14	GK	n/a	n/a	MSL3917

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34338-1, MC34338-2, MC34338-3, MC34338-5

CAS No.	Compound	MC34338-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		250	51.7	21* [a]	250	73.9	30* [a]	35* [b]	70-130/30
107-02-8	Acrolein	ND		1250	1080	86	1250	1050	84	3	70-130/30
107-13-1	Acrylonitrile	ND		250	200	80	250	187	75	7	70-130/30
71-43-2	Benzene	0.68		250	213	85	250	216	86	1	70-130/30
108-86-1	Bromobenzene	ND		250	214	86	250	221	88	3	70-130/30
74-97-5	Bromochloromethane	ND		250	202	81	250	215	86	6	70-130/30
75-27-4	Bromodichloromethane	ND		250	223	89	250	240	96	7	70-130/30
75-25-2	Bromoform	ND		250	179	72	250	191	76	6	70-130/30
74-83-9	Bromomethane	ND		250	201	80	250	243	97	19	70-130/30
78-93-3	2-Butanone (MEK)	ND		250	163	65* [a]	250	161	64* [a]	1	70-130/30
104-51-8	n-Butylbenzene	ND		250	242	97	250	252	101	4	70-130/30
135-98-8	sec-Butylbenzene	ND		250	236	94	250	245	98	4	70-130/30
98-06-6	tert-Butylbenzene	ND		250	242	97	250	247	99	2	70-130/30
75-15-0	Carbon disulfide	ND		250	196	78	250	193	77	2	70-130/30
56-23-5	Carbon tetrachloride	ND		250	211	84	250	213	85	1	70-130/30
108-90-7	Chlorobenzene	ND		250	178	71	250	187	75	5	70-130/30
75-00-3	Chloroethane	ND		250	249	100	250	246	98	1	70-130/30
110-75-8	2-Chloroethyl vinyl ether	ND		250	267	107	250	243	97	9	70-130/30
67-66-3	Chloroform	ND		250	247	99	250	249	100	1	70-130/30
74-87-3	Chloromethane	ND		250	223	89	250	254	102	13	70-130/30
95-49-8	o-Chlorotoluene	ND		250	247	99	250	244	98	1	70-130/30
106-43-4	p-Chlorotoluene	ND		250	237	95	250	240	96	1	70-130/30
124-48-1	Dibromochloromethane	ND		250	203	81	250	204	82	0	70-130/30
95-50-1	1,2-Dichlorobenzene	ND		250	200	80	250	205	82	2	70-130/30
541-73-1	1,3-Dichlorobenzene	ND		250	201	80	250	215	86	7	70-130/30
106-46-7	1,4-Dichlorobenzene	ND		250	199	80	250	202	81	1	70-130/30
75-71-8	Dichlorodifluoromethane	ND		250	161	64* [a]	250	166	66* [a]	3	70-130/30
75-34-3	1,1-Dichloroethane	ND		250	252	101	250	239	96	5	70-130/30
107-06-2	1,2-Dichloroethane	ND		250	249	100	250	253	101	2	70-130/30
75-35-4	1,1-Dichloroethene	ND		250	220	88	250	219	88	0	70-130/30
156-59-2	cis-1,2-Dichloroethene	ND		250	229	92	250	222	89	3	70-130/30
156-60-5	trans-1,2-Dichloroethene	ND		250	214	86	250	210	84	2	70-130/30
78-87-5	1,2-Dichloropropane	ND		250	212	85	250	215	86	1	70-130/30
142-28-9	1,3-Dichloropropane	ND		250	182	73	250	192	77	5	70-130/30
594-20-7	2,2-Dichloropropane	ND		250	310	124	250	299	120	4	70-130/30
563-58-6	1,1-Dichloropropene	ND		250	228	91	250	227	91	0	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34338
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34338-3MS	L87879.D	5	10/24/14	GK	n/a	n/a	MSL3917
MC34338-3MSD	L87880.D	5	10/24/14	GK	n/a	n/a	MSL3917
MC34338-3	L87875.D	1	10/24/14	GK	n/a	n/a	MSL3917

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34338-1, MC34338-2, MC34338-3, MC34338-5

CAS No.	Compound	MC34338-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-01-5	cis-1,3-Dichloropropene	ND		250	220	88	250	227	91	3	70-130/30
10061-02-6	trans-1,3-Dichloropropene	ND		250	223	89	250	232	93	4	70-130/30
123-91-1	1,4-Dioxane	ND		625	422	68* a	625	554	89	27	70-130/30
97-63-2	Ethyl methacrylate	ND		250	201	80	250	206	82	2	72-139/30
100-41-4	Ethylbenzene	ND		250	185	74	250	189	76	2	70-130/30
87-68-3	Hexachlorobutadiene	ND		250	189	76	250	205	82	8	70-130/30
591-78-6	2-Hexanone	ND		250	109	44* a	250	110	44* a	1	70-130/30
98-82-8	Isopropylbenzene	ND		250	243	97	250	244	98	0	70-130/30
99-87-6	p-Isopropyltoluene	ND		250	223	89	250	228	91	2	70-130/30
1634-04-4	Methyl Tert Butyl Ether	ND		250	217	87	250	219	88	1	70-130/30
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		250	172	69* a	250	185	74	7	70-130/30
74-95-3	Methylene bromide	ND		250	199	80	250	202	81	1	70-130/30
75-09-2	Methylene chloride	ND		250	206	82	250	203	81	1	70-130/30
91-20-3	Naphthalene	ND		250	243	97	250	263	105	8	70-130/30
103-65-1	n-Propylbenzene	ND		250	244	98	250	250	100	2	70-130/30
100-42-5	Styrene	ND		250	197	79	250	198	79	1	70-130/30
630-20-6	1,1,1,2-Tetrachloroethane	ND		250	196	78	250	203	81	4	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	218	87	250	224	90	3	70-130/30
127-18-4	Tetrachloroethene	ND		250	189	76	250	188	75	1	70-130/30
108-88-3	Toluene	ND		250	208	83	250	215	86	3	70-130/30
87-61-6	1,2,3-Trichlorobenzene	ND		250	205	82	250	213	85	4	70-130/30
120-82-1	1,2,4-Trichlorobenzene	ND		250	204	82	250	223	89	9	70-130/30
71-55-6	1,1,1-Trichloroethane	ND		250	252	101	250	248	99	2	70-130/30
79-00-5	1,1,2-Trichloroethane	ND		250	208	83	250	208	83	0	70-130/30
79-01-6	Trichloroethene	ND		250	201	80	250	202	81	0	70-130/30
75-69-4	Trichlorofluoromethane	ND		250	222	89	250	227	91	2	70-130/30
96-18-4	1,2,3-Trichloropropane	ND		250	234	94	250	248	99	6	70-130/30
95-63-6	1,2,4-Trimethylbenzene	ND		250	226	90	250	239	96	6	70-130/30
108-67-8	1,3,5-Trimethylbenzene	ND		250	224	90	250	225	90	0	70-130/30
108-05-4	Vinyl Acetate	ND		250	484	194* a	250	484	194* a	0	70-130/30
75-01-4	Vinyl chloride	ND		250	190	76	250	190	76	0	70-130/30
	m,p-Xylene	ND		500	358	72	500	363	73	1	70-130/30
95-47-6	o-Xylene	ND		250	187	75	250	188	75	1	70-130/30
1330-20-7	Xylene (total)	0.43	J	750	545	73	750	551	73	1	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34338
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34338-3MS	L87879.D	5	10/24/14	GK	n/a	n/a	MSL3917
MC34338-3MSD	L87880.D	5	10/24/14	GK	n/a	n/a	MSL3917
MC34338-3	L87875.D	1	10/24/14	GK	n/a	n/a	MSL3917

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34338-1, MC34338-2, MC34338-3, MC34338-5

CAS No.	Surrogate Recoveries	MS	MSD	MC34338-3	Limits
1868-53-7	Dibromofluoromethane	107%	105%	101%	70-130%
2037-26-5	Toluene-D8	105%	102%	100%	70-130%
460-00-4	4-Bromofluorobenzene	122%	117%	121%	70-130%

(a) Outside control limits due to possible matrix interference. Refer to Blank Spike.
(b) High RPD due to possible matrix interference and/or sample non-homogeneity.

* = Outside of Control Limits.

Volatile Internal Standard Area Summary

Job Number: MC34338
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSL3916-CC3872	Injection Date:	10/23/14
Lab File ID:	L87837.D	Injection Time:	13:18
Instrument ID:	GCMSL	Method:	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	212272	8.11	292596	8.93	151806	12.12	155787	14.66	29857	5.85
Upper Limit [a]	424544	8.61	585192	9.43	303612	12.62	311574	15.16	59714	6.35
Lower Limit [b]	106136	7.61	146298	8.43	75903	11.62	77894	14.16	14929	5.35
Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSL3916-BS	212272	8.11	292596	8.93	151806	12.12	155787	14.66	29857	5.85
MSL3916-MB	190403	8.12	261904	8.93	128970	12.12	124846	14.66	22434	5.93
MC34338-8	182018	8.12	251932	8.93	124685	12.12	122961	14.66	24885	5.96
ZZZZZZ	208336	8.12	287887	8.93	138839	12.12	140551	14.66	31153	5.92
MC34231-7	200803	8.12	276986	8.93	141791	12.12	141148	14.66	33957	5.90
MC34231-7MS [c]	216131	8.11	292513	8.93	165287	12.11	155038	14.66	35230	5.86
MC34231-7MSD [c]	188322	8.12	254054	8.93	140069	12.12	133976	14.66	26554	5.86
ZZZZZZ	199173	8.12	283066	8.93	134920	12.12	133206	14.66	27509	5.92
ZZZZZZ	166637	8.12	236442	8.93	115318	12.12	110562	14.66	22910	5.93
MC34338-4	202444	8.12	282320	8.93	138421	12.12	134921	14.66	28563	5.95
MC34338-5	182268	8.12	260167	8.93	145036	12.12	129631	14.66	61731[d]	5.88
ZZZZZZ	232116	8.12	336132	8.93	185445	12.12	168626	14.66	61229[d]	5.90
ZZZZZZ	264232	8.11	374426	8.93	196834	12.12	183677	14.66	47890	5.91
ZZZZZZ	223455	8.12	311175	8.93	163831	12.12	158667	14.66	37675	5.90
MC34338-6	259470	8.12	355756	8.93	186647	12.12	170686	14.66	38344	5.93
MC34338-7	250215	8.12	347171	8.93	177440	12.12	166979	14.66	34567	5.91
ZZZZZZ	244818	8.12	337139	8.93	165096	12.12	161151	14.66	31202	5.91

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Elevated detection limit due to limited sample volume.
(d) Outside control limits. Target analytes not associated with this internal standard.

Volatile Internal Standard Area Summary

Job Number: MC34338
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSL3917-CC3872	**Injection Date:**	10/24/14
Lab File ID:	L87867.D	**Injection Time:**	08:30
Instrument ID:	GCMSL	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	192143	8.12	261493	8.93	147676	12.12	140484	14.66	27949	5.87
Upper Limit [a]	384286	8.62	522986	9.43	295352	12.62	280968	15.16	55898	6.37
Lower Limit [b]	96072	7.62	130747	8.43	73838	11.62	70242	14.16	13975	5.37

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSL3917-BS	181124	8.12	253266	8.93	141879	12.12	132191	14.66	26497	5.87
MSL3917-MB	216954	8.12	296161	8.93	148354	12.12	143669	14.66	28394	5.90
ZZZZZZ	181150	8.12	240485	8.93	123969	12.12	121079	14.66	29806	5.91
ZZZZZZ	184428	8.12	259572	8.93	129776	12.12	130952	14.66	23920	5.89
MC34338-1	186868	8.12	260370	8.93	129671	12.12	129595	14.66	27977	5.90
MC34338-3	201341	8.12	278870	8.93	144112	12.12	138143	14.66	28384	5.93
MC34338-2	174659	8.12	237099	8.93	120360	12.12	120664	14.66	30089	5.89
MC34338-5	186263	8.12	254046	8.93	129025	12.12	126480	14.66	28090	5.88
ZZZZZZ	211344	8.12	299419	8.93	148670	12.12	141946	14.66	31223	5.91
MC34338-3MS	211187	8.11	293300	8.93	165846	12.12	158398	14.66	37072	5.87
MC34338-3MSD	209356	8.11	286056	8.93	159226	12.11	153429	14.66	35479	5.86
ZZZZZZ	209986	8.12	293439	8.93	148277	12.12	146633	14.66	28772	5.90
ZZZZZZ	194642	8.12	265209	8.93	135439	12.12	129987	14.66	26020	5.93
ZZZZZZ	188161	8.12	252387	8.93	124972	12.12	124288	14.66	24047	5.92
ZZZZZZ	188744	8.12	255860	8.93	130988	12.12	123443	14.66	26904	5.91
ZZZZZZ	173349	8.12	248039	8.93	126828	12.12	123533	14.66	24518	5.92
ZZZZZZ	149615	8.12	211885	8.93	103835	12.12	100173	14.66	22227	5.94
ZZZZZZ	149889	8.12	214942	8.93	105207	12.12	98671	14.66	21277	5.92
ZZZZZZ	161170	8.11	227527	8.93	112743	12.12	108727	14.66	22571	5.93
ZZZZZZ	167608	8.12	223341	8.93	110416	12.12	109925	14.66	24585	5.93
ZZZZZZ	165747	8.12	226529	8.93	118498	12.12	111656	14.66	28144	5.92

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary

Job Number: MC34338
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Method: SW846 8260C **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
MC34338-1	L87874.D	106	101	118
MC34338-2	L87876.D	106	101	121
MC34338-3	L87875.D	101	100	121
MC34338-4	L87848.D	98	100	122
MC34338-5	L87877.D	109	101	124
MC34338-5	L87849.D	100	104	131* [a]
MC34338-6	L87857.D	108	103	126
MC34338-7	L87858.D	105	102	125
MC34338-8	L87841.D	99	99	118
MC34231-7MS	L87844.D	106	103	123
MC34231-7MSD	L87845.D	110	105	122
MC34338-3MS	L87879.D	107	105	122
MC34338-3MSD	L87880.D	105	102	117
MSL3916-BS	L87837.D	106	103	122
MSL3916-MB	L87840.D	102	100	117
MSL3917-BS	L87869.D	113	106	122
MSL3917-MB	L87871.D	102	101	123

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	70-130%
S2 = Toluene-D8	70-130%
S3 = 4-Bromofluorobenzene	70-130%

(a) Outside control limits due to possible matrix interference. Confirmed by reanalysis.

GC/MS Semi-volatiles

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QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: MC34338
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40231-MB	R40393.D	1	10/20/14	KD	10/16/14	OP40231	MSR1487

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34338-1, MC34338-2, MC34338-3, MC34338-4, MC34338-5, MC34338-6, MC34338-7

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	10	2.5	ug/l	
95-57-8	2-Chlorophenol	ND	5.0	0.31	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	10	0.83	ug/l	
120-83-2	2,4-Dichlorophenol	ND	10	0.40	ug/l	
105-67-9	2,4-Dimethylphenol	ND	10	0.56	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	2.5	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.9	ug/l	
95-48-7	2-Methylphenol	ND	10	0.23	ug/l	
	3&4-Methylphenol	ND	10	0.47	ug/l	
88-75-5	2-Nitrophenol	ND	10	2.9	ug/l	
100-02-7	4-Nitrophenol	ND	20	0.53	ug/l	
87-86-5	Pentachlorophenol	ND	10	1.1	ug/l	
108-95-2	Phenol	ND	5.0	0.30	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	10	0.37	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	10	0.18	ug/l	
62-53-3	Aniline	ND	10	0.64	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.0	0.47	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.0	0.53	ug/l	
100-51-6	Benzyl Alcohol	ND	10	2.3	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.31	ug/l	
106-47-8	4-Chloroaniline	ND	10	0.56	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.0	0.29	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.0	0.35	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.0	0.33	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.0	0.25	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.0	0.24	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	10	0.46	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	10	0.30	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.27	ug/l	
132-64-9	Dibenzofuran	ND	2.0	0.26	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.0	0.17	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.0	0.28	ug/l	
84-66-2	Diethyl phthalate	ND	5.0	0.20	ug/l	
131-11-3	Dimethyl phthalate	ND	5.0	0.34	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
118-74-1	Hexachlorobenzene	ND	5.0	0.29	ug/l	

Method Blank Summary

Job Number: MC34338
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40231-MB	R40393.D	1	10/20/14	KD	10/16/14	OP40231	MSR1487

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34338-1, MC34338-2, MC34338-3, MC34338-4, MC34338-5, MC34338-6, MC34338-7

CAS No.	Compound	Result	RL	MDL	Units	Q
77-47-4	Hexachlorocyclopentadiene	ND	10	1.3	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.30	ug/l	
78-59-1	Isophorone	ND	5.0	0.45	ug/l	
88-74-4	2-Nitroaniline	ND	10	0.40	ug/l	
99-09-2	3-Nitroaniline	ND	10	1.4	ug/l	
100-01-6	4-Nitroaniline	ND	10	2.2	ug/l	
98-95-3	Nitrobenzene	ND	5.0	0.39	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.0	1.0	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.0	0.40	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.19	ug/l	
110-86-1	Pyridine	ND	10	0.52	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	54%	15-110%
4165-62-2	Phenol-d5	35%	15-110%
118-79-6	2,4,6-Tribromophenol	94%	15-110%
4165-60-0	Nitrobenzene-d5	86%	30-130%
321-60-8	2-Fluorobiphenyl	84%	30-130%
1718-51-0	Terphenyl-d14	105%	30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

Method Blank Summary

Job Number: MC34338
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40232-MB	I92397.D	1	10/23/14	WK	10/16/14	OP40232	MSI3444

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

MC34338-1, MC34338-2, MC34338-3, MC34338-4, MC34338-5, MC34338-6, MC34338-7

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.069	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.050	ug/l	
120-12-7	Anthracene	ND	0.10	0.092	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.050	0.020	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.029	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.050	0.032	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.027	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.039	ug/l	
218-01-9	Chrysene	ND	0.10	0.024	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.032	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.041	ug/l	
86-73-7	Fluorene	ND	0.10	0.099	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.031	ug/l	
90-12-0	1-Methylnaphthalene	ND	2.0	0.50	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.0	0.50	ug/l	
85-01-8	Phenanthrene	0.027	0.050	0.013	ug/l	J
129-00-0	Pyrene	ND	0.10	0.038	ug/l	

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	92%	30-130%
321-60-8	2-Fluorobiphenyl	82%	30-130%
1718-51-0	Terphenyl-d14	92%	30-130%

Blank Spike Summary

Job Number: MC34338
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40231-BS	R40394.D	1	10/20/14	KD	10/16/14	OP40231	MSR1487

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34338-1, MC34338-2, MC34338-3, MC34338-4, MC34338-5, MC34338-6, MC34338-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
65-85-0	Benzoic Acid	50	19.4	39	30-130
95-57-8	2-Chlorophenol	50	35.2	70	30-130
59-50-7	4-Chloro-3-methyl phenol	50	38.7	77	30-130
120-83-2	2,4-Dichlorophenol	50	39.5	79	30-130
105-67-9	2,4-Dimethylphenol	50	34.8	70	30-130
51-28-5	2,4-Dinitrophenol	50	45.6	91	30-130
534-52-1	4,6-Dinitro-o-cresol	50	48.1	96	30-130
95-48-7	2-Methylphenol	50	31.7	63	30-130
	3&4-Methylphenol	100	61.9	62	30-130
88-75-5	2-Nitrophenol	50	39.5	79	30-130
100-02-7	4-Nitrophenol	50	24.4	49	30-130
87-86-5	Pentachlorophenol	50	43.4	87	30-130
108-95-2	Phenol	50	17.4	35	30-130
95-95-4	2,4,5-Trichlorophenol	50	42.1	84	30-130
88-06-2	2,4,6-Trichlorophenol	50	41.9	84	30-130
62-53-3	Aniline	50	28.0	56	40-140
101-55-3	4-Bromophenyl phenyl ether	50	49.0	98	40-140
85-68-7	Butyl benzyl phthalate	50	50.2	100	40-140
100-51-6	Benzyl Alcohol	50	37.2	74	40-140
91-58-7	2-Chloronaphthalene	50	45.3	91	40-140
106-47-8	4-Chloroaniline	50	43.9	88	40-140
111-91-1	bis(2-Chloroethoxy)methane	50	40.6	81	40-140
111-44-4	bis(2-Chloroethyl)ether	50	30.3	61	40-140
108-60-1	bis(2-Chloroisopropyl)ether	50	52.9	106	40-140
7005-72-3	4-Chlorophenyl phenyl ether	50	44.9	90	40-140
122-66-7	1,2-Diphenylhydrazine	50	44.3	89	40-140
121-14-2	2,4-Dinitrotoluene	50	52.6	105	40-140
606-20-2	2,6-Dinitrotoluene	50	47.7	95	40-140
91-94-1	3,3'-Dichlorobenzidine	50	52.4	105	40-140
132-64-9	Dibenzofuran	50	42.6	85	40-140
84-74-2	Di-n-butyl phthalate	50	49.1	98	40-140
117-84-0	Di-n-octyl phthalate	50	51.9	104	40-140
84-66-2	Diethyl phthalate	50	48.8	98	40-140
131-11-3	Dimethyl phthalate	50	46.5	93	40-140
117-81-7	bis(2-Ethylhexyl)phthalate	50	50.8	102	40-140
118-74-1	Hexachlorobenzene	50	51.3	103	40-140

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34338
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40231-BS	R40394.D	1	10/20/14	KD	10/16/14	OP40231	MSR1487

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34338-1, MC34338-2, MC34338-3, MC34338-4, MC34338-5, MC34338-6, MC34338-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
77-47-4	Hexachlorocyclopentadiene	50	20.3	41	40-140
67-72-1	Hexachloroethane	50	24.4	49	40-140
78-59-1	Isophorone	50	37.3	75	40-140
88-74-4	2-Nitroaniline	50	44.8	90	40-140
99-09-2	3-Nitroaniline	50	47.2	94	40-140
100-01-6	4-Nitroaniline	50	47.2	94	40-140
98-95-3	Nitrobenzene	50	39.9	80	40-140
62-75-9	n-Nitrosodimethylamine	50	27.5	55	40-140
621-64-7	N-Nitroso-di-n-propylamine	50	39.1	78	40-140
86-30-6	N-Nitrosodiphenylamine	50	43.7	87	40-140
110-86-1	Pyridine	50	24.3	49	40-140

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	45%	15-110%
4165-62-2	Phenol-d5	31%	15-110%
118-79-6	2,4,6-Tribromophenol	89%	15-110%
4165-60-0	Nitrobenzene-d5	72%	30-130%
321-60-8	2-Fluorobiphenyl	71%	30-130%
1718-51-0	Terphenyl-d14	91%	30-130%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34338
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40232-BS	I92398.D	1	10/23/14	WK	10/16/14	OP40232	MSI3444

The QC reported here applies to the following samples: Method: SW846 8270D BY SIM

MC34338-1, MC34338-2, MC34338-3, MC34338-4, MC34338-5, MC34338-6, MC34338-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
83-32-9	Acenaphthene	50	39.4	79	40-140
208-96-8	Acenaphthylene	50	35.0	70	40-140
120-12-7	Anthracene	50	44.9	90	40-140
56-55-3	Benzo(a)anthracene	50	53.4	107	40-140
50-32-8	Benzo(a)pyrene	50	50.0	100	40-140
205-99-2	Benzo(b)fluoranthene	50	51.8	104	40-140
191-24-2	Benzo(g,h,i)perylene	50	51.8	104	40-140
207-08-9	Benzo(k)fluoranthene	50	42.1	84	40-140
218-01-9	Chrysene	50	48.9	98	40-140
53-70-3	Dibenzo(a,h)anthracene	50	51.8	104	40-140
206-44-0	Fluoranthene	50	44.7	89	40-140
86-73-7	Fluorene	50	48.9	98	40-140
193-39-5	Indeno(1,2,3-cd)pyrene	50	51.3	103	40-140
90-12-0	1-Methylnaphthalene	50	35.9	72	40-140
91-57-6	2-Methylnaphthalene	50	35.8	72	40-140
85-01-8	Phenanthrene	50	46.5	93	40-140
129-00-0	Pyrene	50	42.4	85	40-140

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	76%	30-130%
321-60-8	2-Fluorobiphenyl	70%	30-130%
1718-51-0	Terphenyl-d14	83%	30-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34338
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40231-MS	R40395.D	1	10/20/14	KD	10/16/14	OP40231	MSR1487
OP40231-MSD	R40396.D	1	10/20/14	KD	10/16/14	OP40231	MSR1487
MC34000-22	R40397.D	1	10/20/14	KD	10/16/14	OP40231	MSR1487

The QC reported here applies to the following samples: Method: SW846 8270D

MC34338-1, MC34338-2, MC34338-3, MC34338-4, MC34338-5, MC34338-6, MC34338-7

CAS No.	Compound	MC34000-22 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic Acid	ND		50	26.1	52	50	24.4	49	7	30-130/20
95-57-8	2-Chlorophenol	ND		50	43.6	87	50	40.7	81	7	30-130/20
59-50-7	4-Chloro-3-methyl phenol	ND		50	52.0	104	50	46.9	94	10	30-130/20
120-83-2	2,4-Dichlorophenol	ND		50	51.2	102	50	47.3	95	8	30-130/20
105-67-9	2,4-Dimethylphenol	ND		50	41.5	83	50	40.1	80	3	30-130/20
51-28-5	2,4-Dinitrophenol	ND		50	58.1	116	50	56.0	112	4	30-130/20
534-52-1	4,6-Dinitro-o-cresol	ND		50	60.5	121	50	57.9	116	4	30-130/20
95-48-7	2-Methylphenol	ND		50	39.0	78	50	36.2	72	7	30-130/20
	3&4-Methylphenol	ND		100	78.4	78	100	71.8	72	9	30-130/20
88-75-5	2-Nitrophenol	ND		50	50.2	100	50	46.5	93	8	30-130/20
100-02-7	4-Nitrophenol	ND		50	30.3	61	50	27.6	55	9	30-130/20
87-86-5	Pentachlorophenol	ND		50	55.2	110	50	52.2	104	6	30-130/20
108-95-2	Phenol	ND		50	22.4	45	50	20.5	41	9	30-130/20
95-95-4	2,4,5-Trichlorophenol	ND		50	55.0	110	50	49.5	99	11	30-130/20
88-06-2	2,4,6-Trichlorophenol	ND		50	55.1	110	50	50.2	100	9	30-130/20
62-53-3	Aniline	ND		50	27.6	55	50	27.5	55	0	40-140/20
101-55-3	4-Bromophenyl phenyl ether	ND		50	62.6	125	50	57.9	116	8	40-140/20
85-68-7	Butyl benzyl phthalate	ND		50	60.7	121	50	56.6	113	7	40-140/20
100-51-6	Benzyl Alcohol	ND		50	44.1	88	50	39.2	78	12	40-140/20
91-58-7	2-Chloronaphthalene	ND		50	57.2	114	50	52.5	105	9	40-140/20
106-47-8	4-Chloroaniline	ND		50	44.0	88	50	44.1	88	0	40-140/20
111-91-1	bis(2-Chloroethoxy)methane	ND		50	51.2	102	50	46.8	94	9	40-140/20
111-44-4	bis(2-Chloroethyl)ether	ND		50	36.5	73	50	33.6	67	8	40-140/20
108-60-1	bis(2-Chloroisopropyl)ether	ND		50	66.9	134	50	61.0	122	9	40-140/20
7005-72-3	4-Chlorophenyl phenyl ether	ND		50	59.0	118	50	53.5	107	10	40-140/20
122-66-7	1,2-Diphenylhydrazine	ND		50	55.9	112	50	51.3	103	9	40-140/20
121-14-2	2,4-Dinitrotoluene	ND		50	63.1	126	50	58.7	117	7	40-140/20
606-20-2	2,6-Dinitrotoluene	ND		50	59.0	118	50	54.1	108	9	40-140/20
91-94-1	3,3'-Dichlorobenzidine	ND		50	52.7	105	50	60.0	120	13	40-140/20
132-64-9	Dibenzofuran	ND		50	54.5	109	50	50.0	100	9	40-140/20
84-74-2	Di-n-butyl phthalate	0.44	J	50	59.5	118	50	55.6	110	7	40-140/20
117-84-0	Di-n-octyl phthalate	ND		50	62.5	125	50	59.2	118	5	40-140/20
84-66-2	Diethyl phthalate	ND		50	59.0	118	50	54.6	109	8	40-140/20
131-11-3	Dimethyl phthalate	ND		50	57.9	116	50	52.4	105	10	40-140/20
117-81-7	bis(2-Ethylhexyl)phthalate	ND		50	61.6	123	50	56.8	114	8	40-140/20
118-74-1	Hexachlorobenzene	ND		50	65.7	131	50	61.5	123	7	40-140/20

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34338
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40231-MS	R40395.D	1	10/20/14	KD	10/16/14	OP40231	MSR1487
OP40231-MSD	R40396.D	1	10/20/14	KD	10/16/14	OP40231	MSR1487
MC34000-22	R40397.D	1	10/20/14	KD	10/16/14	OP40231	MSR1487

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34338-1, MC34338-2, MC34338-3, MC34338-4, MC34338-5, MC34338-6, MC34338-7

CAS No.	Compound	MC34000-22 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
77-47-4	Hexachlorocyclopentadiene	ND		50	25.7	51	50	27.2	54	6	40-140/20
67-72-1	Hexachloroethane	ND		50	33.7	67	50	34.3	69	2	40-140/20
78-59-1	Isophorone	ND		50	47.6	95	50	43.4	87	9	40-140/20
88-74-4	2-Nitroaniline	ND		50	56.7	113	50	52.2	104	8	40-140/20
99-09-2	3-Nitroaniline	ND		50	47.0	94	50	49.5	99	5	40-140/20
100-01-6	4-Nitroaniline	ND		50	52.4	105	50	51.1	102	3	40-140/20
98-95-3	Nitrobenzene	ND		50	49.1	98	50	45.7	91	7	40-140/20
62-75-9	n-Nitrosodimethylamine	ND		50	32.4	65	50	30.0	60	8	40-140/20
621-64-7	N-Nitroso-di-n-propylamine	ND		50	50.6	101	50	45.1	90	11	40-140/20
86-30-6	N-Nitrosodiphenylamine	ND		50	53.6	107	50	50.0	100	7	40-140/20
110-86-1	Pyridine	ND		50	24.2	48	50	20.6	41	16	40-140/20

CAS No.	Surrogate Recoveries	MS	MSD	MC34000-22	Limits
367-12-4	2-Fluorophenol	56%	51%	48%	15-110%
4165-62-2	Phenol-d5	39%	35%	32%	15-110%
118-79-6	2,4,6-Tribromophenol	110%	101%	80%	15-110%
4165-60-0	Nitrobenzene-d5	89%	81%	74%	30-130%
321-60-8	2-Fluorobiphenyl	89%	81%	72%	30-130%
1718-51-0	Terphenyl-d14	109%	100%	102%	30-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34338
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40232-MS	I92399.D	1	10/23/14	WK	10/16/14	OP40232	MSI3444
OP40232-MSD	I92400.D	1	10/23/14	WK	10/16/14	OP40232	MSI3444
MC34000-23	I92401.D	1	10/23/14	WK	10/16/14	OP40232	MSI3444

The QC reported here applies to the following samples: Method: SW846 8270D BY SIM

MC34338-1, MC34338-2, MC34338-3, MC34338-4, MC34338-5, MC34338-6, MC34338-7

CAS No.	Compound	MC34000-23 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	ND		50	49.8	100	50	45.4	91	9	40-140/20
208-96-8	Acenaphthylene	ND		50	44.5	89	50	40.6	81	9	40-140/20
120-12-7	Anthracene	ND		50	53.0	106	50	50.9	102	4	40-140/20
56-55-3	Benzo(a)anthracene	ND		50	64.4	129	50	60.0	120	7	40-140/20
50-32-8	Benzo(a)pyrene	ND		50	59.9	120	50	56.7	113	5	40-140/20
205-99-2	Benzo(b)fluoranthene	ND		50	68.3	137	50	63.8	128	7	40-140/20
191-24-2	Benzo(g,h,i)perylene	ND		50	63.0	126	50	58.9	118	7	40-140/20
207-08-9	Benzo(k)fluoranthene	ND		50	52.4	105	50	50.5	101	4	40-140/20
218-01-9	Chrysene	ND		50	58.0	116	50	53.7	107	8	40-140/20
53-70-3	Dibenzo(a,h)anthracene	ND		50	62.4	125	50	58.6	117	6	40-140/20
206-44-0	Fluoranthene	ND		50	53.7	107	50	49.7	99	8	40-140/20
86-73-7	Fluorene	ND		50	59.9	120	50	55.3	111	8	40-140/20
193-39-5	Indeno(1,2,3-cd)pyrene	ND		50	62.2	124	50	58.7	117	6	40-140/20
90-12-0	1-Methylnaphthalene	ND		50	45.2	90	50	42.6	85	6	40-140/20
91-57-6	2-Methylnaphthalene	ND		50	44.9	90	50	41.9	84	7	40-140/20
85-01-8	Phenanthrene	ND		50	56.8	114	50	52.9	106	7	40-140/20
129-00-0	Pyrene	ND		50	51.0	102	50	47.3	95	8	40-140/20

CAS No.	Surrogate Recoveries	MS	MSD	MC34000-23	Limits
4165-60-0	Nitrobenzene-d5	92%	86%	77%	30-130%
321-60-8	2-Fluorobiphenyl	86%	79%	71%	30-130%
1718-51-0	Terphenyl-d14	98%	91%	88%	30-130%

* = Outside of Control Limits.

Semivolatile Internal Standard Area Summary

Job Number: MC34338
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSF3371-CC3361	**Injection Date:**	10/21/14
Lab File ID:	F76953.D	**Injection Time:**	07:53
Instrument ID:	GCMSF	**Method:**	SW846 8270D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	57928	4.20	199122	5.25	133357	6.78	259437	8.06	333294	10.64	332151	12.35
Upper Limit [a]	115856	4.70	398244	5.75	266714	7.28	518874	8.56	666588	11.14	664302	12.85
Lower Limit [b]	28964	3.70	99561	4.75	66679	6.28	129719	7.56	166647	10.14	166076	11.85

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP40254-MB	63443	4.19	219324	5.25	143115	6.77	274688	8.06	322556	10.64	316151	12.35
OP40254-BS	71339	4.20	252954	5.25	160838	6.78	291522	8.06	343638	10.64	321952	12.35
ZZZZZZ	63030	4.19	219279	5.25	143407	6.77	280279	8.06	344289	10.64	334408	12.35
ZZZZZZ	73135	4.20	249585	5.24	164886	6.77	316877	8.06	369603	10.64	342328	12.35
ZZZZZZ	65770	4.19	228019	5.25	150568	6.77	286990	8.06	335989	10.64	321899	12.35
ZZZZZZ	67425	4.19	232940	5.25	150137	6.77	286337	8.06	329425	10.64	312055	12.35
ZZZZZZ	67342	4.20	234329	5.24	153115	6.77	290697	8.06	340458	10.64	319479	12.35
ZZZZZZ	82276	4.20	274240	5.25	177042	6.78	334499	8.06	392779	10.64	399560	12.35
ZZZZZZ	68615	4.20	230663	5.25	151015	6.77	288153	8.06	358591	10.64	365564	12.35
OP40261-MB	73275	4.20	254662	5.25	171369	6.77	331966	8.06	427469	10.64	448055	12.35
OP40261-BS	73796	4.20	257348	5.25	166645	6.78	323119	8.06	416959	10.64	431964	12.36
OP40261-MS	73294	4.20	253391	5.25	162862	6.78	302839	8.06	388422	10.64	403722	12.36
OP40261-MSD	68103	4.20	240446	5.25	157319	6.78	303912	8.06	408647	10.64	418853	12.36
MC34440-1	71058	4.19	243676	5.25	166197	6.77	322182	8.06	405743	10.64	416574	12.36
ZZZZZZ	67837	4.20	234613	5.25	155984	6.78	309582	8.06	379999	10.64	393358	12.35
ZZZZZZ	68038	4.20	237491	5.25	159173	6.78	308101	8.06	384649	10.64	390829	12.36
ZZZZZZ	68096	4.20	240719	5.25	160153	6.77	313376	8.06	381829	10.64	388319	12.36
ZZZZZZ	67588	4.20	234250	5.25	159732	6.77	314559	8.06	399336	10.64	406193	12.35
ZZZZZZ	66363	4.20	229467	5.25	156313	6.78	310990	8.06	388042	10.64	389163	12.36
ZZZZZZ	62096	4.19	215217	5.25	146658	6.77	287040	8.06	376816	10.64	382456	12.36
ZZZZZZ	60884	4.20	214557	5.25	144884	6.78	287328	8.06	366665	10.64	379063	12.35
ZZZZZZ	59944	4.20	206952	5.25	139513	6.78	279886	8.06	350294	10.64	356797	12.35
ZZZZZZ	75725	4.19	259453	5.25	178664	6.77	357878	8.06	431264	10.65	450606	12.36
MC34338-6	60095	4.20	208756	5.25	140689	6.78	272240	8.06	338034	10.64	341842	12.35
MC34338-7	55303	4.20	197156	5.25	133641	6.77	254407	8.06	315048	10.64	320422	12.35

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: MC34338
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSI3444-CC3427	**Injection Date:**	10/23/14
Lab File ID:	I92396.D	**Injection Time:**	08:18
Instrument ID:	GCMSI	**Method:**	SW846 8270D BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	314150	2.82	708772	3.84	414008	5.33	740529	6.57	675642	9.22	1194217	10.60
Upper Limit [a]	628300	3.32	1417544	4.34	828016	5.83	1481058	7.07	1351284	9.72	2388434	11.10
Lower Limit [b]	157075	2.32	354386	3.34	207004	4.83	370265	6.07	337821	8.72	597109	10.10

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP40232-MB	420227	2.82	931645	3.84	542436	5.33	970600	6.57	898515	9.22	1611504	10.61
OP40232-BS	350085	2.82	807802	3.84	465282	5.33	805878	6.57	737877	9.23	1285648	10.61
OP40232-MS	362693	2.82	856128	3.84	486157	5.33	853883	6.57	764969	9.23	1323590	10.61
OP40232-MSD	387105	2.82	906773	3.84	520411	5.33	911704	6.57	839340	9.24	1436391	10.61
MC34000-23	356491	2.82	793456	3.84	458588	5.33	823020	6.56	756860	9.22	1329811	10.60
ZZZZZZ	339961	2.82	764185	3.84	440853	5.33	782917	6.56	735688	9.22	1299314	10.60
ZZZZZZ	356679	2.82	804993	3.84	466847	5.33	817526	6.56	763454	9.22	1357556	10.60

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: MC34338
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSI3445-CC3427	**Injection Date:**	10/23/14
Lab File ID:	I92408.D	**Injection Time:**	14:32
Instrument ID:	GCMSI	**Method:**	SW846 8270D BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	279383	2.82	644600	3.84	373968	5.33	667028	6.57	610503	9.22	1064015	10.60
Upper Limit [a]	558766	3.32	1289200	4.34	747936	5.83	1334056	7.07	1221006	9.72	2128030	11.10
Lower Limit [b]	139692	2.32	322300	3.34	186984	4.83	333514	6.07	305252	8.72	532008	10.10

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
ZZZZZZ	345815	2.82	778436	3.84	446372	5.33	791302	6.56	742193	9.22	1298288	10.60
ZZZZZZ	363516	2.82	824379	3.84	475419	5.33	850212	6.56	788775	9.22	1405118	10.60
ZZZZZZ	370348	2.82	823010	3.84	479455	5.33	862229	6.56	793486	9.22	1402664	10.60
ZZZZZZ	357647	2.82	795387	3.84	459926	5.33	826344	6.56	768946	9.22	1354885	10.60
ZZZZZZ	372445	2.83	842079	3.84	471336	5.33	838194	6.56	783493	9.22	1378762	10.60
ZZZZZZ	296387	2.82	650642	3.84	371890	5.34	674648	6.58	655222	9.22	1133480	10.60
ZZZZZZ	286316	2.82	642932	3.84	369235	5.33	680381	6.57	645629	9.22	1132926	10.60
MC34338-1	380327	2.82	844664	3.84	512481	5.33	878012	6.57	833620	9.23	1471264	10.61
MC34338-2	407752	2.82	943127	3.84	620571	5.33	933287	6.57	878512	9.23	1553982	10.61
MC34338-3	470653	2.82	1052429	3.84	601258	5.33	1054930	6.57	993558	9.23	1726372	10.61
MC34338-4	423414	2.82	938563	3.84	543234	5.33	971918	6.57	909071	9.22	1607591	10.61
MC34338-5	312339	2.82	723215	3.84	435193	5.33	735569	6.57	682459	9.22	1204095	10.60
OP40300-MB	319266	2.82	732475	3.84	425924	5.32	765587	6.56	721184	9.22	1257918	10.60
OP40300-BS	319395	2.82	750006	3.84	431900	5.33	775143	6.57	712113	9.23	1238057	10.61
OP40300-MS	325093	2.82	760237	3.84	435680	5.33	763554	6.57	691922	9.23	1204406	10.61
OP40300-MSD	317579	2.82	748522	3.84	430819	5.33	772804	6.57	708264	9.23	1228215	10.61
MC34100-12	368639	2.82	831476	3.84	486004	5.33	880745	6.56	830938	9.22	1478734	10.60
ZZZZZZ	284575	2.82	653275	3.84	378182	5.32	674780	6.56	635914	9.22	1132721	10.60
ZZZZZZ	294345	2.82	664385	3.84	387325	5.32	692835	6.56	645517	9.22	1141928	10.60
ZZZZZZ	294767	2.82	670247	3.84	388334	5.32	688858	6.56	653406	9.22	1166095	10.60
ZZZZZZ	302286	2.82	693596	3.84	398757	5.33	705186	6.56	663393	9.22	1166299	10.60
ZZZZZZ	306751	2.82	705808	3.84	400579	5.33	713274	6.56	667256	9.22	1176538	10.60
ZZZZZZ	284513	2.82	657137	3.84	379123	5.32	664806	6.56	637403	9.22	1129211	10.60
ZZZZZZ	310570	2.82	708592	3.84	409978	5.32	719365	6.56	683768	9.22	1211366	10.60
ZZZZZZ	363327	2.82	850361	3.84	479960	5.33	843509	6.57	785140	9.23	1338912	10.61
ZZZZZZ	321941	2.83	746862	3.84	424023	5.33	761960	6.56	682489	9.22	1179102	10.60
ZZZZZZ	326469	2.82	754969	3.84	432339	5.33	764262	6.56	685648	9.22	1180768	10.60
ZZZZZZ	326914	2.82	745052	3.84	428650	5.33	769185	6.57	715706	9.23	1235310	10.61

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

Semivolatile Internal Standard Area Summary

Job Number: MC34338
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSI3445-CC3427	**Injection Date:**	10/23/14
Lab File ID:	I92408.D	**Injection Time:**	14:32
Instrument ID:	GCMSI	**Method:**	SW846 8270D BY SIM

Lab	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
Sample ID	**AREA**	**RT**	**AREA**	**RT**	**AREA**	**RT**	**AREA**	**RT**	**AREA**	**RT**	**AREA**	**RT**

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: MC34338
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSI3447-CC3427	**Injection Date:**	10/27/14
Lab File ID:	I92479.D	**Injection Time:**	08:04
Instrument ID:	GCMSI	**Method:**	SW846 8270D BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	268106	2.77	596316	3.78	346413	5.27	631391	6.50	591820	9.14	1010905	10.52
Upper Limit [a]	536212	3.27	1192632	4.28	692826	5.77	1262782	7.00	1183640	9.64	2021810	11.02
Lower Limit [b]	134053	2.27	298158	3.28	173207	4.77	315696	6.00	295910	8.64	505453	10.02
Lab Sample ID	**IS 1 AREA**	**RT**	**IS 2 AREA**	**RT**	**IS 3 AREA**	**RT**	**IS 4 AREA**	**RT**	**IS 5 AREA**	**RT**	**IS 6 AREA**	**RT**
MC34338-6	187414	2.77	419482	3.79	255331	5.27	433049	6.51	405605	9.13	704559	10.51
MC34338-7	192207	2.77	430560	3.79	269189	5.27	445569	6.51	418124	9.14	721058	10.51
ZZZZZZ	329657	2.77	735092	3.78	427388	5.27	766850	6.50	730974	9.14	1250315	10.52
ZZZZZZ	328113	2.77	730305	3.78	422657	5.27	753227	6.50	726674	9.14	1198683	10.52
OP40275-MB	263617	2.76	581606	3.78	342016	5.27	607010	6.50	560613	9.13	973006	10.51
OP40275-BS	271861	2.77	607877	3.78	352112	5.27	624060	6.51	581022	9.14	989527	10.52
OP40275-MS	262971	2.77	595532	3.79	346373	5.27	600662	6.51	554525	9.15	935983	10.52
OP40275-MSD	258860	2.77	583186	3.79	340627	5.27	585425	6.51	550245	9.14	933743	10.52
MC34440-19A	281251	2.77	621669	3.78	366082	5.27	639969	6.50	602358	9.14	1038345	10.52
ZZZZZZ	286609	2.76	639577	3.78	374064	5.27	658243	6.50	628610	9.14	1085185	10.52
ZZZZZZ	302121	2.76	673592	3.78	389686	5.27	683371	6.50	649146	9.14	1110008	10.51
ZZZZZZ	268312	2.76	601861	3.78	350938	5.27	623190	6.50	586751	9.14	1007977	10.51
ZZZZZZ	282632	2.76	627724	3.78	366603	5.27	648459	6.50	619482	9.14	1057604	10.52
ZZZZZZ	284811	2.76	632394	3.78	367963	5.27	649430	6.50	613428	9.13	1054677	10.51
ZZZZZZ	297491	2.76	653684	3.78	388361	5.27	665639	6.50	648303	9.14	1085652	10.52

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: MC34338
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSR1487-CC1481	**Injection Date:**	10/20/14
Lab File ID:	R40392.D	**Injection Time:**	09:47
Instrument ID:	GCMSR	**Method:**	SW846 8270D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	336121	4.07	1204764	5.17	724665	6.68	1207568	7.95	1246765	10.23	1085526	11.64
Upper Limit [a]	672242	4.57	2409528	5.67	1449330	7.18	2415136	8.45	2493530	10.73	2171052	12.14
Lower Limit [b]	168061	3.57	602382	4.67	362333	6.18	603784	7.45	623383	9.73	542763	11.14

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP40231-MB	352941	4.06	1271176	5.17	767738	6.67	1323103	7.94	1347573	10.22	1296360	11.63
OP40231-BS	327483	4.07	1186562	5.17	714494	6.67	1228616	7.94	1293944	10.23	1157802	11.64
OP40231-MS	336568	4.07	1212461	5.17	732482	6.67	1245109	7.94	1303358	10.23	1163618	11.64
OP40231-MSD	375839	4.07	1348574	5.17	809657	6.67	1373225	7.94	1447284	10.23	1271425	11.64
MC34000-22	351707	4.06	1267241	5.17	762171	6.67	1328509	7.94	1347307	10.22	1291928	11.63
ZZZZZZ	370932	4.06	1325361	5.17	800907	6.67	1393040	7.94	1390172	10.22	1319667	11.63
ZZZZZZ	337982	4.06	1209393	5.17	731102	6.67	1252674	7.94	1282256	10.22	1221885	11.63
MC34338-1	368483	4.06	1329526	5.17	809935	6.67	1398317	7.94	1392311	10.22	1331945	11.63
MC34338-2	383271	4.07	1403813	5.17	858707	6.67	1354685	7.94	1452837	10.22	1394073	11.63
MC34338-3	394518	4.07	1408788	5.17	849561	6.67	1463246	7.94	1438510	10.22	1320985	11.63
MC34338-4	404389	4.06	1455717	5.17	879455	6.67	1491851	7.94	1508743	10.22	1405966	11.63
MC34338-5	392128	4.07	1401768	5.17	796201	6.68	1363113	7.94	1389687	10.22	1326502	11.63
MC34338-6	396183	4.07	1427101	5.17	1253697	6.68	1396635	7.94	1456213	10.22	1367947	11.63
MC34338-7	366222	4.07	1307437	5.17	1227675	6.68	1305161	7.94	1355066	10.22	1293918	11.63
OP40242-MB	338068	4.06	1221057	5.17	729916	6.67	1264711	7.93	1290529	10.22	1227242	11.63
OP40242-BS	343417	4.07	1235090	5.17	739075	6.67	1229729	7.94	1288378	10.23	1142571	11.63
OP40242-MS	358417	4.07	1271975	5.17	768096	6.67	1297638	7.94	1372126	10.23	1218572	11.63
OP40242-MSD	364345	4.07	1301853	5.17	783897	6.67	1322333	7.94	1370567	10.23	1196731	11.63
MC34100-1	346145	4.06	1251666	5.17	756419	6.67	1291896	7.93	1276322	10.22	1190287	11.63
ZZZZZZ	356319	4.06	1269704	5.17	761862	6.67	1313877	7.93	1286069	10.22	1184761	11.63
ZZZZZZ	367877	4.06	1316024	5.17	797324	6.67	1371394	7.93	1350126	10.22	1244117	11.63
ZZZZZZ	331004	4.07	1182535	5.17	711423	6.67	1218131	7.93	1198694	10.22	1117662	11.63
ZZZZZZ	338288	4.07	1219625	5.17	733754	6.67	1253735	7.93	1212859	10.22	1138053	11.63
ZZZZZZ	319384	4.07	1158691	5.17	729774	6.67	1129224	7.94	1168688	10.22	1098321	11.63
ZZZZZZ	355514	4.06	1264985	5.17	771256	6.67	1311075	7.93	1249534	10.22	1133437	11.63
ZZZZZZ	349712	4.06	1246710	5.17	761029	6.67	1303718	7.93	1253860	10.22	1160321	11.63
ZZZZZZ	364605	4.07	1308436	5.17	785818	6.67	1354386	7.93	1302994	10.22	1220026	11.63

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

Semivolatile Internal Standard Area Summary

Job Number: MC34338
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSR1487-CC1481	**Injection Date:**	10/20/14
Lab File ID:	R40392.D	**Injection Time:**	09:47
Instrument ID:	GCMSR	**Method:**	SW846 8270D

Lab	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
Sample ID	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Surrogate Recovery Summary

Job Number: MC34338
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Method: SW846 8270D **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
MC34338-1	R40400.D	48	32	96	72	67	95
MC34338-2	R40401.D	47	33	99	70	68	92
MC34338-3	R40402.D	38	26	87	64	62	91
MC34338-4	R40403.D	41	28	80	66	63	95
MC34338-5	R40404.D	50	27	99	58	69	96
MC34338-6	F76979.D	65	43	140* [a]	98	82	116
MC34338-6	R40405.D	49	34	109	77	44	100
MC34338-7	F76980.D	59	44	135* [a]	93	79	108
MC34338-7	R40406.D	48	33	102	75	49	98
OP40231-BS	R40394.D	45	31	89	72	71	91
OP40231-MB	R40393.D	54	35	94	86	84	105
OP40231-MS	R40395.D	56	39	110	89	89	109
OP40231-MSD	R40396.D	51	35	101	81	81	100

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorophenol	15-110%
S2 = Phenol-d5	15-110%
S3 = 2,4,6-Tribromophenol	15-110%
S4 = Nitrobenzene-d5	30-130%
S5 = 2-Fluorobiphenyl	30-130%
S6 = Terphenyl-d14	30-130%

(a) Outside control limits due to dilution.

Semivolatile Surrogate Recovery Summary

Job Number: MC34338
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Method: SW846 8270D BY SIM **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
MC34338-1	I92416.D	77	63	83
MC34338-2	I92417.D	72	57	81
MC34338-3	I92418.D	67	62	80
MC34338-4	I92419.D	69	63	83
MC34338-5	I92420.D	75	78	102
MC34338-6	I92480.D	80	66	85
MC34338-7	I92481.D	77	66	83
OP40232-BS	I92398.D	76	70	83
OP40232-MB	I92397.D	92	82	92
OP40232-MS	I92399.D	92	86	98
OP40232-MSD	I92400.D	86	79	91

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	30-130%
S2 = 2-Fluorobiphenyl	30-130%
S3 = Terphenyl-d14	30-130%

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries

Method Blank Summary

Job Number: MC34338
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40218-MB	BB59914.D	1	10/16/14	NK	10/15/14	OP40218	GBB3334

The QC reported here applies to the following samples: **Method:** SW846 8011

MC34338-1, MC34338-2, MC34338-3, MC34338-4, MC34338-5, MC34338-6, MC34338-7, MC34338-9

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.015	0.0061	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.015	0.0061	ug/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	Bromofluorobenzene (S)	100%	36-173%
460-00-4	Bromofluorobenzene (S)	101%	36-173%

Blank Spike Summary

Job Number: MC34338
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40218-BS	BB59915.D	1	10/16/14	NK	10/15/14	OP40218	GBB3334

The QC reported here applies to the following samples: **Method:** SW846 8011

MC34338-1, MC34338-2, MC34338-3, MC34338-4, MC34338-5, MC34338-6, MC34338-7, MC34338-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
96-12-8	1,2-Dibromo-3-chloropropane	0.071	0.078	110	60-140
106-93-4	1,2-Dibromoethane	0.071	0.068	96	60-140

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	Bromofluorobenzene (S)	90%	36-173%
460-00-4	Bromofluorobenzene (S)	93%	36-173%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34338
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40218-MS	BB59916.D	1	10/16/14	NK	10/15/14	OP40218	GBB3334
OP40218-MSD	BB59917.D	1	10/16/14	NK	10/15/14	OP40218	GBB3334
MC34000-20	BB59918.D	1	10/16/14	NK	10/15/14	OP40218	GBB3334

The QC reported here applies to the following samples: **Method:** SW846 8011

MC34338-1, MC34338-2, MC34338-3, MC34338-4, MC34338-5, MC34338-6, MC34338-7, MC34338-9

CAS No.	Compound	MC34000-20 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
96-12-8	1,2-Dibromo-3-chloropropane	ND		0.071	0.082	115	0.071	0.081	114	1	64-141/29
106-93-4	1,2-Dibromoethane	ND		0.071	0.074	104	0.071	0.072	101	3	63-163/27

CAS No.	Surrogate Recoveries	MS	MSD	MC34000-20	Limits
460-00-4	Bromofluorobenzene (S)	75%	70%	68%	36-173%
460-00-4	Bromofluorobenzene (S)	75%	71%	68%	36-173%

* = Outside of Control Limits.

Volatile Surrogate Recovery Summary

Job Number: MC34338
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Method: SW846 8011 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]
MC34338-1	BB59926.D	90	100
MC34338-2	BB59927.D	75	111
MC34338-3	BB59928.D	88	92
MC34338-4	BB59929.D	90	96
MC34338-5	BB59930.D	52	88
MC34338-6	BB59931.D	55	97
MC34338-7	BB59932.D	52	96
MC34338-9	BB59933.D	86	89
OP40218-BS	BB59915.D	90	93
OP40218-MB	BB59914.D	100	101
OP40218-MS	BB59916.D	75	75
OP40218-MSD	BB59917.D	70	71

Surrogate Compounds	Recovery Limits
S1 = Bromofluorobenzene (S)	36-173%

(a) Recovery from GC signal #2
(b) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: MC34338
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	GBB3334-ICC3334	**Injection Date:**	10/16/14
Lab File ID:	BB59910.D	**Injection Time:**	09:22
Instrument ID:	GCBB	**Method:**	SW846 8011

	S1 [a] RT	S1 [b] RT
Check Std	3.45	3.46

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
OP40218-MB	BB59914.D	10/16/14	10:43	3.45	3.47
OP40218-BS	BB59915.D	10/16/14	11:01	3.45	3.46
OP40218-MS	BB59916.D	10/16/14	11:19	3.45	3.46
OP40218-MSD	BB59917.D	10/16/14	11:37	3.45	3.46
MC34000-20	BB59918.D	10/16/14	11:55	3.45	3.46
ZZZZZZ	BB59919.D	10/16/14	12:13	3.45	3.46
ZZZZZZ	BB59920.D	10/16/14	12:30	3.45	3.46
ZZZZZZ	BB59921.D	10/16/14	12:48	3.45	3.46
ZZZZZZ	BB59922.D	10/16/14	13:06	3.45	3.46
ZZZZZZ	BB59923.D	10/16/14	13:24	3.45	3.46

Surrogate Compounds

S1 = Bromofluorobenzene (S)

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: MC34338
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	GBB3334-CC3334	**Injection Date:**	10/16/14
Lab File ID:	BB59924.D	**Injection Time:**	13:42
Instrument ID:	GCBB	**Method:**	SW846 8011

	S1 [a] RT	S1 [b] RT
Check Std	3.45	3.46

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
ZZZZZZ	BB59925.D	10/16/14	14:00	3.45	3.46
MC34338-1	BB59926.D	10/16/14	14:18	3.45	3.46
MC34338-2	BB59927.D	10/16/14	14:36	3.45	3.46
MC34338-3	BB59928.D	10/16/14	14:54	3.45	3.46
MC34338-4	BB59929.D	10/16/14	15:12	3.45	3.46
MC34338-5	BB59930.D	10/16/14	15:30	3.45	3.46
MC34338-6	BB59931.D	10/16/14	15:48	3.45	3.46
MC34338-7	BB59932.D	10/16/14	16:06	3.45	3.46
MC34338-9	BB59933.D	10/16/14	16:24	3.45	3.46
GBB3334-ECC333B	BB59934.D	10/16/14	16:42	3.45	3.46

Surrogate Compounds

S1 = Bromofluorobenzene (S)

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

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e-Hardcopy 2.0
Automated Report

Technical Report for

Shell Oil

URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana,



SGS Accutest Job Number: MC34365

Sampling Date: 10/15/14

Report to:

AECOM, INC.

Melissa.mansker@aecom.com

ATTN: Melissa Mansker

Total number of pages in report: 115

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

H. (Brad) Madadian
Lab Director

Client Service contact: Jeremy Vienneau 508-481-6200

Certifications: MA (M-MA136,SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) FL (E87579) NY (11791) NJ (MA926) PA (6801121) ND (R-188) CO (MA00136) MN (11546AA) NC (653) IL (002337) WI (399080220) DoD ELAP (L-A-B L2235)

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SGS ACCUTEST

November 02, 2016

AECOM
1001 Highlands Plaza Drive West Suite 300
St. Louis, MO 63110

RE: SGS Accutest Job # MC34365

Dear Elizabeth Kunkel

As you are aware, SGS Accutest Inc. - Marlborough has been conducting an extensive review of data associated with some historical Gas Chromatography-Mass Spectroscopy volatiles analyses. As a result of this review it was determined that some revisions of the original test report for this job were needed. These corrections have been incorporated into the revised report.

Please be assured that corrective actions have been put in place to address this matter and prevent a recurrence.

We apologize for any inconvenience that this issue may have caused. Please don't hesitate to contact us if we can be of further assistance.

Sincerely,

H. (Brad) Madadian

Regional Laboratory Director
SGS Accutest Inc. - Marlborough

SGS ACCUTEST IS PART OF SGS, THE WORLD'S LEADING INSPECTION, VERIFICATION, TESTING AND CERTIFICATION COMPANY.

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Sample Summary

Shell Oil

Job No: MC34365

URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
MC34365-1	10/15/14	10:45	MMLR	10/16/14	AQ	Ground Water	P93A-ROX-101514
MC34365-2	10/15/14	10:45	MMLR	10/16/14	AQ	Ground Water	P93A-ROX-101514-DUP
MC34365-3	10/15/14	11:45	MMLR	10/16/14	AQ	Ground Water	P58-ROX-101514
MC34365-4	10/15/14	13:45	MMLR	10/16/14	AQ	Ground Water	P93C-ROX-101514
MC34365-5	10/15/14	14:30	MMLR	10/16/14	AQ	Ground Water	P93D-ROX-101514
MC34365-6	10/15/14	15:00	MMLR	10/16/14	AQ	Ground Water	P93B-ROX-101514
MC34365-7	10/15/14	00:00	MMLR	10/16/14	AQ	Trip Blank Water	TB-ROX-101514-HCL
MC34365-8	10/15/14	00:00	MMLR	10/16/14	AQ	Trip Blank Water	TB-ROX-101514-ST

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Shell Oil **Job No** MC34365

Site: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Centra **Report Date** 11/3/2016 3:35:20 PM

6 Sample(s), 2 Trip Blank(s) and 0 Field Blank(s) were collected on 10/15/2014 and were received at SGS Accutest New England on 10/16/2014 properly preserved, at 2 Deg. C and intact. These Samples received a job number of MC34365. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report. 1-Chlorohexane, Benzenethiol, Dibenz(a,h)acridine, Indene and Quinoline were searched in the library search and reported only if detections were found.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260C

Matrix: AQ **Batch ID:** MSV1307

- All samples were analyzed within the recommended method holding time.
- Sample(s) MC34408-1MS, MC34408-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Blank Spike Recovery(s) for Acetone, Acrolein are outside control limits.
- Matrix Spike Recovery(s) for 2-Chloroethyl vinyl ether, Acetone, Acrolein, Vinyl chloride are outside control limits. Outside control limits due to possible matrix interference.
- Matrix Spike Duplicate Recovery(s) for 1,4-Dioxane, Acetone, Acrolein, 2-Chloroethyl vinyl ether are outside control limits. High RPD due to possible matrix interference and/or sample non-homogeneity.
- RPD(s) for MSD for 2-Chloroethyl vinyl ether are outside control limits for sample MC34408-1MSD. High RPD due to possible matrix interference and/or sample non-homogeneity.
- MSV1307-BS for 1,1,2,2-Tetrachloroethane, 1,4-Dioxane: Outside control limits. Associated samples are non-detect for this compound.
- 2-Hexanone, 2-Hexanone, Carbon disulfide, Carbon tetrachloride, Acetone: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.

Matrix: AQ **Batch ID:** MSV1308

- All samples were analyzed within the recommended method holding time.
- Sample(s) MC34509-2MS, MC34509-2MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Matrix: AQ **Batch ID:** MSV1310

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) MC34464-4MS, MC34464-4MSD were used as the QC samples indicated.
- Blank Spike Recovery(s) for 1,4-Dioxane, Acetone, Carbon disulfide are outside control limits.
- Matrix Spike Recovery(s) for 1,1-Dichloroethene, 2,2-Dichloropropane, 2-Chloroethyl vinyl ether, Carbon disulfide, Chloromethane, Vinyl chloride, 1,1,2,2-Tetrachloroethane are outside control limits. Outside control limits due to possible matrix interference.
- Matrix Spike Duplicate Recovery(s) for 2-Chloroethyl vinyl ether, Carbon disulfide, Chloromethane, 1,4-Dioxane are outside control limits. High RPD due to possible matrix interference and/or sample non-homogeneity.
- RPD(s) for MSD for 1,4-Dioxane are outside control limits for sample MC34464-4MSD. High RPD due to possible matrix interference and/or sample non-homogeneity.
- Carbon tetrachloride: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.
- Ethylbenzene: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased high.
- MSV1310-BS for 1,1,2,2-Tetrachloroethane, 1,4-Dioxane: Outside control limits. Associated samples are non-detect for this compound.

Extractables by GCMS By Method SW846 8270D

Matrix: AQ **Batch ID:** OP40242

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) MC34100-1MS, MC34100-1MSD were used as the QC samples indicated.
- Sample(s) MC34365-1, MC34365-3 have compound(s) reported with a "B" qualifier, indicating analyte is found in the associated method blank.
- Matrix Spike Duplicate Recovery(s) for Pyridine are outside control limits. High RPD due to possible matrix interference and/or sample heterogeneity.
- RPD(s) for MSD for 2,4-Dimethylphenol, Aniline, Pyridine are outside control limits for sample OP40242-MSD. High RPD due to possible matrix interference and/or sample heterogeneity.
- MC34365-2: Confirmation run for surrogate recoveries.
- MC34365-2 for Phenol-d5: Outside control limits due to possible matrix interference. Confirmed by reanalysis. Insufficient sample volume for re-extraction.

Extractables by GCMS By Method SW846 8270D BY SIM

Matrix: AQ **Batch ID:** OP40243

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) MC34100-2MS, MC34100-2MSD were used as the QC samples indicated.

Volatiles by GC By Method SW846 8011

Matrix: AQ **Batch ID:** OP40305

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) MC34100-13MS, MC34100-13MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

SGS Accutest New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety.The Laboratory Director for SGS Accutest New England or assignee as verified by the signature on the cover page has authorized the release of this report(MC34365).

Summary of Hits

Job Number: MC34365
Account: Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL
Collected: 10/15/14

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
MC34365-1	P93A-ROX-101514					
Benzene		293000	1000	630	ug/l	SW846 8260C
Ethylbenzene [a]		229 J	500	190	ug/l	SW846 8260C
1,2,4-Trimethylbenzene		442 J	2500	160	ug/l	SW846 8260C
o-Xylene		263 J	500	180	ug/l	SW846 8260C
Xylene (total)		650	500	180	ug/l	SW846 8260C
Phenol		47.1	5.2	0.31	ug/l	SW846 8270D
Dibenzofuran		0.30 J	2.1	0.27	ug/l	SW846 8270D
Di-n-butyl phthalate		0.24 J	5.2	0.18	ug/l	SW846 8270D
bis(2-Ethylhexyl)phthalate		0.40 JB	2.1	0.34	ug/l	SW846 8270D
Acenaphthene		0.20	0.10	0.071	ug/l	SW846 8270D BY SIM
Fluorene		0.37	0.10	0.10	ug/l	SW846 8270D BY SIM
1-Methylnaphthalene		11.4	2.1	0.52	ug/l	SW846 8270D BY SIM
2-Methylnaphthalene		9.5	2.1	0.52	ug/l	SW846 8270D BY SIM
Phenanthrene		0.30	0.052	0.013	ug/l	SW846 8270D BY SIM
MC34365-2	P93A-ROX-101514-DUP					
Benzene		277000	1000	630	ug/l	SW846 8260C
Ethylbenzene [a]		226 J	500	190	ug/l	SW846 8260C
o-Xylene		258 J	500	180	ug/l	SW846 8260C
Xylene (total)		635	500	180	ug/l	SW846 8260C
Phenol		50.0	5.4	0.33	ug/l	SW846 8270D
bis(2-Chloroethyl)ether		4.4 J	5.4	0.38	ug/l	SW846 8270D
Dibenzofuran		0.33 J	2.2	0.28	ug/l	SW846 8270D
Di-n-butyl phthalate		0.46 J	5.4	0.19	ug/l	SW846 8270D
bis(2-Ethylhexyl)phthalate		4.1	2.2	0.36	ug/l	SW846 8270D
Nitrobenzene		1.1 J	5.4	0.43	ug/l	SW846 8270D
Acenaphthene		0.22	0.11	0.075	ug/l	SW846 8270D BY SIM
Fluorene		0.39	0.11	0.11	ug/l	SW846 8270D BY SIM
1-Methylnaphthalene		12.2	2.2	0.54	ug/l	SW846 8270D BY SIM
2-Methylnaphthalene		10.1	2.2	0.54	ug/l	SW846 8270D BY SIM
Phenanthrene		0.30	0.054	0.014	ug/l	SW846 8270D BY SIM
MC34365-3	P58-ROX-101514					
Benzene		493000	1000	630	ug/l	SW846 8260C
Ethylbenzene [a]		793	500	190	ug/l	SW846 8260C
Isopropylbenzene		1430 J	2500	170	ug/l	SW846 8260C
n-Propylbenzene		781 J	2500	250	ug/l	SW846 8260C
1,2,4-Trimethylbenzene		720 J	2500	160	ug/l	SW846 8260C
1,3,5-Trimethylbenzene		453 J	2500	190	ug/l	SW846 8260C
o-Xylene		253 J	500	180	ug/l	SW846 8260C
Xylene (total)		718	500	180	ug/l	SW846 8260C

Summary of Hits

Job Number: MC34365
Account: Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL
Collected: 10/15/14

Lab Sample ID / Client Sample ID / Analyte	Result/ Qual	RL	MDL	Units	Method
3&4-Methylphenol	23.7	11	0.51	ug/l	SW846 8270D
Phenol	145	5.4	0.33	ug/l	SW846 8270D
bis(2-Chloroethyl)ether	14.0	5.4	0.38	ug/l	SW846 8270D
Dibenzofuran	2.2	2.2	0.28	ug/l	SW846 8270D
bis(2-Ethylhexyl)phthalate	0.42 JB	2.2	0.36	ug/l	SW846 8270D
Acenaphthene	0.58	0.11	0.075	ug/l	SW846 8270D BY SIM
Acenaphthylene	0.23	0.11	0.054	ug/l	SW846 8270D BY SIM
Benzo(a)anthracene	0.13	0.054	0.021	ug/l	SW846 8270D BY SIM
Benzo(a)pyrene	0.11	0.11	0.031	ug/l	SW846 8270D BY SIM
Benzo(b)fluoranthene	0.074	0.054	0.034	ug/l	SW846 8270D BY SIM
Benzo(g,h,i)perylene	0.065 J	0.11	0.029	ug/l	SW846 8270D BY SIM
Chrysene	0.18	0.11	0.026	ug/l	SW846 8270D BY SIM
Fluoranthene	0.064 J	0.11	0.044	ug/l	SW846 8270D BY SIM
Fluorene	1.5	0.11	0.11	ug/l	SW846 8270D BY SIM
1-Methylnaphthalene	50.4	2.2	0.54	ug/l	SW846 8270D BY SIM
2-Methylnaphthalene	67.4	2.2	0.54	ug/l	SW846 8270D BY SIM
Phenanthrene	1.0	0.054	0.014	ug/l	SW846 8270D BY SIM
Pyrene	0.24	0.11	0.042	ug/l	SW846 8270D BY SIM
MC34365-4 P93C-ROX-101514					
Benzene	0.75	0.50	0.32	ug/l	SW846 8260C
Methyl Tert Butyl Ether	4.6	1.0	0.51	ug/l	SW846 8260C
MC34365-5 P93D-ROX-101514					
Benzene	36400	250	160	ug/l	SW846 8260C
1,2,4-Trimethylbenzene	8.3 J	50	3.2	ug/l	SW846 8260C
Phenol	45.8	5.4	0.33	ug/l	SW846 8270D
Di-n-butyl phthalate	0.31 J	5.4	0.19	ug/l	SW846 8270D
Phenanthrene	0.019 J	0.054	0.014	ug/l	SW846 8270D BY SIM
MC34365-6 P93B-ROX-101514					
Benzene	241000	1000	630	ug/l	SW846 8260C
Phenol	128	5.6	0.34	ug/l	SW846 8270D
Di-n-butyl phthalate	0.24 J	5.6	0.19	ug/l	SW846 8270D
MC34365-7 TB-ROX-101514-HCL					
No hits reported in this sample.					
MC34365-8 TB-ROX-101514-ST					
No hits reported in this sample.					

Summary of Hits

Job Number: MC34365
Account: Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL
Collected: 10/15/14

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method

(a) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased high.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	P93A-ROX-101514		
Lab Sample ID:	MC34365-1	**Date Sampled:**	10/15/14
Matrix:	AQ - Ground Water	**Date Received:**	10/16/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V36140.D	500	10/29/14	AMY	n/a	n/a	MSV1310
Run #2	V36082.D	2000	10/28/14	AMY	n/a	n/a	MSV1308

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5000	1300	ug/l	
107-02-8	Acrolein	ND	13000	3000	ug/l	
107-13-1	Acrylonitrile	ND	2500	1100	ug/l	
71-43-2	Benzene	293000 [a]	1000	630	ug/l	
108-86-1	Bromobenzene	ND	2500	170	ug/l	
74-97-5	Bromochloromethane	ND	2500	280	ug/l	
75-27-4	Bromodichloromethane	ND	500	170	ug/l	
75-25-2	Bromoform	ND	500	310	ug/l	
74-83-9	Bromomethane	ND	1000	880	ug/l	
78-93-3	2-Butanone (MEK)	ND	2500	1300	ug/l	
104-51-8	n-Butylbenzene	ND	2500	540	ug/l	
135-98-8	sec-Butylbenzene	ND	2500	210	ug/l	
98-06-6	tert-Butylbenzene	ND	2500	190	ug/l	
75-15-0	Carbon disulfide	ND	2500	230	ug/l	
56-23-5	Carbon tetrachloride [b]	ND	500	270	ug/l	
108-90-7	Chlorobenzene	ND	500	210	ug/l	
75-00-3	Chloroethane	ND	1000	270	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	2500	1700	ug/l	
67-66-3	Chloroform	ND	500	210	ug/l	
74-87-3	Chloromethane	ND	1000	540	ug/l	
95-49-8	o-Chlorotoluene	ND	2500	190	ug/l	
106-43-4	p-Chlorotoluene	ND	2500	220	ug/l	
124-48-1	Dibromochloromethane	ND	500	190	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	500	160	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	500	280	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	500	180	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1000	360	ug/l	
75-34-3	1,1-Dichloroethane	ND	500	180	ug/l	
107-06-2	1,2-Dichloroethane	ND	500	250	ug/l	
75-35-4	1,1-Dichloroethene	ND	500	300	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	500	420	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	500	250	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P93A-ROX-101514		
Lab Sample ID:	MC34365-1	**Date Sampled:**	10/15/14
Matrix:	AQ - Ground Water	**Date Received:**	10/16/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	1000	250	ug/l	
142-28-9	1,3-Dichloropropane	ND	2500	450	ug/l	
594-20-7	2,2-Dichloropropane	ND	2500	630	ug/l	
563-58-6	1,1-Dichloropropene	ND	2500	240	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	250	210	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	250	250	ug/l	
123-91-1	1,4-Dioxane	ND	13000	5400	ug/l	
97-63-2	Ethyl methacrylate	ND	2500	250	ug/l	
100-41-4	Ethylbenzene [c]	229	500	190	ug/l	J
87-68-3	Hexachlorobutadiene	ND	2500	830	ug/l	
591-78-6	2-Hexanone	ND	2500	800	ug/l	
98-82-8	Isopropylbenzene	ND	2500	170	ug/l	
99-87-6	p-Isopropyltoluene	ND	2500	190	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	500	260	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	2500	490	ug/l	
74-95-3	Methylene bromide	ND	2500	260	ug/l	
75-09-2	Methylene chloride	ND	1000	140	ug/l	
91-20-3	Naphthalene	ND	2500	340	ug/l	
103-65-1	n-Propylbenzene	ND	2500	250	ug/l	
100-42-5	Styrene	ND	2500	430	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	500	220	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	250	200	ug/l	
127-18-4	Tetrachloroethene	ND	500	300	ug/l	
108-88-3	Toluene	ND	500	170	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2500	340	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2500	250	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	500	230	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	500	230	ug/l	
79-01-6	Trichloroethene	ND	500	240	ug/l	
75-69-4	Trichlorofluoromethane	ND	500	270	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2500	410	ug/l	
95-63-6	1,2,4-Trimethylbenzene	442	2500	160	ug/l	J
108-67-8	1,3,5-Trimethylbenzene	ND	2500	190	ug/l	
108-05-4	Vinyl Acetate	ND	2500	360	ug/l	
75-01-4	Vinyl chloride	ND	500	290	ug/l	
	m,p-Xylene	ND	500	470	ug/l	
95-47-6	o-Xylene	263	500	180	ug/l	J
1330-20-7	Xylene (total)	650	500	180	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P93A-ROX-101514		
Lab Sample ID:	MC34365-1	**Date Sampled:**	10/15/14
Matrix:	AQ - Ground Water	**Date Received:**	10/16/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%	103%	70-130%
2037-26-5	Toluene-D8	96%	99%	70-130%
460-00-4	4-Bromofluorobenzene	103%	101%	70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Result is from Run# 2
(b) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.
(c) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased high.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P93A-ROX-101514		
Lab Sample ID:	MC34365-1	**Date Sampled:**	10/15/14
Matrix:	AQ - Ground Water	**Date Received:**	10/16/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R40414.D	1	10/20/14	KD	10/16/14	OP40242	MSR1487
Run #2							

	Initial Volume	Final Volume
Run #1	970 ml	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	10	2.6	ug/l	
95-57-8	2-Chlorophenol	ND	5.2	0.32	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	10	0.85	ug/l	
120-83-2	2,4-Dichlorophenol	ND	10	0.41	ug/l	
105-67-9	2,4-Dimethylphenol	ND	10	0.58	ug/l	
51-28-5	2,4-Dinitrophenol	ND	21	2.6	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	2.0	ug/l	
95-48-7	2-Methylphenol	ND	10	0.23	ug/l	
	3&4-Methylphenol	ND	10	0.48	ug/l	
88-75-5	2-Nitrophenol	ND	10	3.0	ug/l	
100-02-7	4-Nitrophenol	ND	21	0.55	ug/l	
87-86-5	Pentachlorophenol	ND	10	1.2	ug/l	
108-95-2	Phenol	47.1	5.2	0.31	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	10	0.38	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	10	0.18	ug/l	
62-53-3	Aniline	ND	10	0.66	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.2	0.49	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.2	0.55	ug/l	
100-51-6	Benzyl Alcohol	ND	10	2.3	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.2	0.32	ug/l	
106-47-8	4-Chloroaniline	ND	10	0.57	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.2	0.30	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.2	0.36	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.2	0.34	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.2	0.26	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.2	0.25	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	10	0.47	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	10	0.31	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.2	0.28	ug/l	
132-64-9	Dibenzofuran	0.30	2.1	0.27	ug/l	J
84-74-2	Di-n-butyl phthalate	0.24	5.2	0.18	ug/l	J
117-84-0	Di-n-octyl phthalate	ND	5.2	0.29	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P93A-ROX-101514		
Lab Sample ID:	MC34365-1	**Date Sampled:**	10/15/14
Matrix:	AQ - Ground Water	**Date Received:**	10/16/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	5.2	0.21	ug/l	
131-11-3	Dimethyl phthalate	ND	5.2	0.35	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	0.40	2.1	0.34	ug/l	JB
118-74-1	Hexachlorobenzene	ND	5.2	0.30	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	1.3	ug/l	
67-72-1	Hexachloroethane	ND	5.2	0.31	ug/l	
78-59-1	Isophorone	ND	5.2	0.46	ug/l	
88-74-4	2-Nitroaniline	ND	10	0.41	ug/l	
99-09-2	3-Nitroaniline	ND	10	1.4	ug/l	
100-01-6	4-Nitroaniline	ND	10	2.2	ug/l	
98-95-3	Nitrobenzene	ND	5.2	0.40	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.2	1.0	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.2	0.42	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.2	0.20	ug/l	
110-86-1	Pyridine	ND	10	0.53	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	38%		15-110%
4165-62-2	Phenol-d5	25%		15-110%
118-79-6	2,4,6-Tribromophenol	91%		15-110%
4165-60-0	Nitrobenzene-d5	66%		30-130%
321-60-8	2-Fluorobiphenyl	64%		30-130%
1718-51-0	Terphenyl-d14	93%		30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

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Report of Analysis

Client Sample ID:	P93A-ROX-101514		
Lab Sample ID:	MC34365-1	**Date Sampled:**	10/15/14
Matrix:	AQ - Ground Water	**Date Received:**	10/16/14
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I92314.D	1	10/20/14	WK	10/16/14	OP40243	MSI3440
Run #2							

	Initial Volume	Final Volume
Run #1	970 ml	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.20	0.10	0.071	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.051	ug/l	
120-12-7	Anthracene	ND	0.10	0.095	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.052	0.020	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.030	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.052	0.033	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.028	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.040	ug/l	
218-01-9	Chrysene	ND	0.10	0.025	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.033	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.042	ug/l	
86-73-7	Fluorene	0.37	0.10	0.10	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.032	ug/l	
90-12-0	1-Methylnaphthalene	11.4	2.1	0.52	ug/l	
91-57-6	2-Methylnaphthalene	9.5	2.1	0.52	ug/l	
85-01-8	Phenanthrene	0.30	0.052	0.013	ug/l	
129-00-0	Pyrene	ND	0.10	0.040	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	68%		30-130%
321-60-8	2-Fluorobiphenyl	63%		30-130%
1718-51-0	Terphenyl-d14	87%		30-130%

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Report of Analysis

Client Sample ID:	P93A-ROX-101514		
Lab Sample ID:	MC34365-1	**Date Sampled:**	10/15/14
Matrix:	AQ - Ground Water	**Date Received:**	10/16/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB60049.D	1	10/23/14	NK	10/21/14	OP40305	GBB3339
Run #2							

	Initial Volume	Final Volume
Run #1	37.2 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.014	0.0057	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.014	0.0057	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	71%		36-173%
460-00-4	Bromofluorobenzene (S)	88%		36-173%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P93A-ROX-101514-DUP		
Lab Sample ID:	MC34365-2	**Date Sampled:**	10/15/14
Matrix:	AQ - Ground Water	**Date Received:**	10/16/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V36141.D	500	10/29/14	AMY	n/a	n/a	MSV1310
Run #2	V36085.D	2000	10/28/14	AMY	n/a	n/a	MSV1308

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5000	1300	ug/l	
107-02-8	Acrolein	ND	13000	3000	ug/l	
107-13-1	Acrylonitrile	ND	2500	1100	ug/l	
71-43-2	Benzene	277000 [a]	1000	630	ug/l	
108-86-1	Bromobenzene	ND	2500	170	ug/l	
74-97-5	Bromochloromethane	ND	2500	280	ug/l	
75-27-4	Bromodichloromethane	ND	500	170	ug/l	
75-25-2	Bromoform	ND	500	310	ug/l	
74-83-9	Bromomethane	ND	1000	880	ug/l	
78-93-3	2-Butanone (MEK)	ND	2500	1300	ug/l	
104-51-8	n-Butylbenzene	ND	2500	540	ug/l	
135-98-8	sec-Butylbenzene	ND	2500	210	ug/l	
98-06-6	tert-Butylbenzene	ND	2500	190	ug/l	
75-15-0	Carbon disulfide	ND	2500	230	ug/l	
56-23-5	Carbon tetrachloride [b]	ND	500	270	ug/l	
108-90-7	Chlorobenzene	ND	500	210	ug/l	
75-00-3	Chloroethane	ND	1000	270	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	2500	1700	ug/l	
67-66-3	Chloroform	ND	500	210	ug/l	
74-87-3	Chloromethane	ND	1000	540	ug/l	
95-49-8	o-Chlorotoluene	ND	2500	190	ug/l	
106-43-4	p-Chlorotoluene	ND	2500	220	ug/l	
124-48-1	Dibromochloromethane	ND	500	190	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	500	160	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	500	280	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	500	180	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1000	360	ug/l	
75-34-3	1,1-Dichloroethane	ND	500	180	ug/l	
107-06-2	1,2-Dichloroethane	ND	500	250	ug/l	
75-35-4	1,1-Dichloroethene	ND	500	300	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	500	420	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	500	250	ug/l	

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Report of Analysis

Client Sample ID:	P93A-ROX-101514-DUP		
Lab Sample ID:	MC34365-2	**Date Sampled:**	10/15/14
Matrix:	AQ - Ground Water	**Date Received:**	10/16/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	1000	250	ug/l	
142-28-9	1,3-Dichloropropane	ND	2500	450	ug/l	
594-20-7	2,2-Dichloropropane	ND	2500	630	ug/l	
563-58-6	1,1-Dichloropropene	ND	2500	240	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	250	210	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	250	250	ug/l	
123-91-1	1,4-Dioxane	ND	13000	5400	ug/l	
97-63-2	Ethyl methacrylate	ND	2500	250	ug/l	
100-41-4	Ethylbenzene [c]	226	500	190	ug/l	J
87-68-3	Hexachlorobutadiene	ND	2500	830	ug/l	
591-78-6	2-Hexanone	ND	2500	800	ug/l	
98-82-8	Isopropylbenzene	ND	2500	170	ug/l	
99-87-6	p-Isopropyltoluene	ND	2500	190	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	500	260	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	2500	490	ug/l	
74-95-3	Methylene bromide	ND	2500	260	ug/l	
75-09-2	Methylene chloride	ND	1000	140	ug/l	
91-20-3	Naphthalene	ND	2500	340	ug/l	
103-65-1	n-Propylbenzene	ND	2500	250	ug/l	
100-42-5	Styrene	ND	2500	430	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	500	220	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	250	200	ug/l	
127-18-4	Tetrachloroethene	ND	500	300	ug/l	
108-88-3	Toluene	ND	500	170	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2500	340	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2500	250	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	500	230	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	500	230	ug/l	
79-01-6	Trichloroethene	ND	500	240	ug/l	
75-69-4	Trichlorofluoromethane	ND	500	270	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2500	410	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2500	160	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2500	190	ug/l	
108-05-4	Vinyl Acetate	ND	2500	360	ug/l	
75-01-4	Vinyl chloride	ND	500	290	ug/l	
	m,p-Xylene	ND	500	470	ug/l	
95-47-6	o-Xylene	258	500	180	ug/l	J
1330-20-7	Xylene (total)	635	500	180	ug/l	

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Report of Analysis

Client Sample ID:	P93A-ROX-101514-DUP		
Lab Sample ID:	MC34365-2	**Date Sampled:**	10/15/14
Matrix:	AQ - Ground Water	**Date Received:**	10/16/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%	104%	70-130%
2037-26-5	Toluene-D8	93%	97%	70-130%
460-00-4	4-Bromofluorobenzene	103%	101%	70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Result is from Run# 2
(b) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.
(c) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased high.

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RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P93A-ROX-101514-DUP		
Lab Sample ID:	MC34365-2	**Date Sampled:**	10/15/14
Matrix:	AQ - Ground Water	**Date Received:**	10/16/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R40462.D	1	10/22/14	KD	10/16/14	OP40242	MSR1489
Run #2 [a]	R40415.D	1	10/20/14	KD	10/16/14	OP40242	MSR1487

	Initial Volume	Final Volume
Run #1	920 ml	1.0 ml
Run #2	920 ml	1.0 ml

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	11	2.7	ug/l	
95-57-8	2-Chlorophenol	ND	5.4	0.34	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	11	0.90	ug/l	
120-83-2	2,4-Dichlorophenol	ND	11	0.43	ug/l	
105-67-9	2,4-Dimethylphenol	ND	11	0.61	ug/l	
51-28-5	2,4-Dinitrophenol	ND	22	2.7	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	2.1	ug/l	
95-48-7	2-Methylphenol	ND	11	0.25	ug/l	
	3&4-Methylphenol	ND	11	0.51	ug/l	
88-75-5	2-Nitrophenol	ND	11	3.1	ug/l	
100-02-7	4-Nitrophenol	ND	22	0.58	ug/l	
87-86-5	Pentachlorophenol	ND	11	1.2	ug/l	
108-95-2	Phenol	50.0	5.4	0.33	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	11	0.40	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	11	0.19	ug/l	
62-53-3	Aniline	ND	11	0.69	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.4	0.51	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.4	0.58	ug/l	
100-51-6	Benzyl Alcohol	ND	11	2.5	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.4	0.34	ug/l	
106-47-8	4-Chloroaniline	ND	11	0.61	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.4	0.31	ug/l	
111-44-4	bis(2-Chloroethyl)ether	4.4	5.4	0.38	ug/l	J
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.4	0.36	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.4	0.27	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.4	0.26	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	11	0.50	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	11	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.4	0.29	ug/l	
132-64-9	Dibenzofuran	0.33	2.2	0.28	ug/l	J
84-74-2	Di-n-butyl phthalate	0.46	5.4	0.19	ug/l	J
117-84-0	Di-n-octyl phthalate	ND	5.4	0.31	ug/l	

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P93A-ROX-101514-DUP		
Lab Sample ID:	MC34365-2	**Date Sampled:**	10/15/14
Matrix:	AQ - Ground Water	**Date Received:**	10/16/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	5.4	0.22	ug/l	
131-11-3	Dimethyl phthalate	ND	5.4	0.37	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	4.1	2.2	0.36	ug/l	
118-74-1	Hexachlorobenzene	ND	5.4	0.31	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	11	1.4	ug/l	
67-72-1	Hexachloroethane	ND	5.4	0.33	ug/l	
78-59-1	Isophorone	ND	5.4	0.49	ug/l	
88-74-4	2-Nitroaniline	ND	11	0.43	ug/l	
99-09-2	3-Nitroaniline	ND	11	1.5	ug/l	
100-01-6	4-Nitroaniline	ND	11	2.3	ug/l	
98-95-3	Nitrobenzene	1.1	5.4	0.43	ug/l	J
62-75-9	n-Nitrosodimethylamine	ND	5.4	1.1	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.4	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.4	0.21	ug/l	
110-86-1	Pyridine	ND	11	0.56	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	19%	20%	15-110%
4165-62-2	Phenol-d5	13% [b]	14% [b]	15-110%
118-79-6	2,4,6-Tribromophenol	53%	52%	15-110%
4165-60-0	Nitrobenzene-d5	30%	34%	30-130%
321-60-8	2-Fluorobiphenyl	36%	35%	30-130%
1718-51-0	Terphenyl-d14	49%	51%	30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

(a) Confirmation run for surrogate recoveries.
(b) Outside control limits due to possible matrix interference. Confirmed by reanalysis. Insufficient sample volume for re-extraction.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P93A-ROX-101514-DUP		
Lab Sample ID:	MC34365-2	**Date Sampled:**	10/15/14
Matrix:	AQ - Ground Water	**Date Received:**	10/16/14
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I92316.D	1	10/20/14	WK	10/16/14	OP40243	MSI3440
Run #2							

	Initial Volume	Final Volume
Run #1	920 ml	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.22	0.11	0.075	ug/l	
208-96-8	Acenaphthylene	ND	0.11	0.054	ug/l	
120-12-7	Anthracene	ND	0.11	0.10	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.054	0.021	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.11	0.031	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.054	0.034	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.11	0.029	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.11	0.042	ug/l	
218-01-9	Chrysene	ND	0.11	0.026	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.11	0.035	ug/l	
206-44-0	Fluoranthene	ND	0.11	0.044	ug/l	
86-73-7	Fluorene	0.39	0.11	0.11	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.11	0.033	ug/l	
90-12-0	1-Methylnaphthalene	12.2	2.2	0.54	ug/l	
91-57-6	2-Methylnaphthalene	10.1	2.2	0.54	ug/l	
85-01-8	Phenanthrene	0.30	0.054	0.014	ug/l	
129-00-0	Pyrene	ND	0.11	0.042	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	68%		30-130%
321-60-8	2-Fluorobiphenyl	66%		30-130%
1718-51-0	Terphenyl-d14	84%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P93A-ROX-101514-DUP		
Lab Sample ID:	MC34365-2	**Date Sampled:**	10/15/14
Matrix:	AQ - Ground Water	**Date Received:**	10/16/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB60050.D	1	10/23/14	NK	10/21/14	OP40305	GBB3339
Run #2							

	Initial Volume	Final Volume
Run #1	37.4 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.014	0.0057	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.014	0.0057	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	70%		36-173%
460-00-4	Bromofluorobenzene (S)	89%		36-173%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P58-ROX-101514		
Lab Sample ID:	MC34365-3	**Date Sampled:**	10/15/14
Matrix:	AQ - Ground Water	**Date Received:**	10/16/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V36142.D	500	10/29/14	AMY	n/a	n/a	MSV1310
Run #2	V36066.D	2000	10/28/14	AMY	n/a	n/a	MSV1307

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5000	1300	ug/l	
107-02-8	Acrolein	ND	13000	3000	ug/l	
107-13-1	Acrylonitrile	ND	2500	1100	ug/l	
71-43-2	Benzene	493000 [a]	1000	630	ug/l	
108-86-1	Bromobenzene	ND	2500	170	ug/l	
74-97-5	Bromochloromethane	ND	2500	280	ug/l	
75-27-4	Bromodichloromethane	ND	500	170	ug/l	
75-25-2	Bromoform	ND	500	310	ug/l	
74-83-9	Bromomethane	ND	1000	880	ug/l	
78-93-3	2-Butanone (MEK)	ND	2500	1300	ug/l	
104-51-8	n-Butylbenzene	ND	2500	540	ug/l	
135-98-8	sec-Butylbenzene	ND	2500	210	ug/l	
98-06-6	tert-Butylbenzene	ND	2500	190	ug/l	
75-15-0	Carbon disulfide	ND	2500	230	ug/l	
56-23-5	Carbon tetrachloride [b]	ND	500	270	ug/l	
108-90-7	Chlorobenzene	ND	500	210	ug/l	
75-00-3	Chloroethane	ND	1000	270	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	2500	1700	ug/l	
67-66-3	Chloroform	ND	500	210	ug/l	
74-87-3	Chloromethane	ND	1000	540	ug/l	
95-49-8	o-Chlorotoluene	ND	2500	190	ug/l	
106-43-4	p-Chlorotoluene	ND	2500	220	ug/l	
124-48-1	Dibromochloromethane	ND	500	190	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	500	160	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	500	280	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	500	180	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1000	360	ug/l	
75-34-3	1,1-Dichloroethane	ND	500	180	ug/l	
107-06-2	1,2-Dichloroethane	ND	500	250	ug/l	
75-35-4	1,1-Dichloroethene	ND	500	300	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	500	420	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	500	250	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P58-ROX-101514		
Lab Sample ID:	MC34365-3	**Date Sampled:**	10/15/14
Matrix:	AQ - Ground Water	**Date Received:**	10/16/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	1000	250	ug/l	
142-28-9	1,3-Dichloropropane	ND	2500	450	ug/l	
594-20-7	2,2-Dichloropropane	ND	2500	630	ug/l	
563-58-6	1,1-Dichloropropene	ND	2500	240	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	250	210	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	250	250	ug/l	
123-91-1	1,4-Dioxane	ND	13000	5400	ug/l	
97-63-2	Ethyl methacrylate	ND	2500	250	ug/l	
100-41-4	Ethylbenzene [c]	793	500	190	ug/l	
87-68-3	Hexachlorobutadiene	ND	2500	830	ug/l	
591-78-6	2-Hexanone	ND	2500	800	ug/l	
98-82-8	Isopropylbenzene	1430	2500	170	ug/l	J
99-87-6	p-Isopropyltoluene	ND	2500	190	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	500	260	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	2500	490	ug/l	
74-95-3	Methylene bromide	ND	2500	260	ug/l	
75-09-2	Methylene chloride	ND	1000	140	ug/l	
91-20-3	Naphthalene	ND	2500	340	ug/l	
103-65-1	n-Propylbenzene	781	2500	250	ug/l	J
100-42-5	Styrene	ND	2500	430	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	500	220	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	250	200	ug/l	
127-18-4	Tetrachloroethene	ND	500	300	ug/l	
108-88-3	Toluene	ND	500	170	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2500	340	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2500	250	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	500	230	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	500	230	ug/l	
79-01-6	Trichloroethene	ND	500	240	ug/l	
75-69-4	Trichlorofluoromethane	ND	500	270	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2500	410	ug/l	
95-63-6	1,2,4-Trimethylbenzene	720	2500	160	ug/l	J
108-67-8	1,3,5-Trimethylbenzene	453	2500	190	ug/l	J
108-05-4	Vinyl Acetate	ND	2500	360	ug/l	
75-01-4	Vinyl chloride	ND	500	290	ug/l	
	m,p-Xylene	ND	500	470	ug/l	
95-47-6	o-Xylene	253	500	180	ug/l	J
1330-20-7	Xylene (total)	718	500	180	ug/l	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P58-ROX-101514		
Lab Sample ID:	MC34365-3	**Date Sampled:**	10/15/14
Matrix:	AQ - Ground Water	**Date Received:**	10/16/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	111%	99%	70-130%
2037-26-5	Toluene-D8	97%	96%	70-130%
460-00-4	4-Bromofluorobenzene	103%	100%	70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Result is from Run# 2
(b) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.
(c) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased high.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P58-ROX-101514		
Lab Sample ID:	MC34365-3	**Date Sampled:**	10/15/14
Matrix:	AQ - Ground Water	**Date Received:**	10/16/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R40416.D	1	10/20/14	KD	10/16/14	OP40242	MSR1487
Run #2							

	Initial Volume	Final Volume
Run #1	920 ml	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	11	2.7	ug/l	
95-57-8	2-Chlorophenol	ND	5.4	0.34	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	11	0.90	ug/l	
120-83-2	2,4-Dichlorophenol	ND	11	0.43	ug/l	
105-67-9	2,4-Dimethylphenol	ND	11	0.61	ug/l	
51-28-5	2,4-Dinitrophenol	ND	22	2.7	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	2.1	ug/l	
95-48-7	2-Methylphenol	ND	11	0.25	ug/l	
	3&4-Methylphenol	23.7	11	0.51	ug/l	
88-75-5	2-Nitrophenol	ND	11	3.1	ug/l	
100-02-7	4-Nitrophenol	ND	22	0.58	ug/l	
87-86-5	Pentachlorophenol	ND	11	1.2	ug/l	
108-95-2	Phenol	145	5.4	0.33	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	11	0.40	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	11	0.19	ug/l	
62-53-3	Aniline	ND	11	0.69	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.4	0.51	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.4	0.58	ug/l	
100-51-6	Benzyl Alcohol	ND	11	2.5	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.4	0.34	ug/l	
106-47-8	4-Chloroaniline	ND	11	0.61	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.4	0.31	ug/l	
111-44-4	bis(2-Chloroethyl)ether	14.0	5.4	0.38	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.4	0.36	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.4	0.27	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.4	0.26	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	11	0.50	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	11	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.4	0.29	ug/l	
132-64-9	Dibenzofuran	2.2	2.2	0.28	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.4	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.4	0.31	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P58-ROX-101514		
Lab Sample ID:	MC34365-3	**Date Sampled:**	10/15/14
Matrix:	AQ - Ground Water	**Date Received:**	10/16/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	5.4	0.22	ug/l	
131-11-3	Dimethyl phthalate	ND	5.4	0.37	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	0.42	2.2	0.36	ug/l	JB
118-74-1	Hexachlorobenzene	ND	5.4	0.31	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	11	1.4	ug/l	
67-72-1	Hexachloroethane	ND	5.4	0.33	ug/l	
78-59-1	Isophorone	ND	5.4	0.49	ug/l	
88-74-4	2-Nitroaniline	ND	11	0.43	ug/l	
99-09-2	3-Nitroaniline	ND	11	1.5	ug/l	
100-01-6	4-Nitroaniline	ND	11	2.3	ug/l	
98-95-3	Nitrobenzene	ND	5.4	0.43	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.4	1.1	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.4	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.4	0.21	ug/l	
110-86-1	Pyridine	ND	11	0.56	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	53%		15-110%
4165-62-2	Phenol-d5	33%		15-110%
118-79-6	2,4,6-Tribromophenol	109%		15-110%
4165-60-0	Nitrobenzene-d5	88%		30-130%
321-60-8	2-Fluorobiphenyl	85%		30-130%
1718-51-0	Terphenyl-d14	101%		30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P58-ROX-101514		
Lab Sample ID:	MC34365-3	**Date Sampled:**	10/15/14
Matrix:	AQ - Ground Water	**Date Received:**	10/16/14
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I92323.D	1	10/20/14	WK	10/16/14	OP40243	MSI3441
Run #2							

	Initial Volume	Final Volume
Run #1	920 ml	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.58	0.11	0.075	ug/l	
208-96-8	Acenaphthylene	0.23	0.11	0.054	ug/l	
120-12-7	Anthracene	ND	0.11	0.10	ug/l	
56-55-3	Benzo(a)anthracene	0.13	0.054	0.021	ug/l	
50-32-8	Benzo(a)pyrene	0.11	0.11	0.031	ug/l	
205-99-2	Benzo(b)fluoranthene	0.074	0.054	0.034	ug/l	
191-24-2	Benzo(g,h,i)perylene	0.065	0.11	0.029	ug/l	J
207-08-9	Benzo(k)fluoranthene	ND	0.11	0.042	ug/l	
218-01-9	Chrysene	0.18	0.11	0.026	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.11	0.035	ug/l	
206-44-0	Fluoranthene	0.064	0.11	0.044	ug/l	J
86-73-7	Fluorene	1.5	0.11	0.11	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.11	0.033	ug/l	
90-12-0	1-Methylnaphthalene	50.4	2.2	0.54	ug/l	
91-57-6	2-Methylnaphthalene	67.4	2.2	0.54	ug/l	
85-01-8	Phenanthrene	1.0	0.054	0.014	ug/l	
129-00-0	Pyrene	0.24	0.11	0.042	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	91%		30-130%
321-60-8	2-Fluorobiphenyl	80%		30-130%
1718-51-0	Terphenyl-d14	91%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P58-ROX-101514		
Lab Sample ID:	MC34365-3	**Date Sampled:**	10/15/14
Matrix:	AQ - Ground Water	**Date Received:**	10/16/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB60051.D	1	10/23/14	NK	10/21/14	OP40305	GBB3339
Run #2							

	Initial Volume	Final Volume
Run #1	36.6 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.014	0.0058	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.014	0.0058	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	71%		36-173%
460-00-4	Bromofluorobenzene (S)	83%		36-173%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P93C-ROX-101514		
Lab Sample ID:	MC34365-4	**Date Sampled:**	10/15/14
Matrix:	AQ - Ground Water	**Date Received:**	10/16/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V36137.D	1	10/29/14	AMY	n/a	n/a	MSV1310
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	0.75	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride [a]	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P93C-ROX-101514		
Lab Sample ID:	MC34365-4	**Date Sampled:**	10/15/14
Matrix:	AQ - Ground Water	**Date Received:**	10/16/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	4.6	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P93C-ROX-101514		
Lab Sample ID:	MC34365-4	**Date Sampled:**	10/15/14
Matrix:	AQ - Ground Water	**Date Received:**	10/16/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		70-130%
2037-26-5	Toluene-D8	100%		70-130%
460-00-4	4-Bromofluorobenzene	106%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.

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Report of Analysis

Client Sample ID:	P93C-ROX-101514		
Lab Sample ID:	MC34365-4	**Date Sampled:**	10/15/14
Matrix:	AQ - Ground Water	**Date Received:**	10/16/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R40417.D	1	10/20/14	KD	10/16/14	OP40242	MSR1487
Run #2							

	Initial Volume	Final Volume
Run #1	900 ml	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	11	2.8	ug/l	
95-57-8	2-Chlorophenol	ND	5.6	0.34	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	11	0.92	ug/l	
120-83-2	2,4-Dichlorophenol	ND	11	0.44	ug/l	
105-67-9	2,4-Dimethylphenol	ND	11	0.62	ug/l	
51-28-5	2,4-Dinitrophenol	ND	22	2.8	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	2.1	ug/l	
95-48-7	2-Methylphenol	ND	11	0.25	ug/l	
	3&4-Methylphenol	ND	11	0.52	ug/l	
88-75-5	2-Nitrophenol	ND	11	3.2	ug/l	
100-02-7	4-Nitrophenol	ND	22	0.59	ug/l	
87-86-5	Pentachlorophenol	ND	11	1.2	ug/l	
108-95-2	Phenol	ND	5.6	0.34	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	11	0.41	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	11	0.19	ug/l	
62-53-3	Aniline	ND	11	0.71	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.6	0.52	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.6	0.59	ug/l	
100-51-6	Benzyl Alcohol	ND	11	2.5	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.6	0.35	ug/l	
106-47-8	4-Chloroaniline	ND	11	0.62	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.6	0.32	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.6	0.39	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.6	0.37	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.6	0.28	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.6	0.27	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	11	0.51	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	11	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.6	0.30	ug/l	
132-64-9	Dibenzofuran	ND	2.2	0.29	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.6	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.6	0.31	ug/l	

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Report of Analysis

Client Sample ID:	P93C-ROX-101514		
Lab Sample ID:	MC34365-4	**Date Sampled:**	10/15/14
Matrix:	AQ - Ground Water	**Date Received:**	10/16/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	5.6	0.22	ug/l	
131-11-3	Dimethyl phthalate	ND	5.6	0.38	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.2	0.37	ug/l	
118-74-1	Hexachlorobenzene	ND	5.6	0.32	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	11	1.4	ug/l	
67-72-1	Hexachloroethane	ND	5.6	0.34	ug/l	
78-59-1	Isophorone	ND	5.6	0.50	ug/l	
88-74-4	2-Nitroaniline	ND	11	0.44	ug/l	
99-09-2	3-Nitroaniline	ND	11	1.5	ug/l	
100-01-6	4-Nitroaniline	ND	11	2.4	ug/l	
98-95-3	Nitrobenzene	ND	5.6	0.43	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.6	1.1	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.6	0.45	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.6	0.21	ug/l	
110-86-1	Pyridine	ND	11	0.57	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	53%		15-110%
4165-62-2	Phenol-d5	34%		15-110%
118-79-6	2,4,6-Tribromophenol	102%		15-110%
4165-60-0	Nitrobenzene-d5	89%		30-130%
321-60-8	2-Fluorobiphenyl	84%		30-130%
1718-51-0	Terphenyl-d14	104%		30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P93C-ROX-101514		
Lab Sample ID:	MC34365-4	**Date Sampled:**	10/15/14
Matrix:	AQ - Ground Water	**Date Received:**	10/16/14
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I92324.D	1	10/20/14	WK	10/16/14	OP40243	MSI3441
Run #2							

	Initial Volume	Final Volume
Run #1	900 ml	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.11	0.077	ug/l	
208-96-8	Acenaphthylene	ND	0.11	0.055	ug/l	
120-12-7	Anthracene	ND	0.11	0.10	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.056	0.022	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.11	0.032	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.056	0.035	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.11	0.030	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.11	0.043	ug/l	
218-01-9	Chrysene	ND	0.11	0.026	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.11	0.035	ug/l	
206-44-0	Fluoranthene	ND	0.11	0.045	ug/l	
86-73-7	Fluorene	ND	0.11	0.11	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.11	0.034	ug/l	
90-12-0	1-Methylnaphthalene	ND	2.2	0.56	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.2	0.56	ug/l	
85-01-8	Phenanthrene	ND	0.056	0.014	ug/l	
129-00-0	Pyrene	ND	0.11	0.043	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	92%		30-130%
321-60-8	2-Fluorobiphenyl	81%		30-130%
1718-51-0	Terphenyl-d14	92%		30-130%

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P93C-ROX-101514		
Lab Sample ID:	MC34365-4	**Date Sampled:**	10/15/14
Matrix:	AQ - Ground Water	**Date Received:**	10/16/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB60052.D	1	10/23/14	NK	10/21/14	OP40305	GBB3339
Run #2							

	Initial Volume	Final Volume
Run #1	37.4 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.014	0.0057	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.014	0.0057	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	64%		36-173%
460-00-4	Bromofluorobenzene (S)	73%		36-173%

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P93D-ROX-101514		
Lab Sample ID:	MC34365-5	**Date Sampled:**	10/15/14
Matrix:	AQ - Ground Water	**Date Received:**	10/16/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V36143.D	10	10/29/14	AMY	n/a	n/a	MSV1310
Run #2	V36086.D	500	10/28/14	AMY	n/a	n/a	MSV1308

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	100	25	ug/l	
107-02-8	Acrolein	ND	250	60	ug/l	
107-13-1	Acrylonitrile	ND	50	21	ug/l	
71-43-2	Benzene	36400 [a]	250	160	ug/l	
108-86-1	Bromobenzene	ND	50	3.5	ug/l	
74-97-5	Bromochloromethane	ND	50	5.7	ug/l	
75-27-4	Bromodichloromethane	ND	10	3.4	ug/l	
75-25-2	Bromoform	ND	10	6.1	ug/l	
74-83-9	Bromomethane	ND	20	18	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	25	ug/l	
104-51-8	n-Butylbenzene	ND	50	11	ug/l	
135-98-8	sec-Butylbenzene	ND	50	4.2	ug/l	
98-06-6	tert-Butylbenzene	ND	50	3.9	ug/l	
75-15-0	Carbon disulfide	ND	50	4.6	ug/l	
56-23-5	Carbon tetrachloride [b]	ND	10	5.3	ug/l	
108-90-7	Chlorobenzene	ND	10	4.3	ug/l	
75-00-3	Chloroethane	ND	20	5.3	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	50	33	ug/l	
67-66-3	Chloroform	ND	10	4.1	ug/l	
74-87-3	Chloromethane	ND	20	11	ug/l	
95-49-8	o-Chlorotoluene	ND	50	3.8	ug/l	
106-43-4	p-Chlorotoluene	ND	50	4.5	ug/l	
124-48-1	Dibromochloromethane	ND	10	3.8	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	10	3.2	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	10	5.6	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	10	3.6	ug/l	
75-71-8	Dichlorodifluoromethane	ND	20	7.1	ug/l	
75-34-3	1,1-Dichloroethane	ND	10	3.6	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	5.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	10	6.1	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	10	8.4	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	10	5.1	ug/l	

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Report of Analysis

Client Sample ID:	P93D-ROX-101514		
Lab Sample ID:	MC34365-5	**Date Sampled:**	10/15/14
Matrix:	AQ - Ground Water	**Date Received:**	10/16/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	20	5.0	ug/l	
142-28-9	1,3-Dichloropropane	ND	50	8.9	ug/l	
594-20-7	2,2-Dichloropropane	ND	50	13	ug/l	
563-58-6	1,1-Dichloropropene	ND	50	4.7	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	4.2	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	5.0	ug/l	
123-91-1	1,4-Dioxane	ND	250	110	ug/l	
97-63-2	Ethyl methacrylate	ND	50	5.0	ug/l	
100-41-4	Ethylbenzene	ND	10	3.8	ug/l	
87-68-3	Hexachlorobutadiene	ND	50	17	ug/l	
591-78-6	2-Hexanone	ND	50	16	ug/l	
98-82-8	Isopropylbenzene	ND	50	3.5	ug/l	
99-87-6	p-Isopropyltoluene	ND	50	3.7	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	10	5.1	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	50	9.9	ug/l	
74-95-3	Methylene bromide	ND	50	5.2	ug/l	
75-09-2	Methylene chloride	ND	20	2.8	ug/l	
91-20-3	Naphthalene	ND	50	6.9	ug/l	
103-65-1	n-Propylbenzene	ND	50	4.9	ug/l	
100-42-5	Styrene	ND	50	8.5	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	10	4.3	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	4.0	ug/l	
127-18-4	Tetrachloroethene	ND	10	5.9	ug/l	
108-88-3	Toluene	ND	10	3.3	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	50	6.8	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	50	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	10	4.6	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	10	4.5	ug/l	
79-01-6	Trichloroethene	ND	10	4.7	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	5.5	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	50	8.1	ug/l	
95-63-6	1,2,4-Trimethylbenzene	8.3	50	3.2	ug/l	J
108-67-8	1,3,5-Trimethylbenzene	ND	50	3.8	ug/l	
108-05-4	Vinyl Acetate	ND	50	7.1	ug/l	
75-01-4	Vinyl chloride	ND	10	5.8	ug/l	
	m,p-Xylene	ND	10	9.3	ug/l	
95-47-6	o-Xylene	ND	10	3.6	ug/l	
1330-20-7	Xylene (total)	ND	10	3.6	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P93D-ROX-101514		
Lab Sample ID:	MC34365-5	**Date Sampled:**	10/15/14
Matrix:	AQ - Ground Water	**Date Received:**	10/16/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	111%	106%	70-130%
2037-26-5	Toluene-D8	98%	95%	70-130%
460-00-4	4-Bromofluorobenzene	107%	102%	70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Result is from Run# 2
(b) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P93D-ROX-101514		
Lab Sample ID:	MC34365-5	**Date Sampled:**	10/15/14
Matrix:	AQ - Ground Water	**Date Received:**	10/16/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R40418.D	1	10/20/14	KD	10/16/14	OP40242	MSR1487
Run #2							

	Initial Volume	Final Volume
Run #1	920 ml	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	11	2.7	ug/l	
95-57-8	2-Chlorophenol	ND	5.4	0.34	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	11	0.90	ug/l	
120-83-2	2,4-Dichlorophenol	ND	11	0.43	ug/l	
105-67-9	2,4-Dimethylphenol	ND	11	0.61	ug/l	
51-28-5	2,4-Dinitrophenol	ND	22	2.7	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	2.1	ug/l	
95-48-7	2-Methylphenol	ND	11	0.25	ug/l	
	3&4-Methylphenol	ND	11	0.51	ug/l	
88-75-5	2-Nitrophenol	ND	11	3.1	ug/l	
100-02-7	4-Nitrophenol	ND	22	0.58	ug/l	
87-86-5	Pentachlorophenol	ND	11	1.2	ug/l	
108-95-2	Phenol	45.8	5.4	0.33	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	11	0.40	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	11	0.19	ug/l	
62-53-3	Aniline	ND	11	0.69	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.4	0.51	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.4	0.58	ug/l	
100-51-6	Benzyl Alcohol	ND	11	2.5	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.4	0.34	ug/l	
106-47-8	4-Chloroaniline	ND	11	0.61	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.4	0.31	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.4	0.38	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.4	0.36	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.4	0.27	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.4	0.26	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	11	0.50	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	11	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.4	0.29	ug/l	
132-64-9	Dibenzofuran	ND	2.2	0.28	ug/l	
84-74-2	Di-n-butyl phthalate	0.31	5.4	0.19	ug/l	J
117-84-0	Di-n-octyl phthalate	ND	5.4	0.31	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P93D-ROX-101514		
Lab Sample ID:	MC34365-5	**Date Sampled:**	10/15/14
Matrix:	AQ - Ground Water	**Date Received:**	10/16/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	5.4	0.22	ug/l	
131-11-3	Dimethyl phthalate	ND	5.4	0.37	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.2	0.36	ug/l	
118-74-1	Hexachlorobenzene	ND	5.4	0.31	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	11	1.4	ug/l	
67-72-1	Hexachloroethane	ND	5.4	0.33	ug/l	
78-59-1	Isophorone	ND	5.4	0.49	ug/l	
88-74-4	2-Nitroaniline	ND	11	0.43	ug/l	
99-09-2	3-Nitroaniline	ND	11	1.5	ug/l	
100-01-6	4-Nitroaniline	ND	11	2.3	ug/l	
98-95-3	Nitrobenzene	ND	5.4	0.43	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.4	1.1	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.4	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.4	0.21	ug/l	
110-86-1	Pyridine	ND	11	0.56	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	48%		15-110%
4165-62-2	Phenol-d5	31%		15-110%
118-79-6	2,4,6-Tribromophenol	97%		15-110%
4165-60-0	Nitrobenzene-d5	80%		30-130%
321-60-8	2-Fluorobiphenyl	76%		30-130%
1718-51-0	Terphenyl-d14	102%		30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL = Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P93D-ROX-101514		
Lab Sample ID:	MC34365-5	**Date Sampled:**	10/15/14
Matrix:	AQ - Ground Water	**Date Received:**	10/16/14
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I92325.D	1	10/20/14	WK	10/16/14	OP40243	MSI3441
Run #2							

	Initial Volume	Final Volume
Run #1	920 ml	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.11	0.075	ug/l	
208-96-8	Acenaphthylene	ND	0.11	0.054	ug/l	
120-12-7	Anthracene	ND	0.11	0.10	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.054	0.021	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.11	0.031	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.054	0.034	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.11	0.029	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.11	0.042	ug/l	
218-01-9	Chrysene	ND	0.11	0.026	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.11	0.035	ug/l	
206-44-0	Fluoranthene	ND	0.11	0.044	ug/l	
86-73-7	Fluorene	ND	0.11	0.11	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.11	0.033	ug/l	
90-12-0	1-Methylnaphthalene	ND	2.2	0.54	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.2	0.54	ug/l	
85-01-8	Phenanthrene	0.019	0.054	0.014	ug/l	J
129-00-0	Pyrene	ND	0.11	0.042	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	83%		30-130%
321-60-8	2-Fluorobiphenyl	75%		30-130%
1718-51-0	Terphenyl-d14	88%		30-130%

ND = Not detected MDL = Method Detection Limit
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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P93D-ROX-101514		
Lab Sample ID:	MC34365-5	**Date Sampled:**	10/15/14
Matrix:	AQ - Ground Water	**Date Received:**	10/16/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB60053.D	1	10/23/14	NK	10/21/14	OP40305	GBB3339
Run #2							

	Initial Volume	Final Volume
Run #1	36.9 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.014	0.0058	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.014	0.0058	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	61%		36-173%
460-00-4	Bromofluorobenzene (S)	74%		36-173%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P93B-ROX-101514		
Lab Sample ID:	MC34365-6	**Date Sampled:**	10/15/14
Matrix:	AQ - Ground Water	**Date Received:**	10/16/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V36068.D	500	10/28/14	AMY	n/a	n/a	MSV1307
Run #2	V36087.D	2000	10/28/14	AMY	n/a	n/a	MSV1308

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	5000	1300	ug/l	
107-02-8	Acrolein	ND	13000	3000	ug/l	
107-13-1	Acrylonitrile	ND	2500	1100	ug/l	
71-43-2	Benzene	241000 [b]	1000	630	ug/l	
108-86-1	Bromobenzene	ND	2500	170	ug/l	
74-97-5	Bromochloromethane	ND	2500	280	ug/l	
75-27-4	Bromodichloromethane	ND	500	170	ug/l	
75-25-2	Bromoform	ND	500	310	ug/l	
74-83-9	Bromomethane	ND	1000	880	ug/l	
78-93-3	2-Butanone (MEK)	ND	2500	1300	ug/l	
104-51-8	n-Butylbenzene	ND	2500	540	ug/l	
135-98-8	sec-Butylbenzene	ND	2500	210	ug/l	
98-06-6	tert-Butylbenzene	ND	2500	190	ug/l	
75-15-0	Carbon disulfide [a]	ND	2500	230	ug/l	
56-23-5	Carbon tetrachloride [a]	ND	500	270	ug/l	
108-90-7	Chlorobenzene	ND	500	210	ug/l	
75-00-3	Chloroethane	ND	1000	270	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	2500	1700	ug/l	
67-66-3	Chloroform	ND	500	210	ug/l	
74-87-3	Chloromethane	ND	1000	540	ug/l	
95-49-8	o-Chlorotoluene	ND	2500	190	ug/l	
106-43-4	p-Chlorotoluene	ND	2500	220	ug/l	
124-48-1	Dibromochloromethane	ND	500	190	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	500	160	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	500	280	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	500	180	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1000	360	ug/l	
75-34-3	1,1-Dichloroethane	ND	500	180	ug/l	
107-06-2	1,2-Dichloroethane	ND	500	250	ug/l	
75-35-4	1,1-Dichloroethene	ND	500	300	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	500	420	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	500	250	ug/l	

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P93B-ROX-101514		
Lab Sample ID:	MC34365-6	**Date Sampled:**	10/15/14
Matrix:	AQ - Ground Water	**Date Received:**	10/16/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	1000	250	ug/l	
142-28-9	1,3-Dichloropropane	ND	2500	450	ug/l	
594-20-7	2,2-Dichloropropane	ND	2500	630	ug/l	
563-58-6	1,1-Dichloropropene	ND	2500	240	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	250	210	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	250	250	ug/l	
123-91-1	1,4-Dioxane	ND	13000	5400	ug/l	
97-63-2	Ethyl methacrylate	ND	2500	250	ug/l	
100-41-4	Ethylbenzene	ND	500	190	ug/l	
87-68-3	Hexachlorobutadiene	ND	2500	830	ug/l	
591-78-6	2-Hexanone [a]	ND	2500	800	ug/l	
98-82-8	Isopropylbenzene	ND	2500	170	ug/l	
99-87-6	p-Isopropyltoluene	ND	2500	190	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	500	260	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	2500	490	ug/l	
74-95-3	Methylene bromide	ND	2500	260	ug/l	
75-09-2	Methylene chloride	ND	1000	140	ug/l	
91-20-3	Naphthalene	ND	2500	340	ug/l	
103-65-1	n-Propylbenzene	ND	2500	250	ug/l	
100-42-5	Styrene	ND	2500	430	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	500	220	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	250	200	ug/l	
127-18-4	Tetrachloroethene	ND	500	300	ug/l	
108-88-3	Toluene	ND	500	170	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2500	340	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2500	250	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	500	230	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	500	230	ug/l	
79-01-6	Trichloroethene	ND	500	240	ug/l	
75-69-4	Trichlorofluoromethane	ND	500	270	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2500	410	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2500	160	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2500	190	ug/l	
108-05-4	Vinyl Acetate	ND	2500	360	ug/l	
75-01-4	Vinyl chloride	ND	500	290	ug/l	
	m,p-Xylene	ND	500	470	ug/l	
95-47-6	o-Xylene	ND	500	180	ug/l	
1330-20-7	Xylene (total)	ND	500	180	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P93B-ROX-101514		
Lab Sample ID:	MC34365-6	**Date Sampled:**	10/15/14
Matrix:	AQ - Ground Water	**Date Received:**	10/16/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%	107%	70-130%
2037-26-5	Toluene-D8	98%	95%	70-130%
460-00-4	4-Bromofluorobenzene	102%	103%	70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.
(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P93B-ROX-101514		
Lab Sample ID:	MC34365-6	**Date Sampled:**	10/15/14
Matrix:	AQ - Ground Water	**Date Received:**	10/16/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R40419.D	1	10/20/14	KD	10/16/14	OP40242	MSR1487
Run #2							

	Initial Volume	Final Volume
Run #1	900 ml	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	11	2.8	ug/l	
95-57-8	2-Chlorophenol	ND	5.6	0.34	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	11	0.92	ug/l	
120-83-2	2,4-Dichlorophenol	ND	11	0.44	ug/l	
105-67-9	2,4-Dimethylphenol	ND	11	0.62	ug/l	
51-28-5	2,4-Dinitrophenol	ND	22	2.8	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	2.1	ug/l	
95-48-7	2-Methylphenol	ND	11	0.25	ug/l	
	3&4-Methylphenol	ND	11	0.52	ug/l	
88-75-5	2-Nitrophenol	ND	11	3.2	ug/l	
100-02-7	4-Nitrophenol	ND	22	0.59	ug/l	
87-86-5	Pentachlorophenol	ND	11	1.2	ug/l	
108-95-2	Phenol	128	5.6	0.34	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	11	0.41	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	11	0.19	ug/l	
62-53-3	Aniline	ND	11	0.71	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.6	0.52	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.6	0.59	ug/l	
100-51-6	Benzyl Alcohol	ND	11	2.5	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.6	0.35	ug/l	
106-47-8	4-Chloroaniline	ND	11	0.62	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.6	0.32	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.6	0.39	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.6	0.37	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.6	0.28	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.6	0.27	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	11	0.51	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	11	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.6	0.30	ug/l	
132-64-9	Dibenzofuran	ND	2.2	0.29	ug/l	
84-74-2	Di-n-butyl phthalate	0.24	5.6	0.19	ug/l	J
117-84-0	Di-n-octyl phthalate	ND	5.6	0.31	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P93B-ROX-101514		
Lab Sample ID:	MC34365-6	**Date Sampled:**	10/15/14
Matrix:	AQ - Ground Water	**Date Received:**	10/16/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	5.6	0.22	ug/l	
131-11-3	Dimethyl phthalate	ND	5.6	0.38	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.2	0.37	ug/l	
118-74-1	Hexachlorobenzene	ND	5.6	0.32	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	11	1.4	ug/l	
67-72-1	Hexachloroethane	ND	5.6	0.34	ug/l	
78-59-1	Isophorone	ND	5.6	0.50	ug/l	
88-74-4	2-Nitroaniline	ND	11	0.44	ug/l	
99-09-2	3-Nitroaniline	ND	11	1.5	ug/l	
100-01-6	4-Nitroaniline	ND	11	2.4	ug/l	
98-95-3	Nitrobenzene	ND	5.6	0.43	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.6	1.1	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.6	0.45	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.6	0.21	ug/l	
110-86-1	Pyridine	ND	11	0.57	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	53%		15-110%
4165-62-2	Phenol-d5	33%		15-110%
118-79-6	2,4,6-Tribromophenol	98%		15-110%
4165-60-0	Nitrobenzene-d5	86%		30-130%
321-60-8	2-Fluorobiphenyl	79%		30-130%
1718-51-0	Terphenyl-d14	99%		30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P93B-ROX-101514		
Lab Sample ID:	MC34365-6	**Date Sampled:**	10/15/14
Matrix:	AQ - Ground Water	**Date Received:**	10/16/14
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I92326.D	1	10/20/14	WK	10/16/14	OP40243	MSI3441
Run #2							

	Initial Volume	Final Volume
Run #1	900 ml	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.11	0.077	ug/l	
208-96-8	Acenaphthylene	ND	0.11	0.055	ug/l	
120-12-7	Anthracene	ND	0.11	0.10	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.056	0.022	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.11	0.032	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.056	0.035	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.11	0.030	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.11	0.043	ug/l	
218-01-9	Chrysene	ND	0.11	0.026	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.11	0.035	ug/l	
206-44-0	Fluoranthene	ND	0.11	0.045	ug/l	
86-73-7	Fluorene	ND	0.11	0.11	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.11	0.034	ug/l	
90-12-0	1-Methylnaphthalene	ND	2.2	0.56	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.2	0.56	ug/l	
85-01-8	Phenanthrene	ND	0.056	0.014	ug/l	
129-00-0	Pyrene	ND	0.11	0.043	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	90%		30-130%
321-60-8	2-Fluorobiphenyl	76%		30-130%
1718-51-0	Terphenyl-d14	88%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P93B-ROX-101514		
Lab Sample ID:	MC34365-6	**Date Sampled:**	10/15/14
Matrix:	AQ - Ground Water	**Date Received:**	10/16/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB60055.D	1	10/23/14	NK	10/21/14	OP40305	GBB3339
Run #2							

	Initial Volume	Final Volume
Run #1	37.1 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.014	0.0058	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.014	0.0058	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	76%		36-173%
460-00-4	Bromofluorobenzene (S)	91%		36-173%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-ROX-101514-HCL		
Lab Sample ID:	MC34365-7	**Date Sampled:**	10/15/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/16/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V36048.D	1	10/27/14	AMY	n/a	n/a	MSV1307
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	10	2.5	ug/l	
107-02-8	Acrolein	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide [a]	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride [a]	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-ROX-101514-HCL		
Lab Sample ID:	MC34365-7	**Date Sampled:**	10/15/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/16/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone [a]	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-ROX-101514-HCL		
Lab Sample ID:	MC34365-7	**Date Sampled:**	10/15/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/16/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		70-130%
2037-26-5	Toluene-D8	98%		70-130%
460-00-4	4-Bromofluorobenzene	102%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-ROX-101514-ST		
Lab Sample ID:	MC34365-8	**Date Sampled:**	10/15/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/16/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB60056.D	1	10/23/14	NK	10/21/14	OP40305	GBB3339
Run #2							

	Initial Volume	Final Volume
Run #1	36.3 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.014	0.0059	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.014	0.0059	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	69%		36-173%
460-00-4	Bromofluorobenzene (S)	76%		36-173%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

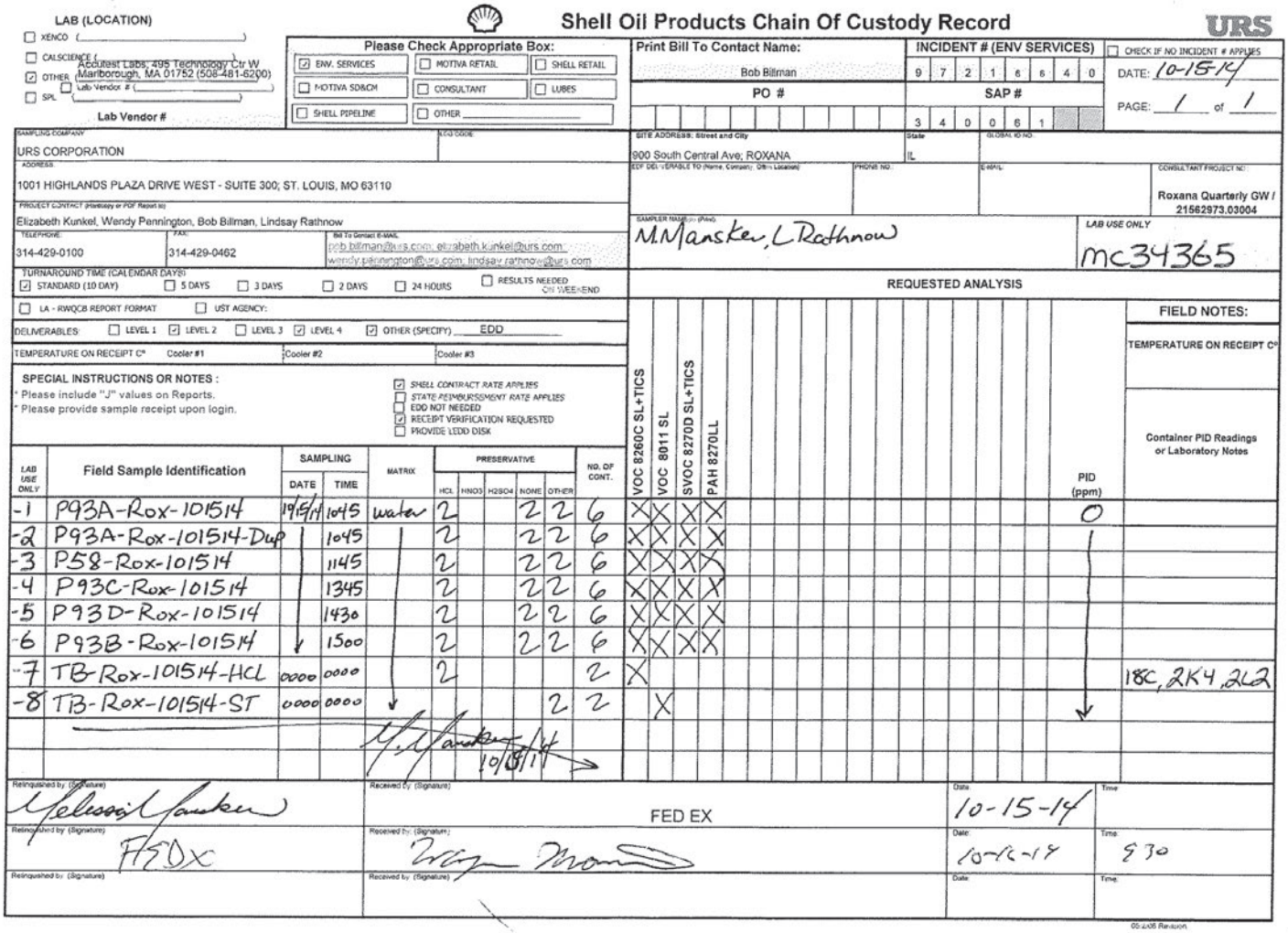
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody



Shell Oil Products Chain Of Custody Record

URS

LAB (LOCATION)
- ☐ XENCO ( )
- ☐ CALSCIENCE ( )
- ☑ OTHER (Accutest Labs, 495 Technology Ctr W Marlborough, MA 01752 (508-481-6200))
- ☐ Lab Vendor # ( )
- ☐ SPL ( )

Lab Vendor #

Please Check Appropriate Box:
- ☑ ENV. SERVICES
- ☐ MOTIVA RETAIL
- ☐ SHELL RETAIL
- ☐ MOTIVA SD&CM
- ☐ CONSULTANT
- ☐ LUBES
- ☐ SHELL PIPELINE
- ☐ OTHER

Print Bill To Contact Name: Bob Billman

PO #

INCIDENT # (ENV SERVICES): 9 7 2 1 6 6 4 0

SAP #: 3 4 0 0 6 1

☐ CHECK IF NO INCIDENT # APPLIES

DATE: 10-15-14

PAGE: 1 of 1

SAMPLING COMPANY: URS CORPORATION

LOG CODE:

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA

State: IL

GLOBAL ID NO.:

ADDRESS: 1001 HIGHLANDS PLAZA DRIVE WEST - SUITE 300; ST. LOUIS, MO 63110

EDF DELIVERABLE TO (Name, Company, Office Location):

PHONE NO.:

E-MAIL:

CONSULTANT PROJECT NO.: Roxana Quarterly GW / 21562973.03004

PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Wendy Pennington, Bob Billman, Lindsay Rathnow

TELEPHONE: 314-429-0100

FAX: 314-429-0462

Bill To Contact E-MAIL: bob.billman@urs.com; elizabeth.kunkel@urs.com; wendy.pennington@urs.com; lindsay.rathnow@urs.com

SAMPLER NAME(s) (Print): M.Mansker, L Rathnow

LAB USE ONLY: mc34365

TURNAROUND TIME (CALENDAR DAYS): ☑ STANDARD (10 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT ☐ UST AGENCY:

DELIVERABLES: ☐ LEVEL 1 ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) EDD

TEMPERATURE ON RECEIPT C°: Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES:
- Please include "J" values on Reports.
- Please provide sample receipt upon login.

- ☑ SHELL CONTRACT RATE APPLIES
- ☐ STATE REIMBURSEMENT RATE APPLIES
- ☐ EDD NOT NEEDED
- ☑ RECEIPT VERIFICATION REQUESTED
- ☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS

FIELD NOTES:

TEMPERATURE ON RECEIPT C°

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260C SL+TICS	VOC 8011 SL	SVOC 8270D SL+TICS	PAH 8270LL	PID (ppm)	Container PID Readings or Laboratory Notes
-1	P93A-Rox-101514	10/15/14	1045	water	2			2	2	6	X	X	X	X	0	
-2	P93A-Rox-101514-Dup	↓	1045	↓	2			2	2	6	X	X	X	X	↓	
-3	P58-Rox-101514	↓	1145	↓	2			2	2	6	X	X	X	X	↓	
-4	P93C-Rox-101514	↓	1345	↓	2			2	2	6	X	X	X	X	↓	
-5	P93D-Rox-101514	↓	1430	↓	2			2	2	6	X	X	X	X	↓	
-6	P93B-Rox-101514	↓	1500	↓	2			2	2	6	X	X	X	X	↓	
-7	TB-Rox-101514-HCL	0000	0000	↓	2					2	X				↓	18C, 2K4, 2L2
-8	TB-Rox-101514-ST	0000	0000	↓					2	2		X			↓	

M. Mansker 10/15/14

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
Melissa Mansker	FED EX	10-15-14	
FEDX	[signature]	10-16-14	830

05/2/06 Revision

2.0°C - 2.0°C

MC34365: Chain of Custody
Page 1 of 2

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: MC34365 **Client:** URS **Project:** 900 SOUTH CENTRAL AVE

Date / Time Received: 10/16/2014 9 30 00 AM **Delivery Method:** **Airbill #'s:**

Cooler Temps (Initial/Adjusted): #1 (2/2) #2 (2/2)

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Thermometer D:	G1;		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	2		

Quality Control_Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☑		☐	☐
2. Trip Blank listed on COC:	☑		☐	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

Accutest Laboratories
V:(508) 481-6200

495 Technology Center West, Bldg One
F: (508) 481-7753

Marlborough, MA 01752
www/accutest.com

Internal Sample Tracking Chronicle

Shell Oil

Job No: MC34365

URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC34365-1 Collected: 15-OCT-14 10:45 By: MMLR Received: 16-OCT-14 By: P93A-ROX-101514						
MC34365-1	SW846 8270D BY SIM	20-OCT-14 13:07	WK	16-OCT-14	AJ	B8270SIMSL
MC34365-1	SW846 8270D	20-OCT-14 18:53	KD	16-OCT-14	AJ	AB8270SL+
MC34365-1	SW846 8011	23-OCT-14 17:09	NK	21-OCT-14	FC	V8011SL
MC34365-1	SW846 8260C	28-OCT-14 11:05	AMY			V8260SL+
MC34365-1	SW846 8260C	29-OCT-14 15:09	AMY			V8260SL+
MC34365-2 Collected: 15-OCT-14 10:45 By: MMLR Received: 16-OCT-14 By: P93A-ROX-101514-DUP						
MC34365-2	SW846 8270D BY SIM	20-OCT-14 13:52	WK	16-OCT-14	AJ	B8270SIMSL
MC34365-2	SW846 8270D	20-OCT-14 19:17	KD	16-OCT-14	AJ	AB8270SL+
MC34365-2	SW846 8270D	22-OCT-14 13:04	KD	16-OCT-14	AJ	AB8270SL+
MC34365-2	SW846 8011	23-OCT-14 17:27	NK	21-OCT-14	FC	V8011SL
MC34365-2	SW846 8260C	28-OCT-14 12:26	AMY			V8260SL+
MC34365-2	SW846 8260C	29-OCT-14 15:36	AMY			V8260SL+
MC34365-3 Collected: 15-OCT-14 11:45 By: MMLR Received: 16-OCT-14 By: P58-ROX-101514						
MC34365-3	SW846 8270D BY SIM	20-OCT-14 16:13	WK	16-OCT-14	AJ	B8270SIMSL
MC34365-3	SW846 8270D	20-OCT-14 19:41	KD	16-OCT-14	AJ	AB8270SL+
MC34365-3	SW846 8011	23-OCT-14 17:45	NK	21-OCT-14	FC	V8011SL
MC34365-3	SW846 8260C	28-OCT-14 03:50	AMY			V8260SL+
MC34365-3	SW846 8260C	29-OCT-14 16:03	AMY			V8260SL+
MC34365-4 Collected: 15-OCT-14 13:45 By: MMLR Received: 16-OCT-14 By: P93C-ROX-101514						
MC34365-4	SW846 8270D BY SIM	20-OCT-14 16:36	WK	16-OCT-14	AJ	B8270SIMSL
MC34365-4	SW846 8270D	20-OCT-14 20:06	KD	16-OCT-14	AJ	AB8270SL+
MC34365-4	SW846 8011	23-OCT-14 18:03	NK	21-OCT-14	FC	V8011SL
MC34365-4	SW846 8260C	29-OCT-14 13:49	AMY			V8260SL+
MC34365-5 Collected: 15-OCT-14 14:30 By: MMLR Received: 16-OCT-14 By: P93D-ROX-101514						
MC34365-5	SW846 8270D BY SIM	20-OCT-14 16:58	WK	16-OCT-14	AJ	B8270SIMSL

Internal Sample Tracking Chronicle

Shell Oil

Job No: MC34365

URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC34365-5	SW846 8270D	20-OCT-14 20:30	KD	16-OCT-14	AJ	AB8270SL+
MC34365-5	SW846 8011	23-OCT-14 18:21	NK	21-OCT-14	FC	V8011SL
MC34365-5	SW846 8260C	28-OCT-14 12:53	AMY			V8260SL+
MC34365-5	SW846 8260C	29-OCT-14 16:29	AMY			V8260SL+
MC34365-6 Collected: 15-OCT-14 15:00 By: MMLR Received: 16-OCT-14 By: P93B-ROX-101514						
MC34365-6	SW846 8270D BY SIM	20-OCT-14 17:21	WK	16-OCT-14	AJ	B8270SIMSL
MC34365-6	SW846 8270D	20-OCT-14 20:55	KD	16-OCT-14	AJ	AB8270SL+
MC34365-6	SW846 8011	23-OCT-14 18:56	NK	21-OCT-14	FC	V8011SL
MC34365-6	SW846 8260C	28-OCT-14 04:43	AMY			V8260SL+
MC34365-6	SW846 8260C	28-OCT-14 13:20	AMY			V8260SL+
MC34365-7 Collected: 15-OCT-14 00:00 By: MMLR Received: 16-OCT-14 By: TB-ROX-101514-HCL						
MC34365-7	SW846 8260C	27-OCT-14 19:53	AMY			V8260SL+
MC34365-8 Collected: 15-OCT-14 00:00 By: MMLR Received: 16-OCT-14 By: TB-ROX-101514-ST						
MC34365-8	SW846 8011	23-OCT-14 19:14	NK	21-OCT-14	FC	V8011SL

SGS Accutest Internal Chain of Custody

Job Number: MC34365
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL
Received: 10/16/14

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC34365-1.1	Walk In Ref #22	Marc Tahtamoni	10/16/14 19:12	Retrieve from Storage
MC34365-1.1	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34365-1.3	VOC Ref #2	Amy Min Yang	10/27/14 18:04	Retrieve from Storage
MC34365-1.3	Amy Min Yang	GCMSV	10/27/14 18:04	Load on Instrument
MC34365-1.3	GCMSV	Amy Min Yang	10/28/14 17:12	Unload from Instrument
MC34365-1.3	Amy Min Yang	VOC Ref #2	10/28/14 17:12	Return to Storage
MC34365-1.3	Scott Parsick		12/18/14 12:16	Disposed
MC34365-1.4	VOC Ref #2	Amy Min Yang	10/28/14 10:30	Retrieve from Storage
MC34365-1.4	Amy Min Yang	GCMSV	10/28/14 10:30	Load on Instrument
MC34365-1.4	GCMSV	Amy Min Yang	10/28/14 17:12	Unload from Instrument
MC34365-1.4	Amy Min Yang	VOC Ref #2	10/28/14 17:12	Return to Storage
MC34365-1.4	Scott Parsick		12/18/14 12:16	Disposed
MC34365-1.6	VOC Ref #2	Marc Tahtamoni	10/21/14 14:41	Retrieve from Storage
MC34365-1.6	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34365-2.1	Walk In Ref #22	Marc Tahtamoni	10/16/14 19:12	Retrieve from Storage
MC34365-2.1	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34365-2.3	VOC Ref #2	Amy Min Yang	10/27/14 18:04	Retrieve from Storage
MC34365-2.3	Amy Min Yang	GCMSV	10/27/14 18:04	Load on Instrument
MC34365-2.3	GCMSV	Amy Min Yang	10/28/14 17:12	Unload from Instrument
MC34365-2.3	Amy Min Yang	VOC Ref #2	10/28/14 17:12	Return to Storage
MC34365-2.3	Scott Parsick		12/18/14 12:16	Disposed
MC34365-2.4	VOC Ref #2	Amy Min Yang	10/28/14 10:30	Retrieve from Storage
MC34365-2.4	Amy Min Yang	GCMSV	10/28/14 10:30	Load on Instrument
MC34365-2.4	GCMSV	Amy Min Yang	10/28/14 17:12	Unload from Instrument
MC34365-2.4	Amy Min Yang	VOC Ref #2	10/28/14 17:12	Return to Storage
MC34365-2.4	Scott Parsick		12/18/14 12:16	Disposed
MC34365-2.6	VOC Ref #2	Marc Tahtamoni	10/21/14 14:41	Retrieve from Storage
MC34365-2.6	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34365-3.2	Walk In Ref #22	Marc Tahtamoni	10/16/14 19:12	Retrieve from Storage
MC34365-3.2	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34365-3.3	VOC Ref #2	Amy Min Yang	10/27/14 18:04	Retrieve from Storage
MC34365-3.3	Amy Min Yang	GCMSV	10/27/14 18:04	Load on Instrument
MC34365-3.3	GCMSV	Amy Min Yang	10/28/14 17:12	Unload from Instrument
MC34365-3.3	Amy Min Yang	VOC Ref #2	10/28/14 17:12	Return to Storage
MC34365-3.3	Scott Parsick		12/18/14 12:16	Disposed

SGS Accutest Internal Chain of Custody

Job Number: MC34365
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL
Received: 10/16/14

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC34365-3.5	VOC Ref #2	Marc Tahtamoni	10/21/14 14:41	Retrieve from Storage
MC34365-3.5	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34365-4.1	Walk In Ref #22	Marc Tahtamoni	10/16/14 19:12	Retrieve from Storage
MC34365-4.1	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34365-4.3	VOC Ref #2	Amy Min Yang	10/28/14 10:30	Retrieve from Storage
MC34365-4.3	Amy Min Yang	GCMSV	10/28/14 10:30	Load on Instrument
MC34365-4.3	GCMSV	Amy Min Yang	10/28/14 17:12	Unload from Instrument
MC34365-4.3	Amy Min Yang	VOC Ref #2	10/28/14 17:12	Return to Storage
MC34365-4.3	Scott Parsick		12/18/14 12:16	Disposed
MC34365-4.4	VOC Ref #2	Amy Min Yang	10/27/14 18:04	Retrieve from Storage
MC34365-4.4	Amy Min Yang	GCMSV	10/27/14 18:04	Load on Instrument
MC34365-4.4	GCMSV	Amy Min Yang	10/28/14 17:12	Unload from Instrument
MC34365-4.4	Amy Min Yang	VOC Ref #2	10/28/14 17:12	Return to Storage
MC34365-4.4	Scott Parsick		12/18/14 12:16	Disposed
MC34365-4.6	VOC Ref #2	Marc Tahtamoni	10/21/14 14:41	Retrieve from Storage
MC34365-4.6	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34365-5.2	Walk In Ref #22	Marc Tahtamoni	10/16/14 19:12	Retrieve from Storage
MC34365-5.2	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34365-5.3	VOC Ref #2	Amy Min Yang	10/28/14 10:30	Retrieve from Storage
MC34365-5.3	Amy Min Yang	GCMSV	10/28/14 10:30	Load on Instrument
MC34365-5.3	GCMSV	Amy Min Yang	10/28/14 17:12	Unload from Instrument
MC34365-5.3	Amy Min Yang	VOC Ref #2	10/28/14 17:12	Return to Storage
MC34365-5.3	Scott Parsick		12/18/14 12:16	Disposed
MC34365-5.4	VOC Ref #2	Amy Min Yang	10/27/14 18:04	Retrieve from Storage
MC34365-5.4	Amy Min Yang	GCMSV	10/27/14 18:04	Load on Instrument
MC34365-5.4	GCMSV	Amy Min Yang	10/28/14 17:12	Unload from Instrument
MC34365-5.4	Amy Min Yang	VOC Ref #2	10/28/14 17:12	Return to Storage
MC34365-5.4	Scott Parsick		12/18/14 12:16	Disposed
MC34365-5.6	VOC Ref #2	Marc Tahtamoni	10/21/14 14:41	Retrieve from Storage
MC34365-5.6	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34365-6.1	Walk In Ref #22	Marc Tahtamoni	10/16/14 19:12	Retrieve from Storage
MC34365-6.1	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34365-6.3	VOC Ref #2	Amy Min Yang	10/28/14 10:30	Retrieve from Storage

SGS Accutest Internal Chain of Custody

Job Number: MC34365
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL
Received: 10/16/14

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC34365-6.3	Amy Min Yang	GCMSV	10/28/14 10:30	Load on Instrument
MC34365-6.3	GCMSV	Amy Min Yang	10/28/14 17:12	Unload from Instrument
MC34365-6.3	Amy Min Yang	VOC Ref #2	10/28/14 17:12	Return to Storage
MC34365-6.3	Scott Parsick		12/18/14 12:16	Disposed
MC34365-6.4	VOC Ref #2	Amy Min Yang	10/27/14 18:04	Retrieve from Storage
MC34365-6.4	Amy Min Yang	GCMSV	10/27/14 18:04	Load on Instrument
MC34365-6.4	GCMSV	Amy Min Yang	10/28/14 17:12	Unload from Instrument
MC34365-6.4	Amy Min Yang	VOC Ref #2	10/28/14 17:12	Return to Storage
MC34365-6.4	Scott Parsick		12/18/14 12:16	Disposed
MC34365-6.5	VOC Ref #2	Marc Tahtamoni	10/21/14 14:41	Retrieve from Storage
MC34365-6.5	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34365-7.1	VOC Ref #2	Amy Min Yang	10/27/14 18:04	Retrieve from Storage
MC34365-7.1	Amy Min Yang	GCMSV	10/27/14 18:04	Load on Instrument
MC34365-7.1	GCMSV	Amy Min Yang	10/28/14 17:12	Unload from Instrument
MC34365-7.1	Amy Min Yang	VOC Ref #2	10/28/14 17:12	Return to Storage
MC34365-7.1	Scott Parsick		12/18/14 12:16	Disposed
MC34365-8.2	VOC Ref #2	Marc Tahtamoni	10/21/14 14:41	Retrieve from Storage
MC34365-8.2	Marc Tahtamoni		11/11/14 17:36	Depleted

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: MC34365
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSV1307-MB	V36047.D	1	10/27/14	AMY	n/a	n/a	MSV1307

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34365-3, MC34365-6, MC34365-7

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	

Method Blank Summary

Job Number: MC34365
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSV1307-MB	V36047.D	1	10/27/14	AMY	n/a	n/a	MSV1307

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34365-3, MC34365-6, MC34365-7

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

Method Blank Summary

Job Number: MC34365
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSV1307-MB	V36047.D	1	10/27/14	AMY	n/a	n/a	MSV1307

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34365-3, MC34365-6, MC34365-7

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	95%	70-130%
2037-26-5	Toluene-D8	99%	70-130%
460-00-4	4-Bromofluorobenzene	101%	70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Method Blank Summary

Job Number: MC34365
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSV1308-MB	V36078.D	1	10/28/14	AMY	n/a	n/a	MSV1308

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34365-1, MC34365-2, MC34365-5, MC34365-6

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.32	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	103%	70-130%
2037-26-5	Toluene-D8	97%	70-130%
460-00-4	4-Bromofluorobenzene	102%	70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Method Blank Summary

Job Number: MC34365
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSV1310-MB	V36134.D	1	10/29/14	AMY	n/a	n/a	MSV1310

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34365-1, MC34365-2, MC34365-3, MC34365-4, MC34365-5

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	

Method Blank Summary

Job Number: MC34365
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSV1310-MB	V36134.D	1	10/29/14	AMY	n/a	n/a	MSV1310

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34365-1, MC34365-2, MC34365-3, MC34365-4, MC34365-5

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

Method Blank Summary

Job Number: MC34365
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSV1310-MB	V36134.D	1	10/29/14	AMY	n/a	n/a	MSV1310

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34365-1, MC34365-2, MC34365-3, MC34365-4, MC34365-5

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	102%	70-130%
2037-26-5	Toluene-D8	99%	70-130%
460-00-4	4-Bromofluorobenzene	105%	70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Method Blank Summary

Job Number: MC34365
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSV1308-MB1	V36134.D	1	10/29/14	AMY	n/a	n/a	MSV1308

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34365-1, MC34365-2, MC34365-5, MC34365-6

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.32	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	102%	70-130%
2037-26-5	Toluene-D8	99%	70-130%
460-00-4	4-Bromofluorobenzene	105%	70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Blank Spike Summary

Job Number: MC34365
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSV1307-BS	V36043.D	1	10/27/14	AMY	n/a	n/a	MSV1307

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34365-3, MC34365-6, MC34365-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	30.1	60* [a]	70-130
107-02-8	Acrolein	250	415	166* [a]	70-130
107-13-1	Acrylonitrile	50	55.5	111	70-130
71-43-2	Benzene	50	59.0	118	70-130
108-86-1	Bromobenzene	50	56.9	114	70-130
74-97-5	Bromochloromethane	50	54.0	108	70-130
75-27-4	Bromodichloromethane	50	55.8	112	70-130
75-25-2	Bromoform	50	52.0	104	70-130
74-83-9	Bromomethane	50	55.1	110	70-130
78-93-3	2-Butanone (MEK)	50	44.2	88	70-130
104-51-8	n-Butylbenzene	50	55.7	111	70-130
135-98-8	sec-Butylbenzene	50	48.9	98	70-130
98-06-6	tert-Butylbenzene	50	50.9	102	70-130
75-15-0	Carbon disulfide	50	52.0	104	70-130
56-23-5	Carbon tetrachloride	50	40.1	80	70-130
108-90-7	Chlorobenzene	50	57.1	114	70-130
75-00-3	Chloroethane	50	60.7	121	70-130
110-75-8	2-Chloroethyl vinyl ether	50	55.3	111	70-130
67-66-3	Chloroform	50	51.0	102	70-130
74-87-3	Chloromethane	50	52.6	105	70-130
95-49-8	o-Chlorotoluene	50	58.4	117	70-130
106-43-4	p-Chlorotoluene	50	56.8	114	70-130
124-48-1	Dibromochloromethane	50	53.9	108	70-130
95-50-1	1,2-Dichlorobenzene	50	57.7	115	70-130
541-73-1	1,3-Dichlorobenzene	50	57.4	115	70-130
106-46-7	1,4-Dichlorobenzene	50	55.9	112	70-130
75-71-8	Dichlorodifluoromethane	50	51.9	104	70-130
75-34-3	1,1-Dichloroethane	50	52.0	104	70-130
107-06-2	1,2-Dichloroethane	50	48.3	97	70-130
75-35-4	1,1-Dichloroethene	50	60.9	122	70-130
156-59-2	cis-1,2-Dichloroethene	50	58.8	118	70-130
156-60-5	trans-1,2-Dichloroethene	50	58.5	117	70-130
78-87-5	1,2-Dichloropropane	50	62.5	125	70-130
142-28-9	1,3-Dichloropropane	50	61.1	122	70-130
594-20-7	2,2-Dichloropropane	50	63.5	127	70-130
563-58-6	1,1-Dichloropropene	50	59.5	119	70-130

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34365
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSV1307-BS	V36043.D	1	10/27/14	AMY	n/a	n/a	MSV1307

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34365-3, MC34365-6, MC34365-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-01-5	cis-1,3-Dichloropropene	50	61.1	122	70-130
10061-02-6	trans-1,3-Dichloropropene	50	60.8	122	70-130
123-91-1	1,4-Dioxane	125	253	202* b	70-130
97-63-2	Ethyl methacrylate	50	53.9	108	77-137
100-41-4	Ethylbenzene	50	62.2	124	70-130
87-68-3	Hexachlorobutadiene	50	56.0	112	70-130
591-78-6	2-Hexanone	50	41.6	83	70-130
98-82-8	Isopropylbenzene	50	50.8	102	70-130
99-87-6	p-Isopropyltoluene	50	47.6	95	70-130
1634-04-4	Methyl Tert Butyl Ether	50	49.3	99	70-130
108-10-1	4-Methyl-2-pentanone (MIBK)	50	50.3	101	70-130
74-95-3	Methylene bromide	50	55.7	111	70-130
75-09-2	Methylene chloride	50	56.6	113	70-130
91-20-3	Naphthalene	50	62.0	124	70-130
103-65-1	n-Propylbenzene	50	50.8	102	70-130
100-42-5	Styrene	50	62.5	125	70-130
630-20-6	1,1,1,2-Tetrachloroethane	50	58.7	117	70-130
79-34-5	1,1,2,2-Tetrachloroethane	50	70.5	141* b	70-130
127-18-4	Tetrachloroethene	50	53.2	106	70-130
108-88-3	Toluene	50	57.9	116	70-130
87-61-6	1,2,3-Trichlorobenzene	50	55.9	112	70-130
120-82-1	1,2,4-Trichlorobenzene	50	54.4	109	70-130
71-55-6	1,1,1-Trichloroethane	50	50.7	101	70-130
79-00-5	1,1,2-Trichloroethane	50	62.8	126	70-130
79-01-6	Trichloroethene	50	49.5	99	70-130
75-69-4	Trichlorofluoromethane	50	45.5	91	70-130
96-18-4	1,2,3-Trichloropropane	50	57.6	115	70-130
95-63-6	1,2,4-Trimethylbenzene	50	52.6	105	70-130
108-67-8	1,3,5-Trimethylbenzene	50	50.5	101	70-130
108-05-4	Vinyl Acetate	50	55.8	112	70-130
75-01-4	Vinyl chloride	50	60.0	120	70-130
	m,p-Xylene	100	126	126	70-130
95-47-6	o-Xylene	50	55.3	111	70-130
1330-20-7	Xylene (total)	150	181	121	70-130

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34365
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSV1307-BS	V36043.D	1	10/27/14	AMY	n/a	n/a	MSV1307

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34365-3, MC34365-6, MC34365-7

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	94%	70-130%
2037-26-5	Toluene-D8	102%	70-130%
460-00-4	4-Bromofluorobenzene	101%	70-130%

(a) Outside control limits. Blank Spike meets program technical requirements.
(b) Outside control limits. Associated samples are non-detect for this compound.

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34365
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSV1308-BS	V36074.D	1	10/28/14	AMY	n/a	n/a	MSV1308

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34365-1, MC34365-2, MC34365-5, MC34365-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	50	56.4	113	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	98%	70-130%
2037-26-5	Toluene-D8	104%	70-130%
460-00-4	4-Bromofluorobenzene	102%	70-130%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34365
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSV1310-BS	V36131.D	1	10/29/14	AMY	n/a	n/a	MSV1310

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34365-1, MC34365-2, MC34365-3, MC34365-4, MC34365-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	67.1	134* [a]	70-130
107-02-8	Acrolein	250	287	115	70-130
107-13-1	Acrylonitrile	50	59.2	118	70-130
71-43-2	Benzene	50	59.4	119	70-130
108-86-1	Bromobenzene	50	55.1	110	70-130
74-97-5	Bromochloromethane	50	54.6	109	70-130
75-27-4	Bromodichloromethane	50	54.1	108	70-130
75-25-2	Bromoform	50	48.0	96	70-130
74-83-9	Bromomethane	50	52.0	104	70-130
78-93-3	2-Butanone (MEK)	50	62.5	125	70-130
104-51-8	n-Butylbenzene	50	50.8	102	70-130
135-98-8	sec-Butylbenzene	50	44.6	89	70-130
98-06-6	tert-Butylbenzene	50	47.0	94	70-130
75-15-0	Carbon disulfide	50	66.1	132* [a]	70-130
56-23-5	Carbon tetrachloride	50	37.8	76	70-130
108-90-7	Chlorobenzene	50	53.9	108	70-130
75-00-3	Chloroethane	50	57.9	116	70-130
110-75-8	2-Chloroethyl vinyl ether	50	52.6	105	70-130
67-66-3	Chloroform	50	50.5	101	70-130
74-87-3	Chloromethane	50	59.9	120	70-130
95-49-8	o-Chlorotoluene	50	55.7	111	70-130
106-43-4	p-Chlorotoluene	50	55.4	111	70-130
124-48-1	Dibromochloromethane	50	51.4	103	70-130
95-50-1	1,2-Dichlorobenzene	50	54.8	110	70-130
541-73-1	1,3-Dichlorobenzene	50	54.0	108	70-130
106-46-7	1,4-Dichlorobenzene	50	52.2	104	70-130
75-71-8	Dichlorodifluoromethane	50	42.5	85	70-130
75-34-3	1,1-Dichloroethane	50	53.2	106	70-130
107-06-2	1,2-Dichloroethane	50	50.9	102	70-130
75-35-4	1,1-Dichloroethene	50	64.2	128	70-130
156-59-2	cis-1,2-Dichloroethene	50	58.8	118	70-130
156-60-5	trans-1,2-Dichloroethene	50	59.2	118	70-130
78-87-5	1,2-Dichloropropane	50	61.4	123	70-130
142-28-9	1,3-Dichloropropane	50	59.8	120	70-130
594-20-7	2,2-Dichloropropane	50	59.1	118	70-130
563-58-6	1,1-Dichloropropene	50	57.9	116	70-130

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34365
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSV1310-BS	V36131.D	1	10/29/14	AMY	n/a	n/a	MSV1310

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34365-1, MC34365-2, MC34365-3, MC34365-4, MC34365-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-01-5	cis-1,3-Dichloropropene	50	59.1	118	70-130
10061-02-6	trans-1,3-Dichloropropene	50	59.2	118	70-130
123-91-1	1,4-Dioxane	125	253	202* [b]	70-130
97-63-2	Ethyl methacrylate	50	50.9	102	77-137
100-41-4	Ethylbenzene	50	57.1	114	70-130
87-68-3	Hexachlorobutadiene	50	48.5	97	70-130
591-78-6	2-Hexanone	50	62.8	126	70-130
98-82-8	Isopropylbenzene	50	46.6	93	70-130
99-87-6	p-Isopropyltoluene	50	43.2	86	70-130
1634-04-4	Methyl Tert Butyl Ether	50	48.9	98	70-130
108-10-1	4-Methyl-2-pentanone (MIBK)	50	52.8	106	70-130
74-95-3	Methylene bromide	50	56.3	113	70-130
75-09-2	Methylene chloride	50	60.0	120	70-130
91-20-3	Naphthalene	50	57.7	115	70-130
103-65-1	n-Propylbenzene	50	47.5	95	70-130
100-42-5	Styrene	50	57.7	115	70-130
630-20-6	1,1,1,2-Tetrachloroethane	50	53.9	108	70-130
79-34-5	1,1,2,2-Tetrachloroethane	50	69.1	138* [b]	70-130
127-18-4	Tetrachloroethene	50	47.8	96	70-130
108-88-3	Toluene	50	54.5	109	70-130
87-61-6	1,2,3-Trichlorobenzene	50	52.9	106	70-130
120-82-1	1,2,4-Trichlorobenzene	50	49.7	99	70-130
71-55-6	1,1,1-Trichloroethane	50	47.4	95	70-130
79-00-5	1,1,2-Trichloroethane	50	59.7	119	70-130
79-01-6	Trichloroethene	50	47.4	95	70-130
75-69-4	Trichlorofluoromethane	50	38.5	77	70-130
96-18-4	1,2,3-Trichloropropane	50	46.8	94	70-130
95-63-6	1,2,4-Trimethylbenzene	50	49.7	99	70-130
108-67-8	1,3,5-Trimethylbenzene	50	47.3	95	70-130
108-05-4	Vinyl Acetate	50	59.5	119	70-130
75-01-4	Vinyl chloride	50	57.8	116	70-130
	m,p-Xylene	100	114	114	70-130
95-47-6	o-Xylene	50	50.0	100	70-130
1330-20-7	Xylene (total)	150	164	109	70-130

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34365
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSV1310-BS	V36131.D	1	10/29/14	AMY	n/a	n/a	MSV1310

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34365-1, MC34365-2, MC34365-3, MC34365-4, MC34365-5

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	96%	70-130%
2037-26-5	Toluene-D8	101%	70-130%
460-00-4	4-Bromofluorobenzene	105%	70-130%

(a) Outside control limits. Blank Spike meets program technical requirements.
(b) Outside control limits. Associated samples are non-detect for this compound.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34365
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34408-1MS	V36056.D	5	10/27/14	AMY	n/a	n/a	MSV1307
MC34408-1MSD	V36057.D	5	10/27/14	AMY	n/a	n/a	MSV1307
MC34408-1	V36053.D	1	10/27/14	AMY	n/a	n/a	MSV1307

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34365-3, MC34365-6, MC34365-7

CAS No.	Compound	MC34408-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		250	133	53* [a]	250	134	54* [a]	1	70-130/30
107-02-8	Acrolein	ND		1250	1790	143* [a]	1250	1800	144* [a]	1	70-130/30
107-13-1	Acrylonitrile	ND		250	250	100	250	229	92	9	70-130/30
71-43-2	Benzene	ND		250	280	112	250	275	110	2	70-130/30
108-86-1	Bromobenzene	ND		250	271	108	250	270	108	0	70-130/30
74-97-5	Bromochloromethane	ND		250	245	98	250	240	96	2	70-130/30
75-27-4	Bromodichloromethane	ND		250	272	109	250	267	107	2	70-130/30
75-25-2	Bromoform	ND		250	229	92	250	224	90	2	70-130/30
74-83-9	Bromomethane	ND		250	284	114	250	263	105	8	70-130/30
78-93-3	2-Butanone (MEK)	ND		250	191	76	250	191	76	0	70-130/30
104-51-8	n-Butylbenzene	ND		250	274	110	250	271	108	1	70-130/30
135-98-8	sec-Butylbenzene	ND		250	242	97	250	242	97	0	70-130/30
98-06-6	tert-Butylbenzene	ND		250	260	104	250	264	106	2	70-130/30
75-15-0	Carbon disulfide	ND		250	237	95	250	219	88	8	70-130/30
56-23-5	Carbon tetrachloride	ND		250	203	81	250	188	75	8	70-130/30
108-90-7	Chlorobenzene	ND		250	272	109	250	267	107	2	70-130/30
75-00-3	Chloroethane	ND		250	314	126	250	285	114	10	70-130/30
110-75-8	2-Chloroethyl vinyl ether	ND		250	ND	0* [a]	250	24.1	10* [a]	200* [b]	70-130/30
67-66-3	Chloroform	ND		250	247	99	250	242	97	2	70-130/30
74-87-3	Chloromethane	ND		250	298	119	250	276	110	8	70-130/30
95-49-8	o-Chlorotoluene	ND		250	291	116	250	291	116	0	70-130/30
106-43-4	p-Chlorotoluene	ND		250	285	114	250	283	113	1	70-130/30
124-48-1	Dibromochloromethane	ND		250	249	100	250	245	98	2	70-130/30
95-50-1	1,2-Dichlorobenzene	ND		250	268	107	250	270	108	1	70-130/30
541-73-1	1,3-Dichlorobenzene	ND		250	274	110	250	271	108	1	70-130/30
106-46-7	1,4-Dichlorobenzene	ND		250	263	105	250	264	106	0	70-130/30
75-71-8	Dichlorodifluoromethane	ND		250	258	103	250	226	90	13	70-130/30
75-34-3	1,1-Dichloroethane	ND		250	246	98	250	233	93	5	70-130/30
107-06-2	1,2-Dichloroethane	ND		250	239	96	250	233	93	3	70-130/30
75-35-4	1,1-Dichloroethene	ND		250	272	109	250	254	102	7	70-130/30
156-59-2	cis-1,2-Dichloroethene	ND		250	266	106	250	260	104	2	70-130/30
156-60-5	trans-1,2-Dichloroethene	ND		250	267	107	250	245	98	9	70-130/30
78-87-5	1,2-Dichloropropane	ND		250	303	121	250	296	118	2	70-130/30
142-28-9	1,3-Dichloropropane	ND		250	275	110	250	274	110	0	70-130/30
594-20-7	2,2-Dichloropropane	ND		250	279	112	250	262	105	6	70-130/30
563-58-6	1,1-Dichloropropene	ND		250	286	114	250	279	112	2	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34365
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34408-1MS	V36056.D	5	10/27/14	AMY	n/a	n/a	MSV1307
MC34408-1MSD	V36057.D	5	10/27/14	AMY	n/a	n/a	MSV1307
MC34408-1	V36053.D	1	10/27/14	AMY	n/a	n/a	MSV1307

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34365-3, MC34365-6, MC34365-7

CAS No.	Compound	MC34408-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-01-5	cis-1,3-Dichloropropene	ND		250	281	112	250	277	111	1	70-130/30
10061-02-6	trans-1,3-Dichloropropene	ND		250	281	112	250	275	110	2	70-130/30
123-91-1	1,4-Dioxane	ND		625	616	99	625	820	131* c	28	70-130/30
97-63-2	Ethyl methacrylate	ND		250	234	94	250	226	90	3	72-139/30
100-41-4	Ethylbenzene	ND		250	301	120	250	296	118	2	70-130/30
87-68-3	Hexachlorobutadiene	ND		250	257	103	250	268	107	4	70-130/30
591-78-6	2-Hexanone	ND		250	178	71	250	174	70	2	70-130/30
98-82-8	Isopropylbenzene	ND		250	250	100	250	252	101	1	70-130/30
99-87-6	p-Isopropyltoluene	ND		250	234	94	250	232	93	1	70-130/30
1634-04-4	Methyl Tert Butyl Ether	1.2		250	199	79	250	190	76	5	70-130/30
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		250	217	87	250	213	85	2	70-130/30
74-95-3	Methylene bromide	ND		250	261	104	250	257	103	2	70-130/30
75-09-2	Methylene chloride	ND		250	257	103	250	239	96	7	70-130/30
91-20-3	Naphthalene	ND		250	227	91	250	253	101	11	70-130/30
103-65-1	n-Propylbenzene	ND		250	253	101	250	253	101	0	70-130/30
100-42-5	Styrene	ND		250	294	118	250	287	115	2	70-130/30
630-20-6	1,1,1,2-Tetrachloroethane	ND		250	275	110	250	276	110	0	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	318	127	250	315	126	1	70-130/30
127-18-4	Tetrachloroethene	ND		250	247	99	250	246	98	0	70-130/30
108-88-3	Toluene	ND		250	283	113	250	273	109	4	70-130/30
87-61-6	1,2,3-Trichlorobenzene	ND		250	200	80	250	231	92	14	70-130/30
120-82-1	1,2,4-Trichlorobenzene	ND		250	220	88	250	230	92	4	70-130/30
71-55-6	1,1,1-Trichloroethane	ND		250	249	100	250	232	93	7	70-130/30
79-00-5	1,1,2-Trichloroethane	ND		250	294	118	250	281	112	5	70-130/30
79-01-6	Trichloroethene	ND		250	236	94	250	232	93	2	70-130/30
75-69-4	Trichlorofluoromethane	ND		250	246	98	250	216	86	13	70-130/30
96-18-4	1,2,3-Trichloropropane	ND		250	272	109	250	271	108	0	70-130/30
95-63-6	1,2,4-Trimethylbenzene	ND		250	269	108	250	260	104	3	70-130/30
108-67-8	1,3,5-Trimethylbenzene	ND		250	253	101	250	252	101	0	70-130/30
108-05-4	Vinyl Acetate	ND		250	268	107	250	255	102	5	70-130/30
75-01-4	Vinyl chloride	ND		250	331	132* a	250	302	121	9	70-130/30
	m,p-Xylene	ND		500	605	121	500	591	118	2	70-130/30
95-47-6	o-Xylene	ND		250	272	109	250	262	105	4	70-130/30
1330-20-7	Xylene (total)	ND		750	877	117	750	853	114	3	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34365
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34408-1MS	V36056.D	5	10/27/14	AMY	n/a	n/a	MSV1307
MC34408-1MSD	V36057.D	5	10/27/14	AMY	n/a	n/a	MSV1307
MC34408-1	V36053.D	1	10/27/14	AMY	n/a	n/a	MSV1307

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34365-3, MC34365-6, MC34365-7

CAS No.	Surrogate Recoveries	MS	MSD	MC34408-1	Limits
1868-53-7	Dibromofluoromethane	95%	94%	102%	70-130%
2037-26-5	Toluene-D8	104%	102%	100%	70-130%
460-00-4	4-Bromofluorobenzene	104%	104%	102%	70-130%

(a) Outside control limits due to possible matrix interference. Refer to Blank Spike.
(b) High RPD due to possible matrix interference and/or sample non-homogeneity.
(c) Outside control limits. Associated samples are non-detect for this compound.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34365
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34464-4MS	V36144.D	1	10/29/14	AMY	n/a	n/a	MSV1310
MC34464-4MSD	V36145.D	1	10/29/14	AMY	n/a	n/a	MSV1310
MC34464-4	V36136.D	1	10/29/14	AMY	n/a	n/a	MSV1310

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34365-1, MC34365-2, MC34365-3, MC34365-4, MC34365-5

CAS No.	Compound	MC34464-4 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		50	59.5	119	50	58.9	118	1	70-130/30
107-02-8	Acrolein	ND		250	215	86	250	290	116	30	70-130/30
107-13-1	Acrylonitrile	ND		50	59.6	119	50	58.4	117	2	70-130/30
71-43-2	Benzene	ND		50	62.6	125	50	59.5	119	5	70-130/30
108-86-1	Bromobenzene	ND		50	54.5	109	50	49.9	100	9	70-130/30
74-97-5	Bromochloromethane	ND		50	55.1	110	50	52.6	105	5	70-130/30
75-27-4	Bromodichloromethane	ND		50	60.1	120	50	57.0	114	5	70-130/30
75-25-2	Bromoform	ND		50	51.0	102	50	47.4	95	7	70-130/30
74-83-9	Bromomethane	ND		50	57.9	116	50	53.9	108	7	70-130/30
78-93-3	2-Butanone (MEK)	ND		50	45.1	90	50	46.5	93	3	70-130/30
104-51-8	n-Butylbenzene	2.0	J	50	55.7	107	50	49.9	96	11	70-130/30
135-98-8	sec-Butylbenzene	ND		50	48.2	96	50	43.8	88	10	70-130/30
98-06-6	tert-Butylbenzene	ND		50	51.3	103	50	46.7	93	9	70-130/30
75-15-0	Carbon disulfide	ND		50	70.3	141* [a]	50	67.9	136* [a]	3	70-130/30
56-23-5	Carbon tetrachloride	ND		50	48.0	96	50	42.3	85	13	70-130/30
108-90-7	Chlorobenzene	ND		50	55.0	110	50	53.1	106	4	70-130/30
75-00-3	Chloroethane	ND		50	63.8	128	50	59.8	120	6	70-130/30
110-75-8	2-Chloroethyl vinyl ether	ND		50	ND	0* [a]	50	ND	0* [a]	nc	70-130/30
67-66-3	Chloroform	ND		50	54.4	109	50	51.3	103	6	70-130/30
74-87-3	Chloromethane	ND		50	73.8	148* [a]	50	71.2	142* [a]	4	70-130/30
95-49-8	o-Chlorotoluene	ND		50	58.6	117	50	53.6	107	9	70-130/30
106-43-4	p-Chlorotoluene	ND		50	58.3	117	50	52.7	105	10	70-130/30
124-48-1	Dibromochloromethane	ND		50	52.7	105	50	51.2	102	3	70-130/30
95-50-1	1,2-Dichlorobenzene	ND		50	55.2	110	50	50.0	100	10	70-130/30
541-73-1	1,3-Dichlorobenzene	ND		50	54.7	109	50	54.3	109	1	70-130/30
106-46-7	1,4-Dichlorobenzene	ND		50	53.4	107	50	54.4	109	2	70-130/30
75-71-8	Dichlorodifluoromethane	ND		50	53.5	107	50	48.7	97	9	70-130/30
75-34-3	1,1-Dichloroethane	ND		50	55.7	111	50	53.0	106	5	70-130/30
107-06-2	1,2-Dichloroethane	ND		50	57.2	114	50	53.7	107	6	70-130/30
75-35-4	1,1-Dichloroethene	ND		50	66.5	133* [a]	50	64.8	130	3	70-130/30
156-59-2	cis-1,2-Dichloroethene	ND		50	58.6	117	50	55.7	111	5	70-130/30
156-60-5	trans-1,2-Dichloroethene	ND		50	62.6	125	50	58.4	117	7	70-130/30
78-87-5	1,2-Dichloropropane	ND		50	63.9	128	50	61.2	122	4	70-130/30
142-28-9	1,3-Dichloropropane	ND		50	58.5	117	50	57.5	115	2	70-130/30
594-20-7	2,2-Dichloropropane	ND		50	68.3	137* [a]	50	63.7	127	7	70-130/30
563-58-6	1,1-Dichloropropene	ND		50	65.0	130	50	61.6	123	5	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34365
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34464-4MS	V36144.D	1	10/29/14	AMY	n/a	n/a	MSV1310
MC34464-4MSD	V36145.D	1	10/29/14	AMY	n/a	n/a	MSV1310
MC34464-4	V36136.D	1	10/29/14	AMY	n/a	n/a	MSV1310

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34365-1, MC34365-2, MC34365-3, MC34365-4, MC34365-5

CAS No.	Compound	MC34464-4 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-01-5	cis-1,3-Dichloropropene	ND		50	59.6	119	50	58.0	116	3	70-130/30
10061-02-6	trans-1,3-Dichloropropene	ND		50	61.8	124	50	58.1	116	6	70-130/30
123-91-1	1,4-Dioxane	ND		125	128	102	125	185	148* b	36* c	70-130/30
97-63-2	Ethyl methacrylate	ND		50	50.8	102	50	49.6	99	2	72-139/30
100-41-4	Ethylbenzene	ND		50	60.3	121	50	58.1	116	4	70-130/30
87-68-3	Hexachlorobutadiene	ND		50	51.6	103	50	47.6	95	8	70-130/30
591-78-6	2-Hexanone	ND		50	41.8	84	50	42.4	85	1	70-130/30
98-82-8	Isopropylbenzene	3.1	J	50	49.1	92	50	45.3	84	8	70-130/30
99-87-6	p-Isopropyltoluene	ND		50	47.0	94	50	44.6	89	5	70-130/30
1634-04-4	Methyl Tert Butyl Ether	ND		50	45.3	91	50	45.4	91	0	70-130/30
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		50	52.5	105	50	51.2	102	3	70-130/30
74-95-3	Methylene bromide	ND		50	59.3	119	50	56.6	113	5	70-130/30
75-09-2	Methylene chloride	ND		50	58.8	118	50	56.3	113	4	70-130/30
91-20-3	Naphthalene	ND		50	50.3	101	50	53.7	107	7	70-130/30
103-65-1	n-Propylbenzene	ND		50	50.4	101	50	45.6	91	10	70-130/30
100-42-5	Styrene	ND		50	61.8	124	50	56.8	114	8	70-130/30
630-20-6	1,1,1,2-Tetrachloroethane	ND		50	55.5	111	50	53.6	107	3	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	ND		50	67.9	136* b	50	61.5	123	10	70-130/30
127-18-4	Tetrachloroethene	ND		50	50.9	102	50	49.6	99	3	70-130/30
108-88-3	Toluene	ND		50	59.4	119	50	56.0	112	6	70-130/30
87-61-6	1,2,3-Trichlorobenzene	ND		50	47.6	95	50	47.9	96	1	70-130/30
120-82-1	1,2,4-Trichlorobenzene	ND		50	48.2	96	50	46.0	92	5	70-130/30
71-55-6	1,1,1-Trichloroethane	ND		50	55.8	112	50	51.4	103	8	70-130/30
79-00-5	1,1,2-Trichloroethane	ND		50	63.4	127	50	60.9	122	4	70-130/30
79-01-6	Trichloroethene	ND		50	50.9	102	50	48.5	97	5	70-130/30
75-69-4	Trichlorofluoromethane	ND		50	52.1	104	50	45.7	91	13	70-130/30
96-18-4	1,2,3-Trichloropropane	ND		50	43.4	87	50	38.7	77	11	70-130/30
95-63-6	1,2,4-Trimethylbenzene	ND		50	52.5	105	50	47.3	95	10	70-130/30
108-67-8	1,3,5-Trimethylbenzene	ND		50	50.1	100	50	45.3	91	10	70-130/30
108-05-4	Vinyl Acetate	ND		50	62.8	126	50	60.9	122	3	70-130/30
75-01-4	Vinyl chloride	ND		50	69.2	138* a	50	63.9	128	8	70-130/30
	m,p-Xylene	ND		100	120	120	100	117	117	3	70-130/30
95-47-6	o-Xylene	ND		50	53.1	106	50	50.1	100	6	70-130/30
1330-20-7	Xylene (total)	ND		150	173	115	150	167	111	4	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34365
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34464-4MS	V36144.D	1	10/29/14	AMY	n/a	n/a	MSV1310
MC34464-4MSD	V36145.D	1	10/29/14	AMY	n/a	n/a	MSV1310
MC34464-4	V36136.D	1	10/29/14	AMY	n/a	n/a	MSV1310

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34365-1, MC34365-2, MC34365-3, MC34365-4, MC34365-5

CAS No.	Surrogate Recoveries	MS	MSD	MC34464-4	Limits
1868-53-7	Dibromofluoromethane	99%	98%	103%	70-130%
2037-26-5	Toluene-D8	106%	103%	85%	70-130%
460-00-4	4-Bromofluorobenzene	102%	97%	102%	70-130%

(a) Outside control limits due to possible matrix interference. Refer to Blank Spike.
(b) Outside control limits. Associated samples are non-detect for this compound.
(c) High RPD due to possible matrix interference and/or sample non-homogeneity.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34365
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34509-2MS	V36146.D	5	10/29/14	AMY	n/a	n/a	MSV1308
MC34509-2MSD	V36147.D	5	10/29/14	AMY	n/a	n/a	MSV1308
MC34509-2	V36083.D	1	10/28/14	AMY	n/a	n/a	MSV1308

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34365-1, MC34365-2, MC34365-5, MC34365-6

CAS No.	Compound	MC34509-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		250	321	128	250	326	130	2	70-130/30

CAS No.	Surrogate Recoveries	MS	MSD	MC34509-2	Limits
1868-53-7	Dibromofluoromethane	98%	99%	103%	70-130%
2037-26-5	Toluene-D8	102%	102%	99%	70-130%
460-00-4	4-Bromofluorobenzene	94%	90%	103%	70-130%

* = Outside of Control Limits.

Volatile Internal Standard Area Summary

Job Number: MC34365
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSV1307-CC1296	**Injection Date:**	10/27/14
Lab File ID:	V36042.D	**Injection Time:**	17:14
Instrument ID:	GCMSV	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	927444	6.57	1512567	7.75	664914	11.08	802240	13.29	108431	3.54
Upper Limit [a]	1854888	7.07	3025134	8.25	1329828	11.58	1604480	13.79	216862	4.04
Lower Limit [b]	463722	6.07	756284	7.25	332457	10.58	401120	12.79	54216	3.04

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSV1307-BS	883535	6.56	1419232	7.75	665944	11.08	819282	13.29	108933	3.53
MSV1307-MB	817314	6.56	1341485	7.75	623292	11.08	750518	13.29	86964	3.53
MC34365-7	801082	6.56	1327564	7.75	618110	11.08	729719	13.29	81232	3.54
ZZZZZZ	756798	6.56	1204566	7.74	560446	11.08	697829	13.29	73401	3.53
ZZZZZZ	750634	6.56	1243637	7.74	558290	11.08	689469	13.29	69813	3.53
ZZZZZZ	739447	6.56	1228442	7.74	573303	11.08	705896	13.29	65984	3.52
ZZZZZZ	670196	6.56	1122972	7.74	518181	11.08	623482	13.29	53729[c]	3.53
MC34408-1	669685	6.56	1117415	7.75	536262	11.08	632029	13.29	54134[d]	3.53
ZZZZZZ	647184	6.56	1071584	7.74	506075	11.08	619547	13.29	52328[e]	3.53
ZZZZZZ	728688	6.56	1137640	7.74	536499	11.08	671793	13.29	51764[c]	3.52
MC34408-1MS	781942	6.56	1271230	7.74	618029	11.08	736554	13.29	68237	3.53
MC34408-1MSD	830289	6.56	1348512	7.74	631878	11.08	738067	13.29	70243	3.52
ZZZZZZ	725710	6.56	1193619	7.74	555531	11.08	680747	13.29	62140	3.52
ZZZZZZ	777372	6.56	1254674	7.74	562528	11.08	689499	13.29	60979	3.53
ZZZZZZ	744547	6.56	1232195	7.74	619462	11.08	740421	13.29	64047	3.53
ZZZZZZ	754945	6.56	1243238	7.74	577310	11.08	687502	13.29	57678	3.53
ZZZZZZ	738864	6.56	1189752	7.74	539024	11.08	654157	13.29	55000	3.53
MC34365-3	654309	6.56	1090634	7.74	486925	11.08	588041	13.29	50360[c]	3.52
MC34365-6	620486	6.56	1043781	7.74	490095	11.08	566633	13.29	46754[c]	3.52

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Outside control limits. Target analytes not associated with this internal standard.
(d) Outside control limits due to possible matrix interference. Confirmed by MS/MSD.
(e) Outside control limits due to possible matrix interference. Confirmed by reanalysis.

Volatile Internal Standard Area Summary

Job Number: MC34365
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSV1308-CC1296	**Injection Date:**	10/28/14
Lab File ID:	V36073.D	**Injection Time:**	06:56
Instrument ID:	GCMSV	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	684373	6.55	1083041	7.74	539995	11.08	662902	13.29	63448	3.52
Upper Limit [a]	1368746	7.05	2166082	8.24	1079990	11.58	1325804	13.79	126896	4.02
Lower Limit [b]	342187	6.05	541521	7.24	269998	10.58	331451	12.79	31724	3.02

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSV1308-BS	707610	6.55	1127998	7.74	562695	11.08	681952	13.29	68545	3.52
MSV1308-MB	629924	6.56	1041720	7.74	484567	11.08	581151	13.29	57676	3.53
ZZZZZZ	681939	6.56	1072562	7.74	497308	11.08	604723	13.29	69094	3.52
MC34365-1	638458	6.56	1043867	7.74	511048	11.08	611731	13.29	70534	3.53
MC34509-2	630289	6.56	1047226	7.74	500284	11.08	581780	13.29	68315	3.53
ZZZZZZ	679535	6.56	1080713	7.74	520605	11.08	626860	13.29	89524	3.53
MC34365-2	629057	6.56	1058065	7.75	487918	11.08	593768	13.29	79195	3.53
MC34365-5	608734	6.56	1023539	7.75	464547	11.08	566200	13.29	73498	3.53
MC34365-6	576223	6.56	990514	7.74	449651	11.08	538324	13.29	72276	3.52
ZZZZZZ	557395	6.57	953734	7.75	469279	11.08	548206	13.29	75363	3.53
ZZZZZZ	573028	6.56	945159	7.75	497105	11.08	612465	13.29	63415	3.53

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Internal Standard Area Summary

Job Number: MC34365
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSV1310-CC1296	**Injection Date:**	10/29/14
Lab File ID:	V36130.D	**Injection Time:**	10:25
Instrument ID:	GCMSV	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	793408	6.57	1277328	7.75	598025	11.09	690070	13.30	77633	3.53
Upper Limit [a]	1586816	7.07	2554656	8.25	1196050	11.59	1380140	13.80	155266	4.03
Lower Limit [b]	396704	6.07	638664	7.25	299013	10.59	345035	12.80	38817	3.03

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSV1310-BS	815399	6.57	1315328	7.75	612219	11.09	713639	13.30	88219	3.53
MSV1308-BS1	815399	6.57	1315328	7.75	612219	11.09	713639	13.30	88219	3.53
MSV1310-MB	718536	6.58	1193581	7.76	543899	11.09	626008	13.30	83829	3.54
MSV1308-MB1	718536	6.58	1193581	7.76	543899	11.09	626008	13.30	83829	3.54
ZZZZZZ	737875	6.58	1179841	7.76	534343	11.09	639632	13.30	73411	3.56
MC34464-4	682369	6.58	1218737	7.76	536698	11.09	575048	13.30	63386	3.54
MC34365-4	615437	6.58	1015532	7.76	483617	11.09	550712	13.30	56766	3.54
ZZZZZZ	641272	6.58	1114901	7.76	495092	11.09	560010	13.30	65715	3.54
ZZZZZZ	577832	6.58	962934	7.76	457001	11.09	554135	13.30	69761	3.55
MC34365-1	590940	6.58	1009963	7.76	448650	11.09	517841	13.30	51598	3.53
MC34365-2	594139	6.58	1038605	7.76	441718	11.09	515395	13.30	49685	3.54
MC34365-3	557282	6.58	937872	7.76	443126	11.09	515762	13.30	60851	3.54
MC34365-5	580917	6.58	1060154	7.76	485375	11.09	532838	13.30	61204	3.54
MC34464-4MS	629995	6.57	997886	7.75	504909	11.09	608897	13.30	67737	3.53
MC34464-4MSD	716108	6.58	1153399	7.76	560437	11.09	702119	13.30	80810	3.54
MC34509-2MS	721366	6.57	1156430	7.75	544531	11.09	710932	13.30	77331	3.53
MC34509-2MSD	732517	6.57	1124553	7.75	548094	11.09	754555	13.30	87252	3.54
ZZZZZZ	708843	6.57	1131117	7.75	526649	11.09	618697	13.30	80754	3.54
ZZZZZZ	745410	6.57	1190734	7.75	588892	11.09	669607	13.30	99418	3.53
ZZZZZZ	681705	6.58	1140151	7.76	511868	11.09	582255	13.30	69420	3.54
ZZZZZZ	633446	6.57	1038874	7.75	462019	11.09	561146	13.30	72426	3.54
ZZZZZZ	630465	6.58	1023726	7.76	482869	11.09	540027	13.30	64884	3.54
ZZZZZZ	600991	6.57	995131	7.75	460703	11.09	576762	13.30	55302	3.53
ZZZZZZ	588402	6.57	958564	7.75	429605	11.09	530688	13.30	52288	3.54

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary

Job Number: MC34365
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Method: SW846 8260C **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
MC34365-1	V36082.D	103	99	101
MC34365-1	V36140.D	107	96	103
MC34365-2	V36141.D	108	93	103
MC34365-2	V36085.D	104	97	101
MC34365-3	V36066.D	99	96	100
MC34365-3	V36142.D	111	97	103
MC34365-4	V36137.D	102	100	106
MC34365-5	V36086.D	106	95	102
MC34365-5	V36143.D	111	98	107
MC34365-6	V36068.D	99	98	102
MC34365-6	V36087.D	107	95	103
MC34365-7	V36048.D	96	98	102
MC34408-1MS	V36056.D	95	104	104
MC34408-1MSD	V36057.D	94	102	104
MC34464-4MS	V36144.D	99	106	102
MC34464-4MSD	V36145.D	98	103	97
MC34509-2MS	V36146.D	98	102	94
MC34509-2MSD	V36147.D	99	102	90
MSV1307-BS	V36043.D	94	102	101
MSV1307-MB	V36047.D	95	99	101
MSV1308-BS	V36074.D	98	104	102
MSV1308-MB	V36078.D	103	97	102
MSV1308-MB1	V36134.D	102	99	105
MSV1310-BS	V36131.D	96	101	105
MSV1310-MB	V36134.D	102	99	105

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	70-130%
S2 = Toluene-D8	70-130%
S3 = 4-Bromofluorobenzene	70-130%

GC/MS Semi-volatiles

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QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: MC34365
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40242-MB	R40407.D	1	10/20/14	KD	10/16/14	OP40242	MSR1487

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34365-1, MC34365-2, MC34365-3, MC34365-4, MC34365-5, MC34365-6

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	10	2.5	ug/l	
95-57-8	2-Chlorophenol	ND	5.0	0.31	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	10	0.83	ug/l	
120-83-2	2,4-Dichlorophenol	ND	10	0.40	ug/l	
105-67-9	2,4-Dimethylphenol	ND	10	0.56	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	2.5	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.9	ug/l	
95-48-7	2-Methylphenol	ND	10	0.23	ug/l	
	3&4-Methylphenol	ND	10	0.47	ug/l	
88-75-5	2-Nitrophenol	ND	10	2.9	ug/l	
100-02-7	4-Nitrophenol	ND	20	0.53	ug/l	
87-86-5	Pentachlorophenol	ND	10	1.1	ug/l	
108-95-2	Phenol	ND	5.0	0.30	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	10	0.37	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	10	0.18	ug/l	
62-53-3	Aniline	ND	10	0.64	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.0	0.47	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.0	0.53	ug/l	
100-51-6	Benzyl Alcohol	ND	10	2.3	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.31	ug/l	
106-47-8	4-Chloroaniline	ND	10	0.56	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.0	0.29	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.0	0.35	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.0	0.33	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.0	0.25	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.0	0.24	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	10	0.46	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	10	0.30	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.27	ug/l	
132-64-9	Dibenzofuran	ND	2.0	0.26	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.0	0.17	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.0	0.28	ug/l	
84-66-2	Diethyl phthalate	ND	5.0	0.20	ug/l	
131-11-3	Dimethyl phthalate	ND	5.0	0.34	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	3.0	2.0	0.33	ug/l	
118-74-1	Hexachlorobenzene	ND	5.0	0.29	ug/l	

Method Blank Summary

Job Number: MC34365
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40242-MB	R40407.D	1	10/20/14	KD	10/16/14	OP40242	MSR1487

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34365-1, MC34365-2, MC34365-3, MC34365-4, MC34365-5, MC34365-6

CAS No.	Compound	Result	RL	MDL	Units	Q
77-47-4	Hexachlorocyclopentadiene	ND	10	1.3	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.30	ug/l	
78-59-1	Isophorone	ND	5.0	0.45	ug/l	
88-74-4	2-Nitroaniline	ND	10	0.40	ug/l	
99-09-2	3-Nitroaniline	ND	10	1.4	ug/l	
100-01-6	4-Nitroaniline	ND	10	2.2	ug/l	
98-95-3	Nitrobenzene	ND	5.0	0.39	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.0	1.0	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.0	0.40	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.19	ug/l	
110-86-1	Pyridine	ND	10	0.52	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	46%	15-110%
4165-62-2	Phenol-d5	30%	15-110%
118-79-6	2,4,6-Tribromophenol	96%	15-110%
4165-60-0	Nitrobenzene-d5	77%	30-130%
321-60-8	2-Fluorobiphenyl	78%	30-130%
1718-51-0	Terphenyl-d14	100%	30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
57-10-3	n-Hexadecanoic acid	8.53	4.6	ug/l	JN
107-52-8	Hexasiloxane, tetradecamethyl-	10.13	13	ug/l	JN
556-71-8	Cyclononasiloxane, octadecamethyl-	11.42	13	ug/l	JN
	Total TIC, Semi-Volatile		30.6	ug/l	J

Method Blank Summary

Job Number: MC34365
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40243-MB	I92302.D	1	10/20/14	WK	10/16/14	OP40243	MSI3440

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

MC34365-1, MC34365-2, MC34365-3, MC34365-4, MC34365-5, MC34365-6

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.069	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.050	ug/l	
120-12-7	Anthracene	ND	0.10	0.092	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.050	0.020	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.029	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.050	0.032	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.027	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.039	ug/l	
218-01-9	Chrysene	ND	0.10	0.024	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.032	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.041	ug/l	
86-73-7	Fluorene	ND	0.10	0.099	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.031	ug/l	
90-12-0	1-Methylnaphthalene	ND	2.0	0.50	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.0	0.50	ug/l	
85-01-8	Phenanthrene	ND	0.050	0.013	ug/l	
129-00-0	Pyrene	ND	0.10	0.038	ug/l	

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	82%	30-130%
321-60-8	2-Fluorobiphenyl	78%	30-130%
1718-51-0	Terphenyl-d14	91%	30-130%

Blank Spike Summary

Job Number: MC34365
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40242-BS	R40408.D	1	10/20/14	KD	10/16/14	OP40242	MSR1487

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34365-1, MC34365-2, MC34365-3, MC34365-4, MC34365-5, MC34365-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
65-85-0	Benzoic Acid	50	21.8	44	30-130
95-57-8	2-Chlorophenol	50	43.2	86	30-130
59-50-7	4-Chloro-3-methyl phenol	50	45.6	91	30-130
120-83-2	2,4-Dichlorophenol	50	48.4	97	30-130
105-67-9	2,4-Dimethylphenol	50	36.8	74	30-130
51-28-5	2,4-Dinitrophenol	50	56.7	113	30-130
534-52-1	4,6-Dinitro-o-cresol	50	56.9	114	30-130
95-48-7	2-Methylphenol	50	36.4	73	30-130
	3&4-Methylphenol	100	71.6	72	30-130
88-75-5	2-Nitrophenol	50	48.4	97	30-130
100-02-7	4-Nitrophenol	50	24.2	48	30-130
87-86-5	Pentachlorophenol	50	49.1	98	30-130
108-95-2	Phenol	50	20.1	40	30-130
95-95-4	2,4,5-Trichlorophenol	50	50.1	100	30-130
88-06-2	2,4,6-Trichlorophenol	50	51.3	103	30-130
62-53-3	Aniline	50	31.0	62	40-140
101-55-3	4-Bromophenyl phenyl ether	50	58.3	117	40-140
85-68-7	Butyl benzyl phthalate	50	54.9	110	40-140
100-51-6	Benzyl Alcohol	50	41.6	83	40-140
91-58-7	2-Chloronaphthalene	50	51.8	104	40-140
106-47-8	4-Chloroaniline	50	46.7	93	40-140
111-91-1	bis(2-Chloroethoxy)methane	50	48.7	97	40-140
111-44-4	bis(2-Chloroethyl)ether	50	36.9	74	40-140
108-60-1	bis(2-Chloroisopropyl)ether	50	68.8	138	40-140
7005-72-3	4-Chlorophenyl phenyl ether	50	53.1	106	40-140
122-66-7	1,2-Diphenylhydrazine	50	52.3	105	40-140
121-14-2	2,4-Dinitrotoluene	50	55.8	112	40-140
606-20-2	2,6-Dinitrotoluene	50	53.5	107	40-140
91-94-1	3,3'-Dichlorobenzidine	50	54.0	108	40-140
132-64-9	Dibenzofuran	50	49.7	99	40-140
84-74-2	Di-n-butyl phthalate	50	53.7	107	40-140
117-84-0	Di-n-octyl phthalate	50	56.7	113	40-140
84-66-2	Diethyl phthalate	50	53.2	106	40-140
131-11-3	Dimethyl phthalate	50	52.8	106	40-140
117-81-7	bis(2-Ethylhexyl)phthalate	50	55.0	110	40-140
118-74-1	Hexachlorobenzene	50	60.3	121	40-140

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34365
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40242-BS	R40408.D	1	10/20/14	KD	10/16/14	OP40242	MSR1487

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34365-1, MC34365-2, MC34365-3, MC34365-4, MC34365-5, MC34365-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
77-47-4	Hexachlorocyclopentadiene	50	24.0	48	40-140
67-72-1	Hexachloroethane	50	34.9	70	40-140
78-59-1	Isophorone	50	44.5	89	40-140
88-74-4	2-Nitroaniline	50	51.4	103	40-140
99-09-2	3-Nitroaniline	50	48.6	97	40-140
100-01-6	4-Nitroaniline	50	48.5	97	40-140
98-95-3	Nitrobenzene	50	48.6	97	40-140
62-75-9	n-Nitrosodimethylamine	50	30.4	61	40-140
621-64-7	N-Nitroso-di-n-propylamine	50	48.2	96	40-140
86-30-6	N-Nitrosodiphenylamine	50	48.9	98	40-140
110-86-1	Pyridine	50	27.2	54	40-140

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	52%	15-110%
4165-62-2	Phenol-d5	34%	15-110%
118-79-6	2,4,6-Tribromophenol	102%	15-110%
4165-60-0	Nitrobenzene-d5	86%	30-130%
321-60-8	2-Fluorobiphenyl	81%	30-130%
1718-51-0	Terphenyl-d14	98%	30-130%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34365
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40243-BS	I92303.D	1	10/20/14	WK	10/16/14	OP40243	MSI3440

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

MC34365-1, MC34365-2, MC34365-3, MC34365-4, MC34365-5, MC34365-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
83-32-9	Acenaphthene	50	48.7	97	40-140
208-96-8	Acenaphthylene	50	42.6	85	40-140
120-12-7	Anthracene	50	49.6	99	40-140
56-55-3	Benzo(a)anthracene	50	58.3	117	40-140
50-32-8	Benzo(a)pyrene	50	54.4	109	40-140
205-99-2	Benzo(b)fluoranthene	50	55.7	111	40-140
191-24-2	Benzo(g,h,i)perylene	50	56.1	112	40-140
207-08-9	Benzo(k)fluoranthene	50	54.9	110	40-140
218-01-9	Chrysene	50	54.3	109	40-140
53-70-3	Dibenzo(a,h)anthracene	50	56.5	113	40-140
206-44-0	Fluoranthene	50	51.3	103	40-140
86-73-7	Fluorene	50	53.0	106	40-140
193-39-5	Indeno(1,2,3-cd)pyrene	50	55.5	111	40-140
90-12-0	1-Methylnaphthalene	50	43.3	87	40-140
91-57-6	2-Methylnaphthalene	50	43.8	88	40-140
85-01-8	Phenanthrene	50	51.9	104	40-140
129-00-0	Pyrene	50	49.7	99	40-140

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	91%	30-130%
321-60-8	2-Fluorobiphenyl	80%	30-130%
1718-51-0	Terphenyl-d14	92%	30-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34365
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40242-MS	R40409.D	1	10/20/14	KD	10/16/14	OP40242	MSR1487
OP40242-MSD	R40410.D	1	10/20/14	KD	10/16/14	OP40242	MSR1487
MC34100-1	R40411.D	1	10/20/14	KD	10/16/14	OP40242	MSR1487

The QC reported here applies to the following samples: Method: SW846 8270D

MC34365-1, MC34365-2, MC34365-3, MC34365-4, MC34365-5, MC34365-6

CAS No.	Compound	MC34100-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic Acid	ND		50	22.0	44	50	23.0	46	4	30-130/20
95-57-8	2-Chlorophenol	ND		50	43.3	87	50	42.9	86	1	30-130/20
59-50-7	4-Chloro-3-methyl phenol	ND		50	46.1	92	50	44.7	89	3	30-130/20
120-83-2	2,4-Dichlorophenol	ND		50	49.1	98	50	48.2	96	2	30-130/20
105-67-9	2,4-Dimethylphenol	ND		50	38.7	77	50	29.6	59	27* [a]	30-130/20
51-28-5	2,4-Dinitrophenol	ND		50	57.4	115	50	56.9	114	1	30-130/20
534-52-1	4,6-Dinitro-o-cresol	ND		50	56.7	113	50	55.8	112	2	30-130/20
95-48-7	2-Methylphenol	ND		50	36.8	74	50	35.9	72	2	30-130/20
	3&4-Methylphenol	ND		100	71.2	71	100	70.7	71	1	30-130/20
88-75-5	2-Nitrophenol	ND		50	48.4	97	50	48.1	96	1	30-130/20
100-02-7	4-Nitrophenol	ND		50	24.2	48	50	24.3	49	0	30-130/20
87-86-5	Pentachlorophenol	ND		50	47.9	96	50	47.5	95	1	30-130/20
108-95-2	Phenol	ND		50	20.1	40	50	20.6	41	2	30-130/20
95-95-4	2,4,5-Trichlorophenol	ND		50	50.5	101	50	49.4	99	2	30-130/20
88-06-2	2,4,6-Trichlorophenol	ND		50	50.6	101	50	50.3	101	1	30-130/20
62-53-3	Aniline	ND		50	30.9	62	50	20.6	41	40* [a]	40-140/20
101-55-3	4-Bromophenyl phenyl ether	ND		50	57.3	115	50	56.7	113	1	40-140/20
85-68-7	Butyl benzyl phthalate	ND		50	53.5	107	50	53.7	107	0	40-140/20
100-51-6	Benzyl Alcohol	ND		50	41.2	82	50	42.2	84	2	40-140/20
91-58-7	2-Chloronaphthalene	ND		50	51.5	103	50	52.0	104	1	40-140/20
106-47-8	4-Chloroaniline	ND		50	47.2	94	50	42.4	85	11	40-140/20
111-91-1	bis(2-Chloroethoxy)methane	ND		50	49.0	98	50	48.4	97	1	40-140/20
111-44-4	bis(2-Chloroethyl)ether	ND		50	37.1	74	50	36.6	73	1	40-140/20
108-60-1	bis(2-Chloroisopropyl)ether	ND		50	67.5	135	50	66.4	133	2	40-140/20
7005-72-3	4-Chlorophenyl phenyl ether	ND		50	52.5	105	50	52.8	106	1	40-140/20
122-66-7	1,2-Diphenylhydrazine	ND		50	51.1	102	50	50.5	101	1	40-140/20
121-14-2	2,4-Dinitrotoluene	ND		50	56.3	113	50	55.7	111	1	40-140/20
606-20-2	2,6-Dinitrotoluene	ND		50	53.6	107	50	52.3	105	2	40-140/20
91-94-1	3,3'-Dichlorobenzidine	ND		50	54.2	108	50	48.9	98	10	40-140/20
132-64-9	Dibenzofuran	ND		50	49.2	98	50	49.2	98	0	40-140/20
84-74-2	Di-n-butyl phthalate	ND		50	52.5	105	50	52.4	105	0	40-140/20
117-84-0	Di-n-octyl phthalate	ND		50	55.5	111	50	56.4	113	2	40-140/20
84-66-2	Diethyl phthalate	ND		50	53.2	106	50	52.7	105	1	40-140/20
131-11-3	Dimethyl phthalate	ND		50	52.4	105	50	51.7	103	1	40-140/20
117-81-7	bis(2-Ethylhexyl)phthalate	ND		50	54.0	108	50	54.9	110	2	40-140/20
118-74-1	Hexachlorobenzene	ND		50	59.2	118	50	59.4	119	0	40-140/20

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34365
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40242-MS	R40409.D	1	10/20/14	KD	10/16/14	OP40242	MSR1487
OP40242-MSD	R40410.D	1	10/20/14	KD	10/16/14	OP40242	MSR1487
MC34100-1	R40411.D	1	10/20/14	KD	10/16/14	OP40242	MSR1487

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34365-1, MC34365-2, MC34365-3, MC34365-4, MC34365-5, MC34365-6

CAS No.	Compound	MC34100-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
77-47-4	Hexachlorocyclopentadiene	ND		50	23.7	47	50	23.1	46	3	40-140/20
67-72-1	Hexachloroethane	ND		50	33.8	68	50	33.0	66	2	40-140/20
78-59-1	Isophorone	ND		50	45.0	90	50	44.7	89	1	40-140/20
88-74-4	2-Nitroaniline	ND		50	51.9	104	50	51.7	103	0	40-140/20
99-09-2	3-Nitroaniline	ND		50	48.7	97	50	47.2	94	3	40-140/20
100-01-6	4-Nitroaniline	ND		50	48.5	97	50	45.7	91	6	40-140/20
98-95-3	Nitrobenzene	ND		50	48.6	97	50	48.0	96	1	40-140/20
62-75-9	n-Nitrosodimethylamine	ND		50	31.5	63	50	31.8	64	1	40-140/20
621-64-7	N-Nitroso-di-n-propylamine	ND		50	47.8	96	50	47.4	95	1	40-140/20
86-30-6	N-Nitrosodiphenylamine	ND		50	48.2	96	50	47.8	96	1	40-140/20
110-86-1	Pyridine	ND		50	27.0	54	50	7.5	15* [b]	113* [a]	40-140/20

CAS No.	Surrogate Recoveries	MS	MSD	MC34100-1	Limits
367-12-4	2-Fluorophenol	53%	52%	55%	15-110%
4165-62-2	Phenol-d5	34%	34%	35%	15-110%
118-79-6	2,4,6-Tribromophenol	100%	97%	98%	15-110%
4165-60-0	Nitrobenzene-d5	86%	83%	89%	30-130%
321-60-8	2-Fluorobiphenyl	80%	77%	85%	30-130%
1718-51-0	Terphenyl-d14	95%	94%	105%	30-130%

(a) High RPD due to possible matrix interference and/or sample heterogeneity.
(b) Outside control limits due to possible matrix interference. Refer to Blank Spike.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34365
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40243-MS	I92304.D	1	10/20/14	WK	10/16/14	OP40243	MSI3440
OP40243-MSD	I92305.D	1	10/20/14	WK	10/16/14	OP40243	MSI3440
MC34100-2	I92306.D	1	10/20/14	WK	10/16/14	OP40243	MSI3440

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

MC34365-1, MC34365-2, MC34365-3, MC34365-4, MC34365-5, MC34365-6

CAS No.	Compound	MC34100-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	ND		50	48.3	97	50	48.0	96	1	40-140/20
208-96-8	Acenaphthylene	ND		50	42.1	84	50	42.1	84	0	40-140/20
120-12-7	Anthracene	ND		50	50.1	100	50	48.4	97	3	40-140/20
56-55-3	Benzo(a)anthracene	ND		50	57.2	114	50	57.0	114	0	40-140/20
50-32-8	Benzo(a)pyrene	ND		50	53.7	107	50	52.8	106	2	40-140/20
205-99-2	Benzo(b)fluoranthene	ND		50	53.4	107	50	54.4	109	2	40-140/20
191-24-2	Benzo(g,h,i)perylene	ND		50	55.2	110	50	54.3	109	2	40-140/20
207-08-9	Benzo(k)fluoranthene	ND		50	48.7	97	50	53.1	106	9	40-140/20
218-01-9	Chrysene	ND		50	53.1	106	50	52.7	105	1	40-140/20
53-70-3	Dibenzo(a,h)anthracene	ND		50	55.5	111	50	54.7	109	1	40-140/20
206-44-0	Fluoranthene	ND		50	50.4	101	50	50.4	101	0	40-140/20
86-73-7	Fluorene	ND		50	52.1	104	50	52.0	104	0	40-140/20
193-39-5	Indeno(1,2,3-cd)pyrene	ND		50	54.7	109	50	53.7	107	2	40-140/20
90-12-0	1-Methylnaphthalene	ND		50	42.8	86	50	42.7	85	0	40-140/20
91-57-6	2-Methylnaphthalene	ND		50	42.9	86	50	42.7	85	0	40-140/20
85-01-8	Phenanthrene	ND		50	51.8	104	50	50.6	101	2	40-140/20
129-00-0	Pyrene	ND		50	48.8	98	50	48.8	98	0	40-140/20

CAS No.	Surrogate Recoveries	MS	MSD	MC34100-2	Limits
4165-60-0	Nitrobenzene-d5	90%	87%	94%	30-130%
321-60-8	2-Fluorobiphenyl	79%	76%	83%	30-130%
1718-51-0	Terphenyl-d14	90%	88%	95%	30-130%

* = Outside of Control Limits.

Semivolatile Internal Standard Area Summary

Job Number: MC34365
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSI3440-CC3427	**Injection Date:**	10/20/14
Lab File ID:	I92301.D	**Injection Time:**	08:14
Instrument ID:	GCMSI	**Method:**	SW846 8270D BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	327019	2.98	725998	4.01	418638	5.50	747713	6.74	618061	9.45	1186129	10.83
Upper Limit [a]	654038	3.48	1451996	4.51	837276	6.00	1495426	7.24	1236122	9.95	2372258	11.33
Lower Limit [b]	163510	2.48	362999	3.51	209319	5.00	373857	6.24	309031	8.95	593065	10.33
Lab Sample ID	**IS 1 AREA**	**RT**	**IS 2 AREA**	**RT**	**IS 3 AREA**	**RT**	**IS 4 AREA**	**RT**	**IS 5 AREA**	**RT**	**IS 6 AREA**	**RT**
OP40243-MB	320529	2.98	709770	4.00	404926	5.50	716500	6.74	603424	9.44	1172310	10.82
OP40243-BS	308324	2.98	687074	4.01	392933	5.50	686935	6.75	573027	9.45	1110430	10.83
OP40243-MS	319622	2.98	723104	4.01	411540	5.50	719692	6.75	609855	9.45	1178122	10.83
OP40243-MSD	319122	2.98	720303	4.01	410355	5.50	719575	6.75	589523	9.45	1140718	10.83
MC34100-2	306639	2.98	683858	4.00	392899	5.50	678161	6.74	573449	9.44	1109769	10.82
ZZZZZZ	311379	2.98	695964	4.00	398153	5.50	697029	6.74	581112	9.44	1134802	10.82
ZZZZZZ	315274	2.98	697463	4.00	404807	5.50	706088	6.74	591429	9.44	1142245	10.82
ZZZZZZ	317292	2.98	712353	4.00	412176	5.50	712797	6.74	605017	9.44	1161383	10.82
ZZZZZZ	310263	2.98	686911	4.00	396987	5.50	687740	6.74	579228	9.44	1115011	10.82
ZZZZZZ	314648	2.98	698841	4.00	405096	5.50	698150	6.74	593845	9.44	1140913	10.82
ZZZZZZ	307587	2.98	684124	4.00	397316	5.50	687368	6.74	588979	9.44	1125856	10.82
ZZZZZZ	310519	2.98	688657	4.00	397519	5.50	686142	6.74	581516	9.44	1118938	10.82
MC34365-1	308491	2.98	691851	4.00	396181	5.50	695756	6.74	587364	9.44	1132763	10.82
ZZZZZZ	292677	2.98	660026	4.00	380400	5.50	664545	6.74	562979	9.44	1076578	10.82
MC34365-2	315448	2.98	705699	4.00	398758	5.50	703898	6.74	590913	9.45	1136258	10.82

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: MC34365
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSI3441-CC3427	**Injection Date:**	10/20/14
Lab File ID:	I92322.D	**Injection Time:**	15:50
Instrument ID:	GCMSI	**Method:**	SW846 8270D BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	281761	2.94	639703	3.97	375933	5.45	677590	6.70	593211	9.40	1131892	10.77
Upper Limit [a]	563522	3.44	1279406	4.47	751866	5.95	1355180	7.20	1186422	9.90	2263784	11.27
Lower Limit [b]	140881	2.44	319852	3.47	187967	4.95	338795	6.20	296606	8.90	565946	10.27
Lab Sample ID	**IS 1 AREA**	**RT**	**IS 2 AREA**	**RT**	**IS 3 AREA**	**RT**	**IS 4 AREA**	**RT**	**IS 5 AREA**	**RT**	**IS 6 AREA**	**RT**
MC34365-3	276031	2.95	627832	3.97	376796	5.46	636394	6.70	560699	9.40	1069934	10.77
MC34365-4	277649	2.94	623186	3.96	364022	5.45	640575	6.70	577406	9.40	1109585	10.77
MC34365-5	278694	2.94	631754	3.96	364727	5.45	650295	6.70	574856	9.39	1107518	10.77
MC34365-6	264331	2.94	597792	3.96	349488	5.45	622012	6.70	557139	9.39	1078296	10.77
OP40262-MB	306274	2.94	682781	3.96	400097	5.45	710869	6.70	637419	9.39	1226495	10.77
OP40262-BS	317486	2.94	728268	3.97	421075	5.46	757178	6.70	653292	9.40	1223807	10.78
OP40262-MS	302428	2.94	688625	3.97	399135	5.45	715764	6.70	617500	9.40	1168952	10.78
OP40262-MSD	294746	2.94	676754	3.97	391692	5.45	701042	6.70	614602	9.40	1169749	10.78
MC34440-1A	313799	2.94	699880	3.96	409340	5.45	719135	6.70	646134	9.39	1234114	10.77
ZZZZZZ	300009	2.94	676770	3.96	390342	5.45	690848	6.70	616044	9.39	1184846	10.77
ZZZZZZ	290321	2.94	655238	3.96	381708	5.45	667934	6.70	599876	9.39	1159654	10.77
ZZZZZZ	297317	2.94	672874	3.96	389834	5.45	695693	6.70	622540	9.39	1199836	10.77
ZZZZZZ	315734	2.94	714545	3.96	417236	5.45	738066	6.70	660034	9.39	1256894	10.77
ZZZZZZ	307104	2.94	689438	3.96	404043	5.45	711890	6.70	639477	9.39	1229965	10.77
ZZZZZZ	308214	2.94	695349	3.96	405537	5.45	724663	6.70	661151	9.39	1237275	10.77
ZZZZZZ	303656	2.94	690590	3.96	403630	5.45	715211	6.70	643596	9.39	1220585	10.77
ZZZZZZ	297120	2.94	668948	3.96	387209	5.45	687951	6.70	616142	9.39	1174691	10.77
ZZZZZZ	287280	2.94	647380	3.96	377971	5.45	663525	6.70	590463	9.39	1124731	10.77
ZZZZZZ	297173	2.94	671185	3.96	385455	5.45	678504	6.70	632021	9.41	1188310	10.78

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: MC34365
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSR1487-CC1481	**Injection Date:**	10/20/14
Lab File ID:	R40392.D	**Injection Time:**	09:47
Instrument ID:	GCMSR	**Method:**	SW846 8270D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	336121	4.07	1204764	5.17	724665	6.68	1207568	7.95	1246765	10.23	1085526	11.64
Upper Limit [a]	672242	4.57	2409528	5.67	1449330	7.18	2415136	8.45	2493530	10.73	2171052	12.14
Lower Limit [b]	168061	3.57	602382	4.67	362333	6.18	603784	7.45	623383	9.73	542763	11.14

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP40231-MB	352941	4.06	1271176	5.17	767738	6.67	1323103	7.94	1347573	10.22	1296360	11.63
OP40231-BS	327483	4.07	1186562	5.17	714494	6.67	1228616	7.94	1293944	10.23	1157802	11.64
OP40231-MS	336568	4.07	1212461	5.17	732482	6.67	1245109	7.94	1303358	10.23	1163618	11.64
OP40231-MSD	375839	4.07	1348574	5.17	809657	6.67	1373225	7.94	1447284	10.23	1271425	11.64
MC34000-22	351707	4.06	1267241	5.17	762171	6.67	1328509	7.94	1347307	10.22	1291928	11.63
ZZZZZZ	370932	4.06	1325361	5.17	800907	6.67	1393040	7.94	1390172	10.22	1319667	11.63
ZZZZZZ	337982	4.06	1209393	5.17	731102	6.67	1252674	7.94	1282256	10.22	1221885	11.63
ZZZZZZ	368483	4.06	1329526	5.17	809935	6.67	1398317	7.94	1392311	10.22	1331945	11.63
ZZZZZZ	383271	4.07	1403813	5.17	858707	6.67	1354685	7.94	1452837	10.22	1394073	11.63
ZZZZZZ	394518	4.07	1408788	5.17	849561	6.67	1463246	7.94	1438510	10.22	1320985	11.63
ZZZZZZ	404389	4.06	1455717	5.17	879455	6.67	1491851	7.94	1508743	10.22	1405966	11.63
ZZZZZZ	392128	4.07	1401768	5.17	796201	6.68	1363113	7.94	1389687	10.22	1326502	11.63
ZZZZZZ	396183	4.07	1427101	5.17	1253697	6.68	1396635	7.94	1456213	10.22	1367947	11.63
ZZZZZZ	366222	4.07	1307437	5.17	1227675	6.68	1305161	7.94	1355066	10.22	1293918	11.63
OP40242-MB	338068	4.06	1221057	5.17	729916	6.67	1264711	7.93	1290529	10.22	1227242	11.63
OP40242-BS	343417	4.07	1235090	5.17	739075	6.67	1229729	7.94	1288378	10.23	1142571	11.63
OP40242-MS	358417	4.07	1271975	5.17	768096	6.67	1297638	7.94	1372126	10.23	1218572	11.63
OP40242-MSD	364345	4.07	1301853	5.17	783897	6.67	1322333	7.94	1370567	10.23	1196731	11.63
MC34100-1	346145	4.06	1251666	5.17	756419	6.67	1291896	7.93	1276322	10.22	1190287	11.63
ZZZZZZ	356319	4.06	1269704	5.17	761862	6.67	1313877	7.93	1286069	10.22	1184761	11.63
ZZZZZZ	367877	4.06	1316024	5.17	797324	6.67	1371394	7.93	1350126	10.22	1244117	11.63
MC34365-1	331004	4.07	1182535	5.17	711423	6.67	1218131	7.93	1198694	10.22	1117662	11.63
MC34365-2 [c]	338288	4.07	1219625	5.17	733754	6.67	1253735	7.93	1212859	10.22	1138053	11.63
MC34365-3	319384	4.07	1158691	5.17	729774	6.67	1129224	7.94	1168688	10.22	1098321	11.63
MC34365-4	355514	4.06	1264985	5.17	771256	6.67	1311075	7.93	1249534	10.22	1133437	11.63
MC34365-5	349712	4.06	1246710	5.17	761029	6.67	1303718	7.93	1253860	10.22	1160321	11.63
MC34365-6	364605	4.07	1308436	5.17	785818	6.67	1354386	7.93	1302994	10.22	1220026	11.63

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

Semivolatile Internal Standard Area Summary

Job Number: MC34365
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSR1487-CC1481	**Injection Date:**	10/20/14
Lab File ID:	R40392.D	**Injection Time:**	09:47
Instrument ID:	GCMSR	**Method:**	SW846 8270D

Lab	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
Sample ID	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Confirmation run for surrogate recoveries.

Semivolatile Internal Standard Area Summary

Job Number: MC34365
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSR1489-CC1481	**Injection Date:**	10/22/14
Lab File ID:	R40450.D	**Injection Time:**	08:11
Instrument ID:	GCMSR	**Method:**	SW846 8270D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	330023	3.98	1186361	5.09	727269	6.59	1244070	7.86	1309365	10.13	1192270	11.51
Upper Limit [a]	660046	4.48	2372722	5.59	1454538	7.09	2488140	8.36	2618730	10.63	2384540	12.01
Lower Limit [b]	165012	3.48	593181	4.59	363635	6.09	622035	7.36	654683	9.63	596135	11.01

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP40290-MB	392049	3.98	1407408	5.08	843673	6.58	1442973	7.85	1463051	10.12	1344824	11.50
OP40237-MB	443415	3.98	1585366	5.08	952620	6.58	1614293	7.85	1592143	10.12	1492009	11.50
OP40290-BS	445698	3.98	1586069	5.09	952350	6.59	1618029	7.86	1647665	10.13	1479180	11.51
OP40290-MS	438402	3.98	1556486	5.09	893200	6.59	1404272	7.87	1070347	10.18	1414271	11.57
OP40290-MSD	421073	3.98	1511982	5.09	872202	6.59	1401410	7.87	1107347	10.17	1362125	11.57
MC34381-11	371923	3.98	1361704	5.09	810109	6.59	1091367	7.87	871400	10.18	1082232	11.60
ZZZZZZ	397227	3.98	1393946	5.09	825459	6.59	1387159	7.86	1009366	10.16	999717	11.58
ZZZZZZ	296974	3.99	1067365	5.09	607293	6.59	1021446	7.87	883349	10.18	916253	11.60
ZZZZZZ	249302	3.99	892321	5.09	529268	6.59	883627	7.86	858531	10.15	847706	11.55
ZZZZZZ	253603	3.99	887877	5.09	523730	6.59	854037	7.87	689238	10.22	871149	11.66
ZZZZZZ	270155	3.99	952577	5.09	563183	6.60	937269	7.86	898984	10.15	910426	11.57
MC34365-2	249765	3.99	889290	5.10	534420	6.60	915583	7.87	926492	10.14	922527	11.54
OP40297-MB	242972	3.99	872973	5.09	537693	6.60	947882	7.86	985888	10.14	967846	11.53
OP40297-LB	242972	3.99	872973	5.09	537693	6.60	947882	7.86	985888	10.14	967846	11.53
OP40297-BS	257401	3.99	920963	5.10	548347	6.60	941387	7.87	930531	10.14	902966	11.53
ZZZZZZ	279484	3.99	986197	5.09	592118	6.59	1013067	7.86	990374	10.13	964790	11.53
ZZZZZZ	269188	3.98	969560	5.09	598923	6.59	1025238	7.86	1049977	10.13	1013693	11.52
ZZZZZZ	313840	3.99	1096856	5.09	655863	6.59	1113925	7.86	1144516	10.13	1089360	11.52
ZZZZZZ	274787	3.98	855559	5.09	528563	6.59	1042291	7.86	969130	10.14	934169	11.53

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Surrogate Recovery Summary

Job Number: MC34365
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Method: SW846 8270D **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
MC34365-1	R40414.D	38	25	91	66	64	93
MC34365-2	R40462.D	19	13* [a]	53	30	36	49
MC34365-2	R40415.D	20	14* [a]	52	34	35	51
MC34365-3	R40416.D	53	33	109	88	85	101
MC34365-4	R40417.D	53	34	102	89	84	104
MC34365-5	R40418.D	48	31	97	80	76	102
MC34365-6	R40419.D	53	33	98	86	79	99
OP40242-BS	R40408.D	52	34	102	86	81	98
OP40242-MB	R40407.D	46	30	96	77	78	100
OP40242-MS	R40409.D	53	34	100	86	80	95
OP40242-MSD	R40410.D	52	34	97	83	77	94

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorophenol	15-110%
S2 = Phenol-d5	15-110%
S3 = 2,4,6-Tribromophenol	15-110%
S4 = Nitrobenzene-d5	30-130%
S5 = 2-Fluorobiphenyl	30-130%
S6 = Terphenyl-d14	30-130%

(a) Outside control limits due to possible matrix interference. Confirmed by reanalysis. Insufficient sample volume for re-extraction.

Semivolatile Surrogate Recovery Summary

Job Number: MC34365
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Method: SW846 8270D BY SIM **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
MC34365-1	I92314.D	68	63	87
MC34365-2	I92316.D	68	66	84
MC34365-3	I92323.D	91	80	91
MC34365-4	I92324.D	92	81	92
MC34365-5	I92325.D	83	75	88
MC34365-6	I92326.D	90	76	88
OP40243-BS	I92303.D	91	80	92
OP40243-MB	I92302.D	82	78	91
OP40243-MS	I92304.D	90	79	90
OP40243-MSD	I92305.D	87	76	88

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	30-130%
S2 = 2-Fluorobiphenyl	30-130%
S3 = Terphenyl-d14	30-130%

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries

Method Blank Summary

Job Number: MC34365
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40305-MB	BB60044.D	1	10/23/14	NK	10/21/14	OP40305	GBB3339

The QC reported here applies to the following samples: **Method:** SW846 8011

MC34365-1, MC34365-2, MC34365-3, MC34365-4, MC34365-5, MC34365-6, MC34365-8

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.015	0.0061	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.015	0.0061	ug/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	Bromofluorobenzene (S)	69%	36-173%
460-00-4	Bromofluorobenzene (S)	71%	36-173%

Blank Spike Summary

Job Number: MC34365
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40305-BS	BB60045.D	1	10/23/14	NK	10/21/14	OP40305	GBB3339

The QC reported here applies to the following samples: **Method:** SW846 8011

MC34365-1, MC34365-2, MC34365-3, MC34365-4, MC34365-5, MC34365-6, MC34365-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
96-12-8	1,2-Dibromo-3-chloropropane	0.071	0.075	106	60-140
106-93-4	1,2-Dibromoethane	0.071	0.076	107	60-140

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	Bromofluorobenzene (S)	75%	36-173%
460-00-4	Bromofluorobenzene (S)	77%	36-173%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34365
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40305-MS	BB60046.D	1	10/23/14	NK	10/21/14	OP40305	GBB3339
OP40305-MSD	BB60047.D	1	10/23/14	NK	10/21/14	OP40305	GBB3339
MC34100-13	BB60048.D	1	10/23/14	NK	10/21/14	OP40305	GBB3339

The QC reported here applies to the following samples: **Method:** SW846 8011

MC34365-1, MC34365-2, MC34365-3, MC34365-4, MC34365-5, MC34365-6, MC34365-8

CAS No.	Compound	MC34100-13 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
96-12-8	1,2-Dibromo-3-chloropropane	ND		0.071	0.082	115	0.071	0.075	106	9	64-141/29
106-93-4	1,2-Dibromoethane	ND		0.071	0.075	106	0.071	0.077	108	3	63-163/27

CAS No.	Surrogate Recoveries	MS	MSD	MC34100-13	Limits
460-00-4	Bromofluorobenzene (S)	83%	73%	71%	36-173%
460-00-4	Bromofluorobenzene (S)	87%	74%	74%	36-173%

* = Outside of Control Limits.

Volatile Surrogate Recovery Summary

Job Number: MC34365
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Method: SW846 8011 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]
MC34365-1	BB60049.D	71	88
MC34365-2	BB60050.D	70	89
MC34365-3	BB60051.D	71	83
MC34365-4	BB60052.D	64	73
MC34365-5	BB60053.D	61	74
MC34365-6	BB60055.D	76	91
MC34365-8	BB60056.D	69	76
OP40305-BS	BB60045.D	75	77
OP40305-MB	BB60044.D	69	71
OP40305-MS	BB60046.D	83	87
OP40305-MSD	BB60047.D	73	74

Surrogate Compounds	Recovery Limits
S1 = Bromofluorobenzene (S)	36-173%

(a) Recovery from GC signal #2
(b) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: MC34365
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	GBB3339-ICC3339	**Injection Date:**	10/23/14
Lab File ID:	BB60040.D	**Injection Time:**	14:08
Instrument ID:	GCBB	**Method:**	SW846 8011

	S1 [a] RT	S1 [b] RT
Check Std	3.32	3.33

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
OP40305-MB	BB60044.D	10/23/14	15:39	3.32	3.33
OP40306-MB	BB60044A.D	10/23/14	15:39	3.32	3.33
OP40306-BS	BB60045A.D	10/23/14	15:57	3.32	3.33
OP40305-BS	BB60045.D	10/23/14	15:57	3.32	3.33
OP40305-MS	BB60046.D	10/23/14	16:15	3.33	3.33
OP40305-MSD	BB60047.D	10/23/14	16:33	3.32	3.33
MC34100-13	BB60048.D	10/23/14	16:51	3.32	3.33
MC34365-1	BB60049.D	10/23/14	17:09	3.32	3.33
MC34365-2	BB60050.D	10/23/14	17:27	3.32	3.33
MC34365-3	BB60051.D	10/23/14	17:45	3.33	3.33
MC34365-4	BB60052.D	10/23/14	18:03	3.32	3.33
MC34365-5	BB60053.D	10/23/14	18:21	3.33	3.33

Surrogate Compounds

S1 = Bromofluorobenzene (S)

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: MC34365
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	GBB3339-CC3339	**Injection Date:**	10/23/14
Lab File ID:	BB60054.D	**Injection Time:**	18:38
Instrument ID:	GCBB	**Method:**	SW846 8011

	S1 [a] RT	S1 [b] RT
Check Std	3.32	3.33

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
MC34365-6	BB60055.D	10/23/14	18:56	3.32	3.33
MC34365-8	BB60056.D	10/23/14	19:14	3.32	3.33
ZZZZZZ	BB60057.D	10/23/14	19:32	3.32	3.33
ZZZZZZ	BB60058.D	10/23/14	19:50	3.32	3.33
ZZZZZZ	BB60059.D	10/23/14	20:08	3.32	3.33
ZZZZZZ	BB60060.D	10/23/14	20:26	3.32	3.33
ZZZZZZ	BB60061.D	10/23/14	20:44	3.33	3.33
ZZZZZZ	BB60062.D	10/23/14	21:02	3.33	3.34
ZZZZZZ	BB60063.D	10/23/14	21:19	3.33	3.33
ZZZZZZ	BB60064.D	10/23/14	21:37	3.32	3.33

Surrogate Compounds

S1 = Bromofluorobenzene (S)

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

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Automated Report

Technical Report for

Shell Oil

URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana,

SGS Accutest Job Number: MC34459

Sampling Date: 10/17/14



Report to:

AECOM, INC.

Melissa.mansker@aecom.com

ATTN: Melissa Mansker

Total number of pages in report: 74

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

H. (Brad) Madadian
Lab Director

Client Service contact: Jeremy Vienneau 508-481-6200

Certifications: MA (M-MA136,SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) FL (E87579) NY (11791) NJ (MA926) PA (6801121) ND (R-188) CO (MA00136) MN (11546AA) NC (653) IL (002337) WI (399080220) DoD ELAP (L-A-B L2235)

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Test results relate only to samples analyzed.

SGS Accutest is the sole authority for authorizing edits or modifications to this document.
Unauthorized modification of this report is strictly prohibited.

SGS ACCUTEST

November 03, 2016

AECOM
1001 Highlands Plaza Drive West Suite 300
St. Louis, MO 63110

RE: SGS Accutest Job # MC34459

Dear Elizabeth Kunkel

As you are aware, SGS Accutest Inc. - Marlborough has been conducting an extensive review of data associated with some historical Gas Chromatography-Mass Spectroscopy volatiles analyses. As a result of this review it was determined that some revisions of the original test report for this job were needed. These corrections have been incorporated into the revised report.

Please be assured that corrective actions have been put in place to address this matter and prevent a recurrence.

We apologize for any inconvenience that this issue may have caused. Please don't hesitate to contact us if we can be of further assistance.

Sincerely,

H. (Brad) Madadian

Regional Laboratory Director
SGS Accutest Inc. - Marlborough

SGS ACCUTEST IS PART OF SGS, THE WORLD'S LEADING INSPECTION, VERIFICATION, TESTING AND CERTIFICATION COMPANY.

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Sample Summary

Shell Oil

Job No: MC34459

URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
MC34459-1	10/17/14	00:00	SVMM	10/18/14	AQ	Trip Blank Water	TB-ROX-101714 HCL
MC34459-2	10/17/14	00:00	SVMM	10/18/14	AQ	Trip Blank Water	TB-ROX-101714 ST
MC34459-3	10/17/14	11:45	SVMM	10/18/14	AQ	Ground Water	P114-ROX-101714
MC34459-4	10/17/14	14:50	SVMM	10/18/14	AQ	Ground Water	T12-ROX-101714

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Shell Oil **Job No** MC34459

Site: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Centra **Report Date** 11/4/2016 9:44:59 AM

2 Sample(s), 2 Trip Blank(s) and 0 Field Blank(s) were collected on 10/17/2014 and were received at SGS Accutest New England on 10/18/2014 properly preserved, at 1.7 Deg. C and intact. These Samples received a job number of MC34459. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report. 1-Chlorohexane, Benzenethiol, Dibenz(a,h)acridine, Indene and Quinoline were searched in the library search and reported only if detections were found.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260C

Matrix: AQ **Batch ID:** MSP2649

- All samples were analyzed within the recommended method holding time.
- Sample(s) MC34461-2MS, MC34461-2MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Blank Spike Recovery(s) for 1,2,3-Trichlorobenzene, 2,2-Dichloropropane, 2-Chloroethyl vinyl ether, Chloromethane, Naphthalene, Vinyl Acetate are outside control limits.
- Matrix Spike Recovery(s) for 1,2,3-Trichlorobenzene, 2-Butanone (MEK), 2-Chloroethyl vinyl ether, 2-Hexanone, Acetone, Acrolein, Vinyl Acetate are outside control limits. Outside control limits due to possible matrix interference.
- Matrix Spike Duplicate Recovery(s) for 1,2,3-Trichlorobenzene, 2-Butanone (MEK), 2-Hexanone, Acetone, Vinyl Acetate, 2,2-Dichloropropane are outside control limits. High RPD due to possible matrix interference and/or sample non-homogeneity.
- RPD(s) for MSD for 2,2-Dichloropropane are outside control limits for sample MC34461-2MSD. High RPD due to possible matrix interference and/or sample non-homogeneity.
- Naphthalene: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased high.
- MC34459-3 for 4-Bromofluorobenzene: Outside control limits due to possible matrix interference. Confirmed by reanalysis.
- Vinyl Acetate, 1,2,3-Trichlorobenzene: Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.

Extractables by GCMS By Method SW846 8270D

Matrix: AQ **Batch ID:** OP40299

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) MC34100-11MS, MC34100-11MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Blank Spike Recovery(s) for 4-Nitrophenol, Pyridine are outside control limits.
- Matrix Spike Recovery(s) for 4-Nitrophenol, Phenol, Pyridine are outside control limits. Outside control limits due to possible matrix interference
- Matrix Spike Duplicate Recovery(s) for 4-Nitrophenol, Phenol, Pyridine are outside control limits. High RPD due to possible matrix interference and/or sample heterogeneity.
- RPD(s) for MSD for Pyridine are outside control limits for sample OP40299-MSD. High RPD due to possible matrix interference and/or sample heterogeneity.
- Initial Calibration Verification standard MSF3361-ICV3361 for 4-Chloroaniline exceeds 30% Difference but within acceptance criteria in continuing calibration check standard MSF3374-CC3361.

Extractables by GCMS By Method SW846 8270D BY SIM

Matrix: AQ **Batch ID:** OP40300

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) MC34100-12MS, MC34100-12MSD were used as the QC samples indicated.
- Calibration standard MSI3446-ICV3427 not associated with this job.

Volatiles by GC By Method SW846 8011

Matrix: AQ **Batch ID:** OP40305

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) MC34100-13MS, MC34100-13MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Continuing calibration check standard GBB3339-CC3339, file BB60070 for 1,2-Dibromoethane (sig#1), 4-Bromo-fluorobenzene (sig#1) 1,2-dibromo-3-chloropropane(sig#1 and sig#2), biased high. Associated samples are non-detect.
- Continuing calibration check standard GBB3339-CC3339, file BB60054 for 1,2-Dibromo-3-chloropropane (sig#1) exceeds criteria and reported from sig#2.
- Continuing calibration check standard GBB3339-CC3339, file BB60065 for 1,2-Dibromoethane (sig#1), 1,2-Dibromo-3-chloropropane (sig#1 and sig#2), biased high. Associated samples are non-detect.

SGS Accutest New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety.The Laboratory Director for SGS Accutest New England or assignee as verified by the signature on the cover page has authorized the release of this report(MC34459).

Summary of Hits

Job Number: MC34459
Account: Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL
Collected: 10/17/14

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
MC34459-1	TB-ROX-101714 HCL					
No hits reported in this sample.						
MC34459-2	TB-ROX-101714 ST					
No hits reported in this sample.						
MC34459-3	P114-ROX-101714					
n-Butylbenzene		5.2	5.0	1.1	ug/l	SW846 8260C
Ethylbenzene		0.45 J	1.0	0.25	ug/l	SW846 8260C
Methyl Tert Butyl Ether		9.8	1.0	0.22	ug/l	SW846 8260C
Methylene chloride		0.60 J	2.0	0.39	ug/l	SW846 8260C
n-Propylbenzene		0.87 J	5.0	0.49	ug/l	SW846 8260C
1,3,5-Trimethylbenzene		0.43 J	5.0	0.18	ug/l	SW846 8260C
m,p-Xylene		0.59 J	1.0	0.38	ug/l	SW846 8260C
Xylene (total)		0.59 J	1.0	0.30	ug/l	SW846 8260C
Acenaphthene		0.078 J	0.11	0.078	ug/l	SW846 8270D BY SIM
MC34459-4	T12-ROX-101714					
Benzene		1830	5.0	2.5	ug/l	SW846 8260C
Ethylbenzene		1750	10	2.5	ug/l	SW846 8260C
Isopropylbenzene		45.9 J	50	3.5	ug/l	SW846 8260C
Naphthalene [a]		184	50	6.9	ug/l	SW846 8260C
n-Propylbenzene		70.7	50	4.9	ug/l	SW846 8260C
Toluene		722	10	2.2	ug/l	SW846 8260C
1,2,4-Trimethylbenzene		244	50	3.0	ug/l	SW846 8260C
1,3,5-Trimethylbenzene		39.1 J	50	1.8	ug/l	SW846 8260C
m,p-Xylene		2250	10	3.8	ug/l	SW846 8260C
o-Xylene		114	10	3.0	ug/l	SW846 8260C
Xylene (total)		2360	10	3.0	ug/l	SW846 8260C
2-Methylphenol		3.0 J	11	0.25	ug/l	SW846 8270D
3&4-Methylphenol		5.9 J	11	0.52	ug/l	SW846 8270D
Phenol		15.4	5.6	0.34	ug/l	SW846 8270D
Di-n-butyl phthalate		0.61 J	5.6	0.19	ug/l	SW846 8270D
Acenaphthene		0.36	0.11	0.077	ug/l	SW846 8270D BY SIM
Acenaphthylene		0.072 J	0.11	0.055	ug/l	SW846 8270D BY SIM
Fluorene		0.31	0.11	0.11	ug/l	SW846 8270D BY SIM
1-Methylnaphthalene		22.0	2.2	0.56	ug/l	SW846 8270D BY SIM
2-Methylnaphthalene		36.9	2.2	0.56	ug/l	SW846 8270D BY SIM
Phenanthrene		0.79	0.056	0.014	ug/l	SW846 8270D BY SIM

(a) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased high.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	TB-ROX-101714 HCL		
Lab Sample ID:	MC34459-1	**Date Sampled:**	10/17/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/18/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P80965.D	1	10/31/14	JM	n/a	n/a	MSP2649
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	ND	0.50	0.25	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.47	ug/l	
75-25-2	Bromoform	ND	1.0	0.30	ug/l	
74-83-9	Bromomethane	ND	2.0	0.77	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.23	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.25	ug/l	
75-00-3	Chloroethane	ND	2.0	0.37	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.31	ug/l	
74-87-3	Chloromethane	ND	2.0	0.59	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.24	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.16	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.31	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.29	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.44	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.47	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-ROX-101714 HCL		
Lab Sample ID:	MC34459-1	**Date Sampled:**	10/17/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/18/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	0.45	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.38	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.22	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.39	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.29	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.30	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.29	ug/l	
108-88-3	Toluene	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene [a]	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.19	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.42	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.30	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.40	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.30	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.18	ug/l	
108-05-4	Vinyl Acetate [a]	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.45	ug/l	
	m,p-Xylene	ND	1.0	0.38	ug/l	
95-47-6	o-Xylene	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.30	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-ROX-101714 HCL		
Lab Sample ID:	MC34459-1	**Date Sampled:**	10/17/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/18/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		70-130%
2037-26-5	Toluene-D8	104%		70-130%
460-00-4	4-Bromofluorobenzene	106%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-ROX-101714 ST		
Lab Sample ID:	MC34459-2	**Date Sampled:**	10/17/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/18/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB60064.D	1	10/23/14	NK	10/21/14	OP40305	GBB3339
Run #2							

	Initial Volume	Final Volume
Run #1	36.4 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.014	0.0059	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.014	0.0059	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	59%		36-173%
460-00-4	Bromofluorobenzene (S)	66%		36-173%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P114-ROX-101714		
Lab Sample ID:	MC34459-3	**Date Sampled:**	10/17/14
Matrix:	AQ - Ground Water	**Date Received:**	10/18/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P80973.D	1	10/31/14	JM	n/a	n/a	MSP2649
Run #2 [a]	P81032.D	1	11/03/14	JM	n/a	n/a	MSP2651

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	ND	0.50	0.25	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.47	ug/l	
75-25-2	Bromoform	ND	1.0	0.30	ug/l	
74-83-9	Bromomethane	ND	2.0	0.77	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	5.2	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.23	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.25	ug/l	
75-00-3	Chloroethane	ND	2.0	0.37	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.31	ug/l	
74-87-3	Chloromethane	ND	2.0	0.59	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.24	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.16	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.31	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.29	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.44	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.47	ug/l	

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P114-ROX-101714		
Lab Sample ID:	MC34459-3	**Date Sampled:**	10/17/14
Matrix:	AQ - Ground Water	**Date Received:**	10/18/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	0.45	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.38	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	0.45	1.0	0.25	ug/l	J
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	9.8	1.0	0.22	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	0.60	2.0	0.39	ug/l	J
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	0.87	5.0	0.49	ug/l	J
100-42-5	Styrene	ND	5.0	0.29	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.30	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.29	ug/l	
108-88-3	Toluene	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene [b]	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.19	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.42	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.30	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.40	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.30	ug/l	
108-67-8	1,3,5-Trimethylbenzene	0.43	5.0	0.18	ug/l	J
108-05-4	Vinyl Acetate [b]	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.45	ug/l	
	m,p-Xylene	0.59	1.0	0.38	ug/l	J
95-47-6	o-Xylene	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	0.59	1.0	0.30	ug/l	J

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P114-ROX-101714		
Lab Sample ID:	MC34459-3	**Date Sampled:**	10/17/14
Matrix:	AQ - Ground Water	**Date Received:**	10/18/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%	96%	70-130%
2037-26-5	Toluene-D8	104%	105%	70-130%
460-00-4	4-Bromofluorobenzene	179% [c]	186% [c]	70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Confirmation run for surrogate recoveries.
(b) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.
(c) Outside control limits due to possible matrix interference. Confirmed by reanalysis.

ND = Not detected MDL = Method Detection Limit
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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P114-ROX-101714		
Lab Sample ID:	MC34459-3	**Date Sampled:**	10/17/14
Matrix:	AQ - Ground Water	**Date Received:**	10/18/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F77022.D	1	10/24/14	MR	10/21/14	OP40299	MSF3374
Run #2							

	Initial Volume	Final Volume
Run #1	880 ml	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	11	2.8	ug/l	
95-57-8	2-Chlorophenol	ND	5.7	0.35	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	11	0.94	ug/l	
120-83-2	2,4-Dichlorophenol	ND	11	0.45	ug/l	
105-67-9	2,4-Dimethylphenol	ND	11	0.64	ug/l	
51-28-5	2,4-Dinitrophenol	ND	23	2.8	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	2.2	ug/l	
95-48-7	2-Methylphenol	ND	11	0.26	ug/l	
	3&4-Methylphenol	ND	11	0.53	ug/l	
88-75-5	2-Nitrophenol	ND	11	3.3	ug/l	
100-02-7	4-Nitrophenol	ND	23	0.61	ug/l	
87-86-5	Pentachlorophenol	ND	11	1.3	ug/l	
108-95-2	Phenol	ND	5.7	0.34	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	11	0.42	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	11	0.20	ug/l	
62-53-3	Aniline	ND	11	0.72	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.7	0.53	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.7	0.60	ug/l	
100-51-6	Benzyl Alcohol	ND	11	2.6	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.7	0.35	ug/l	
106-47-8	4-Chloroaniline	ND	11	0.63	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.7	0.33	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.7	0.40	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.7	0.38	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.7	0.29	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.7	0.27	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	11	0.52	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	11	0.34	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.7	0.30	ug/l	
132-64-9	Dibenzofuran	ND	2.3	0.29	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.7	0.20	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.7	0.32	ug/l	

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Report of Analysis

Client Sample ID:	P114-ROX-101714		
Lab Sample ID:	MC34459-3	**Date Sampled:**	10/17/14
Matrix:	AQ - Ground Water	**Date Received:**	10/18/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	5.7	0.23	ug/l	
131-11-3	Dimethyl phthalate	ND	5.7	0.39	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.3	0.38	ug/l	
118-74-1	Hexachlorobenzene	ND	5.7	0.33	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	11	1.5	ug/l	
67-72-1	Hexachloroethane	ND	5.7	0.34	ug/l	
78-59-1	Isophorone	ND	5.7	0.51	ug/l	
88-74-4	2-Nitroaniline	ND	11	0.45	ug/l	
99-09-2	3-Nitroaniline	ND	11	1.6	ug/l	
100-01-6	4-Nitroaniline	ND	11	2.5	ug/l	
98-95-3	Nitrobenzene	ND	5.7	0.44	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.7	1.1	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.7	0.46	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.7	0.22	ug/l	
110-86-1	Pyridine	ND	11	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	52%		15-110%
4165-62-2	Phenol-d5	36%		15-110%
118-79-6	2,4,6-Tribromophenol	91%		15-110%
4165-60-0	Nitrobenzene-d5	78%		30-130%
321-60-8	2-Fluorobiphenyl	69%		30-130%
1718-51-0	Terphenyl-d14	89%		30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P114-ROX-101714		
Lab Sample ID:	MC34459-3	**Date Sampled:**	10/17/14
Matrix:	AQ - Ground Water	**Date Received:**	10/18/14
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I92438.D	1	10/24/14	WK	10/21/14	OP40300	MSI3445
Run #2							

	Initial Volume	Final Volume
Run #1	880 ml	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.078	0.11	0.078	ug/l	J
208-96-8	Acenaphthylene	ND	0.11	0.056	ug/l	
120-12-7	Anthracene	ND	0.11	0.10	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.057	0.022	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.11	0.033	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.057	0.036	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.11	0.031	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.11	0.044	ug/l	
218-01-9	Chrysene	ND	0.11	0.027	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.11	0.036	ug/l	
206-44-0	Fluoranthene	ND	0.11	0.046	ug/l	
86-73-7	Fluorene	ND	0.11	0.11	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.11	0.035	ug/l	
90-12-0	1-Methylnaphthalene	ND	2.3	0.57	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.3	0.57	ug/l	
85-01-8	Phenanthrene	ND	0.057	0.014	ug/l	
129-00-0	Pyrene	ND	0.11	0.044	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	82%		30-130%
321-60-8	2-Fluorobiphenyl	75%		30-130%
1718-51-0	Terphenyl-d14	82%		30-130%

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Report of Analysis

Client Sample ID:	P114-ROX-101714		
Lab Sample ID:	MC34459-3	**Date Sampled:**	10/17/14
Matrix:	AQ - Ground Water	**Date Received:**	10/18/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB60066.D	1	10/23/14	NK	10/21/14	OP40305	GBB3339
Run #2							

	Initial Volume	Final Volume
Run #1	36.9 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.014	0.0058	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.014	0.0058	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	61%		36-173%
460-00-4	Bromofluorobenzene (S)	55%		36-173%

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	T12-ROX-101714		
Lab Sample ID:	MC34459-4	**Date Sampled:**	10/17/14
Matrix:	AQ - Ground Water	**Date Received:**	10/18/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P80974.D	10	10/31/14	JM	n/a	n/a	MSP2649
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	100	25	ug/l	
107-02-8	Acrolein	ND	250	60	ug/l	
107-13-1	Acrylonitrile	ND	50	21	ug/l	
71-43-2	Benzene	1830	5.0	2.5	ug/l	
108-86-1	Bromobenzene	ND	50	3.5	ug/l	
74-97-5	Bromochloromethane	ND	50	4.2	ug/l	
75-27-4	Bromodichloromethane	ND	10	4.7	ug/l	
75-25-2	Bromoform	ND	10	3.0	ug/l	
74-83-9	Bromomethane	ND	20	7.7	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	25	ug/l	
104-51-8	n-Butylbenzene	ND	50	11	ug/l	
135-98-8	sec-Butylbenzene	ND	50	4.2	ug/l	
98-06-6	tert-Butylbenzene	ND	50	3.9	ug/l	
75-15-0	Carbon disulfide	ND	50	4.6	ug/l	
56-23-5	Carbon tetrachloride	ND	10	2.3	ug/l	
108-90-7	Chlorobenzene	ND	10	2.5	ug/l	
75-00-3	Chloroethane	ND	20	3.7	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	50	33	ug/l	
67-66-3	Chloroform	ND	10	3.1	ug/l	
74-87-3	Chloromethane	ND	20	5.9	ug/l	
95-49-8	o-Chlorotoluene	ND	50	3.8	ug/l	
106-43-4	p-Chlorotoluene	ND	50	4.5	ug/l	
124-48-1	Dibromochloromethane	ND	10	2.6	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	10	2.4	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	10	1.6	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	10	3.1	ug/l	
75-71-8	Dichlorodifluoromethane	ND	20	7.1	ug/l	
75-34-3	1,1-Dichloroethane	ND	10	2.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	3.3	ug/l	
75-35-4	1,1-Dichloroethene	ND	10	2.9	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	10	4.4	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	10	4.7	ug/l	

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Report of Analysis

Client Sample ID:	T12-ROX-101714		
Lab Sample ID:	MC34459-4	**Date Sampled:**	10/17/14
Matrix:	AQ - Ground Water	**Date Received:**	10/18/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	20	4.5	ug/l	
142-28-9	1,3-Dichloropropane	ND	50	8.9	ug/l	
594-20-7	2,2-Dichloropropane	ND	50	13	ug/l	
563-58-6	1,1-Dichloropropene	ND	50	4.7	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	4.2	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	3.8	ug/l	
123-91-1	1,4-Dioxane	ND	250	110	ug/l	
97-63-2	Ethyl methacrylate	ND	50	5.0	ug/l	
100-41-4	Ethylbenzene	1750	10	2.5	ug/l	
87-68-3	Hexachlorobutadiene	ND	50	17	ug/l	
591-78-6	2-Hexanone	ND	50	16	ug/l	
98-82-8	Isopropylbenzene	45.9	50	3.5	ug/l	J
99-87-6	p-Isopropyltoluene	ND	50	3.7	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	10	2.2	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	50	9.9	ug/l	
74-95-3	Methylene bromide	ND	50	5.2	ug/l	
75-09-2	Methylene chloride	ND	20	3.9	ug/l	
91-20-3	Naphthalene [a]	184	50	6.9	ug/l	
103-65-1	n-Propylbenzene	70.7	50	4.9	ug/l	
100-42-5	Styrene	ND	50	2.9	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	10	4.3	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	3.0	ug/l	
127-18-4	Tetrachloroethene	ND	10	2.9	ug/l	
108-88-3	Toluene	722	10	2.2	ug/l	
87-61-6	1,2,3-Trichlorobenzene [b]	ND	50	6.8	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	50	1.9	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	10	4.2	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	10	3.0	ug/l	
79-01-6	Trichloroethene	ND	10	4.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	5.5	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	50	8.1	ug/l	
95-63-6	1,2,4-Trimethylbenzene	244	50	3.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	39.1	50	1.8	ug/l	J
108-05-4	Vinyl Acetate [b]	ND	50	7.1	ug/l	
75-01-4	Vinyl chloride	ND	10	4.5	ug/l	
	m,p-Xylene	2250	10	3.8	ug/l	
95-47-6	o-Xylene	114	10	3.0	ug/l	
1330-20-7	Xylene (total)	2360	10	3.0	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	T12-ROX-101714		
Lab Sample ID:	MC34459-4	**Date Sampled:**	10/17/14
Matrix:	AQ - Ground Water	**Date Received:**	10/18/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		70-130%
2037-26-5	Toluene-D8	102%		70-130%
460-00-4	4-Bromofluorobenzene	93%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased high.
(b) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	T12-ROX-101714		
Lab Sample ID:	MC34459-4	**Date Sampled:**	10/17/14
Matrix:	AQ - Ground Water	**Date Received:**	10/18/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F77023.D	1	10/24/14	MR	10/21/14	OP40299	MSF3374
Run #2							

	Initial Volume	Final Volume
Run #1	900 ml	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	11	2.8	ug/l	
95-57-8	2-Chlorophenol	ND	5.6	0.34	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	11	0.92	ug/l	
120-83-2	2,4-Dichlorophenol	ND	11	0.44	ug/l	
105-67-9	2,4-Dimethylphenol	ND	11	0.62	ug/l	
51-28-5	2,4-Dinitrophenol	ND	22	2.8	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	2.1	ug/l	
95-48-7	2-Methylphenol	3.0	11	0.25	ug/l	J
	3&4-Methylphenol	5.9	11	0.52	ug/l	J
88-75-5	2-Nitrophenol	ND	11	3.2	ug/l	
100-02-7	4-Nitrophenol	ND	22	0.59	ug/l	
87-86-5	Pentachlorophenol	ND	11	1.2	ug/l	
108-95-2	Phenol	15.4	5.6	0.34	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	11	0.41	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	11	0.19	ug/l	
62-53-3	Aniline	ND	11	0.71	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.6	0.52	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.6	0.59	ug/l	
100-51-6	Benzyl Alcohol	ND	11	2.5	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.6	0.35	ug/l	
106-47-8	4-Chloroaniline	ND	11	0.62	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.6	0.32	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.6	0.39	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.6	0.37	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.6	0.28	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.6	0.27	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	11	0.51	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	11	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.6	0.30	ug/l	
132-64-9	Dibenzofuran	ND	2.2	0.29	ug/l	
84-74-2	Di-n-butyl phthalate	0.61	5.6	0.19	ug/l	J
117-84-0	Di-n-octyl phthalate	ND	5.6	0.31	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	T12-ROX-101714		
Lab Sample ID:	MC34459-4	**Date Sampled:**	10/17/14
Matrix:	AQ - Ground Water	**Date Received:**	10/18/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	5.6	0.22	ug/l	
131-11-3	Dimethyl phthalate	ND	5.6	0.38	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.2	0.37	ug/l	
118-74-1	Hexachlorobenzene	ND	5.6	0.32	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	11	1.4	ug/l	
67-72-1	Hexachloroethane	ND	5.6	0.34	ug/l	
78-59-1	Isophorone	ND	5.6	0.50	ug/l	
88-74-4	2-Nitroaniline	ND	11	0.44	ug/l	
99-09-2	3-Nitroaniline	ND	11	1.5	ug/l	
100-01-6	4-Nitroaniline	ND	11	2.4	ug/l	
98-95-3	Nitrobenzene	ND	5.6	0.43	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.6	1.1	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.6	0.45	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.6	0.21	ug/l	
110-86-1	Pyridine	ND	11	0.57	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	67%		15-110%
4165-62-2	Phenol-d5	41%		15-110%
118-79-6	2,4,6-Tribromophenol	101%		15-110%
4165-60-0	Nitrobenzene-d5	87%		30-130%
321-60-8	2-Fluorobiphenyl	76%		30-130%
1718-51-0	Terphenyl-d14	99%		30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	T12-ROX-101714		
Lab Sample ID:	MC34459-4	**Date Sampled:**	10/17/14
Matrix:	AQ - Ground Water	**Date Received:**	10/18/14
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I92447.D	1	10/24/14	WK	10/21/14	OP40300	MSI3446
Run #2							

	Initial Volume	Final Volume
Run #1	900 ml	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.36	0.11	0.077	ug/l	
208-96-8	Acenaphthylene	0.072	0.11	0.055	ug/l	J
120-12-7	Anthracene	ND	0.11	0.10	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.056	0.022	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.11	0.032	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.056	0.035	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.11	0.030	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.11	0.043	ug/l	
218-01-9	Chrysene	ND	0.11	0.026	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.11	0.035	ug/l	
206-44-0	Fluoranthene	ND	0.11	0.045	ug/l	
86-73-7	Fluorene	0.31	0.11	0.11	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.11	0.034	ug/l	
90-12-0	1-Methylnaphthalene	22.0	2.2	0.56	ug/l	
91-57-6	2-Methylnaphthalene	36.9	2.2	0.56	ug/l	
85-01-8	Phenanthrene	0.79	0.056	0.014	ug/l	
129-00-0	Pyrene	ND	0.11	0.043	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	87%		30-130%
321-60-8	2-Fluorobiphenyl	81%		30-130%
1718-51-0	Terphenyl-d14	86%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	T12-ROX-101714		
Lab Sample ID:	MC34459-4	**Date Sampled:**	10/17/14
Matrix:	AQ - Ground Water	**Date Received:**	10/18/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB60067.D	1	10/23/14	NK	10/21/14	OP40305	GBB3339
Run #2							

	Initial Volume	Final Volume
Run #1	36.7 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.014	0.0058	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.014	0.0058	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	57%		36-173%
460-00-4	Bromofluorobenzene (S)	82%		36-173%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

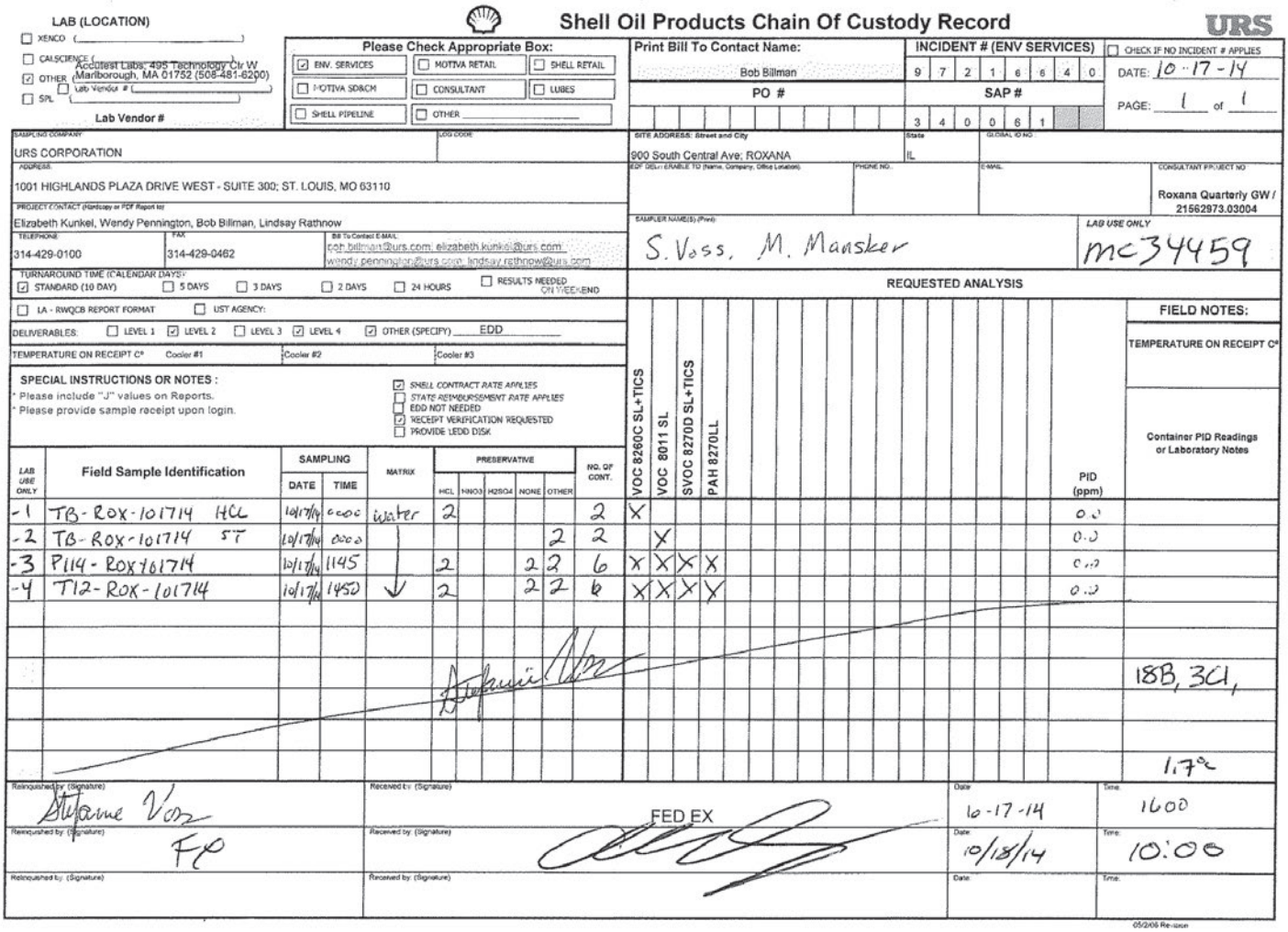
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody



Shell Oil Products Chain Of Custody Record

URS

LAB (LOCATION)
☐ XENCO (_____)
☐ CALSCIENCE (_____)
☑ OTHER Accutest Labs, 495 Technology Ctr W Marlborough, MA 01752 (508-481-6200)
☐ SPL ☐ Lab Vendor # (_____)
Lab Vendor #

Please Check Appropriate Box:
☑ ENV. SERVICES ☐ MOTIVA RETAIL ☐ SHELL RETAIL
☐ MOTIVA SD&CM ☐ CONSULTANT ☐ LUBES
☐ SHELL PIPELINE ☐ OTHER _____

Print Bill To Contact Name: Bob Billman
INCIDENT # (ENV SERVICES): 9 7 2 1 6 6 4 0
☐ CHECK IF NO INCIDENT # APPLIES
DATE: 10-17-14
PO #
SAP #: 3 4 0 0 6 1
PAGE: 1 of 1

SAMPLING COMPANY: URS CORPORATION
LOG CODE:
SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA
State: IL
GLOBAL ID NO.:
ADDRESS: 1001 HIGHLANDS PLAZA DRIVE WEST - SUITE 300; ST. LOUIS, MO 63110
EDF DELIVERABLE TO (Name, Company, Office Location):
PHONE NO.:
E-MAIL:
CONSULTANT PROJECT NO: Roxana Quarterly GW / 21562973.03004
PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Wendy Pennington, Bob Billman, Lindsay Rathnow
SAMPLER NAME(S) (Print): S. Voss, M. Manske
LAB USE ONLY: MC34459
TELEPHONE: 314-429-0100
FAX: 314-429-0462
Bill To Contact E-MAIL: bob.billman@urs.com; elizabeth.kunkel@urs.com; wendy.pennington@urs.com; lindsay.rathnow@urs.com
TURNAROUND TIME (CALENDAR DAYS): ☑ STANDARD (10 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND
☐ LA - RWQCB REPORT FORMAT ☐ LIST AGENCY:
DELIVERABLES: ☐ LEVEL 1 ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) EDD
TEMPERATURE ON RECEIPT C°: Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :
* Please include "J" values on Reports.
* Please provide sample receipt upon login.
☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260C SL+TICS	VOC 8011 SL	SVOC 8270D SL+TICS	PAH 8270LL	PID (ppm)	Container PID Readings or Laboratory Notes
-1	TB-ROX-101714 HCL	10/17/14	0000	water	2					2	X				0.0	
-2	TB-ROX-101714 ST	10/17/14	0000						2	2		X			0.0	
-3	P114-ROX101714	10/17/14	1145		2			2	2	6	X	X	X	X	0.0	
-4	T12-ROX-101714	10/17/14	1450	↓	2			2	2	6	X	X	X	X	0.0	
																18B, 3C1,
																1.7°

FIELD NOTES:
TEMPERATURE ON RECEIPT C°

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
Stephanie Voss	FED EX	10-17-14	1600
FP		10/18/14	10:00

05/2008 Revision

5.1 5

MC34459: Chain of Custody
Page 1 of 2

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: MC34459 **Client:** URS **Project:** 900 SOUTH CENTRAL

Date / Time Received: 10/18/2014 10 00 00 AM **Delivery Method:** **Airbill #'s:**

Cooler Temps (Initial/Adjusted): #1 (1 7/1 7)

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Thermometer D:	G1;		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control_Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☑		☐	☐
2. Trip Blank listed on COC:	☑		☐	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

Accutest Laboratories
V:(508) 481-6200

495 Technology Center West, Bldg One
F: (508) 481-7753

Marlborough, MA 01752
www/accutest.com

Internal Sample Tracking Chronicle

Shell Oil

Job No: MC34459

URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC34459-1 Collected: 17-OCT-14 00:00 By: SVMM Received: 18-OCT-14 By: TB-ROX-101714 HCL						
MC34459-1	SW846 8260C	31-OCT-14 12:21	JM			V8260SL+
MC34459-2 Collected: 17-OCT-14 00:00 By: SVMM Received: 18-OCT-14 By: TB-ROX-101714 ST						
MC34459-2	SW846 8011	23-OCT-14 21:37	NK	21-OCT-14	FC	V8011SL
MC34459-3 Collected: 17-OCT-14 11:45 By: SVMM Received: 18-OCT-14 By: P114-ROX-101714						
MC34459-3	SW846 8011	23-OCT-14 22:13	NK	21-OCT-14	FC	V8011SL
MC34459-3	SW846 8270D BY SIM	24-OCT-14 01:52	WK	21-OCT-14	AZ	B8270SIMSL
MC34459-3	SW846 8270D	24-OCT-14 12:17	MR	21-OCT-14	AZ	AB8270SL+
MC34459-3	SW846 8260C	31-OCT-14 16:18	JM			V8260SL+
MC34459-3	SW846 8260C	03-NOV-14 15:10	JM			V8260SL+
MC34459-4 Collected: 17-OCT-14 14:50 By: SVMM Received: 18-OCT-14 By: T12-ROX-101714						
MC34459-4	SW846 8011	23-OCT-14 22:31	NK	21-OCT-14	FC	V8011SL
MC34459-4	SW846 8270D BY SIM	24-OCT-14 09:25	WK	21-OCT-14	AZ	B8270SIMSL
MC34459-4	SW846 8270D	24-OCT-14 12:40	MR	21-OCT-14	AZ	AB8270SL+
MC34459-4	SW846 8260C	31-OCT-14 16:49	JM			V8260SL+

SGS Accutest Internal Chain of Custody

Job Number: MC34459
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL
Received: 10/18/14

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC34459-1.1	VOC Ref #3	Jaime Maslowski	10/31/14 11:59	Retrieve from Storage
MC34459-1.1	Jaime Maslowski	GCMSP	10/31/14 11:59	Load on Instrument
MC34459-1.1	GCMSP	Jaime Maslowski	11/03/14 10:31	Unload from Instrument
MC34459-1.1	Jaime Maslowski	VOC Ref #3	11/03/14 10:31	Return to Storage
MC34459-1.1	Scott Parsick		12/18/14 12:16	Disposed
MC34459-2.1	VOC Ref #3	Marc Tahtamoni	10/21/14 14:43	Retrieve from Storage
MC34459-2.1	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34459-3.2	Walk In Ref #22	Alireza Zeighami	10/21/14 11:13	Retrieve from Storage
MC34459-3.2	Alireza Zeighami		10/21/14 16:33	Depleted
MC34459-3.3	VOC Ref #3	Jaime Maslowski	10/31/14 11:59	Retrieve from Storage
MC34459-3.3	Jaime Maslowski	GCMSP	10/31/14 11:59	Load on Instrument
MC34459-3.3	GCMSP	Jaime Maslowski	11/03/14 10:31	Unload from Instrument
MC34459-3.3	Jaime Maslowski	VOC Ref #3	11/03/14 10:31	Return to Storage
MC34459-3.3	Scott Parsick		12/18/14 12:16	Disposed
MC34459-3.4	VOC Ref #3	Jaime Maslowski	11/03/14 12:46	Retrieve from Storage
MC34459-3.4	Jaime Maslowski	GCMSP	11/03/14 12:46	Load on Instrument
MC34459-3.4	GCMSP	Jaime Maslowski	11/04/14 10:05	Unload from Instrument
MC34459-3.4	Jaime Maslowski	VOC Ref #3	11/04/14 10:06	Return to Storage
MC34459-3.4	Scott Parsick		12/18/14 12:16	Disposed
MC34459-3.5	VOC Ref #3	Marc Tahtamoni	10/21/14 14:43	Retrieve from Storage
MC34459-3.5	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34459-4.1	Walk In Ref #22	Alireza Zeighami	10/21/14 11:13	Retrieve from Storage
MC34459-4.1	Alireza Zeighami		10/21/14 16:33	Depleted
MC34459-4.4	VOC Ref #3	Jaime Maslowski	10/31/14 11:59	Retrieve from Storage
MC34459-4.4	Jaime Maslowski	GCMSP	10/31/14 11:59	Load on Instrument
MC34459-4.4	GCMSP	Jaime Maslowski	11/03/14 10:31	Unload from Instrument
MC34459-4.4	Jaime Maslowski	VOC Ref #3	11/03/14 10:31	Return to Storage
MC34459-4.4	Scott Parsick		12/18/14 12:16	Disposed
MC34459-4.6	VOC Ref #3	Marc Tahtamoni	10/21/14 14:43	Retrieve from Storage
MC34459-4.6	Marc Tahtamoni		11/11/14 17:36	Depleted

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: MC34459
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSP2649-MB	P80964.D	1	10/31/14	JM	n/a	n/a	MSP2649

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34459-1, MC34459-3, MC34459-4

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	ND	0.50	0.25	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.47	ug/l	
75-25-2	Bromoform	ND	1.0	0.30	ug/l	
74-83-9	Bromomethane	ND	2.0	0.77	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.23	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.25	ug/l	
75-00-3	Chloroethane	ND	2.0	0.37	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.31	ug/l	
74-87-3	Chloromethane	ND	2.0	0.59	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.24	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.16	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.31	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.29	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.44	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.47	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.45	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	

Method Blank Summary

Job Number: MC34459
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSP2649-MB	P80964.D	1	10/31/14	JM	n/a	n/a	MSP2649

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34459-1, MC34459-3, MC34459-4

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.38	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.22	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.39	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.29	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.30	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.29	ug/l	
108-88-3	Toluene	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.19	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.42	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.30	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.40	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.30	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.18	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.45	ug/l	
	m,p-Xylene	ND	1.0	0.38	ug/l	
95-47-6	o-Xylene	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.30	ug/l	

Method Blank Summary

Job Number: MC34459
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSP2649-MB	P80964.D	1	10/31/14	JM	n/a	n/a	MSP2649

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34459-1, MC34459-3, MC34459-4

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	98%	70-130%
2037-26-5	Toluene-D8	105%	70-130%
460-00-4	4-Bromofluorobenzene	104%	70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Method Blank Summary

Job Number: MC34459
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSP2649-MB1	P80997.D	1	11/02/14	JM	n/a	n/a	MSP2649

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34461-2MS

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	ND	0.50	0.25	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.47	ug/l	
75-25-2	Bromoform	ND	1.0	0.30	ug/l	
74-83-9	Bromomethane	ND	2.0	0.77	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.23	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.25	ug/l	
75-00-3	Chloroethane	ND	2.0	0.37	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.31	ug/l	
74-87-3	Chloromethane	ND	2.0	0.59	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.24	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.16	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.31	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.29	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.44	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.47	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.45	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	

Method Blank Summary

Job Number: MC34459
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSP2649-MB1	P80997.D	1	11/02/14	JM	n/a	n/a	MSP2649

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34461-2MS

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.38	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.22	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.39	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.29	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.30	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.29	ug/l	
108-88-3	Toluene	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.19	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.42	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.30	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.40	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.30	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.18	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.45	ug/l	
	m,p-Xylene	ND	1.0	0.38	ug/l	
95-47-6	o-Xylene	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.30	ug/l	

Method Blank Summary

Job Number: MC34459
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSP2649-MB1	P80997.D	1	11/02/14	JM	n/a	n/a	MSP2649

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34461-2MS

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	98%	70-130%
2037-26-5	Toluene-D8	105%	70-130%
460-00-4	4-Bromofluorobenzene	102%	70-130%

Blank Spike Summary

Job Number: MC34459
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSP2649-BS	P80962.D	1	10/31/14	JM	n/a	n/a	MSP2649

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34459-1, MC34459-3, MC34459-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	51.3	103	70-130
107-02-8	Acrolein	250	256	102	70-130
107-13-1	Acrylonitrile	50	45.2	90	70-130
71-43-2	Benzene	50	51.2	102	70-130
108-86-1	Bromobenzene	50	50.8	102	70-130
74-97-5	Bromochloromethane	50	54.4	109	70-130
75-27-4	Bromodichloromethane	50	60.7	121	70-130
75-25-2	Bromoform	50	60.6	121	70-130
74-83-9	Bromomethane	50	54.2	108	70-130
78-93-3	2-Butanone (MEK)	50	43.3	87	70-130
104-51-8	n-Butylbenzene	50	51.4	103	70-130
135-98-8	sec-Butylbenzene	50	55.7	111	70-130
98-06-6	tert-Butylbenzene	50	51.9	104	70-130
75-15-0	Carbon disulfide	50	46.6	93	70-130
56-23-5	Carbon tetrachloride	50	62.1	124	70-130
108-90-7	Chlorobenzene	50	50.2	100	70-130
75-00-3	Chloroethane	50	58.5	117	70-130
110-75-8	2-Chloroethyl vinyl ether	50	66.4	133* [a]	70-130
67-66-3	Chloroform	50	53.1	106	70-130
74-87-3	Chloromethane	50	69.3	139* [a]	70-130
95-49-8	o-Chlorotoluene	50	50.7	101	70-130
106-43-4	p-Chlorotoluene	50	50.7	101	70-130
124-48-1	Dibromochloromethane	50	59.4	119	70-130
95-50-1	1,2-Dichlorobenzene	50	51.4	103	70-130
541-73-1	1,3-Dichlorobenzene	50	54.3	109	70-130
106-46-7	1,4-Dichlorobenzene	50	53.5	107	70-130
75-71-8	Dichlorodifluoromethane	50	50.6	101	70-130
75-34-3	1,1-Dichloroethane	50	57.2	114	70-130
107-06-2	1,2-Dichloroethane	50	56.0	112	70-130
75-35-4	1,1-Dichloroethene	50	49.8	100	70-130
156-59-2	cis-1,2-Dichloroethene	50	49.1	98	70-130
156-60-5	trans-1,2-Dichloroethene	50	49.8	100	70-130
78-87-5	1,2-Dichloropropane	50	54.3	109	70-130
142-28-9	1,3-Dichloropropane	50	52.0	104	70-130
594-20-7	2,2-Dichloropropane	50	67.5	135* [a]	70-130
563-58-6	1,1-Dichloropropene	50	56.8	114	70-130

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34459
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSP2649-BS	P80962.D	1	10/31/14	JM	n/a	n/a	MSP2649

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34459-1, MC34459-3, MC34459-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-01-5	cis-1,3-Dichloropropene	50	49.2	98	70-130
10061-02-6	trans-1,3-Dichloropropene	50	56.8	114	70-130
123-91-1	1,4-Dioxane	125	127	102	70-130
97-63-2	Ethyl methacrylate	50	48.0	96	77-137
100-41-4	Ethylbenzene	50	50.4	101	70-130
87-68-3	Hexachlorobutadiene	50	51.5	103	70-130
591-78-6	2-Hexanone	50	51.0	102	70-130
98-82-8	Isopropylbenzene	50	51.7	103	70-130
99-87-6	p-Isopropyltoluene	50	57.0	114	70-130
1634-04-4	Methyl Tert Butyl Ether	50	44.6	89	70-130
108-10-1	4-Methyl-2-pentanone (MIBK)	50	49.0	98	70-130
74-95-3	Methylene bromide	50	51.6	103	70-130
75-09-2	Methylene chloride	50	48.0	96	70-130
91-20-3	Naphthalene	50	67.0	134* [a]	70-130
103-65-1	n-Propylbenzene	50	53.7	107	70-130
100-42-5	Styrene	50	52.0	104	70-130
630-20-6	1,1,1,2-Tetrachloroethane	50	56.1	112	70-130
79-34-5	1,1,2,2-Tetrachloroethane	50	49.3	99	70-130
127-18-4	Tetrachloroethene	50	55.5	111	70-130
108-88-3	Toluene	50	51.5	103	70-130
87-61-6	1,2,3-Trichlorobenzene	50	31.1	62* [a]	70-130
120-82-1	1,2,4-Trichlorobenzene	50	46.5	93	70-130
71-55-6	1,1,1-Trichloroethane	50	60.5	121	70-130
79-00-5	1,1,2-Trichloroethane	50	53.5	107	70-130
79-01-6	Trichloroethene	50	54.7	109	70-130
75-69-4	Trichlorofluoromethane	50	49.1	98	70-130
96-18-4	1,2,3-Trichloropropane	50	49.7	99	70-130
95-63-6	1,2,4-Trimethylbenzene	50	55.7	111	70-130
108-67-8	1,3,5-Trimethylbenzene	50	53.1	106	70-130
108-05-4	Vinyl Acetate	50	34.3	69* [a]	70-130
75-01-4	Vinyl chloride	50	51.9	104	70-130
	m,p-Xylene	100	101	101	70-130
95-47-6	o-Xylene	50	50.7	101	70-130
1330-20-7	Xylene (total)	150	152	101	70-130

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34459
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSP2649-BS	P80962.D	1	10/31/14	JM	n/a	n/a	MSP2649

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34459-1, MC34459-3, MC34459-4

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	100%	70-130%
2037-26-5	Toluene-D8	103%	70-130%
460-00-4	4-Bromofluorobenzene	84%	70-130%

(a) Outside control limits. Blank Spike meets program technical requirements.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34459
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34461-2MS	P80998.D	5	11/02/14	JM	n/a	n/a	MSP2649
MC34461-2MSD	P80975.D	5	10/31/14	JM	n/a	n/a	MSP2649
MC34461-2	P80968.D	1	10/31/14	JM	n/a	n/a	MSP2649

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34459-1, MC34459-3, MC34459-4

CAS No.	Compound	MC34461-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		250	123	49* [a]	250	108	43* [a]	13	70-130/30
107-02-8	Acrolein	ND		1250	821	66* [a]	1250	880	70	7	70-130/30
107-13-1	Acrylonitrile	ND		250	214	86	250	210	84	2	70-130/30
71-43-2	Benzene	ND		250	261	104	250	259	104	1	70-130/30
108-86-1	Bromobenzene	ND		250	244	98	250	238	95	2	70-130/30
74-97-5	Bromochloromethane	ND		250	280	112	250	265	106	6	70-130/30
75-27-4	Bromodichloromethane	ND		250	313	125	250	301	120	4	70-130/30
75-25-2	Bromoform	ND		250	306	122	250	304	122	1	70-130/30
74-83-9	Bromomethane	ND		250	245	98	250	187	75	27	70-130/30
78-93-3	2-Butanone (MEK)	ND		250	155	62* [a]	250	163	65* [a]	5	70-130/30
104-51-8	n-Butylbenzene	ND		250	227	91	250	241	96	6	70-130/30
135-98-8	sec-Butylbenzene	ND		250	268	107	250	268	107	0	70-130/30
98-06-6	tert-Butylbenzene	ND		250	252	101	250	244	98	3	70-130/30
75-15-0	Carbon disulfide	ND		250	230	92	250	227	91	1	70-130/30
56-23-5	Carbon tetrachloride	ND		250	313	125	250	299	120	5	70-130/30
108-90-7	Chlorobenzene	ND		250	253	101	250	247	99	2	70-130/30
75-00-3	Chloroethane	ND		250	277	111	250	281	112	1	70-130/30
110-75-8	2-Chloroethyl vinyl ether	ND		250	328	131* [a]	250	321	128	2	70-130/30
67-66-3	Chloroform	ND		250	273	109	250	264	106	3	70-130/30
74-87-3	Chloromethane	1.5	J	250	310	123	250	253	101	20	70-130/30
95-49-8	o-Chlorotoluene	ND		250	246	98	250	241	96	2	70-130/30
106-43-4	p-Chlorotoluene	ND		250	242	97	250	239	96	1	70-130/30
124-48-1	Dibromochloromethane	ND		250	298	119	250	290	116	3	70-130/30
95-50-1	1,2-Dichlorobenzene	ND		250	243	97	250	243	97	0	70-130/30
541-73-1	1,3-Dichlorobenzene	ND		250	255	102	250	254	102	0	70-130/30
106-46-7	1,4-Dichlorobenzene	ND		250	252	101	250	251	100	0	70-130/30
75-71-8	Dichlorodifluoromethane	ND		250	240	96	250	240	96	0	70-130/30
75-34-3	1,1-Dichloroethane	ND		250	290	116	250	281	112	3	70-130/30
107-06-2	1,2-Dichloroethane	ND		250	277	111	250	275	110	1	70-130/30
75-35-4	1,1-Dichloroethene	ND		250	267	107	250	261	104	2	70-130/30
156-59-2	cis-1,2-Dichloroethene	ND		250	258	103	250	245	98	5	70-130/30
156-60-5	trans-1,2-Dichloroethene	ND		250	248	99	250	247	99	0	70-130/30
78-87-5	1,2-Dichloropropane	ND		250	276	110	250	268	107	3	70-130/30
142-28-9	1,3-Dichloropropane	ND		250	260	104	250	256	102	2	70-130/30
594-20-7	2,2-Dichloropropane	ND		250	216	86	250	362	145* [a]	51* [b]	70-130/30
563-58-6	1,1-Dichloropropene	ND		250	289	116	250	287	115	1	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34459
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34461-2MS	P80998.D	5	11/02/14	JM	n/a	n/a	MSP2649
MC34461-2MSD	P80975.D	5	10/31/14	JM	n/a	n/a	MSP2649
MC34461-2	P80968.D	1	10/31/14	JM	n/a	n/a	MSP2649

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34459-1, MC34459-3, MC34459-4

CAS No.	Compound	MC34461-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-01-5	cis-1,3-Dichloropropene	ND		250	219	88	250	240	96	9	70-130/30
10061-02-6	trans-1,3-Dichloropropene	ND		250	244	98	250	274	110	12	70-130/30
123-91-1	1,4-Dioxane	ND		625	573	92	625	662	106	14	70-130/30
97-63-2	Ethyl methacrylate	ND		250	223	89	250	228	91	2	72-139/30
100-41-4	Ethylbenzene	ND		250	256	102	250	261	104	2	70-130/30
87-68-3	Hexachlorobutadiene	ND		250	229	92	250	243	97	6	70-130/30
591-78-6	2-Hexanone	ND		250	158	63* [a]	250	161	64* [a]	2	70-130/30
98-82-8	Isopropylbenzene	ND		250	251	100	250	249	100	1	70-130/30
99-87-6	p-Isopropyltoluene	ND		250	270	108	250	270	108	0	70-130/30
1634-04-4	Methyl Tert Butyl Ether	0.25	J	250	226	90	250	227	91	0	70-130/30
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		250	219	88	250	223	89	2	70-130/30
74-95-3	Methylene bromide	ND		250	261	104	250	255	102	2	70-130/30
75-09-2	Methylene chloride	ND		250	240	96	250	237	95	1	70-130/30
91-20-3	Naphthalene	ND		250	286	114	250	271	108	5	70-130/30
103-65-1	n-Propylbenzene	ND		250	257	103	250	257	103	0	70-130/30
100-42-5	Styrene	ND		250	259	104	250	253	101	2	70-130/30
630-20-6	1,1,1,2-Tetrachloroethane	ND		250	288	115	250	278	111	4	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	235	94	250	238	95	1	70-130/30
127-18-4	Tetrachloroethene	ND		250	279	112	250	277	111	1	70-130/30
108-88-3	Toluene	ND		250	259	104	250	258	103	0	70-130/30
87-61-6	1,2,3-Trichlorobenzene	ND		250	116	46* [a]	250	129	52* [a]	11	70-130/30
120-82-1	1,2,4-Trichlorobenzene	ND		250	176	70	250	206	82	16	70-130/30
71-55-6	1,1,1-Trichloroethane	ND		250	312	125	250	304	122	3	70-130/30
79-00-5	1,1,2-Trichloroethane	ND		250	262	105	250	263	105	0	70-130/30
79-01-6	Trichloroethene	ND		250	273	109	250	264	106	3	70-130/30
75-69-4	Trichlorofluoromethane	ND		250	225	90	250	233	93	3	70-130/30
96-18-4	1,2,3-Trichloropropane	ND		250	221	88	250	231	92	4	70-130/30
95-63-6	1,2,4-Trimethylbenzene	0.70	J	250	268	107	250	270	108	1	70-130/30
108-67-8	1,3,5-Trimethylbenzene	ND		250	255	102	250	253	101	1	70-130/30
108-05-4	Vinyl Acetate	ND		250	137	55* [a]	250	173	69* [a]	23	70-130/30
75-01-4	Vinyl chloride	ND		250	240	96	250	236	94	2	70-130/30
	m,p-Xylene	ND		500	510	102	500	518	104	2	70-130/30
95-47-6	o-Xylene	ND		250	260	104	250	252	101	3	70-130/30
1330-20-7	Xylene (total)	ND		750	769	103	750	770	103	0	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34459
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34461-2MS	P80998.D	5	11/02/14	JM	n/a	n/a	MSP2649
MC34461-2MSD	P80975.D	5	10/31/14	JM	n/a	n/a	MSP2649
MC34461-2	P80968.D	1	10/31/14	JM	n/a	n/a	MSP2649

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34459-1, MC34459-3, MC34459-4

CAS No.	Surrogate Recoveries	MS	MSD	MC34461-2	Limits
1868-53-7	Dibromofluoromethane	100%	100%	96%	70-130%
2037-26-5	Toluene-D8	103%	103%	105%	70-130%
460-00-4	4-Bromofluorobenzene	82%	81%	104%	70-130%

(a) Outside control limits due to possible matrix interference. Refer to Blank Spike.
(b) High RPD due to possible matrix interference and/or sample non-homogeneity.

* = Outside of Control Limits.

Volatile Internal Standard Area Summary

Job Number: MC34459
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSP2649-CC2633	**Injection Date:**	10/31/14
Lab File ID:	P80962.D	**Injection Time:**	10:43
Instrument ID:	GCMSP	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	799718	8.48	994598	9.32	502994	12.52	463848	15.08	124032	6.17
Upper Limit [a]	1599436	8.98	1989196	9.82	1005988	13.02	927696	15.58	248064	6.67
Lower Limit [b]	399859	7.98	497299	8.82	251497	12.02	231924	14.58	62016	5.67

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSP2649-BS	799718	8.48	994598	9.32	502994	12.52	463848	15.08	124032	6.17
MSP2649-MB	639335	8.48	802309	9.33	408379	12.53	283835	15.09	140810	6.20
MC34459-1	653375	8.48	822572	9.33	409738	12.53	284513	15.09	122915	6.20
ZZZZZZ	620768	8.48	792709	9.33	399147	12.53	277961	15.09	144260	6.19
GP18364-LB1	656129	8.48	817053	9.33	407554	12.53	275339	15.09	135370	6.19
MC34461-2	660605	8.48	810120	9.33	407713	12.53	280134	15.08	131496	6.20
ZZZZZZ	608299	8.48	756086	9.33	383006	12.53	262814	15.09	141960	6.20
ZZZZZZ	640664	8.48	789602	9.33	400550	12.53	291803	15.08	128803	6.19
ZZZZZZ	805201	8.48	964837	9.32	460250	12.52	456193	15.08	168610	6.19
ZZZZZZ	704371	8.48	863186	9.32	418971	12.53	382511	15.08	155094	6.19
MC34459-3	668685	8.48	830318	9.33	412516	12.53	332276	15.08	146538	6.18
MC34459-4	729069	8.48	906973	9.32	428543	12.52	382627	15.08	176489	6.19
MC34461-2MSD	759158	8.48	954288	9.32	486635	12.52	463675	15.08	144301	6.16
ZZZZZZ	652763	8.48	809386	9.33	412490	12.53	301159	15.09	130983	6.19
ZZZZZZ	637820	8.48	802893	9.33	402862	12.53	282831	15.09	137824	6.19
ZZZZZZ	611338	8.48	767709	9.33	391746	12.53	287398	15.09	109810	6.20
ZZZZZZ	667479	8.48	817610	9.32	409361	12.53	383659	15.08	128536	6.19
ZZZZZZ	661606	8.48	808100	9.32	403984	12.52	365521	15.08	116503	6.19
ZZZZZZ	678268	8.48	830921	9.33	416442	12.52	341449	15.08	141540	6.19
ZZZZZZ	743627	8.48	904598	9.32	431942	12.53	414398	15.08	147767	6.19
ZZZZZZ	661676	8.48	811205	9.33	411464	12.52	358136	15.08	154592	6.19

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Internal Standard Area Summary

Job Number: MC34459
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSP2650-CC2633	**Injection Date:**	11/02/14
Lab File ID:	P80993.D	**Injection Time:**	12:29
Instrument ID:	GCMSP	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	790518	8.48	975662	9.32	491167	12.52	455829	15.08	138954	6.17
Upper Limit [a]	1581036	8.98	1951324	9.82	982334	13.02	911658	15.58	277908	6.67
Lower Limit [b]	395259	7.98	487831	8.82	245584	12.02	227915	14.58	69477	5.67

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSP2649-BS1	785282	8.47	968783	9.31	481509	12.52	454631	15.08	113566	6.16
MSP2649-MB1	634288	8.48	810582	9.33	419308	12.53	294363	15.09	137610	6.19
MC34461-2MS	754014	8.47	948718	9.31	476638	12.53	458801	15.08	129610	6.16

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Internal Standard Area Summary

Job Number: MC34459
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSP2651-CC2633	Injection Date:	11/03/14
Lab File ID:	P81021.D	Injection Time:	09:24
Instrument ID:	GCMSP	Method:	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	783701	8.48	974875	9.32	494820	12.53	456073	15.08	124733	6.17
Upper Limit [a]	1567402	8.98	1949750	9.82	989640	13.03	912146	15.58	249466	6.67
Lower Limit [b]	391851	7.98	487438	8.82	247410	12.03	228037	14.58	62367	5.67
Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSP2651-BS	783701	8.48	974875	9.32	494820	12.53	456073	15.08	124733	6.17
MSP2651-MB	632230	8.48	783938	9.33	407038	12.53	252040	15.09	114451	6.21
ZZZZZZ	645247	8.48	799075	9.33	401992	12.53	265993	15.09	133288	6.18
ZZZZZZ	627256	8.48	794271	9.33	402335	12.53	270448	15.09	137246	6.20
ZZZZZZ	619969	8.48	785088	9.33	402148	12.53	263249	15.09	134412	6.19
ZZZZZZ	620041	8.49	798159	9.35	377028	12.54	231939	15.09	0[c]	0.00*
MC34551-4	583953	8.48	740782	9.33	380435	12.53	251778	15.09	135046	6.19
ZZZZZZ	596871	8.48	759855	9.33	384836	12.53	252783	15.09	134344	6.19
ZZZZZZ	627693	8.48	793065	9.33	404955	12.53	254198	15.09	114640	6.19
MC34459-3 [d]	619913	8.48	764000	9.33	386887	12.53	292215	15.08	158424	6.19
MC34551-4MS	708359	8.48	891376	9.32	450408	12.52	437390	15.08	122674	6.17
MC34551-4MSD	583113	8.48	731431	9.32	375722	12.53	360905	15.08	124906	6.17
ZZZZZZ	594515	8.48	743587	9.33	380993	12.53	269342	15.09	131496	6.19
MSP2651-ECC2633	715907	8.47	889158	9.31	451063	12.52	422599	15.08	104972	6.16

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Outside control limits. Target analytes not associated with this internal standard.
(d) Confirmation run for surrogate recoveries.

Volatile Surrogate Recovery Summary

Job Number: MC34459
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Method: SW846 8260C **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
MC34459-1	P80965.D	97	104	106
MC34459-3	P81032.D	96	105	186* [a]
MC34459-3	P80973.D	95	104	179* [a]
MC34459-4	P80974.D	96	102	93
MC34461-2MS	P80998.D	100	103	82
MC34461-2MSD	P80975.D	100	103	81
MSP2649-BS	P80962.D	100	103	84
MSP2649-MB	P80964.D	98	105	104
MSP2649-MB1	P80997.D	98	105	102

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	70-130%
S2 = Toluene-D8	70-130%
S3 = 4-Bromofluorobenzene	70-130%

(a) Outside control limits due to possible matrix interference. Confirmed by reanalysis.

GC/MS Semi-volatiles

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QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: MC34459
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40299-MB	F77013.D	1	10/24/14	MR	10/21/14	OP40299	MSF3374

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34459-3, MC34459-4

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	10	2.5	ug/l	
95-57-8	2-Chlorophenol	ND	5.0	0.31	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	10	0.83	ug/l	
120-83-2	2,4-Dichlorophenol	ND	10	0.40	ug/l	
105-67-9	2,4-Dimethylphenol	ND	10	0.56	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	2.5	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.9	ug/l	
95-48-7	2-Methylphenol	ND	10	0.23	ug/l	
	3&4-Methylphenol	ND	10	0.47	ug/l	
88-75-5	2-Nitrophenol	ND	10	2.9	ug/l	
100-02-7	4-Nitrophenol	ND	20	0.53	ug/l	
87-86-5	Pentachlorophenol	ND	10	1.1	ug/l	
108-95-2	Phenol	ND	5.0	0.30	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	10	0.37	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	10	0.18	ug/l	
62-53-3	Aniline	ND	10	0.64	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.0	0.47	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.0	0.53	ug/l	
100-51-6	Benzyl Alcohol	ND	10	2.3	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.31	ug/l	
106-47-8	4-Chloroaniline	ND	10	0.56	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.0	0.29	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.0	0.35	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.0	0.33	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.0	0.25	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.0	0.24	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	10	0.46	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	10	0.30	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.27	ug/l	
132-64-9	Dibenzofuran	ND	2.0	0.26	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.0	0.17	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.0	0.28	ug/l	
84-66-2	Diethyl phthalate	ND	5.0	0.20	ug/l	
131-11-3	Dimethyl phthalate	ND	5.0	0.34	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
118-74-1	Hexachlorobenzene	ND	5.0	0.29	ug/l	

Method Blank Summary

Job Number: MC34459
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40299-MB	F77013.D	1	10/24/14	MR	10/21/14	OP40299	MSF3374

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34459-3, MC34459-4

CAS No.	Compound	Result	RL	MDL	Units	Q
77-47-4	Hexachlorocyclopentadiene	ND	10	1.3	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.30	ug/l	
78-59-1	Isophorone	ND	5.0	0.45	ug/l	
88-74-4	2-Nitroaniline	ND	10	0.40	ug/l	
99-09-2	3-Nitroaniline	ND	10	1.4	ug/l	
100-01-6	4-Nitroaniline	ND	10	2.2	ug/l	
98-95-3	Nitrobenzene	ND	5.0	0.39	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.0	1.0	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.0	0.40	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.19	ug/l	
110-86-1	Pyridine	ND	10	0.52	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	51%	15-110%
4165-62-2	Phenol-d5	35%	15-110%
118-79-6	2,4,6-Tribromophenol	92%	15-110%
4165-60-0	Nitrobenzene-d5	81%	30-130%
321-60-8	2-Fluorobiphenyl	78%	30-130%
1718-51-0	Terphenyl-d14	96%	30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

Method Blank Summary

Job Number: MC34459
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40300-MB	I92423.D	1	10/23/14	WK	10/21/14	OP40300	MSI3445

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

MC34459-3, MC34459-4

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.069	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.050	ug/l	
120-12-7	Anthracene	ND	0.10	0.092	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.050	0.020	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.029	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.050	0.032	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.027	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.039	ug/l	
218-01-9	Chrysene	ND	0.10	0.024	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.032	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.041	ug/l	
86-73-7	Fluorene	ND	0.10	0.099	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.031	ug/l	
90-12-0	1-Methylnaphthalene	ND	2.0	0.50	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.0	0.50	ug/l	
85-01-8	Phenanthrene	ND	0.050	0.013	ug/l	
129-00-0	Pyrene	ND	0.10	0.038	ug/l	

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	87%	30-130%
321-60-8	2-Fluorobiphenyl	81%	30-130%
1718-51-0	Terphenyl-d14	83%	30-130%

Blank Spike Summary

Job Number: MC34459
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40299-BS	F77014.D	1	10/24/14	MR	10/21/14	OP40299	MSF3374

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34459-3, MC34459-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
65-85-0	Benzoic Acid	50	17.5	35	30-130
95-57-8	2-Chlorophenol	50	38.9	78	30-130
59-50-7	4-Chloro-3-methyl phenol	50	37.7	75	30-130
120-83-2	2,4-Dichlorophenol	50	38.1	76	30-130
105-67-9	2,4-Dimethylphenol	50	32.3	65	30-130
51-28-5	2,4-Dinitrophenol	50	57.5	115	30-130
534-52-1	4,6-Dinitro-o-cresol	50	57.8	116	30-130
95-48-7	2-Methylphenol	50	34.5	69	30-130
	3&4-Methylphenol	100	63.2	63	30-130
88-75-5	2-Nitrophenol	50	39.8	80	30-130
100-02-7	4-Nitrophenol	50	14.2	28* [a]	30-130
87-86-5	Pentachlorophenol	50	37.8	76	30-130
108-95-2	Phenol	50	14.9	30	30-130
95-95-4	2,4,5-Trichlorophenol	50	35.8	72	30-130
88-06-2	2,4,6-Trichlorophenol	50	38.2	76	30-130
62-53-3	Aniline	50	28.8	58	40-140
101-55-3	4-Bromophenyl phenyl ether	50	42.7	85	40-140
85-68-7	Butyl benzyl phthalate	50	49.6	99	40-140
100-51-6	Benzyl Alcohol	50	24.1	48	40-140
91-58-7	2-Chloronaphthalene	50	42.6	85	40-140
106-47-8	4-Chloroaniline	50	34.6	69	40-140
111-91-1	bis(2-Chloroethoxy)methane	50	39.2	78	40-140
111-44-4	bis(2-Chloroethyl)ether	50	41.2	82	40-140
108-60-1	bis(2-Chloroisopropyl)ether	50	53.9	108	40-140
7005-72-3	4-Chlorophenyl phenyl ether	50	38.6	77	40-140
122-66-7	1,2-Diphenylhydrazine	50	43.1	86	40-140
121-14-2	2,4-Dinitrotoluene	50	45.9	92	40-140
606-20-2	2,6-Dinitrotoluene	50	45.8	92	40-140
91-94-1	3,3'-Dichlorobenzidine	50	54.2	108	40-140
132-64-9	Dibenzofuran	50	38.5	77	40-140
84-74-2	Di-n-butyl phthalate	50	43.6	87	40-140
117-84-0	Di-n-octyl phthalate	50	45.2	90	40-140
84-66-2	Diethyl phthalate	50	41.3	83	40-140
131-11-3	Dimethyl phthalate	50	42.6	85	40-140
117-81-7	bis(2-Ethylhexyl)phthalate	50	51.6	103	40-140
118-74-1	Hexachlorobenzene	50	41.2	82	40-140

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34459
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40299-BS	F77014.D	1	10/24/14	MR	10/21/14	OP40299	MSF3374

The QC reported here applies to the following samples: Method: SW846 8270D

MC34459-3, MC34459-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
77-47-4	Hexachlorocyclopentadiene	50	23.5	47	40-140
67-72-1	Hexachloroethane	50	30.1	60	40-140
78-59-1	Isophorone	50	36.8	74	40-140
88-74-4	2-Nitroaniline	50	44.5	89	40-140
99-09-2	3-Nitroaniline	50	40.2	80	40-140
100-01-6	4-Nitroaniline	50	39.9	80	40-140
98-95-3	Nitrobenzene	50	38.8	78	40-140
62-75-9	n-Nitrosodimethylamine	50	30.0	60	40-140
621-64-7	N-Nitroso-di-n-propylamine	50	43.6	87	40-140
86-30-6	N-Nitrosodiphenylamine	50	41.4	83	40-140
110-86-1	Pyridine	50	13.8	28* [a]	40-140

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	49%	15-110%
4165-62-2	Phenol-d5	33%	15-110%
118-79-6	2,4,6-Tribromophenol	91%	15-110%
4165-60-0	Nitrobenzene-d5	78%	30-130%
321-60-8	2-Fluorobiphenyl	76%	30-130%
1718-51-0	Terphenyl-d14	90%	30-130%

(a) Outside control limits. Blank Spike meets program technical requirements.

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34459
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40300-BS	I92424.D	1	10/23/14	WK	10/21/14	OP40300	MSI3445

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

MC34459-3, MC34459-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
83-32-9	Acenaphthene	50	40.8	82	40-140
208-96-8	Acenaphthylene	50	35.4	71	40-140
120-12-7	Anthracene	50	42.0	84	40-140
56-55-3	Benzo(a)anthracene	50	48.1	96	40-140
50-32-8	Benzo(a)pyrene	50	45.9	92	40-140
205-99-2	Benzo(b)fluoranthene	50	49.4	99	40-140
191-24-2	Benzo(g,h,i)perylene	50	46.2	92	40-140
207-08-9	Benzo(k)fluoranthene	50	42.0	84	40-140
218-01-9	Chrysene	50	43.7	87	40-140
53-70-3	Dibenzo(a,h)anthracene	50	46.7	93	40-140
206-44-0	Fluoranthene	50	38.8	78	40-140
86-73-7	Fluorene	50	48.2	96	40-140
193-39-5	Indeno(1,2,3-cd)pyrene	50	45.9	92	40-140
90-12-0	1-Methylnaphthalene	50	38.1	76	40-140
91-57-6	2-Methylnaphthalene	50	39.0	78	40-140
85-01-8	Phenanthrene	50	42.9	86	40-140
129-00-0	Pyrene	50	37.8	76	40-140

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	85%	30-130%
321-60-8	2-Fluorobiphenyl	80%	30-130%
1718-51-0	Terphenyl-d14	81%	30-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34459
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40299-MS	F77015.D	1	10/24/14	MR	10/21/14	OP40299	MSF3374
OP40299-MSD	F77016.D	1	10/24/14	MR	10/21/14	OP40299	MSF3374
MC34100-11	R40554.D	1	10/27/14	KD	10/21/14	OP40299	MSR1493

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34459-3, MC34459-4

CAS No.	Compound	MC34100-11 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic Acid	ND		50	17.2	34	50	16.8	34	2	30-130/20
95-57-8	2-Chlorophenol	ND		50	36.8	74	50	34.6	69	6	30-130/20
59-50-7	4-Chloro-3-methyl phenol	ND		50	37.8	76	50	36.2	72	4	30-130/20
120-83-2	2,4-Dichlorophenol	ND		50	37.6	75	50	35.4	71	6	30-130/20
105-67-9	2,4-Dimethylphenol	ND		50	31.5	63	50	28.1	56	11	30-130/20
51-28-5	2,4-Dinitrophenol	ND		50	60.0	120	50	60.1	120	0	30-130/20
534-52-1	4,6-Dinitro-o-cresol	ND		50	56.2	112	50	58.3	117	4	30-130/20
95-48-7	2-Methylphenol	ND		50	32.8	66	50	29.9	60	9	30-130/20
	3&4-Methylphenol	ND		100	61.6	62	100	58.0	58	6	30-130/20
88-75-5	2-Nitrophenol	ND		50	39.2	78	50	37.3	75	5	30-130/20
100-02-7	4-Nitrophenol	ND		50	13.7	27* [a]	50	13.8	28* [a]	1	30-130/20
87-86-5	Pentachlorophenol	ND		50	37.0	74	50	37.3	75	1	30-130/20
108-95-2	Phenol	ND		50	14.4	29* [a]	50	13.8	28* [a]	4	30-130/20
95-95-4	2,4,5-Trichlorophenol	ND		50	35.8	72	50	33.4	67	7	30-130/20
88-06-2	2,4,6-Trichlorophenol	ND		50	36.8	74	50	36.7	73	0	30-130/20
62-53-3	Aniline	ND		50	24.6	49	50	22.8	46	8	40-140/20
101-55-3	4-Bromophenyl phenyl ether	ND		50	41.8	84	50	42.7	85	2	40-140/20
85-68-7	Butyl benzyl phthalate	ND		50	49.4	99	50	49.6	99	0	40-140/20
100-51-6	Benzyl Alcohol	ND		50	25.1	50	50	22.4	45	11	40-140/20
91-58-7	2-Chloronaphthalene	ND		50	42.4	85	50	40.9	82	4	40-140/20
106-47-8	4-Chloroaniline	ND		50	34.4	69	50	32.9	66	4	40-140/20
111-91-1	bis(2-Chloroethoxy)methane	ND		50	39.0	78	50	36.1	72	8	40-140/20
111-44-4	bis(2-Chloroethyl)ether	ND		50	41.1	82	50	37.6	75	9	40-140/20
108-60-1	bis(2-Chloroisopropyl)ether	ND		50	53.0	106	50	49.6	99	7	40-140/20
7005-72-3	4-Chlorophenyl phenyl ether	ND		50	38.3	77	50	38.3	77	0	40-140/20
122-66-7	1,2-Diphenylhydrazine	ND		50	42.8	86	50	43.3	87	1	40-140/20
121-14-2	2,4-Dinitrotoluene	ND		50	45.4	91	50	45.1	90	1	40-140/20
606-20-2	2,6-Dinitrotoluene	ND		50	46.2	92	50	45.0	90	3	40-140/20
91-94-1	3,3'-Dichlorobenzidine	ND		50	54.4	109	50	52.8	106	3	40-140/20
132-64-9	Dibenzofuran	ND		50	38.4	77	50	37.7	75	2	40-140/20
84-74-2	Di-n-butyl phthalate	ND		50	43.5	87	50	43.3	87	0	40-140/20
117-84-0	Di-n-octyl phthalate	ND		50	44.2	88	50	44.6	89	1	40-140/20
84-66-2	Diethyl phthalate	ND		50	41.3	83	50	41.1	82	0	40-140/20
131-11-3	Dimethyl phthalate	ND		50	42.1	84	50	42.2	84	0	40-140/20
117-81-7	bis(2-Ethylhexyl)phthalate	ND		50	51.7	103	50	51.8	104	0	40-140/20
118-74-1	Hexachlorobenzene	ND		50	40.6	81	50	41.0	82	1	40-140/20

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34459
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40299-MS	F77015.D	1	10/24/14	MR	10/21/14	OP40299	MSF3374
OP40299-MSD	F77016.D	1	10/24/14	MR	10/21/14	OP40299	MSF3374
MC34100-11	R40554.D	1	10/27/14	KD	10/21/14	OP40299	MSR1493

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34459-3, MC34459-4

CAS No.	Compound	MC34100-11 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
77-47-4	Hexachlorocyclopentadiene	ND		50	23.3	47	50	21.6	43	8	40-140/20
67-72-1	Hexachloroethane	ND		50	30.9	62	50	29.6	59	4	40-140/20
78-59-1	Isophorone	ND		50	36.5	73	50	34.6	69	5	40-140/20
88-74-4	2-Nitroaniline	ND		50	43.9	88	50	44.1	88	0	40-140/20
99-09-2	3-Nitroaniline	ND		50	40.8	82	50	40.2	80	1	40-140/20
100-01-6	4-Nitroaniline	ND		50	40.6	81	50	39.4	79	3	40-140/20
98-95-3	Nitrobenzene	ND		50	38.8	78	50	36.2	72	7	40-140/20
62-75-9	n-Nitrosodimethylamine	ND		50	30.4	61	50	27.6	55	10	40-140/20
621-64-7	N-Nitroso-di-n-propylamine	ND		50	43.3	87	50	40.6	81	6	40-140/20
86-30-6	N-Nitrosodiphenylamine	ND		50	40.5	81	50	41.2	82	2	40-140/20
110-86-1	Pyridine	ND		50	11.9	24* [a]	50	9.5	19* [a]	22* [b]	40-140/20

CAS No.	Surrogate Recoveries	MS	MSD	MC34100-11	Limits
367-12-4	2-Fluorophenol	47%	43%	51%	15-110%
4165-62-2	Phenol-d5	33%	28%	32%	15-110%
118-79-6	2,4,6-Tribromophenol	90%	93%	105%	15-110%
4165-60-0	Nitrobenzene-d5	79%	73%	82%	30-130%
321-60-8	2-Fluorobiphenyl	75%	71%	85%	30-130%
1718-51-0	Terphenyl-d14	89%	90%	95%	30-130%

(a) Outside control limits due to possible matrix interference. Refer to Blank Spike.
(b) High RPD due to possible matrix interference and/or sample heterogeneity.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34459
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40300-MS	I92425.D	1	10/23/14	WK	10/21/14	OP40300	MSI3445
OP40300-MSD	I92426.D	1	10/23/14	WK	10/21/14	OP40300	MSI3445
MC34100-12	I92427.D	1	10/23/14	WK	10/21/14	OP40300	MSI3445

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

MC34459-3, MC34459-4

CAS No.	Compound	MC34100-12 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	ND		50	40.4	81	50	40.0	80	1	40-140/20
208-96-8	Acenaphthylene	ND		50	35.5	71	50	34.9	70	2	40-140/20
120-12-7	Anthracene	ND		50	42.4	85	50	42.1	84	1	40-140/20
56-55-3	Benzo(a)anthracene	ND		50	47.6	95	50	47.3	95	1	40-140/20
50-32-8	Benzo(a)pyrene	ND		50	44.9	90	50	44.7	89	0	40-140/20
205-99-2	Benzo(b)fluoranthene	ND		50	45.1	90	50	50.0	100	10	40-140/20
191-24-2	Benzo(g,h,i)perylene	ND		50	45.5	91	50	45.3	91	0	40-140/20
207-08-9	Benzo(k)fluoranthene	ND		50	39.5	79	50	40.3	81	2	40-140/20
218-01-9	Chrysene	ND		50	44.0	88	50	43.6	87	1	40-140/20
53-70-3	Dibenzo(a,h)anthracene	ND		50	46.1	92	50	45.5	91	1	40-140/20
206-44-0	Fluoranthene	ND		50	39.7	79	50	39.0	78	2	40-140/20
86-73-7	Fluorene	ND		50	47.6	95	50	48.1	96	1	40-140/20
193-39-5	Indeno(1,2,3-cd)pyrene	ND		50	45.0	90	50	44.7	89	1	40-140/20
90-12-0	1-Methylnaphthalene	ND		50	38.5	77	50	37.2	74	3	40-140/20
91-57-6	2-Methylnaphthalene	ND		50	38.8	78	50	37.1	74	4	40-140/20
85-01-8	Phenanthrene	ND		50	43.6	87	50	43.9	88	1	40-140/20
129-00-0	Pyrene	ND		50	38.4	77	50	37.9	76	1	40-140/20

CAS No.	Surrogate Recoveries	MS	MSD	MC34100-12	Limits
4165-60-0	Nitrobenzene-d5	84%	78%	77%	30-130%
321-60-8	2-Fluorobiphenyl	79%	75%	72%	30-130%
1718-51-0	Terphenyl-d14	82%	81%	76%	30-130%

* = Outside of Control Limits.

Semivolatile Internal Standard Area Summary

Job Number: MC34459
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSF3374-CC3361	**Injection Date:**	10/24/14
Lab File ID:	F77012.D	**Injection Time:**	08:26
Instrument ID:	GCMSF	**Method:**	SW846 8270D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	80351	4.14	268321	5.19	174204	6.72	314738	8.00	396524	10.57	383698	12.27
Upper Limit [a]	160702	4.64	536642	5.69	348408	7.22	629476	8.50	793048	11.07	767396	12.77
Lower Limit [b]	40176	3.64	134161	4.69	87102	6.22	157369	7.50	198262	10.07	191849	11.77

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP40299-MB	90931	4.14	316725	5.19	203417	6.72	387270	8.00	454373	10.56	445536	12.27
OP40299-BS	87440	4.14	308603	5.19	197061	6.72	366496	8.00	461227	10.57	439548	12.27
OP40299-MS	82458	4.14	289463	5.19	186365	6.72	353436	8.00	440524	10.57	420636	12.27
OP40299-MSD	86127	4.14	299261	5.19	192367	6.72	354781	8.00	436867	10.57	420358	12.27
ZZZZZZ	81206	4.14	275345	5.19	186349	6.72	356089	8.00	437086	10.57	429373	12.27
ZZZZZZ	103572	4.14	372561	5.19	240380	6.72	462925	8.00	586739	10.57	583854	12.28
ZZZZZZ	85272	4.14	296589	5.19	195859	6.72	365005	8.00	424462	10.57	416597	12.27
ZZZZZZ	85397	4.14	290696	5.19	189975	6.72	360204	8.00	423550	10.57	414730	12.27
MC34459-3	79965	4.14	287719	5.19	195895	6.72	380569	8.00	476031	10.57	478953	12.28
MC34459-4	80497	4.14	282748	5.19	188113	6.72	356583	8.00	432675	10.57	423992	12.27
ZZZZZZ	74255	4.14	254909	5.19	171761	6.72	335050	8.00	404844	10.57	390244	12.27
ZZZZZZ	76499	4.14	266435	5.19	179984	6.72	347229	8.00	424444	10.57	411451	12.27
ZZZZZZ	73607	4.14	257296	5.19	170422	6.72	333745	8.00	406301	10.57	398241	12.27
OP40329-MB	81892	4.14	274909	5.19	177974	6.72	329537	8.00	367511	10.57	341893	12.27
OP40329-BS	75472	4.14	266061	5.19	165865	6.72	296548	8.00	350600	10.57	331989	12.27
OP40329-MS	80456	4.14	284813	5.19	181355	6.72	335061	8.00	395829	10.57	362712	12.27
OP40329-MSD	85934	4.14	299585	5.19	186055	6.72	345612	8.00	392524	10.57	357971	12.27
MC34536-1	92224	4.14	312217	5.19	205154	6.72	380992	8.00	418408	10.57	388879	12.27
ZZZZZZ	83760	4.14	286780	5.19	183594	6.71	344862	8.00	377271	10.57	350812	12.27
ZZZZZZ	75364	4.14	261041	5.19	171397	6.72	322913	8.00	363766	10.57	338701	12.27
ZZZZZZ	79711	4.14	270484	5.19	174144	6.71	323424	8.00	362206	10.57	337244	12.27
ZZZZZZ	65063	4.14	224164	5.19	146930	6.72	282926	8.00	341006	10.57	331397	12.27
ZZZZZZ	66895	4.14	224244	5.19	144374	6.71	269930	8.00	342328	10.57	370291	12.27
ZZZZZZ	76943	4.14	262613	5.19	167113	6.71	310107	8.00	356554	10.57	361585	12.27
ZZZZZZ	71557	4.14	242246	5.19	152362	6.72	285746	8.00	338012	10.57	350376	12.27
ZZZZZZ	62966	4.14	219082	5.19	145315	6.72	283055	8.00	361554	10.57	367425	12.27

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: MC34459
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSF3374-CC3361	**Injection Date:**	10/24/14
Lab File ID:	F77012.D	**Injection Time:**	08:26
Instrument ID:	GCMSF	**Method:**	SW846 8270D

Lab Sample ID	IS 1 AREA	IS 1 RT	IS 2 AREA	IS 2 RT	IS 3 AREA	IS 3 RT	IS 4 AREA	IS 4 RT	IS 5 AREA	IS 5 RT	IS 6 AREA	IS 6 RT

(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: MC34459
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSI3445-CC3427	**Injection Date:**	10/23/14
Lab File ID:	I92408.D	**Injection Time:**	14:32
Instrument ID:	GCMSI	**Method:**	SW846 8270D BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	279383	2.82	644600	3.84	373968	5.33	667028	6.57	610503	9.22	1064015	10.60
Upper Limit [a]	558766	3.32	1289200	4.34	747936	5.83	1334056	7.07	1221006	9.72	2128030	11.10
Lower Limit [b]	139692	2.32	322300	3.34	186984	4.83	333514	6.07	305252	8.72	532008	10.10

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
ZZZZZZ	345815	2.82	778436	3.84	446372	5.33	791302	6.56	742193	9.22	1298288	10.60
ZZZZZZ	363516	2.82	824379	3.84	475419	5.33	850212	6.56	788775	9.22	1405118	10.60
ZZZZZZ	370348	2.82	823010	3.84	479455	5.33	862229	6.56	793486	9.22	1402664	10.60
ZZZZZZ	357647	2.82	795387	3.84	459926	5.33	826344	6.56	768946	9.22	1354885	10.60
ZZZZZZ	372445	2.83	842079	3.84	471336	5.33	838194	6.56	783493	9.22	1378762	10.60
ZZZZZZ	296387	2.82	650642	3.84	371890	5.34	674648	6.58	655222	9.22	1133480	10.60
ZZZZZZ	286316	2.82	642932	3.84	369235	5.33	680381	6.57	645629	9.22	1132926	10.60
ZZZZZZ	380327	2.82	844664	3.84	512481	5.33	878012	6.57	833620	9.23	1471264	10.61
ZZZZZZ	407752	2.82	943127	3.84	620571	5.33	933287	6.57	878512	9.23	1553982	10.61
ZZZZZZ	470653	2.82	1052429	3.84	601258	5.33	1054930	6.57	993558	9.23	1726372	10.61
ZZZZZZ	423414	2.82	938563	3.84	543234	5.33	971918	6.57	909071	9.22	1607591	10.61
ZZZZZZ	312339	2.82	723215	3.84	435193	5.33	735569	6.57	682459	9.22	1204095	10.60
OP40300-MB	319266	2.82	732475	3.84	425924	5.32	765587	6.56	721184	9.22	1257918	10.60
OP40300-BS	319395	2.82	750006	3.84	431900	5.33	775143	6.57	712113	9.23	1238057	10.61
OP40300-MS	325093	2.82	760237	3.84	435680	5.33	763554	6.57	691922	9.23	1204406	10.61
OP40300-MSD	317579	2.82	748522	3.84	430819	5.33	772804	6.57	708264	9.23	1228215	10.61
MC34100-12	368639	2.82	831476	3.84	486004	5.33	880745	6.56	830938	9.22	1478734	10.60
ZZZZZZ	284575	2.82	653275	3.84	378182	5.32	674780	6.56	635914	9.22	1132721	10.60
ZZZZZZ	294345	2.82	664385	3.84	387325	5.32	692835	6.56	645517	9.22	1141928	10.60
ZZZZZZ	294767	2.82	670247	3.84	388334	5.32	688858	6.56	653406	9.22	1166095	10.60
ZZZZZZ	302286	2.82	693596	3.84	398757	5.33	705186	6.56	663393	9.22	1166299	10.60
ZZZZZZ	306751	2.82	705808	3.84	400579	5.33	713274	6.56	667256	9.22	1176538	10.60
ZZZZZZ	284513	2.82	657137	3.84	379123	5.32	664806	6.56	637403	9.22	1129211	10.60
ZZZZZZ	310570	2.82	708592	3.84	409978	5.32	719365	6.56	683768	9.22	1211366	10.60
ZZZZZZ	363327	2.82	850361	3.84	479960	5.33	843509	6.57	785140	9.23	1338912	10.61
ZZZZZZ	321941	2.83	746862	3.84	424023	5.33	761960	6.56	682489	9.22	1179102	10.60
ZZZZZZ	326469	2.82	754969	3.84	432339	5.33	764262	6.56	685648	9.22	1180768	10.60
MC34459-3	326914	2.82	745052	3.84	428650	5.33	769185	6.57	715706	9.23	1235310	10.61

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

Semivolatile Internal Standard Area Summary

Job Number: MC34459
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSI3445-CC3427	**Injection Date:**	10/23/14
Lab File ID:	I92408.D	**Injection Time:**	14:32
Instrument ID:	GCMSI	**Method:**	SW846 8270D BY SIM

Lab	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
Sample ID	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: MC34459
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSI3446-CC3427	**Injection Date:**	10/24/14
Lab File ID:	I92444.D	**Injection Time:**	08:17
Instrument ID:	GCMSI	**Method:**	SW846 8270D BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	272435	2.79	609399	3.81	356904	5.29	638917	6.53	595334	9.18	1028885	10.56
Upper Limit [a]	544870	3.29	1218798	4.31	713808	5.79	1277834	7.03	1190668	9.68	2057770	11.06
Lower Limit [b]	136218	2.29	304700	3.31	178452	4.79	319459	6.03	297667	8.68	514443	10.06

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP40266-MB	302298	2.79	675467	3.81	392228	5.29	695770	6.53	661311	9.18	1155691	10.56
OP40266-BS	302895	2.79	690722	3.81	398772	5.30	699613	6.53	650108	9.19	1124124	10.56
MC34459-4	318062	2.79	717104	3.81	410486	5.30	728336	6.53	678642	9.18	1190926	10.56
ZZZZZZ	306533	2.79	691693	3.81	398833	5.29	709940	6.53	659574	9.18	1149461	10.56
OP40266-BSD	273393	2.79	621851	3.81	361366	5.30	632969	6.53	590844	9.19	1010909	10.56
OP40266-MS	292207	2.79	657570	3.81	381041	5.30	674059	6.53	629402	9.19	1091543	10.56
OP40266-MSD	286066	2.79	647930	3.81	381202	5.30	667291	6.53	621890	9.19	1072484	10.56
MC34427-8	314338	2.79	701616	3.81	405893	5.29	724224	6.53	686306	9.18	1199947	10.56
OP40343-MB	316046	2.79	705630	3.81	407106	5.29	740084	6.53	678817	9.18	1181458	10.56
OP40343-BS	328917	2.79	746917	3.81	435987	5.29	768490	6.53	709361	9.19	1225594	10.57
ZZZZZZ	324851	2.79	729065	3.81	427756	5.29	756450	6.53	713131	9.18	1238776	10.56
ZZZZZZ	315057	2.79	706541	3.81	410044	5.29	726763	6.53	681069	9.18	1180416	10.56
OP40343-MS	335520	2.79	765249	3.81	448574	5.29	784362	6.53	730982	9.19	1253347	10.57
OP40343-MSD	310218	2.79	717424	3.81	413358	5.29	730964	6.53	675990	9.19	1165351	10.56
MC34100-20	303413	2.79	679383	3.81	398366	5.29	701479	6.53	645774	9.18	1123656	10.56
ZZZZZZ	295239	2.79	666263	3.81	389185	5.29	688356	6.53	639447	9.18	1103567	10.56
ZZZZZZ	301897	2.79	674397	3.81	392925	5.29	694874	6.52	649088	9.18	1120562	10.56
ZZZZZZ	295509	2.79	660772	3.81	384349	5.29	680196	6.53	632588	9.18	1099142	10.56
ZZZZZZ	284910	2.79	640266	3.81	371208	5.29	656637	6.53	614217	9.18	1065352	10.56
ZZZZZZ	306303	2.79	674643	3.81	398151	5.29	693160	6.53	653878	9.18	1135203	10.56
ZZZZZZ	287215	2.79	643100	3.81	374757	5.29	664561	6.53	622094	9.17	1087963	10.56
ZZZZZZ	316075	2.79	707978	3.81	412041	5.29	730767	6.53	673206	9.18	1169046	10.56
ZZZZZZ	315054	2.79	697956	3.81	405808	5.29	715419	6.53	671716	9.18	1160226	10.56
ZZZZZZ	305849	2.79	681594	3.81	396994	5.29	704170	6.52	651918	9.17	1120812	10.56
ZZZZZZ	309019	2.79	689056	3.81	401328	5.29	712039	6.53	667359	9.17	1158458	10.56
ZZZZZZ	281622	2.79	634871	3.81	368220	5.29	650620	6.53	607223	9.17	1048351	10.55
ZZZZZZ	282189	2.79	632245	3.81	368398	5.29	642988	6.53	606208	9.17	1047787	10.55
ZZZZZZ	304841	2.79	685377	3.81	396921	5.29	710154	6.53	663771	9.17	1138569	10.55

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

Semivolatile Internal Standard Area Summary

Job Number: MC34459
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSI3446-CC3427	**Injection Date:**	10/24/14
Lab File ID:	I92444.D	**Injection Time:**	08:17
Instrument ID:	GCMSI	**Method:**	SW846 8270D BY SIM

Lab	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
Sample ID	**AREA**	**RT**	**AREA**	**RT**	**AREA**	**RT**	**AREA**	**RT**	**AREA**	**RT**	**AREA**	**RT**

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Surrogate Recovery Summary

Job Number: MC34459
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Method: SW846 8270D **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
MC34459-3	F77022.D	52	36	91	78	69	89
MC34459-4	F77023.D	67	41	101	87	76	99
OP40299-BS	F77014.D	49	33	91	78	76	90
OP40299-MB	F77013.D	51	35	92	81	78	96
OP40299-MS	F77015.D	47	33	90	79	75	89
OP40299-MSD	F77016.D	43	28	93	73	71	90

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorophenol	15-110%
S2 = Phenol-d5	15-110%
S3 = 2,4,6-Tribromophenol	15-110%
S4 = Nitrobenzene-d5	30-130%
S5 = 2-Fluorobiphenyl	30-130%
S6 = Terphenyl-d14	30-130%

Semivolatile Surrogate Recovery Summary

Job Number: MC34459
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Method: SW846 8270D BY SIM **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
MC34459-3	I92438.D	82	75	82
MC34459-4	I92447.D	87	81	86
OP40300-BS	I92424.D	85	80	81
OP40300-MB	I92423.D	87	81	83
OP40300-MS	I92425.D	84	79	82
OP40300-MSD	I92426.D	78	75	81

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	30-130%
S2 = 2-Fluorobiphenyl	30-130%
S3 = Terphenyl-d14	30-130%

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries

Method Blank Summary

Job Number: MC34459
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40305-MB	BB60044.D	1	10/23/14	NK	10/21/14	OP40305	GBB3339

The QC reported here applies to the following samples: **Method:** SW846 8011

MC34459-2, MC34459-3, MC34459-4

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.015	0.0061	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.015	0.0061	ug/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	Bromofluorobenzene (S)	69%	36-173%
460-00-4	Bromofluorobenzene (S)	71%	36-173%

Blank Spike Summary

Job Number: MC34459
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40305-BS	BB60045.D	1	10/23/14	NK	10/21/14	OP40305	GBB3339

The QC reported here applies to the following samples: **Method:** SW846 8011

MC34459-2, MC34459-3, MC34459-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
96-12-8	1,2-Dibromo-3-chloropropane	0.071	0.075	106	60-140
106-93-4	1,2-Dibromoethane	0.071	0.076	107	60-140

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	Bromofluorobenzene (S)	75%	36-173%
460-00-4	Bromofluorobenzene (S)	77%	36-173%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34459
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40305-MS	BB60046.D	1	10/23/14	NK	10/21/14	OP40305	GBB3339
OP40305-MSD	BB60047.D	1	10/23/14	NK	10/21/14	OP40305	GBB3339
MC34100-13	BB60048.D	1	10/23/14	NK	10/21/14	OP40305	GBB3339

The QC reported here applies to the following samples: **Method:** SW846 8011

MC34459-2, MC34459-3, MC34459-4

CAS No.	Compound	MC34100-13 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
96-12-8	1,2-Dibromo-3-chloropropane	ND		0.071	0.082	115	0.071	0.075	106	9	64-141/29
106-93-4	1,2-Dibromoethane	ND		0.071	0.075	106	0.071	0.077	108	3	63-163/27

CAS No.	Surrogate Recoveries	MS	MSD	MC34100-13	Limits
460-00-4	Bromofluorobenzene (S)	83%	73%	71%	36-173%
460-00-4	Bromofluorobenzene (S)	87%	74%	74%	36-173%

* = Outside of Control Limits.

Volatile Surrogate Recovery Summary

Job Number: MC34459
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Method: SW846 8011 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]
MC34459-2	BB60064.D	59	66
MC34459-3	BB60066.D	61	55
MC34459-4	BB60067.D	57	82
OP40305-BS	BB60045.D	75	77
OP40305-MB	BB60044.D	69	71
OP40305-MS	BB60046.D	83	87
OP40305-MSD	BB60047.D	73	74

Surrogate Compounds	Recovery Limits
S1 = Bromofluorobenzene (S)	36-173%

(a) Recovery from GC signal #2
(b) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: MC34459
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	GBB3339-ICC3339	**Injection Date:**	10/23/14
Lab File ID:	BB60040.D	**Injection Time:**	14:08
Instrument ID:	GCBB	**Method:**	SW846 8011

	S1 [a] RT	S1 [b] RT
Check Std	3.32	3.33

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
OP40305-MB	BB60044.D	10/23/14	15:39	3.32	3.33
OP40306-MB	BB60044A.D	10/23/14	15:39	3.32	3.33
OP40306-BS	BB60045A.D	10/23/14	15:57	3.32	3.33
OP40305-BS	BB60045.D	10/23/14	15:57	3.32	3.33
OP40305-MS	BB60046.D	10/23/14	16:15	3.33	3.33
OP40305-MSD	BB60047.D	10/23/14	16:33	3.32	3.33
MC34100-13	BB60048.D	10/23/14	16:51	3.32	3.33
ZZZZZZ	BB60049.D	10/23/14	17:09	3.32	3.33
ZZZZZZ	BB60050.D	10/23/14	17:27	3.32	3.33
ZZZZZZ	BB60051.D	10/23/14	17:45	3.33	3.33
ZZZZZZ	BB60052.D	10/23/14	18:03	3.32	3.33
ZZZZZZ	BB60053.D	10/23/14	18:21	3.33	3.33

Surrogate Compounds

S1 = Bromofluorobenzene (S)

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: MC34459
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	GBB3339-CC3339	**Injection Date:**	10/23/14
Lab File ID:	BB60054.D	**Injection Time:**	18:38
Instrument ID:	GCBB	**Method:**	SW846 8011

	S1 [a] RT	S1 [b] RT
Check Std	3.32	3.33

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
ZZZZZZ	BB60055.D	10/23/14	18:56	3.32	3.33
ZZZZZZ	BB60056.D	10/23/14	19:14	3.32	3.33
ZZZZZZ	BB60057.D	10/23/14	19:32	3.32	3.33
ZZZZZZ	BB60058.D	10/23/14	19:50	3.32	3.33
ZZZZZZ	BB60059.D	10/23/14	20:08	3.32	3.33
ZZZZZZ	BB60060.D	10/23/14	20:26	3.32	3.33
ZZZZZZ	BB60061.D	10/23/14	20:44	3.33	3.33
ZZZZZZ	BB60062.D	10/23/14	21:02	3.33	3.34
ZZZZZZ	BB60063.D	10/23/14	21:19	3.33	3.33
MC34459-2	BB60064.D	10/23/14	21:37	3.32	3.33

Surrogate Compounds

S1 = Bromofluorobenzene (S)

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: MC34459
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	GBB3339-CC3339	**Injection Date:**	10/23/14
Lab File ID:	BB60065.D	**Injection Time:**	21:55
Instrument ID:	GCBB	**Method:**	SW846 8011

	S1 [a] RT	S1 [b] RT
Check Std	3.32	3.33

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
MC34459-3	BB60066.D	10/23/14	22:13	3.32	3.33
MC34459-4	BB60067.D	10/23/14	22:31	3.32	3.33
GBB3339-ECC333B	BB60070.D	10/23/14	23:26	3.33	3.33

Surrogate Compounds

S1 = Bromofluorobenzene (S)

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

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Technical Report for

Shell Oil

URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

21562973.15000

SGS Accutest Job Number: MC34460



Sampling Date: 10/16/14

Report to:

AECOM, INC.

Melissa.mansker@aecom.com

ATTN: Melissa Mansker

Total number of pages in report: 174

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

H. (Brad) Madadian
Lab Director

Client Service contact: Jeremy Vienneau 508-481-6200

Certifications: MA (M-MA136,SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) FL (E87579) NY (11791) NJ (MA926) PA (6801121) ND (R-188) CO (MA00136) MN (11546AA) NC (653) IL (002337) WI (399080220) DoD ELAP (L-A-B L2235)

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Test results relate only to samples analyzed.

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Unauthorized modification of this report is strictly prohibited.

SGS ACCUTEST

October 27, 2016

AECOM
1001 Highlands Plaza Drive West Suite 300
St. Louis, MO 63110

RE: SGS Accutest Job # MC34460

Dear Elizabeth Kunkel

As you are aware, SGS Accutest Inc. - Marlborough has been conducting an extensive review of data associated with some historical Gas Chromatography-Mass Spectroscopy volatiles analyses. As a result of this review it was determined that some revisions of the original test report for this job were needed. These corrections have been incorporated into the revised report.

Please be assured that corrective actions have been put in place to address this matter and prevent a recurrence.

We apologize for any inconvenience that this issue may have caused. Please don't hesitate to contact us if we can be of further assistance.

Sincerely,

H. (Brad) Madadian

Regional Laboratory Director
SGS Accutest Inc. - Marlborough

SGS ACCUTEST IS PART OF SGS, THE WORLD'S LEADING INSPECTION, VERIFICATION, TESTING AND CERTIFICATION COMPANY.

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Sample Summary

Shell Oil

Job No: MC34460

URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL
Project No: 21562973.15000

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
MC34460-1	10/16/14	13:35	MM	10/18/14	SO	Soil	MW-27-101614 (40-42)
MC34460-2	10/16/14	15:40	MM	10/18/14	SO	Soil	MW-27-101614 (48-50)
MC34460-3	10/16/14	09:00	MM	10/18/14	AQ	Trip Blank Water	TB-101614-HCL
MC34460-4	10/16/14	09:00	MM	10/18/14	AQ	Trip Blank Water	TB-101614-ST
MC34460-5	10/16/14	09:20	MM	10/18/14	AQ	Equipment Blank	EQB-101614

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: She O **Job No** MC34460

Site: URSMOSTL: Roxana Add t ona Character zat on, 900 South Centr **Report Date** 0/28/20 6 :07:57 A

3 Samp e(s), 2 Tr p B ank(s) were co ected on 0/ 6/20 4 and were rece ved at SGS Accutest New Eng and on 0/ 8/20 4 proper y preserved, at 9 Deg C and ntact These Samp es rece ved a job number of MC34460 A st ng of the Laboratory Samp e ID, C ent Samp e ID and dates of co ect on are presented n the Resu ts Summary Sect on of th s report -Ch orohexane, Benzeneth o , D benz(a,h)acr d ne, Indene, and Qu no ne were searched n the bra y search and reported on y f detect ons were found

Except as noted be ow, a method spec f ed ca brat ons and qua ty contro performance cr ter a were met for th s job For more nformat on, p ease refer to QC summary pages

Volatiles by GCMS By Method SW846 8260C

Matrix: AQ **Batch ID:** MSP2648

- A samp es were ana yzed w th n the recommended method ho d ng t me
- Samp e(s) MC34463-3MS, MC34463-3MSD were used as the QC samp es nd cated
- A method b anks for th s batch meet method spec f c cr ter a
- B ank Sp ke Recovery(s) for ,2,3-Tr ch orobenzene, 2-Ch oroethy v ny ether, Ch oromethane, V ny Acetate are outs de contro m ts
- MC34463-3MS/MSD for Benzene s outs de contro m ts Outs de contro m ts due to h gh eve n samp e re at ve to sp ke amount
- MC34463-3MS for Acetone, 2-Butanone (MEK), 2,2-D ch oropropane, 2-Hexanone: Outs de contro m ts due to poss b e matr x nterference
- MC34463-3MS/MSD for ,2,3-Tr ch orobenzene, 2-Ch oroethy v ny ether, Ch oromethane: Outs de contro m ts
- MC34463-3MSD for Acetone, 2-Butanone (MEK), 2,2-D ch oropropane: Outs de contro m ts due to poss b e matr x nterference
- 2-Butanone (MEK), ,2,3-Tr ch orobenzene, V ny Acetate: Cont nu ng Ca brat on Ver f cat on outs de of acceptance cr ter a Samp e resu t may be b ased ow

Matrix: SO **Batch ID:** MSM2454

- A samp es were ana yzed w th n the recommended method ho d ng t me
- Samp e(s) MC34636- MS, MC34636- MSD were used as the QC samp es nd cated
- A method b anks for th s batch meet method spec f c cr ter a
- MSM2454-BSD for Acetone: Outs de contro m ts
- Matr x Sp ke Recovery(s) for , , ,2-Tetrach oroethane, , , -Tr ch oroethane, , ,2,2-Tetrach oroethane, , ,2-Tr ch oroethane, , -D ch oroethane, , -D ch oroethene, , -D ch oropropene, ,2,3-Tr ch orobenzene, ,2,3-Tr ch oropropane, ,2,4-Tr ch orobenzene, ,2,4-Tr methy benzene, ,2-D ch orobenzene, ,2-D ch oropropane, ,3,5-Tr methy benzene, ,3-D ch orobenzene, ,3-D ch oropropane, ,4-D ch orobenzene, 2,2-D ch oropropane, 2-Ch oroethy v ny ether, Acetone, Benzene, Bromobenzene, Bromod ch oromethane, Bromoform, Bromomethane, Carbon d su f de, Carbon tetrach or de, Ch orobenzene, Ch oroform, c s- ,2-D ch oroethene, c s- ,3-D ch oropropene, D bromoch oromethane, Ethy benzene, Hexach orobutad ene, Isopropy benzene, m,p-Xy ene, n-Buty benzene, n-Propy benzene, Naphtha ene, o-Ch oroto uene, o-Xy ene, p-Ch oroto uene, p-Isopropy to uene, sec-Buty benzene, Styrene, tert-Buty benzene, Tetrach oroethene, To uene, trans- ,2-D ch oroethene, trans- ,3-D ch oropropene, Tr ch oroethene, Tr ch orof uoromethane, V ny Acetate, V ny ch or de, Xy ene (tota) are outs de contro m ts Outs de contro m ts due to poss b e matr x nterference
- Matr x Sp ke Dup cate Recove y(s) for , , ,2-Tetrach oroethane, , , -Tr ch oroethane, , ,2,2-Tetrach oroethane, , -D ch oropropene, ,2,3-Tr ch orobenzene, ,2,3-Tr ch oropropane, ,2,4-Tr ch orobenzene, ,2,4-Tr methy benzene, ,2-D ch orobenzene, ,3,5-Tr methy benzene, ,3-D ch orobenzene, ,4-D ch orobenzene, 2,2-D ch oropropane, 2-Ch oroethy v ny ether, Acetone, Benzene, Bromobenzene, Bromod ch oromethane, Bromoform, Carbon tetrach or de, Ch orobenzene, Ch oroform, c s- ,2-D ch oroethene, Ethy benzene, Hexach orobutad ene, Isopropy benzene, m,p-Xy ene, n-Buty benzene, n-Propy benzene, Naphtha ene, o-Ch oroto uene, o-Xy ene, p-Ch oroto uene, p-Isopropy to uene, sec-Buty benzene, Styrene, te t-Buty benzene, Tetrach oroethene, To uene, Tr ch oroethene, V ny Acetate, Xy ene (tota) are outs de contro m ts Outs de contro m ts due to poss b e matr x nterference
- MC34460-2 for 2-Butanone (MEK): Cont nu ng Ca brat on outs de of acceptance cr ter a Samp e resu t may be b ased h gh

Volatiles by GCMS By Method SW846 8260C

Matrix: SO **Batch ID:** MSM2454

- MC34460- ,2 for V ny Acetate: In t a Ca brat on Ver f cat on outs de of acceptance cr ter a Sp ke B ank(second source standard)was used to ver fy ca bat on standard accuracy
- MC34460- ,2 for 2-Ch oroethy v ny ether: Cont nu ng Ca brat on outs de of acceptance cr ter a Samp e resu t may be b ased ow

Extractables by GCMS By Method SW846 8270D

Matrix: AQ **Batch ID:** OP40299

- A samp es were extracted w th n the recommended method ho d ng t me
- A samp es were ana yzed w th n the recommended method ho d ng t me
- A method b anks for th s batch meet method spec f c cr ter a
- Samp e(s) MC34 00- MS, MC34 00- MSD were used as the QC samp es nd cated
- B ank Sp ke Recovery(s) for 4-N tropheno , Pyr d ne are outs de contro m ts
- OP40299-MS/MSD Recovery(s) for 4-N tropheno , Pheno , Pyr d ne are outs de contro m ts Outs de contro m ts due to poss b e matr x nterference
- In t a ca brat on ver f cat on standard MSF336 -ICV336 for 4-Ch oroan ne exceed 30% D fference 4-Ch oroan ne s w th n cr ter a n cont nu ng ca brat on check standard MSF3374-CC336
- RPD(s) for MSD for Pyr d ne are outs de contro m ts for samp e OP40299-MSD H gh RPD due to poss b e matr x nterference and/or samp e heterogene ty

Matrix: SO **Batch ID:** OP4029

- A samp es were extracted w th n the recommended method ho d ng t me
- A samp es were ana yzed w th n the recommended method ho d ng t me
- Samp e(s) MC34460- MS, MC34460- MSD were used as the QC samp es nd cated
- A method b anks for th s batch meet method spec f c cr ter a
- Matr x Sp ke Recovery(s) for 2,4-D n tropheno , Benzo c ac d, Hexach orocyc opentad ene are outs de contro m ts Outs de contro m ts due to poss b e matr x nterference Refer to B ank Sp ke
- Matr x Sp ke Dup cate Recove y(s) for 2,4-D n tropheno , Benzo c ac d are outs de contro m ts Outs de contro m ts due to poss b e matr x nterference Refer to B ank Sp ke

Extractables by GCMS By Method SW846 8270D BY SIM

Matrix: AQ **Batch ID:** OP40300

- A samp es were extracted w th n the recommended method ho d ng t me
- A samp es were ana yzed w th n the recommended method ho d ng t me
- A method b anks for th s batch meet method spec f c cr ter a
- Samp e(s) MC34 00- 2MS, MC34 00- 2MSD were used as the QC samp es nd cated
- Ca brat on standard MSI3446-ICV3427 not assoc ate w th th s job

Matrix: SO **Batch ID:** OP40292

- A samp es were extracted w th n the recommended method ho d ng t me
- A samp es were ana yzed w th n the recommended method ho d ng t me
- Samp e(s) MC34460- MS, MC34460- MSD were used as the QC samp es nd cated
- Samp e(s) MC34460-2 have compound(s) repo ted w th a “B” qua f er, nd cat ng ana yte s found n the assoc ated method b ank

Volatiles by GC By Method SW846 8011

Matrix: AQ **Batch ID:** OP40305

- A samp es were extracted w th n the recommended method ho d ng t me
- A samp es were ana yzed w th n the recommended method ho d ng t me
- A method b anks for th s batch meet method spec f c cr ter a
- Samp e(s) MC34 00- 3MS, MC34 00- 3MSD were used as the QC samp es nd cated
- Cont nu ng ca brat on check standard GBB3339-CC3339, f e BB60065 for ,2-D bromoethane (s gna #), ,2-D bromo-3-ch oropropane (s gna # and s gna #2), exceeds cr ter a (response b as h gh) Assoc ated samp es are non-detect for th s compound
- Cont nu ng ca brat on check standard GBB3339-CC3339, s gna # , f e BB60054 for ,2-D bromo-3-ch oropropane exceeds cr ter a ,2-D bromo-3-ch oropropane s repo ted from s gna #2

Matrix: SO **Batch ID:** OP40303

- A samp es were extracted w th n the recommended method ho d ng t me
- A samp es were ana yzed w th n the recommended method ho d ng t me
- Samp e(s) MC34460- MS, MC34460- MSD were used as the QC samp es nd cated
- A method b anks for th s batch meet method spec f c cr ter a

Volatiles by GC By Method SW846 8015

Matrix: AQ **Batch ID:** GAB4627

- A samp es were ana yzed w th n the recommended method ho d ng t me
- Samp e(s) MC34422- MS, MC34422- MSD were used as the QC samp es nd cated
- A method b anks for th s batch meet method spec f c cr ter a

Matrix: SO **Batch ID:** GAB4626

- A samp es were ana yzed w th n the recommended method ho d ng t me
- Samp e(s) MC34460-2MS, MC34460-2MSD were used as the QC samp es nd cated
- A method b anks for th s batch meet method spec f c cr ter a
- Ca brat on check standard GAB4626-CC448 ut zed the same f e as GAB4627-CC4488

Wet Chemistry By Method SM21 2540 B MOD.

Matrix: SO **Batch ID:** GN48809

- Samp e(s) MC34460-2DUP were used as the QC samp es for So ds, Percent

SGS Accutest New Eng and cert f es that a ana ys s were performed w th n method spec f cat on It s further recommended that th s report to be used n ts ent rety The Laborato y D rector for SGS Accutest New Eng and or ass gnee as ver f ed by the s gnature on the cover page has author zed the re ease of th s repo t(MC34460)

Summary of Hits

Job Number: MC34460
Account: Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL
Collected: 10/16/14

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
MC34460-1	MW-27-101614 (40-42)					
Benzene		0.0011	0.00059	0.00040	mg/kg	SW846 8260C
Carbon disulfide		0.0013 J	0.0059	0.00015	mg/kg	SW846 8260C
Ethylbenzene		0.0019 J	0.0024	0.00082	mg/kg	SW846 8260C
Toluene		0.0023 J	0.0059	0.00024	mg/kg	SW846 8260C
Xylene (total)		0.00050 J	0.0024	0.00026	mg/kg	SW846 8260C
4-Chloroaniline		0.0410 J	0.60	0.015	mg/kg	SW846 8270D
Acenaphthene		0.0278	0.0060	0.0010	mg/kg	SW846 8270D BY SIM
Acenaphthylene		0.0029 J	0.0060	0.00092	mg/kg	SW846 8270D BY SIM
Anthracene		0.0403	0.0060	0.0013	mg/kg	SW846 8270D BY SIM
Benzo(a)anthracene		0.0154	0.0060	0.0028	mg/kg	SW846 8270D BY SIM
Benzo(a)pyrene		0.0056 J	0.0060	0.0024	mg/kg	SW846 8270D BY SIM
Benzo(b)fluoranthene		0.0035 J	0.0060	0.0027	mg/kg	SW846 8270D BY SIM
Benzo(g,h,i)perylene		0.0017 J	0.0060	0.0016	mg/kg	SW846 8270D BY SIM
Benzo(k)fluoranthene		0.0040 J	0.0060	0.0019	mg/kg	SW846 8270D BY SIM
Chrysene		0.0140	0.0060	0.0016	mg/kg	SW846 8270D BY SIM
Fluoranthene		0.0280	0.0060	0.0018	mg/kg	SW846 8270D BY SIM
Fluorene		0.0256	0.0060	0.0012	mg/kg	SW846 8270D BY SIM
1-Methylnaphthalene		0.0410 J	0.12	0.030	mg/kg	SW846 8270D BY SIM
2-Methylnaphthalene		0.0798 J	0.12	0.030	mg/kg	SW846 8270D BY SIM
Phenanthrene		0.106	0.0060	0.0013	mg/kg	SW846 8270D BY SIM
Pyrene		0.0377	0.0060	0.0019	mg/kg	SW846 8270D BY SIM
MC34460-2	MW-27-101614 (48-50)					
Benzene		0.0128	0.00054	0.00036	mg/kg	SW846 8260C
2-Butanone (MEK) [a]		0.0799	0.011	0.0033	mg/kg	SW846 8260C
Ethylbenzene		0.0010 J	0.0021	0.00074	mg/kg	SW846 8260C
Toluene		0.0018 J	0.0054	0.00022	mg/kg	SW846 8260C
Benzo(a)anthracene		0.0036 J	0.0063	0.0029	mg/kg	SW846 8270D BY SIM
Benzo(b)fluoranthene		0.0113	0.0063	0.0028	mg/kg	SW846 8270D BY SIM
Benzo(g,h,i)perylene		0.0060 J	0.0063	0.0017	mg/kg	SW846 8270D BY SIM
Benzo(k)fluoranthene		0.0047 J	0.0063	0.0019	mg/kg	SW846 8270D BY SIM
Chrysene		0.0038 J	0.0063	0.0017	mg/kg	SW846 8270D BY SIM
Fluoranthene		0.0029 J	0.0063	0.0019	mg/kg	SW846 8270D BY SIM
Indeno(1,2,3-cd)pyrene		0.0047 J	0.0063	0.0016	mg/kg	SW846 8270D BY SIM
Phenanthrene		0.0020 JB	0.0063	0.0013	mg/kg	SW846 8270D BY SIM
Pyrene		0.0058 J	0.0063	0.0020	mg/kg	SW846 8270D BY SIM
TPH-GRO (VOA)		5.31 J	13	2.0	mg/kg	SW846 8015
MC34460-3	TB-101614-HCL					
No hits reported in this sample.						

Summary of Hits

Job Number: MC34460
Account: Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL
Collected: 10/16/14

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method

MC34460-4 **TB-101614-ST**

No hits reported in this sample.

MC34460-5 **EQB-101614**

No hits reported in this sample.

(a) Continuing Calibration outside of acceptance criteria. Sample result may be biased high.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-27-101614 (40-42)		
Lab Sample ID:	MC34460-1	**Date Sampled:**	10/16/14
Matrix:	SO - Soil	**Date Received:**	10/18/14
Method:	SW846 8260C	**Percent Solids:**	81.1
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M69226.D	1	10/29/14	AMY	n/a	n/a	MSM2454
Run #2							

	Initial Weight	Final Volume
Run #1	5.21 g	5.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	0.012	0.0033	mg/kg	
107-02-8	Acrolein	ND	0.030	0.010	mg/kg	
107-13-1	Acrylonitrile	ND	0.030	0.0032	mg/kg	
71-43-2	Benzene	0.0011	0.00059	0.00040	mg/kg	
108-86-1	Bromobenzene	ND	0.0059	0.00030	mg/kg	
74-97-5	Bromochloromethane	ND	0.0059	0.00041	mg/kg	
75-27-4	Bromodichloromethane	ND	0.0024	0.00025	mg/kg	
75-25-2	Bromoform	ND	0.0024	0.00042	mg/kg	
74-83-9	Bromomethane	ND	0.0024	0.00071	mg/kg	
78-93-3	2-Butanone (MEK)	ND	0.012	0.0036	mg/kg	
104-51-8	n-Butylbenzene	ND	0.0059	0.00029	mg/kg	
135-98-8	sec-Butylbenzene	ND	0.0059	0.00088	mg/kg	
98-06-6	tert-Butylbenzene	ND	0.0059	0.00025	mg/kg	
75-15-0	Carbon disulfide	0.0013	0.0059	0.00015	mg/kg	J
56-23-5	Carbon tetrachloride	ND	0.0024	0.00026	mg/kg	
108-90-7	Chlorobenzene	ND	0.0024	0.00019	mg/kg	
75-00-3	Chloroethane	ND	0.0059	0.00089	mg/kg	
110-75-8	2-Chloroethyl vinyl ether [a]	ND	0.0059	0.0015	mg/kg	
67-66-3	Chloroform	ND	0.0024	0.00020	mg/kg	
74-87-3	Chloromethane	ND	0.0059	0.00067	mg/kg	
95-49-8	o-Chlorotoluene	ND	0.0059	0.00023	mg/kg	
106-43-4	p-Chlorotoluene	ND	0.0059	0.00031	mg/kg	
124-48-1	Dibromochloromethane	ND	0.0024	0.00038	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0024	0.00025	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.0024	0.00036	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.0024	0.00041	mg/kg	
75-71-8	Dichlorodifluoromethane	ND	0.0024	0.00096	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0024	0.00032	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0024	0.00038	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0024	0.00049	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0024	0.00053	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0024	0.00049	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-27-101614 (40-42)		
Lab Sample ID:	MC34460-1	**Date Sampled:**	10/16/14
Matrix:	SO - Soil	**Date Received:**	10/18/14
Method:	SW846 8260C	**Percent Solids:**	81.1
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	0.0024	0.00050	mg/kg	
142-28-9	1,3-Dichloropropane	ND	0.0059	0.00039	mg/kg	
594-20-7	2,2-Dichloropropane	ND	0.0059	0.00067	mg/kg	
563-58-6	1,1-Dichloropropene	ND	0.0059	0.00031	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0024	0.00027	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	0.0024	0.00031	mg/kg	
123-91-1	1,4-Dioxane	ND	0.030	0.024	mg/kg	
97-63-2	Ethyl methacrylate	ND	0.0059	0.00042	mg/kg	
100-41-4	Ethylbenzene	0.0019	0.0024	0.00082	mg/kg	J
87-68-3	Hexachlorobutadiene	ND	0.0059	0.00068	mg/kg	
591-78-6	2-Hexanone	ND	0.012	0.00090	mg/kg	
98-82-8	Isopropylbenzene	ND	0.0059	0.00020	mg/kg	
99-87-6	p-Isopropyltoluene	ND	0.0059	0.00021	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.0024	0.00022	mg/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	0.0059	0.00064	mg/kg	
74-95-3	Methylene bromide	ND	0.0059	0.00054	mg/kg	
75-09-2	Methylene chloride	ND	0.0024	0.00063	mg/kg	
91-20-3	Naphthalene	ND	0.0059	0.00047	mg/kg	
103-65-1	n-Propylbenzene	ND	0.0059	0.00018	mg/kg	
100-42-5	Styrene	ND	0.0059	0.00020	mg/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.0059	0.00048	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.0024	0.00047	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0024	0.00037	mg/kg	
108-88-3	Toluene	0.0023	0.0059	0.00024	mg/kg	J
87-61-6	1,2,3-Trichlorobenzene	ND	0.0059	0.00051	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.0059	0.00061	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0024	0.00026	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	0.0024	0.00068	mg/kg	
79-01-6	Trichloroethene	ND	0.0024	0.00029	mg/kg	
75-69-4	Trichlorofluoromethane	ND	0.0024	0.00047	mg/kg	
96-18-4	1,2,3-Trichloropropane	ND	0.0059	0.00034	mg/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	0.0059	0.0017	mg/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	0.0059	0.0018	mg/kg	
108-05-4	Vinyl Acetate [b]	ND	0.0059	0.0018	mg/kg	
75-01-4	Vinyl chloride	ND	0.0024	0.0011	mg/kg	
	m,p-Xylene	ND	0.0024	0.00052	mg/kg	
95-47-6	o-Xylene	ND	0.0024	0.00033	mg/kg	
1330-20-7	Xylene (total)	0.00050	0.0024	0.00026	mg/kg	J

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-27-101614 (40-42)		
Lab Sample ID:	MC34460-1	**Date Sampled:**	10/16/14
Matrix:	SO - Soil	**Date Received:**	10/18/14
Method:	SW846 8260C	**Percent Solids:**	81.1
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	86%		70-130%
2037-26-5	Toluene-D8	83%		70-130%
460-00-4	4-Bromofluorobenzene	106%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	mg/kg	

(a) Continuing Calibration outside of acceptance criteria. Sample result may be biased low.
(b) Initial Calibration Verification outside of acceptance criteria. Spike Blank(second source standard)was used to verify calibation standard accuracy.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-27-101614 (40-42)		
Lab Sample ID:	MC34460-1	**Date Sampled:**	10/16/14
Matrix:	SO - Soil	**Date Received:**	10/18/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	81.1
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R40436.D	1	10/21/14	KD	10/20/14	OP40291	MSR1488
Run #2							

	Initial Weight	Final Volume
Run #1	20.4 g	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	0.60	0.075	mg/kg	
95-57-8	2-Chlorophenol	ND	0.30	0.014	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	0.60	0.015	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	0.60	0.017	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	0.60	0.098	mg/kg	
51-28-5	2,4-Dinitrophenol	ND	1.2	0.15	mg/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	0.60	0.075	mg/kg	
95-48-7	2-Methylphenol	ND	0.60	0.024	mg/kg	
	3&4-Methylphenol	ND	0.60	0.029	mg/kg	
88-75-5	2-Nitrophenol	ND	0.60	0.016	mg/kg	
100-02-7	4-Nitrophenol	ND	1.2	0.11	mg/kg	
87-86-5	Pentachlorophenol	ND	0.60	0.043	mg/kg	
108-95-2	Phenol	ND	0.30	0.017	mg/kg	
95-95-4	2,4,5-Trichlorophenol	ND	0.60	0.015	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	0.60	0.015	mg/kg	
62-53-3	Aniline	ND	0.60	0.030	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	0.30	0.015	mg/kg	
85-68-7	Butyl benzyl phthalate	ND	0.30	0.012	mg/kg	
100-51-6	Benzyl Alcohol	ND	0.60	0.030	mg/kg	
91-58-7	2-Chloronaphthalene	ND	0.30	0.016	mg/kg	
106-47-8	4-Chloroaniline	0.0410	0.60	0.015	mg/kg	J
111-91-1	bis(2-Chloroethoxy)methane	ND	0.30	0.014	mg/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	0.30	0.018	mg/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	0.30	0.022	mg/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	0.30	0.018	mg/kg	
122-66-7	1,2-Diphenylhydrazine	ND	0.30	0.014	mg/kg	
121-14-2	2,4-Dinitrotoluene	ND	0.60	0.040	mg/kg	
606-20-2	2,6-Dinitrotoluene	ND	0.60	0.015	mg/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	0.30	0.030	mg/kg	
132-64-9	Dibenzofuran	ND	0.12	0.017	mg/kg	
84-74-2	Di-n-butyl phthalate	ND	0.30	0.032	mg/kg	
117-84-0	Di-n-octyl phthalate	ND	0.30	0.0094	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-27-101614 (40-42)		
Lab Sample ID:	MC34460-1	**Date Sampled:**	10/16/14
Matrix:	SO - Soil	**Date Received:**	10/18/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	81.1
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	0.30	0.015	mg/kg	
131-11-3	Dimethyl phthalate	ND	0.30	0.017	mg/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	0.30	0.011	mg/kg	
118-74-1	Hexachlorobenzene	ND	0.30	0.019	mg/kg	
77-47-4	Hexachlorocyclopentadiene	ND	0.60	0.15	mg/kg	
67-72-1	Hexachloroethane	ND	0.30	0.015	mg/kg	
78-59-1	Isophorone	ND	0.30	0.014	mg/kg	
88-74-4	2-Nitroaniline	ND	0.60	0.015	mg/kg	
99-09-2	3-Nitroaniline	ND	0.60	0.033	mg/kg	
100-01-6	4-Nitroaniline	ND	0.60	0.015	mg/kg	
98-95-3	Nitrobenzene	ND	0.30	0.016	mg/kg	
62-75-9	n-Nitrosodimethylamine	ND	0.30	0.014	mg/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	0.30	0.017	mg/kg	
86-30-6	N-Nitrosodiphenylamine	ND	0.30	0.018	mg/kg	
110-86-1	Pyridine	ND	0.60	0.030	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	71%		30-130%
4165-62-2	Phenol-d5	69%		30-130%
118-79-6	2,4,6-Tribromophenol	79%		30-130%
4165-60-0	Nitrobenzene-d5	69%		30-130%
321-60-8	2-Fluorobiphenyl	72%		30-130%
1718-51-0	Terphenyl-d14	86%		30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-27-101614 (40-42)		
Lab Sample ID:	MC34460-1	**Date Sampled:**	10/16/14
Matrix:	SO - Soil	**Date Received:**	10/18/14
Method:	SW846 8270D BY SIM SW846 3546	**Percent Solids:**	81.1
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I92382.D	1	10/22/14	WK	10/20/14	OP40292	MSI3443
Run #2							

	Initial Weight	Final Volume
Run #1	20.4 g	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.0278	0.0060	0.0010	mg/kg	
208-96-8	Acenaphthylene	0.0029	0.0060	0.00092	mg/kg	J
120-12-7	Anthracene	0.0403	0.0060	0.0013	mg/kg	
56-55-3	Benzo(a)anthracene	0.0154	0.0060	0.0028	mg/kg	
50-32-8	Benzo(a)pyrene	0.0056	0.0060	0.0024	mg/kg	J
205-99-2	Benzo(b)fluoranthene	0.0035	0.0060	0.0027	mg/kg	J
191-24-2	Benzo(g,h,i)perylene	0.0017	0.0060	0.0016	mg/kg	J
207-08-9	Benzo(k)fluoranthene	0.0040	0.0060	0.0019	mg/kg	J
218-01-9	Chrysene	0.0140	0.0060	0.0016	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	0.0060	0.0017	mg/kg	
206-44-0	Fluoranthene	0.0280	0.0060	0.0018	mg/kg	
86-73-7	Fluorene	0.0256	0.0060	0.0012	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.0060	0.0015	mg/kg	
90-12-0	1-Methylnaphthalene	0.0410	0.12	0.030	mg/kg	J
91-57-6	2-Methylnaphthalene	0.0798	0.12	0.030	mg/kg	J
85-01-8	Phenanthrene	0.106	0.0060	0.0013	mg/kg	
129-00-0	Pyrene	0.0377	0.0060	0.0019	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	72%		30-130%
321-60-8	2-Fluorobiphenyl	72%		30-130%
1718-51-0	Terphenyl-d14	76%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-27-101614 (40-42)		
Lab Sample ID:	MC34460-1	**Date Sampled:**	10/16/14
Matrix:	SO - Soil	**Date Received:**	10/18/14
Method:	SW846 8011 SW846 3550B	**Percent Solids:**	81.1
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB60034.D	1	10/22/14	NK	10/21/14	OP40303	GBB3338
Run #2							

	Initial Weight	Final Volume
Run #1	30.4 g	75.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.0046	0.0013	mg/kg	
106-93-4	1,2-Dibromoethane	ND	0.0046	0.0011	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	141%		61-167%
460-00-4	Bromofluorobenzene (S)	126%		61-167%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-27-101614 (40-42)		
Lab Sample ID:	MC34460-1	**Date Sampled:**	10/16/14
Matrix:	SO - Soil	**Date Received:**	10/18/14
Method:	SW846 8015	**Percent Solids:**	81.1
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB86447.D	1	10/20/14	AF	n/a	n/a	GAB4626
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.05 g	10.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (VOA)	ND	16	2.4	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	2,3,4-Trifluorotoluene	84%		50-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-27-101614 (48-50)		
Lab Sample ID:	MC34460-2	**Date Sampled:**	10/16/14
Matrix:	SO - Soil	**Date Received:**	10/18/14
Method:	SW846 8260C	**Percent Solids:**	76.8
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M69227.D	1	10/29/14	AMY	n/a	n/a	MSM2454
Run #2							

	Initial Weight	Final Volume
Run #1	6.07 g	5.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	0.011	0.0030	mg/kg	
107-02-8	Acrolein	ND	0.027	0.0094	mg/kg	
107-13-1	Acrylonitrile	ND	0.027	0.0029	mg/kg	
71-43-2	Benzene	0.0128	0.00054	0.00036	mg/kg	
108-86-1	Bromobenzene	ND	0.0054	0.00027	mg/kg	
74-97-5	Bromochloromethane	ND	0.0054	0.00037	mg/kg	
75-27-4	Bromodichloromethane	ND	0.0021	0.00022	mg/kg	
75-25-2	Bromoform	ND	0.0021	0.00038	mg/kg	
74-83-9	Bromomethane	ND	0.0021	0.00065	mg/kg	
78-93-3	2-Butanone (MEK) [a]	0.0799	0.011	0.0033	mg/kg	
104-51-8	n-Butylbenzene	ND	0.0054	0.00026	mg/kg	
135-98-8	sec-Butylbenzene	ND	0.0054	0.00080	mg/kg	
98-06-6	tert-Butylbenzene	ND	0.0054	0.00023	mg/kg	
75-15-0	Carbon disulfide	ND	0.0054	0.00014	mg/kg	
56-23-5	Carbon tetrachloride	ND	0.0021	0.00024	mg/kg	
108-90-7	Chlorobenzene	ND	0.0021	0.00017	mg/kg	
75-00-3	Chloroethane	ND	0.0054	0.00081	mg/kg	
110-75-8	2-Chloroethyl vinyl ether [b]	ND	0.0054	0.0013	mg/kg	
67-66-3	Chloroform	ND	0.0021	0.00018	mg/kg	
74-87-3	Chloromethane	ND	0.0054	0.00061	mg/kg	
95-49-8	o-Chlorotoluene	ND	0.0054	0.00021	mg/kg	
106-43-4	p-Chlorotoluene	ND	0.0054	0.00029	mg/kg	
124-48-1	Dibromochloromethane	ND	0.0021	0.00035	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0021	0.00023	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.0021	0.00032	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.0021	0.00037	mg/kg	
75-71-8	Dichlorodifluoromethane	ND	0.0021	0.00087	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0021	0.00029	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0021	0.00034	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0021	0.00044	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0021	0.00048	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0021	0.00045	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-27-101614 (48-50)		
Lab Sample ID:	MC34460-2	**Date Sampled:**	10/16/14
Matrix:	SO - Soil	**Date Received:**	10/18/14
Method:	SW846 8260C	**Percent Solids:**	76.8
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	0.0021	0.00045	mg/kg	
142-28-9	1,3-Dichloropropane	ND	0.0054	0.00035	mg/kg	
594-20-7	2,2-Dichloropropane	ND	0.0054	0.00060	mg/kg	
563-58-6	1,1-Dichloropropene	ND	0.0054	0.00028	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0021	0.00024	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	0.0021	0.00028	mg/kg	
123-91-1	1,4-Dioxane	ND	0.027	0.022	mg/kg	
97-63-2	Ethyl methacrylate	ND	0.0054	0.00038	mg/kg	
100-41-4	Ethylbenzene	0.0010	0.0021	0.00074	mg/kg	J
87-68-3	Hexachlorobutadiene	ND	0.0054	0.00062	mg/kg	
591-78-6	2-Hexanone	ND	0.011	0.00081	mg/kg	
98-82-8	Isopropylbenzene	ND	0.0054	0.00018	mg/kg	
99-87-6	p-Isopropyltoluene	ND	0.0054	0.00019	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.0021	0.00020	mg/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	0.0054	0.00058	mg/kg	
74-95-3	Methylene bromide	ND	0.0054	0.00049	mg/kg	
75-09-2	Methylene chloride	ND	0.0021	0.00057	mg/kg	
91-20-3	Naphthalene	ND	0.0054	0.00042	mg/kg	
103-65-1	n-Propylbenzene	ND	0.0054	0.00016	mg/kg	
100-42-5	Styrene	ND	0.0054	0.00018	mg/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.0054	0.00043	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.0021	0.00042	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0021	0.00034	mg/kg	
108-88-3	Toluene	0.0018	0.0054	0.00022	mg/kg	J
87-61-6	1,2,3-Trichlorobenzene	ND	0.0054	0.00046	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.0054	0.00055	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0021	0.00023	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	0.0021	0.00062	mg/kg	
79-01-6	Trichloroethene	ND	0.0021	0.00026	mg/kg	
75-69-4	Trichlorofluoromethane	ND	0.0021	0.00043	mg/kg	
96-18-4	1,2,3-Trichloropropane	ND	0.0054	0.00031	mg/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	0.0054	0.0015	mg/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	0.0054	0.0016	mg/kg	
108-05-4	Vinyl Acetate [c]	ND	0.0054	0.0016	mg/kg	
75-01-4	Vinyl chloride	ND	0.0021	0.00098	mg/kg	
	m,p-Xylene	ND	0.0021	0.00047	mg/kg	
95-47-6	o-Xylene	ND	0.0021	0.00030	mg/kg	
1330-20-7	Xylene (total)	ND	0.0021	0.00023	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-27-101614 (48-50)		
Lab Sample ID:	MC34460-2	**Date Sampled:**	10/16/14
Matrix:	SO - Soil	**Date Received:**	10/18/14
Method:	SW846 8260C	**Percent Solids:**	76.8
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	90%		70-130%
2037-26-5	Toluene-D8	81%		70-130%
460-00-4	4-Bromofluorobenzene	116%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	mg/kg	

(a) Continuing Calibration outside of acceptance criteria. Sample result may be biased high.
(b) Continuing Calibration outside of acceptance criteria. Sample result may be biased low.
(c) Initial Calibration Verification outside of acceptance criteria. Spike Blank(second source standard)was used to verify calibation standard accuracy.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-27-101614 (48-50)		
Lab Sample ID:	MC34460-2	**Date Sampled:**	10/16/14
Matrix:	SO - Soil	**Date Received:**	10/18/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	76.8
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R40437.D	1	10/21/14	KD	10/20/14	OP40291	MSR1488
Run #2							

	Initial Weight	Final Volume
Run #1	20.6 g	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	0.63	0.079	mg/kg	
95-57-8	2-Chlorophenol	ND	0.32	0.014	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	0.63	0.016	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	0.63	0.018	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	0.63	0.10	mg/kg	
51-28-5	2,4-Dinitrophenol	ND	1.3	0.16	mg/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	0.63	0.079	mg/kg	
95-48-7	2-Methylphenol	ND	0.63	0.025	mg/kg	
	3&4-Methylphenol	ND	0.63	0.031	mg/kg	
88-75-5	2-Nitrophenol	ND	0.63	0.017	mg/kg	
100-02-7	4-Nitrophenol	ND	1.3	0.12	mg/kg	
87-86-5	Pentachlorophenol	ND	0.63	0.045	mg/kg	
108-95-2	Phenol	ND	0.32	0.018	mg/kg	
95-95-4	2,4,5-Trichlorophenol	ND	0.63	0.016	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	0.63	0.016	mg/kg	
62-53-3	Aniline	ND	0.63	0.032	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	0.32	0.016	mg/kg	
85-68-7	Butyl benzyl phthalate	ND	0.32	0.013	mg/kg	
100-51-6	Benzyl Alcohol	ND	0.63	0.032	mg/kg	
91-58-7	2-Chloronaphthalene	ND	0.32	0.017	mg/kg	
106-47-8	4-Chloroaniline	ND	0.63	0.016	mg/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	0.32	0.015	mg/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	0.32	0.019	mg/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	0.32	0.023	mg/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	0.32	0.019	mg/kg	
122-66-7	1,2-Diphenylhydrazine	ND	0.32	0.014	mg/kg	
121-14-2	2,4-Dinitrotoluene	ND	0.63	0.042	mg/kg	
606-20-2	2,6-Dinitrotoluene	ND	0.63	0.016	mg/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	0.32	0.032	mg/kg	
132-64-9	Dibenzofuran	ND	0.13	0.017	mg/kg	
84-74-2	Di-n-butyl phthalate	ND	0.32	0.034	mg/kg	
117-84-0	Di-n-octyl phthalate	ND	0.32	0.0099	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-27-101614 (48-50)		
Lab Sample ID:	MC34460-2	**Date Sampled:**	10/16/14
Matrix:	SO - Soil	**Date Received:**	10/18/14
Method:	SW846 8270D SW846 3546	**Percent Solids:**	76.8
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	0.32	0.016	mg/kg	
131-11-3	Dimethyl phthalate	ND	0.32	0.018	mg/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	0.32	0.012	mg/kg	
118-74-1	Hexachlorobenzene	ND	0.32	0.020	mg/kg	
77-47-4	Hexachlorocyclopentadiene	ND	0.63	0.16	mg/kg	
67-72-1	Hexachloroethane	ND	0.32	0.015	mg/kg	
78-59-1	Isophorone	ND	0.32	0.015	mg/kg	
88-74-4	2-Nitroaniline	ND	0.63	0.016	mg/kg	
99-09-2	3-Nitroaniline	ND	0.63	0.035	mg/kg	
100-01-6	4-Nitroaniline	ND	0.63	0.016	mg/kg	
98-95-3	Nitrobenzene	ND	0.32	0.017	mg/kg	
62-75-9	n-Nitrosodimethylamine	ND	0.32	0.015	mg/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	0.32	0.018	mg/kg	
86-30-6	N-Nitrosodiphenylamine	ND	0.32	0.019	mg/kg	
110-86-1	Pyridine	ND	0.63	0.032	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	79%		30-130%
4165-62-2	Phenol-d5	77%		30-130%
118-79-6	2,4,6-Tribromophenol	79%		30-130%
4165-60-0	Nitrobenzene-d5	69%		30-130%
321-60-8	2-Fluorobiphenyl	85%		30-130%
1718-51-0	Terphenyl-d14	96%		30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-27-101614 (48-50)		
Lab Sample ID:	MC34460-2	**Date Sampled:**	10/16/14
Matrix:	SO - Soil	**Date Received:**	10/18/14
Method:	SW846 8270D BY SIM SW846 3546	**Percent Solids:**	76.8
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I92383.D	1	10/22/14	WK	10/20/14	OP40292	MSI3443
Run #2							

	Initial Weight	Final Volume
Run #1	20.6 g	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.0063	0.0011	mg/kg	
208-96-8	Acenaphthylene	ND	0.0063	0.00096	mg/kg	
120-12-7	Anthracene	ND	0.0063	0.0014	mg/kg	
56-55-3	Benzo(a)anthracene	0.0036	0.0063	0.0029	mg/kg	J
50-32-8	Benzo(a)pyrene	ND	0.0063	0.0025	mg/kg	
205-99-2	Benzo(b)fluoranthene	0.0113	0.0063	0.0028	mg/kg	
191-24-2	Benzo(g,h,i)perylene	0.0060	0.0063	0.0017	mg/kg	J
207-08-9	Benzo(k)fluoranthene	0.0047	0.0063	0.0019	mg/kg	J
218-01-9	Chrysene	0.0038	0.0063	0.0017	mg/kg	J
53-70-3	Dibenzo(a,h)anthracene	ND	0.0063	0.0018	mg/kg	
206-44-0	Fluoranthene	0.0029	0.0063	0.0019	mg/kg	J
86-73-7	Fluorene	ND	0.0063	0.0012	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	0.0047	0.0063	0.0016	mg/kg	J
90-12-0	1-Methylnaphthalene	ND	0.13	0.032	mg/kg	
91-57-6	2-Methylnaphthalene	ND	0.13	0.032	mg/kg	
85-01-8	Phenanthrene	0.0020	0.0063	0.0013	mg/kg	JB
129-00-0	Pyrene	0.0058	0.0063	0.0020	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	74%		30-130%
321-60-8	2-Fluorobiphenyl	81%		30-130%
1718-51-0	Terphenyl-d14	84%		30-130%

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-27-101614 (48-50)		
Lab Sample ID:	MC34460-2	**Date Sampled:**	10/16/14
Matrix:	SO - Soil	**Date Received:**	10/18/14
Method:	SW846 8011 SW846 3550B	**Percent Solids:**	76.8
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB60035.D	1	10/22/14	NK	10/21/14	OP40303	GBB3338
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	50.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.0033	0.00095	mg/kg	
106-93-4	1,2-Dibromoethane	ND	0.0033	0.00080	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	152%		61-167%
460-00-4	Bromofluorobenzene (S)	125%		61-167%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-27-101614 (48-50)		
Lab Sample ID:	MC34460-2	**Date Sampled:**	10/16/14
Matrix:	SO - Soil	**Date Received:**	10/18/14
Method:	SW846 8015	**Percent Solids:**	76.8
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB86441.D	1	10/20/14	AF	n/a	n/a	GAB4626
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.52 g	10.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (VOA)	5.31	13	2.0	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	2,3,4-Trifluorotoluene	85%		50-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-101614-HCL		
Lab Sample ID:	MC34460-3	**Date Sampled:**	10/16/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/18/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P80932.D	1	10/30/14	JM	n/a	n/a	MSP2648
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK) [a]	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-101614-HCL		
Lab Sample ID:	MC34460-3	**Date Sampled:**	10/16/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/18/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene [a]	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate [a]	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-101614-HCL		
Lab Sample ID:	MC34460-3	**Date Sampled:**	10/16/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/18/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		70-130%
2037-26-5	Toluene-D8	104%		70-130%
460-00-4	4-Bromofluorobenzene	104%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-101614-ST		
Lab Sample ID:	MC34460-4	**Date Sampled:**	10/16/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/18/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB60057.D	1	10/23/14	NK	10/21/14	OP40305	GBB3339
Run #2							

	Initial Volume	Final Volume
Run #1	37.0 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.014	0.0058	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.014	0.0058	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	80%		36-173%
460-00-4	Bromofluorobenzene (S)	87%		36-173%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EQB-101614		
Lab Sample ID:	MC34460-5	**Date Sampled:**	10/16/14
Matrix:	AQ - Equipment Blank	**Date Received:**	10/18/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P80933.D	1	10/30/14	JM	n/a	n/a	MSP2648
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	ND	0.50	0.25	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.47	ug/l	
75-25-2	Bromoform	ND	1.0	0.30	ug/l	
74-83-9	Bromomethane	ND	2.0	0.77	ug/l	
78-93-3	2-Butanone (MEK) [a]	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.23	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.25	ug/l	
75-00-3	Chloroethane	ND	2.0	0.37	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.31	ug/l	
74-87-3	Chloromethane	ND	2.0	0.59	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.24	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.16	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.31	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.29	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.44	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.47	ug/l	

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EQB-101614		
Lab Sample ID:	MC34460-5	**Date Sampled:**	10/16/14
Matrix:	AQ - Equipment Blank	**Date Received:**	10/18/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	0.45	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.38	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.22	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.39	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.29	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.30	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.29	ug/l	
108-88-3	Toluene	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene [a]	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.19	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.42	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.30	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.40	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.30	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.18	ug/l	
108-05-4	Vinyl Acetate [a]	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.45	ug/l	
	m,p-Xylene	ND	1.0	0.38	ug/l	
95-47-6	o-Xylene	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.30	ug/l	

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EQB-101614		
Lab Sample ID:	MC34460-5	**Date Sampled:**	10/16/14
Matrix:	AQ - Equipment Blank	**Date Received:**	10/18/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		70-130%
2037-26-5	Toluene-D8	105%		70-130%
460-00-4	4-Bromofluorobenzene	106%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EQB-101614		
Lab Sample ID:	MC34460-5	**Date Sampled:**	10/16/14
Matrix:	AQ - Equipment Blank	**Date Received:**	10/18/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F77026.D	1	10/24/14	MR	10/21/14	OP40299	MSF3374
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	9.5	2.4	ug/l	
95-57-8	2-Chlorophenol	ND	4.8	0.29	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	9.5	0.79	ug/l	
120-83-2	2,4-Dichlorophenol	ND	9.5	0.38	ug/l	
105-67-9	2,4-Dimethylphenol	ND	9.5	0.53	ug/l	
51-28-5	2,4-Dinitrophenol	ND	19	2.4	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	9.5	1.8	ug/l	
95-48-7	2-Methylphenol	ND	9.5	0.21	ug/l	
	3&4-Methylphenol	ND	9.5	0.44	ug/l	
88-75-5	2-Nitrophenol	ND	9.5	2.7	ug/l	
100-02-7	4-Nitrophenol	ND	19	0.51	ug/l	
87-86-5	Pentachlorophenol	ND	9.5	1.1	ug/l	
108-95-2	Phenol	ND	4.8	0.29	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	9.5	0.35	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	9.5	0.17	ug/l	
62-53-3	Aniline	ND	9.5	0.61	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	4.8	0.45	ug/l	
85-68-7	Butyl benzyl phthalate	ND	4.8	0.51	ug/l	
100-51-6	Benzyl Alcohol	ND	9.5	2.2	ug/l	
91-58-7	2-Chloronaphthalene	ND	4.8	0.30	ug/l	
106-47-8	4-Chloroaniline	ND	9.5	0.53	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	4.8	0.27	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	4.8	0.33	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	4.8	0.32	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	4.8	0.24	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	4.8	0.23	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	9.5	0.43	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	9.5	0.29	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	4.8	0.25	ug/l	
132-64-9	Dibenzofuran	ND	1.9	0.25	ug/l	
84-74-2	Di-n-butyl phthalate	ND	4.8	0.16	ug/l	
117-84-0	Di-n-octyl phthalate	ND	4.8	0.27	ug/l	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EQB-101614		
Lab Sample ID:	MC34460-5	**Date Sampled:**	10/16/14
Matrix:	AQ - Equipment Blank	**Date Received:**	10/18/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	4.8	0.19	ug/l	
131-11-3	Dimethyl phthalate	ND	4.8	0.32	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	1.9	0.32	ug/l	
118-74-1	Hexachlorobenzene	ND	4.8	0.28	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	9.5	1.2	ug/l	
67-72-1	Hexachloroethane	ND	4.8	0.29	ug/l	
78-59-1	Isophorone	ND	4.8	0.43	ug/l	
88-74-4	2-Nitroaniline	ND	9.5	0.38	ug/l	
99-09-2	3-Nitroaniline	ND	9.5	1.3	ug/l	
100-01-6	4-Nitroaniline	ND	9.5	2.1	ug/l	
98-95-3	Nitrobenzene	ND	4.8	0.37	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	4.8	0.96	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	4.8	0.38	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	4.8	0.18	ug/l	
110-86-1	Pyridine	ND	9.5	0.49	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	41%		15-110%
4165-62-2	Phenol-d5	26%		15-110%
118-79-6	2,4,6-Tribromophenol	88%		15-110%
4165-60-0	Nitrobenzene-d5	76%		30-130%
321-60-8	2-Fluorobiphenyl	73%		30-130%
1718-51-0	Terphenyl-d14	96%		30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EQB-101614		
Lab Sample ID:	MC34460-5	**Date Sampled:**	10/16/14
Matrix:	AQ - Equipment Blank	**Date Received:**	10/18/14
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I92448.D	1	10/24/14	WK	10/21/14	OP40300	MSI3446
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.095	0.066	ug/l	
208-96-8	Acenaphthylene	ND	0.095	0.047	ug/l	
120-12-7	Anthracene	ND	0.095	0.087	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.048	0.019	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.095	0.027	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.048	0.030	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.095	0.026	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.095	0.037	ug/l	
218-01-9	Chrysene	ND	0.095	0.023	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.095	0.030	ug/l	
206-44-0	Fluoranthene	ND	0.095	0.039	ug/l	
86-73-7	Fluorene	ND	0.095	0.095	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.095	0.029	ug/l	
90-12-0	1-Methylnaphthalene	ND	1.9	0.48	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.9	0.48	ug/l	
85-01-8	Phenanthrene	ND	0.048	0.012	ug/l	
129-00-0	Pyrene	ND	0.095	0.037	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	81%		30-130%
321-60-8	2-Fluorobiphenyl	76%		30-130%
1718-51-0	Terphenyl-d14	84%		30-130%

ND = Not detected MDL = Method Detection Limit
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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EQB-101614		
Lab Sample ID:	MC34460-5	**Date Sampled:**	10/16/14
Matrix:	AQ - Equipment Blank	**Date Received:**	10/18/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB60058.D	1	10/23/14	NK	10/21/14	OP40305	GBB3339
Run #2							

	Initial Volume	Final Volume
Run #1	36.5 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.014	0.0059	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.014	0.0058	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	85%		36-173%
460-00-4	Bromofluorobenzene (S)	94%		36-173%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EQB-101614		
Lab Sample ID:	MC34460-5	**Date Sampled:**	10/16/14
Matrix:	AQ - Equipment Blank	**Date Received:**	10/18/14
Method:	SW846 8015	**Percent Solids:**	n/a
Project:	URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB86456.D	1	10/20/14	AF	n/a	n/a	GAB4627
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (VOA)	ND	0.10	0.013	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	2,3,4-Trifluorotoluene	85%		60-135%

ND = Not detected MDL = Method Detection Limit
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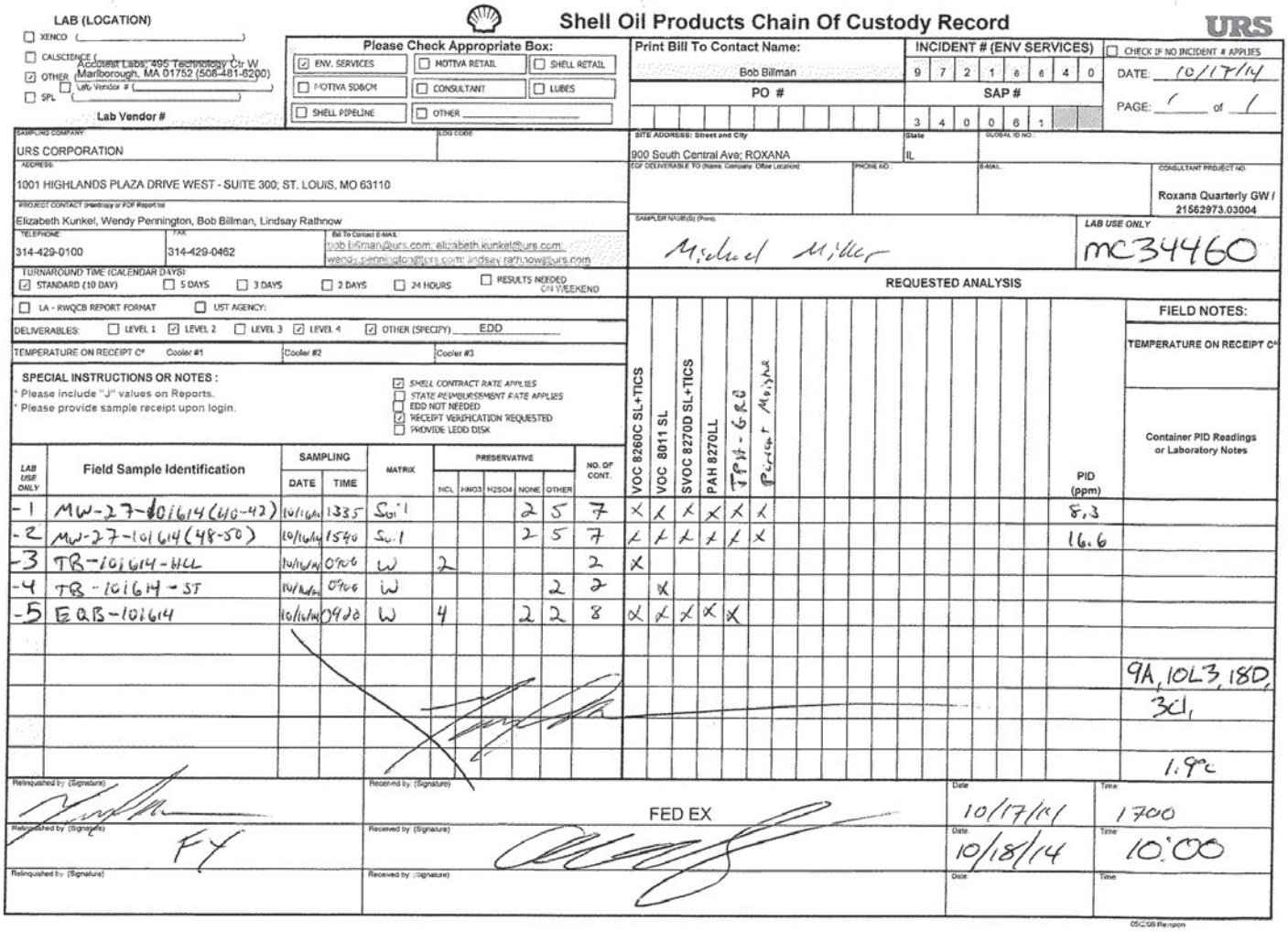
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- REPROC Form: Reprocessed/Corrected Data
- Sample Tracking Chronicle
- Internal Chain of Custody



Shell Oil Products Chain Of Custody Record

URS

LAB (LOCATION)
- [ ] XENCO ( )
- [ ] CALSCIENCE ( )
- [x] OTHER (Accutest Labs, 495 Technology Ctr W Marlborough, MA 01752 (508-481-6200))
- [ ] SPL (Lab Vendor # ( ))

Lab Vendor #

Please Check Appropriate Box:
- [x] ENV. SERVICES
- [ ] MOTIVA RETAIL
- [ ] SHELL RETAIL
- [ ] MOTIVA SD&CM
- [ ] CONSULTANT
- [ ] LUBES
- [ ] SHELL PIPELINE
- [ ] OTHER

Print Bill To Contact Name: Bob Billman

PO #

INCIDENT # (ENV SERVICES): 9 7 2 1 6 6 4 0

SAP #: 3 4 0 0 6 1

- [ ] CHECK IF NO INCIDENT # APPLIES

DATE: 10/17/14

PAGE: 1 of 1

SAMPLING COMPANY: URS CORPORATION

LOG CODE:

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA

State: IL

GLOBAL ID NO.:

ADDRESS: 1001 HIGHLANDS PLAZA DRIVE WEST - SUITE 300; ST. LOUIS, MO 63110

EDF DELIVERABLE TO (Name, Company, Office Location):

PHONE NO.:

E-MAIL:

CONSULTANT PROJECT NO.: Roxana Quarterly GW / 21562973.03004

PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Wendy Pennington, Bob Billman, Lindsay Rathnow

TELEPHONE: 314-429-0100

FAX: 314-429-0462

Bill To Contact E-MAIL: bob.billman@urs.com; elizabeth.kunkel@urs.com; wendy.pennington@urs.com; lindsay.rathnow@urs.com

SAMPLER NAME(S) (Print): Michael Miller

LAB USE ONLY: MC34460

TURNAROUND TIME (CALENDAR DAYS):
- [x] STANDARD (10 DAY)
- [ ] 5 DAYS
- [ ] 3 DAYS
- [ ] 2 DAYS
- [ ] 24 HOURS
- [ ] RESULTS NEEDED ON WEEKEND

- [ ] LA - RWQCB REPORT FORMAT
- [ ] UST AGENCY:

DELIVERABLES: [ ] LEVEL 1 [x] LEVEL 2 [ ] LEVEL 3 [x] LEVEL 4 [x] OTHER (SPECIFY) EDD

TEMPERATURE ON RECEIPT C°: Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES:
- * Please include "J" values on Reports.
- * Please provide sample receipt upon login.

- [x] SHELL CONTRACT RATE APPLIES
- [ ] STATE REIMBURSEMENT RATE APPLIES
- [ ] EDD NOT NEEDED
- [x] RECEIPT VERIFICATION REQUESTED
- [ ] PROVIDE LEDD DISK

REQUESTED ANALYSIS

FIELD NOTES:

TEMPERATURE ON RECEIPT C°:

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260C SL+TICS	VOC 8011 SL	SVOC 8270D SL+TICS	PAH 8270LL	TPH-GRO	Percent Moisture	PID (ppm)	Container PID Readings or Laboratory Notes
-1	MW-27-101614(40-42)	10/16/14	1335	Soil				2	5	7	X	X	X	X	X	X	8.3	
-2	MW-27-101614(48-50)	10/16/14	1540	Soil				2	5	7	X	X	X	X	X	X	16.6	
-3	TB-101614-HCL	10/16/14	0900	W	2					2	X							
-4	TB-101614-ST	10/16/14	0900	W					2	2		X						
-5	EQB-101614	10/16/14	0920	W	4			2	2	8	X	X	X	X	X			
																		9A, 10L3, 18D, 3Cl,
																		1.9°C

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
[signature]	FED EX	10/17/14	1700
FY	[signature]	10/18/14	10:00

05/2/08 Revision

5.1

5

MC34460: Chain of Custody
Page 1 of 2

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: MC34460 **Client:** URS **Project:** 900 SOUTH CENTRAL

Date / Time Received: 10/18/2014 10 00 00 AM **Delivery Method:** **Airbill #'s:**

Cooler Temps (Initial/Adjusted): #1 (1 9/1 9)

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Thermometer D:	G1;		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control_Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☑		☐	☐
2. Trip Blank listed on COC:	☑		☐	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

Accutest Laboratories
V:(508) 481-6200

495 Technology Center West, Bldg One
F: (508) 481-7753

Marlborough, MA 01752
www/accutest.com

Initial Calibration Summary

Job Number: MC34460 **Sample:** MSM2417-ICC2417
Account: SHELLWIC Shell Oil **Lab FileID:** M68278.D
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Response Factor Report GCMS M

Method : O:\msm\1\methods\m140919sx.m (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Mon Oct 12 18:04:08 2015
Response via : Initial Calibration

Calibration Files
.5 =m68272.d 20 =m68277.d 2 =m68274.d 5 =m68275.d
10 =m68276.d 50 =m68278.d 200 =m68280.d 400 =m68281.d
= =

Compound	.5	20	2	5	10	50	200	400	Avg	%RSD
1) I 1,4-difluorobenzene	----------ISTD----------									
2) trichloroethene	0.602	0.374	0.477	0.429	0.414	0.417	0.402	0.382	0.437	16.90

---- Linear regression ---- Coefficient = 0.9991
Response Ratio = 0.00263 + 0.38976 *A

(#) = Out of Range ### Number of calibration levels exceeded format ###

m140919sx.m Mon Oct 12 18:07:41 2015

Initial Calibration Verification

Job Number: MC34460 **Sample:** MSM2417-ICV2417
Account: SHELLWIC Shell Oil **Lab FileID:** M68284.D
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Evaluate Continuing Calibration Report

Data File : O:\msm\1\data.back-up\m140919s\m68284.d Vial: 22
Acq On : 20 Sep 2014 4:54 am Operator: krystend
Sample : icv2417-50 Inst : GCMS M
Misc : MS32769,MSM2417,5,,,5,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : O:\msm\1\methods\m140919sx.m (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Mon Oct 12 18:04:08 2015
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	1,4-difluorobenzene	1.000	1.000	0.0	97	0.00	10.22
		Amount	Calc.	%Drift			
2 P	trichloroethene	50.000	52.093	-4.2	96	0.00	10.66

(#) = Out of Range SPCC's out = 0 CCC's out = 0
m68278.d m140919sx.m Mon Oct 12 18:07:52 2015

Continuing Calibration Summary

Job Number: MC34460 **Sample:** MSM2454-CC2417
Account: SHELLWIC Shell Oil **Lab FileID:** M69218.D
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Evaluate Continuing Calibration Report

Data File : O:\msm\1\data.back-up\m141029s\m69218.d Vial: 2
Acq On : 29 Oct 2014 9:05 am Operator: amym
Sample : cc2417-50 Inst : GCMS M
Misc : MS33081,MSM2454,5,,,5,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : O:\msm\1\methods\m140919sx.m (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Mon Oct 12 18:04:08 2015
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	1,4-difluorobenzene	1.000	1.000	0.0	74	0.00	10.22
		Amount	Calc.	%Drift			
2 P	trichloroethene	50.000	46.766	6.5	65	0.00	10.65

(#) = Out of Range SPCC's out = 0 CCC's out = 0
m68278.d m140919sx.m Wed Nov 04 10:45:11 2015

Quantitation Report (QT Reviewed)

Data Path : O:\msm\1\data.back-up\m140919s\
Data File : m68272.d
Acq On : 19 Sep 2014 11:04 pm
Operator : krystend
Sample : ic2417-0.5
Misc : MS32769,MSM2417,5,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 12 17:56:54 2015
Quant Method : O:\msm\1\methods\m140919sx.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Oct 12 17:55:54 2015
Response via : Initial Calibration

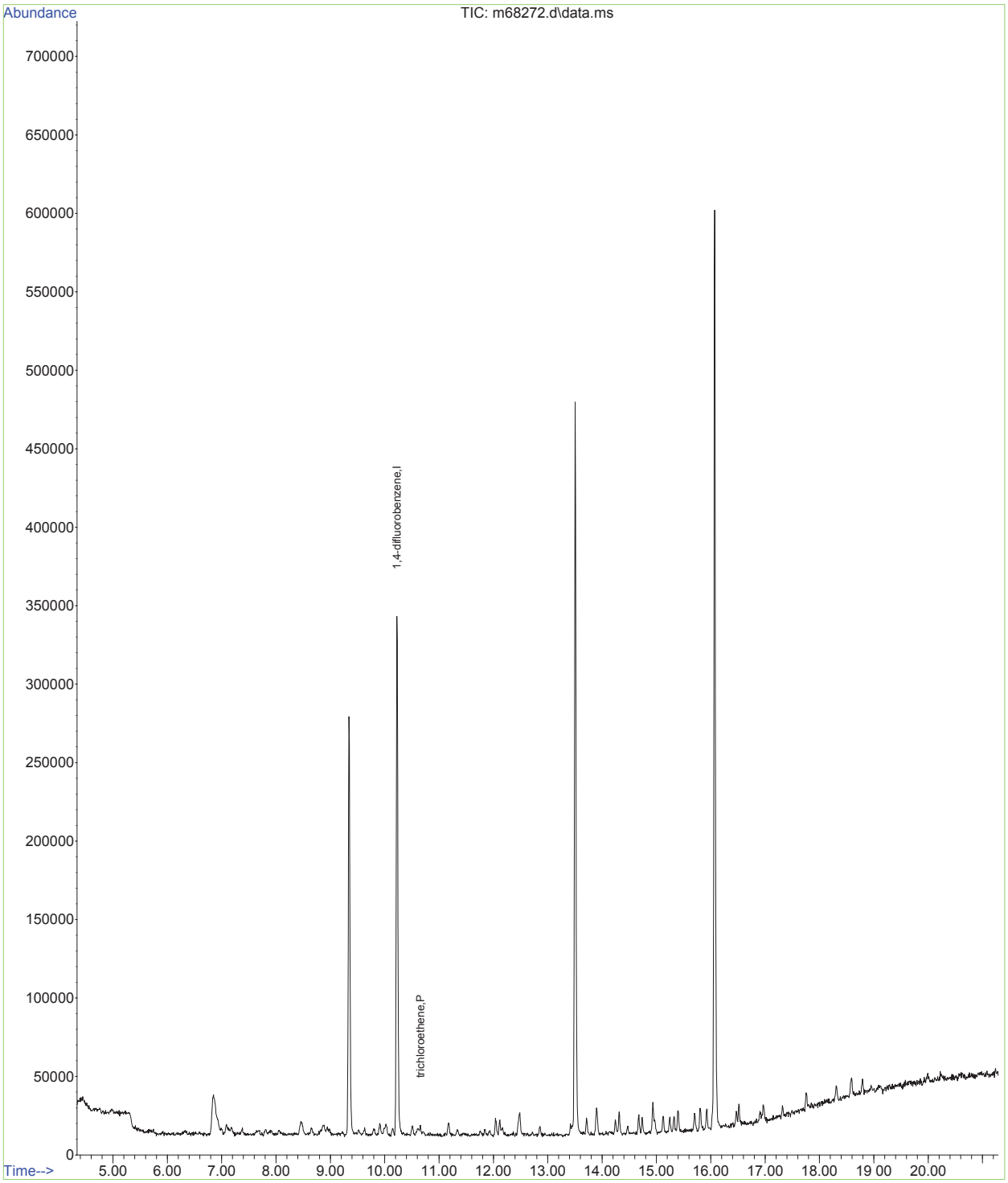
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-difluorobenzene	10.224	114	314225	50.00	ug/kg	0.00
Target Compounds						Qvalue
2) trichloroethene	10.655	95	1892	0.72	ug/kg	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\msm\1\data.back-up\m140919s\
Data File : m68272.d
Acq On : 19 Sep 2014 11:04 pm
Operator : krystend
Sample : ic2417-0.5
Misc : MS32769,MSM2417,5,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 12 17:56:54 2015
Quant Method : O:\msm\1\methods\m140919sx.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Oct 12 17:55:54 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msm\1\data.back-up\m140919s\
Data File : m68274.d
Acq On : 20 Sep 2014 12:02 am
Operator : krystend
Sample : ic2417-2
Misc : MS32769,MSM2417,5,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Oct 12 17:58:46 2015
Quant Method : O:\msm\1\methods\m140919sx.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Oct 12 17:55:54 2015
Response via : Initial Calibration

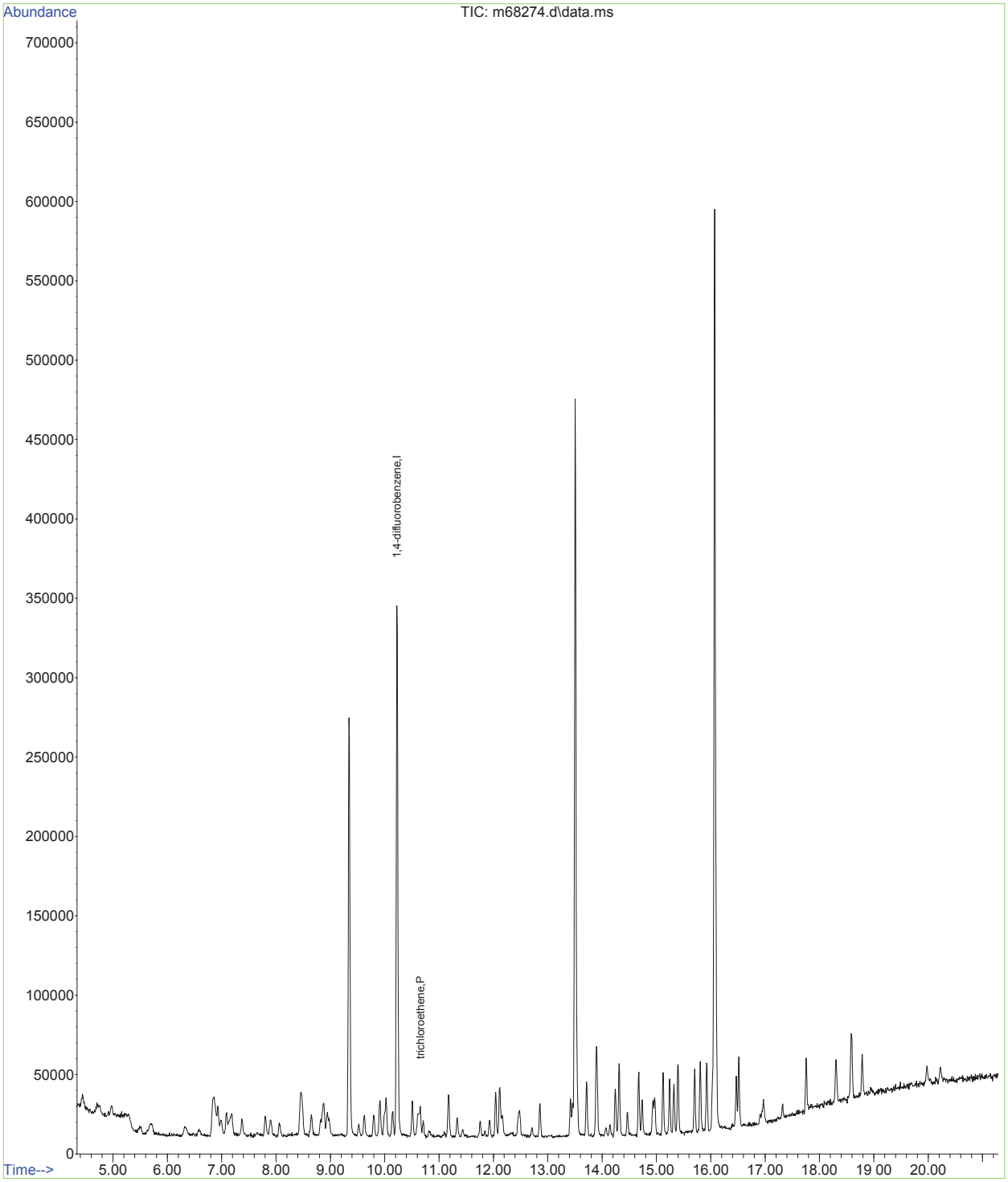
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-difluorobenzene	10.224	114	317547	50.00	ug/kg	0.00
Target Compounds						Qvalue
2) trichloroethene	10.655	95	6064m	2.29	ug/kg	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST MC34460

Data Path : O:\msm\1\data.back-up\m140919s\
Data File : m68274.d
Acq On : 20 Sep 2014 12:02 am
Operator : krystend
Sample : ic2417-2
Misc : MS32769,MSM2417,5,,,5,1
ALS Vial : 12 Sample Multiplier: 1

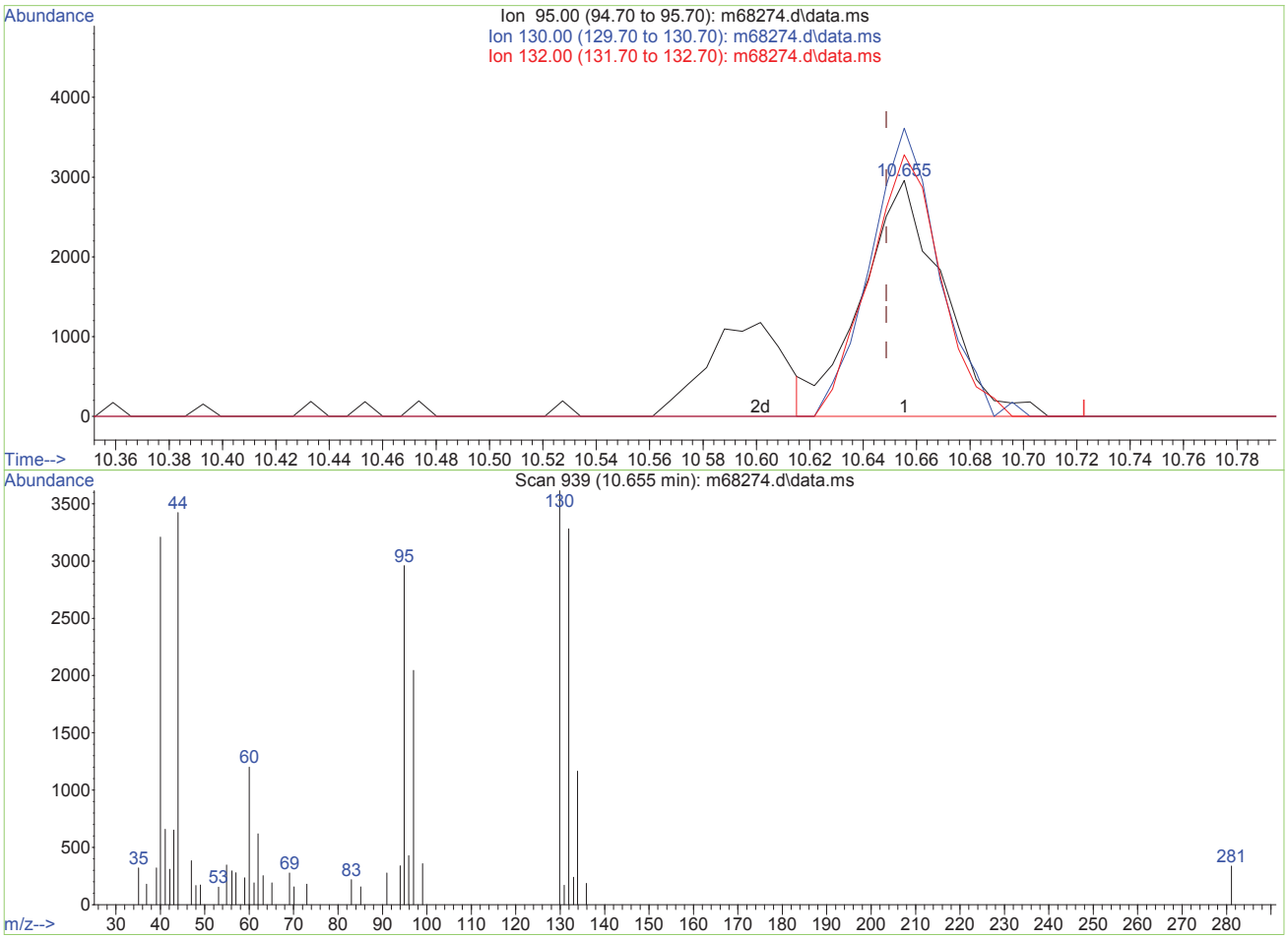
Quant Time: Oct 12 17:58:46 2015
Quant Method : O:\msm\1\methods\m140919sx.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Oct 12 17:55:54 2015
Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : O:\msm\1\data.back-up\m140919s\
Data File : m68274.d
Acq On : 20 Sep 2014 12:02 am
Operator : krystend
Sample : ic2417-2
Misc : MS32769,MSM2417,5,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Oct 12 17:56:57 2015
Quant Method : O:\msm\1\methods\m140919sx.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Oct 12 17:55:54 2015
Response via : Initial Calibration



TIC: m68274.d\data.ms

(2) trichloroethene (P)

10.655min (+0.007) 2.35ug/kg

response 6219

Ion	Exp%	Act%
95.00	100	100
130.00	120.60	122.17
132.00	110.20	110.88
0.00	0.00	0.00

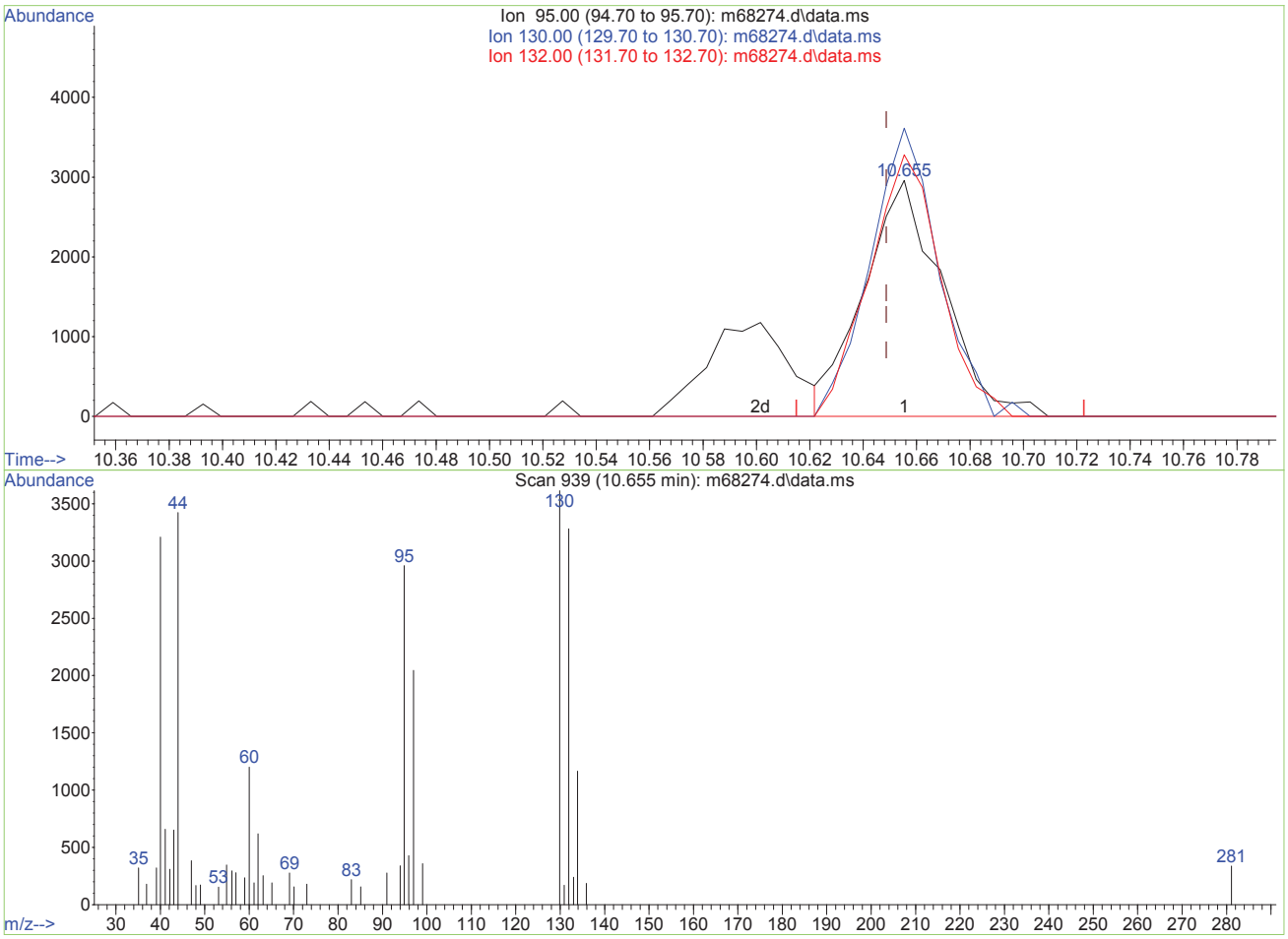
M68274.D edits: trichloroethene

SGS ACCUTEST MC34460

Quantitation Report (Qedit)

Data Path : O:\msm\1\data.back-up\m140919s\
Data File : m68274.d
Acq On : 20 Sep 2014 12:02 am
Operator : krystend
Sample : ic2417-2
Misc : MS32769,MSM2417,5,,,5,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Oct 12 17:56:57 2015
Quant Method : O:\msm\1\methods\m140919sx.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Oct 12 17:55:54 2015
Response via : Initial Calibration



TIC: m68274.d\data.ms

(2) trichloroethene (P)

10.655min (+0.007) 2.29ug/kg m

response 6064

Ion	Exp%	Act%
95.00	100	100
130.00	120.60	122.17
132.00	110.20	110.88
0.00	0.00	0.00

M68274.D edits: trichloroethene

Quantitation Report (QT Reviewed)

Data Path : O:\msm\1\data.back-up\m140919s\
Data File : m68275.d
Acq On : 20 Sep 2014 12:31 am
Operator : krystend
Sample : ic2417-5
Misc : MS32769,MSM2417,5,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Oct 12 17:59:22 2015
Quant Method : O:\msm\1\methods\m140919sx.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Oct 12 17:55:54 2015
Response via : Initial Calibration

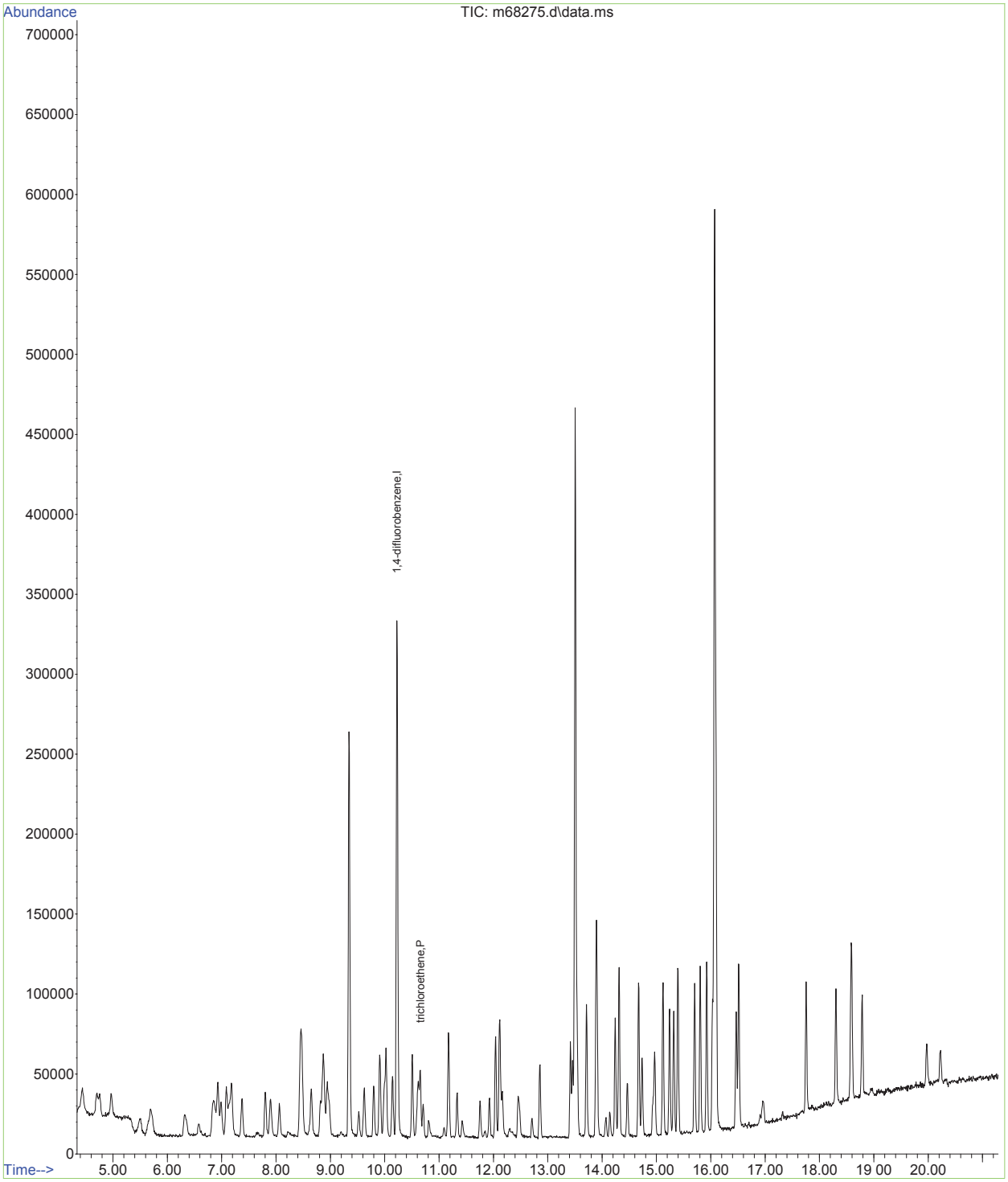
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-difluorobenzene	10.224	114	303955	50.00	ug/kg	0.00
Target Compounds						Qvalue
2) trichloroethene	10.655	95	13030m	5.15	ug/kg	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST MC34460

Data Path : O:\msm\1\data.back-up\m140919s\
Data File : m68275.d
Acq On : 20 Sep 2014 12:31 am
Operator : krystend
Sample : ic2417-5
Misc : MS32769,MSM2417,5,,,5,1
ALS Vial : 13 Sample Multiplier: 1

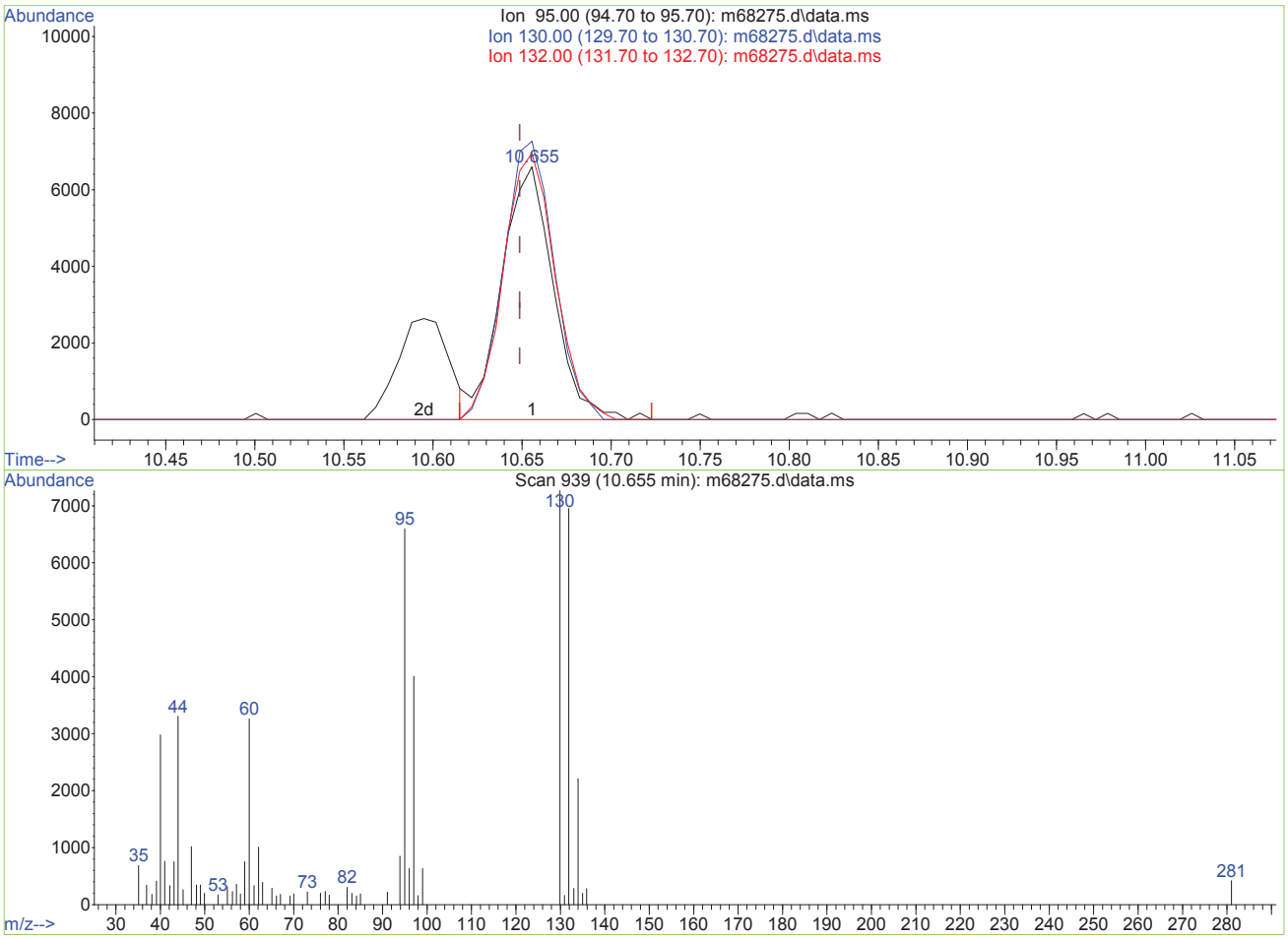
Quant Time: Oct 12 17:59:22 2015
Quant Method : O:\msm\1\methods\m140919sx.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Oct 12 17:55:54 2015
Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : O:\msm\1\data.back-up\m140919s\
Data File : m68275.d
Acq On : 20 Sep 2014 12:31 am
Operator : krystend
Sample : ic2417-5
Misc : MS32769,MSM2417,5,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Oct 12 17:56:59 2015
Quant Method : O:\msm\1\methods\m140919sx.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Oct 12 17:55:54 2015
Response via : Initial Calibration



TIC: m68275.d\data.ms

(2) trichloroethene (P)

10.655min (+0.007) 5.26ug/kg

response 13330

Ion	Exp%	Act%
95.00	100	100
130.00	120.60	110.19
132.00	110.20	105.38
0.00	0.00	0.00

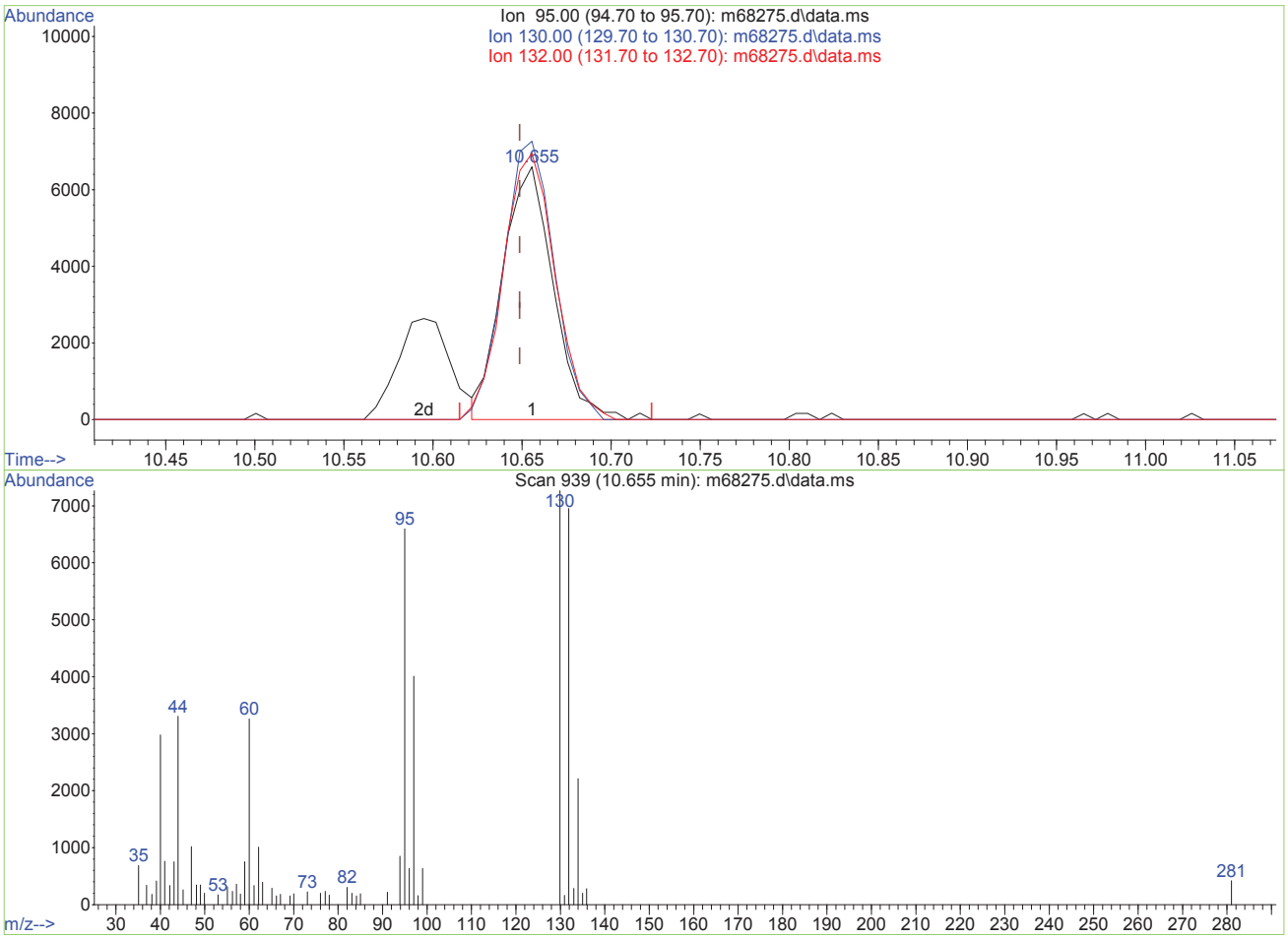
M68275.D edits: trichloroethene

SGS ACCUTEST MC34460

Quantitation Report (Qedit)

Data Path : O:\msm\1\data.back-up\m140919s\
Data File : m68275.d
Acq On : 20 Sep 2014 12:31 am
Operator : krystend
Sample : ic2417-5
Misc : MS32769,MSM2417,5,,,5,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Oct 12 17:56:59 2015
Quant Method : O:\msm\1\methods\m140919sx.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Oct 12 17:55:54 2015
Response via : Initial Calibration



TIC: m68275.d\data.ms

(2) trichloroethene (P)

10.655min (+0.007) 5.15ug/kg m

response 13030

Ion	Exp%	Act%
95.00	100	100
130.00	120.60	110.19
132.00	110.20	105.38
0.00	0.00	0.00

M68275.D edits: trichloroethene

SGS ACCUTEST MC34460

Quantitation Report (QT Reviewed)

Data Path : O:\msm\1\data.back-up\m140919s\
Data File : m68276.d
Acq On : 20 Sep 2014 1:01 am
Operator : krystend
Sample : ic2417-10
Misc : MS32769,MSM2417,5,,,5,1
ALS Vial : 14 Sample Multiplier: 1

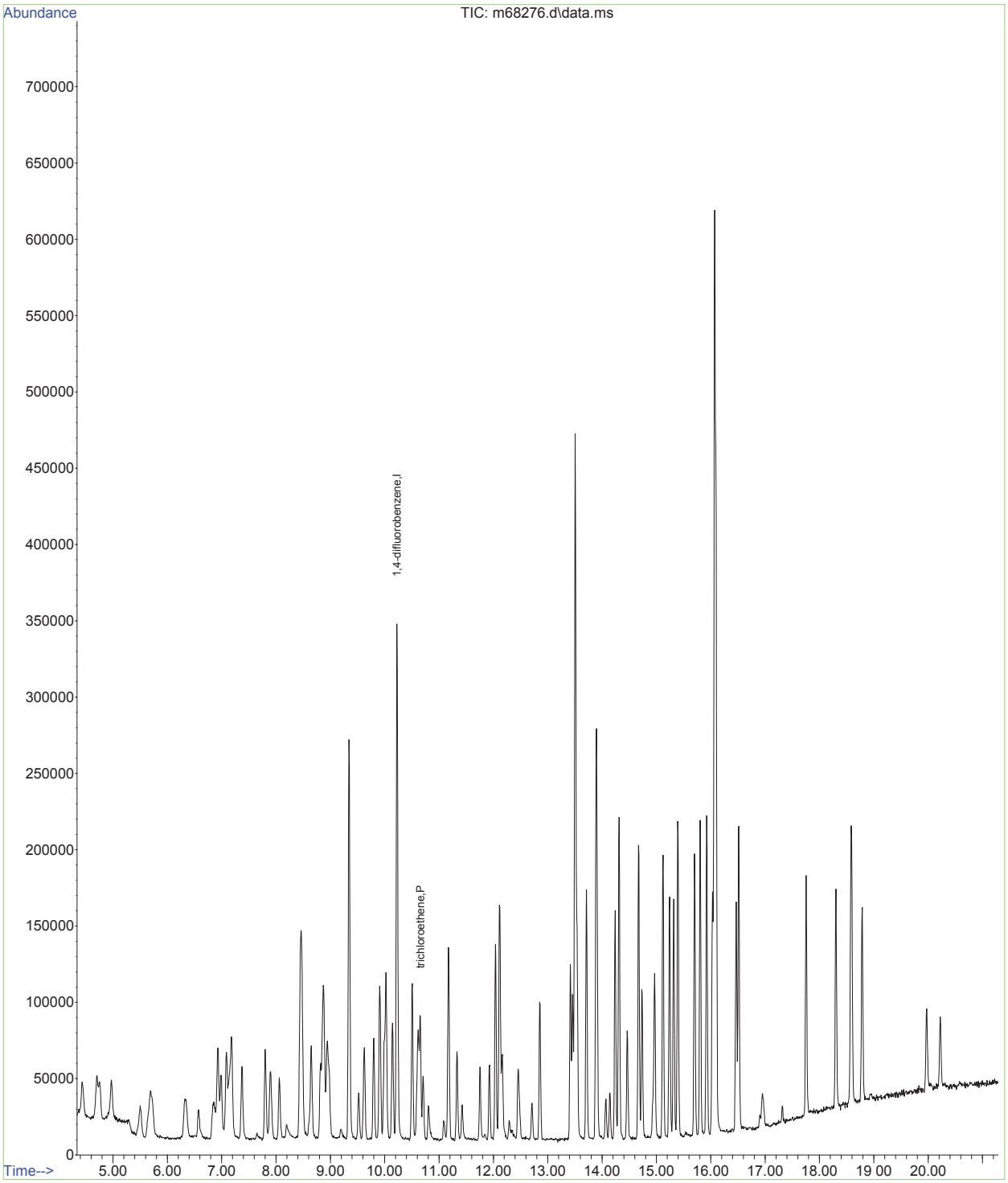
Quant Time: Oct 12 17:59:56 2015
Quant Method : O:\msm\1\methods\m140919sx.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Oct 12 17:55:54 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-difluorobenzene	10.225	114	313655	50.00	ug/kg	0.00
Target Compounds						Qvalue
2) trichloroethene	10.656	95	25966m	9.94	ug/kg	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : O:\msm\1\data.back-up\m140919s\
Data File : m68276.d
Acq On : 20 Sep 2014 1:01 am
Operator : krystend
Sample : ic2417-10
Misc : MS32769,MSM2417,5,,,5,1
ALS Vial : 14 Sample Multiplier: 1

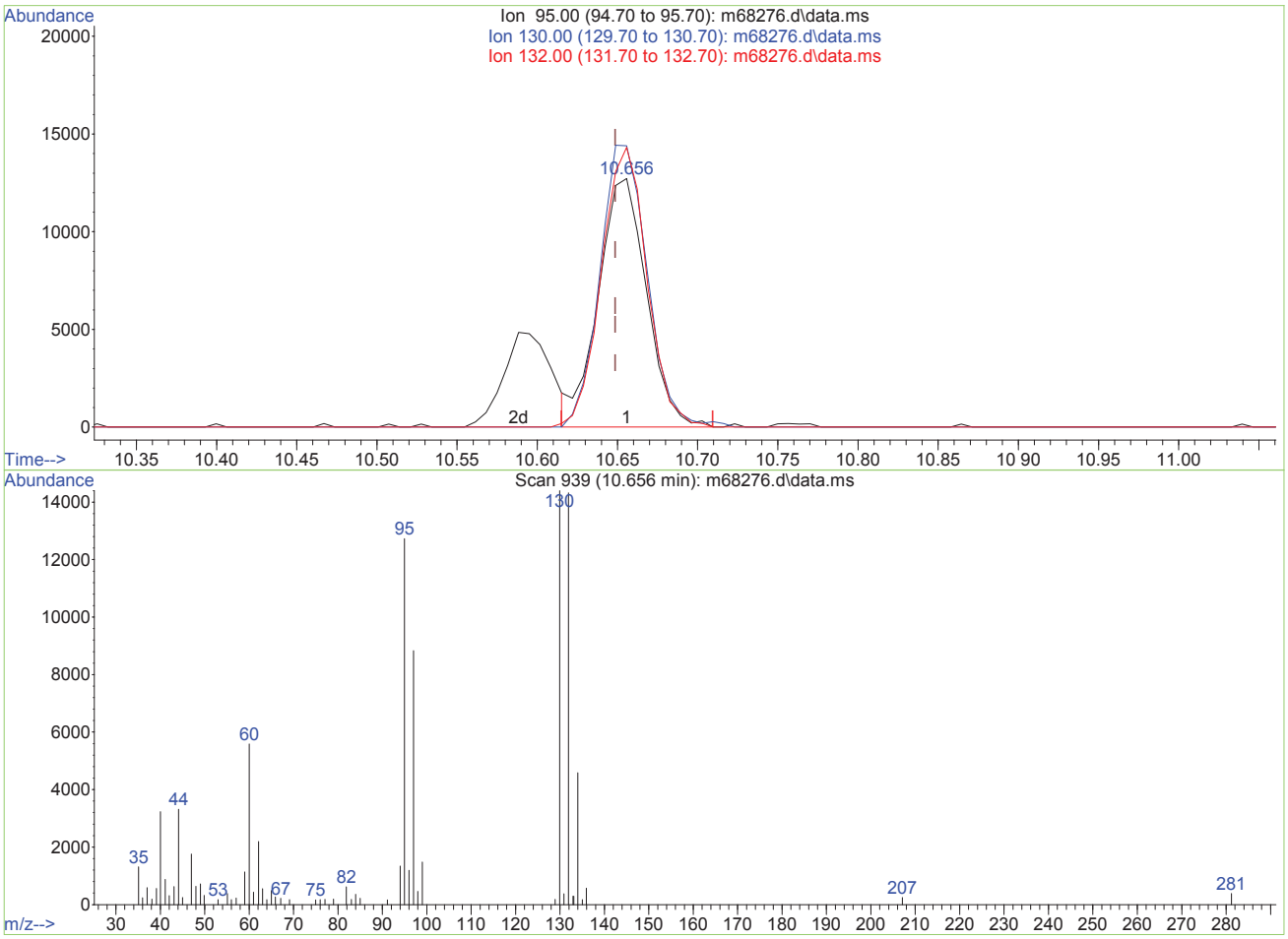
Quant Time: Oct 12 17:59:56 2015
Quant Method : O:\msm\1\methods\m140919sx.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Oct 12 17:55:54 2015
Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : O:\msm\1\data.back-up\m140919s\
Data File : m68276.d
Acq On : 20 Sep 2014 1:01 am
Operator : krystend
Sample : ic2417-10
Misc : MS32769,MSM2417,5,,,5,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 12 17:57:01 2015
Quant Method : O:\msm\1\methods\m140919sx.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Oct 12 17:55:54 2015
Response via : Initial Calibration



TIC: m68276.d\data.ms

(2) trichloroethene (P)

10.656min (+0.007) 10.17ug/kg

response 26566

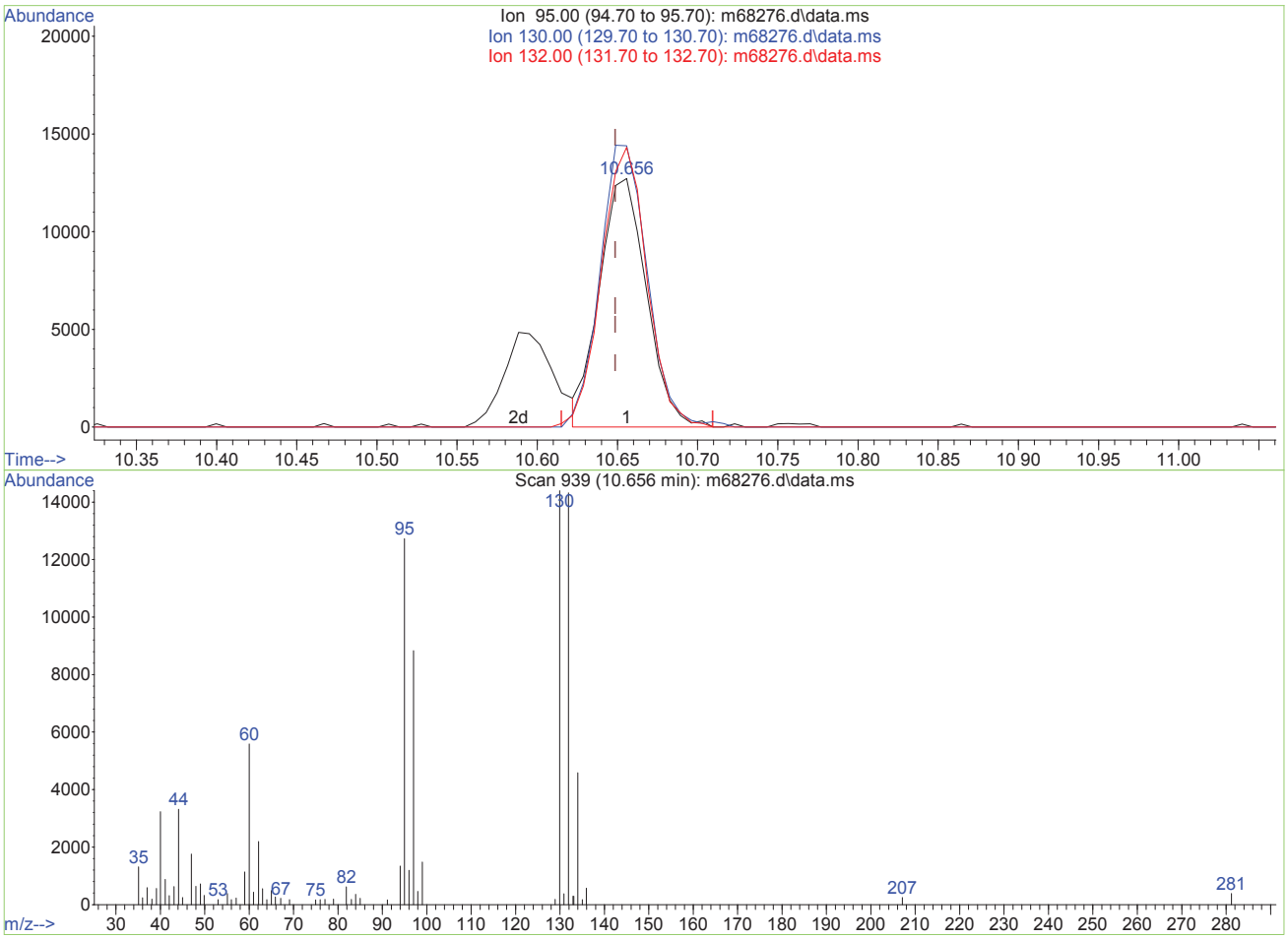
Ion	Exp%	Act%
95.00	100	100
130.00	120.60	113.18
132.00	110.20	112.54
0.00	0.00	0.00

M68276.D edits: trichloroethene

SGS ACCUTEST MC34460

Data Path : O:\msm\1\data.back-up\m140919s\
Data File : m68276.d
Acq On : 20 Sep 2014 1:01 am
Operator : krystend
Sample : ic2417-10
Misc : MS32769,MSM2417,5,,,5,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 12 17:57:01 2015
Quant Method : O:\msm\1\methods\m140919sx.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Oct 12 17:55:54 2015
Response via : Initial Calibration



TIC: m68276.d\data.ms

(2) trichloroethene (P)

10.656min (+0.007) 9.94ug/kg m

response 25966

Ion	Exp%	Act%
95.00	100	100
130.00	120.60	113.18
132.00	110.20	112.54
0.00	0.00	0.00

M68276.D edits: trichloroethene

Quantitation Report (QT Reviewed)

Data Path : O:\msm\1\data.back-up\m140919s\
Data File : m68277.d
Acq On : 20 Sep 2014 1:30 am
Operator : krystend
Sample : ic2417-20
Misc : MS32769,MSM2417,5,,,5,1
ALS Vial : 15 Sample Multiplier: 1

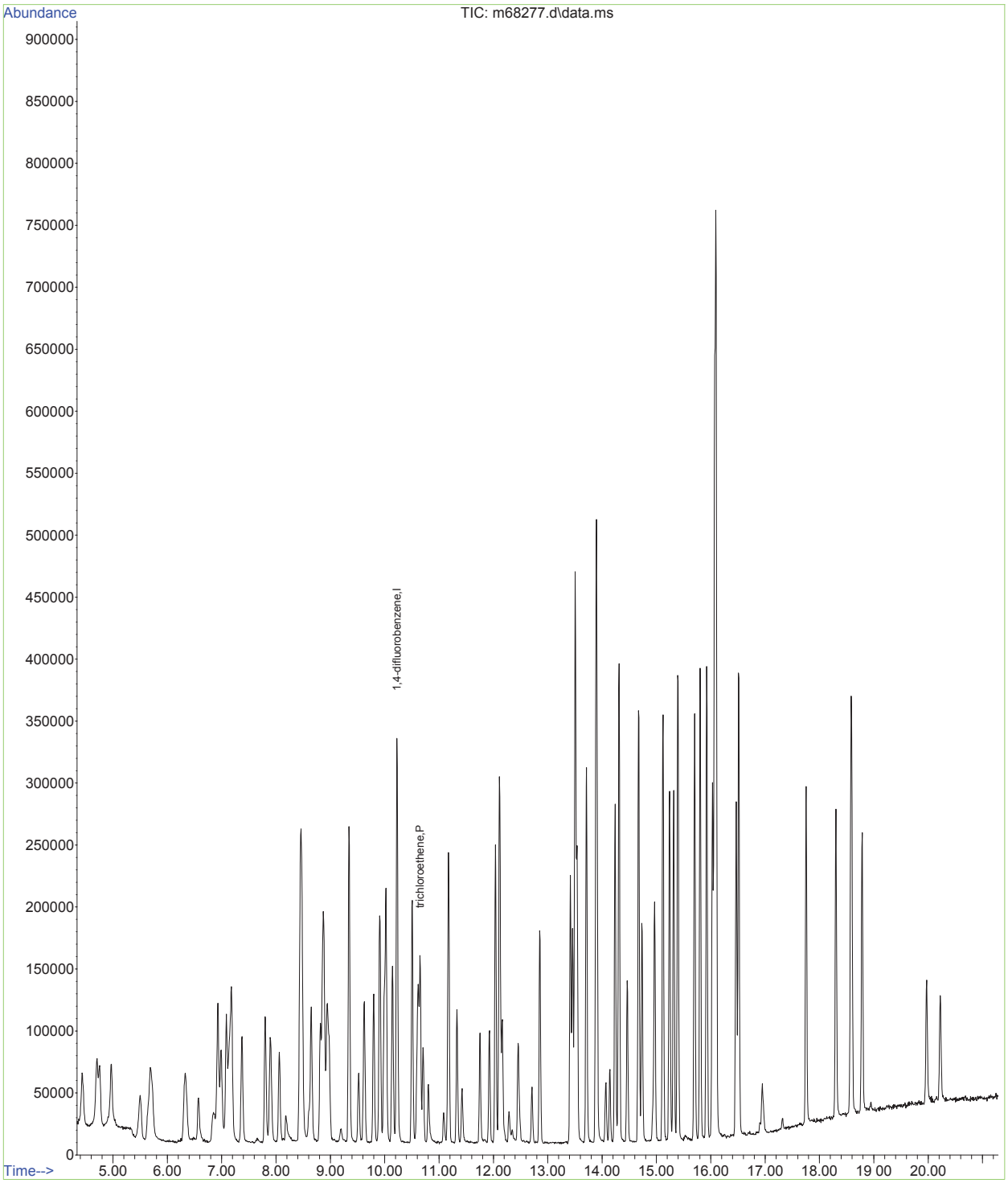
Quant Time: Oct 12 18:00:28 2015
Quant Method : O:\msm\1\methods\m140919sx.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Oct 12 17:55:54 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-difluorobenzene	10.224	114	308778	50.00	ug/kg	0.00
Target Compounds						Qvalue
2) trichloroethene	10.649	95	46153m	17.94	ug/kg	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : O:\msm\1\data.back-up\m140919s\
Data File : m68277.d
Acq On : 20 Sep 2014 1:30 am
Operator : krystend
Sample : ic2417-20
Misc : MS32769,MSM2417,5,,,5,1
ALS Vial : 15 Sample Multiplier: 1

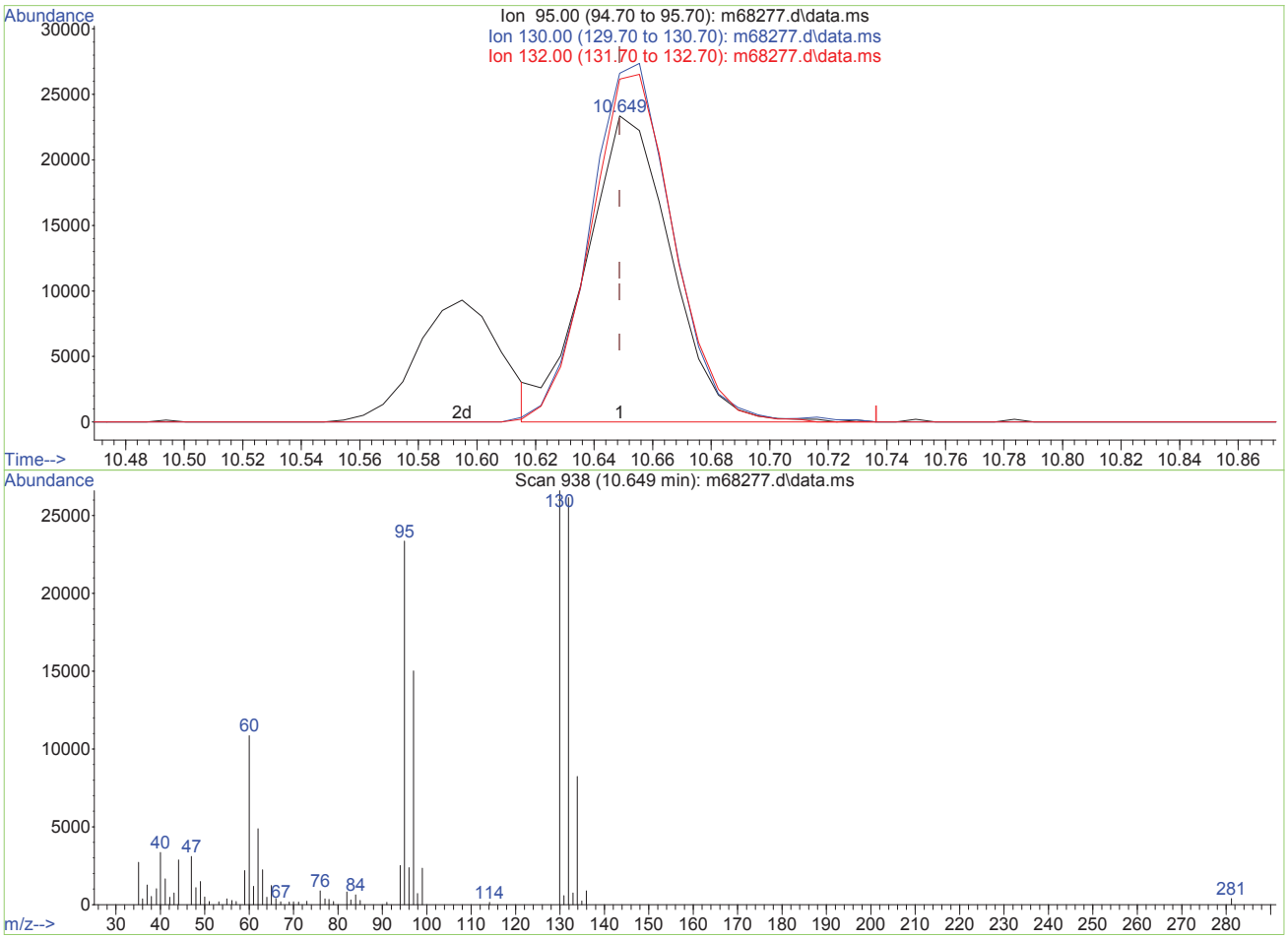
Quant Time: Oct 12 18:00:28 2015
Quant Method : O:\msm\1\methods\m140919sx.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Oct 12 17:55:54 2015
Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : O:\msm\1\data.back-up\m140919s\
Data File : m68277.d
Acq On : 20 Sep 2014 1:30 am
Operator : krystend
Sample : ic2417-20
Misc : MS32769,MSM2417,5,,,5,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 12 17:57:03 2015
Quant Method : O:\msm\1\methods\m140919sx.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Oct 12 17:55:54 2015
Response via : Initial Calibration



TIC: m68277.d\data.ms

(2) trichloroethene (P)

10.649min (+0.000) 18.35ug/kg

response 47203

Ion	Exp%	Act%
95.00	100	100
130.00	120.60	113.90
132.00	110.20	111.99
0.00	0.00	0.00

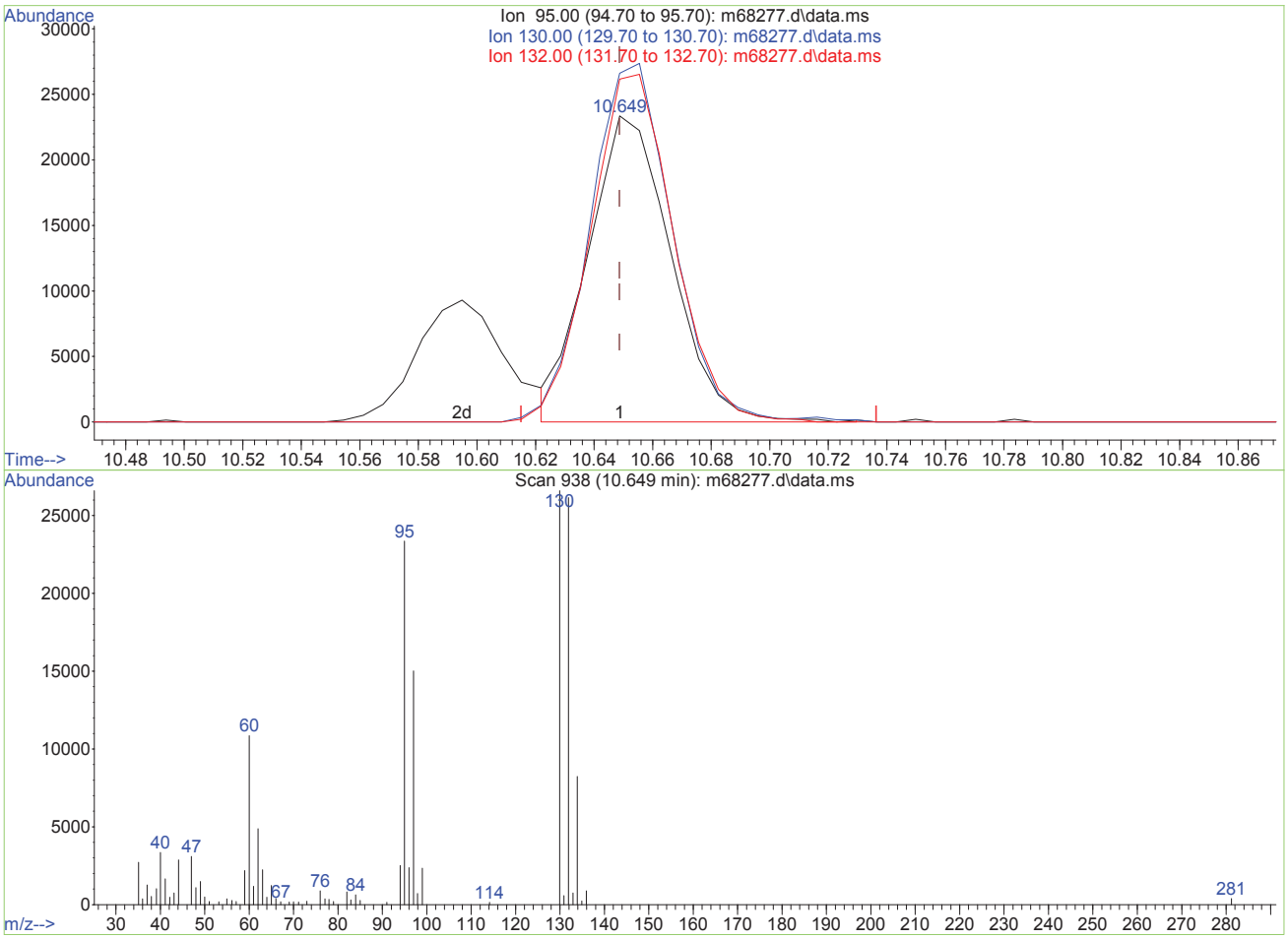
M68277.D edits: trichloroethene

SGS ACCUTEST MC34460

Quantitation Report (Qedit)

Data Path : O:\msm\1\data.back-up\m140919s\
Data File : m68277.d
Acq On : 20 Sep 2014 1:30 am
Operator : krystend
Sample : ic2417-20
Misc : MS32769,MSM2417,5,,,5,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 12 17:57:03 2015
Quant Method : O:\msm\1\methods\m140919sx.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Oct 12 17:55:54 2015
Response via : Initial Calibration



TIC: m68277.d\data.ms

(2) trichloroethene (P)

10.649min (+0.000) 17.94ug/kg m

response 46153

Ion	Exp%	Act%
95.00	100	100
130.00	120.60	113.90
132.00	110.20	111.99
0.00	0.00	0.00

M68277.D edits: trichloroethene

Quantitation Report (QT Reviewed)

Data Path : O:\msm\1\data.back-up\m140919s\
Data File : m68278.d
Acq On : 20 Sep 2014 1:59 am
Operator : krystend
Sample : icc2417-50
Misc : MS32769,MSM2417,5,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Oct 12 17:57:05 2015
Quant Method : O:\msm\1\methods\m140919sx.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Oct 12 17:55:54 2015
Response via : Initial Calibration

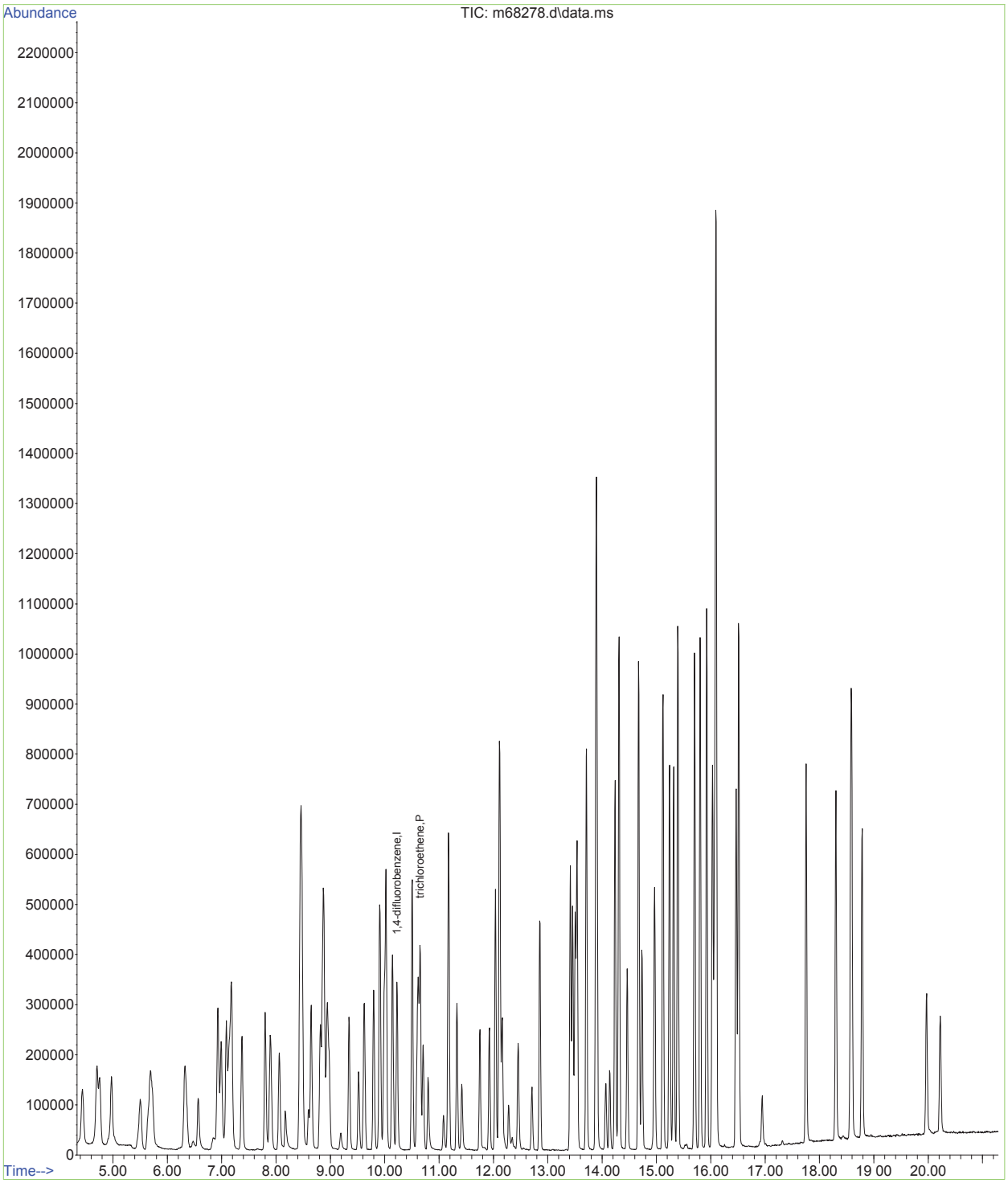
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-difluorobenzene	10.224	114	315450	50.00	ug/kg	0.00
Target Compounds						Qvalue
2) trichloroethene	10.649	95	131397	50.00	ug/kg	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST
MC34460

Data Path : O:\msm\1\data.back-up\m140919s\
Data File : m68278.d
Acq On : 20 Sep 2014 1:59 am
Operator : krystend
Sample : icc2417-50
Misc : MS32769,MSM2417,5,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Oct 12 17:57:05 2015
Quant Method : O:\msm\1\methods\m140919sx.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Oct 12 17:55:54 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msm\1\data.back-up\m140919s\
Data File : m68280.d
Acq On : 20 Sep 2014 2:57 am
Operator : krystend
Sample : ic2417-200
Misc : MS32769,MSM2417,5,,,5,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Oct 12 17:57:07 2015
Quant Method : O:\msm\1\methods\m140919sx.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Oct 12 17:55:54 2015
Response via : Initial Calibration

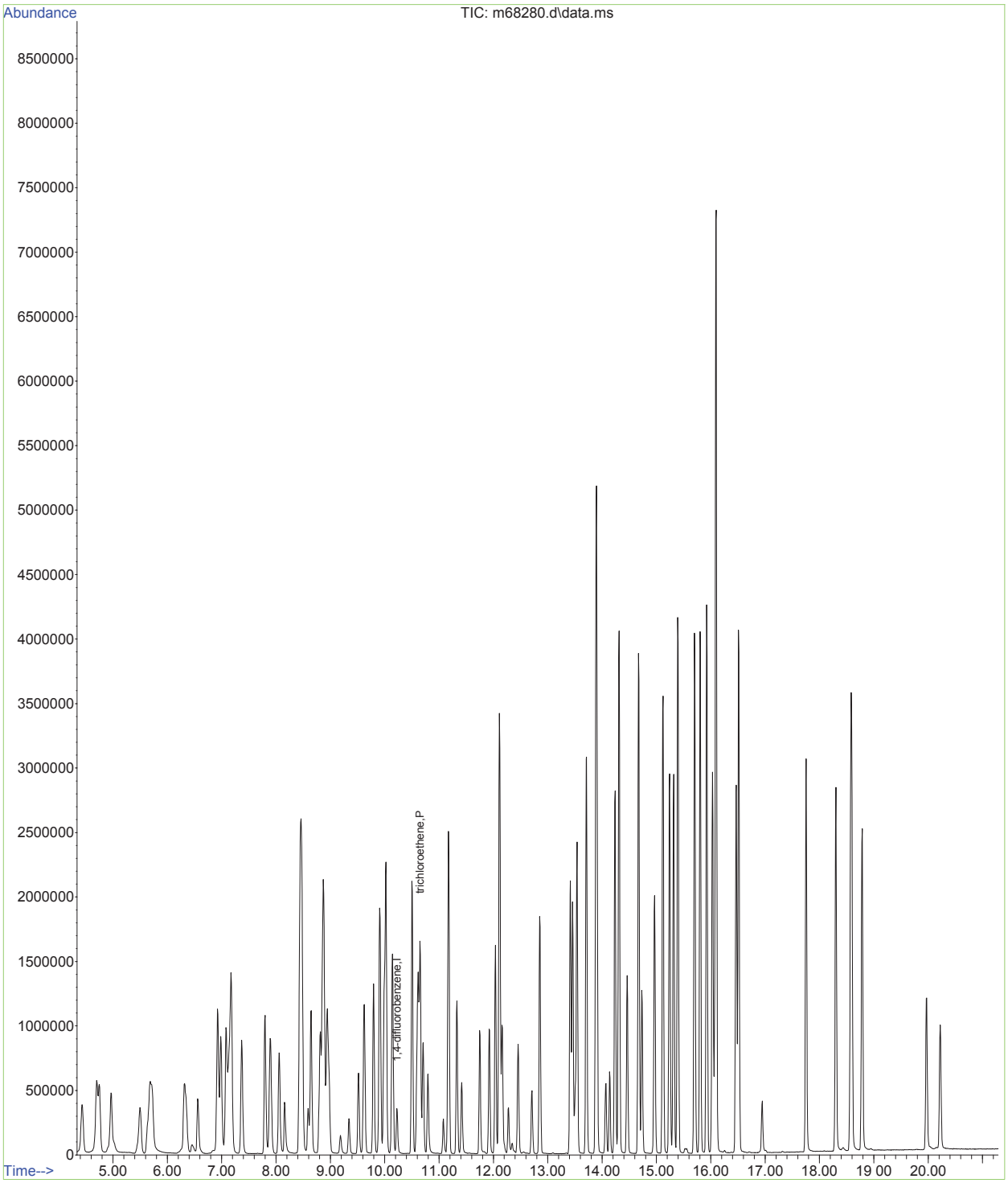
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-difluorobenzene	10.224	114	325008	50.00	ug/kg	0.00
Target Compounds						Qvalue
2) trichloroethene	10.649	95	522361	192.93	ug/kg	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST
MC34460

Data Path : O:\msm\1\data.back-up\m140919s\
Data File : m68280.d
Acq On : 20 Sep 2014 2:57 am
Operator : krystend
Sample : ic2417-200
Misc : MS32769,MSM2417,5,,,5,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Oct 12 17:57:07 2015
Quant Method : O:\msm\1\methods\m140919sx.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Oct 12 17:55:54 2015
Response via : Initial Calibration



SGS ACCUTEST MC34460

Quantitation Report (QT Reviewed)

Data Path : O:\msm\1\data.back-up\m140919s\
Data File : m68281.d
Acq On : 20 Sep 2014 3:26 am
Operator : krystend
Sample : ic2417-400
Misc : MS32769,MSM2417,5,,,5,1
ALS Vial : 19 Sample Multiplier: 1

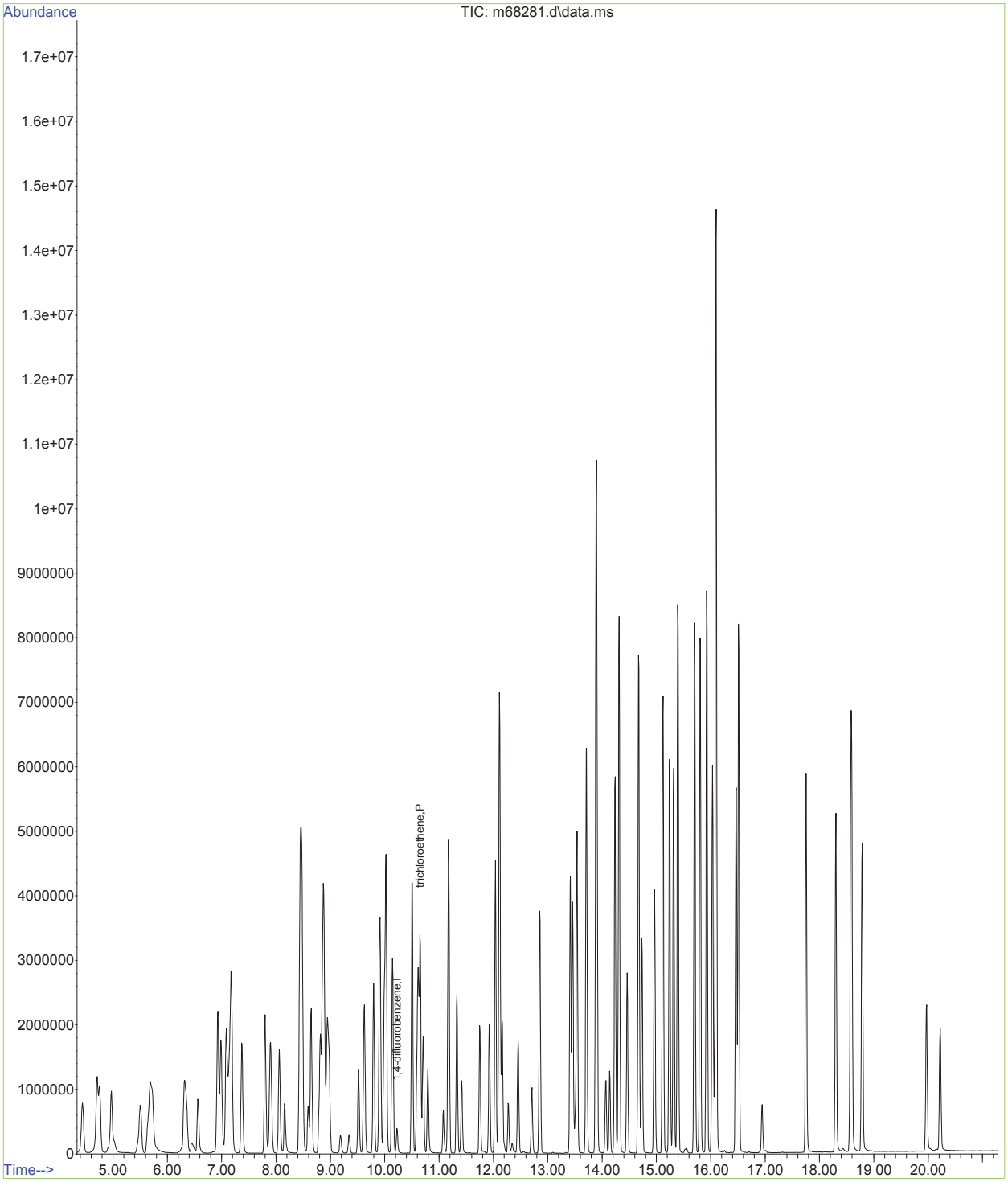
Quant Time: Oct 12 17:57:09 2015
Quant Method : O:\msm\1\methods\m140919sx.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Oct 12 17:55:54 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-difluorobenzene	10.224	114	353653	50.00	ug/kg	0.00
Target Compounds						Qvalue
2) trichloroethene	10.649	95	1080854	366.86	ug/kg	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : O:\msm\1\data.back-up\m140919s\
Data File : m68281.d
Acq On : 20 Sep 2014 3:26 am
Operator : krystend
Sample : ic2417-400
Misc : MS32769,MSM2417,5,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Oct 12 17:57:09 2015
Quant Method : O:\msm\1\methods\m140919sx.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Oct 12 17:55:54 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msm\1\data.back-up\m140919s\
Data File : m68284.d
Acq On : 20 Sep 2014 4:54 am
Operator : krystend
Sample : icv2417-50
Misc : MS32769,MSM2417,5,,,5,1
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Oct 12 18:07:14 2015
Quant Method : O:\msm\1\methods\m140919sx.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Oct 12 18:04:08 2015
Response via : Initial Calibration

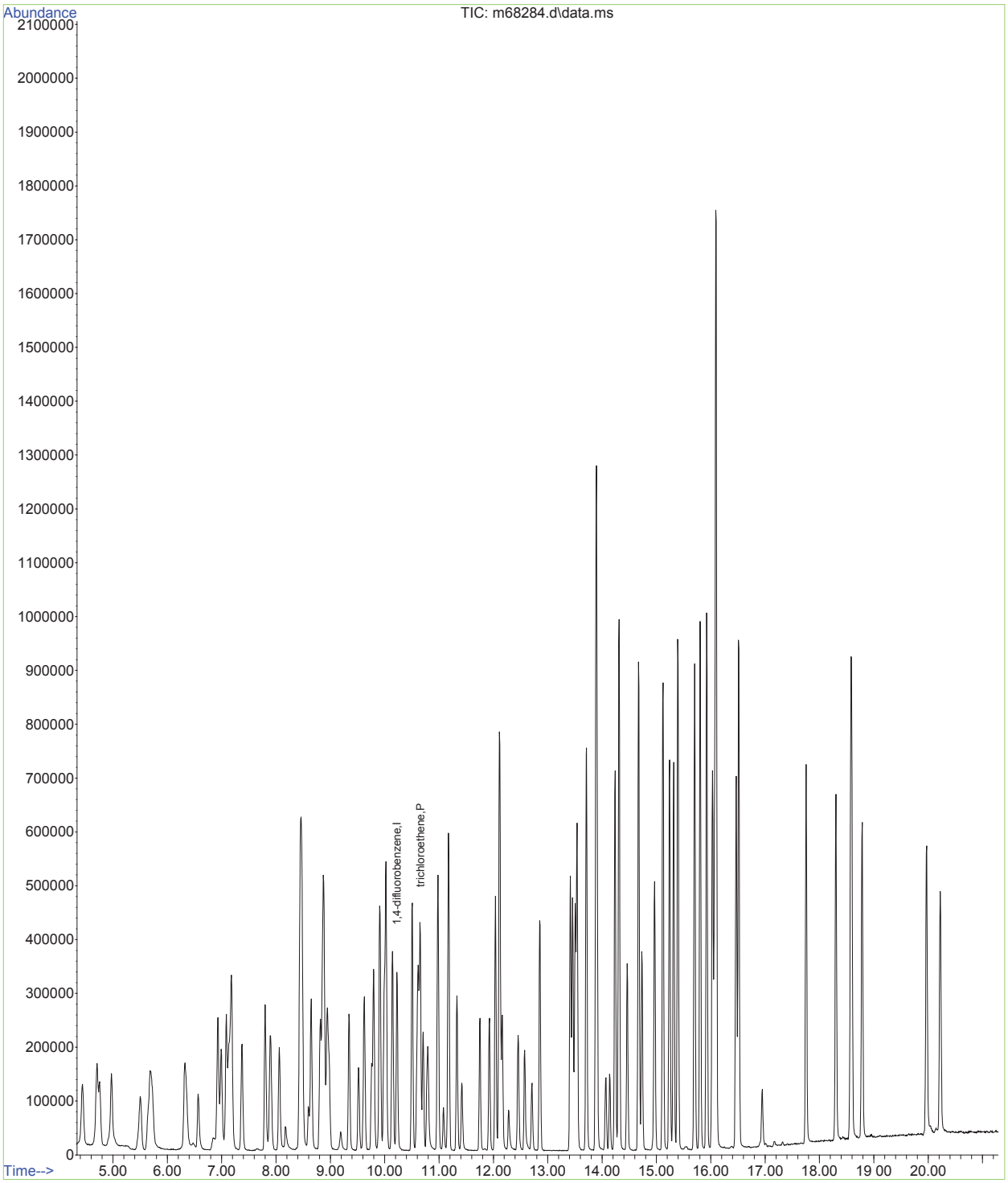
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-difluorobenzene	10.225	114	307393	50.00	ug/kg	0.00
Target Compounds						Qvalue
2) trichloroethene	10.656	95	125633	52.09	ug/kg	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST
MC34460

Data Path : O:\msm\1\data.back-up\m140919s\
Data File : m68284.d
Acq On : 20 Sep 2014 4:54 am
Operator : krystend
Sample : icv2417-50
Misc : MS32769,MSM2417,5,,,5,1
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Oct 12 18:07:14 2015
Quant Method : O:\msm\1\methods\m140919sx.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Oct 12 18:04:08 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msm\1\data.back-up\m141029s\
Data File : m69218.d
Acq On : 29 Oct 2014 9:05 am
Operator : amym
Sample : cc2417-50
Misc : MS33081,MSM2454,5,,,5,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Nov 04 10:42:23 2015
Quant Method : O:\msm\1\methods\m140919sx.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Oct 12 18:04:08 2015
Response via : Initial Calibration

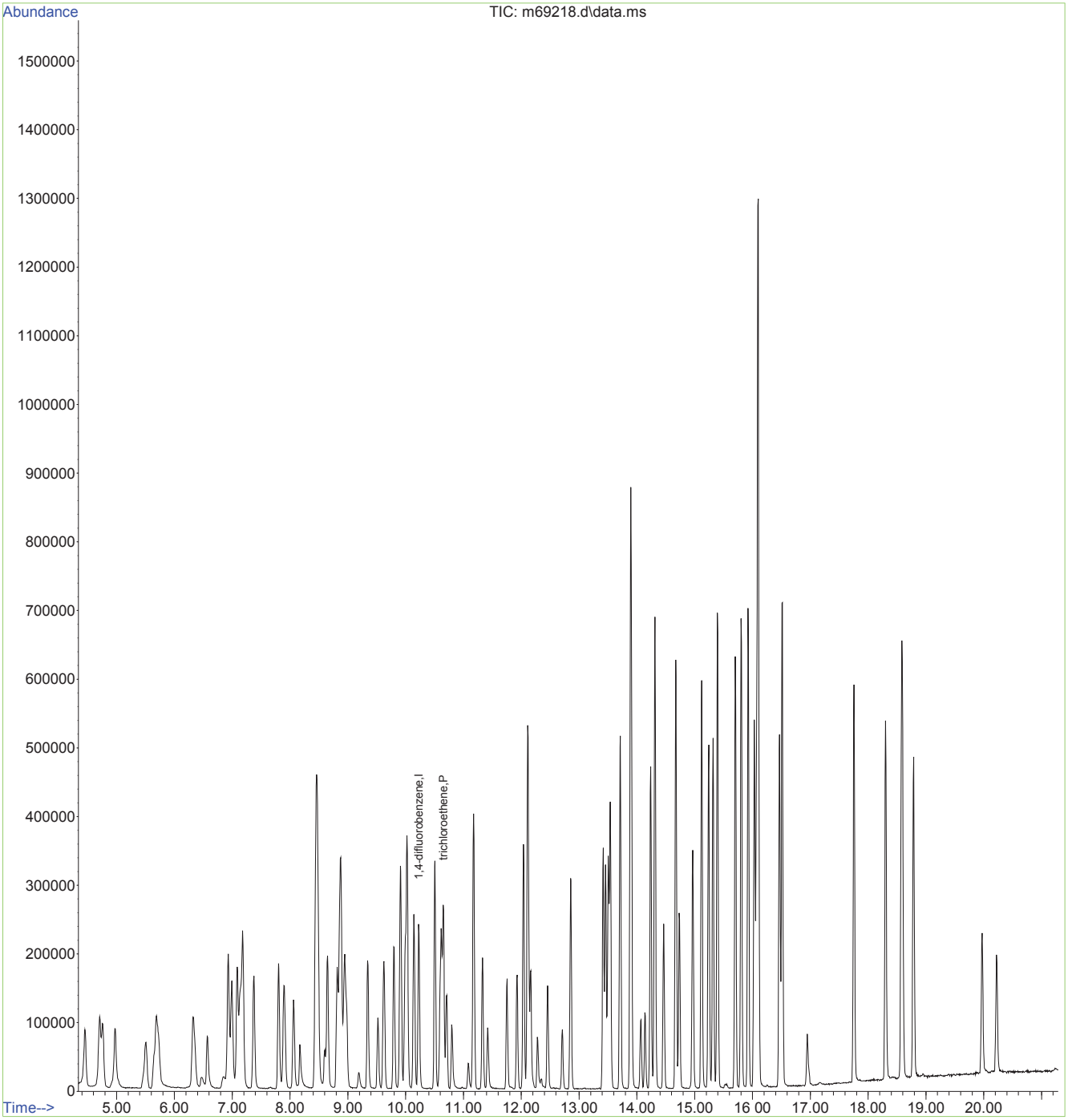
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-difluorobenzene	10.224	114	232156	50.00	ug/kg	0.00
Target Compounds						Qvalue
2) trichloroethene	10.649	95	85243	46.766	ug/kg	97

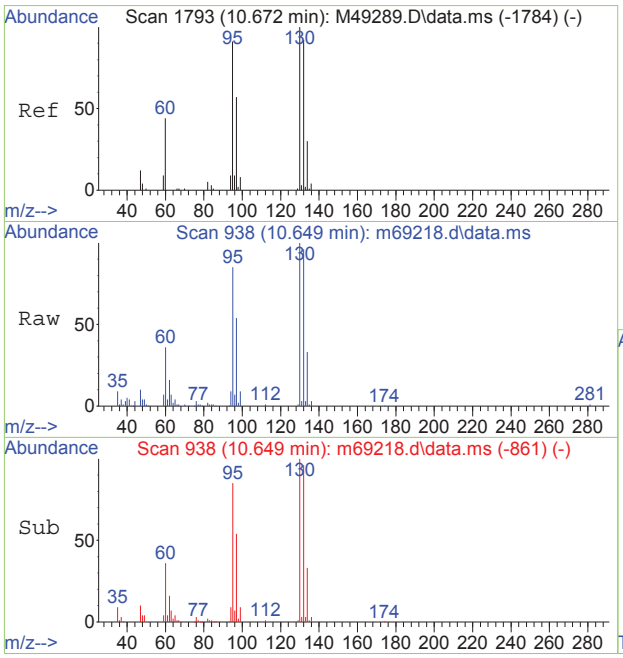
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\msm\1\data.back-up\m141029s\
Data File : m69218.d
Acq On : 29 Oct 2014 9:05 am
Operator : amym
Sample : cc2417-50
Misc : MS33081,MSM2454,5,,,5,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Nov 04 10:42:23 2015
Quant Method : O:\msm\1\methods\m140919sx.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Oct 12 18:04:08 2015
Response via : Initial Calibration

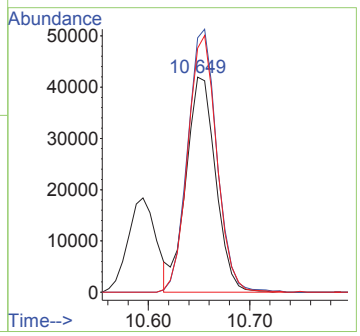




#2
trichloroethene
Concen: 46.766 ug/kg
RT: 10.649 min Scan# 938
Delta R.T. -0.000 min
Lab File: m69218.d
Acq: 29 Oct 2014 9:05 am

Tgt Ion: 95 Resp: 85243

Ion	Ratio	Lower	Upper
95	100		
130	118.3	90.6	150.6
132	113.5	80.2	140.2



Quantitation Report (QT Reviewed)

Data Path : O:\msm\1\data.back-up\m141029s\
Data File : m69226.d
Acq On : 29 Oct 2014 1:02 pm
Operator : amym
Sample : mc34460-1
Misc : MS33091,MSM2454,5.21,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Nov 04 10:42:36 2015
Quant Method : O:\msm\1\methods\m140919sx.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Oct 12 18:04:08 2015
Response via : Initial Calibration

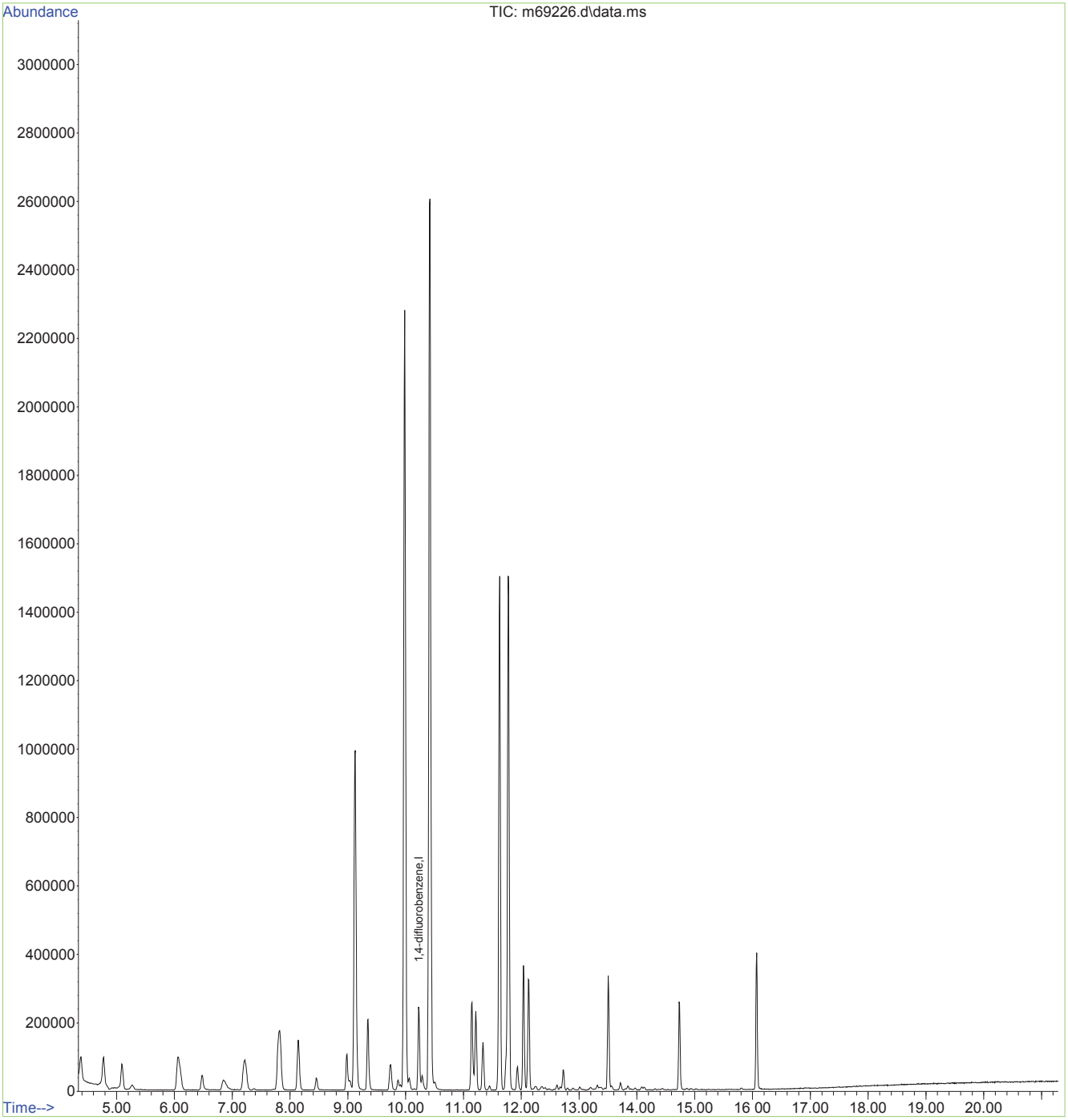
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-difluorobenzene	10.224	114	237926	50.00	ug/kg	0.00
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\msm\1\data.back-up\m141029s\
Data File : m69226.d
Acq On : 29 Oct 2014 1:02 pm
Operator : amym
Sample : mc34460-1
Misc : MS33091,MSM2454,5.21,,,5,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Nov 04 10:42:36 2015
Quant Method : O:\msm\1\methods\m140919sx.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Oct 12 18:04:08 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msm\1\data.back-up\m141029s\
Data File : m69227.d
Acq On : 29 Oct 2014 1:31 pm
Operator : amym
Sample : mc34460-2
Misc : MS33091,MSM2454,6.07,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Nov 04 10:42:38 2015
Quant Method : O:\msm\1\methods\m140919sx.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Oct 12 18:04:08 2015
Response via : Initial Calibration

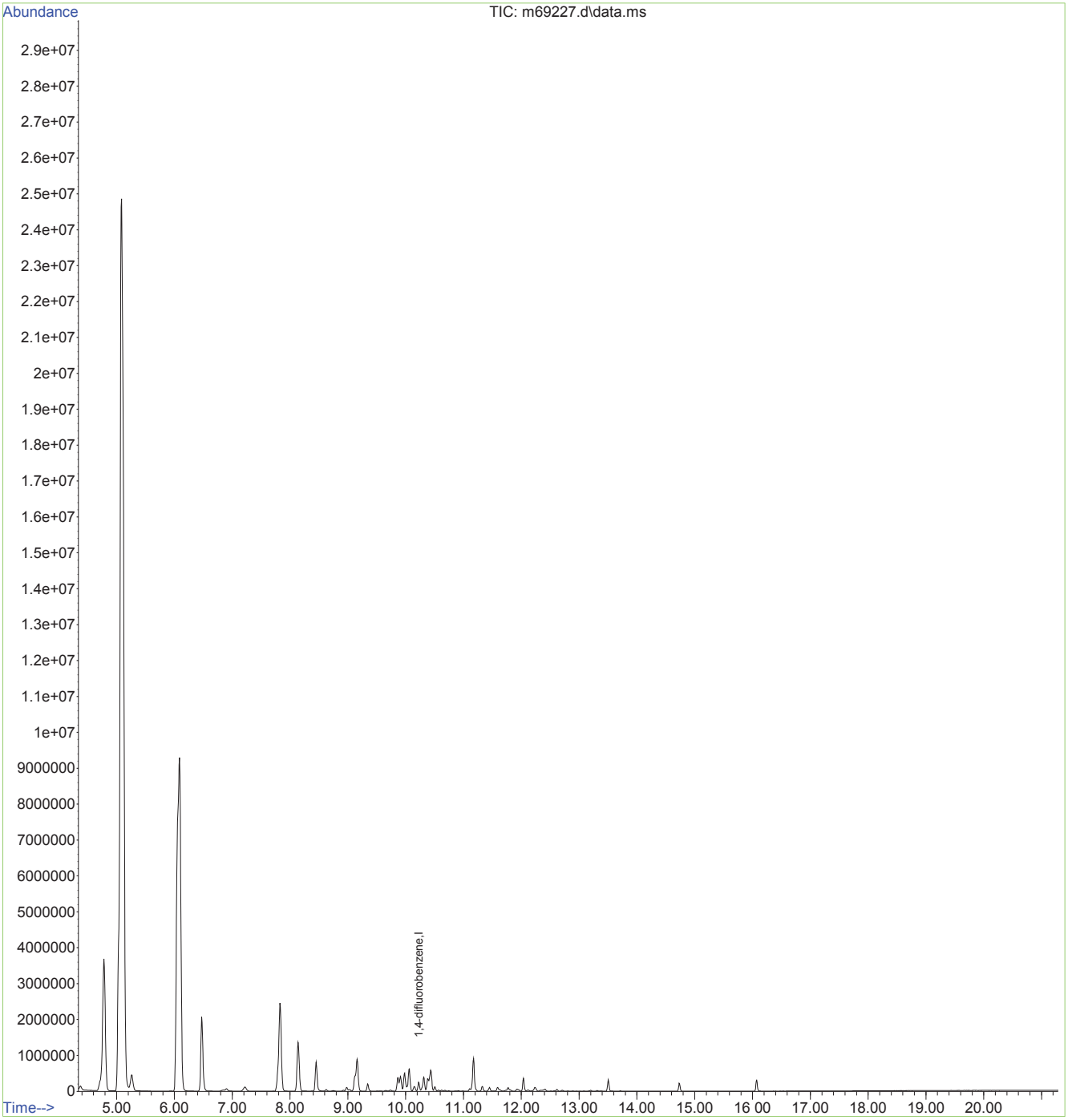
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-difluorobenzene	10.224	114	238283	50.00	ug/kg	0.00
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\msm\1\data.back-up\m141029s\
Data File : m69227.d
Acq On : 29 Oct 2014 1:31 pm
Operator : amym
Sample : mc34460-2
Misc : MS33091,MSM2454,6.07,,,5,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Nov 04 10:42:38 2015
Quant Method : O:\msm\1\methods\m140919sx.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Oct 12 18:04:08 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msm\1\data.back-up\m141029s\
Data File : m69219.d
Acq On : 29 Oct 2014 9:35 am
Operator : amym
Sample : bs
Misc : MS33081,MSM2454,5,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 04 10:42:26 2015
Quant Method : O:\msm\1\methods\m140919sx.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Oct 12 18:04:08 2015
Response via : Initial Calibration

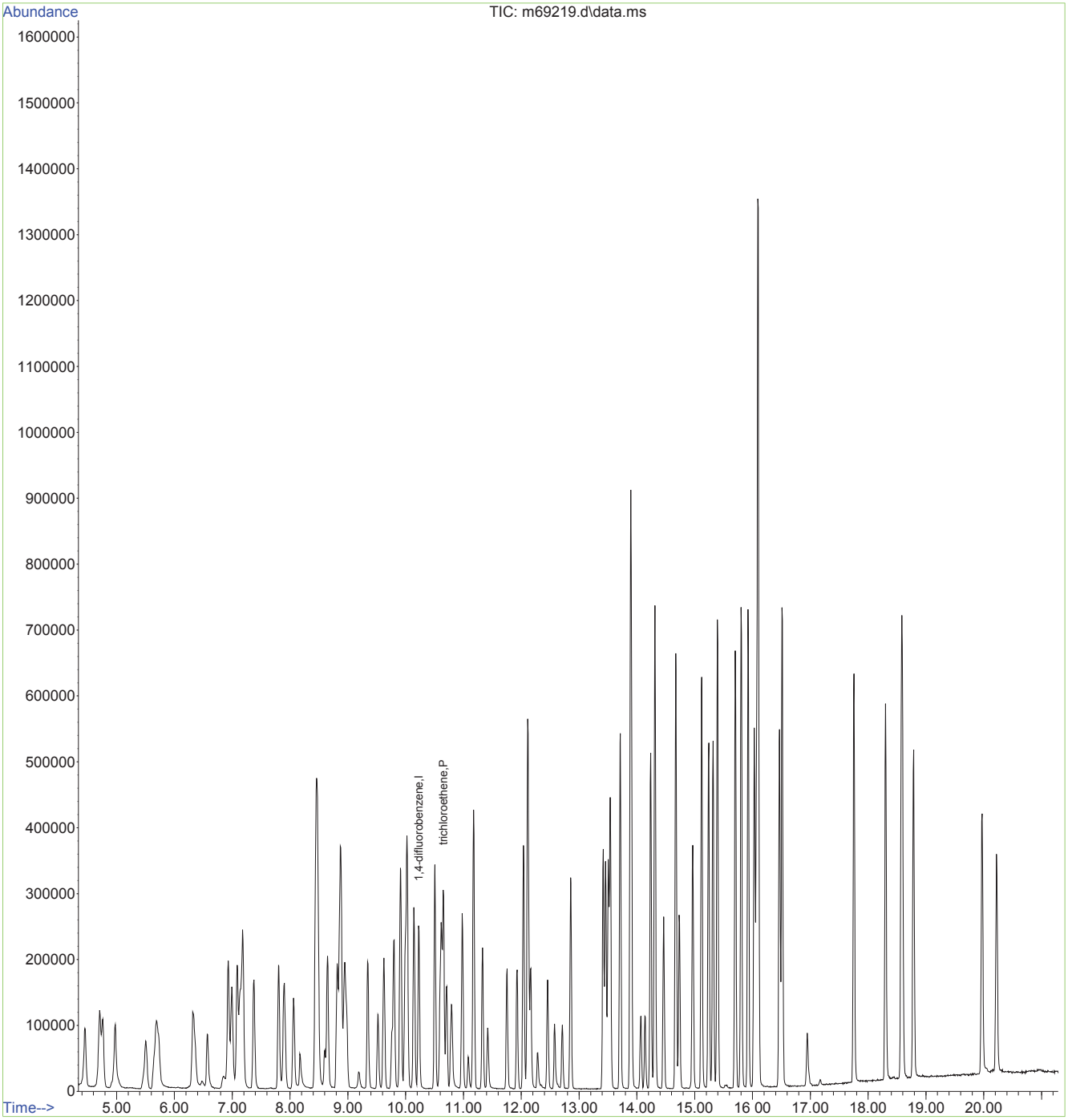
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-difluorobenzene	10.224	114	240243	50.00	ug/kg	0.00
Target Compounds						Qvalue
2) trichloroethene	10.649	95	89981	47.710	ug/kg	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

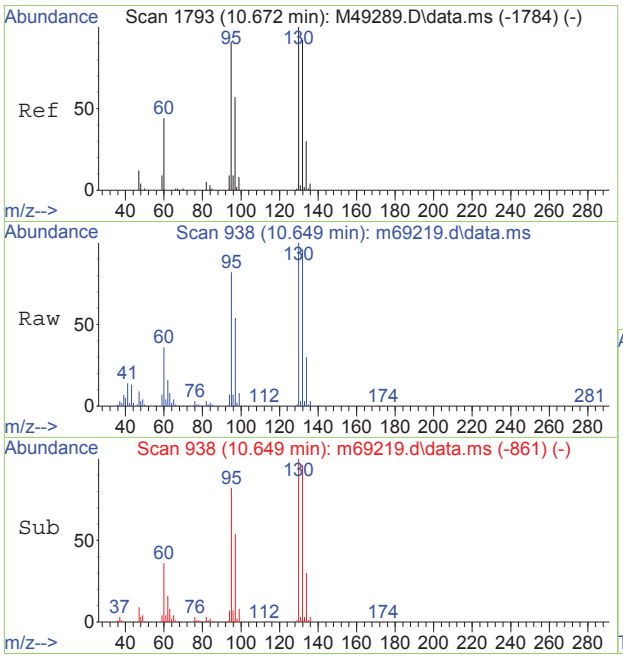
Quantitation Report (QT Reviewed)

Data Path : O:\msm\1\data.back-up\m141029s\
Data File : m69219.d
Acq On : 29 Oct 2014 9:35 am
Operator : amym
Sample : bs
Misc : MS33081,MSM2454,5,,,5,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Nov 04 10:42:26 2015
Quant Method : O:\msm\1\methods\m140919sx.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Oct 12 18:04:08 2015
Response via : Initial Calibration



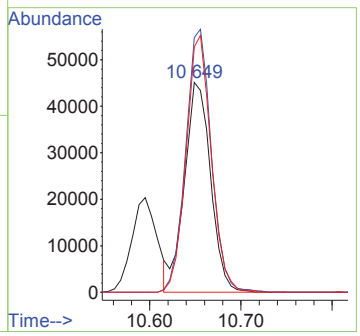
SGS ACCUTEST MC34460



#2
trichloroethene
Concen: 47.710 ug/kg
RT: 10.649 min Scan# 938
Delta R.T. -0.000 min
Lab File: m69219.d
Acq: 29 Oct 2014 9:35 am

Tgt Ion: 95 Resp: 89981

Ion	Ratio	Lower	Upper
95	100		
130	121.4	90.6	150.6
132	116.8	80.2	140.2



Quantitation Report (QT Reviewed)

Data Path : O:\msm\1\data.back-up\m141029s\
Data File : m69220.d
Acq On : 29 Oct 2014 10:05 am
Operator : amym
Sample : bsd
Misc : MS33081,MSM2454,5,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 04 10:42:28 2015
Quant Method : O:\msm\1\methods\m140919sx.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Oct 12 18:04:08 2015
Response via : Initial Calibration

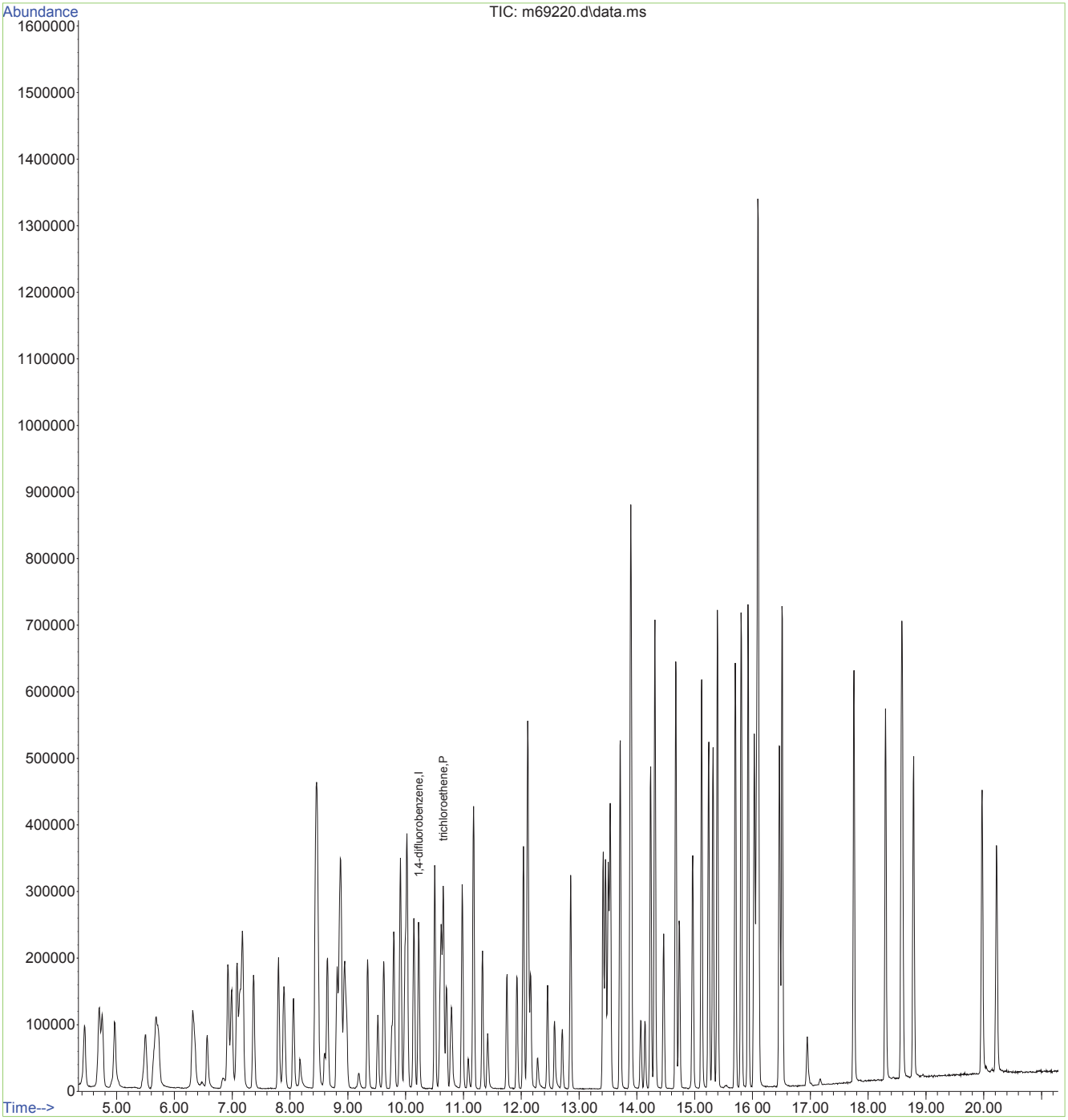
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-difluorobenzene	10.224	114	238193	50.00	ug/kg	0.00
Target Compounds						Qvalue
2) trichloroethene	10.649	95	88627	47.395	ug/kg	97

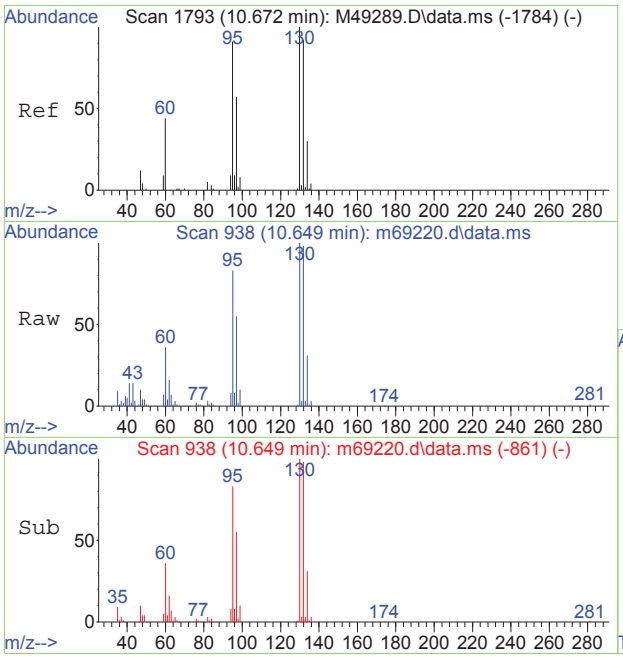
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\msm\1\data.back-up\m141029s\
Data File : m69220.d
Acq On : 29 Oct 2014 10:05 am
Operator : amym
Sample : bsd
Misc : MS33081,MSM2454,5,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 04 10:42:28 2015
Quant Method : O:\msm\1\methods\m140919sx.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Oct 12 18:04:08 2015
Response via : Initial Calibration

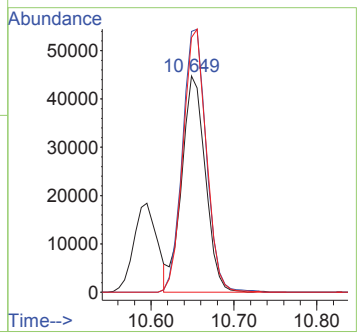




#2
trichloroethene
Concen: 47.395 ug/kg
RT: 10.649 min Scan# 938
Delta R.T. -0.000 min
Lab File: m69220.d
Acq: 29 Oct 2014 10:05 am

Tgt Ion: 95 Resp: 88627

Ion	Ratio	Lower	Upper
95	100		
130	120.6	90.6	150.6
132	117.9	80.2	140.2



Quantitation Report (QT Reviewed)

Data Path : O:\msm\1\data.back-up\m141029s\
Data File : m69222.d
Acq On : 29 Oct 2014 11:03 am
Operator : amym
Sample : mb
Misc : MS33081,MSM2454,5,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Nov 04 10:42:30 2015
Quant Method : O:\msm\1\methods\m140919sx.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Oct 12 18:04:08 2015
Response via : Initial Calibration

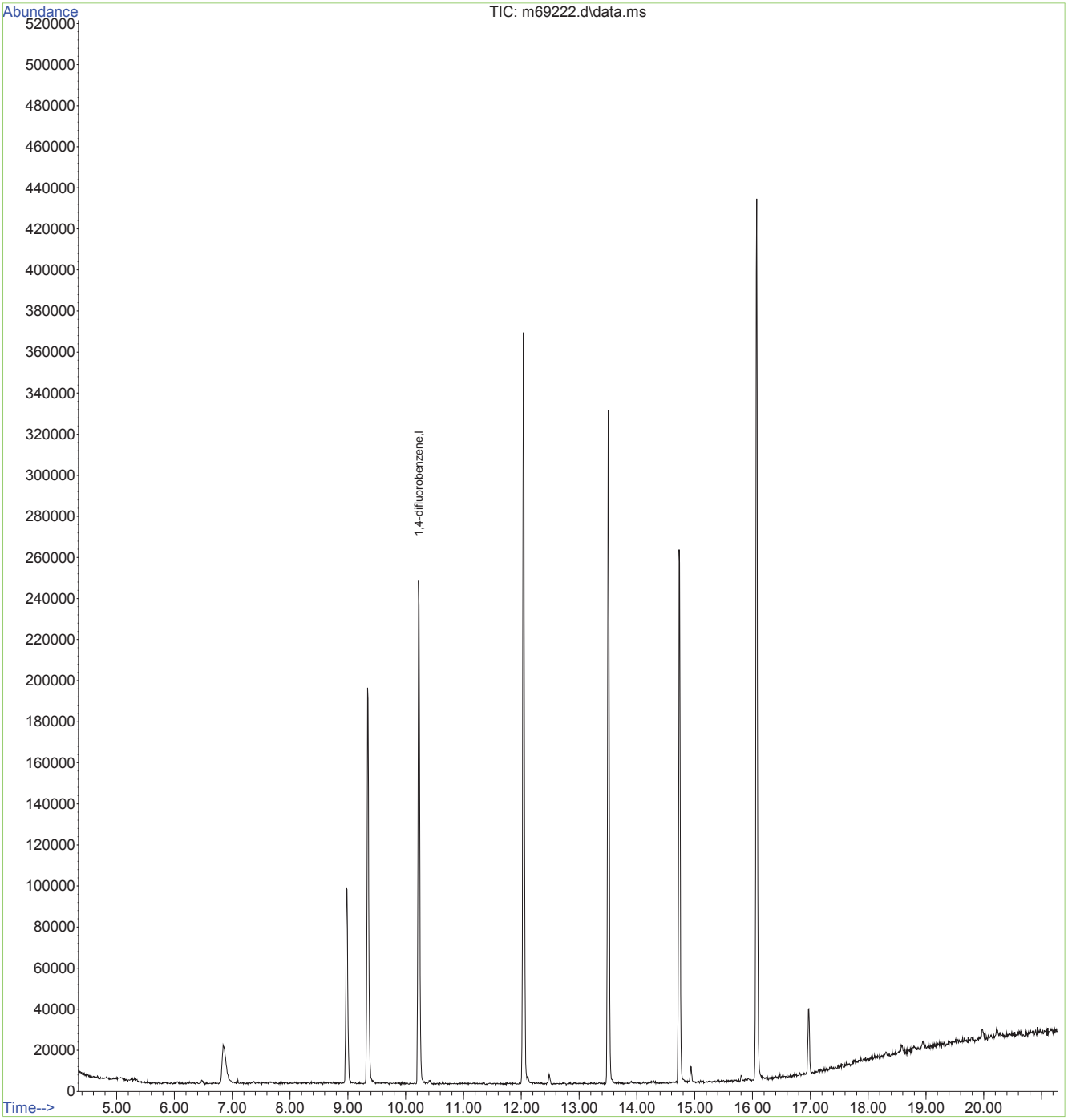
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-difluorobenzene	10.224	114	240625	50.00	ug/kg	0.00
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\msm\1\data.back-up\m141029s\
Data File : m69222.d
Acq On : 29 Oct 2014 11:03 am
Operator : amym
Sample : mb
Misc : MS33081,MSM2454,5,,,5,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Nov 04 10:42:30 2015
Quant Method : O:\msm\1\methods\m140919sx.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Oct 12 18:04:08 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msm\1\data.back-up\m141029s\
Data File : m69234.d
Acq On : 29 Oct 2014 4:57 pm
Operator : amym
Sample : mc34636-1ms
Misc : MS33081,MSM2454,6.933,,,5,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Nov 04 10:42:54 2015
Quant Method : O:\msm\1\methods\m140919sx.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Oct 12 18:04:08 2015
Response via : Initial Calibration

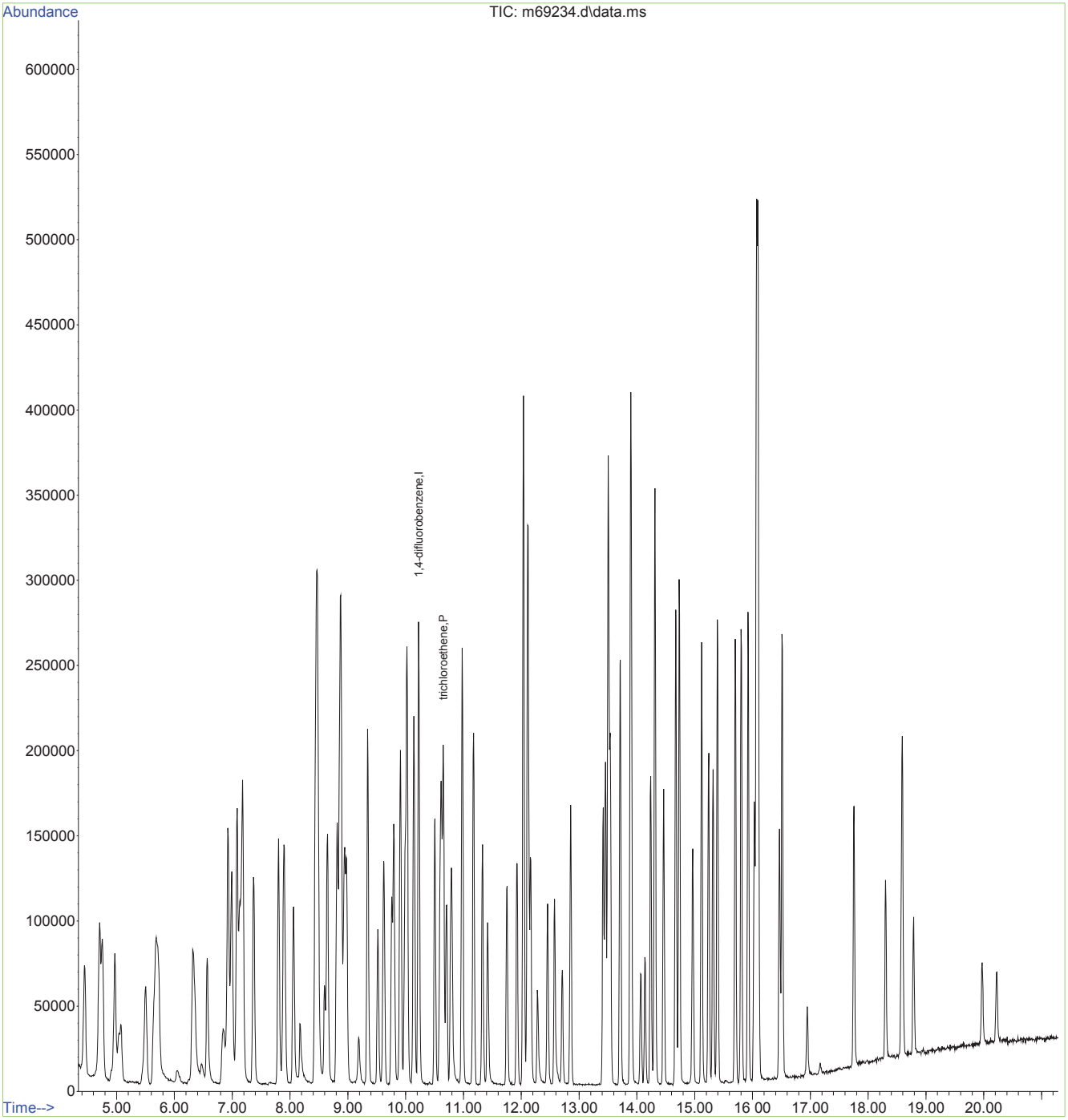
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-difluorobenzene	10.224	114	260620	50.00	ug/kg	0.00
Target Compounds						Qvalue
2) trichloroethene	10.649	95	54965	26.718	ug/kg	92

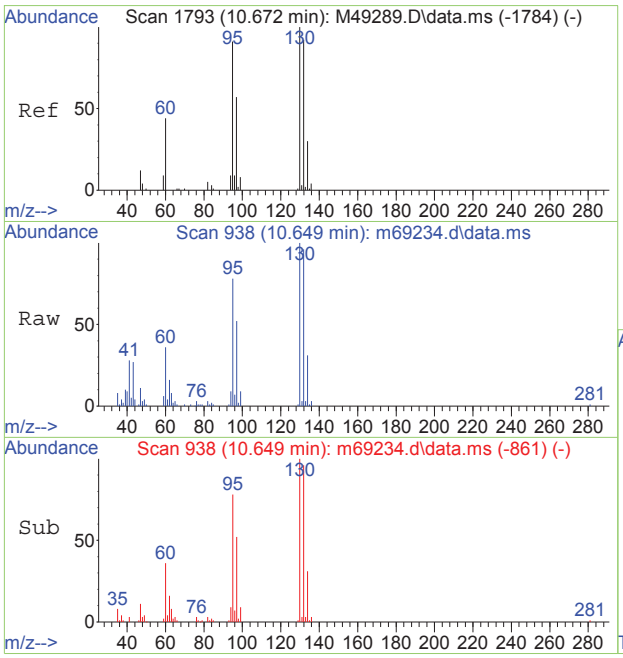
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\msm\1\data.back-up\m141029s\
Data File : m69234.d
Acq On : 29 Oct 2014 4:57 pm
Operator : amym
Sample : mc34636-1ms
Misc : MS33081,MSM2454,6.933,,,5,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Nov 04 10:42:54 2015
Quant Method : O:\msm\1\methods\m140919sx.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Oct 12 18:04:08 2015
Response via : Initial Calibration

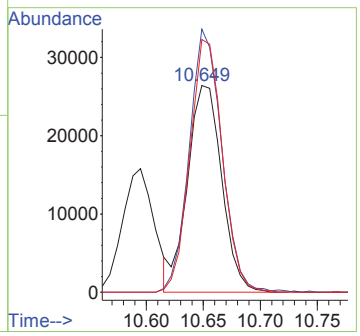




#2
trichloroethene
Concen: 26.718 ug/kg
RT: 10.649 min Scan# 938
Delta R.T. -0.000 min
Lab File: m69234.d
Acq: 29 Oct 2014 4:57 pm

Tgt Ion: 95 Resp: 54965

Ion	Ratio	Lower	Upper
95	100		
130	126.6	90.6	150.6
132	122.4	80.2	140.2



Quantitation Report (QT Reviewed)

Data Path : O:\msm\1\data.back-up\m141029s\
Data File : m69235.d
Acq On : 29 Oct 2014 5:26 pm
Operator : amym
Sample : mc34636-1msd
Misc : MS33081,MSM2454,6.943,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Nov 04 10:42:56 2015
Quant Method : O:\msm\1\methods\m140919sx.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Oct 12 18:04:08 2015
Response via : Initial Calibration

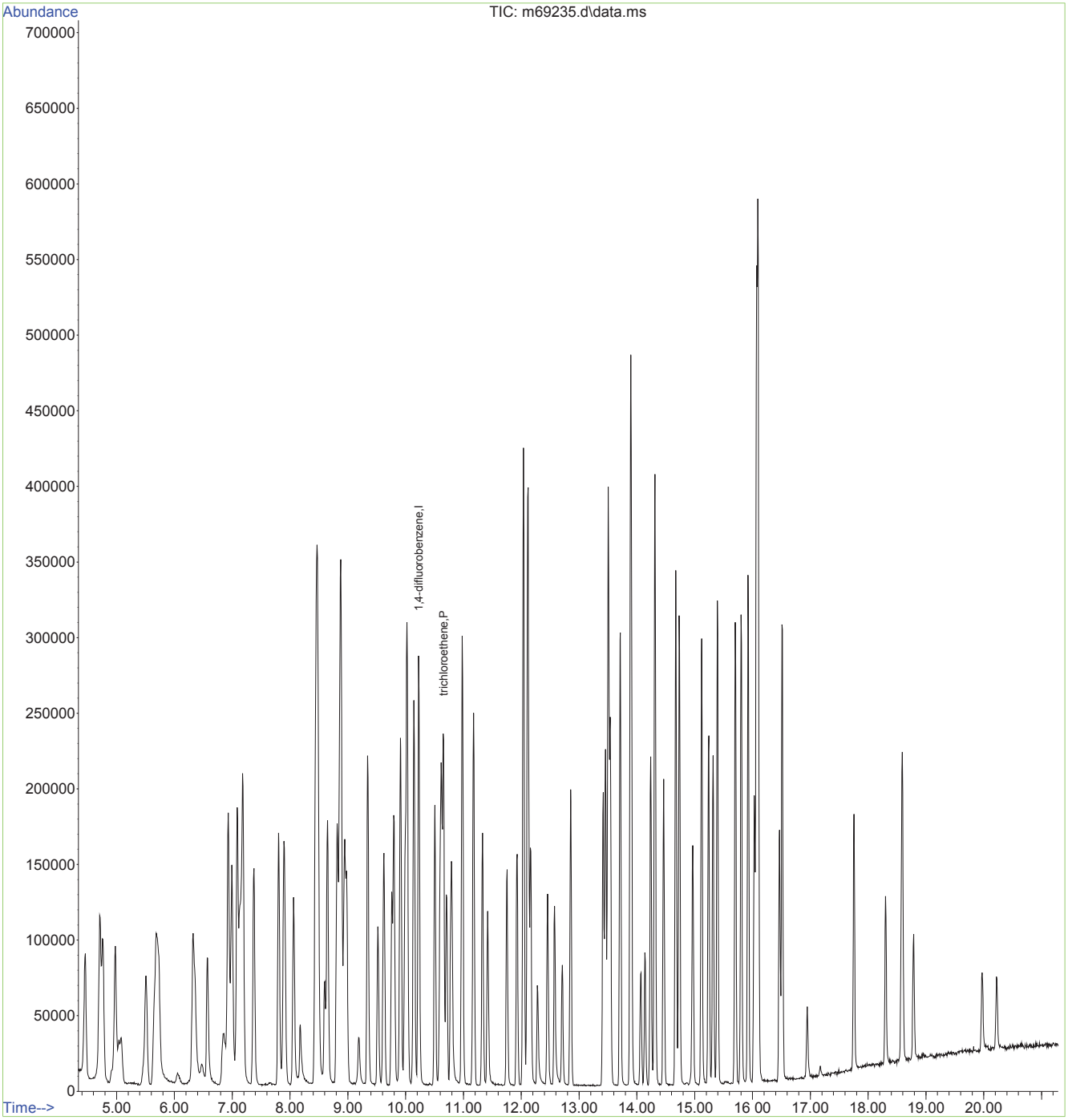
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-difluorobenzene	10.224	114	271348	50.00	ug/kg	0.00
Target Compounds						Qvalue
2) trichloroethene	10.656	95	65247	30.509	ug/kg	91

(#) = qualifier out of range (m) = manual integration (+) = signals summed

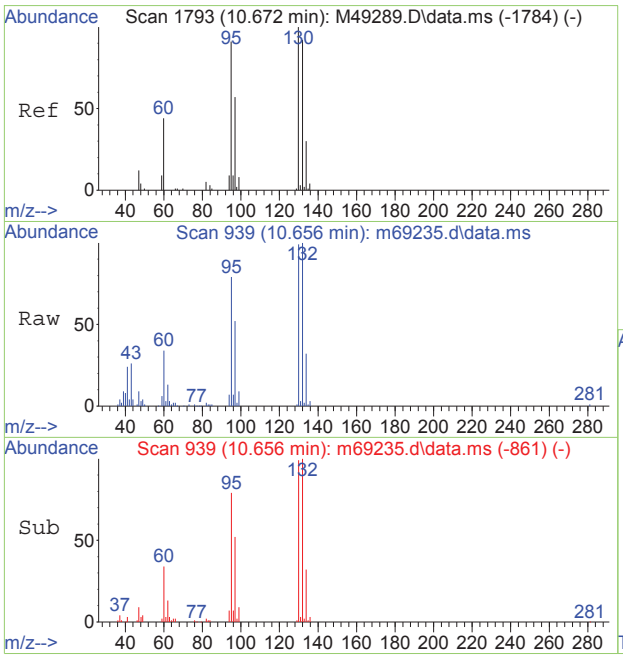
Quantitation Report (QT Reviewed)

Data Path : O:\msm\1\data.back-up\m141029s\
Data File : m69235.d
Acq On : 29 Oct 2014 5:26 pm
Operator : amym
Sample : mc34636-1msd
Misc : MS33081,MSM2454,6.943,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Nov 04 10:42:56 2015
Quant Method : O:\msm\1\methods\m140919sx.m
Quant Title : SW-846 Method 8260
QLast Update : Mon Oct 12 18:04:08 2015
Response via : Initial Calibration



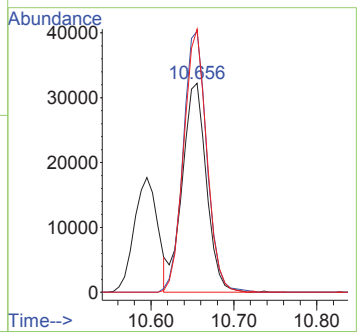
SGS ACCUTEST
MC34460



#2
trichloroethene
Concen: 30.509 ug/kg
RT: 10.656 min Scan# 939
Delta R.T. 0.007 min
Lab File: m69235.d
Acq: 29 Oct 2014 5:26 pm

Tgt Ion: 95 Resp: 65247

Ion	Ratio	Lower	Upper
95	100		
130	125.0	90.6	150.6
132	126.0	80.2	140.2



Internal Sample Tracking Chronicle

Shell Oil

Job No: MC34460

URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL
Project No: 21562973.15000

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC34460-1 Collected: 16-OCT-14 13:35 By: MM MW-27-101614 (40-42)			Received: 18-OCT-14 By:			
MC34460-1	SW846 8015	20-OCT-14 17:05	AF			V8015GRO
MC34460-1	SW846 8270D	21-OCT-14 15:51	KD	20-OCT-14	MT	AB8270SL+
MC34460-1	SW846 8270D BY SIM	22-OCT-14 12:08	WK	20-OCT-14	MT	B8270SIMSL
MC34460-1	SW846 8011	22-OCT-14 13:57	NK	21-OCT-14	FC	V8011SL
MC34460-1	SM21 2540 B MOD.	24-OCT-14	MC			%SOL
MC34460-1	SW846 8260C	29-OCT-14 13:02	AMY			V8260SL+
MC34460-2 Collected: 16-OCT-14 15:40 By: MM MW-27-101614 (48-50)			Received: 18-OCT-14 By:			
MC34460-2	SW846 8015	20-OCT-14 12:40	AF			V8015GRO
MC34460-2	SW846 8270D	21-OCT-14 16:16	KD	20-OCT-14	MT	AB8270SL+
MC34460-2	SW846 8270D BY SIM	22-OCT-14 12:30	WK	20-OCT-14	MT	B8270SIMSL
MC34460-2	SW846 8011	22-OCT-14 14:15	NK	21-OCT-14	FC	V8011SL
MC34460-2	SM21 2540 B MOD.	24-OCT-14	MC			%SOL
MC34460-2	SW846 8260C	29-OCT-14 13:31	AMY			V8260SL+
MC34460-3 Collected: 16-OCT-14 09:00 By: MM TB-101614-HCL			Received: 18-OCT-14 By:			
MC34460-3	SW846 8260C	30-OCT-14 11:05	JM			V8260SL+
MC34460-4 Collected: 16-OCT-14 09:00 By: MM TB-101614-ST			Received: 18-OCT-14 By:			
MC34460-4	SW846 8011	23-OCT-14 19:32	NK	21-OCT-14	FC	V8011SL
MC34460-5 Collected: 16-OCT-14 09:20 By: MM EQB-101614			Received: 18-OCT-14 By:			
MC34460-5	SW846 8015	20-OCT-14 22:45	AF			V8015GRO
MC34460-5	SW846 8011	23-OCT-14 19:50	NK	21-OCT-14	FC	V8011SL
MC34460-5	SW846 8270D BY SIM	24-OCT-14 09:48	WK	21-OCT-14	AZ	B8270SIMSL
MC34460-5	SW846 8270D	24-OCT-14 13:49	MR	21-OCT-14	AZ	AB8270SL+
MC34460-5	SW846 8260C	30-OCT-14 11:35	JM			V8260SL+

SGS Accutest Internal Chain of Custody

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL
Received: 10/18/14

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC34460-1.1	Walk In Ref #9	Nicole Estey	10/20/14 15:56	Retrieve from Storage
MC34460-1.1	Nicole Estey	Walk In Ref #9	10/20/14 22:07	Return to Storage
MC34460-1.1	Walk In Ref #9	Nicole Estey	10/21/14 15:03	Retrieve from Storage
MC34460-1.1	Nicole Estey	Walk In Ref #9	10/21/14 22:13	Return to Storage
MC34460-1.1	Scott Parsick		12/18/14 12:16	Disposed
MC34460-1.2	Walk In Ref #9	Miranda Cardullo	10/24/14 09:36	Retrieve from Storage
MC34460-1.2	Miranda Cardullo	Walk In Ref #9	10/24/14 11:21	Return to Storage
MC34460-1.2	Scott Parsick		12/18/14 12:16	Disposed
MC34460-1.3	VOC Ref #10	Amy Min Yang	10/29/14 12:28	Retrieve from Storage
MC34460-1.3	Amy Min Yang	GCMSM	10/29/14 12:29	Load on Instrument
MC34460-1.3	GCMSM	Amy Min Yang	11/04/14 11:51	Unload from Instrument
MC34460-1.3	Amy Min Yang	VOC Ref #10	11/04/14 11:51	Return to Storage
MC34460-1.3	Scott Parsick		12/18/14 12:16	Disposed
MC34460-1.5	VOC Ref #10	Anthony Franciosa	10/20/14 09:39	Retrieve from Storage
MC34460-1.5	Anthony Franciosa	GCAB	10/20/14 09:39	Load on Instrument
MC34460-1.5	GCAB	Anthony Franciosa	10/20/14 13:27	Unload from Instrument
MC34460-1.5	Anthony Franciosa	VOC Ref #10	10/20/14 13:27	Return to Storage
MC34460-1.5	Scott Parsick		12/18/14 12:16	Disposed
MC34460-1.7	VOC Ref #10	Jaime Maslowski	10/20/14 16:30	Retrieve from Storage
MC34460-1.7	Jaime Maslowski	VOC Ref #10	10/21/14 09:10	Return to Storage
MC34460-1.7	Scott Parsick		12/18/14 12:16	Disposed
MC34460-2.1	Walk In Ref #9	Nicole Estey	10/20/14 15:56	Retrieve from Storage
MC34460-2.1	Nicole Estey	Walk In Ref #9	10/20/14 22:07	Return to Storage
MC34460-2.1	Walk In Ref #9	Nicole Estey	10/21/14 15:03	Retrieve from Storage
MC34460-2.1	Nicole Estey	Walk In Ref #9	10/21/14 22:13	Return to Storage
MC34460-2.1	Scott Parsick		12/18/14 12:16	Disposed
MC34460-2.2	Walk In Ref #9	Miranda Cardullo	10/24/14 09:36	Retrieve from Storage
MC34460-2.2	Miranda Cardullo	Walk In Ref #9	10/24/14 11:21	Return to Storage
MC34460-2.2	Scott Parsick		12/18/14 12:16	Disposed
MC34460-2.3	VOC Ref #10	Amy Min Yang	10/29/14 12:28	Retrieve from Storage
MC34460-2.3	Amy Min Yang	GCMSM	10/29/14 12:29	Load on Instrument
MC34460-2.3	GCMSM	Amy Min Yang	11/04/14 11:51	Unload from Instrument
MC34460-2.3	Amy Min Yang	VOC Ref #10	11/04/14 11:51	Return to Storage
MC34460-2.3	Scott Parsick		12/18/14 12:16	Disposed
MC34460-2.5	VOC Ref #10	Anthony Franciosa	10/20/14 09:39	Retrieve from Storage
MC34460-2.5	Anthony Franciosa	GCAB	10/20/14 09:39	Load on Instrument

SGS Accutest Internal Chain of Custody

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL
Received: 10/18/14

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC34460-2.5	GCAB	Anthony Franciosa	10/20/14 13:27	Unload from Instrument
MC34460-2.5	Anthony Franciosa	VOC Ref #10	10/20/14 13:27	Return to Storage
MC34460-2.5	Scott Parsick		12/18/14 12:16	Disposed
MC34460-2.7	VOC Ref #10	Jaime Maslowski	10/20/14 16:30	Retrieve from Storage
MC34460-2.7	Jaime Maslowski	VOC Ref #10	10/21/14 09:10	Return to Storage
MC34460-2.7	Scott Parsick		12/18/14 12:16	Disposed
MC34460-3.2	VOC Ref #3	Jaime Maslowski	10/30/14 09:09	Retrieve from Storage
MC34460-3.2	Jaime Maslowski	GCMSP	10/30/14 09:09	Load on Instrument
MC34460-3.2	GCMSP	Jaime Maslowski	10/31/14 09:51	Unload from Instrument
MC34460-3.2	Jaime Maslowski	VOC Ref #3	10/31/14 09:52	Return to Storage
MC34460-3.2	Scott Parsick		12/18/14 12:16	Disposed
MC34460-4.1	VOC Ref #3	Marc Tahtamoni	10/21/14 14:43	Retrieve from Storage
MC34460-4.1	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34460-5.1	Walk In Ref #22	Thomas Abruzzise	10/21/14 14:56	Retrieve from Storage
MC34460-5.1	Thomas Abruzzise		10/23/14 15:08	Depleted
MC34460-5.4	VOC Ref #3	Jaime Maslowski	10/30/14 09:09	Retrieve from Storage
MC34460-5.4	Jaime Maslowski	GCMSP	10/30/14 09:09	Load on Instrument
MC34460-5.4	GCMSP	Jaime Maslowski	10/31/14 09:51	Unload from Instrument
MC34460-5.4	Jaime Maslowski	VOC Ref #3	10/31/14 09:52	Return to Storage
MC34460-5.4	Scott Parsick		12/18/14 12:16	Disposed
MC34460-5.6	VOC Ref #2	Anthony Franciosa	10/20/14 09:39	Retrieve from Storage
MC34460-5.6	Anthony Franciosa	GCAB	10/20/14 09:39	Load on Instrument
MC34460-5.6	GCAB	Anthony Franciosa	10/21/14 07:00	Unload from Instrument
MC34460-5.6	Anthony Franciosa	VOC Ref #2	10/21/14 07:00	Return to Storage
MC34460-5.6	Scott Parsick		12/18/14 12:16	Disposed
MC34460-5.7	VOC Ref #3	Marc Tahtamoni	10/21/14 14:43	Retrieve from Storage
MC34460-5.7	Marc Tahtamoni		11/11/14 17:36	Depleted

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSM2454-MB	M69222.D	1	10/29/14	AMY	n/a	n/a	MSM2454

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34460-1, MC34460-2

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.8	ug/kg	
107-02-8	Acrolein	ND	25	8.8	ug/kg	
107-13-1	Acrylonitrile	ND	25	2.7	ug/kg	
71-43-2	Benzene	ND	0.50	0.34	ug/kg	
108-86-1	Bromobenzene	ND	5.0	0.25	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	0.35	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	0.21	ug/kg	
75-25-2	Bromoform	ND	2.0	0.35	ug/kg	
74-83-9	Bromomethane	ND	2.0	0.60	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	3.1	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	0.24	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	0.75	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	0.21	ug/kg	
75-15-0	Carbon disulfide	ND	5.0	0.13	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	0.22	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	0.16	ug/kg	
75-00-3	Chloroethane	ND	5.0	0.76	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.3	ug/kg	
67-66-3	Chloroform	ND	2.0	0.17	ug/kg	
74-87-3	Chloromethane	ND	5.0	0.56	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	0.19	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	0.27	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	0.32	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	2.0	0.21	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	2.0	0.30	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	2.0	0.35	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.81	ug/kg	
75-34-3	1,1-Dichloroethane	ND	2.0	0.27	ug/kg	
107-06-2	1,2-Dichloroethane	ND	2.0	0.32	ug/kg	
75-35-4	1,1-Dichloroethene	ND	2.0	0.41	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	2.0	0.45	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	2.0	0.42	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	0.42	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	0.33	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	0.56	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	0.26	ug/kg	

Method Blank Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSM2454-MB	M69222.D	1	10/29/14	AMY	n/a	n/a	MSM2454

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34460-1, MC34460-2

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.23	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.26	ug/kg	
123-91-1	1,4-Dioxane	ND	25	20	ug/kg	
97-63-2	Ethyl methacrylate	ND	5.0	0.36	ug/kg	
100-41-4	Ethylbenzene	ND	2.0	0.69	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.0	0.57	ug/kg	
591-78-6	2-Hexanone	ND	10	0.76	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	0.17	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	0.17	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	2.0	0.18	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.54	ug/kg	
74-95-3	Methylene bromide	ND	5.0	0.46	ug/kg	
75-09-2	Methylene chloride	ND	2.0	0.53	ug/kg	
91-20-3	Naphthalene	ND	5.0	0.40	ug/kg	
103-65-1	n-Propylbenzene	ND	5.0	0.15	ug/kg	
100-42-5	Styrene	ND	5.0	0.17	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.40	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.39	ug/kg	
127-18-4	Tetrachloroethene	ND	2.0	0.31	ug/kg	
108-88-3	Toluene	ND	5.0	0.21	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.43	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.51	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.22	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.57	ug/kg	
79-01-6	Trichloroethene	ND	2.0	0.24	ug/kg	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.29	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	1.4	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.5	ug/kg	
108-05-4	Vinyl Acetate	ND	5.0	1.5	ug/kg	
75-01-4	Vinyl chloride	ND	2.0	0.91	ug/kg	
	m,p-Xylene	ND	2.0	0.44	ug/kg	
95-47-6	o-Xylene	ND	2.0	0.28	ug/kg	
1330-20-7	Xylene (total)	ND	2.0	0.22	ug/kg	

Method Blank Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSM2454-MB	M69222.D	1	10/29/14	AMY	n/a	n/a	MSM2454

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34460-1, MC34460-2

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	81%	70-130%
2037-26-5	Toluene-D8	84%	70-130%
460-00-4	4-Bromofluorobenzene	98%	70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

Method Blank Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSP2648-MB	P80930.D	1	10/30/14	JM	n/a	n/a	MSP2648

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34460-3, MC34460-5

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	

Method Blank Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSP2648-MB	P80930.D	1	10/30/14	JM	n/a	n/a	MSP2648

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34460-3, MC34460-5

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

Method Blank Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSP2648-MB	P80930.D	1	10/30/14	JM	n/a	n/a	MSP2648

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34460-3, MC34460-5

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	96%	70-130%
2037-26-5	Toluene-D8	104%	70-130%
460-00-4	4-Bromofluorobenzene	102%	70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Blank Spike Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSP2648-BS	P80928.D	1	10/30/14	JM	n/a	n/a	MSP2648

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34460-3, MC34460-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	44.3	89	70-130
107-02-8	Acrolein	250	204	82	70-130
107-13-1	Acrylonitrile	50	43.6	87	70-130
71-43-2	Benzene	50	51.8	104	70-130
108-86-1	Bromobenzene	50	50.6	101	70-130
74-97-5	Bromochloromethane	50	55.5	111	70-130
75-27-4	Bromodichloromethane	50	61.0	122	70-130
75-25-2	Bromoform	50	60.7	121	70-130
74-83-9	Bromomethane	50	48.2	96	70-130
78-93-3	2-Butanone (MEK)	50	37.3	75	70-130
104-51-8	n-Butylbenzene	50	52.0	104	70-130
135-98-8	sec-Butylbenzene	50	56.0	112	70-130
98-06-6	tert-Butylbenzene	50	51.1	102	70-130
75-15-0	Carbon disulfide	50	50.2	100	70-130
56-23-5	Carbon tetrachloride	50	64.6	129	70-130
108-90-7	Chlorobenzene	50	50.7	101	70-130
75-00-3	Chloroethane	50	59.8	120	70-130
110-75-8	2-Chloroethyl vinyl ether	50	66.2	132* [a]	70-130
67-66-3	Chloroform	50	53.4	107	70-130
74-87-3	Chloromethane	50	69.2	138* [a]	70-130
95-49-8	o-Chlorotoluene	50	49.9	100	70-130
106-43-4	p-Chlorotoluene	50	50.0	100	70-130
124-48-1	Dibromochloromethane	50	59.1	118	70-130
95-50-1	1,2-Dichlorobenzene	50	51.4	103	70-130
541-73-1	1,3-Dichlorobenzene	50	53.8	108	70-130
106-46-7	1,4-Dichlorobenzene	50	53.0	106	70-130
75-71-8	Dichlorodifluoromethane	50	54.7	109	70-130
75-34-3	1,1-Dichloroethane	50	57.6	115	70-130
107-06-2	1,2-Dichloroethane	50	54.2	108	70-130
75-35-4	1,1-Dichloroethene	50	53.2	106	70-130
156-59-2	cis-1,2-Dichloroethene	50	49.2	98	70-130
156-60-5	trans-1,2-Dichloroethene	50	48.8	98	70-130
78-87-5	1,2-Dichloropropane	50	54.1	108	70-130
142-28-9	1,3-Dichloropropane	50	51.8	104	70-130
594-20-7	2,2-Dichloropropane	50	65.1	130	70-130
563-58-6	1,1-Dichloropropene	50	57.4	115	70-130

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSP2648-BS	P80928.D	1	10/30/14	JM	n/a	n/a	MSP2648

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34460-3, MC34460-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-01-5	cis-1,3-Dichloropropene	50	48.1	96	70-130
10061-02-6	trans-1,3-Dichloropropene	50	55.1	110	70-130
123-91-1	1,4-Dioxane	125	141	113	70-130
97-63-2	Ethyl methacrylate	50	46.6	93	77-137
100-41-4	Ethylbenzene	50	50.9	102	70-130
87-68-3	Hexachlorobutadiene	50	53.9	108	70-130
591-78-6	2-Hexanone	50	43.9	88	70-130
98-82-8	Isopropylbenzene	50	51.3	103	70-130
99-87-6	p-Isopropyltoluene	50	56.7	113	70-130
1634-04-4	Methyl Tert Butyl Ether	50	43.1	86	70-130
108-10-1	4-Methyl-2-pentanone (MIBK)	50	46.6	93	70-130
74-95-3	Methylene bromide	50	51.0	102	70-130
75-09-2	Methylene chloride	50	48.6	97	70-130
91-20-3	Naphthalene	50	64.8	130	70-130
103-65-1	n-Propylbenzene	50	53.3	107	70-130
100-42-5	Styrene	50	52.4	105	70-130
630-20-6	1,1,1,2-Tetrachloroethane	50	56.4	113	70-130
79-34-5	1,1,2,2-Tetrachloroethane	50	48.6	97	70-130
127-18-4	Tetrachloroethene	50	57.8	116	70-130
108-88-3	Toluene	50	51.3	103	70-130
87-61-6	1,2,3-Trichlorobenzene	50	33.4	67* [a]	70-130
120-82-1	1,2,4-Trichlorobenzene	50	49.3	99	70-130
71-55-6	1,1,1-Trichloroethane	50	61.1	122	70-130
79-00-5	1,1,2-Trichloroethane	50	52.5	105	70-130
79-01-6	Trichloroethene	50	54.7	109	70-130
75-69-4	Trichlorofluoromethane	50	50.3	101	70-130
96-18-4	1,2,3-Trichloropropane	50	48.3	97	70-130
95-63-6	1,2,4-Trimethylbenzene	50	55.0	110	70-130
108-67-8	1,3,5-Trimethylbenzene	50	52.9	106	70-130
108-05-4	Vinyl Acetate	50	34.3	69* [a]	70-130
75-01-4	Vinyl chloride	50	52.7	105	70-130
	m,p-Xylene	100	103	103	70-130
95-47-6	o-Xylene	50	51.6	103	70-130
1330-20-7	Xylene (total)	150	154	103	70-130

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSP2648-BS	P80928.D	1	10/30/14	JM	n/a	n/a	MSP2648

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34460-3, MC34460-5

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	98%	70-130%
2037-26-5	Toluene-D8	102%	70-130%
460-00-4	4-Bromofluorobenzene	81%	70-130%

(a) Outside control limits. Blank Spike meets program technical requirements.

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSM2454-BS	M69219.D	1	10/29/14	AMY	n/a	n/a	MSM2454
MSM2454-BSD	M69220.D	1	10/29/14	AMY	n/a	n/a	MSM2454

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34460-1, MC34460-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	50	42.3	85	34.5	69* [a]	20	70-130/20
107-02-8	Acrolein	250	260	104	243	97	7	70-130/20
107-13-1	Acrylonitrile	50	46.9	94	44.0	88	6	70-130/20
71-43-2	Benzene	50	43.8	88	44.1	88	1	70-130/20
108-86-1	Bromobenzene	50	47.6	95	48.3	97	1	70-130/20
74-97-5	Bromochloromethane	50	50.8	102	49.5	99	3	70-130/20
75-27-4	Bromodichloromethane	50	47.8	96	46.3	93	3	70-130/20
75-25-2	Bromoform	50	58.7	117	55.2	110	6	70-130/20
74-83-9	Bromomethane	50	44.3	89	49.8	100	12	70-130/20
78-93-3	2-Butanone (MEK)	50	41.9	84	38.2	76	9	70-130/20
104-51-8	n-Butylbenzene	50	44.4	89	45.4	91	2	70-130/20
135-98-8	sec-Butylbenzene	50	44.8	90	46.3	93	3	70-130/20
98-06-6	tert-Butylbenzene	50	42.0	84	42.7	85	2	70-130/20
75-15-0	Carbon disulfide	50	46.8	94	48.6	97	4	70-130/20
56-23-5	Carbon tetrachloride	50	45.9	92	45.5	91	1	70-130/20
108-90-7	Chlorobenzene	50	49.8	100	49.1	98	1	70-130/20
75-00-3	Chloroethane	50	52.6	105	59.4	119	12	70-130/20
110-75-8	2-Chloroethyl vinyl ether	50	47.3	95	44.0	88	7	10-160/20
67-66-3	Chloroform	50	43.1	86	42.9	86	0	70-130/20
74-87-3	Chloromethane	50	49.8	100	52.7	105	6	70-130/20
95-49-8	o-Chlorotoluene	50	43.6	87	44.7	89	2	70-130/20
106-43-4	p-Chlorotoluene	50	44.0	88	44.2	88	0	70-130/20
124-48-1	Dibromochloromethane	50	55.6	111	53.1	106	5	70-130/20
95-50-1	1,2-Dichlorobenzene	50	49.3	99	49.1	98	0	70-130/20
541-73-1	1,3-Dichlorobenzene	50	48.3	97	48.6	97	1	70-130/20
106-46-7	1,4-Dichlorobenzene	50	49.1	98	49.0	98	0	70-130/20
75-71-8	Dichlorodifluoromethane	50	52.3	105	54.8	110	5	70-130/20
75-34-3	1,1-Dichloroethane	50	46.0	92	46.2	92	0	70-130/20
107-06-2	1,2-Dichloroethane	50	48.9	98	46.6	93	5	70-130/20
75-35-4	1,1-Dichloroethene	50	44.5	89	45.1	90	1	70-130/20
156-59-2	cis-1,2-Dichloroethene	50	45.4	91	45.5	91	0	70-130/20
156-60-5	trans-1,2-Dichloroethene	50	44.2	88	44.8	90	1	70-130/20
78-87-5	1,2-Dichloropropane	50	48.3	97	47.4	95	2	70-130/20
142-28-9	1,3-Dichloropropane	50	48.4	97	46.2	92	5	70-130/20
594-20-7	2,2-Dichloropropane	50	42.8	86	43.0	86	0	70-130/20
563-58-6	1,1-Dichloropropene	50	44.9	90	46.4	93	3	70-130/20

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSM2454-BS	M69219.D	1	10/29/14	AMY	n/a	n/a	MSM2454
MSM2454-BSD	M69220.D	1	10/29/14	AMY	n/a	n/a	MSM2454

The QC reported here applies to the following samples: Method: SW846 8260C

MC34460-1, MC34460-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
10061-01-5	cis-1,3-Dichloropropene	50	49.9	100	48.6	97	3	70-130/20
10061-02-6	trans-1,3-Dichloropropene	50	51.8	104	49.5	99	5	70-130/20
123-91-1	1,4-Dioxane	125	162	130	132	106	20	70-130/20
97-63-2	Ethyl methacrylate	50	44.9	90	41.1	82	9	76-141/20
100-41-4	Ethylbenzene	50	44.9	90	44.6	89	1	70-130/20
87-68-3	Hexachlorobutadiene	50	50.0	100	51.0	102	2	70-130/20
591-78-6	2-Hexanone	50	49.8	100	43.4	87	14	70-130/20
98-82-8	Isopropylbenzene	50	44.0	88	45.1	90	2	70-130/20
99-87-6	p-Isopropyltoluene	50	45.8	92	47.2	94	3	70-130/20
1634-04-4	Methyl Tert Butyl Ether	50	43.3	87	41.7	83	4	70-130/20
108-10-1	4-Methyl-2-pentanone (MIBK)	50	48.9	98	44.2	88	10	70-130/20
74-95-3	Methylene bromide	50	51.4	103	48.9	98	5	70-130/20
75-09-2	Methylene chloride	50	42.9	86	42.9	86	0	70-130/20
91-20-3	Naphthalene	50	55.4	111	55.2	110	0	70-130/20
103-65-1	n-Propylbenzene	50	43.3	87	44.5	89	3	70-130/20
100-42-5	Styrene	50	46.9	94	45.9	92	2	70-130/20
630-20-6	1,1,1,2-Tetrachloroethane	50	51.6	103	52.3	105	1	70-130/20
79-34-5	1,1,2,2-Tetrachloroethane	50	47.4	95	46.0	92	3	70-130/20
127-18-4	Tetrachloroethene	50	48.3	97	48.1	96	0	70-130/20
108-88-3	Toluene	50	46.5	93	46.1	92	1	70-130/20
87-61-6	1,2,3-Trichlorobenzene	50	53.5	107	54.1	108	1	70-130/20
120-82-1	1,2,4-Trichlorobenzene	50	54.3	109	55.7	111	3	70-130/20
71-55-6	1,1,1-Trichloroethane	50	42.4	85	42.7	85	1	70-130/20
79-00-5	1,1,2-Trichloroethane	50	47.4	95	44.4	89	7	70-130/20
79-01-6	Trichloroethene	50	47.7	95	47.4	95	1	70-130/20
75-69-4	Trichlorofluoromethane	50	47.7	95	49.6	99	4	70-130/20
96-18-4	1,2,3-Trichloropropane	50	48.3	97	45.6	91	6	70-130/20
95-63-6	1,2,4-Trimethylbenzene	50	45.4	91	46.1	92	2	70-130/20
108-67-8	1,3,5-Trimethylbenzene	50	43.9	88	44.7	89	2	70-130/20
108-05-4	Vinyl Acetate	50	48.3	97	41.8	84	14	70-130/20
75-01-4	Vinyl chloride	50	46.5	93	49.2	98	6	70-130/20
	m,p-Xylene	100	94.7	95	94.3	94	0	70-130/20
95-47-6	o-Xylene	50	48.8	98	48.3	97	1	70-130/20
1330-20-7	Xylene (total)	150	144	96	143	95	1	70-130/20

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSM2454-BS	M69219.D	1	10/29/14	AMY	n/a	n/a	MSM2454
MSM2454-BSD	M69220.D	1	10/29/14	AMY	n/a	n/a	MSM2454

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34460-1, MC34460-2

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	81%	80%	70-130%
2037-26-5	Toluene-D8	84%	82%	70-130%
460-00-4	4-Bromofluorobenzene	97%	97%	70-130%

(a) Outside control limits. Blank Spike meets program technical requirements.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34636-1MS	M69234.D	1	10/29/14	AMY	n/a	n/a	MSM2454
MC34636-1MSD	M69235.D	1	10/29/14	AMY	n/a	n/a	MSM2454
MC34636-1	M69224.D	1	10/29/14	AMY	n/a	n/a	MSM2454

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34460-1, MC34460-2

CAS No.	Compound	MC34636-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	12.8		39.4	30.3	44* a	39.4	33.5	53* a	10	70-130/30
107-02-8	Acrolein	ND		197	153	78	197	167	85	9	70-130/30
107-13-1	Acrylonitrile	ND		39.4	35.9	91	39.4	38.3	97	6	70-130/30
71-43-2	Benzene	ND		39.4	21.6	55* a	39.4	24.5	62* a	13	70-130/30
108-86-1	Bromobenzene	ND		39.4	12.9	33* a	39.4	14.7	37* a	13	70-130/30
74-97-5	Bromochloromethane	ND		39.4	30.1	76	39.4	33.0	84	9	70-130/30
75-27-4	Bromodichloromethane	ND		39.4	23.2	59* a	39.4	26.6	68* a	14	70-130/30
75-25-2	Bromoform	ND		39.4	25.0	63* a	39.4	26.9	68* a	7	70-130/30
74-83-9	Bromomethane	ND		39.4	25.9	66* a	39.4	29.9	76	14	70-130/30
78-93-3	2-Butanone (MEK)	ND		39.4	30.3	77	39.4	35.7	91	16	70-130/30
104-51-8	n-Butylbenzene	ND		39.4	11.5	29* a	39.4	13.0	33* a	12	70-130/30
135-98-8	sec-Butylbenzene	ND		39.4	12.3	31* a	39.4	14.5	37* a	16	70-130/30
98-06-6	tert-Butylbenzene	ND		39.4	11.7	30* a	39.4	13.8	35* a	16	70-130/30
75-15-0	Carbon disulfide	ND		39.4	26.4	67* a	39.4	28.7	73	8	70-130/30
56-23-5	Carbon tetrachloride	ND		39.4	20.9	53* a	39.4	23.4	59* a	11	70-130/30
108-90-7	Chlorobenzene	ND		39.4	16.8	43* a	39.4	18.7	48* a	11	70-130/30
75-00-3	Chloroethane	ND		39.4	32.3	82	39.4	37.0	94	14	70-130/30
110-75-8	2-Chloroethyl vinyl ether	ND		39.4	ND	0* a	39.4	ND	0* a	nc	10-160/30
67-66-3	Chloroform	ND		39.4	23.5	60* a	39.4	26.2	67* a	11	70-130/30
74-87-3	Chloromethane	ND		39.4	28.3	72	39.4	32.4	82	14	70-130/30
95-49-8	o-Chlorotoluene	ND		39.4	11.7	30* a	39.4	13.5	34* a	14	70-130/30
106-43-4	p-Chlorotoluene	ND		39.4	10.9	28* a	39.4	12.8	33* a	16	70-130/30
124-48-1	Dibromochloromethane	ND		39.4	25.2	64* a	39.4	28.5	72	12	70-130/30
95-50-1	1,2-Dichlorobenzene	ND		39.4	9.5	24* a	39.4	10.7	27* a	12	70-130/30
541-73-1	1,3-Dichlorobenzene	ND		39.4	10.2	26* a	39.4	11.7	30* a	14	70-130/30
106-46-7	1,4-Dichlorobenzene	ND		39.4	10	25* a	39.4	11.0	28* a	10	70-130/30
75-71-8	Dichlorodifluoromethane	ND		39.4	28.6	73	39.4	33.4	85	15	70-130/30
75-34-3	1,1-Dichloroethane	ND		39.4	25.9	66* a	39.4	28.7	73	10	70-130/30
107-06-2	1,2-Dichloroethane	ND		39.4	28.3	72	39.4	31.6	80	11	70-130/30
75-35-4	1,1-Dichloroethene	ND		39.4	24.7	63* a	39.4	27.9	71	12	70-130/30
156-59-2	cis-1,2-Dichloroethene	ND		39.4	24.7	63* a	39.4	27.0	69* a	9	70-130/30
156-60-5	trans-1,2-Dichloroethene	ND		39.4	24.8	63* a	39.4	27.6	70	11	70-130/30
78-87-5	1,2-Dichloropropane	ND		39.4	24.8	63* a	39.4	28.1	71	12	70-130/30
142-28-9	1,3-Dichloropropane	ND		39.4	25.9	66* a	39.4	28.9	73	11	70-130/30
594-20-7	2,2-Dichloropropane	ND		39.4	22.8	58* a	39.4	25.0	64* a	9	70-130/30
563-58-6	1,1-Dichloropropene	ND		39.4	20.7	53* a	39.4	24.2	61* a	16	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34636-1MS	M69234.D	1	10/29/14	AMY	n/a	n/a	MSM2454
MC34636-1MSD	M69235.D	1	10/29/14	AMY	n/a	n/a	MSM2454
MC34636-1	M69224.D	1	10/29/14	AMY	n/a	n/a	MSM2454

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34460-1, MC34460-2

CAS No.	Compound	MC34636-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
10061-01-5	cis-1,3-Dichloropropene	ND		39.4	24.0	61* a	39.4	27.6	70	14	70-130/30
10061-02-6	trans-1,3-Dichloropropene	ND		39.4	25.0	63* a	39.4	28.0	71	11	70-130/30
123-91-1	1,4-Dioxane	ND		98.5	100	101	98.4	112	114	11	70-130/30
97-63-2	Ethyl methacrylate	ND		39.4	25.6	65	39.4	28.9	73	12	41-160/30
100-41-4	Ethylbenzene	ND		39.4	15.5	39* a	39.4	17.4	44* a	12	70-130/30
87-68-3	Hexachlorobutadiene	ND		39.4	11.5	29* a	39.4	12.5	32* a	8	70-130/30
591-78-6	2-Hexanone	ND		39.4	36.7	93	39.4	40.0	102	9	70-130/30
98-82-8	Isopropylbenzene	ND		39.4	13.5	34* a	39.4	15.7	40* a	15	70-130/30
99-87-6	p-Isopropyltoluene	ND		39.4	12.3	31* a	39.4	14.1	36* a	14	70-130/30
1634-04-4	Methyl Tert Butyl Ether	ND		39.4	29.7	75	39.4	31.7	81	7	70-130/30
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		39.4	37.0	94	39.4	40.6	103	9	70-130/30
74-95-3	Methylene bromide	ND		39.4	29.5	75	39.4	33.2	84	12	70-130/30
75-09-2	Methylene chloride	ND		39.4	27.4	70	39.4	29.0	74	6	70-130/30
91-20-3	Naphthalene	ND		39.4	6.4	16* a	39.4	6.8	17* a	6	70-130/30
103-65-1	n-Propylbenzene	ND		39.4	12.7	32* a	39.4	14.8	38* a	15	70-130/30
100-42-5	Styrene	ND		39.4	13.3	34* a	39.4	14.0	36* a	5	70-130/30
630-20-6	1,1,1,2-Tetrachloroethane	ND		39.4	20.7	53* a	39.4	22.7	58* a	9	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	ND		39.4	20.7	53* a	39.4	23.2	59* a	11	70-130/30
127-18-4	Tetrachloroethene	ND		39.4	18.0	46* a	39.4	20.2	51* a	12	70-130/30
108-88-3	Toluene	ND		39.4	18.8	48* a	39.4	21.1	54* a	12	70-130/30
87-61-6	1,2,3-Trichlorobenzene	ND		39.4	6.1	15* a	39.4	6.3	16* a	3	70-130/30
120-82-1	1,2,4-Trichlorobenzene	ND		39.4	7.0	18* a	39.4	7.6	19* a	8	70-130/30
71-55-6	1,1,1-Trichloroethane	ND		39.4	21.6	55* a	39.4	23.6	60* a	9	70-130/30
79-00-5	1,1,2-Trichloroethane	ND		39.4	25.0	63* a	39.4	28.4	72	13	70-130/30
79-01-6	Trichloroethene	ND		39.4	21.1	54* a	39.4	24.0	61* a	13	70-130/30
75-69-4	Trichlorofluoromethane	ND		39.4	24.0	61* a	39.4	28.3	72	16	70-130/30
96-18-4	1,2,3-Trichloropropane	ND		39.4	22.7	58* a	39.4	26.6	68* a	16	70-130/30
95-63-6	1,2,4-Trimethylbenzene	ND		39.4	11.6	29* a	39.4	13.4	34* a	14	70-130/30
108-67-8	1,3,5-Trimethylbenzene	ND		39.4	11.9	30* a	39.4	13.6	35* a	13	70-130/30
108-05-4	Vinyl Acetate	ND		39.4	26.9	68* a	39.4	27.0	69* a	0	70-130/30
75-01-4	Vinyl chloride	ND		39.4	26.5	67* a	39.4	30.4	77	14	70-130/30
	m,p-Xylene	ND		78.8	31.3	40* a	78.7	35.1	45* a	11	70-130/30
95-47-6	o-Xylene	ND		39.4	15.9	40* a	39.4	17.4	44* a	9	70-130/30
1330-20-7	Xylene (total)	ND		118	47.2	40* a	118	52.5	44* a	11	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34636-1MS	M69234.D	1	10/29/14	AMY	n/a	n/a	MSM2454
MC34636-1MSD	M69235.D	1	10/29/14	AMY	n/a	n/a	MSM2454
MC34636-1	M69224.D	1	10/29/14	AMY	n/a	n/a	MSM2454

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34460-1, MC34460-2

CAS No.	Surrogate Recoveries	MS	MSD	MC34636-1	Limits
1868-53-7	Dibromofluoromethane	87%	87%	87%	70-130%
2037-26-5	Toluene-D8	83%	84%	84%	70-130%
460-00-4	4-Bromofluorobenzene	99%	102%	99%	70-130%

(a) Outside control limits due to possible matrix interference. Refer to Blank Spike.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34463-3MS	P80949.D	5	10/30/14	JM	n/a	n/a	MSP2648
MC34463-3MSD	P80950.D	5	10/30/14	JM	n/a	n/a	MSP2648
MC34463-3	P80935.D	5	10/30/14	JM	n/a	n/a	MSP2648

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34460-3, MC34460-5

CAS No.	Compound	MC34463-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		250	145	58* [a]	250	137	55* [a]	6	70-130/30
107-02-8	Acrolein	ND		1250	967	77	1250	1020	82	5	70-130/30
107-13-1	Acrylonitrile	ND		250	216	86	250	209	84	3	70-130/30
71-43-2	Benzene	815		250	942	51* [b]	250	943	51* [b]	0	70-130/30
108-86-1	Bromobenzene	ND		250	245	98	250	252	101	3	70-130/30
74-97-5	Bromochloromethane	ND		250	251	100	250	257	103	2	70-130/30
75-27-4	Bromodichloromethane	ND		250	307	123	250	312	125	2	70-130/30
75-25-2	Bromoform	ND		250	305	122	250	308	123	1	70-130/30
74-83-9	Bromomethane	ND		250	237	95	250	253	101	7	70-130/30
78-93-3	2-Butanone (MEK)	ND		250	161	64* [a]	250	167	67* [a]	4	70-130/30
104-51-8	n-Butylbenzene	ND		250	237	95	250	255	102	7	70-130/30
135-98-8	sec-Butylbenzene	ND		250	271	108	250	282	113	4	70-130/30
98-06-6	tert-Butylbenzene	ND		250	251	100	250	259	104	3	70-130/30
75-15-0	Carbon disulfide	ND		250	244	98	250	249	100	2	70-130/30
56-23-5	Carbon tetrachloride	ND		250	319	128	250	319	128	0	70-130/30
108-90-7	Chlorobenzene	ND		250	253	101	250	254	102	0	70-130/30
75-00-3	Chloroethane	ND		250	293	117	250	292	117	0	70-130/30
110-75-8	2-Chloroethyl vinyl ether	ND		250	385	154* [c]	250	379	152* [c]	2	70-130/30
67-66-3	Chloroform	ND		250	269	108	250	270	108	0	70-130/30
74-87-3	Chloromethane	ND		250	344	138* [c]	250	356	142* [c]	3	70-130/30
95-49-8	o-Chlorotoluene	ND		250	243	97	250	252	101	4	70-130/30
106-43-4	p-Chlorotoluene	ND		250	242	97	250	252	101	4	70-130/30
124-48-1	Dibromochloromethane	ND		250	294	118	250	299	120	2	70-130/30
95-50-1	1,2-Dichlorobenzene	ND		250	244	98	250	257	103	5	70-130/30
541-73-1	1,3-Dichlorobenzene	ND		250	256	102	250	269	108	5	70-130/30
106-46-7	1,4-Dichlorobenzene	ND		250	252	101	250	265	106	5	70-130/30
75-71-8	Dichlorodifluoromethane	ND		250	258	103	250	263	105	2	70-130/30
75-34-3	1,1-Dichloroethane	ND		250	287	115	250	292	117	2	70-130/30
107-06-2	1,2-Dichloroethane	ND		250	275	110	250	283	113	3	70-130/30
75-35-4	1,1-Dichloroethene	ND		250	272	109	250	269	108	1	70-130/30
156-59-2	cis-1,2-Dichloroethene	ND		250	254	102	250	255	102	0	70-130/30
156-60-5	trans-1,2-Dichloroethene	ND		250	253	101	250	260	104	3	70-130/30
78-87-5	1,2-Dichloropropane	ND		250	272	109	250	274	110	1	70-130/30
142-28-9	1,3-Dichloropropane	ND		250	259	104	250	264	106	2	70-130/30
594-20-7	2,2-Dichloropropane	ND		250	329	132* [a]	250	335	134* [a]	2	70-130/30
563-58-6	1,1-Dichloropropene	ND		250	293	117	250	294	118	0	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34463-3MS	P80949.D	5	10/30/14	JM	n/a	n/a	MSP2648
MC34463-3MSD	P80950.D	5	10/30/14	JM	n/a	n/a	MSP2648
MC34463-3	P80935.D	5	10/30/14	JM	n/a	n/a	MSP2648

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34460-3, MC34460-5

CAS No.	Compound	MC34463-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-01-5	cis-1,3-Dichloropropene	ND		250	237	95	250	241	96	2	70-130/30
10061-02-6	trans-1,3-Dichloropropene	ND		250	267	107	250	276	110	3	70-130/30
123-91-1	1,4-Dioxane	ND		625	559	89	625	632	101	12	70-130/30
97-63-2	Ethyl methacrylate	ND		250	231	92	250	240	96	4	72-139/30
100-41-4	Ethylbenzene	ND		250	257	103	250	257	103	0	70-130/30
87-68-3	Hexachlorobutadiene	ND		250	241	96	250	253	101	5	70-130/30
591-78-6	2-Hexanone	ND		250	167	67* [a]	250	176	70	5	70-130/30
98-82-8	Isopropylbenzene	2.6	J	250	255	101	250	263	104	3	70-130/30
99-87-6	p-Isopropyltoluene	ND		250	272	109	250	285	114	5	70-130/30
1634-04-4	Methyl Tert Butyl Ether	37.9		250	260	89	250	271	93	4	70-130/30
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		250	228	91	250	238	95	4	70-130/30
74-95-3	Methylene bromide	ND		250	255	102	250	262	105	3	70-130/30
75-09-2	Methylene chloride	ND		250	244	98	250	248	99	2	70-130/30
91-20-3	Naphthalene	ND		250	294	118	250	314	126	7	70-130/30
103-65-1	n-Propylbenzene	ND		250	262	105	250	271	108	3	70-130/30
100-42-5	Styrene	ND		250	259	104	250	261	104	1	70-130/30
630-20-6	1,1,1,2-Tetrachloroethane	ND		250	283	113	250	284	114	0	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	238	95	250	247	99	4	70-130/30
127-18-4	Tetrachloroethene	ND		250	287	115	250	289	116	1	70-130/30
108-88-3	Toluene	ND		250	263	105	250	263	105	0	70-130/30
87-61-6	1,2,3-Trichlorobenzene	ND		250	122	49* [c]	250	149	60* [c]	20	70-130/30
120-82-1	1,2,4-Trichlorobenzene	ND		250	184	74	250	219	88	17	70-130/30
71-55-6	1,1,1-Trichloroethane	ND		250	309	124	250	308	123	0	70-130/30
79-00-5	1,1,2-Trichloroethane	ND		250	262	105	250	269	108	3	70-130/30
79-01-6	Trichloroethene	ND		250	270	108	250	275	110	2	70-130/30
75-69-4	Trichlorofluoromethane	ND		250	242	97	250	242	97	0	70-130/30
96-18-4	1,2,3-Trichloropropane	ND		250	235	94	250	244	98	4	70-130/30
95-63-6	1,2,4-Trimethylbenzene	3.7	J	250	267	105	250	278	110	4	70-130/30
108-67-8	1,3,5-Trimethylbenzene	ND		250	257	103	250	265	106	3	70-130/30
108-05-4	Vinyl Acetate	ND		250	175	70	250	186	74	6	70-130/30
75-01-4	Vinyl chloride	ND		250	260	104	250	261	104	0	70-130/30
	m,p-Xylene	8.6		500	518	102	500	523	103	1	70-130/30
95-47-6	o-Xylene	2.2	J	250	259	103	250	261	104	1	70-130/30
1330-20-7	Xylene (total)	10.8		750	777	102	750	784	103	1	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34463-3MS	P80949.D	5	10/30/14	JM	n/a	n/a	MSP2648
MC34463-3MSD	P80950.D	5	10/30/14	JM	n/a	n/a	MSP2648
MC34463-3	P80935.D	5	10/30/14	JM	n/a	n/a	MSP2648

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34460-3, MC34460-5

CAS No.	Surrogate Recoveries	MS	MSD	MC34463-3	Limits
1868-53-7	Dibromofluoromethane	99%	98%	95%	70-130%
2037-26-5	Toluene-D8	103%	102%	103%	70-130%
460-00-4	4-Bromofluorobenzene	81%	82%	102%	70-130%

(a) Outside control limits due to possible matrix interference. Refer to Blank Spike.
(b) Outside control limits due to high level in sample relative to spike amount.
(c) Outside control limits. Blank Spike meets program technical requirements.

* = Outside of Control Limits.

Volatile Internal Standard Area Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Check Std:	MSM2454-CC2417	**Injection Date:**	10/29/14
Lab File ID:	M69218.D	**Injection Time:**	09:05
Instrument ID:	GCMSM	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	152573	9.34	232156	10.22	102377	13.50	139295	16.07	47213	6.84
Upper Limit [a]	305146	9.84	464312	10.72	204754	14.00	278590	16.57	94426	7.34
Lower Limit [b]	76287	8.84	116078	9.72	51189	13.00	69648	15.57	23607	6.34
Lab Sample ID	**IS 1 AREA**	**RT**	**IS 2 AREA**	**RT**	**IS 3 AREA**	**RT**	**IS 4 AREA**	**RT**	**IS 5 AREA**	**RT**
MSM2454-BS	159496	9.35	240243	10.22	105056	13.51	141506	16.07	49596	6.85
MSM2454-BSD	156980	9.34	238193	10.22	103435	13.50	136384	16.07	42962	6.84
MSM2454-MB	158683	9.35	240625	10.22	101430	13.51	141564	16.07	50452	6.84
MC34636-1	161407	9.35	245501	10.22	108085	13.50	150633	16.07	89203	6.85
ZZZZZZ	170005	9.35	263356	10.22	112824	13.51	161416	16.07	93105	6.85
MC34460-1	155658	9.35	237926	10.22	101445	13.50	128831	16.07	84956	6.85
MC34460-2	151812	9.34	238283	10.22	94541	13.51	100856	16.07	89436	6.85
ZZZZZZ	152335	9.35	234125	10.22	85878	13.51	89529	16.07	80479	6.85
ZZZZZZ	150160	9.35	232408	10.22	88765	13.51	96490	16.07	83187	6.85
ZZZZZZ	122675	9.34	193155	10.22	74157	13.50	62732[c]	16.07	90833	6.84
ZZZZZZ	156621	9.34	237282	10.22	109033	13.51	138500	16.07	91234	6.84
ZZZZZZ	172975	9.34	267849	10.22	112747	13.51	142108	16.07	94753[d]	6.84
ZZZZZZ	166339	9.34	257932	10.22	109739	13.50	151260	16.07	105324[d]	6.85
MC34636-1MS	165368	9.34	260620	10.22	113256	13.51	155862	16.07	86497	6.84
MC34636-1MSD	176122	9.34	271348	10.22	119859	13.51	157786	16.07	92400	6.84
ZZZZZZ	166270	9.34	255584	10.22	113447	13.51	160942	16.07	91704	6.84
ZZZZZZ	164706	9.35	256557	10.22	113883	13.50	163167	16.07	87602	6.85
ZZZZZZ	166573	9.34	256663	10.22	113358	13.50	162122	16.07	87121	6.85
ZZZZZZ	162196	9.34	249141	10.22	110209	13.50	159519	16.07	91629	6.85
ZZZZZZ	148891	9.34	220983	10.22	94385	13.51	133987	16.07	48833	6.84
ZZZZZZ	160992	9.34	243537	10.22	105140	13.50	144305	16.07	50513	6.85

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Outside control limits due to possible matrix interference. Confirmed by reanalysis.
(d) Outside control limits. Target analytes not associated with this internal standard.

Volatile Internal Standard Area Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Check Std:	MSP2648-CC2633	**Injection Date:**	10/30/14
Lab File ID:	P80927.D	**Injection Time:**	08:36
Instrument ID:	GCMSP	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	781040	8.48	963369	9.32	481564	12.52	447575	15.08	116345	6.17
Upper Limit [a]	1562080	8.98	1926738	9.82	963128	13.02	895150	15.58	232690	6.67
Lower Limit [b]	390520	7.98	481685	8.82	240782	12.02	223788	14.58	58173	5.67

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSP2648-BS	779078	8.48	973338	9.32	487755	12.52	457982	15.08	133283	6.16
MSP2648-MB	639955	8.48	807149	9.33	406700	12.53	294606	15.09	133888	6.20
ZZZZZZ	540465	8.48	667624	9.33	343374	12.53	240731	15.09	132875	6.21
MC34460-3	628292	8.48	783720	9.33	394072	12.53	274583	15.09	144968	6.19
MC34460-5	620285	8.48	772489	9.33	388808	12.53	270767	15.09	120232	6.20
ZZZZZZ	659884	8.48	815919	9.33	406363	12.53	275255	15.09	131284	6.20
MC34463-3	582213	8.48	727165	9.33	361850	12.53	262876	15.09	135572	6.19
ZZZZZZ	670142	8.48	838890	9.32	405682	12.53	273933	15.09	152108	6.19
ZZZZZZ	637569	8.48	788903	9.32	390955	12.53	259294	15.09	139792	6.19
ZZZZZZ	666377	8.48	828056	9.33	401984	12.53	270929	15.09	145685	6.19
GP18363-LB1	628870	8.48	785018	9.33	397898	12.53	289355	15.09	145926	6.18
ZZZZZZ	622699	8.48	765026	9.33	392045	12.53	276143	15.09	157740	6.19
GP18363-LS1	718270	8.48	888489	9.32	449218	12.53	445349	15.08	123700	6.16
ZZZZZZ	631185	8.48	784935	9.33	393607	12.53	297580	15.08	156506	6.19
ZZZZZZ	638764	8.48	794885	9.33	406741	12.53	287727	15.09	143763	6.19
ZZZZZZ	643388	8.48	788696	9.33	398833	12.53	277031	15.09	169994	6.19
ZZZZZZ	596071	8.48	751143	9.33	374179	12.53	246975	15.09	119555	6.21
GP18364-LS1	698315	8.48	865848	9.32	437294	12.53	426474	15.08	138769	6.16
ZZZZZZ	639197	8.48	800295	9.33	404064	12.53	305087	15.09	137142	6.19
MC34463-3MS	751542	8.48	937132	9.32	470956	12.53	448580	15.08	136912	6.17
MC34463-3MSD	758770	8.48	949103	9.32	476774	12.53	445276	15.08	137818	6.17

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Method: SW846 8260C **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
MC34460-3	P80932.D	97	104	104
MC34460-5	P80933.D	94	105	106
MC34463-3MS	P80949.D	99	103	81
MC34463-3MSD	P80950.D	98	102	82
MSP2648-BS	P80928.D	98	102	81
MSP2648-MB	P80930.D	96	104	102

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	70-130%
S2 = Toluene-D8	70-130%
S3 = 4-Bromofluorobenzene	70-130%

Volatile Surrogate Recovery Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Method: SW846 8260C **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
MC34460-1	M69226.D	86	83	106
MC34460-2	M69227.D	90	81	116
MC34636-1MS	M69234.D	87	83	99
MC34636-1MSD	M69235.D	87	84	102
MSM2454-BS	M69219.D	81	84	97
MSM2454-BSD	M69220.D	80	82	97
MSM2454-MB	M69222.D	81	84	98

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	70-130%
S2 = Toluene-D8	70-130%
S3 = 4-Bromofluorobenzene	70-130%

GC/MS Semi-volatiles

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QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40291-MB	R40432.D	1	10/21/14	KD	10/20/14	OP40291	MSR1488

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34460-1, MC34460-2

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	480	60	ug/kg	
95-57-8	2-Chlorophenol	ND	240	11	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	480	12	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	480	14	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	480	79	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	960	120	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	480	60	ug/kg	
95-48-7	2-Methylphenol	ND	480	19	ug/kg	
	3&4-Methylphenol	ND	480	23	ug/kg	
88-75-5	2-Nitrophenol	ND	480	13	ug/kg	
100-02-7	4-Nitrophenol	ND	960	90	ug/kg	
87-86-5	Pentachlorophenol	ND	480	34	ug/kg	
108-95-2	Phenol	ND	240	14	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	480	12	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	480	12	ug/kg	
62-53-3	Aniline	ND	480	24	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	240	12	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	240	9.8	ug/kg	
100-51-6	Benzyl Alcohol	ND	480	24	ug/kg	
91-58-7	2-Chloronaphthalene	ND	240	13	ug/kg	
106-47-8	4-Chloroaniline	ND	480	12	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	240	11	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	240	15	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	240	17	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	240	15	ug/kg	
122-66-7	1,2-Diphenylhydrazine	ND	240	11	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	480	32	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	480	12	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	240	24	ug/kg	
132-64-9	Dibenzofuran	ND	96	13	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	240	26	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	240	7.5	ug/kg	
84-66-2	Diethyl phthalate	ND	240	12	ug/kg	
131-11-3	Dimethyl phthalate	ND	240	14	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	240	8.9	ug/kg	
118-74-1	Hexachlorobenzene	ND	240	15	ug/kg	

Method Blank Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40291-MB	R40432.D	1	10/21/14	KD	10/20/14	OP40291	MSR1488

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34460-1, MC34460-2

CAS No.	Compound	Result	RL	MDL	Units	Q
77-47-4	Hexachlorocyclopentadiene	ND	480	120	ug/kg	
67-72-1	Hexachloroethane	ND	240	12	ug/kg	
78-59-1	Isophorone	ND	240	11	ug/kg	
88-74-4	2-Nitroaniline	ND	480	12	ug/kg	
99-09-2	3-Nitroaniline	ND	480	26	ug/kg	
100-01-6	4-Nitroaniline	ND	480	12	ug/kg	
98-95-3	Nitrobenzene	ND	240	13	ug/kg	
62-75-9	n-Nitrosodimethylamine	ND	240	11	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	240	14	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	240	15	ug/kg	
110-86-1	Pyridine	ND	480	24	ug/kg	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	89%	30-130%
4165-62-2	Phenol-d5	88%	30-130%
118-79-6	2,4,6-Tribromophenol	89%	30-130%
4165-60-0	Nitrobenzene-d5	88%	30-130%
321-60-8	2-Fluorobiphenyl	90%	30-130%
1718-51-0	Terphenyl-d14	102%	30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/kg	

Method Blank Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40299-MB	F77013.D	1	10/24/14	MR	10/21/14	OP40299	MSF3374

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34460-5

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	10	2.5	ug/l	
95-57-8	2-Chlorophenol	ND	5.0	0.31	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	10	0.83	ug/l	
120-83-2	2,4-Dichlorophenol	ND	10	0.40	ug/l	
105-67-9	2,4-Dimethylphenol	ND	10	0.56	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	2.5	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.9	ug/l	
95-48-7	2-Methylphenol	ND	10	0.23	ug/l	
	3&4-Methylphenol	ND	10	0.47	ug/l	
88-75-5	2-Nitrophenol	ND	10	2.9	ug/l	
100-02-7	4-Nitrophenol	ND	20	0.53	ug/l	
87-86-5	Pentachlorophenol	ND	10	1.1	ug/l	
108-95-2	Phenol	ND	5.0	0.30	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	10	0.37	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	10	0.18	ug/l	
62-53-3	Aniline	ND	10	0.64	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.0	0.47	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.0	0.53	ug/l	
100-51-6	Benzyl Alcohol	ND	10	2.3	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.31	ug/l	
106-47-8	4-Chloroaniline	ND	10	0.56	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.0	0.29	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.0	0.35	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.0	0.33	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.0	0.25	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.0	0.24	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	10	0.46	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	10	0.30	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.27	ug/l	
132-64-9	Dibenzofuran	ND	2.0	0.26	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.0	0.17	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.0	0.28	ug/l	
84-66-2	Diethyl phthalate	ND	5.0	0.20	ug/l	
131-11-3	Dimethyl phthalate	ND	5.0	0.34	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
118-74-1	Hexachlorobenzene	ND	5.0	0.29	ug/l	

Method Blank Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40299-MB	F77013.D	1	10/24/14	MR	10/21/14	OP40299	MSF3374

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34460-5

CAS No.	Compound	Result	RL	MDL	Units	Q
77-47-4	Hexachlorocyclopentadiene	ND	10	1.3	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.30	ug/l	
78-59-1	Isophorone	ND	5.0	0.45	ug/l	
88-74-4	2-Nitroaniline	ND	10	0.40	ug/l	
99-09-2	3-Nitroaniline	ND	10	1.4	ug/l	
100-01-6	4-Nitroaniline	ND	10	2.2	ug/l	
98-95-3	Nitrobenzene	ND	5.0	0.39	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.0	1.0	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.0	0.40	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.19	ug/l	
110-86-1	Pyridine	ND	10	0.52	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	51%	15-110%
4165-62-2	Phenol-d5	35%	15-110%
118-79-6	2,4,6-Tribromophenol	92%	15-110%
4165-60-0	Nitrobenzene-d5	81%	30-130%
321-60-8	2-Fluorobiphenyl	78%	30-130%
1718-51-0	Terphenyl-d14	96%	30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

Method Blank Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40292-MB	I92378.D	1	10/22/14	WK	10/20/14	OP40292	MSI3443

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

MC34460-1, MC34460-2

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	4.8	0.83	ug/kg	
208-96-8	Acenaphthylene	ND	4.8	0.73	ug/kg	
120-12-7	Anthracene	ND	4.8	1.1	ug/kg	
56-55-3	Benzo(a)anthracene	ND	4.8	2.2	ug/kg	
50-32-8	Benzo(a)pyrene	ND	4.8	1.9	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	4.8	2.1	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	1.3	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	4.8	1.5	ug/kg	
218-01-9	Chrysene	ND	4.8	1.3	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	1.4	ug/kg	
206-44-0	Fluoranthene	ND	4.8	1.4	ug/kg	
86-73-7	Fluorene	ND	4.8	0.95	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	1.2	ug/kg	
90-12-0	1-Methylnaphthalene	ND	96	24	ug/kg	
91-57-6	2-Methylnaphthalene	ND	96	24	ug/kg	
85-01-8	Phenanthrene	1.2	4.8	1.0	ug/kg	J
129-00-0	Pyrene	ND	4.8	1.5	ug/kg	

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	89%	30-130%
321-60-8	2-Fluorobiphenyl	87%	30-130%
1718-51-0	Terphenyl-d14	90%	30-130%

Method Blank Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40300-MB	I92423.D	1	10/23/14	WK	10/21/14	OP40300	MSI3445

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

MC34460-5

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.069	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.050	ug/l	
120-12-7	Anthracene	ND	0.10	0.092	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.050	0.020	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.029	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.050	0.032	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.027	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.039	ug/l	
218-01-9	Chrysene	ND	0.10	0.024	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.032	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.041	ug/l	
86-73-7	Fluorene	ND	0.10	0.099	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.031	ug/l	
90-12-0	1-Methylnaphthalene	ND	2.0	0.50	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.0	0.50	ug/l	
85-01-8	Phenanthrene	ND	0.050	0.013	ug/l	
129-00-0	Pyrene	ND	0.10	0.038	ug/l	

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	87%	30-130%
321-60-8	2-Fluorobiphenyl	81%	30-130%
1718-51-0	Terphenyl-d14	83%	30-130%

Blank Spike Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40291-BS	R40433.D	1	10/21/14	KD	10/20/14	OP40291	MSR1488

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34460-1, MC34460-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
65-85-0	Benzoic acid	2480	2100	85	30-130
95-57-8	2-Chlorophenol	2480	1990	80	30-130
59-50-7	4-Chloro-3-methyl phenol	2480	2170	87	30-130
120-83-2	2,4-Dichlorophenol	2480	2190	88	30-130
105-67-9	2,4-Dimethylphenol	2480	2070	83	30-130
51-28-5	2,4-Dinitrophenol	2480	2010	81	30-130
534-52-1	4,6-Dinitro-o-cresol	2480	2290	92	30-130
95-48-7	2-Methylphenol	2480	1940	78	30-130
	3&4-Methylphenol	4970	4070	82	30-130
88-75-5	2-Nitrophenol	2480	2110	85	30-130
100-02-7	4-Nitrophenol	2480	2280	92	30-130
87-86-5	Pentachlorophenol	2480	2130	86	30-130
108-95-2	Phenol	2480	2020	81	30-130
95-95-4	2,4,5-Trichlorophenol	2480	2250	91	30-130
88-06-2	2,4,6-Trichlorophenol	2480	2310	93	30-130
62-53-3	Aniline	2480	1410	57	40-140
101-55-3	4-Bromophenyl phenyl ether	2480	2040	82	40-140
85-68-7	Butyl benzyl phthalate	2480	1950	79	40-140
100-51-6	Benzyl Alcohol	2480	1730	70	40-140
91-58-7	2-Chloronaphthalene	2480	2000	81	40-140
106-47-8	4-Chloroaniline	2480	1620	65	40-140
111-91-1	bis(2-Chloroethoxy)methane	2480	1730	70	40-140
111-44-4	bis(2-Chloroethyl)ether	2480	1950	79	40-140
108-60-1	bis(2-Chloroisopropyl)ether	2480	2250	91	40-140
7005-72-3	4-Chlorophenyl phenyl ether	2480	1880	76	40-140
122-66-7	1,2-Diphenylhydrazine	2480	2040	82	40-140
121-14-2	2,4-Dinitrotoluene	2480	1940	78	40-140
606-20-2	2,6-Dinitrotoluene	2480	1900	76	40-140
91-94-1	3,3'-Dichlorobenzidine	2480	2240	90	40-140
132-64-9	Dibenzofuran	2480	1800	72	40-140
84-74-2	Di-n-butyl phthalate	2480	1880	76	40-140
117-84-0	Di-n-octyl phthalate	2480	2020	81	40-140
84-66-2	Diethyl phthalate	2480	1910	77	40-140
131-11-3	Dimethyl phthalate	2480	1890	76	40-140
117-81-7	bis(2-Ethylhexyl)phthalate	2480	1960	79	40-140
118-74-1	Hexachlorobenzene	2480	2060	83	40-140

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40291-BS	R40433.D	1	10/21/14	KD	10/20/14	OP40291	MSR1488

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34460-1, MC34460-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
77-47-4	Hexachlorocyclopentadiene	2480	1300	52	40-140
67-72-1	Hexachloroethane	2480	1830	74	40-140
78-59-1	Isophorone	2480	1590	64	40-140
88-74-4	2-Nitroaniline	2480	1820	73	40-140
99-09-2	3-Nitroaniline	2480	1550	62	40-140
100-01-6	4-Nitroaniline	2480	1700	68	40-140
98-95-3	Nitrobenzene	2480	1740	70	40-140
62-75-9	n-Nitrosodimethylamine	2480	1610	65	40-140
621-64-7	N-Nitroso-di-n-propylamine	2480	1710	69	40-140
86-30-6	N-Nitrosodiphenylamine	2480	1740	70	40-140
110-86-1	Pyridine	2480	1280	52	40-140

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	68%	30-130%
4165-62-2	Phenol-d5	67%	30-130%
118-79-6	2,4,6-Tribromophenol	78%	30-130%
4165-60-0	Nitrobenzene-d5	68%	30-130%
321-60-8	2-Fluorobiphenyl	72%	30-130%
1718-51-0	Terphenyl-d14	79%	30-130%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40299-BS	F77014.D	1	10/24/14	MR	10/21/14	OP40299	MSF3374

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34460-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
65-85-0	Benzoic Acid	50	17.5	35	30-130
95-57-8	2-Chlorophenol	50	38.9	78	30-130
59-50-7	4-Chloro-3-methyl phenol	50	37.7	75	30-130
120-83-2	2,4-Dichlorophenol	50	38.1	76	30-130
105-67-9	2,4-Dimethylphenol	50	32.3	65	30-130
51-28-5	2,4-Dinitrophenol	50	57.5	115	30-130
534-52-1	4,6-Dinitro-o-cresol	50	57.8	116	30-130
95-48-7	2-Methylphenol	50	34.5	69	30-130
	3&4-Methylphenol	100	63.2	63	30-130
88-75-5	2-Nitrophenol	50	39.8	80	30-130
100-02-7	4-Nitrophenol	50	14.2	28* [a]	30-130
87-86-5	Pentachlorophenol	50	37.8	76	30-130
108-95-2	Phenol	50	14.9	30	30-130
95-95-4	2,4,5-Trichlorophenol	50	35.8	72	30-130
88-06-2	2,4,6-Trichlorophenol	50	38.2	76	30-130
62-53-3	Aniline	50	28.8	58	40-140
101-55-3	4-Bromophenyl phenyl ether	50	42.7	85	40-140
85-68-7	Butyl benzyl phthalate	50	49.6	99	40-140
100-51-6	Benzyl Alcohol	50	24.1	48	40-140
91-58-7	2-Chloronaphthalene	50	42.6	85	40-140
106-47-8	4-Chloroaniline	50	34.6	69	40-140
111-91-1	bis(2-Chloroethoxy)methane	50	39.2	78	40-140
111-44-4	bis(2-Chloroethyl)ether	50	41.2	82	40-140
108-60-1	bis(2-Chloroisopropyl)ether	50	53.9	108	40-140
7005-72-3	4-Chlorophenyl phenyl ether	50	38.6	77	40-140
122-66-7	1,2-Diphenylhydrazine	50	43.1	86	40-140
121-14-2	2,4-Dinitrotoluene	50	45.9	92	40-140
606-20-2	2,6-Dinitrotoluene	50	45.8	92	40-140
91-94-1	3,3'-Dichlorobenzidine	50	54.2	108	40-140
132-64-9	Dibenzofuran	50	38.5	77	40-140
84-74-2	Di-n-butyl phthalate	50	43.6	87	40-140
117-84-0	Di-n-octyl phthalate	50	45.2	90	40-140
84-66-2	Diethyl phthalate	50	41.3	83	40-140
131-11-3	Dimethyl phthalate	50	42.6	85	40-140
117-81-7	bis(2-Ethylhexyl)phthalate	50	51.6	103	40-140
118-74-1	Hexachlorobenzene	50	41.2	82	40-140

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40299-BS	F77014.D	1	10/24/14	MR	10/21/14	OP40299	MSF3374

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34460-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
77-47-4	Hexachlorocyclopentadiene	50	23.5	47	40-140
67-72-1	Hexachloroethane	50	30.1	60	40-140
78-59-1	Isophorone	50	36.8	74	40-140
88-74-4	2-Nitroaniline	50	44.5	89	40-140
99-09-2	3-Nitroaniline	50	40.2	80	40-140
100-01-6	4-Nitroaniline	50	39.9	80	40-140
98-95-3	Nitrobenzene	50	38.8	78	40-140
62-75-9	n-Nitrosodimethylamine	50	30.0	60	40-140
621-64-7	N-Nitroso-di-n-propylamine	50	43.6	87	40-140
86-30-6	N-Nitrosodiphenylamine	50	41.4	83	40-140
110-86-1	Pyridine	50	13.8	28* [a]	40-140

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	49%	15-110%
4165-62-2	Phenol-d5	33%	15-110%
118-79-6	2,4,6-Tribromophenol	91%	15-110%
4165-60-0	Nitrobenzene-d5	78%	30-130%
321-60-8	2-Fluorobiphenyl	76%	30-130%
1718-51-0	Terphenyl-d14	90%	30-130%

(a) Outside control limits. Blank Spike meets program technical requirements.

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40292-BS	I92379.D	1	10/22/14	WK	10/20/14	OP40292	MSI3443

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

MC34460-1, MC34460-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
83-32-9	Acenaphthene	2480	1750	70	40-140
208-96-8	Acenaphthylene	2480	1530	62	40-140
120-12-7	Anthracene	2480	1810	73	40-140
56-55-3	Benzo(a)anthracene	2480	2050	83	40-140
50-32-8	Benzo(a)pyrene	2480	1960	79	40-140
205-99-2	Benzo(b)fluoranthene	2480	1930	78	40-140
191-24-2	Benzo(g,h,i)perylene	2480	1930	78	40-140
207-08-9	Benzo(k)fluoranthene	2480	1800	72	40-140
218-01-9	Chrysene	2480	1920	77	40-140
53-70-3	Dibenzo(a,h)anthracene	2480	1950	79	40-140
206-44-0	Fluoranthene	2480	1740	70	40-140
86-73-7	Fluorene	2480	1540	62	40-140
193-39-5	Indeno(1,2,3-cd)pyrene	2480	1600	64	40-140
90-12-0	1-Methylnaphthalene	2480	1690	68	40-140
91-57-6	2-Methylnaphthalene	2480	1700	68	40-140
85-01-8	Phenanthrene	2480	1850	74	40-140
129-00-0	Pyrene	2480	1690	68	40-140

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	70%	30-130%
321-60-8	2-Fluorobiphenyl	70%	30-130%
1718-51-0	Terphenyl-d14	73%	30-130%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40300-BS	I92424.D	1	10/23/14	WK	10/21/14	OP40300	MSI3445

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

MC34460-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
83-32-9	Acenaphthene	50	40.8	82	40-140
208-96-8	Acenaphthylene	50	35.4	71	40-140
120-12-7	Anthracene	50	42.0	84	40-140
56-55-3	Benzo(a)anthracene	50	48.1	96	40-140
50-32-8	Benzo(a)pyrene	50	45.9	92	40-140
205-99-2	Benzo(b)fluoranthene	50	49.4	99	40-140
191-24-2	Benzo(g,h,i)perylene	50	46.2	92	40-140
207-08-9	Benzo(k)fluoranthene	50	42.0	84	40-140
218-01-9	Chrysene	50	43.7	87	40-140
53-70-3	Dibenzo(a,h)anthracene	50	46.7	93	40-140
206-44-0	Fluoranthene	50	38.8	78	40-140
86-73-7	Fluorene	50	48.2	96	40-140
193-39-5	Indeno(1,2,3-cd)pyrene	50	45.9	92	40-140
90-12-0	1-Methylnaphthalene	50	38.1	76	40-140
91-57-6	2-Methylnaphthalene	50	39.0	78	40-140
85-01-8	Phenanthrene	50	42.9	86	40-140
129-00-0	Pyrene	50	37.8	76	40-140

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	85%	30-130%
321-60-8	2-Fluorobiphenyl	80%	30-130%
1718-51-0	Terphenyl-d14	81%	30-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40291-MS	R40434.D	1	10/21/14	KD	10/20/14	OP40291	MSR1488
OP40291-MSD	R40435.D	1	10/21/14	KD	10/20/14	OP40291	MSR1488
MC34460-1	R40436.D	1	10/21/14	KD	10/20/14	OP40291	MSR1488

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34460-1, MC34460-2

CAS No.	Compound	MC34460-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic acid	ND		3040	81.8	3* [a]	3010	107	4* [a]	27	30-130/30
95-57-8	2-Chlorophenol	ND		3040	2140	70	3010	2180	72	2	30-130/30
59-50-7	4-Chloro-3-methyl phenol	ND		3040	2290	75	3010	2420	80	6	30-130/30
120-83-2	2,4-Dichlorophenol	ND		3040	2370	78	3010	2440	81	3	30-130/30
105-67-9	2,4-Dimethylphenol	ND		3040	2200	72	3010	2210	73	0	30-130/30
51-28-5	2,4-Dinitrophenol	ND		3040	560	18* [a]	3010	585	19* [a]	4	30-130/30
534-52-1	4,6-Dinitro-o-cresol	ND		3040	1130	37	3010	1250	42	10	30-130/30
95-48-7	2-Methylphenol	ND		3040	2050	67	3010	2090	69	2	30-130/30
	3&4-Methylphenol	ND		6080	4390	72	6010	4500	75	2	30-130/30
88-75-5	2-Nitrophenol	ND		3040	2240	74	3010	2310	77	3	30-130/30
100-02-7	4-Nitrophenol	ND		3040	2510	83	3010	2770	92	10	30-130/30
87-86-5	Pentachlorophenol	ND		3040	1980	65	3010	2150	71	8	30-130/30
108-95-2	Phenol	ND		3040	2160	71	3010	2210	73	2	30-130/30
95-95-4	2,4,5-Trichlorophenol	ND		3040	2410	79	3010	2530	84	5	30-130/30
88-06-2	2,4,6-Trichlorophenol	ND		3040	2430	80	3010	2560	85	5	30-130/30
62-53-3	Aniline	ND		3040	1500	49	3010	1550	52	3	40-140/30
101-55-3	4-Bromophenyl phenyl ether	ND		3040	2150	71	3010	2270	75	5	40-140/30
85-68-7	Butyl benzyl phthalate	ND		3040	2120	70	3010	2240	74	6	40-140/30
100-51-6	Benzyl Alcohol	ND		3040	1840	60	3010	1860	62	1	40-140/30
91-58-7	2-Chloronaphthalene	ND		3040	2180	72	3010	2300	76	5	40-140/30
106-47-8	4-Chloroaniline	41.0	J	3040	1740	56	3010	1820	59	4	40-140/30
111-91-1	bis(2-Chloroethoxy)methane	ND		3040	1870	61	3010	1920	64	3	40-140/30
111-44-4	bis(2-Chloroethyl)ether	ND		3040	2120	70	3010	1950	65	8	40-140/30
108-60-1	bis(2-Chloroisopropyl)ether	ND		3040	2420	80	3010	2530	84	4	40-140/30
7005-72-3	4-Chlorophenyl phenyl ether	ND		3040	1990	65	3010	2130	71	7	40-140/30
122-66-7	1,2-Diphenylhydrazine	ND		3040	2240	74	3010	2190	73	2	40-140/30
121-14-2	2,4-Dinitrotoluene	ND		3040	2050	67	3010	2260	75	10	40-140/30
606-20-2	2,6-Dinitrotoluene	ND		3040	2030	67	3010	2160	72	6	40-140/30
91-94-1	3,3'-Dichlorobenzidine	ND		3040	2550	84	3010	2730	91	7	40-140/30
132-64-9	Dibenzofuran	ND		3040	1950	64	3010	2070	69	6	40-140/30
84-74-2	Di-n-butyl phthalate	ND		3040	2010	66	3010	2170	72	8	40-140/30
117-84-0	Di-n-octyl phthalate	ND		3040	2140	70	3010	2300	76	7	40-140/30
84-66-2	Diethyl phthalate	ND		3040	2070	68	3010	2210	73	7	40-140/30
131-11-3	Dimethyl phthalate	ND		3040	2000	66	3010	2140	71	7	40-140/30
117-81-7	bis(2-Ethylhexyl)phthalate	ND		3040	2120	70	3010	2260	75	6	40-140/30
118-74-1	Hexachlorobenzene	ND		3040	2170	71	3010	2300	76	6	40-140/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40291-MS	R40434.D	1	10/21/14	KD	10/20/14	OP40291	MSR1488
OP40291-MSD	R40435.D	1	10/21/14	KD	10/20/14	OP40291	MSR1488
MC34460-1	R40436.D	1	10/21/14	KD	10/20/14	OP40291	MSR1488

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34460-1, MC34460-2

CAS No.	Compound	MC34460-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
77-47-4	Hexachlorocyclopentadiene	ND		3040	1160	38* [a]	3010	1200	40	3	40-140/30
67-72-1	Hexachloroethane	ND		3040	1950	64	3010	2000	67	3	40-140/30
78-59-1	Isophorone	ND		3040	1710	56	3010	1770	59	3	40-140/30
88-74-4	2-Nitroaniline	ND		3040	1940	64	3010	2090	69	7	40-140/30
99-09-2	3-Nitroaniline	ND		3040	1740	57	3010	1940	65	11	40-140/30
100-01-6	4-Nitroaniline	ND		3040	1790	59	3010	1970	66	10	40-140/30
98-95-3	Nitrobenzene	ND		3040	1900	62	3010	1950	65	3	40-140/30
62-75-9	n-Nitrosodimethylamine	ND		3040	1640	54	3010	1650	55	1	40-140/30
621-64-7	N-Nitroso-di-n-propylamine	ND		3040	1830	60	3010	1870	62	2	40-140/30
86-30-6	N-Nitrosodiphenylamine	ND		3040	1900	62	3010	2000	67	5	40-140/30
110-86-1	Pyridine	ND		3040	1340	44	3010	1360	45	1	40-140/30

CAS No.	Surrogate Recoveries	MS	MSD	MC34460-1	Limits
367-12-4	2-Fluorophenol	60%	63%	71%	30-130%
4165-62-2	Phenol-d5	58%	61%	69%	30-130%
118-79-6	2,4,6-Tribromophenol	67%	71%	79%	30-130%
4165-60-0	Nitrobenzene-d5	60%	63%	69%	30-130%
321-60-8	2-Fluorobiphenyl	63%	68%	72%	30-130%
1718-51-0	Terphenyl-d14	69%	74%	86%	30-130%

(a) Outside control limits due to possible matrix interference. Refer to Blank Spike.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40299-MS	F77015.D	1	10/24/14	MR	10/21/14	OP40299	MSF3374
OP40299-MSD	F77016.D	1	10/24/14	MR	10/21/14	OP40299	MSF3374
MC34100-11	R40554.D	1	10/27/14	KD	10/21/14	OP40299	MSR1493

The QC reported here applies to the following samples: Method: SW846 8270D

MC34460-5

CAS No.	Compound	MC34100-11 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic Acid	ND		50	17.2	34	50	16.8	34	2	30-130/20
95-57-8	2-Chlorophenol	ND		50	36.8	74	50	34.6	69	6	30-130/20
59-50-7	4-Chloro-3-methyl phenol	ND		50	37.8	76	50	36.2	72	4	30-130/20
120-83-2	2,4-Dichlorophenol	ND		50	37.6	75	50	35.4	71	6	30-130/20
105-67-9	2,4-Dimethylphenol	ND		50	31.5	63	50	28.1	56	11	30-130/20
51-28-5	2,4-Dinitrophenol	ND		50	60.0	120	50	60.1	120	0	30-130/20
534-52-1	4,6-Dinitro-o-cresol	ND		50	56.2	112	50	58.3	117	4	30-130/20
95-48-7	2-Methylphenol	ND		50	32.8	66	50	29.9	60	9	30-130/20
	3&4-Methylphenol	ND		100	61.6	62	100	58.0	58	6	30-130/20
88-75-5	2-Nitrophenol	ND		50	39.2	78	50	37.3	75	5	30-130/20
100-02-7	4-Nitrophenol	ND		50	13.7	27* [a]	50	13.8	28* [a]	1	30-130/20
87-86-5	Pentachlorophenol	ND		50	37.0	74	50	37.3	75	1	30-130/20
108-95-2	Phenol	ND		50	14.4	29* [a]	50	13.8	28* [a]	4	30-130/20
95-95-4	2,4,5-Trichlorophenol	ND		50	35.8	72	50	33.4	67	7	30-130/20
88-06-2	2,4,6-Trichlorophenol	ND		50	36.8	74	50	36.7	73	0	30-130/20
62-53-3	Aniline	ND		50	24.6	49	50	22.8	46	8	40-140/20
101-55-3	4-Bromophenyl phenyl ether	ND		50	41.8	84	50	42.7	85	2	40-140/20
85-68-7	Butyl benzyl phthalate	ND		50	49.4	99	50	49.6	99	0	40-140/20
100-51-6	Benzyl Alcohol	ND		50	25.1	50	50	22.4	45	11	40-140/20
91-58-7	2-Chloronaphthalene	ND		50	42.4	85	50	40.9	82	4	40-140/20
106-47-8	4-Chloroaniline	ND		50	34.4	69	50	32.9	66	4	40-140/20
111-91-1	bis(2-Chloroethoxy)methane	ND		50	39.0	78	50	36.1	72	8	40-140/20
111-44-4	bis(2-Chloroethyl)ether	ND		50	41.1	82	50	37.6	75	9	40-140/20
108-60-1	bis(2-Chloroisopropyl)ether	ND		50	53.0	106	50	49.6	99	7	40-140/20
7005-72-3	4-Chlorophenyl phenyl ether	ND		50	38.3	77	50	38.3	77	0	40-140/20
122-66-7	1,2-Diphenylhydrazine	ND		50	42.8	86	50	43.3	87	1	40-140/20
121-14-2	2,4-Dinitrotoluene	ND		50	45.4	91	50	45.1	90	1	40-140/20
606-20-2	2,6-Dinitrotoluene	ND		50	46.2	92	50	45.0	90	3	40-140/20
91-94-1	3,3'-Dichlorobenzidine	ND		50	54.4	109	50	52.8	106	3	40-140/20
132-64-9	Dibenzofuran	ND		50	38.4	77	50	37.7	75	2	40-140/20
84-74-2	Di-n-butyl phthalate	ND		50	43.5	87	50	43.3	87	0	40-140/20
117-84-0	Di-n-octyl phthalate	ND		50	44.2	88	50	44.6	89	1	40-140/20
84-66-2	Diethyl phthalate	ND		50	41.3	83	50	41.1	82	0	40-140/20
131-11-3	Dimethyl phthalate	ND		50	42.1	84	50	42.2	84	0	40-140/20
117-81-7	bis(2-Ethylhexyl)phthalate	ND		50	51.7	103	50	51.8	104	0	40-140/20
118-74-1	Hexachlorobenzene	ND		50	40.6	81	50	41.0	82	1	40-140/20

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40299-MS	F77015.D	1	10/24/14	MR	10/21/14	OP40299	MSF3374
OP40299-MSD	F77016.D	1	10/24/14	MR	10/21/14	OP40299	MSF3374
MC34100-11	R40554.D	1	10/27/14	KD	10/21/14	OP40299	MSR1493

The QC reported here applies to the following samples: Method: SW846 8270D

MC34460-5

CAS No.	Compound	MC34100-11 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
77-47-4	Hexachlorocyclopentadiene	ND		50	23.3	47	50	21.6	43	8	40-140/20
67-72-1	Hexachloroethane	ND		50	30.9	62	50	29.6	59	4	40-140/20
78-59-1	Isophorone	ND		50	36.5	73	50	34.6	69	5	40-140/20
88-74-4	2-Nitroaniline	ND		50	43.9	88	50	44.1	88	0	40-140/20
99-09-2	3-Nitroaniline	ND		50	40.8	82	50	40.2	80	1	40-140/20
100-01-6	4-Nitroaniline	ND		50	40.6	81	50	39.4	79	3	40-140/20
98-95-3	Nitrobenzene	ND		50	38.8	78	50	36.2	72	7	40-140/20
62-75-9	n-Nitrosodimethylamine	ND		50	30.4	61	50	27.6	55	10	40-140/20
621-64-7	N-Nitroso-di-n-propylamine	ND		50	43.3	87	50	40.6	81	6	40-140/20
86-30-6	N-Nitrosodiphenylamine	ND		50	40.5	81	50	41.2	82	2	40-140/20
110-86-1	Pyridine	ND		50	11.9	24* a	50	9.5	19* a	22* b	40-140/20

CAS No.	Surrogate Recoveries	MS	MSD	MC34100-11	Limits
367-12-4	2-Fluorophenol	47%	43%	51%	15-110%
4165-62-2	Phenol-d5	33%	28%	32%	15-110%
118-79-6	2,4,6-Tribromophenol	90%	93%	105%	15-110%
4165-60-0	Nitrobenzene-d5	79%	73%	82%	30-130%
321-60-8	2-Fluorobiphenyl	75%	71%	85%	30-130%
1718-51-0	Terphenyl-d14	89%	90%	95%	30-130%

(a) Outside control limits due to possible matrix interference. Refer to Blank Spike.
(b) High RPD due to possible matrix interference and/or sample heterogeneity.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40292-MS	I92380.D	1	10/22/14	WK	10/20/14	OP40292	MSI3443
OP40292-MSD	I92381.D	1	10/22/14	WK	10/20/14	OP40292	MSI3443
MC34460-1	I92382.D	1	10/22/14	WK	10/20/14	OP40292	MSI3443

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

MC34460-1, MC34460-2

CAS No.	Compound	MC34460-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	27.8		3040	1910	62	3010	2020	66	6	40-140/30
208-96-8	Acenaphthylene	2.9	J	3040	1650	54	3010	1750	58	6	40-140/30
120-12-7	Anthracene	40.3		3040	1950	63	3010	2060	67	5	40-140/30
56-55-3	Benzo(a)anthracene	15.4		3040	2210	72	3010	2380	79	7	40-140/30
50-32-8	Benzo(a)pyrene	5.6	J	3040	2060	68	3010	2250	75	9	40-140/30
205-99-2	Benzo(b)fluoranthene	3.5	J	3040	2090	69	3010	2350	78	12	40-140/30
191-24-2	Benzo(g,h,i)perylene	1.7	J	3040	2020	66	3010	2200	73	9	40-140/30
207-08-9	Benzo(k)fluoranthene	4.0	J	3040	2090	69	3010	2190	73	5	40-140/30
218-01-9	Chrysene	14.0		3040	2020	66	3010	2220	73	9	40-140/30
53-70-3	Dibenzo(a,h)anthracene	ND		3040	2060	68	3010	2250	75	9	40-140/30
206-44-0	Fluoranthene	28.0		3040	1930	63	3010	2080	68	7	40-140/30
86-73-7	Fluorene	25.6		3040	1610	52	3010	1740	57	8	40-140/30
193-39-5	Indeno(1,2,3-cd)pyrene	ND		3040	1660	55	3010	1810	60	9	40-140/30
90-12-0	1-Methylnaphthalene	41.0	J	3040	1840	59	3010	1920	62	4	40-140/30
91-57-6	2-Methylnaphthalene	79.8	J	3040	1840	58	3010	1950	62	6	40-140/30
85-01-8	Phenanthrene	106		3040	1990	62	3010	2120	67	6	40-140/30
129-00-0	Pyrene	37.7		3040	1850	60	3010	1980	65	7	40-140/30

CAS No.	Surrogate Recoveries	MS	MSD	MC34460-1	Limits
4165-60-0	Nitrobenzene-d5	62%	65%	72%	30-130%
321-60-8	2-Fluorobiphenyl	62%	65%	72%	30-130%
1718-51-0	Terphenyl-d14	63%	69%	76%	30-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40300-MS	I92425.D	1	10/23/14	WK	10/21/14	OP40300	MSI3445
OP40300-MSD	I92426.D	1	10/23/14	WK	10/21/14	OP40300	MSI3445
MC34100-12	I92427.D	1	10/23/14	WK	10/21/14	OP40300	MSI3445

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

MC34460-5

CAS No.	Compound	MC34100-12 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	ND		50	40.4	81	50	40.0	80	1	40-140/20
208-96-8	Acenaphthylene	ND		50	35.5	71	50	34.9	70	2	40-140/20
120-12-7	Anthracene	ND		50	42.4	85	50	42.1	84	1	40-140/20
56-55-3	Benzo(a)anthracene	ND		50	47.6	95	50	47.3	95	1	40-140/20
50-32-8	Benzo(a)pyrene	ND		50	44.9	90	50	44.7	89	0	40-140/20
205-99-2	Benzo(b)fluoranthene	ND		50	45.1	90	50	50.0	100	10	40-140/20
191-24-2	Benzo(g,h,i)perylene	ND		50	45.5	91	50	45.3	91	0	40-140/20
207-08-9	Benzo(k)fluoranthene	ND		50	39.5	79	50	40.3	81	2	40-140/20
218-01-9	Chrysene	ND		50	44.0	88	50	43.6	87	1	40-140/20
53-70-3	Dibenzo(a,h)anthracene	ND		50	46.1	92	50	45.5	91	1	40-140/20
206-44-0	Fluoranthene	ND		50	39.7	79	50	39.0	78	2	40-140/20
86-73-7	Fluorene	ND		50	47.6	95	50	48.1	96	1	40-140/20
193-39-5	Indeno(1,2,3-cd)pyrene	ND		50	45.0	90	50	44.7	89	1	40-140/20
90-12-0	1-Methylnaphthalene	ND		50	38.5	77	50	37.2	74	3	40-140/20
91-57-6	2-Methylnaphthalene	ND		50	38.8	78	50	37.1	74	4	40-140/20
85-01-8	Phenanthrene	ND		50	43.6	87	50	43.9	88	1	40-140/20
129-00-0	Pyrene	ND		50	38.4	77	50	37.9	76	1	40-140/20

CAS No.	Surrogate Recoveries	MS	MSD	MC34100-12	Limits
4165-60-0	Nitrobenzene-d5	84%	78%	77%	30-130%
321-60-8	2-Fluorobiphenyl	79%	75%	72%	30-130%
1718-51-0	Terphenyl-d14	82%	81%	76%	30-130%

* = Outside of Control Limits.

Semivolatile Internal Standard Area Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Check Std:	MSF3374-CC3361	**Injection Date:**	10/24/14
Lab File ID:	F77012.D	**Injection Time:**	08:26
Instrument ID:	GCMSF	**Method:**	SW846 8270D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	80351	4.14	268321	5.19	174204	6.72	314738	8.00	396524	10.57	383698	12.27
Upper Limit [a]	160702	4.64	536642	5.69	348408	7.22	629476	8.50	793048	11.07	767396	12.77
Lower Limit [b]	40176	3.64	134161	4.69	87102	6.22	157369	7.50	198262	10.07	191849	11.77

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP40299-MB	90931	4.14	316725	5.19	203417	6.72	387270	8.00	454373	10.56	445536	12.27
OP40299-BS	87440	4.14	308603	5.19	197061	6.72	366496	8.00	461227	10.57	439548	12.27
OP40299-MS	82458	4.14	289463	5.19	186365	6.72	353436	8.00	440524	10.57	420636	12.27
OP40299-MSD	86127	4.14	299261	5.19	192367	6.72	354781	8.00	436867	10.57	420358	12.27
ZZZZZZ	81206	4.14	275345	5.19	186349	6.72	356089	8.00	437086	10.57	429373	12.27
ZZZZZZ	103572	4.14	372561	5.19	240380	6.72	462925	8.00	586739	10.57	583854	12.28
ZZZZZZ	85272	4.14	296589	5.19	195859	6.72	365005	8.00	424462	10.57	416597	12.27
ZZZZZZ	85397	4.14	290696	5.19	189975	6.72	360204	8.00	423550	10.57	414730	12.27
ZZZZZZ	79965	4.14	287719	5.19	195895	6.72	380569	8.00	476031	10.57	478953	12.28
ZZZZZZ	80497	4.14	282748	5.19	188113	6.72	356583	8.00	432675	10.57	423992	12.27
ZZZZZZ	74255	4.14	254909	5.19	171761	6.72	335050	8.00	404844	10.57	390244	12.27
ZZZZZZ	76499	4.14	266435	5.19	179984	6.72	347229	8.00	424444	10.57	411451	12.27
MC34460-5	73607	4.14	257296	5.19	170422	6.72	333745	8.00	406301	10.57	398241	12.27
OP40329-MB	81892	4.14	274909	5.19	177974	6.72	329537	8.00	367511	10.57	341893	12.27
OP40329-BS	75472	4.14	266061	5.19	165865	6.72	296548	8.00	350600	10.57	331989	12.27
OP40329-MS	80456	4.14	284813	5.19	181355	6.72	335061	8.00	395829	10.57	362712	12.27
OP40329-MSD	85934	4.14	299585	5.19	186055	6.72	345612	8.00	392524	10.57	357971	12.27
MC34536-1	92224	4.14	312217	5.19	205154	6.72	380992	8.00	418408	10.57	388879	12.27
ZZZZZZ	83760	4.14	286780	5.19	183594	6.71	344862	8.00	377271	10.57	350812	12.27
ZZZZZZ	75364	4.14	261041	5.19	171397	6.72	322913	8.00	363766	10.57	338701	12.27
ZZZZZZ	79711	4.14	270484	5.19	174144	6.71	323424	8.00	362206	10.57	337244	12.27
ZZZZZZ	65063	4.14	224164	5.19	146930	6.72	282926	8.00	341006	10.57	331397	12.27
ZZZZZZ	66895	4.14	224244	5.19	144374	6.71	269930	8.00	342328	10.57	370291	12.27
ZZZZZZ	76943	4.14	262613	5.19	167113	6.71	310107	8.00	356554	10.57	361585	12.27
ZZZZZZ	71557	4.14	242246	5.19	152362	6.72	285746	8.00	338012	10.57	350376	12.27
ZZZZZZ	62966	4.14	219082	5.19	145315	6.72	283055	8.00	361554	10.57	367425	12.27

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Check Std:	MSF3374-CC3361	**Injection Date:**	10/24/14
Lab File ID:	F77012.D	**Injection Time:**	08:26
Instrument ID:	GCMSF	**Method:**	SW846 8270D

Lab	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
Sample ID	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT

(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Check Std:	MSI3443-CC3427	**Injection Date:**	10/22/14
Lab File ID:	I92377.D	**Injection Time:**	10:14
Instrument ID:	GCMSI	**Method:**	SW846 8270D BY SIM

	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Check Std	299281	2.84	680162	3.86	394906	5.35	711713	6.59	656886	9.25	1181772	10.63
Upper Limit [a]	598562	3.34	1360324	4.36	789812	5.85	1423426	7.09	1313772	9.75	2363544	11.13
Lower Limit [b]	149641	2.34	340081	3.36	197453	4.85	355857	6.09	328443	8.75	590886	10.13
Lab Sample ID	**IS 1 AREA**	**RT**	**IS 2 AREA**	**RT**	**IS 3 AREA**	**RT**	**IS 4 AREA**	**RT**	**IS 5 AREA**	**RT**	**IS 6 AREA**	**RT**
OP40292-MB	285335	2.84	641133	3.86	365350	5.34	632963	6.58	545473	9.25	948131	10.62
OP40292-BS	332414	2.84	763124	3.86	436395	5.35	761748	6.59	669921	9.25	1155326	10.63
OP40292-MS	317427	2.84	734731	3.86	419338	5.35	729686	6.59	634249	9.25	1100683	10.63
OP40292-MSD	271761	2.84	627944	3.86	361912	5.35	636065	6.59	550991	9.25	958255	10.63
MC34460-1	351505	2.84	795817	3.86	453737	5.35	798419	6.58	698857	9.25	1231042	10.63
MC34460-2	339128	2.84	756188	3.86	433942	5.35	745620	6.58	632868	9.25	1088275	10.63
ZZZZZZ	359340	2.84	815435	3.86	461928	5.35	785437	6.58	680257	9.25	1176195	10.63
ZZZZZZ	344405	2.84	774266	3.86	441741	5.35	755519	6.58	656223	9.25	1125585	10.63
ZZZZZZ	333015	2.84	755478	3.86	428633	5.35	741121	6.58	641254	9.25	1105676	10.63
ZZZZZZ	316710	2.84	710552	3.86	403632	5.35	697551	6.58	601770	9.25	1035025	10.63
ZZZZZZ	321849	2.84	722477	3.86	414364	5.35	712769	6.58	623419	9.25	1069070	10.63
OP40298-MB	308968	2.84	685023	3.86	396466	5.35	699373	6.58	645144	9.25	1162710	10.63
OP40298-LB	308968	2.84	685023	3.86	396466	5.35	699373	6.58	645144	9.25	1162710	10.63
OP40298-BS	306825	2.84	708932	3.86	404003	5.35	706952	6.59	631119	9.25	1107282	10.63
ZZZZZZ	317580	2.84	711682	3.86	409250	5.34	722697	6.58	649224	9.25	1166105	10.63
ZZZZZZ	324400	2.84	733640	3.86	419878	5.34	741230	6.58	669368	9.25	1199027	10.63

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Check Std:	MSI3445-CC3427	**Injection Date:**	10/23/14
Lab File ID:	I92408.D	**Injection Time:**	14:32
Instrument ID:	GCMSI	**Method:**	SW846 8270D BY SIM

	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Check Std	279383	2.82	644600	3.84	373968	5.33	667028	6.57	610503	9.22	1064015	10.60
Upper Limit [a]	558766	3.32	1289200	4.34	747936	5.83	1334056	7.07	1221006	9.72	2128030	11.10
Lower Limit [b]	139692	2.32	322300	3.34	186984	4.83	333514	6.07	305252	8.72	532008	10.10

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
ZZZZZZ	345815	2.82	778436	3.84	446372	5.33	791302	6.56	742193	9.22	1298288	10.60
ZZZZZZ	363516	2.82	824379	3.84	475419	5.33	850212	6.56	788775	9.22	1405118	10.60
ZZZZZZ	370348	2.82	823010	3.84	479455	5.33	862229	6.56	793486	9.22	1402664	10.60
ZZZZZZ	357647	2.82	795387	3.84	459926	5.33	826344	6.56	768946	9.22	1354885	10.60
ZZZZZZ	372445	2.83	842079	3.84	471336	5.33	838194	6.56	783493	9.22	1378762	10.60
ZZZZZZ	296387	2.82	650642	3.84	371890	5.34	674648	6.58	655222	9.22	1133480	10.60
ZZZZZZ	286316	2.82	642932	3.84	369235	5.33	680381	6.57	645629	9.22	1132926	10.60
ZZZZZZ	380327	2.82	844664	3.84	512481	5.33	878012	6.57	833620	9.23	1471264	10.61
ZZZZZZ	407752	2.82	943127	3.84	620571	5.33	933287	6.57	878512	9.23	1553982	10.61
ZZZZZZ	470653	2.82	1052429	3.84	601258	5.33	1054930	6.57	993558	9.23	1726372	10.61
ZZZZZZ	423414	2.82	938563	3.84	543234	5.33	971918	6.57	909071	9.22	1607591	10.61
ZZZZZZ	312339	2.82	723215	3.84	435193	5.33	735569	6.57	682459	9.22	1204095	10.60
OP40300-MB	319266	2.82	732475	3.84	425924	5.32	765587	6.56	721184	9.22	1257918	10.60
OP40300-BS	319395	2.82	750006	3.84	431900	5.33	775143	6.57	712113	9.23	1238057	10.61
OP40300-MS	325093	2.82	760237	3.84	435680	5.33	763554	6.57	691922	9.23	1204406	10.61
OP40300-MSD	317579	2.82	748522	3.84	430819	5.33	772804	6.57	708264	9.23	1228215	10.61
MC34100-12	368639	2.82	831476	3.84	486004	5.33	880745	6.56	830938	9.22	1478734	10.60
ZZZZZZ	284575	2.82	653275	3.84	378182	5.32	674780	6.56	635914	9.22	1132721	10.60
ZZZZZZ	294345	2.82	664385	3.84	387325	5.32	692835	6.56	645517	9.22	1141928	10.60
ZZZZZZ	294767	2.82	670247	3.84	388334	5.32	688858	6.56	653406	9.22	1166095	10.60
ZZZZZZ	302286	2.82	693596	3.84	398757	5.33	705186	6.56	663393	9.22	1166299	10.60
ZZZZZZ	306751	2.82	705808	3.84	400579	5.33	713274	6.56	667256	9.22	1176538	10.60
ZZZZZZ	284513	2.82	657137	3.84	379123	5.32	664806	6.56	637403	9.22	1129211	10.60
ZZZZZZ	310570	2.82	708592	3.84	409978	5.32	719365	6.56	683768	9.22	1211366	10.60
ZZZZZZ	363327	2.82	850361	3.84	479960	5.33	843509	6.57	785140	9.23	1338912	10.61
ZZZZZZ	321941	2.83	746862	3.84	424023	5.33	761960	6.56	682489	9.22	1179102	10.60
ZZZZZZ	326469	2.82	754969	3.84	432339	5.33	764262	6.56	685648	9.22	1180768	10.60
ZZZZZZ	326914	2.82	745052	3.84	428650	5.33	769185	6.57	715706	9.23	1235310	10.61

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

Semivolatile Internal Standard Area Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Check Std:	MSI3445-CC3427	**Injection Date:**	10/23/14
Lab File ID:	I92408.D	**Injection Time:**	14:32
Instrument ID:	GCMSI	**Method:**	SW846 8270D BY SIM

Lab	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
Sample ID	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Check Std:	MSI3446-CC3427	**Injection Date:**	10/24/14
Lab File ID:	I92444.D	**Injection Time:**	08:17
Instrument ID:	GCMSI	**Method:**	SW846 8270D BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	272435	2.79	609399	3.81	356904	5.29	638917	6.53	595334	9.18	1028885	10.56
Upper Limit [a]	544870	3.29	1218798	4.31	713808	5.79	1277834	7.03	1190668	9.68	2057770	11.06
Lower Limit [b]	136218	2.29	304700	3.31	178452	4.79	319459	6.03	297667	8.68	514443	10.06

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP40266-MB	302298	2.79	675467	3.81	392228	5.29	695770	6.53	661311	9.18	1155691	10.56
OP40266-BS	302895	2.79	690722	3.81	398772	5.30	699613	6.53	650108	9.19	1124124	10.56
ZZZZZZ	318062	2.79	717104	3.81	410486	5.30	728336	6.53	678642	9.18	1190926	10.56
MC34460-5	306533	2.79	691693	3.81	398833	5.29	709940	6.53	659574	9.18	1149461	10.56
OP40266-BSD	273393	2.79	621851	3.81	361366	5.30	632969	6.53	590844	9.19	1010909	10.56
OP40266-MS	292207	2.79	657570	3.81	381041	5.30	674059	6.53	629402	9.19	1091543	10.56
OP40266-MSD	286066	2.79	647930	3.81	381202	5.30	667291	6.53	621890	9.19	1072484	10.56
MC34427-8	314338	2.79	701616	3.81	405893	5.29	724224	6.53	686306	9.18	1199947	10.56
OP40343-MB	316046	2.79	705630	3.81	407106	5.29	740084	6.53	678817	9.18	1181458	10.56
OP40343-BS	328917	2.79	746917	3.81	435987	5.29	768490	6.53	709361	9.19	1225594	10.57
ZZZZZZ	324851	2.79	729065	3.81	427756	5.29	756450	6.53	713131	9.18	1238776	10.56
ZZZZZZ	315057	2.79	706541	3.81	410044	5.29	726763	6.53	681069	9.18	1180416	10.56
OP40343-MS	335520	2.79	765249	3.81	448574	5.29	784362	6.53	730982	9.19	1253347	10.57
OP40343-MSD	310218	2.79	717424	3.81	413358	5.29	730964	6.53	675990	9.19	1165351	10.56
MC34100-20	303413	2.79	679383	3.81	398366	5.29	701479	6.53	645774	9.18	1123656	10.56
ZZZZZZ	295239	2.79	666263	3.81	389185	5.29	688356	6.53	639447	9.18	1103567	10.56
ZZZZZZ	301897	2.79	674397	3.81	392925	5.29	694874	6.52	649088	9.18	1120562	10.56
ZZZZZZ	295509	2.79	660772	3.81	384349	5.29	680196	6.53	632588	9.18	1099142	10.56
ZZZZZZ	284910	2.79	640266	3.81	371208	5.29	656637	6.53	614217	9.18	1065352	10.56
ZZZZZZ	306303	2.79	674643	3.81	398151	5.29	693160	6.53	653878	9.18	1135203	10.56
ZZZZZZ	287215	2.79	643100	3.81	374757	5.29	664561	6.53	622094	9.17	1087963	10.56
ZZZZZZ	316075	2.79	707978	3.81	412041	5.29	730767	6.53	673206	9.18	1169046	10.56
ZZZZZZ	315054	2.79	697956	3.81	405808	5.29	715419	6.53	671716	9.18	1160226	10.56
ZZZZZZ	305849	2.79	681594	3.81	396994	5.29	704170	6.52	651918	9.17	1120812	10.56
ZZZZZZ	309019	2.79	689056	3.81	401328	5.29	712039	6.53	667359	9.17	1158458	10.56
ZZZZZZ	281622	2.79	634871	3.81	368220	5.29	650620	6.53	607223	9.17	1048351	10.55
ZZZZZZ	282189	2.79	632245	3.81	368398	5.29	642988	6.53	606208	9.17	1047787	10.55
ZZZZZZ	304841	2.79	685377	3.81	396921	5.29	710154	6.53	663771	9.17	1138569	10.55

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

Semivolatile Internal Standard Area Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Check Std:	MSI3446-CC3427	**Injection Date:**	10/24/14
Lab File ID:	I92444.D	**Injection Time:**	08:17
Instrument ID:	GCMSI	**Method:**	SW846 8270D BY SIM

Lab	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
Sample ID	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Check Std:	MSR1488-CC1481	**Injection Date:**	10/21/14
Lab File ID:	R40425.D	**Injection Time:**	11:12
Instrument ID:	GCMSR	**Method:**	SW846 8270D

	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Check Std	340017	4.02	1206020	5.12	716005	6.63	1208204	7.90	1214169	10.17	1092212	11.57
Upper Limit [a]	680034	4.52	2412040	5.62	1432010	7.13	2416408	8.40	2428338	10.67	2184424	12.07
Lower Limit [b]	170009	3.52	603010	4.62	358003	6.13	604102	7.40	607085	9.67	546106	11.07

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP40247-MB	385003	4.01	1358780	5.12	818854	6.63	1390679	7.89	1315390	10.17	1194403	11.56
OP40247-LB	385003	4.01	1358780	5.12	818854	6.63	1390679	7.89	1315390	10.17	1194403	11.56
OP40291-MB	332757	4.02	1189945	5.12	711774	6.62	1194131	7.89	1115417	10.16	1008283	11.56
OP40291-BS	435816	4.02	1543752	5.12	915469	6.63	1519933	7.89	1480598	10.17	1298643	11.56
OP40291-MS	429946	4.02	1515192	5.12	897252	6.63	1467460	7.89	1394914	10.17	1237360	11.56
OP40291-MSD	346607	4.02	1219333	5.12	712325	6.62	1193421	7.89	1157364	10.17	1019878	11.56
MC34460-1	407196	4.02	1447526	5.12	883682	6.62	1526180	7.89	1450351	10.17	1333613	11.56
MC34460-2	429142	4.02	1510266	5.12	888238	6.62	1486044	7.89	1372678	10.17	1249131	11.56
ZZZZZZ	432701	4.02	1537488	5.12	924625	6.62	1554913	7.89	1466581	10.17	1306944	11.56
ZZZZZZ	434456	4.02	1548061	5.12	925166	6.62	1576871	7.89	1457759	10.17	1310013	11.56
ZZZZZZ	400532	4.02	1431053	5.12	864792	6.62	1429480	7.89	1376507	10.17	1244128	11.56
ZZZZZZ	428899	4.02	1522049	5.12	903865	6.62	1497287	7.89	1387128	10.17	1254201	11.56
OP40285-MB	382351	4.01	1343764	5.12	815953	6.62	1378970	7.89	1247133	10.16	1103177	11.56
OP40285-BS	390521	4.02	1385335	5.12	822171	6.63	1367397	7.89	1303112	10.17	1129476	11.56
OP40285-MS [c]	354849	4.01	1239603	5.12	723482	6.62	1189632	7.89	1187492	10.17	1234076	11.59
OP40285-MSD [c]	368593	4.01	1297945	5.12	758216	6.62	1252682	7.89	1221502	10.17	1225642	11.58
MC34393-1	346503	4.01	1206174	5.12	716788	6.62	1185931	7.89	1232892	10.17	1254147	11.58

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Elevated RL due to dilution required for matrix interference.

Semivolatile Surrogate Recovery Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Method: SW846 8270D **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
MC34460-5	F77026.D	41	26	88	76	73	96
OP40299-BS	F77014.D	49	33	91	78	76	90
OP40299-MB	F77013.D	51	35	92	81	78	96
OP40299-MS	F77015.D	47	33	90	79	75	89
OP40299-MSD	F77016.D	43	28	93	73	71	90

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorophenol	15-110%
S2 = Phenol-d5	15-110%
S3 = 2,4,6-Tribromophenol	15-110%
S4 = Nitrobenzene-d5	30-130%
S5 = 2-Fluorobiphenyl	30-130%
S6 = Terphenyl-d14	30-130%

Semivolatile Surrogate Recovery Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Method: SW846 8270D **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
MC34460-1	R40436.D	71	69	79	69	72	86
MC34460-2	R40437.D	79	77	79	69	85	96
OP40291-BS	R40433.D	68	67	78	68	72	79
OP40291-MB	R40432.D	89	88	89	88	90	102
OP40291-MS	R40434.D	60	58	67	60	63	69
OP40291-MSD	R40435.D	63	61	71	63	68	74

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorophenol	30-130%
S2 = Phenol-d5	30-130%
S3 = 2,4,6-Tribromophenol	30-130%
S4 = Nitrobenzene-d5	30-130%
S5 = 2-Fluorobiphenyl	30-130%
S6 = Terphenyl-d14	30-130%

Semivolatile Surrogate Recovery Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Method: SW846 8270D BY SIM **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
MC34460-5	I92448.D	81	76	84
OP40300-BS	I92424.D	85	80	81
OP40300-MB	I92423.D	87	81	83
OP40300-MS	I92425.D	84	79	82
OP40300-MSD	I92426.D	78	75	81

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	30-130%
S2 = 2-Fluorobiphenyl	30-130%
S3 = Terphenyl-d14	30-130%

Semivolatile Surrogate Recovery Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Method: SW846 8270D BY SIM **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
MC34460-1	I92382.D	72	72	76
MC34460-2	I92383.D	74	81	84
OP40292-BS	I92379.D	70	70	73
OP40292-MB	I92378.D	89	87	90
OP40292-MS	I92380.D	62	62	63
OP40292-MSD	I92381.D	65	65	69

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	30-130%
S2 = 2-Fluorobiphenyl	30-130%
S3 = Terphenyl-d14	30-130%

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries

Method Blank Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40303-MB	BB60030.D	1	10/22/14	NK	10/21/14	OP40303	GBB3338

The QC reported here applies to the following samples: **Method:** SW846 8011

MC34460-1, MC34460-2

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.73	ug/kg	
106-93-4	1,2-Dibromoethane	ND	2.5	0.61	ug/kg	

CAS No.	Surrogate Recoveries		Limits
460-00-4	Bromofluorobenzene (S)	107%	61-167%
460-00-4	Bromofluorobenzene (S)	120%	61-167%

Method Blank Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40305-MB	BB60044.D	1	10/23/14	NK	10/21/14	OP40305	GBB3339

The QC reported here applies to the following samples: **Method:** SW846 8011

MC34460-4, MC34460-5

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.015	0.0061	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.015	0.0061	ug/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	Bromofluorobenzene (S)	69%	36-173%
460-00-4	Bromofluorobenzene (S)	71%	36-173%

Method Blank Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GAB4627-MB	AB86437A.D	1	10/20/14	AF	n/a	n/a	GAB4627

The QC reported here applies to the following samples: **Method:** SW846 8015

MC34460-5

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (VOA)	ND	0.10	0.013	mg/l	

CAS No.	Surrogate Recoveries		Limits
	2,3,4-Trifluorotoluene	85%	60-135%

Method Blank Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GAB4626-MB	AB86437.D	1	10/20/14	AF	n/a	n/a	GAB4626

The QC reported here applies to the following samples: **Method:** SW846 8015

MC34460-1, MC34460-2

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (VOA)	ND	5.0	0.74	mg/kg	

CAS No.	Surrogate Recoveries		Limits
	2,3,4-Trifluorotoluene	85%	61-116%

Blank Spike Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40303-BS	BB60031.D	1	10/22/14	NK	10/21/14	OP40303	GBB3338

The QC reported here applies to the following samples: **Method:** SW846 8011

MC34460-1, MC34460-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
96-12-8	1,2-Dibromo-3-chloropropane	33.3	28.9	87	59-142
106-93-4	1,2-Dibromoethane	33.3	36.2	109	56-140

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	Bromofluorobenzene (S)	119%	61-167%
460-00-4	Bromofluorobenzene (S)	95%	61-167%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40305-BS	BB60045.D	1	10/23/14	NK	10/21/14	OP40305	GBB3339

The QC reported here applies to the following samples: **Method:** SW846 8011

MC34460-4, MC34460-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
96-12-8	1,2-Dibromo-3-chloropropane	0.071	0.075	106	60-140
106-93-4	1,2-Dibromoethane	0.071	0.076	107	60-140

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	Bromofluorobenzene (S)	75%	36-173%
460-00-4	Bromofluorobenzene (S)	77%	36-173%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GAB4627-BSP	AB86438A.D	1	10/20/14	AF	n/a	n/a	GAB4627
GAB4627-BSD	AB86442A.D	1	10/20/14	AF	n/a	n/a	GAB4627

The QC reported here applies to the following samples: **Method:** SW846 8015

MC34460-5

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	BSD mg/l	BSD %	RPD	Limits Rec/RPD
	TPH-GRO (VOA)	0.65	0.626	96	0.621	96	1	68-134/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
	2,3,4-Trifluorotoluene	92%	92%	60-135%

8.3.1

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* = Outside of Control Limits.

SGS ACCUTEST MC34460

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GAB4626-BSP	AB86438.D	1	10/20/14	AF	n/a	n/a	GAB4626
GAB4626-BSD	AB86442.D	1	10/20/14	AF	n/a	n/a	GAB4626

The QC reported here applies to the following samples: **Method:** SW846 8015

MC34460-1, MC34460-2

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH-GRO (VOA)	32.5	31.3	96	31.1	96	1	66-126/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
	2,3,4-Trifluorotoluene	92%	92%	61-116%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40303-MS	BB60032.D	1	10/22/14	NK	10/21/14	OP40303	GBB3338
OP40303-MSD	BB60033.D	1	10/22/14	NK	10/21/14	OP40303	GBB3338
MC34460-1	BB60034.D	1	10/22/14	NK	10/21/14	OP40303	GBB3338

The QC reported here applies to the following samples: **Method:** SW846 8011

MC34460-1, MC34460-2

CAS No.	Compound	MC34460-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
96-12-8	1,2-Dibromo-3-chloropropane	ND		39.9	51.2	129	41.1	52.8	129	3	40-156/27
106-93-4	1,2-Dibromoethane	ND		39.9	46.1	116	41.1	45.2	110	2	48-141/27

CAS No.	Surrogate Recoveries	MS	MSD	MC34460-1	Limits
460-00-4	Bromofluorobenzene (S)	108%	128%	141%	61-167%
460-00-4	Bromofluorobenzene (S)	105%	112%	126%	61-167%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40305-MS	BB60046.D	1	10/23/14	NK	10/21/14	OP40305	GBB3339
OP40305-MSD	BB60047.D	1	10/23/14	NK	10/21/14	OP40305	GBB3339
MC34100-13	BB60048.D	1	10/23/14	NK	10/21/14	OP40305	GBB3339

The QC reported here applies to the following samples: **Method:** SW846 8011

MC34460-4, MC34460-5

CAS No.	Compound	MC34100-13 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
96-12-8	1,2-Dibromo-3-chloropropane	ND		0.071	0.082	115	0.071	0.075	106	9	64-141/29
106-93-4	1,2-Dibromoethane	ND		0.071	0.075	106	0.071	0.077	108	3	63-163/27

CAS No.	Surrogate Recoveries	MS	MSD	MC34100-13	Limits
460-00-4	Bromofluorobenzene (S)	83%	73%	71%	36-173%
460-00-4	Bromofluorobenzene (S)	87%	74%	74%	36-173%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34460-2MS	AB86443.D	1	10/20/14	AF	n/a	n/a	GAB4626
MC34460-2MSD	AB86443A.D	1	10/20/14	AF	n/a	n/a	GAB4626
MC34460-2	AB86441.D	1	10/20/14	AF	n/a	n/a	GAB4626

The QC reported here applies to the following samples: **Method:** SW846 8015

MC34460-1, MC34460-2

CAS No.	Compound	MC34460-2 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	Spike mg/kg	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (VOA)	5.31	J	86.4	86.5	94	86.4	84.3	91	3	40-143/20

CAS No.	Surrogate Recoveries	MS	MSD	MC34460-2	Limits
	2,3,4-Trifluorotoluene	92%	91%	85%	50-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34422-1MS	AB86444.D	1	10/20/14	AF	n/a	n/a	GAB4627
MC34422-1MSD	AB86445.D	1	10/20/14	AF	n/a	n/a	GAB4627
MC34422-1	AB86440.D	1	10/20/14	AF	n/a	n/a	GAB4627

The QC reported here applies to the following samples: **Method:** SW846 8015

MC34460-5

CAS No.	Compound	MC34422-1 mg/l	Q	Spike mg/l	MS mg/l	MS %	Spike mg/l	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (VOA)	0.10	U	0.65	0.644	99	0.65	0.633	97	2	72-131/20

CAS No.	Surrogate Recoveries	MS	MSD	MC34422-1	Limits
	2,3,4-Trifluorotoluene	95%	93%	83%	60-135%

* = Outside of Control Limits.

Volatile Surrogate Recovery Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Method: SW846 8011 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]
MC34460-4	BB60057.D	80	87
MC34460-5	BB60058.D	85	94
OP40305-BS	BB60045.D	75	77
OP40305-MB	BB60044.D	69	71
OP40305-MS	BB60046.D	83	87
OP40305-MSD	BB60047.D	73	74

Surrogate Compounds	Recovery Limits
S1 = Bromofluorobenzene (S)	36-173%

(a) Recovery from GC signal #2
(b) Recovery from GC signal #1

Volatile Surrogate Recovery Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Method: SW846 8011 **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]
MC34460-1	BB60034.D	141	126
MC34460-2	BB60035.D	152	125
OP40303-BS	BB60031.D	119	95
OP40303-MB	BB60030.D	107	120
OP40303-MS	BB60032.D	108	105
OP40303-MSD	BB60033.D	128	112

Surrogate Compounds	Recovery Limits
S1 = Bromofluorobenzene (S)	61-167%

(a) Recovery from GC signal #2
(b) Recovery from GC signal #1

Volatile Surrogate Recovery Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Method: SW846 8015 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
MC34460-5	AB86456.D	85
GAB4627-BSD	AB86442A.D	92
GAB4627-BSP	AB86438A.D	92
GAB4627-MB	AB86437A.D	85
MC34422-1MS	AB86444.D	95
MC34422-1MSD	AB86445.D	93

Surrogate Compounds	Recovery Limits
S1 = 2,3,4-Trifluorotoluene	60-135%

(a) Recovery from GC signal #1

Volatile Surrogate Recovery Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Method: SW846 8015 **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
MC34460-1	AB86447.D	84
MC34460-2	AB86441.D	85
GAB4626-BSD	AB86442.D	92
GAB4626-BSP	AB86438.D	92
GAB4626-MB	AB86437.D	85
MC34460-2MS	AB86443.D	92
MC34460-2MSD	AB86443A.D	91

Surrogate Compounds	Recovery Limits
S1 = 2,3,4-Trifluorotoluene	50-130%

(a) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Check Std:	GBB3338-ICC3338	**Injection Date:**	10/22/14
Lab File ID:	BB60027.D	**Injection Time:**	11:52
Instrument ID:	GCBB	**Method:**	SW846 8011

	S1 [a] RT	S1 [b] RT
Check Std	3.40	3.41

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
OP40303-MB	BB60030.D	10/22/14	12:45	3.40	3.41
OP40303-BS	BB60031.D	10/22/14	13:03	3.40	3.41
OP40303-MS	BB60032.D	10/22/14	13:21	3.40	3.40
OP40303-MSD	BB60033.D	10/22/14	13:39	3.40	3.41
MC34460-1	BB60034.D	10/22/14	13:57	3.40	3.41
MC34460-2	BB60035.D	10/22/14	14:15	3.40	3.41
GBB3338-ECC3338	BB60036.D	10/22/14	14:33	3.40	3.41

Surrogate Compounds

S1 = Bromofluorobenzene (S)

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Check Std:	GBB3339-ICC3339	**Injection Date:**	10/23/14
Lab File ID:	BB60040.D	**Injection Time:**	14:08
Instrument ID:	GCBB	**Method:**	SW846 8011

	S1 [a] RT	S1 [b] RT
Check Std	3.32	3.33

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
OP40305-MB	BB60044.D	10/23/14	15:39	3.32	3.33
OP40306-MB	BB60044A.D	10/23/14	15:39	3.32	3.33
OP40306-BS	BB60045A.D	10/23/14	15:57	3.32	3.33
OP40305-BS	BB60045.D	10/23/14	15:57	3.32	3.33
OP40305-MS	BB60046.D	10/23/14	16:15	3.33	3.33
OP40305-MSD	BB60047.D	10/23/14	16:33	3.32	3.33
MC34100-13	BB60048.D	10/23/14	16:51	3.32	3.33
ZZZZZZ	BB60049.D	10/23/14	17:09	3.32	3.33
ZZZZZZ	BB60050.D	10/23/14	17:27	3.32	3.33
ZZZZZZ	BB60051.D	10/23/14	17:45	3.33	3.33
ZZZZZZ	BB60052.D	10/23/14	18:03	3.32	3.33
ZZZZZZ	BB60053.D	10/23/14	18:21	3.33	3.33

Surrogate Compounds

S1 = Bromofluorobenzene (S)

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Check Std:	GBB3339-CC3339	**Injection Date:**	10/23/14
Lab File ID:	BB60054.D	**Injection Time:**	18:38
Instrument ID:	GCBB	**Method:**	SW846 8011

	S1 [a] RT	S1 [b] RT
Check Std	3.32	3.33

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
ZZZZZZ	BB60055.D	10/23/14	18:56	3.32	3.33
ZZZZZZ	BB60056.D	10/23/14	19:14	3.32	3.33
MC34460-4	BB60057.D	10/23/14	19:32	3.32	3.33
MC34460-5	BB60058.D	10/23/14	19:50	3.32	3.33
ZZZZZZ	BB60059.D	10/23/14	20:08	3.32	3.33
ZZZZZZ	BB60060.D	10/23/14	20:26	3.32	3.33
ZZZZZZ	BB60061.D	10/23/14	20:44	3.33	3.33
ZZZZZZ	BB60062.D	10/23/14	21:02	3.33	3.34
ZZZZZZ	BB60063.D	10/23/14	21:19	3.33	3.33
ZZZZZZ	BB60064.D	10/23/14	21:37	3.32	3.33

Surrogate Compounds

S1 = Bromofluorobenzene (S)

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Check Std:	GAB4626-CC4488	**Injection Date:**	10/20/14
Lab File ID:	AB86436.D	**Injection Time:**	09:30
Instrument ID:	GCAB	**Method:**	SW846 8015

	S1 [a] RT
Check Std	20.30

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT
GAB4626-MB	AB86437.D	10/20/14	10:07	20.30
GAB4627-MB	AB86437A.D	10/20/14	10:07	20.30
GAB4627-BSP	AB86438A.D	10/20/14	10:45	20.30
GAB4626-BSP	AB86438.D	10/20/14	10:45	20.30
MC34422-1	AB86440.D	10/20/14	12:02	20.30
MC34460-2	AB86441.D	10/20/14	12:40	20.30
GAB4626-BSD	AB86442.D	10/20/14	13:18	20.30
GAB4627-BSD	AB86442A.D	10/20/14	13:18	20.30
MC34460-2MS	AB86443.D	10/20/14	13:56	20.30
MC34460-2MSD	AB86443A.D	10/20/14	14:33	20.30
MC34422-1MS	AB86444.D	10/20/14	15:11	20.30
MC34422-1MSD	AB86445.D	10/20/14	15:49	20.30

Surrogate Compounds

S1 = 2,3,4-Trifluorotoluene

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Check Std:	GAB4627-CC4488	**Injection Date:**	10/20/14
Lab File ID:	AB86436A.D	**Injection Time:**	09:30
Instrument ID:	GCAB	**Method:**	SW846 8015

	S1 [a] RT
Check Std	20.30

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT
GAB4627-MB	AB86437A.D	10/20/14	10:07	20.30
GAB4626-MB	AB86437.D	10/20/14	10:07	20.30
GAB4626-BSP	AB86438.D	10/20/14	10:45	20.30
GAB4627-BSP	AB86438A.D	10/20/14	10:45	20.30
MC34422-1	AB86440.D	10/20/14	12:02	20.30
MC34460-2	AB86441.D	10/20/14	12:40	20.30
GAB4627-BSD	AB86442A.D	10/20/14	13:18	20.30
GAB4626-BSD	AB86442.D	10/20/14	13:18	20.30
MC34460-2MS	AB86443.D	10/20/14	13:56	20.30
MC34460-2MSD	AB86443A.D	10/20/14	14:33	20.30
MC34422-1MS	AB86444.D	10/20/14	15:11	20.30
MC34422-1MSD	AB86445.D	10/20/14	15:49	20.30

Surrogate Compounds

S1 = 2,3,4-Trifluorotoluene

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Check Std:	GAB4627-CC4488	**Injection Date:**	10/20/14
Lab File ID:	AB86446A.D	**Injection Time:**	16:27
Instrument ID:	GCAB	**Method:**	SW846 8015

	S1 [a] RT
Check Std	20.30

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT
MC34460-1	AB86447.D	10/20/14	17:05	20.30
ZZZZZZ	AB86448.D	10/20/14	17:43	20.30
ZZZZZZ	AB86449.D	10/20/14	18:20	20.30
ZZZZZZ	AB86450.D	10/20/14	18:59	20.30
ZZZZZZ	AB86452.D	10/20/14	20:14	20.30
ZZZZZZ	AB86453.D	10/20/14	20:53	20.30
ZZZZZZ	AB86454.D	10/20/14	21:31	20.30
ZZZZZZ	AB86455.D	10/20/14	22:08	20.30
MC34460-5	AB86456.D	10/20/14	22:45	20.30

Surrogate Compounds

S1 = 2,3,4-Trifluorotoluene

(a) Retention time from GC signal #1

8.9.6

8

GC Surrogate Retention Time Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Check Std:	GAB4626-CC4488	**Injection Date:**	10/20/14
Lab File ID:	AB86446.D	**Injection Time:**	16:27
Instrument ID:	GCAB	**Method:**	SW846 8015

	S1 [a] RT
Check Std	20.30

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT
MC34460-1	AB86447.D	10/20/14	17:05	20.30
ZZZZZZ	AB86448.D	10/20/14	17:43	20.30
ZZZZZZ	AB86449.D	10/20/14	18:20	20.30
ZZZZZZ	AB86450.D	10/20/14	18:59	20.30
ZZZZZZ	AB86452.D	10/20/14	20:14	20.30
ZZZZZZ	AB86453.D	10/20/14	20:53	20.30
ZZZZZZ	AB86454.D	10/20/14	21:31	20.30
ZZZZZZ	AB86455.D	10/20/14	22:08	20.30
MC34460-5	AB86456.D	10/20/14	22:45	20.30

Surrogate Compounds

S1 = 2,3,4-Trifluorotoluene

(a) Retention time from GC signal #1

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Percent Solids Raw Data Summary

Percent Solids Raw Data Summary

Job Number: MC34460
Account: SHELLWIC Shell Oil
Project: URSMOSTL: Roxana Additional Characterization, 900 South Central Ave, Roxana,IL

Sample: MC34460-1 **Analyzed:** 24-OCT-14 by MC **Method:** SM21 2540 B MOD.
ClientID: MW-27-101614 (40-42)

Wet Weight (Total)	28.813	g
Tare Weight	17.066	g
Dry Weight (Total)	26.59	g
Solids, Percent	81.1	%

Sample: MC34460-2 **Analyzed:** 24-OCT-14 by MC **Method:** SM21 2540 B MOD.
ClientID: MW-27-101614 (48-50)

Wet Weight (Total)	38.554	g
Tare Weight	26.932	g
Dry Weight (Total)	35.859	g
Solids, Percent	76.8	%

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Automated Report

Technical Report for

Shell Oil

URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana,

SGS Accutest Job Number: MC34463

Sampling Date: 10/16/14



Report to:

AECOM, INC.

Melissa.mansker@aecom.com

ATTN: Melissa Mansker

Total number of pages in report: 83

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

H. (Brad) Madadian
Lab Director

Client Service contact: Jeremy Vienneau 508-481-6200

Certifications: MA (M-MA136,SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) FL (E87579) NY (11791) NJ (MA926) PA (6801121) ND (R-188) CO (MA00136) MN (11546AA) NC (653) IL (002337) WI (399080220) DoD ELAP (L-A-B L2235)

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Test results relate only to samples analyzed.

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Unauthorized modification of this report is strictly prohibited.

SGS ACCUTEST

November 04, 2016

AECOM
1001 Highlands Plaza Drive West Suite 300
St. Louis, MO 63110

RE: SGS Accutest Job # MC34463

Dear Elizabeth Kunkel

As you are aware, SGS Accutest Inc. - Marlborough has been conducting an extensive review of data associated with some historical Gas Chromatography-Mass Spectroscopy volatiles analyses. As a result of this review it was determined that some revisions of the original test report for this job were needed. These corrections have been incorporated into the revised report.

Please be assured that corrective actions have been put in place to address this matter and prevent a recurrence.

We apologize for any inconvenience that this issue may have caused. Please don't hesitate to contact us if we can be of further assistance.

Sincerely,

H. (Brad) Madadian

Regional Laboratory Director
SGS Accutest Inc. - Marlborough

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Sample Summary

Shell Oil

Job No: MC34463

URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
MC34463-1	10/16/14	00:00	SVMM	10/20/14	AQ	Trip Blank Water	TB-ROX-101614-HCL
MC34463-2	10/16/14	00:00	SVMM	10/20/14	AQ	Trip Blank Water	TB-ROX-101614-ST
MC34463-3	10/16/14	09:15	SVMM	10/20/14	AQ	Ground Water	MW4-ROX-101614
MC34463-4	10/16/14	10:50	SVMM	10/20/14	AQ	Ground Water	MW8-ROX-101614
MC34463-5	10/16/14	13:30	SVMM	10/20/14	AQ	Ground Water	MW7-ROX-101614
MC34463-6	10/16/14	13:30	SVMM	10/20/14	AQ	Ground Water	MW7-ROX-101614-DUP

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: She O **Job No** MC34463

Site: URSMOSTL:Roxana 4Q 4 GW/ 2 562973 03004 900 South Centra **Report Date** /4/20 6 0:53:03 A

4 Samp e(s), 2 Tr p B ank(s) were co ected on 0/ 6/20 4 and were rece ved at SGS Accutest New Eng and on 0/20/20 4 proper y preserved, at 5 Deg C and ntact These Samp es rece ved a job number of MC34463 A st ng of the Laboratory Samp e ID, C ent Samp e ID and dates of co ect on are presented n the Resu ts Summary Sect on of th s report -Ch orohexane, Benzeneth o , D benz(a,h)acr d ne, Indene, and Qu no ne were searched n the bra y search and reported on y f detect ons were found

Except as noted be ow, a method spec f ed ca brat ons and qua ty contro performance cr ter a were met for th s job For more nformat on, p ease refer to QC summary pages

Volatiles by GCMS By Method SW846 8260C

Matrix: AQ **Batch ID:** MSP2648

- A samp es were ana yzed w th n the recommended method ho d ng t me
- Samp e(s) MC34463-3MS, MC34463-3MSD were used as the QC samp es nd cated
- A method b anks for th s batch meet method spec f c cr ter a
- B ank Sp ke Recovery(s) for ,2,3-Tr ch orobenzene, 2-Ch oroethy v ny ether, Ch oromethane, V ny Acetate are outs de contro m ts
- MC34463-3MS/MSD for Benzene s outs de contro m ts Outs de contro m ts due to h gh eve n samp e re at ve to sp ke amount
- MC34463-3MS/MSD for Acetone, 2-Butanone (MEK), 2,2-D ch oropropane, 2-Hexanone (MS on y): Outs de contro m ts due to poss b e matr x nterference
- MC34463-3MS/MSD for ,2,3-Tr ch orobenzene, 2-Ch oroethy v ny ether, Ch oromethane: Outs de contro m ts
- ,2,3-Tr ch orobenzen, V ny Acetate, 2-Butanone (MEK): Cont nu ng Ca brat on Ver f cat on outs de of acceptance cr ter a Samp e resu t may be b ased ow

Extractables by GCMS By Method SW846 8270D

Matrix: AQ **Batch ID:** OP40299

- A samp es were extracted w th n the recommended method ho d ng t me
- A samp es were ana yzed w th n the recommended method ho d ng t me
- A method b anks for th s batch meet method spec f c cr ter a
- Samp e(s) MC34 00- MS, MC34 00- MSD were used as the QC samp es nd cated
- In t a ca brat on ver f cat on standard MSF336 -ICV336 for 4-Ch oroan ne exceed 30% D fference 4-Ch oroan ne s w th n cr ter a n cont nu ng ca brat on check standard MSF3374-CC336
- B ank Sp ke Recovery(s) for 4-N tropheno , Pyr d ne are outs de contro m ts
- OP40299-MS/MSD Recovery(s) for 4-N tropheno , Pheno , Pyr d ne are outs de contro m ts Outs de contro m ts due to poss b e matr x nterference Refer to B ank Sp ke
- RPD(s) for MSD for Pyr d ne are outs de contro m ts for samp e OP40299-MSD H gh RPD due to poss b e matr x nterference and/or samp e heterogene ty

Extractables by GCMS By Method SW846 8270D BY SIM

Matrix: AQ **Batch ID:** OP40300

- A samp es were extracted w th n the recommended method ho d ng t me
- A samp es were ana yzed w th n the recommended method ho d ng t me
- A method b anks for th s batch meet method spec f c cr ter a
- Samp e(s) MC34 00- 2MS, MC34 00- 2MSD were used as the QC samp es nd cated

Volatiles by GC By Method SW846 8011

Matrix: AQ **Batch ID:** OP40305

- A samp es were extracted w th n the recommended method ho d ng t me
- A samp es were ana yzed w th n the recommended method ho d ng t me
- A method b anks for th s batch meet method spec f c cr ter a
- Samp e(s) MC34 00- 3MS, MC34 00- 3MSD were used as the QC samp es nd cated
- Cont nu ng ca brat on check standard GBB3339-CC3339, f e BB60065 for ,2-D bromoethane (s gna #), ,2-D bromo-3-ch oropropane (s gna # and s gna #2), exceeds cr ter a (response b as h gh) Assoc ated samp es are non-detect for th s compound
- Cont nu ng ca brat on check standard GBB3339-CC3339, s gna # , f e BB60054 for ,2-D bromo-3-ch oropropane exceeds cr ter a ,2-D bromo-3-ch oropropane s repo ted from s gna #2

SGS Accutest New Eng and cert f es that a ana ys s were performed w th n method spec f cat on It s further recommended that th s report to be used n ts ent rety The Laborato y D rector for SGS Accutest New Eng and or ass gnee as ver f ed by the s gnature on the cover page has author zed the re ease of th s repo t(MC34463)

Summary of Hits

Job Number: MC34463
Account: Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL
Collected: 10/16/14

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
MC34463-1	TB-ROX-101614-HCL					
No hits reported in this sample.						
MC34463-2	TB-ROX-101614-ST					
No hits reported in this sample.						
MC34463-3	MW4-ROX-101614					
Benzene		815	2.5	1.2	ug/l	SW846 8260C
Isopropylbenzene		2.6 J	25	1.7	ug/l	SW846 8260C
Methyl Tert Butyl Ether		37.9	5.0	1.1	ug/l	SW846 8260C
1,2,4-Trimethylbenzene		3.7 J	25	1.5	ug/l	SW846 8260C
m,p-Xylene		8.6	5.0	1.9	ug/l	SW846 8260C
o-Xylene		2.2 J	5.0	1.5	ug/l	SW846 8260C
Xylene (total)		10.8	5.0	1.5	ug/l	SW846 8260C
Phenol		11.5	5.9	0.36	ug/l	SW846 8270D
Phenanthrene		0.029 J	0.059	0.015	ug/l	SW846 8270D BY SIM
MC34463-4	MW8-ROX-101614					
Benzene		486000	5000	2500	ug/l	SW846 8260C
Ethylbenzene		305 J	1000	250	ug/l	SW846 8260C
Methyl Tert Butyl Ether		1190	1000	220	ug/l	SW846 8260C
2,4-Dimethylphenol		9.9 J	11	0.62	ug/l	SW846 8270D
2-Methylphenol		19.0	11	0.25	ug/l	SW846 8270D
3&4-Methylphenol		55.8	11	0.52	ug/l	SW846 8270D
Phenol		126	5.6	0.34	ug/l	SW846 8270D
Acenaphthene		0.21	0.11	0.077	ug/l	SW846 8270D BY SIM
Fluorene		0.54	0.11	0.11	ug/l	SW846 8270D BY SIM
1-Methylnaphthalene		14.5	2.2	0.56	ug/l	SW846 8270D BY SIM
2-Methylnaphthalene		4.5	2.2	0.56	ug/l	SW846 8270D BY SIM
Phenanthrene		0.23	0.056	0.014	ug/l	SW846 8270D BY SIM
MC34463-5	MW7-ROX-101614					
Benzene		1130000	2500	1200	ug/l	SW846 8260C
Phenol		155	5.6	0.34	ug/l	SW846 8270D
Acenaphthene		0.24	0.11	0.077	ug/l	SW846 8270D BY SIM
Fluorene		0.20	0.11	0.11	ug/l	SW846 8270D BY SIM
1-Methylnaphthalene		4.9	2.2	0.56	ug/l	SW846 8270D BY SIM
2-Methylnaphthalene		7.4	2.2	0.56	ug/l	SW846 8270D BY SIM
Phenanthrene		0.28	0.056	0.014	ug/l	SW846 8270D BY SIM

Summary of Hits

Job Number: MC34463
Account: Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL
Collected: 10/16/14

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
MC34463-6	MW7-ROX-101614-DUP					
Benzene		984000	2500	1200	ug/l	SW846 8260C
Phenol		133	5.7	0.34	ug/l	SW846 8270D
Acenaphthene		0.22	0.11	0.078	ug/l	SW846 8270D BY SIM
Fluorene		0.19	0.11	0.11	ug/l	SW846 8270D BY SIM
1-Methylnaphthalene		4.7	2.3	0.57	ug/l	SW846 8270D BY SIM
2-Methylnaphthalene		7.0	2.3	0.57	ug/l	SW846 8270D BY SIM
Phenanthrene		0.27	0.057	0.014	ug/l	SW846 8270D BY SIM

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	TB-ROX-101614-HCL		
Lab Sample ID:	MC34463-1	**Date Sampled:**	10/16/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/20/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P80934.D	1	10/30/14	JM	n/a	n/a	MSP2648
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	ND	0.50	0.25	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.47	ug/l	
75-25-2	Bromoform	ND	1.0	0.30	ug/l	
74-83-9	Bromomethane	ND	2.0	0.77	ug/l	
78-93-3	2-Butanone (MEK) [a]	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.23	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.25	ug/l	
75-00-3	Chloroethane	ND	2.0	0.37	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.31	ug/l	
74-87-3	Chloromethane	ND	2.0	0.59	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.24	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.16	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.31	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.29	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.44	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.47	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-ROX-101614-HCL		
Lab Sample ID:	MC34463-1	**Date Sampled:**	10/16/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/20/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	0.45	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.38	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.22	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.39	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.29	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.30	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.29	ug/l	
108-88-3	Toluene	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene [a]	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.19	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.42	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.30	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.40	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.30	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.18	ug/l	
108-05-4	Vinyl Acetate [a]	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.45	ug/l	
	m,p-Xylene	ND	1.0	0.38	ug/l	
95-47-6	o-Xylene	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.30	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-ROX-101614-HCL		
Lab Sample ID:	MC34463-1	**Date Sampled:**	10/16/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/20/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		70-130%
2037-26-5	Toluene-D8	105%		70-130%
460-00-4	4-Bromofluorobenzene	108%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-ROX-101614-ST		
Lab Sample ID:	MC34463-2	**Date Sampled:**	10/16/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/20/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB60059.D	1	10/23/14	NK	10/21/14	OP40305	GBB3339
Run #2							

	Initial Volume	Final Volume
Run #1	36.3 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.014	0.0059	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.014	0.0059	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	66%		36-173%
460-00-4	Bromofluorobenzene (S)	73%		36-173%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW4-ROX-101614		
Lab Sample ID:	MC34463-3	**Date Sampled:**	10/16/14
Matrix:	AQ - Ground Water	**Date Received:**	10/20/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P80935.D	5	10/30/14	JM	n/a	n/a	MSP2648
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	13	ug/l	
107-02-8	Acrolein	ND	130	30	ug/l	
107-13-1	Acrylonitrile	ND	25	11	ug/l	
71-43-2	Benzene	815	2.5	1.2	ug/l	
108-86-1	Bromobenzene	ND	25	1.7	ug/l	
74-97-5	Bromochloromethane	ND	25	2.1	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	2.4	ug/l	
75-25-2	Bromoform	ND	5.0	1.5	ug/l	
74-83-9	Bromomethane	ND	10	3.9	ug/l	
78-93-3	2-Butanone (MEK) [a]	ND	25	13	ug/l	
104-51-8	n-Butylbenzene	ND	25	5.4	ug/l	
135-98-8	sec-Butylbenzene	ND	25	2.1	ug/l	
98-06-6	tert-Butylbenzene	ND	25	1.9	ug/l	
75-15-0	Carbon disulfide	ND	25	2.3	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	1.2	ug/l	
108-90-7	Chlorobenzene	ND	5.0	1.3	ug/l	
75-00-3	Chloroethane	ND	10	1.9	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	25	17	ug/l	
67-66-3	Chloroform	ND	5.0	1.5	ug/l	
74-87-3	Chloromethane	ND	10	3.0	ug/l	
95-49-8	o-Chlorotoluene	ND	25	1.9	ug/l	
106-43-4	p-Chlorotoluene	ND	25	2.2	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	1.3	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	1.2	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	0.79	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	1.6	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	3.6	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	0.99	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	1.7	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	1.5	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	5.0	2.2	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	2.4	ug/l	

ND = Not detected MDL = Method Detection Limit
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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW4-ROX-101614		
Lab Sample ID:	MC34463-3	**Date Sampled:**	10/16/14
Matrix:	AQ - Ground Water	**Date Received:**	10/20/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	10	2.2	ug/l	
142-28-9	1,3-Dichloropropane	ND	25	4.5	ug/l	
594-20-7	2,2-Dichloropropane	ND	25	6.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	25	2.4	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	2.5	2.1	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	2.5	1.9	ug/l	
123-91-1	1,4-Dioxane	ND	130	54	ug/l	
97-63-2	Ethyl methacrylate	ND	25	2.5	ug/l	
100-41-4	Ethylbenzene	ND	5.0	1.3	ug/l	
87-68-3	Hexachlorobutadiene	ND	25	8.3	ug/l	
591-78-6	2-Hexanone	ND	25	8.0	ug/l	
98-82-8	Isopropylbenzene	2.6	25	1.7	ug/l	J
99-87-6	p-Isopropyltoluene	ND	25	1.9	ug/l	
1634-04-4	Methyl Tert Butyl Ether	37.9	5.0	1.1	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	25	4.9	ug/l	
74-95-3	Methylene bromide	ND	25	2.6	ug/l	
75-09-2	Methylene chloride	ND	10	2.0	ug/l	
91-20-3	Naphthalene	ND	25	3.4	ug/l	
103-65-1	n-Propylbenzene	ND	25	2.5	ug/l	
100-42-5	Styrene	ND	25	1.5	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	2.2	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.5	1.5	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	1.4	ug/l	
108-88-3	Toluene	ND	5.0	1.1	ug/l	
87-61-6	1,2,3-Trichlorobenzene [a]	ND	25	3.4	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	25	0.93	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	2.1	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.5	ug/l	
79-01-6	Trichloroethene	ND	5.0	2.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	2.7	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	25	4.1	ug/l	
95-63-6	1,2,4-Trimethylbenzene	3.7	25	1.5	ug/l	J
108-67-8	1,3,5-Trimethylbenzene	ND	25	0.90	ug/l	
108-05-4	Vinyl Acetate [a]	ND	25	3.6	ug/l	
75-01-4	Vinyl chloride	ND	5.0	2.2	ug/l	
	m,p-Xylene	8.6	5.0	1.9	ug/l	
95-47-6	o-Xylene	2.2	5.0	1.5	ug/l	J
1330-20-7	Xylene (total)	10.8	5.0	1.5	ug/l	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW4-ROX-101614		
Lab Sample ID:	MC34463-3	**Date Sampled:**	10/16/14
Matrix:	AQ - Ground Water	**Date Received:**	10/20/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		70-130%
2037-26-5	Toluene-D8	103%		70-130%
460-00-4	4-Bromofluorobenzene	102%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW4-ROX-101614		
Lab Sample ID:	MC34463-3	**Date Sampled:**	10/16/14
Matrix:	AQ - Ground Water	**Date Received:**	10/20/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F77018.D	1	10/24/14	MR	10/21/14	OP40299	MSF3374
Run #2							

	Initial Volume	Final Volume
Run #1	850 ml	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	12	2.9	ug/l	
95-57-8	2-Chlorophenol	ND	5.9	0.36	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	12	0.97	ug/l	
120-83-2	2,4-Dichlorophenol	ND	12	0.47	ug/l	
105-67-9	2,4-Dimethylphenol	ND	12	0.66	ug/l	
51-28-5	2,4-Dinitrophenol	ND	24	2.9	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	12	2.3	ug/l	
95-48-7	2-Methylphenol	ND	12	0.27	ug/l	
	3&4-Methylphenol	ND	12	0.55	ug/l	
88-75-5	2-Nitrophenol	ND	12	3.4	ug/l	
100-02-7	4-Nitrophenol	ND	24	0.63	ug/l	
87-86-5	Pentachlorophenol	ND	12	1.3	ug/l	
108-95-2	Phenol	11.5	5.9	0.36	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	12	0.44	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	12	0.21	ug/l	
62-53-3	Aniline	ND	12	0.75	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.9	0.55	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.9	0.62	ug/l	
100-51-6	Benzyl Alcohol	ND	12	2.7	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.9	0.37	ug/l	
106-47-8	4-Chloroaniline	ND	12	0.66	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.9	0.34	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.9	0.41	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.9	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.9	0.30	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.9	0.28	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	12	0.54	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	12	0.35	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.9	0.31	ug/l	
132-64-9	Dibenzofuran	ND	2.4	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.9	0.20	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.9	0.33	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW4-ROX-101614		
Lab Sample ID:	MC34463-3	**Date Sampled:**	10/16/14
Matrix:	AQ - Ground Water	**Date Received:**	10/20/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	5.9	0.24	ug/l	
131-11-3	Dimethyl phthalate	ND	5.9	0.40	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.4	0.39	ug/l	
118-74-1	Hexachlorobenzene	ND	5.9	0.34	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	12	1.5	ug/l	
67-72-1	Hexachloroethane	ND	5.9	0.36	ug/l	
78-59-1	Isophorone	ND	5.9	0.53	ug/l	
88-74-4	2-Nitroaniline	ND	12	0.47	ug/l	
99-09-2	3-Nitroaniline	ND	12	1.6	ug/l	
100-01-6	4-Nitroaniline	ND	12	2.5	ug/l	
98-95-3	Nitrobenzene	ND	5.9	0.46	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.9	1.2	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.9	0.47	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.9	0.23	ug/l	
110-86-1	Pyridine	ND	12	0.61	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	54%		15-110%
4165-62-2	Phenol-d5	39%		15-110%
118-79-6	2,4,6-Tribromophenol	91%		15-110%
4165-60-0	Nitrobenzene-d5	83%		30-130%
321-60-8	2-Fluorobiphenyl	75%		30-130%
1718-51-0	Terphenyl-d14	93%		30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW4-ROX-101614		
Lab Sample ID:	MC34463-3	**Date Sampled:**	10/16/14
Matrix:	AQ - Ground Water	**Date Received:**	10/20/14
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I92434.D	1	10/24/14	WK	10/21/14	OP40300	MSI3445
Run #2							

	Initial Volume	Final Volume
Run #1	850 ml	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.12	0.081	ug/l	
208-96-8	Acenaphthylene	ND	0.12	0.058	ug/l	
120-12-7	Anthracene	ND	0.12	0.11	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.059	0.023	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.12	0.034	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.059	0.037	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.12	0.032	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.12	0.045	ug/l	
218-01-9	Chrysene	ND	0.12	0.028	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.12	0.038	ug/l	
206-44-0	Fluoranthene	ND	0.12	0.048	ug/l	
86-73-7	Fluorene	ND	0.12	0.12	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.12	0.036	ug/l	
90-12-0	1-Methylnaphthalene	ND	2.4	0.59	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.4	0.59	ug/l	
85-01-8	Phenanthrene	0.029	0.059	0.015	ug/l	J
129-00-0	Pyrene	ND	0.12	0.045	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	87%		30-130%
321-60-8	2-Fluorobiphenyl	77%		30-130%
1718-51-0	Terphenyl-d14	82%		30-130%

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW4-ROX-101614		
Lab Sample ID:	MC34463-3	**Date Sampled:**	10/16/14
Matrix:	AQ - Ground Water	**Date Received:**	10/20/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB60060.D	1	10/23/14	NK	10/21/14	OP40305	GBB3339
Run #2							

	Initial Volume	Final Volume
Run #1	37.2 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.014	0.0057	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.014	0.0057	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	67%		36-173%
460-00-4	Bromofluorobenzene (S)	97%		36-173%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW8-ROX-101614		
Lab Sample ID:	MC34463-4	**Date Sampled:**	10/16/14
Matrix:	AQ - Ground Water	**Date Received:**	10/20/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P80936.D	1000	10/30/14	JM	n/a	n/a	MSP2648
Run #2	P80948.D	10000	10/30/14	JM	n/a	n/a	MSP2648

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10000	2500	ug/l	
107-02-8	Acrolein	ND	25000	6000	ug/l	
107-13-1	Acrylonitrile	ND	5000	2100	ug/l	
71-43-2	Benzene	486000 [a]	5000	2500	ug/l	
108-86-1	Bromobenzene	ND	5000	350	ug/l	
74-97-5	Bromochloromethane	ND	5000	420	ug/l	
75-27-4	Bromodichloromethane	ND	1000	470	ug/l	
75-25-2	Bromoform	ND	1000	300	ug/l	
74-83-9	Bromomethane	ND	2000	770	ug/l	
78-93-3	2-Butanone (MEK) [b]	ND	5000	2500	ug/l	
104-51-8	n-Butylbenzene	ND	5000	1100	ug/l	
135-98-8	sec-Butylbenzene	ND	5000	420	ug/l	
98-06-6	tert-Butylbenzene	ND	5000	390	ug/l	
75-15-0	Carbon disulfide	ND	5000	460	ug/l	
56-23-5	Carbon tetrachloride	ND	1000	230	ug/l	
108-90-7	Chlorobenzene	ND	1000	250	ug/l	
75-00-3	Chloroethane	ND	2000	370	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5000	3300	ug/l	
67-66-3	Chloroform	ND	1000	310	ug/l	
74-87-3	Chloromethane	ND	2000	590	ug/l	
95-49-8	o-Chlorotoluene	ND	5000	380	ug/l	
106-43-4	p-Chlorotoluene	ND	5000	450	ug/l	
124-48-1	Dibromochloromethane	ND	1000	260	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1000	240	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1000	160	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1000	310	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2000	710	ug/l	
75-34-3	1,1-Dichloroethane	ND	1000	200	ug/l	
107-06-2	1,2-Dichloroethane	ND	1000	330	ug/l	
75-35-4	1,1-Dichloroethene	ND	1000	290	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1000	440	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1000	470	ug/l	

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW8-ROX-101614		
Lab Sample ID:	MC34463-4	**Date Sampled:**	10/16/14
Matrix:	AQ - Ground Water	**Date Received:**	10/20/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2000	450	ug/l	
142-28-9	1,3-Dichloropropane	ND	5000	890	ug/l	
594-20-7	2,2-Dichloropropane	ND	5000	1300	ug/l	
563-58-6	1,1-Dichloropropene	ND	5000	470	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	500	420	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	500	380	ug/l	
123-91-1	1,4-Dioxane	ND	25000	11000	ug/l	
97-63-2	Ethyl methacrylate	ND	5000	500	ug/l	
100-41-4	Ethylbenzene	305	1000	250	ug/l	J
87-68-3	Hexachlorobutadiene	ND	5000	1700	ug/l	
591-78-6	2-Hexanone	ND	5000	1600	ug/l	
98-82-8	Isopropylbenzene	ND	5000	350	ug/l	
99-87-6	p-Isopropyltoluene	ND	5000	370	ug/l	
1634-04-4	Methyl Tert Butyl Ether	1190	1000	220	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5000	990	ug/l	
74-95-3	Methylene bromide	ND	5000	520	ug/l	
75-09-2	Methylene chloride	ND	2000	390	ug/l	
91-20-3	Naphthalene	ND	5000	690	ug/l	
103-65-1	n-Propylbenzene	ND	5000	490	ug/l	
100-42-5	Styrene	ND	5000	290	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1000	430	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	500	300	ug/l	
127-18-4	Tetrachloroethene	ND	1000	290	ug/l	
108-88-3	Toluene	ND	1000	220	ug/l	
87-61-6	1,2,3-Trichlorobenzene [b]	ND	5000	680	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5000	190	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1000	420	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1000	300	ug/l	
79-01-6	Trichloroethene	ND	1000	400	ug/l	
75-69-4	Trichlorofluoromethane	ND	1000	550	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5000	810	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5000	300	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5000	180	ug/l	
108-05-4	Vinyl Acetate [b]	ND	5000	710	ug/l	
75-01-4	Vinyl chloride	ND	1000	450	ug/l	
	m,p-Xylene	ND	1000	380	ug/l	
95-47-6	o-Xylene	ND	1000	300	ug/l	
1330-20-7	Xylene (total)	ND	1000	300	ug/l	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW8-ROX-101614		
Lab Sample ID:	MC34463-4	**Date Sampled:**	10/16/14
Matrix:	AQ - Ground Water	**Date Received:**	10/20/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%	96%	70-130%
2037-26-5	Toluene-D8	101%	105%	70-130%
460-00-4	4-Bromofluorobenzene	107%	98%	70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Result is from Run# 2
(b) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW8-ROX-101614		
Lab Sample ID:	MC34463-4	**Date Sampled:**	10/16/14
Matrix:	AQ - Ground Water	**Date Received:**	10/20/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F77019.D	1	10/24/14	MR	10/21/14	OP40299	MSF3374
Run #2							

	Initial Volume	Final Volume
Run #1	900 ml	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	11	2.8	ug/l	
95-57-8	2-Chlorophenol	ND	5.6	0.34	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	11	0.92	ug/l	
120-83-2	2,4-Dichlorophenol	ND	11	0.44	ug/l	
105-67-9	2,4-Dimethylphenol	9.9	11	0.62	ug/l	J
51-28-5	2,4-Dinitrophenol	ND	22	2.8	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	2.1	ug/l	
95-48-7	2-Methylphenol	19.0	11	0.25	ug/l	
	3&4-Methylphenol	55.8	11	0.52	ug/l	
88-75-5	2-Nitrophenol	ND	11	3.2	ug/l	
100-02-7	4-Nitrophenol	ND	22	0.59	ug/l	
87-86-5	Pentachlorophenol	ND	11	1.2	ug/l	
108-95-2	Phenol	126	5.6	0.34	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	11	0.41	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	11	0.19	ug/l	
62-53-3	Aniline	ND	11	0.71	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.6	0.52	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.6	0.59	ug/l	
100-51-6	Benzyl Alcohol	ND	11	2.5	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.6	0.35	ug/l	
106-47-8	4-Chloroaniline	ND	11	0.62	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.6	0.32	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.6	0.39	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.6	0.37	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.6	0.28	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.6	0.27	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	11	0.51	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	11	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.6	0.30	ug/l	
132-64-9	Dibenzofuran	ND	2.2	0.29	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.6	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.6	0.31	ug/l	

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Report of Analysis

Client Sample ID:	MW8-ROX-101614		
Lab Sample ID:	MC34463-4	**Date Sampled:**	10/16/14
Matrix:	AQ - Ground Water	**Date Received:**	10/20/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	5.6	0.22	ug/l	
131-11-3	Dimethyl phthalate	ND	5.6	0.38	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.2	0.37	ug/l	
118-74-1	Hexachlorobenzene	ND	5.6	0.32	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	11	1.4	ug/l	
67-72-1	Hexachloroethane	ND	5.6	0.34	ug/l	
78-59-1	Isophorone	ND	5.6	0.50	ug/l	
88-74-4	2-Nitroaniline	ND	11	0.44	ug/l	
99-09-2	3-Nitroaniline	ND	11	1.5	ug/l	
100-01-6	4-Nitroaniline	ND	11	2.4	ug/l	
98-95-3	Nitrobenzene	ND	5.6	0.43	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.6	1.1	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.6	0.45	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.6	0.21	ug/l	
110-86-1	Pyridine	ND	11	0.57	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	49%		15-110%
4165-62-2	Phenol-d5	35%		15-110%
118-79-6	2,4,6-Tribromophenol	89%		15-110%
4165-60-0	Nitrobenzene-d5	82%		30-130%
321-60-8	2-Fluorobiphenyl	73%		30-130%
1718-51-0	Terphenyl-d14	87%		30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW8-ROX-101614		
Lab Sample ID:	MC34463-4	**Date Sampled:**	10/16/14
Matrix:	AQ - Ground Water	**Date Received:**	10/20/14
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I92435.D	1	10/24/14	WK	10/21/14	OP40300	MSI3445
Run #2							

	Initial Volume	Final Volume
Run #1	900 ml	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.21	0.11	0.077	ug/l	
208-96-8	Acenaphthylene	ND	0.11	0.055	ug/l	
120-12-7	Anthracene	ND	0.11	0.10	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.056	0.022	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.11	0.032	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.056	0.035	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.11	0.030	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.11	0.043	ug/l	
218-01-9	Chrysene	ND	0.11	0.026	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.11	0.035	ug/l	
206-44-0	Fluoranthene	ND	0.11	0.045	ug/l	
86-73-7	Fluorene	0.54	0.11	0.11	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.11	0.034	ug/l	
90-12-0	1-Methylnaphthalene	14.5	2.2	0.56	ug/l	
91-57-6	2-Methylnaphthalene	4.5	2.2	0.56	ug/l	
85-01-8	Phenanthrene	0.23	0.056	0.014	ug/l	
129-00-0	Pyrene	ND	0.11	0.043	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	81%		30-130%
321-60-8	2-Fluorobiphenyl	76%		30-130%
1718-51-0	Terphenyl-d14	80%		30-130%

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW8-ROX-101614		
Lab Sample ID:	MC34463-4	**Date Sampled:**	10/16/14
Matrix:	AQ - Ground Water	**Date Received:**	10/20/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB60061.D	1	10/23/14	NK	10/21/14	OP40305	GBB3339
Run #2							

	Initial Volume	Final Volume
Run #1	35.8 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.015	0.0060	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.015	0.0060	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	70%		36-173%
460-00-4	Bromofluorobenzene (S)	77%		36-173%

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RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW7-ROX-101614		
Lab Sample ID:	MC34463-5	**Date Sampled:**	10/16/14
Matrix:	AQ - Ground Water	**Date Received:**	10/20/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P80937.D	5000	10/30/14	JM	n/a	n/a	MSP2648
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50000	13000	ug/l	
107-02-8	Acrolein	ND	130000	30000	ug/l	
107-13-1	Acrylonitrile	ND	25000	11000	ug/l	
71-43-2	Benzene	1130000	2500	1200	ug/l	
108-86-1	Bromobenzene	ND	25000	1700	ug/l	
74-97-5	Bromochloromethane	ND	25000	2100	ug/l	
75-27-4	Bromodichloromethane	ND	5000	2400	ug/l	
75-25-2	Bromoform	ND	5000	1500	ug/l	
74-83-9	Bromomethane	ND	10000	3900	ug/l	
78-93-3	2-Butanone (MEK) [a]	ND	25000	13000	ug/l	
104-51-8	n-Butylbenzene	ND	25000	5400	ug/l	
135-98-8	sec-Butylbenzene	ND	25000	2100	ug/l	
98-06-6	tert-Butylbenzene	ND	25000	1900	ug/l	
75-15-0	Carbon disulfide	ND	25000	2300	ug/l	
56-23-5	Carbon tetrachloride	ND	5000	1200	ug/l	
108-90-7	Chlorobenzene	ND	5000	1300	ug/l	
75-00-3	Chloroethane	ND	10000	1900	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	25000	17000	ug/l	
67-66-3	Chloroform	ND	5000	1500	ug/l	
74-87-3	Chloromethane	ND	10000	3000	ug/l	
95-49-8	o-Chlorotoluene	ND	25000	1900	ug/l	
106-43-4	p-Chlorotoluene	ND	25000	2200	ug/l	
124-48-1	Dibromochloromethane	ND	5000	1300	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5000	1200	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5000	790	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5000	1600	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10000	3600	ug/l	
75-34-3	1,1-Dichloroethane	ND	5000	990	ug/l	
107-06-2	1,2-Dichloroethane	ND	5000	1700	ug/l	
75-35-4	1,1-Dichloroethene	ND	5000	1500	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	5000	2200	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	5000	2400	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW7-ROX-101614		
Lab Sample ID:	MC34463-5	**Date Sampled:**	10/16/14
Matrix:	AQ - Ground Water	**Date Received:**	10/20/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	10000	2200	ug/l	
142-28-9	1,3-Dichloropropane	ND	25000	4500	ug/l	
594-20-7	2,2-Dichloropropane	ND	25000	6300	ug/l	
563-58-6	1,1-Dichloropropene	ND	25000	2400	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	2500	2100	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	2500	1900	ug/l	
123-91-1	1,4-Dioxane	ND	130000	54000	ug/l	
97-63-2	Ethyl methacrylate	ND	25000	2500	ug/l	
100-41-4	Ethylbenzene	ND	5000	1300	ug/l	
87-68-3	Hexachlorobutadiene	ND	25000	8300	ug/l	
591-78-6	2-Hexanone	ND	25000	8000	ug/l	
98-82-8	Isopropylbenzene	ND	25000	1700	ug/l	
99-87-6	p-Isopropyltoluene	ND	25000	1900	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5000	1100	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	25000	4900	ug/l	
74-95-3	Methylene bromide	ND	25000	2600	ug/l	
75-09-2	Methylene chloride	ND	10000	2000	ug/l	
91-20-3	Naphthalene	ND	25000	3400	ug/l	
103-65-1	n-Propylbenzene	ND	25000	2500	ug/l	
100-42-5	Styrene	ND	25000	1500	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5000	2200	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2500	1500	ug/l	
127-18-4	Tetrachloroethene	ND	5000	1400	ug/l	
108-88-3	Toluene	ND	5000	1100	ug/l	
87-61-6	1,2,3-Trichlorobenzene [a]	ND	25000	3400	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	25000	930	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5000	2100	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5000	1500	ug/l	
79-01-6	Trichloroethene	ND	5000	2000	ug/l	
75-69-4	Trichlorofluoromethane	ND	5000	2700	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	25000	4100	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	25000	1500	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	25000	900	ug/l	
108-05-4	Vinyl Acetate [a]	ND	25000	3600	ug/l	
75-01-4	Vinyl chloride	ND	5000	2200	ug/l	
	m,p-Xylene	ND	5000	1900	ug/l	
95-47-6	o-Xylene	ND	5000	1500	ug/l	
1330-20-7	Xylene (total)	ND	5000	1500	ug/l	

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Report of Analysis

Client Sample ID:	MW7-ROX-101614		
Lab Sample ID:	MC34463-5	**Date Sampled:**	10/16/14
Matrix:	AQ - Ground Water	**Date Received:**	10/20/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		70-130%
2037-26-5	Toluene-D8	103%		70-130%
460-00-4	4-Bromofluorobenzene	108%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW7-ROX-101614		
Lab Sample ID:	MC34463-5	**Date Sampled:**	10/16/14
Matrix:	AQ - Ground Water	**Date Received:**	10/20/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F77020.D	1	10/24/14	MR	10/21/14	OP40299	MSF3374
Run #2							

	Initial Volume	Final Volume
Run #1	890 ml	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	11	2.8	ug/l	
95-57-8	2-Chlorophenol	ND	5.6	0.35	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	11	0.93	ug/l	
120-83-2	2,4-Dichlorophenol	ND	11	0.45	ug/l	
105-67-9	2,4-Dimethylphenol	ND	11	0.63	ug/l	
51-28-5	2,4-Dinitrophenol	ND	22	2.8	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	2.2	ug/l	
95-48-7	2-Methylphenol	ND	11	0.25	ug/l	
	3&4-Methylphenol	ND	11	0.52	ug/l	
88-75-5	2-Nitrophenol	ND	11	3.2	ug/l	
100-02-7	4-Nitrophenol	ND	22	0.60	ug/l	
87-86-5	Pentachlorophenol	ND	11	1.3	ug/l	
108-95-2	Phenol	155	5.6	0.34	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	11	0.42	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	11	0.20	ug/l	
62-53-3	Aniline	ND	11	0.72	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.6	0.53	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.6	0.60	ug/l	
100-51-6	Benzyl Alcohol	ND	11	2.5	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.6	0.35	ug/l	
106-47-8	4-Chloroaniline	ND	11	0.63	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.6	0.32	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.6	0.39	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.6	0.37	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.6	0.28	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.6	0.27	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	11	0.51	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	11	0.34	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.6	0.30	ug/l	
132-64-9	Dibenzofuran	ND	2.2	0.29	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.6	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.6	0.32	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW7-ROX-101614		
Lab Sample ID:	MC34463-5	**Date Sampled:**	10/16/14
Matrix:	AQ - Ground Water	**Date Received:**	10/20/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	5.6	0.23	ug/l	
131-11-3	Dimethyl phthalate	ND	5.6	0.38	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.2	0.37	ug/l	
118-74-1	Hexachlorobenzene	ND	5.6	0.33	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	11	1.4	ug/l	
67-72-1	Hexachloroethane	ND	5.6	0.34	ug/l	
78-59-1	Isophorone	ND	5.6	0.50	ug/l	
88-74-4	2-Nitroaniline	ND	11	0.45	ug/l	
99-09-2	3-Nitroaniline	ND	11	1.5	ug/l	
100-01-6	4-Nitroaniline	ND	11	2.4	ug/l	
98-95-3	Nitrobenzene	ND	5.6	0.44	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.6	1.1	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.6	0.45	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.6	0.22	ug/l	
110-86-1	Pyridine	ND	11	0.58	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	55%		15-110%
4165-62-2	Phenol-d5	40%		15-110%
118-79-6	2,4,6-Tribromophenol	96%		15-110%
4165-60-0	Nitrobenzene-d5	85%		30-130%
321-60-8	2-Fluorobiphenyl	76%		30-130%
1718-51-0	Terphenyl-d14	97%		30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW7-ROX-101614		
Lab Sample ID:	MC34463-5	**Date Sampled:**	10/16/14
Matrix:	AQ - Ground Water	**Date Received:**	10/20/14
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I92436.D	1	10/24/14	WK	10/21/14	OP40300	MSI3445
Run #2							

	Initial Volume	Final Volume
Run #1	890 ml	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.24	0.11	0.077	ug/l	
208-96-8	Acenaphthylene	ND	0.11	0.056	ug/l	
120-12-7	Anthracene	ND	0.11	0.10	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.056	0.022	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.11	0.032	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.056	0.036	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.11	0.030	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.11	0.043	ug/l	
218-01-9	Chrysene	ND	0.11	0.027	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.11	0.036	ug/l	
206-44-0	Fluoranthene	ND	0.11	0.046	ug/l	
86-73-7	Fluorene	0.20	0.11	0.11	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.11	0.034	ug/l	
90-12-0	1-Methylnaphthalene	4.9	2.2	0.56	ug/l	
91-57-6	2-Methylnaphthalene	7.4	2.2	0.56	ug/l	
85-01-8	Phenanthrene	0.28	0.056	0.014	ug/l	
129-00-0	Pyrene	ND	0.11	0.043	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	86%		30-130%
321-60-8	2-Fluorobiphenyl	79%		30-130%
1718-51-0	Terphenyl-d14	85%		30-130%

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW7-ROX-101614		
Lab Sample ID:	MC34463-5	**Date Sampled:**	10/16/14
Matrix:	AQ - Ground Water	**Date Received:**	10/20/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB60062.D	1	10/23/14	NK	10/21/14	OP40305	GBB3339
Run #2							

	Initial Volume	Final Volume
Run #1	37.2 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.014	0.0057	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.014	0.0057	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	67%		36-173%
460-00-4	Bromofluorobenzene (S)	83%		36-173%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW7-ROX-101614-DUP		
Lab Sample ID:	MC34463-6	**Date Sampled:**	10/16/14
Matrix:	AQ - Ground Water	**Date Received:**	10/20/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P80938.D	5000	10/30/14	JM	n/a	n/a	MSP2648
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50000	13000	ug/l	
107-02-8	Acrolein	ND	130000	30000	ug/l	
107-13-1	Acrylonitrile	ND	25000	11000	ug/l	
71-43-2	Benzene	984000	2500	1200	ug/l	
108-86-1	Bromobenzene	ND	25000	1700	ug/l	
74-97-5	Bromochloromethane	ND	25000	2100	ug/l	
75-27-4	Bromodichloromethane	ND	5000	2400	ug/l	
75-25-2	Bromoform	ND	5000	1500	ug/l	
74-83-9	Bromomethane	ND	10000	3900	ug/l	
78-93-3	2-Butanone (MEK) [a]	ND	25000	13000	ug/l	
104-51-8	n-Butylbenzene	ND	25000	5400	ug/l	
135-98-8	sec-Butylbenzene	ND	25000	2100	ug/l	
98-06-6	tert-Butylbenzene	ND	25000	1900	ug/l	
75-15-0	Carbon disulfide	ND	25000	2300	ug/l	
56-23-5	Carbon tetrachloride	ND	5000	1200	ug/l	
108-90-7	Chlorobenzene	ND	5000	1300	ug/l	
75-00-3	Chloroethane	ND	10000	1900	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	25000	17000	ug/l	
67-66-3	Chloroform	ND	5000	1500	ug/l	
74-87-3	Chloromethane	ND	10000	3000	ug/l	
95-49-8	o-Chlorotoluene	ND	25000	1900	ug/l	
106-43-4	p-Chlorotoluene	ND	25000	2200	ug/l	
124-48-1	Dibromochloromethane	ND	5000	1300	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5000	1200	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5000	790	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5000	1600	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10000	3600	ug/l	
75-34-3	1,1-Dichloroethane	ND	5000	990	ug/l	
107-06-2	1,2-Dichloroethane	ND	5000	1700	ug/l	
75-35-4	1,1-Dichloroethene	ND	5000	1500	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	5000	2200	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	5000	2400	ug/l	

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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW7-ROX-101614-DUP		
Lab Sample ID:	MC34463-6	**Date Sampled:**	10/16/14
Matrix:	AQ - Ground Water	**Date Received:**	10/20/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	10000	2200	ug/l	
142-28-9	1,3-Dichloropropane	ND	25000	4500	ug/l	
594-20-7	2,2-Dichloropropane	ND	25000	6300	ug/l	
563-58-6	1,1-Dichloropropene	ND	25000	2400	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	2500	2100	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	2500	1900	ug/l	
123-91-1	1,4-Dioxane	ND	130000	54000	ug/l	
97-63-2	Ethyl methacrylate	ND	25000	2500	ug/l	
100-41-4	Ethylbenzene	ND	5000	1300	ug/l	
87-68-3	Hexachlorobutadiene	ND	25000	8300	ug/l	
591-78-6	2-Hexanone	ND	25000	8000	ug/l	
98-82-8	Isopropylbenzene	ND	25000	1700	ug/l	
99-87-6	p-Isopropyltoluene	ND	25000	1900	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5000	1100	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	25000	4900	ug/l	
74-95-3	Methylene bromide	ND	25000	2600	ug/l	
75-09-2	Methylene chloride	ND	10000	2000	ug/l	
91-20-3	Naphthalene	ND	25000	3400	ug/l	
103-65-1	n-Propylbenzene	ND	25000	2500	ug/l	
100-42-5	Styrene	ND	25000	1500	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5000	2200	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2500	1500	ug/l	
127-18-4	Tetrachloroethene	ND	5000	1400	ug/l	
108-88-3	Toluene	ND	5000	1100	ug/l	
87-61-6	1,2,3-Trichlorobenzene [a]	ND	25000	3400	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	25000	930	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5000	2100	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5000	1500	ug/l	
79-01-6	Trichloroethene	ND	5000	2000	ug/l	
75-69-4	Trichlorofluoromethane	ND	5000	2700	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	25000	4100	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	25000	1500	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	25000	900	ug/l	
108-05-4	Vinyl Acetate [a]	ND	25000	3600	ug/l	
75-01-4	Vinyl chloride	ND	5000	2200	ug/l	
	m,p-Xylene	ND	5000	1900	ug/l	
95-47-6	o-Xylene	ND	5000	1500	ug/l	
1330-20-7	Xylene (total)	ND	5000	1500	ug/l	

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW7-ROX-101614-DUP		
Lab Sample ID:	MC34463-6	**Date Sampled:**	10/16/14
Matrix:	AQ - Ground Water	**Date Received:**	10/20/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		70-130%
2037-26-5	Toluene-D8	102%		70-130%
460-00-4	4-Bromofluorobenzene	108%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW7-ROX-101614-DUP		
Lab Sample ID:	MC34463-6	**Date Sampled:**	10/16/14
Matrix:	AQ - Ground Water	**Date Received:**	10/20/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F77021.D	1	10/24/14	MR	10/21/14	OP40299	MSF3374
Run #2							

	Initial Volume	Final Volume
Run #1	880 ml	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	11	2.8	ug/l	
95-57-8	2-Chlorophenol	ND	5.7	0.35	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	11	0.94	ug/l	
120-83-2	2,4-Dichlorophenol	ND	11	0.45	ug/l	
105-67-9	2,4-Dimethylphenol	ND	11	0.64	ug/l	
51-28-5	2,4-Dinitrophenol	ND	23	2.8	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	2.2	ug/l	
95-48-7	2-Methylphenol	ND	11	0.26	ug/l	
	3&4-Methylphenol	ND	11	0.53	ug/l	
88-75-5	2-Nitrophenol	ND	11	3.3	ug/l	
100-02-7	4-Nitrophenol	ND	23	0.61	ug/l	
87-86-5	Pentachlorophenol	ND	11	1.3	ug/l	
108-95-2	Phenol	133	5.7	0.34	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	11	0.42	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	11	0.20	ug/l	
62-53-3	Aniline	ND	11	0.72	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.7	0.53	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.7	0.60	ug/l	
100-51-6	Benzyl Alcohol	ND	11	2.6	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.7	0.35	ug/l	
106-47-8	4-Chloroaniline	ND	11	0.63	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.7	0.33	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.7	0.40	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.7	0.38	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.7	0.29	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.7	0.27	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	11	0.52	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	11	0.34	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.7	0.30	ug/l	
132-64-9	Dibenzofuran	ND	2.3	0.29	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.7	0.20	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.7	0.32	ug/l	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW7-ROX-101614-DUP		
Lab Sample ID:	MC34463-6	**Date Sampled:**	10/16/14
Matrix:	AQ - Ground Water	**Date Received:**	10/20/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	5.7	0.23	ug/l	
131-11-3	Dimethyl phthalate	ND	5.7	0.39	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.3	0.38	ug/l	
118-74-1	Hexachlorobenzene	ND	5.7	0.33	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	11	1.5	ug/l	
67-72-1	Hexachloroethane	ND	5.7	0.34	ug/l	
78-59-1	Isophorone	ND	5.7	0.51	ug/l	
88-74-4	2-Nitroaniline	ND	11	0.45	ug/l	
99-09-2	3-Nitroaniline	ND	11	1.6	ug/l	
100-01-6	4-Nitroaniline	ND	11	2.5	ug/l	
98-95-3	Nitrobenzene	ND	5.7	0.44	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.7	1.1	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.7	0.46	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.7	0.22	ug/l	
110-86-1	Pyridine	ND	11	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	45%		15-110%
4165-62-2	Phenol-d5	34%		15-110%
118-79-6	2,4,6-Tribromophenol	91%		15-110%
4165-60-0	Nitrobenzene-d5	75%		30-130%
321-60-8	2-Fluorobiphenyl	73%		30-130%
1718-51-0	Terphenyl-d14	91%		30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW7-ROX-101614-DUP		
Lab Sample ID:	MC34463-6	**Date Sampled:**	10/16/14
Matrix:	AQ - Ground Water	**Date Received:**	10/20/14
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I92437.D	1	10/24/14	WK	10/21/14	OP40300	MSI3445
Run #2							

	Initial Volume	Final Volume
Run #1	880 ml	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.22	0.11	0.078	ug/l	
208-96-8	Acenaphthylene	ND	0.11	0.056	ug/l	
120-12-7	Anthracene	ND	0.11	0.10	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.057	0.022	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.11	0.033	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.057	0.036	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.11	0.031	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.11	0.044	ug/l	
218-01-9	Chrysene	ND	0.11	0.027	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.11	0.036	ug/l	
206-44-0	Fluoranthene	ND	0.11	0.046	ug/l	
86-73-7	Fluorene	0.19	0.11	0.11	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.11	0.035	ug/l	
90-12-0	1-Methylnaphthalene	4.7	2.3	0.57	ug/l	
91-57-6	2-Methylnaphthalene	7.0	2.3	0.57	ug/l	
85-01-8	Phenanthrene	0.27	0.057	0.014	ug/l	
129-00-0	Pyrene	ND	0.11	0.044	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	77%		30-130%
321-60-8	2-Fluorobiphenyl	75%		30-130%
1718-51-0	Terphenyl-d14	83%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW7-ROX-101614-DUP		
Lab Sample ID:	MC34463-6	**Date Sampled:**	10/16/14
Matrix:	AQ - Ground Water	**Date Received:**	10/20/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB60063.D	1	10/23/14	NK	10/21/14	OP40305	GBB3339
Run #2							

	Initial Volume	Final Volume
Run #1	36.8 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.014	0.0058	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.014	0.0058	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	69%		36-173%
460-00-4	Bromofluorobenzene (S)	86%		36-173%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

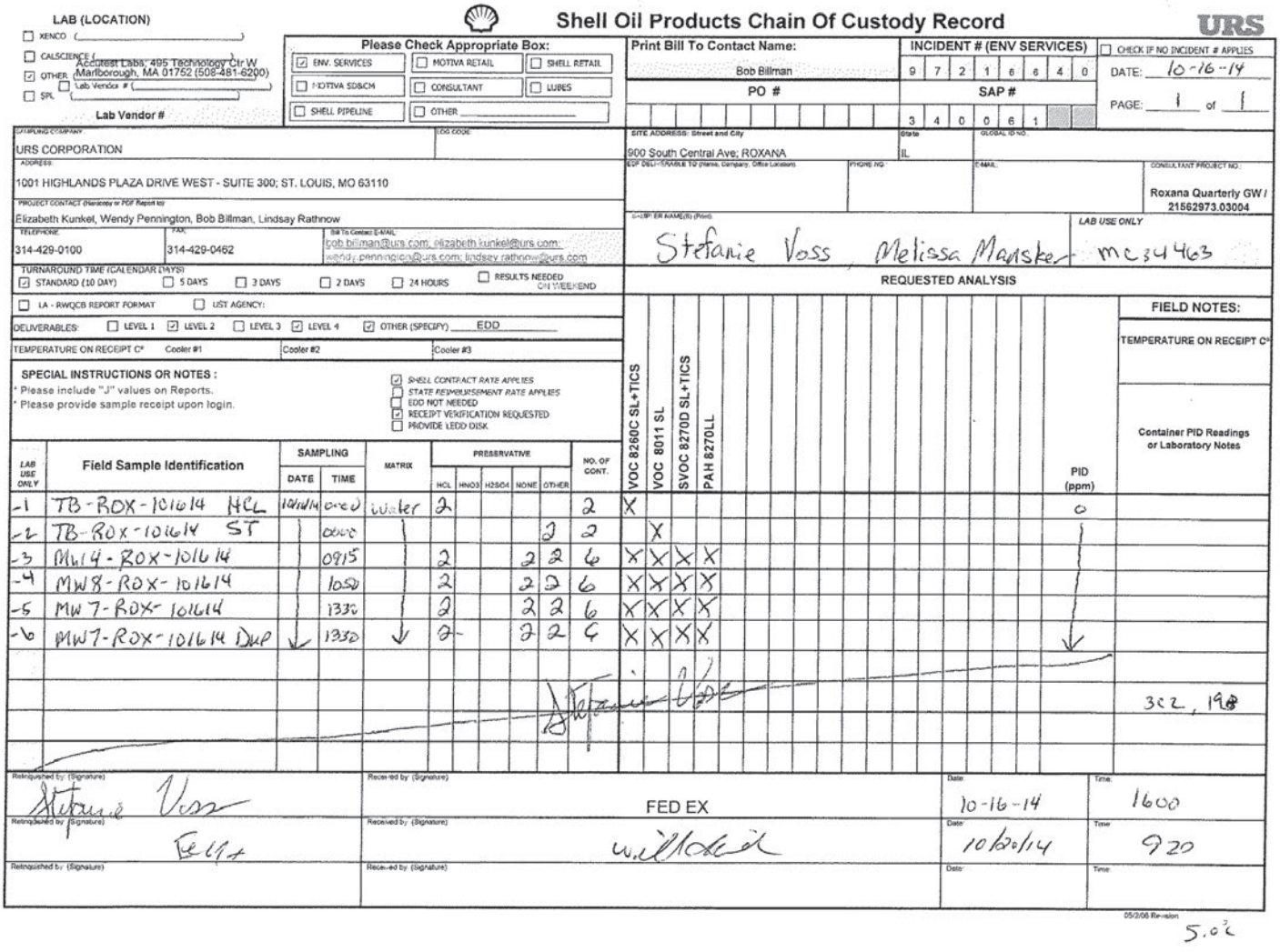
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody



Shell Oil Products Chain Of Custody Record

URS

LAB (LOCATION)
☐ XENCO (_____)
☐ CALSCIENCE (_____)
☑ OTHER Accutest Labs, 495 Technology Ctr W Marlborough, MA 01752 (508-481-6200)
☐ SPL (_____)
Lab Vendor #: Lab Vendor # (_____)

Please Check Appropriate Box:
☑ ENV. SERVICES ☐ MOTIVA RETAIL ☐ SHELL RETAIL
☐ MOTIVA SD&CM ☐ CONSULTANT ☐ LUBES
☐ SHELL PIPELINE ☐ OTHER _____

Print Bill To Contact Name: Bob Billman
PO #
INCIDENT # (ENV SERVICES): 9 7 2 1 6 6 4 0
SAP #: 3 4 0 0 6 1
☐ CHECK IF NO INCIDENT # APPLIES
DATE: 10-16-14
PAGE: 1 of 1

SAMPLING COMPANY: URS CORPORATION
LOG CODE:
ADDRESS: 1001 HIGHLANDS PLAZA DRIVE WEST - SUITE 300; ST. LOUIS, MO 63110
PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Wendy Pennington, Bob Billman, Lindsay Rathnow
TELEPHONE: 314-429-0100
FAX: 314-429-0462
Bill To Contact E-MAIL: bob.billman@urs.com; elizabeth.kunkel@urs.com; wendy.pennington@urs.com; lindsay.rathnow@urs.com
SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA
State: IL
GLOBAL ID NO.:
EDP DELIVERABLE TO (Name, Company, Office Location):
PHONE NO.:
E-MAIL:
CONSULTANT PROJECT NO.: Roxana Quarterly GW / 21562973.03004
C-SIGN ER NAME(S) (Print): Stefanie Voss, Melissa Manske
LAB USE ONLY: MC34463

TURNAROUND TIME (CALENDAR DAYS)
☑ STANDARD (10 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND
☐ LA - RWQCB REPORT FORMAT ☐ UST AGENCY:
DELIVERABLES: ☐ LEVEL 1 ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) EDD
TEMPERATURE ON RECEIPT C°: Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :
* Please include "J" values on Reports.
* Please provide sample receipt upon login.

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260C SL+TICS	VOC 8011 SL	SVOC 8270D SL+TICS	PAH 8270LL	PID (ppm)	FIELD NOTES: Container PID Readings or Laboratory Notes
-1	TB-ROX-101614 HCL	10/14/14	0800	water	2					2	X				0	
-2	TB-ROX-101614 ST		0800						2	2		X				
-3	MW14-ROX-101614		0915		2			2	2	6	X	X	X	X		
-4	MW8-ROX-101614		1050		2			2	2	6	X	X	X	X		
-5	MW7-ROX-101614		1330		2			2	2	6	X	X	X	X		
-6	MW7-ROX-101614 DUP		1330		2			2	2	6	X	X	X	X		
																3C2, 198

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
Stefanie Voss	FED EX	10-16-14	1600
[illegible]	[illegible]	10/20/14	920

05/2/06 Revision
5.0

MC34463: Chain of Custody
Page 1 of 2

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: MC34463 **Client:** URS **Project:** ROXANA

Date / Time Received: 10/20/2014 9 20 00 AM **Delivery Method:** **Airbill #'s:**

Cooler Temps (Initial/Adjusted): #1 (5/5)

Cooler Security	Y or N		Y or N
1 Custody Seals Present	☑ ☐	3 COC Present	☑ ☐
2 Custody Seals ntact	☑ ☐	4 Smpl Dates/ ime OK	☑ ☐

Cooler Temperature	Y or N
1 emp criteria achieved	☑ ☐
2 hermometer D	G1
3 Cooler media	ce (Bag)
4 No Coolers	1

Quality Control Preservation	Y or N	N/A
1 rip Blank present / cooler	☑ ☐	☐
2 rip Blank listed on COC	☑ ☐	☐
3 Samples preserved properly	☑ ☐	
4 VOCs headspace ree	☑ ☐	☐

Sample Integrity - Documentation	Y or N
1 Sample labels present on bottles	☑ ☐
2 Container labeling complete	☑ ☐
3 Sample container label / COC agree	☑ ☐

Sample Integrity - Condition	Y or N
1 Sample recvd within H	☑ ☐
2 All containers accounted or	☑ ☐
3 Condition o sample	ntact

Sample Integrity - Instructions	Y or N	N/A
1 Analysis requested is clear	☑ ☐	
2 Bottles received or unspeci ied tests	☐ ☑	
3 Su icient volume recvd or analysis	☑ ☐	
4 Compositing instructions clear	☐ ☐	☑
5 Filtering instructions clear	☐ ☐	☑

Comments

Accutest Laboratories
V:(508) 481-6200

495 Technology Center West, Bldg One
F: (508) 481-7753

Marlborough, MA 01752
www/accutest.com

Internal Sample Tracking Chronicle

Shell Oil

Job No: MC34463

URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC34463-1 Collected: 16-OCT-14 00:00 By: SVMM Received: 20-OCT-14 By: BA TB-ROX-101614-HCL						
MC34463-1	SW846 8260C	30-OCT-14 12:05	JM			V8260SL+
MC34463-2 Collected: 16-OCT-14 00:00 By: SVMM Received: 20-OCT-14 By: BA TB-ROX-101614-ST						
MC34463-2	SW846 8011	23-OCT-14 20:08	NK	21-OCT-14	FC	V8011SL
MC34463-3 Collected: 16-OCT-14 09:15 By: SVMM Received: 20-OCT-14 By: BA MW4-ROX-101614						
MC34463-3	SW846 8011	23-OCT-14 20:26	NK	21-OCT-14	FC	V8011SL
MC34463-3	SW846 8270D BY SIM	24-OCT-14 00:21	WK	21-OCT-14	AZ	B8270SIMSL
MC34463-3	SW846 8270D	24-OCT-14 10:44	MR	21-OCT-14	AZ	AB8270SL+
MC34463-3	SW846 8260C	30-OCT-14 12:36	JM			V8260SL+
MC34463-4 Collected: 16-OCT-14 10:50 By: SVMM Received: 20-OCT-14 By: BA MW8-ROX-101614						
MC34463-4	SW846 8011	23-OCT-14 20:44	NK	21-OCT-14	FC	V8011SL
MC34463-4	SW846 8270D BY SIM	24-OCT-14 00:44	WK	21-OCT-14	AZ	B8270SIMSL
MC34463-4	SW846 8270D	24-OCT-14 11:08	MR	21-OCT-14	AZ	AB8270SL+
MC34463-4	SW846 8260C	30-OCT-14 13:05	JM			V8260SL+
MC34463-4	SW846 8260C	30-OCT-14 19:09	JM			V8260SL+
MC34463-5 Collected: 16-OCT-14 13:30 By: SVMM Received: 20-OCT-14 By: BA MW7-ROX-101614						
MC34463-5	SW846 8011	23-OCT-14 21:02	NK	21-OCT-14	FC	V8011SL
MC34463-5	SW846 8270D BY SIM	24-OCT-14 01:06	WK	21-OCT-14	AZ	B8270SIMSL
MC34463-5	SW846 8270D	24-OCT-14 11:31	MR	21-OCT-14	AZ	AB8270SL+
MC34463-5	SW846 8260C	30-OCT-14 13:35	JM			V8260SL+
MC34463-6 Collected: 16-OCT-14 13:30 By: SVMM Received: 20-OCT-14 By: BA MW7-ROX-101614-DUP						
MC34463-6	SW846 8011	23-OCT-14 21:19	NK	21-OCT-14	FC	V8011SL
MC34463-6	SW846 8270D BY SIM	24-OCT-14 01:29	WK	21-OCT-14	AZ	B8270SIMSL

Internal Sample Tracking Chronicle

Shell Oil

Job No: MC34463

URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC34463-6	SW846 8270D	24-OCT-14 11:54	MR	21-OCT-14	AZ	AB8270SL+
MC34463-6	SW846 8260C	30-OCT-14 14:05	JM			V8260SL+

SGS Accutest Internal Chain of Custody

Job Number: MC34463
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL
Received: 10/20/14

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC34463-1.2	VOC Ref #3	Jaime Maslowski	10/30/14 09:09	Retrieve from Storage
MC34463-1.2	Jaime Maslowski	GCMSP	10/30/14 09:09	Load on Instrument
MC34463-1.2	GCMSP	Jaime Maslowski	10/31/14 09:51	Unload from Instrument
MC34463-1.2	Jaime Maslowski	VOC Ref #3	10/31/14 09:52	Return to Storage
MC34463-1.2	Scott Parsick		12/18/14 12:16	Disposed
MC34463-2.1	VOC Ref #3	Marc Tahtamoni	10/21/14 14:43	Retrieve from Storage
MC34463-2.1	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34463-3.1	Walk In Ref #22	Alireza Zeighami	10/21/14 11:13	Retrieve from Storage
MC34463-3.1	Alireza Zeighami		10/21/14 16:33	Depleted
MC34463-3.2	Walk In Ref #22	Thomas Abruzzise	10/21/14 14:56	Retrieve from Storage
MC34463-3.2	Thomas Abruzzise	Walk In Ref #22	10/21/14 15:42	Return to Storage
MC34463-3.2	Scott Parsick		12/18/14 12:16	Disposed
MC34463-3.3	VOC Ref #3	Marc Tahtamoni	10/21/14 14:43	Retrieve from Storage
MC34463-3.3	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34463-3.6	VOC Ref #3	Jaime Maslowski	10/30/14 09:09	Retrieve from Storage
MC34463-3.6	Jaime Maslowski	GCMSP	10/30/14 09:09	Load on Instrument
MC34463-3.6	GCMSP	Jaime Maslowski	10/31/14 09:51	Unload from Instrument
MC34463-3.6	Jaime Maslowski	VOC Ref #3	10/31/14 09:52	Return to Storage
MC34463-3.6	Scott Parsick		12/18/14 12:16	Disposed
MC34463-4.2	Walk In Ref #22	Alireza Zeighami	10/21/14 11:13	Retrieve from Storage
MC34463-4.2	Alireza Zeighami		10/21/14 16:33	Depleted
MC34463-4.3	VOC Ref #3	Marc Tahtamoni	10/21/14 14:43	Retrieve from Storage
MC34463-4.3	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34463-4.5	VOC Ref #3	Jaime Maslowski	10/30/14 09:09	Retrieve from Storage
MC34463-4.5	Jaime Maslowski	GCMSP	10/30/14 09:09	Load on Instrument
MC34463-4.5	GCMSP	Jaime Maslowski	10/31/14 09:51	Unload from Instrument
MC34463-4.5	Jaime Maslowski	VOC Ref #3	10/31/14 09:52	Return to Storage
MC34463-4.5	Scott Parsick		12/18/14 12:16	Disposed
MC34463-5.1	Walk In Ref #22	Alireza Zeighami	10/21/14 11:13	Retrieve from Storage
MC34463-5.1	Alireza Zeighami		10/21/14 16:33	Depleted
MC34463-5.4	VOC Ref #3	Marc Tahtamoni	10/21/14 14:43	Retrieve from Storage
MC34463-5.4	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34463-5.5	VOC Ref #3	Jaime Maslowski	10/30/14 09:09	Retrieve from Storage

SGS Accutest Internal Chain of Custody

Job Number: MC34463
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL
Received: 10/20/14

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC34463-5.5	Jaime Maslowski	GCMSP	10/30/14 09:09	Load on Instrument
MC34463-5.5	GCMSP	Jaime Maslowski	10/31/14 09:51	Unload from Instrument
MC34463-5.5	Jaime Maslowski	VOC Ref #3	10/31/14 09:52	Return to Storage
MC34463-5.5	Scott Parsick		12/18/14 12:16	Disposed
MC34463-6.1	Walk In Ref #22	Alireza Zeighami	10/21/14 11:13	Retrieve from Storage
MC34463-6.1	Alireza Zeighami		10/21/14 16:33	Depleted
MC34463-6.4	VOC Ref #3	Marc Tahtamoni	10/21/14 14:43	Retrieve from Storage
MC34463-6.4	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34463-6.6	VOC Ref #3	Jaime Maslowski	10/30/14 09:09	Retrieve from Storage
MC34463-6.6	Jaime Maslowski	GCMSP	10/30/14 09:09	Load on Instrument
MC34463-6.6	GCMSP	Jaime Maslowski	10/31/14 09:51	Unload from Instrument
MC34463-6.6	Jaime Maslowski	VOC Ref #3	10/31/14 09:52	Return to Storage
MC34463-6.6	Scott Parsick		12/18/14 12:16	Disposed

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: MC34463
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSP2648-MB	P80930.D	1	10/30/14	JM	n/a	n/a	MSP2648

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34463-1, MC34463-3, MC34463-4, MC34463-5, MC34463-6

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	ND	0.50	0.32	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.57	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.34	ug/l	
75-25-2	Bromoform	ND	1.0	0.61	ug/l	
74-83-9	Bromomethane	ND	2.0	1.8	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.53	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.43	ug/l	
75-00-3	Chloroethane	ND	2.0	0.53	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	1.1	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.56	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.36	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.61	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.84	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	

Method Blank Summary

Job Number: MC34463
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSP2648-MB	P80930.D	1	10/30/14	JM	n/a	n/a	MSP2648

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34463-1, MC34463-3, MC34463-4, MC34463-5, MC34463-6

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.85	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.59	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.45	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.47	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.38	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.58	ug/l	
	m,p-Xylene	ND	1.0	0.93	ug/l	
95-47-6	o-Xylene	ND	1.0	0.36	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.36	ug/l	

Method Blank Summary

Job Number: MC34463
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSP2648-MB	P80930.D	1	10/30/14	JM	n/a	n/a	MSP2648

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34463-1, MC34463-3, MC34463-4, MC34463-5, MC34463-6

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	96%	70-130%
2037-26-5	Toluene-D8	104%	70-130%
460-00-4	4-Bromofluorobenzene	102%	70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Blank Spike Summary

Job Number: MC34463
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSP2648-BS	P80928.D	1	10/30/14	JM	n/a	n/a	MSP2648

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34463-1, MC34463-3, MC34463-4, MC34463-5, MC34463-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	44.3	89	70-130
107-02-8	Acrolein	250	204	82	70-130
107-13-1	Acrylonitrile	50	43.6	87	70-130
71-43-2	Benzene	50	51.8	104	70-130
108-86-1	Bromobenzene	50	50.6	101	70-130
74-97-5	Bromochloromethane	50	55.5	111	70-130
75-27-4	Bromodichloromethane	50	61.0	122	70-130
75-25-2	Bromoform	50	60.7	121	70-130
74-83-9	Bromomethane	50	48.2	96	70-130
78-93-3	2-Butanone (MEK)	50	37.3	75	70-130
104-51-8	n-Butylbenzene	50	52.0	104	70-130
135-98-8	sec-Butylbenzene	50	56.0	112	70-130
98-06-6	tert-Butylbenzene	50	51.1	102	70-130
75-15-0	Carbon disulfide	50	50.2	100	70-130
56-23-5	Carbon tetrachloride	50	64.6	129	70-130
108-90-7	Chlorobenzene	50	50.7	101	70-130
75-00-3	Chloroethane	50	59.8	120	70-130
110-75-8	2-Chloroethyl vinyl ether	50	66.2	132* [a]	70-130
67-66-3	Chloroform	50	53.4	107	70-130
74-87-3	Chloromethane	50	69.2	138* [a]	70-130
95-49-8	o-Chlorotoluene	50	49.9	100	70-130
106-43-4	p-Chlorotoluene	50	50.0	100	70-130
124-48-1	Dibromochloromethane	50	59.1	118	70-130
95-50-1	1,2-Dichlorobenzene	50	51.4	103	70-130
541-73-1	1,3-Dichlorobenzene	50	53.8	108	70-130
106-46-7	1,4-Dichlorobenzene	50	53.0	106	70-130
75-71-8	Dichlorodifluoromethane	50	54.7	109	70-130
75-34-3	1,1-Dichloroethane	50	57.6	115	70-130
107-06-2	1,2-Dichloroethane	50	54.2	108	70-130
75-35-4	1,1-Dichloroethene	50	53.2	106	70-130
156-59-2	cis-1,2-Dichloroethene	50	49.2	98	70-130
156-60-5	trans-1,2-Dichloroethene	50	48.8	98	70-130
78-87-5	1,2-Dichloropropane	50	54.1	108	70-130
142-28-9	1,3-Dichloropropane	50	51.8	104	70-130
594-20-7	2,2-Dichloropropane	50	65.1	130	70-130
563-58-6	1,1-Dichloropropene	50	57.4	115	70-130

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34463
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSP2648-BS	P80928.D	1	10/30/14	JM	n/a	n/a	MSP2648

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34463-1, MC34463-3, MC34463-4, MC34463-5, MC34463-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-01-5	cis-1,3-Dichloropropene	50	48.1	96	70-130
10061-02-6	trans-1,3-Dichloropropene	50	55.1	110	70-130
123-91-1	1,4-Dioxane	125	141	113	70-130
97-63-2	Ethyl methacrylate	50	46.6	93	77-137
100-41-4	Ethylbenzene	50	50.9	102	70-130
87-68-3	Hexachlorobutadiene	50	53.9	108	70-130
591-78-6	2-Hexanone	50	43.9	88	70-130
98-82-8	Isopropylbenzene	50	51.3	103	70-130
99-87-6	p-Isopropyltoluene	50	56.7	113	70-130
1634-04-4	Methyl Tert Butyl Ether	50	43.1	86	70-130
108-10-1	4-Methyl-2-pentanone (MIBK)	50	46.6	93	70-130
74-95-3	Methylene bromide	50	51.0	102	70-130
75-09-2	Methylene chloride	50	48.6	97	70-130
91-20-3	Naphthalene	50	64.8	130	70-130
103-65-1	n-Propylbenzene	50	53.3	107	70-130
100-42-5	Styrene	50	52.4	105	70-130
630-20-6	1,1,1,2-Tetrachloroethane	50	56.4	113	70-130
79-34-5	1,1,2,2-Tetrachloroethane	50	48.6	97	70-130
127-18-4	Tetrachloroethene	50	57.8	116	70-130
108-88-3	Toluene	50	51.3	103	70-130
87-61-6	1,2,3-Trichlorobenzene	50	33.4	67* [a]	70-130
120-82-1	1,2,4-Trichlorobenzene	50	49.3	99	70-130
71-55-6	1,1,1-Trichloroethane	50	61.1	122	70-130
79-00-5	1,1,2-Trichloroethane	50	52.5	105	70-130
79-01-6	Trichloroethene	50	54.7	109	70-130
75-69-4	Trichlorofluoromethane	50	50.3	101	70-130
96-18-4	1,2,3-Trichloropropane	50	48.3	97	70-130
95-63-6	1,2,4-Trimethylbenzene	50	55.0	110	70-130
108-67-8	1,3,5-Trimethylbenzene	50	52.9	106	70-130
108-05-4	Vinyl Acetate	50	34.3	69* [a]	70-130
75-01-4	Vinyl chloride	50	52.7	105	70-130
	m,p-Xylene	100	103	103	70-130
95-47-6	o-Xylene	50	51.6	103	70-130
1330-20-7	Xylene (total)	150	154	103	70-130

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34463
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSP2648-BS	P80928.D	1	10/30/14	JM	n/a	n/a	MSP2648

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34463-1, MC34463-3, MC34463-4, MC34463-5, MC34463-6

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	98%	70-130%
2037-26-5	Toluene-D8	102%	70-130%
460-00-4	4-Bromofluorobenzene	81%	70-130%

(a) Outside control limits. Blank Spike meets program technical requirements.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34463
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34463-3MS	P80949.D	5	10/30/14	JM	n/a	n/a	MSP2648
MC34463-3MSD	P80950.D	5	10/30/14	JM	n/a	n/a	MSP2648
MC34463-3	P80935.D	5	10/30/14	JM	n/a	n/a	MSP2648

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34463-1, MC34463-3, MC34463-4, MC34463-5, MC34463-6

CAS No.	Compound	MC34463-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		250	145	58* [a]	250	137	55* [a]	6	70-130/30
107-02-8	Acrolein	ND		1250	967	77	1250	1020	82	5	70-130/30
107-13-1	Acrylonitrile	ND		250	216	86	250	209	84	3	70-130/30
71-43-2	Benzene	815		250	942	51* [b]	250	943	51* [b]	0	70-130/30
108-86-1	Bromobenzene	ND		250	245	98	250	252	101	3	70-130/30
74-97-5	Bromochloromethane	ND		250	251	100	250	257	103	2	70-130/30
75-27-4	Bromodichloromethane	ND		250	307	123	250	312	125	2	70-130/30
75-25-2	Bromoform	ND		250	305	122	250	308	123	1	70-130/30
74-83-9	Bromomethane	ND		250	237	95	250	253	101	7	70-130/30
78-93-3	2-Butanone (MEK)	ND		250	161	64* [a]	250	167	67* [a]	4	70-130/30
104-51-8	n-Butylbenzene	ND		250	237	95	250	255	102	7	70-130/30
135-98-8	sec-Butylbenzene	ND		250	271	108	250	282	113	4	70-130/30
98-06-6	tert-Butylbenzene	ND		250	251	100	250	259	104	3	70-130/30
75-15-0	Carbon disulfide	ND		250	244	98	250	249	100	2	70-130/30
56-23-5	Carbon tetrachloride	ND		250	319	128	250	319	128	0	70-130/30
108-90-7	Chlorobenzene	ND		250	253	101	250	254	102	0	70-130/30
75-00-3	Chloroethane	ND		250	293	117	250	292	117	0	70-130/30
110-75-8	2-Chloroethyl vinyl ether	ND		250	385	154* [c]	250	379	152* [c]	2	70-130/30
67-66-3	Chloroform	ND		250	269	108	250	270	108	0	70-130/30
74-87-3	Chloromethane	ND		250	344	138* [c]	250	356	142* [c]	3	70-130/30
95-49-8	o-Chlorotoluene	ND		250	243	97	250	252	101	4	70-130/30
106-43-4	p-Chlorotoluene	ND		250	242	97	250	252	101	4	70-130/30
124-48-1	Dibromochloromethane	ND		250	294	118	250	299	120	2	70-130/30
95-50-1	1,2-Dichlorobenzene	ND		250	244	98	250	257	103	5	70-130/30
541-73-1	1,3-Dichlorobenzene	ND		250	256	102	250	269	108	5	70-130/30
106-46-7	1,4-Dichlorobenzene	ND		250	252	101	250	265	106	5	70-130/30
75-71-8	Dichlorodifluoromethane	ND		250	258	103	250	263	105	2	70-130/30
75-34-3	1,1-Dichloroethane	ND		250	287	115	250	292	117	2	70-130/30
107-06-2	1,2-Dichloroethane	ND		250	275	110	250	283	113	3	70-130/30
75-35-4	1,1-Dichloroethene	ND		250	272	109	250	269	108	1	70-130/30
156-59-2	cis-1,2-Dichloroethene	ND		250	254	102	250	255	102	0	70-130/30
156-60-5	trans-1,2-Dichloroethene	ND		250	253	101	250	260	104	3	70-130/30
78-87-5	1,2-Dichloropropane	ND		250	272	109	250	274	110	1	70-130/30
142-28-9	1,3-Dichloropropane	ND		250	259	104	250	264	106	2	70-130/30
594-20-7	2,2-Dichloropropane	ND		250	329	132* [a]	250	335	134* [a]	2	70-130/30
563-58-6	1,1-Dichloropropene	ND		250	293	117	250	294	118	0	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34463
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34463-3MS	P80949.D	5	10/30/14	JM	n/a	n/a	MSP2648
MC34463-3MSD	P80950.D	5	10/30/14	JM	n/a	n/a	MSP2648
MC34463-3	P80935.D	5	10/30/14	JM	n/a	n/a	MSP2648

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34463-1, MC34463-3, MC34463-4, MC34463-5, MC34463-6

CAS No.	Compound	MC34463-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-01-5	cis-1,3-Dichloropropene	ND		250	237	95	250	241	96	2	70-130/30
10061-02-6	trans-1,3-Dichloropropene	ND		250	267	107	250	276	110	3	70-130/30
123-91-1	1,4-Dioxane	ND		625	559	89	625	632	101	12	70-130/30
97-63-2	Ethyl methacrylate	ND		250	231	92	250	240	96	4	72-139/30
100-41-4	Ethylbenzene	ND		250	257	103	250	257	103	0	70-130/30
87-68-3	Hexachlorobutadiene	ND		250	241	96	250	253	101	5	70-130/30
591-78-6	2-Hexanone	ND		250	167	67* [a]	250	176	70	5	70-130/30
98-82-8	Isopropylbenzene	2.6	J	250	255	101	250	263	104	3	70-130/30
99-87-6	p-Isopropyltoluene	ND		250	272	109	250	285	114	5	70-130/30
1634-04-4	Methyl Tert Butyl Ether	37.9		250	260	89	250	271	93	4	70-130/30
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		250	228	91	250	238	95	4	70-130/30
74-95-3	Methylene bromide	ND		250	255	102	250	262	105	3	70-130/30
75-09-2	Methylene chloride	ND		250	244	98	250	248	99	2	70-130/30
91-20-3	Naphthalene	ND		250	294	118	250	314	126	7	70-130/30
103-65-1	n-Propylbenzene	ND		250	262	105	250	271	108	3	70-130/30
100-42-5	Styrene	ND		250	259	104	250	261	104	1	70-130/30
630-20-6	1,1,1,2-Tetrachloroethane	ND		250	283	113	250	284	114	0	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	238	95	250	247	99	4	70-130/30
127-18-4	Tetrachloroethene	ND		250	287	115	250	289	116	1	70-130/30
108-88-3	Toluene	ND		250	263	105	250	263	105	0	70-130/30
87-61-6	1,2,3-Trichlorobenzene	ND		250	122	49* [c]	250	149	60* [c]	20	70-130/30
120-82-1	1,2,4-Trichlorobenzene	ND		250	184	74	250	219	88	17	70-130/30
71-55-6	1,1,1-Trichloroethane	ND		250	309	124	250	308	123	0	70-130/30
79-00-5	1,1,2-Trichloroethane	ND		250	262	105	250	269	108	3	70-130/30
79-01-6	Trichloroethene	ND		250	270	108	250	275	110	2	70-130/30
75-69-4	Trichlorofluoromethane	ND		250	242	97	250	242	97	0	70-130/30
96-18-4	1,2,3-Trichloropropane	ND		250	235	94	250	244	98	4	70-130/30
95-63-6	1,2,4-Trimethylbenzene	3.7	J	250	267	105	250	278	110	4	70-130/30
108-67-8	1,3,5-Trimethylbenzene	ND		250	257	103	250	265	106	3	70-130/30
108-05-4	Vinyl Acetate	ND		250	175	70	250	186	74	6	70-130/30
75-01-4	Vinyl chloride	ND		250	260	104	250	261	104	0	70-130/30
	m,p-Xylene	8.6		500	518	102	500	523	103	1	70-130/30
95-47-6	o-Xylene	2.2	J	250	259	103	250	261	104	1	70-130/30
1330-20-7	Xylene (total)	10.8		750	777	102	750	784	103	1	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34463
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34463-3MS	P80949.D	5	10/30/14	JM	n/a	n/a	MSP2648
MC34463-3MSD	P80950.D	5	10/30/14	JM	n/a	n/a	MSP2648
MC34463-3	P80935.D	5	10/30/14	JM	n/a	n/a	MSP2648

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34463-1, MC34463-3, MC34463-4, MC34463-5, MC34463-6

CAS No.	Surrogate Recoveries	MS	MSD	MC34463-3	Limits
1868-53-7	Dibromofluoromethane	99%	98%	95%	70-130%
2037-26-5	Toluene-D8	103%	102%	103%	70-130%
460-00-4	4-Bromofluorobenzene	81%	82%	102%	70-130%

(a) Outside control limits due to possible matrix interference. Refer to Blank Spike.
(b) Outside control limits due to high level in sample relative to spike amount.
(c) Outside control limits. Blank Spike meets program technical requirements.

* = Outside of Control Limits.

Volatile Internal Standard Area Summary

Job Number: MC34463
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSP2648-CC2633	**Injection Date:**	10/30/14
Lab File ID:	P80927.D	**Injection Time:**	08:36
Instrument ID:	GCMSP	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	781040	8.48	963369	9.32	481564	12.52	447575	15.08	116345	6.17
Upper Limit [a]	1562080	8.98	1926738	9.82	963128	13.02	895150	15.58	232690	6.67
Lower Limit [b]	390520	7.98	481685	8.82	240782	12.02	223788	14.58	58173	5.67

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSP2648-BS	779078	8.48	973338	9.32	487755	12.52	457982	15.08	133283	6.16
MSP2648-MB	639955	8.48	807149	9.33	406700	12.53	294606	15.09	133888	6.20
ZZZZZZ	540465	8.48	667624	9.33	343374	12.53	240731	15.09	132875	6.21
ZZZZZZ	628292	8.48	783720	9.33	394072	12.53	274583	15.09	144968	6.19
ZZZZZZ	620285	8.48	772489	9.33	388808	12.53	270767	15.09	120232	6.20
MC34463-1	659884	8.48	815919	9.33	406363	12.53	275255	15.09	131284	6.20
MC34463-3	582213	8.48	727165	9.33	361850	12.53	262876	15.09	135572	6.19
MC34463-4	670142	8.48	838890	9.32	405682	12.53	273933	15.09	152108	6.19
MC34463-5	637569	8.48	788903	9.32	390955	12.53	259294	15.09	139792	6.19
MC34463-6	666377	8.48	828056	9.33	401984	12.53	270929	15.09	145685	6.19
GP18363-LB1	628870	8.48	785018	9.33	397898	12.53	289355	15.09	145926	6.18
ZZZZZZ	622699	8.48	765026	9.33	392045	12.53	276143	15.09	157740	6.19
GP18363-LS1	718270	8.48	888489	9.32	449218	12.53	445349	15.08	123700	6.16
ZZZZZZ	631185	8.48	784935	9.33	393607	12.53	297580	15.08	156506	6.19
ZZZZZZ	638764	8.48	794885	9.33	406741	12.53	287727	15.09	143763	6.19
ZZZZZZ	643388	8.48	788696	9.33	398833	12.53	277031	15.09	169994	6.19
ZZZZZZ	596071	8.48	751143	9.33	374179	12.53	246975	15.09	119555	6.21
GP18364-LS1	698315	8.48	865848	9.32	437294	12.53	426474	15.08	138769	6.16
MC34463-4	639197	8.48	800295	9.33	404064	12.53	305087	15.09	137142	6.19
MC34463-3MS	751542	8.48	937132	9.32	470956	12.53	448580	15.08	136912	6.17
MC34463-3MSD	758770	8.48	949103	9.32	476774	12.53	445276	15.08	137818	6.17

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary

Job Number: MC34463
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Method: SW846 8260C **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
MC34463-1	P80934.D	94	105	108
MC34463-3	P80935.D	95	103	102
MC34463-4	P80948.D	96	105	98
MC34463-4	P80936.D	96	101	107
MC34463-5	P80937.D	94	103	108
MC34463-6	P80938.D	95	102	108
MC34463-3MS	P80949.D	99	103	81
MC34463-3MSD	P80950.D	98	102	82
MSP2648-BS	P80928.D	98	102	81
MSP2648-MB	P80930.D	96	104	102

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	70-130%
S2 = Toluene-D8	70-130%
S3 = 4-Bromofluorobenzene	70-130%

GC/MS Semi-volatiles

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QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: MC34463
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40299-MB	F77013.D	1	10/24/14	MR	10/21/14	OP40299	MSF3374

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34463-3, MC34463-4, MC34463-5, MC34463-6

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	10	2.5	ug/l	
95-57-8	2-Chlorophenol	ND	5.0	0.31	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	10	0.83	ug/l	
120-83-2	2,4-Dichlorophenol	ND	10	0.40	ug/l	
105-67-9	2,4-Dimethylphenol	ND	10	0.56	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	2.5	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.9	ug/l	
95-48-7	2-Methylphenol	ND	10	0.23	ug/l	
	3&4-Methylphenol	ND	10	0.47	ug/l	
88-75-5	2-Nitrophenol	ND	10	2.9	ug/l	
100-02-7	4-Nitrophenol	ND	20	0.53	ug/l	
87-86-5	Pentachlorophenol	ND	10	1.1	ug/l	
108-95-2	Phenol	ND	5.0	0.30	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	10	0.37	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	10	0.18	ug/l	
62-53-3	Aniline	ND	10	0.64	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.0	0.47	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.0	0.53	ug/l	
100-51-6	Benzyl Alcohol	ND	10	2.3	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.31	ug/l	
106-47-8	4-Chloroaniline	ND	10	0.56	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.0	0.29	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.0	0.35	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.0	0.33	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.0	0.25	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.0	0.24	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	10	0.46	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	10	0.30	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.27	ug/l	
132-64-9	Dibenzofuran	ND	2.0	0.26	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.0	0.17	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.0	0.28	ug/l	
84-66-2	Diethyl phthalate	ND	5.0	0.20	ug/l	
131-11-3	Dimethyl phthalate	ND	5.0	0.34	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
118-74-1	Hexachlorobenzene	ND	5.0	0.29	ug/l	

Method Blank Summary

Job Number: MC34463
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40299-MB	F77013.D	1	10/24/14	MR	10/21/14	OP40299	MSF3374

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34463-3, MC34463-4, MC34463-5, MC34463-6

CAS No.	Compound	Result	RL	MDL	Units	Q
77-47-4	Hexachlorocyclopentadiene	ND	10	1.3	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.30	ug/l	
78-59-1	Isophorone	ND	5.0	0.45	ug/l	
88-74-4	2-Nitroaniline	ND	10	0.40	ug/l	
99-09-2	3-Nitroaniline	ND	10	1.4	ug/l	
100-01-6	4-Nitroaniline	ND	10	2.2	ug/l	
98-95-3	Nitrobenzene	ND	5.0	0.39	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.0	1.0	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.0	0.40	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.19	ug/l	
110-86-1	Pyridine	ND	10	0.52	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	51%	15-110%
4165-62-2	Phenol-d5	35%	15-110%
118-79-6	2,4,6-Tribromophenol	92%	15-110%
4165-60-0	Nitrobenzene-d5	81%	30-130%
321-60-8	2-Fluorobiphenyl	78%	30-130%
1718-51-0	Terphenyl-d14	96%	30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

Method Blank Summary

Job Number: MC34463
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40300-MB	I92423.D	1	10/23/14	WK	10/21/14	OP40300	MSI3445

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

MC34463-3, MC34463-4, MC34463-5, MC34463-6

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.069	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.050	ug/l	
120-12-7	Anthracene	ND	0.10	0.092	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.050	0.020	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.029	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.050	0.032	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.027	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.039	ug/l	
218-01-9	Chrysene	ND	0.10	0.024	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.032	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.041	ug/l	
86-73-7	Fluorene	ND	0.10	0.099	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.031	ug/l	
90-12-0	1-Methylnaphthalene	ND	2.0	0.50	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.0	0.50	ug/l	
85-01-8	Phenanthrene	ND	0.050	0.013	ug/l	
129-00-0	Pyrene	ND	0.10	0.038	ug/l	

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	87%	30-130%
321-60-8	2-Fluorobiphenyl	81%	30-130%
1718-51-0	Terphenyl-d14	83%	30-130%

Blank Spike Summary

Job Number: MC34463
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40299-BS	F77014.D	1	10/24/14	MR	10/21/14	OP40299	MSF3374

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34463-3, MC34463-4, MC34463-5, MC34463-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
65-85-0	Benzoic Acid	50	17.5	35	30-130
95-57-8	2-Chlorophenol	50	38.9	78	30-130
59-50-7	4-Chloro-3-methyl phenol	50	37.7	75	30-130
120-83-2	2,4-Dichlorophenol	50	38.1	76	30-130
105-67-9	2,4-Dimethylphenol	50	32.3	65	30-130
51-28-5	2,4-Dinitrophenol	50	57.5	115	30-130
534-52-1	4,6-Dinitro-o-cresol	50	57.8	116	30-130
95-48-7	2-Methylphenol	50	34.5	69	30-130
	3&4-Methylphenol	100	63.2	63	30-130
88-75-5	2-Nitrophenol	50	39.8	80	30-130
100-02-7	4-Nitrophenol	50	14.2	28* [a]	30-130
87-86-5	Pentachlorophenol	50	37.8	76	30-130
108-95-2	Phenol	50	14.9	30	30-130
95-95-4	2,4,5-Trichlorophenol	50	35.8	72	30-130
88-06-2	2,4,6-Trichlorophenol	50	38.2	76	30-130
62-53-3	Aniline	50	28.8	58	40-140
101-55-3	4-Bromophenyl phenyl ether	50	42.7	85	40-140
85-68-7	Butyl benzyl phthalate	50	49.6	99	40-140
100-51-6	Benzyl Alcohol	50	24.1	48	40-140
91-58-7	2-Chloronaphthalene	50	42.6	85	40-140
106-47-8	4-Chloroaniline	50	34.6	69	40-140
111-91-1	bis(2-Chloroethoxy)methane	50	39.2	78	40-140
111-44-4	bis(2-Chloroethyl)ether	50	41.2	82	40-140
108-60-1	bis(2-Chloroisopropyl)ether	50	53.9	108	40-140
7005-72-3	4-Chlorophenyl phenyl ether	50	38.6	77	40-140
122-66-7	1,2-Diphenylhydrazine	50	43.1	86	40-140
121-14-2	2,4-Dinitrotoluene	50	45.9	92	40-140
606-20-2	2,6-Dinitrotoluene	50	45.8	92	40-140
91-94-1	3,3'-Dichlorobenzidine	50	54.2	108	40-140
132-64-9	Dibenzofuran	50	38.5	77	40-140
84-74-2	Di-n-butyl phthalate	50	43.6	87	40-140
117-84-0	Di-n-octyl phthalate	50	45.2	90	40-140
84-66-2	Diethyl phthalate	50	41.3	83	40-140
131-11-3	Dimethyl phthalate	50	42.6	85	40-140
117-81-7	bis(2-Ethylhexyl)phthalate	50	51.6	103	40-140
118-74-1	Hexachlorobenzene	50	41.2	82	40-140

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34463
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40299-BS	F77014.D	1	10/24/14	MR	10/21/14	OP40299	MSF3374

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34463-3, MC34463-4, MC34463-5, MC34463-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
77-47-4	Hexachlorocyclopentadiene	50	23.5	47	40-140
67-72-1	Hexachloroethane	50	30.1	60	40-140
78-59-1	Isophorone	50	36.8	74	40-140
88-74-4	2-Nitroaniline	50	44.5	89	40-140
99-09-2	3-Nitroaniline	50	40.2	80	40-140
100-01-6	4-Nitroaniline	50	39.9	80	40-140
98-95-3	Nitrobenzene	50	38.8	78	40-140
62-75-9	n-Nitrosodimethylamine	50	30.0	60	40-140
621-64-7	N-Nitroso-di-n-propylamine	50	43.6	87	40-140
86-30-6	N-Nitrosodiphenylamine	50	41.4	83	40-140
110-86-1	Pyridine	50	13.8	28* [a]	40-140

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	49%	15-110%
4165-62-2	Phenol-d5	33%	15-110%
118-79-6	2,4,6-Tribromophenol	91%	15-110%
4165-60-0	Nitrobenzene-d5	78%	30-130%
321-60-8	2-Fluorobiphenyl	76%	30-130%
1718-51-0	Terphenyl-d14	90%	30-130%

(a) Outside control limits. Blank Spike meets program technical requirements.

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34463
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40300-BS	I92424.D	1	10/23/14	WK	10/21/14	OP40300	MSI3445

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

MC34463-3, MC34463-4, MC34463-5, MC34463-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
83-32-9	Acenaphthene	50	40.8	82	40-140
208-96-8	Acenaphthylene	50	35.4	71	40-140
120-12-7	Anthracene	50	42.0	84	40-140
56-55-3	Benzo(a)anthracene	50	48.1	96	40-140
50-32-8	Benzo(a)pyrene	50	45.9	92	40-140
205-99-2	Benzo(b)fluoranthene	50	49.4	99	40-140
191-24-2	Benzo(g,h,i)perylene	50	46.2	92	40-140
207-08-9	Benzo(k)fluoranthene	50	42.0	84	40-140
218-01-9	Chrysene	50	43.7	87	40-140
53-70-3	Dibenzo(a,h)anthracene	50	46.7	93	40-140
206-44-0	Fluoranthene	50	38.8	78	40-140
86-73-7	Fluorene	50	48.2	96	40-140
193-39-5	Indeno(1,2,3-cd)pyrene	50	45.9	92	40-140
90-12-0	1-Methylnaphthalene	50	38.1	76	40-140
91-57-6	2-Methylnaphthalene	50	39.0	78	40-140
85-01-8	Phenanthrene	50	42.9	86	40-140
129-00-0	Pyrene	50	37.8	76	40-140

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	85%	30-130%
321-60-8	2-Fluorobiphenyl	80%	30-130%
1718-51-0	Terphenyl-d14	81%	30-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34463
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40299-MS	F77015.D	1	10/24/14	MR	10/21/14	OP40299	MSF3374
OP40299-MSD	F77016.D	1	10/24/14	MR	10/21/14	OP40299	MSF3374
MC34100-11	R40554.D	1	10/27/14	KD	10/21/14	OP40299	MSR1493

The QC reported here applies to the following samples: Method: SW846 8270D

MC34463-3, MC34463-4, MC34463-5, MC34463-6

CAS No.	Compound	MC34100-11 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic Acid	ND		50	17.2	34	50	16.8	34	2	30-130/20
95-57-8	2-Chlorophenol	ND		50	36.8	74	50	34.6	69	6	30-130/20
59-50-7	4-Chloro-3-methyl phenol	ND		50	37.8	76	50	36.2	72	4	30-130/20
120-83-2	2,4-Dichlorophenol	ND		50	37.6	75	50	35.4	71	6	30-130/20
105-67-9	2,4-Dimethylphenol	ND		50	31.5	63	50	28.1	56	11	30-130/20
51-28-5	2,4-Dinitrophenol	ND		50	60.0	120	50	60.1	120	0	30-130/20
534-52-1	4,6-Dinitro-o-cresol	ND		50	56.2	112	50	58.3	117	4	30-130/20
95-48-7	2-Methylphenol	ND		50	32.8	66	50	29.9	60	9	30-130/20
	3&4-Methylphenol	ND		100	61.6	62	100	58.0	58	6	30-130/20
88-75-5	2-Nitrophenol	ND		50	39.2	78	50	37.3	75	5	30-130/20
100-02-7	4-Nitrophenol	ND		50	13.7	27* [a]	50	13.8	28* [a]	1	30-130/20
87-86-5	Pentachlorophenol	ND		50	37.0	74	50	37.3	75	1	30-130/20
108-95-2	Phenol	ND		50	14.4	29* [a]	50	13.8	28* [a]	4	30-130/20
95-95-4	2,4,5-Trichlorophenol	ND		50	35.8	72	50	33.4	67	7	30-130/20
88-06-2	2,4,6-Trichlorophenol	ND		50	36.8	74	50	36.7	73	0	30-130/20
62-53-3	Aniline	ND		50	24.6	49	50	22.8	46	8	40-140/20
101-55-3	4-Bromophenyl phenyl ether	ND		50	41.8	84	50	42.7	85	2	40-140/20
85-68-7	Butyl benzyl phthalate	ND		50	49.4	99	50	49.6	99	0	40-140/20
100-51-6	Benzyl Alcohol	ND		50	25.1	50	50	22.4	45	11	40-140/20
91-58-7	2-Chloronaphthalene	ND		50	42.4	85	50	40.9	82	4	40-140/20
106-47-8	4-Chloroaniline	ND		50	34.4	69	50	32.9	66	4	40-140/20
111-91-1	bis(2-Chloroethoxy)methane	ND		50	39.0	78	50	36.1	72	8	40-140/20
111-44-4	bis(2-Chloroethyl)ether	ND		50	41.1	82	50	37.6	75	9	40-140/20
108-60-1	bis(2-Chloroisopropyl)ether	ND		50	53.0	106	50	49.6	99	7	40-140/20
7005-72-3	4-Chlorophenyl phenyl ether	ND		50	38.3	77	50	38.3	77	0	40-140/20
122-66-7	1,2-Diphenylhydrazine	ND		50	42.8	86	50	43.3	87	1	40-140/20
121-14-2	2,4-Dinitrotoluene	ND		50	45.4	91	50	45.1	90	1	40-140/20
606-20-2	2,6-Dinitrotoluene	ND		50	46.2	92	50	45.0	90	3	40-140/20
91-94-1	3,3'-Dichlorobenzidine	ND		50	54.4	109	50	52.8	106	3	40-140/20
132-64-9	Dibenzofuran	ND		50	38.4	77	50	37.7	75	2	40-140/20
84-74-2	Di-n-butyl phthalate	ND		50	43.5	87	50	43.3	87	0	40-140/20
117-84-0	Di-n-octyl phthalate	ND		50	44.2	88	50	44.6	89	1	40-140/20
84-66-2	Diethyl phthalate	ND		50	41.3	83	50	41.1	82	0	40-140/20
131-11-3	Dimethyl phthalate	ND		50	42.1	84	50	42.2	84	0	40-140/20
117-81-7	bis(2-Ethylhexyl)phthalate	ND		50	51.7	103	50	51.8	104	0	40-140/20
118-74-1	Hexachlorobenzene	ND		50	40.6	81	50	41.0	82	1	40-140/20

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34463
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40299-MS	F77015.D	1	10/24/14	MR	10/21/14	OP40299	MSF3374
OP40299-MSD	F77016.D	1	10/24/14	MR	10/21/14	OP40299	MSF3374
MC34100-11	R40554.D	1	10/27/14	KD	10/21/14	OP40299	MSR1493

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34463-3, MC34463-4, MC34463-5, MC34463-6

CAS No.	Compound	MC34100-11 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
77-47-4	Hexachlorocyclopentadiene	ND		50	23.3	47	50	21.6	43	8	40-140/20
67-72-1	Hexachloroethane	ND		50	30.9	62	50	29.6	59	4	40-140/20
78-59-1	Isophorone	ND		50	36.5	73	50	34.6	69	5	40-140/20
88-74-4	2-Nitroaniline	ND		50	43.9	88	50	44.1	88	0	40-140/20
99-09-2	3-Nitroaniline	ND		50	40.8	82	50	40.2	80	1	40-140/20
100-01-6	4-Nitroaniline	ND		50	40.6	81	50	39.4	79	3	40-140/20
98-95-3	Nitrobenzene	ND		50	38.8	78	50	36.2	72	7	40-140/20
62-75-9	n-Nitrosodimethylamine	ND		50	30.4	61	50	27.6	55	10	40-140/20
621-64-7	N-Nitroso-di-n-propylamine	ND		50	43.3	87	50	40.6	81	6	40-140/20
86-30-6	N-Nitrosodiphenylamine	ND		50	40.5	81	50	41.2	82	2	40-140/20
110-86-1	Pyridine	ND		50	11.9	24* [a]	50	9.5	19* [a]	22* [b]	40-140/20

CAS No.	Surrogate Recoveries	MS	MSD	MC34100-11	Limits
367-12-4	2-Fluorophenol	47%	43%	51%	15-110%
4165-62-2	Phenol-d5	33%	28%	32%	15-110%
118-79-6	2,4,6-Tribromophenol	90%	93%	105%	15-110%
4165-60-0	Nitrobenzene-d5	79%	73%	82%	30-130%
321-60-8	2-Fluorobiphenyl	75%	71%	85%	30-130%
1718-51-0	Terphenyl-d14	89%	90%	95%	30-130%

(a) Outside control limits due to possible matrix interference. Refer to Blank Spike.
(b) High RPD due to possible matrix interference and/or sample heterogeneity.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34463
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40300-MS	I92425.D	1	10/23/14	WK	10/21/14	OP40300	MSI3445
OP40300-MSD	I92426.D	1	10/23/14	WK	10/21/14	OP40300	MSI3445
MC34100-12	I92427.D	1	10/23/14	WK	10/21/14	OP40300	MSI3445

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

MC34463-3, MC34463-4, MC34463-5, MC34463-6

CAS No.	Compound	MC34100-12 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	ND		50	40.4	81	50	40.0	80	1	40-140/20
208-96-8	Acenaphthylene	ND		50	35.5	71	50	34.9	70	2	40-140/20
120-12-7	Anthracene	ND		50	42.4	85	50	42.1	84	1	40-140/20
56-55-3	Benzo(a)anthracene	ND		50	47.6	95	50	47.3	95	1	40-140/20
50-32-8	Benzo(a)pyrene	ND		50	44.9	90	50	44.7	89	0	40-140/20
205-99-2	Benzo(b)fluoranthene	ND		50	45.1	90	50	50.0	100	10	40-140/20
191-24-2	Benzo(g,h,i)perylene	ND		50	45.5	91	50	45.3	91	0	40-140/20
207-08-9	Benzo(k)fluoranthene	ND		50	39.5	79	50	40.3	81	2	40-140/20
218-01-9	Chrysene	ND		50	44.0	88	50	43.6	87	1	40-140/20
53-70-3	Dibenzo(a,h)anthracene	ND		50	46.1	92	50	45.5	91	1	40-140/20
206-44-0	Fluoranthene	ND		50	39.7	79	50	39.0	78	2	40-140/20
86-73-7	Fluorene	ND		50	47.6	95	50	48.1	96	1	40-140/20
193-39-5	Indeno(1,2,3-cd)pyrene	ND		50	45.0	90	50	44.7	89	1	40-140/20
90-12-0	1-Methylnaphthalene	ND		50	38.5	77	50	37.2	74	3	40-140/20
91-57-6	2-Methylnaphthalene	ND		50	38.8	78	50	37.1	74	4	40-140/20
85-01-8	Phenanthrene	ND		50	43.6	87	50	43.9	88	1	40-140/20
129-00-0	Pyrene	ND		50	38.4	77	50	37.9	76	1	40-140/20

CAS No.	Surrogate Recoveries	MS	MSD	MC34100-12	Limits
4165-60-0	Nitrobenzene-d5	84%	78%	77%	30-130%
321-60-8	2-Fluorobiphenyl	79%	75%	72%	30-130%
1718-51-0	Terphenyl-d14	82%	81%	76%	30-130%

* = Outside of Control Limits.

Semivolatile Internal Standard Area Summary

Job Number: MC34463
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSF3374-CC3361	**Injection Date:**	10/24/14
Lab File ID:	F77012.D	**Injection Time:**	08:26
Instrument ID:	GCMSF	**Method:**	SW846 8270D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	80351	4.14	268321	5.19	174204	6.72	314738	8.00	396524	10.57	383698	12.27
Upper Limit [a]	160702	4.64	536642	5.69	348408	7.22	629476	8.50	793048	11.07	767396	12.77
Lower Limit [b]	40176	3.64	134161	4.69	87102	6.22	157369	7.50	198262	10.07	191849	11.77

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP40299-MB	90931	4.14	316725	5.19	203417	6.72	387270	8.00	454373	10.56	445536	12.27
OP40299-BS	87440	4.14	308603	5.19	197061	6.72	366496	8.00	461227	10.57	439548	12.27
OP40299-MS	82458	4.14	289463	5.19	186365	6.72	353436	8.00	440524	10.57	420636	12.27
OP40299-MSD	86127	4.14	299261	5.19	192367	6.72	354781	8.00	436867	10.57	420358	12.27
MC34463-3	81206	4.14	275345	5.19	186349	6.72	356089	8.00	437086	10.57	429373	12.27
MC34463-4	103572	4.14	372561	5.19	240380	6.72	462925	8.00	586739	10.57	583854	12.28
MC34463-5	85272	4.14	296589	5.19	195859	6.72	365005	8.00	424462	10.57	416597	12.27
MC34463-6	85397	4.14	290696	5.19	189975	6.72	360204	8.00	423550	10.57	414730	12.27
ZZZZZZ	79965	4.14	287719	5.19	195895	6.72	380569	8.00	476031	10.57	478953	12.28
ZZZZZZ	80497	4.14	282748	5.19	188113	6.72	356583	8.00	432675	10.57	423992	12.27
ZZZZZZ	74255	4.14	254909	5.19	171761	6.72	335050	8.00	404844	10.57	390244	12.27
ZZZZZZ	76499	4.14	266435	5.19	179984	6.72	347229	8.00	424444	10.57	411451	12.27
ZZZZZZ	73607	4.14	257296	5.19	170422	6.72	333745	8.00	406301	10.57	398241	12.27
OP40329-MB	81892	4.14	274909	5.19	177974	6.72	329537	8.00	367511	10.57	341893	12.27
OP40329-BS	75472	4.14	266061	5.19	165865	6.72	296548	8.00	350600	10.57	331989	12.27
OP40329-MS	80456	4.14	284813	5.19	181355	6.72	335061	8.00	395829	10.57	362712	12.27
OP40329-MSD	85934	4.14	299585	5.19	186055	6.72	345612	8.00	392524	10.57	357971	12.27
MC34536-1	92224	4.14	312217	5.19	205154	6.72	380992	8.00	418408	10.57	388879	12.27
ZZZZZZ	83760	4.14	286780	5.19	183594	6.71	344862	8.00	377271	10.57	350812	12.27
ZZZZZZ	75364	4.14	261041	5.19	171397	6.72	322913	8.00	363766	10.57	338701	12.27
ZZZZZZ	79711	4.14	270484	5.19	174144	6.71	323424	8.00	362206	10.57	337244	12.27
ZZZZZZ	65063	4.14	224164	5.19	146930	6.72	282926	8.00	341006	10.57	331397	12.27
ZZZZZZ	66895	4.14	224244	5.19	144374	6.71	269930	8.00	342328	10.57	370291	12.27
ZZZZZZ	76943	4.14	262613	5.19	167113	6.71	310107	8.00	356554	10.57	361585	12.27
ZZZZZZ	71557	4.14	242246	5.19	152362	6.72	285746	8.00	338012	10.57	350376	12.27
ZZZZZZ	62966	4.14	219082	5.19	145315	6.72	283055	8.00	361554	10.57	367425	12.27

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: MC34463
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSF3374-CC3361	**Injection Date:**	10/24/14
Lab File ID:	F77012.D	**Injection Time:**	08:26
Instrument ID:	GCMSF	**Method:**	SW846 8270D

Lab	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
Sample ID	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT

(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: MC34463
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSI3445-CC3427	**Injection Date:**	10/23/14
Lab File ID:	I92408.D	**Injection Time:**	14:32
Instrument ID:	GCMSI	**Method:**	SW846 8270D BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	279383	2.82	644600	3.84	373968	5.33	667028	6.57	610503	9.22	1064015	10.60
Upper Limit [a]	558766	3.32	1289200	4.34	747936	5.83	1334056	7.07	1221006	9.72	2128030	11.10
Lower Limit [b]	139692	2.32	322300	3.34	186984	4.83	333514	6.07	305252	8.72	532008	10.10

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
ZZZZZZ	345815	2.82	778436	3.84	446372	5.33	791302	6.56	742193	9.22	1298288	10.60
ZZZZZZ	363516	2.82	824379	3.84	475419	5.33	850212	6.56	788775	9.22	1405118	10.60
ZZZZZZ	370348	2.82	823010	3.84	479455	5.33	862229	6.56	793486	9.22	1402664	10.60
ZZZZZZ	357647	2.82	795387	3.84	459926	5.33	826344	6.56	768946	9.22	1354885	10.60
ZZZZZZ	372445	2.83	842079	3.84	471336	5.33	838194	6.56	783493	9.22	1378762	10.60
ZZZZZZ	296387	2.82	650642	3.84	371890	5.34	674648	6.58	655222	9.22	1133480	10.60
ZZZZZZ	286316	2.82	642932	3.84	369235	5.33	680381	6.57	645629	9.22	1132926	10.60
ZZZZZZ	380327	2.82	844664	3.84	512481	5.33	878012	6.57	833620	9.23	1471264	10.61
ZZZZZZ	407752	2.82	943127	3.84	620571	5.33	933287	6.57	878512	9.23	1553982	10.61
ZZZZZZ	470653	2.82	1052429	3.84	601258	5.33	1054930	6.57	993558	9.23	1726372	10.61
ZZZZZZ	423414	2.82	938563	3.84	543234	5.33	971918	6.57	909071	9.22	1607591	10.61
ZZZZZZ	312339	2.82	723215	3.84	435193	5.33	735569	6.57	682459	9.22	1204095	10.60
OP40300-MB	319266	2.82	732475	3.84	425924	5.32	765587	6.56	721184	9.22	1257918	10.60
OP40300-BS	319395	2.82	750006	3.84	431900	5.33	775143	6.57	712113	9.23	1238057	10.61
OP40300-MS	325093	2.82	760237	3.84	435680	5.33	763554	6.57	691922	9.23	1204406	10.61
OP40300-MSD	317579	2.82	748522	3.84	430819	5.33	772804	6.57	708264	9.23	1228215	10.61
MC34100-12	368639	2.82	831476	3.84	486004	5.33	880745	6.56	830938	9.22	1478734	10.60
ZZZZZZ	284575	2.82	653275	3.84	378182	5.32	674780	6.56	635914	9.22	1132721	10.60
ZZZZZZ	294345	2.82	664385	3.84	387325	5.32	692835	6.56	645517	9.22	1141928	10.60
ZZZZZZ	294767	2.82	670247	3.84	388334	5.32	688858	6.56	653406	9.22	1166095	10.60
ZZZZZZ	302286	2.82	693596	3.84	398757	5.33	705186	6.56	663393	9.22	1166299	10.60
ZZZZZZ	306751	2.82	705808	3.84	400579	5.33	713274	6.56	667256	9.22	1176538	10.60
ZZZZZZ	284513	2.82	657137	3.84	379123	5.32	664806	6.56	637403	9.22	1129211	10.60
MC34463-3	310570	2.82	708592	3.84	409978	5.32	719365	6.56	683768	9.22	1211366	10.60
MC34463-4	363327	2.82	850361	3.84	479960	5.33	843509	6.57	785140	9.23	1338912	10.61
MC34463-5	321941	2.83	746862	3.84	424023	5.33	761960	6.56	682489	9.22	1179102	10.60
MC34463-6	326469	2.82	754969	3.84	432339	5.33	764262	6.56	685648	9.22	1180768	10.60
ZZZZZZ	326914	2.82	745052	3.84	428650	5.33	769185	6.57	715706	9.23	1235310	10.61

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

Semivolatile Internal Standard Area Summary

Job Number: MC34463
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSI3445-CC3427	**Injection Date:**	10/23/14
Lab File ID:	I92408.D	**Injection Time:**	14:32
Instrument ID:	GCMSI	**Method:**	SW846 8270D BY SIM

Lab	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
Sample ID	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Surrogate Recovery Summary

Job Number: MC34463
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Method: SW846 8270D **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
MC34463-3	F77018.D	54	39	91	83	75	93
MC34463-4	F77019.D	49	35	89	82	73	87
MC34463-5	F77020.D	55	40	96	85	76	97
MC34463-6	F77021.D	45	34	91	75	73	91
OP40299-BS	F77014.D	49	33	91	78	76	90
OP40299-MB	F77013.D	51	35	92	81	78	96
OP40299-MS	F77015.D	47	33	90	79	75	89
OP40299-MSD	F77016.D	43	28	93	73	71	90

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorophenol	15-110%
S2 = Phenol-d5	15-110%
S3 = 2,4,6-Tribromophenol	15-110%
S4 = Nitrobenzene-d5	30-130%
S5 = 2-Fluorobiphenyl	30-130%
S6 = Terphenyl-d14	30-130%

Semivolatile Surrogate Recovery Summary

Job Number: MC34463
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Method: SW846 8270D BY SIM **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
MC34463-3	I92434.D	87	77	82
MC34463-4	I92435.D	81	76	80
MC34463-5	I92436.D	86	79	85
MC34463-6	I92437.D	77	75	83
OP40300-BS	I92424.D	85	80	81
OP40300-MB	I92423.D	87	81	83
OP40300-MS	I92425.D	84	79	82
OP40300-MSD	I92426.D	78	75	81

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	30-130%
S2 = 2-Fluorobiphenyl	30-130%
S3 = Terphenyl-d14	30-130%

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries

Method Blank Summary

Job Number: MC34463
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40305-MB	BB60044.D	1	10/23/14	NK	10/21/14	OP40305	GBB3339

The QC reported here applies to the following samples: **Method:** SW846 8011

MC34463-2, MC34463-3, MC34463-4, MC34463-5, MC34463-6

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.015	0.0061	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.015	0.0061	ug/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	Bromofluorobenzene (S)	69%	36-173%
460-00-4	Bromofluorobenzene (S)	71%	36-173%

Blank Spike Summary

Job Number: MC34463
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40305-BS	BB60045.D	1	10/23/14	NK	10/21/14	OP40305	GBB3339

The QC reported here applies to the following samples: **Method:** SW846 8011

MC34463-2, MC34463-3, MC34463-4, MC34463-5, MC34463-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
96-12-8	1,2-Dibromo-3-chloropropane	0.071	0.075	106	60-140
106-93-4	1,2-Dibromoethane	0.071	0.076	107	60-140

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	Bromofluorobenzene (S)	75%	36-173%
460-00-4	Bromofluorobenzene (S)	77%	36-173%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34463
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40305-MS	BB60046.D	1	10/23/14	NK	10/21/14	OP40305	GBB3339
OP40305-MSD	BB60047.D	1	10/23/14	NK	10/21/14	OP40305	GBB3339
MC34100-13	BB60048.D	1	10/23/14	NK	10/21/14	OP40305	GBB3339

The QC reported here applies to the following samples: **Method:** SW846 8011

MC34463-2, MC34463-3, MC34463-4, MC34463-5, MC34463-6

CAS No.	Compound	MC34100-13 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
96-12-8	1,2-Dibromo-3-chloropropane	ND		0.071	0.082	115	0.071	0.075	106	9	64-141/29
106-93-4	1,2-Dibromoethane	ND		0.071	0.075	106	0.071	0.077	108	3	63-163/27

CAS No.	Surrogate Recoveries	MS	MSD	MC34100-13	Limits
460-00-4	Bromofluorobenzene (S)	83%	73%	71%	36-173%
460-00-4	Bromofluorobenzene (S)	87%	74%	74%	36-173%

* = Outside of Control Limits.

Volatile Surrogate Recovery Summary

Job Number: MC34463
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Method: SW846 8011 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]
MC34463-2	BB60059.D	66	73
MC34463-3	BB60060.D	67	97
MC34463-4	BB60061.D	70	77
MC34463-5	BB60062.D	67	83
MC34463-6	BB60063.D	69	86
OP40305-BS	BB60045.D	75	77
OP40305-MB	BB60044.D	69	71
OP40305-MS	BB60046.D	83	87
OP40305-MSD	BB60047.D	73	74

Surrogate Compounds	Recovery Limits
S1 = Bromofluorobenzene (S)	36-173%

(a) Recovery from GC signal #2
(b) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: MC34463
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	GBB3339-ICC3339	**Injection Date:**	10/23/14
Lab File ID:	BB60040.D	**Injection Time:**	14:08
Instrument ID:	GCBB	**Method:**	SW846 8011

	S1 [a] RT	S1 [b] RT
Check Std	3.32	3.33

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
OP40305-MB	BB60044.D	10/23/14	15:39	3.32	3.33
OP40306-MB	BB60044A.D	10/23/14	15:39	3.32	3.33
OP40306-BS	BB60045A.D	10/23/14	15:57	3.32	3.33
OP40305-BS	BB60045.D	10/23/14	15:57	3.32	3.33
OP40305-MS	BB60046.D	10/23/14	16:15	3.33	3.33
OP40305-MSD	BB60047.D	10/23/14	16:33	3.32	3.33
MC34100-13	BB60048.D	10/23/14	16:51	3.32	3.33
ZZZZZZ	BB60049.D	10/23/14	17:09	3.32	3.33
ZZZZZZ	BB60050.D	10/23/14	17:27	3.32	3.33
ZZZZZZ	BB60051.D	10/23/14	17:45	3.33	3.33
ZZZZZZ	BB60052.D	10/23/14	18:03	3.32	3.33
ZZZZZZ	BB60053.D	10/23/14	18:21	3.33	3.33

Surrogate Compounds

S1 = Bromofluorobenzene (S)

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: MC34463
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	GBB3339-CC3339	**Injection Date:**	10/23/14
Lab File ID:	BB60054.D	**Injection Time:**	18:38
Instrument ID:	GCBB	**Method:**	SW846 8011

	S1 [a] RT	S1 [b] RT
Check Std	3.32	3.33

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
ZZZZZZ	BB60055.D	10/23/14	18:56	3.32	3.33
ZZZZZZ	BB60056.D	10/23/14	19:14	3.32	3.33
ZZZZZZ	BB60057.D	10/23/14	19:32	3.32	3.33
ZZZZZZ	BB60058.D	10/23/14	19:50	3.32	3.33
MC34463-2	BB60059.D	10/23/14	20:08	3.32	3.33
MC34463-3	BB60060.D	10/23/14	20:26	3.32	3.33
MC34463-4	BB60061.D	10/23/14	20:44	3.33	3.33
MC34463-5	BB60062.D	10/23/14	21:02	3.33	3.34
MC34463-6	BB60063.D	10/23/14	21:19	3.33	3.33
ZZZZZZ	BB60064.D	10/23/14	21:37	3.32	3.33

Surrogate Compounds

S1 = Bromofluorobenzene (S)

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

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Automated Report

Technical Report for

Shell Oil

URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana,

SGS Accutest Job Number: MC34553

Sampling Date: 10/21/14



Report to:

AECOM, INC.

Melissa.mansker@aecom.com

ATTN: Melissa Mansker

Total number of pages in report: 128

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

H. (Brad) Madadian
Lab Director

Client Service contact: Jeremy Vienneau 508-481-6200

Certifications: MA (M-MA136,SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) FL (E87579) NY (11791) NJ (MA926) PA (6801121) ND (R-188) CO (MA00136) MN (11546AA) NC (653) IL (002337) WI (399080220) DoD ELAP (L-A-B L2235)

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Test results relate only to samples analyzed.

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Unauthorized modification of this report is strictly prohibited.

SGS ACCUTEST

October 8, 2016

Elizabeth Kunkel
AECOM, INC.
1001 Highlands Plaza Drive West Suite 300
St. Louis, MO 63110
Elizabeth.Kunkel@URS.com; bob.billman@urs.com;
Melissa.Mansker@urs.com

RE: SGS Accutest Job # MC34553

Dear Elizabeth Kunkel,

As you are aware, SGS Accutest Inc. - Marlborough has been conducting an extensive review of data associated with some historical Gas Chromatography-Mass Spectroscopy volatiles analyses. As a result of this review it was determined that some revisions of the original test report for this job were needed. These corrections have been incorporated into the revised report.

Please be assured that corrective actions have been put in place to address this matter and prevent a recurrence.

We apologize for any inconvenience that this issue may have caused. Please don't hesitate to contact us if we can be of further assistance.

Sincerely,

H. (Brad) Madadian

Regional Laboratory Director
SGS Accutest Inc. - Marlborough

SGS ACCUTEST IS PART OF SGS, THE WORLD'S LEADING INSPECTION, VERIFICATION, TESTING AND CERTIFICATION COMPANY.

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Sample Summary

Shell Oil

Job No: MC34553

URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
MC34553-1	10/21/14	11:25	LRCW	10/23/14	AQ	Ground Water	MW28-ROX-102114
MC34553-2	10/21/14	13:25	LRCW	10/23/14	AQ	Ground Water	MW27-ROX-102114
MC34553-3	10/21/14	14:45	LRCW	10/23/14	AQ	Ground Water	MW26-ROX-102114
MC34553-4	10/21/14	16:00	LRCW	10/23/14	AQ	Ground Water	MW25-ROX-102114
MC34553-5	10/21/14	00:00	LRCW	10/23/14	AQ	Trip Blank Water	TB-ROX-102114-HCL
MC34553-6	10/21/14	00:00	LRCW	10/23/14	AQ	Trip Blank Water	TB-ROX-102114-ST

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Shell Oil **Job No** MC34553

Site: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Centra **Report Date** 10/8/2016 4:24:48 PM

4 Sample(s), 2 Trip Blank(s) were collected on 10/21/2014 and were received at SGS Accutest New England on 10/23/2014 properly preserved, at 1.7 Deg. C and intact. These Samples received a job number of MC34553. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report. 1-Chlorohexane, Benzenethiol, Dibenz(a,h)acridine, Indene, Quinoline were searched in the library search and reported only if detections were found.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260C

Matrix: AQ **Batch ID:** MSN3393

- All samples were analyzed within the recommended method holding time.
- Sample(s) MC34589-1MS, MC34589-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Blank Spike Recovery(s) for 2-Butanone (MEK), Carbon disulfide are outside control limits. Blank Spike meets program technical requirements.
- MC34589-1MS/MSD Recovery(s) for 1,1,2,2-Tetrachloroethane, 1,1-Dichloroethene, Acetone, Carbon disulfide, Chloroethane are outside control limits. Outside control limits due to possible matrix interference. Refer to Blank Spike.
- Continuing Calibration MSN3393-CC3345 for Chloromethane, 1,2-Dichloroethane exceed 20% Difference (biased low). Sample result may be biased low.
- Continuing Calibration MSN3393-CC3345 for chloroethane, 1,1-dichloroethene, carbon disulfide, 2-butanone, 1,1,2,2-Tetrachloroethane exceed 20% Difference (biased high). Associated samples are non-detect for this compound.

Extractables by GCMS By Method SW846 8270D

Matrix: AQ **Batch ID:** OP40382

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) MC34200-6MS, MC34200-6MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Initial calibration verification MSF3361-ICV3361 for 4-Chloroaniline exceeds 30% Difference. 4-Chloroaniline is within criteria in continuing calibration check MSF3381-CC3361.
- OP40382-BS/MS/MSD for Benzoic Acid are outside control limits. Blank Spike meets program technical requirements.

Extractables by GCMS By Method SW846 8270D BY SIM

Matrix: AQ **Batch ID:** OP40383

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) MC34200-7MS, MC34200-7MSD were used as the QC samples indicated.

Volatiles by GC By Method SW846 8011

Matrix: AQ **Batch ID:** OP40406

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) MC34200-11MS, MC34200-11MSD were used as the QC samples indicated.
- OP40406-MS/MSD Recovery(s) for 1,2-Dibromo-3-chloropropane are outside control limits. Outside control limits due to possible matrix interference.

SGS Accutest New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety.The Laboratory Director for SGS Accutest New England or assignee as verified by the signature on the cover page has authorized the release of this report(MC34553).

Summary of Hits

Job Number: MC34553
Account: Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL
Collected: 10/21/14

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
MC34553-1	MW28-ROX-102114					
Benzene		8.1	0.50	0.25	ug/l	SW846 8260C
sec-Butylbenzene		0.83 J	5.0	0.42	ug/l	SW846 8260C
Isopropylbenzene		0.75 J	5.0	0.35	ug/l	SW846 8260C
p-Isopropyltoluene		0.49 J	5.0	0.37	ug/l	SW846 8260C
Toluene		1.1	1.0	0.22	ug/l	SW846 8260C
1,2,4-Trimethylbenzene		3.6 J	5.0	0.30	ug/l	SW846 8260C
1,3,5-Trimethylbenzene		0.59 J	5.0	0.18	ug/l	SW846 8260C
m,p-Xylene		3.6	1.0	0.38	ug/l	SW846 8260C
o-Xylene		5.1	1.0	0.30	ug/l	SW846 8260C
Xylene (total)		8.7	1.0	0.30	ug/l	SW846 8260C
Di-n-butyl phthalate		0.26 J	5.3	0.18	ug/l	SW846 8270D
1-Methylnaphthalene		0.75 J	2.1	0.53	ug/l	SW846 8270D BY SIM
Phenanthrene		0.017 J	0.053	0.013	ug/l	SW846 8270D BY SIM
MC34553-2	MW27-ROX-102114					
Benzene		0.33 J	0.50	0.25	ug/l	SW846 8260C
MC34553-3	MW26-ROX-102114					
Methyl Tert Butyl Ether		1.9	1.0	0.22	ug/l	SW846 8260C
MC34553-4	MW25-ROX-102114					
Benzene		501000	1000	500	ug/l	SW846 8260C
Toluene		2650	2000	440	ug/l	SW846 8260C
Xylene (total)		753 J	2000	610	ug/l	SW846 8260C
2,4-Dimethylphenol		2.5 J	11	0.62	ug/l	SW846 8270D
2-Methylphenol		1.1 J	11	0.25	ug/l	SW846 8270D
3&4-Methylphenol		2.8 J	11	0.52	ug/l	SW846 8270D
Phenol		173	5.6	0.34	ug/l	SW846 8270D
1-Methylnaphthalene		0.93 J	2.2	0.56	ug/l	SW846 8270D BY SIM
2-Methylnaphthalene		0.57 J	2.2	0.56	ug/l	SW846 8270D BY SIM
Phenanthrene		0.033 J	0.056	0.014	ug/l	SW846 8270D BY SIM
MC34553-5	TB-ROX-102114-HCL					
No hits reported in this sample.						
MC34553-6	TB-ROX-102114-ST					
No hits reported in this sample.						

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW28-ROX-102114		
Lab Sample ID:	MC34553-1	**Date Sampled:**	10/21/14
Matrix:	AQ - Ground Water	**Date Received:**	10/23/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N91833.D	1	11/04/14	JB	n/a	n/a	MSN3393
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	8.1	0.50	0.25	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.47	ug/l	
75-25-2	Bromoform	ND	1.0	0.30	ug/l	
74-83-9	Bromomethane	ND	2.0	0.77	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	0.83	5.0	0.42	ug/l	J
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.23	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.25	ug/l	
75-00-3	Chloroethane	ND	2.0	0.37	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.31	ug/l	
74-87-3	Chloromethane [a]	ND	2.0	0.59	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.24	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.16	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.31	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane [a]	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.29	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.44	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.47	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW28-ROX-102114		
Lab Sample ID:	MC34553-1	**Date Sampled:**	10/21/14
Matrix:	AQ - Ground Water	**Date Received:**	10/23/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	0.45	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.38	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	0.75	5.0	0.35	ug/l	J
99-87-6	p-Isopropyltoluene	0.49	5.0	0.37	ug/l	J
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.22	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.39	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.29	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.30	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.29	ug/l	
108-88-3	Toluene	1.1	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.19	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.42	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.30	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.40	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	3.6	5.0	0.30	ug/l	J
108-67-8	1,3,5-Trimethylbenzene	0.59	5.0	0.18	ug/l	J
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.45	ug/l	
	m,p-Xylene	3.6	1.0	0.38	ug/l	
95-47-6	o-Xylene	5.1	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	8.7	1.0	0.30	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW28-ROX-102114		
Lab Sample ID:	MC34553-1	**Date Sampled:**	10/21/14
Matrix:	AQ - Ground Water	**Date Received:**	10/23/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		70-130%
2037-26-5	Toluene-D8	101%		70-130%
460-00-4	4-Bromofluorobenzene	105%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Continuing Calibration outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW28-ROX-102114		
Lab Sample ID:	MC34553-1	**Date Sampled:**	10/21/14
Matrix:	AQ - Ground Water	**Date Received:**	10/23/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R40741.D	1	10/31/14	KD	10/26/14	OP40382	MSR1499
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	11	2.6	ug/l	
95-57-8	2-Chlorophenol	ND	5.3	0.33	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	11	0.87	ug/l	
120-83-2	2,4-Dichlorophenol	ND	11	0.42	ug/l	
105-67-9	2,4-Dimethylphenol	ND	11	0.59	ug/l	
51-28-5	2,4-Dinitrophenol	ND	21	2.6	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	2.0	ug/l	
95-48-7	2-Methylphenol	ND	11	0.24	ug/l	
	3&4-Methylphenol	ND	11	0.49	ug/l	
88-75-5	2-Nitrophenol	ND	11	3.0	ug/l	
100-02-7	4-Nitrophenol	ND	21	0.56	ug/l	
87-86-5	Pentachlorophenol	ND	11	1.2	ug/l	
108-95-2	Phenol	ND	5.3	0.32	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	11	0.39	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	11	0.18	ug/l	
62-53-3	Aniline	ND	11	0.67	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.3	0.50	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.3	0.56	ug/l	
100-51-6	Benzyl Alcohol	ND	11	2.4	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.3	0.33	ug/l	
106-47-8	4-Chloroaniline	ND	11	0.59	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.3	0.30	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.3	0.37	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.3	0.35	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.3	0.26	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.3	0.25	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	11	0.48	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	11	0.32	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.3	0.28	ug/l	
132-64-9	Dibenzofuran	ND	2.1	0.27	ug/l	
84-74-2	Di-n-butyl phthalate	0.26	5.3	0.18	ug/l	J
117-84-0	Di-n-octyl phthalate	ND	5.3	0.30	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW28-ROX-102114		
Lab Sample ID:	MC34553-1	**Date Sampled:**	10/21/14
Matrix:	AQ - Ground Water	**Date Received:**	10/23/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	5.3	0.21	ug/l	
131-11-3	Dimethyl phthalate	ND	5.3	0.36	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.1	0.35	ug/l	
118-74-1	Hexachlorobenzene	ND	5.3	0.30	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	11	1.4	ug/l	
67-72-1	Hexachloroethane	ND	5.3	0.32	ug/l	
78-59-1	Isophorone	ND	5.3	0.47	ug/l	
88-74-4	2-Nitroaniline	ND	11	0.42	ug/l	
99-09-2	3-Nitroaniline	ND	11	1.4	ug/l	
100-01-6	4-Nitroaniline	ND	11	2.3	ug/l	
98-95-3	Nitrobenzene	ND	5.3	0.41	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.3	1.1	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.3	0.42	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.3	0.20	ug/l	
110-86-1	Pyridine	ND	11	0.54	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	49%		15-110%
4165-62-2	Phenol-d5	33%		15-110%
118-79-6	2,4,6-Tribromophenol	105%		15-110%
4165-60-0	Nitrobenzene-d5	73%		30-130%
321-60-8	2-Fluorobiphenyl	80%		30-130%
1718-51-0	Terphenyl-d14	98%		30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW28-ROX-102114		
Lab Sample ID:	MC34553-1	**Date Sampled:**	10/21/14
Matrix:	AQ - Ground Water	**Date Received:**	10/23/14
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I92613.D	1	10/30/14	MR	10/26/14	OP40383	MSI3452
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.11	0.073	ug/l	
208-96-8	Acenaphthylene	ND	0.11	0.052	ug/l	
120-12-7	Anthracene	ND	0.11	0.097	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.053	0.021	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.11	0.030	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.053	0.033	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.11	0.028	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.11	0.041	ug/l	
218-01-9	Chrysene	ND	0.11	0.025	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.11	0.034	ug/l	
206-44-0	Fluoranthene	ND	0.11	0.043	ug/l	
86-73-7	Fluorene	ND	0.11	0.10	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.11	0.032	ug/l	
90-12-0	1-Methylnaphthalene	0.75	2.1	0.53	ug/l	J
91-57-6	2-Methylnaphthalene	ND	2.1	0.53	ug/l	
85-01-8	Phenanthrene	0.017	0.053	0.013	ug/l	J
129-00-0	Pyrene	ND	0.11	0.040	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	89%		30-130%
321-60-8	2-Fluorobiphenyl	77%		30-130%
1718-51-0	Terphenyl-d14	84%		30-130%

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Report of Analysis

Client Sample ID:	MW28-ROX-102114		
Lab Sample ID:	MC34553-1	**Date Sampled:**	10/21/14
Matrix:	AQ - Ground Water	**Date Received:**	10/23/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB60085.D	1	10/28/14	NK	10/27/14	OP40406	GBB3340
Run #2							

	Initial Volume	Final Volume
Run #1	36.9 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.014	0.0058	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.014	0.0058	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	88%		36-173%
460-00-4	Bromofluorobenzene (S)	112%		36-173%

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW27-ROX-102114		
Lab Sample ID:	MC34553-2	**Date Sampled:**	10/21/14
Matrix:	AQ - Ground Water	**Date Received:**	10/23/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N91834.D	1	11/04/14	JB	n/a	n/a	MSN3393
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	0.33	0.50	0.25	ug/l	J
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.47	ug/l	
75-25-2	Bromoform	ND	1.0	0.30	ug/l	
74-83-9	Bromomethane	ND	2.0	0.77	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.23	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.25	ug/l	
75-00-3	Chloroethane	ND	2.0	0.37	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.31	ug/l	
74-87-3	Chloromethane [a]	ND	2.0	0.59	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.24	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.16	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.31	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane [a]	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.29	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.44	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.47	ug/l	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW27-ROX-102114		
Lab Sample ID:	MC34553-2	**Date Sampled:**	10/21/14
Matrix:	AQ - Ground Water	**Date Received:**	10/23/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	0.45	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.38	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.22	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.39	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.29	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.30	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.29	ug/l	
108-88-3	Toluene	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.19	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.42	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.30	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.40	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.30	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.18	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.45	ug/l	
	m,p-Xylene	ND	1.0	0.38	ug/l	
95-47-6	o-Xylene	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.30	ug/l	

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E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW27-ROX-102114		
Lab Sample ID:	MC34553-2	**Date Sampled:**	10/21/14
Matrix:	AQ - Ground Water	**Date Received:**	10/23/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		70-130%
2037-26-5	Toluene-D8	102%		70-130%
460-00-4	4-Bromofluorobenzene	107%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Continuing Calibration outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW27-ROX-102114		
Lab Sample ID:	MC34553-2	**Date Sampled:**	10/21/14
Matrix:	AQ - Ground Water	**Date Received:**	10/23/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F77206.D	1	10/31/14	MR	10/26/14	OP40382	MSF3381
Run #2							

	Initial Volume	Final Volume
Run #1	940 ml	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	11	2.7	ug/l	
95-57-8	2-Chlorophenol	ND	5.3	0.33	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	11	0.88	ug/l	
120-83-2	2,4-Dichlorophenol	ND	11	0.42	ug/l	
105-67-9	2,4-Dimethylphenol	ND	11	0.60	ug/l	
51-28-5	2,4-Dinitrophenol	ND	21	2.7	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	2.1	ug/l	
95-48-7	2-Methylphenol	ND	11	0.24	ug/l	
	3&4-Methylphenol	ND	11	0.50	ug/l	
88-75-5	2-Nitrophenol	ND	11	3.1	ug/l	
100-02-7	4-Nitrophenol	ND	21	0.57	ug/l	
87-86-5	Pentachlorophenol	ND	11	1.2	ug/l	
108-95-2	Phenol	ND	5.3	0.32	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	11	0.39	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	11	0.19	ug/l	
62-53-3	Aniline	ND	11	0.68	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.3	0.50	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.3	0.56	ug/l	
100-51-6	Benzyl Alcohol	ND	11	2.4	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.3	0.33	ug/l	
106-47-8	4-Chloroaniline	ND	11	0.59	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.3	0.30	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.3	0.37	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.3	0.35	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.3	0.27	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.3	0.26	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	11	0.49	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	11	0.32	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.3	0.28	ug/l	
132-64-9	Dibenzofuran	ND	2.1	0.28	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.3	0.18	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.3	0.30	ug/l	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW27-ROX-102114		
Lab Sample ID:	MC34553-2	**Date Sampled:**	10/21/14
Matrix:	AQ - Ground Water	**Date Received:**	10/23/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	5.3	0.21	ug/l	
131-11-3	Dimethyl phthalate	ND	5.3	0.36	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.1	0.35	ug/l	
118-74-1	Hexachlorobenzene	ND	5.3	0.31	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	11	1.4	ug/l	
67-72-1	Hexachloroethane	ND	5.3	0.32	ug/l	
78-59-1	Isophorone	ND	5.3	0.48	ug/l	
88-74-4	2-Nitroaniline	ND	11	0.42	ug/l	
99-09-2	3-Nitroaniline	ND	11	1.5	ug/l	
100-01-6	4-Nitroaniline	ND	11	2.3	ug/l	
98-95-3	Nitrobenzene	ND	5.3	0.42	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.3	1.1	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.3	0.43	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.3	0.21	ug/l	
110-86-1	Pyridine	ND	11	0.55	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	43%		15-110%
4165-62-2	Phenol-d5	29%		15-110%
118-79-6	2,4,6-Tribromophenol	86%		15-110%
4165-60-0	Nitrobenzene-d5	68%		30-130%
321-60-8	2-Fluorobiphenyl	59%		30-130%
1718-51-0	Terphenyl-d14	93%		30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW27-ROX-102114		
Lab Sample ID:	MC34553-2	**Date Sampled:**	10/21/14
Matrix:	AQ - Ground Water	**Date Received:**	10/23/14
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I92614.D	1	10/30/14	MR	10/26/14	OP40383	MSI3452
Run #2							

	Initial Volume	Final Volume
Run #1	940 ml	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.11	0.073	ug/l	
208-96-8	Acenaphthylene	ND	0.11	0.053	ug/l	
120-12-7	Anthracene	ND	0.11	0.098	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.053	0.021	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.11	0.031	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.053	0.034	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.11	0.029	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.11	0.041	ug/l	
218-01-9	Chrysene	ND	0.11	0.025	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.11	0.034	ug/l	
206-44-0	Fluoranthene	ND	0.11	0.043	ug/l	
86-73-7	Fluorene	ND	0.11	0.11	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.11	0.033	ug/l	
90-12-0	1-Methylnaphthalene	ND	2.1	0.53	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.1	0.53	ug/l	
85-01-8	Phenanthrene	ND	0.053	0.013	ug/l	
129-00-0	Pyrene	ND	0.11	0.041	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	79%		30-130%
321-60-8	2-Fluorobiphenyl	67%		30-130%
1718-51-0	Terphenyl-d14	81%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW27-ROX-102114		
Lab Sample ID:	MC34553-2	**Date Sampled:**	10/21/14
Matrix:	AQ - Ground Water	**Date Received:**	10/23/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB60086.D	1	10/28/14	NK	10/27/14	OP40406	GBB3340
Run #2							

	Initial Volume	Final Volume
Run #1	37.0 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.014	0.0058	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.014	0.0058	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	109%		36-173%
460-00-4	Bromofluorobenzene (S)	112%		36-173%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW26-ROX-102114		
Lab Sample ID:	MC34553-3	**Date Sampled:**	10/21/14
Matrix:	AQ - Ground Water	**Date Received:**	10/23/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N91835.D	1	11/04/14	JB	n/a	n/a	MSN3393
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	ND	0.50	0.25	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.47	ug/l	
75-25-2	Bromoform	ND	1.0	0.30	ug/l	
74-83-9	Bromomethane	ND	2.0	0.77	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.23	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.25	ug/l	
75-00-3	Chloroethane	ND	2.0	0.37	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.31	ug/l	
74-87-3	Chloromethane [a]	ND	2.0	0.59	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.24	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.16	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.31	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane [a]	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.29	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.44	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.47	ug/l	

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J = Indicates an estimated value
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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW26-ROX-102114		
Lab Sample ID:	MC34553-3	**Date Sampled:**	10/21/14
Matrix:	AQ - Ground Water	**Date Received:**	10/23/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	0.45	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.38	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	1.9	1.0	0.22	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.39	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.29	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.30	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.29	ug/l	
108-88-3	Toluene	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.19	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.42	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.30	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.40	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.30	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.18	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.45	ug/l	
	m,p-Xylene	ND	1.0	0.38	ug/l	
95-47-6	o-Xylene	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.30	ug/l	

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW26-ROX-102114		
Lab Sample ID:	MC34553-3	**Date Sampled:**	10/21/14
Matrix:	AQ - Ground Water	**Date Received:**	10/23/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		70-130%
2037-26-5	Toluene-D8	101%		70-130%
460-00-4	4-Bromofluorobenzene	105%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Continuing Calibration outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW26-ROX-102114		
Lab Sample ID:	MC34553-3	**Date Sampled:**	10/21/14
Matrix:	AQ - Ground Water	**Date Received:**	10/23/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F77207.D	1	10/31/14	MR	10/26/14	OP40382	MSF3381
Run #2							

	Initial Volume	Final Volume
Run #1	940 ml	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	11	2.7	ug/l	
95-57-8	2-Chlorophenol	ND	5.3	0.33	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	11	0.88	ug/l	
120-83-2	2,4-Dichlorophenol	ND	11	0.42	ug/l	
105-67-9	2,4-Dimethylphenol	ND	11	0.60	ug/l	
51-28-5	2,4-Dinitrophenol	ND	21	2.7	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	2.1	ug/l	
95-48-7	2-Methylphenol	ND	11	0.24	ug/l	
	3&4-Methylphenol	ND	11	0.50	ug/l	
88-75-5	2-Nitrophenol	ND	11	3.1	ug/l	
100-02-7	4-Nitrophenol	ND	21	0.57	ug/l	
87-86-5	Pentachlorophenol	ND	11	1.2	ug/l	
108-95-2	Phenol	ND	5.3	0.32	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	11	0.39	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	11	0.19	ug/l	
62-53-3	Aniline	ND	11	0.68	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.3	0.50	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.3	0.56	ug/l	
100-51-6	Benzyl Alcohol	ND	11	2.4	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.3	0.33	ug/l	
106-47-8	4-Chloroaniline	ND	11	0.59	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.3	0.30	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.3	0.37	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.3	0.35	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.3	0.27	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.3	0.26	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	11	0.49	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	11	0.32	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.3	0.28	ug/l	
132-64-9	Dibenzofuran	ND	2.1	0.28	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.3	0.18	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.3	0.30	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW26-ROX-102114		
Lab Sample ID:	MC34553-3	**Date Sampled:**	10/21/14
Matrix:	AQ - Ground Water	**Date Received:**	10/23/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	5.3	0.21	ug/l	
131-11-3	Dimethyl phthalate	ND	5.3	0.36	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.1	0.35	ug/l	
118-74-1	Hexachlorobenzene	ND	5.3	0.31	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	11	1.4	ug/l	
67-72-1	Hexachloroethane	ND	5.3	0.32	ug/l	
78-59-1	Isophorone	ND	5.3	0.48	ug/l	
88-74-4	2-Nitroaniline	ND	11	0.42	ug/l	
99-09-2	3-Nitroaniline	ND	11	1.5	ug/l	
100-01-6	4-Nitroaniline	ND	11	2.3	ug/l	
98-95-3	Nitrobenzene	ND	5.3	0.42	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.3	1.1	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.3	0.43	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.3	0.21	ug/l	
110-86-1	Pyridine	ND	11	0.55	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	33%		15-110%
4165-62-2	Phenol-d5	23%		15-110%
118-79-6	2,4,6-Tribromophenol	80%		15-110%
4165-60-0	Nitrobenzene-d5	57%		30-130%
321-60-8	2-Fluorobiphenyl	49%		30-130%
1718-51-0	Terphenyl-d14	85%		30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW26-ROX-102114		
Lab Sample ID:	MC34553-3	**Date Sampled:**	10/21/14
Matrix:	AQ - Ground Water	**Date Received:**	10/23/14
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I92615.D	1	10/30/14	MR	10/26/14	OP40383	MSI3452
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.11	0.073	ug/l	
208-96-8	Acenaphthylene	ND	0.11	0.052	ug/l	
120-12-7	Anthracene	ND	0.11	0.097	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.053	0.021	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.11	0.030	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.053	0.033	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.11	0.028	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.11	0.041	ug/l	
218-01-9	Chrysene	ND	0.11	0.025	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.11	0.034	ug/l	
206-44-0	Fluoranthene	ND	0.11	0.043	ug/l	
86-73-7	Fluorene	ND	0.11	0.10	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.11	0.032	ug/l	
90-12-0	1-Methylnaphthalene	ND	2.1	0.53	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.1	0.53	ug/l	
85-01-8	Phenanthrene	ND	0.053	0.013	ug/l	
129-00-0	Pyrene	ND	0.11	0.040	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	65%		30-130%
321-60-8	2-Fluorobiphenyl	56%		30-130%
1718-51-0	Terphenyl-d14	77%		30-130%

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW26-ROX-102114		
Lab Sample ID:	MC34553-3	**Date Sampled:**	10/21/14
Matrix:	AQ - Ground Water	**Date Received:**	10/23/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB60087.D	1	10/28/14	NK	10/27/14	OP40406	GBB3340
Run #2							

	Initial Volume	Final Volume
Run #1	36.2 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.015	0.0059	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.015	0.0059	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	110%		36-173%
460-00-4	Bromofluorobenzene (S)	110%		36-173%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW25-ROX-102114		
Lab Sample ID:	MC34553-4	**Date Sampled:**	10/21/14
Matrix:	AQ - Ground Water	**Date Received:**	10/23/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N91836.D	2000	11/04/14	JB	n/a	n/a	MSN3393
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	20000	5000	ug/l	
107-02-8	Acrolein	ND	50000	12000	ug/l	
107-13-1	Acrylonitrile	ND	10000	4200	ug/l	
71-43-2	Benzene	501000	1000	500	ug/l	
108-86-1	Bromobenzene	ND	10000	700	ug/l	
74-97-5	Bromochloromethane	ND	10000	830	ug/l	
75-27-4	Bromodichloromethane	ND	2000	940	ug/l	
75-25-2	Bromoform	ND	2000	610	ug/l	
74-83-9	Bromomethane	ND	4000	1500	ug/l	
78-93-3	2-Butanone (MEK)	ND	10000	5000	ug/l	
104-51-8	n-Butylbenzene	ND	10000	2200	ug/l	
135-98-8	sec-Butylbenzene	ND	10000	840	ug/l	
98-06-6	tert-Butylbenzene	ND	10000	780	ug/l	
75-15-0	Carbon disulfide	ND	10000	920	ug/l	
56-23-5	Carbon tetrachloride	ND	2000	460	ug/l	
108-90-7	Chlorobenzene	ND	2000	500	ug/l	
75-00-3	Chloroethane	ND	4000	740	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	10000	6600	ug/l	
67-66-3	Chloroform	ND	2000	620	ug/l	
74-87-3	Chloromethane [a]	ND	4000	1200	ug/l	
95-49-8	o-Chlorotoluene	ND	10000	760	ug/l	
106-43-4	p-Chlorotoluene	ND	10000	900	ug/l	
124-48-1	Dibromochloromethane	ND	2000	520	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	2000	480	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	2000	310	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	2000	620	ug/l	
75-71-8	Dichlorodifluoromethane	ND	4000	1400	ug/l	
75-34-3	1,1-Dichloroethane	ND	2000	390	ug/l	
107-06-2	1,2-Dichloroethane [a]	ND	2000	670	ug/l	
75-35-4	1,1-Dichloroethene	ND	2000	590	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	2000	880	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	2000	940	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW25-ROX-102114		
Lab Sample ID:	MC34553-4	**Date Sampled:**	10/21/14
Matrix:	AQ - Ground Water	**Date Received:**	10/23/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	4000	890	ug/l	
142-28-9	1,3-Dichloropropane	ND	10000	1800	ug/l	
594-20-7	2,2-Dichloropropane	ND	10000	2500	ug/l	
563-58-6	1,1-Dichloropropene	ND	10000	950	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1000	830	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1000	770	ug/l	
123-91-1	1,4-Dioxane	ND	50000	22000	ug/l	
97-63-2	Ethyl methacrylate	ND	10000	1000	ug/l	
100-41-4	Ethylbenzene	ND	2000	500	ug/l	
87-68-3	Hexachlorobutadiene	ND	10000	3300	ug/l	
591-78-6	2-Hexanone	ND	10000	3200	ug/l	
98-82-8	Isopropylbenzene	ND	10000	700	ug/l	
99-87-6	p-Isopropyltoluene	ND	10000	750	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	2000	430	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	10000	2000	ug/l	
74-95-3	Methylene bromide	ND	10000	1000	ug/l	
75-09-2	Methylene chloride	ND	4000	780	ug/l	
91-20-3	Naphthalene	ND	10000	1400	ug/l	
103-65-1	n-Propylbenzene	ND	10000	980	ug/l	
100-42-5	Styrene	ND	10000	590	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	2000	870	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1000	590	ug/l	
127-18-4	Tetrachloroethene	ND	2000	580	ug/l	
108-88-3	Toluene	2650	2000	440	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	10000	1400	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	10000	370	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	2000	840	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	2000	590	ug/l	
79-01-6	Trichloroethene	ND	2000	800	ug/l	
75-69-4	Trichlorofluoromethane	ND	2000	1100	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10000	1600	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10000	600	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10000	360	ug/l	
108-05-4	Vinyl Acetate	ND	10000	1400	ug/l	
75-01-4	Vinyl chloride	ND	2000	890	ug/l	
	m,p-Xylene	ND	2000	770	ug/l	
95-47-6	o-Xylene	ND	2000	610	ug/l	
1330-20-7	Xylene (total)	753	2000	610	ug/l	J

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW25-ROX-102114		
Lab Sample ID:	MC34553-4	**Date Sampled:**	10/21/14
Matrix:	AQ - Ground Water	**Date Received:**	10/23/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		70-130%
2037-26-5	Toluene-D8	102%		70-130%
460-00-4	4-Bromofluorobenzene	108%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Continuing Calibration outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
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E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW25-ROX-102114		
Lab Sample ID:	MC34553-4	**Date Sampled:**	10/21/14
Matrix:	AQ - Ground Water	**Date Received:**	10/23/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F77208.D	1	10/31/14	MR	10/26/14	OP40382	MSF3381
Run #2							

	Initial Volume	Final Volume
Run #1	900 ml	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	11	2.8	ug/l	
95-57-8	2-Chlorophenol	ND	5.6	0.34	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	11	0.92	ug/l	
120-83-2	2,4-Dichlorophenol	ND	11	0.44	ug/l	
105-67-9	2,4-Dimethylphenol	2.5	11	0.62	ug/l	J
51-28-5	2,4-Dinitrophenol	ND	22	2.8	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	2.1	ug/l	
95-48-7	2-Methylphenol	1.1	11	0.25	ug/l	J
	3&4-Methylphenol	2.8	11	0.52	ug/l	J
88-75-5	2-Nitrophenol	ND	11	3.2	ug/l	
100-02-7	4-Nitrophenol	ND	22	0.59	ug/l	
87-86-5	Pentachlorophenol	ND	11	1.2	ug/l	
108-95-2	Phenol	173	5.6	0.34	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	11	0.41	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	11	0.19	ug/l	
62-53-3	Aniline	ND	11	0.71	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.6	0.52	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.6	0.59	ug/l	
100-51-6	Benzyl Alcohol	ND	11	2.5	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.6	0.35	ug/l	
106-47-8	4-Chloroaniline	ND	11	0.62	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.6	0.32	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.6	0.39	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.6	0.37	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.6	0.28	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.6	0.27	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	11	0.51	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	11	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.6	0.30	ug/l	
132-64-9	Dibenzofuran	ND	2.2	0.29	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.6	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.6	0.31	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW25-ROX-102114		
Lab Sample ID:	MC34553-4	**Date Sampled:**	10/21/14
Matrix:	AQ - Ground Water	**Date Received:**	10/23/14
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
84-66-2	Diethyl phthalate	ND	5.6	0.22	ug/l	
131-11-3	Dimethyl phthalate	ND	5.6	0.38	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.2	0.37	ug/l	
118-74-1	Hexachlorobenzene	ND	5.6	0.32	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	11	1.4	ug/l	
67-72-1	Hexachloroethane	ND	5.6	0.34	ug/l	
78-59-1	Isophorone	ND	5.6	0.50	ug/l	
88-74-4	2-Nitroaniline	ND	11	0.44	ug/l	
99-09-2	3-Nitroaniline	ND	11	1.5	ug/l	
100-01-6	4-Nitroaniline	ND	11	2.4	ug/l	
98-95-3	Nitrobenzene	ND	5.6	0.43	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.6	1.1	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.6	0.45	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.6	0.21	ug/l	
110-86-1	Pyridine	ND	11	0.57	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	51%		15-110%
4165-62-2	Phenol-d5	35%		15-110%
118-79-6	2,4,6-Tribromophenol	101%		15-110%
4165-60-0	Nitrobenzene-d5	83%		30-130%
321-60-8	2-Fluorobiphenyl	72%		30-130%
1718-51-0	Terphenyl-d14	95%		30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW25-ROX-102114		
Lab Sample ID:	MC34553-4	**Date Sampled:**	10/21/14
Matrix:	AQ - Ground Water	**Date Received:**	10/23/14
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I92616.D	1	10/30/14	MR	10/26/14	OP40383	MSI3452
Run #2							

	Initial Volume	Final Volume
Run #1	900 ml	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.11	0.077	ug/l	
208-96-8	Acenaphthylene	ND	0.11	0.055	ug/l	
120-12-7	Anthracene	ND	0.11	0.10	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.056	0.022	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.11	0.032	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.056	0.035	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.11	0.030	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.11	0.043	ug/l	
218-01-9	Chrysene	ND	0.11	0.026	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.11	0.035	ug/l	
206-44-0	Fluoranthene	ND	0.11	0.045	ug/l	
86-73-7	Fluorene	ND	0.11	0.11	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.11	0.034	ug/l	
90-12-0	1-Methylnaphthalene	0.93	2.2	0.56	ug/l	J
91-57-6	2-Methylnaphthalene	0.57	2.2	0.56	ug/l	J
85-01-8	Phenanthrene	0.033	0.056	0.014	ug/l	J
129-00-0	Pyrene	ND	0.11	0.043	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	93%		30-130%
321-60-8	2-Fluorobiphenyl	79%		30-130%
1718-51-0	Terphenyl-d14	85%		30-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW25-ROX-102114		
Lab Sample ID:	MC34553-4	**Date Sampled:**	10/21/14
Matrix:	AQ - Ground Water	**Date Received:**	10/23/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB60089.D	1	10/28/14	NK	10/27/14	OP40406	GBB3340
Run #2							

	Initial Volume	Final Volume
Run #1	36.9 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.014	0.0058	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.014	0.0058	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	86%		36-173%
460-00-4	Bromofluorobenzene (S)	124%		36-173%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-ROX-102114-HCL		
Lab Sample ID:	MC34553-5	**Date Sampled:**	10/21/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/23/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N91827.D	1	11/04/14	JB	n/a	n/a	MSN3393
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	ND	0.50	0.25	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.47	ug/l	
75-25-2	Bromoform	ND	1.0	0.30	ug/l	
74-83-9	Bromomethane	ND	2.0	0.77	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.23	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.25	ug/l	
75-00-3	Chloroethane	ND	2.0	0.37	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.31	ug/l	
74-87-3	Chloromethane [a]	ND	2.0	0.59	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.24	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.16	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.31	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane [a]	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.29	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.44	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.47	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-ROX-102114-HCL		
Lab Sample ID:	MC34553-5	**Date Sampled:**	10/21/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/23/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	0.45	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.38	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.22	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.39	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.29	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.30	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.29	ug/l	
108-88-3	Toluene	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.19	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.42	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.30	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.40	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.30	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.18	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.45	ug/l	
	m,p-Xylene	ND	1.0	0.38	ug/l	
95-47-6	o-Xylene	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.30	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-ROX-102114-HCL		
Lab Sample ID:	MC34553-5	**Date Sampled:**	10/21/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/23/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	91%		70-130%
2037-26-5	Toluene-D8	102%		70-130%
460-00-4	4-Bromofluorobenzene	105%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Continuing Calibration outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-ROX-102114-ST		
Lab Sample ID:	MC34553-6	**Date Sampled:**	10/21/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/23/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB60090.D	1	10/28/14	NK	10/27/14	OP40406	GBB3340
Run #2							

	Initial Volume	Final Volume
Run #1	35.8 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.015	0.0060	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.015	0.0060	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	96%		36-173%
460-00-4	Bromofluorobenzene (S)	102%		36-173%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

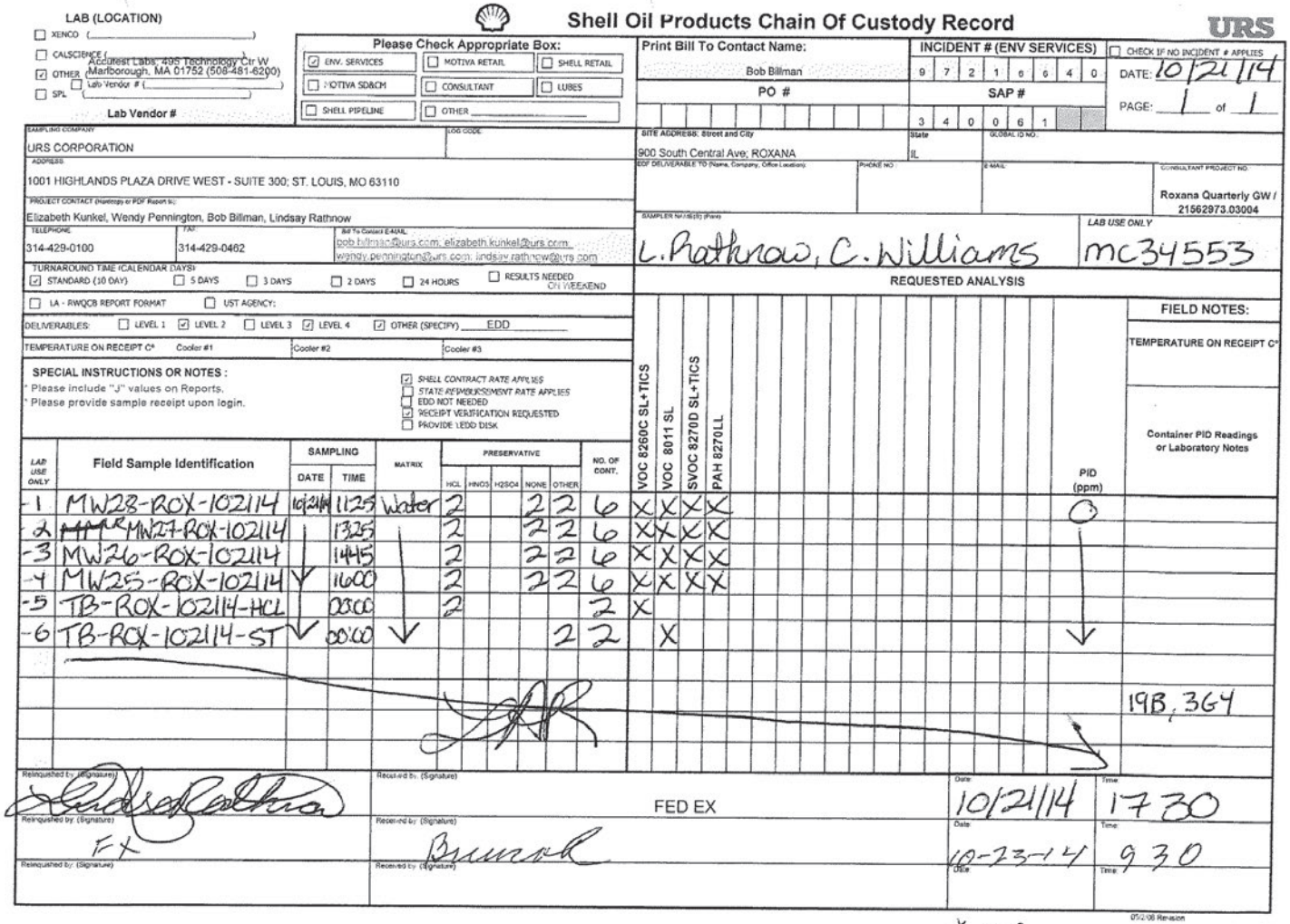
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- REPROC Form: Reprocessed/Corrected Data
- Sample Tracking Chronicle
- Internal Chain of Custody



Shell Oil Products Chain Of Custody Record

URS

LAB (LOCATION)
- [ ] XENCO ( )
- [ ] CALSCIENCE ( )
- [x] OTHER (Accutest Labs, 495 Technology Ctr W Marlborough, MA 01752 (508-481-6200)
- [ ] Lab Vendor # ( )
- [ ] SPL ( )

Lab Vendor #

Please Check Appropriate Box:
- [x] ENV. SERVICES
- [ ] MOTIVA RETAIL
- [ ] SHELL RETAIL
- [ ] MOTIVA SD&CM
- [ ] CONSULTANT
- [ ] LUBES
- [ ] SHELL PIPELINE
- [ ] OTHER

Print Bill To Contact Name: Bob Billman

PO #

INCIDENT # (ENV SERVICES): 9 7 2 1 6 6 4 0

SAP #: 3 4 0 0 6 1

- [ ] CHECK IF NO INCIDENT # APPLIES

DATE: 10/21/14

PAGE: 1 of 1

SAMPLING COMPANY: URS CORPORATION

LOG CODE:

ADDRESS: 1001 HIGHLANDS PLAZA DRIVE WEST - SUITE 300; ST. LOUIS, MO 63110

PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Wendy Pennington, Bob Billman, Lindsay Rathnow

TELEPHONE: 314-429-0100

FAX: 314-429-0462

Bill To Contact E-MAIL: bob.billman@urs.com; elizabeth.kunkel@urs.com; wendy.pennington@urs.com; lindsay.rathnow@urs.com

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA

State: IL

GLOBAL ID NO.:

EDF DELIVERABLE TO (Name, Company, Office Location):

PHONE NO.:

E-MAIL:

CONSULTANT PROJECT NO.: Roxana Quarterly GW / 21562973.03004

SAMPLER NAME(S) (Print): L. Rathnow, C. Williams

LAB USE ONLY: MC34553

TURNAROUND TIME (CALENDAR DAYS):
- [x] STANDARD (10 DAY)
- [ ] 5 DAYS
- [ ] 3 DAYS
- [ ] 2 DAYS
- [ ] 24 HOURS
- [ ] RESULTS NEEDED ON WEEKEND

- [ ] LA - RWQCB REPORT FORMAT
- [ ] UST AGENCY:

DELIVERABLES: [ ] LEVEL 1 [x] LEVEL 2 [ ] LEVEL 3 [x] LEVEL 4 [x] OTHER (SPECIFY) EDD

TEMPERATURE ON RECEIPT C°: Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES:
- Please include "J" values on Reports.
- Please provide sample receipt upon login.

- [x] SHELL CONTRACT RATE APPLIES
- [ ] STATE REIMBURSEMENT RATE APPLIES
- [ ] EDD NOT NEEDED
- [x] RECEIPT VERIFICATION REQUESTED
- [ ] PROVIDE LEDD DISK

REQUESTED ANALYSIS

FIELD NOTES:

TEMPERATURE ON RECEIPT C°

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260C SL+TICS	VOC 8011 SL	SVOC 8270D SL+TICS	PAH 8270LL	PID (ppm)	Container PID Readings or Laboratory Notes
-1	MW28-ROX-102114	10/21/14	1125	Water	2			2	2	6	X	X	X	X	0	
-2	~~MW~~ MW27-ROX-102114	↓	1325	↓	2			2	2	6	X	X	X	X	↓	
-3	MW26-ROX-102114	↓	1445	↓	2			2	2	6	X	X	X	X	↓	
-4	MW25-ROX-102114	↓	1600	↓	2			2	2	6	X	X	X	X	↓	
-5	TB-ROX-102114-HCL	↓	00:00	↓	2					2	X				↓	
-6	TB-ROX-102114-ST	↓	00:00	↓					2	2		X			↓	
																19B, 3G4

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
[signature]	FED EX	10/21/14	1730
FX	[signature]	10-23-14	930

05/2/08 Revision

Airbill #8057667044 68

1.7°C

MC34553: Chain of Custody
Page 1 of 2

5.1 5

42 of 128
SGS ACCUTEST MC34553

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: MC34553 **Client:** URS **Project:** ROX QUARTERLY

Date / Time Received: 10/23/2014 9 30 00 AM **Delivery Method:** **Airbill #'s:**

Cooler Temps (Initial/Adjusted): #1 (1 7/1 7)

Cooler Security	Y	or	N		Y	or	N
1 Custody Seals Present	☑		☐	3 COC Present	☑		☐
2 Custody Seals ntact	☑		☐	4 Smpl Dates/ ime OK	☑		☐

Cooler Temperature	Y	or	N
1 emp criteria achieved	☑		☐
2 hermometer D	G1		
3 Cooler media	ce (Bag)		
4 No Coolers	1		

Quality Control Preservation	Y	or	N	N/A
1 rip Blank present / cooler	☑		☐	☐
2 rip Blank listed on COC	☑		☐	☐
3 Samples preserved properly	☑		☐	
4 VOCs headspace ree	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1 Sample labels present on bottles	☑		☐
2 Container labeling complete	☑		☐
3 Sample container label / COC agree	☑		☐

Sample Integrity - Condition	Y	or	N
1 Sample recvd within H	☑		☐
2 All containers accounted or	☑		☐
3 Condition o sample	ntact		

Sample Integrity - Instructions	Y	or	N	N/A
1 Analysis requested is clear	☑		☐	
2 Bottles received or unspeci ied tests	☐		☑	
3 Su icient volume recvd or analysis	☑		☐	
4 Compositing instructions clear	☐		☐	☑
5 Filtering instructions clear	☐		☐	☑

Comments

Accutest Laboratories
V:(508) 481-6200

495 Technology Center West, Bldg One
F: (508) 481-7753

Marlborough, MA 01752
www/accutest.com

MC34553: Chain of Custody
Page 2 of 2

Initial Calibration Summary

Job Number: MC34553 **Sample:** MSN3345-ICC3345
Account: SHELLWIC Shell Oil **Lab FileID:** N90397.D
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Response Factor Report MSN

Method : O:\msn\1\methods\n140918wx.m (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration

Calibration Files
0.5 =n90391.d 1 =n90392.d 2 =n90393.d 5 =n90394.d
10 =n90395.d 25 =n90396.d 50 =n90397.d 100 =n90398.d
200 =n90399.d 400 =n90400.d = =

Compound

	0.5	1	2	5	10	25	50	100	200	400	Avg	%RSD
1) I pentafluorobenzene	----------ISTD----------											
2) methyl tert butyl ether	1.122	1.215	0.906	0.695	0.592	1.488	1.263	1.271	1.294	1.197	1.104	25.73

---- Linear regression ---- Coefficient = 0.9929
Response Ratio = -0.00683 + 1.23664 *A

(#) = Out of Range ### Number of calibration levels exceeded format ###

n140918wx.m Fri Oct 16 13:20:48 2015

Job Number: MC34553 **Sample:** MSN3345-ICV3345
Account: SHELLWIC Shell Oil **Lab FileID:** N90407.D
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Evaluate Continuing Calibration Report

Data File : O:\msn\1\data backup\n140919\n90407.d Vial: 16
Acq On : 19 Sep 2014 1:04 pm Operator: krystend
Sample : cc3345-50 Inst : MSN
Misc : ms32746,MSN3345,,,,5,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : O:\msn\1\methods\n140918wx.m (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Fri Oct 16 13:19:49 2015
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	pentafluorobenzene	1.000	1.000	0.0	108	0.00	9.12
		Amount	Calc.	%Drift			
2 p	methyl tert butyl ether	50.000	54.861	-9.7	115	-0.01	7.70

(#) = Out of Range SPCC's out = 0 CCC's out = 0
n90397.d n140918wx.m Thu Oct 22 14:46:51 2015

Continuing Calibration Summary

Job Number: MC34553 **Sample:** MSN3393-CC3345
Account: SHELLWIC Shell Oil **Lab FileID:** N91823.D
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Evaluate Continuing Calibration Report

```
Data File : O:\msn\1\data backup\n141104\n91823.d        Vial: 16
Acq On    :  4 Nov 2014   8:22 am                    Operator: jaclynb
Sample    : cc3345-50                                Inst    : MSN
Misc      : ms33122,MSN3393,,,,5,1                   Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : O:\msn\1\methods\n140918wx.m (RTE Integrator)
Title        : SW-846 Method 8260
Last Update  : Fri Oct 16 13:19:49 2015
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 200%

       Compound                   AvgRF   CCRF      %Dev Area%  Dev(min)R.T.
-----------------------------------------------------------------------------
1 I   pentafluorobenzene          1.000   1.000      0.0  132   0.00    9.12

          ----------------------- Amount  Calc.    %Drift   -------------
2 p   methyl tert butyl ether    50.000  47.109      5.8  121  -0.01    7.71
-----------------------------------------------------------------------------
-----------------------------------------------------------------------------

   (#) = Out of Range              SPCC's out = 0  CCC's out = 0
    n90397.d   n140918wx.m       Wed Oct 28 08:48:07 2015
```

5.2

5

Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n140918\
Data File : n90391.d
Acq On : 18 Sep 2014 4:07 pm
Operator : krystend
Sample : IC3345-0.5
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Oct 16 13:14:40 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration

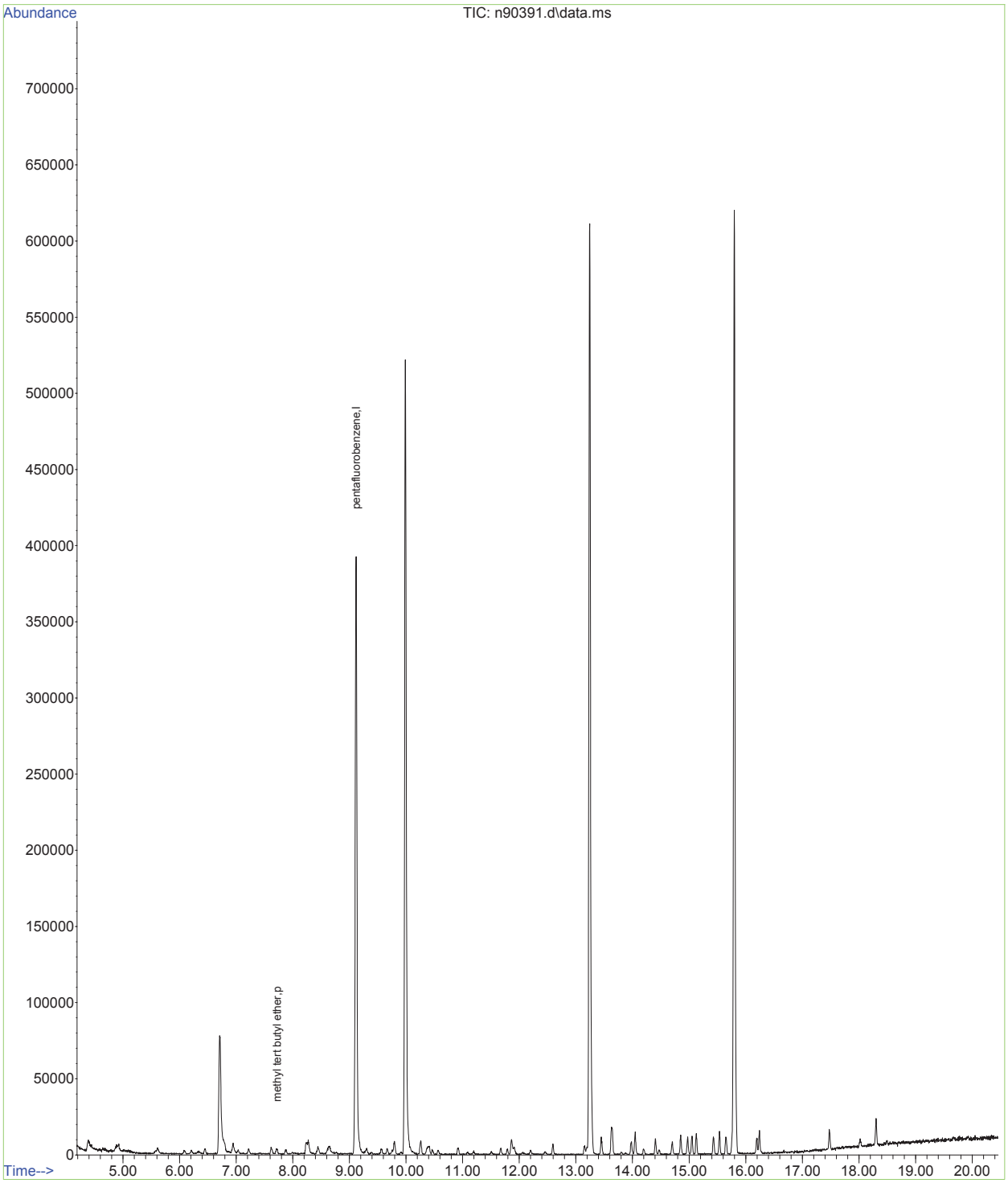
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.119	168	275131	50.00	ug/L	0.00
Target Compounds						Qvalue
2) methyl tert butyl ether	7.719	73	3086	0.44	ug/L	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST
MC34553

Data Path : O:\msn\1\data backup\n140918\
Data File : n90391.d
Acq On : 18 Sep 2014 4:07 pm
Operator : krystend
Sample : IC3345-0.5
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Oct 16 13:14:40 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n140918\
Data File : n90392.d
Acq On : 18 Sep 2014 4:35 pm
Operator : krystend
Sample : IC3345-1
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Oct 16 13:14:42 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration

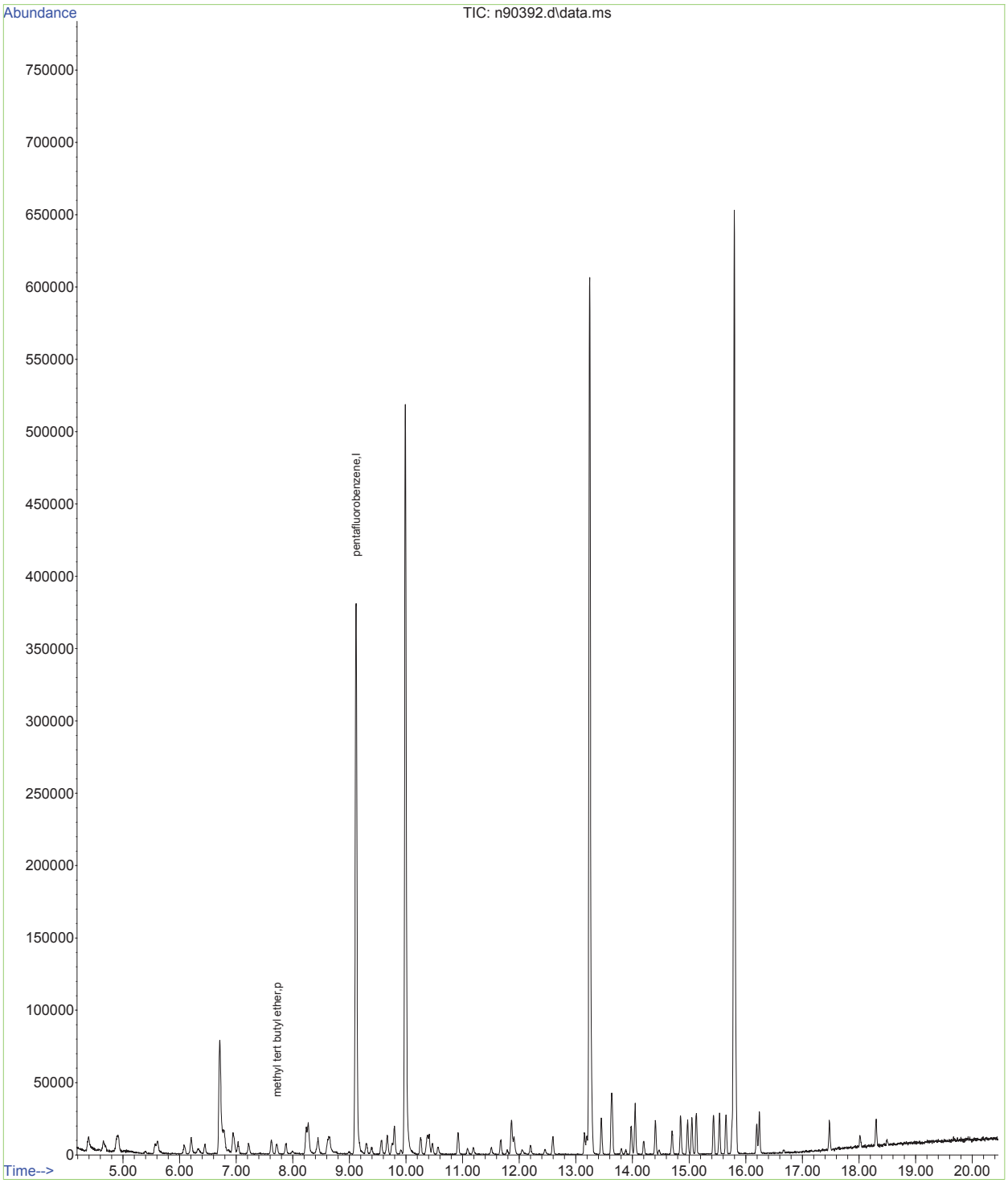
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.119	168	271362	50.00	ug/L	0.00
Target Compounds						Qvalue
2) methyl tert butyl ether	7.719	73	6594	0.96	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST
MC34553

Data Path : O:\msn\1\data backup\n140918\
Data File : n90392.d
Acq On : 18 Sep 2014 4:35 pm
Operator : krystend
Sample : IC3345-1
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Oct 16 13:14:42 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n140918\
Data File : n90393.d
Acq On : 18 Sep 2014 5:03 pm
Operator : krystend
Sample : IC3345-2
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Oct 16 13:14:44 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration

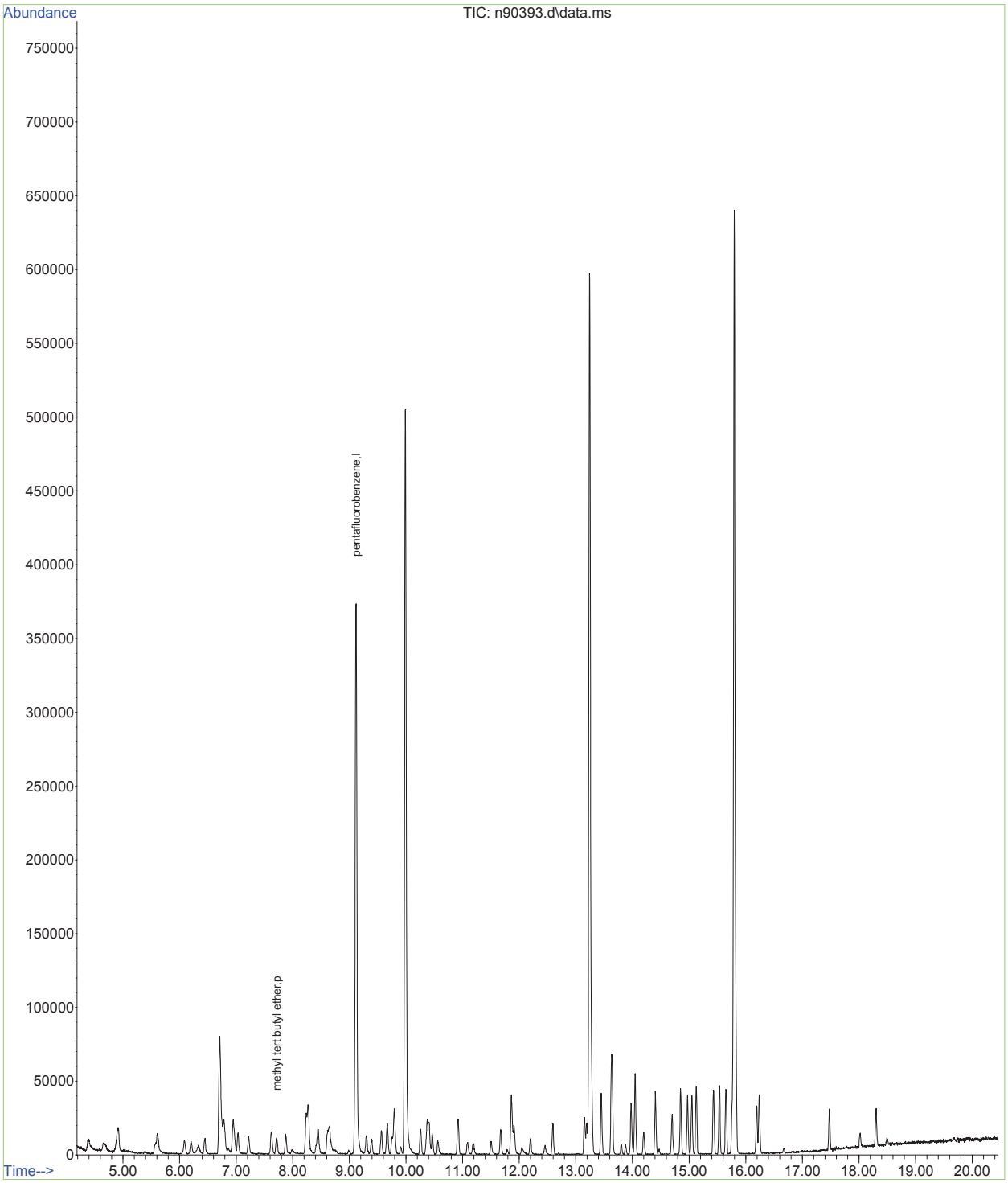
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.119	168	263657	50.00	ug/L	0.00
Target Compounds						Qvalue
2) methyl tert butyl ether	7.715	73	9559	1.43	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST MC34553

Data Path : O:\msn\1\data backup\n140918\
Data File : n90393.d
Acq On : 18 Sep 2014 5:03 pm
Operator : krystend
Sample : IC3345-2
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Oct 16 13:14:44 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n140918\
Data File : n90394.d
Acq On : 18 Sep 2014 5:32 pm
Operator : krystend
Sample : IC3345-5
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Oct 16 13:14:46 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration

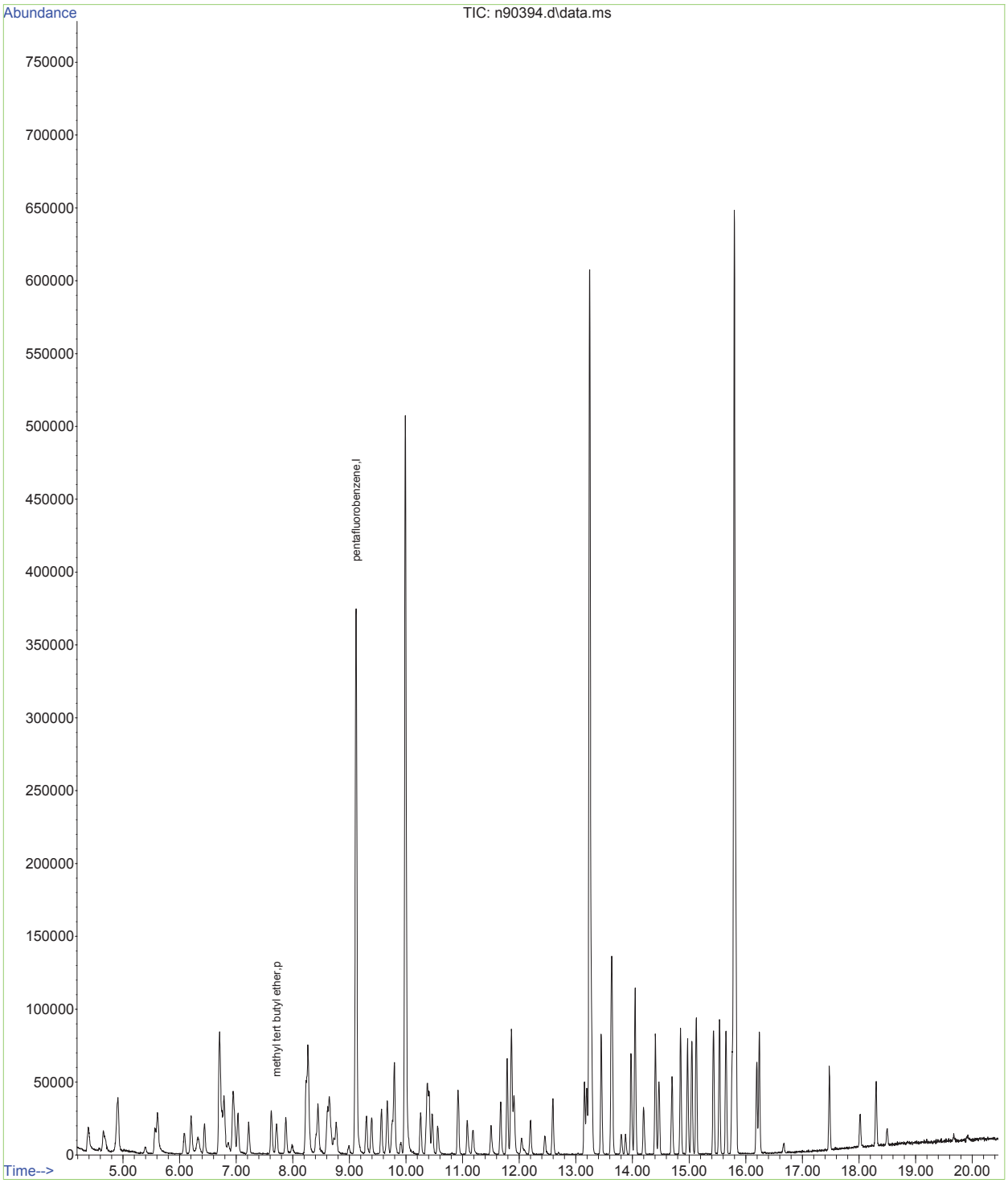
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.118	168	257045	50.00	ug/L	0.00
Target Compounds						Qvalue
2) methyl tert butyl ether	7.711	73	17856	2.75	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST MC34553

Data Path : O:\msn\1\data backup\n140918\
Data File : n90394.d
Acq On : 18 Sep 2014 5:32 pm
Operator : krystend
Sample : IC3345-5
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Oct 16 13:14:46 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n140918\
Data File : n90395.d
Acq On : 18 Sep 2014 6:00 pm
Operator : krystend
Sample : IC3345-10
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 25 Sample Multiplier: 1

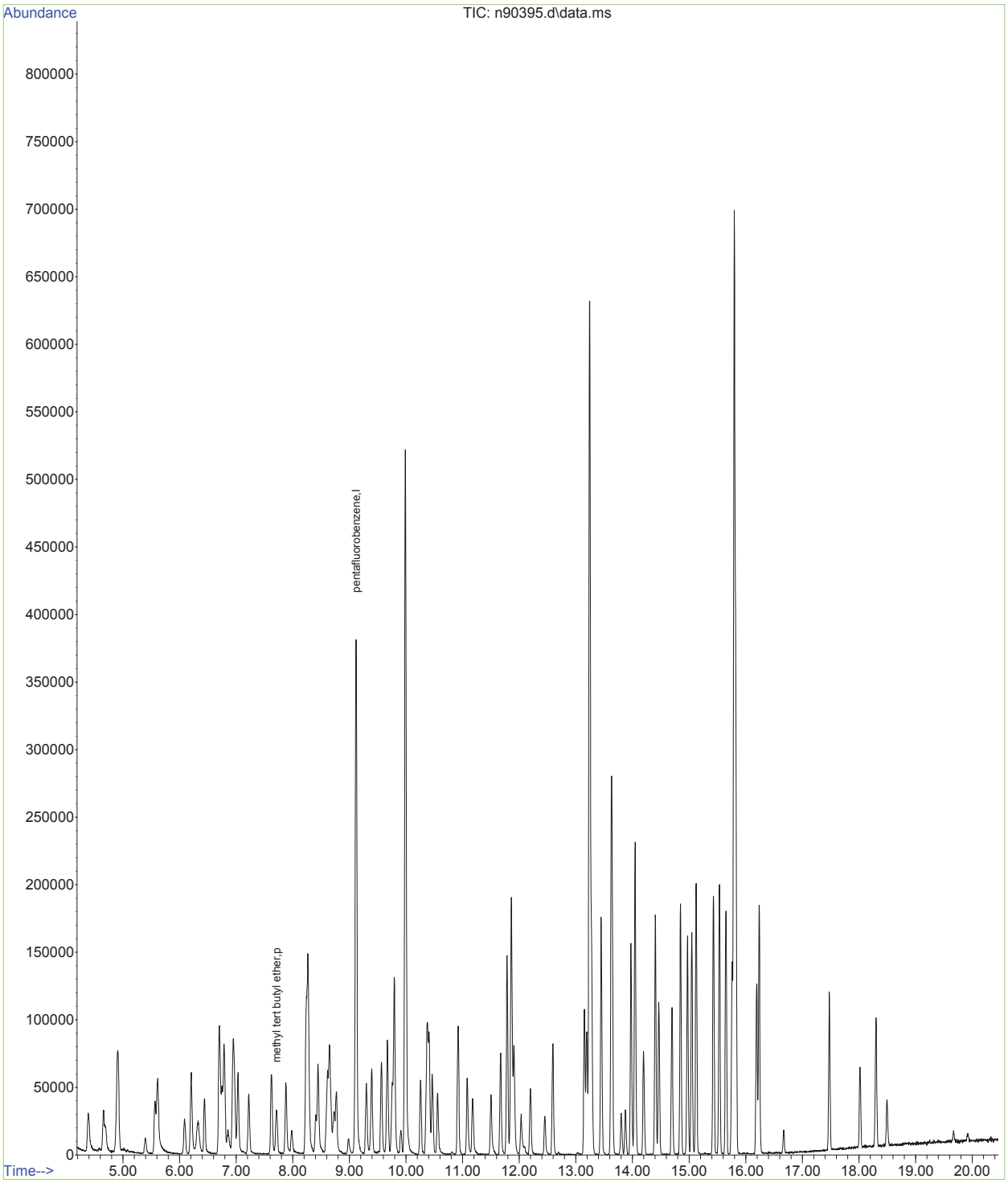
Quant Time: Oct 16 13:14:48 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.119	168	259103	50.00	ug/L	0.00
Target Compounds						Qvalue
2) methyl tert butyl ether	7.712	73	30689	4.69	ug/L	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : O:\msn\1\data backup\n140918\
Data File : n90395.d
Acq On : 18 Sep 2014 6:00 pm
Operator : krystend
Sample : IC3345-10
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Oct 16 13:14:48 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n140918\
Data File : n90396.d
Acq On : 18 Sep 2014 6:30 pm
Operator : krystend
Sample : IC3345-25
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Oct 16 13:14:50 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration

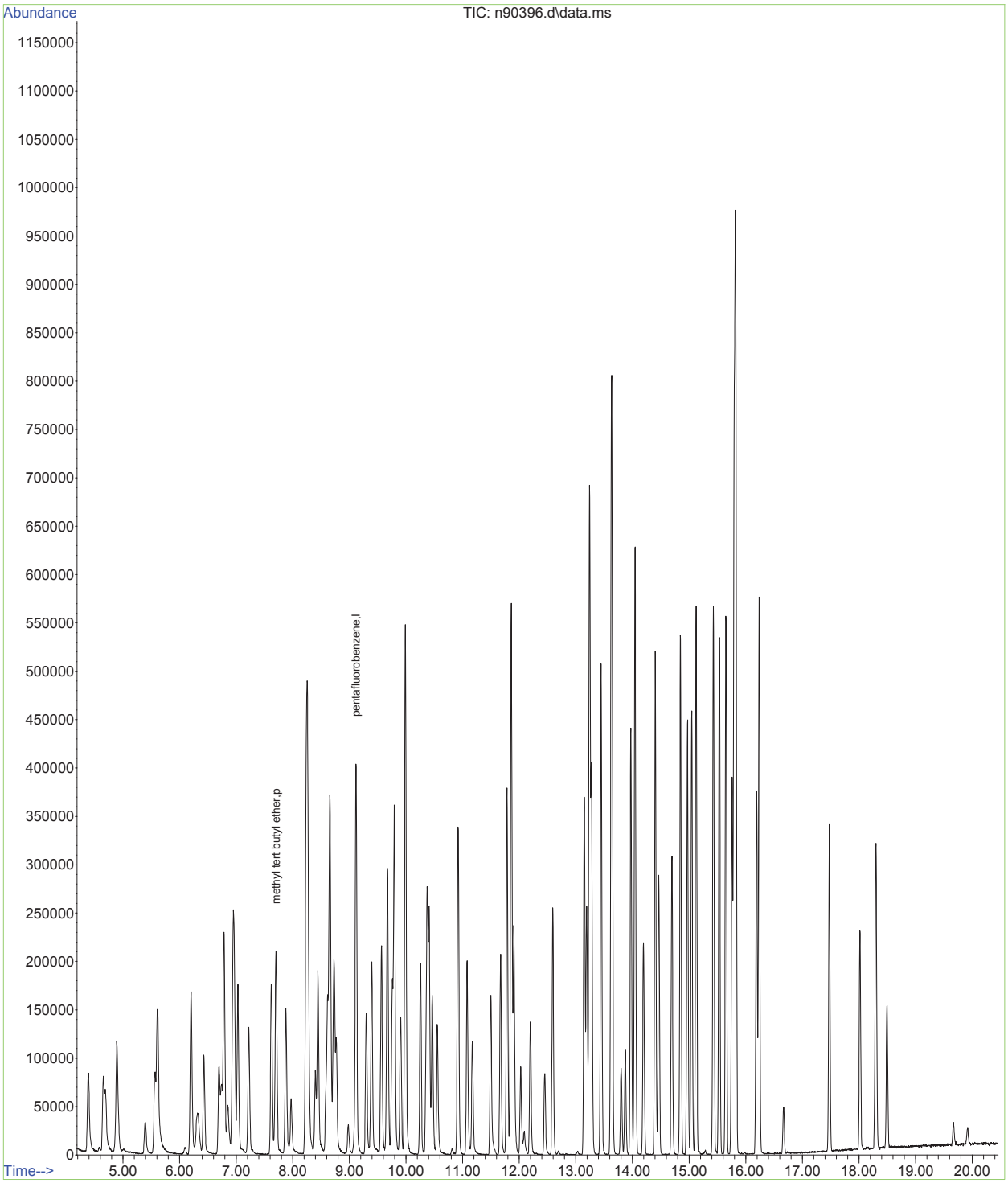
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.115	168	269555	50.00	ug/L	0.00
Target Compounds						Qvalue
2) methyl tert butyl ether	7.705	73	200518	29.43	ug/L	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST MC34553

Data Path : O:\msn\1\data backup\n140918\
Data File : n90396.d
Acq On : 18 Sep 2014 6:30 pm
Operator : krystend
Sample : IC3345-25
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Oct 16 13:14:50 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n140918\
Data File : n90397.d
Acq On : 18 Sep 2014 6:59 pm
Operator : krystend
Sample : ICC3345-50
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 27 Sample Multiplier: 1

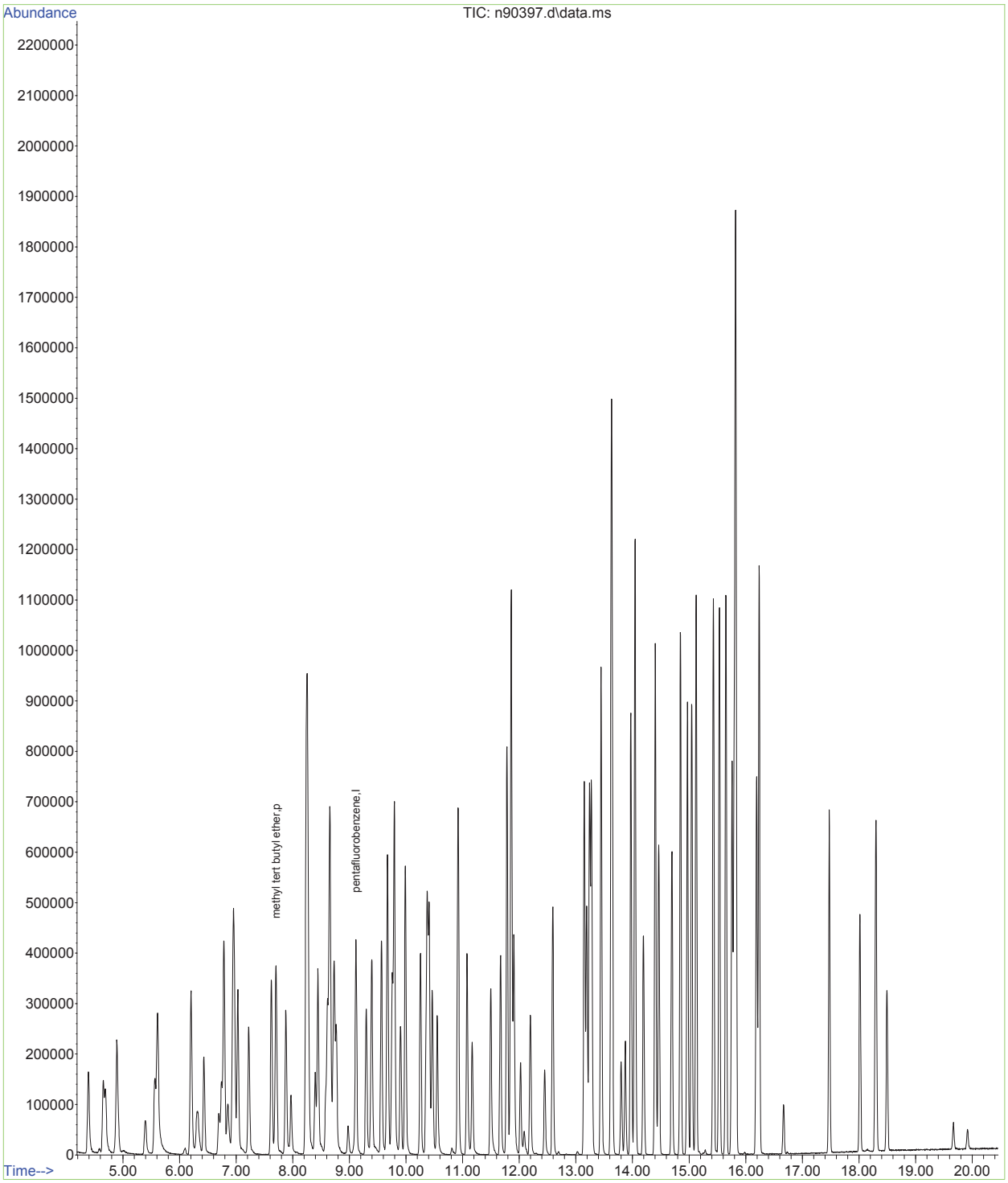
Quant Time: Oct 16 13:14:52 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.115	168	281476	50.00	ug/L	0.00
Target Compounds						Qvalue
2) methyl tert butyl ether	7.704	73	355515	49.97	ug/L	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : O:\msn\1\data backup\n140918\
Data File : n90397.d
Acq On : 18 Sep 2014 6:59 pm
Operator : krystend
Sample : ICC3345-50
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Oct 16 13:14:52 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n140918\
Data File : n90398.d
Acq On : 18 Sep 2014 7:27 pm
Operator : krystend
Sample : IC3345-100
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 28 Sample Multiplier: 1

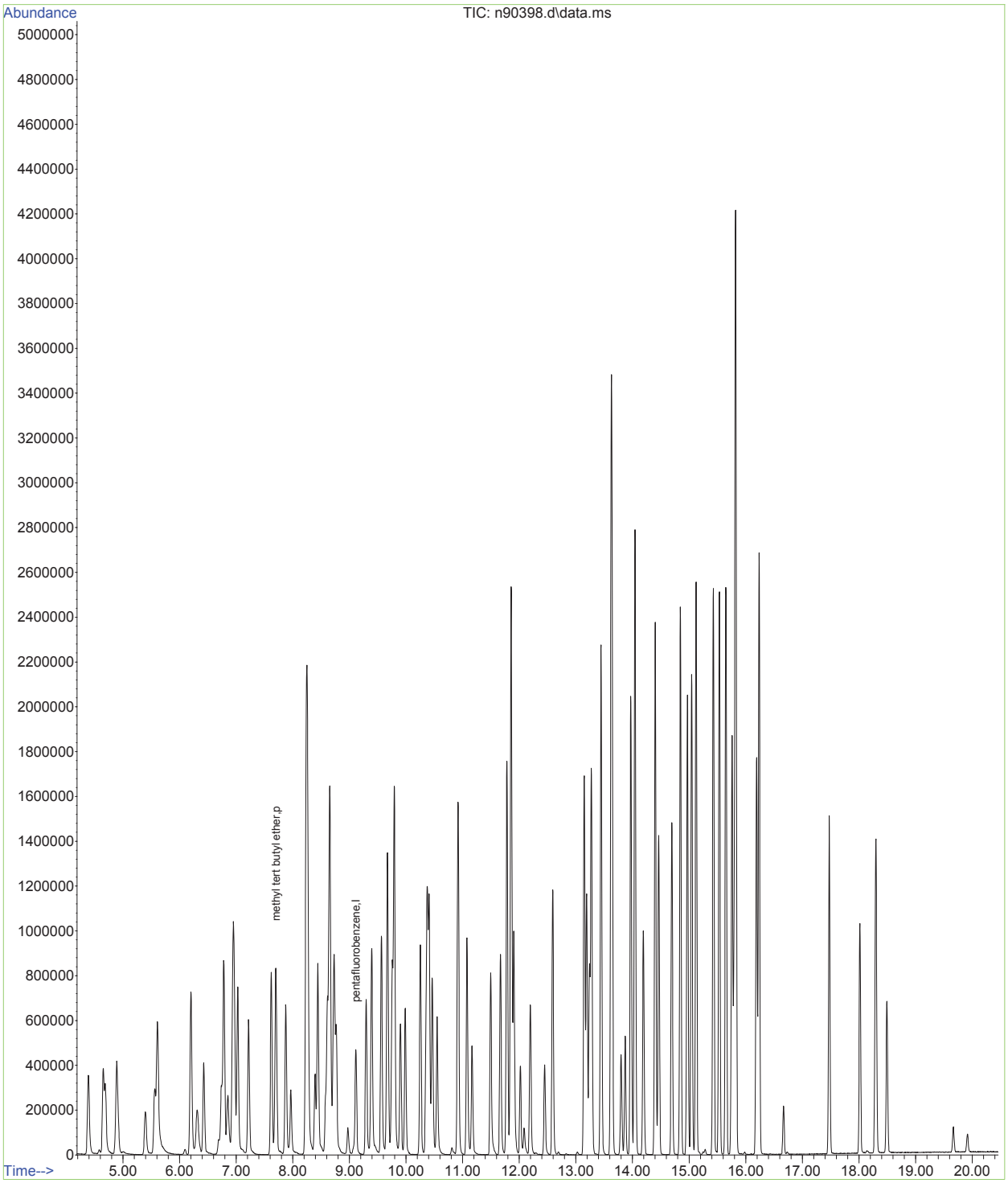
Quant Time: Oct 16 13:14:54 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.111	168	321164	50.00	ug/L	0.00
Target Compounds						Qvalue
2) methyl tert butyl ether	7.701	73	816619	100.59	ug/L	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : O:\msn\1\data backup\n140918\
Data File : n90398.d
Acq On : 18 Sep 2014 7:27 pm
Operator : krystend
Sample : IC3345-100
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Oct 16 13:14:54 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n140918\
Data File : n90399.d
Acq On : 18 Sep 2014 7:55 pm
Operator : krystend
Sample : IC3345-200
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 29 Sample Multiplier: 1

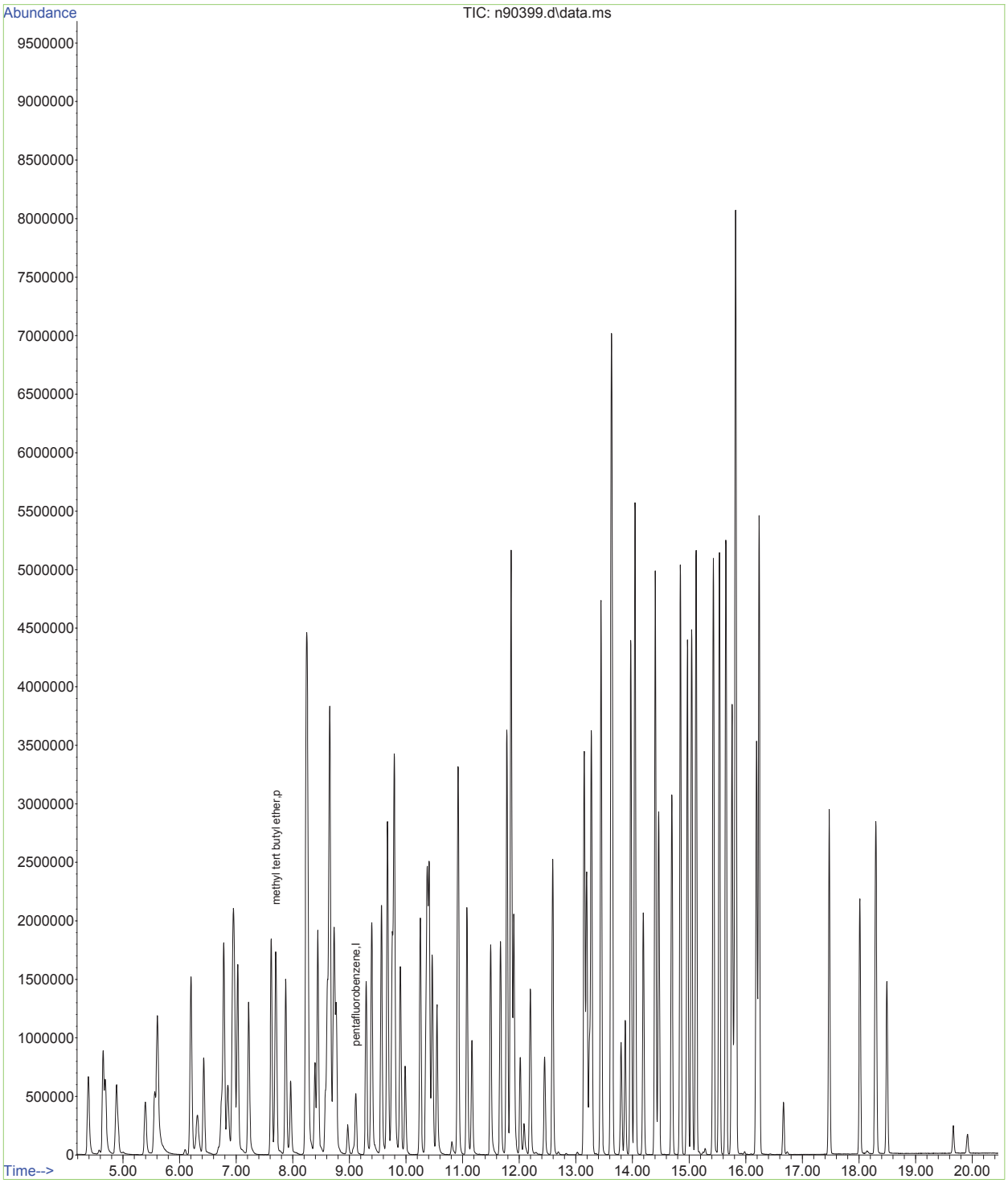
Quant Time: Oct 16 13:14:57 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.115	168	355344	50.00	ug/L	0.00
Target Compounds						Qvalue
2) methyl tert butyl ether	7.701	73	1838735	204.71	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : O:\msn\1\data backup\n140918\
Data File : n90399.d
Acq On : 18 Sep 2014 7:55 pm
Operator : krystend
Sample : IC3345-200
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Oct 16 13:14:57 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n140918\
Data File : n90400.d
Acq On : 18 Sep 2014 8:23 pm
Operator : krystend
Sample : IC3345-400
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 30 Sample Multiplier: 1

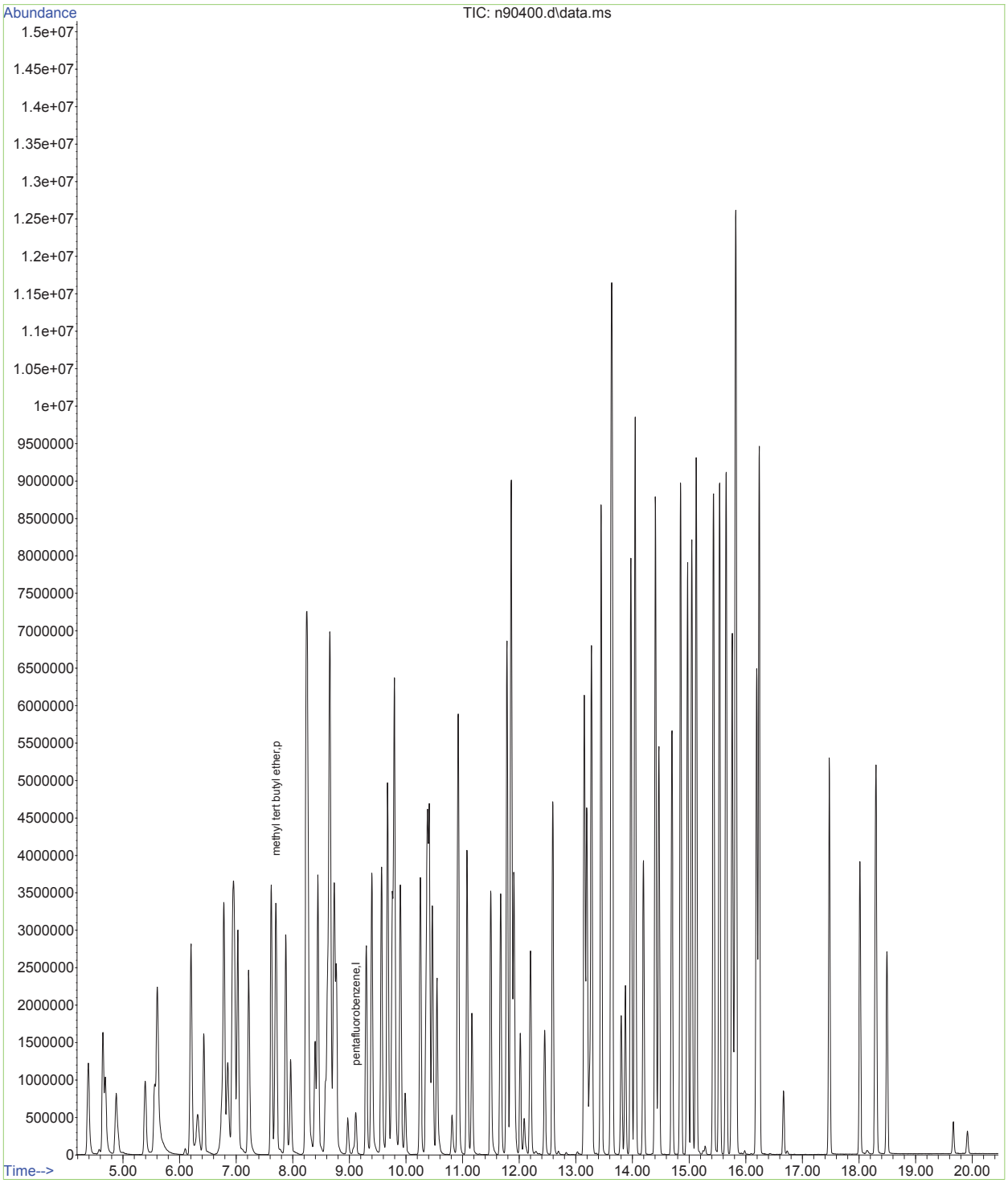
Quant Time: Oct 16 13:14:58 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.111	168	394186	50.00	ug/L	0.00
Target Compounds						Qvalue
2) methyl tert butyl ether	7.701	73	3773711	378.74	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : O:\msn\1\data backup\n140918\
Data File : n90400.d
Acq On : 18 Sep 2014 8:23 pm
Operator : krystend
Sample : IC3345-400
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Oct 16 13:14:58 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:14:00 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n140919\
Data File : n90407.d
Acq On : 19 Sep 2014 1:04 pm
Operator : krystend
Sample : ICV3345-50
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

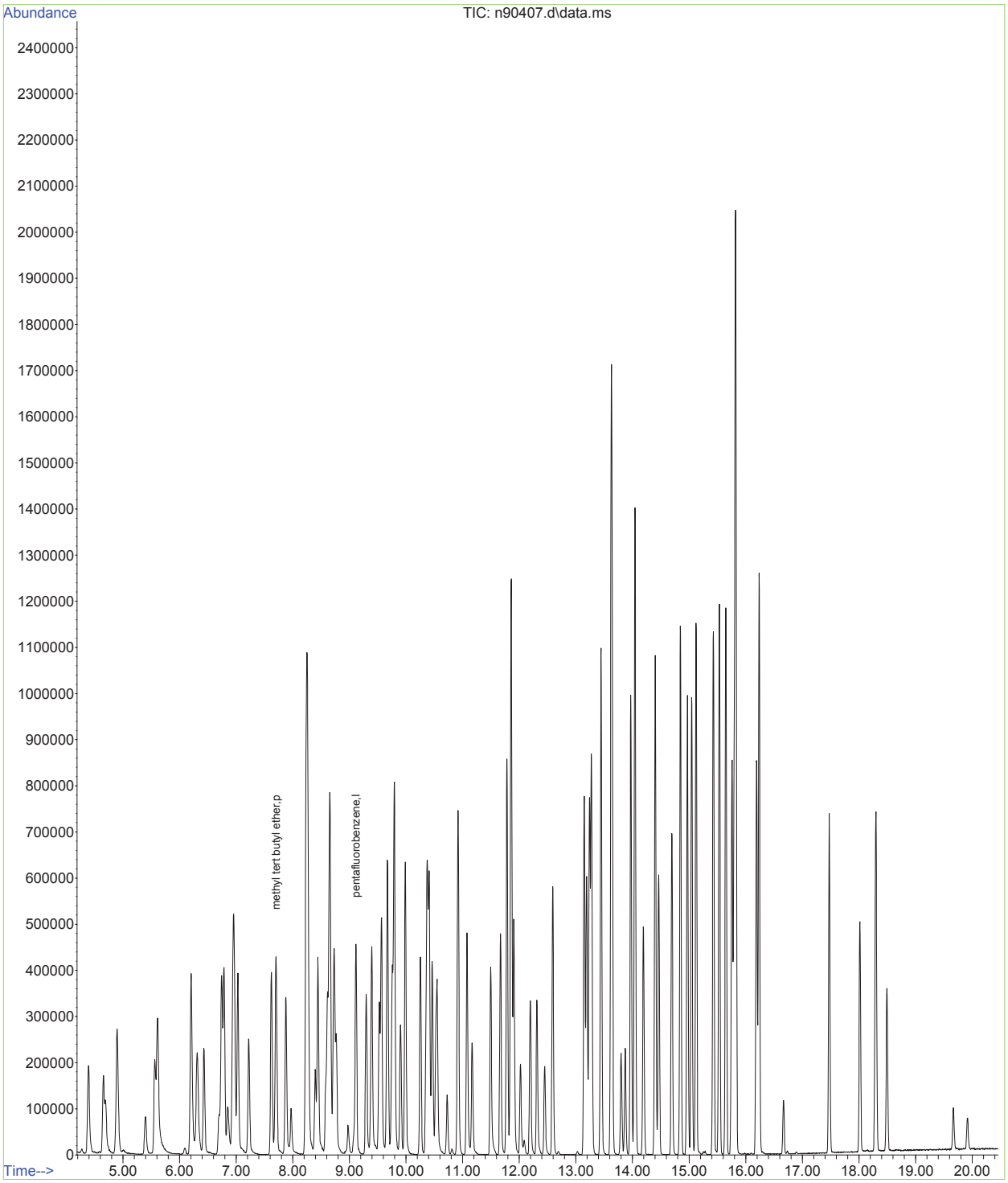
Quant Time: Oct 16 13:20:29 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.115	168	303678	50.00	ug/L	0.00
Target Compounds						Qvalue
2) methyl tert butyl ether	7.705	73	409974	54.86	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : O:\msn\1\data backup\n140919\
Data File : n90407.d
Acq On : 19 Sep 2014 1:04 pm
Operator : krystend
Sample : ICV3345-50
Misc : ms32746,MSN3345,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Oct 16 13:20:29 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141104\
Data File : n91823.d
Acq On : 4 Nov 2014 8:22 am
Operator : jaclynb
Sample : bs
Misc : ms33122,MSN3393,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Oct 28 08:46:57 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration

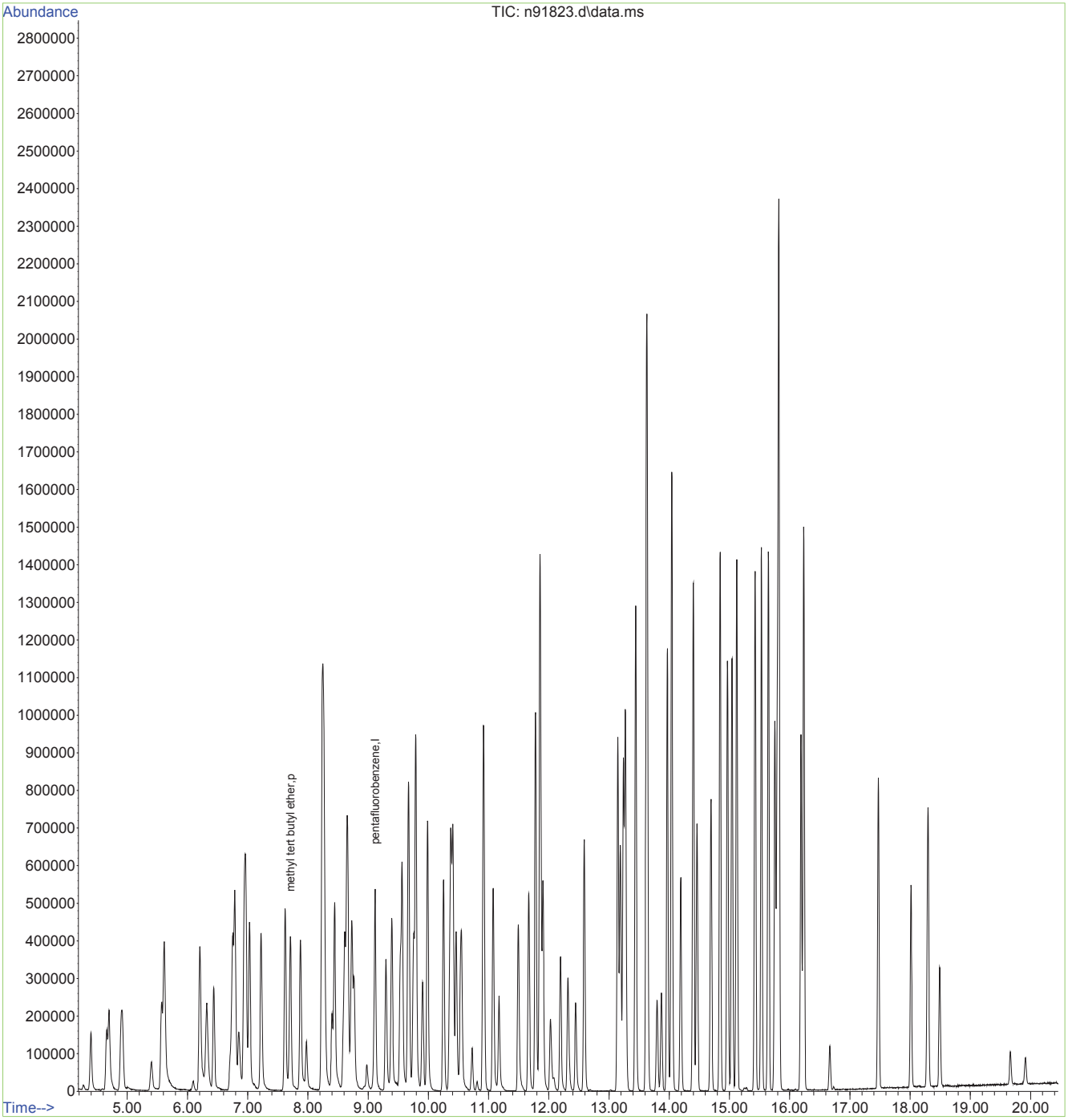
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.115	168	372855	50.00	ug/L	0.00
Target Compounds						Qvalue
2) methyl tert butyl ether	7.708	73	431880	47.11	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141104\
Data File : n91823.d
Acq On : 4 Nov 2014 8:22 am
Operator : jaclynb
Sample : bs
Misc : ms33122,MSN3393,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Oct 28 08:46:57 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration



SGS ACCUTEST
MC34553

Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141104\
Data File : n91827.d
Acq On : 4 Nov 2014 10:15 am
Operator : jaclynb
Sample : mc34553-5
Misc : ms33129,MSN3393,,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Oct 28 08:49:28 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration

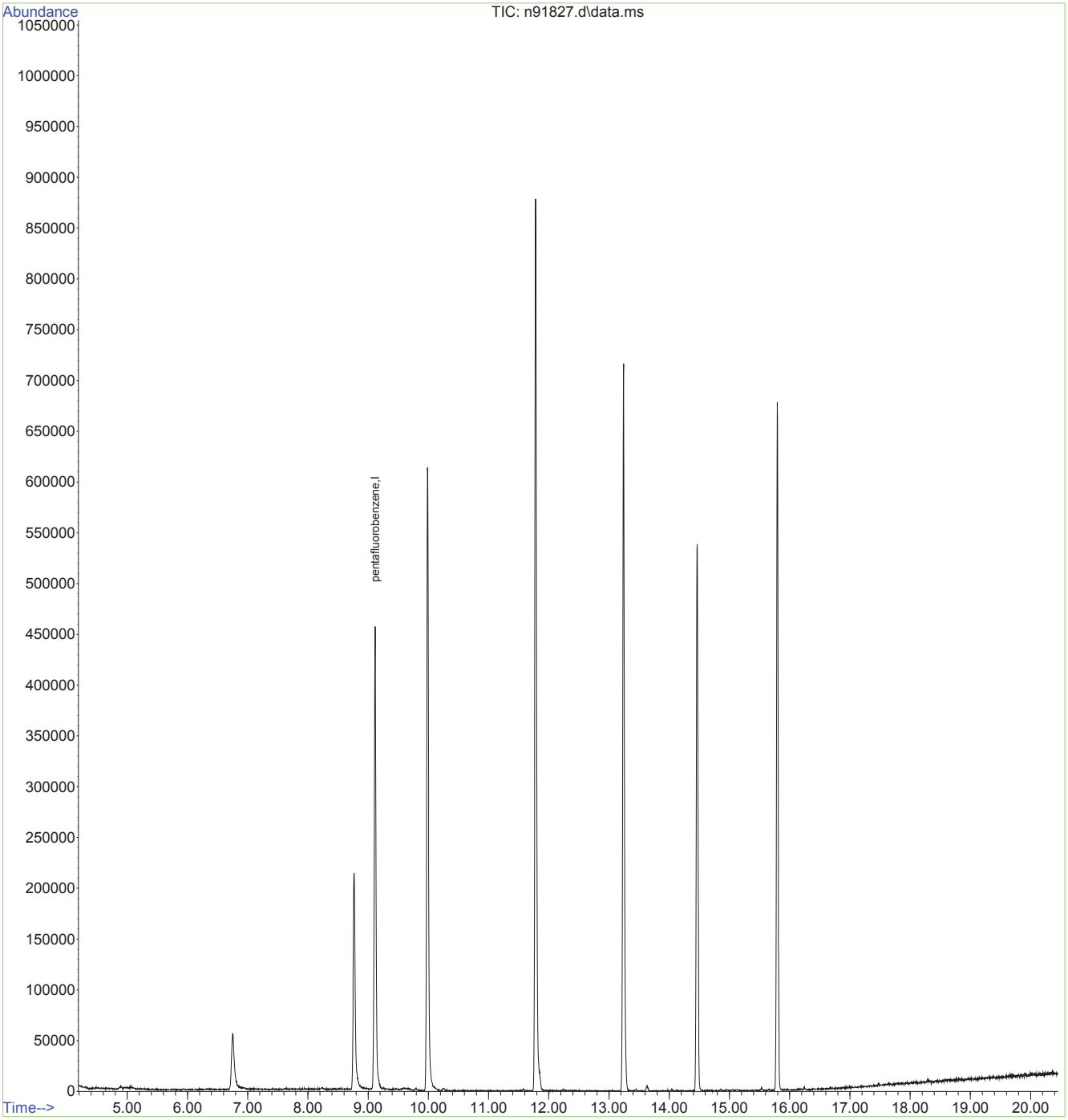
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.115	168	336528	50.00	ug/L	0.00
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141104\
Data File : n91827.d
Acq On : 4 Nov 2014 10:15 am
Operator : jaclynb
Sample : mc34553-5
Misc : ms33129,MSN3393,,,,5,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Oct 28 08:49:28 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141104\
Data File : n91833.d
Acq On : 4 Nov 2014 1:05 pm
Operator : jaclynb
Sample : mc34553-1
Misc : ms33129,MSN3393,,,,5,1
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Oct 28 08:49:40 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration

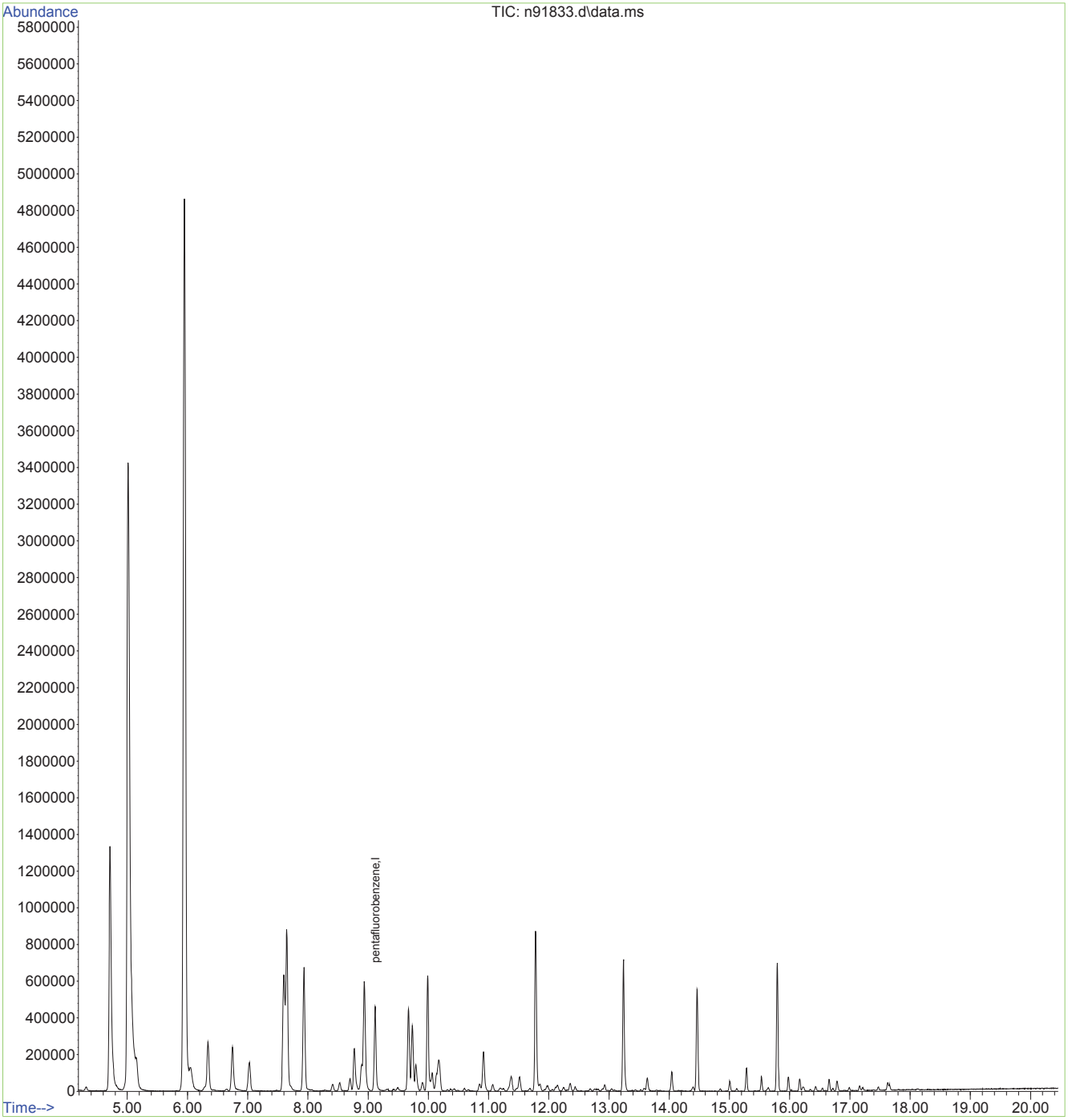
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.119	168	331547	50.00	ug/L	0.00
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141104\
Data File : n91833.d
Acq On : 4 Nov 2014 1:05 pm
Operator : jaclynb
Sample : mc34553-1
Misc : ms33129,MSN3393,,,,5,1
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Oct 28 08:49:40 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141104\
Data File : n91834.d
Acq On : 4 Nov 2014 1:33 pm
Operator : jaclynb
Sample : mc34553-2
Misc : ms33129,MSN3393,,,,5,1
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Oct 28 08:49:42 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration

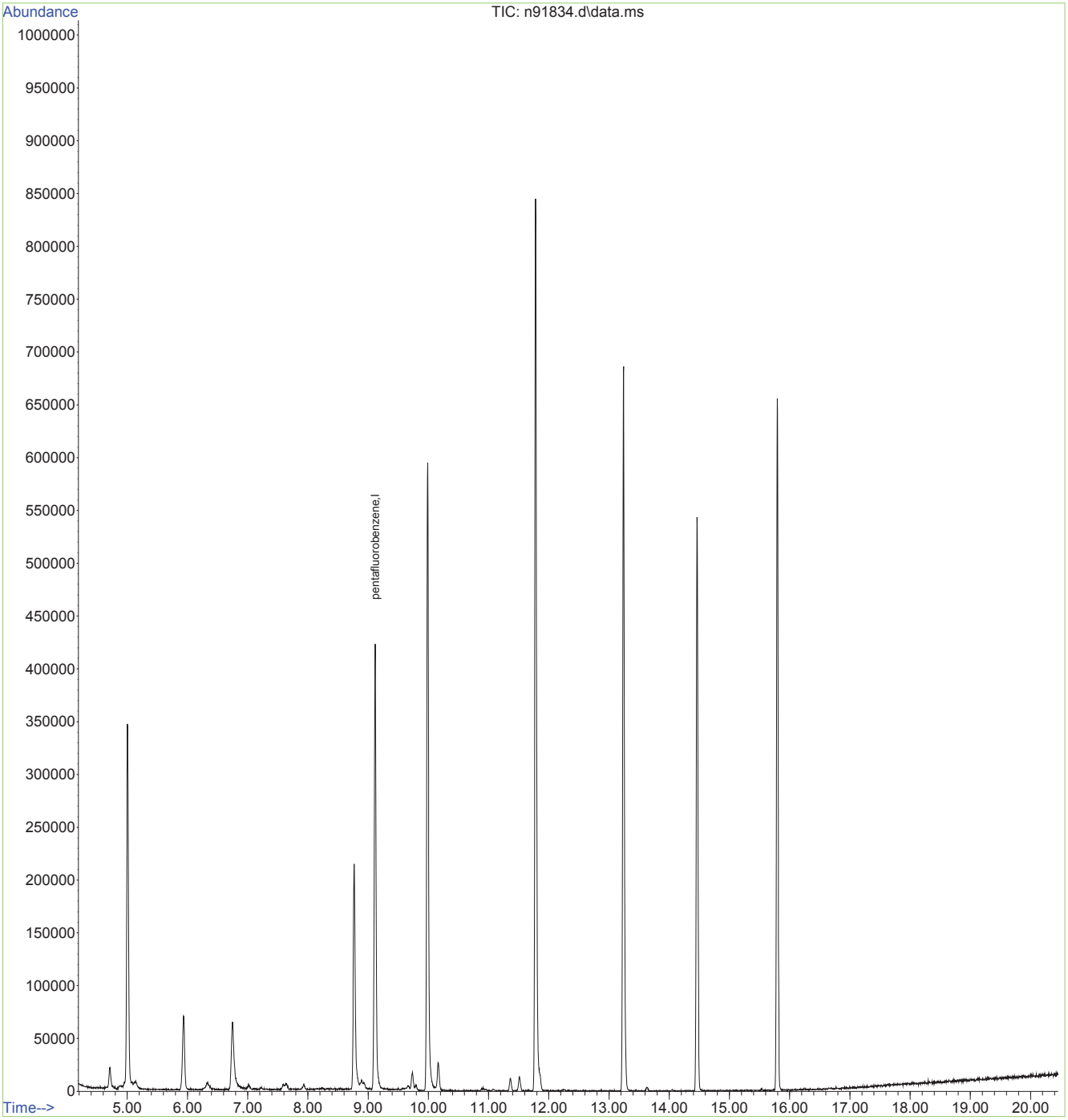
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.115	168	315803	50.00	ug/L	0.00
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141104\
Data File : n91834.d
Acq On : 4 Nov 2014 1:33 pm
Operator : jaclynb
Sample : mc34553-2
Misc : ms33129,MSN3393,,,,5,1
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Oct 28 08:49:42 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141104\
Data File : n91835.d
Acq On : 4 Nov 2014 2:01 pm
Operator : jaclynb
Sample : mc34553-3
Misc : ms33129,MSN3393,,,,5,1
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Oct 28 08:49:44 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration

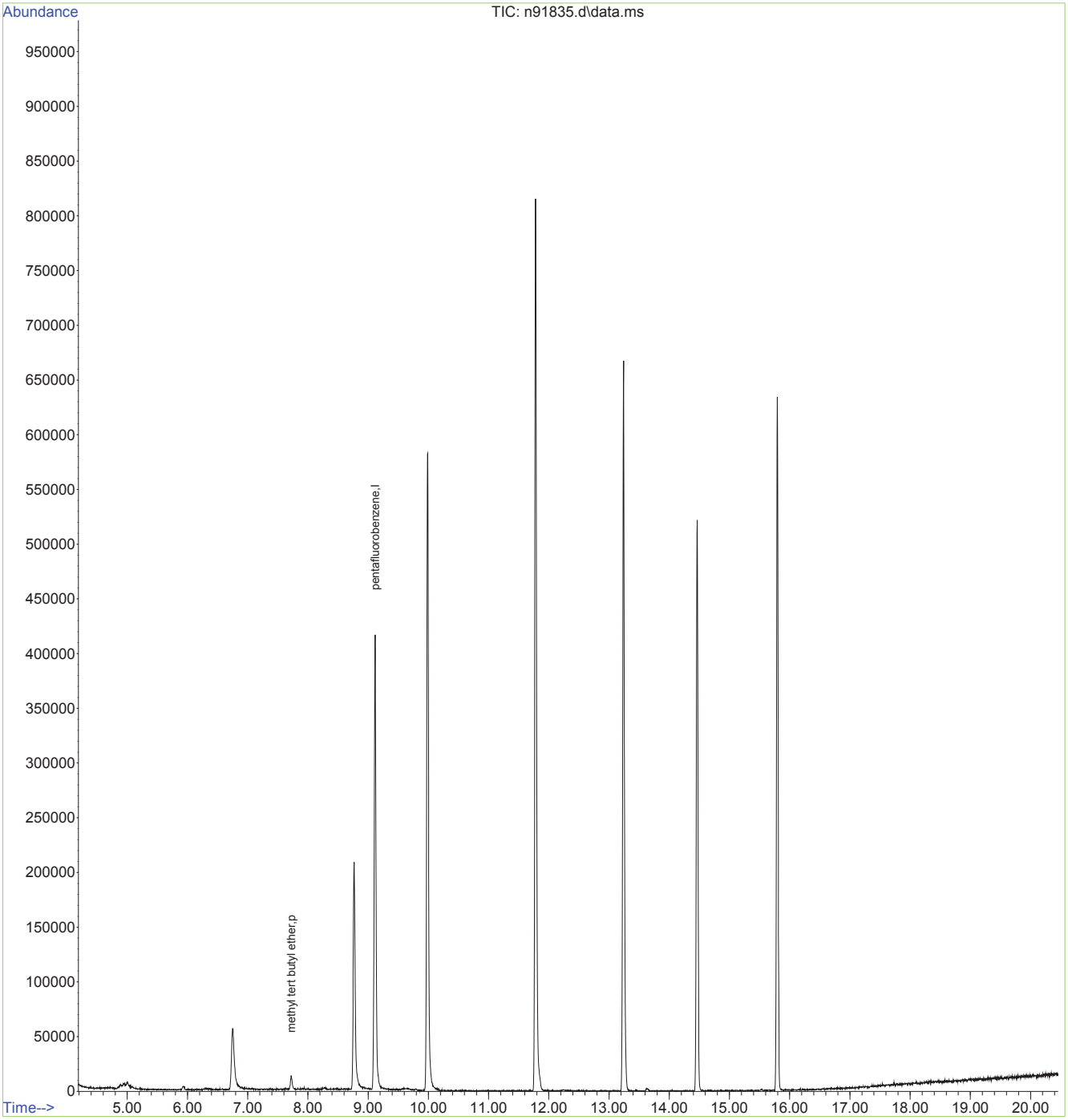
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.115	168	308009	50.00	ug/L	0.00
Target Compounds						Qvalue
2) methyl tert butyl ether	7.719	73	12424	1.91	ug/L	94

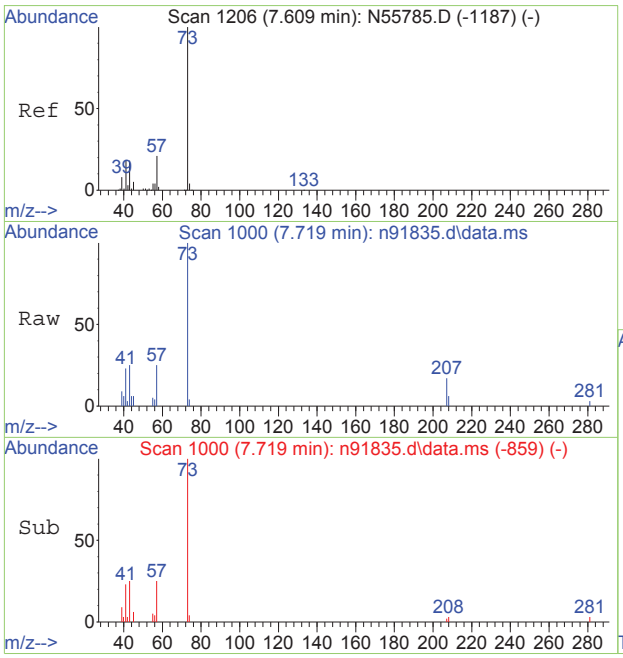
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141104\
Data File : n91835.d
Acq On : 4 Nov 2014 2:01 pm
Operator : jaclynb
Sample : mc34553-3
Misc : ms33129,MSN3393,,,,5,1
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Oct 28 08:49:44 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration

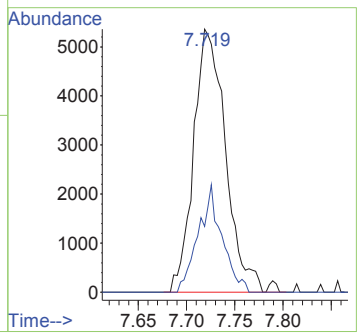




#2
methyl tert butyl ether
Concen: 1.91 ug/L
RT: 7.719 min Scan# 1000
Delta R.T. -0.000 min
Lab File: n91835.d
Acq: 4 Nov 2014 2:01 pm

Tgt Ion: 73 Resp: 12424

Ion	Ratio	Lower	Upper
73	100		
57	25.1	0.0	58.4



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141104\
Data File : n91836.d
Acq On : 4 Nov 2014 2:30 pm
Operator : jaclynb
Sample : mc34553-4
Misc : ms33129,MSN3393,,,,5,2000
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Oct 28 08:49:46 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration

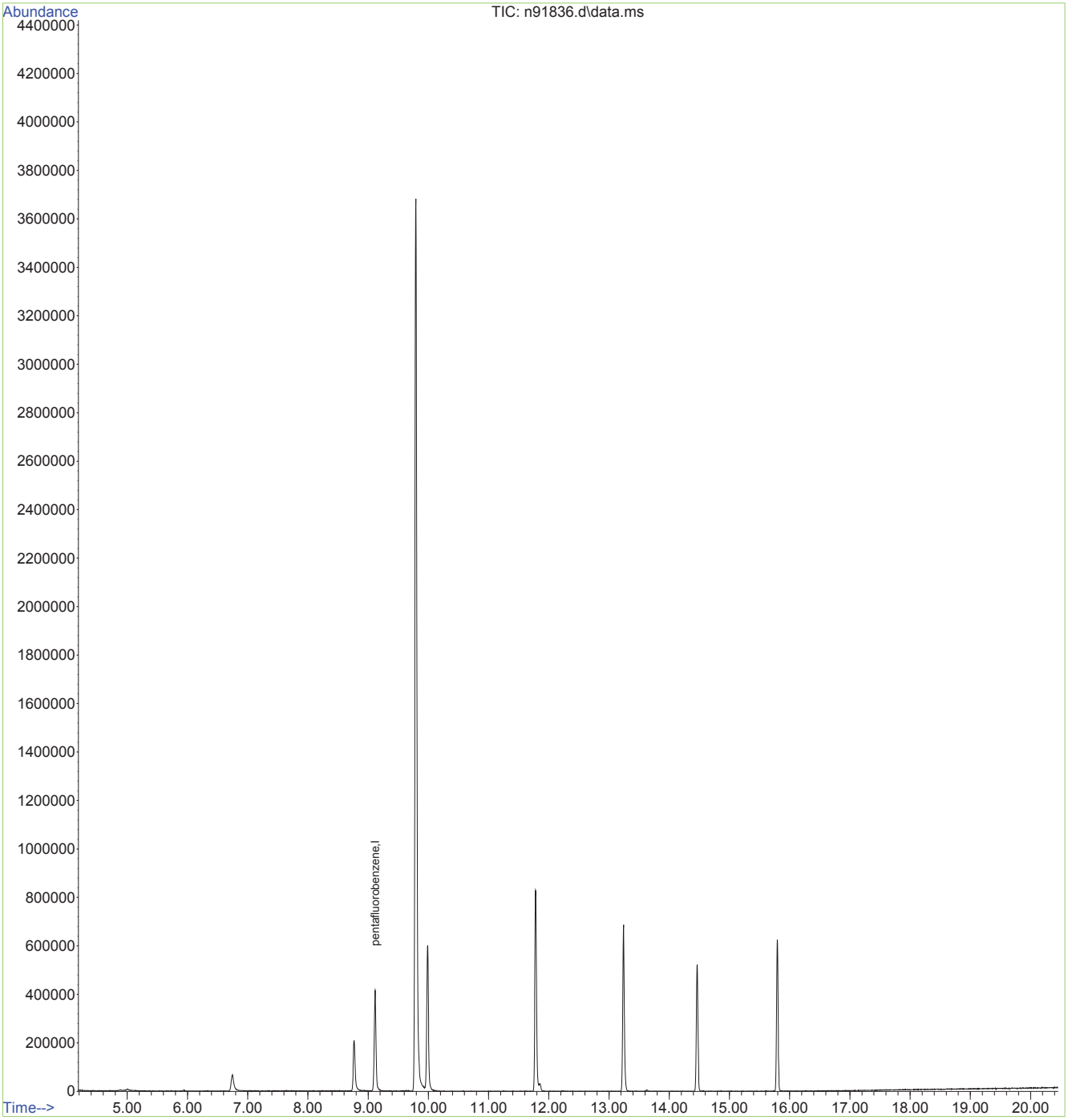
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.115	168	302283	50.00	ug/L	0.00
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141104\
Data File : n91836.d
Acq On : 4 Nov 2014 2:30 pm
Operator : jaclynb
Sample : mc34553-4
Misc : ms33129,MSN3393,,,,5,2000
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Oct 28 08:49:46 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141104\
Data File : n91823.d
Acq On : 4 Nov 2014 8:22 am
Operator : jaclynb
Sample : bs
Misc : ms33122,MSN3393,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Oct 28 08:46:57 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.115	168	372855	50.00	ug/L	0.00
Target Compounds						Qvalue
2) methyl tert butyl ether	7.708	73	431880	47.11	ug/L	98

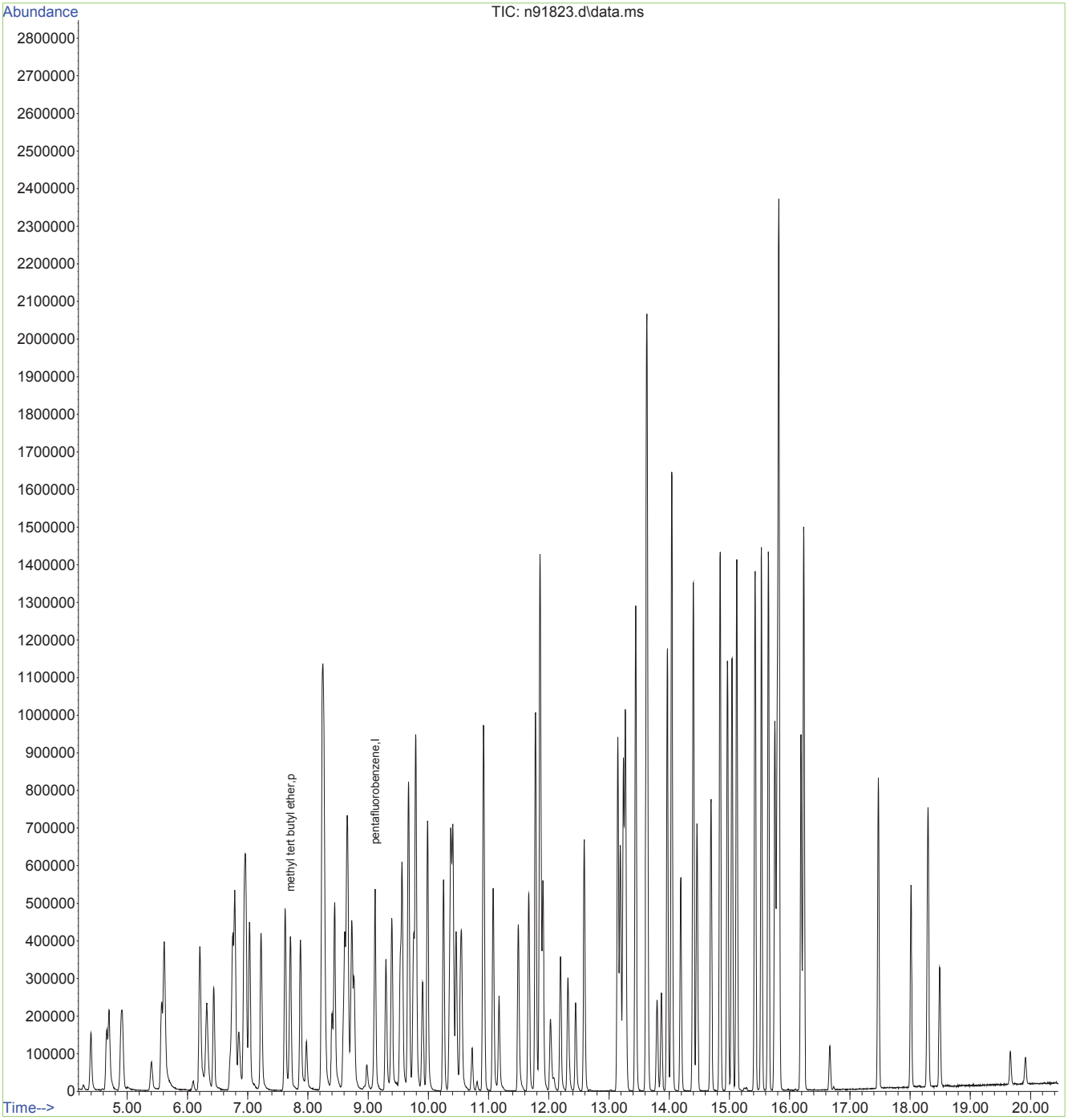
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST MC34553

Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141104\
Data File : n91823.d
Acq On : 4 Nov 2014 8:22 am
Operator : jaclynb
Sample : bs
Misc : ms33122,MSN3393,,,,5,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Oct 28 08:46:57 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration



SGS ACCUTEST MC34553

Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141104\
Data File : n91826.d
Acq On : 4 Nov 2014 9:47 am
Operator : jaclynb
Sample : mb
Misc : ms33129,MSN3393,,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Oct 28 08:49:26 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration

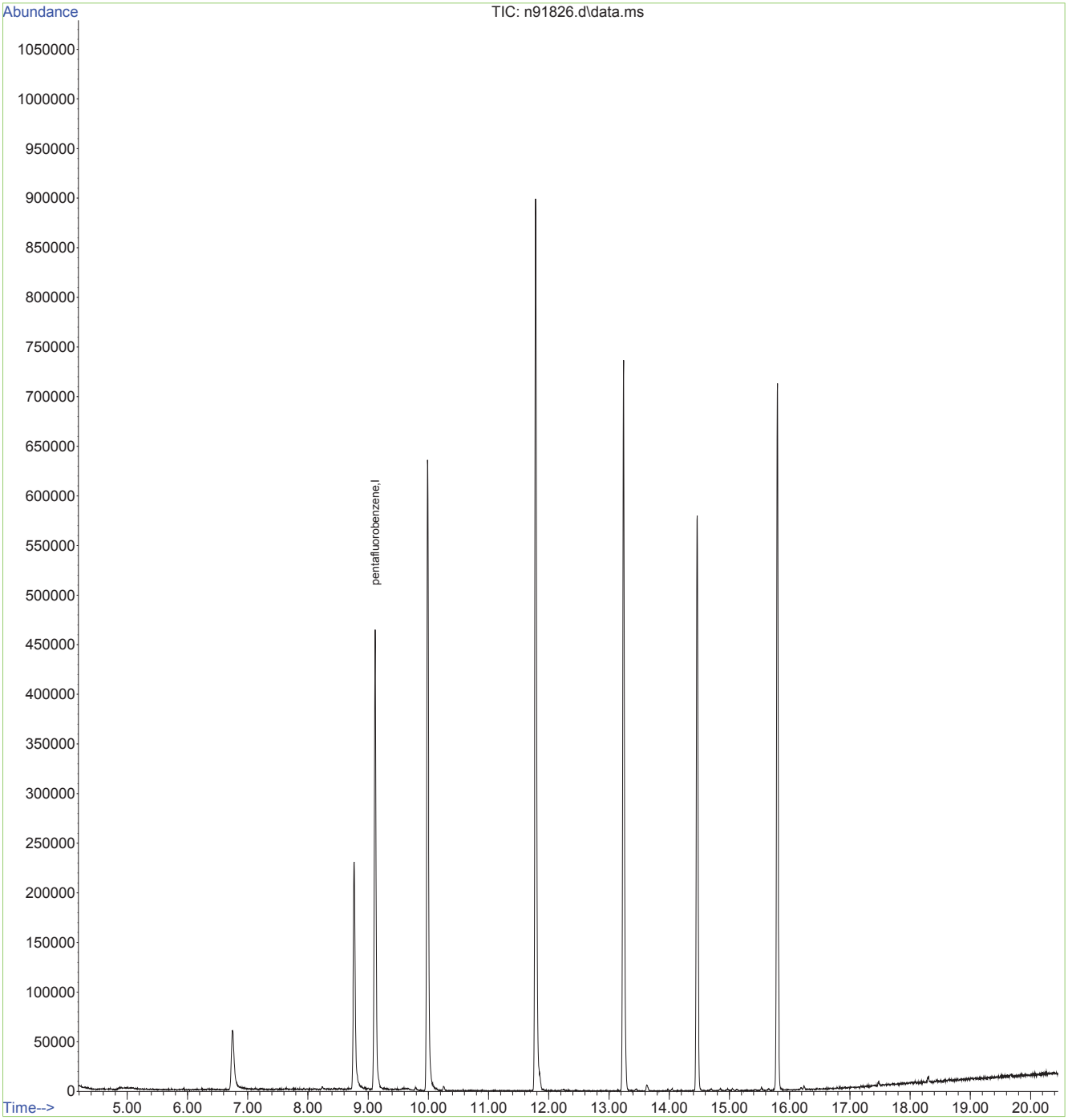
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.115	168	347210	50.00	ug/L	0.00
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141104\
Data File : n91826.d
Acq On : 4 Nov 2014 9:47 am
Operator : jaclynb
Sample : mb
Misc : ms33129,MSN3393,,,,5,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Oct 28 08:49:26 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141104\
Data File : n91846.d
Acq On : 4 Nov 2014 7:13 pm
Operator : jaclynb
Sample : mc34589-1ms
Misc : ms33129,MSN3393,,,,5,5
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Oct 28 08:50:04 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration

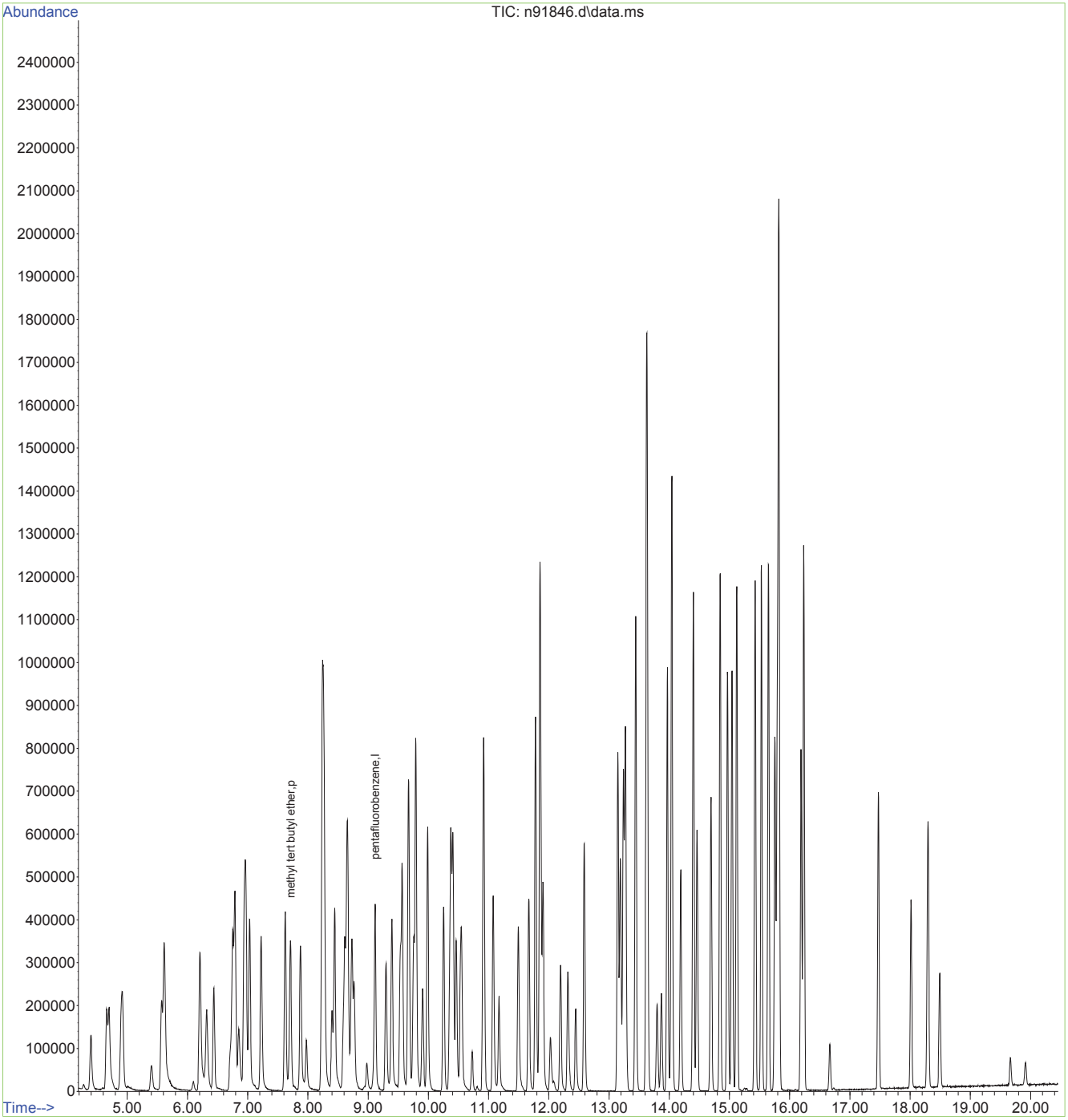
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.115	168	293413	50.00	ug/L	0.00
Target Compounds						Qvalue
2) methyl tert butyl ether	7.711	73	348847	48.35	ug/L	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141104\
Data File : n91846.d
Acq On : 4 Nov 2014 7:13 pm
Operator : jaclynb
Sample : mc34589-1ms
Misc : ms33129,MSN3393,,,,5,5
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Oct 28 08:50:04 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141104\
Data File : n91847.d
Acq On : 4 Nov 2014 7:41 pm
Operator : jaclynb
Sample : mc34589-1msd
Misc : ms33129,MSN3393,,,,5,5
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Oct 28 08:50:06 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration

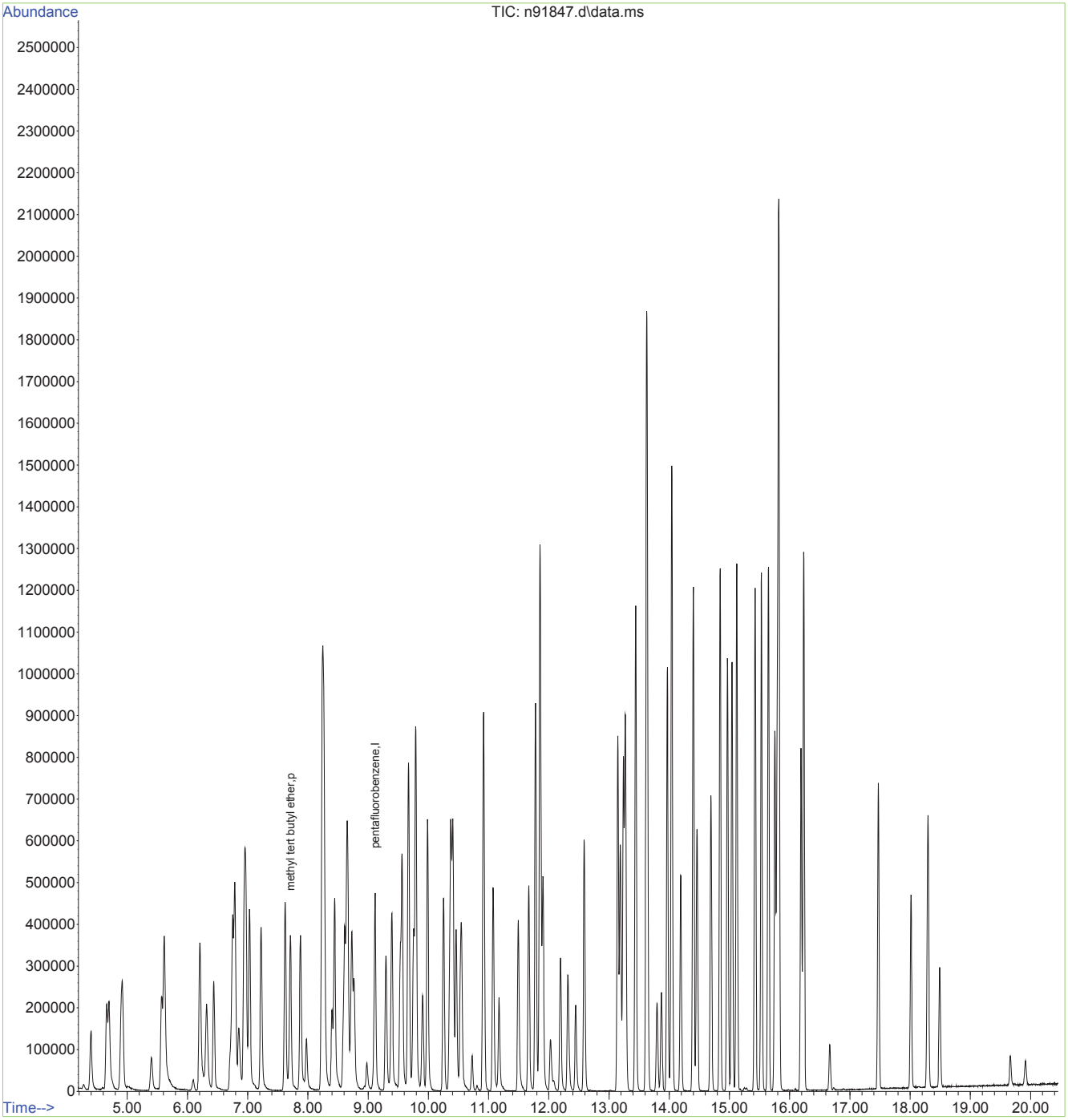
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) pentafluorobenzene	9.115	168	320418	50.00	ug/L	0.00
Target Compounds						Qvalue
2) methyl tert butyl ether	7.708	73	374610	47.55	ug/L	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\msn\1\data backup\n141104\
Data File : n91847.d
Acq On : 4 Nov 2014 7:41 pm
Operator : jaclynb
Sample : mc34589-1msd
Misc : ms33129,MSN3393,,,,5,5
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Oct 28 08:50:06 2015
Quant Method : O:\msn\1\methods\n140918wx.m
Quant Title : SW-846 Method 8260
QLast Update : Fri Oct 16 13:19:49 2015
Response via : Initial Calibration



Internal Sample Tracking Chronicle

Shell Oil

Job No: MC34553

URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC34553-1 Collected: 21-OCT-14 11:25 By: LRCW Received: 23-OCT-14 By: MW28-ROX-102114						
MC34553-1	SW846 8011	28-OCT-14 13:16	NK	27-OCT-14	NE	V8011SL
MC34553-1	SW846 8270D BY SIM	30-OCT-14 14:02	MR	26-OCT-14	AJ	B8270SIMSL
MC34553-1	SW846 8270D	31-OCT-14 19:25	KD	26-OCT-14	AJ	AB8270SL+
MC34553-1	SW846 8260C	04-NOV-14 13:05	JB			V8260SL+
MC34553-2 Collected: 21-OCT-14 13:25 By: LRCW Received: 23-OCT-14 By: MW27-ROX-102114						
MC34553-2	SW846 8011	28-OCT-14 13:33	NK	27-OCT-14	NE	V8011SL
MC34553-2	SW846 8270D BY SIM	30-OCT-14 14:25	MR	26-OCT-14	AJ	B8270SIMSL
MC34553-2	SW846 8270D	31-OCT-14 18:02	MR	26-OCT-14	AJ	AB8270SL+
MC34553-2	SW846 8260C	04-NOV-14 13:33	JB			V8260SL+
MC34553-3 Collected: 21-OCT-14 14:45 By: LRCW Received: 23-OCT-14 By: MW26-ROX-102114						
MC34553-3	SW846 8011	28-OCT-14 13:51	NK	27-OCT-14	NE	V8011SL
MC34553-3	SW846 8270D BY SIM	30-OCT-14 14:47	MR	26-OCT-14	AJ	B8270SIMSL
MC34553-3	SW846 8270D	31-OCT-14 18:24	MR	26-OCT-14	AJ	AB8270SL+
MC34553-3	SW846 8260C	04-NOV-14 14:01	JB			V8260SL+
MC34553-4 Collected: 21-OCT-14 16:00 By: LRCW Received: 23-OCT-14 By: MW25-ROX-102114						
MC34553-4	SW846 8011	28-OCT-14 14:27	NK	27-OCT-14	NE	V8011SL
MC34553-4	SW846 8270D BY SIM	30-OCT-14 15:10	MR	26-OCT-14	AJ	B8270SIMSL
MC34553-4	SW846 8270D	31-OCT-14 18:47	MR	26-OCT-14	AJ	AB8270SL+
MC34553-4	SW846 8260C	04-NOV-14 14:30	JB			V8260SL+
MC34553-5 Collected: 21-OCT-14 00:00 By: LRCW Received: 23-OCT-14 By: TB-ROX-102114-HCL						
MC34553-5	SW846 8260C	04-NOV-14 10:15	JB			V8260SL+
MC34553-6 Collected: 21-OCT-14 00:00 By: LRCW Received: 23-OCT-14 By: TB-ROX-102114-ST						

Internal Sample Tracking Chronicle

Shell Oil

Job No: MC34553

URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC34553-6	SW846 8011	28-OCT-14 14:45	NK	27-OCT-14	NE	V8011SL

SGS Accutest Internal Chain of Custody

Job Number: MC34553
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL
Received: 10/23/14

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC34553-1.1	Walk In Ref #22	Marc Tahtamoni	10/26/14 14:52	Retrieve from Storage
MC34553-1.1	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34553-1.3	VOC Ref #3	Jaclyn Bergeron	11/04/14 09:17	Retrieve from Storage
MC34553-1.3	Jaclyn Bergeron	GCMSN	11/04/14 09:17	Load on Instrument
MC34553-1.3	GCMSN	Jaclyn Bergeron	11/05/14 08:36	Unload from Instrument
MC34553-1.3	Jaclyn Bergeron	VOC Ref #3	11/05/14 08:36	Return to Storage
MC34553-1.3	Scott Parsick		12/18/14 12:16	Disposed
MC34553-1.4	VOC Ref #3	Gary Krasinski	11/03/14 16:28	Retrieve from Storage
MC34553-1.4	Gary Krasinski	GCMSL	11/03/14 16:28	Load on Instrument
MC34553-1.4	GCMSL	Gary Krasinski	11/04/14 11:08	Unload from Instrument
MC34553-1.4	Gary Krasinski	VOC Ref #3	11/04/14 11:09	Return to Storage
MC34553-1.4	Scott Parsick		12/18/14 12:16	Disposed
MC34553-1.6	VOC Ref #3	Marc Tahtamoni	10/27/14 14:13	Retrieve from Storage
MC34553-1.6	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34553-2.2	Walk In Ref #22	Marc Tahtamoni	10/26/14 14:52	Retrieve from Storage
MC34553-2.2	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34553-2.3	VOC Ref #3	Jaclyn Bergeron	11/04/14 09:19	Retrieve from Storage
MC34553-2.3	Jaclyn Bergeron	GCMSN	11/04/14 09:19	Load on Instrument
MC34553-2.3	GCMSN	Jaclyn Bergeron	11/05/14 08:36	Unload from Instrument
MC34553-2.3	Jaclyn Bergeron	VOC Ref #3	11/05/14 08:36	Return to Storage
MC34553-2.3	Scott Parsick		12/18/14 12:16	Disposed
MC34553-2.4	VOC Ref #3	Gary Krasinski	11/03/14 16:28	Retrieve from Storage
MC34553-2.4	Gary Krasinski	GCMSL	11/03/14 16:28	Load on Instrument
MC34553-2.4	GCMSL	Gary Krasinski	11/04/14 11:08	Unload from Instrument
MC34553-2.4	Gary Krasinski	VOC Ref #3	11/04/14 11:09	Return to Storage
MC34553-2.4	Scott Parsick		12/18/14 12:16	Disposed
MC34553-2.5	VOC Ref #3	Marc Tahtamoni	10/27/14 14:13	Retrieve from Storage
MC34553-2.5	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34553-3.2	Walk In Ref #22	Marc Tahtamoni	10/26/14 14:52	Retrieve from Storage
MC34553-3.2	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34553-3.3	VOC Ref #3	Jaclyn Bergeron	11/04/14 09:19	Retrieve from Storage
MC34553-3.3	Jaclyn Bergeron	GCMSN	11/04/14 09:19	Load on Instrument
MC34553-3.3	GCMSN	Jaclyn Bergeron	11/05/14 08:36	Unload from Instrument
MC34553-3.3	Jaclyn Bergeron	VOC Ref #3	11/05/14 08:36	Return to Storage
MC34553-3.3	Scott Parsick		12/18/14 12:16	Disposed

SGS Accutest Internal Chain of Custody

Job Number: MC34553
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL
Received: 10/23/14

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC34553-3.4	VOC Ref #3	Gary Krasinski	11/03/14 16:28	Retrieve from Storage
MC34553-3.4	Gary Krasinski	GCMSL	11/03/14 16:28	Load on Instrument
MC34553-3.4	GCMSL	Gary Krasinski	11/04/14 11:08	Unload from Instrument
MC34553-3.4	Gary Krasinski	VOC Ref #3	11/04/14 11:09	Return to Storage
MC34553-3.4	Scott Parsick		12/18/14 12:16	Disposed
MC34553-3.5	VOC Ref #3	Marc Tahtamoni	10/27/14 14:13	Retrieve from Storage
MC34553-3.5	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34553-4.2	Walk In Ref #22	Marc Tahtamoni	10/26/14 14:52	Retrieve from Storage
MC34553-4.2	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34553-4.3	VOC Ref #3	Gary Krasinski	11/03/14 16:28	Retrieve from Storage
MC34553-4.3	Gary Krasinski	GCMSL	11/03/14 16:28	Load on Instrument
MC34553-4.3	GCMSL	Gary Krasinski	11/04/14 11:08	Unload from Instrument
MC34553-4.3	Gary Krasinski	VOC Ref #3	11/04/14 11:09	Return to Storage
MC34553-4.3	Scott Parsick		12/18/14 12:16	Disposed
MC34553-4.4	VOC Ref #3	Jaclyn Bergeron	11/04/14 09:19	Retrieve from Storage
MC34553-4.4	Jaclyn Bergeron	GCMSN	11/04/14 09:19	Load on Instrument
MC34553-4.4	GCMSN	Jaclyn Bergeron	11/05/14 08:36	Unload from Instrument
MC34553-4.4	Jaclyn Bergeron	VOC Ref #3	11/05/14 08:36	Return to Storage
MC34553-4.4	Scott Parsick		12/18/14 12:16	Disposed
MC34553-4.6	VOC Ref #3	Marc Tahtamoni	10/27/14 14:13	Retrieve from Storage
MC34553-4.6	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34553-5.1	VOC Ref #3	Jaclyn Bergeron	11/04/14 09:17	Retrieve from Storage
MC34553-5.1	Jaclyn Bergeron	GCMSN	11/04/14 09:17	Load on Instrument
MC34553-5.1	GCMSN	Jaclyn Bergeron	11/05/14 08:36	Unload from Instrument
MC34553-5.1	Jaclyn Bergeron	VOC Ref #3	11/05/14 08:36	Return to Storage
MC34553-5.1	Scott Parsick		12/18/14 12:16	Disposed
MC34553-6.2	VOC Ref #3	Marc Tahtamoni	10/27/14 14:13	Retrieve from Storage
MC34553-6.2	Marc Tahtamoni		11/11/14 17:36	Depleted

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: MC34553
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN3393-MB	N91826.D	1	11/04/14	JB	n/a	n/a	MSN3393

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34553-1, MC34553-2, MC34553-3, MC34553-4, MC34553-5

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	ND	0.50	0.25	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.47	ug/l	
75-25-2	Bromoform	ND	1.0	0.30	ug/l	
74-83-9	Bromomethane	ND	2.0	0.77	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.23	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.25	ug/l	
75-00-3	Chloroethane	ND	2.0	0.37	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.31	ug/l	
74-87-3	Chloromethane	ND	2.0	0.59	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.24	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.16	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.31	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.29	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.44	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.47	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.45	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	

Method Blank Summary

Job Number: MC34553
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN3393-MB	N91826.D	1	11/04/14	JB	n/a	n/a	MSN3393

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34553-1, MC34553-2, MC34553-3, MC34553-4, MC34553-5

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.38	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.22	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.39	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.29	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.30	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.29	ug/l	
108-88-3	Toluene	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.19	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.42	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.30	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.40	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.30	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.18	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.45	ug/l	
	m,p-Xylene	ND	1.0	0.38	ug/l	
95-47-6	o-Xylene	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.30	ug/l	

Method Blank Summary

Job Number: MC34553
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN3393-MB	N91826.D	1	11/04/14	JB	n/a	n/a	MSN3393

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34553-1, MC34553-2, MC34553-3, MC34553-4, MC34553-5

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	94%	70-130%
2037-26-5	Toluene-D8	101%	70-130%
460-00-4	4-Bromofluorobenzene	104%	70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Blank Spike Summary

Job Number: MC34553
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN3393-BS	N91823.D	1	11/04/14	JB	n/a	n/a	MSN3393

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34553-1, MC34553-2, MC34553-3, MC34553-4, MC34553-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	52.2	104	70-130
107-02-8	Acrolein	250	243	97	70-130
107-13-1	Acrylonitrile	50	50.4	101	70-130
71-43-2	Benzene	50	49.9	100	70-130
108-86-1	Bromobenzene	50	53.9	108	70-130
74-97-5	Bromochloromethane	50	56.9	114	70-130
75-27-4	Bromodichloromethane	50	46.7	93	70-130
75-25-2	Bromoform	50	51.1	102	70-130
74-83-9	Bromomethane	50	47.3	95	70-130
78-93-3	2-Butanone (MEK)	50	65.6	131* [a]	70-130
104-51-8	n-Butylbenzene	50	55.3	111	70-130
135-98-8	sec-Butylbenzene	50	56.3	113	70-130
98-06-6	tert-Butylbenzene	50	50.6	101	70-130
75-15-0	Carbon disulfide	50	67.1	134* [a]	70-130
56-23-5	Carbon tetrachloride	50	44.7	89	70-130
108-90-7	Chlorobenzene	50	51.6	103	70-130
75-00-3	Chloroethane	50	62.1	124	70-130
110-75-8	2-Chloroethyl vinyl ether	50	56.3	113	70-130
67-66-3	Chloroform	50	45.5	91	70-130
74-87-3	Chloromethane	50	39.9	80	70-130
95-49-8	o-Chlorotoluene	50	52.7	105	70-130
106-43-4	p-Chlorotoluene	50	51.5	103	70-130
124-48-1	Dibromochloromethane	50	50.8	102	70-130
95-50-1	1,2-Dichlorobenzene	50	53.5	107	70-130
541-73-1	1,3-Dichlorobenzene	50	52.9	106	70-130
106-46-7	1,4-Dichlorobenzene	50	57.4	115	70-130
75-71-8	Dichlorodifluoromethane	50	40.5	81	70-130
75-34-3	1,1-Dichloroethane	50	49.7	99	70-130
107-06-2	1,2-Dichloroethane	50	38.8	78	70-130
75-35-4	1,1-Dichloroethene	50	63.9	128	70-130
156-59-2	cis-1,2-Dichloroethene	50	54.0	108	70-130
156-60-5	trans-1,2-Dichloroethene	50	55.5	111	70-130
78-87-5	1,2-Dichloropropane	50	55.6	111	70-130
142-28-9	1,3-Dichloropropane	50	56.0	112	70-130
594-20-7	2,2-Dichloropropane	50	50.5	101	70-130
563-58-6	1,1-Dichloropropene	50	57.2	114	70-130

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34553
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN3393-BS	N91823.D	1	11/04/14	JB	n/a	n/a	MSN3393

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34553-1, MC34553-2, MC34553-3, MC34553-4, MC34553-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-01-5	cis-1,3-Dichloropropene	50	57.7	115	70-130
10061-02-6	trans-1,3-Dichloropropene	50	58.5	117	70-130
123-91-1	1,4-Dioxane	125	148	118	70-130
97-63-2	Ethyl methacrylate	50	55.7	111	77-137
100-41-4	Ethylbenzene	50	50.7	101	70-130
87-68-3	Hexachlorobutadiene	50	48.4	97	70-130
591-78-6	2-Hexanone	50	48.6	97	70-130
98-82-8	Isopropylbenzene	50	55.9	112	70-130
99-87-6	p-Isopropyltoluene	50	54.3	109	70-130
1634-04-4	Methyl Tert Butyl Ether	50	47.1	94	70-130
108-10-1	4-Methyl-2-pentanone (MIBK)	50	45.0	90	70-130
74-95-3	Methylene bromide	50	52.0	104	70-130
75-09-2	Methylene chloride	50	55.9	112	70-130
91-20-3	Naphthalene	50	46.8	94	70-130
103-65-1	n-Propylbenzene	50	57.1	114	70-130
100-42-5	Styrene	50	59.1	118	70-130
630-20-6	1,1,1,2-Tetrachloroethane	50	48.5	97	70-130
79-34-5	1,1,2,2-Tetrachloroethane	50	63.8	128	70-130
127-18-4	Tetrachloroethene	50	50.2	100	70-130
108-88-3	Toluene	50	52.3	105	70-130
87-61-6	1,2,3-Trichlorobenzene	50	44.5	89	70-130
120-82-1	1,2,4-Trichlorobenzene	50	53.9	108	70-130
71-55-6	1,1,1-Trichloroethane	50	50.2	100	70-130
79-00-5	1,1,2-Trichloroethane	50	50.5	101	70-130
79-01-6	Trichloroethene	50	45.7	91	70-130
75-69-4	Trichlorofluoromethane	50	41.9	84	70-130
96-18-4	1,2,3-Trichloropropane	50	58.7	117	70-130
95-63-6	1,2,4-Trimethylbenzene	50	49.5	99	70-130
108-67-8	1,3,5-Trimethylbenzene	50	47.8	96	70-130
108-05-4	Vinyl Acetate	50	43.4	87	70-130
75-01-4	Vinyl chloride	50	47.5	95	70-130
	m,p-Xylene	100	103	103	70-130
95-47-6	o-Xylene	50	52.3	105	70-130
1330-20-7	Xylene (total)	150	155	103	70-130

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34553
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSN3393-BS	N91823.D	1	11/04/14	JB	n/a	n/a	MSN3393

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34553-1, MC34553-2, MC34553-3, MC34553-4, MC34553-5

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	94%	70-130%
2037-26-5	Toluene-D8	104%	70-130%
460-00-4	4-Bromofluorobenzene	97%	70-130%

(a) Outside control limits. Blank Spike meets program technical requirements.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34553
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34589-1MS	N91846.D	5	11/04/14	JB	n/a	n/a	MSN3393
MC34589-1MSD	N91847.D	5	11/04/14	JB	n/a	n/a	MSN3393
MC34589-1	N91829.D	1	11/04/14	JB	n/a	n/a	MSN3393

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34553-1, MC34553-2, MC34553-3, MC34553-4, MC34553-5

CAS No.	Compound	MC34589-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		250	133	53* a	250	127	51* a	5	70-130/30
107-02-8	Acrolein	ND		1250	1330	106	1250	1310	105	2	70-130/30
107-13-1	Acrylonitrile	ND		250	283	113	250	280	112	1	70-130/30
71-43-2	Benzene	ND		250	256	102	250	259	104	1	70-130/30
108-86-1	Bromobenzene	ND		250	262	105	250	265	106	1	70-130/30
74-97-5	Bromochloromethane	ND		250	294	118	250	291	116	1	70-130/30
75-27-4	Bromodichloromethane	ND		250	237	95	250	238	95	0	70-130/30
75-25-2	Bromoform	ND		250	247	99	250	244	98	1	70-130/30
74-83-9	Bromomethane	ND		250	224	90	250	250	100	11	70-130/30
78-93-3	2-Butanone (MEK)	ND		250	265	106	250	270	108	2	70-130/30
104-51-8	n-Butylbenzene	ND		250	274	110	250	272	109	1	70-130/30
135-98-8	sec-Butylbenzene	ND		250	281	112	250	278	111	1	70-130/30
98-06-6	tert-Butylbenzene	ND		250	259	104	250	253	101	2	70-130/30
75-15-0	Carbon disulfide	ND		250	359	144* a	250	354	142* a	1	70-130/30
56-23-5	Carbon tetrachloride	ND		250	230	92	250	232	93	1	70-130/30
108-90-7	Chlorobenzene	ND		250	243	97	250	245	98	1	70-130/30
75-00-3	Chloroethane	ND		250	344	138* a	250	345	138* a	0	70-130/30
110-75-8	2-Chloroethyl vinyl ether	ND		250	295	118	250	293	117	1	70-130/30
67-66-3	Chloroform	ND		250	241	96	250	241	96	0	70-130/30
74-87-3	Chloromethane	ND		250	303	121	250	299	120	1	70-130/30
95-49-8	o-Chlorotoluene	ND		250	262	105	250	263	105	0	70-130/30
106-43-4	p-Chlorotoluene	ND		250	255	102	250	255	102	0	70-130/30
124-48-1	Dibromochloromethane	ND		250	240	96	250	242	97	1	70-130/30
95-50-1	1,2-Dichlorobenzene	ND		250	262	105	250	261	104	0	70-130/30
541-73-1	1,3-Dichlorobenzene	ND		250	257	103	250	258	103	0	70-130/30
106-46-7	1,4-Dichlorobenzene	ND		250	284	114	250	287	115	1	70-130/30
75-71-8	Dichlorodifluoromethane	ND		250	224	90	250	222	89	1	70-130/30
75-34-3	1,1-Dichloroethane	ND		250	265	106	250	266	106	0	70-130/30
107-06-2	1,2-Dichloroethane	ND		250	210	84	250	209	84	0	70-130/30
75-35-4	1,1-Dichloroethene	ND		250	348	139* a	250	351	140* a	1	70-130/30
156-59-2	cis-1,2-Dichloroethene	ND		250	280	112	250	281	112	0	70-130/30
156-60-5	trans-1,2-Dichloroethene	ND		250	285	114	250	286	114	0	70-130/30
78-87-5	1,2-Dichloropropane	ND		250	291	116	250	289	116	1	70-130/30
142-28-9	1,3-Dichloropropane	ND		250	272	109	250	275	110	1	70-130/30
594-20-7	2,2-Dichloropropane	ND		250	242	97	250	239	96	1	70-130/30
563-58-6	1,1-Dichloropropene	ND		250	299	120	250	301	120	1	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34553
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34589-1MS	N91846.D	5	11/04/14	JB	n/a	n/a	MSN3393
MC34589-1MSD	N91847.D	5	11/04/14	JB	n/a	n/a	MSN3393
MC34589-1	N91829.D	1	11/04/14	JB	n/a	n/a	MSN3393

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34553-1, MC34553-2, MC34553-3, MC34553-4, MC34553-5

CAS No.	Compound	MC34589-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-01-5	cis-1,3-Dichloropropene	ND		250	286	114	250	290	116	1	70-130/30
10061-02-6	trans-1,3-Dichloropropene	ND		250	297	119	250	295	118	1	70-130/30
123-91-1	1,4-Dioxane	ND		625	672	108	625	685	110	2	70-130/30
97-63-2	Ethyl methacrylate	ND		250	300	120	250	288	115	4	72-139/30
100-41-4	Ethylbenzene	ND		250	247	99	250	247	99	0	70-130/30
87-68-3	Hexachlorobutadiene	ND		250	228	91	250	229	92	0	70-130/30
591-78-6	2-Hexanone	ND		250	187	75	250	178	71	5	70-130/30
98-82-8	Isopropylbenzene	ND		250	274	110	250	280	112	2	70-130/30
99-87-6	p-Isopropyltoluene	ND		250	273	109	250	274	110	0	70-130/30
1634-04-4	Methyl Tert Butyl Ether	0.44		250	242	97	250	238	95	2	70-130/30
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		250	248	99	250	233	93	6	70-130/30
74-95-3	Methylene bromide	ND		250	269	108	250	270	108	0	70-130/30
75-09-2	Methylene chloride	ND		250	298	119	250	293	117	2	70-130/30
91-20-3	Naphthalene	ND		250	244	98	250	252	101	3	70-130/30
103-65-1	n-Propylbenzene	ND		250	284	114	250	281	112	1	70-130/30
100-42-5	Styrene	ND		250	275	110	250	271	108	1	70-130/30
630-20-6	1,1,1,2-Tetrachloroethane	ND		250	226	90	250	231	92	2	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	342	137* [a]	250	344	138* [a]	1	70-130/30
127-18-4	Tetrachloroethene	ND		250	245	98	250	240	96	2	70-130/30
108-88-3	Toluene	ND		250	265	106	250	266	106	0	70-130/30
87-61-6	1,2,3-Trichlorobenzene	ND		250	223	89	250	225	90	1	70-130/30
120-82-1	1,2,4-Trichlorobenzene	ND		250	257	103	250	263	105	2	70-130/30
71-55-6	1,1,1-Trichloroethane	ND		250	270	108	250	269	108	0	70-130/30
79-00-5	1,1,2-Trichloroethane	ND		250	259	104	250	256	102	1	70-130/30
79-01-6	Trichloroethene	ND		250	234	94	250	234	94	0	70-130/30
75-69-4	Trichlorofluoromethane	ND		250	219	88	250	221	88	1	70-130/30
96-18-4	1,2,3-Trichloropropane	ND		250	311	124	250	303	121	3	70-130/30
95-63-6	1,2,4-Trimethylbenzene	ND		250	244	98	250	243	97	0	70-130/30
108-67-8	1,3,5-Trimethylbenzene	ND		250	234	94	250	234	94	0	70-130/30
108-05-4	Vinyl Acetate	ND		250	243	97	250	239	96	2	70-130/30
75-01-4	Vinyl chloride	ND		250	325	130	250	317	127	2	70-130/30
	m,p-Xylene	ND		500	492	98	500	490	98	0	70-130/30
95-47-6	o-Xylene	ND		250	249	100	250	250	100	0	70-130/30
1330-20-7	Xylene (total)	ND		750	740	99	750	739	99	0	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34553
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34589-1MS	N91846.D	5	11/04/14	JB	n/a	n/a	MSN3393
MC34589-1MSD	N91847.D	5	11/04/14	JB	n/a	n/a	MSN3393
MC34589-1	N91829.D	1	11/04/14	JB	n/a	n/a	MSN3393

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34553-1, MC34553-2, MC34553-3, MC34553-4, MC34553-5

CAS No.	Surrogate Recoveries	MS	MSD	MC34589-1	Limits
1868-53-7	Dibromofluoromethane	98%	98%	95%	70-130%
2037-26-5	Toluene-D8	105%	106%	102%	70-130%
460-00-4	4-Bromofluorobenzene	97%	98%	104%	70-130%

(a) Outside control limits due to possible matrix interference. Refer to Blank Spike.

* = Outside of Control Limits.

Volatile Internal Standard Area Summary

Job Number: MC34553
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSN3393-CC3345	**Injection Date:**	11/04/14
Lab File ID:	N91823.D	**Injection Time:**	08:22
Instrument ID:	GCMSN	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	372855	9.12	601865	9.98	313678	13.24	243750	15.79	129794	6.71
Upper Limit [a]	745710	9.62	1203730	10.48	627356	13.74	487500	16.29	259588	7.21
Lower Limit [b]	186428	8.62	300933	9.48	156839	12.74	121875	15.29	64897	6.21

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSN3393-BS	372855	9.12	601865	9.98	313678	13.24	243750	15.79	129794	6.71
MSN3393-MB	347210	9.12	561342	9.98	281831	13.24	191954	15.80	125264	6.75
MC34553-5	336528	9.12	537858	9.98	265133	13.24	179481	15.80	117933	6.75
ZZZZZZ	331102	9.12	534615	9.99	265135	13.24	181720	15.80	121467	6.75
MC34589-1	331412	9.12	537713	9.99	268271	13.24	185232	15.79	114030	6.76
ZZZZZZ	325157	9.12	521801	9.99	265030	13.24	196478	15.79	125821	6.75
ZZZZZZ	327633	9.12	521814	9.99	262734	13.24	183083	15.80	129074	6.75
ZZZZZZ	322940	9.11	520405	9.99	259169	13.24	173759	15.79	125325	6.75
MC34553-1	331547	9.12	540285	9.99	264532	13.24	180375	15.79	132672	6.75
MC34553-2	315803	9.12	514109	9.99	255705	13.24	171117	15.79	129965	6.75
MC34553-3	308009	9.12	500555	9.98	246964	13.24	166625	15.79	119035	6.75
MC34553-4	302283	9.11	508929	9.99	251959	13.24	164685	15.79	129635	6.75
ZZZZZZ	300411	9.11	492749	9.99	255257	13.24	164117	15.79	121299	6.75
ZZZZZZ	294168	9.11	484702	9.99	242528	13.24	155539	15.80	120390	6.75
ZZZZZZ	296197	9.11	494507	9.98	249321	13.24	172453	15.80	149342	6.72
ZZZZZZ	287063	9.12	475093	9.99	242002	13.24	163447	15.79	119514	6.74
ZZZZZZ	284098	9.12	462954	9.99	238280	13.24	155818	15.79	117746	6.74
ZZZZZZ	288684	9.11	475187	9.99	243932	13.24	159870	15.79	110923	6.74
ZZZZZZ	280632	9.11	459387	9.99	232691	13.24	153127	15.79	115278	6.74
ZZZZZZ	277785	9.12	452756	9.99	229830	13.24	152438	15.79	107225	6.75
ZZZZZZ	277657	9.12	456986	9.99	237293	13.24	153689	15.79	114862	6.74
MC34589-1MS	293413	9.11	486503	9.99	266921	13.24	203608	15.79	124299	6.71
MC34589-1MSD	320418	9.12	526040	9.98	284683	13.24	212459	15.79	120847	6.71

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary

Job Number: MC34553
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Method: SW846 8260C **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
MC34553-1	N91833.D	97	101	105
MC34553-2	N91834.D	96	102	107
MC34553-3	N91835.D	95	101	105
MC34553-4	N91836.D	96	102	108
MC34553-5	N91827.D	91	102	105
MC34589-1MS	N91846.D	98	105	97
MC34589-1MSD	N91847.D	98	106	98
MSN3393-BS	N91823.D	94	104	97
MSN3393-MB	N91826.D	94	101	104

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	70-130%
S2 = Toluene-D8	70-130%
S3 = 4-Bromofluorobenzene	70-130%

GC/MS Semi-volatiles

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QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: MC34553
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40382-MB	R40736.D	1	10/31/14	KD	10/26/14	OP40382	MSR1499

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34553-1, MC34553-2, MC34553-3, MC34553-4

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	10	2.5	ug/l	
95-57-8	2-Chlorophenol	ND	5.0	0.31	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	10	0.83	ug/l	
120-83-2	2,4-Dichlorophenol	ND	10	0.40	ug/l	
105-67-9	2,4-Dimethylphenol	ND	10	0.56	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	2.5	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.9	ug/l	
95-48-7	2-Methylphenol	ND	10	0.23	ug/l	
	3&4-Methylphenol	ND	10	0.47	ug/l	
88-75-5	2-Nitrophenol	ND	10	2.9	ug/l	
100-02-7	4-Nitrophenol	ND	20	0.53	ug/l	
87-86-5	Pentachlorophenol	ND	10	1.1	ug/l	
108-95-2	Phenol	ND	5.0	0.30	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	10	0.37	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	10	0.18	ug/l	
62-53-3	Aniline	ND	10	0.64	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.0	0.47	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.0	0.53	ug/l	
100-51-6	Benzyl Alcohol	ND	10	2.3	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.31	ug/l	
106-47-8	4-Chloroaniline	ND	10	0.56	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.0	0.29	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.0	0.35	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.0	0.33	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.0	0.25	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	5.0	0.24	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	10	0.46	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	10	0.30	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.27	ug/l	
132-64-9	Dibenzofuran	ND	2.0	0.26	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.0	0.17	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.0	0.28	ug/l	
84-66-2	Diethyl phthalate	ND	5.0	0.20	ug/l	
131-11-3	Dimethyl phthalate	ND	5.0	0.34	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
118-74-1	Hexachlorobenzene	ND	5.0	0.29	ug/l	

Method Blank Summary

Job Number: MC34553
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40382-MB	R40736.D	1	10/31/14	KD	10/26/14	OP40382	MSR1499

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34553-1, MC34553-2, MC34553-3, MC34553-4

CAS No.	Compound	Result	RL	MDL	Units	Q
77-47-4	Hexachlorocyclopentadiene	ND	10	1.3	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.30	ug/l	
78-59-1	Isophorone	ND	5.0	0.45	ug/l	
88-74-4	2-Nitroaniline	ND	10	0.40	ug/l	
99-09-2	3-Nitroaniline	ND	10	1.4	ug/l	
100-01-6	4-Nitroaniline	ND	10	2.2	ug/l	
98-95-3	Nitrobenzene	ND	5.0	0.39	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	5.0	1.0	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.0	0.40	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.19	ug/l	
110-86-1	Pyridine	ND	10	0.52	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	46%	15-110%
4165-62-2	Phenol-d5	30%	15-110%
118-79-6	2,4,6-Tribromophenol	92%	15-110%
4165-60-0	Nitrobenzene-d5	72%	30-130%
321-60-8	2-Fluorobiphenyl	76%	30-130%
1718-51-0	Terphenyl-d14	99%	30-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

Method Blank Summary

Job Number: MC34553
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40383-MB	I92608.D	1	10/30/14	MR	10/26/14	OP40383	MSI3452

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

MC34553-1, MC34553-2, MC34553-3, MC34553-4

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.069	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.050	ug/l	
120-12-7	Anthracene	ND	0.10	0.092	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.050	0.020	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.029	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.050	0.032	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.027	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.039	ug/l	
218-01-9	Chrysene	ND	0.10	0.024	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.032	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.041	ug/l	
86-73-7	Fluorene	ND	0.10	0.099	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.031	ug/l	
90-12-0	1-Methylnaphthalene	ND	2.0	0.50	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.0	0.50	ug/l	
85-01-8	Phenanthrene	ND	0.050	0.013	ug/l	
129-00-0	Pyrene	ND	0.10	0.038	ug/l	

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	87%	30-130%
321-60-8	2-Fluorobiphenyl	74%	30-130%
1718-51-0	Terphenyl-d14	84%	30-130%

Blank Spike Summary

Job Number: MC34553
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40382-BS	R40737.D	1	10/31/14	KD	10/26/14	OP40382	MSR1499

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34553-1, MC34553-2, MC34553-3, MC34553-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
65-85-0	Benzoic Acid	50	11.7	23* [a]	30-130
95-57-8	2-Chlorophenol	50	37.0	74	30-130
59-50-7	4-Chloro-3-methyl phenol	50	35.5	71	30-130
120-83-2	2,4-Dichlorophenol	50	44.4	89	30-130
105-67-9	2,4-Dimethylphenol	50	28.9	58	30-130
51-28-5	2,4-Dinitrophenol	50	24.2	48	30-130
534-52-1	4,6-Dinitro-o-cresol	50	35.2	70	30-130
95-48-7	2-Methylphenol	50	29.3	59	30-130
	3&4-Methylphenol	100	56.3	56	30-130
88-75-5	2-Nitrophenol	50	43.7	87	30-130
100-02-7	4-Nitrophenol	50	18.5	37	30-130
87-86-5	Pentachlorophenol	50	24.3	49	30-130
108-95-2	Phenol	50	15.5	31	30-130
95-95-4	2,4,5-Trichlorophenol	50	43.7	87	30-130
88-06-2	2,4,6-Trichlorophenol	50	44.9	90	30-130
62-53-3	Aniline	50	26.3	53	40-140
101-55-3	4-Bromophenyl phenyl ether	50	50.9	102	40-140
85-68-7	Butyl benzyl phthalate	50	45.1	90	40-140
100-51-6	Benzyl Alcohol	50	32.2	64	40-140
91-58-7	2-Chloronaphthalene	50	47.7	95	40-140
106-47-8	4-Chloroaniline	50	39.3	79	40-140
111-91-1	bis(2-Chloroethoxy)methane	50	37.3	75	40-140
111-44-4	bis(2-Chloroethyl)ether	50	35.7	71	40-140
108-60-1	bis(2-Chloroisopropyl)ether	50	50.1	100	40-140
7005-72-3	4-Chlorophenyl phenyl ether	50	44.3	89	40-140
122-66-7	1,2-Diphenylhydrazine	50	41.7	83	40-140
121-14-2	2,4-Dinitrotoluene	50	46.0	92	40-140
606-20-2	2,6-Dinitrotoluene	50	44.8	90	40-140
91-94-1	3,3'-Dichlorobenzidine	50	42.0	84	40-140
132-64-9	Dibenzofuran	50	42.4	85	40-140
84-74-2	Di-n-butyl phthalate	50	42.2	84	40-140
117-84-0	Di-n-octyl phthalate	50	43.0	86	40-140
84-66-2	Diethyl phthalate	50	40.7	81	40-140
131-11-3	Dimethyl phthalate	50	41.1	82	40-140
117-81-7	bis(2-Ethylhexyl)phthalate	50	45.6	91	40-140
118-74-1	Hexachlorobenzene	50	54.8	110	40-140

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34553
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40382-BS	R40737.D	1	10/31/14	KD	10/26/14	OP40382	MSR1499

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34553-1, MC34553-2, MC34553-3, MC34553-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
77-47-4	Hexachlorocyclopentadiene	50	19.9	40	40-140
67-72-1	Hexachloroethane	50	28.5	57	40-140
78-59-1	Isophorone	50	33.3	67	40-140
88-74-4	2-Nitroaniline	50	43.9	88	40-140
99-09-2	3-Nitroaniline	50	40.5	81	40-140
100-01-6	4-Nitroaniline	50	39.2	78	40-140
98-95-3	Nitrobenzene	50	52.9	106	40-140
62-75-9	n-Nitrosodimethylamine	50	24.2	48	40-140
621-64-7	N-Nitroso-di-n-propylamine	50	31.5	63	40-140
86-30-6	N-Nitrosodiphenylamine	50	40.0	80	40-140
110-86-1	Pyridine	50	22.7	45	40-140

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	46%	15-110%
4165-62-2	Phenol-d5	33%	15-110%
118-79-6	2,4,6-Tribromophenol	97%	15-110%
4165-60-0	Nitrobenzene-d5	71%	30-130%
321-60-8	2-Fluorobiphenyl	78%	30-130%
1718-51-0	Terphenyl-d14	95%	30-130%

(a) Outside control limits. Blank Spike meets program technical requirements.

* = Outside of Control Limits.

Blank Spike Summary

Job Number: MC34553
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40383-BS	I92609.D	1	10/30/14	MR	10/26/14	OP40383	MSI3452

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

MC34553-1, MC34553-2, MC34553-3, MC34553-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
83-32-9	Acenaphthene	50	41.6	83	40-140
208-96-8	Acenaphthylene	50	36.9	74	40-140
120-12-7	Anthracene	50	44.1	88	40-140
56-55-3	Benzo(a)anthracene	50	51.4	103	40-140
50-32-8	Benzo(a)pyrene	50	46.8	94	40-140
205-99-2	Benzo(b)fluoranthene	50	48.1	96	40-140
191-24-2	Benzo(g,h,i)perylene	50	46.3	93	40-140
207-08-9	Benzo(k)fluoranthene	50	46.2	92	40-140
218-01-9	Chrysene	50	46.8	94	40-140
53-70-3	Dibenzo(a,h)anthracene	50	46.3	93	40-140
206-44-0	Fluoranthene	50	41.8	84	40-140
86-73-7	Fluorene	50	45.6	91	40-140
193-39-5	Indeno(1,2,3-cd)pyrene	50	45.8	92	40-140
90-12-0	1-Methylnaphthalene	50	39.2	78	40-140
91-57-6	2-Methylnaphthalene	50	39.2	78	40-140
85-01-8	Phenanthrene	50	45.4	91	40-140
129-00-0	Pyrene	50	39.7	79	40-140

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	88%	30-130%
321-60-8	2-Fluorobiphenyl	76%	30-130%
1718-51-0	Terphenyl-d14	81%	30-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34553
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40382-MS	R40738.D	1	10/31/14	KD	10/26/14	OP40382	MSR1499
OP40382-MSD	R40739.D	1	10/31/14	KD	10/26/14	OP40382	MSR1499
MC34200-6	R40740.D	1	10/31/14	KD	10/26/14	OP40382	MSR1499

The QC reported here applies to the following samples: Method: SW846 8270D

MC34553-1, MC34553-2, MC34553-3, MC34553-4

CAS No.	Compound	MC34200-6 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic Acid	ND		50	12.7	25* a	50	11.7	23* a	8	30-130/20
95-57-8	2-Chlorophenol	ND		50	39.2	78	50	38.7	77	1	30-130/20
59-50-7	4-Chloro-3-methyl phenol	ND		50	36.5	73	50	36.7	73	1	30-130/20
120-83-2	2,4-Dichlorophenol	ND		50	46.6	93	50	46.7	93	0	30-130/20
105-67-9	2,4-Dimethylphenol	ND		50	33.5	67	50	32.0	64	5	30-130/20
51-28-5	2,4-Dinitrophenol	ND		50	31.7	63	50	29.0	58	9	30-130/20
534-52-1	4,6-Dinitro-o-cresol	ND		50	41.6	83	50	40.4	81	3	30-130/20
95-48-7	2-Methylphenol	ND		50	31.3	63	50	30.6	61	2	30-130/20
	3&4-Methylphenol	ND		100	59.5	60	100	59.5	60	0	30-130/20
88-75-5	2-Nitrophenol	ND		50	46.2	92	50	46.2	92	0	30-130/20
100-02-7	4-Nitrophenol	ND		50	19.1	38	50	19.3	39	1	30-130/20
87-86-5	Pentachlorophenol	ND		50	25.1	50	50	25.3	51	1	30-130/20
108-95-2	Phenol	ND		50	16.1	32	50	16.2	32	1	30-130/20
95-95-4	2,4,5-Trichlorophenol	ND		50	45.6	91	50	45.8	92	0	30-130/20
88-06-2	2,4,6-Trichlorophenol	ND		50	47.1	94	50	47.2	94	0	30-130/20
62-53-3	Aniline	ND		50	28.8	58	50	28.3	57	2	40-140/20
101-55-3	4-Bromophenyl phenyl ether	ND		50	55.0	110	50	52.8	106	4	40-140/20
85-68-7	Butyl benzyl phthalate	ND		50	48.4	97	50	47.2	94	3	40-140/20
100-51-6	Benzyl Alcohol	ND		50	34.6	69	50	33.8	68	2	40-140/20
91-58-7	2-Chloronaphthalene	ND		50	50.7	101	50	50.1	100	1	40-140/20
106-47-8	4-Chloroaniline	ND		50	42.4	85	50	42.2	84	0	40-140/20
111-91-1	bis(2-Chloroethoxy)methane	ND		50	39.8	80	50	38.3	77	4	40-140/20
111-44-4	bis(2-Chloroethyl)ether	ND		50	37.8	76	50	36.7	73	3	40-140/20
108-60-1	bis(2-Chloroisopropyl)ether	ND		50	53.7	107	50	51.2	102	5	40-140/20
7005-72-3	4-Chlorophenyl phenyl ether	ND		50	46.7	93	50	46.1	92	1	40-140/20
122-66-7	1,2-Diphenylhydrazine	ND		50	43.5	87	50	43.4	87	0	40-140/20
121-14-2	2,4-Dinitrotoluene	ND		50	50.5	101	50	47.4	95	6	40-140/20
606-20-2	2,6-Dinitrotoluene	ND		50	48.9	98	50	46.8	94	4	40-140/20
91-94-1	3,3'-Dichlorobenzidine	ND		50	45.1	90	50	46.8	94	4	40-140/20
132-64-9	Dibenzofuran	ND		50	44.1	88	50	43.4	87	2	40-140/20
84-74-2	Di-n-butyl phthalate	ND		50	44.8	90	50	44.0	88	2	40-140/20
117-84-0	Di-n-octyl phthalate	ND		50	44.7	89	50	44.3	89	1	40-140/20
84-66-2	Diethyl phthalate	ND		50	44.3	89	50	43.9	88	1	40-140/20
131-11-3	Dimethyl phthalate	ND		50	44.6	89	50	44.3	89	1	40-140/20
117-81-7	bis(2-Ethylhexyl)phthalate	ND		50	48.3	97	50	47.2	94	2	40-140/20
118-74-1	Hexachlorobenzene	ND		50	58.8	118	50	57.7	115	2	40-140/20

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34553
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40382-MS	R40738.D	1	10/31/14	KD	10/26/14	OP40382	MSR1499
OP40382-MSD	R40739.D	1	10/31/14	KD	10/26/14	OP40382	MSR1499
MC34200-6	R40740.D	1	10/31/14	KD	10/26/14	OP40382	MSR1499

The QC reported here applies to the following samples: **Method:** SW846 8270D

MC34553-1, MC34553-2, MC34553-3, MC34553-4

CAS No.	Compound	MC34200-6 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
77-47-4	Hexachlorocyclopentadiene	ND		50	22.7	45	50	22.9	46	1	40-140/20
67-72-1	Hexachloroethane	ND		50	32.5	65	50	31.7	63	2	40-140/20
78-59-1	Isophorone	ND		50	35.3	71	50	34.2	68	3	40-140/20
88-74-4	2-Nitroaniline	ND		50	46.1	92	50	45.4	91	2	40-140/20
99-09-2	3-Nitroaniline	ND		50	42.1	84	50	41.8	84	1	40-140/20
100-01-6	4-Nitroaniline	ND		50	42.3	85	50	40.6	81	4	40-140/20
98-95-3	Nitrobenzene	ND		50	56.0	112	50	55.3	111	1	40-140/20
62-75-9	n-Nitrosodimethylamine	ND		50	25.6	51	50	24.8	50	3	40-140/20
621-64-7	N-Nitroso-di-n-propylamine	ND		50	32.5	65	50	32.4	65	0	40-140/20
86-30-6	N-Nitrosodiphenylamine	ND		50	44.0	88	50	42.1	84	4	40-140/20
110-86-1	Pyridine	ND		50	24.0	48	50	23.5	47	2	40-140/20

CAS No.	Surrogate Recoveries	MS	MSD	MC34200-6	Limits
367-12-4	2-Fluorophenol	47%	47%	42%	15-110%
4165-62-2	Phenol-d5	35%	34%	28%	15-110%
118-79-6	2,4,6-Tribromophenol	106%	102%	87%	15-110%
4165-60-0	Nitrobenzene-d5	74%	73%	72%	30-130%
321-60-8	2-Fluorobiphenyl	82%	82%	79%	30-130%
1718-51-0	Terphenyl-d14	101%	98%	96%	30-130%

(a) Outside control limits. Blank Spike meets program technical requirements.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34553
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40383-MS	I92610.D	1	10/30/14	MR	10/26/14	OP40383	MSI3452
OP40383-MSD	I92611.D	1	10/30/14	MR	10/26/14	OP40383	MSI3452
MC34200-7	I92612.D	1	10/30/14	MR	10/26/14	OP40383	MSI3452

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

MC34553-1, MC34553-2, MC34553-3, MC34553-4

CAS No.	Compound	MC34200-7 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	ND		50	44.1	88	50	42.9	86	3	40-140/20
208-96-8	Acenaphthylene	ND		50	39.0	78	50	38.4	77	2	40-140/20
120-12-7	Anthracene	ND		50	46.7	93	50	45.1	90	3	40-140/20
56-55-3	Benzo(a)anthracene	ND		50	55.1	110	50	53.0	106	4	40-140/20
50-32-8	Benzo(a)pyrene	ND		50	50.2	100	50	48.2	96	4	40-140/20
205-99-2	Benzo(b)fluoranthene	ND		50	58.6	117	50	50.7	101	14	40-140/20
191-24-2	Benzo(g,h,i)perylene	ND		50	49.4	99	50	47.5	95	4	40-140/20
207-08-9	Benzo(k)fluoranthene	ND		50	42.2	84	50	46.1	92	9	40-140/20
218-01-9	Chrysene	ND		50	49.8	100	50	49.0	98	2	40-140/20
53-70-3	Dibenzo(a,h)anthracene	ND		50	49.7	99	50	47.7	95	4	40-140/20
206-44-0	Fluoranthene	ND		50	43.9	88	50	42.4	85	3	40-140/20
86-73-7	Fluorene	ND		50	47.8	96	50	47.1	94	1	40-140/20
193-39-5	Indeno(1,2,3-cd)pyrene	ND		50	49.1	98	50	47.3	95	4	40-140/20
90-12-0	1-Methylnaphthalene	ND		50	42.0	84	50	40.9	82	3	40-140/20
91-57-6	2-Methylnaphthalene	ND		50	42.2	84	50	41.0	82	3	40-140/20
85-01-8	Phenanthrene	ND		50	48.1	96	50	47.4	95	1	40-140/20
129-00-0	Pyrene	ND		50	42.5	85	50	40.8	82	4	40-140/20

CAS No.	Surrogate Recoveries	MS	MSD	MC34200-7	Limits
4165-60-0	Nitrobenzene-d5	91%	89%	88%	30-130%
321-60-8	2-Fluorobiphenyl	81%	79%	76%	30-130%
1718-51-0	Terphenyl-d14	85%	82%	81%	30-130%

* = Outside of Control Limits.

Semivolatile Internal Standard Area Summary

Job Number: MC34553
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSF3381-CC3361	**Injection Date:**	10/31/14
Lab File ID:	F77196.D	**Injection Time:**	14:11
Instrument ID:	GCMSF	**Method:**	SW846 8270D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	51668	3.97	184918	5.02	122344	6.54	211428	7.82	282460	10.34	264118	12.01
Upper Limit [a]	103336	4.47	369836	5.52	244688	7.04	422856	8.32	564920	10.84	528236	12.51
Lower Limit [b]	25834	3.47	92459	4.52	61172	6.04	105714	7.32	141230	9.84	132059	11.51

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
ZZZZZZ	61873	3.97	213905	5.01	137979	6.54	270104	7.82	319153	10.34	303547	12.01
ZZZZZZ	54447	3.97	193661	5.01	127903	6.54	242266	7.82	326401	10.34	302645	12.01
ZZZZZZ	58108	3.96	203410	5.01	131987	6.54	250365	7.82	305696	10.33	279504	12.01
ZZZZZZ	53567	3.96	188125	5.01	128098	6.54	238867	7.82	310492	10.33	292982	12.01
ZZZZZZ	55430	3.97	189752	5.01	124885	6.54	245692	7.82	315158	10.34	300905	12.01
OP40465-MB	52758	3.96	183371	5.01	121919	6.54	226092	7.82	276654	10.33	255652	12.01
OP40465-BS	58381	3.97	205864	5.01	124517	6.54	227066	7.82	271773	10.34	253226	12.01
OP40465-BSD	56195	3.97	206001	5.02	125111	6.54	221702	7.82	283547	10.34	255205	12.01
ZZZZZZ	58955	3.97	225644	5.02	151940	6.54	310726	7.82	449851	10.37	480081	12.08
MC34553-2	60668	3.97	213943	5.02	142385	6.54	298093	7.82	401491	10.34	434454	12.01
MC34553-3	60306	3.97	200964	5.02	130471	6.54	260580	7.82	357039	10.34	379197	12.01
MC34553-4	66588	3.97	220791	5.01	144816	6.54	271756	7.82	356317	10.34	378337	12.01
OP40470-LB	49202	3.97	172369	5.01	116096	6.54	225541	7.82	289827	10.34	296624	12.01
OP40470-MB	49202	3.97	172369	5.01	116096	6.54	225541	7.82	289827	10.34	296624	12.01
OP40470-BS	63074	3.97	218059	5.02	141228	6.54	261273	7.82	336944	10.34	357967	12.01
ZZZZZZ	46770	3.96	163701	5.01	109551	6.54	212333	7.82	271462	10.33	278314	12.01
ZZZZZZ	54424	3.96	183392	5.01	120307	6.54	223035	7.82	274786	10.33	277323	12.01
ZZZZZZ	50496	3.96	175476	5.01	112270	6.54	210702	7.82	258057	10.34	260823	12.01
ZZZZZZ	56079	3.96	203058	5.01	131177	6.54	251216	7.82	307594	10.33	321964	12.01

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: MC34553
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSI3452-CC3427	**Injection Date:**	10/30/14
Lab File ID:	I92599.D	**Injection Time:**	08:44
Instrument ID:	GCMSI	**Method:**	SW846 8270D BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	259846	2.71	583482	3.73	334178	5.21	597233	6.45	555049	9.07	936878	10.46
Upper Limit [a]	519692	3.21	1166964	4.23	668356	5.71	1194466	6.95	1110098	9.57	1873756	10.96
Lower Limit [b]	129923	2.21	291741	3.23	167089	4.71	298617	5.95	277525	8.57	468439	9.96

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
ZZZZZZ	349723	2.72	767972	3.73	438516	5.21	757280	6.45	669094	9.07	1051294	10.46
ZZZZZZ	311146	2.72	691892	3.73	398504	5.21	687621	6.45	620807	9.07	1012827	10.46
ZZZZZZ	291668	2.72	653497	3.73	370399	5.21	648877	6.44	573628	9.07	938253	10.46
ZZZZZZ	340193	2.72	756444	3.73	428655	5.21	736797	6.45	636933	9.07	989172	10.47
OP40320-MB	258983	2.71	575867	3.73	328799	5.21	575879	6.45	534307	9.07	858033	10.45
OP40320-BS	250821	2.71	564170	3.73	321541	5.21	557860	6.45	522351	9.08	849309	10.46
ZZZZZZ	256990	2.71	558827	3.73	325004	5.21	561401	6.44	513988	9.07	838248	10.45
ZZZZZZ	252267	2.71	555342	3.73	316530	5.21	547549	6.44	481113	9.07	731520	10.47
OP40383-MB	263545	2.71	585862	3.73	334970	5.21	584391	6.44	530994	9.07	891128	10.45
OP40383-BS	283636	2.71	637836	3.74	361394	5.22	621892	6.45	561707	9.08	933688	10.46
OP40383-MS	268690	2.71	608123	3.74	343643	5.22	589802	6.45	535675	9.08	886463	10.46
OP40383-MSD	261612	2.71	587902	3.74	333152	5.22	576894	6.45	517630	9.08	870213	10.46
MC34200-7	258908	2.71	569665	3.73	322468	5.21	561646	6.44	508458	9.07	864244	10.45
MC34553-1	274174	2.71	602855	3.73	340376	5.21	600869	6.44	543748	9.07	909748	10.45
MC34553-2	260642	2.71	564206	3.73	322355	5.21	565943	6.44	509645	9.07	859551	10.45
MC34553-3	255543	2.71	557477	3.73	317025	5.21	550808	6.44	496763	9.07	836208	10.45
MC34553-4	273092	2.72	599376	3.73	344546	5.21	595180	6.44	526716	9.07	885219	10.45
ZZZZZZ	261362	2.71	578197	3.73	323987	5.21	562840	6.44	511611	9.07	861038	10.45
ZZZZZZ	260483	2.71	574116	3.73	323837	5.21	569046	6.44	526031	9.07	859615	10.45
ZZZZZZ	248414	2.71	538539	3.73	306480	5.21	533283	6.44	484752	9.07	796878	10.45

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: MC34553
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSR1499-CC1481	**Injection Date:**	10/31/14
Lab File ID:	R40713.D	**Injection Time:**	08:02
Instrument ID:	GCMSR	**Method:**	SW846 8270D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	395004	3.39	1357825	4.53	822129	6.02	1345434	7.26	1280900	9.49	1218427	10.67
Upper Limit [a]	790008	3.89	2715650	5.03	1644258	6.52	2690868	7.76	2561800	9.99	2436854	11.17
Lower Limit [b]	197502	2.89	678913	4.03	411065	5.52	672717	6.76	640450	8.99	609214	10.17

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP40284-MB	501532	3.38	1739473	4.52	1058636	6.01	1773344	7.25	1678443	9.48	1589584	10.67
OP40284-BS	505209	3.39	1743981	4.53	1038092	6.02	1646077	7.26	1590893	9.49	1490930	10.67
OP40284-MS	481337	3.39	1669042	4.53	1001206	6.02	1623878	7.26	1534917	9.48	1437551	10.67
OP40284-MSD	468214	3.38	1605016	4.53	964663	6.02	1562439	7.26	1453144	9.48	1386046	10.67
MC34100-7	463181	3.38	1586645	4.52	961408	6.01	1584766	7.25	1527576	9.47	1404810	10.66
ZZZZZZ	456970	3.38	1552295	4.52	833168	6.02	1443871	7.26	1569314	9.48	1543538	10.68
ZZZZZZ	486199	3.38	1663679	4.52	1012019	6.01	1670991	7.25	1609443	9.48	1540309	10.67
ZZZZZZ	453101	3.38	1560054	4.52	949009	6.01	1568407	7.25	1573234	9.49	1542179	10.68
ZZZZZZ	438182	3.38	1522107	4.52	931082	6.01	1538169	7.25	1475159	9.48	1421699	10.67
ZZZZZZ	438704	3.38	1498273	4.52	908655	6.01	1490164	7.25	1406905	9.48	1322852	10.67
ZZZZZZ	439777	3.38	1510720	4.52	938388	6.01	1539150	7.25	1479731	9.48	1412157	10.67
ZZZZZZ	382251	3.38	1307491	4.52	801946	6.01	1318375	7.25	1289747	9.48	1255366	10.67
ZZZZZZ	419763	3.38	1450433	4.52	891176	6.01	1471804	7.25	1400810	9.48	1323768	10.66
ZZZZZZ	486067	3.38	1671733	4.52	1013465	6.01	1680740	7.25	1630797	9.48	1531689	10.67
ZZZZZZ	438816	3.38	1502674	4.52	912836	6.01	1499394	7.25	1430518	9.48	1402652	10.67
ZZZZZZ	459355	3.38	1586024	4.52	961701	6.01	1589510	7.25	1540446	9.47	1451917	10.66
ZZZZZZ	501008	3.38	1699895	4.52	1033164	6.01	1710102	7.25	1640380	9.48	1547021	10.67
ZZZZZZ	412752	3.38	1417145	4.52	852274	6.01	1664357	7.25	1332078	9.48	1346368	10.68
ZZZZZZ	445702	3.38	1521889	4.52	911698	6.01	1453798	7.25	1357781	9.48	1295970	10.67
ZZZZZZ	490199	3.38	1665026	4.52	1000740	6.01	1644331	7.25	1552988	9.48	1495023	10.67
ZZZZZZ	428855	3.38	1469372	4.52	904516	6.01	1512212	7.25	1452794	9.48	1360446	10.67
OP40382-MB	447516	3.38	1524757	4.52	935915	6.01	1541849	7.25	1490060	9.47	1406745	10.66
OP40382-BS	482895	3.38	1647299	4.53	990997	6.02	1606033	7.26	1550273	9.49	1474919	10.67
OP40382-MS	472979	3.39	1622430	4.53	978329	6.02	1572204	7.26	1495668	9.48	1472308	10.67
OP40382-MSD	470764	3.38	1591804	4.53	945413	6.02	1516663	7.26	1434085	9.48	1375943	10.67
MC34200-6	482093	3.38	1634523	4.52	966024	6.01	1581918	7.25	1489876	9.47	1389055	10.66
MC34553-1	501118	3.38	1695198	4.52	1005384	6.01	1641572	7.25	1592815	9.47	1512184	10.66

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

Semivolatile Internal Standard Area Summary

Job Number: MC34553
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSR1499-CC1481	**Injection Date:**	10/31/14
Lab File ID:	R40713.D	**Injection Time:**	08:02
Instrument ID:	GCMSR	**Method:**	SW846 8270D

Lab	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
Sample ID	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Surrogate Recovery Summary

Job Number: MC34553
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Method: SW846 8270D **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
MC34553-1	R40741.D	49	33	105	73	80	98
MC34553-2	F77206.D	43	29	86	68	59	93
MC34553-3	F77207.D	33	23	80	57	49	85
MC34553-4	F77208.D	51	35	101	83	72	95
OP40382-BS	R40737.D	46	33	97	71	78	95
OP40382-MB	R40736.D	46	30	92	72	76	99
OP40382-MS	R40738.D	47	35	106	74	82	101
OP40382-MSD	R40739.D	47	34	102	73	82	98

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorophenol	15-110%
S2 = Phenol-d5	15-110%
S3 = 2,4,6-Tribromophenol	15-110%
S4 = Nitrobenzene-d5	30-130%
S5 = 2-Fluorobiphenyl	30-130%
S6 = Terphenyl-d14	30-130%

Semivolatile Surrogate Recovery Summary

Job Number: MC34553
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Method: SW846 8270D BY SIM **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
MC34553-1	I92613.D	89	77	84
MC34553-2	I92614.D	79	67	81
MC34553-3	I92615.D	65	56	77
MC34553-4	I92616.D	93	79	85
OP40383-BS	I92609.D	88	76	81
OP40383-MB	I92608.D	87	74	84
OP40383-MS	I92610.D	91	81	85
OP40383-MSD	I92611.D	89	79	82

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	30-130%
S2 = 2-Fluorobiphenyl	30-130%
S3 = Terphenyl-d14	30-130%

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries

Method Blank Summary

Job Number: MC34553
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40406-MB	BB60078.D	1	10/28/14	NK	10/27/14	OP40406	GBB3340

The QC reported here applies to the following samples: **Method:** SW846 8011

MC34553-1, MC34553-2, MC34553-3, MC34553-4, MC34553-6

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.015	0.0061	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.015	0.0061	ug/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	Bromofluorobenzene (S)	86%	36-173%
460-00-4	Bromofluorobenzene (S)	82%	36-173%

Blank Spike Summary

Job Number: MC34553
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40406-BS	BB60079.D	1	10/28/14	NK	10/27/14	OP40406	GBB3340

The QC reported here applies to the following samples: **Method:** SW846 8011

MC34553-1, MC34553-2, MC34553-3, MC34553-4, MC34553-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
96-12-8	1,2-Dibromo-3-chloropropane	0.036	0.042	118	60-140
106-93-4	1,2-Dibromoethane	0.036	0.035	98	60-140

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	Bromofluorobenzene (S)	89%	36-173%
460-00-4	Bromofluorobenzene (S)	80%	36-173%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34553
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40406-MS	BB60082.D	1	10/28/14	NK	10/27/14	OP40406	GBB3340
OP40406-MSD	BB60083.D	1	10/28/14	NK	10/27/14	OP40406	GBB3340
MC34200-11	BB60084.D	1	10/28/14	NK	10/27/14	OP40406	GBB3340

The QC reported here applies to the following samples: **Method:** SW846 8011

MC34553-1, MC34553-2, MC34553-3, MC34553-4, MC34553-6

CAS No.	Compound	MC34200-11 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
96-12-8	1,2-Dibromo-3-chloropropane	ND		0.036	0.057	160* [a]	0.036	0.059	166* [a]	3	64-141/29
106-93-4	1,2-Dibromoethane	ND		0.036	0.044	124	0.036	0.050	140	13	63-163/27

CAS No.	Surrogate Recoveries	MS	MSD	MC34200-11	Limits
460-00-4	Bromofluorobenzene (S)	91%	95%	105%	36-173%
460-00-4	Bromofluorobenzene (S)	93%	92%	104%	36-173%

(a) Outside control limits due to possible matrix interference.

* = Outside of Control Limits.

Volatile Surrogate Recovery Summary

Job Number: MC34553
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Method: SW846 8011 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]
MC34553-1	BB60085.D	88	112
MC34553-2	BB60086.D	109	112
MC34553-3	BB60087.D	110	110
MC34553-4	BB60089.D	86	124
MC34553-6	BB60090.D	96	102
OP40406-BS	BB60079.D	89	80
OP40406-MB	BB60078.D	86	82
OP40406-MS	BB60082.D	91	93
OP40406-MSD	BB60083.D	95	92

Surrogate Compounds	Recovery Limits
S1 = Bromofluorobenzene (S)	36-173%

(a) Recovery from GC signal #2
(b) Recovery from GC signal #1

8.4.1

8

GC Surrogate Retention Time Summary

Job Number: MC34553
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	GBB3340-ICC3340	**Injection Date:**	10/28/14
Lab File ID:	BB60074.D	**Injection Time:**	08:57
Instrument ID:	GCBB	**Method:**	SW846 8011

	S1 [a] RT	S1 [b] RT
Check Std	3.32	3.33

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
OP40407-MB	BB60078A.D	10/28/14	11:09	3.32	3.33
OP40406-MB	BB60078.D	10/28/14	11:09	3.32	3.33
OP40407-BS	BB60079A.D	10/28/14	11:28	3.32	3.33
OP40406-BS	BB60079.D	10/28/14	11:28	3.32	3.33
ZZZZZZ	BB60081.D	10/28/14	12:04	3.33	3.34
OP40406-MS	BB60082.D	10/28/14	12:22	3.32	3.33
OP40406-MSD	BB60083.D	10/28/14	12:40	3.32	3.33
MC34200-11	BB60084.D	10/28/14	12:58	3.32	3.33
MC34553-1	BB60085.D	10/28/14	13:16	3.32	3.33
MC34553-2	BB60086.D	10/28/14	13:33	3.32	3.33
MC34553-3	BB60087.D	10/28/14	13:51	3.32	3.33

Surrogate Compounds

S1 = Bromofluorobenzene (S)

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: MC34553
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	GBB3340-CC3340	**Injection Date:**	10/28/14
Lab File ID:	BB60088.D	**Injection Time:**	14:09
Instrument ID:	GCBB	**Method:**	SW846 8011

	S1 [a] RT	S1 [b] RT
Check Std	3.32	3.33

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
MC34553-4	BB60089.D	10/28/14	14:27	3.32	3.33
MC34553-6	BB60090.D	10/28/14	14:45	3.32	3.33
GBB3340-ECC334B	BB60091.D	10/28/14	15:03	3.32	3.33

Surrogate Compounds

S1 = Bromofluorobenzene (S)

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

SGS ACCUTEST IS PART OF SGS, THE WORLD'S LEADING INSPECTION, VERIFICATION, TESTING AND CERTIFICATION COMPANY.

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Automated Report

Technical Report for

Shell Oil

URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana,

SGS Accutest Job Number: MC34842

Sampling Date: 11/04/14



Report to:

AECOM, INC.

Melissa.mansker@aecom.com

ATTN: Melissa Mansker

Total number of pages in report: 39

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

H. (Brad) Madadian
Lab Director

Client Service contact: Jeremy Vienneau 508-481-6200

Certifications: MA (M-MA136,SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) FL (E87579) NY (11791) NJ (MA926) PA (6801121) ND (R-188) CO (MA00136) MN (11546AA) NC (653) IL (002337) WI (399080220) DoD ELAP (L-A-B L2235)

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Test results relate only to samples analyzed.

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Unauthorized modification of this report is strictly prohibited.

SGS ACCUTEST

November 04, 2016

AECOM
1001 Highlands Plaza Drive West Suite 300
St. Louis, MO 63110

RE: SGS Accutest Job # MC34842

Dear Elizabeth Kunkel

As you are aware, SGS Accutest Inc. - Marlborough has been conducting an extensive review of data associated with some historical Gas Chromatography-Mass Spectroscopy volatiles analyses. As a result of this review it was determined that some revisions of the original test report for this job were needed. These corrections have been incorporated into the revised report.

Please be assured that corrective actions have been put in place to address this matter and prevent a recurrence.

We apologize for any inconvenience that this issue may have caused. Please don't hesitate to contact us if we can be of further assistance.

Sincerely,

H. (Brad) Madadian

Regional Laboratory Director
SGS Accutest Inc. - Marlborough

SGS ACCUTEST IS PART OF SGS, THE WORLD'S LEADING INSPECTION, VERIFICATION, TESTING AND CERTIFICATION COMPANY.

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Sample Summary

Shell Oil

Job No: MC34842

URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
MC34842-1	11/04/14	13:15	LRMC	11/05/14	AQ	Ground Water	P93D-ROX-110414
MC34842-2	11/04/14	00:00	LRMC	11/05/14	AQ	Trip Blank Water	TB-ROX-110414-HCL
MC34842-3	11/04/14	00:00	LRMC	11/05/14	AQ	Trip Blank Water	TB-ROX-110414-ST

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: She O **Job No** MC34842

Site: URSMOSTL:Roxana 4Q 4 GW/ 2 562973 03004 900 South Centra **Report Date** /4/20 6 :0 :02 A

Samp e(s), 2 Tr p B ank(s) were co ected on /04/20 4 and were rece ved at SGS Accutest New Eng and on /05/20 4 proper y preserved, at 6 Deg C and ntact These Samp es rece ved a job number of MC34842 A st ng of the Laboratory Samp e ID, C ent Samp e ID and dates of co ect on are presented n the Resu ts Summary Sect on of th s report -Ch orohexane, Benzeneth o , D benz(a,h)acr d ne, Indene, and Qu no ne were searched n the bra y search and reported on y f detect ons were found

Except as noted be ow, a method spec f ed ca brat ons and qua ty contro performance cr ter a were met for th s job For more nformat on, p ease refer to QC summary pages

Volatiles by GCMS By Method SW846 8260C

Matrix: AQ **Batch ID:** MSV 3 8

- A samp es were ana yzed w th n the recommended method ho d ng t me
- A method b anks for th s batch meet method spec f c cr ter a
- Samp e(s) MC34842- MS, MC34842- MSD were used as the QC samp es nd cated
- MSV 3 8-BS Recovery(s) for ,4-D oxane, Acro e n are outs de contro m ts
- MSV 3 8-BSD Recovery(s) for Acro e n are outs de contro m ts
- Matr x Sp ke Recovery(s) for 2-Hexanone, Acetone, Acro e n, Benzene, Naphtha ene are outs de contro m ts Outs de contro m ts due to poss b e matr x nterference
- Matr x Sp ke Dup cate Recove y(s) for 2-Butanone (MEK), 2-Hexanone, Acetone, ,4-D oxane are outs de contro m ts Outs de contro m ts due to poss b e matr x nterference
- RPD(s) for MSD for ,4-D oxane are outs de contro m ts for samp e MC34842- MSD H gh RPD due to poss b e matr x nterference and/or samp e non-homogene ty
- ,2,3-Tr ch oropropane,Tr ch orof uoromethane: Cont nu ng Ca brat on Ver f cat on outs de of acceptance cr ter a Samp e resu t may be b ased ow
- RPD of MSV 3 8-BSD for ,4-D oxane: Outs de contro m ts

Volatiles by GC By Method SW846 8011

Matrix: AQ **Batch ID:** OP40576

- A samp es were extracted w th n the recommended method ho d ng t me
- A samp es were ana yzed w th n the recommended method ho d ng t me
- A method b anks for th s batch meet method spec f c cr ter a
- Samp e(s) MC34799-8MS, MC34799-8MSD were used as the QC samp es nd cated
- Ca brat on check standard GYZ7664-CC7664 for ,2-D bromo-3-ch oropropane exceeds cr ter a (response b as h gh) Assoc ated samp es are non-detect for th s compound

SGS Accutest New Eng and cert f es that a ana ys s were performed w th n method spec f cat on It s further recommended that th s report to be used n ts ent rety The Laborato y D rector for SGS Accutest New Eng and or ass gnee as ver f ed by the s gnature on the cover page has author zed the re ease of th s repo t(MC34842)

Summary of Hits

Job Number: MC34842
Account: Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL
Collected: 11/04/14

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
MC34842-1	P93D-ROX-110414					
Benzene		19900	50	25	ug/l	SW846 8260C
1,2-Dichloropropane		7.9	2.0	0.45	ug/l	SW846 8260C
Ethylbenzene		1.3	1.0	0.25	ug/l	SW846 8260C
Methyl Tert Butyl Ether		2.0	1.0	0.22	ug/l	SW846 8260C
n-Propylbenzene		0.67 J	5.0	0.49	ug/l	SW846 8260C
Toluene		1.8	1.0	0.22	ug/l	SW846 8260C
1,2,4-Trimethylbenzene		0.57 J	5.0	0.30	ug/l	SW846 8260C
MC34842-2	TB-ROX-110414-HCL					
No hits reported in this sample.						
MC34842-3	TB-ROX-110414-ST					
No hits reported in this sample.						

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	P93D-ROX-110414		
Lab Sample ID:	MC34842-1	**Date Sampled:**	11/04/14
Matrix:	AQ - Ground Water	**Date Received:**	11/05/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V36408.D	1	11/06/14	AMY	n/a	n/a	MSV1318
Run #2	V36414.D	100	11/06/14	AMY	n/a	n/a	MSV1318

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	19900 [a]	50	25	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.47	ug/l	
75-25-2	Bromoform	ND	1.0	0.30	ug/l	
74-83-9	Bromomethane	ND	2.0	0.77	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.23	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.25	ug/l	
75-00-3	Chloroethane	ND	2.0	0.37	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.31	ug/l	
74-87-3	Chloromethane	ND	2.0	0.59	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.24	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.16	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.31	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.29	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.44	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.47	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P93D-ROX-110414		
Lab Sample ID:	MC34842-1	**Date Sampled:**	11/04/14
Matrix:	AQ - Ground Water	**Date Received:**	11/05/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	7.9	2.0	0.45	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.38	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	1.3	1.0	0.25	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	2.0	1.0	0.22	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.39	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	0.67	5.0	0.49	ug/l	J
100-42-5	Styrene	ND	5.0	0.29	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.30	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.29	ug/l	
108-88-3	Toluene	1.8	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.19	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.42	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.30	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.40	ug/l	
75-69-4	Trichlorofluoromethane [b]	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane [b]	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	0.57	5.0	0.30	ug/l	J
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.18	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.45	ug/l	
	m,p-Xylene	ND	1.0	0.38	ug/l	
95-47-6	o-Xylene	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.30	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P93D-ROX-110414		
Lab Sample ID:	MC34842-1	**Date Sampled:**	11/04/14
Matrix:	AQ - Ground Water	**Date Received:**	11/05/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%	100%	70-130%
2037-26-5	Toluene-D8	98%	96%	70-130%
460-00-4	4-Bromofluorobenzene	102%	99%	70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Result is from Run# 2
(b) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	P93D-ROX-110414		
Lab Sample ID:	MC34842-1	**Date Sampled:**	11/04/14
Matrix:	AQ - Ground Water	**Date Received:**	11/05/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ92090.D	1	11/06/14	NK	11/05/14	OP40576	GYZ7664
Run #2							

	Initial Volume	Final Volume
Run #1	37.6 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.014	0.0057	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.014	0.0057	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	91%		36-173%
460-00-4	Bromofluorobenzene (S)	105%		36-173%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-ROX-110414-HCL		
Lab Sample ID:	MC34842-2	**Date Sampled:**	11/04/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	11/05/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V36406.D	1	11/06/14	AMY	n/a	n/a	MSV1318
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	ND	0.50	0.25	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.47	ug/l	
75-25-2	Bromoform	ND	1.0	0.30	ug/l	
74-83-9	Bromomethane	ND	2.0	0.77	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.23	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.25	ug/l	
75-00-3	Chloroethane	ND	2.0	0.37	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.31	ug/l	
74-87-3	Chloromethane	ND	2.0	0.59	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.24	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.16	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.31	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.29	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.44	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.47	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-ROX-110414-HCL		
Lab Sample ID:	MC34842-2	**Date Sampled:**	11/04/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	11/05/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	2.0	0.45	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.38	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.22	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.39	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.29	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.30	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.29	ug/l	
108-88-3	Toluene	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.19	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.42	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.30	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.40	ug/l	
75-69-4	Trichlorofluoromethane [a]	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane [a]	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.30	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.18	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.45	ug/l	
	m,p-Xylene	ND	1.0	0.38	ug/l	
95-47-6	o-Xylene	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.30	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-ROX-110414-HCL		
Lab Sample ID:	MC34842-2	**Date Sampled:**	11/04/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	11/05/14
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		70-130%
2037-26-5	Toluene-D8	101%		70-130%
460-00-4	4-Bromofluorobenzene	99%		70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

(a) Continuing Calibration Verification outside of acceptance criteria. Sample result may be biased low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TB-ROX-110414-ST		
Lab Sample ID:	MC34842-3	**Date Sampled:**	11/04/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	11/05/14
Method:	SW846 8011 SW846 8011	**Percent Solids:**	n/a
Project:	URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ92091.D	1	11/06/14	NK	11/05/14	OP40576	GYZ7664
Run #2							

	Initial Volume	Final Volume
Run #1	36.7 ml	2.0 ml
Run #2		

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.014	0.0058	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.014	0.0058	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	80%		36-173%
460-00-4	Bromofluorobenzene (S)	91%		36-173%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

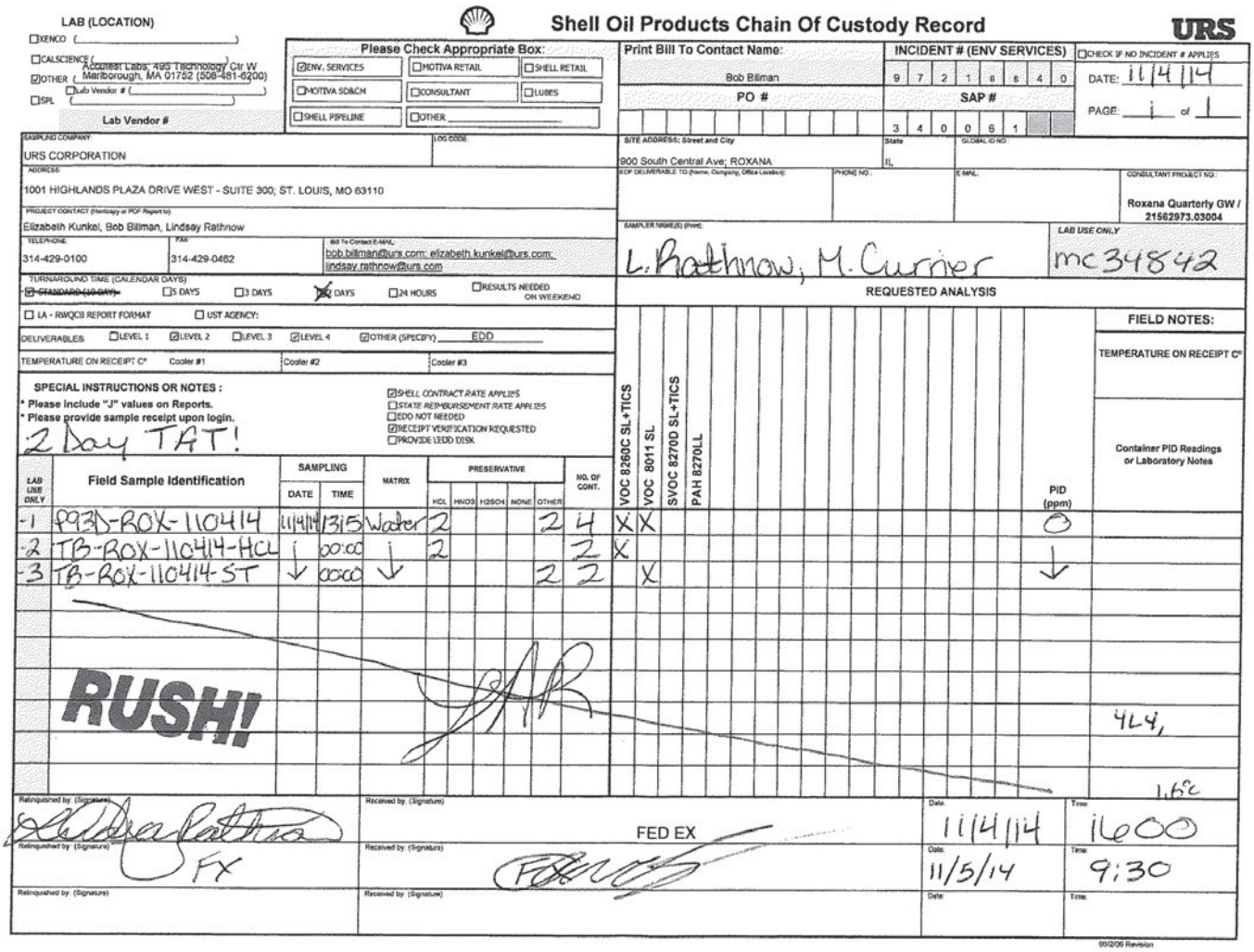
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody



LAB (LOCATION)
☐XENCO (_____)
☐CALSCIENCE (_____)
☑OTHER (Accutest Labs; 495 Technology Ctr W Marlborough, MA 01752 (508-481-6200))
☐SPL (Lab Vendor # _____)
Lab Vendor #

Shell Oil Products Chain Of Custody Record

URS

Please Check Appropriate Box:
☑ENV. SERVICES | ☐MOTIVA RETAIL | ☐SHELL RETAIL
☐MOTIVA SD&CM | ☐CONSULTANT | ☐LUBES
☐SHELL PIPELINE | ☐OTHER _____

Print Bill To Contact Name: Bob Billman
PO #
INCIDENT # (ENV SERVICES): 97216840
SAP #: 340061
☐CHECK IF NO INCIDENT # APPLIES
DATE: 11/4/14
PAGE: 1 of 1

SAMPLING COMPANY: URS CORPORATION
LOG CODE:
ADDRESS: 1001 HIGHLANDS PLAZA DRIVE WEST - SUITE 300; ST. LOUIS, MO 63110
PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Bob Billman, Lindsay Rathnow
TELEPHONE: 314-429-0100
FAX: 314-429-0462
Bill To Contact E-MAIL: bob.billman@urs.com; elizabeth.kunkel@urs.com; lindsay.rathnow@urs.com

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA
State: IL
GLOBAL ID NO.:
EDF DELIVERABLE TO (Name, Company, Office Location):
PHONE NO.:
E-MAIL:
CONSULTANT PROJECT NO.: Roxana Quarterly GW / 21562973.03004

SAMPLER NAME(S) (Print): L. Rathnow, M. Currier
LAB USE ONLY: mc34842

TURNAROUND TIME (CALENDAR DAYS)
~~☑STANDARD (10 DAY)~~ ☐5 DAYS ☐3 DAYS ☒2 DAYS ☐24 HOURS ☐RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT ☐ UST AGENCY:

DELIVERABLES: ☐LEVEL 1 ☑LEVEL 2 ☐LEVEL 3 ☑LEVEL 4 ☑OTHER (SPECIFY) EDD

TEMPERATURE ON RECEIPT C° Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :
* Please include "J" values on Reports.
* Please provide sample receipt upon login.
2 Day TAT!

☑SHELL CONTRACT RATE APPLIES
☐STATE REIMBURSEMENT RATE APPLIES
☐EDD NOT NEEDED
☑RECEIPT VERIFICATION REQUESTED
☐PROVIDE EDD DISK

REQUESTED ANALYSIS

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260C SL+TICS	VOC 8011 SL	SVOC 8270D SL+TICS	PAH 8270LL	PID (ppm)	Container PID Readings or Laboratory Notes
-1	FB3D-ROX-110414	11/4/14	1315	Water	2				2	4	X	X			0	
-2	TB-ROX-110414-HCL	↓	0000	↓	2					2	X				↓	
-3	TB-ROX-110414-ST	↓	0000	↓					2	2		X			↓	

FIELD NOTES:
TEMPERATURE ON RECEIPT C°: 4.4, 1.6°C

RUSH!

Relinquished by (Signature)	Received by (Signature)	Date	Time
[signature]	FED EX	11/4/14	1600
FX	[signature]	11/5/14	9:30

09/2/06 Revision

5.1 5

MC34842: Chain of Custody
Page 1 of 2

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: MC34842 **Client:** URS **Project:** 900 SOUTH CENTRAL AVE

Date / Time Received: 11/5/2014 9 30 00 AM **Delivery Method:** **Airbill #'s:**

Cooler Temps (Initial/Adjusted): #1 (1 6/1 6)

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Thermometer D:	G1;		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control_Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☑		☐	☐
2. Trip Blank listed on COC:	☑		☐	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

Accutest Laboratories
V:(508) 481-6200

495 Technology Center West, Bldg One
F: (508) 481-7753

Marlborough, MA 01752
www/accutest.com

Internal Sample Tracking Chronicle

Shell Oil

Job No: MC34842

URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC34842-1 Collected: 04-NOV-14 13:15 By: LRMC Received: 05-NOV-14 By: P93D-ROX-110414						
MC34842-1	SW846 8260C	06-NOV-14 15:26	AMY			V8260SL+
MC34842-1	SW846 8260C	06-NOV-14 18:06	AMY			V8260SL+
MC34842-1	SW846 8011	06-NOV-14 18:52	NK	05-NOV-14	MT	V8011SL
MC34842-2 Collected: 04-NOV-14 00:00 By: LRMC Received: 05-NOV-14 By: TB-ROX-110414-HCL						
MC34842-2	SW846 8260C	06-NOV-14 14:33	AMY			V8260SL+
MC34842-3 Collected: 04-NOV-14 00:00 By: LRMC Received: 05-NOV-14 By: TB-ROX-110414-ST						
MC34842-3	SW846 8011	06-NOV-14 19:09	NK	05-NOV-14	MT	V8011SL

SGS Accutest Internal Chain of Custody

Job Number: MC34842
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL
Received: 11/05/14

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC34842-1.1	VOC Ref #4	Amy Min Yang	11/06/14 13:36	Retrieve from Storage
MC34842-1.1	Amy Min Yang	GCMSV	11/06/14 13:36	Load on Instrument
MC34842-1.1	GCMSV	Amy Min Yang	11/07/14 15:48	Unload from Instrument
MC34842-1.1	Amy Min Yang	VOC Ref #4	11/07/14 15:49	Return to Storage
MC34842-1.1	Scott Parsick		12/18/14 12:17	Disposed
MC34842-1.2	VOC Ref #4	Amy Min Yang	11/06/14 15:50	Retrieve from Storage
MC34842-1.2	Amy Min Yang	GCMSV	11/06/14 15:50	Load on Instrument
MC34842-1.2	GCMSV	Amy Min Yang	11/07/14 15:48	Unload from Instrument
MC34842-1.2	Amy Min Yang	VOC Ref #4	11/07/14 15:49	Return to Storage
MC34842-1.2	Scott Parsick		12/18/14 12:17	Disposed
MC34842-1.3	VOC Ref #4	Marc Tahtamoni	11/05/14 14:16	Retrieve from Storage
MC34842-1.3	Marc Tahtamoni		11/11/14 17:36	Depleted
MC34842-2.1	VOC Ref #4	Amy Min Yang	11/06/14 13:36	Retrieve from Storage
MC34842-2.1	Amy Min Yang	GCMSV	11/06/14 13:36	Load on Instrument
MC34842-2.1	GCMSV	Amy Min Yang	11/07/14 15:48	Unload from Instrument
MC34842-2.1	Amy Min Yang	VOC Ref #4	11/07/14 15:49	Return to Storage
MC34842-2.1	Scott Parsick		12/18/14 12:17	Disposed
MC34842-3.2	VOC Ref #4	Marc Tahtamoni	11/05/14 14:16	Retrieve from Storage
MC34842-3.2	Marc Tahtamoni		11/11/14 17:36	Depleted

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: MC34842
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSV1318-MB	V36404.D	1	11/06/14	AMY	n/a	n/a	MSV1318

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34842-1, MC34842-2

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.5	ug/l	
107-02-8	Acrolein	ND	25	6.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	2.1	ug/l	
71-43-2	Benzene	ND	0.50	0.25	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.35	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.47	ug/l	
75-25-2	Bromoform	ND	1.0	0.30	ug/l	
74-83-9	Bromomethane	ND	2.0	0.77	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	1.1	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.42	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.39	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.23	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.25	ug/l	
75-00-3	Chloroethane	ND	2.0	0.37	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	3.3	ug/l	
67-66-3	Chloroform	ND	1.0	0.31	ug/l	
74-87-3	Chloromethane	ND	2.0	0.59	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.38	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.45	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.24	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.16	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.31	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.71	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.29	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.44	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.47	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.45	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	0.89	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.3	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.47	ug/l	

Method Blank Summary

Job Number: MC34842
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSV1318-MB	V36404.D	1	11/06/14	AMY	n/a	n/a	MSV1318

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34842-1, MC34842-2

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.42	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.38	ug/l	
123-91-1	1,4-Dioxane	ND	25	11	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.7	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.35	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.22	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	0.99	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.52	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.39	ug/l	
91-20-3	Naphthalene	ND	5.0	0.69	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.49	ug/l	
100-42-5	Styrene	ND	5.0	0.29	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.43	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.30	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.29	ug/l	
108-88-3	Toluene	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.68	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.19	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.42	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.30	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.40	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.55	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.81	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.30	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.18	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	0.71	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.45	ug/l	
	m,p-Xylene	ND	1.0	0.38	ug/l	
95-47-6	o-Xylene	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.30	ug/l	

Method Blank Summary

Job Number: MC34842
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSV1318-MB	V36404.D	1	11/06/14	AMY	n/a	n/a	MSV1318

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34842-1, MC34842-2

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	106%	70-130%
2037-26-5	Toluene-D8	95%	70-130%
460-00-4	4-Bromofluorobenzene	97%	70-130%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC34842
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSV1318-BS	V36400.D	1	11/06/14	AMY	n/a	n/a	MSV1318
MSV1318-BSD	V36401.D	1	11/06/14	AMY	n/a	n/a	MSV1318

The QC reported here applies to the following samples: Method: SW846 8260C

MC34842-1, MC34842-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	50	41.1	82	41.0	82	0	70-130/20
107-02-8	Acrolein	250	366	146* [a]	358	143* [a]	2	70-130/20
107-13-1	Acrylonitrile	50	52.6	105	53.5	107	2	70-130/20
71-43-2	Benzene	50	48.8	98	48.7	97	0	70-130/20
108-86-1	Bromobenzene	50	49.9	100	48.0	96	4	70-130/20
74-97-5	Bromochloromethane	50	48.4	97	48.9	98	1	70-130/20
75-27-4	Bromodichloromethane	50	55.0	110	52.7	105	4	70-130/20
75-25-2	Bromoform	50	52.5	105	52.9	106	1	70-130/20
74-83-9	Bromomethane	50	43.9	88	43.7	87	0	70-130/20
78-93-3	2-Butanone (MEK)	50	45.0	90	45.9	92	2	70-130/20
104-51-8	n-Butylbenzene	50	54.6	109	53.2	106	3	70-130/20
135-98-8	sec-Butylbenzene	50	47.9	96	45.3	91	6	70-130/20
98-06-6	tert-Butylbenzene	50	53.8	108	50.0	100	7	70-130/20
75-15-0	Carbon disulfide	50	51.5	103	52.2	104	1	70-130/20
56-23-5	Carbon tetrachloride	50	50.6	101	53.1	106	5	70-130/20
108-90-7	Chlorobenzene	50	48.2	96	47.8	96	1	70-130/20
75-00-3	Chloroethane	50	49.3	99	49.2	98	0	70-130/20
110-75-8	2-Chloroethyl vinyl ether	50	50.9	102	49.6	99	3	70-130/20
67-66-3	Chloroform	50	46.9	94	46.8	94	0	70-130/20
74-87-3	Chloromethane	50	45.5	91	44.7	89	2	70-130/20
95-49-8	o-Chlorotoluene	50	52.0	104	49.5	99	5	70-130/20
106-43-4	p-Chlorotoluene	50	51.3	103	49.5	99	4	70-130/20
124-48-1	Dibromochloromethane	50	55.0	110	53.1	106	4	70-130/20
95-50-1	1,2-Dichlorobenzene	50	49.5	99	48.8	98	1	70-130/20
541-73-1	1,3-Dichlorobenzene	50	49.5	99	48.4	97	2	70-130/20
106-46-7	1,4-Dichlorobenzene	50	47.5	95	46.2	92	3	70-130/20
75-71-8	Dichlorodifluoromethane	50	49.7	99	49.4	99	1	70-130/20
75-34-3	1,1-Dichloroethane	50	47.3	95	48.5	97	3	70-130/20
107-06-2	1,2-Dichloroethane	50	48.0	96	46.9	94	2	70-130/20
75-35-4	1,1-Dichloroethene	50	51.5	103	52.1	104	1	70-130/20
156-59-2	cis-1,2-Dichloroethene	50	47.5	95	48.5	97	2	70-130/20
156-60-5	trans-1,2-Dichloroethene	50	49.7	99	51.7	103	4	70-130/20
78-87-5	1,2-Dichloropropane	50	52.9	106	51.9	104	2	70-130/20
142-28-9	1,3-Dichloropropane	50	49.7	99	48.8	98	2	70-130/20
594-20-7	2,2-Dichloropropane	50	48.6	97	48.5	97	0	70-130/20
563-58-6	1,1-Dichloropropene	50	54.2	108	54.7	109	1	70-130/20

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC34842
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSV1318-BS	V36400.D	1	11/06/14	AMY	n/a	n/a	MSV1318
MSV1318-BSD	V36401.D	1	11/06/14	AMY	n/a	n/a	MSV1318

The QC reported here applies to the following samples: Method: SW846 8260C

MC34842-1, MC34842-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
10061-01-5	cis-1,3-Dichloropropene	50	61.2	122	59.2	118	3	70-130/20
10061-02-6	trans-1,3-Dichloropropene	50	60.1	120	59.5	119	1	70-130/20
123-91-1	1,4-Dioxane	125	223	178* [a]	147	118	41* [a]	70-130/20
97-63-2	Ethyl methacrylate	50	44.3	89	44.3	89	0	77-137/20
100-41-4	Ethylbenzene	50	50.7	101	50.3	101	1	70-130/20
87-68-3	Hexachlorobutadiene	50	52.7	105	51.9	104	2	70-130/20
591-78-6	2-Hexanone	50	40.1	80	40.5	81	1	70-130/20
98-82-8	Isopropylbenzene	50	56.7	113	53.2	106	6	70-130/20
99-87-6	p-Isopropyltoluene	50	47.6	95	45.4	91	5	70-130/20
1634-04-4	Methyl Tert Butyl Ether	50	46.8	94	48.1	96	3	70-130/20
108-10-1	4-Methyl-2-pentanone (MIBK)	50	47.5	95	47.4	95	0	70-130/20
74-95-3	Methylene bromide	50	53.0	106	51.1	102	4	70-130/20
75-09-2	Methylene chloride	50	46.7	93	47.3	95	1	70-130/20
91-20-3	Naphthalene	50	59.1	118	61.5	123	4	70-130/20
103-65-1	n-Propylbenzene	50	48.6	97	46.4	93	5	70-130/20
100-42-5	Styrene	50	51.4	103	51.7	103	1	70-130/20
630-20-6	1,1,1,2-Tetrachloroethane	50	50.5	101	50.2	100	1	70-130/20
79-34-5	1,1,2,2-Tetrachloroethane	50	53.7	107	51.1	102	5	70-130/20
127-18-4	Tetrachloroethene	50	48.3	97	46.9	94	3	70-130/20
108-88-3	Toluene	50	48.9	98	47.5	95	3	70-130/20
87-61-6	1,2,3-Trichlorobenzene	50	63.1	126	65.1	130	3	70-130/25
120-82-1	1,2,4-Trichlorobenzene	50	58.0	116	59.0	118	2	70-130/20
71-55-6	1,1,1-Trichloroethane	50	49.1	98	50.0	100	2	70-130/20
79-00-5	1,1,2-Trichloroethane	50	54.5	109	52.2	104	4	70-130/20
79-01-6	Trichloroethene	50	47.9	96	46.6	93	3	70-130/20
75-69-4	Trichlorofluoromethane	50	39.5	79	39.4	79	0	70-130/20
96-18-4	1,2,3-Trichloropropane	50	38.2	76	44.3	89	15	70-130/20
95-63-6	1,2,4-Trimethylbenzene	50	50.9	102	48.6	97	5	70-130/20
108-67-8	1,3,5-Trimethylbenzene	50	57.1	114	53.7	107	6	70-130/20
108-05-4	Vinyl Acetate	50	47.9	96	47.2	94	1	70-130/20
75-01-4	Vinyl chloride	50	46.1	92	45.2	90	2	70-130/20
	m,p-Xylene	100	100	100	99.1	99	1	70-130/20
95-47-6	o-Xylene	50	50.5	101	49.9	100	1	70-130/20
1330-20-7	Xylene (total)	150	151	101	149	99	1	70-130/20

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC34842
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSV1318-BS	V36400.D	1	11/06/14	AMY	n/a	n/a	MSV1318
MSV1318-BSD	V36401.D	1	11/06/14	AMY	n/a	n/a	MSV1318

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34842-1, MC34842-2

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	100%	100%	70-130%
2037-26-5	Toluene-D8	103%	102%	70-130%
460-00-4	4-Bromofluorobenzene	99%	97%	70-130%

(a) Outside control limits. Blank Spike meets program technical requirements.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34842
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34842-1MS	V36411.D	100	11/06/14	AMY	n/a	n/a	MSV1318
MC34842-1MSD	V36412.D	100	11/06/14	AMY	n/a	n/a	MSV1318
MC34842-1	V36408.D	1	11/06/14	AMY	n/a	n/a	MSV1318
MC34842-1	V36414.D	100	11/06/14	AMY	n/a	n/a	MSV1318

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34842-1, MC34842-2

CAS No.	Compound	MC34842-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		5000	2220	44* [a]	5000	2130	43* [a]	4	70-130/30
107-02-8	Acrolein	ND		25000	36100	144* [a]	25000	31800	127	13	70-130/30
107-13-1	Acrylonitrile	ND		5000	5510	110	5000	5010	100	10	70-130/30
71-43-2	Benzene	19900 [b]		5000	25200	449* [a]	5000	23700	419* [a]	6	70-130/30
108-86-1	Bromobenzene	ND		5000	5040	101	5000	5050	101	0	70-130/30
74-97-5	Bromochloromethane	ND		5000	5080	102	5000	4720	94	7	70-130/30
75-27-4	Bromodichloromethane	ND		5000	5260	105	5000	5150	103	2	70-130/30
75-25-2	Bromoform	ND		5000	5180	104	5000	5020	100	3	70-130/30
74-83-9	Bromomethane	ND		5000	4260	85	5000	3980	80	7	70-130/30
78-93-3	2-Butanone (MEK)	ND		5000	3680	74	5000	3470	69* [a]	6	70-130/30
104-51-8	n-Butylbenzene	ND		5000	5490	110	5000	5430	109	1	70-130/30
135-98-8	sec-Butylbenzene	ND		5000	4680	94	5000	4680	94	0	70-130/30
98-06-6	tert-Butylbenzene	ND		5000	5150	103	5000	5290	106	3	70-130/30
75-15-0	Carbon disulfide	ND		5000	5250	105	5000	4930	99	6	70-130/30
56-23-5	Carbon tetrachloride	ND		5000	5220	104	5000	4810	96	8	70-130/30
108-90-7	Chlorobenzene	ND		5000	5000	100	5000	4890	98	2	70-130/30
75-00-3	Chloroethane	ND		5000	4950	99	5000	4420	88	11	70-130/30
110-75-8	2-Chloroethyl vinyl ether	ND		5000	4420	88	5000	4040	81	9	70-130/30
67-66-3	Chloroform	ND		5000	4830	97	5000	4500	90	7	70-130/30
74-87-3	Chloromethane	ND		5000	4490	90	5000	4070	81	10	70-130/30
95-49-8	o-Chlorotoluene	ND		5000	5210	104	5000	5180	104	1	70-130/30
106-43-4	p-Chlorotoluene	ND		5000	5170	103	5000	5150	103	0	70-130/30
124-48-1	Dibromochloromethane	ND		5000	5290	106	5000	5250	105	1	70-130/30
95-50-1	1,2-Dichlorobenzene	ND		5000	5010	100	5000	4930	99	2	70-130/30
541-73-1	1,3-Dichlorobenzene	ND		5000	5020	100	5000	4980	100	1	70-130/30
106-46-7	1,4-Dichlorobenzene	ND		5000	4800	96	5000	4720	94	2	70-130/30
75-71-8	Dichlorodifluoromethane	ND		5000	5010	100	5000	4620	92	8	70-130/30
75-34-3	1,1-Dichloroethane	ND		5000	5050	101	5000	4660	93	8	70-130/30
107-06-2	1,2-Dichloroethane	ND		5000	4810	96	5000	4530	91	6	70-130/30
75-35-4	1,1-Dichloroethene	ND		5000	5350	107	5000	5000	100	7	70-130/30
156-59-2	cis-1,2-Dichloroethene	ND		5000	5120	102	5000	4700	94	9	70-130/30
156-60-5	trans-1,2-Dichloroethene	ND		5000	5390	108	5000	5010	100	7	70-130/30
78-87-5	1,2-Dichloropropane	7.9		5000	5440	109	5000	5200	104	5	70-130/30
142-28-9	1,3-Dichloropropane	ND		5000	5150	103	5000	5010	100	3	70-130/30
594-20-7	2,2-Dichloropropane	ND		5000	4910	98	5000	4680	94	5	70-130/30
563-58-6	1,1-Dichloropropene	ND		5000	5750	115	5000	5300	106	8	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34842
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34842-1MS	V36411.D	100	11/06/14	AMY	n/a	n/a	MSV1318
MC34842-1MSD	V36412.D	100	11/06/14	AMY	n/a	n/a	MSV1318
MC34842-1	V36408.D	1	11/06/14	AMY	n/a	n/a	MSV1318
MC34842-1	V36414.D	100	11/06/14	AMY	n/a	n/a	MSV1318

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34842-1, MC34842-2

CAS No.	Compound	MC34842-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-01-5	cis-1,3-Dichloropropene	ND		5000	6140	123	5000	6010	120	2	70-130/30
10061-02-6	trans-1,3-Dichloropropene	ND		5000	6200	124	5000	5930	119	4	70-130/30
123-91-1	1,4-Dioxane	ND		12500	13100	105	12500	18400	147* [a]	34* [c]	70-130/30
97-63-2	Ethyl methacrylate	ND		5000	4810	96	5000	4490	90	7	72-139/30
100-41-4	Ethylbenzene	1.3		5000	5230	105	5000	5120	102	2	70-130/30
87-68-3	Hexachlorobutadiene	ND		5000	5230	105	5000	5350	107	2	70-130/30
591-78-6	2-Hexanone	ND		5000	3090	62* [a]	5000	2890	58* [a]	7	70-130/30
98-82-8	Isopropylbenzene	ND		5000	5550	111	5000	5570	111	0	70-130/30
99-87-6	p-Isopropyltoluene	ND		5000	4730	95	5000	4690	94	1	70-130/30
1634-04-4	Methyl Tert Butyl Ether	2.0		5000	5070	101	5000	4750	95	7	70-130/30
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5000	4860	97	5000	4410	88	10	70-130/30
74-95-3	Methylene bromide	ND		5000	5330	107	5000	5040	101	6	70-130/30
75-09-2	Methylene chloride	ND		5000	4930	99	5000	4590	92	7	70-130/30
91-20-3	Naphthalene	ND		5000	7050	141* [a]	5000	6310	126	11	70-130/30
103-65-1	n-Propylbenzene	0.67	J	5000	4890	98	5000	4880	98	0	70-130/30
100-42-5	Styrene	ND		5000	5400	108	5000	5250	105	3	70-130/30
630-20-6	1,1,1,2-Tetrachloroethane	ND		5000	4930	99	5000	4870	97	1	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	ND		5000	5510	110	5000	5330	107	3	70-130/30
127-18-4	Tetrachloroethene	ND		5000	4850	97	5000	4840	97	0	70-130/30
108-88-3	Toluene	1.8		5000	4990	100	5000	4850	97	3	70-130/30
87-61-6	1,2,3-Trichlorobenzene	ND		5000	5910	118	5000	6340	127	7	70-130/30
120-82-1	1,2,4-Trichlorobenzene	ND		5000	5930	119	5000	5930	119	0	70-130/30
71-55-6	1,1,1-Trichloroethane	ND		5000	4990	100	5000	4770	95	5	70-130/30
79-00-5	1,1,2-Trichloroethane	ND		5000	5560	111	5000	5260	105	6	70-130/30
79-01-6	Trichloroethene	ND		5000	4760	95	5000	4670	93	2	70-130/30
75-69-4	Trichlorofluoromethane	ND		5000	3870	77	5000	3540	71	9	70-130/30
96-18-4	1,2,3-Trichloropropane	ND		5000	3860	77	5000	3700	74	4	70-130/30
95-63-6	1,2,4-Trimethylbenzene	0.57	J	5000	5270	105	5000	5100	102	3	70-130/30
108-67-8	1,3,5-Trimethylbenzene	ND		5000	5630	113	5000	5630	113	0	70-130/30
108-05-4	Vinyl Acetate	ND		5000	4900	98	5000	4640	93	5	70-130/30
75-01-4	Vinyl chloride	ND		5000	4510	90	5000	4180	84	8	70-130/30
	m,p-Xylene	ND		10000	10400	104	10000	10200	102	2	70-130/30
95-47-6	o-Xylene	ND		5000	5190	104	5000	5050	101	3	70-130/30
1330-20-7	Xylene (total)	ND		15000	15600	104	15000	15200	101	3	70-130/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34842
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MC34842-1MS	V36411.D	100	11/06/14	AMY	n/a	n/a	MSV1318
MC34842-1MSD	V36412.D	100	11/06/14	AMY	n/a	n/a	MSV1318
MC34842-1	V36408.D	1	11/06/14	AMY	n/a	n/a	MSV1318
MC34842-1	V36414.D	100	11/06/14	AMY	n/a	n/a	MSV1318

The QC reported here applies to the following samples: **Method:** SW846 8260C

MC34842-1, MC34842-2

CAS No.	Surrogate Recoveries	MS	MSD	MC34842-1	MC34842-1	Limits
1868-53-7	Dibromofluoromethane	99%	97%	109%	100%	70-130%
2037-26-5	Toluene-D8	103%	102%	98%	96%	70-130%
460-00-4	4-Bromofluorobenzene	100%	100%	102%	99%	70-130%

(a) Outside control limits due to possible matrix interference. Refer to Blank Spike.
(b) Result is from Run #2.
(c) High RPD due to possible matrix interference and/or sample non-homogeneity.

* = Outside of Control Limits.

Volatile Internal Standard Area Summary

Job Number: MC34842
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	MSV1318-CC1312	**Injection Date:**	11/06/14
Lab File ID:	V36400.D	**Injection Time:**	11:52
Instrument ID:	GCMSV	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	902444	6.57	1468979	7.75	670729	11.08	774502	13.29	72522	3.53
Upper Limit [a]	1804888	7.07	2937958	8.25	1341458	11.58	1549004	13.79	145044	4.03
Lower Limit [b]	451222	6.07	734490	7.25	335365	10.58	387251	12.79	36261	3.03

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSV1318-BS	902444	6.57	1468979	7.75	670729	11.08	774502	13.29	72522	3.53
MSV1318-BSD	899440	6.57	1394135	7.75	640422	11.08	781355	13.29	72243	3.54
MSV1318-MB	791572	6.57	1291129	7.75	551188	11.09	682746	13.30	60983	3.54
ZZZZZZ	772019	6.57	1271403	7.75	581549	11.09	666746	13.30	58580	3.53
MC34842-2	725791	6.58	1219221	7.76	572048	11.09	664053	13.30	59904	3.54
ZZZZZZ	755673	6.58	1251729	7.76	572117	11.09	657524	13.30	57961	3.54
MC34842-1	782257	6.58	1331673	7.76	604674	11.09	665159	13.30	64343	3.54
ZZZZZZ	769446	6.58	1321373	7.76	586982	11.09	677183	13.30	62226	3.54
ZZZZZZ	855317	6.58	1357431	7.76	659047	11.09	769247	13.30	115856	3.54
MC34842-1MS	909361	6.58	1407776	7.76	659245	11.09	787059	13.30	79433	3.55
MC34842-1MSD	924308	6.58	1491343	7.76	676144	11.09	786829	13.30	76192	3.55
ZZZZZZ	867781	6.58	1387493	7.76	616086	11.09	750781	13.30	79019	3.54
MC34842-1	873051	6.59	1413221	7.77	615467	11.09	715278	13.30	74076	3.55
ZZZZZZ	803207	6.59	1347461	7.77	622226	11.09	702971	13.30	72909	3.55
ZZZZZZ	812634	6.59	1237409	7.77	565844	11.10	665703	13.31	64714	3.55
ZZZZZZ	787308	6.59	1326454	7.77	591067	11.10	670818	13.31	66385	3.55
ZZZZZZ	745791	6.59	1226094	7.77	527542	11.10	648486	13.31	63091	3.55
ZZZZZZ	731849	6.59	1228524	7.77	561870	11.10	644824	13.31	66630	3.56
ZZZZZZ	725237	6.60	1216418	7.77	569520	11.10	641999	13.31	60764	3.56
ZZZZZZ	719271	6.60	1232184	7.77	542107	11.10	636915	13.31	59222	3.56
ZZZZZZ	760834	6.60	1248501	7.78	566679	11.10	647209	13.31	57337	3.56
ZZZZZZ	740276	6.60	1257976	7.78	565249	11.10	643416	13.31	56634	3.56
ZZZZZZ	754524	6.60	1215956	7.77	495590	11.10	600435	13.31	54426	3.55

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary

Job Number: MC34842
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Method: SW846 8260C **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
MC34842-1	V36414.D	100	96	99
MC34842-1	V36408.D	109	98	102
MC34842-2	V36406.D	108	101	99
MC34842-1MS	V36411.D	99	103	100
MC34842-1MSD	V36412.D	97	102	100
MSV1318-BS	V36400.D	100	103	99
MSV1318-BSD	V36401.D	100	102	97
MSV1318-MB	V36404.D	106	95	97

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	70-130%
S2 = Toluene-D8	70-130%
S3 = 4-Bromofluorobenzene	70-130%

GC Volatiles

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QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries

Method Blank Summary

Job Number: MC34842
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40576-MB	YZ92081.D	1	11/06/14	NK	11/06/14	OP40576	GYZ7664

The QC reported here applies to the following samples: **Method:** SW846 8011

MC34842-1, MC34842-3

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.015	0.0061	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.015	0.0061	ug/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	Bromofluorobenzene (S)	117%	36-173%
460-00-4	Bromofluorobenzene (S)	134%	36-173%

Blank Spike Summary

Job Number: MC34842
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40576-BS	YZ92082.D	1	11/06/14	NK	11/06/14	OP40576	GYZ7664

The QC reported here applies to the following samples: **Method:** SW846 8011

MC34842-1, MC34842-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
96-12-8	1,2-Dibromo-3-chloropropane	0.071	0.079	111	60-140
106-93-4	1,2-Dibromoethane	0.071	0.085	120	60-140

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	Bromofluorobenzene (S)	111%	36-173%
460-00-4	Bromofluorobenzene (S)	134%	36-173%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC34842
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP40576-MS	YZ92083.D	1	11/06/14	NK	11/06/14	OP40576	GYZ7664
OP40576-MSD	YZ92084.D	1	11/06/14	NK	11/06/14	OP40576	GYZ7664
MC34799-8	YZ92085.D	1	11/06/14	NK	11/06/14	OP40576	GYZ7664

The QC reported here applies to the following samples: **Method:** SW846 8011

MC34842-1, MC34842-3

CAS No.	Compound	MC34799-8 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
96-12-8	1,2-Dibromo-3-chloropropane	ND		0.071	0.077	108	0.071	0.078	110	1	64-141/29
106-93-4	1,2-Dibromoethane	ND		0.071	0.088	124	0.071	0.092	130	4	63-163/27

CAS No.	Surrogate Recoveries	MS	MSD	MC34799-8	Limits
460-00-4	Bromofluorobenzene (S)	117%	120%	117%	36-173%
460-00-4	Bromofluorobenzene (S)	138%	139%	133%	36-173%

* = Outside of Control Limits.

Volatile Surrogate Recovery Summary

Job Number: MC34842
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Method: SW846 8011 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]
MC34842-1	YZ92090.D	91	105
MC34842-3	YZ92091.D	80	91
OP40576-BS	YZ92082.D	111	134
OP40576-MB	YZ92081.D	117	134
OP40576-MS	YZ92083.D	117	138
OP40576-MSD	YZ92084.D	120	139

Surrogate Compounds	Recovery Limits
S1 = Bromofluorobenzene (S)	36-173%

(a) Recovery from GC signal #2
(b) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: MC34842
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	GYZ7664-CC7664	**Injection Date:**	11/06/14
Lab File ID:	YZ92075.D	**Injection Time:**	14:46
Instrument ID:	GCYZ	**Method:**	SW846 8011

	S1 [a] RT	S1 [b] RT
Check Std	3.44	3.61

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
ZZZZZZ	YZ92076.D	11/06/14	15:02	3.44	3.61
ZZZZZZ	YZ92077.D	11/06/14	15:19	3.44	3.61
ZZZZZZ	YZ92078.D	11/06/14	15:35	3.44	3.61
ZZZZZZ	YZ92079.D	11/06/14	15:52	3.44	3.61
ZZZZZZ	YZ92080.D	11/06/14	16:08	3.44	3.61
OP40576-MB	YZ92081.D	11/06/14	16:25	3.44	3.61
OP40606-MB	YZ92081A.D	11/06/14	16:25	3.44	3.61
OP40606-BS	YZ92082A.D	11/06/14	16:41	3.44	3.61
OP40576-BS	YZ92082.D	11/06/14	16:41	3.44	3.61
OP40606-MS	YZ92083A.D	11/06/14	16:57	3.44	3.61
OP40576-MS	YZ92083.D	11/06/14	16:57	3.44	3.61
OP40606-MSD	YZ92084A.D	11/06/14	17:14	3.44	3.61
OP40576-MSD	YZ92084.D	11/06/14	17:14	3.44	3.61
MC34799-14	YZ92085A.D	11/06/14	17:30	3.44	3.61
MC34799-8	YZ92085.D	11/06/14	17:30	3.44	3.61

Surrogate Compounds

S1 = Bromofluorobenzene (S)

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: MC34842
Account: SHELLWIC Shell Oil
Project: URSMOSTL:Roxana 4Q14 GW/ 21562973.03004 900 South Central Avenue, Roxana, IL

Check Std:	GYZ7664-CC7664	**Injection Date:**	11/06/14
Lab File ID:	YZ92086.D	**Injection Time:**	17:46
Instrument ID:	GCYZ	**Method:**	SW846 8011

	S1 [a] RT	S1 [b] RT
Check Std	3.44	3.61

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
ZZZZZZ	YZ92087.D	11/06/14	18:03	3.44	3.61
ZZZZZZ	YZ92088.D	11/06/14	18:19	3.44	3.61
ZZZZZZ	YZ92089.D	11/06/14	18:36	3.44	3.61
MC34842-1	YZ92090.D	11/06/14	18:52	3.44	3.61
MC34842-3	YZ92091.D	11/06/14	19:09	3.44	3.61
ZZZZZZ	YZ92092.D	11/06/14	19:25	3.44	3.61
ZZZZZZ	YZ92093.D	11/06/14	19:42	3.44	3.61
ZZZZZZ	YZ92094.D	11/06/14	19:58	3.44	3.61
ZZZZZZ	YZ92095.D	11/06/14	20:15	3.44	3.61
ZZZZZZ	YZ92096.D	11/06/14	20:32	3.44	3.61

Surrogate Compounds

S1 = Bromofluorobenzene (S)

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1