

ILLINOIS EPA RCRA CORRECTIVE ACTION CERTIFICATION

This certification must accompany any document submitted to Illinois EPA in accordance with the corrective action requirements set forth in a facility's RCRA permit. The original and two copies of all documents submitted must be provided.

1.0 FACILITY IDENTIFICATION

Name: WRB Refining LP - Wood River Refinery County: Madison
Street Address: 900 South Central Ave. Site No. (IEPA): 1191150002
City: Roxana, IL 62084 Site No. (USEPA): ILD 080 012 305

2.0 OWNER INFORMATION

Name: Not Applicable

Mailing Address: _____

Contact Name: _____

Contact Title: _____

Phone No.: _____

3.0 OPERATOR INFORMATION

Equilon Enterprises LLC d/b/a Shell Oil Products US

17 Junction Drive, PMB #399

Glen Carbon, IL 62034

Kevin Dyer

Principal Program Manager

618-288-7237

4.0 TYPE OF SUBMISSION (check applicable item and provide requested information, as applicable)

- RFI Phase I Workplan/Report
 RFI Phase II Workplan/Report
 CMP Report; Phase _____
 Other (describe):

Revised 4Q10 Report Figures 6-10
Date of Submittal May 14, 2012

IEPA Permit Log No. B-43R

Date of Last IEPA Letter
on Project 3/14/12

Log No. of Last IEPA
Letter on Project B-43R-CA-26 and 29

Does this submittal include groundwater information: Yes No

5.0 DESCRIPTION OF SUBMITTAL: (briefly describe what is being submitted and its purpose)

Revised Figure Nos 6-10 for 4th Quarter 2010 Roxana Interim Groundwater Monitoring Program Reports.

6.0 DOCUMENTS SUBMITTED (identify all documents in submittal, including cover letter; give dates of all documents)

Cover letter (May 14, 2012), RCRA Corrective Action Certification, 4th Quarter 2010 Revised Figures 6-10.

7.0 CERTIFICATION STATEMENT - (This statement is part of the overall certification being provided by the owner/operator, professional and laboratory in Items 7.1, 7.2 and 7.3 below). The activities described in the subject submittals have been carried out in accordance with procedures approved by Illinois EPA. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

IEPA RCRA Corrective Action Certification

For: Equilon Enterprises LLC d/b/a Shell Oil Products US

Date of Submission: 5/14/12

Page 2

7.1 OWNER/OPERATOR CERTIFICATION (Must be completed for all submittals. Certification and signature requirements are set forth in 35 IAC 702.126.) All submittals pertaining to the corrective action requirements set forth in a RCRA Permit must be signed by the person designated below (or by a duly authorized representative of that person):

1. For a Corporation, by a principal executive officer of at least the level of vice-president.
2. For a Partnership or Sole Proprietorship, by a general partner or the proprietor, respectively.
3. For a Governmental Entity, by either a principal executive officer or a ranking elected official.

A person is a duly authorized representative only if:

1. the authorization is made in writing by a person described above; and
2. the written authorization is provided with this submittal (a copy of a previously submitted authorization can be used).

Owner Signature: _____ (Date) _____

Title: _____

Operator Signature: [Signature] _____ 5/11/12 (Date)

Title: Principal Program Manager

7.2 PROFESSIONAL CERTIFICATION (if necessary) - Work carried out in this submittal or the regulations may also be subject to other laws governing professional services, such as the Illinois Professional Land Surveyor Act of 1989, the Professional Engineering Practice Act of 1989, the Professional Geologist Licensing Act, and the Structural Engineering Licensing Act of 1989. No one is relieved from compliance with these laws and the regulations adopted pursuant to these laws. All work that falls within the scope and definitions of these laws must be performed in compliance with them. The Illinois EPA may refer any discovered violation of these laws to the appropriate regulating authority.

Professional's Signature: [Signature] _____ 5/14/12 Date

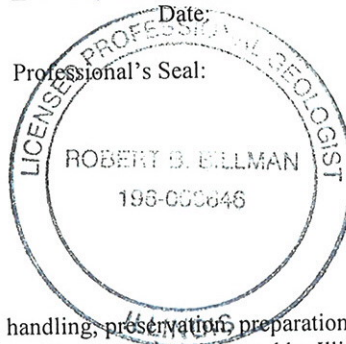
Professional's Name: Robert B. Billman

Professional's Address: URS Corporation

1001 Highlands Plaza Drive West

St. Louis, MO 63110

Professional's Phone No.: 314-743-4108



7.3 LABORATORY CERTIFICATION (if necessary) - The sample collection, handling, preservation, preparation and analysis efforts for which this laboratory was responsible were carried out in accordance with procedures approved by Illinois EPA

Name of Laboratory _____

Signature of Laboratory Responsible Officer

Date

Mailing Address of Laboratory

Name and Title of Laboratory Responsible Officer



May 14, 2012

Mr. Steven F. Nightingale, P.E.
Manager, Permit Section
Illinois Environmental Protection Agency
Bureau of Land
1021 North Grand Avenue East
Springfield, Illinois 62794

**Subject: Groundwater Monitoring Revised Figures – 4th Quarter 2010
Roxana, Illinois
119115002 – Madison County
Equilon Enterprises LLC d/b/a Shell Oil Products US
Log No. B-43R-CA-26 and 29**

Dear Mr. Nightingale:

On behalf of Shell Oil Products US (SOPUS), URS Corporation is submitting the enclosed figures for your review. The figures are being submitted as required by Condition 1 of the Illinois Environmental Protection Agency's (IEPA) letter dated February 14, 2012 and to satisfy Condition 5 of the June 16, 2011 letter.

Similar figures were first presented in the 3rd quarter 2011 report (submitted October 13, 2011) and development of such figures continues to the present in quarterly reports. In their August 31, 2011 letter, the Agency requested development of similar figures for the 1st and 2nd quarter 2011 reports. These were submitted to the Agency on November 28, 2011.

For the 4th Quarter 2010, Figure 6 was created to depict groundwater contours for a broad view of regional groundwater flow, Figure 7 was created to depict thickness of free product at the site, and Figures 8 through 10 were created to present dissolved phase benzene concentrations at the site (plan and cross-sectional views). As with any of these Figures generated for prior periods, data from that requisite period was utilized to either create, or revise the Figures as required by the agency.

1001 Highland Plaza Drive West, Suite 300
St. Louis, MO 63110
Phone: 314.429.0100
Fax: 314.429.0462



Mr. Stephen Nightingale, P.E.
Illinois Environmental Protection Agency
May 14, 2012
Page 2

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

Sincerely,

Kelly Hurst
Environmental Scientist

Robert B. Billman
Senior Project Manager

Enclosures:

4th Quarter 2010 Figures

Figure 6 – Groundwater Contour Map 4Q10

Figure 7 – Thickness of Free Product 4Q10

Figure 8 – Dissolved Phase Benzene Concentrations in Groundwater 4Q10

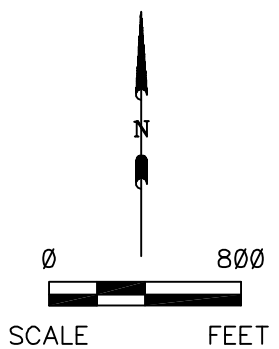
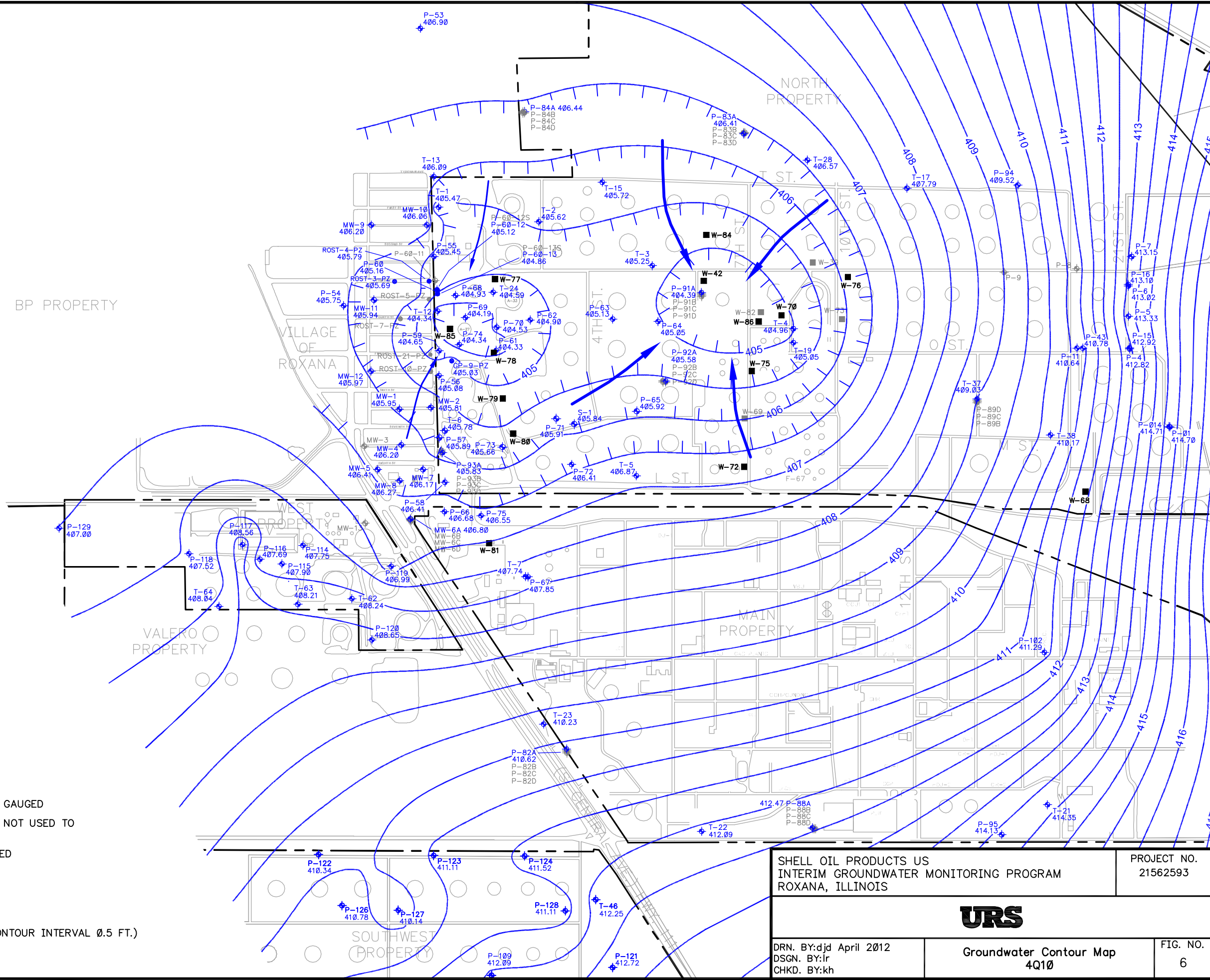
Figure 9 – Cross-Section with Benzene 4Q10 Groundwater Analytical Results – Chaffer Street

Figure 10 – Cross Section with Benzene 4Q10 Groundwater Analytical Results – Route 111 to Chaffer Street

Cc: Kevin Dyer, SOPUS
Marty Reynolds, Village of Roxana
Eric Petersen, Phillips 66
Repository – Roxana Public Library

NOTES:

1. WATER LEVELS WERE OBTAINED DURING THE FOURTH QUARTER 2010 GAUGING EVENT THAT WAS CONDUCTED ON NOVEMBER 12, 2010.
2. CONTOUR LINES PRIMARILY GENERATED BY SURFER VERSION 8 MODELING OF GROUNDWATER ELEVATIONS. SOME INTERPRETATION WAS DONE UTILIZING PROFESSIONAL JUDGMENT AND CONTOUR LINES WERE MODIFIED BY HAND.
3. ELEVATIONS ARE RELATIVE TO 1988 USGS DATUM.



LEGEND

- ◆ GROUNDWATER MONITORING WELL LOCATION GAUGED
- ◆ GROUNDWATER MONITORING WELL LOCATION NOT USED TO GENERATE GROUNDWATER CONTOURS
- GROUNDWATER PIEZOMETER LOCATION GAUGED
- WRR GROUNDWATER DEPRESSION WELLS
- GROUNDWATER GRADIENT
- 407 — GROUNDWATER SURFACE CONTOUR NGVD (CONTOUR INTERVAL 0.5 FT.)

SHELL OIL PRODUCTS US
INTERIM GROUNDWATER MONITORING PROGRAM
ROXANA, ILLINOIS

PROJECT NO.
21562593






DRN. BY:djd April 2012
DSGN. BY:lr
CHKD. BY:kh

Groundwater Contour Map
4Q10

FIG. NO.
6

Fig. P:\ENVIRONMENTAL\SHELL OIL PRODUCT US-ROXANA-ROUTE 111\21562593\ROXANA_I & A\QUARTERLY_GW_4Q10\FIGURES\Figure 6 ROXANA_4Q10 CONTOUR MAP.DWG Last edited: APR. 23, 12 @ 2:20 p.m. by: david_squire

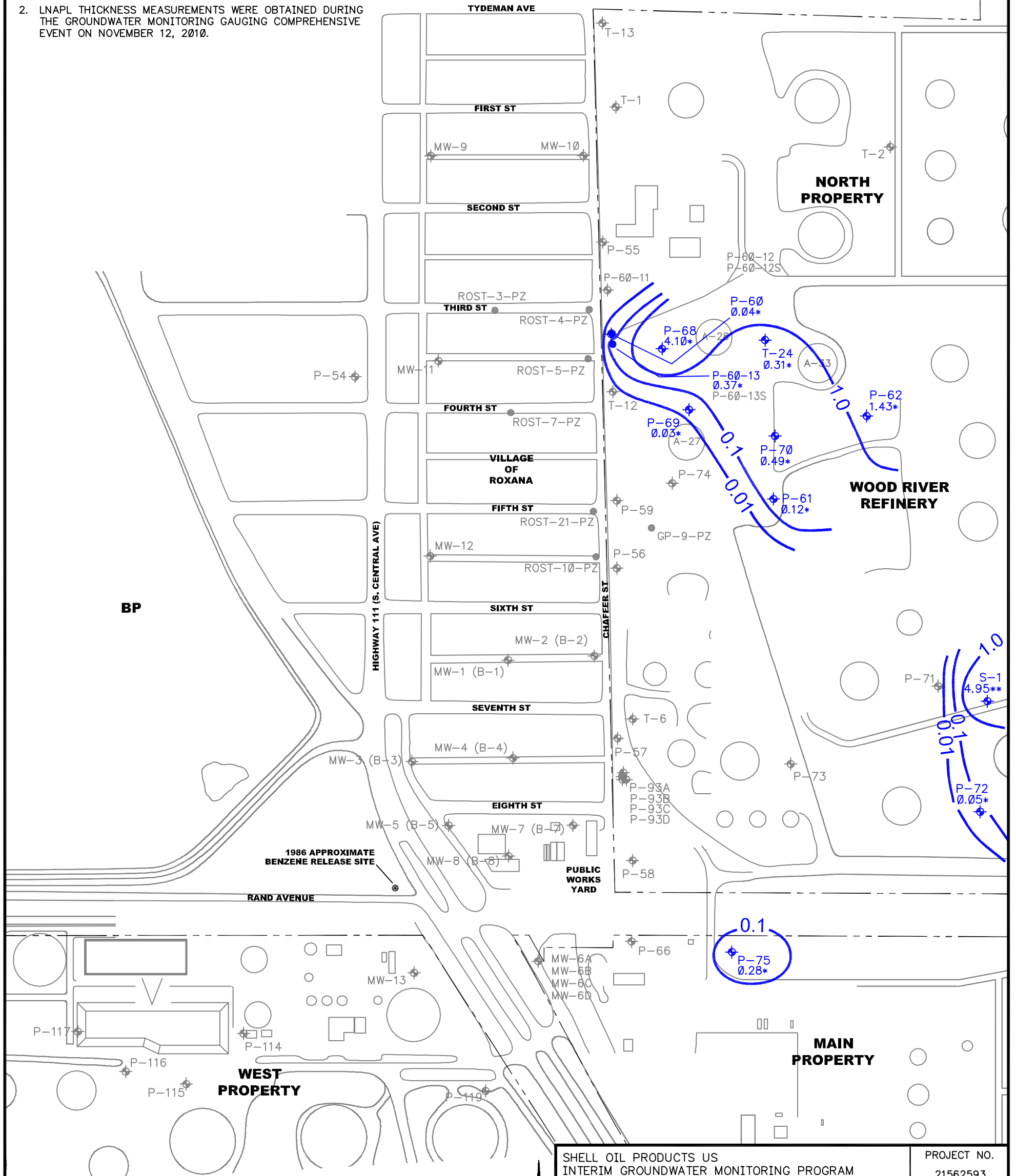
LEGEND

-  GROUNDWATER MONITORING WELL LOCATION GAUGED, LNAPL THICKNESS IN FEET
-  GROUNDWATER MONITORING WELL LOCATION (NO LNAPL OBSERVED UNLESS OTHERWISE NOTED)
-  LNAPL THICKNESS CONTOUR
- * INDICATES THAT THE LNAPL LEVEL IS ABOVE THE TOP OF WELL SCREEN

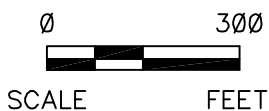
** SCREENED INTERVAL INFORMATION IS NOT AVAILABLE FOR THIS WELL

NOTE:







1. THIS MAP DEPICTS OF THE EXTENT AND THICKNESS OF LNAPL BENEATH THE WEST FENCE LINE AREA. REFER TO TABLE 3 FOR GAUGING INFORMATION ON INDIVIDUAL GROUNDWATER MONITORING WELLS.
2. LNAPL THICKNESS MEASUREMENTS WERE OBTAINED DURING THE GROUNDWATER MONITORING GAUGING COMPREHENSIVE EVENT ON NOVEMBER 12, 2010.



SHELL OIL PRODUCTS US INTERIM GROUNDWATER MONITORING PROGRAM ROXANA, ILLINOIS		PROJECT NO. 21562593
URS		
DRN. BY: djd April 2012 DSGN. BY: lr CHKD. BY: kh	Thickness of Free Product 4Q10	FIG. NO. 7

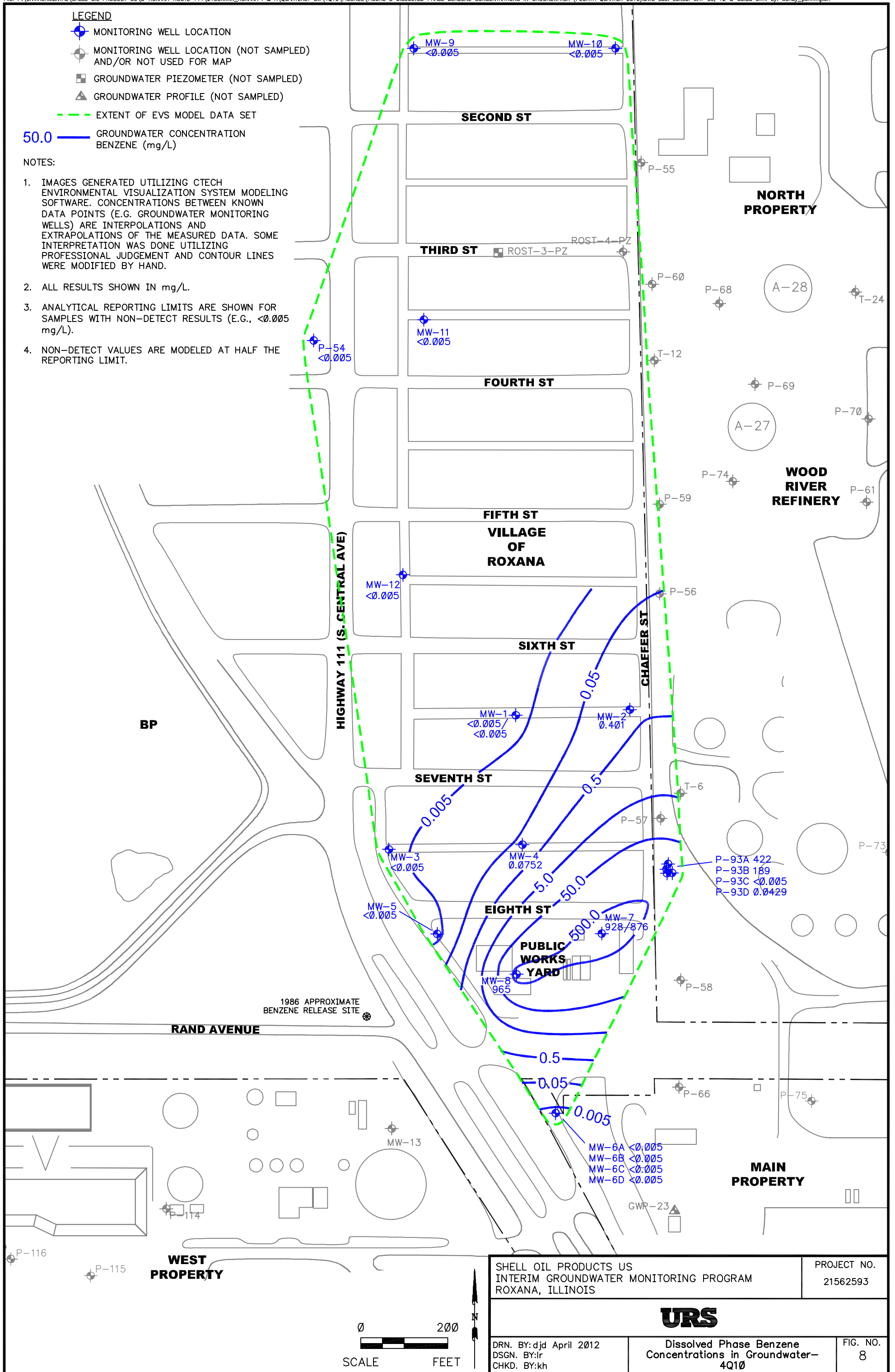


LEGEND

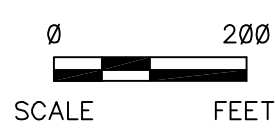
-  MONITORING WELL LOCATION
-  MONITORING WELL LOCATION (NOT SAMPLED) AND/OR NOT USED FOR MAP
-  GROUNDWATER PIEZOMETER (NOT SAMPLED)
-  GROUNDWATER PROFILE (NOT SAMPLED)
-  EXTENT OF EVS MODEL DATA SET
-  50.0 GROUNDWATER CONCENTRATION BENZENE (mg/L)

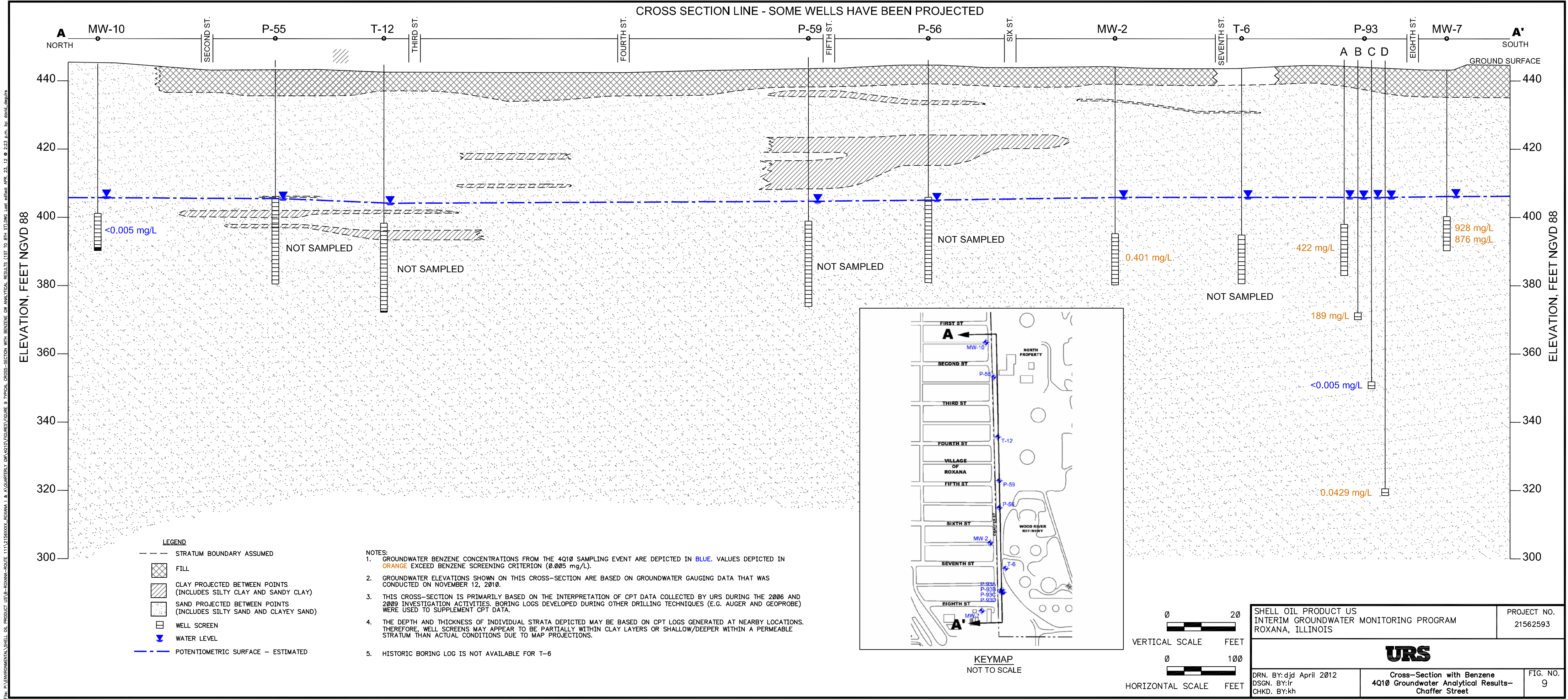
NOTES:

1. IMAGES GENERATED UTILIZING CTECH ENVIRONMENTAL VISUALIZATION SYSTEM MODELING SOFTWARE. CONCENTRATIONS BETWEEN KNOWN DATA POINTS (E.G. GROUNDWATER MONITORING WELLS) ARE INTERPOLATIONS AND EXTRAPOLATIONS OF THE MEASURED DATA. SOME INTERPRETATION WAS DONE UTILIZING PROFESSIONAL JUDGEMENT AND CONTOUR LINES WERE MODIFIED BY HAND.
2. ALL RESULTS SHOWN IN mg/L.
3. ANALYTICAL REPORTING LIMITS ARE SHOWN FOR SAMPLES WITH NON-DETECT RESULTS (E.G., <0.005 mg/L).
4. NON-DETECT VALUES ARE MODELED AT HALF THE REPORTING LIMIT.



SHELL OIL PRODUCTS US INTERIM GROUNDWATER MONITORING PROGRAM ROXANA, ILLINOIS		PROJECT NO. 21562593
URS		
DRN. BY: djd April 2012 DSGN. BY: lr CHKD. BY: kh	Dissolved Phase Benzene Concentrations in Groundwater- 4Q10	FIG. NO. 8

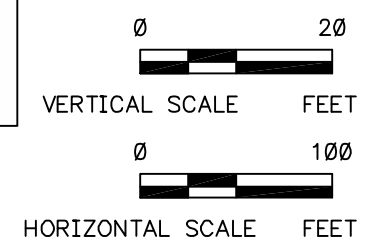




P:\ENVIRONMENTAL\ROXANA\ROUTE 111\21562593\ROXANA - 4 QUARTERLY GW MONITORING PROGRAM - TYPICAL CROSS-SECTION WITH BENZENE GW ANALYTICAL RESULTS (LIST TO 8TH ST).DWG (last updated APR 23, 12 @ 2:23 p.m. by david.deppa)

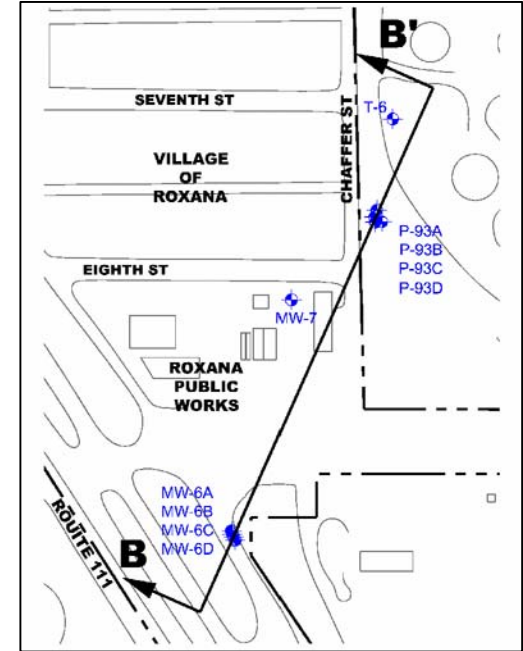
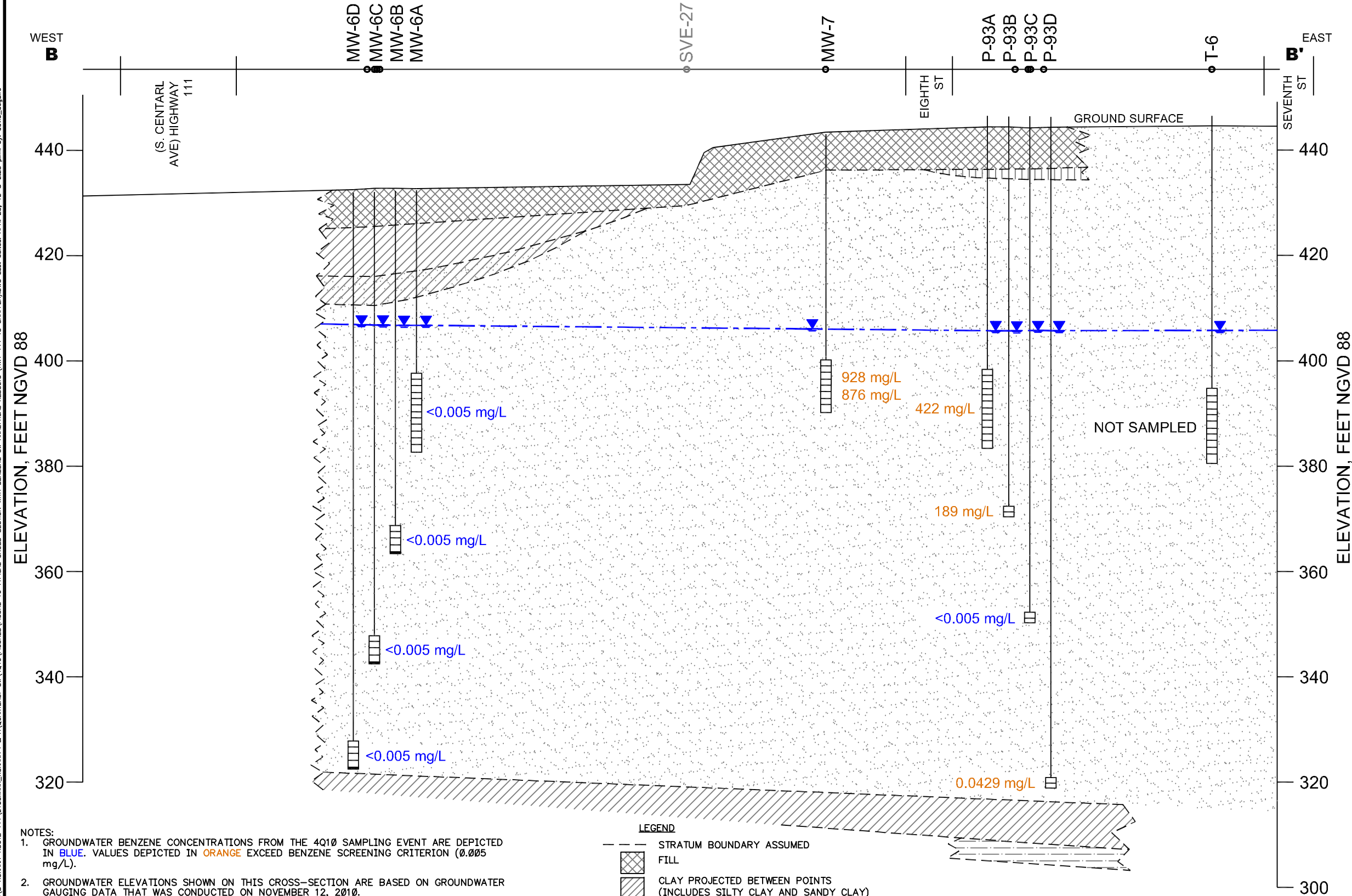
- LEGEND**
- STRATUM BOUNDARY ASSUMED
 - [Cross-hatch pattern] FILL
 - [Diagonal lines pattern] CLAY PROJECTED BETWEEN POINTS (INCLUDES SILTY CLAY AND SANDY CLAY)
 - [Stippled pattern] SAND PROJECTED BETWEEN POINTS (INCLUDES SILTY SAND AND CLAYEY SAND)
 - [Square with cross pattern] WELL SCREEN
 - [Triangle pointing down] WATER LEVEL
 - POTENTIOMETRIC SURFACE - ESTIMATED

- NOTES:**
1. GROUNDWATER BENZENE CONCENTRATIONS FROM THE 4Q10 SAMPLING EVENT ARE DEPICTED IN BLUE. VALUES DEPICTED IN ORANGE EXCEED BENZENE SCREENING CRITERION (0.005 mg/L).
 2. GROUNDWATER ELEVATIONS SHOWN ON THIS CROSS-SECTION ARE BASED ON GROUNDWATER GAUGING DATA THAT WAS CONDUCTED ON NOVEMBER 12, 2010.
 3. THIS CROSS-SECTION IS PRIMARILY BASED ON THE INTERPRETATION OF CPT DATA COLLECTED BY URS DURING THE 2006 AND 2009 INVESTIGATION ACTIVITIES. BORING LOGS DEVELOPED DURING OTHER DRILLING TECHNIQUES (E.G. AUGER AND GEOPROBE) WERE USED TO SUPPLEMENT CPT DATA.
 4. THE DEPTH AND THICKNESS OF INDIVIDUAL STRATA DEPICTED MAY BE BASED ON CPT LOGS GENERATED AT NEARBY LOCATIONS. THEREFORE, WELL SCREENS MAY APPEAR TO BE PARTIALLY WITHIN CLAY LAYERS OR SHALLOW/DEEPER WITHIN A PERMEABLE STRATUM THAN ACTUAL CONDITIONS DUE TO MAP PROJECTIONS.
 5. HISTORIC BORING LOG IS NOT AVAILABLE FOR T-6

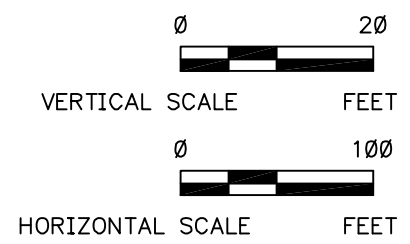


SHELL OIL PRODUCT US INTERIM GROUNDWATER MONITORING PROGRAM ROXANA, ILLINOIS		PROJECT NO. 21562593
URS		
DRN. BY: djd April 2012 DSGN. BY: lr CHKD. BY: kh	Cross-Section with Benzene 4Q10 Groundwater Analytical Results- Chaffer Street	FIG. NO. 9

CROSS SECTION LINE - SOME WELLS HAVE BEEN PROJECTED



KEYMAP
NOT TO SCALE



- NOTES:
- GROUNDWATER BENZENE CONCENTRATIONS FROM THE 4Q10 SAMPLING EVENT ARE DEPICTED IN BLUE. VALUES DEPICTED IN ORANGE EXCEED BENZENE SCREENING CRITERION (0.005 mg/L).
 - GROUNDWATER ELEVATIONS SHOWN ON THIS CROSS-SECTION ARE BASED ON GROUNDWATER GAUGING DATA THAT WAS CONDUCTED ON NOVEMBER 12, 2010.
 - THIS CROSS-SECTION IS PRIMARILY BASED ON THE INTERPRETATION OF CPT DATA COLLECTED BY URS DURING THE 2006 AND 2009 INVESTIGATION ACTIVITIES. BORING LOGS DEVELOPED DURING OTHER DRILLING TECHNIQUES (E.G. AUGER AND GEOPROBE) WERE USED TO SUPPLEMENT CPT DATA.
 - THE DEPTH AND THICKNESS OF INDIVIDUAL STRATA DEPICTED MAY BE BASED ON CPT LOGS GENERATED AT NEARBY LOCATIONS. THEREFORE, WELL SCREENS MAY APPEAR TO BE PARTIALLY WITHIN CLAY LAYERS OR SHALLOW/DEEPER WITHIN A PERMEABLE STRATUM THAN ACTUAL CONDITIONS DUE TO MAP PROJECTIONS.
 - LITHOLOGICAL INFORMATION FROM SVE-27 WAS OBTAINED FROM BORING LOG TO SUPPLEMENT SITE GEOLOGY ONLY.
 - HISTORIC BORING LOG IS NOT AVAILABLE FOR T-6

- LEGEND
- STRATUM BOUNDARY ASSUMED
 - [Cross-hatched] FILL
 - [Diagonal lines] CLAY PROJECTED BETWEEN POINTS (INCLUDES SILTY CLAY AND SANDY CLAY)
 - [Dotted] SAND PROJECTED BETWEEN POINTS (INCLUDES SILTY SAND AND CLAYEY SAND)
 - [Horizontal lines] SILT
 - [Vertical lines] SHALE
 - [Square with vertical lines] WELL SCREEN
 - [Blue inverted triangle] WATER LEVEL
 - [Dashed blue line] POTENTIOMETRIC SURFACE - ESTIMATED

SHELL OIL PRODUCT US INTERIM GROUNDWATER MONITORING PROGRAM ROXANA, ILLINOIS		PROJECT NO. 21562593
URS		
DRN. BY:djd April 2012 DSGN. BY:lr CHKD. BY:kh	Cross-Section with Benzene 4Q10 Groundwater Analytical Results- Route 111 to Chaffer Street	FIG. NO. 10

Fig. P:\ENVIRONMENTAL\SHELL OIL PRODUCT US\B-ROXANA-ROUTE 111\21562593\FIGURE 10 TYPICAL CROSS-SECTION WITH BENZENE GW ANALYTICAL RESULTS (HWY 111 TO CHAFFER) DWG Last edited: APR. 23, 12 @ 2:25 p.m. by: david_desjardis