



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: WRB Refining LP - Wood River Refinery Site ID #: 1191150002
Facility Address: 900 S. Central Ave; Roxana, IL 62048 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.

<input type="checkbox"/>	LPC-160 Forms		
<input type="checkbox"/>	<u>Groundwater</u>	<input type="checkbox"/>	<u>Leachate</u>
<input type="checkbox"/>	Quarterly – Indicate one: 1 2 3 4	<input type="checkbox"/>	Quarterly – Indicate one: 1 2 3 4
<input type="checkbox"/>	Semi-Annual	<input type="checkbox"/>	Semi-Annual
<input type="checkbox"/>	Annual	<input type="checkbox"/>	Annual
<input type="checkbox"/>	Biennial	<input type="checkbox"/>	Biennial

<input type="checkbox"/>	Groundwater Data (without LPC-160 Forms)
<input type="checkbox"/>	Quarterly – Indicate one: 1 2 3 4
<input type="checkbox"/>	Annual <input type="checkbox"/> Semi-Annual <input type="checkbox"/> 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)

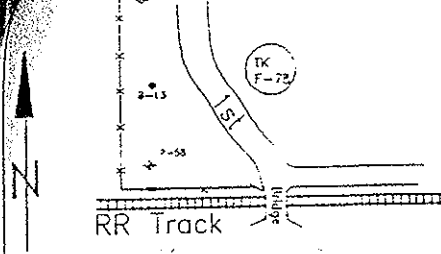
Notice of Exceedence of Groundwater Concentration Limit (35 Ill. Adm. Code 724.199(h))

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) Water Well Sealing Form for P-93D (new replacement well, with same ID, was installed 10 feet south of the abandoned well)

LOCATION MAP



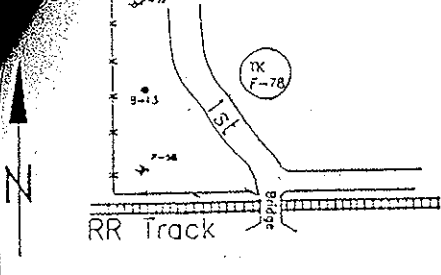
SHELL OIL COMPANY

WELL NUMBER	▶ WELL P-93	LOCATION	▶ 1st STREET, NO. PROPERTY
DATE	▶ 3-11-91-3-22-91	WEATHER	▶ CLOUDY, WINDY TEMP. 50'S
LOGGED BY	▶ J. PAWLIK	DRILLED BY	▶ MATHES
DRILLING METHOD	▶ MUD ROTARY 7 7/8" TRI-CONE	SAMPLING METHOD	▶ 2.0' SPLIT- SPOON ON JARS
GRAVEL PACK	▶ NONE	SEAL	▶ GROUT TO SURFACE

CASING	▶ TYPE SCHEDULE 40 PVC	DIAMETER	8"	LENGTH	60'	HOLE 12" TO 60" DIA. 60"-70:77/8"
SCREEN	▶ TYPE NA	SLOT NA	DIAMETER NA	LENGTH NA		TOTAL DEPTH 136'

MOISTURE CONTENT	SORTING	DENSITY	PLASTICITY	SAMPLE NUMBER	TIP READING (PPM)	DEPTH	SAMPLE RECOVERY	PENETRATION RESISTANCE	LITHOLOGY/REMARKS	WELL COMPLETION
moist		soft	plas	1	-	1-2.0'			*Lithology descriptions from 0'-6' are from spud auger cuttings. 0.00'-2.00' Limestone gravel and clay.	
moist		soft	plas	2	5.3	2-2.0'			2.00'-4.00' CLAY, black, some very fine-grained sand and silt.	
damp	well	loose		3	8.6	3-2.0'			4.00'-6.00' SAND, tan, very fine-grained and silt.	
moist	well	loose		4	3.0	4-2.0'			0.00'-2.00' SILT, tan to brown, some clay.	
moist	well	loose		5	3.0	5-1.03			0.00'-1.03' SAND, black to gray to tan, very fine-grained and fine-grained, little silt.	
moist	well	loose		6	9.1	6-1.0'			0.00'-1.00' SAND, gray to tan, very fine-grained and fine-grained, little silt.	
moist	well	loose		7	11	7-0.99			0.00'-0.99' SAND, tan, fine-grained, some very fine-grained, trace of silt.	
moist	well	loose		8	7	8-1.12			0.00'-1.12' SAND, tan, fine-grained, some very fine-grained, trace of silt.	
moist	well	loose		9	15	9-1.14			0.00'-1.14' SAND, tan, fine-grained, little very fine-grained, trace of silt.	
moist	well	loose		10	12	10-1.21			0.00'-1.21' SAND, tan to black, fine-grained, some very fine-grained, little silt.	

EXPLANATION	GROUT	SAND	SCREEN
	BENTONITE	CASING	WATER LEVEL



WELL NUMBER	▶ WELL P-93	LOCATION	▶ 1st STREET. NO. PROPERTY
DATE	▶ 5-11-91-3-22-91	WEATHER	▶ CLOUDY, WINDY TEMP 50'S
LOGGED BY	▶ J. PAWLIK	DRILLED BY	▶ MATHES
DRILLING METHOD	▶ MUD ROTARY 7 7/8" TRI-CONE	SAMPLING METHOD	▶ 2.0" SPLIT- SPOON ON JARS
GRAVEL PACK	▶ NONE	SEAL	▶ GROUT TO SURFACE

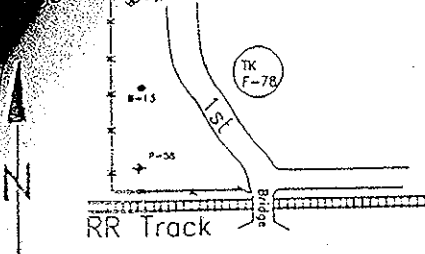
CASING ▶ TYPE SCHEDULE 40 PVC DIAMETER 8" LENGTH 60' HOLE 12" TO 60'
DIA. 60"-TD:77/8'

SCREEN ▶ TYPE NA SLOT NA DIAMETER NA LENGTH NA TOTAL DEPTH 136'

MOISTURE CONTENT	SORTING	DENSITY	PLASTICITY	SAMPLE NUMBER	TIP READING (PPH)	DEPTH	SAMPLE RECOVERY	PENETRATION RESISTANCE	LITHOLOGY/REMARKS	WELL COMPLETION
moist	well	loose		11	2	20			0.00'-1.30' SAND, tan, fine-grained, some very fine-grained, little silt.	
						21	1.30			
moist	well	loose		12	28	22			0.00'-0.93' SAND, tan, black laminated, fine-grained, some very fine-grained, little silt.	
						23	0.93			
moist	mod	loose		13	9	24			0.00'-0.92' SAND, tan, fine-grained, little very fine-grained, trace of medium-grained and silt.	
						25	0.92			
moist	mod	loose		14	27	26			0.00'-0.87' SAND, tan, fine-grained, some medium-grained, little very fine-grained.	
						27	0.87			
moist	mod	loose		15	2	28			0.00'-0.92' SAND, tan, fine-grained, some medium-grained, little very fine-grained.	
						29	0.92			
moist	mod	loose		16	30	30			0.00'-1.13' SAND, tan, fine and medium-grained, little very fine-grained.	
						31	1.13			
moist	mod	loose		17	9	32			0.00'-0.15' SAND, tan, fine and medium-grained, little very fine-grained.	
						33	1.12			
moist	mod	loose		18	19	34			0.15'-1.12' SAND, tan, medium-grained, some fine-grained, trace of coarse-grained.	
						35	0.92			
moist	mod	loose		19	4	36			0.00'-0.92' SAND, tan, medium and fine-grained, little very fine-grained.	
						37	0.91			
moist	mod	loose		20	30	38			0.00'-0.91' SAND, tan, medium-grained, some coarse-grained, trace of fine-grained.	
						39	0.95			
moist	mod	loose				40			0.00'-0.95' SAND, tan, medium-grained, some fine-grained, little coarse-grained.	

EXPLANATION	GROUT	SAND	SCREEN
	BENTONITE	CASING	WATER LEVEL

LOCATION MAP



SHELL OIL COMPANY

PAGE 3 OF 4

WELL NUMBER	▶ W-93	LOCATION	▶ 1st STREET, NO. PROPERTY
DATE	▶ 3-11-91-3-22-91	WEATHER	▶ CLOUDY, WINDY TEMP 50'S
LOGGED BY	▶ J. PAWLIK	DRILLED BY	▶ MATHES
DRILLING METHOD	▶ MUD ROTARY 7 7/8" TRI-CONE	SAMPLING METHOD	▶ 2.0" SPLIT- SPOON OR BARS
GRAVEL PACK	▶ NONE	SEAL	▶ GROUT TO SURFACE

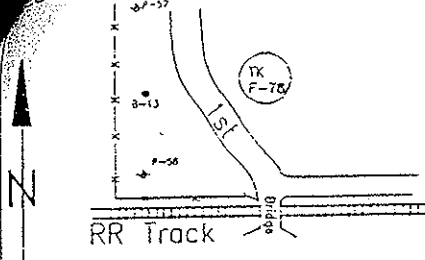
CASING ▶ TYPE SCHEDULE 40 PVC DIAMETER 8" LENGTH 60' HOLE DIA. TO 50" DIA. 50'-73.77/2'

SCREEN ▶ TYPE NA SLOT NA DIAMETER NA LENGTH NA TOTAL DEPTH : 56'

MOISTURE CONTENT	SORTING	DENSITY	PLASTICITY	SAMPLE NUMBER	TIP READING (PPM)	DEPTH	SAMPLE RECOVERY	PENETRATION RESISTANCE	LITHOLOGY/REMARKS	WELL COMPLETION
moist	mod	loose		21	26	40			0.00' - 0.85' SAND, tan, medium and coarse-grained, little fine-grained, trace of fine-gravel.	[Patterned well completion column]
						41	0.85			
moist	mod	loose		22	19	42			0.00' - 0.72' SAND, tan, coarse-grained, some medium-grained, little fine-grained, trace of fine-gravel.	
						43	0.72			
moist	mod	loose		23	271	44			0.00' - 0.95' SAND, tan, coarse-grained, some medium-grained, little fine-grained, trace of fine and coarse-gravel.	
						45	0.95			
moist	mod	loose		24	538	46			0.00' - 0.83' SAND, tan, coarse-grained, some medium-grained, little fine-grained, trace of fine-gravel.	
						47	0.83			
moist	mod	loose		25	631	48			0.00' - 0.91' SAND, tan, coarse-grained, some medium-grained, little fine-grained.	
						49	0.91			
sat	mod	loose		26	165	50			0.00' - 0.97' SAND, tan, coarse-grained, some medium-grained, little fine-grained, trace of fine-gravel.	
						51	0.97			
sat	mod	loose		27	398	52			0.00' - 0.85' SAND, tan, medium and coarse-grained, little fine-grained.	
						53	0.85			
sat	mod	loose		28	634	54			0.00' - 0.74' SAND, tan, medium and coarse-grained, little fine-grained.	
						55	0.74			
sat	mod	loose		29	315	56			0.00' - 0.76' SAND, tan, medium and coarse-grained, little fine-grained.	
						57	0.76			
sat	mod	loose		30	332	58			0.00' - 0.81' SAND, tan, coarse-grained, some medium-grained, little fine-grained, trace of silt.	
						59	0.81			
						60				

EXPLANATION	[Symbol] GROUT	[Symbol] SAND	[Symbol] SCREEN
	[Symbol] BENTONITE	[Symbol] CASING	[Symbol] WATER LEVEL

LOCATION MAP



SHELL OIL COMPANY

PAGE 1 OF 2

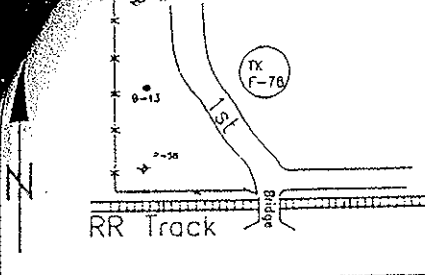
WELL NUMBER ► **WELL P-93** LOCATION ► 1st STREET, NO. PROPERTY
 DATE ► 11-91-3-22-91 WEATHER ► CLOUDY, WINDY, TEMP. 50'S
 LOGGED BY ► J. PAWLIK DRILLED BY ► MATHES
 DRILLING METHOD ► MUD ROTARY 7 7/8" TRI-CONE SAMPLING METHOD ► 2.0' SPLIT-SPOON ON ARS
 GRAVEL PACK ► NONE SEAL ► GROUT TO SURFACE

CASING ► TYPE SCHEDULE 40 PVC DIAMETER 8" LENGTH 60' HOLE: 2 TO 60 DIA. 50"-70.77/8"

SCREEN ► TYPE NA SLOT NA DIAMETER NA LENGTH NA TOTAL DEPTH 38'

MOISTURE CONTENT	SORTING	DENSITY	PLASTICITY	SAMPLE NUMBER	TIP READING (PPM)	DEPTH	SAMPLE RECOVERY	PENETRATION RESISTANCE	LITHOLOGY/REMARKS	WELL COMPLETION
-	-	-	-	31	-	60	-	-	No sample, grout only.	
sat	mod	loose		32	7.1	61	-	-	0.00' - 0.72' SAND, tan, medium-grained, some coarse-grained, little fine-grained.	
sat	mod	loose		33	53	62	-	-	0.00' - 0.90' SAND, tan, coarse-grained, some medium-grained, little fine-grained, trace of coal.	
sat	mod	loose		34	15	63	0.72	-	0.00' - 0.59' SAND, tan, medium-grained, some coarse-grained, little fine-grained.	
sat	mod	loose		35	15	64	-	-	0.00' - 1.00' SAND, tan, medium-grained, some coarse-grained, little fine-grained.	
sat	mod	loose		36	707	65	0.90	-	0.00' - 0.85' SAND, tan, medium-grained, some very fine-grained, scattered coal.	
sat	well	loose		37	42	66	-	-	0.00' - 0.77' SAND, tan, fine-grained, some very fine-grained, trace of silt.	
sat	well	loose		38	78	67	0.59	-	0.00' - 0.76' SAND, tan, fine-grained, some very fine-grained, trace of silt.	
sat	mod	loose		39	35	68	-	-	0.00' - 0.90' SAND, tan, coarse-grained, some medium-grained, little fine-gravel, chert.	
sat	mod	loose		40	2.2	69	0.90	-	0.00' - 0.90' SAND, tan, coarse-grained, some medium-grained, little fine-grained and fine-gravel, chert.	
						70				
						71				
						72				
						73				
						74				
						75				
						76				
						77				
						78				
						79				
						80				

EXPLANATION



WELL NUMBER	▶ WEL P-93	LOCATION	▶ 1st STREET, NO. PROPERTY
DATE	▶ 5-11-91-5-22-91	WEATHER	▶ CLOUDY, WINDY TEMP 50'S
LOGGED BY	▶ J. PAWLK	DRILLED BY	▶ MATHES
DRILLING METHOD	▶ MUD ROTARY 7 7/8" TRI-CONE	SAMPLING METHOD	▶ 2.5" SPLIT- SPOON ON JARS
GRAVEL PACK	▶ NONE	SEAL	▶ GROUT TO SURFACE

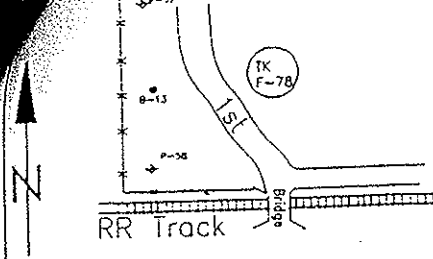
CASING	▶ TYPE SCHEDULE 40 PVC	DIAMETER	8"	LENGTH	60'	HOLE DIA.	12" TO 60" 57-0.77/8"
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SCREEN	▶ TYPE NA	SLOT NA	DIAMETER NA	LENGTH NA	TOTAL DEPTH	136'
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MOISTURE CONTENT	SORTING	DENSITY	PLASTICITY	SAMPLE NUMBER	TIP READING (PPM)	DEPTH	SAMPLE RECOVERY	PENETRATION RESISTANCE	LITHOLOGY/REMARKS	WELL COMPLETION
sat	mod	loose		41	12	80-81	0.91		0.00'-0.91' SAND, tan, coarse-grained, little medium-grained, some fine-gravel (chert, quartz, rhyolite).	[Patterned well completion area]
wet sat	mod	soft loose	plas	42	9.7	82-83	0.97		0.00'-0.28' CLAY, tan. 0.28'-0.97' SAND, tan, coarse-grained, little medium-grained, some fine-gravel (chert, quartz, rhyolite).	
sat	mod	loose		43	3.4	84-85	0.76		0.28'-0.76' SAND, tan, coarse-grained, little medium-grained, some fine-gravel (chert, quartz, rhyolite).	
sat	mod	loose		44	6.0	86-87	0.98		0.00'-0.98' SAND, tan, coarse-grained, little fine-gravel and medium-grained sand.	
sat	mod	loose		45	3.4	88-89	0.81		0.00'-0.81' SAND, tan, coarse-grained, little fine-gravel and medium-grained sand.	
sat	mod	loose		46	6.0	90-91	0.83		0.00'-0.83' SAND, tan, medium-grained, little fine-grained, trace of fine-gravel and very fine-grained sand.	
sat	well	loose		47	4.1	92-93	1.02		0.00'-1.02' SAND, tan, coarse-grained, little medium-grained, trace of fine-gravel (quartz and limestone).	
sat	mod	loose		48	4.3	94-95	0.55		0.00'-0.55' SAND, tan, coarse-grained, some medium-grained, little fine-grained, trace of fine-gravel.	
sat	mod	loose		49	5.3	96-97	0.93		0.00'-0.93' SAND, tan, coarse-grained, little medium-grained, trace of fine-grained and fine-gravel.	
sat	mod	loose		50	12	98-99	0.94		0.00'-0.94' SAND, tan, coarse-grained, little medium-grained, trace of fine-grained and fine-gravel.	

EXPLANATION	[Symbol] GROUT	[Symbol] SAND	[Symbol] SCREEN
[Symbol] BENTONITE	[Symbol] CASING	[Symbol] WATER LEVEL	

LOCATION MAP



SHELL OIL COMPANY

PAGE 3 OF 7

WELL NUMBER	WELL P-93	LOCATION	1st STREET, NO. PROPERTY
DATE	3-11-91-3-22-91	WEATHER	CLOUDY, WINDY TEMP 50'S
LOGGED BY	J. PAWLK	DRILLED BY	MATHES
DRILLING METHOD	MUD ROTARY 7 7/8" TRI-CONE	SAMPLING METHOD	2.0' SPLIT- SPOON ON JARS
GRAVEL PACK	NONE	SEAL	GROUT TO SURFACE

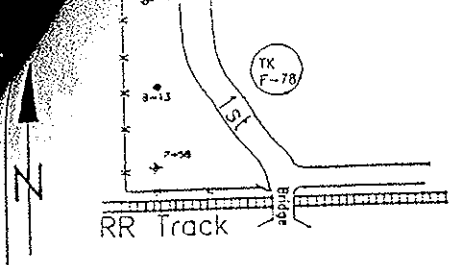
CASING ▶ TYPE SCHEDULE 40 PVC^v DIAMETER 8" LENGTH 60' HOLE: 2" TO 60" DIA. 50'-10.77/8'

SCREEN ▶ TYPE NA SLOT NA DIAMETER NA LENGTH NA TOTAL DEPTH 136'

MOISTURE CONTENT	SORTING	DENSITY	PLASTICITY	SAMPLE NUMBER	TIP READING (PPM)	DEPTH	SAMPLE RECOVERY	PENETRATION RESISTANCE	LITHOLOGY/REMARKS	WELL COMPLETION
sat	mod	loose		51	14	100			0.00'-0.80' SAND, tan, coarse-grained, some medium-grained, little fine-grained.	[Patterned well completion area]
sat	poor	loose		52	14	102	0.80		0.00'-0.87' SAND, tan, coarse-grained, little medium-grained, little fine-gravel, trace of coarse-gravel (chert, quartz, limestone).	
sat	poor	loose		53	9	104	0.87		0.00'-0.62' SAND, tan, coarse-grained, little medium-grained, little fine-gravel, trace of coarse-gravel (chert, quartz, limestone).	
sat	poor	loose		54	12	105	0.62		0.00'-0.83' SAND, tan, coarse-grained, little medium-grained, little fine-gravel, trace of coarse-gravel (chert, quartz, limestone).	
sat	poor	loose		55	8	106	0.83		0.00'-0.88' SAND, tan, coarse-grained, little medium-grained, little fine-gravel, trace of coarse-gravel (chert, quartz, limestone).	
sat	poor	loose		56	9.7	107	0.88		0.00'-0.83' SAND, tan, coarse-grained, little medium-grained, little fine-gravel, trace of coarse-gravel (chert, quartz, limestone).	
sat	poor	loose		57	7.2	108	0.83		0.00'-0.25' SAND, tan, coarse-grained, little medium-grained, little fine-gravel, trace of coarse-gravel (chert, quartz, limestone).	
sat	mod	loose		58	9.7	109	0.63		0.25'-0.63' SAND, tan, coarse-grained, some medium-grained, little fine-grained.	
sat	poor	loose		59	4.1	110	0.81		0.00'-0.81' SAND, tan, coarse-grained and fine-gravel, little medium-grained, trace of coarse-gravel.	
sat	mod	loose		60	6.6	111	0.83		0.00'-0.83' SAND, tan, coarse-grained, some medium-grained, trace of fine-gravel (quartz, chert, mafic igneous).	
sat	mod	loose				112			0.00'-0.90' SAND, tan, coarse-grained, some medium-grained, trace of fine-gravel (quartz, chert, mafic igneous).	
						118				
						119				
						120				

EXPLANATION

- [Symbol] GROUT
- [Symbol] SAND
- [Symbol] SCREEN
- [Symbol] BENTONITE
- [Symbol] CASING
- [Symbol] WATER LEVEL



WELL NUMBER	WELL P-93	LOCATION	1st STREET, NO. PROPERTY
DATE	11-91-3-22-91	WEATHER	CLOUDY, WINDY TEMP 50'S
LOGGED BY	J. PAWLIK	DRILLED BY	MATHES
DRILLING METHOD	MUD ROTARY 7 7/8" TRI-CONE	SAMPLING METHOD	2.0' SPLIT- SPCON ON JAPS
GRAVEL PACK	NONE	SEAL	GROUT TO SURFACE

CASING TYPE SCHEDULE 40 PVC DIAMETER 8" LENGTH 60' HOLE DIA. 7.9178"

SCREEN TYPE NA SLOT NA DIAMETER NA LENGTH NA TOTAL DEPTH 136'

MOISTURE CONTENT	SORTING	DENSITY	PLASTICITY	SAMPLE NUMBER	TIP READING (PPM)	DEPTH	SAMPLE RECOVERY	PENETRATION RESISTANCE	LITHOLOGY/REMARKS	WELL COMPLETION
sat	mod	loose				120			0.00'-0.05' SAND, tan, coarse-grained, some medium-grained, little fine-grained.	
wet		soft	plas	61	2.2	121	0.92		0.05'-0.18' CLAY, brown, little silt.	
sat	well	dense				122			0.18'-0.42' SAND, tan, fine-grained, some very fine-grained, little silt.	
sat	mod	loose				123			0.42'-0.92' SAND, tan, coarse-grained, little medium-grained and fine-gravel.	
sat	mod	loose		62	7.8	124	1.04		0.00'-1.04' SAND, tan, medium-grained, some coarse-grained, little fine-grained, trace of silt.	
sat	well	loose		63	2.4	125	0.50		0.00'-0.50' SAND, tan, medium-grained, little fine-grained and coarse-grained.	
damp			vplas	64	1.5	126			0.00'-0.25' CLAY, gray to dark gray, little very fine-grained sand.	
dry			ehard			127	1.15		0.25'-1.15' SHALE, gray, trace of silt.	
dry			ehard	65	2.2	128			*Hard drilling at 127.5'.	
			ehard			129	1.05		0.00'-1.05' SHALE, gray, trace of silt.	
				NS		130			*Hard drilling from 130'-137.75', mud returns show gray to white limestone.	
				NS		131			Gray to blue clay from 134'.	
				NS		132				
dry			ehard	66	1.1	133			0.00'-0.55' SHALE, good fissility, gray to blue, very calcareous, trace of limestone.	
dry			ehard	67	0.8	134			0.00'-0.38' SHALE, good fissility, gray to blue, very calcareous, trace of limestone.	
dry			ehard			135	0.53		0.38'-0.45' LIMESTONE, brown.	
						136				
						137	0.45			
						138				
						139				
						140				

Final boring depth = 136', last interval sampled = 136'-138'.

EXPLANATION

	GROUT		SAND		SCREEN
	BENTONITE		CASING		WATER LEVEL



Site Number: 1191150002

County: Madison

Well #: P-93D

Site Name: WRB Refining LP - Wood River Refinery

State

Plane Coordinate: X 200000 Y 7015600 (or) Latitude: Longitude:

Borehole #: P-93

Surveyed by: Juneau Engineering & Surveying-Philip Huskey, PLS

IL Registration #: 35-2659

Drilling Contractor: Boart Longyear

Driller: Kevin Smith

Consulting Firm: URS Corporation

Geologist: Mike Miller

Drilling Method: Roto-Sonic

Drilling Fluid (Type): N/A

Logged By: (used log for well being replaced)

Date Started: 4/20/11 (replacement well) Date Finished: 4/20/11 (replacement well)

Report Form

Completed By: Wendy Pennington

Date: 4/5/2011

ANNULAR SPACE DETAILS

Elevations (MSL)*

Depths (BGS)

(.01ft.)

Type of Surface Seal: Concrete

Type of Annular Sealant: Cement/Bentonite Grout

Installation Method: Tremie

Setting Time: 1030 (3/9/11)

Type of Bentonite Seal - - Granular, Pellet, Slurry (Choose One)

Installation Method: Placed

Setting Time: 1725 (3/8/11)

Type of Sand Pack: ANSI/NSF Quartz Sand

Grain Size: #10 (Sieve Size)

Installation Method: Placed

Type of Backfill Material: Native and placed sand (if applicable)

Installation Method: Cave in and placed

WELL CONSTRUCTION MATERIAL

(Choose one type of material for each area)

Table with 2 columns: Material Area and Material Options (SS304, SS316, PTFE, PVC, or Other)

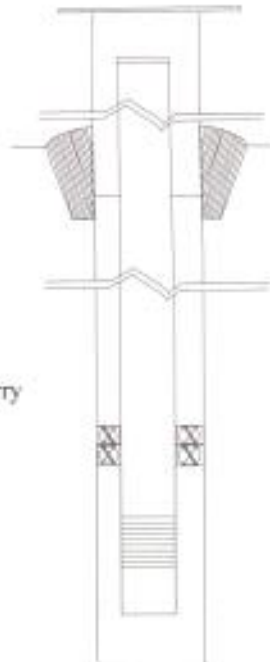


Table with 3 columns: Elevation (MSL), Depth (BGS), and Description of well components and levels.

* Referenced to a National Geodetic Datum

CASING MEASUREMENTS

Table with 2 columns: Measurement and Value (e.g., Diameter of Borehole, ID of Riser Pipe, etc.)

**Hand-Slotted Well Screens are Unacceptable

GROUNDWATER DEVELOPMENT/SAMPLING DATA SHEET

PROJECT NAME: Wood River Refinery GW Monitoring PROJECT NUMBER: 21562594
 DATE: 3/23/11, 3/24/11
 WEATHER: N 30°F
 FIELD PERSONNEL: N. Satam / Brent Crafton
 MONITORING WELL ID: P-93D

INITIAL DATA

Well Diameter: 2 in.
 Total Depth of Well: 127.9 ft btoe
 Depth to Water: 41.91 ft btoe
 Height of Water Column: 85.99 ft
 (0.163 gallons/ft for 2 inch well, 1.468 gallons/ft for 6-inch well)

Gallons/Lin.Ft: 0.163
 Vol. Of Water Column: 14.01 gallons
 Min. Purge Volume: 70 gallons (5 volumes)
 Depth to Top of Screen: 125.9 ft btoe

Water Added during Drilling: 60 gallons
 Water to be Removed: 300 gallons (5x added)
 Ambient PID/FID Reading: 0.0 ppm
 Wellbore PID/FID Reading: 0.0 ppm

PURGE DATA

Purge Method: _____

Purge Volume (gals)	Time	Depth to Water (ft)	Color	Odor	pH	Temp (°C)	Cond. (µmhos/cm)	Turbidity (NTUs)	DO (mg/l)	ORP (mv)
335	1436	52.62	clear	none	6.34	17.40	1360	2.1	0.16	0.09
349	1460	52.62	↓	↓	6.30	17.30	1345	0.1	0.10	0.09
363	1484	52.62	↓	↓	6.36	17.45	1338	0.0	0.18	0.05
381	1510	52.62	↓	↓	6.38	17.50	1349	0.0	0.20	0.07
395	1524	52.62			6.34	17.29	1350	0.2	0.24	0.08

Start Time: 0940 Purge Stop Time: 1510 Elapsed Time: — NA Total Volume Purged: 395 gallons
 Average Purge Rate (gallons/min): 1 gal/min Well Volumes Purged: 5 Water Quality Meter ID: Ta0119500 Calibrated on: 3/24/11

SAMPLING DATA

Sampling Method: _____
 Sample Date: N/A Sample Time: N/A Analysis: N/A

COMMENTS:

DTB = 127.9 ft btoe prior to development
 DTB = 128 ft btoe after development

Purged 35 gal on 3/23/11
 Purged 374 gal on 3/24/11
 Tot water purge 395 gal

Parameters not collected until 5x water added by drillers was removed and purgewater was visually sediment free.

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
 DIVISION OF ENVIRONMENTAL HEALTH
 525 W. JEFFERSON ST.
 SPRINGFIELD, IL 62761

WATER WELL SEALING FORM

RETURN ALL COPIES TO IDPH OR
 LOCAL HEALTH DEPARTMENT

TYPE OR PRESS FIRMLY

This form shall be submitted to this Department or the local health department not more than 30 days after a water well, boring or monitoring well is sealed. Such wells are to be sealed not more than 30 days after they are abandoned in accordance with the sealing requirements in the Water Well Construction Code. **THE LOCAL HEALTH DEPARTMENT OR REGIONAL PUBLIC HEALTH DEPARTMENT MUST BE NOTIFIED AT LEAST 48 HOURS PRIOR TO SEALING.**

1. Ownership (Name of Controlling Party) Shell Oil Products US at the WRB Refining LP Wood River Refinery

2. Well Location 900 South Central Avenue Roxana, IL Madison County
 Address - Lot Number City County

General Description Township 5 N (N)(S) Range 9 W (E)(W) Section 35
SW Quarter of the SW Quarter of the NW Quarter

3. Year Drilled 1991

4. Drilling Permit Number (and date, if known) Unknown

5. Type of Well Bored _____ Drilled Other _____

6. Total Depth 125.5 ft bgs Diameter (inches) 2

7. Formation clear of obstruction Yes _____ No _____

8. DETAILS OF PLUGGING
 Filled with High solids bentonite grout (obstruction at 44 ft bgs preventing from using tremie deeper) from 44 ft bgs to 0 ft bgs ft.
 (cement or other materials)

Kind of plug _____ from _____ to _____ ft.

Filled with _____ from _____ to _____ ft.

Kind of plug _____ from _____ to _____ ft.

Filled with _____ from _____ to _____ ft.

Kind of plug _____ from _____ to _____ ft.

9. CASING RECORD Upper 2 feet of casing removed Yes _____ No _____

10. Date well was sealed Month March Day 9 Year 2011.

11. Licensed water well driller or other person approved by the Department performing well sealing.

Roberts Environmental Drilling, Inc. - Charley Roberts 092-006-865
 Name Complete License Number

1107 South Mulberry Street Millstadt Illinois 62260-2079
 Address City State/ZIP

This state agency is requesting disclosure of information that is necessary to accomplish the statutory purpose as outlined under Public Act 85-0863. Disclosure of this information is mandatory. This form has been approved by the Forms Management Center. IL 482-0631