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SOUTHERN UNION GAS SERVICES LTD

9/3/2013

SOIL REMEDIATION SUMMARY

AND SITE

CLOSURE REQUEST

Regency Field Services LLC
(Formerly known as Southern Union Gas Services)

Trunk "O" 12/6/2010 Historical Release Site
Lea County, New Mexico
UNIT LTR "E" (SW ¼ /NW ¼), Section 23, Township 23 South, Range 36 East
Latitude 32° 17.414' North, Longitude 103° 14.628' West
NMOCD Reference # 1RP-2667

Trunk "O" (12/6/2012) 30 Inch Release Site
Lea County, New Mexico
UNIT LTR "E" (SW ¼ /NW ¼), Section 23, Township 23 South, Range 36 East
Latitude 32° 17.412' North, Longitude 103° 14.639' West
NMOCD Reference # 1RP-2884

NOVA
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Prepared For:

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HOBBS OCD
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July 2013

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1.0 INTRODUCTION

Nova Safety & Environmental (NOVA), on behalf of Regency Field Services LLC (Regency) previously known as Southern Union Gas Services (SUGS), has prepared this Soil Remediation Summary and Site Closure Request for Trunk "O" 12/6/10 Historical Release Site and Trunk "O" (12/6/12) 30 Inch Release Site. On March 27, 2013, in a meeting between SUGS, NOVA and NMOCD representatives, the NMOCD representative approved the concurrent remediation and closure of the Trunk "O" 12/6/10 Historical Release Site and Trunk "O" (12/6/12) 30 Inch Release Site. The legal description of the Release Sites is Unit Letter "E" (SW ¼ NW ¼), Section 23, Township 23 South, Range 36 East, in Lea County, New Mexico. The property affected by the release is owned by The State of New Mexico, and administered by The New Mexico State Land Office (NMSLO). SUGS applied for and received a Right of Entry Permit (Contract No. ROE-2230) from the NMSLO for the remediation of the Release Site. The Release Site GPS coordinates for the Trunk "O" 12/6/10 Historical Release Site are 32° 17.414' North and 103° 14.628' West. The Release Site GPS coordinates for the Trunk "O" (12/6/10) 30 Inch Release Site are 32° 17.412' North and 103° 14.639' West. Please reference Figure 1 for a Site Location Map and Figure 2 for a Site Details and Confirmation Soil Sample Locations Map. The Release Notification and Corrective Action(s) (Form(s) C-141) are provided as Appendix C.

On December 6, 2010, SUGS discovered a release of natural gas, crude oil and produced water had occurred from a thirty (30) inch low pressure steel pipeline. The cause of the release was attributed to failure of a segment of steel pipeline. The pipeline was shut in and the pipeline was repaired. SUGS submitted the Release Notification and Corrective Action (Form C-141) to the New Mexico Oil Conservation Division (NMOCD) Hobbs District Office on December 10, 2010. The C-141 indicated approximately nine (9) barrels of crude oil and produced water were released from the pipeline, with approximately five (5) barrels recovered using a vacuum truck.

On December 6, 2012, SUGS discovered a release of natural gas, crude oil and produced water had occurred from a thirty (30) inch low pressure steel pipeline. The cause of the release was attributed to internal corrosion of the steel pipeline. The pipeline was shut in and the pipeline was repaired using a pipeline patch. SUGS submitted the Release Notification and Corrective Action (Form C-141) to the New Mexico Oil Conservation Division (NMOCD) Hobbs District Office on or about December 12, 2012. The C-141 indicated approximately five (5) barrels of crude oil and produced water were released from the pipeline, with no recovery.

The SUGS Trunk "O" pipeline is located in a pipeline corridor utilized by SUGS and El Paso Natural Gas Company (El Paso), which was recently purchased by Kinder Morgan. The eastern most pipeline within the corridor is a high-pressure transmission pipeline operated by El Paso / Kinder Morgan.

General photographs of the site are provided as Appendix B.

SUGS has researched and identified various historical Release Rites located in New Mexico. At the request of SUGS, NOVA has reviewed the historical data for these sites and conducted the necessary activities to ensure the sites meet the criteria for closure in accordance with NMOCD regulatory guidelines.

2.0 NMOCD SITE CLASSIFICATION

A search of the New Mexico Office of the State Engineer (NMOSE) database did not identify the average depth to groundwater information for Section 23, Township 23 South, Range 36 East. A reference map utilized by the NMOCD indicated depth to groundwater at the Release Site should be encountered at approximately one hundred fifty (150) feet below ground surface (bgs). The depth to groundwater at the Trunk "O" 12/6/10 Historical Release Site and Trunk "O" (12/6/12) 30 Inch Release Site results in a score of zero (0) points being assigned to the site, based on the NMOCD depth to groundwater criteria.

The water well database, maintained by the NMOSE, indicated there are no water wells less than 1,000 feet from the release, resulting in zero (0) points being assigned to this site as a result of this criteria.

There are no surface water bodies located within 1,000 feet of the site. Based on the NMOCD ranking system zero (0) points will be assigned to the site as a result of the criteria.

The NMOCD guidelines indicate the Trunk "O" 12/6/10 Historical Release Site and Trunk "O" (12/6/12) 30 Inch Release Site have ranking score of zero (0). Based on this score, the soil remediation levels for a site with a ranking score of zero (0) points are as follows:

- Benzene – 10 mg/Kg (ppm)
- BTEX – 50 mg/Kg (ppm)
- TPH – 5,000 mg/Kg (ppm)

The NMOCD chloride cleanup level concentrations are site specific and will be determined by the NMOCD Hobbs District Office.

3.0 SUMMARY OF SOIL REMEDIATION ACTIVITIES

As stated above, the Trunk "O" 12/6/10 Historical Release Site and Trunk "O" (12/6/12) 30 Inch Release Site were remediated concurrently and will from this point forward be referred to collectively as the "Trunk "O" Release Site".

On February 26, 2013, NOVA commenced soil remediation activities at the Trunk "O" Release Site. The pipeline right-of-road, utilized by area ranchers is adjacent to the pipeline and was maintained throughout the project. Excavation activities began at the release point and progressed to the north, south and east of the release point and to a depth of approximately twelve (12) feet below ground surface (bgs). The excavation adjacent to the release point was referred to as the "Release Point Excavation". The thirty (30) inch pipeline was repaired using polyline and due to safety concerns, soil was not removed from beneath the polyline to maintain the integrity of the polyline. Excavated impacted soil was stockpiled on-site pending final disposition.

On March 1, 2013, two (2) confirmation soil samples (RPE BH-1 @ 12' and RPE NSW-1 @ 11') were collected from the release point excavation and submitted for analysis to Permian Basin Environmental Lab, LP, of Midland, Texas. The soil samples were analyzed for

concentrations of benzene, toluene, ethylbenzene and xylene (BTEX) using EPA Method SW 846-8021b, total petroleum hydrocarbon (TPH) using EPA Method SW 8015M and chloride using EPA Method E 300.1. Soil sample RPE BH-1 @ 12' was collected from the floor of the Release Point Excavation and analytical results indicated concentrations of benzene, BTEX and TPH were less than the appropriate laboratory Method Detection Limit (MDL). The soil sample exhibited a chloride concentration of 33.2 mg/Kg. Soil sample RPE NSW-1 @ 11' was collected from the north sidewall of the Release Point Excavation. The analytical results indicated benzene, BTEX and TPH concentrations were less than the appropriate laboratory MDL. The soil sample exhibited a chloride concentration of 5.18 mg/Kg. Table 1 summarizes the Concentrations of Benzene, BTEX, TPH and Chlorides in Soil. Laboratory analytical reports are provided as Appendix A. Please reference Figure 2 for a Site Details and Confirmation Soil Sample Locations Map.

On March 4, 2013, excavation of an area east of the El Paso / Kinder Morgan high-pressure pipeline began. This area was referred to as the "East Trench Excavation". Excavated soil was added to the existing impacted soil stockpile. The area was excavated to a depth of approximately thirteen (13) feet bgs and measured approximately twenty (20) feet in width and thirty five (35) feet in length. On March 4, 2013, two (2) confirmation soil samples (ET BH-1 @ 13' and ET ESW-1 @ 12') were collected from the East Trench Excavation. Soil sample ET BH-1 @ 13' was collected from the floor of the East Trench Excavation. The analytical results indicated the benzene, BTEX and TPH concentrations were less than the appropriate laboratory MDL. The soil sample exhibited a chloride concentration of 30.2 mg/Kg. Soil sample ET ESW-1 @ 12' was collected from the east sidewall of the East Trench Excavation. The analytical results indicated the benzene, BTEX and TPH concentrations were less than the appropriate laboratory MDL. The soil sample exhibited a chloride concentration of 26.8 mg/Kg.

On March 4, 2013, excavation of an area west of the El Paso / Kinder Morgan high-pressure pipeline began. This area was referred to as the "East Trench "A" Excavation". Excavated soil was added to the existing impacted soil stockpile. The area was excavated to a depth of approximately six (6) feet bgs and measured approximately seven (7) feet in width and twenty (20) feet in length. On March 4, 2013, one (1) confirmation soil sample (ETA BH-1 @ 6') was collected from the floor of the East Trench "A" Excavation. The analytical results indicated the benzene, BTEX and TPH concentrations were less than the appropriate laboratory MDL. The soil sample exhibited a chloride concentration of 56.3 mg/Kg.

On March 4, 2013, an additional confirmation soil sample (RPE SSW-1 @11') was collected from the south sidewall of the Release Point Excavation. The analytical results indicated the benzene, BTEX and TPH concentrations were less than the appropriate laboratory MDL. The soil sample exhibited a chloride concentration of 15.5 mg/Kg.

On March 1, 2013, the NMSLO Hobbs District was consulted and approved the detour of the pipeline right-of-way road during remediation activities.

On March 18, 2013, approximately one-hundred (100) cubic yards (cy) of caliche was purchased from the NMSLO to detour the pipeline right-of-way road and allow for excavation of the west half of the Release Point Excavation. Following the excavation of the west half of the Release Point Excavation, the excavated soil was added to the existing impacted soil stockpile. On

completion of the excavation activities, the total area of the Release Point Excavation was approximately twenty-five (25) feet in width and sixty (60) feet in length.

On March 19, 2013, two (2) confirmation soil samples (RPE West S/W @11' and RPE East S/W @ 9') were collected from the Release Point Excavation sidewalls and submitted to the laboratory for analysis. The analytical results indicated the benzene, BTEX and TPH concentrations were less than the appropriate laboratory MDL for each submitted soil sample. The RPE West S/W @11' and RPE East S/W @ 9' soil samples exhibited chloride concentrations of 9.24 mg/Kg and 2.15 mg/Kg, respectively.

On March 19, 2013, one (1) confirmation soil sample (Surface) were collected from the area west of the original right-of-way road. The soil sample was collected and analyzed to demonstrate the area was not impacted by the release(s). The analytical results indicated the benzene, BTEX, TPH and chloride concentrations were less than the appropriate laboratory MDL.

Following the completion of excavation activities, the soil stockpile was blended. On March 21, 2013, two (2), five (5) point composite soil samples (SP-1 and SP-2), representing approximately one thousand (1,000) cy of soil were collected and submitted to the laboratory. The analytical results indicated the benzene and TPH concentrations were less than the appropriate laboratory MDL for each submitted soil sample. BTEX concentrations for soil samples SP-1 and SP-2 were 0.00410 mg/Kg and 0.02216 mg/Kg, respectively. The SP-1 and SP-2 composite soil samples exhibited chloride concentrations of 26.3 mg/Kg and 17.4 mg/Kg, respectively.

On March 27, 2013, in a meeting between SUGS, NOVA and NMOCD representatives, the NMOCD representative approved the backfilling of the site with the blended soil stockpiled on site.

On April 1, 2013, backfilling activities began at the Release Site. On completion of backfilling activities the impacted area was contoured to fit the surrounding area. Caliche utilized to detour the right-of-way road was moved to re-establish the original location of the right-of-way road, as request by the NMSLO Hobbs District Office. Additional caliche was purchased from the glazing lessee's private caliche pit to further re-establish the right-of-way road. Following the re-establishment of the road, a roller was utilized to compact the caliche road base.

4.0 QA/QC PROCEDURES

4.1 Soil Sampling

Soil Samples were delivered to Permian Basin Environmental Lab, LP, of Midland, Texas for BTEX and/or TPH and/or chloride analyses using the methods described below. Soil samples were analyzed for BTEX and/or TPH and/or chloride concentrations within fourteen (14) days following the sampling event.

The soil samples were analyzed as follows:

- BTEX concentrations in accordance with EPA Method 8021B, 5030

- TPH concentrations in accordance with modified EPA Method 8015M GRO/DRO
- Chloride concentration in accordance with Method E 300.

4.2 Decontamination of Equipment

Cleaning of the sampling equipment was the responsibility of the environmental technician. Prior to use and between each sample, the sampling equipment was cleaned with Liqui-Nox® detergent and rinsed with distilled water.

4.3 Laboratory Protocol

The laboratory was responsible for proper QA/QC procedures after signing the chain-of-custody (COC) form. These procedures were either transmitted with the laboratory reports or are on file at the laboratory.

5.0 SITE CLOSURE REQUEST

Based on the analytical results of confirmation soil samples, NOVA recommends Regency provide the NMOCD a copy of this Soil Remediation Summary and Site Closure Request and request the NMOCD grant final closure to the Trunk "O" 12/6/10 Historical Release Site and Trunk "O" (12/6/12) 30 Inch Release Site.

6.0 LIMITATIONS

NOVA Safety and Environmental has prepared this Soil Remediation Summary and Site Closure Request to the best of its ability. No other warranty, expressed or implied, is made or intended.

NOVA Safety and Environmental has examined and relied upon documents referenced in the report and has relied on oral statements made by certain individuals. NOVA Safety and Environmental has not conducted an independent examination of the facts contained in referenced materials and statements. We have presumed the genuineness of the documents and that the information provided in documents or statements is true and accurate. NOVA Safety and Environmental has prepared this report, in a professional manner, using the degree of skill and care exercised by similar environmental consultants. NOVA Safety and Environmental also notes that the facts and conditions referenced in this report may change over time and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

This report has been prepared for the benefit of Regency Field Services LLC. The information contained in this report, including all exhibits and attachments, may not be used by any other party without the express consent of NOVA Safety and Environmental and/or Regency Field Services LLC.

7.0 DISTRIBUTION:

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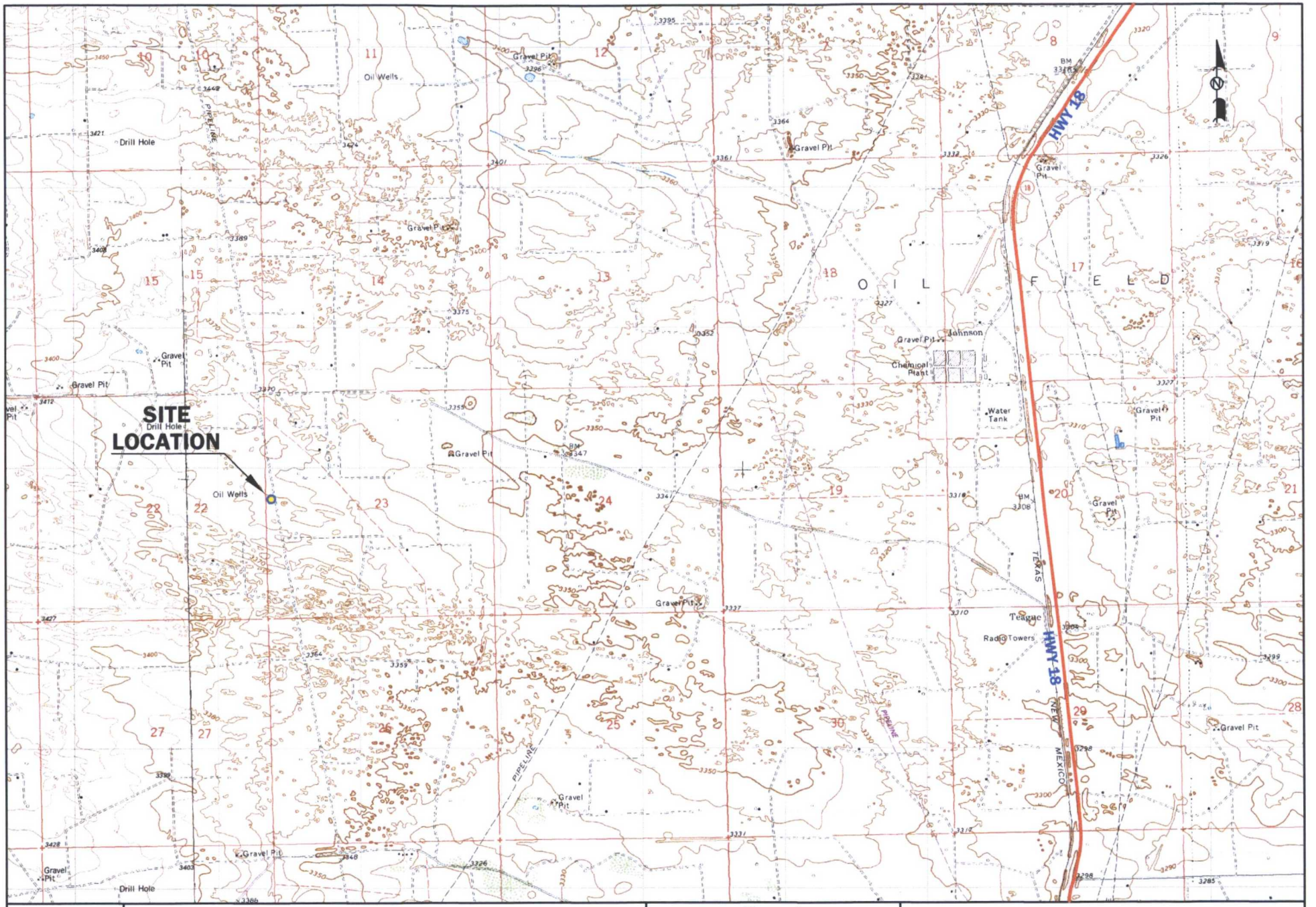

Legend:

Mapped edited and Published by the Geological Survey Control by USGS & USC & GS

Map Re-edited by Nova Safety and Environmental for the purpose of Site Location Maps.

Planimetry by Photogrammetric methods from aerial Photographs taken 1958. Topography by Planetabe Surveys 1961.

Fine red dashed lines indicate selected fence lines.

This map Complies with National Map Accuracy Standards

3000 1500 0 1500 3000

Distance in Feet

Figure 1
Site Location Map
Southern Union Gas Service
Trunk "O" 12610 Historical Release Site
Trunk "O" (12/6/2012) Release Site
Lea County, NM

NOVA safety and environmental
2057 Commerce Drive
Midland, Texas 79703
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March 22, 2013	Scale: 1" - 3000'	CAD By: CAS	Checked By:
Lat. N 32° 17' 28.84"	Long. W 103° 14' 37.68"		

TABLE 1

CONCENTRATIONS OF BENZENE, BTEX, TPH AND CHLORIDE IN SOIL

SOUTHERN UNION GAS SERVICES
TRUNK "O" 12/6/2010 RELEASE SITE AND TRUNK "O" 12/6/2012 RELEASE SITE
LEA COUNTY, NEW MEXICO

All concentrations are reported in mg/Kg

SAMPLE LOCATION	SAMPLE DATE	METHODS: SW 846-8021b						METHOD: SW 8015M				E 300.1
		BENZENE	TOLUENE	ETHYL-BENZENE	m, p - XYLENES	o - XYLENE	TOTAL BTEX	TPH GRO C_6-C_{12}	TPH DRO C_{12}-C_{28}	TPH ORO C_{28}-C_{35}	TOTAL TPH C_6-C_{35}	CHLORIDE
RPE BH-1 @ 12'	03/01/13	<0.00100	<0.00200	<0.00100	<0.00200	<0.00100	<0.00200	<30.5	<30.5	<30.5	<30.5	33.2
RPE NSW-1 @ 11'	03/01/13	<0.00100	<0.00200	<0.00100	<0.00200	<0.00100	<0.00200	<25.3	<25.3	<25.3	<25.3	5.18
ET BH-1 @ 13'	03/04/13	<0.00100	<0.00200	<0.00100	<0.00200	<0.00100	<0.00200	<25.9	<25.9	<25.9	<25.9	30.2
ET ESW 1 @ 12'	03/04/13	<0.00100	<0.00200	<0.00100	<0.00200	<0.00100	<0.00200	<25.3	<25.3	<25.3	<25.3	26.8
ETA BH-1 @ 6'	03/04/13	<0.00100	<0.00200	<0.00100	<0.00200	<0.00100	<0.00200	<27.2	<27.2	<27.2	<27.2	56.3
RPE SSW-1 @ 11'	03/04/13	<0.00100	<0.00200	<0.00100	<0.00200	<0.00100	<0.00200	<25.3	<25.3	<25.3	<25.3	15.5
RPE West S/W @ 11'	03/19/13	<0.00100	<0.00200	<0.00100	<0.00200	<0.00100	<0.00200	<25.5	<25.5	<25.5	<25.5	9.24
RPE East S/W @ 9'	03/19/13	<0.00100	<0.00200	<0.00100	<0.00200	<0.00100	<0.00200	<25.0	<25.0	<25.0	<25.0	2.15
Surface	03/19/13	<0.00100	<0.00200	<0.00100	<0.00200	<0.00100	<0.00200	<25.3	<25.3	<25.3	<25.3	<1.01
SP-1	03/21/13	<0.00100	<0.00200	<0.00100	0.00410	<0.00100	0.00410	<25.5	<25.5	<25.5	<25.5	26.3
SP-2	03/21/13	<0.00100	<0.00200	<0.00100	0.0159	0.00626	0.02216	<25.8	<25.8	<25.8	<25.8	17.4