1R - 952

REPORTS

2008-2009

Larson & Associates, Inc.
Environmental Consultants

November 21, 2008

Mr. Larry Johnson
Environmental Engineer
New Mexico Oil Conservation Division – District 1
1625 North French Drive
Hobbs, New Mexico 88240

Re: 1RP-952 - Notification of Groundwater Impairment - North 10" Pipeline Release
Targa Midstream Services, L.P., Unit B (NW/4, NE/4), Section 22, Township ~~22~~ 21 South, Range 37 East, Lea County, New Mexico

Dear Mr. Johnson:

This letter is submitted to the New Mexico Oil Conservation Division (OCD) on behalf of Targa Midstream Services, L.P. (Targa) by Larson & Associates Inc. (LAI), its consultant, to report groundwater impairment, as a required by 19.15.1.19 (B) (2) (a) and (b) NMAC, from a pipeline release known as the North 10-Inch pipeline. Contact information for Targa is as follows:

Name:	Mr. Don Embrey
Address:	6 Desta Drive, Suite 3300
	Midland, Texas 79705
Telephone:	(432) 688-0555
Fax:	(432) 688-0552
Email:	dembrey@targaresources.com

Setting

The release occurred about 2.8 miles northeast of Eunice, New Mexico, in Unit B (NW/4, NE/4), Section 22, Township ~~22~~ 21 South, Range 37 East in Lea County, New Mexico. The release is located at latitude 32° 28' 05.36" north and longitude 103° 08' 52.41" west. The surface estate is owned by Mr. Charlie Bettis and is used for livestock grazing and oil and gas production. A railroad right-of-way is located about 250 feet west of the release. The surface elevation is approximately 3410 feet above mean sea level (MSL) and slope gently east and southeast toward Monument Draw located about 4,500 feet east of the release. The nearest residence and domestic well is located about 900 feet north (up and cross gradient) of the release.

Groundwater occurs in the Ogallala formation at approximately 58 feet below ground surface (BGS) and the regional groundwater flow direction is from northwest to southeast. The Ogallala formation is overlain by unconsolidated windblown sand. A layer of moderately hard to dense caliche (commonly referred to as caprock) was observed below the windblown sand between approximately 15 and 30 feet BGS. The Ogallala formation consists of interbedded units of sand, silt, clay, gravel, and is underlain by the Chinle formation (Triassic) of the Dockum group. The Chinle formation consists of interbedded units of clay, shale, mudstone, sandstone and

siltstone. The Dockum group is generally referred to as "red bed". The Chinle formation was encountered in borings MW-1 and MW-2 at approximately 70 and 68 feet BGS, respectively. Figure 1 presents a Google® image of the release and vicinity. Figure 2 presents a location and topographic map extracted from the U.S.G.S. 7.5 - minute topographic series map for the Eunice, New Mexico Quadrangle (1969).

Recommended remediation action levels (RRAL) benzene, toluene, ethylbenzene, xylene (BTEX) and total petroleum hydrocarbons (TPH) were calculated using published guidelines (Guidelines for Remediation of Leaks, Spills and Releases, August 13, 1994) and the following criteria:

Ranking Criteria	Result	Ranking Score
Depth-to-Groundwater	50 – 99 Feet	10
Wellhead Protection Area	Yes	20
Distance to Surface Water Body	>1000 Horizontal Feet	0
		Total Score: 30

The following RRAL are assigned to the leak based on the total ranking score (30):

- **Benzene** **10 mg/kg**
- **Total BTEX** **50 mg/kg**
- **TPH** **100 mg/kg**

Background

The release occurred on August 16, 2002 and was reported to the OCD on form C-141. The reported volume released was less than 5 barrels (bbl) liquid. No product was recovered. Targa excavated soil from the release to expose, blind and abandon the pipeline. The excavated soil was piled on the north side of the release. Targa contracted Environmental Plus, Inc. (EPI) to delineate the release. EPI personnel investigated the release on July 19, 2005, August 29, 2005, August 31, 2005, October 24, 2005 and February 2, 2006, including collecting soil samples from the bottom of the excavation, backhoe trenches and machine-drilled (auger and air rotary) borings. Two (2) machine-drilled borings (BH-1 and SB-4) were advanced below the static groundwater level, and a temporary monitoring well (TMW-1) was installed in boring SB-4. On February 10, 2006, EPI personnel collected groundwater samples from the temporary well for laboratory methods of BTEX, chloride and sulfate. The temporary well was plugged following the investigation.

The investigation results were submitted to the OCD in a letter dated June 30, 2006 (Site Characterization and Soil Remediation Proposal, Targa Resources, Inc. – North 10-Inch Release Site (Ref. #210010), NW1/4 of the NE1/4, Section 22, T21S, R37E, Lea County, New Mexico) and requested approval for the following:

1) Collect grab-type soil samples from the excavation sidewalls;
2) Based on laboratory analytical data, excavate hydrocarbon impacted soil from sidewalls (if necessary);
3) Dispose of impacted soil at a state approved disposal facility;
4) Install an impermeable barrier (i.e., compacted clay, poly-vinyl chloride or equivalent) on

the excavation floor;
5) Backfill the excavation with clean soil and grade/contour to allow natural drainage;
6) Seed the area with a blend preferred by the landowner.

In September 2006, EPI deepened the excavation to approximately 11 feet BGS and expanded the sides to the current configuration. On October 16, 2006, twenty-one (21) soil samples (SW-1 through SW-21) were collected from the sides of the expanded excavation. Fourteen (14) samples were tested for chloride and reported concentrations from less than 16 mg/Kg ((SW-20) to 864 mg/Kg (SW-10). The highest chloride concentrations were observed near the southwest corner of the excavation in samples SW-8, 4' (608 mg/Kg) and SW-10, 4' (864 mg/Kg).

In summary, the EPI soil sample results reported no concentrations of benzene, BTEX and TPH above the calculated RRAL. The side samples indicated elevated chloride near the southwest corner of the excavation. Chloride in the lowermost soil sample, above groundwater, from boring BH-1 near the excavation center was 1,040 mg/Kg. The laboratory reported benzene in sample TMW-1 at 0.221 milligrams per liter (mg/L) and exceeded the New Mexico Water Quality Control Commission (WQCC) human health standard of 0.01 mg/L. Toluene (0.298 mg/L), ethylbenzene (0.037 mg/L) and xylene (0.075 mg/L) were less than the WQCC human health standards. Chloride and sulfate were reported in sample TMW-1 at 3,799 mg/L and 468 mg/L, respectively. The chloride value exceeded the WQCC domestic water quality standard of 250 mg/L.

Current Investigation

On October 29 and 30, 2008, Scarborough Drilling, Inc., under supervision from LAI, collected soil samples at six (6) locations (B1 through B4, MW-1 and MW-2) using an air-rotary rig and jam tube sampler. Soil samples were from each location at approximately 1, 5, 10, 15, 20, 30, 40 and 50 feet BGS, and analyzed by field method for organic vapors. No field headspace readings exceeded 100 parts per million, therefore, Xenco Laboratories, formerly Environmental Lab of Texas, Inc., analyzed the samples for TPH by method 8015 modified and chloride by method 300. Two (2) soil borings (MW-1 and MW-2) were completed as temporary monitoring wells to determine if groundwater has been impaired. Well MW-1 was installed approximately 150 feet northwest (up gradient) of the release and well MW-2 was installed approximately 150 feet southeast (down gradient) of the release. The borings were advanced to approximately 75 feet BGS and completed with about 20 feet of 2-inch schedule 40 PVC 0.010-inch factory-slotted screen. The well screen was placed near the bottom of the borings and extends into the entire saturated thickness of the Ogallala formation and above the groundwater surface observed during drilling. Figure 3 presents a site drawing showing the boring and monitoring well locations. Table 1 presents a summary of the field and laboratory analysis of soil samples. Appendix A presents the boring logs and temporary well completion forms. Appendix B presents the laboratory reports.

Referring to Table 1, TPH was below the RRAL (100 mg/Kg) in all samples. The chloride levels in the background boring (MW-1) ranged from 35.3 mg/Kg to 371 mg/Kg. Chloride was reported at 140 mg/Kg in the sample from 50 feet BGS. Chloride exceeded the maximum

background concentration (371 mg/Kg) in the following samples:

Boring	Sample (Feet)	Chloride (mg/Kg)
MW-2	30	281
MW-2	40	240
B1	15	581
B1	20	818
B1	30	1,230
B1	40	1,730
B1	50	590
B2	10	628
B2	15	707
B2	20	1,080
B2	30	3,310
B2	40	2,100
B2	50	1,840
B3	15	678
B3	20	429

The chloride results confirm that the vertical limit of the release is the approximate depth of the static groundwater level. However, the lateral limit of the release was not determined during the investigation on October 29 and 30, 2008.

On October 30, 2008, following hand-bailing to develop the monitoring wells, groundwater samples were collected using dedicated disposable PVC bailers. The groundwater samples were labeled, properly preserved and delivered under chain of custody control to Xenco, which analyzed the samples by EPA methods for BTEX, dissolved metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver), anions, cations and total dissolved solids (TDS). Table 2a presents a summary of the BTEX. Table 2b presents a summary of the dissolved metals and cations. Table 2c presents a summary of the anions and TDS. Appendix A presents the laboratory reports. Appendix C presents photographs. Appendix D presents the initial and final C-141.

BTEX was not reported above the method detection limits or WQCC human health standards in the groundwater samples. No dissolved metals, except manganese, exceeded the WQCC human health or domestic water quality standards. Manganese was reported at 0.255 mg/L in sample well MW-1 and exceeded the WQCC domestic water quality standard of 0.2 mg/L. Chloride was reported at 190 mg/L and 824 mg/L in samples from wells MW-1 and MW-2, respectively. Chloride exceeded the WQCC domestic water quality standard (250 mg/L) in sample MW-2. TDS was 1,330 mg/L and 1,800 mg/L in samples MW-1 and MW-2, respectively, and exceeded the WQCC domestic water quality standard of 1,000 mg/L.

LAI personnel collected two (2) composite soil samples (SS-1 and SS-2) from the soil pile located north of the excavation. The samples were analyzed for TPH and chloride by methods

8015 modified and 300, respectively. The laboratory reported no TPH above the method detection limit and chloride was 532 mg/Kg and 1,190 mg/Kg, in samples SS-1 and SS-2, respectively.

Remediation and Delineation Proposal

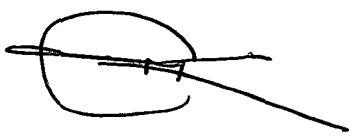
Based on the results of the previous and current investigations, Targa proposes the following options to remediate and delineate the release:

1) Dispose of the contaminated soil piled north side of the excavation at a OCD approved disposal facility;
2) Install an impermeable barrier (i.e., compacted clay or 20-mil thickness polyethylene liner) in the bottom of the excavation, fill the excavation with clean soil, crown the surface for drainage and seed the surface to landowner specifications;
3) Install three (3) monitoring wells (MW-3, MW-4 and MW-5) to delineate the vadose zone and groundwater impact;
4) Analyze soil samples for chloride and groundwater samples for anions, cations and TDS;
5) Prepare a report that includes excavation closure summary, soil and groundwater investigation summary, geological logs and cross sections, iopleth maps for chloride and TDS concentrations in groundwater;
6) Groundwater remedial alternative.

Your approval of the remediation and delineation proposal is requested. Please contact Mr. Don Embrey with Targa at (432) 688-0555 or email DEmbrey@targaresources.com or myself at the contact information provided below, if you have questions.

Sincerely,

Larson & Associates, Inc.



Mark J. Larson, PG, CPG, CGWP
Sr. Project Manager / President

Encl.

Cc: Wayne Price – OCD Santa Fe
James Lingnau - Targa
Don Embrey – Targa

TABLES

Table 1
Targa Midstream Services, L.P.
1RP-952
Soil Analytical Data Summary
North 10-Inch Release
Unit B (NW/4, NE/4) Sec 22, T21S, R37E
Lea County, New Mexico
Project Number: 8-0132

Sample ID	Date	PID	GRO C6-C12	DRO C12-C28	TPH C6-C28	Chlorides
RAL:			---	---	1,000	250
MW-1-1'	10/29/2008	0.7	<16.6	<16.6	<16.6	<5.00
MW-1-5'	10/29/2008	0.8	<16.2	<16.2	<16.2	**35.3**
MW-1-10'	10/29/2008	0.9	<17.1	<17.1	<17.1	**371**
MW-1-15'	10/29/2008	0.9	<15.8	<15.8	<15.8	**171**
MW-1-20'	10/29/2008	0.7	<15.7	<15.7	<15.7	**110**
MW-1-30'	10/29/2008	0.7	<16.8	<16.8	<16.8	**82.7**
MW-1-40'	10/29/2008	0.9	<16.6	<16.6	<16.6	**90.7**
MW-1-50'	10/29/2008	0.5	<16.6	<16.6	<16.6	**140**
MW-2-1'	10/30/2008	0.3	<16.8	<16.8	<16.8	<56.0
MW-2-5'	10/30/2008	0.4	<16.1	<16.1	<16.1	<53.5
MW-2-10'	10/30/2008	0.4	<16.9	<16.9	<16.9	<56.2
MW-2-15'	10/30/2008	0.3	<16.4	<16.4	<16.4	<109
MW-2-20'	10/30/2008	0.2	<15.4	<15.4	<15.4	<103
MW-2-30'	10/30/2008	0.0	<17.4	<17.4	<17.4	**281**
MW-2-40'	10/30/2008	0.0	<17.5	<17.5	<17.5	**240**
MW-2-50'	10/30/2008	0.0	<16.9	<16.9	<16.9	**181**
B1-1'	10/29/2008	0.3	<15.7	<15.7	<15.7	<5.00
B1-5'	10/29/2008	0.3	<16.2	<16.2	<16.2	**23.3**
B1-10'	10/29/2008	0.3	<16.1	<16.1	<16.1	**230**
B1-15'	10/29/2008	0.3	<16.9	<16.9	<16.9	**581**
B1-20'	10/29/2008	0.4	<16.8	<16.8	<16.8	**818**
B1-30'	10/29/2008	0.2	<17.9	<17.9	<17.9	**1,230**
B1-40'	10/29/2008	0.2	<16.9	<16.9	<16.9	**1,730**
B1-50'	10/29/2008	0.2	<16.8	**24.1**	**24.1**	**590**
B2-1'	10/29/2008	0.2	<16.1	<16.1	<16.1	**6.43**
B2-5'	10/29/2008	0.3	<16.5	<16.5	<16.5	**233**
B2-10'	10/29/2008	0.2	<16.6	<16.6	<16.6	**628**
B2-15'	10/29/2008	0.2	<16.2	<16.2	<16.2	**707**
B2-20'	10/29/2008	0.2	<16.1	<16.1	<16.1	**1,080**
B2-30'	10/29/2008	0.0	<18.5	<18.5	<18.5	**3,310**
B2-40	10/29/2008	0.0	<17.0	<17.0	<17.0	**2,100**
B2-50'	10/29/2008	0.0	<17.1	<17.1	<17.1	**1,840**

Table 1
Targa Midstream Services, L.P.
1RP-952
Soil Analytical Data Summary
North 10-Inch Release
Unit B (NW/4, NE/4) Sec 22, T21S, R37E
Lea County, New Mexico
Project Number: 8-0132

Sample ID	Date	PID	GRO C6-C12	DRO C12-C28	TPH C6-C28	Chlorides
RAL:			---	---	1,000	250
B3-1'	10/29/2008	0.0	<15.7	<15.7	<15.7	<10.5
B3-5'	10/29/2008	0.0	<15.8	<15.8	<15.8	**16.6**
B3-10'	10/29/2008	0.0	<16.2	**17.2**	**17.2**	**60.2**
B3-15'	10/29/2008	0.0	<16.6	<16.6	<16.6	**678**
B3-20'	10/29/2008	0.0	<15.8	<15.8	<15.8	**429**
B3-30'	10/29/2008	0.0	<19.9	<19.9	<19.9	<13.3
B3-40'	10/29/2008	0.0	<16.0	<16.0	<16.0	<5.34
B3-50'	10/29/2008	0.0	<17.0	<17.0	<17.0	<11.3
B4-1'	10/30/2008	0.0	<16.4	<16.4	<16.4	**240**
B4-5'	10/30/2008	0.0	<15.6	<15.6	<15.6	**181**
B4-10'	10/30/2008	0.2	<16.6	<16.6	<16.6	<54.5
B4-15'	10/30/2008	0.0	<16.5	<16.5	<16.5	<52.0
B4-20'	10/30/2008	0.0	<16.0	<16.0	<16.0	<107
B4-30'	10/30/2008	0.0	<16.4	<16.4	<16.4	**190**
B4-40'	10/30/2008	0.0	<16.5	<16.5	<16.5	**251**
B4-50'	10/30/2008	0.0	<15.8	<15.8	<15.8	**196**
SS1	10/29/2008	---	<15.5	<15.5	<15.5	**532**
SS2	10/29/2008	---	<15.9	<15.9	<15.9	**1,190**

Notes

RAL - Regulatory Action Level

Total Petroleum Hydrocarbons analyzed via EPA SW Method 8015 Mod.

Chlorides analyzed via EPA Method 300.

All values reported in Milligrams per Kilogram - dry (mg/Kg, parts per million).

Bold indicates the analyte was detected.

Bold and blue indicates the value exceeds NMOCD requirements.

Table 2a
Targa Midstream Services, L.P.
1RP-952
Groundwater Analytical Data Summary
North 10-Inch Release
Unit B (NW/4, NE/4) Sec 22, T21S, R37E
Lea County, New Mexico
Project Number: 8-0132

Sample ID	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Total BTEX
RAL:		0.01	0.75	0.75	1	---
MW-1	10/30/2008	<0.0010	<0.0020	<0.0010	<00010	<0.0050
MW-2	10/30/2008	<0.0010	<0.0020	<0.0010	<00010	<0.0050

Notes

RAL - Regulatory Action Level

BTEX analyzed via EPA SW Method 8021B.

Bold indicates the analyte was detected.

Bold and blue indicates the value exceeds regulatory requirements.

Table 2b
Targa Midstream Services, L.P.
1RP-952
Groundwater Analytical Data Summary
North 10-Inch Release
Unit B (NW/4, NE/4) Sec 22, T21S, R37E
Lea County, New Mexico
Project Number: 8-0132

Sample ID	Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Lead
RAL:		---	0.1	1.0	---	0.01	---	0.05	0.05
MW-1	10/30/2008	<0.006	0.017	0.699	0.0012	<0.001	464	0.025	0.014
MW-2	10/30/2008	<0.006	0.016	0.409	0.0010	<0.001	282	0.022	0.010

Sample ID	Date	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium
RAL:		0.2	0.002	0.2	---	0.05	0.05	---
MW-1	10/30/2008	**0.255**	<0.0001	0.037	13.6	0.014	<0.002	183
MW-2	10/30/2008	0.198	<0.0001	0.027	12.9	0.018	<0.002	302

Notes

RAL - Regulatory Action Level

Metals except mercury analyzed via EPA SW Method 6020.

Mercury analyzed via EPA SW Method 7470A.

Bold and blue indicates the value exceeds regulatory requirements.

Table 2c
Targa Midstream Services, L.P.
1RP-952
Groundwater Analytical Data Summary
North 10-Inch Release
Unit B (NW/4, NE/4) Sec 22, T21S, R37E
Lea County, New Mexico
Project Number: 8-0132

Sample ID	Date	Total Alkalinity	Chlorides	Sulfate	Total Dissolved Solids
RAL:		---	250	600	1,000
MW-1	10/30/2008	156	190	511	**1,330**
MW-2	10/30/2008	208	**824**	303	**1,800**

Notes

RAL - Regulatory Action Level

Bold and blue indicates the value exceeds regulatory requirements.

FIGURES

JWW

Y:\PROJECTS\TARGA\8-0132\8-0132 NORTH PIPELINE SITE DRAWING.dwg 11/26/2008 11:06:48 AM

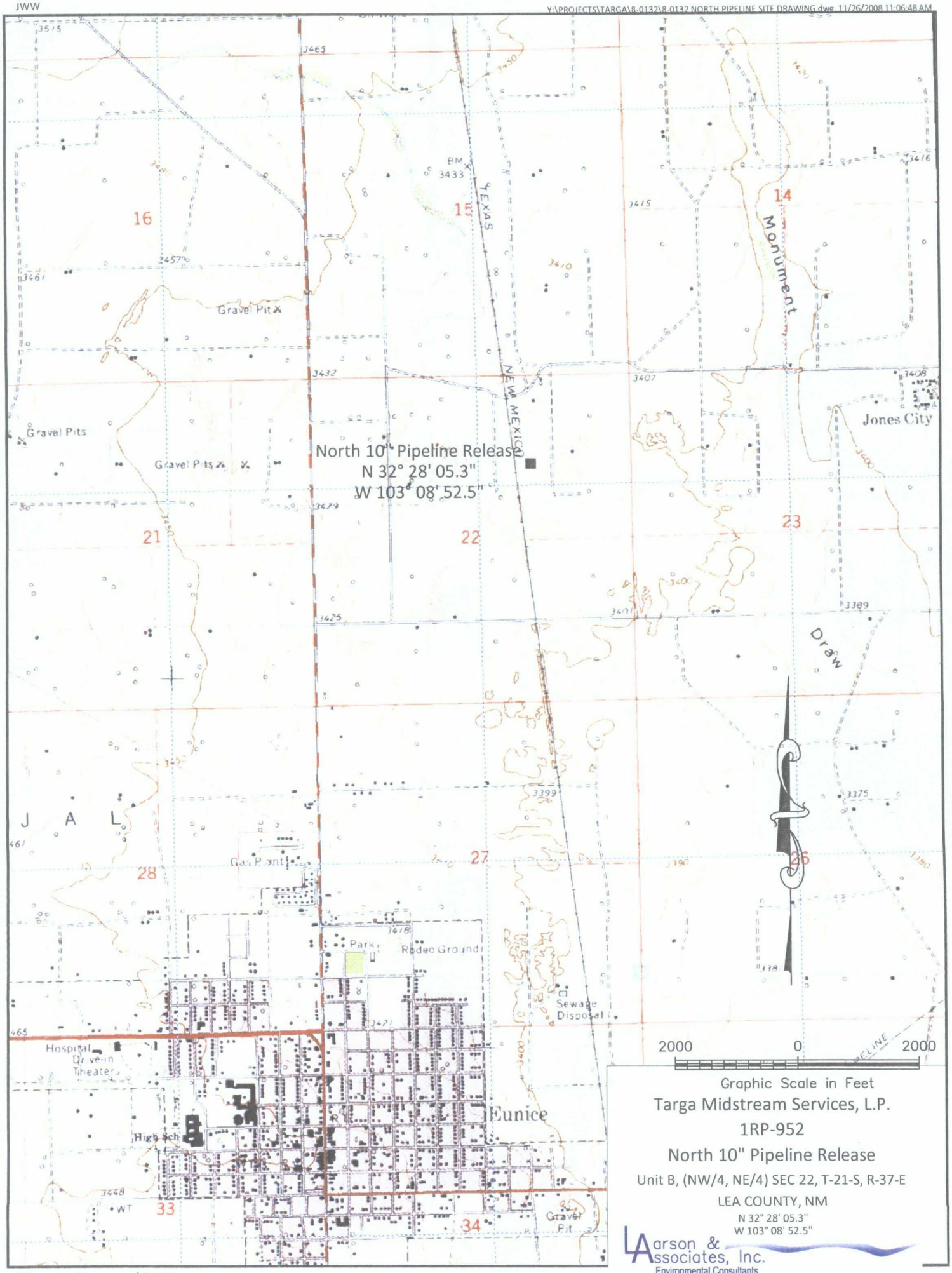
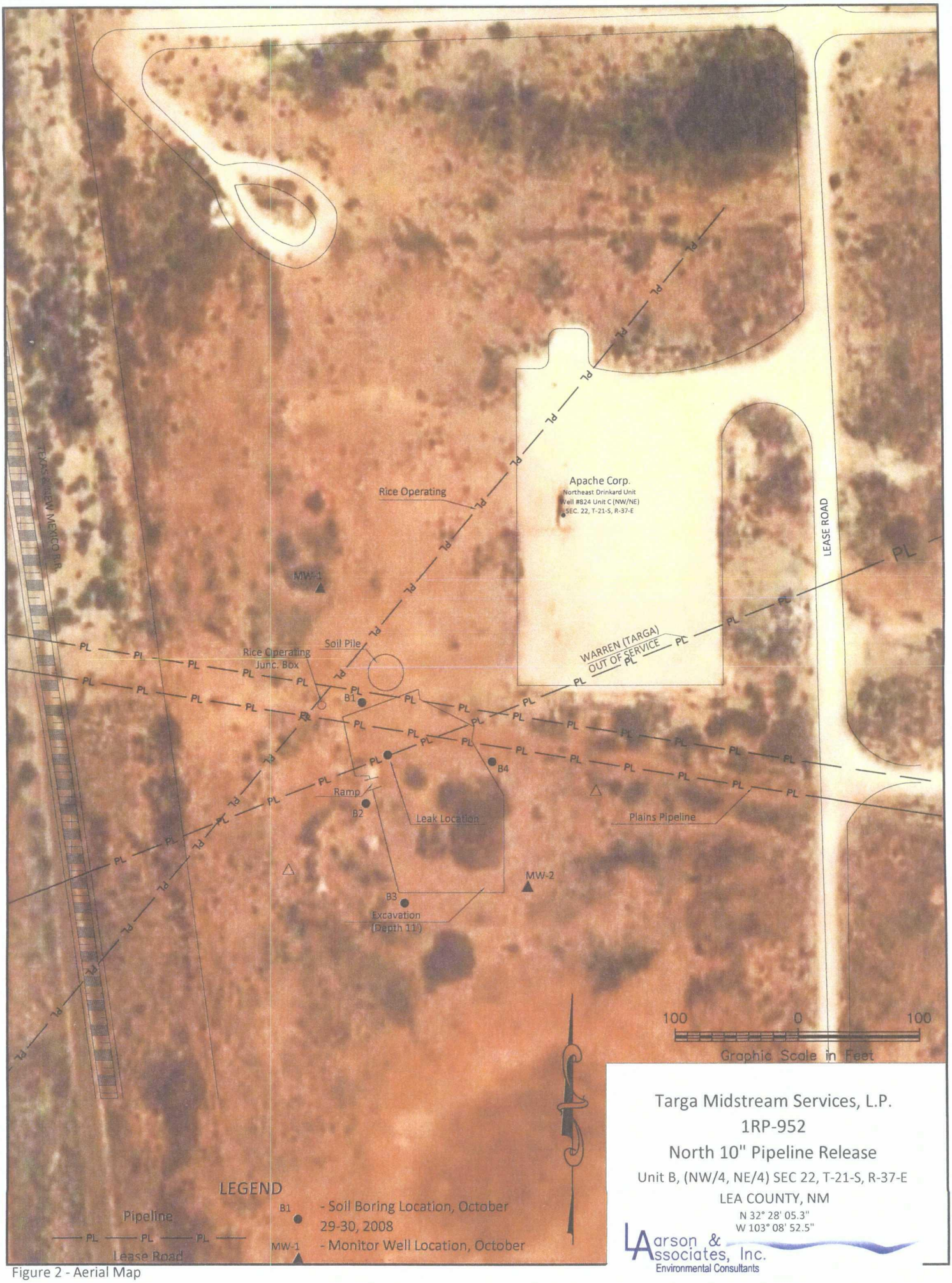


Figure 1- Topographic Map

JWW

Y:\PROJECTS\TARGA\8-0132\8-0132 NORTH PIPELINE SITE DRAWING.dwg, 11/26/2008 11:08:27 AM



Targa Midstream Services, L.P.

1RP-952

North 10" Pipeline Release

Unit B, (NW/4, NE/4) SEC 22, T-21-S, R-37-E

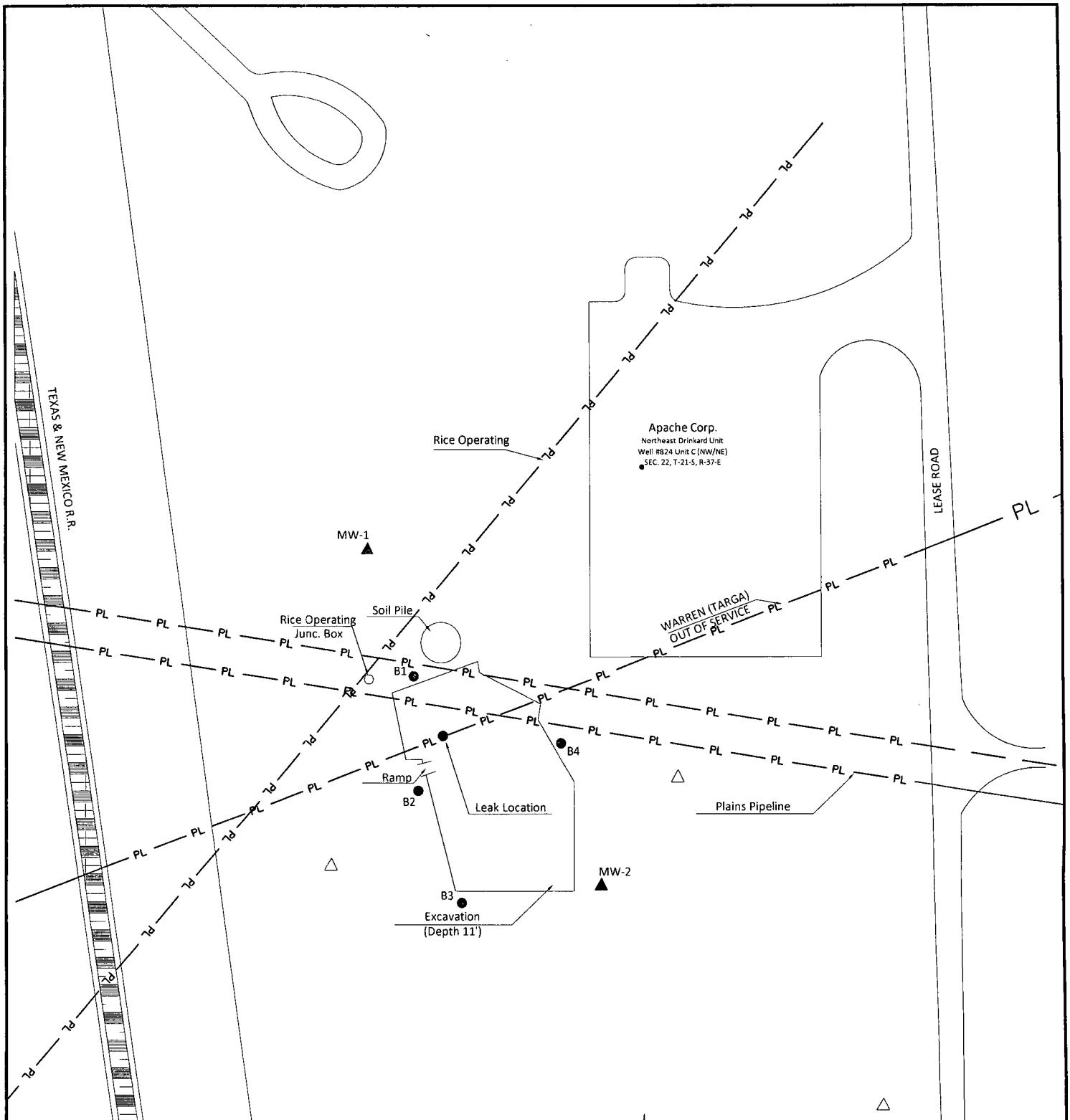
LEA COUNTY, NM

N 32° 28' 05.3"

W 103° 08' 52.5"

Larson & Associates, Inc.
Environmental Consultants

Figure 2 - Aerial Map



100 0 100

Graphic Scale in Feet

LEGEND

Pipeline — PL — PL — PL —

Lease Road

Fence

B1 ● - Soil Boring Location, October 29-30, 2008

MW-1 ▲ - Monitor Well Location, October 29-30, 2008

△ - Proposed Monitor Well Location

Targa Midstream Services, L.P.

1RP-952

North 10" Pipeline Release

Unit B, (NW/4, NE/4) SEC 22, T-21-S, R-37-E

LEA COUNTY, NM

N 32° 28' 05.3"

W 103° 08' 52.5"

Larson & Associates, Inc.
Environmental Consultants

Figure 3- Site Map

APPENDIX A

Boring Logs and Well Completion Records

Latitude N 32° 36' 29.42"
Longitude W 103° 18' 57.75"

PID Response Log Plot (parts per million)

<1 2 3 4 5 6 7 8 9 10 20 30 40 50 70 90 100 200 300 500 700 >1,000

Lithologic Well Log

Drilling started 09/30/2008, completed 09/30/2008.
Drilled with Air Rotary by Scarborough Drilling.

SP- Yellowish Red (5YR 6/6) silty sand, very fine grained sand, poorly sorted, dry, brittle

10' bgs

Reddish Brown(5YR 6/6) below 10'

20' bgs

Interbedded with thin Caliche units below 20'

30' bgs

40' bgs

50' bgs

Total Depth 51'

60' bgs

70' bgs

80' bgs

0.3
0.3
0.3
0.3
0.4
0.2
0.2
0.2

Targa Midstream Services, L.P.
1RP-952
North 10" Pipeline Release
Unit B, (NW/4, NE/4) SEC 22, T-21-S, R-37-E
LEA COUNTY, NM
N 32° 28' 05.3"
W 103° 08' 52.5"

Larson & Associates, Inc.
Environmental Consultants

B1 - Boring Log

Latitude N 32° 36' 29.42"
Longitude W 103° 18' 57.75"

PID Response Log Plot
(parts per million)

<1 2 3 4 5 6 7 8 9 10 20 30 40 50 70 90 100 200 300 500 700 >1,000

Lithologic Well Log

Drilling started 09/30/2008, completed 09/30/2008.
Drilled with Air Rotary by Scarborough Drilling.

SP- Yellowish Red (5YR 4/6) silty sand, very fine grained sand, poorly sorted, moist, brittle

10' bgs

Caliche - Pinkish White (10YR 7/1) very fine ground quartz sand, weakly cemented, interbedded with indurated layers and sand

20' bgs

30' bgs

SP - Yellowish Red (7.5 YR 6/6) very fine ground quartz sand, poorly sorted, interbedded with thin units of indurated Caliche

40' bgs

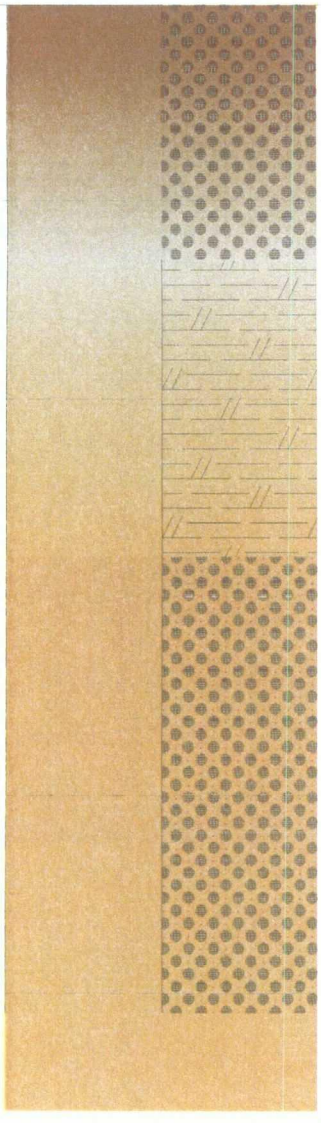
50' bgs

Total Depth 51'

60' bgs

70' bgs

80' bgs



0.2
0.3
0.2
0.2
0.2
0.0
0.0
0.0

Targa Midstream Services, L.P.
1RP-952
North 10" Pipeline Release
Unit B, (NW/4, NE/4) SEC 22, T-21-S, R-37-E
LEA COUNTY, NM
N 32° 28' 05.3"
W 103° 08' 52.5"

Larson & Associates, Inc.
Environmental Consultants

B2 - Boring Log

Latitude N 32° 36' 29.42"
Longitude W 103° 18' 57.75"

PID Response Log Plot (parts per million)

<1 2 3 4 5 6 7 8 9 10 20 30 40 50 70 90 100 200 300 500 700 >1,000

Lithologic Well Log

Drilling started 09/30/2008, completed 09/30/2008.
Drilled with Air Rotary by Scarborough Drilling.

SP- Yellowish Red (5YR 4/6) silty sand, very fine grained sand, poorly sorted, moist, brittle

10' bgs

Caliche - Pinkish White (10YR 7/1) very fine ground quartz sand, weakly cemented, interbedded with indurated layers and sand

20' bgs

30' bgs

SP - Yellowish Red (7.5 YR 6/6) very fine ground quartz sand, poorly sorted, weakly cemented

40' bgs

50' bgs

Total Depth 51'

60' bgs

70' bgs

80' bgs

0.0
0.0
0.0
0.0
0.0
0.0
0.0

Targa Midstream Services, L.P.
1RP-952
North 10" Pipeline Release
Unit B, (NW/4, NE/4) SEC 22, T-21-S, R-37-E
LEA COUNTY, NM
N 32° 28' 05.3"
W 103° 08' 52.5"

Larson & Associates, Inc.
Environmental Consultants

B3 - Boring Log

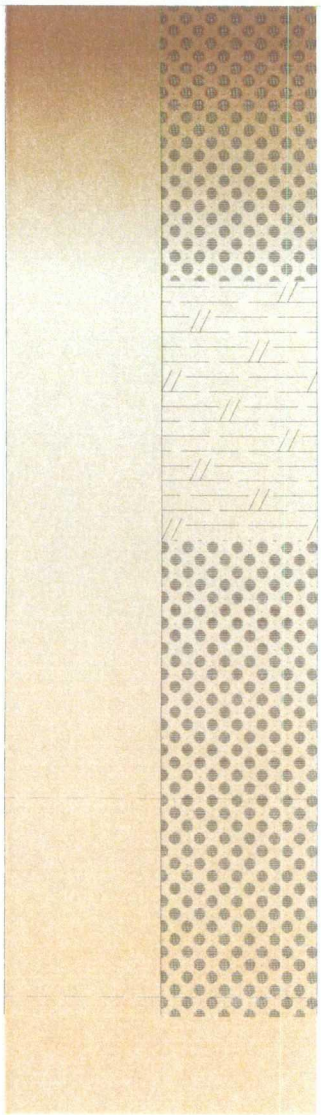
Latitude N 32° 36' 29.42"
Longitude W 103° 18' 57.75"

PID Response Log Plot (parts per million)

<1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 20 | 30 | 40 | 50 | 70 | 90 | 100 | 200 | 300 | 500 | 700 | >1,000

Lithologic Well Log

Drilling started 09/30/2008, completed 09/30/2008.
Drilled with Air Rotary by Scarborough Drilling.



	PID
0' bgs	0.0
	0.0
10' bgs	0.2
	0.0
20' bgs	0.0
30' bgs	0.0
40' bgs	0.0
50' bgs	0.0
60' bgs	
70' bgs	
80' bgs	

SP- Yellowish Red (5YR 4/6) silty sand, very fine grained sand, poorly sorted, moist, dry below 5', iron oxide observed below 5'

Caliche - Pinkish White (10YR 8/1) very fine ground quartz sand, weakly cemented, interbedded with indurated units and sand

SP - Reddish Yellow (5 YR 7/4) very fine ground quartz sand, poorly sorted, weakly cemented

Total Depth 51'

Targa Midstream Services, L.P.
1RP-952
North 10" Pipeline Release
Unit B, (NW/4, NE/4) SEC 22, T-21-S, R-37-E
LEA COUNTY, NM
N 32° 28' 05.3"
W 103° 08' 52.5"

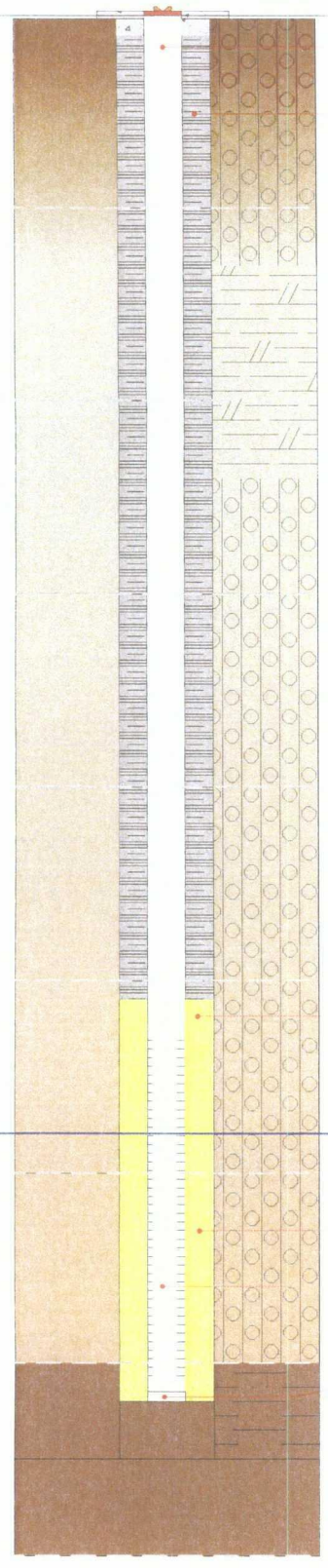
Larson & Associates, Inc.
Environmental Consultants

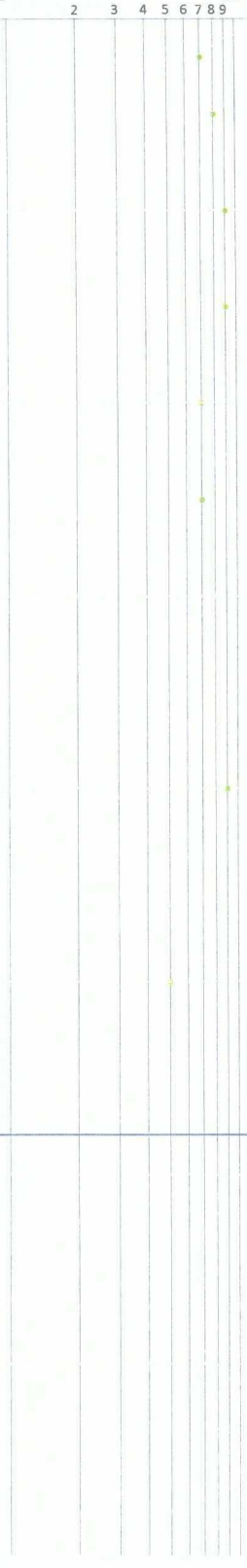
B4 - Boring Log

JWW

Y:\PROJECTS\TARGA\8-0132\MW-1 Well Log.dwg, 11/25/2008 3:34:00 PM

Latitude N 32° 29' 55.9"
Longitude W 103° 10' 42.1"





Lithologic Well Log

Drilling started 10/29/2008, completed 10/29/2008.
Drilled with Air Rotary by Scarborough Drilling.

SM- Yellowish Red (5YR 4/6) very fine grained quartz sand, round, moist, clay dry and brittle below 5',slightly mottled

Caliche - Pinkish White (10YR 4/6) very fine grained quartz sand, weakly cemented, interbedded with indurated layers and sand

SM - Pinkish White (2.5YR 7/4) very fine grained quartz sand, subround, poorly sorted, interbedded with thin Caliche units

SM - Reddish Yellow (5YR 7/4) below 60'

Shale - Red (2.5YR 4/6) silty, dry

Total depth 75'

Targa Midstream Services, L.P.
1RP-952
North 10" Pipeline Release
Unit B, (NW/4, NE/4) SEC 22, T-21-S, R-37-E
LEA COUNTY, NM
N 32° 28' 05.3"
W 103° 08' 52.5"

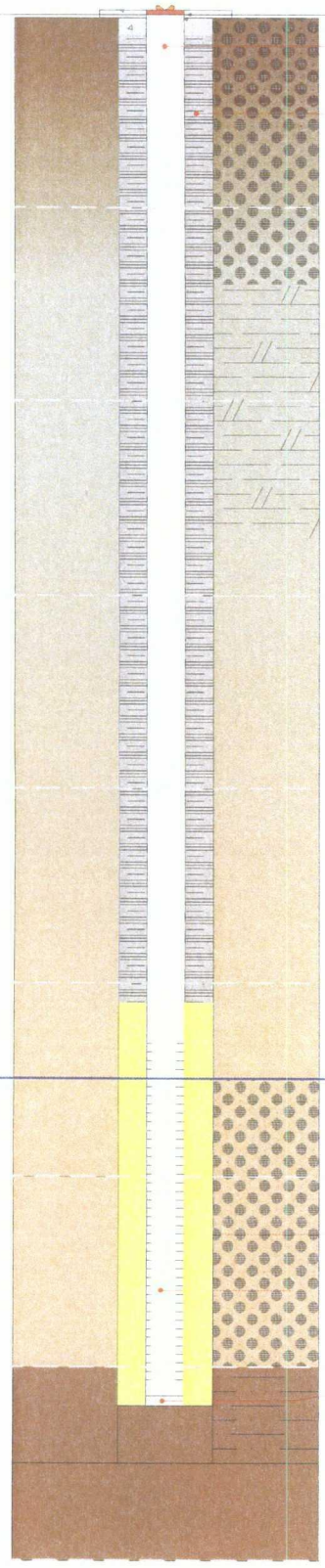
Larson & Associates, Inc.
Environmental Consultants

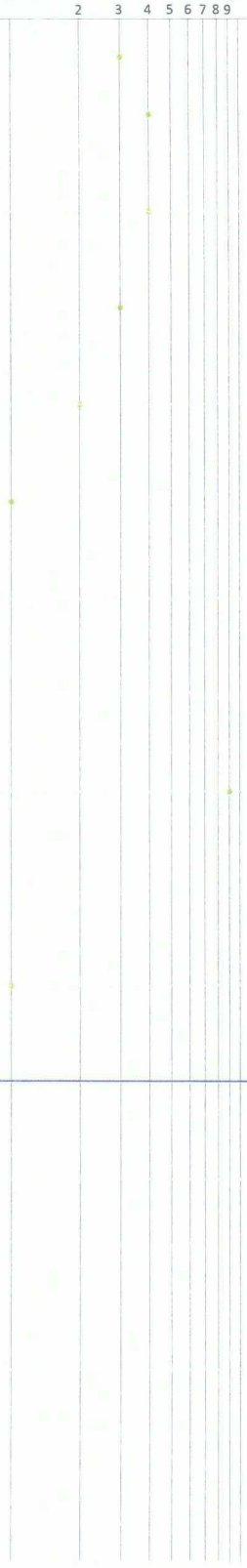
MW - 1 - Boring & Completion Log

JWW

Y:\PROJECTS\TARGA\8-0132\MW-2 Well Log.dwg, 11/25/2008 3:40:59 PM

Latitude N 32° 29' 55.9"
Longitude W 103° 10' 42.1"





Lithologic Well Log

Drilling started 10/30/2008, completed 10/30/2008. Drilled with Air Rotary by Scarborough Drilling.

SP- Yellowish Red (5YR 4/6) very fine grained quartz sand, poorly sorted, round, moist, dry below 5'

Caliche - Pinkish White (10YR 7/1) very fine grained quartz sand, weakly cemented, interbedded with indurated layers and sand

SM - Reddish Yellow (5YR 7/4) very fine grained quartz sand, subround, poorly sorted, wekly cemented, interbedded with indurated layer of Caliche

Shale - Red (2.5YR 4/6) silty, dry

Total depth 75'

Targa Midstream Services, L.P.

1RP-952

North 10" Pipeline Release

Unit B, (NW/4, NE/4) SEC 22, T-21-S, R-37-E

LEA COUNTY, NM

N 32° 28' 05.3"
W 103° 08' 52.5"

Larson & Associates, Inc.
Environmental Consultants

MW - 2 - Boring & Completion Log

APPENDIX B

Laboratory Reports

Analytical Report 316093

for

Larson & Associates

Project Manager: Mark Larson

Midland/Odessa Standard List of Methods

8-0132

07-NOV-08

E84880

12600 West I-20 East Odessa, Texas 79765

Texas certification numbers:
Houston, TX T104704215 - Odessa/Midland, TX T104704215-08-TX

Florida certification numbers:
Houston, TX E871002 - Miami, FL E86678 - Tampa, FL E86675
Norcross(Atlanta), GA E87429

South Carolina certification numbers:
Norcross(Atlanta), GA 98015

North Carolina certification numbers:
Norcross(Atlanta), GA 483

Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America
Midland - Corpus Christi - Atlanta

07-NOV-08

Project Manager: **Mark Larson**
Larson & Associates
P.O. Box 50685
Midland, TX 79710

Reference: XENCO Report No: **316093**
Midland/Odessa Standard List of Methods
Project Address:

Mark Larson:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 316093. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 316093 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Brent Barron, II
Odessa Laboratory Manager

XENCO Laboratories

Sample Cross Reference 316093

ACCREDITED IN ACCORDANCE WITH nelac

Larson & Associates, Midland, TX

Midland/Odessa Standard List of Methods

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-1-1'	S	Oct-29-08 10:10		316093-001
MW-1-5'	S	Oct-29-08 10:15		316093-002
MW-1-10'	S	Oct-29-08 10:18		316093-003
MW-1-15'	S	Oct-29-08 10:22		316093-004
MW-1-20'	S	Oct-29-08 10:25		316093-005
MW-1-30'	S	Oct-29-08 10:36		316093-006
MW-1-40'	S	Oct-29-08 10:45		316093-007
MW-1-50'	S	Oct-29-08 11:00		316093-008
B1-1'	S	Oct-29-08 13:37		316093-009
B1-5'	S	Oct-29-08 13:51		316093-010
B1-10'	S	Oct-29-08 13:55		316093-011
B1-15'	S	Oct-29-08 14:00		316093-012
B1-20'	S	Oct-29-08 14:03		316093-013
B1-30'	S	Oct-29-08 14:11		316093-014
B1-40'	S	Oct-29-08 14:19		316093-015
B1-50'	S	Oct-29-08 14:36		316093-016
B2-1'	S	Oct-29-08 14:55		316093-017
B2-5'	S	Oct-29-08 14:58		316093-018
B2-10'	S	Oct-29-08 15:01		316093-019
B2-15'	S	Oct-29-08 15:04		316093-020
B2-20'	S	Oct-29-08 15:16		316093-021
B2-30'	S	Oct-29-08 15:19		316093-022
B2-40'	S	Oct-29-08 15:27		316093-023
B2-50'	S	Oct-29-08 15:37		316093-024
SS1	S	Oct-29-08 15:30		316093-025
SS2	S	Oct-29-08 15:35		316093-026
B3-1'	S	Oct-29-08 15:50		316093-027
B3-5'	S	Oct-29-08 15:55		316093-028
B3-10'	S	Oct-29-08 15:58		316093-029
B3-15'	S	Oct-29-08 16:02		316093-030
B3-20'	S	Oct-29-08 16:05		316093-031
B3-30'	S	Oct-29-08 16:15		316093-032
B3-40'	S	Oct-29-08 16:24		316093-033
B3-50'	S	Oct-29-08 16:35		316093-034

Certificate of Analysis Summary 316093

Larson & Associates, Midland, TX

Project Name: Midland/Odessa Standard List of Methods

Project Id: 8-0132
Contact: Mark Larson
Project Location:

Date Received in Lab: Oct-30-08 08:40 am
Report Date: 07-NOV-08
Project Manager: Brent Barron, II

Analysis Requested									
	Lab Id:	316093-001		316093-002		316093-003		316093-004	
	Field Id:	MW-1-1'		MW-1-5'		MW-1-10'		MW-1-15'	
	Depth:								
	Matrix:	SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-29-08 10:10		Oct-29-08 10:15		Oct-29-08 10:18		Oct-29-08 10:22	
Anions by EPA 300/300.1	*Extracted:*								
	Analyzed:	Oct-30-08 13:40		Oct-30-08 13:40		Oct-30-08 13:40		Oct-30-08 13:40	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		ND	5.00	35.3	5.00	371	10.0	171	10.0
Percent Moisture	*Extracted:*								
	Analyzed:	Oct-30-08 17:00		Oct-30-08 17:00		Oct-30-08 17:00		Oct-30-08 17:00	
	Units/RL:	%	RL	%	RL	%	RL	%	RL
Percent Moisture		9.67	1.00	7.66	1.00	12.18	1.00	5.28	1.00
TPH by SW 8015B	*Extracted:*	Oct-30-08 10:30		Oct-30-08 11:00		Oct-30-08 11:00		Oct-30-08 11:00	
	Analyzed:	Oct-31-08 03:47		Oct-31-08 08:51		Oct-31-08 09:19		Oct-31-08 09:46	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C10 Gasoline Range Hydrocarbons		ND	16.6	ND	16.2	ND	17.1	ND	15.8
C10-C28 Diesel Range Hydrocarbons		ND	16.6	ND	16.2	ND	17.1	ND	15.8
Total TPH		ND		ND		ND		ND	

Brent Barron
Odessa Laboratory Director

Certificate of Analysis Summary 316093
Larson & Associates, Midland, TX

Project Name: Midland/Odessa Standard List of Methods

Project Id: 8-0132
Contact: Mark Larson
Project Location:

Date Received in Lab: Oct-30-08 08:40 am
Report Date: 07-NOV-08
Project Manager: Brent Barron, II

Analysis Requested									
	Lab Id:	316093-005		316093-006		316093-007		316093-008	
	Field Id:	MW-1-20'		MW-1-30'		MW-1-40'		MW-1-50'	
	Depth:								
	Matrix:	SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-29-08 10:25		Oct-29-08 10:36		Oct-29-08 10:45		Oct-29-08 11:00	
Anions by EPA 300/300.1	*Extracted:*								
	Analyzed:	Oct-30-08 22:13		Oct-30-08 22:13		Oct-30-08 22:13		Oct-30-08 22:13	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		110	10.0	82.7	20.0	90.7	20.0	140	20.0
Percent Moisture	*Extracted:*								
	Analyzed:	Oct-30-08 17:00		Oct-30-08 17:00		Oct-30-08 17:00		Oct-30-08 17:00	
	Units/RL:	%	RL	%	RL	%	RL	%	RL
Percent Moisture		4.62	1.00	10.69	1.00	9.75	1.00	9.69	1.00
TPH by SW 8015B	*Extracted:*	Oct-30-08 11:00		Oct-30-08 11:00		Oct-30-08 11:00		Oct-30-08 11:00	
	Analyzed:	Oct-31-08 10:13		Oct-31-08 10:40		Oct-31-08 11:04		Oct-31-08 11:29	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C10 Gasoline Range Hydrocarbons		ND	15.7	ND	16.8	ND	16.6	ND	16.6
C10-C28 Diesel Range Hydrocarbons		ND	15.7	ND	16.8	ND	16.6	ND	16.6
Total TPH		ND		ND		ND		ND	

Brent Barron
Odessa Laboratory Director

Certificate of Analysis Summary 316093
Larson & Associates, Midland, TX

Project Name: Midland/Odessa Standard List of Methods

Project Id: 8-0132
Contact: Mark Larson
Project Location:

Date Received in Lab: Oct-30-08 08:40 am
Report Date: 07-NOV-08
Project Manager: Brent Barron, II

Analysis Requested									
	Lab Id:	316093-009		316093-010		316093-011		316093-012	
	Field Id:	B1-1'		B1-5'		B1-10'		B1-15'	
	Depth:								
	Matrix:	SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-29-08 13:37		Oct-29-08 13:51		Oct-29-08 13:55		Oct-29-08 14:00	
Anions by EPA 300/300.1	*Extracted:*								
	Analyzed:	Oct-30-08 22:13		Oct-30-08 22:13		Oct-30-08 22:13		Oct-30-08 22:13	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		ND	5.00	23.3	10.0	230	10.0	581	20.0
Percent Moisture	*Extracted:*								
	Analyzed:	Oct-30-08 17:00		Oct-30-08 17:00		Oct-30-08 17:00		Oct-30-08 17:00	
	Units/RL:	%	RL	%	RL	%	RL	%	RL
Percent Moisture		4.66	1.00	7.22	1.00	6.96	1.00	11.22	1.00
TPH by SW 8015B	*Extracted:*	Oct-30-08 11:00		Oct-30-08 11:00		Oct-30-08 11:00		Oct-30-08 11:00	
	Analyzed:	Oct-31-08 11:54		Oct-31-08 12:21		Oct-31-08 12:45		Oct-31-08 13:35	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C10 Gasoline Range Hydrocarbons		ND	15.7	ND	16.2	ND	16.1	ND	16.9
C10-C28 Diesel Range Hydrocarbons		ND	15.7	ND	16.2	ND	16.1	ND	16.9
Total TPH		ND		ND		ND		ND	

Brent Barron
Odessa Laboratory Director

Certificate of Analysis Summary 316093

Larson & Associates, Midland, TX

Project Name: Midland/Odessa Standard List of Methods

Project Id: 8-0132
Contact: Mark Larson
Project Location:

Date Received in Lab: Oct-30-08 08:40 am
Report Date: 07-NOV-08
Project Manager: Brent Barron, II

Analysis Requested									
	Lab Id:	316093-013		316093-014		316093-015		316093-016	
	Field Id:	B1-20'		B1-30'		B1-40'		B1-50'	
	Depth:								
	Matrix:	SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-29-08 14:03		Oct-29-08 14:11		Oct-29-08 14:19		Oct-29-08 14:36	
Anions by EPA 300/300.1	*Extracted:*								
	Analyzed:	Oct-30-08 22:13		Oct-30-08 22:13		Oct-30-08 22:13		Oct-30-08 22:13	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		818	25.0	1230	25.0	1730	25.0	590	20.0
Percent Moisture	*Extracted:*								
	Analyzed:	Oct-30-08 17:00		Oct-30-08 17:00		Oct-30-08 17:00		Oct-30-08 17:00	
	Units/RL:	%	RL	%	RL	%	RL	%	RL
Percent Moisture		10.61	1.00	16.41	1.00	11.08	1.00	10.49	1.00
TPH by SW 8015B	*Extracted:*	Oct-30-08 11:00		Oct-30-08 11:00		Oct-30-08 11:00		Oct-30-08 11:00	
	Analyzed:	Oct-31-08 14:01		Oct-31-08 14:27		Oct-31-08 14:54		Oct-31-08 15:19	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C10 Gasoline Range Hydrocarbons		ND	16.8	ND	17.9	ND	16.9	ND	16.8
C10-C28 Diesel Range Hydrocarbons		ND	16.8	ND	17.9	ND	16.9	24.1	16.8
Total TPH		ND		ND		ND		24.1	

Brent Barron
Odessa Laboratory Director

Certificate of Analysis Summary 316093

Larson & Associates, Midland, TX

Project Name: Midland/Odessa Standard List of Methods

Project Id: 8-0132
Contact: Mark Larson
Project Location:

Date Received in Lab: Oct-30-08 08:40 am
Report Date: 07-NOV-08
Project Manager: Brent Barron, II

Analysis Requested												
	Lab Id:	316093-017		316093-018		316093-019		316093-020	
	Field Id:	B2-1'		B2-5'		B2-10'		B2-15'	
	Depth:								
	Matrix:	SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-29-08 14:55		Oct-29-08 14:58		Oct-29-08 15:01		Oct-29-08 15:04	
Anions by EPA 300/300.1	*Extracted:*								
	Analyzed:	Oct-30-08 22:13		Oct-30-08 22:13		Oct-30-08 22:13		Oct-30-08 22:13	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		6.43	5.00	233	10.0	628	10.0	707	20.0
Percent Moisture	*Extracted:*								
	Analyzed:	Oct-30-08 17:00		Oct-30-08 17:00		Oct-30-08 17:00		Oct-30-08 17:00	
	Units/RL:	%	RL	%	RL	%	RL	%	RL
Percent Moisture		6.85	1.00	9.08	1.00	9.44	1.00	7.50	1.00
TPH by SW 8015B	*Extracted:*	Oct-30-08 11:00		Oct-30-08 11:00		Oct-30-08 11:00		Oct-30-08 11:00	
	Analyzed:	Oct-31-08 15:43		Oct-31-08 16:59		Oct-31-08 17:25		Oct-31-08 17:50	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C10 Gasoline Range Hydrocarbons		ND	16.1	ND	16.5	ND	16.6	ND	16.2
C10-C28 Diesel Range Hydrocarbons		ND	16.1	ND	16.5	ND	16.6	ND	16.2
Total TPH		ND		ND		ND		ND	

Brent Barron
Odessa Laboratory Director

Certificate of Analysis Summary 316093
Larson & Associates, Midland, TX

Project Name: Midland/Odessa Standard List of Methods

Project Id: 8-0132
Contact: Mark Larson
Project Location:

Date Received in Lab: Oct-30-08 08:40 am
Report Date: 07-NOV-08
Project Manager: Brent Barron, II

Analysis Requested									
	Lab Id:	316093-021		316093-022		316093-023		316093-024	
	Field Id:	B2-20'		B2-30'		B2-40'		B2-50'	
	Depth:								
	Matrix:	SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-29-08 15:16		Oct-29-08 15:19		Oct-29-08 15:27		Oct-29-08 15:37	
Anions by EPA 300/300.1	*Extracted:*								
	Analyzed:	Oct-30-08 22:13		Oct-30-08 22:13		Oct-30-08 22:13		Oct-30-08 22:13	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		1080	25.0	3310	50.0	2100	50.0	1840	50.0
Percent Moisture	*Extracted:*								
	Analyzed:	Oct-30-08 17:00		Oct-30-08 17:00		Oct-30-08 17:00		Oct-30-08 17:00	
	Units/RL:	%	RL	%	RL	%	RL	%	RL
Percent Moisture		7.11	1.00	18.92	1.00	11.55	1.00	12.06	1.00
TPH by SW 8015B	*Extracted:*	Oct-30-08 11:00		Oct-30-08 11:00		Oct-30-08 11:00		Oct-30-08 11:00	
	Analyzed:	Oct-31-08 18:16		Oct-31-08 23:02		Oct-31-08 23:29		Oct-31-08 23:56	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C10 Gasoline Range Hydrocarbons		ND	16.1	ND	18.5	ND	17.0	ND	17.1
C10-C28 Diesel Range Hydrocarbons		ND	16.1	ND	18.5	ND	17.0	ND	17.1
Total TPH		ND		ND		ND		ND	

Brent Barron
Odessa Laboratory Director

Certificate of Analysis Summary 316093
Larson & Associates, Midland, TX

Project Name: Midland/Odessa Standard List of Methods

Project Id: 8-0132
Contact: Mark Larson
Project Location:

Date Received in Lab: Oct-30-08 08:40 am
Report Date: 07-NOV-08
Project Manager: Brent Barron, II

Analysis Requested									
	Lab Id:	316093-025		316093-026		316093-027		316093-028	
	Field Id:	SS1		SS2		B3-1'		B3-5'	
	Depth:								
	Matrix:	SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-29-08 15:30		Oct-29-08 15:35		Oct-29-08 15:50		Oct-29-08 15:55	
Anions by EPA 300/300.1	*Extracted:*								
	Analyzed:	Oct-31-08 11:00		Oct-31-08 11:00		Oct-31-08 11:00		Oct-31-08 11:00	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		532	20.6	1190	26.4	ND	10.5	16.6	10.5
Percent Moisture	*Extracted:*								
	Analyzed:	Oct-30-08 17:00		Oct-30-08 17:00		Oct-30-08 17:00		Oct-30-08 17:00	
	Units/RL:	%	RL	%	RL	%	RL	%	RL
Percent Moisture		3.13	1.00	5.41	1.00	4.57	1.00	5.12	1.00
TPH by SW 8015B	*Extracted:*	Oct-30-08 11:00		Oct-30-08 11:00		Oct-30-08 11:00		Oct-30-08 11:00	
	Analyzed:	Nov-01-08 00:23		Nov-01-08 00:50		Nov-01-08 01:17		Nov-01-08 01:44	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C10 Gasoline Range Hydrocarbons		ND	15.5	ND	15.9	ND	15.7	ND	15.8
C10-C28 Diesel Range Hydrocarbons		ND	15.5	ND	15.9	ND	15.7	ND	15.8
Total TPH		ND		ND		ND		ND	

Brent Barron
Odessa Laboratory Director

Certificate of Analysis Summary 316093
Larson & Associates, Midland, TX

Project Name: Midland/Odessa Standard List of Methods

Project Id: 8-0132
Contact: Mark Larson
Project Location:

Date Received in Lab: Oct-30-08 08:40 am
Report Date: 07-NOV-08
Project Manager: Brent Barron, II

Analysis Requested		*Lab Id:*	316093-029		316093-030		316093-031		316093-032	
		Field Id:	B3-10'		B3-15'		B3-20'		B3-30'	
		Depth:								
		Matrix:	SOIL		SOIL		SOIL		SOIL	
		Sampled:	Oct-29-08 15:58		Oct-29-08 16:02		Oct-29-08 16:05		Oct-29-08 16:15	
Anions by EPA 300/300.1	*Extracted:*									
	Analyzed:		Oct-31-08 11:00		Oct-31-08 11:00		Oct-31-08 11:00		Oct-31-08 11:00	
	Units/RL:		mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride			60.2	10.8	678	27.6	429	21.0	ND	13.3
Percent Moisture	*Extracted:*									
	Analyzed:		Oct-30-08 17:00		Oct-30-08 17:00		Oct-30-08 17:00		Oct-30-08 17:00	
	Units/RL:		%	RL	%	RL	%	RL	%	RL
Percent Moisture			7.58	1.00	9.41	1.00	4.87	1.00	24.75	1.00
TPH by SW 8015B	*Extracted:*		Oct-30-08 11:00		Oct-30-08 11:00		Oct-30-08 11:00		Oct-30-08 11:00	
	Analyzed:		Nov-01-08 02:11		Nov-01-08 02:38		Nov-01-08 03:03		Nov-01-08 03:54	
	Units/RL:		mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C10 Gasoline Range Hydrocarbons			ND	16.2	ND	16.6	ND	15.8	ND	19.9
C10-C28 Diesel Range Hydrocarbons			17.2	16.2	ND	16.6	ND	15.8	ND	19.9
Total TPH			17.2		ND		ND		ND	

Brent Barron
Odessa Laboratory Director

Certificate of Analysis Summary 316093

Larson & Associates, Midland, TX

Project Name: Midland/Odessa Standard List of Methods

Project Id: 8-0132
Contact: Mark Larson
Project Location:

Date Received in Lab: Oct-30-08 08:40 am
Report Date: 07-NOV-08
Project Manager: Brent Barron, II

Analysis Requested		*Lab Id:*	316093-033		316093-034			
		Field Id:	B3-40'		B3-50'			
		Depth:						
		Matrix:	SOIL		SOIL			
		Sampled:	Oct-29-08 16:24		Oct-29-08 16:35			
Anions by EPA 300/300.1	*Extracted:*							
	Analyzed:		Oct-31-08 11:00		Oct-31-08 11:00			
	Units/RL:		mg/kg	RL	mg/kg	RL		
Chloride			ND	5.34	ND	11.3		
Percent Moisture	*Extracted:*							
	Analyzed:		Oct-30-08 17:00		Oct-30-08 17:00			
	Units/RL:		%	RL	%	RL		
Percent Moisture			6.35	1.00	11.66	1.00		
TPH by SW 8015B	*Extracted:*		Oct-30-08 11:00		Oct-30-08 11:00			
	Analyzed:		Nov-01-08 04:21		Nov-01-08 04:48			
	Units/RL:		mg/kg	RL	mg/kg	RL		
C6-C10 Gasoline Range Hydrocarbons			ND	16.0	ND	17.0		
C10-C28 Diesel Range Hydrocarbons			ND	16.0	ND	17.0		
Total TPH			ND		ND			

Brent Barron
Odessa Laboratory Director

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the MQL(PQL) and above the SQL(MDL).

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

* Outside XENCO'S scope of NELAC Accreditation

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5332 Blackberry Drive, Suite 104, San Antonio, TX 78238	(210) 509-3334	(210) 509-3335
2505 N. Falkenburg Rd., Tampa, FL 33619	(813) 620-2000	(813) 620-2033
5757 NW 158th St, Miami Lakes, FL 33014	(305) 823-8500	(305) 823-8555
6017 Financial Dr., Norcross, GA 30071	(770) 449-8800	(770) 449-5477

Form 2 - Surrogate Recoveries

Project Name: Midland/Odessa Standard List of Methods

Work Orders : 316093,

Project ID: 8-0132

Lab Batch #: 739399 **Sample:** 316093-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	107	100	107	70-135	
o-Terphenyl	54.9	50.0	110	70-135	

Lab Batch #: 739399 **Sample:** 518788-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	123	100	123	70-135	
o-Terphenyl	59.4	50.0	119	70-135	

Lab Batch #: 739399 **Sample:** 518788-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	123	100	123	70-135	
o-Terphenyl	62.3	50.0	125	70-135	

Lab Batch #: 739399 **Sample:** 518788-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	130	100	130	70-135	
o-Terphenyl	63.7	50.0	127	70-135	

Lab Batch #: 739401 **Sample:** 316093-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	107	100	107	70-135	
o-Terphenyl	54.4	50.0	109	70-135	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: Midland/Odessa Standard List of Methods

Work Orders : 316093,

Project ID: 8-0132

Lab Batch #: 739401 **Sample:** 316093-002 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	118	100	118	70-135	
o-Terphenyl	57.0	50.0	114	70-135	

Lab Batch #: 739401 **Sample:** 316093-002 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	115	100	115	70-135	
o-Terphenyl	54.6	50.0	109	70-135	

Lab Batch #: 739401 **Sample:** 316093-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	114	100	114	70-135	
o-Terphenyl	56.9	50.0	114	70-135	

Lab Batch #: 739401 **Sample:** 316093-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	102	100	102	70-135	
o-Terphenyl	52.0	50.0	104	70-135	

Lab Batch #: 739401 **Sample:** 316093-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	104	100	104	70-135	
o-Terphenyl	53.1	50.0	106	70-135	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Midland/Odessa Standard List of Methods

Work Orders : 316093, **Project ID:** 8-0132

Lab Batch #: 739401 **Sample:** 316093-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	105	100	105	70-135	
o-Terphenyl	53.6	50.0	107	70-135	

Lab Batch #: 739401 **Sample:** 316093-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	110	100	110	70-135	
o-Terphenyl	56.3	50.0	113	70-135	

Lab Batch #: 739401 **Sample:** 316093-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	110	100	110	70-135	
o-Terphenyl	56.2	50.0	112	70-135	

Lab Batch #: 739401 **Sample:** 316093-009 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	107	100	107	70-135	
o-Terphenyl	54.9	50.0	110	70-135	

Lab Batch #: 739401 **Sample:** 316093-010 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	108	100	108	70-135	
o-Terphenyl	55.0	50.0	110	70-135	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Midland/Odessa Standard List of Methods

Work Orders : 316093, **Project ID:** 8-0132

Lab Batch #: 739401 **Sample:** 316093-011 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	113	100	113	70-135	
o-Terphenyl	60.1	50.0	120	70-135	

Lab Batch #: 739401 **Sample:** 316093-012 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	109	100	109	70-135	
o-Terphenyl	56.0	50.0	112	70-135	

Lab Batch #: 739401 **Sample:** 316093-013 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	109	100	109	70-135	
o-Terphenyl	55.3	50.0	111	70-135	

Lab Batch #: 739401 **Sample:** 316093-014 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	110	100	110	70-135	
o-Terphenyl	56.3	50.0	113	70-135	

Lab Batch #: 739401 **Sample:** 316093-015 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	106	100	106	70-135	
o-Terphenyl	54.3	50.0	109	70-135	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Midland/Odessa Standard List of Methods

Work Orders : 316093, **Project ID:** 8-0132

Lab Batch #: 739401 **Sample:** 316093-016 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	110	100	110	70-135	
o-Terphenyl	56.6	50.0	113	70-135	

Lab Batch #: 739401 **Sample:** 316093-017 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	112	100	112	70-135	
o-Terphenyl	55.3	50.0	111	70-135	

Lab Batch #: 739401 **Sample:** 316093-018 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	113	100	113	70-135	
o-Terphenyl	34.2	50.0	68	70-135	**

Lab Batch #: 739401 **Sample:** 316093-019 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	112	100	112	70-135	
o-Terphenyl	40.2	50.0	80	70-135	

Lab Batch #: 739401 **Sample:** 316093-020 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	108	100	108	70-135	
o-Terphenyl	41.1	50.0	82	70-135	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Midland/Odessa Standard List of Methods

Work Orders : 316093, **Project ID:** 8-0132

Lab Batch #: 739401 **Sample:** 316093-021 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	110	100	110	70-135	
o-Terphenyl	45.3	50.0	91	70-135	

Lab Batch #: 739401 **Sample:** 518784-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	121	100	121	70-135	
o-Terphenyl	60.6	50.0	121	70-135	

Lab Batch #: 739401 **Sample:** 518784-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	123	100	123	70-135	
o-Terphenyl	62.3	50.0	125	70-135	

Lab Batch #: 739401 **Sample:** 518784-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	129	100	129	70-135	
o-Terphenyl	62.0	50.0	124	70-135	

Lab Batch #: 739402 **Sample:** 316093-022 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	106	100	106	70-135	
o-Terphenyl	51.7	50.0	103	70-135	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Midland/Odessa Standard List of Methods

Work Orders : 316093, **Project ID:** 8-0132

Lab Batch #: 739402 **Sample:** 316093-022 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	117	100	117	70-135	
o-Terphenyl	61.0	50.0	122	70-135	

Lab Batch #: 739402 **Sample:** 316093-022 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	118	100	118	70-135	
o-Terphenyl	57.5	50.0	115	70-135	

Lab Batch #: 739402 **Sample:** 316093-023 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	105	100	105	70-135	
o-Terphenyl	52.0	50.0	104	70-135	

Lab Batch #: 739402 **Sample:** 316093-024 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	110	100	110	70-135	
o-Terphenyl	53.9	50.0	108	70-135	

Lab Batch #: 739402 **Sample:** 316093-025 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	107	100	107	70-135	
o-Terphenyl	51.7	50.0	103	70-135	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Midland/Odessa Standard List of Methods

Work Orders : 316093, **Project ID:** 8-0132

Lab Batch #: 739402 **Sample:** 316093-026 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	107	100	107	70-135	
o-Terphenyl	52.6	50.0	105	70-135	

Lab Batch #: 739402 **Sample:** 316093-027 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	113	100	113	70-135	
o-Terphenyl	54.8	50.0	110	70-135	

Lab Batch #: 739402 **Sample:** 316093-028 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	112	100	112	70-135	
o-Terphenyl	54.7	50.0	109	70-135	

Lab Batch #: 739402 **Sample:** 316093-029 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	112	100	112	70-135	
o-Terphenyl	55.6	50.0	111	70-135	

Lab Batch #: 739402 **Sample:** 316093-030 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	111	100	111	70-135	
o-Terphenyl	54.8	50.0	110	70-135	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Midland/Odessa Standard List of Methods

Work Orders : 316093,

Project ID: 8-0132

Lab Batch #: 739402 **Sample:** 316093-031 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	110	100	110	70-135	
o-Terphenyl	54.3	50.0	109	70-135	

Lab Batch #: 739402 **Sample:** 316093-032 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	113	100	113	70-135	
o-Terphenyl	55.4	50.0	111	70-135	

Lab Batch #: 739402 **Sample:** 316093-033 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	110	100	110	70-135	
o-Terphenyl	53.8	50.0	108	70-135	

Lab Batch #: 739402 **Sample:** 316093-034 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	109	100	109	70-135	
o-Terphenyl	53.4	50.0	107	70-135	

Lab Batch #: 739402 **Sample:** 518787-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	124	100	124	70-135	
o-Terphenyl	64.5	50.0	129	70-135	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Midland/Odessa Standard List of Methods

Work Orders : 316093,

Project ID: 8-0132

Lab Batch #: 739402 **Sample:** 518787-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	119	100	119	70-135	
o-Terphenyl	57.6	50.0	115	70-135	

Lab Batch #: 739402 **Sample:** 518787-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	130	100	130	70-135	
o-Terphenyl	64.0	50.0	128	70-135	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Blank Spike Recovery

Project Name: Midland/Odessa Standard List of Methods

Work Order #: 316093 **Project ID:** 8-0132

Lab Batch #: 738696 **Sample:** 738696-1-BKS **Matrix:** Solid
Date Analyzed: 10/30/2008 **Date Prepared:** 10/30/2008 **Analyst:** LATCOR
Reporting Units: mg/kg **Batch #:** 1

Anions by EPA 300/300.1 Analytes	BLANK /BLANK SPIKE RECOVERY STUDY					
	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Chloride	ND	10.0	9.61	96	75-125	

Lab Batch #: 738697 **Sample:** 738697-1-BKS **Matrix:** Solid
Date Analyzed: 10/30/2008 **Date Prepared:** 10/30/2008 **Analyst:** LATCOR
Reporting Units: mg/kg **Batch #:** 1

Anions by EPA 300/300.1 Analytes	BLANK /BLANK SPIKE RECOVERY STUDY					
	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Chloride	ND	10.0	8.73	87	75-125	

Lab Batch #: 738877 **Sample:** 738877-1-BKS **Matrix:** Solid
Date Analyzed: 10/31/2008 **Date Prepared:** 10/31/2008 **Analyst:** LATCOR
Reporting Units: mg/kg **Batch #:** 1

Anions by EPA 300/300.1 Analytes	BLANK /BLANK SPIKE RECOVERY STUDY					
	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Chloride	ND	10.0	9.02	90	75-125	

Blank Spike Recovery [D] = 100*[C]/[B]
All results are based on MDL and validated for QC purposes.

BS / BSD Recoveries

Project Name: Midland/Odessa Standard List of Methods

Work Order #: 316093 **Project ID:** 8-0132

Analyst: BRB **Date Prepared:** 10/30/2008 **Date Analyzed:** 10/31/2008

Lab Batch ID: 739401 **Sample:** 518784-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH by SW 8015B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C10 Gasoline Range Hydrocarbons	ND	1000	840	84	1000	882	88	5	70-135	35	
C10-C28 Diesel Range Hydrocarbons	ND	1000	882	88	1000	930	93	5	70-135	35	

Analyst: BRB **Date Prepared:** 10/30/2008 **Date Analyzed:** 10/31/2008

Lab Batch ID: 739402 **Sample:** 518787-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH by SW 8015B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C10 Gasoline Range Hydrocarbons	ND	1000	852	85	1000	901	90	6	70-135	35	
C10-C28 Diesel Range Hydrocarbons	ND	1000	883	88	1000	943	94	7	70-135	35	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

BS / BSD Recoveries

Project Name: Midland/Odessa Standard List of Methods

Work Order #: 316093 **Project ID:** 8-0132

Analyst: BRB **Date Prepared:** 10/30/2008 **Date Analyzed:** 10/30/2008

Lab Batch ID: 739399 **Sample:** 518788-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH by SW 8015B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C10 Gasoline Range Hydrocarbons	ND	1000	847	85	1000	901	90	6	70-135	35	
C10-C28 Diesel Range Hydrocarbons	ND	1000	905	91	1000	956	96	5	70-135	35	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Form 3 - MS Recoveries

Project Name: Midland/Odessa Standard List of Methods

Work Order #: 316093

Lab Batch #: 738696 **Project ID:** 8-0132

Date Analyzed: 10/30/2008 **Date Prepared:** 10/30/2008 **Analyst:** LATCOR

QC- Sample ID: 316119-001 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	33.2	105	156	117	75-125	

Lab Batch #: 738697

Date Analyzed: 10/30/2008 **Date Prepared:** 10/30/2008 **Analyst:** LATCOR

QC- Sample ID: 316093-006 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	82.7	400	538	114	75-125	

Lab Batch #: 738877

Date Analyzed: 10/31/2008 **Date Prepared:** 10/31/2008 **Analyst:** LATCOR

QC- Sample ID: 316093-026 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	1190	516	1810	120	75-125	

trix Spike Percent Recovery [D] = 100*(C-A)/B
ative Percent Difference [E] = 200*(C-A)/(C+B)
ll Results are based on MDL and Validated for QC Purposes

Form 3 - MS / MSD Recoveries

Project Name: Midland/Odessa Standard List of Methods

Work Order # : 316093 **Project ID:** 8-0132

Lab Batch ID: 739401 **QC- Sample ID:** 316093-002 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 10/31/2008 **Date Prepared:** 10/30/2008 **Analyst:** BRB

Reporting Units: mg/kg

TPH by SW 8015B Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C10 Gasoline Range Hydrocarbons	ND	1080	936	87	1080	915	85	2	70-135	35	
C10-C28 Diesel Range Hydrocarbons	ND	1080	963	89	1080	941	87	2	70-135	35	

Lab Batch ID: 739402 **QC- Sample ID:** 316093-022 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 11/01/2008 **Date Prepared:** 10/30/2008 **Analyst:** BRB

Reporting Units: mg/kg

TPH by SW 8015B Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C10 Gasoline Range Hydrocarbons	ND	1230	1070	87	1230	1080	88	1	70-135	35	
C10-C28 Diesel Range Hydrocarbons	ND	1230	1120	91	1230	1140	93	2	70-135	35	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not ApplicableN = See Narrative, EQL = Estimated Quantitation Limit

Sample Duplicate Recovery

Project Name: Midland/Odessa Standard List of Methods

Work Order #: 316093

Lab Batch #: 738696 **Project ID:** 8-0132
Date Analyzed: 10/30/2008 **Date Prepared:** 10/30/2008 **Analyst:** LATCOR
QC- Sample ID: 316119-001 D **Batch #:** 1 **Matrix:** Soil
Reporting Units: mg/kg

Anions by EPA 300/300.1 Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	33.2	30.4	9	20	

Lab Batch #: 738697
Date Analyzed: 10/30/2008 **Date Prepared:** 10/30/2008 **Analyst:** LATCOR
QC- Sample ID: 316093-006 D **Batch #:** 1 **Matrix:** Soil
Reporting Units: mg/kg

Anions by EPA 300/300.1 Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	82.7	79.4	4	20	

Lab Batch #: 738877
Date Analyzed: 10/31/2008 **Date Prepared:** 10/31/2008 **Analyst:** LATCOR
QC- Sample ID: 316093-026 D **Batch #:** 1 **Matrix:** Soil
Reporting Units: mg/kg

Anions by EPA 300/300.1 Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	1190	1110	7	20	

Lab Batch #: 738800
Date Analyzed: 10/30/2008 **Date Prepared:** 10/30/2008 **Analyst:** BEV
QC- Sample ID: 316093-001 D **Batch #:** 1 **Matrix:** Soil
Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	9.67	9.61	1	20	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |
All Results are based on MDL and validated for QC purposes.

Sample Duplicate Recovery

Project Name: Midland/Odessa Standard List of Methods

Work Order #: 316093

Lab Batch #: 738801 **Project ID:** 8-0132

Date Analyzed: 10/30/2008 **Date Prepared:** 10/30/2008 **Analyst:** BEV

QC- Sample ID: 316093-021- D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	6.99	6.99	2	20	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |
All Results are based on MDL and validated for QC purposes.

CLIENT NAME:

SITE MANAGER: M. Larson

PROJECT NO.: 8-0132

PROJECT NAME:

PAGE 1 OF 2

LAB PO #

PARAMETERS/METHOD NUMBER

CHAI

LA

507 N.

DATE	TIME	WATER	SOIL	OTHER	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	GRO 8015	DRO 8015	Chloride 300	LAB. I.D NUMBE (LAB USE O
10-29	1010		X		MW-1-1'	2				31600
	1015				MW-1-5'					
	1018				MW-1-10'					
	1022				MW-1-15'					
	1025				MW-1-20'					
	1036				MW-1-30'					
	1045				MW-1-40'					
	1100				MW-1-50'					
					~~MW-1-60'~~ DUP					
10-29	1337		X		B1-1'	2				
	1351				B1-5'					
	1355				B1-10'					
	1400				B1-15'					
	1403				B1-20'					
	1411				B1-30'					
	1419				B1-40'					
	1436				B1-50'					

SAMPLED BY: (Signature) DATE: 10-30-08 TIME: ~~0840~~ 0840

RELINQUISHED BY: (Signature) DATE: TIME:

RECEIVED BY: (Signature) DATE: TIME:

RELINQUISHED BY: (Signature) DATE: 10-30-08 TIME: 0840

RECEIVED BY: (Signature) DATE: TIME:

RECEIVED BY

SAMPLE SHIPP

FEDEX

HAND DELIVER

COMMENTS: Standard TAT

TURNAROUND TIME NEEDED

WHITE – REC

YELLOW – REC LA

PINK – PR

GOLD – QA

RECEIVING LABORATORY: Ecot/Xenco

ADDRESS:

CITY: STATE: ZIP:

CONTACT: PHONE:

RECEIVED BY: (Signature) Jana Fitch

DATE: 10-30-08 TIME: 0840

SAMPLE CONDITION WHEN RECEIVED: 2.0°C

4oz glass on ice labels/no seals

LA CONTACT PERSON:

SAMPLE TYPE:

CLIENT NAME:

SITE MANAGER: M. Larson

PROJECT NO.: 8-0132

PROJECT NAME:

PAGE 2 OF 2

LAB PO #

DATE	TIME	WATER	SOIL	OTHER	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	GRO 8015	DRO 8015	Chloride 300
10-29	1455		X		B2- 1'	2			
	1458				B2- 5'				
	1501				B2- 10'				
	1504				B2- 15'				
	1516				B2- 20'				
	1519				B2- 30'				
	1527				B2- 40'				
	1537				B2- 50'	2			
	1530				SS1	1			
	1535				SS2	1			
	1550				B3- 1'	2			
	1555				B3- 5'				
	1558				B3- 10'				
	1602				B3- 15'				
	1605				B3- 20'				
	1615				B3- 30'				
	1624				B3- 40'				
	1635				B3- 50'				

PARAMETERS/METHOD NUMBER

CHA

LA

507

LAB NUM (LAB US

3160

SAMPLED BY: (Signature) DATE: 10-29-08 TIME:

RELINQUISHED BY: (Signature) DATE: TIME:

RECEIVED B

RELINQUISHED BY: (Signature) DATE: 10-30-08 TIME: 0840

RECEIVED BY: (Signature) DATE: TIME:

SAMPLE SH

FEDEX

HAND DEL

COMMENTS: Standard TAT

TURNAROUND TIME NEEDED

WHITE -

YELLOW -

RECEIVING LABORATORY: ECOT/Xenco

ADDRESS:

CITY: STATE: ZIP:

CONTACT: PHONE:

RECEIVED BY: (Signature)

DATE: 10-30-08 TIME: 0840

PINK -

GOLD -

SAMPLE CONDITION WHEN RECEIVED:

2.0°C 4oz, glass, no labels/no seals

LA CONTACT PERSON:

SAMPLE TY

#1	Temperature of container/ cooler?	Yes	No	2.0 °C	
#2	Shipping container in good condition?	Yes	No		
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	Not Present	
#4	Custody Seals intact on sample bottles/ container?	Yes	No	Not Present	
#5	Chain of Custody present?	Yes	No		
#6	Sample instructions complete of Chain of Custody?	Yes	No		
#7	Chain of Custody signed when relinquished/ received?	Yes	No		
#8	Chain of Custody agrees with sample label(s)?	Yes	No	ID written on Cont./ Lid	
#9	Container label(s) legible and intact?	Yes	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	Yes	No		
#11	Containers supplied by ELOT?	Yes	No		
#12	Samples in proper container/ bottle?	Yes	No	See Below	
#13	Samples properly preserved?	Yes	No	See Below	
#14	Sample bottles intact?	Yes	No		
#15	Preservations documented on Chain of Custody?	Yes	No		
#16	Containers documented on Chain of Custody?	Yes	No		
#17	Sufficient sample amount for indicated test(s)?	Yes	No	See Below	
#18	All samples received within sufficient hold time?	Yes	No	See Below	
#19	Subcontract of sample(s)?	Yes	No	Not Applicable	
#20	VOC samples have zero headspace?	Yes	No	Not Applicable	

Variance Documentation

Contact: _____ Contacted by: _____ Date/ Time: _____

Regarding: _____

_____

Corrective Action Taken:

_____

_____

_____

Check all that Apply:

- ☐ See attached e-mail/ fax
- ☐ Client understands and would like to proceed with analysis
- ☐ Cooling process had begun shortly after sampling event

Analytical Report 316265

for

Larson & Associates

Project Manager: Mark Larson

North 10-inch

8-0132

05-NOV-08

E84880

12600 West I-20 East Odessa, Texas 79765

Texas certification numbers:
Houston, TX T104704215 - Odessa/Midland, TX T104704215-08-TX

Florida certification numbers:
Houston, TX E871002 - Miami, FL E86678 - Tampa, FL E86675
Norcross(Atlanta), GA E87429

South Carolina certification numbers:
Norcross(Atlanta), GA 98015

North Carolina certification numbers:
Norcross(Atlanta), GA 483

Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America
Midland - Corpus Christi - Atlanta

05-NOV-08

Project Manager: **Mark Larson**
Larson & Associates
P.O. Box 50685
Midland, TX 79710

Reference: XENCO Report No: **316265**
North 10-inch
Project Address:

Mark Larson:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 316265. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 316265 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Brent Barron, II
Odessa Laboratory Manager

Sample Cross Reference 316265

Larson & Associates, Midland, TX

North 10-inch

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW2 - 1'	S	Oct-30-08 09:30		316265-001
MW2 - 5'	S	Oct-30-08 09:39		316265-002
MW2 - 10'	S	Oct-30-08 09:43		316265-003
MW2 - 15'	S	Oct-30-08 09:48		316265-004
MW2 - 20'	S	Oct-30-08 09:52		316265-005
MW2 - 30'	S	Oct-30-08 10:15		316265-006
MW2 - 40'	S	Oct-30-08 10:22		316265-007
MW2 - 50'	S	Oct-30-08 10:33		316265-008
B4 - 1'	S	Oct-30-08 11:55		316265-009
B4 - 5'	S	Oct-30-08 11:59		316265-010
B4 - 10'	S	Oct-30-08 12:02		316265-011
B4 - 15'	S	Oct-30-08 12:05		316265-012
B4 - 20'	S	Oct-30-08 12:10		316265-013
B4 - 30'	S	Oct-30-08 12:17		316265-014
B4 - 40'	S	Oct-30-08 12:25		316265-015
B4 - 50'	S	Oct-30-08 12:40		316265-016

[redacted] **Project Id:** 8-0132 **Project Name:** [redacted]

Contact: Mark Larson

Project Location:

Date Received in Lab: Fri Oct-31-08 08:56 am

Report Date: 05-NOV-08

Project Manager: Brent Barron, II

Analysis Requested													
	Lab Id:	316265-001		316265-002		316265-003		316265-004		316265-005		316265-006	
	Field Id:	MW2 - 1'		MW2 - 5'		MW2 - 10'		MW2 - 15'		MW2 - 20'		MW2 - 30'	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-30-08 09:30		Oct-30-08 09:39		Oct-30-08 09:43		Oct-30-08 09:48		Oct-30-08 09:52		Oct-30-08 10:15	
Anions by EPA 300/300.1	***Extracted:***												
	Analyzed:	Nov-03-08 19:04		Nov-03-08 19:04		Nov-03-08 19:04		Nov-03-08 19:04		Nov-03-08 19:04		Nov-03-08 19:04	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		ND	56.0	ND	53.5	ND	56.2	ND	109	ND	103	281	116
Percent Moisture	***Extracted:***												
	Analyzed:	Oct-31-08 17:00		Oct-31-08 17:00		Oct-31-08 17:00		Oct-31-08 17:00		Oct-31-08 17:00		Oct-31-08 17:00	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		10.71	1.00	6.61	1.00	10.98	1.00	8.46	1.00	2.83	1.00	13.56	1.00
TPH by SW 8015B	***Extracted:***	Nov-03-08 17:15		Nov-03-08 17:15		Nov-03-08 17:15		Nov-03-08 17:15		Nov-03-08 17:15		Nov-03-08 17:15	
	Analyzed:	Nov-04-08 20:32		Nov-04-08 20:57		Nov-04-08 21:23		Nov-04-08 21:49		Nov-04-08 22:14		Nov-04-08 22:40	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C10 Gasoline Range Hydrocarbons		ND	16.8	ND	16.1	ND	16.9	ND	16.4	ND	15.4	ND	17.4
C10-C28 Diesel Range Hydrocarbons		ND	16.8	ND	16.1	ND	16.9	ND	16.4	ND	15.4	ND	17.4
Total TPH		ND		ND		ND		ND		ND		ND	

Brent Barron
Odessa Laboratory Director

Project Id: 8-0132

Contact: Mark Larson

Project Location:

Date Received in Lab: Fri Oct-31-08 08:56 am

Report Date: 05-NOV-08

Project Manager: Brent Barron, II

Analysis Requested													
	Lab Id:	316265-007		316265-008		316265-009		316265-010		316265-011		316265-012	
	Field Id:	MW2 - 40'		MW2 - 50'		B4 - 1'		B4 - 5'		B4 - 10'		B4 - 15'	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-30-08 10:22		Oct-30-08 10:33		Oct-30-08 11:55		Oct-30-08 11:59		Oct-30-08 12:02		Oct-30-08 12:05	
Anions by EPA 300/300.1	***Extracted:***												
	Analyzed:	Nov-03-08 19:04		Nov-03-08 19:04		Nov-04-08 03:18		Nov-04-08 03:18		Nov-04-08 03:18		Nov-04-08 03:18	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		240	117	181	113	ND	54.5	ND	52.0	ND	55.2	ND	110
Percent Moisture	***Extracted:***												
	Analyzed:	Oct-31-08 17:00		Oct-31-08 17:00		Oct-31-08 17:00		Oct-31-08 17:00		Oct-31-08 17:00		Oct-31-08 17:00	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		14.21	1.00	11.44	1.00	8.27	1.00	3.84	1.00	9.46	1.00	8.87	1.00
TPH by SW 8015B	***Extracted:***	Nov-03-08 17:15		Nov-03-08 17:15		Nov-03-08 17:30		Nov-03-08 17:30		Nov-03-08 17:30		Nov-03-08 17:30	
	Analyzed:	Nov-04-08 23:05		Nov-04-08 23:31		Nov-05-08 04:14		Nov-05-08 04:40		Nov-05-08 05:05		Nov-05-08 05:31	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C10 Gasoline Range Hydrocarbons		ND	17.5	ND	16.9	ND	16.4	ND	15.6	ND	16.6	ND	16.5
C10-C28 Diesel Range Hydrocarbons		ND	17.5	ND	16.9	ND	16.4	ND	15.6	ND	16.6	ND	16.5
Total TPH		ND		ND		ND		ND		ND		ND	

Brent Barron
Odessa Laboratory Director

Project Id: 8-0132

Contact: Mark Larson

Project Location:

Date Received in Lab: Fri Oct-31-08 08:56 am

Report Date: *05-NOV-08*

Project Manager: Brent Barron, II

Analysis Requested													
	Lab Id:	316265-013		316265-014		316265-015		316265-016					
	Field Id:	B4 - 20'		B4 - 30'		B4 - 40'		B4 - 50'					
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL					
	Sampled:	Oct-30-08 12:10		Oct-30-08 12:17		Oct-30-08 12:25		Oct-30-08 12:40					
Anions by EPA 300/300.1	***Extracted:***												
	Analyzed:	Nov-04-08 03:18		Nov-04-08 03:18		Nov-04-08 03:18		Nov-04-08 03:18					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		ND	107	190	109	251	110	196	106				
Percent Moisture	***Extracted:***												
	Analyzed:	Oct-31-08 17:00		Oct-31-08 17:00		Oct-31-08 17:00		Oct-31-08 17:00					
	Units/RL:	%	RL	%	RL	%	RL	%	RL				
Percent Moisture		6.50	1.00	8.63	1.00	9.15	1.00	5.25	1.00				
TPH by SW 8015B	***Extracted:***	Nov-03-08 17:30		Nov-03-08 17:30		Nov-03-08 17:30		Nov-03-08 17:30					
	Analyzed:	Nov-05-08 05:58		Nov-05-08 06:23		Nov-05-08 06:49		Nov-05-08 07:16					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
C6-C10 Gasoline Range Hydrocarbons		ND	16.0	ND	16.4	ND	16.5	ND	15.8				
C10-C28 Diesel Range Hydrocarbons		ND	16.0	ND	16.4	ND	16.5	ND	15.8				
Total TPH		ND		ND		ND		ND					

Brent Barron
Odessa Laboratory Director

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the MQL(PQL) and above the SQL(MDL).

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

* Outside XENCO'S scope of NELAC Accreditation

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5332 Blackberry Drive, Suite 104, San Antonio, TX 78238	(210) 509-3334	(210) 509-3335
2505 N. Falkenburg Rd., Tampa, FL 33619	(813) 620-2000	(813) 620-2033
5757 NW 158th St, Miami Lakes, FL 33014	(305) 823-8500	(305) 823-8555
6017 Financial Dr., Norcross, GA 30071	(770) 449-8800	(770) 449-5477

Form 2 - Surrogate Recoveries

Project Name: North 10-inch

Work Orders : 316265,

Project ID: 8-0132

Lab Batch #: 739170 **Sample:** 316265-009 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY				
	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	87.2	100	87	70-135	
o-Terphenyl	46.0	50.0	92	70-135	

Lab Batch #: 739170 **Sample:** 316265-010 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY				
	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	89.5	100	90	70-135	
o-Terphenyl	46.8	50.0	94	70-135	

Lab Batch #: 739170 **Sample:** 316265-011 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY				
	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	88.8	100	89	70-135	
o-Terphenyl	46.7	50.0	93	70-135	

Lab Batch #: 739170 **Sample:** 316265-012 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY				
	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	92.2	100	92	70-135	
o-Terphenyl	48.2	50.0	96	70-135	

Lab Batch #: 739170 **Sample:** 316265-013 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY				
	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	87.5	100	88	70-135	
o-Terphenyl	45.6	50.0	91	70-135	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: North 10-inch

Work Orders : 316265,

Project ID: 8-0132

Lab Batch #: 739170 **Sample:** 316265-014 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	88.0	100	88	70-135	
o-Terphenyl	46.3	50.0	93	70-135	

Lab Batch #: 739170 **Sample:** 316265-015 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	89.1	100	89	70-135	
o-Terphenyl	46.6	50.0	93	70-135	

Lab Batch #: 739170 **Sample:** 316265-015 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	107	100	107	70-135	
o-Terphenyl	44.7	50.0	89	70-135	

Lab Batch #: 739170 **Sample:** 316265-015 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	106	100	106	70-135	
o-Terphenyl	44.5	50.0	89	70-135	

Lab Batch #: 739170 **Sample:** 316265-016 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	87.7	100	88	70-135	
o-Terphenyl	46.0	50.0	92	70-135	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: North 10-inch

Work Orders : 316265,

Project ID: 8-0132

Lab Batch #: 739170 **Sample:** 518635-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	106	100	106	70-135	
o-Terphenyl	43.7	50.0	87	70-135	

Lab Batch #: 739170 **Sample:** 518635-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	90.1	100	90	70-135	
o-Terphenyl	48.7	50.0	97	70-135	

Lab Batch #: 739170 **Sample:** 518635-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	106	100	106	70-135	
o-Terphenyl	43.4	50.0	87	70-135	

Lab Batch #: 739174 **Sample:** 316265-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	88.5	100	89	70-135	
o-Terphenyl	45.8	50.0	92	70-135	

Lab Batch #: 739174 **Sample:** 316265-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	106	100	106	70-135	
o-Terphenyl	44.0	50.0	88	70-135	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: North 10-inch

Work Orders : 316265,

Project ID: 8-0132

Lab Batch #: 739174 **Sample:** 316265-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	102	100	102	70-135	
o-Terphenyl	42.3	50.0	85	70-135	

Lab Batch #: 739174 **Sample:** 316265-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	84.8	100	85	70-135	
o-Terphenyl	43.6	50.0	87	70-135	

Lab Batch #: 739174 **Sample:** 316265-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	87.8	100	88	70-135	
o-Terphenyl	45.8	50.0	92	70-135	

Lab Batch #: 739174 **Sample:** 316265-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	87.0	100	87	70-135	
o-Terphenyl	45.0	50.0	90	70-135	

Lab Batch #: 739174 **Sample:** 316265-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	87.4	100	87	70-135	
o-Terphenyl	45.1	50.0	90	70-135	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: North 10-inch

Work Orders : 316265,

Project ID: 8-0132

Lab Batch #: 739174 **Sample:** 316265-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	86.0	100	86	70-135	
o-Terphenyl	45.3	50.0	91	70-135	

Lab Batch #: 739174 **Sample:** 316265-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	88.0	100	88	70-135	
o-Terphenyl	45.7	50.0	91	70-135	

Lab Batch #: 739174 **Sample:** 316265-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH by SW 8015B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	89.1	100	89	70-135	
o-Terphenyl	46.0	50.0	92	70-135	

Lab Batch #: 739174 **Sample:** 518638-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH by SW 8015B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	102	100	102	70-135	
o-Terphenyl	43.4	50.0	87	70-135	

Lab Batch #: 739174 **Sample:** 518638-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH by SW 8015B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	86.8	100	87	70-135	
o-Terphenyl	45.8	50.0	92	70-135	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: North 10-inch

Work Orders : 316265,

Project ID: 8-0132

Lab Batch #: 739174 **Sample:** 518638-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH by SW 8015B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	104	100	104	70-135	
o-Terphenyl	43.0	50.0	86	70-135	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Blank Spike Recovery

Project Name: North 10-inch

Work Order #: 316265 **Project ID:** 8-0132

Lab Batch #: 739033 **Sample:** 739033-1-BKS **Matrix:** Solid
Date Analyzed: 11/03/2008 **Date Prepared:** 11/03/2008 **Analyst:** LATCOR
Reporting Units: mg/kg **Batch #:** 1

Anions by EPA 300/300.1 Analytes	Blank Result [A]	BLANK /BLANK SPIKE RECOVERY STUDY Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Chloride	ND	10.0	10.2	102	75-125	

Lab Batch #: 739036 **Sample:** 739036-1-BKS **Matrix:** Solid
Date Analyzed: 11/04/2008 **Date Prepared:** 11/04/2008 **Analyst:** LATCOR
Reporting Units: mg/kg **Batch #:** 1

Anions by EPA 300/300.1 Analytes	Blank Result [A]	BLANK /BLANK SPIKE RECOVERY STUDY Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Chloride	ND	10.0	9.63	96	75-125	

Blank Spike Recovery [D] = 100*[C]/[B]
All results are based on MDL and validated for QC purposes.

BS / BSD Recoveries

Project Name: North 10-inch

Work Order #: 316265 **Project ID:** 8-0132

Analyst: ASA **Date Prepared:** 11/03/2008 **Date Analyzed:** 11/05/2008

Lab Batch ID: 739170 **Sample:** 518635-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

TPH by SW 8015B	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C10 Gasoline Range Hydrocarbons	ND	1000	847	85	1000	852	85	1	70-135	35	
C10-C28 Diesel Range Hydrocarbons	ND	1000	832	83	1000	832	83	0	70-135	35	

Analyst: ASA **Date Prepared:** 11/03/2008 **Date Analyzed:** 11/04/2008

Lab Batch ID: 739174 **Sample:** 518638-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

TPH by SW 8015B	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C10 Gasoline Range Hydrocarbons	ND	1000	836	84	1000	841	84	1	70-135	35	
C10-C28 Diesel Range Hydrocarbons	ND	1000	812	81	1000	812	81	0	70-135	35	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Form 3 - MS Recoveries

Project Name: North 10-inch

Work Order #: 316265

Lab Batch #: 739033 **Project ID:** 8-0132

Date Analyzed: 11/03/2008 **Date Prepared:** 11/03/2008 **Analyst:** LATCOR

QC- Sample ID: 316212-046 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	ND	102	109	107	75-125	

Lab Batch #: 739036

Date Analyzed: 11/04/2008 **Date Prepared:** 11/04/2008 **Analyst:** LATCOR

QC- Sample ID: 316265-009 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	ND	109	110	101	75-125	

trix Spike Percent Recovery [D] = 100*(C-A)/B
lative Percent Difference [E] = 200*(C-A)/(C+B)
l Results are based on MDL and Validated for QC Purposes

Form 3 - MS / MSD Recoveries

Project Name: North 10-inch

Work Order # : 316265 **Project ID:** 8-0132

Lab Batch ID: 739170 **QC- Sample ID:** 316265-015 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 11/05/2008 **Date Prepared:** 11/03/2008 **Analyst:** ASA

Reporting Units: mg/kg

TPH by SW 8015B	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C10 Gasoline Range Hydrocarbons	ND	1100	916	83	1100	905	82	1	70-135	35	
C10-C28 Diesel Range Hydrocarbons	ND	1100	906	82	1100	891	81	1	70-135	35	

Lab Batch ID: 739174 **QC- Sample ID:** 316265-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 11/04/2008 **Date Prepared:** 11/03/2008 **Analyst:** ASA

Reporting Units: mg/kg

TPH by SW 8015B	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C10 Gasoline Range Hydrocarbons	ND	1120	939	84	1120	913	82	2	70-135	35	
C10-C28 Diesel Range Hydrocarbons	ND	1120	919	82	1120	888	79	4	70-135	35	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not ApplicableN = See Narrative, EQL = Estimated Quantitation Limit

Sample Duplicate Recovery

Project Name: North 10-inch

Work Order #: 316265

Lab Batch #: 739033 **Project ID:** 8-0132
Date Analyzed: 11/03/2008 **Date Prepared:** 11/03/2008 **Analyst:** LATCOR
QC- Sample ID: 316212-046 D **Batch #:** 1 **Matrix:** Soil
Reporting Units: mg/kg

Anions by EPA 300/300.1 Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	ND	ND	NC	20	

Lab Batch #: 739036
Date Analyzed: 11/04/2008 **Date Prepared:** 11/04/2008 **Analyst:** LATCOR
QC- Sample ID: 316265-009 D **Batch #:** 1 **Matrix:** Soil
Reporting Units: mg/kg

Anions by EPA 300/300.1 Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	ND	ND	NC	20	

Lab Batch #: 738813
Date Analyzed: 10/31/2008 **Date Prepared:** 10/31/2008 **Analyst:** ASA
QC- Sample ID: 316265-001 D **Batch #:** 1 **Matrix:** Soil
Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	10.7	9.86	8	20	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |
All Results are based on MDL and validated for QC purposes.

CLIENT NAME:

SITE MANAGER: M Larson

PROJECT NO.: 8-0132

PROJECT NAME:

PAGE OF

LAB PO #

DATE	TIME	WATER	SOIL	OTHER	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	GRO 8015	DRO 8015	Chloride
10-30	0930		X		MW2 - 1'	2	✓	✓	✓
	0939				MW2 - 5'				
	0943				MW2 - 10'				
	0948				MW2 - 15'				
	0952				MW2 - 20'				
	1015				MW2 - 30'				
	1022				MW2 - 40'				
	1033				MW2 - 50'				
	1155				B4 - 1'				
	1159				B4 - 5'				
	1202				B4 - 10'				
	1205				B4 - 15'				
	1210				B4 - 20'				
	1217				B4 - 30'				
	1225				B4 - 40'				
↓	1240	↓	↓		B4 - 50'	↓	↓	↓	↓

PARAMETERS/METHOD NUMBER

CHA

LA

507 N

LAB. NUMB (LAB USE

3102

SAMPLED BY: (Signature) Don L McGinnis DATE: 10-30-08 TIME:

RELINQUISHED BY: (Signature) DATE: TIME:

RECEIVED BY

RELINQUISHED BY: (Signature) DATE 10-31-08 TIME: 0900

RECEIVED BY: (Signature) Grant Valley DATE: 11-1-08 TIME: 8:54

SAMPLE SHI

FEDEX

HAND DELIV

COMMENTS:

TURNAROUND TIME NEEDED Standard

WHITE – R

YELLOW – R

L

PINK – F

GOLD – C

RECEIVING LABORATORY:

ADDRESS:

CITY: STATE: ZIP:

CONTACT: PHONE:

RECEIVED BY: (Signature)

DATE: TIME:

SAMPLE CONDITION WHEN RECEIVED: 32-43 °C.

LA CONTACT PERSON:

SAMPLE TYP

#1	Temperature of container/ cooler?	(Yes)	No	4.5 °C	
#2	Shipping container in good condition?	(Yes)	No		
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	(Not Present)	
#4	Custody Seals intact on sample bottles/ container?	Yes	No	(Not Present)	
#5	Chain of Custody present?	(Yes)	No		
#6	Sample instructions complete of Chain of Custody?	(Yes)	No		
#7	Chain of Custody signed when relinquished/ received?	(Yes)	No		
#8	Chain of Custody agrees with sample label(s)?	(Yes)	No	ID written on Cont./ Lid	
#9	Container label(s) legible and intact?	(Yes)	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	(Yes)	No		
#11	Containers supplied by ELOT?	(Yes)	No		
#12	Samples in proper container/ bottle?	(Yes)	No	See Below	
#13	Samples properly preserved?	(Yes)	No	See Below	
#14	Sample bottles intact?	(Yes)	No		
#15	Preservations documented on Chain of Custody?	(Yes)	No		
#16	Containers documented on Chain of Custody?	(Yes)	No		
#17	Sufficient sample amount for indicated test(s)?	(Yes)	No	See Below	
#18	All samples received within sufficient hold time?	(Yes)	No	See Below	
#19	Subcontract of sample(s)?	Yes	No	(Not Applicable)	
#20	VOC samples have zero headspace?	Yes	No	(Not Applicable)	

Variance Documentation

Contact: _____ Contacted by: _____ Date/ Time: _____

Regarding: _____

Corrective Action Taken:

Check all that Apply:

- ☐ See attached e-mail/ fax
- ☐ Client understands and would like to proceed with analysis
- ☐ Cooling process had begun shortly after sampling event

Thank you,

Michelle L. Green
Larson & Associates, Inc.
507 N Marienfeld, Suite 200
Midland, TX 79701

Office: 432.687.0901
Fax: 432.687.0456
Cell: 432.934.3231

Larson & Associates, Inc.
Environmental Consultants

11/3/2008

Analytical Report 313582

for

Larson & Associates

Project Manager: Michelle Green

Targa South Brine Pond

6-0107

07-OCT-08

E84880

12600 West I-20 East Odessa, Texas 79765

Texas certification numbers:
Houston, TX T104704215 - Odessa/Midland, TX T104704215-08-TX

Florida certification numbers:
Houston, TX E871002 - Miami, FL E86678 - Tampa, FL E86675
Norcross(Atlanta), GA E87429

South Carolina certification numbers:
Norcross(Atlanta), GA 98015

North Carolina certification numbers:
Norcross(Atlanta), GA 483

Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America
Midland - Corpus Christi - Atlanta

07-OCT-08

Project Manager: **Michelle Green**
Larson & Associates
P.O. Box 50685
Midland, TX 79710

Reference: XENCO Report No: **313582**
Targa South Brine Pond
Project Address:

Michelle Green:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 313582. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 313582 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Brent Barron, II
Odessa Laboratory Manager

Sample Cross Reference 313582

Larson & Associates, Midland, TX

Targa South Brine Pond

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
NW @ 1'	S	Sep-30-08 10:21		313582-001
NW @ 3'	S	Sep-30-08 10:26		313582-002
NW @ 5'	S	Sep-30-08 10:29		313582-003
NW @ 10'	S	Sep-30-08 10:33		313582-004
NW @ 15'	S	Sep-30-08 10:36		313582-005
NW @ 20'	S	Sep-30-08 10:42		313582-006
SW @ 1'	S	Sep-30-08 10:55		313582-007
SW @ 3'	S	Sep-30-08 10:58		313582-008
SW @ 5'	S	Sep-30-08 11:00		313582-009
SW @ 10'	S	Sep-30-08 11:04		313582-010
SW @ 15'	S	Sep-30-08 11:08		313582-011
SW @ 20'	S	Sep-30-08 11:11		313582-012
SE @ 1'	S	Sep-30-08 12:36		313582-013
SE @ 3'	S	Sep-30-08 12:39		313582-014
SE @ 5'	S	Sep-30-08 12:42		313582-015
SE @ 10'	S	Sep-30-08 12:44		313582-016
SE @ 15'	S	Sep-30-08 12:47		313582-017
SE @ 20'	S	Sep-30-08 12:52		313582-018
Center @ 1'	S	Sep-30-08 09:08		313582-019
Center @ 3'	S	Sep-30-08 09:12		313582-020
Center @ 5'	S	Sep-30-08 09:17		313582-021
Center @ 10'	S	Sep-30-08 09:20		313582-022
Center @ 15'	S	Sep-30-08 09:23		313582-023
Center @ 20'	S	Sep-30-08 09:27		313582-024
NE @ 1'	S	Sep-30-08 09:48		313582-025
NE @ 3'	S	Sep-30-08 09:51		313582-026
NE @ 5'	S	Sep-30-08 09:54		313582-027
NE @ 10'	S	Sep-30-08 09:57		313582-028
NE @ 15'	S	Sep-30-08 10:00		313582-029
NE @ 20'	S	Sep-30-08 10:04		313582-030

Project Id: 6-0107 **Project Name:** Targa South Belle Pon

Contact: Michelle Green

Project Location:

Date Received in Lab: Tue Sep-30-08 04:38 pm

Report Date: 07-OCT-08

Project Manager: Brent Barron, II

Analysis Requested													
	Lab Id:	313582-001		313582-002		313582-003		313582-004		313582-005		313582-006	
	Field Id:	NW @ 1'		NW @ 3'		NW @ 5'		NW @ 10'		NW @ 15'		NW @ 20'	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Sep-30-08 10:21		Sep-30-08 10:26		Sep-30-08 10:29		Sep-30-08 10:33		Sep-30-08 10:36		Sep-30-08 10:42	
Anions by EPA 300/300.1	***Extracted:***												
	Analyzed:	Oct-01-08 14:42		Oct-01-08 14:42		Oct-01-08 14:42		Oct-01-08 14:42		Oct-01-08 14:42		Oct-01-08 14:42	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		8330	110	2650	56.7	1030	22.3	970	22.5	1040	22.4	644	11.5
Percent Moisture	***Extracted:***												
	Analyzed:	Oct-01-08 17:00		Oct-01-08 17:00		Oct-01-08 17:00		Oct-01-08 17:00		Oct-01-08 17:00		Oct-01-08 17:00	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		8.84		11.8		10.3		11		10.7		12.8	
TPH By SW8015 Mod	***Extracted:***	Oct-03-08 18:20		Oct-03-08 18:20		Oct-03-08 18:20		Oct-03-08 18:20		Oct-03-08 18:20		Oct-03-08 18:20	
	Analyzed:	Oct-05-08 01:53		Oct-05-08 02:20		Oct-05-08 02:47		Oct-05-08 03:15		Oct-05-08 03:43		Oct-05-08 04:09	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C12 Gasoline Range Hydrocarbons		ND	16.5	ND	17.0	ND	16.7	ND	16.9	ND	16.8	ND	17.2
C12-C28 Diesel Range Hydrocarbons		ND	16.5	ND	17.0	ND	16.7	ND	16.9	ND	16.8	ND	17.2
C28-C35 Oil Range Hydrocarbons		ND	16.5	ND	17.0	ND	16.7	ND	16.9	ND	16.8	ND	17.2
Total TPH		ND		ND		ND		ND		ND		ND	

Brent Barron
Odessa Laboratory Director

Project Id: 6-0107

Contact: Michelle Green

Project Location:

Date Received in Lab: Tue Sep-30-08 04:38 pm

Report Date: 07-OCT-08

Project Manager: Brent Barron, II

Analysis Requested													
	Lab Id:	313582-007		313582-008		313582-009		313582-010		313582-011		313582-012	
	Field Id:	SW @ 1'		SW @ 3'		SW @ 5'		SW @ 10'		SW @ 15'		SW @ 20'	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Sep-30-08 10:55		Sep-30-08 10:58		Sep-30-08 11:00		Sep-30-08 11:04		Sep-30-08 11:08		Sep-30-08 11:11	
Anions by EPA 300/300.1	***Extracted:***												
	Analyzed:	Oct-01-08 14:42		Oct-01-08 14:42		Oct-01-08 14:42		Oct-01-08 14:42		Oct-01-08 14:42		Oct-01-08 14:42	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		9660	220	9550	222	5640	108	1300	21.9	423	10.9	336	11.1
Percent Moisture	***Extracted:***												
	Analyzed:	Oct-01-08 17:00		Oct-01-08 17:00		Oct-01-08 17:00		Oct-01-08 17:00		Oct-01-08 17:00		Oct-01-08 17:00	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		9.14		10.1		7.78		8.74		8.17		9.53	
TPH By SW8015 Mod	***Extracted:***	Oct-03-08 18:20		Oct-03-08 18:20		Oct-03-08 18:20		Oct-03-08 18:20		Oct-03-08 18:20		Oct-03-08 18:20	
	Analyzed:	Oct-05-08 04:35		Oct-05-08 05:02		Oct-05-08 05:30		Oct-05-08 05:57		Oct-05-08 06:50		Oct-05-08 07:18	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C12 Gasoline Range Hydrocarbons		ND	16.5	ND	16.7	ND	16.3	ND	16.4	ND	16.3	ND	16.6
C12-C28 Diesel Range Hydrocarbons		ND	16.5	ND	16.7	ND	16.3	ND	16.4	ND	16.3	ND	16.6
C28-C35 Oil Range Hydrocarbons		ND	16.5	ND	16.7	ND	16.3	ND	16.4	ND	16.3	ND	16.6
Total TPH		ND		ND		ND		ND		ND		ND	

Brent Barron
Odessa Laboratory Director

[redacted] Project Id: 6-0107 [redacted] Proj[redacted]ame[redacted]rga[redacted]h B[redacted]Pon[redacted]

Contact: Michelle Green

Project Location:

Date Received in Lab: Tue Sep-30-08 04:38 pm

Report Date: 07-OCT-08

Project Manager: Brent Barron, II

Analysis Requested	*Lab Id:*	313582-013		313582-014		313582-015		313582-016		313582-017		313582-018	
	Field Id:	SE @ 1'		SE @ 3'		SE @ 5'		SE @ 10'		SE @ 15'		SE @ 20'	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Sep-30-08 12:36		Sep-30-08 12:39		Sep-30-08 12:42		Sep-30-08 12:44		Sep-30-08 12:47		Sep-30-08 12:52	
Anions by EPA 300/300.1	*Extracted:*												
	Analyzed:	Oct-01-08 14:42		Oct-01-08 21:05		Oct-01-08 21:05		Oct-01-08 21:05		Oct-01-08 21:05		Oct-01-08 21:05	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		5460	110	5200	100	2170	50.0	815	20.0	369	10.0	548	10.0
Percent Moisture	*Extracted:*												
	Analyzed:	Oct-01-08 17:00		Oct-01-08 17:00		Oct-01-08 17:00		Oct-01-08 17:00		Oct-01-08 17:00		Oct-01-08 17:00	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		8.8		9.07		8.82		10.9		9.93		15	
TPH By SW8015 Mod	*Extracted:*	Oct-03-08 18:20		Oct-03-08 18:20		Oct-03-08 18:20		Oct-03-08 18:20		Oct-03-08 18:20		Oct-03-08 18:20	
	Analyzed:	Oct-05-08 07:45		Oct-05-08 08:13		Oct-05-08 08:41		Oct-05-08 09:09		Oct-05-08 09:37		Oct-05-08 10:03	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C12 Gasoline Range Hydrocarbons		ND	16.4	ND	16.5	ND	16.5	ND	16.8	ND	16.7	ND	17.7
C12-C28 Diesel Range Hydrocarbons		ND	16.4	ND	16.5	ND	16.5	ND	16.8	ND	16.7	ND	17.7
C28-C35 Oil Range Hydrocarbons		ND	16.4	ND	16.5	ND	16.5	ND	16.8	ND	16.7	ND	17.7
Total TPH		ND		ND		ND		ND		ND		ND	

Brent Barron
Odessa Laboratory Director

Project Id: 6-0107

Contact: Michelle Green

Project Location:

Date Received in Lab: Tue Sep-30-08 04:38 pm

Report Date: 07-OCT-08

Project Manager: Brent Barron, II

Analysis Requested													
	Lab Id:	313582-019		313582-020		313582-021		313582-022		313582-023		313582-024	
	Field Id:	Center @ 1'		Center @ 3'		Center @ 5'		Center @ 10'		Center @ 15'		Center @ 20'	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Sep-30-08 09:08		Sep-30-08 09:12		Sep-30-08 09:17		Sep-30-08 09:20		Sep-30-08 09:23		Sep-30-08 09:27	
Anions by EPA 300/300.1	***Extracted:***												
	Analyzed:	Oct-01-08 21:05		Oct-01-08 21:05		Oct-01-08 21:05		Oct-01-08 21:05		Oct-01-08 21:05		Oct-01-08 21:05	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		13300	200	6920	200	5960	100	738	20.0	388	10.0	363	10.0
Percent Moisture	***Extracted:***												
	Analyzed:	Oct-01-08 17:00		Oct-01-08 17:00		Oct-01-08 17:00		Oct-01-08 17:00		Oct-01-08 17:00		Oct-01-08 17:00	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		9.74		8.08		11.1		11.3		9.05		13.4	
TPH By SW8015 Mod	***Extracted:***	Oct-03-08 18:20		Oct-03-08 18:20		Oct-03-08 18:00		Oct-03-08 18:00		Oct-03-08 18:00		Oct-03-08 18:00	
	Analyzed:	Oct-05-08 10:29		Oct-05-08 10:55		Oct-05-08 15:33		Oct-05-08 15:58		Oct-06-08 09:48		Oct-05-08 16:49	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C12 Gasoline Range Hydrocarbons		ND	16.6	ND	16.3	ND	16.9	ND	16.9	ND	16.5	ND	17.3
C12-C28 Diesel Range Hydrocarbons		ND	16.6	ND	16.3	ND	16.9	ND	16.9	ND	16.5	ND	17.3
C28-C35 Oil Range Hydrocarbons		ND	16.6	ND	16.3	ND	16.9	ND	16.9	ND	16.5	ND	17.3
Total TPH		ND		ND		ND		ND		ND		ND	

Brent Barron
Odessa Laboratory Director

Project Id: 6-0107

Contact: Michelle Green

Project Location:

Date Received in Lab: Tue Sep-30-08 04:38 pm

Report Date: 07-OCT-08

Project Manager: Brent Barron, II

Analysis Requested													
	Lab Id:	313582-025		313582-026		313582-027		313582-028		313582-029		313582-030	
	Field Id:	NE @ 1'		NE @ 3'		NE @ 5'		NE @ 10'		NE @ 15'		NE @ 20'	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Sep-30-08 09:48		Sep-30-08 09:51		Sep-30-08 09:54		Sep-30-08 09:57		Sep-30-08 10:00		Sep-30-08 10:04	
Anions by EPA 300/300.1	***Extracted:***												
	Analyzed:	Oct-01-08 21:05		Oct-01-08 21:05		Oct-01-08 21:05		Oct-01-08 21:05		Oct-01-08 21:05		Oct-01-08 21:05	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		6080	100	5190	100	4400	200	1590	50.0	774	20.0	466	20.0
Percent Moisture	***Extracted:***												
	Analyzed:	Oct-01-08 17:00		Oct-01-08 17:00		Oct-01-08 17:00		Oct-01-08 17:00		Oct-01-08 17:00		Oct-01-08 17:00	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		16.9		18.4		21.7		16.7		9.94		10.9	
TPH By SW8015 Mod	***Extracted:***	Oct-03-08 18:00		Oct-03-08 18:00		Oct-03-08 18:00		Oct-03-08 18:00		Oct-03-08 18:00		Oct-03-08 18:00	
	Analyzed:	Oct-05-08 17:14		Oct-05-08 17:40		Oct-05-08 18:06		Oct-05-08 18:31		Oct-05-08 18:57		Oct-05-08 19:22	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C12 Gasoline Range Hydrocarbons		ND	18.1	ND	18.4	ND	19.1	ND	18.0	ND	16.7	ND	16.8
C12-C28 Diesel Range Hydrocarbons		ND	18.1	ND	18.4	ND	19.1	ND	18.0	ND	16.7	ND	16.8
C28-C35 Oil Range Hydrocarbons		ND	18.1	ND	18.4	ND	19.1	ND	18.0	ND	16.7	ND	16.8
Total TPH		ND		ND		ND		ND		ND		ND	

Brent Barron
Odessa Laboratory Director

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the MQL(PQL) and above the SQL(MDL).

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

* Outside XENCO'S scope of NELAC Accreditation

Form 2 - Surrogate Recoveries

Project Name: Targa South Brine Pond

Work Orders : 313582, **Project ID:** 6-0107

Lab Batch #: 736185 **Sample:** 313582-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	103	100	103	70-135	
o-Terphenyl	51.4	50.0	103	70-135	

Lab Batch #: 736185 **Sample:** 313582-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	97.4	100	97	70-135	
o-Terphenyl	49.1	50.0	98	70-135	

Lab Batch #: 736185 **Sample:** 313582-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	92.3	100	92	70-135	
o-Terphenyl	46.8	50.0	94	70-135	

Lab Batch #: 736185 **Sample:** 313582-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	96.7	100	97	70-135	
o-Terphenyl	48.9	50.0	98	70-135	

Lab Batch #: 736185 **Sample:** 313582-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	99.2	100	99	70-135	
o-Terphenyl	50.1	50.0	100	70-135	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Targa South Brine Pond

Work Orders : 313582,

Project ID: 6-0107

Lab Batch #: 736185 **Sample:** 313582-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	96.3	100	96	70-135	
o-Terphenyl	48.4	50.0	97	70-135	

Lab Batch #: 736185 **Sample:** 313582-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	94.9	100	95	70-135	
o-Terphenyl	48.2	50.0	96	70-135	

Lab Batch #: 736185 **Sample:** 313582-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	93.5	100	94	70-135	
o-Terphenyl	47.2	50.0	94	70-135	

Lab Batch #: 736185 **Sample:** 313582-009 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	97.4	100	97	70-135	
o-Terphenyl	48.6	50.0	97	70-135	

Lab Batch #: 736185 **Sample:** 313582-010 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	97.7	100	98	70-135	
o-Terphenyl	49.1	50.0	98	70-135	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Targa South Brine Pond

Work Orders : 313582,

Project ID: 6-0107

Lab Batch #: 736185 **Sample:** 313582-011 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	96.8	100	97	70-135	
o-Terphenyl	48.5	50.0	97	70-135	

Lab Batch #: 736185 **Sample:** 313582-012 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	96.5	100	97	70-135	
o-Terphenyl	48.7	50.0	97	70-135	

Lab Batch #: 736185 **Sample:** 313582-013 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	96.9	100	97	70-135	
o-Terphenyl	48.7	50.0	97	70-135	

Lab Batch #: 736185 **Sample:** 313582-014 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	96.5	100	97	70-135	
o-Terphenyl	48.5	50.0	97	70-135	

Lab Batch #: 736185 **Sample:** 313582-015 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	95.6	100	96	70-135	
o-Terphenyl	48.4	50.0	97	70-135	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Targa South Brine Pond

Work Orders : 313582, **Project ID:** 6-0107

Lab Batch #: 736185 **Sample:** 313582-016 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	91.0	100	91	70-135	
o-Terphenyl	45.9	50.0	92	70-135	

Lab Batch #: 736185 **Sample:** 313582-017 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	97.1	100	97	70-135	
o-Terphenyl	49.2	50.0	98	70-135	

Lab Batch #: 736185 **Sample:** 313582-018 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	96.2	100	96	70-135	
o-Terphenyl	48.4	50.0	97	70-135	

Lab Batch #: 736185 **Sample:** 313582-019 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	96.9	100	97	70-135	
o-Terphenyl	49.3	50.0	99	70-135	

Lab Batch #: 736185 **Sample:** 313582-020 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	91.4	100	91	70-135	
o-Terphenyl	46.0	50.0	92	70-135	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Targa South Brine Pond

Work Orders : 313582, **Project ID:** 6-0107

Lab Batch #: 736185 **Sample:** 313582-020 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	111	100	111	70-135	
o-Terphenyl	55.6	50.0	111	70-135	

Lab Batch #: 736185 **Sample:** 313582-020 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	111	100	111	70-135	
o-Terphenyl	53.0	50.0	106	70-135	

Lab Batch #: 736185 **Sample:** 516858-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	107	100	107	70-135	
o-Terphenyl	52.3	50.0	105	70-135	

Lab Batch #: 736185 **Sample:** 516858-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	96.6	100	97	70-135	
o-Terphenyl	48.4	50.0	97	70-135	

Lab Batch #: 736185 **Sample:** 516858-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	115	100	115	70-135	
o-Terphenyl	55.2	50.0	110	70-135	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Targa South Brine Pond

Work Orders : 313582,

Project ID: 6-0107

Lab Batch #: 736200 **Sample:** 313582-021 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	98.8	100	99	70-135	
o-Terphenyl	49.3	50.0	99	70-135	

Lab Batch #: 736200 **Sample:** 313582-022 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	99.0	100	99	70-135	
o-Terphenyl	49.7	50.0	99	70-135	

Lab Batch #: 736200 **Sample:** 313582-023 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	122	100	122	70-135	
o-Terphenyl	58.6	50.0	117	70-135	

Lab Batch #: 736200 **Sample:** 313582-024 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	93.4	100	93	70-135	
o-Terphenyl	46.6	50.0	93	70-135	

Lab Batch #: 736200 **Sample:** 313582-025 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	97.9	100	98	70-135	
o-Terphenyl	49.2	50.0	98	70-135	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Targa South Brine Pond

Work Orders : 313582,

Project ID: 6-0107

Lab Batch #: 736200 **Sample:** 313582-026 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	98.2	100	98	70-135	
o-Terphenyl	49.1	50.0	98	70-135	

Lab Batch #: 736200 **Sample:** 313582-027 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	98.4	100	98	70-135	
o-Terphenyl	49.1	50.0	98	70-135	

Lab Batch #: 736200 **Sample:** 313582-028 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	97.6	100	98	70-135	
o-Terphenyl	48.7	50.0	97	70-135	

Lab Batch #: 736200 **Sample:** 313582-029 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	95.9	100	96	70-135	
o-Terphenyl	48.3	50.0	97	70-135	

Lab Batch #: 736200 **Sample:** 313582-030 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	97.0	100	97	70-135	
o-Terphenyl	48.7	50.0	97	70-135	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Targa South Brine Pond

Work Orders : 313582, **Project ID:** 6-0107

Lab Batch #: 736200 **Sample:** 313700-030 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	115	100	115	70-135	
o-Terphenyl	55.7	50.0	111	70-135	

Lab Batch #: 736200 **Sample:** 313700-030 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	111	100	111	70-135	
o-Terphenyl	53.8	50.0	108	70-135	

Lab Batch #: 736200 **Sample:** 516892-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	109	100	109	70-135	
o-Terphenyl	53.9	50.0	108	70-135	

Lab Batch #: 736200 **Sample:** 516892-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	97.5	100	98	70-135	
o-Terphenyl	48.9	50.0	98	70-135	

Lab Batch #: 736200 **Sample:** 516892-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	107	100	107	70-135	
o-Terphenyl	51.5	50.0	103	70-135	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Blank Spike Recovery

Project Name: Targa South Brine Pond

Work Order #: 313582 **Project ID:** 6-0107

Lab Batch #: 735838 **Sample:** 735838-1-BKS **Matrix:** Solid
Date Analyzed: 10/01/2008 **Date Prepared:** 10/01/2008 **Analyst:** LATCOR
Reporting Units: mg/kg **Batch #:** 1

Anions by EPA 300/300.1 Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
	BLANK /BLANK SPIKE RECOVERY STUDY					
Chloride	ND	10.0	ND	0	75-125	L

Lab Batch #: 735839 **Sample:** 735839-1-BKS **Matrix:** Solid
Date Analyzed: 10/01/2008 **Date Prepared:** 10/01/2008 **Analyst:** LATCOR
Reporting Units: mg/kg **Batch #:** 1

Anions by EPA 300/300.1 Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
	BLANK /BLANK SPIKE RECOVERY STUDY					
Chloride	ND	10.0	8.79	88	75-125	

Blank Spike Recovery [D] = 100*[C]/[B]
All results are based on MDL and validated for QC purposes.

BS / BSD Recoveries

Project Name: Targa South Brine Pond

Work Order #: 313582 **Project ID:** 6-0107

Analyst: ASA **Date Prepared:** 10/03/2008 **Date Analyzed:** 10/05/2008

Lab Batch ID: 736185 **Sample:** 516858-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

TPH By SW8015 Mod	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	ND	1000	860	86	1000	885	89	3	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1000	952	95	1000	983	98	3	70-135	35	

Analyst: ASA **Date Prepared:** 10/03/2008 **Date Analyzed:** 10/05/2008

Lab Batch ID: 736200 **Sample:** 516892-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

TPH By SW8015 Mod	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	ND	1000	873	87	1000	849	85	3	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1000	963	96	1000	940	94	2	70-135	35	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Form 3 - MS Recoveries

Project Name: Targa South Brine Pond

Work Order #: 313582
Lab Batch #: 735838
Project ID: 6-0107
Date Analyzed: 10/01/2008
Date Prepared: 10/01/2008
Analyst: LATCOR
QC- Sample ID: 313614-001 S
Batch #: 1
Matrix: Soil
Reporting Units: mg/kg

Inorganic Anions by EPA 300 Analytes	MATRIX / MATRIX SPIKE RECOVERY STUDY					
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	198	200	436	119	75-125	

Lab Batch #: 735839
Date Analyzed: 10/01/2008
Date Prepared: 10/01/2008
Analyst: LATCOR
QC- Sample ID: 313582-014 S
Batch #: 1
Matrix: Soil
Reporting Units: mg/kg

Inorganic Anions by EPA 300 Analytes	MATRIX / MATRIX SPIKE RECOVERY STUDY					
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	5200	2000	7610	121	75-125	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference [E] = 200*(C-A)/(C+B)
All Results are based on MDL and Validated for QC Purposes

Form 3 - MS / MSD Recoveries

Project Name: Targa South Brine Pond

Work Order # : 313582 **Project ID:** 6-0107

Lab Batch ID: 736185 **QC- Sample ID:** 313582-020 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 10/05/2008 **Date Prepared:** 10/03/2008 **Analyst:** ASA

Reporting Units: mg/kg

TPH By SW8015 Mod Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	ND	1090	951	87	1090	947	87	0	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1090	1060	97	1090	1050	96	1	70-135	35	

Lab Batch ID: 736200 **QC- Sample ID:** 313700-030 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 10/06/2008 **Date Prepared:** 10/03/2008 **Analyst:** ASA

Reporting Units: mg/kg

TPH By SW8015 Mod Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	ND	1070	957	89	1070	926	87	2	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1070	1070	100	1070	1040	97	3	70-135	35	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not ApplicableN = See Narrative, EQL = Estimated Quantitation Limit

Sample Duplicate Recovery

Project Name: Targa South Brine Pond

Work Order #: 313582

Lab Batch #: 735838 **Project ID:** 6-0107
Date Analyzed: 10/01/2008 **Date Prepared:** 10/01/2008 **Analyst:** LATCOR
QC- Sample ID: 313614-001 D **Batch #:** 1 **Matrix:** Soil
Reporting Units: mg/kg

Anions by EPA 300/300.1 Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	198	195	2	20	

Lab Batch #: 735839
Date Analyzed: 10/01/2008 **Date Prepared:** 10/01/2008 **Analyst:** LATCOR
QC- Sample ID: 313582-014 D **Batch #:** 1 **Matrix:** Soil
Reporting Units: mg/kg

Anions by EPA 300/300.1 Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	5200	5150	1	20	

Lab Batch #: 735882
Date Analyzed: 10/01/2008 **Date Prepared:** 10/01/2008 **Analyst:** WRU
QC- Sample ID: 313549-001 D **Batch #:** 1 **Matrix:** Soil
Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	5.62	2.88	64	20	F

Lab Batch #: 735894
Date Analyzed: 10/01/2008 **Date Prepared:** 10/01/2008 **Analyst:** WRU
QC- Sample ID: 313582-019 D **Batch #:** 1 **Matrix:** Soil
Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	9.74	8.55	13	20	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |
All Results are based on MDL and validated for QC purposes.

CLIENT NAME:

SITE MANAGER: Mark Larson

PROJECT NO.: 6-0107

PROJECT NAME: Tonga South Boise Pond

PAGE OF

LAB. PO # 313592

DATE	TIME	WATER	SOIL	OTHER	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	PARAMETERS/METHOD NUMBER: TPH 8015 mod.	PARAMETERS/METHOD NUMBER: Chlorides
7-30-08	1021		✓		NW@1'	1	X	X
	1026		✓		NW@3'			
	1029		✓		NW@5'			
	1033		✓		NW@10'			
	1036		✓		NW@15'			
	1042		✓		NW@20'			
	1055		✓		SW@1'			
	1058				SW@3'			
	1100				SW@5'			
	1104				SW@10'			
	1108				SW@15'			
	1111		✓		SW@20'			
	1236				SE@1'			
	1239				SE@3'			
	1242				SE@5'			
	1244				SE@10'			
	1247				SE@15'			
↓	1252		↓		SE@20'			

SAMPLED BY: (Signature) DATE: 7/30/08 TIME: 1438

RELINQUISHED BY: (Signature) DATE: 7/30/08 TIME: 1438

RECEIVED BY: (Signature) DATE: TIME:

RELINQUISHED BY: (Signature) DATE: TIME:

RECEIVED BY: (Signature) DATE: TIME:

COMMENTS:

TURNAROUND TIME NEEDED

RECEIVING LABORATORY: Inco Tech

ADDRESS:

CITY: STATE: ZIP:

CONTACT: PHONE:

RECEIVED BY: (Signature) Andrea Jones

DATE: 7/30/08 TIME: 1438

SAMPLE CONDITION WHEN RECEIVED: 3.5°C w/ labels

LA CONTACT PERSON:

CHA

LA

507 N

LAB. NUM

(LAB USE

RECEIVED BY

SAMPLE SHI

FEDEX

HAND DELI

WHITE -

YELLOW -

PINK -

GOLD -

SAMPLE TYP

DHL ANALYTICAL
2300 Double Creek Drive • Round Rock, TX 78664
Phone (512) 388-8222 • FAX (512) 388-8229

CLIENT: Larson & Associates
ADDRESS:
PHONE: FAX
DATA REPORTED TO:
ADDITIONAL REPORT COPIES TO:

DATE: 9/30/08
PO #: DHL
PROJECT LOCATION OR NAME: Ta
CLIENT PROJECT #: Bore Test 6-0107

Authorize 5% surcharge for TRRP report? ☐ Yes ☐ No

S=SOIL W=WATER A=AIR P=PAINT SL=SLUDGE OT=OTHER

Field Sample I.D.	DHL Lab #	Date	Time	Matrix	Container Type	# of Containers	PRESERVATION: HCl	HNO_3	H_2SO_4, ☐ NaOH ☐	ICE	UNPRESERVED
Center @ 1'			902	Soil	4 oz	1					
Center @ 3'			912			1					
Center @ 5'			917			1					
Center @ 10'			920			2					
Center @ 15'			923			2					
Center @ 20'			927			2					
NE @ 1'			948			2					
NE @ 3'			951			2					
NE @ 5'			954			2					
NE @ 10'			957			2					
NE @ 15'			1000			2					
NE @ 20'			1004			2					

ANALYSES: BTEX ☐ MTBE ☐ | TRPH 418.1 ☐ | TPH 1005 ☐ TPH 1006 ☐ | GASOLINE MOD 8015 ☐ | DIESEL - MOD 8015 ☐ | VOC 8260 ☐ | SVOC 8270 ☐ | PAH 8270 ☐ HOLDPAH ☐ | 8081 PESTICIDES ☐ 8151 HERBICIDES ☐ | 8082 PCBS ☐ | TCLP - METALS (RCRA) ☐ TCL | TCLP - PEST ☐ HERB ☐ | TOTAL METALS (RCR | LEAD - TOT | RCI

TOTAL

RELINQUISHED BY: (Signature) DATE/TIME 9/30/08 430 RECEIVED BY: (Signature)
RELINQUISHED BY: (Signature) DATE/TIME RECEIVED BY: (Signature)
RELINQUISHED BY: (Signature) DATE/TIME RECEIVED BY: (Signature)

☐ DHL DISPOSAL @ $5.00 each ☐ Return

TURN AROUND TIME
RUSH ☐ CALL FIRST
1 DAY ☐ CALL FIRST
2 DAY ☐
NORMAL ☑
OTHER ☐ ____

LABOR
RECEIV
CUSTO
☐ CARR
☐ APC
☐ HAND

#1	Temperature of container/ cooler?	Yes	No	5.5 °C	
#2	Shipping container in good condition?	Yes	No		
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	Not Present	
#4	Custody Seals intact on sample bottles/ container?	Yes	No	Not Present	
#5	Chain of Custody present?	Yes	No		
#6	Sample instructions complete of Chain of Custody?	Yes	No		
#7	Chain of Custody signed when relinquished/ received?	Yes	No		
#8	Chain of Custody agrees with sample label(s)?	Yes	No	ID written on Cont./ Lid	
#9	Container label(s) legible and intact?	Yes	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	Yes	No		
#11	Containers supplied by ELOT?	Yes	No		
#12	Samples in proper container/ bottle?	Yes	No	See Below	
#13	Samples properly preserved?	Yes	No	See Below	
#14	Sample bottles intact?	Yes	No		
#15	Preservations documented on Chain of Custody?	Yes	No		
#16	Containers documented on Chain of Custody?	Yes	No		
#17	Sufficient sample amount for indicated test(s)?	Yes	No	See Below	
#18	All samples received within sufficient hold time?	Yes	No	See Below	
#19	Subcontract of sample(s)?	Yes	No	Not Applicable	
#20	VOC samples have zero headspace?	Yes	No	Not Applicable	

Variance Documentation

Contact: _____ Contacted by: _____ Date/ Time: _____

Regarding: _____

_____

Corrective Action Taken:

_____

_____

_____

Check all that Apply:

- ☐ See attached e-mail/ fax
- ☐ Client understands and would like to proceed with analysis
- ☐ Cooling process had begun shortly after sampling event

Please use this method for our New Mexico projects.

If you need additional information please let me know.

Thank you,

Michelle L. Green
Larson & Associates, Inc.
507 N Marienfeld, Suite 200
Midland, TX 79701

Office: 432.687.0901
Fax: 432.687.0456
Cell: 432.934.3231

10/3/2008

Analytical Report 316263

for

Larson & Associates

Project Manager: Mark Larson

Midland/Odessa Standard List of Methods

8-0132

18-NOV-08

12600 West I-20 East Odessa, Texas 79765

Texas certification numbers:
Houston, TX T104704215-08B - Odessa/Midland, TX T104704400-08

Florida certification numbers:
Houston, TX E871002 - Miami, FL E86678 - Tampa, FL E86675
Norcross(Atlanta), GA E87429

South Carolina certification numbers:
Norcross(Atlanta), GA 98015

North Carolina certification numbers:
Norcross(Atlanta), GA 483

Houston - Dallas - San Antonio - Tampa - Miami - Latin America
Midland - Corpus Christi - Atlanta

18-NOV-08

Project Manager: **Mark Larson**
Larson & Associates
P.O. Box 50685
Midland, TX 79710

Reference: XENCO Report No: **316263**
Midland/Odessa Standard List of Methods
Project Address:

Mark Larson:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 316263. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 316263 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Brent Barron, II
Odessa Laboratory Manager

Sample Cross Reference 316263

Larson & Associates, Midland, TX

Midland/Odessa Standard List of Methods

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-1	W	Oct-30-08 14:20		316263-001
MW-2	W	Oct-30-08 15:20		316263-002

Version: 1.014

Certificate of Analysis Summary 316263
Larson & Associates, Midland, TX

Project Name: Midland/Odessa Standard List of Methods

Project Id: 8-0132
Contact: Mark Larson
Project Location:

Date Received in Lab: Oct-31-08 08:56 am
Report Date: 18-NOV-08
Project Manager: Brent Barron, II

Analysis Requested							
	Lab Id:	316263-001		316263-002			
	Field Id:	MW-1		MW-2			
	Depth:						
	Matrix:	WATER		WATER			
	Sampled:	Oct-30-08 14:20		Oct-30-08 15:20			
Alkalinity by SM2320B	***Extracted:***						
	Analyzed:	Nov-07-08 11:00		Nov-07-08 11:00			
	Units/RL:	mg/L	RL	mg/L	RL		
Alkalinity, Total (as CaCO3)		156	4.00	208	4.00		
Anions by EPA 300/300.1	***Extracted:***						
	Analyzed:	Nov-01-08 16:09		Nov-01-08 16:09			
	Units/RL:	mg/L	RL	mg/L	RL		
Chloride		190	10.0	824	25.0		
Sulfate		511	10.0	303	25.0		
BTEX by EPA 8021B	***Extracted:***	Nov-05-08 11:00		Nov-05-08 11:00			
	Analyzed:	Nov-05-08 12:41		Nov-05-08 13:03			
	Units/RL:	mg/L	RL	mg/L	RL		
Benzene		ND	0.0010	ND	0.0010		
Toluene		ND	0.0020	ND	0.0020		
Ethylbenzene		ND	0.0010	ND	0.0010		
m,p-Xylenes		ND	0.0020	ND	0.0020		
o-Xylene		ND	0.0010	ND	0.0010		
Total Xylenes		ND		ND			
Total BTEX		ND		ND			
Mercury by EPA 7470A	***Extracted:***	Nov-06-08 07:00		Nov-06-08 07:00			
	Analyzed:	Nov-06-08 11:30		Nov-06-08 11:32			
	Units/RL:	mg/L	RL	mg/L	RL		
Mercury		ND	0.0001	ND	0.0001		
TDS by SM2540C	***Extracted:***						
	Analyzed:	Nov-03-08 15:50		Nov-03-08 15:50			
	Units/RL:	mg/L	RL	mg/L	RL		
Total dissolved solids		1330	5.00	1800	5.00		

Since 1990 Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America - Atlanta - Corpus Christi

Version: 1.014

Brent Barron
Odessa Laboratory Director

Certificate of Analysis Summary 316263
Larson & Associates, Midland, TX

Project Name: Midland/Odessa Standard List of Methods

Project Id: 8-0132
Contact: Mark Larson
Project Location:

Date Received in Lab: Oct-31-08 08:56 am
Report Date: 18-NOV-08
Project Manager: Brent Barron, II

Analysis Requested							
	Lab Id:	316263-001		316263-002			
	Field Id:	MW-1		MW-2			
	Depth:						
	Matrix:	WATER		WATER			
	Sampled:	Oct-30-08 14:20		Oct-30-08 15:20			
Total RCRA Metals by SW6020A	***Extracted:***	Nov-04-08 10:45		Nov-04-08 10:45			
	Analyzed:	Nov-04-08 16:09		Nov-04-08 16:14			
	Units/RL:	mg/L	RL	mg/L	RL		
Antimony		ND	0.006	ND	0.006		
Arsenic		0.017	0.002	0.016	0.002		
Barium		0.699	0.005	0.409	0.005		
Beryllium		0.0012	0.0010	0.0010	0.0010		
Cadmium		ND	0.001	ND	0.001		
Calcium		464	0.500	282	0.500		
Chromium		0.025	0.003	0.022	0.003		
Lead		0.014	0.002	0.010	0.002		
Manganese		0.255	0.003	0.198	0.003		
Nickel		0.037	0.005	0.027	0.005		
Potassium		13.6	0.300	12.9	0.300		
Selenium		0.014	0.003	0.018	0.003		
Silver		ND	0.002	ND	0.002		
Sodium		183	0.500	302	5.00		

Brent Barron
Odessa Laboratory Director

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the MQL and above the SQL.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

Form 2 - Surrogate Recoveries

Project Name: Midland/Odessa Standard List of Methods

Work Orders : 316263,

Project ID: 8-0132

Lab Batch #: 739349 **Sample:** 316263-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0333	0.0300	111	80-120	
4-Bromofluorobenzene	0.0182	0.0300	61	80-120	**

Lab Batch #: 739349 **Sample:** 316263-001 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0278	0.0300	93	80-120	
4-Bromofluorobenzene	0.0303	0.0300	101	80-120	

Lab Batch #: 739349 **Sample:** 316263-001 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0272	0.0300	91	80-120	
4-Bromofluorobenzene	0.0306	0.0300	102	80-120	

Lab Batch #: 739349 **Sample:** 316263-002 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0330	0.0300	110	80-120	
4-Bromofluorobenzene	0.0185	0.0300	62	80-120	**

Lab Batch #: 739349 **Sample:** 518744-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0272	0.0300	91	80-120	
4-Bromofluorobenzene	0.0300	0.0300	100	80-120	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Version: 1.014

Form 2 - Surrogate Recoveries

Project Name: Midland/Odessa Standard List of Methods

Work Orders : 316263,

Project ID: 8-0132

Lab Batch #: 739349 **Sample:** 518744-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0330	0.0300	110	80-120	
4-Bromofluorobenzene	0.0204	0.0300	68	80-120	**

Lab Batch #: 739349 **Sample:** 518744-1-BSD / BSD **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0276	0.0300	92	80-120	
4-Bromofluorobenzene	0.0319	0.0300	106	80-120	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Version: 1.014

Blank Spike Recovery

Project Name: Midland/Odessa Standard List of Methods

Work Order #: 316263 **Project ID:** 8-0132

Lab Batch #: 739485 **Sample:** 739485-1-BKS **Matrix:** Water
Date Analyzed: 11/07/2008 **Date Prepared:** 11/07/2008 **Analyst:** LATCOR
Reporting Units: mg/L **Batch #:** 1

Alkalinity by SM2320B Analytes	Blank Result [A]	BLANK /BLANK SPIKE RECOVERY STUDY Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Alkalinity, Total (as CaCO3)	ND	200	172	86	80-120	

Lab Batch #: 738894 **Sample:** 738894-1-BKS **Matrix:** Water
Date Analyzed: 11/01/2008 **Date Prepared:** 11/01/2008 **Analyst:** LATCOR
Reporting Units: mg/L **Batch #:** 1

Anions by EPA 300/300.1 Analytes	Blank Result [A]	BLANK /BLANK SPIKE RECOVERY STUDY Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Chloride	ND	10.0	9.11	91	80-120	
Sulfate	ND	10.0	8.70	87	80-120	

Lab Batch #: 739192 **Sample:** 518557-1-BKS **Matrix:** Water
Date Analyzed: 11/04/2008 **Date Prepared:** 11/04/2008 **Analyst:** HAT
Reporting Units: mg/L **Batch #:** 1

Total RCRA Metals by SW6020A Analytes	Blank Result [A]	BLANK /BLANK SPIKE RECOVERY STUDY Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Antimony	ND	0.020	0.022	110	75-125	
Arsenic	ND	0.050	0.051	102	75-125	
Barium	ND	0.050	0.051	102	75-125	
Beryllium	ND	0.020	0.022	110	75-125	
Cadmium	ND	0.020	0.021	105	75-125	
Calcium	ND	3.00	3.04	101	75-125	
Chromium	ND	0.050	0.051	102	75-125	
Lead	ND	0.050	0.049	98	75-125	
Manganese	ND	0.050	0.051	102	75-125	
Nickel	ND	0.050	0.050	100	75-125	
Potassium	ND	2.00	2.01	101	75-125	
Selenium	ND	0.050	0.051	102	75-125	
Silver	ND	0.020	0.020	100	75-125	
Sodium	ND	3.00	3.00	100	75-125	

Blank Spike Recovery [D] = 100*[C]/[B]
All results are based on MDL and validated for QC purposes.

Version: 1.014

BS / BSD Recoveries

Project Name: Midland/Odessa Standard List of Methods

Work Order #: 316263 **Project ID:** 8-0132

Analyst: ASA **Date Prepared:** 11/05/2008 **Date Analyzed:** 11/05/2008

Lab Batch ID: 739349 **Sample:** 518744-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	ND	0.1000	0.0998	100	0.1	0.0995	100	0	70-125	25	
Toluene	ND	0.1000	0.1029	103	0.1	0.1057	106	3	70-125	25	
Ethylbenzene	ND	0.1000	0.0995	100	0.1	0.1059	106	6	71-129	25	
m,p-Xylenes	ND	0.2000	0.2238	112	0.2	0.2394	120	7	70-131	25	
o-Xylene	ND	0.1000	0.1031	103	0.1	0.1099	110	6	71-133	25	

Analyst: DAT **Date Prepared:** 11/06/2008 **Date Analyzed:** 11/06/2008

Lab Batch ID: 739295 **Sample:** 518706-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

Mercury by EPA 7470A	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Mercury	ND	0.0050	0.0050	100	0.005	0.0050	100	0	75-125	20	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Version: 1.014

Form 3 - MS Recoveries

Project Name: Midland/Odessa Standard List of Methods

Work Order #: 316263
Lab Batch #: 738894
Project ID: 8-0132
Date Analyzed: 11/01/2008
Date Prepared: 11/01/2008
Analyst: LATCOR
QC- Sample ID: 316263-001 S
Batch #: 1
Matrix: Water
Reporting Units: mg/L

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	190	200	515	163	80-120	X
Sulfate	511	200	788	139	80-120	X

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference [E] = 200*(C-A)/(C+B)
All Results are based on MDL and Validated for QC Purposes

Version: 1.014

Form 3 - MS / MSD Recoveries

Project Name: Midland/Odessa Standard List of Methods

Work Order # : 316263 **Project ID:** 8-0132

Lab Batch ID: 739349 **QC- Sample ID:** 316263-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 11/05/2008 **Date Prepared:** 11/05/2008 **Analyst:** ASA

Reporting Units: mg/L

BTEX by EPA 8021B Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	ND	0.1000	0.0920	92	0.1000	0.0953	95	3	70-125	25	
Toluene	ND	0.1000	0.0940	94	0.1000	0.0974	97	3	70-125	25	
Ethylbenzene	ND	0.1000	0.0913	91	0.1000	0.0942	94	3	71-129	25	
m,p-Xylenes	ND	0.2000	0.2049	102	0.2000	0.2116	106	4	70-131	25	
o-Xylene	ND	0.1000	0.0955	96	0.1000	0.0992	99	3	71-133	25	

Lab Batch ID: 739295 **QC- Sample ID:** 316372-002 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 11/06/2008 **Date Prepared:** 11/06/2008 **Analyst:** DAT

Reporting Units: mg/L

Mercury by EPA 7470A Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Mercury	ND	0.0050	0.0045	90	0.0050	0.0046	92	2	75-125	20	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not ApplicableN = See Narrative, EQL = Estimated Quantitation Limit

Version: 1.014

Form 3 - MS / MSD Recoveries

Project Name: Midland/Odessa Standard List of Methods

Work Order # : 316263 **Project ID:** 8-0132

Lab Batch ID: 739192 **QC- Sample ID:** 315914-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 11/04/2008 **Date Prepared:** 11/04/2008 **Analyst:** HAT

Reporting Units: mg/L

Total RCRA Metals by SW6020A Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Antimony	0.020	0.020	0.042	110	0.020	0.043	115	4	85-115	20	
Arsenic	0.198	0.050	0.235	74	0.050	0.240	84	13	85-115	20	X
Barium	0.099	0.050	0.150	102	0.050	0.155	112	9	85-115	20	
Beryllium	ND	0.0200	0.0190	95	0.0200	0.0190	95	0	85-115	20	
Cadmium	ND	0.020	0.017	85	0.020	0.017	85	0	85-115	20	
Calcium	124	3.00	124	0	3.00	126	67	200	85-115	20	XF
Chromium	ND	0.050	0.053	106	0.050	0.052	104	2	85-115	20	
Lead	ND	0.050	0.052	104	0.050	0.052	104	0	85-115	20	
Manganese	0.041	0.050	0.089	96	0.050	0.090	98	2	85-115	20	
Nickel	0.008	0.050	0.054	92	0.050	0.053	90	2	85-115	20	
Potassium	19.8	2.00	21.2	70	2.00	21.7	95	30	85-115	20	XF
Selenium	ND	0.050	0.038	76	0.050	0.037	74	3	85-115	20	X
Silver	ND	0.020	0.017	85	0.020	0.017	85	0	85-115	20	
Sodium	213	3.00	206	0	3.00	210	0	NC	85-115	20	X

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not ApplicableN = See Narrative, EQL = Estimated Quantitation Limit

Version: 1.014

Sample Duplicate Recovery

Project Name: Midland/Odessa Standard List of Methods

Work Order #: 316263

Lab Batch #: 739485 **Project ID:** 8-0132

Date Analyzed: 11/07/2008 **Date Prepared:** 11/07/2008 **Analyst:** LATCOR

QC- Sample ID: 316263-001 D **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

Alkalinity by SM2320B	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Alkalinity, Total (as CaCO3)	156	160	3	20	

Lab Batch #: 738894

Date Analyzed: 11/01/2008 **Date Prepared:** 11/01/2008 **Analyst:** LATCOR

QC- Sample ID: 316263-001 D **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

Anions by EPA 300/300.1	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	190	190	0	20	
Sulfate	511	513	0	20	

Lab Batch #: 739048

Date Analyzed: 11/03/2008 **Date Prepared:** 11/03/2008 **Analyst:** LATCOR

QC- Sample ID: 316263-001 D **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

TDS by SM2540C	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Total dissolved solids	1330	1370	3	30	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |
All Results are based on MDL and validated for QC purposes.

Version: 1.014

Sample Duplicate Recovery

Project Name: Midland/Odessa Standard List of Methods

Work Order #: 316263

Lab Batch #: 739192 **Project ID:** 8-0132

Date Analyzed: 11/04/2008 **Date Prepared:** 11/04/2008 **Analyst:** HAT

QC- Sample ID: 315914-001 D **Batch #:** 1 **Matrix:** Water

Reporting Units: mg/L

Total RCRA Metals by SW6020A	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Antimony	0.020	0.017	16	20	
Arsenic	0.198	0.186	6	20	
Barium	0.099	0.095	4	20	
Beryllium	ND	ND	NC	20	
Cadmium	ND	ND	NC	20	
Calcium	124	117	6	20	
Chromium	ND	ND	NC	20	
Lead	ND	ND	NC	20	
Manganese	0.041	0.037	10	20	
Nickel	0.008	0.007	13	20	
Potassium	19.8	18.5	7	20	
Selenium	ND	ND	NC	20	
Silver	ND	ND	NC	20	
Sodium	213	199	7	20	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |
All Results are based on MDL and validated for QC purposes.

Version: 1.014

CHAIN—OF—CUSTODY RECORD

Larson & Associates, Inc. Environmental Consultants
Fax: 432-687-0456
432-687-0901
507 N. Marienfeld, Ste. 202 • Midland, TX 79701

CLIENT NAME:

SITE MANAGER: M. Larson

PROJECT NO.: 8-0132

PROJECT NAME:

PAGE ___ OF ___

LAB. PO #

DATE	TIME	WATER	SOIL	OTHER	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	BTEX	Metals (Need to Filter)	Anions	Cations	TDS	LAB I.D. NUMBER (LAB USE ONLY)	REMARKS (I.E. FILTERED, UNFILTERED, PRESERVED, UNPRESERVED, GRAB COMPOSITE)
10-30	1420	✓			MW-1	6	/	/	/	/	/	316263	Unfiltered
1-30	1520	✓			MW-2	6	/	/	/	/	/	-02	Unfiltered

SAMPLED BY: (Signature) Don L McGinnis DATE: 10-30-08 TIME:

RELINQUISHED BY: (Signature) DATE: TIME:

RECEIVED BY: (Signature) DATE: TIME:

RELINQUISHED BY: (Signature) [signature] DATE: 10-31-08 TIME: 0900

RECEIVED BY: (Signature) [signature] 1.5°C DATE: 10/31/08 TIME: 8:56

SAMPLE SHIPPED BY: (Circle) FEDEX BUS AIRBILL #: HAND DELIVERED UPS OTHER:

COMMENTS:

TURNAROUND TIME NEEDED: Standard

WHITE – RECEIVING LAB
YELLOW – RECEIVING LAB (TO BE RETURNED TO LA AFTER RECEIPT)
PINK – PROJECT MANAGER
GOLD – QA/QC COORDINATOR

RECEIVING LABORATORY:
ADDRESS:
CITY: STATE: ZIP:
CONTACT: PHONE:

RECEIVED BY: (Signature)
DATE: TIME:

SAMPLE CONDITION WHEN RECEIVED: 1.5°C 6 unp 2-25-L poly

LA CONTACT PERSON:

SAMPLE TYPE: Waters

unp 4-1L poly

[redacted]

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Larson & Assoc.

Date/ Time: 10/31/05 5 54

Lab ID # : 314263

Initials: GLG

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	Yes	No	1.5 °C	
#2	Shipping container in good condition?	Yes	No		
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	Not Present	
#4	Custody Seals intact on sample bottles/ container?	Yes	No	Not Present	
#5	Chain of Custody present?	Yes	No		
#6	Sample instructions complete of Chain of Custody?	Yes	No		
#7	Chain of Custody signed when relinquished/ received?	Yes	No		
#8	Chain of Custody agrees with sample label(s)?	Yes	No	ID written on Cont./ Lid	
#9	Container label(s) legible and intact?	Yes	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	Yes	No		
#11	Containers supplied by ELOT?	Yes	No		
#12	Samples in proper container/ bottle?	Yes	No	See Below	
#13	Samples properly preserved?	Yes	No	See Below	
#14	Sample bottles intact?	Yes	No		
#15	Preservations documented on Chain of Custody?	Yes	No		
#16	Containers documented on Chain of Custody?	Yes	No		
#17	Sufficient sample amount for indicated test(s)?	Yes	No	See Below	
#18	All samples received within sufficient hold time?	Yes	No	See Below	
#19	Subcontract of sample(s)?	Yes	No	Not Applicable	
#20	VOC samples have zero headspace?	Yes	No	Not Applicable	

Variance Documentation

Contact: _____ Contacted by: _____ Date/ Time: _____

Regarding: _____

Corrective Action Taken: _____

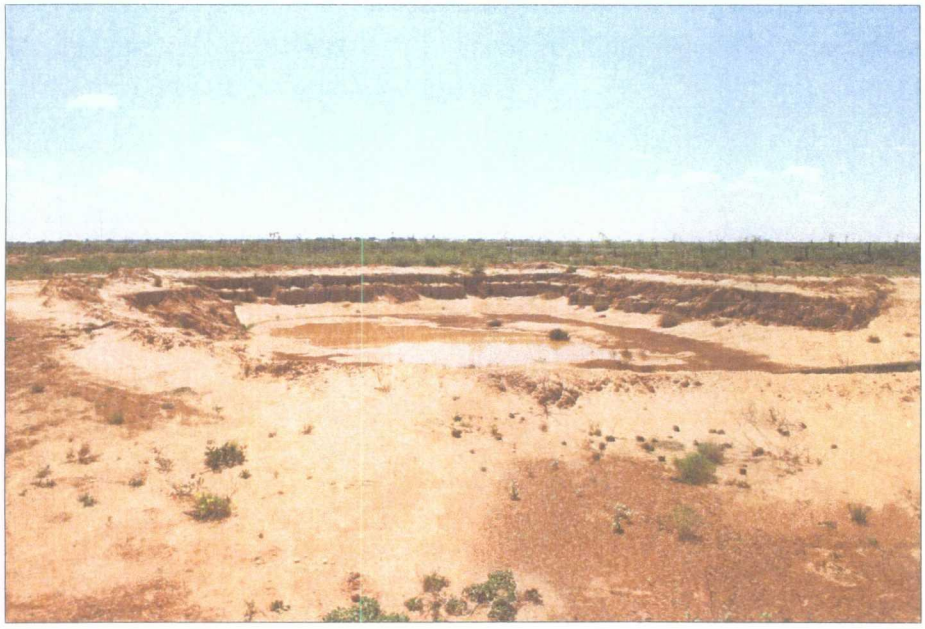
Check all that Apply:

- ☐ See attached e-mail/ fax
- ☐ Client understands and would like to proceed with analysis
- ☐ Cooling process had begun shortly after sampling event

APPENDIX C

Photographs

Leak Location
Looking West



Leak Location
Looking Southwest

Targa Midstream Services, L.P.
1RP-952
North 10" Pipeline Release
Unit B, (NW/4, NE/4) SEC 22, T-21-S, R-37-E
LEA COUNTY, NM
N 32° 28' 05.3"
W 103° 08' 52.5"

Larson & Associates, Inc.
Environmental Consultants

Leak Location
Looking Northwest

Leak Location
Looking Northeast

Targa Midstream Services, L.P.
1RP-952
North 10" Pipeline Release
Unit B, (NW/4, NE/4) SEC 22, T-21-S, R-37-E
LEA COUNTY, NM
N 32° 28' 05.3"
W 103° 08' 52.5"

Larson & Associates, Inc.
Environmental Consultants

APPENDIX D

Initial and Final C-141

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised March 17, 1999

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: **Dynegy Midstream Services**	Contact: **Roger Holland**
Address **P.O. Box 1929, Eunice, New Mexico 88231**	Telephone No. **505-631-7094**
Facility Name **North 10" #210010**	Facility Type **10 inch steel pipeline**
Surface Owner: **C.A. Bettis**	Mineral Owner / Lease No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County: Lea
C	**22**	**T21S**	**R37E**					**Lat. 32° 28' 05.36"N** **Lon. 103° 08' 52.41"W**

NATURE OF RELEASE

Type of Release **Natural Gas Pipeline Fluids**	Volume of Release **<5 barrels**	Volume Recovered **None**
Source of Release **10 inch steel pipeline with a normal daily flow rate of 1,000 mcf and normal operating pressure of 12 p.s.i .**	Date and Hour of Occurrence **August 16, 2002**	Date and Hour of Discovery
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. **NA**	

If a Watercourse was Impacted, Describe Fully.*
NA

Describe Cause of Problem and Remedial Action Taken.*
10 inch steel pipeline. **Release was due to corrosion. A line repair clamp was installed.**

Describe Area Affected and Cleanup Action Taken.*
Release Area: ~400 square feet. Soil contaminated above the NMOCD Remedial Guidelines will be remediated. Remedial Goals: TPH 8015m = 1,000 mg/Kg, Benzene = 10 mg/Kg, and BTEX, i.e., the mass sum of Benzene, Ethylbenzene, Toluene, and Xylenes = 50 mg/Kg.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature:	**OIL CONSERVATION DIVISION**	
Printed Name: Roger Holland	Approved by District Supervisor:	
E-mail Address: Roger.Holland@Dynegy.com	Approval Date:	Expiration Date:
Title:	Conditions of Approval:	Attached ☐
Date: Phone: 505-631-7094		

* Attach Additional Sheets If Necessary

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company: Targa Midstream Services, L.P.	Contact: Don Embrey
Address: 6 Desta Drive, Suite 3300, Midland, TX 79705	Telephone No.: (432) 688-0555
Facility Name: North 10" Pipeline	Facility Type: Natural Gas Pipeline (not associated with a well)

Surface Owner: Charlie Bettis	Mineral Owner	Lease No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
B	22	22S	37E					Lea

Latitude: N 32° 28' 05.36" Longitude: W 103° 08' 52.41"

NATURE OF RELEASE

Type of Release: Natural Gas Fluids	Volume of Release: <5 barrels	Volume Recovered: None
Source of Release: Pipeline 10 inch steel pipeline with a normal daily flow rate of 1,000 mcf and normal operating pressure of 12 p.s.i.	Date and Hour of Occurrence: Unknown August 16, 2002	Date and Hour of Discovery: Unknown
Was Immediate Notice Given? ☐ Yes ☒ No ☐ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.* N/A

Describe Cause of Problem and Remedial Action Taken.* Release was due to corrosion of 10 inch steel pipeline. Line was exposed, blinded and taken out of service. Excavated soil was piled north of location.

Describe Area Affected and Cleanup Action Taken.* Area measuring approximately 11,400 ft^2 excavated to average depth of 7.5 feet and maximum depth of 11 feet below natural grade. Contaminated soil piled on north side of location. Soil borings and samples were collected to assess vertical and horizontal limits of release. Vertical limits determined with 2 monitoring wells installed up gradient (northwest) and down gradient (southeast) confirmed groundwater impaction from chloride (824 mg/L). Propose 3 additional monitoring wells to complete vadose/groundwater delineation, haul contaminated soil to commercial disposal facility (Sundance Disposal Services, Inc.), line excavation bottom with impermeable barrier (compacted clay or 20-mill thickness polyethylene liner), fill excavation with clean soil, crown and seed to landowner requirements.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: 	OIL CONSERVATION DIVISION
Printed Name: Mark J. Larson (Consultant to Targa Midstream Services, L.P.)	Approved by District Supervisor:
Title: Sr. Project Manager / President, Larson and Associates, Inc.	Approval Date: / Expiration Date:
E-mail Address: mark@laenvironmental.com	Conditions of Approval: / Attached ☐
Date: 11/21/2008 Phone: (432) 687-0901	

* Attach Additional Sheets If Necessary