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**AGWMR**

**11/01/2011**



**2010 ANNUAL GROUNDWATER MONITORING  
REPORT**

**LOVINGTON PADDOCK SITE**

**LATITUDE: N 32° 51' 33.93" LONGITUDE: W 103° 18' 30.32"**

**LOVINGTON, LEA COUNTY, NEW MEXICO**



**Matthew P. Hudson**  
Remediation Project  
Manager

**Upstream Business Unit**  
Chevron Environmental  
Management Company  
1400 Smith St  
Room 07076  
Houston, TX 77002  
Tel 713 372 9207  
mHUDSON@chevron.com

November 1, 2011

Mr. Glenn von Gonten  
Oil Conservation Division  
New Mexico Energy, Minerals and Natural Resources Department  
1200 South Francis Drive  
Santa Fe, New Mexico 87505

**RE: 2010 Annual Reports**

Dear Glenn:

Please find enclosed one hardcopy and one CD of the following annual reports:

**2010 Annual Groundwater Monitoring Report**  
**Lovington Paddock Site, Lea County, NM**

*1R 272*

**2010 Annual Groundwater Monitoring Report**  
**Mark Owen #9 Reserve Pit, Lea County, NM AP-57**

**2010 Annual Groundwater Monitoring Report**  
**Cooper-Jal Unit South Injection Station, Lea County, NM 1R289**

**2010 Annual Groundwater Monitoring Report**  
**J.R. Philips Tank Battery No. 2, Lea County, NM 1R255**

**2010 Annual Groundwater Monitoring Report**  
**G.L. Erwin "A&B" Federal NCT-2 Tank Battery, Lea County, NM 1R254**

**2010 Annual Groundwater Monitoring Report**  
**Eunice South Gas Plant, Lea County, NM GW-003**

Should you have any questions or concerns, please do not hesitate to contact me at (713) 372-9207.

Sincerely,

Matthew P. Hudson

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## LOVINGTON PADDOCK SITE – 2010 ANNUAL GROUNDWATER MONITORING REPORT

LOVINGTON PADDOCK SITE  
LATITUDE: N 32° 51' 33.93" LONGITUDE: W 103° 18' 30.32"  
LOVINGTON, LEA COUNTY, NEW MEXICO

**Prepared For:**

Mr. Matt Hudson  
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY  
UPSTREAM BUSINESS UNIT  
1400 Smith Street, Room 07062  
Houston, Texas 770025

**Prepared by:**  
Conestoga-Rovers  
& Associates

SEPTEMBER 19, 2011  
REF. NO. 073020 (1)

2135 South Loop 250 West  
Midland, Texas 79703  
Office: (432) 686-0086  
Fax: (432) 686-0186

web:  
<http://www.CRAworld.com>

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## 1.0 INTRODUCTION

This report is a review of groundwater monitoring activities and operation of the bio-sparge system at the Lovington Paddock Groundwater Remediation Site (hereafter referred to as the "Site") in Lea County, New Mexico. Conestoga-Rovers & Associates (CRA) has prepared this report on behalf of Chevron Environmental Management Company (CEMC). Data presented in this report were collected by Stantec during two semiannual monitoring events conducted on January 25-27, 2010 and July 9 and 17, 2010. The report also includes data recorded by Stantec during periodic site visits to operate and maintain the bio-sparge system on the site. CRA did not collect the groundwater gauging and sampling data; therefore, CRA cannot be responsible for the quality of this information.

UL 40" - 42"

The Site is located in the S/2-SE/4-Section 1-T17S-R36E about 6.2 miles southeast of Lovington in Lea County, New Mexico. The Site lies at latitude N 32° 51' 33" and longitude W 103° 18' 30" (FIGURE 1). There are two active pipelines on the Site. The Site is owned by the City of Lovington, New Mexico.

## 2.0 HISTORY OF ACTIVITIES AT THE SITE

In June 1998, the initial assessment of an abandoned pit by Highlander Environmental Corporation (Highlander) included the installation of five soil borings (BH-1 through BH-5). Borings BH-1 through BH-4 were installed to 31 feet below ground surface (bgs) around the edge of an abandoned pit, and BH-5 was installed to 71' bgs in the bottom of the pit. Hydrocarbons were detected in samples of soil from BH-1 and BH-5. In July 1998 and August 1998, sludge material and soils were excavated approximately two feet deep, where a hard caliche layer was encountered. During October and November 1998, monitoring wells MW-1 through MW-6 were installed to approximately 75 feet bgs. Monitoring wells MW-7, MW-8, and MW-9 were installed to about 75 feet bgs in March 1999. Based on groundwater sampling results, two separate plumes were identified. One plume appeared to have been associated with the abandoned pit, and one plume was up-gradient of the pit. Soil borings BH-6 through BH-11 were installed to 63' bgs to investigate the plume up-gradient of the abandoned pit. Of this group of six borings, only in BH-11 were hydrocarbons detected. Soil boring BH-11 was drilled out to 76' bgs and completed as monitoring well MW-10. Dissolved-hydrocarbons were detected in groundwater from monitor wells MW-3, MW-5, MW-6, and MW-9. Light non-aqueous phase liquids (LNAPL) was found in monitor wells MW-4 and MW-10.

In March 2001, Environmental Plus, Inc. (EPI), on behalf of EOTT Energy, LLC, uncovered 300 feet of EOTT pipeline to look for previously-repaired or replaced line. Based on EPI's observations, no previously-repaired or replaced lines were found. EPI also stated that the area that showed staining during drilling activities was moist with water and had no petroleum hydrocarbon odor. As indicated in EPI's report, a representative from Chevron's field office (formerly Pure Resources, LP) was on-site during the excavation of the pipeline.

In 2001, the 40-acre tract on which the Site is located was purchased by AST West from the City of Lovington. AST West installed a well near their business and south of the site. Goff Dairies installed four water wells to the east and south of the site. The wells were designed to pump roughly 600 to 800 gallons per minute. Pumping from these wells appears to have lowered the water table and changed its direction. Monitoring wells MW-1 through MW-10 went dry apparently due to the dewatering of the aquifer.

Arcadis installed 13 monitoring wells, MW-A through MW-J and MW-L through MW-N, in June 2003 to replace monitoring wells MW-1 through MW-10. LNAPL has not been found in monitoring wells MW-A through MW-N. The replacement wells ranged in depth from 104 feet to 204 feet.

To remediate the petroleum hydrocarbon concentrations in groundwater and soil, a pilot low flow biosparge well (BW-1) was installed in November 2003 by Arcadis. Additionally, four monitoring wells (MW-O, MW-P, MW-Q, and MW-D2) were installed by Arcadis to determine the extent of the petroleum hydrocarbon plume.

A 90-day pilot test was conducted to measure the effectiveness of the biosparge well. The biosparge well was used to inject air into the saturated and vadose zones at a rate of approximately 5 cubic feet per minute (cfm). The purpose of the air injection was to

stimulate aerobic biodegradation of petroleum hydrocarbons by indigenous microorganisms in the saturated and vadose zones. The biosparging process showed significant success during the 90-day pilot test.

Arcadis installed two additional biosparge wells (BW-2 and BW-3) at the Site in May 2005. A 180-day study was conducted subsequently to monitor the effectiveness of the three biosparge wells. During the study, groundwater and soil vapor sampling was conducted, a radius of influence of approximately 85 feet was observed, and further down-gradient movement of the petroleum hydrocarbon plume was prevented. Results were summarized in the report "180 Day Expanded Biosparge Study" dated March 3, 2006.

The biosparge study was continued by SECOR International Incorporated (SECOR) for a total of 700 days after acquiring the Site from Arcadis. Activities conducted from July 2006 through May 2007 were summarized in the "Biosparging Assessment Report" dated June 22, 2007. Discussions regarding system effectiveness triggered a detailed review of the data. SECOR concluded that assumptions made by Arcadis regarding the quantification of oxygen consumption in biomass production were incorrect, and could not verify that the system was having the desired effect on the aquifer.

SECOR installed two additional groundwater monitoring wells (MW-S and MW-T) in July 2006. In April 2007, MW-T was converted to a biosparge well due to failure of well BW-2. Three additional groundwater monitoring wells (MW-U, MW-V, and MW-W) were installed to better evaluate the biosparge system.

SECOR continued groundwater assessment activities and operation and maintenance of the bio-sparge system through 2007. Stantec continued groundwater assessment activities and operation and maintenance of the bio-sparge system throughout 2008, 2009, and 2010. Activities conducted by Stantec during 2010 are the subject of this report.

### 3.0 REGULATORY FRAMEWORK

The New Mexico Oil Conservation Division of the New Mexico Energy, Minerals, and Natural Resources Department (NMOCD) has regulatory jurisdiction over corrective actions being conducted at the Lovington Paddock Site. Corrective actions follow guidance given by the NMOCD in *Guidelines for Remediation of Leaks, Spills, and Releases* (August 13, 1993). These guidelines require remediation of groundwater to the human health standards of the New Mexico Water Quality Control Commission set forth in New Mexico Administrative Code (NMAC) 20.6.2.2103A that are shown in the following table.

Analyte	NMWQCC Standard for Groundwater (mg/L)
Benzene <sup>1</sup>	0.01
Toluene <sup>1</sup>	0.75
Ethylbenzene <sup>1</sup>	0.75
Total xylenes <sup>1</sup>	0.62

Notes:

- 1) <sup>1</sup>New Mexico Water Quality Control Commission (NMWQCC) Human Health Standards per NMAC 20.6.2.3103A.

## 4.0 GROUNDWATER MONITORING

The Lovington Paddock Site includes 23 monitor wells and 3 biosparge wells. They are shown on the Site Details Map in FIGURE 2. The Site was monitored during two semi-annual events in 2010. The first event took place from January 25 through January 27. Only two monitor wells, MW-A and MW-T were not gauged and sampled during that event. Biosparge wells BW-2 and BW-3 were not gauged or sampled during the first event.

The second event was conducted from July 6 through July 13. All three biosparge wells, and all monitor wells except MW-A were gauged. Only BW-3 and MW-A were not sampled during the second event.

### 4.1 FIELD METHODOLOGY

Water levels were measured to the nearest one-hundredth of a foot on the first day of each monitoring event with an electronic oil-water interface probe. Water levels were measured from on the top of the casing in each well at permanent reference points on the casing or at the north edge of the casing if no permanent reference point had been marked. No free-phase petroleum was detected in any well.

Each well was purged of at least one well-volume. Turbidity, temperature, oxidation-reduction potential (ORP), pH, conductivity, and dissolved oxygen (DO) were monitored during purging. Purging continued until at least three of these parameters were within 10% of each other for 3 consecutive measurements. A sample was then collected, labeled, recorded on a laboratory chain-of-custody form, and on ice in a cooler to maintain a temperature of approximately 40° (4°C). Field equipment was decontaminated with an Alconox™ wash and distilled water rinse before beginning field activities and between wells. Samples of groundwater were shipped to Lancaster Laboratories in Lancaster, Pennsylvania for analyses. Proper chain-of-custody documentation was maintained throughout sampling and analytical processes.

Samples collected during 2010 were analyzed for dissolved benzene, toluene, ethylbenzene, and xylenes (BTEX) according to analytical method SW846-8021B. Samples were analyzed for total petroleum in the gasoline range (TPH-GRO) and TPH in the diesel range (TPH-DRO) according to analytical method SW846-8015B.

### 4.2 GROUNDWATER GAUGING AND ANALYTICAL RESULTS

Fluid level measurements collected during 2010 are shown in TABLE I. Surveyed tops of casings of wells are shown in feet above mean sea level (famsl). Elevations of the top of the saturated zone are also shown in feet above mean sea level (famsl). The range of elevations on the potentiometric surface during the first semi-annual monitoring event on January 25 was from 3717.01 famsl to 3725.41 famsl. The average elevation on the potentiometric surface during that event was 3721.27 famsl. The map of elevations of the potentiometric surface during the first semi-annual monitoring event is shown in

FIGURE 3. It indicates that the direction of flow of groundwater at that time was toward the East. The magnitude of the gradient was 0.0095 ft./ft.

The range of elevations on the potentiometric surface during the second monitoring event on July 6 was from 3706.94 to 3722.60 famsl. The average elevation on the potentiometric surface was 3715.60 famsl. The map of elevations of the potentiometric surface on July 6, the second semi-annual monitoring event, is shown in FIGURE 4. This map indicates that the direction of flow of groundwater was east-southeast. Its magnitude was approximately 0.0152 ft./ft.

Directions of the gradient on the potentiometric surface have changed dramatically over time at the Lovington Paddock Site due to pumping from the AST well and wells used by the Goff Dairy, WW-1 through WW-4. Directions of the gradients shown on FIGURES 3 and 4 suggest that recent pumping occurred at WW-2, WW-3 and WW-4. Directions of the gradients changed slightly from east to east-southeast between January and July. Magnitude of the gradients changed as well—from 0.0095 ft./ft. to 0.0152 ft./ft. from January to July, respectively. Comparison of gauging data from the two monitoring events in 2010 indicates that the potentiometric surface decreased in elevation in all 21 wells that were measured during both semi-annual monitoring events. The range of decline was 2.64 ft. to 10.07 ft. The average decline among those wells was 5.84 feet.

A cumulative table of results of all analyses of groundwater samples collected at the Lovington Paddock Site since 2005 is shown in Table II. Chemicals of Concern (COCs) are shown in columns across the top of the table. Appropriate standards are shown below the names of analytes. Analytical results for the first monitoring event, January 25-27, 2010, are shown in FIGURE 5. Samples of groundwater were collected from all wells during the first semi-annual event except BW-2, BW-3, MW-A, and MW-T. Analytical results of the second monitoring event, July 6-13, 2010, are shown in FIGURE 6. Concentrations that exceeded the appropriate standards have been shaded in yellow on FIGURES 5 and 6. Copies of signed analytical reports and chains-of-custody are attached in APPENDIX A. Trends of concentrations of chemicals of concern over time are shown in APPENDIX B. Dissolved benzene was present in wells BW-2, MW-B, MW-H, MW-I, and MW-T at concentrations exceeding the New Mexico Water Quality Control Commission (NMWQCC) standard of 0.01 mg/L and showed increasing trends. The remaining wells have concentrations of dissolved benzene below the NMWQCC standard and at stable or decreasing trends. The other BTEX components, toluene, ethylbenzene, and xylenes, were not present in concentrations exceeding NMWQCC standards during 2010.

## 5.0 GROUNDWATER REMEDIATION AND PERFORMANCE

To remediate the petroleum hydrocarbon concentrations in groundwater and soil, a pilot low-flow biosparge well (BW-1) was installed in November 2003 by Arcadis. A 90-day pilot test was conducted to measure the effectiveness of the biosparge well. The biosparge well was used to inject air into the saturated and vadose zones at a rate of approximately 5 cubic feet per minute (cfm). The purpose of the air injection was to stimulate aerobic biodegradation of petroleum hydrocarbons by indigenous microorganisms in the saturated and vadose zones. The biosparging process showed significant success during the 90-day pilot test. Arcadis installed two additional biosparge wells (BW-2 and BW-3) at the Site in May 2005. A 180-day study was conducted subsequently to monitor the effectiveness of the three biosparge wells. During the study, groundwater and soil vapor sampling was conducted, a radius of influence of approximately 85 feet was observed, and further down-gradient movement of the petroleum hydrocarbon plume was prevented. SECOR installed two additional groundwater monitoring wells (MW-S and MW-T) in July 2006. In April 2007, MW-T was converted to a biosparge well due to failure of well BW-2. Three additional groundwater monitoring wells (MW-U, MW-V, and MW-W) were installed to better evaluate the biosparge system. SECOR continued groundwater assessment activities and operation and maintenance of the bio-sparge system through 2007. Stantec continued groundwater assessment activities and operation and maintenance of the biosparge system throughout 2008, 2009, and 2010.

The biosparge system was operated by Stantec from January into October of 2010. One visit to the site was made each month to monitor the operation of the compressors, perform periodic maintenance upon them and associated conveyance lines, and to record various physical parameters of the system useful in monitoring and evaluating its performance. Notes taken during each of the monthly site visits are shown in APPENDIX C. The compressor at BW-1 did not operate during 2010. The compressor at BW-2 (servicing MW-T since 2007) operated approximately 135 days during the year. The compressor at BW-3 was operated approximately 60 days during 2010.

## 6.0 PLANNED ACTIVITIES

Semi-annual gauging and sampling events for 2011 were completed in January and July. Groundwater levels were measured in all monitor wells and biosparge wells where groundwater was present. Samples were also collected from all wells for analyses of BTEX, TPH-GRO and TPH-DRO where sufficient groundwater was present.

The biosparge system has been repaired as needed, operated, and monitored during 2011. Weekly site visits are being conducted to monitor the operation, maintenance, and performance of the biosparge system.

## 7.0 SUMMARY OF FINDINGS

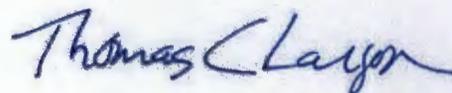
Based on groundwater monitoring and sampling activities performed at the Site, CRA presents the following summary of findings:

- Groundwater monitoring was conducted by Stantec on a semi-annual basis during 2010. The first monitoring event occurred on January 25-27. Only two monitor wells, MW-A and MW-T were not gauged and sampled during that event. Biosparge wells BW-2 and BW-3 were not gauged or sampled during the first event. Figure 3 indicates that the direction of flow of groundwater at that time was toward the East with a magnitude of the gradient of 0.0095 ft./ft.
- The second semi-annual event was conducted from July 6 through July 13. All three biosparge wells and all monitor wells except MW-A were gauged. Only BW-3 and MW-A were not sampled during this event. FIGURE 4 indicates that the direction of flow of groundwater was east-southeast. The magnitude of the gradient was approximately 0.0152 ft./ft.
- The elevation of the potentiometric surface declined by an average of 5.84 feet between groundwater monitoring events in 2010.
- Trends of concentrations of dissolved-phase benzene were above the NMWQCC standard of 0.01 mg/L and increasing during 2010 in BW-2, MW-B, MW-H, MW-I, and MW-T. Detectable levels of dissolved-phase hydrocarbons were also found in MW-C, MW-F, MW-G, MW-M, and MW-S; however, these were below the NMWQCC standard and showed stable or declining trends.
- Toluene, ethylbenzene, and xylenes were not present in concentrations exceeding NMWQCC standards during 2010.
- The biosparge compressor at BW-2 (servicing MW-T since 2007) operated approximately 135 days during 2010. The compressor at BW-3 was operated approximately 60 days during 2010.
- Semi-annual gauging and sampling events were completed in January and July of 2011.
- The biosparge system has repaired as needed, operated, and monitored during 2011. Weekly site visits are being conducted to monitor the operation, maintenance, and performance of the biosparge system.

All of which is Respectfully Submitted,  
CONESTOGA-ROVERS & ASSOCIATES, INC.

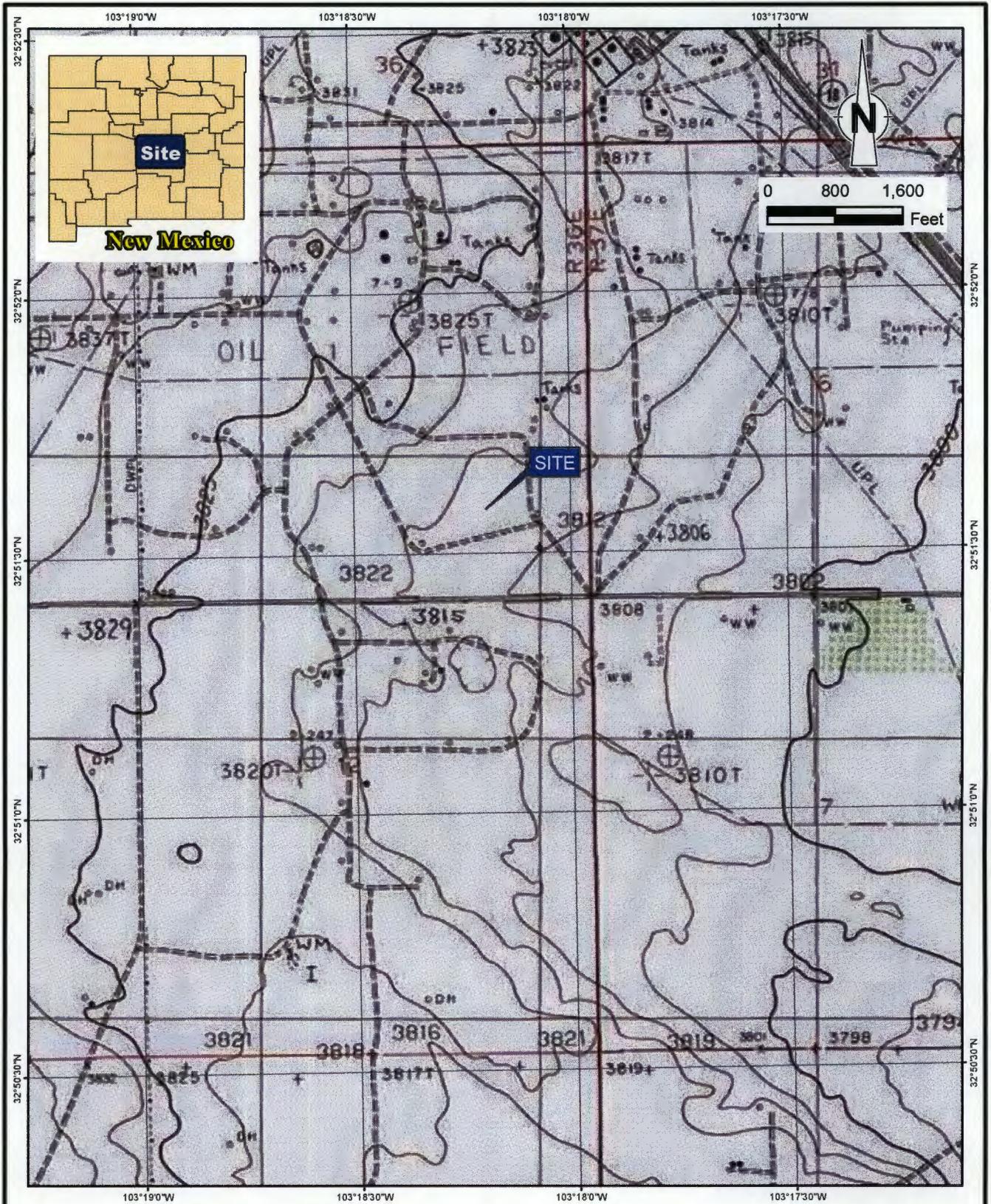


John P. Schnable, P.G.  
Project Manager



Thomas C. Larson, P.G.  
Senior Project Manager

**FIGURES**



RE: USGS 7.5 Minute Topographic Maps.

figure 1  
VICINITY MAP  
LOVINGTON PADDOCK GROUNDWATER REMEDIATION SITE  
LEA COUNTY, NEW MEXICO  
*Chevron Environmental Management Company*





**LEGEND:**

- MONITORING WELL LOCATION
- GOFF DAIRY WELL LOCATION
- ⊗ PLUGGED AND ABANDONED MONITOR WELL
- FORMER SOIL BORING LOCATION
- ✦ SOIL BORING LOCATION (JULY 25, 2006)(B-)
- ✦ SOIL BORING LOCATION (APRIL 10-11, 2008)(SB-)
- \*— FENCE
- P — UNDERGROUND PETROLEUM PIPELINE

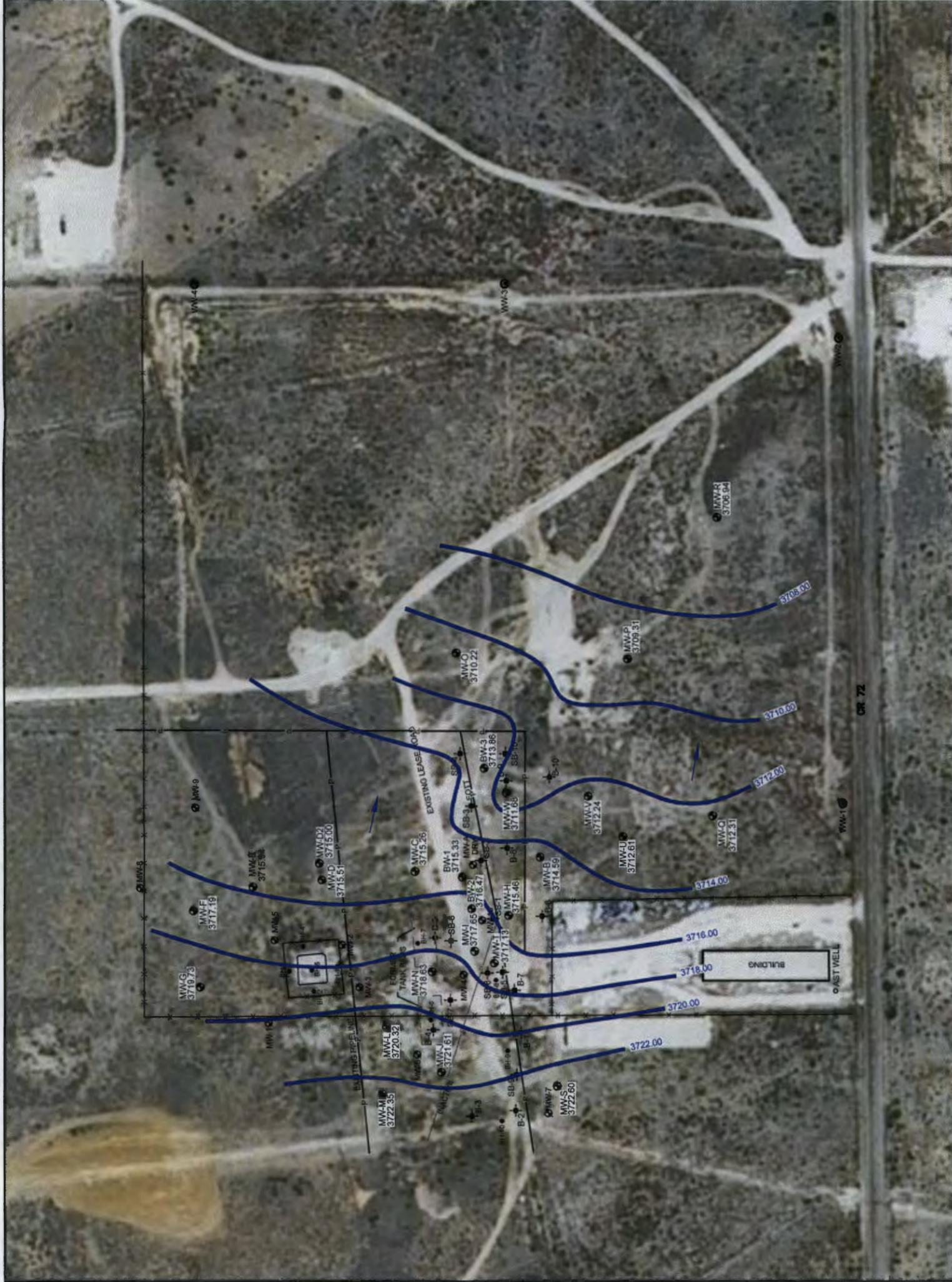
figure 2  
 SITE DETAILS MAP  
 LOVINGTON PADDOCK GROUNDWATER REMEDIATION SITE  
 LEA COUNTY, NEW MEXICO  
 Chevron Environmental Management Company





figure 3  
 MAP OF THE POTENTIOMETRIC SURFACE - JANUARY 25, 2010  
 LOVINGTON PADDOCK GROUNDWATER REMEDIATION SITE  
 LEA COUNTY, NEW MEXICO  
 Chevron Environmental Management Company





**LEGEND:**

- MONITORING WELL LOCATION
- GOFF DAIRY WELL LOCATION
- ⊗ PLUGGED AND ABANDONED MONITOR WELL
- FORMER SOIL BORING LOCATION
- ⊕ SOIL BORING LOCATION (JULY 25, 2006) (B-)
- ⊕ SOIL BORING LOCATION (APRIL 10-11, 2008) (SB-)
- FENCE
- UNDERGROUND PETROLEUM PIPELINE
- 3712.31 GROUNDWATER ELEVATION, FEET AMSL
- 3712.00 GROUNDWATER POTENTIOMETRIC CONTOUR, FEET AMSL
- APPARENT GROUNDWATER FLOW DIRECTION

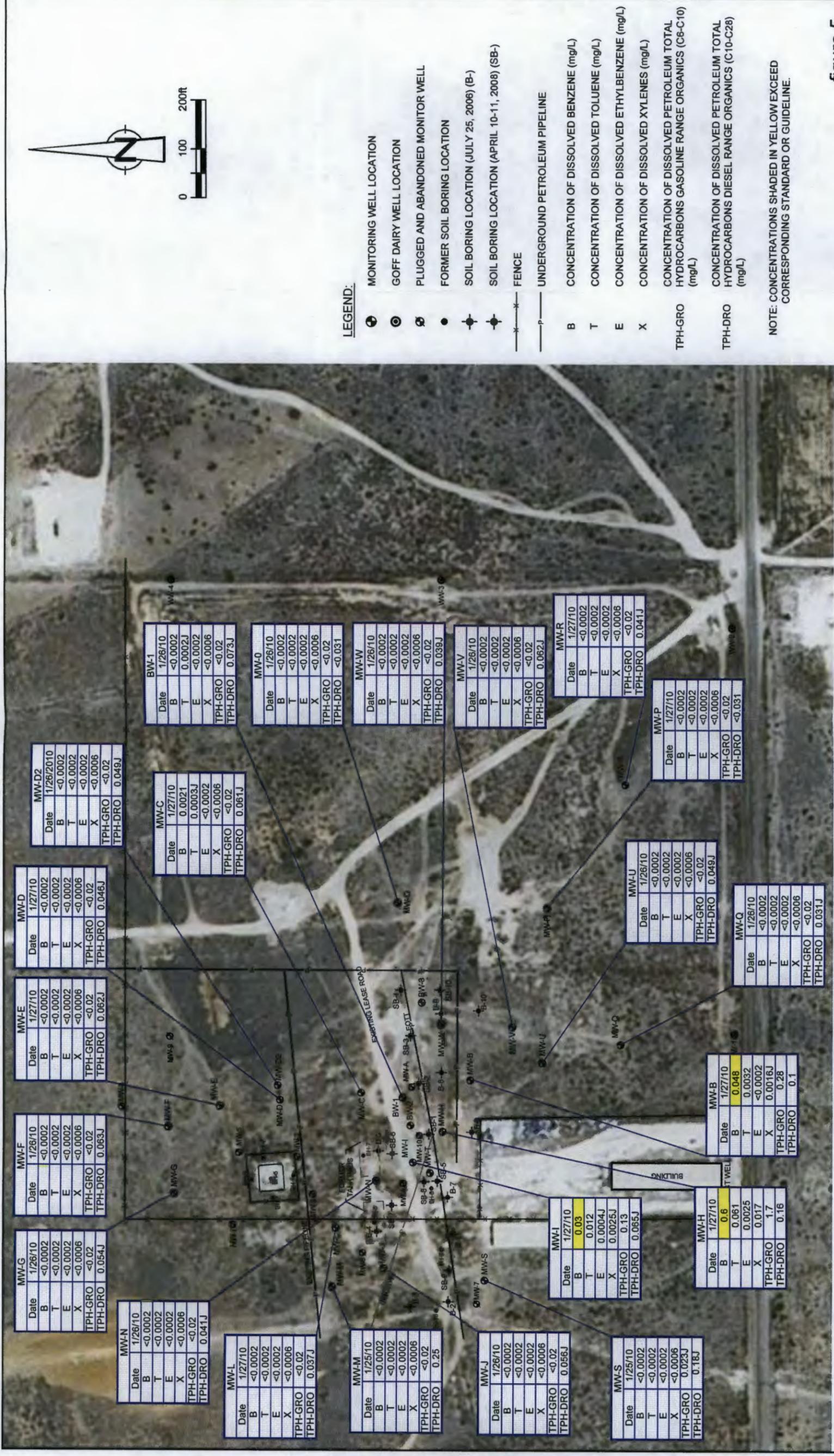
figure 4  
 MAP OF THE POTENTIOMETRIC SURFACE - JULY 6, 2010  
 LOVINGTON PADDOCK GROUNDWATER REMEDIATION SITE  
 LEA COUNTY, NEW MEXICO  
 Chevron Environmental Management Company





MAP OF CONCENTRATIONS OF DISSOLVED HYDROCARBONS - JANUARY 25-27, 2010  
 LOVINGTON PADDOCK GROUNDWATER REMEDIATION SITE  
 LEA COUNTY, NEW MEXICO  
 Chevron Environmental Management Company

figure 5

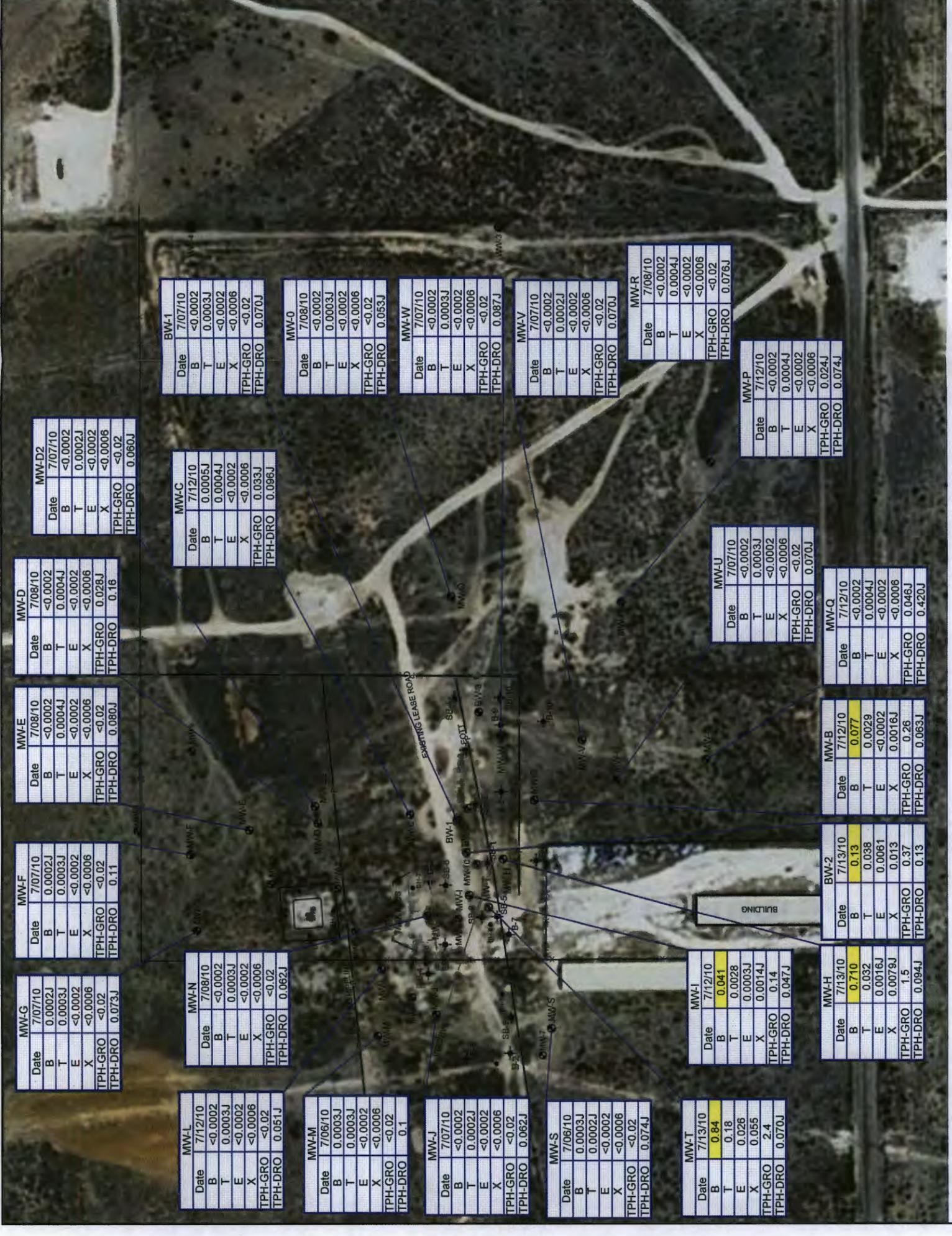




**LEGEND:**

- MONITORING WELL LOCATION
- GOFF DAIRY WELL LOCATION
- ⊗ PLUGGED AND ABANDONED MONITOR WELL
- FORMER SOIL BORING LOCATION
- ⊕ SOIL BORING LOCATION (JULY 25, 2006) (B-)
- ⊖ SOIL BORING LOCATION (APRIL 10-11, 2008) (SB-)
- FENCE
- UNDERGROUND PETROLEUM PIPELINE
- B CONCENTRATION OF DISSOLVED BENZENE (mg/L)
- T CONCENTRATION OF DISSOLVED TOLUENE (mg/L)
- E CONCENTRATION OF DISSOLVED ETHYLBENZENE (mg/L)
- X CONCENTRATION OF DISSOLVED XYLENES (mg/L)
- TPH-GRO CONCENTRATION OF DISSOLVED TOTAL PETROLEUM HYDROCARBONS GASOLINE RANGE ORGANICS (C6-C10) (mg/L)
- TPH-DRO CONCENTRATION OF DISSOLVED TOTAL PETROLEUM HYDROCARBONS DIESEL RANGE ORGANICS (C10-C28) (mg/L)

NOTE: CONCENTRATIONS SHADED IN YELLOW EXCEED CORRESPONDING STANDARD OR GUIDELINE.



MAP OF CONCENTRATIONS OF DISSOLVED HYDROCARBONS - JULY 6-13, 2010  
 LOVINGTON PADDOCK GROUNDWATER REMEDIATION SITE  
 LEA COUNTY, NEW MEXICO  
 Chevron Environmental Management Company



**TABLE I**  
**CUMULATIVE SUMMARY OF FLUID LEVELS**  
**LOVINGTON PADDOCK**  
**LEA COUNTY, NEW MEXICO**

Well ID	Date Measured	TOC Elevation (famsl)	Depth to Water (fbtoc)	Total Depth (fbtoc)	Elevation of Potentiometric Surface (famsl)
BW-1	06/16/05	3816.14	86.75	128.04	3729.39
BW-1	07/27/05	3816.14	92.32	128.04	3723.82
BW-1	09/21/05	3816.14	90.41	128.04	3725.73
BW-1	12/09/05	3816.14	88.38	128.04	3727.76
BW-1	05/09/07	3816.14	N/A <sup>1</sup>	128.04	--
BW-1	06/13/08	3816.14	94.25	128.04	3721.89
BW-1	09/17/08	3816.14	97.51	128.04	3718.63
BW-1	01/26/09	3816.14	91.08	128.04	3725.06
BW-1	07/09/09	3816.14	98.83	128.04	3717.31
BW-1	01/25/10	3816.14	95.08	118.80	3721.06
BW-1	07/06/10	3816.14	100.81	118.80	3715.33
BW-2	06/16/05	3816.57	86.38	123.04	3730.19
BW-2	07/27/05	3816.57	90.70	123.04	3725.87
BW-2	09/21/05	3816.57	89.99	123.04	3726.58
BW-2	12/09/05	3816.57	88.21	123.04	3728.36
BW-2	05/09/07	3816.57	N/A <sup>1</sup>	123.04	--
BW-2	06/13/08	3816.57	95.16	123.04	3721.41
BW-2	09/17/08	3816.57	96.92	123.04	3719.65
BW-2	01/26/09	3816.57	91.13	123.04	3725.44
BW-2	07/09/09	3816.57	98.47	123.04	3718.10
BW-2	07/06/10	3816.57	100.10	122.16	3716.47
BW-3	06/16/05	3815.82	87.39	123.09	3728.43
BW-3	07/27/05	3815.82	92.72	123.09	3723.10
BW-3	09/22/05	3815.82	91.07	123.09	3724.75
BW-3	12/09/05	3815.82	88.46	123.09	3727.36
BW-3	05/09/07	3815.82	N/A <sup>1</sup>	123.09	--
BW-3	09/17/08	3815.82	98.57	123.09	3717.25
BW-3	01/26/09	3815.82	92.44	123.09	3723.38
BW-3	07/09/09	3815.82	100.44	123.09	3715.38
BW-3	07/06/10	3815.82	101.96	120.30	3713.86
MW-A	06/16/05	3816.04	86.75	100.51	3729.29
MW-A	07/25/05	3816.04	DRY	100.51	DRY
MW-A	09/19/05	3816.04	90.41	100.51	3725.63
MW-A	12/05/05	3816.04	88.38	100.51	3727.66
MW-A	05/09/07	3816.04	DRY	100.51	DRY
MW-A	07/01/08				
MW-A	07/06/10	3816.04	DRY	99.03	DRY
MW-B	06/16/05	3816.09	87.15	108.11	3728.94
MW-B	07/25/05	3816.09	92.55	108.11	3723.54

**TABLE I**  
**CUMULATIVE SUMMARY OF FLUID LEVELS**  
**LOVINGTON PADDOCK**  
**LEA COUNTY, NEW MEXICO**

Well ID	Date Measured	TOC Elevation (famsl)	Depth to Water (fbtoc)	Total Depth (fbtoc)	Elevation of Potentiometric Surface (famsl)
MW-B	09/19/05	3816.09	90.82	108.11	3725.27
MW-B	12/05/05	3816.09	88.73	108.11	3727.36
MW-B	05/09/07	3816.09	91.78	108.11	3724.31
MW-B	10/02/07	3816.09	92.94	108.11	3723.15
MW-B	06/13/08	3816.09	95.05	108.11	3721.04
MW-B	09/15/08	3816.09	98.39	108.11	3717.70
MW-B	01/26/09	3816.09	91.36	108.11	3724.73
MW-B	07/09/09	3816.09	99.76	108.11	3716.33
MW-B	01/25/10	3816.09	95.21	107.65	3720.88
MW-B	07/06/10	3816.09	101.50	107.65	3714.59
MW-C	06/15/05	3817.04	87.83	108.05	3729.21
MW-C	07/25/05	3817.04	92.53	108.05	3724.51
MW-C	09/19/05	3817.04	91.54	108.05	3725.50
MW-C	12/05/05	3817.04	89.50	108.05	3727.54
MW-C	05/09/07	3817.04	92.56	108.05	3724.48
MW-C	10/02/07	3817.04	93.66	108.05	3723.38
MW-C	06/13/08	3817.04	95.21	108.05	3721.83
MW-C	09/15/08	3817.04	98.75	108.05	3718.29
MW-C	01/26/09	3817.04	92.10	108.05	3724.94
MW-C	07/09/09	3817.04	99.78	108.05	3717.26
MW-C	01/25/10	3817.04	96.09	106.35	3720.95
MW-C	07/06/10	3817.04	101.78	106.35	3715.26
MW-D	03/02/05	3816.08	82.68	107.92	3733.40
MW-D	09/19/05	3816.08	90.48	107.92	3725.60
MW-D	12/05/05	3816.08	88.44	107.92	3727.64
MW-D	05/09/07	3816.08	91.49	107.92	3724.59
MW-D	09/27/07	3816.08	92.62	107.92	3723.46
MW-D	06/13/08	3816.08	94.43	107.92	3721.65
MW-D	09/15/08	3816.08	97.49	107.92	3718.59
MW-D	01/26/09	3816.08	91.08	107.92	3725.00
MW-D	07/09/09	3816.08	98.82	107.92	3717.26
MW-D	01/25/10	3816.08	95.14	106.90	3720.94
MW-D	07/06/10	3816.08	100.57	106.90	3715.51
MW-E	09/19/05	3816.31	90.39	107.99	3725.92
MW-E	12/05/05	3816.31	88.40	107.99	3727.91
MW-E	05/09/07	3816.31	91.47	107.99	3724.84
MW-E	09/27/07	3816.31	92.60	107.99	3723.71
MW-E	07/01/08	3816.31	95.54	107.99	3720.77
MW-E	09/15/08	3816.31	97.21	107.99	3719.10
MW-E	01/26/09	3816.31	91.11	107.99	3725.20

**TABLE I**  
**CUMULATIVE SUMMARY OF FLUID LEVELS**  
**LOVINGTON PADDOCK**  
**LEA COUNTY, NEW MEXICO**

Well ID	Date Measured	TOC Elevation (famsl)	Depth to Water (fbtoc)	Total Depth (fbtoc)	Elevation of Potentiometric Surface (famsl)
MW-E	07/09/09	3816.31	98.81	107.99	3717.50
MW-E	01/25/10	3816.31	95.20	107.01	3721.11
MW-E	07/06/10	3816.31	100.37	107.01	3715.94
MW-F	09/19/05	3816.69	89.86	108.09	3726.83
MW-F	12/05/05	3816.69	88.09	108.09	3728.60
MW-F	05/09/07	3816.69	91.21	108.09	3725.48
MW-F	09/27/07	3816.69	92.26	108.09	3724.43
MW-F	07/01/08	3816.69	93.93	108.09	3722.76
MW-F	09/15/08	3816.69	96.49	108.09	3720.20
MW-F	01/26/09	3816.69	91.10	108.09	3725.59
MW-F	07/09/09	3816.69	98.00	108.09	3718.69
MW-F	01/25/10	3816.69	94.89	106.70	3721.80
MW-F	07/06/10	3816.69	99.50	106.70	3717.19
MW-G	09/19/05	3818.23	89.46	108.05	3728.77
MW-G	12/05/05	3818.23	88.18	108.05	3730.05
MW-G	05/09/07	3818.23	91.19	108.05	3727.04
MW-G	10/01/07	3818.23	92.08	108.05	3726.15
MW-G	07/01/08	3818.23	95.54	108.05	3722.69
MW-G	09/15/08	3818.23	95.70	108.05	3722.53
MW-G	01/26/09	3818.23	91.48	108.05	3726.75
MW-G	07/09/09	3818.23	96.72	108.05	3721.51
MW-G	01/25/10	3818.23	95.01	106.55	3723.22
MW-G	07/06/10	3818.23	98.50	106.55	3719.73
MW-H	06/15/05	3816.74	86.46	108.10	3730.28
MW-H	07/25/05	3816.74	91.05	108.10	3725.69
MW-H	09/19/05	3816.74	90.15	108.10	3726.59
MW-H	12/05/05	3816.74	88.30	108.10	3728.44
MW-H	05/09/07	3816.74	91.30	108.10	3725.44
MW-H	10/02/07	3816.74	92.37	108.10	3724.37
MW-H	06/13/08	3816.74	93.94	108.10	3722.80
MW-H	09/15/08	3816.74	97.28	108.10	3719.46
MW-H	01/26/09	3816.74	91.14	108.10	3725.60
MW-H	07/09/09	3816.74	98.30	108.10	3718.44
MW-H	01/25/10	3816.74	94.91	105.53	3721.83
MW-H	07/06/10	3816.74	101.28	105.53	3715.46
MW-I	06/15/05	3816.94	85.90	108.07	3731.04
MW-I	07/25/05	3816.94	89.94	108.07	3727.00
MW-I	09/19/05	3816.94	89.50	108.07	3727.44
MW-I	12/05/05	3816.94	87.88	108.07	3729.06

**TABLE I**  
**CUMULATIVE SUMMARY OF FLUID LEVELS**  
**LOVINGTON PADDOCK**  
**LEA COUNTY, NEW MEXICO**

Well ID	Date Measured	TOC Elevation (famsl)	Depth to Water (fbtoc)	Total Depth (fbtoc)	Elevation of Potentiometric Surface (famsl)
MW-I	05/09/07	3816.94	90.83	108.07	3726.11
MW-I	10/01/07	3816.94	91.82	108.07	3725.12
MW-I	06/13/08	3816.94	93.03	108.07	3723.91
MW-I	09/15/08	3816.94	96.38	108.07	3720.56
MW-I	01/26/09	3816.94	90.78	108.07	3726.16
MW-I	07/09/09	3816.94	97.19	108.07	3719.75
MW-I	01/25/10	3816.94	94.52	103.79	3722.42
MW-I	07/06/10	3816.94	99.29	103.79	3717.65
MW-J	09/19/05	3817.66	87.24	108.05	3730.42
MW-J	12/05/05	3817.66	86.23	108.05	3731.43
MW-J	05/09/07	3817.66	89.07	108.05	3728.59
MW-J	10/01/07	3817.66	89.86	108.05	3727.80
MW-J	06/13/08	3817.66	90.51	108.05	3727.15
MW-J	09/15/08	3817.66	93.44	108.05	3724.22
MW-J	01/26/09	3817.66	89.58	108.05	3728.08
MW-J	07/09/09	3817.66	93.95	108.05	3723.71
MW-J	01/25/10	3817.66	93.03	105.97	3724.63
MW-J	07/06/10	3817.66	96.05	105.97	3721.61
MW-L	09/19/05	3818.35	86.95	108.07	3731.40
MW-L	12/05/05	3818.35	87.80	108.07	3730.55
MW-L	05/09/07	3818.35	90.70	108.07	3727.65
MW-L	10/01/07	3818.35	91.54	108.07	3726.81
MW-L	06/13/08	3818.35	92.29	108.07	3726.06
MW-L	09/15/08	3818.35	95.36	108.07	3722.99
MW-L	01/26/09	3818.35	91.03	108.07	3727.32
MW-L	07/09/09	3818.35	95.76	108.07	3722.59
MW-L	01/25/10	3818.35	94.57	107.20	3723.78
MW-L	07/06/10	3818.35	98.03	107.20	3720.32
MW-M	09/19/05	3817.88	86.95	108.04	3730.93
MW-M	12/05/05	3817.88	86.06	108.04	3731.82
MW-M	05/09/07	3817.88	88.89	108.04	3728.99
MW-M	10/01/07	3817.88	89.63	108.04	3728.25
MW-M	06/13/08	3817.88	90.18	108.04	3727.70
MW-M	09/15/08	3817.88	92.97	108.04	3724.91
MW-M	01/26/09	3817.88	89.49	108.04	3728.39
MW-M	07/09/09	3817.88	93.50	108.04	3724.38
MW-M	01/25/10	3817.88	92.89	108.13	3724.99
MW-M	07/06/10	3817.88	95.53	108.13	3722.35
MW-N	06/16/05	3817.70	86.25	108.08	3731.45

**TABLE I**  
**CUMULATIVE SUMMARY OF FLUID LEVELS**  
**LOVINGTON PADDOCK**  
**LEA COUNTY, NEW MEXICO**

Well ID	Date Measured	TOC Elevation (famsl)	Depth to Water (fbtoc)	Total Depth (fbtoc)	Elevation of Potentiometric Surface (famsl)
MW-N	07/25/05	3817.70	89.85	108.08	3727.85
MW-N	09/19/05	3817.70	89.73	108.08	3727.97
MW-N	12/05/05	3817.70	88.19	108.08	3729.51
MW-N	05/09/07	3817.70	91.17	108.08	3726.53
MW-N	10/02/07	3817.70	92.12	108.08	3725.58
MW-N	06/13/08	3817.70	93.14	108.08	3724.56
MW-N	09/15/08	3817.70	96.44	108.08	3721.26
MW-N	01/26/09	3817.70	91.24	108.08	3726.46
MW-N	07/09/09	3817.70	97.16	108.08	3720.54
MW-N	01/25/10	3817.70	94.94	108.67	3722.76
MW-N	07/06/10	3817.70	99.07	108.67	3718.63
MW-O	07/25/05	3814.74	96.58	113.05	3718.16
MW-O	09/19/05	3814.74	93.71	113.05	3721.03
MW-O	12/05/05	3814.74	90.80	113.05	3723.94
MW-O	05/09/07	3814.74	93.97	113.05	3720.77
MW-O	10/02/07	3814.74	95.44	113.05	3719.30
MW-O	06/13/08	3814.74	92.82	113.05	3721.92
MW-O	09/15/08	3814.74	102.30	113.05	3712.44
MW-O	01/26/09	3814.74	92.41	113.05	3722.33
MW-O	07/09/09	3814.74	103.69	113.05	3711.05
MW-O	01/25/10	3814.74	97.04	112.47	3717.70
MW-O	07/06/10	3814.74	104.52	112.47	3710.22
MW-P	06/15/05	3814.24	88.88	113.05	3725.36
MW-P	07/25/05	3814.24	96.83	113.05	3717.41
MW-P	09/19/05	3814.24	92.73	113.05	3721.51
MW-P	12/05/05	3814.24	89.84	113.05	3724.40
MW-P	05/09/07	3814.24	93.07	113.05	3721.17
MW-P	09/27/07	3814.24	94.58	113.05	3719.66
MW-P	06/13/08	3814.24	98.30	113.05	3715.94
MW-P	09/15/08	3814.24	101.73	113.05	3712.51
MW-P	01/26/09	3814.24	91.62	113.05	3722.62
MW-P	07/09/09	3814.24	103.99	113.05	3710.25
MW-P	01/25/10	3814.24	96.05	112.90	3718.19
MW-P	07/06/10	3814.24	104.93	112.90	3709.31
MW-Q	07/25/05	3814.23	96.81	108.07	3717.42
MW-Q	09/19/05	3814.23	90.00	108.07	3724.23
MW-Q	12/05/05	3814.23	87.53	108.07	3726.70
MW-Q	05/09/07	3814.23	90.43	108.07	3723.80
MW-Q	09/27/07	3814.23	92.23	108.07	3722.00
MW-Q	06/13/08	3814.23	98.61	108.07	3715.62

**TABLE I**  
**CUMULATIVE SUMMARY OF FLUID LEVELS**  
**LOVINGTON PADDOCK**  
**LEA COUNTY, NEW MEXICO**

Well ID	Date Measured	TOC Elevation (famsl)	Depth to Water (fbtoc)	Total Depth (fbtoc)	Elevation of Potentiometric Surface (famsl)
MW-Q	09/15/08	3814.23	98.08	108.07	3716.15
MW-Q	01/26/09	3814.23	90.52	108.07	3723.71
MW-Q	07/09/09	3814.23	103.51	108.07	3710.72
MW-Q	01/25/10	3814.23	94.13	108.41	3720.10
MW-Q	07/06/10	3814.23	101.92	108.41	3712.31
MW-R	09/19/05	3810.89	91.19	152.93	3719.70
MW-R	12/05/05	3810.89	87.71	152.93	3723.18
MW-R	05/09/07	3810.89	90.83	152.93	3720.06
MW-R	09/27/07	3810.89	92.83	152.93	3718.06
MW-R	06/13/08	3810.89	98.18	152.93	3712.71
MW-R	09/15/08	3810.89	100.76	152.93	3710.13
MW-R	01/26/09	3810.89	88.57	152.93	3722.32
MW-R	07/09/09	3810.89	105.25	152.93	3705.64
MW-R	01/25/10	3810.89	93.88	152.29	3717.01
MW-R	07/06/10	3810.89	103.95	152.29	3706.94
MW-S	05/09/07	3816.52	87.07	122.73	3729.45
MW-S	10/01/07	3816.52	87.85	122.73	3728.67
MW-S	06/13/08	3816.52	88.58	122.73	3727.94
MW-S	09/15/08	3816.52	91.27	122.73	3725.25
MW-S	01/26/09	3816.52	87.74	122.73	3728.78
MW-S	07/09/09	3816.52	91.86	122.73	3724.66
MW-S	01/25/10	3816.52	91.11	122.77	3725.41
MW-S	07/06/10	3816.52	93.92	122.77	3722.60
MW-T	05/09/07	3816.71	N/A <sup>2</sup>	--	N/A <sup>2</sup>
MW-T	07/07/08	3816.71	94.43	--	3722.28
MW-T	09/15/08	3816.71	96.81	--	3719.90
MW-T	01/26/09	3816.71	92.39	122.17	3724.32
MW-T	07/09/09	3816.71	97.92	122.17	3718.79
MW-T	07/06/10	3816.71	99.58	122.17	3717.13
MW-U	05/09/07	3814.94	91.76	123.10	3723.18
MW-U	09/27/07	3814.94	93.09	123.10	3721.85
MW-U	06/13/08	3814.94	96.34	123.10	3718.60
MW-U	09/15/08	3814.94	99.07	123.10	3715.87
MW-U	01/26/09	3814.94	91.19	123.10	3723.75
MW-U	07/09/09	3814.94	101.27	123.10	3713.67
MW-U	01/25/10	3814.94	95.12	123.09	3719.82
MW-U	07/06/10	3814.94	102.33	123.09	3712.61
MW-V	05/09/07	3815.04	92.17	122.79	3722.87

**TABLE I**  
**CUMULATIVE SUMMARY OF FLUID LEVELS**  
**LOVINGTON PADDOCK**  
**LEA COUNTY, NEW MEXICO**

Well ID	Date Measured	TOC Elevation (famsl)	Depth to Water (fbtoc)	Total Depth (fbtoc)	Elevation of Potentiometric Surface (famsl)
MW-V	09/27/07	3815.04	93.48	122.79	3721.56
MW-V	06/13/08	3815.04	96.14	122.79	3718.90
MW-V	09/15/08	3815.04	99.61	122.79	3715.43
MW-V	01/26/09	3815.04	91.31	122.79	3723.73
MW-V	07/09/09	3815.04	101.25	122.79	3713.79
MW-V	01/25/10	3815.04	95.45	122.84	3719.59
MW-V	07/06/10	3815.04	102.80	122.84	3712.24
MW-W	05/09/07	3815.09	92.76	122.05	3722.33
MW-W	09/27/07	3815.09	94.06	122.05	3721.03
MW-W	06/13/08	3815.09	96.37	122.05	3718.72
MW-W	09/15/08	3815.09	100.23	122.05	3714.86
MW-W	01/26/09	3815.09	91.72	122.05	3723.37
MW-W	07/09/09	3815.09	101.58	122.05	3713.51
MW-W	01/25/10	3815.09	95.98	133.15	3719.11
MW-W	07/06/10	3815.09	103.41	133.15	3711.68
MW-D2	05/09/07	3815.93	91.63	204.00	N/A <sup>3</sup>
MW-D2	09/26/07	3815.93	92.79	--	--
MW-D2	06/13/08	3815.93	94.93	--	--
MW-D2	09/15/08	3815.93	97.77	204.00	N/A <sup>3</sup>
MW-D2	01/26/09	3815.93	91.12	204.00	3724.81
MW-D2	07/09/09	3815.93	99.30	204.00	3716.63
MW-D2	01/25/10	3815.93	95.27	204.00	3720.66
MW-D2	07/06/10	3815.93	100.93	204.00	3715.00

**Notes and Abbreviations:**

1. Wells with treatment equipment present were not gauged.
2. Well was converted to a biosparge well.
3. Wells had not been surbeyed as of gauging date.
4. famsl = feet above mean sea level.
5. Total depths of wells reported through 07-08-09, except for wells MW-S, MW-T, MW-U, MW-W, and MW-D2 were calculated rather than measured.

**TABLE II**  
**CUMULATIVE SUMMARY OF DISSOLVED-PHASE CONTAMINANTS IN GROUNDWATER**  
**LOVINGTON PADDOCK**  
**LEA COUNTY, NEW MEXICO**

Sample Location	Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	TPH-GRO (mg/L)	TPH-DRO (mg/L)	Total TPH (mg/L)
<b>NMWQCC HHSGR<sup>1</sup></b>		<b>0.01<sup>1</sup></b>	<b>0.75<sup>1</sup></b>	<b>0.75<sup>1</sup></b>	<b>0.62<sup>1</sup></b>			
BW-1	06/16/05	<0.005	<0.005	<0.005	<0.005	---	---	---
BW-1	07/27/05	<0.001	<0.001	<0.001	<0.001	---	---	---
BW-1	09/21/05	<0.001	<0.001	<0.001	<0.001	---	---	---
BW-1	12/09/05	<b>0.184</b>	<b>0.24</b>	<b>0.0458</b>	<b>0.172</b>	---	---	---
BW-1	07/02/08	<b>0.0052</b>	<b>0.0018</b>	<b>0.0007</b>	<b>0.0018</b>	<b>0.027</b>	<b>0.077</b>	---
BW-1	09/18/08	<b>0.0022</b>	<b>0.0014</b>	<b>0.0007J</b>	<b>0.0015J</b>	<0.02	<b>0.076J</b>	---
BW-1	02/11/09	<b>0.0004</b>	<b>0.0002J</b>	<b>0.0002J</b>	<0.0006	<0.02	<b>0.031</b>	---
BW-1	07/14/09	<0.0002	<0.0002	<b>0.0003J</b>	<0.0006	<b>0.035J</b>	<b>0.13</b>	---
BW-1	01/26/10	<0.0002	<b>0.0002J</b>	<0.0002	<0.0006	<0.02	<b>0.073J</b>	---
BW-1	07/07/10	<0.0002	<b>0.0003J</b>	<0.0002	<0.0006	<0.02	<b>0.070J</b>	---
BW-2	06/16/05	<b>0.0039</b>	<b>0.0026</b>	<0.001	<b>0.001</b>	---	---	---
BW-2	07/27/05	<0.001	<0.001	<0.001	<0.001	---	---	---
BW-2	09/21/05	<0.001	<0.001	<0.001	<0.001	---	---	---
BW-2	12/09/05	<b>0.076</b>	<b>0.117</b>	<b>0.0272</b>	<b>0.0981</b>	---	---	---
BW-2	07/02/08	<b>0.0099</b>	<b>0.0025</b>	<b>0.0009</b>	<b>0.0022</b>	<b>0.043</b>	<b>0.11</b>	---
BW-2	09/18/08	<b>0.0016</b>	<b>0.0011</b>	<b>0.0003J</b>	<b>0.0009J</b>	<0.02	<0.033	---
BW-2	02/11/09	<b>0.0002J</b>	<0.0002	<0.0002	<0.0006	<0.02	<0.031	---
BW-2	07/16/09	<b>0.018</b>	<b>0.0002J</b>	<b>0.0019</b>	<b>0.0009J</b>	<b>0.087</b>	<b>0.64</b>	---
BW-2	07/13/10	<b>0.13</b>	<b>0.038</b>	<b>0.0061</b>	<b>0.013</b>	<b>0.37</b>	<b>0.13</b>	---
BW-3	06/16/05	<b>4.25</b>	<b>0.11</b>	<0.1	<0.1	---	---	---
BW-3	07/27/05	<0.001	<0.001	<0.001	<0.001	---	---	---
BW-3	09/22/05	<0.001	<0.001	<0.001	<0.001	---	---	---
BW-3	12/09/05	<b>0.0508</b>	<b>0.0769</b>	<b>0.0182</b>	<b>0.0724</b>	---	---	---
BW-3	07/02/08	<b>0.0073</b>	<b>0.0024</b>	<b>0.001</b>	<b>0.0023</b>	<b>0.035</b>	<b>0.095</b>	---
BW-3	09/18/08	<b>0.0029</b>	<b>0.0017</b>	<b>0.0004J</b>	<b>0.0012J</b>	<0.02	<0.033	---
BW-3	02/11/09	<b>0.0003J</b>	<b>0.0002J</b>	<0.0002	<0.0006	<0.02	<0.031	---
BW-3	07/16/09	<b>0.012</b>	<0.0002	<b>0.0016</b>	<b>0.0007J</b>	<b>0.063</b>	<b>0.13</b>	---
MW-A	06/16/05	<b>0.0348</b>	<b>0.0034</b>	<0.001	<0.001	---	---	---
MW-A	07/26/05	Well Dry	Well Dry	Well Dry	Well Dry	Well Dry	Well Dry	Well Dry
MW-A	09/20/05	Well Dry	Well Dry	Well Dry	Well Dry	Well Dry	Well Dry	Well Dry
MW-A	12/08/05	<b>0.0206</b>	<b>0.0887</b>	<b>0.0159</b>	<b>0.0858</b>	---	---	---
MW-A	07/01/08	Collapsed	Collapsed	Collapsed	Collapsed	Collapsed	Collapsed	Collapsed
MW-B	06/16/05	<b>0.713</b>	<b>0.0266</b>	<0.02	<0.02	---	---	---
MW-B	07/26/05	<b>0.546</b>	<b>0.917</b>	<b>0.0902</b>	<b>0.485</b>	---	---	---
MW-B	09/20/05	<b>0.312</b>	<b>0.454</b>	<b>0.0344</b>	<b>0.236</b>	---	---	---
MW-B	12/08/05	<b>0.103</b>	<b>0.172</b>	<0.02	<b>0.115</b>	---	---	---
MW-B	05/17/07	<b>0.086</b>	<b>0.0076</b>	<b>0.0005</b>	<b>0.003</b>	<b>0.3</b>	<b>0.088</b>	---
MW-B	10/02/07	<b>0.068</b>	<b>0.003</b>	<b>0.0003</b>	<b>0.0009</b>	---	---	<b>1.3</b>
MW-B	06/30/08	<b>0.670</b>	<b>0.025</b>	<b>0.0028</b>	<b>0.02</b>	<b>1.7</b>	<b>0.087**</b>	---
MW-B	09/17/08	<b>0.11</b>	<b>0.0041J</b>	<b>0.0019J</b>	<b>0.0081J</b>	<b>0.34</b>	<0.032	---
MW-B	02/03/09	<b>0.041</b>	<b>0.0019</b>	<b>0.0004J</b>	<b>0.0014J</b>	<b>0.095</b>	<0.056	---
MW-B	07/15/09	<b>0.034</b>	<0.0002	<b>0.0013</b>	<0.0006	<b>0.14</b>	<b>0.09J</b>	---
MW-B	01/27/10	<b>0.048</b>	<b>0.0032</b>	<0.0002	<b>0.0016J</b>	<b>0.28</b>	<b>0.1</b>	---
MW-B	07/12/10	<b>0.077</b>	<b>0.0029</b>	<0.0002	<b>0.0016J</b>	<b>0.26</b>	<b>0.063J</b>	---
MW-C	06/15/05	<0.005	<0.005	<0.005	<0.005	---	---	---
MW-C	07/26/05	<b>0.414</b>	<b>0.543</b>	<b>0.0885</b>	<b>0.266</b>	---	---	---
MW-C	09/21/05	<b>0.239</b>	<b>0.317</b>	<b>0.0599</b>	<b>0.17</b>	---	---	---
MW-C	12/08/05	<b>0.0472</b>	<b>0.0741</b>	<b>0.0162</b>	<b>0.0592</b>	---	---	---
MW-C	05/17/07	<b>0.012</b>	<b>0.0049</b>	<b>0.0006</b>	<b>0.0019</b>	<b>0.062</b>	<b>0.095</b>	---
MW-C	10/02/07	<b>0.029</b>	<b>0.011</b>	<b>0.0011</b>	<b>0.003</b>	---	---	<0.095
MW-C	06/30/08	<b>0.019</b>	<b>0.0053</b>	<b>0.0011</b>	<b>0.0016</b>	<b>0.075</b>	<b>0.260</b>	---
MW-C	09/17/08	<b>0.0029</b>	<b>0.0014</b>	<b>0.0006J</b>	<b>0.0015J</b>	<b>0.025J</b>	<b>0.068J</b>	---
MW-C	02/05/09	<b>0.0086</b>	<b>0.0036</b>	<b>0.0007J</b>	<b>0.0019J</b>	<b>0.039J</b>	<0.032	---
MW-C	07/14/09	<b>0.0071</b>	<b>0.0002J</b>	<b>0.0014</b>	<b>0.0006J</b>	<b>0.093</b>	<b>0.09J</b>	---
MW-C	01/27/10	<b>0.0021</b>	<b>0.0003J</b>	<0.0002	<0.0006	<0.02	<b>0.061J</b>	---
MW-C	07/12/10	<b>0.0005J</b>	<b>0.0004J</b>	<0.0002	<0.0006	<b>0.033J</b>	<b>0.096J</b>	---

**TABLE II**  
**CUMULATIVE SUMMARY OF DISSOLVED-PHASE CONTAMINANTS IN GROUNDWATER**  
**LOVINGTON PADDOCK**  
**LEA COUNTY, NEW MEXICO**

Sample Location	Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	TPH-GRO (mg/L)	TPH-DRO (mg/L)	Total TPH (mg/L)
<b>NMWQCC HHSGR<sup>1</sup></b>		<b>0.01<sup>1</sup></b>	<b>0.75<sup>1</sup></b>	<b>0.75<sup>1</sup></b>	<b>0.62<sup>1</sup></b>			
MW-D	05/15/07	<0.002	<0.002	<0.002	<0.006	<0.02	<0.028	---
MW-D	09/27/07	<0.002	<0.002	<0.002	<0.006	---	---	<0.094
MW-D	06/30/08	<b>0.039</b>	<b>0.0073</b>	<b>0.0013</b>	<b>0.0013</b>	<b>0.095</b>	<b>0.130</b>	---
MW-D	09/16/08	<b>0.0013</b>	<b>0.001J</b>	<b>0.0005J</b>	<b>0.0012J</b>	<0.02	<b>0.088J</b>	---
MW-D	02/04/09	<b>0.0081</b>	<b>0.0023</b>	<b>0.0007J</b>	<b>0.0019J</b>	<b>0.034J</b>	<0.031	---
MW-D	07/13/09	<0.0002	<0.0002	<0.0002	<0.0006	<b>0.044J</b>	<b>0.13</b>	---
MW-D	01/27/10	<0.0002	<0.0002	<0.0002	<0.0006	<0.02	<b>0.046J</b>	---
MW-D	07/08/10	<0.0002	<b>0.0004J</b>	<0.0002	<0.0006	<b>0.028J</b>	<b>0.160</b>	---
MW-E	06/15/05	<0.005	<0.005	<0.005	<0.005	---	---	---
MW-E	05/16/07	<0.002	<0.002	<0.002	<0.006	<0.02	<0.028	---
MW-E	09/27/07	<0.002	<0.002	<0.002	<0.006	---	---	<0.094
MW-E	07/01/08	<b>0.017</b>	<b>0.005</b>	<b>0.0010</b>	<b>0.0011</b>	<b>0.049</b>	<b>0.041</b>	---
MW-E	09/17/08	<b>0.01</b>	<b>0.0059</b>	<b>0.0006J</b>	<b>0.0034</b>	<b>0.055</b>	<0.03	---
MW-E	02/11/09	<b>0.0008J</b>	<b>0.0004J</b>	<b>0.0003J</b>	<b>0.0007J</b>	<0.02	<0.031	---
MW-E	07/15/09	<0.0002	<0.0002	<b>0.0002J</b>	<0.0006	<b>0.044J</b>	0.33	---
MW-E	01/27/10	<0.0002	<0.0002	<0.0002	<0.0006	<0.02	<b>0.062J</b>	---
MW-E	07/08/10	<0.0002	<b>0.0004J</b>	<0.0002	<0.0006	<0.02	<b>0.080J</b>	---
MW-F	06/15/05	<0.005	<0.005	<0.005	<0.005	---	---	---
MW-F	05/16/07	<0.002	<0.002	<0.002	<0.006	<0.02	<0.028	---
MW-F	09/27/07	<0.002	<0.002	<0.002	<0.006	---	---	<0.096
MW-F	07/02/08	<b>0.013</b>	<b>0.0036</b>	<b>0.0007</b>	<b>0.0008</b>	<b>0.039</b>	<b>0.044</b>	---
MW-F	09/17/08	<b>0.0074</b>	<b>0.0042</b>	<b>0.0005J</b>	<b>0.0025J</b>	<b>0.039J</b>	<0.031	---
MW-F	02/11/09	<b>0.0004J</b>	<b>0.0002J</b>	<0.0002	<0.0006	<0.02	<0.031	---
MW-F	07/14/09	<0.0002	<0.0002	<0.0002	<0.0006	<0.02	<b>0.079J</b>	---
MW-F	01/26/10	<0.0002	<0.0002	<0.0002	<0.0006	<0.02	<b>0.063J</b>	---
MW-F	07/07/10	<b>0.0002J</b>	<b>0.0003J</b>	<0.0002	<0.0006	<0.02	<b>0.110</b>	---
MW-G	06/15/05	<0.005	<0.005	<0.005	<0.005	---	---	---
MW-G	05/16/07	<0.002	<0.002	<0.002	<0.006	<0.02	<0.028	---
MW-G	10/01/07	<0.002	<0.002	<0.002	<0.006	---	---	<0.096
MW-G	07/02/08	<b>0.0081</b>	<b>0.0025</b>	<b>0.0006</b>	<b>0.0006</b>	<b>0.026</b>	<0.029	---
MW-G	09/17/08	<b>0.024</b>	<b>0.013</b>	<b>0.001</b>	<b>0.0057</b>	<b>0.11</b>	<0.031	---
MW-G	02/11/09	<b>0.0012</b>	<b>0.0005J</b>	<b>0.0003J</b>	<b>0.0009J</b>	<0.02	<0.031	---
MW-G	07/15/09	<0.0002	<0.0002	<0.0002	<0.0006	<0.02	<b>0.11</b>	---
MW-G	01/26/10	<0.0002	<0.0002	<0.0002	<0.0006	<0.02	<b>0.054J</b>	---
MW-G	07/07/10	<b>0.0002J</b>	<b>0.0003J</b>	<0.0002	<0.0006	<0.02	<b>0.073J</b>	---
MW-H	06/15/05	<b>0.492</b>	<b>0.0219</b>	<0.02	<0.02	---	---	---
MW-H	07/26/05	<b>1.93</b>	<b>2.01</b>	<b>0.144</b>	<b>0.677</b>	---	---	---
MW-H	09/20/05	<b>2.35</b>	<b>2.54</b>	<b>0.188</b>	<b>0.932</b>	---	---	---
MW-H	12/06/05	<b>3.89</b>	<b>2.72</b>	<b>0.202</b>	<b>0.815</b>	---	---	---
MW-H	05/17/07	<b>0.73</b>	<b>0.082</b>	<b>0.0089</b>	<b>0.031</b>	<b>2.4</b>	<b>0.2</b>	---
MW-H	10/02/07	<b>0.2</b>	<b>0.037</b>	<b>0.0027</b>	<b>0.01</b>	---	---	<0.094
MW-H	07/02/08	<b>0.14</b>	<b>0.022</b>	<b>0.0018</b>	<b>0.006</b>	<b>0.36</b>	<b>0.036</b>	---
MW-H	09/17/08	<b>0.26</b>	<b>0.077</b>	<b>0.0032</b>	<b>0.022</b>	<b>0.86</b>	<b>0.036J</b>	---
MW-H	02/03/09	<b>0.49</b>	<b>0.056</b>	<b>0.0075</b>	<b>0.022</b>	<b>1.2</b>	<b>0.078J</b>	---
MW-H	07/15/09	<b>0.25</b>	<b>0.0018</b>	<b>0.027</b>	<b>0.012</b>	<b>0.64</b>	<b>0.068J</b>	---
MW-H	01/27/10	<b>0.6</b>	<b>0.061</b>	<b>0.0025</b>	<b>0.017</b>	<b>1.7</b>	<b>0.16</b>	---
MW-H	07/13/10	<b>0.710</b>	<b>0.032</b>	<b>0.0016J</b>	<b>0.0079J</b>	<b>1.5</b>	<b>0.094J</b>	---
MW-I	06/15/05	<b>0.378</b>	<b>0.0124</b>	<0.01	<0.01	---	---	---
MW-I	07/26/05	<b>1.1</b>	<b>1.4</b>	<b>0.067</b>	<b>0.491</b>	---	---	---
MW-I	09/20/05	<b>0.555</b>	<b>0.801</b>	<b>0.0253</b>	<b>0.375</b>	---	---	---
MW-I	12/06/05	<b>0.496</b>	<b>0.611</b>	<b>0.0287</b>	<b>0.238</b>	---	---	---
MW-I	05/17/07	<b>0.067</b>	<b>0.032</b>	<b>0.0009</b>	<b>0.007</b>	<b>0.26</b>	<b>0.053</b>	---
MW-I	10/01/07	<b>0.033</b>	<b>0.01</b>	<0.002	<b>0.002</b>	---	---	<0.097
MW-I	07/01/08	<b>0.086</b>	<b>0.034</b>	<b>0.0017</b>	<b>0.0059</b>	<b>0.3</b>	<b>0.063</b>	---
MW-I	09/17/08	<b>0.0042</b>	<b>0.0022</b>	<b>0.0007J</b>	<b>0.0019J</b>	<b>0.029J</b>	<b>0.091J</b>	---

TABLE II  
 CUMULATIVE SUMMARY OF DISSOLVED-PHASE CONTAMINANTS IN GROUNDWATER  
 LOVINGTON PADDOCK  
 LEA COUNTY, NEW MEXICO

Sample Location	Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	TPH-GRO (mg/L)	TPH-DRO (mg/L)	Total TPH (mg/L)
<b>NMWQCC HHSGR<sup>1</sup></b>		<b>0.01<sup>1</sup></b>	<b>0.75<sup>1</sup></b>	<b>0.75<sup>1</sup></b>	<b>0.62<sup>1</sup></b>			
MW-I	02/05/09	0.012	0.0056	0.0005J	0.0021J	0.058	<0.031	---
MW-I	07/14/09	0.011	0.0002J	0.004	0.001J	0.091	0.1	---
MW-I	01/27/10	0.03	0.012	0.0004J	0.0025J	0.13	0.065J	---
MW-I	07/12/10	0.041	0.0028	0.0003J	0.0014J	0.14	0.047J	---
MW-J	12/06/05	<0.005	<0.005	<0.005	<0.005	---	---	---
MW-J	05/15/07	0.0015	<0.002	<0.002	<0.006	<0.02	<0.028	---
MW-J	10/01/07	0.0005	<0.002	<0.002	<0.006	---	---	<0.096
MW-J	06/30/08	0.038	0.0073	0.0014	0.0014	0.093	0.280	---
MW-J	09/16/08	0.0012	0.0008J	0.0005J	0.0011J	<0.02	0.093J	---
MW-J	02/04/09	0.0078	0.0022	0.0007J	0.0019J	0.032J	<0.031	---
MW-J	07/13/09	<0.0002	<0.0002	<0.0002	<0.0006	0.035J	0.11	---
MW-J	01/26/10	<0.0002	<0.0002	<0.0002	<0.0006	<0.02	0.056J	---
MW-J	07/07/10	<0.0002	0.0002J	<0.0002	<0.0006	<0.02	0.062J	---
MW-L	06/15/05	<0.005	<0.005	<0.005	<0.005	---	---	---
MW-L	05/15/07	<0.002	<0.002	<0.002	<0.006	<0.02	0.038	---
MW-L	10/01/07	<0.002	<0.002	<0.002	<0.006	---	---	<0.093
MW-L	07/01/08	0.018	0.0031	0.001	0.0025	0.063	0.089	---
MW-L	09/16/08	0.0019	0.0012	<0.0006	<0.0015	<0.02	0.13	---
MW-L	02/04/09	0.011	0.003	0.0009J	0.0024J	0.041J	0.042J	---
MW-L	07/14/09	0.0003J	<0.0002	0.0002J	<0.0006	0.033J	0.079J	---
MW-L	01/27/10	<0.0002	<0.0002	<0.0002	<0.0006	<0.02	0.037J	---
MW-L	07/12/10	<0.0002	0.0003J	<0.0002	<0.0006	<0.02	0.051J	---
MW-M	06/15/05	<0.005	<0.005	<0.005	<0.005	---	---	---
MW-M	05/15/07	<0.002	<0.002	<0.002	<0.006	<0.02	<0.028	---
MW-M	10/01/07	<0.002	<0.002	<0.002	<0.006	---	---	<0.096
MW-M	06/30/08	0.042	0.004	0.0011	0.0032	0.11	0.034**	---
MW-M	09/16/08	0.0023	0.0013	0.0006J	0.0014J	0.022	0.13	---
MW-M	02/04/09	0.013	0.0031J	0.001J	0.0025J	0.053	0.036J	---
MW-M	07/15/09	<0.0002	<0.0002	<0.0002	<0.0006	<0.02	0.071J	---
MW-M	01/25/10	<0.0002	<0.0002	<0.0002	<0.0006	<0.02	0.25	---
MW-M	07/06/10	0.0003J	0.0003J	<0.0002	<0.0006	<0.02	0.1	---
MW-N	06/15/05	<0.001	<0.001	<0.001	<0.001	---	---	---
MW-N	07/26/05	0.0059	<0.005	<0.005	<0.005	---	---	---
MW-N	09/21/05	0.0076	<0.001	<0.001	<0.001	---	---	---
MW-N	12/06/05	<0.001	<0.001	<0.001	<0.001	---	---	---
MW-N	05/17/07	0.0013	0.0007	0.0002	<0.006	0.032	0.067	---
MW-N	10/02/07	<0.002	<0.002	<0.002	<0.006	---	---	<0.095
MW-N	06/30/08	0.011	0.0031	0.0008	0.0009	0.056	0.05	---
MW-N	09/17/08	0.0014	0.0011	0.0007J	0.0016J	<0.02	0.073	---
MW-N	02/05/09	0.0051	0.0025	0.0006J	0.0014J	0.031J	0.034J	---
MW-N	07/13/09	<0.0002	<0.0002	<0.0002	<0.0006	0.079	0.32	---
MW-N	01/26/10	<0.0002	<0.0002	<0.0002	<0.0006	<0.02	0.041J	---
MW-N	07/08/10	<0.0002	0.0003J	<0.0002	<0.0006	<0.02	0.062J	---
MW-O	07/25/05	0.0035	<0.001	<0.001	<0.001	---	---	---
MW-O	09/21/05	0.0102	<0.001	<0.001	<0.001	---	---	---
MW-O	12/08/05	0.0045	<0.001	<0.001	<0.001	---	---	---
MW-O	05/14/07	0.0072	<0.002	<0.002	<0.006	0.043	0.130	---
MW-O	10/02/07	0.0012	0.001	<0.002	<0.006	---	---	<0.093
MW-O	06/30/08	0.04	0.01	0.0065	0.011	0.15	0.280**	---
MW-O	09/16/08	<0.0002	<0.0002	<0.0002	<0.0006	<0.02	<0.031	---
MW-O	02/02/09	<0.0002	0.0012	0.0005J	0.0011J	<0.02	0.063J	---
MW-O	07/13/09	<0.0002	<0.0002	0.0003J	<0.0006	0.1	0.36	---
MW-O	01/26/10	<0.0002	<0.0002	<0.0002	<0.0006	<0.02	<0.031	---
MW-O	07/08/10	<0.0002	0.0003J	<0.0002	<0.0006	<0.02	0.053J	---
MW-P	06/15/05	1.92	<0.05	<0.05	<0.05	---	---	---

TABLE II  
 CUMULATIVE SUMMARY OF DISSOLVED-PHASE CONTAMINANTS IN GROUNDWATER  
 LOVINGTON PADDOCK  
 LEA COUNTY, NEW MEXICO

Sample Location	Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	TPH-GRO (mg/L)	TPH-DRO (mg/L)	Total TPH (mg/L)
<b>NMWQCC HHSGR<sup>1</sup></b>		<b>0.01<sup>1</sup></b>	<b>0.75<sup>1</sup></b>	<b>0.75<sup>1</sup></b>	<b>0.62<sup>1</sup></b>			
MW-P	07/25/05	0.179	<0.001	<0.001	<0.001	---	---	---
MW-P	09/19/05	<0.001	<0.001	<0.001	<0.001	---	---	---
MW-P	12/08/05	<0.001	<0.001	<0.001	<0.001	---	---	---
MW-P	05/14/07	<0.002	<0.002	<0.002	<0.006	<0.02	0.028	---
MW-P	09/27/07	<0.002	<0.002	<0.002	<0.006	---	---	<0.094
MW-P	06/17/08	<0.002	0.003	<0.002	<0.006	<0.037	<0.062	---
MW-P	09/16/08	<0.0002	<0.0002	<0.0002	<0.0006	<0.02	<0.031	---
MW-P	02/02/09	<0.0002	0.0033	0.0005J	0.0011J	<0.02	0.049J	---
MW-P	07/13/09	0.0011	<0.0002	0.0003J	<0.0006	0.31	4.7	---
MW-P	01/27/10	<0.0002	<0.0002	<0.0002	<0.0006	<0.02	<0.031	---
MW-P	07/12/10	<0.0002	0.0004J	<0.0002	<0.0006	0.024J	0.074J	---
MW-Q	07/25/05	<0.001	<0.001	<0.001	<0.001	---	---	---
MW-Q	09/21/05	<0.001	<0.001	<0.001	<0.001	---	---	---
MW-Q	12/06/05	<0.001	<0.001	<0.001	<0.001	---	---	---
MW-Q	05/14/07	<0.002	<0.002	<0.002	<0.006	<0.02	<0.028	---
MW-Q	09/27/07	<0.002	<0.002	<0.002	<0.006	---	---	<0.094
MW-Q	06/17/08	0.005	0.006	0.003	0.006	<0.043	<0.062	---
MW-Q	09/16/08	<0.0002	<0.0002	<0.0002	<0.0006	<0.02	<0.031	---
MW-Q	02/02/09	<0.0002	0.0021	0.0003J	0.0007J	<0.02	0.048J	---
MW-Q	07/14/09	<0.0002	<0.0002	0.0003J	<0.0006	0.16	0.68	---
MW-Q	01/26/10	<0.0002	<0.0002	<0.0002	<0.0006	<0.02	0.031J	---
MW-Q	07/12/10	<0.0002	0.0004J	<0.0002	<0.0006	0.046J	0.420J	---
MW-R	08/12/05	<0.001	<0.001	<0.001	<0.001	---	---	---
MW-R	09/19/05	<0.001	<0.001	<0.001	<0.001	---	---	---
MW-R	12/08/05	<0.001	<0.001	<0.001	<0.001	---	---	---
MW-R	05/14/07	<0.002	<0.002	<0.002	<0.006	<0.02	0.028	---
MW-R	09/27/07	<0.002	<0.002	<0.002	<0.006	---	---	<0.095
MW-R	06/17/08	<0.002	0.002	<0.002	<0.006	<0.061	<0.110	---
MW-R	09/15/08	<0.0002	0.000**	<0.0002	<0.0006	<0.02	<0.039	---
MW-R	02/02/09	0.0002J	0.0005J	0.0008J	0.0016J	0.028J	0.074J	---
MW-R	07/14/09	<0.0002	<0.0002	0.0002J	<0.0006	0.049J	0.13	---
MW-R	01/27/10	<0.0002	<0.0002	<0.0002	<0.0006	<0.02	0.041J	---
MW-R	07/08/10	<0.0002	0.0004J	<0.0002	<0.0006	<0.02	0.076J	---
MW-S	07/27/06	<0.0005	<0.0007	<0.0008	<0.0008	0.028	0.053	---
MW-S	05/14/07	<0.002	<0.002	<0.002	<0.006	<0.02	0.390	---
MW-S	10/01/07	<0.002	<0.002	<0.002	<0.006	---	---	<0.095
MW-S	06/30/08	0.039	0.0032	0.0005	0.0021	0.11	<0.043	---
MW-S	09/16/08	0.004	0.0018	0.0008J	0.0019J	0.029J	0.35	---
MW-S	02/04/09	0.022	0.0048	0.0011	0.0031	0.072	0.044J	---
MW-S	07/15/09	<0.0002	<0.0002	<0.0002	<0.0006	<0.02	0.050J	---
MW-S	01/25/10	<0.0002	<0.0002	<0.0002	<0.0006	0.023J	0.18J	---
MW-S	07/06/10	0.0003J	0.0002J	<0.0002	<0.0006	<0.02	0.074J	---
MW-T	07/27/06	0.36	0.12	0.037	0.15	1.3	0.86	---
MW-T	09/18/08	0.0049	0.0028	0.0008J	0.002J	0.027J	0.11	---
MW-T	02/11/09	0.0004J	0.0003J	<0.0002	<0.0006	<0.02	0.033J	---
MW-T	07/16/09	0.0071	<0.0002	0.0013	0.0008J	0.044J	0.13	---
MW-T	07/13/10	0.84	0.18	0.026	0.055	2.4	0.070J	---
MW-U	04/24/07	<0.005	0.009	<0.008	<0.008	0.027	0.180*	---
MW-U	05/16/07	<0.0002	<0.0002	<0.0002	<0.0006	0.027	0.18	---
MW-U	09/27/07	<0.002	<0.002	<0.002	<0.006	---	---	<0.093
MW-U	06/30/08	0.004	0.0018	0.0009	0.0019	0.028	0.057**	---
MW-U	09/17/08	<0.0002	0.0003J	0.0002J	<0.0006	0.025J	<0.032	---
MW-U	02/03/09	<0.0002	0.0021	0.0006J	0.0013J	<0.02	0.060J	---
MW-U	07/14/09	<0.0002	<0.0002	<0.0002	<0.0006	0.034J	0.1	---
MW-U	01/26/10	<0.0002	<0.0002	<0.0002	<0.0006	<0.02	0.049J	---
MW-U	07/07/10	<0.0002	0.0003J	<0.0002	<0.0006	<0.02	0.070J	---

TABLE II  
 CUMULATIVE SUMMARY OF DISSOLVED-PHASE CONTAMINANTS IN GROUNDWATER  
 LOVINGTON PADDOCK  
 LEA COUNTY, NEW MEXICO

Sample Location	Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	TPH-GRO (mg/L)	TPH-DRO (mg/L)	Total TPH (mg/L)
<b>NMWQCC HHSGR<sup>1</sup></b>		<b>0.01<sup>1</sup></b>	<b>0.75<sup>1</sup></b>	<b>0.75<sup>1</sup></b>	<b>0.62<sup>1</sup></b>			
MW-V	04/24/07	<0.005	<0.007	<0.008	<0.008	0.028*	0.310*	---
MW-V	05/16/08	<0.001	<0.0002	<0.0002	<0.0006	0.028	0.310	---
MW-V	09/27/07	<0.002	<0.002	<0.002	<0.006	---	---	<0.094
MW-V	06/30/08	<b>0.011</b>	0.0027	0.0012	0.0025	0.044	0.093**	---
MW-V	09/16/08	<b>0.0045</b>	<0.0002	<0.0002	<0.0006	0.023J	0.064J	---
MW-V	02/02/09	<0.0002	0.0078	0.0003J	0.0007J	0.023J	0.066J	---
MW-V	07/13/09	<0.0002	<0.0002	<0.0002	<0.0006	0.027J	0.14	---
MW-V	01/26/10	<0.0002	<0.0002	<0.0002	<0.0006	<0.02	0.062J	---
MW-V	07/07/10	<0.0002	0.0002J	<0.0002	<0.0006	<0.02	0.070J	---
MW-W	04/24/07	<0.005	<0.007	<0.008	<0.008	0.037*	0.450*	---
MW-W	05/16/07	<0.001	<0.0002	<0.0002	<0.0006	0.037	0.450	---
MW-W	09/27/07	<0.002	<0.002	<0.002	<0.006	---	---	<0.094
MW-W	06/30/08	<b>0.031</b>	0.0035	0.0015	0.0032	0.092	0.130**	---
MW-W	09/16/08	<b>0.0025</b>	<0.0002	<0.0002	<0.0002	0.021J	0.068J	---
MW-W	02/02/09	<0.0002	0.0029	0.0004J	0.0009J	<0.02	0.078J	---
MW-W	07/13/09	<0.0002	<0.0002	0.0003J	<0.0006	0.093	0.33	---
MW-W	01/26/10	<0.0002	<0.0002	<0.0002	<0.0006	<0.02	0.039J	---
MW-W	07/07/10	<0.0002	0.0003J	<0.0002	<0.0006	<0.02	0.087J	---
MW-D2	05/15/07	<0.002	<0.002	<0.002	<0.006	<0.02	<0.028	---
MW-D2	09/27/07	<0.002	<0.002	<0.002	<0.006	---	---	<0.096
MW-D2	06/30/08	<b>0.026</b>	0.0046	0.0009	0.0009	0.061	0.036	---
MW-D2	09/17/08	0.0011	0.0008J	0.0007J	0.0015J	<0.02	0.052J	---
MW-D2	02/04/09	0.0067	0.0031	0.0006J	0.0016J	0.030J	<0.031	---
MW-D2	07/13/09	<0.0002	<0.0002	<0.0002	<0.0006	0.023J	0.086J	---
MW-D2	01/26/10	<0.0002	<0.0002	<0.0002	<0.0006	<0.02	0.049J	---
MW-D2	07/07/10	<0.0002	0.0002J	<0.0002	<0.0006	<0.02	0.060J	---

**Notes and Abbreviations:**

mg/L = milligrams per liter

TPH = total petroleum hydrocarbons

GRO = gasoline range organic

DRO = diesel range organic

NMWQCC HHSGR = New Mexico Water Quality Control Commission Human Health Standard for Groundwater (NMAC 20.6.2.3103A)

**Bold = concentration exceeding noted standard or guideline**

J = estimated value. The result is greater than or equal to the method detection limit and less than the limit of quantitation (LOQ) or reporting limit (RL)

\* Resampled on 5/16/07

\*\* Resampled on 7/1/08



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-668-2300 Fax: 717-668-2881 • www.lancasterlabs.com

## ANALYTICAL RESULTS

Prepared for:

STANTEC International, Inc.  
2321 Club Meridian Drive  
Suite E  
Okemos MI 48864

517-349-9499

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

February 08, 2010

Project: Lovington Paddock

Samples arrived at the laboratory on Thursday, January 28, 2010. The PO# for this group is 89CH.49521.08 and the release number is LOVINGTON. The group number for this submittal is 1180477.

### Client Sample Description

### Lancaster Labs (LLI) #

MW-F Grab Water Sample	5894530
MW-G Grab Water Sample	5894531
MW-D2 Grab Water Sample	5894532
MW-V Grab Water Sample	5894533
MW-U Grab Water Sample	5894534
MW-J Grab Water Sample	5894535
BW-1 Grab Water Sample	5894536
MW-D Grab Water Sample	5894537
MW-E Grab Water Sample	5894538
MW-R Grab Water Sample	5894539
MW-B Grab Water Sample	5894540
MW-H Grab Water Sample	5894541
DUP-1 Grab Water Sample	5894542
MW-S Grab Water Sample	5894543
MW-M Grab Water Sample	5894544
MW-N Grab Water Sample	5894545
MW-W Grab Water Sample	5894546
MW-O Grab Water Sample	5894547
MW-Q Grab Water Sample	5894548
MW-L Grab Water Sample	5894549
MW-P Grab Water Sample	5894550
MW-C Grab Water Sample	5894551



# Analysis Report

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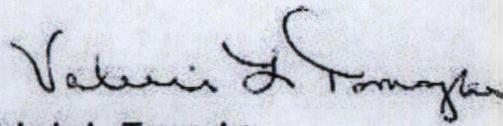
MW-1 Grab Water Sample	5894552
Trip Blank Water Sample	5894553
DUP #2 Grab Water Sample	5894554

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO	STANTEC International, Inc.	Attn: Seth Maher
ELECTRONIC COPY TO	STANTEC International, Inc.	Attn: Steve Bell

Questions? Contact your Client Services Representative  
Wendy A Kozma at (717) 656-2300

Respectfully Submitted,



Valerie L. Tomayko  
Group Leader



# Analysis Report

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Page 1 of 1

Sample Description: MW-F Grab Water Sample  
Lovington Paddock, NM

LLI Sample # WW 5894530  
LLI Group # 1180477  
NM

Project Name: Lovington Paddock

Collected: 01/26/2010 11:57 by JL

Account Number: 11842

Submitted: 01/28/2010 09:00

STANTEC International, Inc.

Reported: 02/08/2010 at 14:01

2321 Club Meridian Drive

Discard: 03/11/2010

Suite E

Okemos MI 48864

LOV-F

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC Volatiles	SW-846 8015B		ug/l	ug/l	
01636	TPH-GRO water C6-C10	n.a.	N.D.	20	1
GC Volatiles	SW-846 8021B		ug/l	ug/l	
08213	Benzene	71-43-2	N.D.	0.2	1
08213	Ethylbenzene	100-41-4	N.D.	0.2	1
08213	Toluene	108-88-3	N.D.	0.2	1
08213	Total Xylenes	1330-20-7	N.D.	0.6	1
GC Extractable TPH	SW-846 8015B		ug/l	ug/l	
08269	TPH-DRO water C10-C28	n.a.	63 J	30	1

### General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01636	TPH-GRO water C6-C10	SW-846 8015B	1	10029A53A	02/01/2010 14:02	Elizabeth J Marin	1
08213	BTEX (8021)	SW-846 8021B	1	10029A53A	02/01/2010 13:44	Elizabeth J Marin	1
01146	GC VOA Water Prep	SW-846 5030B	1	10029A53A	02/01/2010 14:02	Elizabeth J Marin	1
08269	TPH-DRO water C10-C28	SW-846 8015B	1	100290002A	02/02/2010 06:08	Melissa McDermott	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	100290002A	01/29/2010 14:30	Timothy J Attenberger	1



# Analysis Report

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Page 1 of 1

Sample Description: MW-G Grab Water Sample  
Lovington Paddock, NM

LLI Sample # WW 5894531  
LLI Group # 1180477  
NM

Project Name: Lovington Paddock

Collected: 01/26/2010 12:33 by JL

Account Number: 11842

Submitted: 01/28/2010 09:00

STANTEC International, Inc.

Reported: 02/08/2010 at 14:01

2321 Club Meridian Drive

Discard: 03/11/2010

Suite E

Okemos MI 48864

LOV-G

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC Volatiles	SW-846 8015B		ug/l	ug/l	
01636	TPH-GRO water C6-C10	n.a.	N.D.	20	1
GC Volatiles	SW-846 8021B		ug/l	ug/l	
08213	Benzene	71-43-2	N.D.	0.2	1
08213	Ethylbenzene	100-41-4	N.D.	0.2	1
08213	Toluene	108-88-3	N.D.	0.2	1
08213	Total Xylenes	1330-20-7	N.D.	0.6	1
GC Extractable TPH	SW-846 8015B		ug/l	ug/l	
08269	TPH-DRO water C10-C28	n.a.	54 J	31	1

### General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01636	TPH-GRO water C6-C10	SW-846 8015B	1	10029A53A	02/01/2010 14:26	Elizabeth J Marin	1
08213	BTEX (8021)	SW-846 8021B	1	10029A53A	02/01/2010 14:08	Elizabeth J Marin	1
01146	GC VOA Water Prep	SW-846 5030B	1	10029A53A	02/01/2010 14:26	Elizabeth J Marin	1
08269	TPH-DRO water C10-C28	SW-846 8015B	1	100290002A	02/02/2010 06:30	Melissa McDermott	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	100290002A	01/29/2010 14:30	Timothy J Attenberger	1



# Analysis Report

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Page 1 of 1

Sample Description: MW-D2 Grab Water Sample  
Lovington Paddock, NM

LLI Sample # WW 5894532  
LLI Group # 1180477  
NM

Project Name: Lovington Paddock

Collected: 01/26/2010 13:10 by JL

Account Number: 11842

Submitted: 01/28/2010 09:00

STANTEC International, Inc.

Reported: 02/08/2010 at 14:01

2321 Club Meridian Drive

Discard: 03/11/2010

Suite E

Okemos MI 48864

LOVD2

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles</b>					
01636	TPH-GRO water C6-C10	SW-846 8015B n.a.	ug/l N.D.	ug/l 20	1
<b>GC Volatiles</b>					
08213	Benzene	SW-846 8021B 71-43-2	ug/l N.D.	ug/l 0.2	1
08213	Ethylbenzene	100-41-4	N.D.	0.2	1
08213	Toluene	108-88-3	N.D.	0.2	1
08213	Total Xylenes	1330-20-7	N.D.	0.6	1
<b>GC Extractable TPH</b>					
08269	TPH-DRO water C10-C28	SW-846 8015B n.a.	ug/l 49 J	ug/l 31	1

### General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01636	TPH-GRO water C6-C10	SW-846 8015B	1	10029A53A	02/01/2010 14:51	Elizabeth J Marin	1
08213	BTEX (8021)	SW-846 8021B	1	10029A53A	02/01/2010 14:33	Elizabeth J Marin	1
01146	GC VOA Water Prep	SW-846 5030B	1	10029A53A	02/01/2010 14:51	Elizabeth J Marin	1
08269	TPH-DRO water C10-C28	SW-846 8015B	1	100290002A	02/02/2010 06:51	Melissa McDermott	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	100290002A	01/29/2010 14:30	Timothy J Attenberger	1



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Sample Description: MW-V Grab Water Sample  
Lovington Paddock, NM

LLI Sample # WW 5894533  
LLI Group # 1180477  
NM

Project Name: Lovington Paddock

Collected: 01/26/2010 13:44 by JL

Account Number: 11842

Submitted: 01/28/2010 09:00  
Reported: 02/08/2010 at 14:01  
Discard: 03/11/2010

STANTEC International, Inc.  
2321 Club Meridian Drive  
Suite E  
Okemos MI 48864

LOV-V

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles</b>					
01636	TPH-GRO water C6-C10	SW-846 8015B n.a.	ug/l N.D.	ug/l 20	1
<b>GC Volatiles</b>					
08213	Benzene	SW-846 8021B 71-43-2	ug/l N.D.	ug/l 0.2	1
08213	Ethylbenzene	100-41-4	N.D.	0.2	1
08213	Toluene	108-88-3	N.D.	0.2	1
08213	Total Xylenes	1330-20-7	N.D.	0.6	1
<b>GC Extractable TPH</b>					
08269	TPH-DRO water C10-C28	SW-846 8015B n.a.	ug/l 62 J	ug/l 31	1

### General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01636	TPH-GRO water C6-C10	SW-846 8015B	1	10029A53A	02/01/2010 15:15	Elizabeth J Marin	1
08213	BTEX (8021)	SW-846 8021B	1	10029A53A	02/01/2010 14:57	Elizabeth J Marin	1
01146	GC VOA Water Prep	SW-846 5030B	1	10029A53A	02/01/2010 15:15	Elizabeth J Marin	1
08269	TPH-DRO water C10-C28	SW-846 8015B	1	100290002A	02/02/2010 07:13	Melissa McDermott	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	100290002A	01/29/2010 14:30	Timothy J Attenberger	1



# Analysis Report

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Sample Description: MW-U Grab Water Sample  
Lovington Paddock, NM

LLI Sample # WW 5894534  
LLI Group # 1180477  
NM

Project Name: Lovington Paddock

Collected: 01/26/2010 14:12 by JL

Account Number: 11842

Submitted: 01/28/2010 09:00

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Discard: 03/11/2010

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LOV-U

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles</b>					
01636	TPH-GRO water C6-C10	n.a.	N.D.	20	1
<b>GC Volatiles</b>					
08213	Benzene	71-43-2	N.D.	0.2	1
08213	Ethylbenzene	100-41-4	N.D.	0.2	1
08213	Toluene	108-88-3	N.D.	0.2	1
08213	Total Xylenes	1330-20-7	N.D.	0.6	1
<b>GC Extractable TPH</b>					
08269	TPH-DRO water C10-C28	n.a.	49 J	30	1

### General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01636	TPH-GRO water C6-C10	SW-846 8015B	1	10029A53A	02/01/2010 15:39	Elizabeth J Marin	1
08213	BTEX (8021)	SW-846 8021B	1	10029A53A	02/01/2010 15:21	Elizabeth J Marin	1
01146	GC VOA Water Prep	SW-846 5030B	1	10029A53A	02/01/2010 15:39	Elizabeth J Marin	1
08269	TPH-DRO water C10-C28	SW-846 8015B	1	100290002A	02/02/2010 07:35	Melissa McDermott	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	100290002A	01/29/2010 14:30	Timothy J Attenberger	1



# Analysis Report

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Sample Description: MW-J Grab Water Sample  
Lovington Paddock, NM

LLI Sample # WW 5894535  
LLI Group # 1180477  
NM

Project Name: Lovington Paddock

Collected: 01/26/2010 15:11 by JL

Account Number: 11842

Submitted: 01/28/2010 09:00

STANTEC International, Inc.

Reported: 02/08/2010 at 14:01

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LOV-J

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles SW-846 8015B</b>					
01636	TPH-GRO water C6-C10	n.a.	ug/l N.D.	ug/l 20	1
<b>GC Volatiles SW-846 8021B</b>					
08213	Benzene	71-43-2	N.D.	0.2	1
08213	Ethylbenzene	100-41-4	N.D.	0.2	1
08213	Toluene	108-88-3	N.D.	0.2	1
08213	Total Xylenes	1330-20-7	N.D.	0.6	1
<b>GC Extractable TPH SW-846 8015B</b>					
08269	TPH-DRO water C10-C28	n.a.	ug/l 56 J	ug/l 31	1

### General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01636	TPH-GRO water C6-C10	SW-846 8015B	1	10029A53A	02/01/2010 16:04	Elizabeth J Marin	1
08213	BTEX (8021)	SW-846 8021B	1	10029A53A	02/01/2010 15:46	Elizabeth J Marin	1
01146	GC VOA Water Prep	SW-846 5030B	1	10029A53A	02/01/2010 16:04	Elizabeth J Marin	1
08269	TPH-DRO water C10-C28	SW-846 8015B	1	100290002A	02/02/2010 08:14	Melissa McDermott	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	100290002A	01/29/2010 14:30	Timothy J Attenberger	1



# Analysis Report

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Sample Description: BW-1 Grab Water Sample  
Lovington Paddock, NM

LLI Sample # WW 5894536  
LLI Group # 1180477  
NM

Project Name: Lovington Paddock

Collected: 01/27/2010 10:50 by JL

Account Number: 11842

Submitted: 01/28/2010 09:00

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Reported: 02/08/2010 at 14:01

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LOVB1

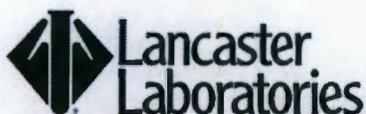
CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles</b>					
01636	TPH-GRO water C6-C10	SW-846 8015B n.a.	ug/l N.D.	ug/l 20	1
<b>GC Volatiles</b>					
08213	Benzene	SW-846 8021B 71-43-2	ug/l N.D.	ug/l 0.2	1
08213	Ethylbenzene	100-41-4	N.D.	0.2	1
08213	Toluene	108-88-3	0.2 J	0.2	1
08213	Total Xylenes	1330-20-7	N.D.	0.6	1
<b>GC Extractable TPH</b>					
08269	TPH-DRO water C10-C28	SW-846 8015B n.a.	ug/l 73 J	ug/l 31	1

### General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01636	TPH-GRO water C6-C10	SW-846 8015B	1	10029A53A	02/01/2010 16:28	Elizabeth J Marin	1
08213	BTEX (8021)	SW-846 8021B	1	10029A53A	02/01/2010 16:10	Elizabeth J Marin	1
01146	GC VOA Water Prep	SW-846 5030B	1	10029A53A	02/01/2010 16:28	Elizabeth J Marin	1
08269	TPH-DRO water C10-C28	SW-846 8015B	1	100320015A	02/03/2010 16:15	Melissa McDermott	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	100320015A	02/02/2010 05:20	Roman Kuropatkin	1



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Sample Description: MW-D Grab Water Sample  
Lovington Paddock, NM

LLI Sample # WW 5894537  
LLI Group # 1180477  
NM

Project Name: Lovington Paddock

Collected: 01/27/2010 11:21 by JL

Account Number: 11842

Submitted: 01/28/2010 09:00

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Reported: 02/08/2010 at 14:01

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LOV-D

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles SW-846 8015B</b>					
01636	TPH-GRO water C6-C10	n.a.	ug/l N.D.	ug/l 20	1
<b>GC Volatiles SW-846 8021B</b>					
08213	Benzene	71-43-2	ug/l N.D.	ug/l 0.2	1
08213	Ethylbenzene	100-41-4	N.D.	0.2	1
08213	Toluene	108-88-3	N.D.	0.2	1
08213	Total Xylenes	1330-20-7	N.D.	0.6	1
<b>GC Extractable TPH SW-846 8015B</b>					
08269	TPH-DRO water C10-C28	n.a.	ug/l 46 J	ug/l 31	1

### General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01636	TPH-GRO water C6-C10	SW-846 8015B	1	10029A53A	02/01/2010 16:52	Elizabeth J Marin	1
08213	BTEX (8021)	SW-846 8021B	1	10029A53A	02/01/2010 16:34	Elizabeth J Marin	1
01146	GC VOA Water Prep	SW-846 5030B	1	10029A53A	02/01/2010 16:52	Elizabeth J Marin	1
08269	TPH-DRO water C10-C28	SW-846 8015B	1	100320015A	02/03/2010 16:37	Melissa McDermott	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	100320015A	02/02/2010 05:20	Roman Kuropatkin	1



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Sample Description: MW-E Grab Water Sample  
Lovington Paddock, NM

LLI Sample # WW 5894538  
LLI Group # 1180477  
NM

Project Name: Lovington Paddock

Collected: 01/27/2010 11:53 by JL

Account Number: 11842

Submitted: 01/28/2010 09:00

STANTEC International, Inc.

Reported: 02/08/2010 at 14:01

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LOV-E

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles</b>					
01636	TPH-GRO water C6-C10	SW-846 8015B n.a.	ug/l N.D.	ug/l 20	1
<b>GC Volatiles</b>					
08213	Benzene	71-43-2	N.D.	0.2	1
08213	Ethylbenzene	100-41-4	N.D.	0.2	1
08213	Toluene	108-88-3	N.D.	0.2	1
08213	Total Xylenes	1330-20-7	N.D.	0.6	1
<b>GC Extractable TPH</b>					
08269	TPH-DRO water C10-C28	SW-846 8015B n.a.	ug/l 62 J	ug/l 31	1

### General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01636	TPH-GRO water C6-C10	SW-846 8015B	1	10029A53A	02/01/2010 17:16	Elizabeth J Marin	1
08213	BTEX (8021)	SW-846 8021B	1	10029A53A	02/01/2010 16:58	Elizabeth J Marin	1
01146	GC VOA Water Prep	SW-846 5030B	1	10029A53A	02/01/2010 17:16	Elizabeth J Marin	1
08269	TPH-DRO water C10-C28	SW-846 8015B	1	100320015A	02/03/2010 16:59	Melissa McDermott	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	100320015A	02/02/2010 05:20	Roman Kuropatkin	1



# Analysis Report

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Sample Description: MW-R Grab Water Sample  
Lovington Paddock, NM

LLI Sample # WW 5894539  
LLI Group # 1180477  
NM

Project Name: Lovington Paddock

Collected: 01/27/2010 12:36 by JL

Account Number: 11842

Submitted: 01/28/2010 09:00

STANTEC International, Inc.

Reported: 02/08/2010 at 14:01

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LOV-R

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles SW-846 8015B</b>					
01636	TPH-GRO water C6-C10	n.a.	ug/l N.D.	ug/l 20	1
<b>GC Volatiles SW-846 8021B</b>					
08213	Benzene	71-43-2	ug/l N.D.	ug/l 0.2	1
08213	Ethylbenzene	100-41-4	N.D.	0.2	1
08213	Toluene	108-88-3	N.D.	0.2	1
08213	Total Xylenes	1330-20-7	N.D.	0.6	1
<b>GC Extractable TPH SW-846 8015B</b>					
08269	TPH-DRO water C10-C28	n.a.	ug/l 41 J	ug/l 30	1

### General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01636	TPH-GRO water C6-C10	SW-846 8015B	1	10029A53A	02/01/2010 17:40	Elizabeth J Marin	1
08213	BTEX (8021)	SW-846 8021B	1	10029A53A	02/01/2010 17:22	Elizabeth J Marin	1
01146	GC VOA Water Prep	SW-846 5030B	1	10029A53A	02/01/2010 17:40	Elizabeth J Marin	1
08269	TPH-DRO water C10-C28	SW-846 8015B	1	100320015A	02/03/2010 18:27	Melissa McDermott	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	100320015A	02/02/2010 05:20	Roman Kuropatkin	1



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Sample Description: MW-B Grab Water Sample  
Lovington Paddock, NM

LLI Sample # WW 5894540  
LLI Group # 1180477  
NM

Project Name: Lovington Paddock

Collected: 01/27/2010 13:28 by JL

Account Number: 11842

Submitted: 01/28/2010 09:00

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Reported: 02/08/2010 at 14:01

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LOV-B

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles SW-846 8015B</b>					
01636	TPH-GRO water C6-C10	n.a.	ug/l 280	ug/l 20	1
<b>GC Volatiles SW-846 8021B</b>					
08213	Benzene	71-43-2	48	0.2	1
08213	Ethylbenzene	100-41-4	N.D.	0.2	1
08213	Toluene	108-88-3	3.2	0.2	1
08213	Total Xylenes	1330-20-7	1.6 J	0.6	1
<b>GC Extractable TPH SW-846 8015B</b>					
08269	TPH-DRO water C10-C28	n.a.	ug/l 100	ug/l 31	1

### General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01636	TPH-GRO water C6-C10	SW-846 8015B	1	10029A53A	02/01/2010 19:18	Elizabeth J Marin	1
08213	BTEX (8021)	SW-846 8021B	1	10029A53A	02/01/2010 19:00	Elizabeth J Marin	1
01146	GC VOA Water Prep	SW-846 5030B	1	10029A53A	02/01/2010 19:18	Elizabeth J Marin	1
08269	TPH-DRO water C10-C28	SW-846 8015B	1	100320015A	02/03/2010 18:49	Melissa McDermott	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	100320015A	02/02/2010 05:20	Roman Kuropatkin	1



# Analysis Report

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Sample Description: MW-H Grab Water Sample  
Lovington Paddock, NM

LLI Sample # WW 5894541  
LLI Group # 1180477  
NM

Project Name: Lovington Paddock

Collected: 01/27/2010 14:11 by JL

Account Number: 11842

Submitted: 01/28/2010 09:00  
Reported: 02/08/2010 at 14:01  
Discard: 03/11/2010

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LOV-H

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles SW-846 8015B</b>					
01636	TPH-GRO water C6-C10	n.a.	ug/l 1,700	ug/l 20	1
<b>GC Volatiles SW-846 8021B</b>					
08213	Benzene	71-43-2	ug/l 600	ug/l 1.0	5
08213	Ethylbenzene	100-41-4	2.5	0.2	1
08213	Toluene	108-88-3	61	0.2	1
08213	Total Xylenes	1330-20-7	17	0.6	1
<b>GC Extractable TPH SW-846 8015B</b>					
08269	TPH-DRO water C10-C28	n.a.	ug/l 160	ug/l 31	1

### General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01636	TPH-GRO water C6-C10	SW-846 8015B	1	10029A53A	02/02/2010 10:01	Elizabeth J Marin	1
08213	BTEX (8021)	SW-846 8021B	1	10029A53A	02/01/2010 22:39	Elizabeth J Marin	5
08213	BTEX (8021)	SW-846 8021B	1	10029A53A	02/02/2010 09:43	Elizabeth J Marin	1
01146	GC VOA Water Prep	SW-846 5030B	1	10029A53A	02/01/2010 22:39	Elizabeth J Marin	5
01146	GC VOA Water Prep	SW-846 5030B	2	10029A53A	02/02/2010 09:43	Elizabeth J Marin	1
08269	TPH-DRO water C10-C28	SW-846 8015B	1	100320015A	02/03/2010 19:10	Melissa McDermott	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	100320015A	02/02/2010 05:20	Roman Kuropatkin	1



# Analysis Report

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Sample Description: DUP-1 Grab Water Sample  
Lovington Paddock, NM

LLI Sample # WW 5894542  
LLI Group # 1180477  
NM

Project Name: Lovington Paddock

Collected: 01/27/2010 by JL

Account Number: 11842

Submitted: 01/28/2010 09:00

STANTEC International, Inc.

Reported: 02/08/2010 at 14:01

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LOVFD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles SW-846 8015B</b>					
01636	TPH-GRO water C6-C10	n.a.	ug/l N.D.	ug/l 20	1
<b>GC Volatiles SW-846 8021B</b>					
08213	Benzene	71-43-2	ug/l N.D.	ug/l 0.2	1
08213	Ethylbenzene	100-41-4	N.D.	0.2	1
08213	Toluene	108-88-3	N.D.	0.2	1
08213	Total Xylenes	1330-20-7	N.D.	0.6	1
<b>GC Extractable TPH SW-846 8015B</b>					
08269	TPH-DRO water C10-C28	n.a.	ug/l 47 J	ug/l 31	1

### General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01636	TPH-GRO water C6-C10	SW-846 8015B	1	10029A53A	02/01/2010 19:42	Elizabeth J Marin	1
08213	BTEX (8021)	SW-846 8021B	1	10029A53A	02/01/2010 19:24	Elizabeth J Marin	1
01146	GC VOA Water Prep	SW-846 5030B	1	10029A53A	02/01/2010 19:42	Elizabeth J Marin	1
08269	TPH-DRO water C10-C28	SW-846 8015B	1	100320015A	02/03/2010 19:32	Melissa McDermott	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	100320015A	02/02/2010 05:20	Roman Kuropatkin	1



# Analysis Report

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Sample Description: MW-S Grab Water Sample  
Lovington Paddock, NM

LLI Sample # WW 5894543  
LLI Group # 1180477  
NM

Project Name: Lovington Paddock

Collected: 01/25/2010 14:10 by SB

Account Number: 11842

Submitted: 01/28/2010 09:00  
Reported: 02/08/2010 at 14:01  
Discard: 03/11/2010

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LOV-S

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC Volatiles	SW-846 8015B		ug/l	ug/l	
01636	TPH-GRO water C6-C10	n.a.	23 J	20	1
GC Volatiles	SW-846 8021B		ug/l	ug/l	
08213	Benzene	71-43-2	N.D.	0.2	1
08213	Ethylbenzene	100-41-4	N.D.	0.2	1
08213	Toluene	108-88-3	N.D.	0.2	1
08213	Total Xylenes	1330-20-7	N.D.	0.6	1
GC Extractable TPH	SW-846 8015B		ug/l	ug/l	
08269	TPH-DRO water C10-C28	n.a.	180 J	61	2

### General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01636	TPH-GRO water C6-C10	SW-846 8015B	1	10029A53A	02/01/2010 20:06	Elizabeth J Marin	1
08213	BTEX (8021)	SW-846 8021B	1	10029A53A	02/01/2010 19:48	Elizabeth J Marin	1
01146	GC VOA Water Prep	SW-846 5030B	1	10029A53A	02/01/2010 20:06	Elizabeth J Marin	1
08269	TPH-DRO water C10-C28	SW-846 8015B	1	100290002A	02/03/2010 09:36	Melissa McDermott	2
07003	Extraction - DRO (Waters)	SW-846 3510C	1	100290002A	01/29/2010 14:30	Timothy J Attenberger	1



# Analysis Report

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Sample Description: MW-M Grab Water Sample  
Lovington Paddock, NM

LLI Sample # WW 5894544  
LLI Group # 1180477  
NM

Project Name: Lovington Paddock

Collected: 01/25/2010 14:53 by SB

Account Number: 11842

Submitted: 01/28/2010 09:00

STANTEC International, Inc.

Reported: 02/08/2010 at 14:01

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Discard: 03/11/2010

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LOV-M

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles</b>					
01636	TPH-GRO water C6-C10	SW-846 8015B n.a.	ug/l N.D.	ug/l 20	1
<b>GC Volatiles</b>					
08213	Benzene	SW-846 8021B 71-43-2	ug/l N.D.	ug/l 0.2	1
08213	Ethylbenzene	100-41-4	N.D.	0.2	1
08213	Toluene	108-88-3	N.D.	0.2	1
08213	Total Xylenes	1330-20-7	N.D.	0.6	1
<b>GC Extractable TPH</b>					
08269	TPH-DRO water C10-C28	SW-846 8015B n.a.	ug/l 250	ug/l 31	1

### General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01636	TPH-GRO water C6-C10	SW-846 8015B	1	10029A53A	02/01/2010 20:30	Elizabeth J Marin	1
08213	BTEX (8021)	SW-846 8021B	1	10029A53A	02/01/2010 20:12	Elizabeth J Marin	1
01146	GC VOA Water Prep	SW-846 5030B	1	10029A53A	02/01/2010 20:30	Elizabeth J Marin	1
08269	TPH-DRO water C10-C28	SW-846 8015B	1	100290002A	02/02/2010 09:20	Melissa McDermott	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	100290002A	01/29/2010 14:30	Timothy J Attenberger	1



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Sample Description: MW-N Grab Water Sample  
Lovington Paddock, NM

LLI Sample # WW 5894545  
LLI Group # 1180477  
NM

Project Name: Lovington Paddock

Collected: 01/26/2010 11:35 by SB

Account Number: 11842

Submitted: 01/28/2010 09:00  
Reported: 02/08/2010 at 14:01  
Discard: 03/11/2010

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Suite E  
Okemos MI 48864

LOV-N

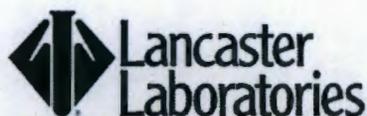
CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles SW-846 8015B</b>					
01636	TPH-GRO water C6-C10	n.a.	ug/l N.D.	ug/l 20	1
<b>GC Volatiles SW-846 8021B</b>					
08213	Benzene	71-43-2	ug/l N.D.	ug/l 0.2	1
08213	Ethylbenzene	100-41-4	N.D.	0.2	1
08213	Toluene	108-88-3	N.D.	0.2	1
08213	Total Xylenes	1330-20-7	N.D.	0.6	1
<b>GC Extractable TPH SW-846 8015B</b>					
08269	TPH-DRO water C10-C28	n.a.	ug/l 41 J	ug/l 30	1

### General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01636	TPH-GRO water C6-C10	SW-846 8015B	1	10029A53A	02/01/2010 20:55	Elizabeth J Marin	1
08213	BTEX (8021)	SW-846 8021B	1	10029A53A	02/01/2010 20:37	Elizabeth J Marin	1
01146	GC VOA Water Prep	SW-846 5030B	1	10029A53A	02/01/2010 20:55	Elizabeth J Marin	1
08269	TPH-DRO water C10-C28	SW-846 8015B	1	100290002A	02/02/2010 09:42	Melissa McDermott	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	100290002A	01/29/2010 14:30	Timothy J Attenberger	1



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Sample Description: MW-W Grab Water Sample  
Lovington Paddock, NM

LLI Sample # WW 5894546  
LLI Group # 1180477  
NM

Project Name: Lovington Paddock

Collected: 01/26/2010 12:31 by SB

Account Number: 11842

Submitted: 01/28/2010 09:00

STANTEC International, Inc.

Reported: 02/08/2010 at 14:01

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Discard: 03/11/2010

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LOV-W

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles SW-846 8015B</b>					
01636	TPH-GRO water C6-C10	n.a.	ug/l N.D.	ug/l 20	1
<b>GC Volatiles SW-846 8021B</b>					
08213	Benzene	71-43-2	ug/l N.D.	ug/l 0.2	1
08213	Ethylbenzene	100-41-4	N.D.	0.2	1
08213	Toluene	108-88-3	N.D.	0.2	1
08213	Total Xylenes	1330-20-7	N.D.	0.6	1
<b>GC Extractable TPH SW-846 8015B</b>					
08269	TPH-DRO water C10-C28	n.a.	ug/l 39 J	ug/l 31	1

### General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01636	TPH-GRO water C6-C10	SW-846 8015B	1	10029A53A	02/01/2010 21:19	Elizabeth J Marin	1
08213	BTEX (8021)	SW-846 8021B	1	10029A53A	02/01/2010 21:01	Elizabeth J Marin	1
01146	GC VOA Water Prep	SW-846 5030B	1	10029A53A	02/01/2010 21:19	Elizabeth J Marin	1
08269	TPH-DRO water C10-C28	SW-846 8015B	1	100290002A	02/02/2010 10:48	Melissa McDermott	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	100290002A	01/29/2010 14:30	Timothy J Attenberger	1



# Analysis Report

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Sample Description: MW-O Grab Water Sample  
Lovington Paddock, NM

LLI Sample # WW 5894547  
LLI Group # 1180477  
NM

Project Name: Lovington Paddock

Collected: 01/26/2010 13:17 by SB

Account Number: 11842

Submitted: 01/28/2010 09:00  
Reported: 02/08/2010 at 14:01  
Discard: 03/11/2010

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LOV-O

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles</b>					
01636	TPH-GRO water C6-C10	SW-846 8015B n.a.	ug/l N.D.	ug/l 20	1
<b>GC Volatiles</b>					
08213	Benzene	71-43-2	N.D.	0.2	1
08213	Ethylbenzene	100-41-4	N.D.	0.2	1
08213	Toluene	108-88-3	N.D.	0.2	1
08213	Total Xylenes	1330-20-7	N.D.	0.6	1
<b>GC Extractable TPH</b>					
08269	TPH-DRO water C10-C28	SW-846 8015B n.a.	ug/l N.D.	ug/l 31	1

### General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01636	TPH-GRO water C6-C10	SW-846 8015B	1	10029A53A	02/01/2010 21:43	Elizabeth J Marin	1
08213	BTEX (8021)	SW-846 8021B	1	10029A53A	02/01/2010 21:25	Elizabeth J Marin	1
01146	GC VOA Water Prep	SW-846 5030B	1	10029A53A	02/01/2010 21:43	Elizabeth J Marin	1
08269	TPH-DRO water C10-C28	SW-846 8015B	1	100290002A	02/02/2010 11:09	Melissa McDermott	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	100290002A	01/29/2010 14:30	Timothy J Attenberger	1



# Analysis Report

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Page 1 of 1

Sample Description: MW-Q Grab Water Sample  
Lovington Paddock, NM

LLI Sample # WW 5894548  
LLI Group # 1180477  
NM

Project Name: Lovington Paddock

Collected: 01/26/2010 13:56 by SB

Account Number: 11842

Submitted: 01/28/2010 09:00

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Reported: 02/08/2010 at 14:01

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Discard: 03/11/2010

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LOV-Q

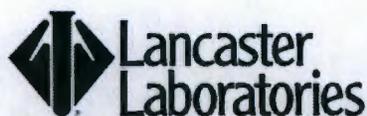
CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles</b>					
01636	TPH-GRO water C6-C10	SW-846 8015B n.a.	ug/l N.D.	ug/l 20	1
<b>GC Volatiles</b>					
08213	Benzene	SW-846 8021B 71-43-2	ug/l N.D.	ug/l 0.2	1
08213	Ethylbenzene	100-41-4	N.D.	0.2	1
08213	Toluene	108-88-3	N.D.	0.2	1
08213	Total Xylenes	1330-20-7	N.D.	0.6	1
<b>GC Extractable TPH</b>					
08269	TPH-DRO water C10-C28	SW-846 8015B n.a.	ug/l 31 J	ug/l 31	1

### General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01636	TPH-GRO water C6-C10	SW-846 8015B	1	10029A53A	02/01/2010 22:08	Elizabeth J Marin	1
08213	BTEX (8021)	SW-846 8021B	1	10029A53A	02/01/2010 21:50	Elizabeth J Marin	1
01146	GC VOA Water Prep	SW-846 5030B	1	10029A53A	02/01/2010 22:08	Elizabeth J Marin	1
08269	TPH-DRO water C10-C28	SW-846 8015B	1	100290002A	02/02/2010 11:31	Melissa McDermott	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	100290002A	01/29/2010 14:30	Timothy J Attenberger	1



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Page 1 of 1

Sample Description: MW-L Grab Water Sample  
Lovington Paddock, NM

LLI Sample # WW 5894549  
LLI Group # 1180477  
NM

Project Name: Lovington Paddock

Collected: 01/27/2010 11:00 by SB

Account Number: 11842

Submitted: 01/28/2010 09:00

STANTEC International, Inc.

Reported: 02/08/2010 at 14:01

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Discard: 03/11/2010

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LOV-L

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles</b>					
01636	TPH-GRO water C6-C10	SW-846 8015B n.a.	ug/l N.D.	ug/l 20	1
<b>GC Volatiles</b>					
08213	Benzene	SW-846 8021B 71-43-2	ug/l N.D.	ug/l 0.2	1
08213	Ethylbenzene	100-41-4	N.D.	0.2	1
08213	Toluene	108-88-3	N.D.	0.2	1
08213	Total Xylenes	1330-20-7	N.D.	0.6	1
<b>GC Extractable TPH</b>					
08269	TPH-DRO water C10-C28	SW-846 8015B n.a.	ug/l 37 J	ug/l 32	1

### General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01636	TPH-GRO water C6-C10	SW-846 8015B	1	10029A53A	02/01/2010 22:33	Elizabeth J Marin	1
08213	BTEX (8021)	SW-846 8021B	1	10029A53A	02/01/2010 22:15	Elizabeth J Marin	1
01146	GC VOA Water Prep	SW-846 5030B	1	10029A53A	02/01/2010 22:15	Elizabeth J Marin	1
08269	TPH-DRO water C10-C28	SW-846 8015B	1	100320015A	02/03/2010 19:54	Melissa McDermott	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	100320015A	02/02/2010 05:20	Roman Kuropatkin	1



# Analysis Report

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Sample Description: MW-P Grab Water Sample  
Lovington Paddock, NM

LLI Sample # WW 5894550  
LLI Group # 1180477  
NM

Project Name: Lovington Paddock

Collected: 01/27/2010 11:54 by SB

Account Number: 11842

Submitted: 01/28/2010 09:00

STANTEC International, Inc.

Reported: 02/08/2010 at 14:01

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LOV-P

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles</b>					
01636	TPH-GRO water C6-C10	SW-846 8015B n.a.	ug/l N.D.	ug/l 20	1
<b>GC Volatiles</b>					
08213	Benzene	SW-846 8021B 71-43-2	ug/l N.D.	ug/l 0.2	1
08213	Ethylbenzene	100-41-4	N.D.	0.2	1
08213	Toluene	108-88-3	N.D.	0.2	1
08213	Total Xylenes	1330-20-7	N.D.	0.6	1
<b>GC Extractable TPH</b>					
08269	TPH-DRO water C10-C28	SW-846 8015B n.a.	ug/l N.D.	ug/l 31	1

### General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01636	TPH-GRO water C6-C10	SW-846 8015B	1	10032A53A	02/02/2010 14:21	Marie D John	1
08213	BTEX (8021)	SW-846 8021B	1	10032A53A	02/02/2010 14:03	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	10032A53A	02/02/2010 14:21	Marie D John	1
08269	TPH-DRO water C10-C28	SW-846 8015B	1	100320015A	02/03/2010 20:16	Melissa McDermott	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	100320015A	02/02/2010 05:20	Roman Kuropatkin	1



# Analysis Report

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Page 1 of 1

Sample Description: MW-C Grab Water Sample  
Lovington Paddock, NM

LLI Sample # WW 5894551  
LLI Group # 1180477  
NM

Project Name: Lovington Paddock

Collected: 01/27/2010 12:52 by SB

Account Number: 11842

Submitted: 01/28/2010 09:00

STANTEC International, Inc.

Reported: 02/08/2010 at 14:01

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Discard: 03/11/2010

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LOV-C

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles</b>					
01636	TPH-GRO water C6-C10	SW-846 8015B n.a.	ug/l N.D.	ug/l 20	1
<b>GC Volatiles</b>					
08213	Benzene	SW-846 8021B 71-43-2	ug/l 2.1	ug/l 0.2	1
08213	Ethylbenzene	100-41-4	N.D.	0.2	1
08213	Toluene	108-88-3	0.3 J	0.2	1
08213	Total Xylenes	1330-20-7	N.D.	0.6	1
<b>GC Extractable TPH</b>					
08269	TPH-DRO water C10-C28	SW-846 8015B n.a.	ug/l 61 J	ug/l 31	1

### General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01636	TPH-GRO water C6-C10	SW-846 8015B	1	10032A53A	02/02/2010 14:45	Marie D John	1
08213	BTEX (8021)	SW-846 8021B	1	10032A53A	02/02/2010 14:27	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	10032A53A	02/02/2010 14:27	Marie D John	1
08269	TPH-DRO water C10-C28	SW-846 8015B	1	100320015A	02/03/2010 20:38	Melissa McDermott	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	100320015A	02/02/2010 05:20	Roman Kuropatkin	1



# Analysis Report

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Page 1 of 1

Sample Description: MW-I Grab Water Sample  
Lovington Paddock, NM

LLI Sample # WW 5894552  
LLI Group # 1180477  
NM

Project Name: Lovington Paddock

Collected: 01/27/2010 13:45 by SB

Account Number: 11842

Submitted: 01/28/2010 09:00

STANTEC International, Inc.

Reported: 02/08/2010 at 14:01

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Discard: 03/11/2010

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LOV-I

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles</b>					
01636	TPH-GRO water C6-C10	SW-846 8015B n.a.	ug/l 130	ug/l 20	1
<b>GC Volatiles</b>					
08213	Benzene	71-43-2	30	0.2	1
08213	Ethylbenzene	100-41-4	0.4 J	0.2	1
08213	Toluene	108-88-3	12	0.2	1
08213	Total Xylenes	1330-20-7	2.5 J	0.6	1
<b>GC Extractable TPH</b>					
08269	TPH-DRO water C10-C28	SW-846 8015B n.a.	ug/l 65 J	ug/l 31	1

### General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01636	TPH-GRO water C6-C10	SW-846 8015B	1	10032A53A	02/02/2010 15:10	Marie D John	1
08213	BTEX (8021)	SW-846 8021B	1	10032A53A	02/02/2010 14:52	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	10032A53A	02/02/2010 15:10	Marie D John	1
08269	TPH-DRO water C10-C28	SW-846 8015B	1	100320015A	02/03/2010 21:00	Melissa McDermott	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	100320015A	02/02/2010 05:20	Roman Kuropatkin	1



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Sample Description: Trip Blank Water Sample  
Lovington Paddock, NM

LLI Sample # WW 5894553  
LLI Group # 1180477  
NM

Project Name: Lovington Paddock

Collected: 01/25/2010

Account Number: 11842

Submitted: 01/28/2010 09:00

STANTEC International, Inc.

Reported: 02/08/2010 at 14:01

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Discard: 03/11/2010

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LOVTB

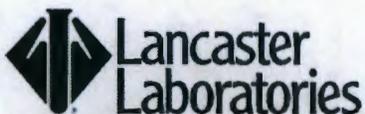
CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles</b>					
		<b>SW-846 8021B</b>	<b>ug/l</b>	<b>ug/l</b>	
08213	Benzene	71-43-2	N.D.	0.2	1
08213	Ethylbenzene	100-41-4	N.D.	0.2	1
08213	Toluene	108-88-3	N.D.	0.2	1
08213	Total Xylenes	1330-20-7	N.D.	0.6	1

### General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08213	BTEX (8021)	SW-846 8021B	1	10032A53A	02/02/2010 13:14	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	10032A53A	02/02/2010 13:14	Marie D John	1



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Sample Description: DUP #2 Grab Water Sample  
Lovington Paddock, NM

LLI Sample # WW 5894554  
LLI Group # 1180477  
NM

Project Name: Lovington Paddock

Collected: 01/27/2010 by SB

Account Number: 11842

Submitted: 01/28/2010 09:00

STANTEC International, Inc.

Reported: 02/08/2010 at 14:01

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LOVF2

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles</b>					
01636	TPH-GRO water C6-C10	SW-846 8015B n.a.	ug/l N.D.	ug/l 20	1
<b>GC Volatiles</b>					
08213	Benzene	SW-846 8021B 71-43-2	ug/l 1.6	ug/l 0.2	1
08213	Ethylbenzene	100-41-4	N.D.	0.2	1
08213	Toluene	108-88-3	0.3 J	0.2	1
08213	Total Xylenes	1330-20-7	N.D.	0.6	1
<b>GC Extractable TPH</b>					
08269	TPH-DRO water C10-C28	SW-846 8015B n.a.	ug/l 67 J	ug/l 31	1

### General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01636	TPH-GRO water C6-C10	SW-846 8015B	1	10032A53A	02/02/2010 15:34	Marie D John	1
08213	BTEX (8021)	SW-846 8021B	1	10032A53A	02/02/2010 15:16	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	2	10032A53A	02/02/2010 15:16	Marie D John	1
08269	TPH-DRO water C10-C28	SW-846 8015B	1	100320015A	02/03/2010 21:22	Melissa McDermott	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	100320015A	02/02/2010 05:20	Roman Kuropatkin	1

## Quality Control Summary

 Client Name: STANTEC International, Inc.  
 Reported: 02/08/10 at 02:01 PM

Group Number: 1180477

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

### Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 10029A53A	Sample number(s): 5894530-5894549							
Benzene	N.D.	0.2	ug/l	105	100	80-120	5	30
Ethylbenzene	N.D.	0.2	ug/l	110	105	80-120	5	30
Toluene	N.D.	0.2	ug/l	105	105	80-120	0	30
TPH-GRO water C6-C10	N.D.	20.	ug/l	109	109	75-135	0	30
Total Xylenes	N.D.	0.6	ug/l	110	108	80-120	2	30
Batch number: 10032A53A	Sample number(s): 5894550-5894554							
Benzene	N.D.	0.2	ug/l	100	100	80-120	0	30
Ethylbenzene	N.D.	0.2	ug/l	105	105	80-120	0	30
Toluene	N.D.	0.2	ug/l	100	100	80-120	0	30
TPH-GRO water C6-C10	N.D.	20.	ug/l	109	109	75-135	0	30
Total Xylenes	N.D.	0.6	ug/l	105	105	80-120	0	30
Batch number: 100290002A	Sample number(s): 5894530-5894535, 5894543-5894548							
TPH-DRO water C10-C28	N.D.	32.	ug/l	80	74	56-122	8	20
Batch number: 100320015A	Sample number(s): 5894536-5894542, 5894549-5894552, 5894554							
TPH-DRO water C10-C28	N.D.	32.	ug/l	70	66	56-122	6	20

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
 Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 10029A53A	Sample number(s): 5894530-5894549 UNSPK: 5894530, 5894531								
Benzene	100		80-152						
Ethylbenzene	105		80-133						
Toluene	105		80-133						
TPH-GRO water C6-C10	109		63-154						
Total Xylenes	108		80-148						
Batch number: 10032A53A	Sample number(s): 5894550-5894554 UNSPK: 5894550, 5894551								
Benzene	110		80-152						
Ethylbenzene	115		80-133						
Toluene	110		80-133						
TPH-GRO water C6-C10	127		63-154						
Total Xylenes	117		80-148						

\*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

 Client Name: STANTEC International, Inc.  
 Reported: 02/08/10 at 02:01 PM

Group Number: 1180477

### Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

 Analysis Name: TPH-GRO water C6-C10  
 Batch number: 10029A53A

	Trifluorotoluene-F	Trifluorotoluene-P
5894530	81	80
5894531	79	81
5894532	83	82
5894533	80	82
5894534	80	83
5894535	80	83
5894536	80	83
5894537	80	83
5894538	81	83
5894539	81	83
5894540	79	84
5894541	96	85
5894542	81	82
5894543	80	83
5894544	83	83
5894545	82	83
5894546	81	83
5894547	80	83
5894548	81	84
5894549	82	83
Blank	81	81
LCS	88	83
LCSD	94	84
MS	87	84
<hr/>		
Limits:	63-135	58-146

 Analysis Name: TPH-GRO water C6-C10  
 Batch number: 10032A53A

	Trifluorotoluene-F	Trifluorotoluene-P
5894550	83	82
5894551	80	83
5894552	82	84
5894553		81
5894554	80	83
Blank	80	81
LCS	91	84
LCSD	89	83
MS	93	83
<hr/>		
Limits:	63-135	58-146

 Analysis Name: TPH-DRO water C10-C28  
 Batch number: 100290002A  
 Orthoterphenyl

5894530	70
5894531	76

\*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: STANTEC International, Inc.  
Reported: 02/08/10 at 02:01 PM

Group Number: 1180477

### Surrogate Quality Control

5894532	80
5894533	76
5894534	79
5894535	77
5894543	79
5894544	76
5894545	78
5894546	76
5894547	78
5894548	73
Blank	84
LCS	92
LCSD	86

---

Limits: 54-127

Analysis Name: TPH-DRO water C10-C28  
Batch number: 100320015A  
Orthoterphenyl

5894536	81
5894537	76
5894538	82
5894539	84
5894540	89
5894541	83
5894542	83
5894549	82
5894550	80
5894551	89
5894552	84
5894554	84
Blank	78
LCS	94
LCSD	88

---

Limits: 54-127

\*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.



# Chevron Generic Analysis Request/Chain of Custody

010675



For Lancaster Laboratories use only  
 Act. #: 11842 Sample #: 5894530-54 SCR#: Group# 118077

Facility #: Lovington Padale 2-22-1131  
 Site Address: Lovington, New Mexico  
 Chevron PM: M. Hudson Lead Consultant: Seth Maher  
 Consultant/Office: Stamper - Lancaster MI  
 Consultant Prj. Mgr.: Seth Maher  
 Consultant Phone #: 517-349-9499 Cell #: 517-490-7967  
 Sampler: SB

Service Order #:  Non SAR:

Sample Identification	Date Collected	Time Collected	Matrix			Total Number of Containers	Analyses Requested						Preservative Codes H = HCl N = HNO <sub>3</sub> S = H <sub>2</sub> SO <sub>4</sub> O = Other	Comments / Remarks
			Soil	Water	Oil		Air	TPH G	Oxygenates	TPH D	TPH/EPH	NWTFH HClID		
MMW-S	1-25-10	1410	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7	<input checked="" type="checkbox"/>							
MMW-M	1-25-10	1453	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7	<input checked="" type="checkbox"/>							
MMW-N	1-26-10	1135	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7	<input checked="" type="checkbox"/>							
MMW-W	1-26-10	1231	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7	<input checked="" type="checkbox"/>							
MMW-O	1-26-10	1317	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7	<input checked="" type="checkbox"/>							
MMW-Q	1-26-10	1356	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7	<input checked="" type="checkbox"/>							
MMW-L	1-27-10	1100	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7	<input checked="" type="checkbox"/>							
MMW-P	1-27-10	1154	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7	<input checked="" type="checkbox"/>							
MMW-C	1-27-10	1252	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7	<input checked="" type="checkbox"/>							
MMW-I	1-27-10	1345	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7	<input checked="" type="checkbox"/>							
TRIP Blanks			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7	<input checked="" type="checkbox"/>							
PUP#2			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7	<input checked="" type="checkbox"/>							

Relinquished by: Steu Ball Date: 1/27/10 Time: 1725

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Relinquished by Commercial Carrier: \_\_\_\_\_ Date: 1/28/10 Time: 900

Temperature Upon Receipt: COOL - 900 Custody Seals Intact?  Yes  No

Turnaround Time Requested (TAT) (please circle)

72 hour  48 hour  5 day  4 day  24-hour

Data Package Options (please circle if required)

QC Summary  Type I - Full  Type VI (Raw Data)  Disk / EDD  Standard Format  Other: \_\_\_\_\_

WIP (RWOCB)  Disk  Other: \_\_\_\_\_

## Lancaster Laboratories Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

<b>N.D.</b>	none detected	<b>BMQL</b>	Below Minimum Quantitation Level
<b>TNTC</b>	Too Numerous To Count	<b>MPN</b>	Most Probable Number
<b>IU</b>	International Units	<b>CP Units</b>	cobalt-chloroplatinate units
<b>umhos/cm</b>	micromhos/cm	<b>NTU</b>	nephelometric turbidity units
<b>C</b>	degrees Celsius	<b>F</b>	degrees Fahrenheit
<b>Cal</b>	(diet) calories	<b>lb.</b>	pound(s)
<b>meq</b>	milliequivalents	<b>kg</b>	kilogram(s)
<b>g</b>	gram(s)	<b>mg</b>	milligram(s)
<b>ug</b>	microgram(s)	<b>l</b>	liter(s)
<b>ml</b>	milliliter(s)	<b>ul</b>	microliter(s)
<b>m3</b>	cubic meter(s)	<b>fib &gt;5 um/ml</b>	fibers greater than 5 microns in length per ml
<b>&lt;</b>	less than – The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
<b>&gt;</b>	greater than		
<b>ppm</b>	parts per million – One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
<b>ppb</b>	parts per billion		
<b>Dry weight basis</b>	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture.		

### U.S. EPA data qualifiers:

Organic Qualifiers	Inorganic Qualifiers
<b>A</b> TIC is a possible aldol-condensation product	<b>B</b> Value is <CRDL, but ≥IDL
<b>B</b> Analyte was also detected in the blank	<b>E</b> Estimated due to interference
<b>C</b> Pesticide result confirmed by GC/MS	<b>M</b> Duplicate injection precision not met
<b>D</b> Compound quantitated on a diluted sample	<b>N</b> Spike amount not within control limits
<b>E</b> Concentration exceeds the calibration range of the instrument	<b>S</b> Method of standard additions (MSA) used for calculation
<b>J</b> Estimated value	<b>U</b> Compound was not detected
<b>N</b> Presumptive evidence of a compound (TICs only)	<b>W</b> Post digestion spike out of control limits
<b>P</b> Concentration difference between primary and confirmation columns >25%	<b>*</b> Duplicate analysis not within control limits
<b>U</b> Compound was not detected	<b>+</b> Correlation coefficient for MSA <0.995
<b>X,Y,Z</b> Defined in case narrative	

Analytical test results for methods listed on the laboratories' accreditation scope meet all requirements of NELAC unless otherwise noted under the individual analysis.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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# Analysis Report

2425 New Holland Pike, PO Box 19428, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2881 • www.lancasterlabs.com

## ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

Prepared for:

STANTEC International, Inc.  
2321 Club Meridian Drive  
Suite E  
Okemos MI 48864

July 23, 2010

Project: Lovington Paddock

Submittal Date: 07/14/2010

Group Number: 1202888

PO Number: 212201131

Release Number: LOVINGTON

State of Sample Origin: NM

Client Sample Description

MW-Q Grab Water Sample  
MW-L Grab Water Sample  
MW-P Grab Water Sample  
MW-C Grab Water Sample  
MW-I Grab Water Sample  
MW-B Grab Water Sample  
MW-H Grab Water Sample  
MW-T Grab Water Sample  
BW-2 Grab Water Sample  
DUP-101 Grab Water Sample  
Trip Blank Water Sample

Lancaster Labs (LLI) #

6031210  
6031211  
6031212  
6031213  
6031214  
6031215  
6031216  
6031217  
6031218  
6031219  
6031220

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC  
COPY TO

STANTEC International, Inc.

Attn: Seth Maher



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2881 • www.lancasterlabs.com

Questions? Contact your Client Services Representative  
Wendy A Kozma at (717) 656-2300 Ext. 1522

Respectfully Submitted,

A handwritten signature in cursive script that reads "Tracy A. Cole".

Tracy A. Cole  
Senior Specialist



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Sample Description: MW-Q Grab Water Sample  
Lovington Paddock, NM

LLI Sample # WW 6031210  
LLI Group # 1202888  
Account # 11842

Project Name: Lovington Paddock

Collected: 07/12/2010 13:10 by JL

STANTEC International, Inc.  
2321 Club Meridian Drive  
Suite E  
Okemos MI 48864

Submitted: 07/14/2010 09:20

Reported: 07/23/2010 09:31

Discard: 08/23/2010

LOVMQ

CAT No.	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles</b>	<b>SW-846 8015B</b>	<b>ug/l</b>	<b>ug/l</b>	
01636 TPH-GRO water C6-C10	n.a.	46 J	20	1
<b>GC Volatiles</b>	<b>SW-846 8021B</b>	<b>ug/l</b>	<b>ug/l</b>	
08213 Benzene	71-43-2	N.D.	0.2	1
08213 Ethylbenzene	100-41-4	N.D.	0.2	1
08213 Toluene	108-88-3	0.4 J	0.2	1
08213 Total Xylenes	1330-20-7	N.D.	0.6	1
<b>GC Extractable TPH</b>	<b>SW-846 8015B</b>	<b>ug/l</b>	<b>ug/l</b>	
08269 TPH-DRO water C10-C28	n.a.	420 J	150	5

Due to the nature of the sample extract matrix, a dilution was used for the analysis. The reporting limits were raised accordingly.

### General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01636	TPH-GRO water C6-C10	SW-846 8015B	1	10196A53A	07/16/2010 17:27	Elizabeth J Marin	1
08213	BTEX (8021) Water	SW-846 8021B	1	10196A53A	07/16/2010 17:27	Elizabeth J Marin	1
01146	GC VOA Water Prep	SW-846 5030B	1	10196A53A	07/16/2010 17:27	Elizabeth J Marin	1
08269	TPH-DRO water C10-C28	SW-846 8015B	1	101950028A	07/19/2010 17:43	Melissa McDermott	5
07003	Extraction - DRO (Waters)	SW-846 3510C	1	101950028A	07/15/2010 09:10	Karen R Rettew	1



# Analysis Report

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Page 1 of 1

Sample Description: MW-L Grab Water Sample  
Lovington Paddock, NM

LLI Sample # WW 6031211  
LLI Group # 1202888  
Account # 11842

Project Name: Lovington Paddock

Collected: 07/12/2010 13:43 by JL

STANTEC International, Inc.

2321 Club Meridian Drive

Submitted: 07/14/2010 09:20

Suite E

Reported: 07/23/2010 09:31

Okemos MI 48864

Discard: 08/23/2010

## LOVML

CAT No.	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles</b>	<b>SW-846 8015B</b>	<b>ug/l</b>	<b>ug/l</b>	
01636 TPH-GRO water C6-C10	n.a.	N.D.	20	1
<b>GC Volatiles</b>	<b>SW-846 8021B</b>	<b>ug/l</b>	<b>ug/l</b>	
08213 Benzene	71-43-2	N.D.	0.2	1
08213 Ethylbenzene	100-41-4	N.D.	0.2	1
08213 Toluene	108-88-3	0.3 J	0.2	1
08213 Total Xylenes	1330-20-7	N.D.	0.6	1
<b>GC Extractable TPH</b>	<b>SW-846 8015B</b>	<b>ug/l</b>	<b>ug/l</b>	
08269 TPH-DRO water C10-C28	n.a.	51 J	32	1

## General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01636	TPH-GRO water C6-C10	SW-846 8015B	1	10196A53A	07/16/2010 17:51	Elizabeth J Marin	1
08213	BTEX (8021) Water	SW-846 8021B	1	10196A53A	07/16/2010 17:51	Elizabeth J Marin	1
01146	GC VOA Water Prep	SW-846 5030B	1	10196A53A	07/16/2010 17:51	Elizabeth J Marin	1
08269	TPH-DRO water C10-C28	SW-846 8015B	1	101950028A	07/17/2010 17:54	Melissa McDermott	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	101950028A	07/15/2010 09:10	Karen R Rettew	1



# Analysis Report

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Page 1 of 1

Sample Description: MW-P Grab Water Sample  
Lovington Paddock, NM

LLI Sample # WW 6031212  
LLI Group # 1202888  
Account # 11842

Project Name: Lovington Paddock

Collected: 07/12/2010 14:12 by JL

STANTEC International, Inc.  
2321 Club Meridian Drive  
Suite E  
Okemos MI 48864

Submitted: 07/14/2010 09:20

Reported: 07/23/2010 09:31

Discard: 08/23/2010

## LOVMP

CAT No.	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles</b>	<b>SW-846 8015B</b>	<b>ug/l</b>	<b>ug/l</b>	
01636 TPH-GRO water C6-C10	n.a.	24 J	20	1
<b>GC Volatiles</b>	<b>SW-846 8021B</b>	<b>ug/l</b>	<b>ug/l</b>	
08213 Benzene	71-43-2	N.D.	0.2	1
08213 Ethylbenzene	100-41-4	N.D.	0.2	1
08213 Toluene	108-88-3	0.4 J	0.2	1
08213 Total Xylenes	1330-20-7	N.D.	0.6	1
<b>GC Extractable TPH</b>	<b>SW-846 8015B</b>	<b>ug/l</b>	<b>ug/l</b>	
08269 TPH-DRO water C10-C28	n.a.	74 J	32	1

## General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis		Analyst	Dilution Factor
					Date	Time		
01636	TPH-GRO water C6-C10	SW-846 8015B	1	10196A53A	07/16/2010	18:15	Elizabeth J Marin	1
08213	BTEX (8021) Water	SW-846 8021B	1	10196A53A	07/16/2010	18:15	Elizabeth J Marin	1
01146	GC VOA Water Prep	SW-846 5030B	1	10196A53A	07/16/2010	18:15	Elizabeth J Marin	1
08269	TPH-DRO water C10-C28	SW-846 8015B	1	101950028A	07/17/2010	18:16	Melissa McDermott	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	101950028A	07/15/2010	09:10	Karen R Rettew	1

Sample Description: MW-C Grab Water Sample  
Lovington Paddock, NM

LLI Sample # WW 6031213  
LLI Group # 1202888  
Account # 11842

Project Name: Lovington Paddock

Collected: 07/12/2010 14:59 by JL

STANTEC International, Inc.

Submitted: 07/14/2010 09:20

2321 Club Meridian Drive

Reported: 07/23/2010 09:31

Suite E

Discard: 08/23/2010

Okemos MI 48864

LOVMC

CAT No.	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles</b>	<b>SW-846 8015B</b>	<b>ug/l</b>	<b>ug/l</b>	
01636 TPH-GRO water C6-C10	n.a.	33 J	20	1
<b>GC Volatiles</b>	<b>SW-846 8021B</b>	<b>ug/l</b>	<b>ug/l</b>	
08213 Benzene	71-43-2	0.5 J	0.2	1
08213 Ethylbenzene	100-41-4	N.D.	0.2	1
08213 Toluene	108-88-3	0.4 J	0.2	1
08213 Total Xylenes	1330-20-7	N.D.	0.6	1
<b>GC Extractable TPH</b>	<b>SW-846 8015B</b>	<b>ug/l</b>	<b>ug/l</b>	
08269 TPH-DRO water C10-C28	n.a.	96 J	33	1

### General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01636	TPH-GRO water C6-C10	SW-846 8015B	1	10196A53A	07/16/2010 18:40	Elizabeth J Marin	1
08213	BTEX (8021) Water	SW-846 8021B	1	10196A53A	07/16/2010 18:40	Elizabeth J Marin	1
01146	GC VOA Water Prep	SW-846 5030B	1	10196A53A	07/16/2010 18:40	Elizabeth J Marin	1
08269	TPH-DRO water C10-C28	SW-846 8015B	1	101950028A	07/17/2010 18:37	Melissa McDermott	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	101950028A	07/15/2010 09:10	Karen R Rettew	1



# Analysis Report

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Page 1 of 1

Sample Description: MW-I Grab Water Sample  
Lovington Paddock, NM

LLI Sample # WW 6031214  
LLI Group # 1202888  
Account # 11842

Project Name: Lovington Paddock

Collected: 07/12/2010 16:21 by JL

STANTEC International, Inc.  
2321 Club Meridian Drive  
Suite E  
Okemos MI 48864

Submitted: 07/14/2010 09:20

Reported: 07/23/2010 09:31

Discard: 08/23/2010

LOVMI

CAT No.	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles</b>	<b>SW-846 8015B</b>	<b>ug/l</b>	<b>ug/l</b>	
01636 TPH-GRO water C6-C10	n.a.	140	20	1
<b>GC Volatiles</b>	<b>SW-846 8021B</b>	<b>ug/l</b>	<b>ug/l</b>	
08213 Benzene	71-43-2	41	0.2	1
08213 Ethylbenzene	100-41-4	0.3 J	0.2	1
08213 Toluene	108-88-3	2.8	0.2	1
08213 Total Xylenes	1330-20-7	1.4 J	0.6	1
<b>GC Extractable TPH</b>	<b>SW-846 8015B</b>	<b>ug/l</b>	<b>ug/l</b>	
08269 TPH-DRO water C10-C28	n.a.	47 J	31	1

### General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01636	TPH-GRO water C6-C10	SW-846 8015B	1	10196A53A	07/16/2010 19:04	Elizabeth J Marin	1
08213	BTEX (8021) Water	SW-846 8021B	1	10196A53A	07/16/2010 19:04	Elizabeth J Marin	1
01146	GC VOA Water Prep	SW-846 5030B	1	10196A53A	07/16/2010 19:04	Elizabeth J Marin	1
08269	TPH-DRO water C10-C28	SW-846 8015B	1	101950028A	07/17/2010 18:59	Melissa McDermott	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	101950028A	07/15/2010 09:10	Karen R Rettew	1



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Sample Description: MW-B Grab Water Sample  
Lovington Paddock, NM

LLI Sample # WW 6031215  
LLI Group # 1202888  
Account # 11842

Project Name: Lovington Paddock

Collected: 07/12/2010 17:09 by JL

STANTEC International, Inc.

2321 Club Meridian Drive

Submitted: 07/14/2010 09:20

Suite E

Reported: 07/23/2010 09:31

Okemos MI 48864

Discard: 08/23/2010

## LOVMB

CAT No.	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles</b>	<b>SW-846 8015B</b>	<b>ug/l</b>	<b>ug/l</b>	
01636 TPH-GRO water C6-C10	n.a.	260	20	1
<b>GC Volatiles</b>	<b>SW-846 8021B</b>	<b>ug/l</b>	<b>ug/l</b>	
08213 Benzene	71-43-2	77	0.2	1
08213 Ethylbenzene	100-41-4	N.D.	0.2	1
08213 Toluene	108-88-3	2.9	0.2	1
08213 Total Xylenes	1330-20-7	1.6 J	0.6	1
<b>GC Extractable TPH</b>	<b>SW-846 8015B</b>	<b>ug/l</b>	<b>ug/l</b>	
08269 TPH-DRO water C10-C28	n.a.	63 J	31	1

## General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01636	TPH-GRO water C6-C10	SW-846 8015B	1	10196A53A	07/16/2010 19:29	Elizabeth J Marin	1
08213	BTEX (8021) Water	SW-846 8021B	1	10196A53A	07/16/2010 19:29	Elizabeth J Marin	1
01146	GC VOA Water Prep	SW-846 5030B	1	10196A53A	07/16/2010 19:29	Elizabeth J Marin	1
08269	TPH-DRO water C10-C28	SW-846 8015B	1	101950028A	07/17/2010 20:05	Melissa McDermott	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	101950028A	07/15/2010 09:10	Karen R Rettew	1



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Sample Description: MW-H Grab Water Sample  
Lovington Paddock, NM

LLI Sample # WW 6031216  
LLI Group # 1202888  
Account # 11842

Project Name: Lovington Paddock

Collected: 07/13/2010 09:06 by JL

STANTEC International, Inc.  
2321 Club Meridian Drive  
Suite E  
Okemos MI 48864

Submitted: 07/14/2010 09:20

Reported: 07/23/2010 09:31

Discard: 08/23/2010

LOVMH

CAT No.	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles</b>	<b>SW-846 8015B</b>	<b>ug/l</b>	<b>ug/l</b>	
01636 TPH-GRO water C6-C10	n.a.	1,500	100	5
<b>GC Volatiles</b>	<b>SW-846 8021B</b>	<b>ug/l</b>	<b>ug/l</b>	
08213 Benzene	71-43-2	710	1.0	5
08213 Ethylbenzene	100-41-4	1.6 J	1.0	5
08213 Toluene	108-88-3	32	1.0	5
08213 Total Xylenes	1330-20-7	7.9 J	3.0	5
<b>GC Extractable TPH</b>	<b>SW-846 8015B</b>	<b>ug/l</b>	<b>ug/l</b>	
08269 TPH-DRO water C10-C28	n.a.	94 J	31	1

### General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis		Analyst	Dilution Factor
					Date	Time		
01636	TPH-GRO water C6-C10	SW-846 8015B	1	10196A53A	07/16/2010	23:06	Elizabeth J Marin	5
08213	BTEX (8021) Water	SW-846 8021B	1	10196A53A	07/16/2010	23:06	Elizabeth J Marin	5
01146	GC VOA Water Prep	SW-846 5030B	1	10196A53A	07/16/2010	23:06	Elizabeth J Marin	5
08269	TPH-DRO water C10-C28	SW-846 8015B	1	101950028A	07/17/2010	20:26	Melissa McDermott	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	101950028A	07/15/2010	09:10	Karen R Rettew	1



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2661 • www.lancasterlabs.com

Page 1 of 1

Sample Description: MW-T Grab Water Sample  
Lovington Paddock, NM

LLI Sample # WW 6031217  
LLI Group # 1202888  
Account # 11842

Project Name: Lovington Paddock

Collected: 07/13/2010 09:56 by JL

STANTEC International, Inc.  
2321 Club Meridian Drive  
Suite E  
Okemos MI 48864

Submitted: 07/14/2010 09:20

Reported: 07/23/2010 09:31

Discard: 08/23/2010

## LOVMT

CAT No.	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles</b>	<b>SW-846 8015B</b>	<b>ug/l</b>	<b>ug/l</b>	
01636 TPH-GRO water C6-C10	n.a.	2,400	20	1
<b>GC Volatiles</b>	<b>SW-846 8021B</b>	<b>ug/l</b>	<b>ug/l</b>	
08213 Benzene	71-43-2	840	1.0	5
08213 Ethylbenzene	100-41-4	26	0.2	1
08213 Toluene	108-88-3	180	0.2	1
08213 Total Xylenes	1330-20-7	55	0.6	1
<b>GC Extractable TPH</b>	<b>SW-846 8015B</b>	<b>ug/l</b>	<b>ug/l</b>	
08269 TPH-DRO water C10-C28	n.a.	70 J	31	1

## General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis		Analyst	Dilution Factor
					Date	Time		
01636	TPH-GRO water C6-C10	SW-846 8015B	1	10196A53A	07/16/2010	19:52	Elizabeth J Marin	1
08213	BTEX (8021) Water	SW-846 8021B	1	10196A53A	07/16/2010	19:52	Elizabeth J Marin	1
08213	BTEX (8021) Water	SW-846 8021B	1	10196A53B	07/18/2010	21:02	Carrie E Miller	5
01146	GC VOA Water Prep	SW-846 5030B	1	10196A53A	07/16/2010	19:52	Elizabeth J Marin	1
01146	GC VOA Water Prep	SW-846 5030B	2	10196A53B	07/18/2010	21:02	Carrie E Miller	5
08269	TPH-DRO water C10-C28	SW-846 8015B	1	101950028A	07/17/2010	20:48	Melissa McDermott	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	101950028A	07/15/2010	09:10	Karen R Rettew	1



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2881 • www.lancasterlabs.com

Sample Description: BW-2 Grab Water Sample  
Lovington Paddock, NM

LLI Sample # WW 6031218  
LLI Group # 1202888  
Account # 11842

Project Name: Lovington Paddock

Collected: 07/13/2010 10:43 by JL

STANTEC International, Inc.  
2321 Club Meridian Drive  
Suite E  
Okemos MI 48864

Submitted: 07/14/2010 09:20

Reported: 07/23/2010 09:31

Discard: 08/23/2010

LOVB2

CAT No.	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles</b>	<b>SW-846 8015B</b>	<b>ug/l</b>	<b>ug/l</b>	
01636 TPH-GRO water C6-C10	n.a.	370	20	1
<b>GC Volatiles</b>	<b>SW-846 8021B</b>	<b>ug/l</b>	<b>ug/l</b>	
08213 Benzene	71-43-2	130	0.2	1
08213 Ethylbenzene	100-41-4	6.1	0.2	1
08213 Toluene	108-88-3	38	0.2	1
08213 Total Xylenes	1330-20-7	13	0.6	1
<b>GC Extractable TPH</b>	<b>SW-846 8015B</b>	<b>ug/l</b>	<b>ug/l</b>	
08269 TPH-DRO water C10-C28	n.a.	130	32	1

### General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01636	TPH-GRO water C6-C10	SW-846 8015B	1	10196A53B	07/18/2010 20:13	Carrie E Miller	1
08213	BTEX (8021) Water	SW-846 8021B	1	10196A53B	07/18/2010 20:13	Carrie E Miller	1
01146	GC VOA Water Prep	SW-846 5030B	1	10196A53B	07/18/2010 20:13	Carrie E Miller	1
08269	TPH-DRO water C10-C28	SW-846 8015B	1	101950028A	07/17/2010 21:10	Melissa McDermott	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	101950028A	07/15/2010 09:10	Karen R Rettew	1



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Sample Description: DUP-101 Grab Water Sample  
Lovington Paddock, NM

LLI Sample # WW 6031219  
LLI Group # 1202888  
Account # 11842

Project Name: Lovington Paddock

Collected: 07/13/2010 by JL

STANTEC International, Inc.

2321 Club Meridian Drive

Suite E

Okemos MI 48864

Submitted: 07/14/2010 09:20

Reported: 07/23/2010 09:31

Discard: 08/23/2010

## FDLOV

CAT No.	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles</b>	<b>SW-846 8015B</b>	<b>ug/l</b>	<b>ug/l</b>	
01636 TPH-GRO water C6-C10	n.a.	2,400	20	1
<b>GC Volatiles</b>	<b>SW-846 8021B</b>	<b>ug/l</b>	<b>ug/l</b>	
08213 Benzene	71-43-2	860	1.0	5
08213 Ethylbenzene	100-41-4	26	0.2	1
08213 Toluene	108-88-3	180	0.2	1
08213 Total Xylenes	1330-20-7	55	0.6	1
<b>GC Extractable TPH</b>	<b>SW-846 8015B</b>	<b>ug/l</b>	<b>ug/l</b>	
08269 TPH-DRO water C10-C28	n.a.	72 J	31	1

## General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01636	TPH-GRO water C6-C10	SW-846 8015B	1	10196A53A	07/16/2010 21:29	Elizabeth J Marin	1
08213	BTEX (8021) Water	SW-846 8021B	1	10196A53A	07/16/2010 21:29	Elizabeth J Marin	1
08213	BTEX (8021) Water	SW-846 8021B	1	10196A53B	07/18/2010 21:26	Carrie E Miller	5
01146	GC VOA Water Prep	SW-846 5030B	1	10196A53A	07/16/2010 21:29	Elizabeth J Marin	1
01146	GC VOA Water Prep	SW-846 5030B	2	10196A53B	07/18/2010 21:26	Carrie E Miller	5
08269	TPH-DRO water C10-C28	SW-846 8015B	1	101950028A	07/17/2010 21:32	Melissa McDermott	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	101950028A	07/15/2010 09:10	Karen R Rettew	1



# Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17805-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Sample Description: Trip Blank Water Sample  
Lovington Paddock, NM

LLI Sample # WW 6031220  
LLI Group # 1202888  
Account # 11842

Project Name: Lovington Paddock

Collected: 07/12/2010

STANTEC International, Inc.  
2321 Club Meridian Drive  
Suite E  
Okemos MI 48864

Submitted: 07/14/2010 09:20

Reported: 07/23/2010 09:31

Discard: 08/23/2010

TBLOV

CAT No.	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles</b>	<b>SW-846 8021B</b>	<b>ug/l</b>	<b>ug/l</b>	
08213 Benzene	71-43-2	N.D.	0.2	1
08213 Ethylbenzene	100-41-4	N.D.	0.2	1
08213 Toluene	108-88-3	N.D.	0.2	1
08213 Total Xylenes	1330-20-7	N.D.	0.6	1

### General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08213	BTEX (8021) Water	SW-846 8021B	1	10196A53A	07/16/2010 16:39	Elizabeth J Marin	1
01146	GC VOA Water Prep	SW-846 5030B	1	10196A53A	07/16/2010 16:39	Elizabeth J Marin	1

## Quality Control Summary

 Client Name: STANTEC International, Inc.  
 Reported: 07/23/10 at 09:31 AM

Group Number: 1202888

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

### Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 10196A53A	Sample number(s): 6031210-6031217, 6031219-6031220							
Benzene	N.D.	0.2	ug/l	105	105	80-120	0	30
Ethylbenzene	N.D.	0.2	ug/l	105	105	80-120	0	30
Toluene	N.D.	0.2	ug/l	105	105	80-120	0	30
TPH-GRO water C6-C10	N.D.	20.	ug/l	109	118	75-135	8	30
Total Xylenes	N.D.	0.6	ug/l	107	108	80-120	2	30
Batch number: 10196A53B	Sample number(s): 6031217-6031219							
Benzene	N.D.	0.2	ug/l	105	105	80-120	0	30
Ethylbenzene	N.D.	0.2	ug/l	105	105	80-120	0	30
Toluene	N.D.	0.2	ug/l	105	105	80-120	0	30
TPH-GRO water C6-C10	N.D.	20.	ug/l	109	118	75-135	8	30
Total Xylenes	N.D.	0.6	ug/l	107	108	80-120	2	30
Batch number: 101950028A	Sample number(s): 6031210-6031219							
TPH-DRO water C10-C28	N.D.	32.	ug/l	88	85	56-122	3	20

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike  
 Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 10196A53A	Sample number(s): 6031210-6031217, 6031219-6031220 UNSPK: 6031211, 6031212								
Benzene	115		80-152						
Ethylbenzene	120		80-133						
Toluene	118		80-133						
TPH-GRO water C6-C10	125		63-154						
Total Xylenes	122		80-148						
Batch number: 10196A53B	Sample number(s): 6031217-6031219 UNSPK: 6031211, 6031212								
Benzene	115		80-152						
Ethylbenzene	120		80-133						
Toluene	118		80-133						
TPH-GRO water C6-C10	125		63-154						
Total Xylenes	122		80-148						

### Surrogate Quality Control

\*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

 Client Name: STANTEC International, Inc.  
 Reported: 07/23/10 at 09:31 AM

Group Number: 1202888

### Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

 Analysis Name: TPH-GRO water C6-C10  
 Batch number: 10196A53A

	Trifluorotoluene-F	Trifluorotoluene-P
6031210	80	87
6031211	79	88
6031212	81	89
6031213	79	90
6031214	80	90
6031215	80	90
6031216	81	92
6031217	97	95
6031219	92	95
6031220		87
Blank	78	86
LCS	82	89
LCS D	82	89
MS	87	89
Limits:	63-135	58-146

 Analysis Name: TPH-GRO water C6-C10  
 Batch number: 10196A53B

	Trifluorotoluene-F	Trifluorotoluene-P
6031218	81	90
Blank	81	88
LCS	82	89
LCS D	82	89
MS	87	89
Limits:	63-135	58-146

 Analysis Name: TPH-DRO water C10-C28  
 Batch number: 101950028A  
 Orthoterphenyl

6031210	82
6031211	73
6031212	79
6031213	84
6031214	79
6031215	81
6031216	82
6031217	82
6031218	87
6031219	78
Blank	80
LCS	90
LCS D	88
Limits:	54-127

#### \*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

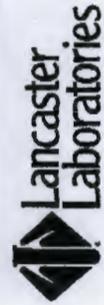
Client Name: STANTEC International, Inc.  
Reported: 07/23/10 at 09:31 AM

Group Number: 1202888

\*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

# Analysis Request / Environmental Services Chain of Custody



For Lancaster Laboratories use only

Acc. # 11842 Group # 1203888 Sample # 0031210-20 **COC # 237683**

Please print. Instructions on reverse side correspond with circled numbers.

Client: Stowlec Acct. #: \_\_\_\_\_  
 Project Name: Reddock / Zirconia St. PWSID #: 300-750  
 Project Manager: S. Mahoney P.O. #: \_\_\_\_\_  
 Sampler: D. Kousyuel Quote #: \_\_\_\_\_  
 Name of state where samples were collected: MD

For Lab Use Only  
 FSC: \_\_\_\_\_ SCR#: 92623

Preservation Codes  
 H=HCl T=Thiosulfate  
 N=HNO<sub>3</sub> B=NaOH  
 S=H<sub>2</sub>SO<sub>4</sub> O=Other

Temperature of samples (upon receipt if requested) **6**

Sample Identification	Date Collected	Time Collected	Matrix			Total # of Containers	Analyses Requested			Remarks
			Soil	Water	Other		Preservation Codes	Preservation Codes	Preservation Codes	
MW-Q	7/12/10	1310	X	X		8	H	H	H	
MW-L		1343	X	X		8	H	H	H	TPH @ (801B)
MW-P		1412	X	X		8	H	H	H	TPH @ (801B)
MW-C		1459	X	X		8	H	H	H	TPH @ (801B)
MW-E		1621	X	X		8	H	H	H	TPH @ (801B)
MW-B	7/12/10	1709	X	X		8	H	H	H	TPH @ (801B)
MW-H	7/13/10	0900	X	X		8	H	H	H	TPH @ (801B)
MW-T		0950	X	X		8	H	H	H	TPH @ (801B)
BW-2		1003	X	X		8	H	H	H	TPH @ (801B)
DUP-101	7/12/10		X	X		8	H	H	H	TPH @ (801B)

Relinquished by: [Signature] Date: 7-10-10 Time: 1210

Relinquished by: [Signature] Date: 7/13/10 Time: 1533

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Relinquished by: [Signature] Date: 7/13/10 Time: 0920

Turnaround Time Requested (TAT) (please circle): Normal Rush  
 (Rush TAT is subject to Lancaster Laboratories approval and surcharge.)  
 Date results are needed: \_\_\_\_\_  
 Rush results requested by (please circle): Phone Fax E-mail  
 Phone #: \_\_\_\_\_ Fax #: \_\_\_\_\_  
 E-mail address: \_\_\_\_\_

SDG Complete? Yes No  
 TX TRRP-13 Yes No  
 MA MCP CT RCP Yes No  
 Site-specific QC (MS/MSD/Dup)? Yes No  
 Internal COC Required? Yes / No



# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

<b>RL</b>	Reporting Limit	<b>BMQL</b>	Below Minimum Quantitation Level
<b>N.D.</b>	none detected	<b>MPN</b>	Most Probable Number
<b>TNTC</b>	Too Numerous To Count	<b>CP Units</b>	cobalt-chloroplatinate units
<b>IU</b>	International Units	<b>NTU</b>	nephelometric turbidity units
<b>umhos/cm</b>	micromhos/cm	<b>ng</b>	nanogram(s)
<b>C</b>	degrees Celsius	<b>F</b>	degrees Fahrenheit
<b>meq</b>	milliequivalents	<b>lb.</b>	pound(s)
<b>g</b>	gram(s)	<b>kg</b>	kilogram(s)
<b>ug</b>	microgram(s)	<b>mg</b>	milligram(s)
<b>ml</b>	milliliter(s)	<b>l</b>	liter(s)
<b>m<sup>3</sup></b>	cubic meter(s)	<b>ul</b>	microliter(s)
<b>&lt;</b>	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
<b>&gt;</b>	greater than		
<b>J</b>	estimated value - The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).		
<b>ppm</b>	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
<b>ppb</b>	parts per billion		
<b>Dry weight basis</b>	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

## U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
<b>A</b>	TIC is a possible aldol-condensation product	<b>B</b>	Value is $<$ CRDL, but $\geq$ IDL
<b>B</b>	Analyte was also detected in the blank	<b>E</b>	Estimated due to interference
<b>C</b>	Pesticide result confirmed by GC/MS	<b>M</b>	Duplicate injection precision not met
<b>D</b>	Compound quantitated on a diluted sample	<b>N</b>	Spike sample not within control limits
<b>E</b>	Concentration exceeds the calibration range of the instrument	<b>S</b>	Method of standard additions (MSA) used for calculation
<b>N</b>	Presumptive evidence of a compound (TICs only)	<b>U</b>	Compound was not detected
<b>P</b>	Concentration difference between primary and confirmation columns $>$ 25%	<b>W</b>	Post digestion spike out of control limits
<b>U</b>	Compound was not detected	<b>*</b>	Duplicate analysis not within control limits
<b>X,Y,Z</b>	Defined in case narrative	<b>+</b>	Correlation coefficient for MSA $<$ 0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

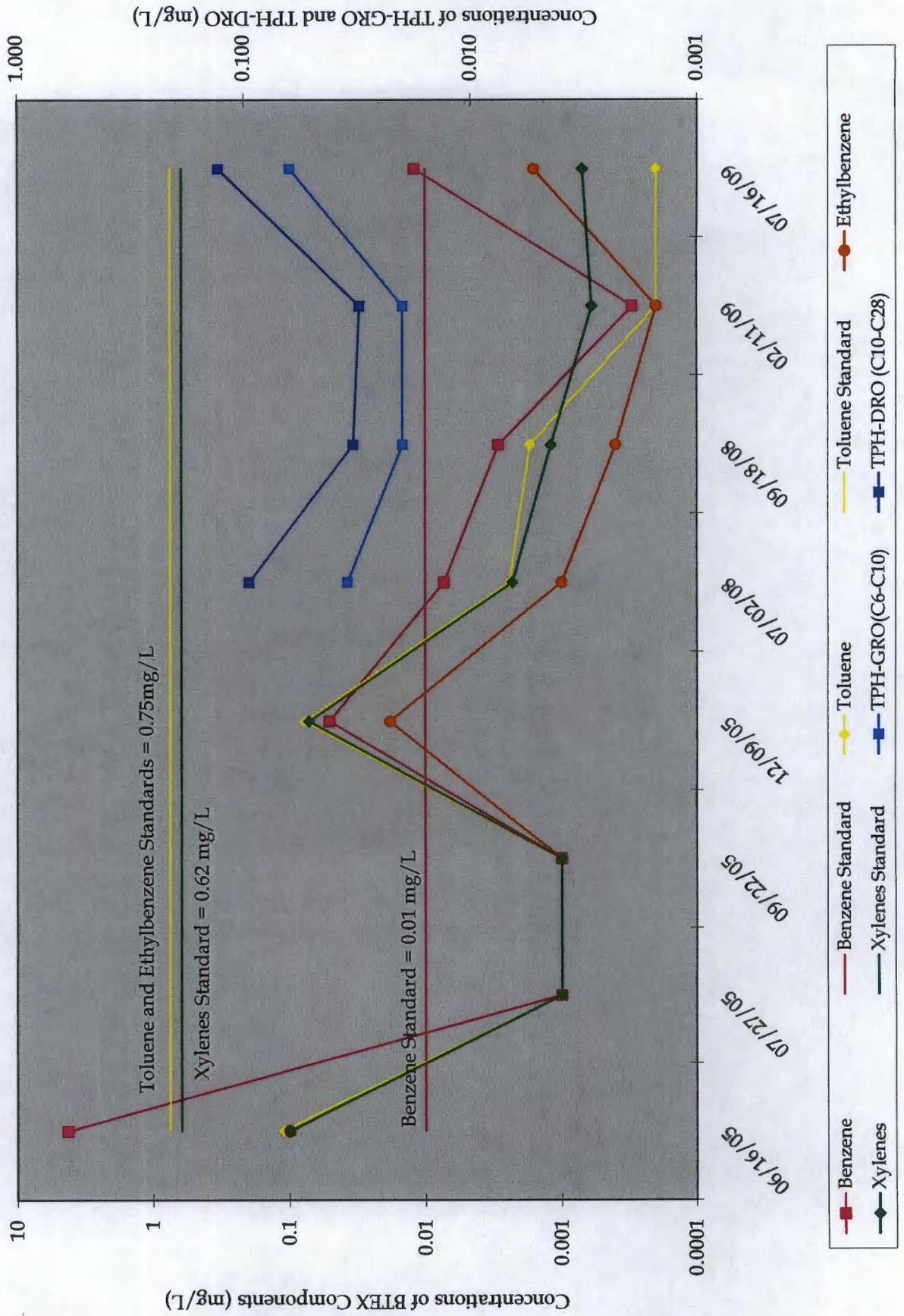
Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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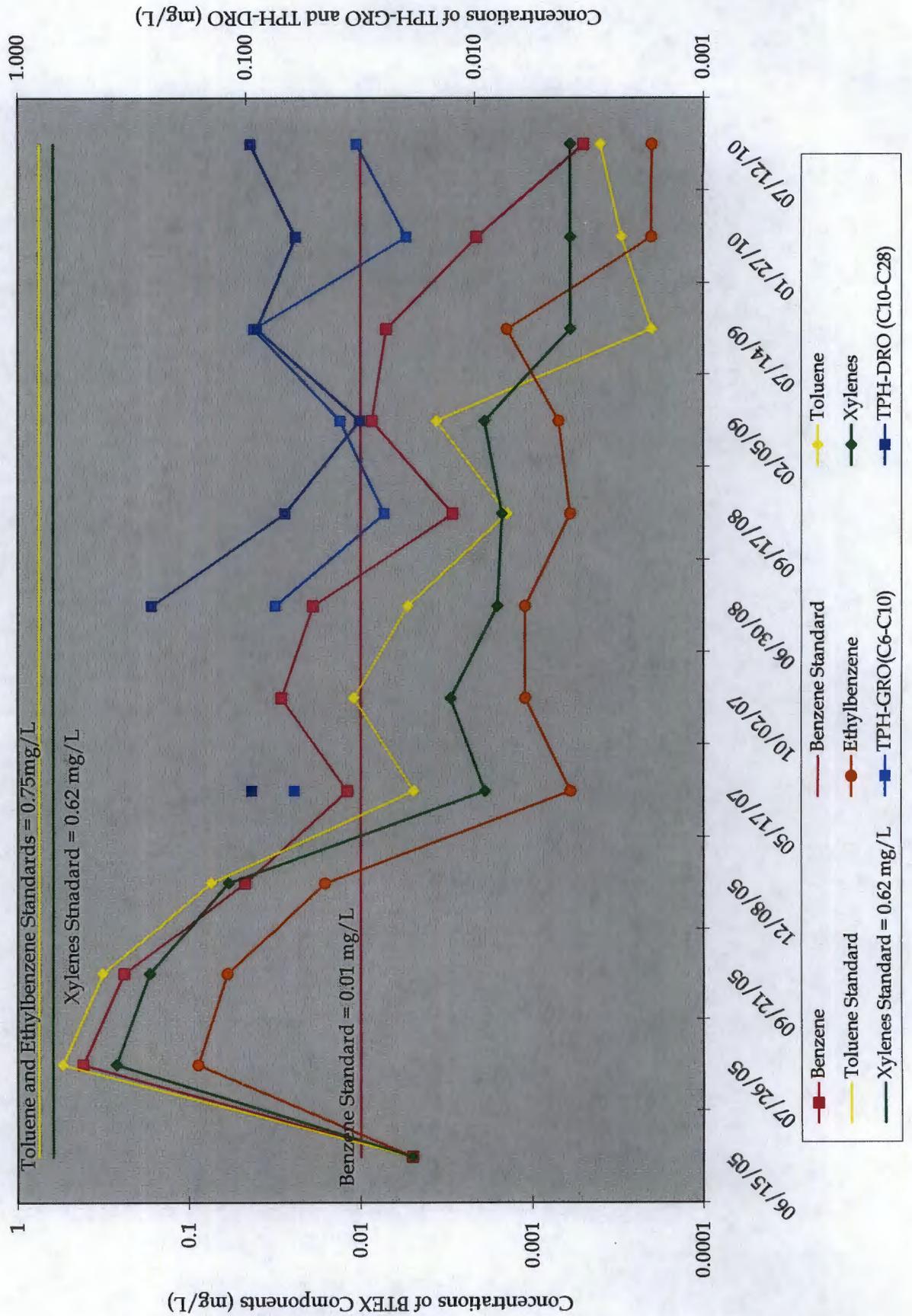


**DISSOLVED BTEX AND TPH--BW-3  
LOVINGTON PADDOCK GROUNDWATER REMEDIATION SITE  
LEA COUNTY, NEW MEXICO**



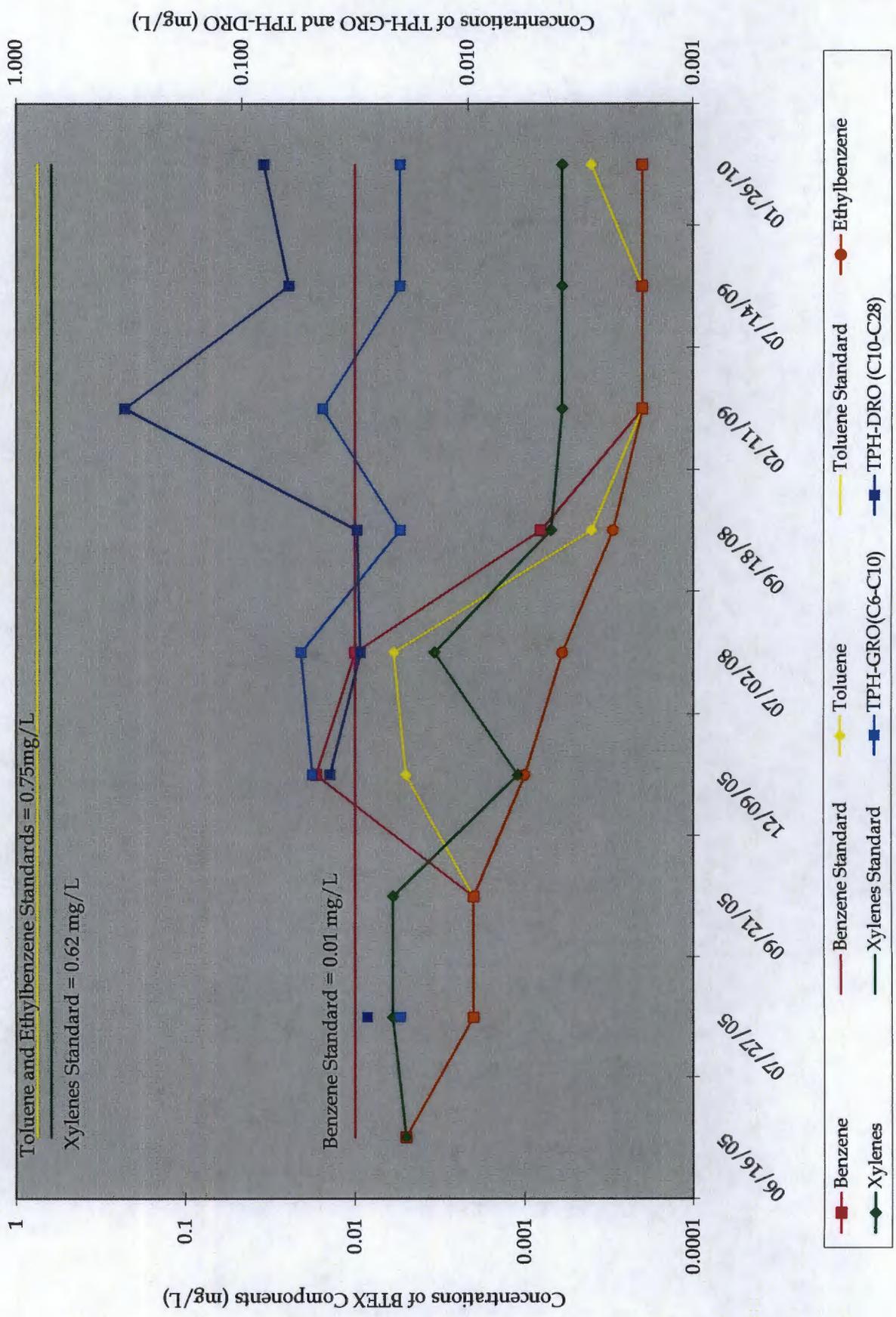


**DISSOLVED BTEX AND TPH--MW-C  
LOVINGTON PADDOCK GROUNDWATER REMEDIATION SITE  
LEA COUNTY, NEW MEXICO**



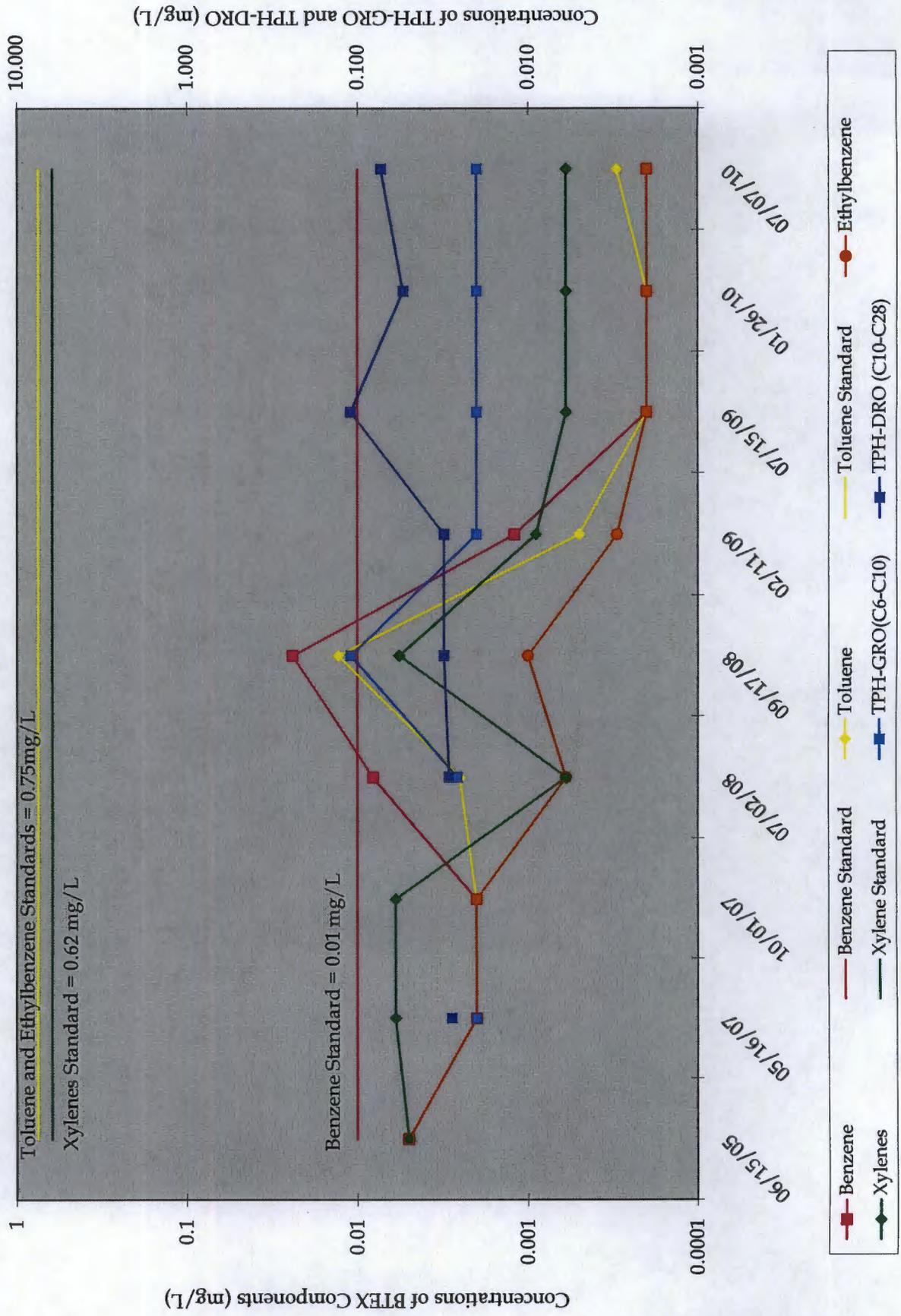


**DISSOLVED BTEX AND TPH-MW-E  
LOVINGTON PADDOCK GROUNDWATER REMEDIATION SITE  
LEA COUNTY, NEW MEXICO**





**DISSOLVED BTEX AND TPH--MW-G  
LOVINGTON PADDOCK GROUNDWATER REMEDIATION SITE  
LEA COUNTY, NEW MEXICO**

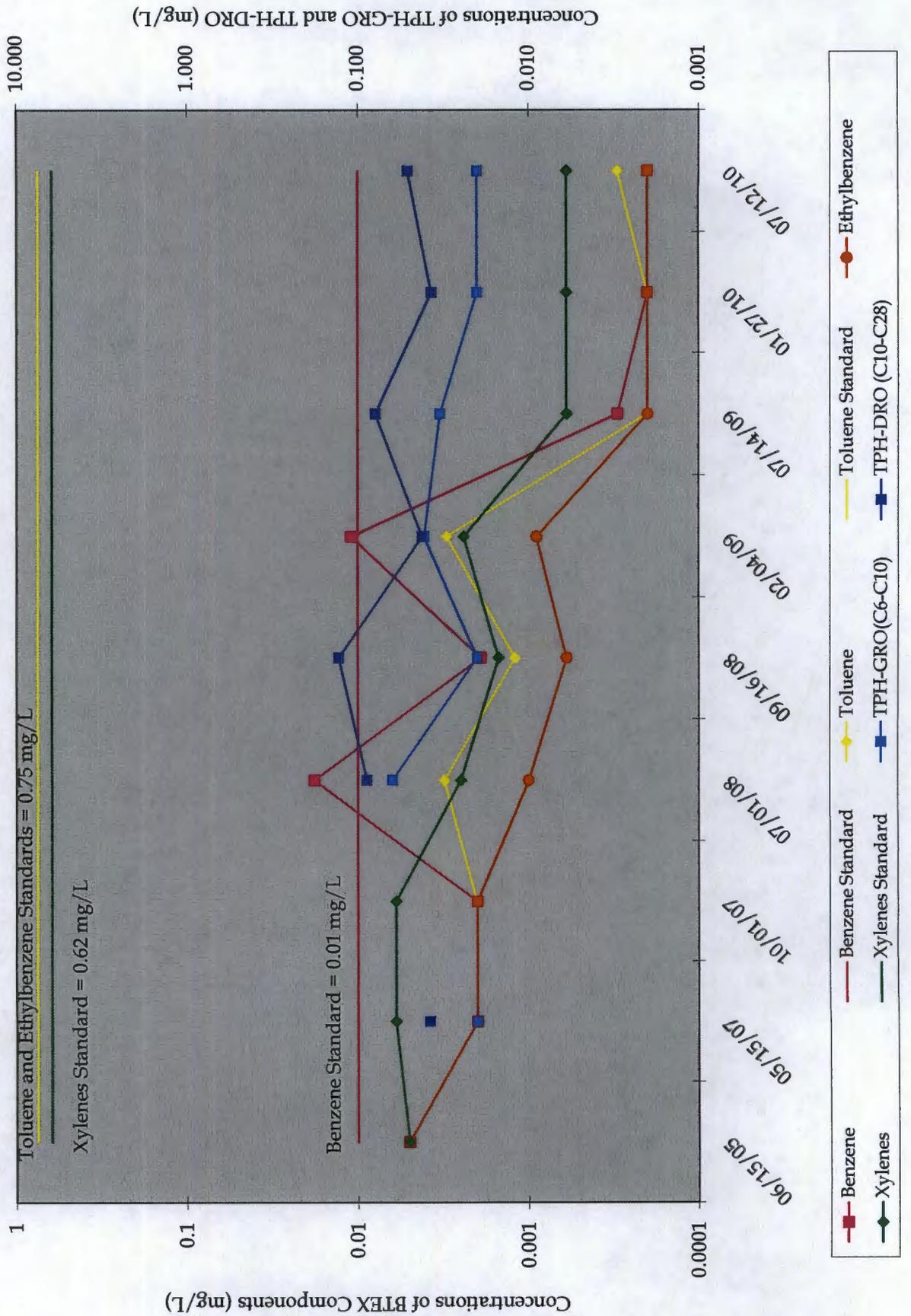






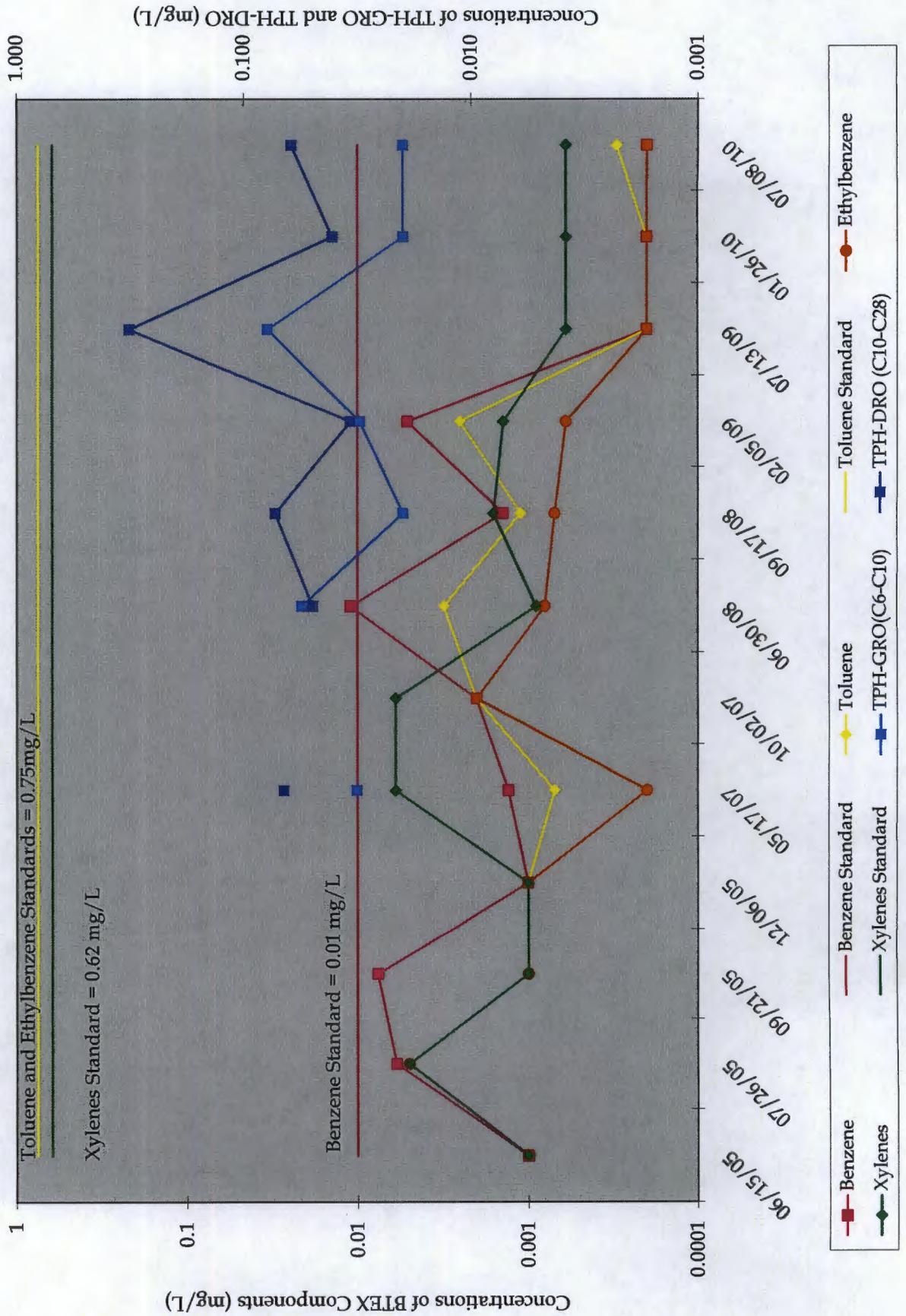


**DISSOLVED BTEX AND TPH--MW-L  
LOVINGTON PADDOCK GROUNDWATER REMEDIATION SITE  
LEA COUNTY, NEW MEXICO**



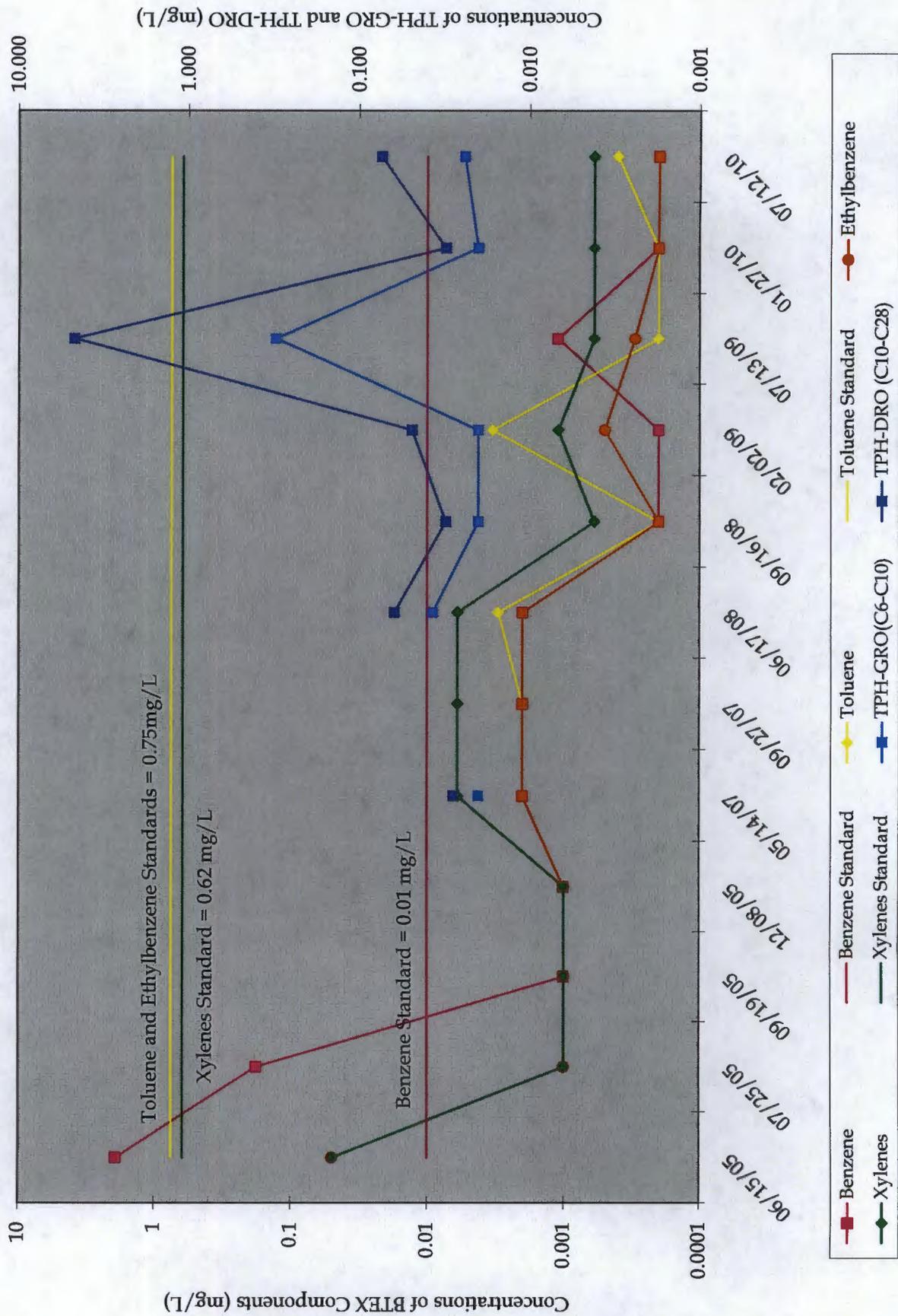


**DISSOLVED BTEX AND TPH-MW-N  
LOVINGTON PADDOCK GROUNDWATER REMEDIATION SITE  
LEA COUNTY, NEW MEXICO**

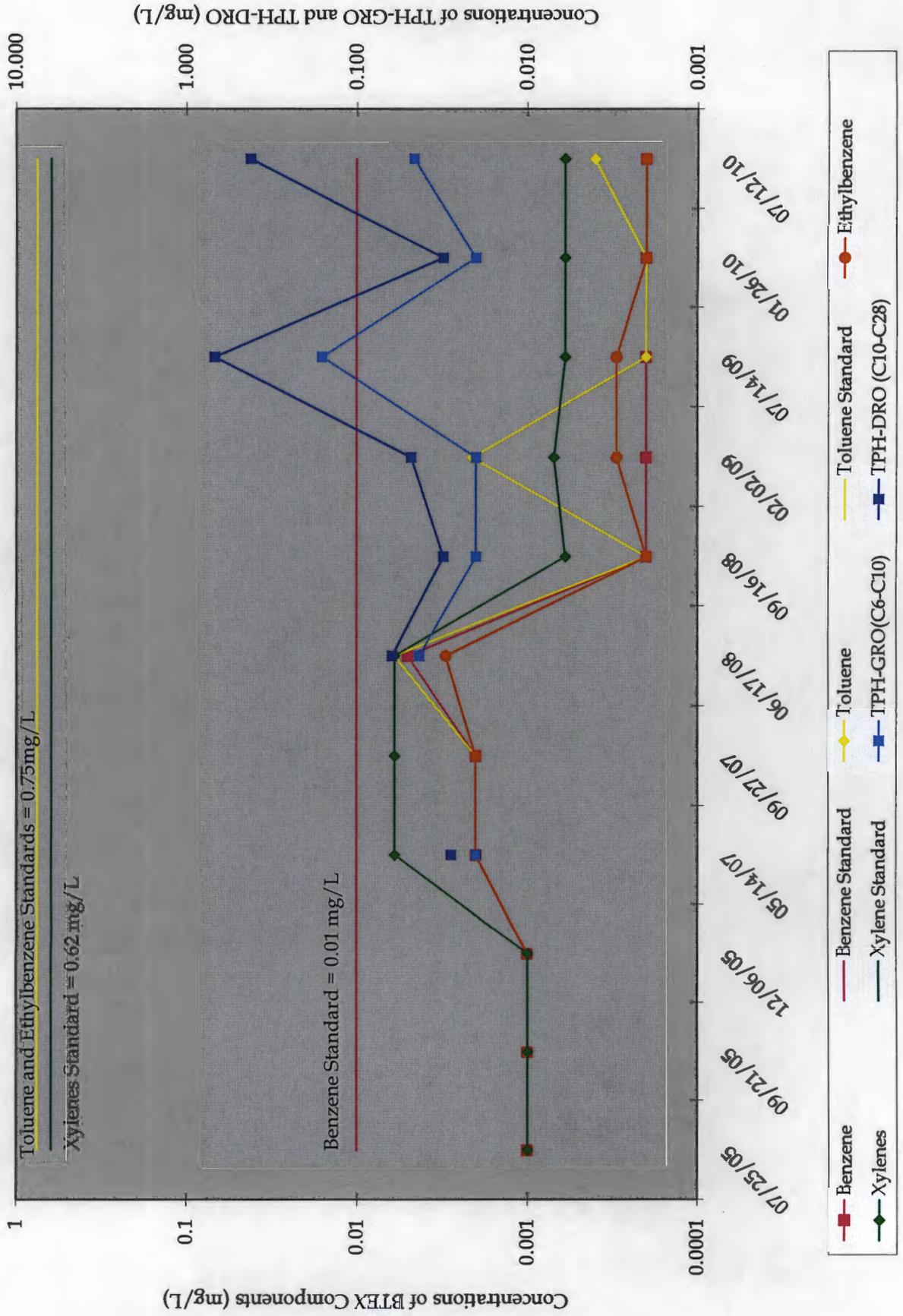




**DISSOLVED BTEX AND TPH-MW-P  
LOVINGTON PADDOCK GROUNDWATER REMEDIATION SITE  
LEA COUNTY, NEW MEXICO**

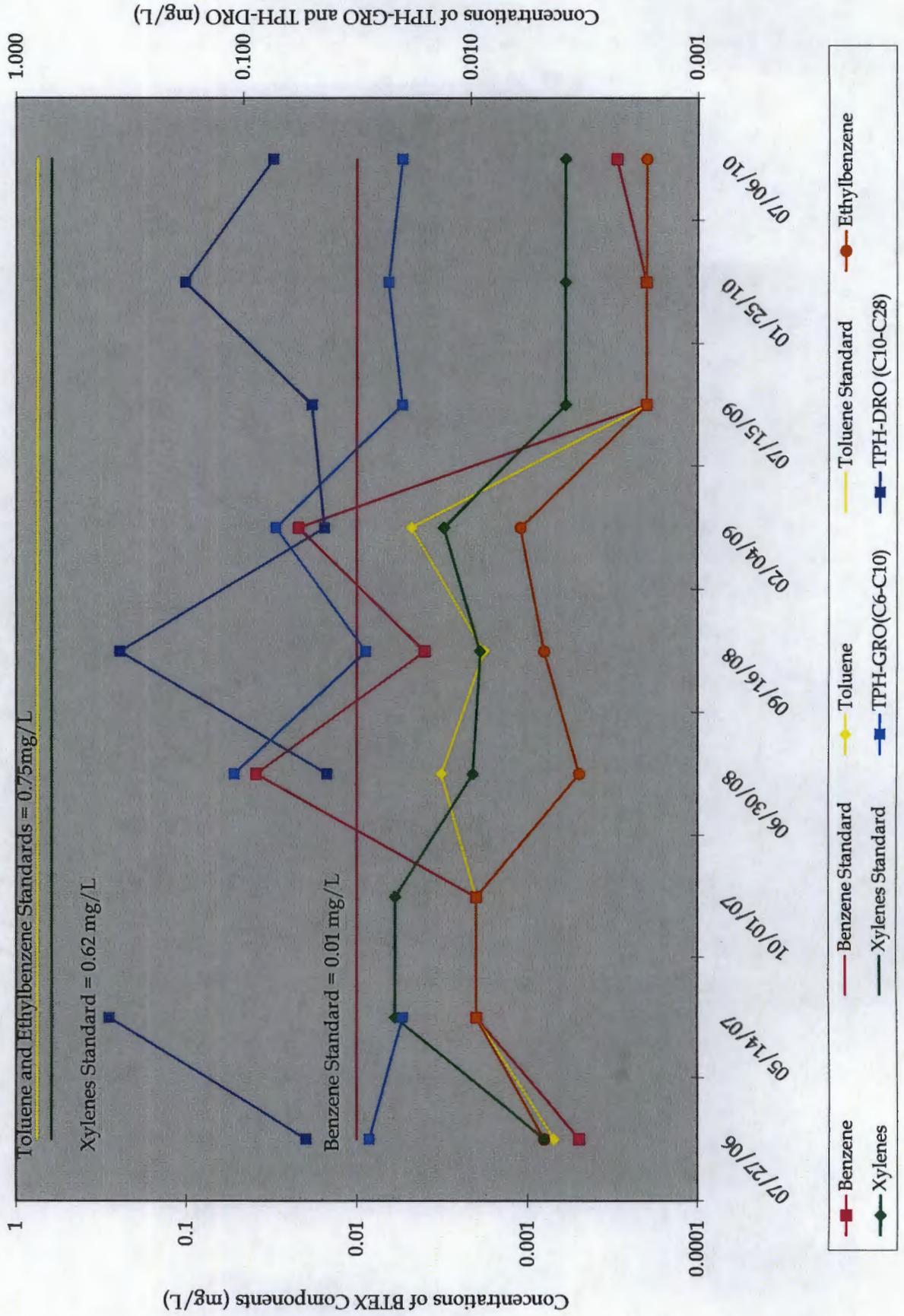


**DISSOLVED BTEX AND TPH-MW-Q  
LOVINGTON PADDOCK GROUNDWATER REMEDIATION SITE  
LEA COUNTY, NEW MEXICO**

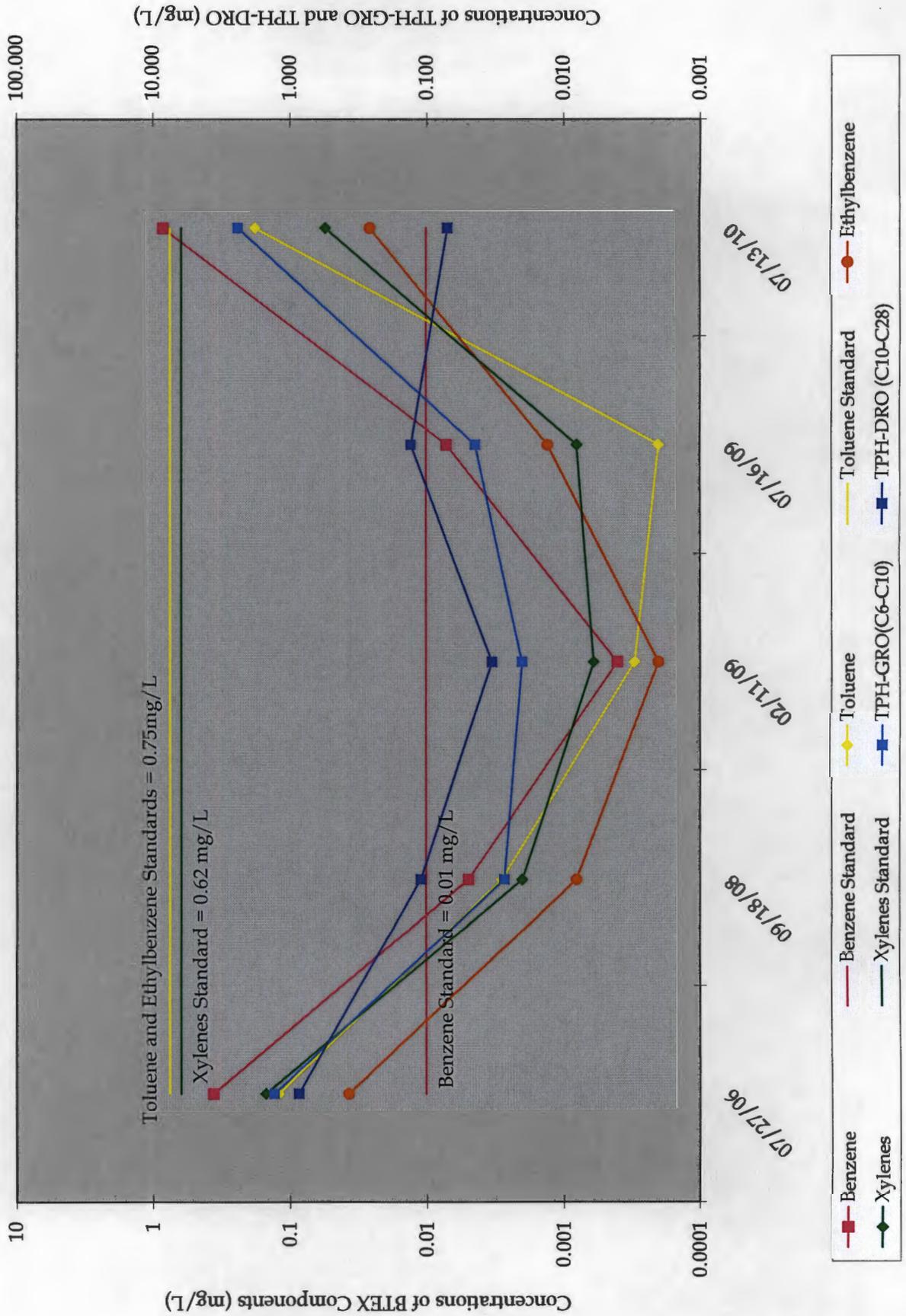




**DISSOLVED BTEX AND TPH--MW-S  
LOVINGTON PADDOCK GROUNDWATER REMEDIATION SITE  
LEA COUNTY, NEW MEXICO**



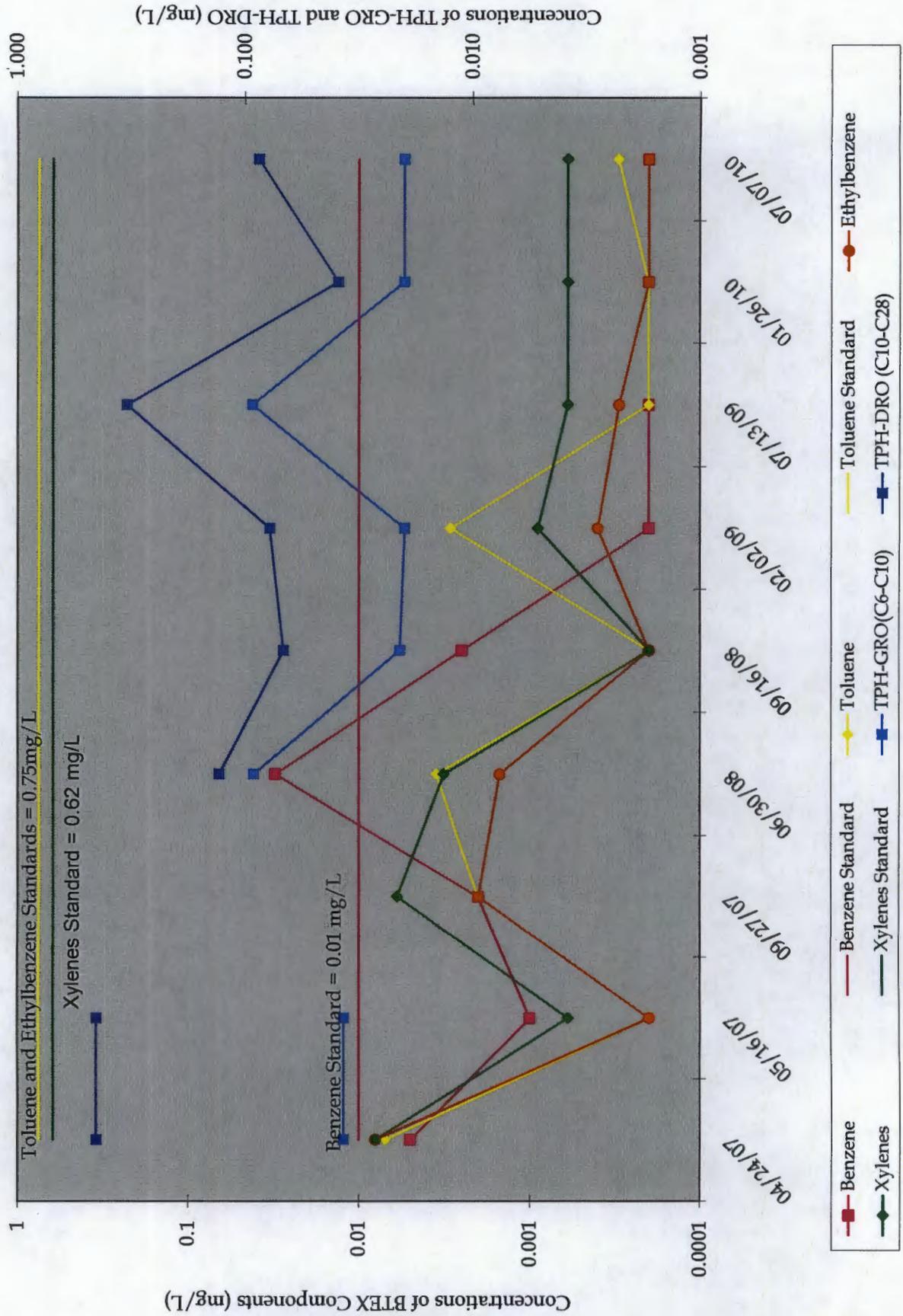
**DISSOLVED BTEX AND TPH--MW-T  
LOVINGTON PADDOCK GROUNDWATER REMEDIATION SITE  
LEA COUNTY, NEW MEXICO**



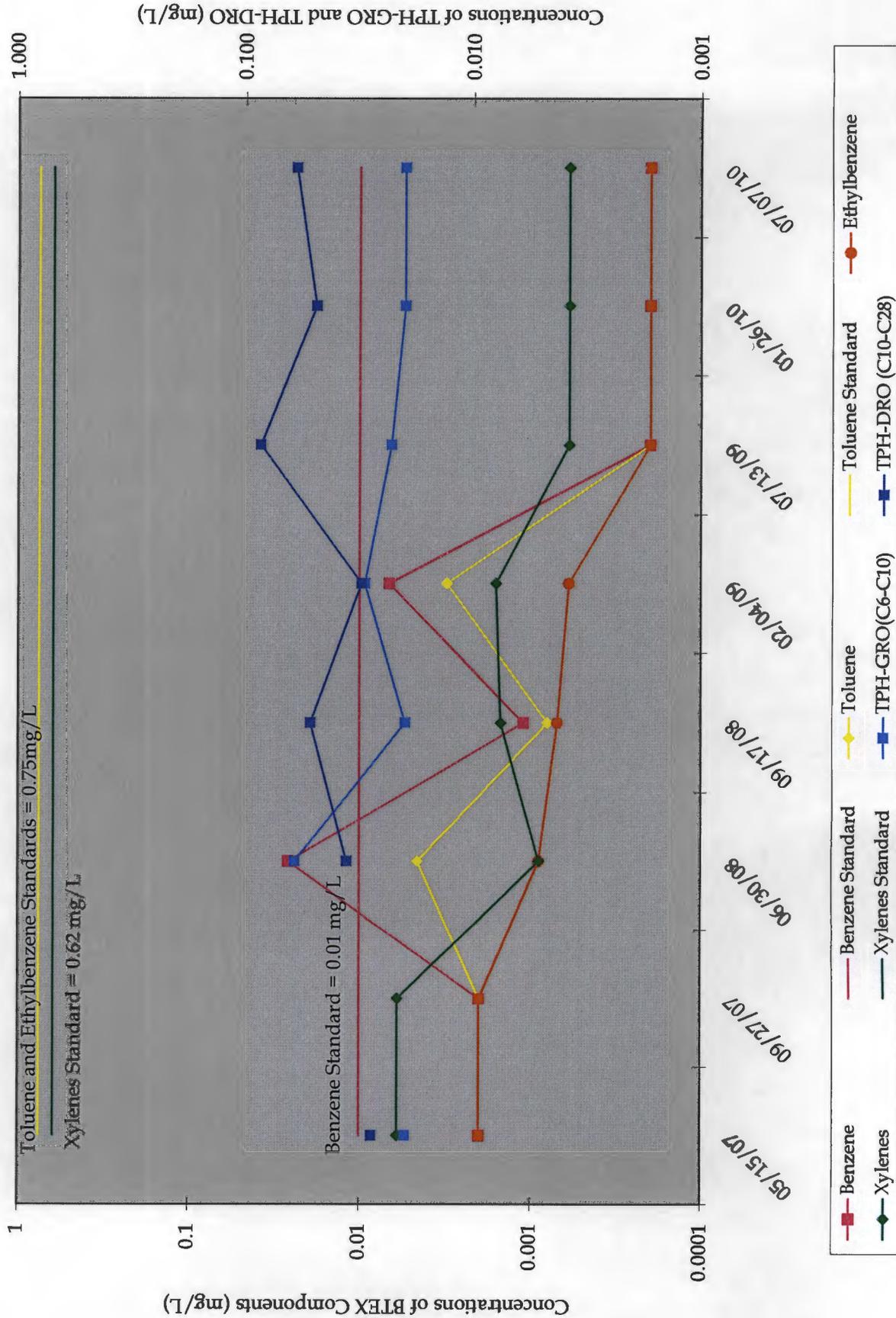




**DISSOLVED BTEX AND TPH--MW-W  
LOVINGTON PADDOCK GROUNDWATER REMEDIATION SITE  
LEA COUNTY, NEW MEXICO**



**DISSOLVED BTEX AND TPH--MW-D2  
LOVINGTON PADDOCK GROUNDWATER REMEDIATION SITE  
LEA COUNTY, NEW MEXICO**



LOVINGTON PADDOCK O&M  
Lovington Paddock Field, NM

WELL ID #	Date	Compressor Tank Pressure (PSI)	Temperature	Pressure Gauge A (PSI)	Pressure Gauge B (PSI)	Pressure Gauge C (PSI)	Pressure Gauge D (PSI)	Water drained from tools & traps (Y/N)	Automatic blowdown checked (Y/N)	Oil Checked (Y/N)	Oil Change (semi-annually)	Belt Condition	Air Filter Checked	Personnel on site:
BW-1	1-13-10		Down											
BW-2	1-13-10	145	66	140	34	28	0.5	Y	Y	Y	N	OK	OK	
BW-3	1-13-10	160	69	164	28	5	0	Y	Y	Y	N	OK	OK	S Bell
Air Filled Compressor Oil change every two months														
Additional Comments:														
BW-2. On arrival - found belt off, checked drive motor & compressor, both seem to be in good working order. Re-installed drive belt and re-started compressor, belt appears to be in good condition. BW-3 Automatic Blowdown Stroke open - Plug on Blowdown - Tightened, Tests OK														
Next Scheduled Visit: 1/12/2010 Air Filter Change Due - No Change Air Filter change every 2 months: November-08, January-09, March-09, May-09, July-09, September-09 Compressor Oil change quarterly: November-09, February-09, May-09, August-09 Belt changed out annually: August-09 BW-1 Due ASAP Others due 2/10 BW-1 Due ASAP Others due 8/10														

BW-2. Automatic blowdown would not test properly. Was not open, took valve controls from BW-1 and installed on BW-2 - working properly.

LOWINGTON PADDOCK O&M  
Lowington Paddock Field, NH

WELL ID #	Date	Compressor Tank Pressure (PSI)	Temperature	Pressure Gauge A (psi)	Pressure Gauge B (psi)	Pressure Gauge C (psi)	Pressure Gauge D (psi)	Water drained from tanks & traps (Y/N)	Automatic blowdown checked (Y/N)	Oil checked (Y/N)	Oil Change (Based on monthly)	Belt Condition	Air Filter Checked	Permitted on site:
BW-1	2/11/10	110	39°F	0	0	0	0	Yes	Yes	Yes	NO	Broken Good	JK	JK
BW-2	2/11/10	0	39°F	0	0	0	0	Yes	Yes	Yes	NO	Broken Good	JK	JK
BW-3	2/11/10	175	39°F	165	32	10	0	Yes	Yes	Yes	NO	Good	JK	JK
<p><b>Additional Comments:</b>                  * Note BW-2 Has a broken belt, motor was running did not have oil to replace                  * Note BW-3 was dipped reset &amp; seal caps. Did not have a walk motor to dip &amp; probe                  and caps! &amp; Note After reset motor &amp; pump ran bleed oil from line and allowed it                  to cycle multiple times (maybe power outage!)</p>														
<p>Next Scheduled Visit: 2/5/2010 Air Filter Change Overdue/Oil change due</p>														
<p>Air Filter change every 2 months</p>														
<p>Compressor Oil change quarterly</p>														
<p>Belt changed out annually</p>														

September-06	July-09	September-06
May-09	August-09	May-09
March-09	May-09	August-09
November-09	February-09	November-09
August-09	August-09	August-09
BW-1 Due ASAP Others due 2/10 BW-1 Due ASAP Others due 8/10		

JK!

LOVINGTON PADDOCK O&H  
Lovington Paddock Field, NM

WELL ID #	Date	Compressor Tank Pressure (PSI)	Temperature	Pressure Gauge A (PSI)	Pressure Gauge B (PSI)	Pressure Gauge C (PSI)	Pressure Gauge D (PSI)	Water drained from tanks & traps (Y/N)	Automatic blowdown checked (Y/N)	Oil Change (annual)	Belt Condition	Air Filter Checked	Personnel on site
BW-1	3/26/10	150	79	135	12	2	1	Y	Y	DONE	GOOD	GOOD	OSL
BW-2	3/26/10												
BW-3	3/26/10												
<p>Additional Comments:                      (New Belt on BW-2 replaced oil BW-2) (Filter looked clean &amp; new)                      * Note BW-3 is not running &amp; checked voltage (485 volts) motor will not run sounds like its single phasing. Next oil level switch may also need to be replaced if I was going to remove the electric motor from BW-2 chose not to due to it being a 2 man job.                      Next Scheduled Visit 3/26/2010 Air Filter Change Overdue/Oil Change Overdue                      Air Filter change every 2 months November-09 January-09 March-09 May-09 July-09 September-09 Overdue                      Compressor Oil change quarterly November-09 February-09 May-09 August-09                      Belt changed out annually August-09                      BW-1 Due ASAP Others due 2/10                      BW-1 Due ASAP Others due 8/10</p>													

\* Note BW-2 was continually running, checked into SCFM it was needed out reset and adjusted to 5 SCFM \*  
 \* Note BW-2 psi gauge needs to be replaced

LOVINGTON PADDOCK O&M  
Lovington Paddock Field, NM

WELL ID #	Date	Compressor Tank Pressure (PSI)	Temperature	Pressure Gauge A (Psi)	Pressure Gauge B (Psi)	Pressure Gauge C (Psi)	Flow Meter (SCFH)	Pressure Gauge C (Psi)	Pressure Gauge B (Psi)	Water collected from tanks & traps (Y/N)	Automatic Microswitch checked (Y/N)	Oil Checked (Y/N)	Oil Change (Monthly)	Belt Condition	Air Filter Checked	Repaired on site:																		
BW-1 (Down)																																		
BW-2 Replace psi gauge	4-15-10	160	66	153	15	10	7			Y	Y	Y	-	OK	OK	SBell																		
BW-3 (Down)	4-15-10	175	62	178	32	8	5			Y	Y	Y	-	OK	OK	SB																		
Additional Comments:																																		
BW-2-10-210 - Reversed last from switchgear - Re-started compressor normally																																		
BW-3 - Found Blown Fuse in switchgear, replaced and at 11:40 restarted compressor operating normally																																		
Next Scheduled Visit-4/22/10																																		
Air Filter change every 2 months																																		
Compressor Oil change quarterly																																		
Belt changed out annually																																		
<table border="0"> <tr> <td>January-10</td> <td>March-10</td> <td>May-10</td> <td>Jul-10</td> <td>Sep-10</td> <td>Nov-10</td> </tr> <tr> <td>August-09</td> <td>June-10</td> <td>Sep-10</td> <td>Dec-10</td> <td>BW-1 when online</td> <td>BW-1 when online, Check BW2-change if needed</td> </tr> <tr> <td colspan="6">BW-1 due when online, BW2 due 3/11, BW-3 due 2/10</td> </tr> </table>																	January-10	March-10	May-10	Jul-10	Sep-10	Nov-10	August-09	June-10	Sep-10	Dec-10	BW-1 when online	BW-1 when online, Check BW2-change if needed	BW-1 due when online, BW2 due 3/11, BW-3 due 2/10					
January-10	March-10	May-10	Jul-10	Sep-10	Nov-10																													
August-09	June-10	Sep-10	Dec-10	BW-1 when online	BW-1 when online, Check BW2-change if needed																													
BW-1 due when online, BW2 due 3/11, BW-3 due 2/10																																		

Reviewed by *[Signature]* 4/19/10

LOWINGTON PADDOCK O&M  
Lowington Paddock Field, NH

WELL ID #	Date	Compressor Tank Pressure (PSI)	Temperature	Pressure Gauge A (PSI)	Pressure Gauge B (PSI)	Pressure Gauge C (PSI)	Pressure Gauge D (PSI)	Water drained from tanks & traps (Y/N)	Automatic Meters checked (Y/N)	Oil Checked (Y/N)	Oil Change (Semi-annually)	Belt Condition	Air Filter Checked	Personnel on site:
BW-1 (Down)														
BW-2	5/19/10	158	85	151	13	10	1	yes	yes	no	no	OK		Ag. SO
BW-3	5/19/10	193	87	165	33	5	1	yes	yes	no	no	OK		Ag. SO

Additional Comments:

BW-3 Had a bleed line. Replaced the line and checked other oil checks OK.

Next Scheduled Visit-5/13/10

Air Filter change every 2 months

Compressor Oil change quarterly

Belt changed out annually

January-10  
March-10  
August-09

May-10  
Sep-10

Jul-10  
Dec-10

Sep-10  
Nov-10

Check BW2-change if needed

BW-1 due when online, BW2 due 3/11, BW-3 due 3/10

LOVINGTON PADDOCK O&M  
 Lovington Paddock Field, NM

WELL ID #	Date	Compressor Tank Pressure (PSI)	Temperature	Pressure Gauge A (PSI)	Pressure Gauge B (PSI)	Flow Meter (SCFD)	Pressure Gauge C (PSI)	Pressure Gauge D (PSI)	Water drained from tanks & traps (Y/N)	Automatic Inflow checked (Y/N)	Oil checked (Y/N)	Oil Change (Blank annually)	Ball Condition	Air Filter Checked	Percent on site:
BW-1 (Down)															
BW-2	6/15/10														69
down															
BW-3	6/15/10														69
down															
Additional Comments:															
BW-2 Needs a New Motor.															
BW-3 Needs a New water separator the cap blew off															

Next Scheduled Visit 06/10/10  
 Air Filter change every 2 months  
 Compressor Oil change quarterly  
 Belt changed out annually

Jan-10  
 March-10  
 June-10  
 Sep-10  
 Oct-10  
 Nov-10

Jan-10  
 March-10  
 June-10  
 Sep-10  
 Oct-10  
 Nov-10

Jan-10  
 March-10  
 June-10  
 Sep-10  
 Oct-10  
 Nov-10

Air filter changed 6/15/10  
 Compressor oil changed 6/15/10  
 Belts OK

LOVINGTON PADDOCK OAM  
Lovington Paddock Field, NM

WELL ID #	Date	Compressor Tank Pressure (PSI)	Temperature	Pressure Gauge A (psi)	Pressure Gauge B (psi)	Flow Meter (SCFM)	Pressure Gauge C (psi)	Pressure Gauge D (psi)	Water drained from tanks & traps (Y/N)	Automatic blowdown checked (Y/N)	Oil Checked (Y/N)	Oil Change (semi-annually)	Belt Condition	Air Filter Checked	Personnel on site
BW-1 (Down)	7/24/10					X	X								
BW-3 (Down)	7/16/10	160	85	150	12	6	4	1	Yes	Yes	Yes	NO	NO	Yes	OSK
BW-3 (Down)	7/16/10														
<p>Additional Comments:            * Dated &amp; replaced the (indicated) of the first moisture trap removed from the comp. on (BW-1 BW-2) but used 6 for spare parts. A 1050 started BW-2 port A for replacement (5297-64 (rapid-0.7 bar) &amp; BW-2 Flow meter is gone &amp; BW-3 Spece pipe. 4" Banded in side well *</p>															
<p>Next Scheduled Visit: 07/15/10</p>															
<p>Air Filter change every 2 months</p>															
<p>Compressor Oil change quarterly</p>															
<p>Belt changed out annually</p>															

January-10    March-10    June-10    Aug-10    Oct-10    Dec-10  
 March-10    June-10    Sep-10    Dec-10  
 August-09

Dec-10 BW-1 when online  
 BW-1 when online  
 BW-1 due when online, BW2 due 3/11, BW-3 due 8/10

LOVINGTON PADDOCK O&M  
Lovington Paddock Field, NM

WELL ID #	Date	Compressor Tank Pressure (PSI)	GET PRV's Replaces periodically per vendor recommendations	Temperature	Pressure Gauge A (PSI)	Pressure Gauge B (PSI)	Flow Meter (GPM)	Pressure Gauge C (PSI)	Pressure Gauge D (PSI)	Water tested from tanks & traps (Y/N)	Automatic Inhibitors checked (Y/N)	Oil Checked (Y/M)	Oil Change (Status/annually)	Belt Condition	Air Filter Checked	Performance																								
BW-1 (Down)	DOWN	ACR														ACR Controls																								
BW-2 (Down)	DOWN	ACR																																						
BW-3 (Down)	DOWN	ACR																																						
Additional Comments:																																								
All compressors are down																																								
Next Scheduled Visit 8/19/2010																																								
Air Filter change every 2 months 8/17/10																																								
Compressor Oil change quarterly																																								
Belt changed out annually																																								
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Jan-10	Feb-10	Mar-10	Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10																													

Dec-10 BW-1 when online  
 Dec-10 BW-1 when online  
 BW-1 due when online, BW2 due 3/11, BW-3 due 8/10

LOWINGTON PADDOCK OSM  
Lowington Paddock Field, NJ

WELL ID #	Date	Compressor Tank Pressure (PSI)	TEST PRV'S Replace periodically per vendor recommendations	Temperature	Pressure Gauge A (PSI)	Pressure Gauge B (PSI)	Flow Meter (SCFM)	Pressure Gauge C (PSI)	Pressure Gauge D (PSI)	Water Added From Tanks A & B (Y/N)	Automatic Inhibitors checked (Y/N)	Oil Checked (Y/N)	Oil Change (Bent-annually)	Bolt Condition	Air Filter Checked	Permitted on site:
BW-1 (Down)																
BW-2 (Down)	9/2/10	170	YES	96	150	10	11	PO	0	YES	YES	NO	NO	OK	YES	Ag
BW-3 (Down)																

Additional Comments:

Next Scheduled Visit 9/2/2010  
 Air Filter change every 2 months  
 Compressor Oil change quarterly  
 Bolt changed out annually

January-10	March-10	June-10	Oct-10	Dec-10
March-10	June-10	Sep-10	Dec-10	Dec-10

BW-1 due when online, BW2 due 3/11, BW-3 overdue 8/10

LOVINGTON PADDOCK O&M  
 Lovington Paddock Field, NM

WELL ID #	Date	Compressor Tank Pressure (PSI)	TEST PRV'S Replace periodically per vendor recommendations	Temperature	Pressure Gauge A (PSI)	Pressure Gauge B (PSI)	Flow Meter (SCFH)	Pressure Gauge C (PSI)	Pressure Gauge D (PSI)	Water drained from tanks & traps (Y/N)	Automatic drain checked (Y/N)	Oil Checked (Y/N)	Oil Change (Check annually)	Belt Condition	Air Filter Checked	Personnel on site:
BM-1 (Down)																
BM-2 (Down)	10-7-2010	170	601D	86	165	12	11	0	1	YES	YES	GOOD	NO	NEW	NEW	AV
BM-3 (Down)																
Additional Comments: INSTRUCTED NEW BELT ON BM-2, CLEANED AUTO DRAIN LINE. INSTRUCTED NEW FILTER ON BM-2																
Next Scheduled Visit 10/22/2010																
Air Filter change every 2 months																
Compressor Oil change quarterly																
Belt changed out annually																

Jan-10  
 March-10  
 June-10  
 Sep-10  
 Dec-10

Oct-10  
 Dec-10

BM-1 when online  
 BM-1 when online  
 BM-1 due when online, BM-2 due 3/11, BM-3 overdue 8/10

August-08 OVERDUE