

GW – 361

2009 AGWMR

10 / 14 / 2009

GU-361



October 14, 2009

Return Receipt Requested
7008 1830 0001 3448 4562

Mr. Glenn Von Gonten
Senior Hydrologist
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Re: **TEPPCO Hobbs Station, Hobbs, New Mexico**

Dear Mr. Von Gonten:

TEPPCO Crude Oil, LLC (TEPPCO) is submitting the enclosed 2009 annual groundwater monitoring report for the TEPPCO Hobbs Station. This report documents the results for two semi-annual monitoring events conducted during the 2009 monitoring period. Current site conditions at Hobbs Station are documented in the October 11, 2005 report entitled: *Supplemental Environmental Site Investigation Report*. This report describes the soil and groundwater monitoring results obtained during investigation of the station during 2007 following acquisition of the station from ARCO. TEPPCO is currently monitoring four monitor wells at the station, and has performed a total of eight (8) semi-annual groundwater monitoring events at the facility. Based on these monitoring events, no light non-aqueous phase liquids (LNAPL) are present at the facility, and monitored groundwater constituent concentrations are below applicable New Mexico Water Quality Commission (NMWQC) *Ground Water Standards*. Trace constituents remaining in groundwater are stable, or declining in concentration, and will naturally attenuate.

Please note that a crude oil recovery system is currently in operation at the station. This recovery system is operated by Holly/Navajo Pipeline to recover crude oil due to a release occurring on July 22, 2004 at Holly/Navajo Tank 5201. This tank is located on station property leased to Navajo. Navajo reported this release to the New Mexico Oil Conservation Division (OCD) on October 10, 2004; however, the release has not been delineated and no further reporting has been prepared. TEPPCO has requested updates regarding operation of this recovery system from the OCD and Holly/Navajo and has not received any information other than the initial release report and a summary of recovery volumes provided during 2007.



Mr. Glenn Von Gonten
Re: TEPPCO Hobbs Station
October 14, 2009
Page 2

TEPPCO requests that the NM Oil Conservation Division approve discontinuing groundwater monitoring at the facility. We will provide a proposed plugging and abandonment plan for the existing monitor wells upon approval. Please do not hesitate to contact me at drsmith@epco.com or (713) 381-2286 if you have any questions.

Sincerely,



David R. Smith, P.G.
Sr. Environmental Scientist

/bjm

Enclosure

cc: w/ Enclosure

Dickie Townley
Holly Energy Partners
1602 W. Main
Artesia, New Mexico 88210

Larry Johnson
NM Oil Conservation Division
District 1
1625 N. French Drive
Hobbs, New Mexico 88240

w/o Enclosure
Chris Mitchell – Southwest Geoscience, Dallas, TX

ANNUAL GROUNDWATER MONITORING REPORT
TEPPCO Hobbs Station
Off County Road 61
Hobbs, Lea County, New Mexico

SWG Project No. 0105013
September 28, 2009

Prepared for:
TEPPCO Crude Oil, LLC
PO Box 2521
Houston, Texas 77252-2521
Attn: Mr. David Smith, P.G.

PREPARED BY:



Timothy F. Zoch
Senior Project Manager



B. Chris Mitchell, P.G.
Senior Technical Review

Southwest
GEOSCIENCE
2351 W. Northwest Hwy., Suite 3321
Dallas, Texas 75220
Ph: (214) 350-5469
Fax: (214) 350-2914

TABLE OF CONTENTS

1.0 INTRODUCTION	1
1.1 SITE DESCRIPTION & HISTORY	1
1.2 SCOPE OF WORK.....	2
1.3 STANDARD OF CARE	2
1.4 ADDITIONAL LIMITATIONS	2
1.5 RELIANCE	3
2.0 SAMPLING PROGRAM	3
3.0 LABORATORY ANALYTICAL PROGRAM AND RESULTS	4
4.0 GROUNDWATER FLOW DIRECTION	5
5.0 FINDINGS.....	5
6.0 RECOMMENDATIONS	5

LIST OF APPENDICES

APPENDIX A	Figure 1: Topographic Map Figure 2: Site Vicinity Map Figure 3: Site Plan Figure 4A: Groundwater Gradient Map (February 25, 2009) Figure 4B: Groundwater Gradient Map (September 23, 2009)
APPENDIX B	Table 1: Groundwater Analytical Results Table 2: Fluid Level Gauging Data
APPENDIX C	LABORATORY ANALYTICAL DATA & CHAIN-OF-CUSTODY DOCUMENTATION

ANNUAL GROUNDWATER MONITORING REPORT
TEPPCO Hobbs Station
Off County Road 61
Hobbs, Lea County, New Mexico

1.0 INTRODUCTION

1.1 Site Description & History

Southwest Geoscience (SWG) has conducted eight (8) semi-annual groundwater monitoring events at the TEPPCO Crude Oil, LLC (TEPPCO) Hobbs Station, referred to hereinafter as the "Site" or "subject Site". The Site is located off County Road 61, Hobbs, Lea County, New Mexico. The site consists of approximately 35 acres developed as a crude oil storage facility associated with crude oil pipeline operations located to the south of Hobbs, New Mexico.

A topographic map is included as Figure 1, a site vicinity map is included as Figure 2, and a site plan is included as Figure 3 of Appendix A.

During the completion of due diligence activities during the acquisition of select ARCO assets by TEPPCO, soil borings MW-1, MW-2, MW-4 and B-5 were advanced at the station by ALPHA TESTING, INC. (ALPHA) in March, 2003. Soil borings MW-1, MW-2 and MW-4 were subsequently converted to permanent groundwater monitoring wells. The objective of the due diligence activities was to evaluate the presence of petroleum hydrocarbons in the on-site soil and groundwater as a result of the operations historically associated with the site.

In addition, an existing monitoring well previously installed under the direction of ARCO, labeled MW-3, was identified on the north-northeast portion of the site during the completion of the due diligence activities. No other existing monitoring wells were observed during the 2003 investigation activities.

A groundwater monitoring event was subsequently conducted by ALPHA in May, 2004 to further evaluate the magnitude of petroleum hydrocarbon constituents in the on-site groundwater. During the completion of sampling activities, on-site personnel indicated the location of two (2) additional groundwater monitoring wells previously installed under the direction of ARCO, labeled MW-1 and MW-2. ALPHA sampled monitoring wells MW-1(ARCO), MW-2(ARCO), MW-1, MW-2 and MW-4. However, the groundwater table appeared to have dropped below the total depth of monitoring well MW-3(ARCO); therefore, no groundwater sample was collected.

Due to the absence of chemicals of concern (COCs) above the laboratory method detection limits (MDLs) in groundwater samples collected from MW-1(ARCO) and MW-2(ARCO), these monitoring wells were removed from the semi-annual groundwater monitoring sample program.

Due to the elevation of the groundwater table below the total depth of monitoring well MW-3(ARCO), monitoring well MW-3R was installed adjacent to monitoring well MW-3(ARCO) on July 25, 2005 by SWG.

Analytical tables which include the historical groundwater analytical data are provided in Appendix B.

In addition, according to the New Mexico Energy, Minerals and Natural Resources Department, Oil Conservation Division *Release Notification and Correction Action Form* (Form C-141) prepared by Navajo Pipeline (Navajo) and dated October 11, 2004, an unknown volume of crude oil was released on July 22, 2004 as a result of an external corrosion hole in the pipeline which extends from the Navajo truck unloading rack to storage tank No. 5201, which is owned by TEPPCO and leased to Navajo.

Subsequent to the discovery of the leak, the pipeline was isolated, depressurized and clamped to repair the leak. An area approximately 4 feet wide, 20 feet long and 18 feet deep was subsequently excavated, and the excavated soil was disposed off-site.

Based on SWG's review of the Navajo file information, seven (7) soil borings were advanced at the Site in the vicinity of the Navajo pipeline release. Three (3) of the soil borings were subsequently converted to monitoring wells. The soil and groundwater samples collected on behalf of Navajo from the borings/monitoring wells were analyzed for total petroleum hydrocarbons (TPH) Gasoline Range Organics (GRO) and Diesel Range Organics (DRO) using EPA method SW-846 #8015, benzene, toluene, ethylbenzene and xylenes (BTEX) using EPA SW-846 #8021, chlorides utilizing EPA method 300 and/or total dissolved solids (TDS) utilizing EPA method 160.1.

Based on SWG's observations in the field, Navajo is currently utilizing a pneumatic recovery system to recover the phase-separated hydrocarbons (PSH) from the initial groundwater-bearing unit. SWG is not aware of the total volume of PSH recovered by the Navajo recovery system to date.

1.2 Scope of Work

The objective of the semi-annual groundwater monitoring events was to evaluate the concentrations of COCs in the on-site groundwater in the vicinity of monitoring wells MW-1, MW-2, MW-3R and MW-4 over time.

1.3 Standard of Care

SWG's services were performed in accordance with standards customarily provided by a firm rendering the same or similar services in the area during the same time period. SWG makes no warranties, express or implied, as to the services performed hereunder. Additionally, SWG does not warrant the work of third parties supplying information used in the report (e.g. laboratories, regulatory agencies, or other third parties). This scope of services was performed in accordance with the scope of work agreed with the client, as detailed in our proposal.

1.4 Additional Limitations

Findings, conclusions and recommendations resulting from these services are based upon information derived from the on-site activities and other services performed under this scope of work and it should be noted that this information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, or not present during these services, and

SWG cannot represent that the site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during this Groundwater Monitoring Event. Environmental conditions at other areas or portions of the Site may vary from those encountered at actual sample locations. SWG's findings, and recommendations are based solely upon data available to SWG at the time of these services.

1.5 Reliance

This report has been prepared for the exclusive use of TEPPCO, and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the site) is prohibited without the express written authorization of TEPPCO and SWG. Any unauthorized distribution or reuse is at the client's sole risk.

2.0 SAMPLING PROGRAM

The groundwater sampling events were conducted on February 25, 2009 and August 20, 2009 by Russell D. Howard and Timothy F. Zoch, SWG environmental professionals. The monitoring wells were gauged on September 23, 2009 following the August 2009 sampling event. SWG's groundwater sampling program consisted of the following:

Monitoring Wells MW-1, MW-2, MW-3R and MW-4

- Collection of one groundwater sample from each monitoring well utilizing low-flow sampling techniques.

Prior to sample collection, SWG gauged the depth to fluids in each monitoring well utilizing an interface probe capable of detecting the presence of PSH. PSH was not observed in monitoring wells MW-1, MW-2, MW-3R or MW-4 during the February 2009 sampling activities. Due to technical issues with field equipment, SWG was unable to gauge the depth to fluids in the monitoring wells during the August 2009 sampling event. The site was revisited on September 23, 2009 to gauge the monitoring wells. PSH was not observed in monitoring wells MW-1, MW-2, MW-3R or MW-4 during the September 2009 gauging activities.

Groundwater samples were collected utilizing low-flow minimal drawdown techniques. Samples were collected utilizing dedicated sampling materials subsequent to the stabilization of Dissolved Oxygen, Conductivity, pH and Temperature.

Low-flow refers to the velocity with which water enters the pump intake and that is imparted to the formation pore water in the immediate vicinity of the well screen. Water level drawdown provides the best indication of the stress imparted by a given flow-rate for a given hydrological situation. The objective is to pump in a manner that minimizes stress (drawdown) to the system to the extent practical taking into account established site sampling objectives. Flow rates on the order of 0.1 to 0.5 L/min were maintained during the sampling activities using dedicated sampling equipment.

The utilization of low-flow minimal drawdown techniques enables the isolation of the screened interval groundwater from the overlying stagnant casing water. The pump intake is placed within the screened interval such that the groundwater pumped is drawn in directly from the formation with little mixing of casing water or disturbance to the sampling zone.

Due to the absence of COCs above the laboratory method detection limits (MDLs) in groundwater samples historically collected from MW-1(ARCO) and MW-2(ARCO), these monitoring wells were removed from the semi-annual groundwater monitoring sample program.

Due to the elevation of the groundwater table below the total depth of monitoring well MW-3(ARCO), monitoring well MW-3R was removed from the semi-annual groundwater monitoring sample program.

Since the monitoring wells installed at the site on behalf of Navajo are strictly related to the Navajo release of crude oil and associated on-going corrective action, the Navajo monitoring wells were not included in the semi-annual groundwater monitoring sample program.

Groundwater samples were collected in laboratory prepared glassware, sealed with custody tape and placed on ice in a cooler secured with a custody seal. The sample coolers and completed chain-of-custody forms were relinquished to ERMI Environmental Laboratories, Inc in Allen, Texas.

3.0 LABORATORY ANALYTICAL PROGRAM AND RESULTS

The groundwater samples collected from the monitoring wells were analyzed for total petroleum hydrocarbons (TPH) Gasoline Range Organics (GRO) and Diesel Range Organics (DRO) using EPA method SW-846 #8015, and benzene, toluene, ethylbenzene and xylenes (BTEX) using EPA SW-846 #8021.

Laboratory results are summarized in Table 1, Appendix B. The executed chain-of-custody documentation and laboratory data sheets are provided in Appendix C.

4.0 GROUNDWATER FLOW DIRECTION

The monitoring wells were surveyed for top-of-casing (TOC) elevations relative to an arbitrary on-site benchmark of 100.0 feet. Groundwater measurements collected during each gauging event are presented with TOC elevations in Table 2, Appendix B.

Prior to sample collection, SWG typically gauges the depth to fluids in each monitoring well. Due to technical issues with field equipment, SWG was unable to gauge the depth to fluids in the monitoring wells during the August 2009 sampling event. The site was revisited on September 23, 2009 to gauge the monitoring wells. PSH was not observed in monitoring wells MW-1, MW-2, MW-3R or MW-4 during the February 2009 or September 2009 gauging activities.

Based on the groundwater elevations associated with each of the monitoring wells installed on behalf of TEPPCO, groundwater generally flows to the east-southeast at an average hydraulic gradient of 0.0012 ft./ft.

5.0 FINDINGS

The findings of this investigation are presented as follows:

- The laboratory analyses of the groundwater samples collected from monitoring wells MW-1, MW-2, and MW-4 did not exhibit TPH GRO concentrations above the sample reporting limits (SRLs).
- The laboratory analyses of the groundwater samples collected from monitoring wells MW-1, MW-2, and MW-4 did not exhibit benzene, toluene, ethylbenzene or xylenes concentrations above the SRLs.
- The laboratory analyses of the groundwater samples collected from monitoring well MW-3R exhibited TPH GRO concentration of 0.1197 mg/L in February 2009 and 0.231 mg/L in August 2009.
- The laboratory analyses of the groundwater samples collected from monitoring wells MW-1, MW-2, MW-3R, and MW-4 in February 2009 and August 2009 exhibited TPH DRO concentrations ranging from 0.135 mg/L in MW-1 up to 3.42 mg/L in MW-3R.
- The laboratory analyses of the groundwater samples collected from monitoring well MW-3R exhibited an ethylbenzene concentration of 4.45 µg/L during the February 2009 sampling event and an ethylbenzene concentration of 5.63 µg/L during the August 2009 sampling event. However, these reported concentrations are below the New Mexico Water Quality Commission (NMWQC) Ground Water Standards of 750 µg/L.
- SWG gauged the depth to fluids in each monitoring well in February 2009 and September 2009. PSH was not observed in monitoring wells MW-1, MW-2, MW-3R or MW-4.
- Based on SWG's evaluation of the historic trends in groundwater analytical data, the COC concentrations identified in the groundwater samples collected from monitoring wells MW-1, MW-2, MW-3R and MW-4 appear to be stable or declining.

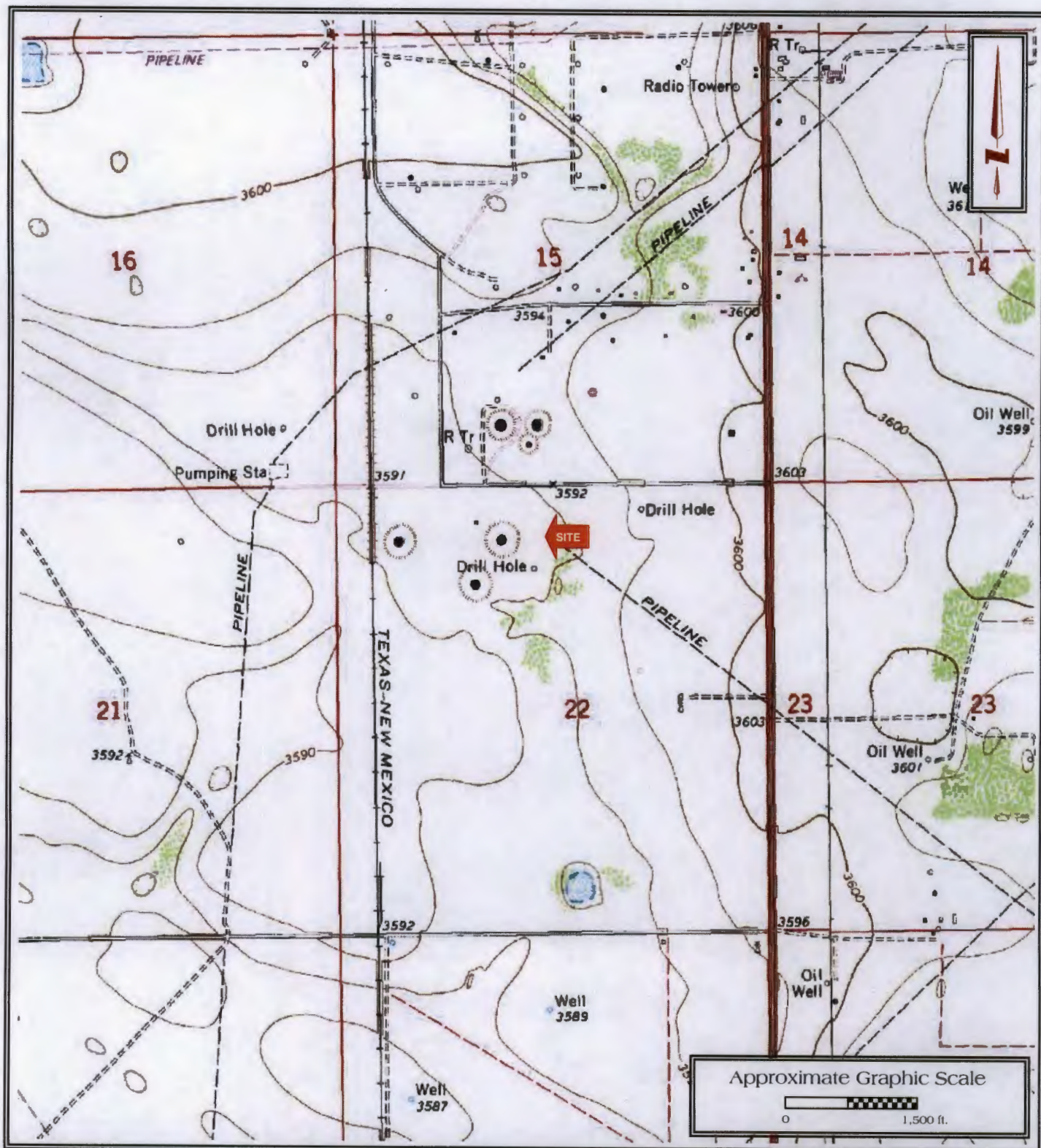
6.0 RECOMMENDATIONS

Based on the geochemistry and subsurface conditions identified at the site, the COC concentrations which have been identified in the on-site groundwater will likely naturally attenuate over time.

Based on the results of the semiannual groundwater monitoring activities and review of the historic groundwater sampling data, SWG recommends TEPPCO request regulatory closure from the New Mexico Energy, Minerals and Natural Resources Department, Oil Conservation Division for the historical petroleum hydrocarbon impact to soil and groundwater.

APPENDIX A

Figures



Groundwater Monitoring
TEPPCO Hobbs Station
Off County Road 61
N 32° 39.135'; W 103° 8.373'
Hobbs, Lea County, New Mexico

SWG Project No. 0105013

Southwest
GEOSCIENCE

FIGURE 1
Topographic Map
Hobbs, NM Quadrangle
Contour Interval - 10 Feet
1979



Approximate Graphic Scale

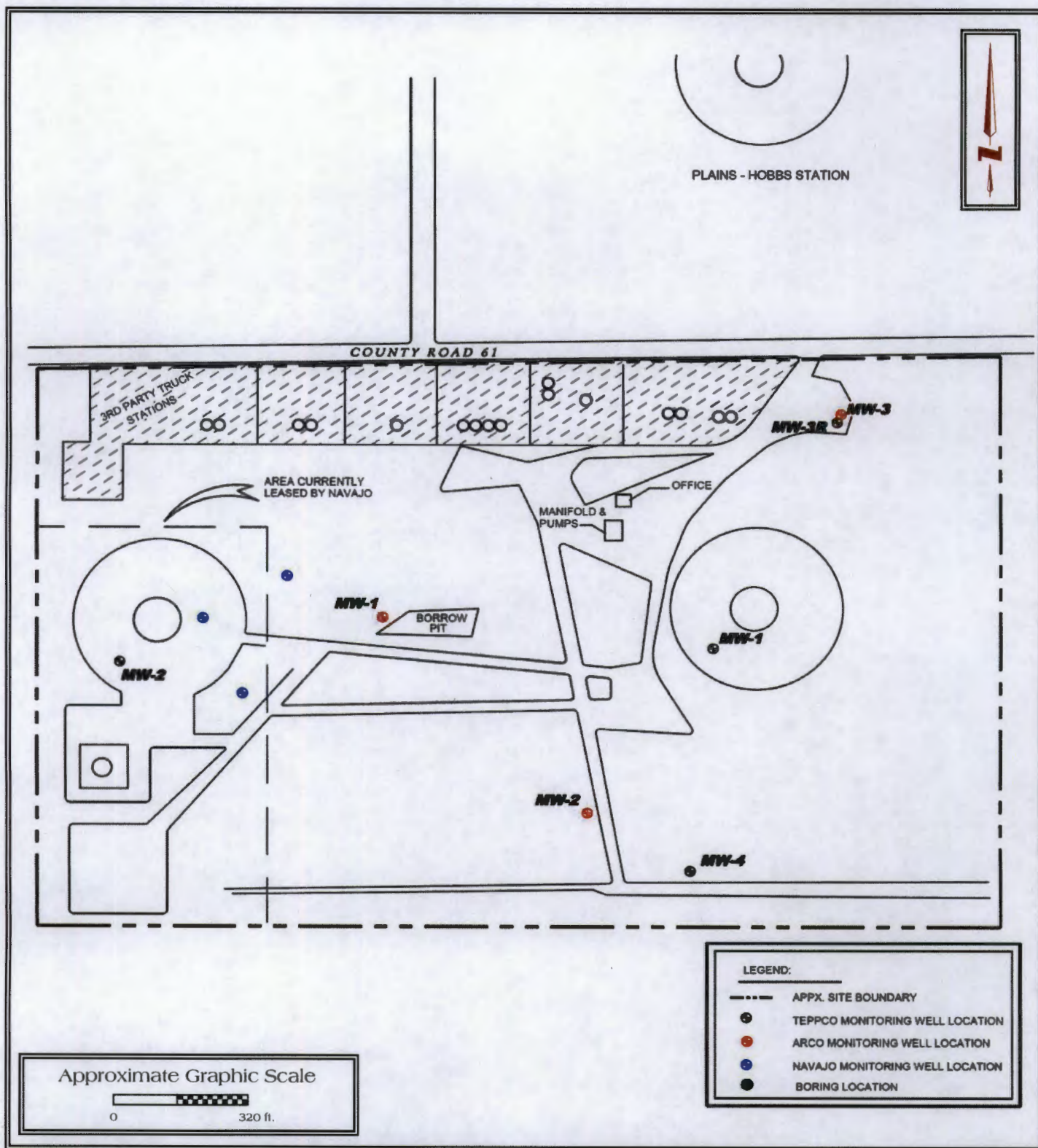
0 975 ft.

Groundwater Monitoring
TEPPCO Hobbs Station
Off County Road 61
N 32° 39.135'; W 103° 8.373'
Hobbs, Lea County, New Mexico

SWG Project No. 0105013

Southwest
GEOSCIENCE

FIGURE 2
Site Vicinity Map
2002 Aerial Photograph
Source: USGS

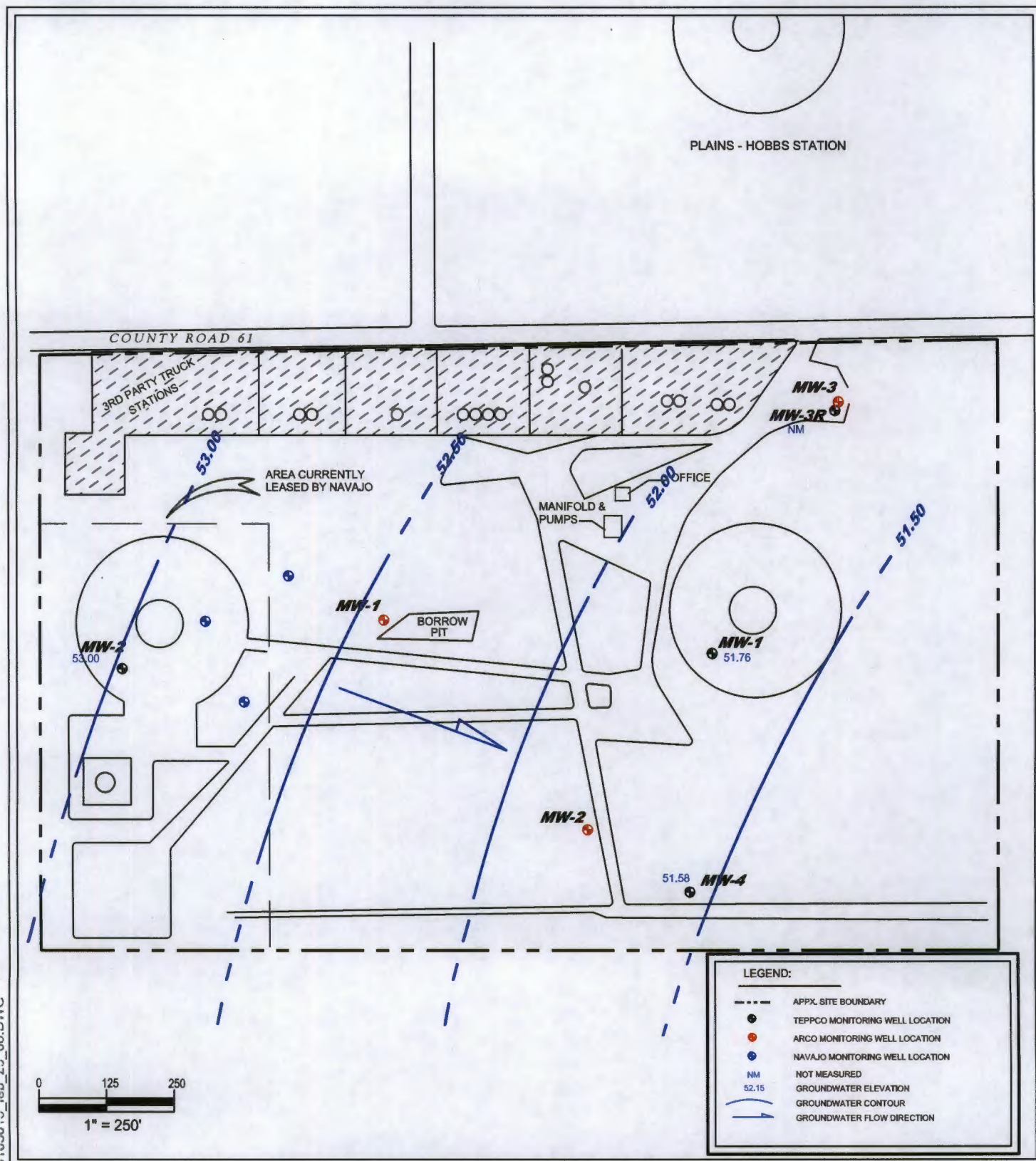


Groundwater Monitoring
TEPPCO Hobbs Station
Off County Road 61
N 32° 39.135'; W 103° 8.373'
Hobbs, Lea County, New Mexico

SWG Project No. 0105013

Southwest
GEOSCIENCE

FIGURE 3
Site Plan

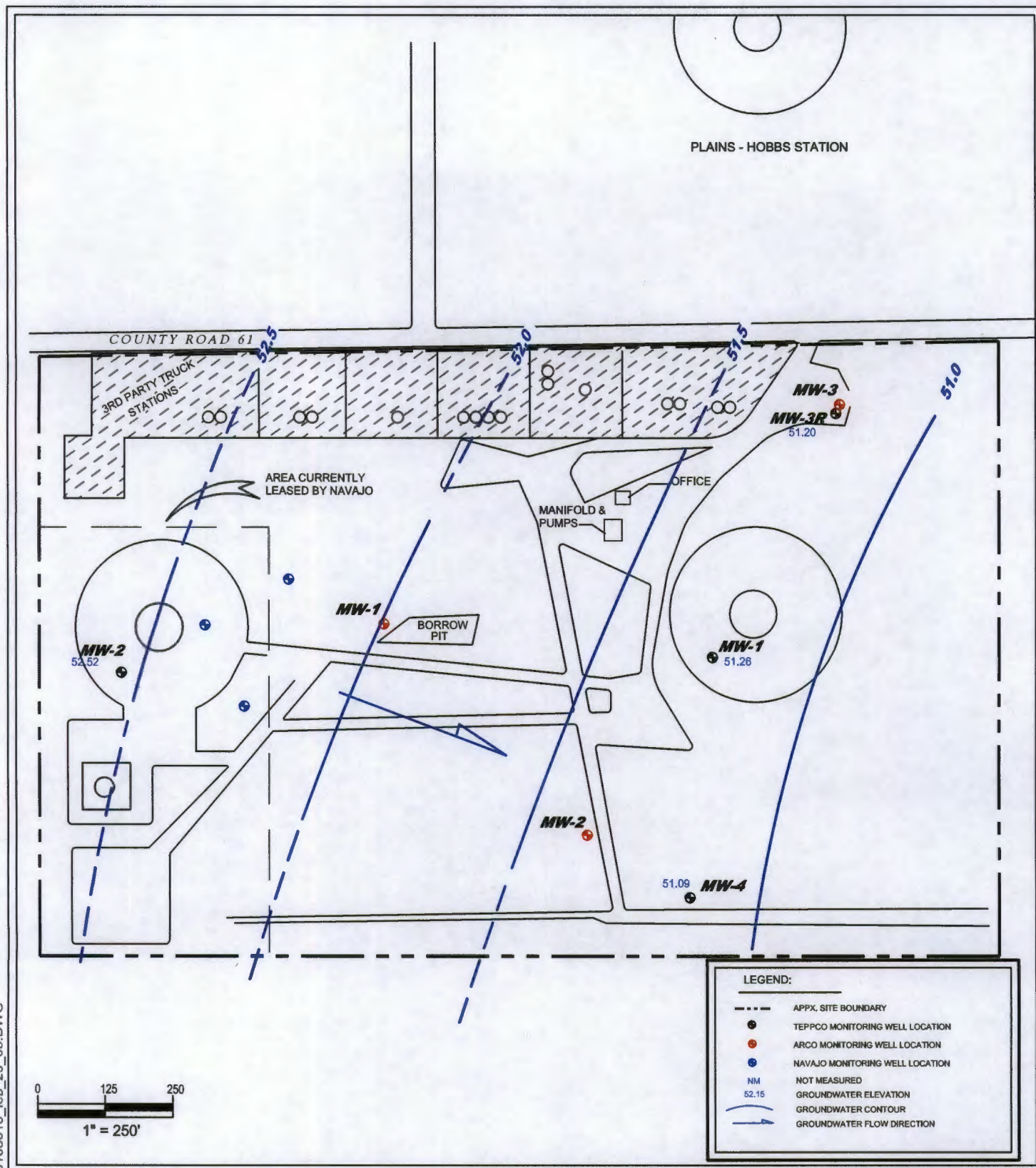


Groundwater Monitoring
TEPPCO Hobbs Station
Off County Road 61
N32° 39.135'; W103° 8.373'
Hobbs, Lea County, New Mexico

SWG Project No. 0105013

Southwest
GEOSCIENCE

FIGURE 4A
GROUNDWATER GRADIENT
MAP
FEBRUARY 25, 2009



Groundwater Monitoring
TEPPCO Hobbs Station
Off County Road 61
N32° 39.135'; W103° 8.373'
Hobbs, Lea County, New Mexico

SWG Project No. 0105013

Southwest
GEOSCIENCE

FIGURE 4B
GROUNDWATER GRADIENT
MAP
SEPTEMBER 23, 2009

TABLE 1
GROUNDWATER ANALYTICAL RESULTS

Sample I.D.	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	TPH GRO (mg/L)	TPH DRO (mg/L)
New Mexico Water Quality Commission (NMWQC) Ground Water Standards		10	750	750	620	NE	NE
Monitoring Wells Installed by ARCO							
MW-1	5.11.04	<1.0	<1.0	<1.0	<3.0	NA	0.124
MW-2	5.11.04	<1.0	<1.0	<1.0	<3.0	NA	<0.10
MW-3	3.20.03	63.7	2.49	197	6.23	1.95	18
	5.11.04	Insufficient Water Volume for Sample Collection					
Monitoring Wells Installed by TEPPCO							
MW-1	3.20.03	<1.0	<1.0	<1.0	<3.0	<0.05	2.44
	5.11.04	<1.0	<1.0	<1.0	<3.0	<0.05	1.31
	2.03.06	<2.0	<2.0	<2.0	<6.0	<0.05	<0.5
	8.19.06	<2.0	<2.0	<2.0	<6.0	<0.05	<0.5
	1.31.07	<2.0	<2.0	<2.0	<6.0	<0.15	<0.5
	8.01.07	<1.0	<1.0	<1.0	<3.0	<0.05	0.262
	2.29.08	<1.0	<1.0	<1.0	<3.0	<0.05	0.333
	8.13.08	<1.0	<1.0	<1.0	<3.0	<0.05	**
	2.25.09	<1.0	<1.0	<1.0	<3.0	<0.05	0.226
8.20.09	<1.0	<1.0	<1.0	<3.0	<0.05	0.135	
MW-2	3.20.03	<1.0	<1.0	<1.0	<3.0	<0.05	0.493
	5.11.04	<1.0	<1.0	<1.0	<3.0	<0.05	<0.10
	2.03.06	<2.0	<2.0	<2.0	<6.0	<0.05	<0.5
	8.19.06	2.0	<2.0	<2.0	<6.0	<0.05	<0.5
	1.31.07	<2.0	<2.0	<2.0	<6.0	<0.15	<0.5
	8.01.07	<1.0	<1.0	<1.0	<3.0	<0.05	0.393
	2.29.08	<1.0	<1.0	<1.0	<3.0	<0.05	0.247
	8.13.08	<1.0	<1.0	<1.0	<3.0	0.065	0.848
	2.25.09	<1.0	<1.0	<1.0	<3.0	<0.05	1.08
8.20.09	<1.0	<1.0	<1.0	<3.0	<0.05	0.809	
MW-3R	7.25.05	<2.0	<2.0	<2.0	<6.0	0.074	2.4
	2.03.06	<2.0	<2.0	4.0	<6.0	0.175	1.94
	8.19.06	2.0	<2.0	<2.0	<6.0	0.323	1.97
	1.31.07	<2.0	<2.0	3.1	<6.0	0.209	2.5
	8.01.07	<1.0	<1.0	<1.0	<3.0	0.101	4.06
	2.29.08	<1.0	<1.0	<1.0	<3.0	0.0504	3.75
	8.13.08	1.96	1.53	1.79	<3.0	0.161	4.21
	2.25.09	<1.0	1.43	4.45	<3.0	0.197	3.42
8.20.09	<1.0	<1.0	5.63	<3.0	0.231	2.63	
MW-4	3.20.03	<1.0	<1.0	<1.0	<3.0	<0.05	0.829
	5.11.04	<1.0	<1.0	<1.0	<3.0	<0.05	<0.10
	2.03.06	<2.0	<2.0	<2.0	<6.0	<0.05	<0.5
	8.19.06	4.0	5.0	<2.0	<6.0	<0.05	<0.5
	1.31.07	<2.0	<2.0	<2.0	<6.0	<0.15	<0.5
	8.01.07	<1.0	<1.0	<1.0	<3.0	<0.05	0.129
	2.29.08	<1.0	<1.0	<1.0	<3.0	<0.05	0.219
	8.13.08	<1.0	<1.0	<1.0	<3.0	<0.05	0.201
	2.25.09	<1.0	<1.0	<1.0	<3.0	<0.05	0.16
8.20.09	<1.0	<1.0	<1.0	<3.0	<0.05	0.212	

NE = Not Established

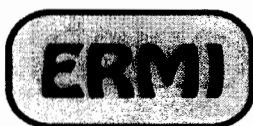
**Sample was not analyzed due to sample mishandling by the analytical laboratory.

TABLE 2
FLUID LEVEL GAUGING DATA

Well ID	Measurement Date	Ground Surface Elevation (feet)	Top-of-Casing Elevation (feet)	Depth to PSH (feet)	Depth to Water (feet)	PSH Thickness (feet)	Corrected Groundwater Elevation
Monitoring Wells Installed by TEPPCO							
MW-1	2.3.06	93.5	97.08	None Detected	Not Recorded	0	Not Determined
	8.19.06		97.08	None Detected	44.19	0	52.89
	1.31.07		97.08	None Detected	44.31	0	52.77
	8.01.07		97.08	None Detected	44.91	0	52.17
	2.29.08		97.08	None Detected	44.71	0	52.37
	8.13.08		97.08	None Detected	45.01	0	52.07
	2.25.09		97.08	None Detected	45.32	0	51.76
	9.23.09		97.08	None Detected	45.82	0	51.26
MW-2	2.3.06	95.58	99.36	None Detected	44.89	0	54.47
	8.19.06		99.36	None Detected	45.24	0	54.12
	1.31.07		99.36	None Detected	45.35	0	54.01
	8.01.07		99.36	None Detected	45.65	0	53.71
	2.29.08		99.36	None Detected	45.79	0	53.57
	8.13.08		99.36	None Detected	46.06	0	53.30
	2.25.09		99.36	None Detected	46.36	0	53.00
	9.23.09		99.36	None Detected	46.84	0	52.52
MW-3R	2.3.06	95.26	98.66	None Detected	45.31	0	53.35
	8.19.06		98.66	None Detected	45.78	0	52.88
	1.31.07		98.66	None Detected	45.82	0	52.84
	8.01.07		98.66	None Detected	46.07	0	52.59
	2.29.08		98.66	None Detected	46.25	0	52.41
	8.13.08		98.66	None Detected	46.6	0	52.06
	2.25.09		98.66	None Detected	Not Recorded	0	Not Determined
	9.23.09		98.66	None Detected	47.46	0	51.20
MW-4	2.3.06	93.63	97.15	None Detected	44.1	0	53.05
	8.19.06		97.15	None Detected	44.52	0	52.63
	1.31.07		97.15	None Detected	44.55	0	52.60
	8.01.07		97.15	None Detected	44.91	0	52.24
	2.29.08		97.15	None Detected	45	0	52.15
	8.13.08		97.15	None Detected	45.3	0	51.85
	2.25.09		97.15	None Detected	45.57	0	51.58
	9.23.09		97.15	None Detected	46.06	0	51.09
Navajo Monitoring Wells							
RW	1.31.07	94.21	98.9	44.74	47.59	2.85	53.82
	8.01.07		98.9	44.88	48.36	3.48	53.60
	2.29.08		98.9	45.31	47.71	2.4	53.30
	8.13.08		98.9	45.71	47.1	1.39	53.02
	2.25.09		98.9	45.91	47.23	1.32	52.83

APPENDIX C

Laboratory Data Reports
& Chain-of-Custody Documentation



Environmental Laboratories
Bethany Tech Center • Suite 190
400 W. Bethany Rd. • Allen, Texas 75013

State Certifications

Arkansas: 88-0647
Oklahoma: 8727



Louisiana: 02007
Texas: T104704232-08D-TX

Report of Sample Analysis

Southwest Geoscience
8620 N. New Braunfels Ave, Suite 531
San Antonio, TX 78217
ATTN: Chris Mitchell

Page: Page 1 of 11
Project: Hobbs Station
Project #: 0105013
Print Date/Time: 03/06/09 10:17

Attached is our analytical report for the samples received for your project. Below is a list of your individual sample descriptions with our corresponding laboratory number. We also have enclosed a copy of the Chain of Custody that was received with your samples and a form documenting the condition of your samples upon arrival. Please note any unused portion of the samples may be discarded upon expiration of the EPA holding time for the analysis performed or after 30 days from the above report date, unless you have requested otherwise.

ERMI Environmental Laboratories certifies that all results contained in this report were produced in accordance with the requirements of the National Environmental Laboratory Accreditation Program (NELAP) unless otherwise noted. The results presented apply to the samples analyzed in accordance with the chain-of-custody document(s) furnished with the samples. This report is intended for the sole use of the customer for whom the work was performed and must be reproduced, without modification, in its entirety.

Sample Identification

<u>Laboratory ID #</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Sampled Date/Time</u>	<u>Received Date/Time</u>
0902744-01	MW-4	Aqueous	02/25/09 09:50	02/27/09 09:25
0902744-02	MW-1	Aqueous	02/25/09 12:35	02/27/09 09:25
0902744-03	MW-2	Aqueous	02/25/09 13:10	02/27/09 09:25
0902744-04	MW-3R	Aqueous	02/25/09 14:10	02/27/09 09:25

Case Narrative

This project does not require TRRP specifications.



Environmental Laboratories
Bethany Tech Center • Suite 190
400 W. Bethany Rd. • Allen, Texas 75013

State Certifications
Arkansas: 88-0647
Oklahoma: 8727



Louisiana: 02007
Texas: T104704232-08D-TX

Report of Sample Analysis

Southwest Geoscience
8620 N. New Braunfels Ave, Suite 531
San Antonio, TX 78217
ATTN: Chris Mitchell

Page: Page 2 of 11
Project: Hobbs Station
Project #: 0105013
Print Date/Time: 03/06/09 10:17

The analytical data and results contained in this report, as well as their supporting data, conform with Texas Risk Reduction Program (TRRP), 30 TAC, Section 350, requirements and are of sufficient and documented quality to meet both TRRP objectives, TCEQ regulatory guidance No. RG-366/TRRP-13 and the project-based objective of achieving the lowest method detection limit (i.e., the TRRP Critical PCL where reasonably achievable or, if not reasonably achievable, the MQL). All information concerning analytical parameters, methods and protocols that might bear upon or otherwise affect the accuracy of the analytical data in this report have been provided or otherwise disclosed herein. The data were obtained using applicable and appropriate EPA SW-846 or Texas Commission on Environmental Quality approved analytical protocols, methodologies and quality assurance/quality control standards. **ERMI Environmental Laboratories** certifies that its quality control program is substantially and materially consistent with the International Organization for Standardization "Guide 25: General Requirements the Competence of Calibration and Testing Laboratories (ISO 25 3rd Edition, 1990)," as amended or the quality standards outlined in the National Environmental Laboratory Accreditation Program, as amended. The entire analytical data package for this report, including the supporting quality control data, will be retained and maintained for at least five (5) years (or such longer period of time as may be required by TRRP) from the report date at the offices of **ERMI Environmental Laboratories, 400 W. Bethany, Suite 190, Allen, Texas 75013.**

I am responsible for the release of this laboratory data package. This data package has been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

Thank you for the opportunity to serve your environmental chemistry analysis needs. If you have any questions or concerns regarding this report please contact our Customer Service Department at the phone number below.

Respectfully submitted,

Kendall K. Brown
President



Environmental Laboratories
 Bethany Tech Center • Suite 190
 400 W. Bethany Rd. • Allen, Texas 75013

State Certifications
 Arkansas: 88-0647
 Oklahoma: 8727



Louisiana: 02007
 Texas: T104704232-08D-TX

Report of Sample Analysis

Southwest Geoscience
 8620 N. New Braunfels Ave, Suite 531
 San Antonio, TX 78217
 ATTN: Chris Mitchell

Page: Page 3 of 11
 Project: Hobbs Station
 Project #: 0105013
 Print Date/Time: 03/06/09 10:17

<u>Laboratory ID #:</u> 0902744-01	<u>Sample Type</u> Grab	<u>Matrix</u> Aqueous	<u>Sample Collected By</u> Russell Howard	<u>Customer</u>
<u>Sample Description</u> MW-4		<u>Sample Date/Time</u> 02/25/09 0950		

Analyte(s)	Result	SRL	MRL	Units	F*	Method	Batch	Analysis Date/Time	Anlst	Flag
Total Petroleum Hydrocarbons - DRO										
Separatory Funnel Liquid-Liquid Extraction	Completed	N/A	N/A	N/A	1.00	EPA 3510C	9C02024	03/02/09 1757	WC	Q-16
TPH Diesel	0.160	0.100	0.100	mg/l	1.00	EPA 8015B mod	9C02024	03/04/09 1853	SMH	
Surrogate: a-Pinene		45 %	17-95			EPA 8015B mod	9C02024	03/04/09 1853	SMH	
Surrogate: Triacontane		73 %	46-139			EPA 8015B mod	9C02024	03/04/09 1853	SMH	
Total Petroleum Hydrocarbons - GRO										
TPH Gasoline	ND	0.050	0.050	mg/l	1.00	EPA 8015B mod	9C02023	03/02/09 2110	ZT	
Surrogate: 4-Bromofluorobenzene		92 %	61-129			EPA 8015B mod	9C02023	03/02/09 2110	ZT	
BTEX										
Benzene	ND	1.00	1.00	ug/l	1.00	EPA 8021B	9C02023	03/02/09 2110	ZT	
Ethyl Benzene	ND	1.00	1.00	ug/l	1.00	EPA 8021B	9C02023	03/02/09 2110	ZT	
Toluene	ND	1.00	1.00	ug/l	1.00	EPA 8021B	9C02023	03/02/09 2110	ZT	
Xylenes (total)	ND	3.00	3.00	ug/l	1.00	EPA 8021B	9C02023	03/02/09 2110	ZT	
Surrogate: 4-Bromofluorobenzene		98 %	44-147			EPA 8021B	9C02023	03/02/09 2110	ZT	



Environmental Laboratories
 Bethany Tech Center • Suite 190
 400 W. Bethany Rd. • Allen, Texas 75013

State Certifications
 Arkansas: 88-0647
 Oklahoma: 8727



Louisiana: 02007
 Texas: T104704232-08D-TX

Report of Sample Analysis

Southwest Geoscience
 8620 N. New Braunfels Ave, Suite 531
 San Antonio, TX 78217
 ATTN: Chris Mitchell

Page: Page 4 of 11
 Project: Hobbs Station
 Project #: 0105013
 Print Date/Time: 03/06/09 10:17

Laboratory ID #:	Sample Type	Matrix	Sample Collected By	Customer
0902744-02	Grab	Aqueous	Russell Howard	
Sample Description	Sample Date/Time			
MW-1	02/25/09 1235			

Analyte(s)	Result	SRL	MRL	Units	F*	Method	Batch	Analysis Date/Time	Anlst	Flag
Total Petroleum Hydrocarbons - DRO										
Separatory Funnel Liquid-Liquid Extraction	Completed	N/A	N/A	N/A	1.09	EPA 3510C	9C02024	03/02/09 1757	WC	Q-16
TPH Diesel	0.226	0.109	0.100	mg/l	1.09	EPA 8015B mod	9C02024	03/04/09 1900	SMH	
Surrogate: a-Pinene		37 %	17-95			EPA 8015B mod	9C02024	03/04/09 1900	SMH	
Surrogate: Triacontane		74 %	46-139			EPA 8015B mod	9C02024	03/04/09 1900	SMH	
Total Petroleum Hydrocarbons - GRO										
TPH Gasoline	ND	0.050	0.050	mg/l	1.00	EPA 8015B mod	9C02023	03/02/09 2133	ZT	
Surrogate: 4-Bromofluorobenzene		94 %	61-129			EPA 8015B mod	9C02023	03/02/09 2133	ZT	
BTEX										
Benzene	ND	1.00	1.00	ug/l	1.00	EPA 8021B	9C02023	03/02/09 2133	ZT	
Ethyl Benzene	ND	1.00	1.00	ug/l	1.00	EPA 8021B	9C02023	03/02/09 2133	ZT	
Toluene	ND	1.00	1.00	ug/l	1.00	EPA 8021B	9C02023	03/02/09 2133	ZT	
Xylenes (total)	ND	3.00	3.00	ug/l	1.00	EPA 8021B	9C02023	03/02/09 2133	ZT	
Surrogate: 4-Bromofluorobenzene		98 %	44-147			EPA 8021B	9C02023	03/02/09 2133	ZT	



Environmental Laboratories
Bethany Tech Center • Suite 190
400 W. Bethany Rd. • Allen, Texas 75013

State Certifications
Arkansas: 88-0647
Oklahoma: 8727



Louisiana: 02007
Texas: T104704232-08D-TX

Report of Sample Analysis

Southwest Geoscience
8620 N. New Braunfels Ave, Suite 531
San Antonio, TX 78217
ATTN: Chris Mitchell

Page: Page 5 of 11
Project: Hobbs Station
Project #: 0105013
Print Date/Time: 03/06/09 10:17

<u>Laboratory ID #:</u> 0902744-03	<u>Sample Type</u> Grab	<u>Matrix</u> Aqueous	<u>Sample Collected By</u> Russell Howard	<u>Customer</u>
<u>Sample Description</u> MW-2		<u>Sample Date/Time</u> 02/25/09 1310		

Analyte(s)	Result	SRL	MRL	Units	F*	Method	Batch	Analysis Date/Time	Anlst	Flag
Total Petroleum Hydrocarbons - DRO										
Separatory Funnel Liquid-Liquid Extraction	Completed	N/A	N/A	N/A	1.05	EPA 3510C	9C02024	03/02/09 1757	WC	Q-16
TPH Diesel	1.08	0.105	0.100	mg/l	1.05	EPA 8015B mod	9C02024	03/04/09 1912	SMH	
Surrogate: <i>a</i> -Pinene		37 %	17-95			EPA 8015B mod	9C02024	03/04/09 1912	SMH	
Surrogate: Triacontane		99 %	46-139			EPA 8015B mod	9C02024	03/04/09 1912	SMH	
Total Petroleum Hydrocarbons - GRO										
TPH Gasoline	ND	0.050	0.050	mg/l	1.00	EPA 8015B mod	9C02023	03/02/09 2156	ZT	
Surrogate: 4-Bromofluorobenzene		94 %	61-129			EPA 8015B mod	9C02023	03/02/09 2156	ZT	
BTEX										
Benzene	ND	1.00	1.00	ug/l	1.00	EPA 8021B	9C02023	03/02/09 2156	ZT	
Ethyl Benzene	ND	1.00	1.00	ug/l	1.00	EPA 8021B	9C02023	03/02/09 2156	ZT	
Toluene	ND	1.00	1.00	ug/l	1.00	EPA 8021B	9C02023	03/02/09 2156	ZT	
Xylenes (total)	ND	3.00	3.00	ug/l	1.00	EPA 8021B	9C02023	03/02/09 2156	ZT	
Surrogate: 4-Bromofluorobenzene		98 %	44-147			EPA 8021B	9C02023	03/02/09 2156	ZT	



Environmental Laboratories
Bethany Tech Center • Suite 190
400 W. Bethany Rd. • Allen, Texas 75013

State Certifications
Arkansas: 88-0647
Oklahoma: 8727



Louisiana: 02007
Texas: T104704232-08D-TX

Report of Sample Analysis

Southwest Geoscience
8620 N. New Braunfels Ave, Suite 531
San Antonio, TX 78217
ATTN: Chris Mitchell

Page: Page 6 of 11
Project: Hobbs Station
Project #: 0105013
Print Date/Time: 03/06/09 10:17

Laboratory ID #:	Sample Type	Matrix	Sample Collected By	Customer
0902744-04	Grab	Aqueous	Russell Howard	
Sample Description	Sample Date/Time			
MW-3R	02/25/09 1410			

Analyte(s)	Result	SRL	MRL	Units	F*	Method	Batch	Analysis Date/Time	Anlst	Flag
Total Petroleum Hydrocarbons - DRO										
Separatory Funnel Liquid-Liquid Extraction	Completed	N/A	N/A	N/A	1.06	EPA 3510C	9C02024	03/02/09 1757	WC	Q-16
TPH Diesel	3.42	0.106	0.100	mg/l	1.06	EPA 8015B mod	9C02024	03/04/09 1918	SMH	
Surrogate: a-Pinene		42 %	17-95			EPA 8015B mod	9C02024	03/04/09 1918	SMH	
Surrogate: Triacontane		76 %	46-139			EPA 8015B mod	9C02024	03/04/09 1918	SMH	
Total Petroleum Hydrocarbons - GRO										
TPH Gasoline	0.197	0.050	0.050	mg/l	1.00	EPA 8015B mod	9C02023	03/02/09 2219	ZT	
Surrogate: 4-Bromofluorobenzene		111 %	61-129			EPA 8015B mod	9C02023	03/02/09 2219	ZT	
BTEX										
Benzene	ND	1.00	1.00	ug/l	1.00	EPA 8021B	9C02023	03/02/09 2219	ZT	
Ethyl Benzene	4.45	1.00	1.00	ug/l	1.00	EPA 8021B	9C02023	03/02/09 2219	ZT	
Toluene	1.43	1.00	1.00	ug/l	1.00	EPA 8021B	9C02023	03/02/09 2219	ZT	
Xylenes (total)	ND	3.00	3.00	ug/l	1.00	EPA 8021B	9C02023	03/02/09 2219	ZT	
Surrogate: 4-Bromofluorobenzene		106 %	44-147			EPA 8021B	9C02023	03/02/09 2219	ZT	



Environmental Laboratories
 Bethany Tech Center • Suite 190
 400 W. Bethany Rd. • Allen, Texas 75013

State Certifications
 Arkansas: 88-0647
 Oklahoma: 8727



Louisiana: 02007
 Texas: T104704232-08D-TX

Report of Sample Analysis

Southwest Geoscience
 8620 N. New Braunfels Ave, Suite 531
 San Antonio, TX 78217
 ATTN: Chris Mitchell

Page: Page 7 of 11
 Project: Hobbs Station
 Project #: 0105013
 Print Date/Time: 03/06/09 10:17

Total Petroleum Hydrocarbons - DRO - Quality Control

Analyte(s)	Result	*SRI	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch 9C02024 - EPA 3510C Separatory Funnel Extraction										
Blank (9C02024-BLK1)										
Prepared & Analyzed: 03/02/09 17:57										
Separatory Funnel Liquid-Liquid Extraction	Completed	N/A	N/A							
TPH Diesel	ND	0.100	mg/l							
Surrogate: a-Pinene	0.0436		mg/l	0.108		40	17-95			
Surrogate: Triacontane	0.0672		mg/l	0.104		65	46-139			
Laboratory Control Sample (9C02024-BS1)										
Prepared & Analyzed: 03/02/09 17:57										
Separatory Funnel Liquid-Liquid Extraction	Completed	N/A	N/A				0-0			
TPH Diesel	0.960	0.100	mg/l	1.10		87	51-147			
Surrogate: a-Pinene	0.0410		mg/l	0.108		38	17-95			
Surrogate: Triacontane	0.0657		mg/l	0.104		63	46-139			
Laboratory Control Sample Duplicate (9C02024-BSD1)										
Prepared & Analyzed: 03/02/09 17:57										
Separatory Funnel Liquid-Liquid Extraction	Completed	N/A	N/A				0-0		0	
TPH Diesel	0.930	0.100	mg/l	1.10		85	51-147	3	32	
Surrogate: a-Pinene	0.0401		mg/l	0.108		37	17-95			
Surrogate: Triacontane	0.0727		mg/l	0.104		70	46-139			



Environmental Laboratories
Bethany Tech Center • Suite 190
400 W. Bethany Rd. • Allen, Texas 75013

State Certifications

Arkansas: 88-0647
Oklahoma: 8727



Louisiana: 02007
Texas: T104704232-08D-TX

Report of Sample Analysis

Southwest Geoscience
8620 N. New Braunfels Ave, Suite 531
San Antonio, TX 78217
ATTN: Chris Mitchell

Page: Page 8 of 11
Project: Hobbs Station
Project #: 0105013
Print Date/Time: 03/06/09 10:17

Total Petroleum Hydrocarbons - GRO - Quality Control

Analyte(s)	Result	*SRI	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch 9C02023 - EPA 5030B Purge-and-Trap for Aqueous Samples										
Blank (9C02023-BLK1)										
Prepared: 03/02/09 17:04 Analyzed: 03/02/09 17:39										
TPH Gasoline	ND	0.050	mg/l							
Surrogate: 4-Bromofluorobenzene	0.0947		mg/l	0.100		95	61-129			
Laboratory Control Sample (9C02023-BS1)										
Prepared: 03/02/09 17:04 Analyzed: 03/02/09 18:03										
TPH Gasoline	0.509	0.050	mg/l	0.500		102	60-137			
Surrogate: 4-Bromofluorobenzene	0.101		mg/l	0.100		101	61-129			
Laboratory Control Sample Duplicate (9C02023-BSD1)										
Prepared: 03/02/09 17:04 Analyzed: 03/02/09 18:27										
TPH Gasoline	0.505	0.050	mg/l	0.500		101	60-137	0.8	19	
Surrogate: 4-Bromofluorobenzene	0.101		mg/l	0.100		101	61-129			
Matrix Spike (9C02023-MS1)										
Prepared: 03/02/09 17:04 Analyzed: 03/03/09 09:29										
					Source: 0902744-01					
TPH Gasoline	0.532	0.050	mg/l	0.500	ND	106	18-196			
Surrogate: 4-Bromofluorobenzene	0.101		mg/l	0.100		101	61-129			
Matrix Spike Duplicate (9C02023-MSD1)										
Prepared: 03/02/09 17:04 Analyzed: 03/03/09 09:51										
					Source: 0902744-01					
TPH Gasoline	0.517	0.050	mg/l	0.500	ND	103	18-196	3	12	
Surrogate: 4-Bromofluorobenzene	0.101		mg/l	0.100		101	61-129			



Environmental Laboratories
Bethany Tech Center • Suite 190
400 W. Bethany Rd. • Allen, Texas 75013

State Certifications

Arkansas: 88-0647
Oklahoma: 8727



Louisiana: 02007
Texas: T104704232-08D-TX

Report of Sample Analysis

Southwest Geoscience
8620 N. New Braunfels Ave, Suite 531
San Antonio, TX 78217
ATTN: Chris Mitchell

Page: Page 9 of 11
Project: Hobbs Station
Project #: 0105013
Print Date/Time: 03/06/09 10:17

BTEX - Quality Control

Analyte(s)	Result	*SRI	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch 9C02023 - EPA 5030B Purge-and-Trap for Aqueous Samples										
Blank (9C02023-BLK1)										
Prepared: 03/02/09 17:04 Analyzed: 03/02/09 17:39										
Benzene	ND	1.00	ug/l							
Ethyl Benzene	ND	1.00	ug/l							
Toluene	ND	1.00	ug/l							
Xylenes (total)	ND	3.00	ug/l							
Surrogate: 4-Bromofluorobenzene	98.6		ug/l	100		99	44-147			
Laboratory Control Sample (9C02023-BS1)										
Prepared: 03/02/09 17:04 Analyzed: 03/02/09 18:03										
Benzene	52.7	1.00	ug/l	50.0		105	81-128			
Ethyl Benzene	47.3	1.00	ug/l	50.0		95	81-126			
Toluene	52.9	1.00	ug/l	50.0		106	83-129			
Xylenes (total)	161	3.00	ug/l	150		107	82-128			
Surrogate: 4-Bromofluorobenzene	101		ug/l	100		101	44-147			
Laboratory Control Sample Duplicate (9C02023-BSD1)										
Prepared: 03/02/09 17:04 Analyzed: 03/02/09 18:27										
Benzene	52.1	1.00	ug/l	50.0		104	81-128	1	12	
Ethyl Benzene	45.9	1.00	ug/l	50.0		92	81-126	3	17	
Toluene	52.2	1.00	ug/l	50.0		104	83-129	1	12	
Xylenes (total)	159	3.00	ug/l	150		106	82-128	1	13	
Surrogate: 4-Bromofluorobenzene	101		ug/l	100		101	44-147			
Matrix Spike (9C02023-MS1)										
Prepared: 03/02/09 17:04 Analyzed: 03/03/09 09:29										
					Source: 0902744-01					
Benzene	54.8	1.00	ug/l	50.0	0.705	108	68-136			
Ethyl Benzene	49.8	1.00	ug/l	50.0	ND	100	63-144			
Toluene	55.4	1.00	ug/l	50.0	ND	111	51-149			
Xylenes (total)	172	3.00	ug/l	150	ND	115	56-146			
Surrogate: 4-Bromofluorobenzene	103		ug/l	100		103	44-147			



Environmental Laboratories
Bethany Tech Center • Suite 190
400 W. Bethany Rd. • Allen, Texas 75013

State Certifications
Arkansas: 88-0647
Oklahoma: 8727



Louisiana: 02007
Texas: T104704232-08D-TX

Report of Sample Analysis

Southwest Geoscience
8620 N. New Braunfels Ave, Suite 531
San Antonio, TX 78217
ATTN: Chris Mitchell

Page: Page 10 of 11
Project: Hobbs Station
Project #: 0105013
Print Date/Time: 03/06/09 10:17

BTEX - Quality Control

Analyte(s)	Result	*SRI	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
------------	--------	------	-------	-------------	---------------	------	-------------	-----	-----------	------

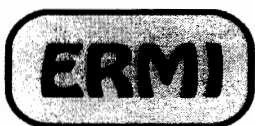
Batch 9C02023 - EPA 5030B Purge-and-Trap for Aqueous Samples (continued)

Matrix Spike Duplicate (9C02023-MSD1)

Prepared: 03/02/09 17:04 Analyzed: 03/03/09 09:51

Source: 0902744-01

Benzene	53.4	1.00	ug/l	50.0	0.705	105	68-136	3	11	
Ethyl Benzene	48.6	1.00	ug/l	50.0	ND	97	63-144	2	15	
Toluene	53.5	1.00	ug/l	50.0	ND	107	51-149	3	12	
Xylenes (total)	165	3.00	ug/l	150	ND	110	56-146	4	17	
Surrogate: 4-Bromofluorobenzene	101		ug/l	100		101	44-147			



Environmental Laboratories
Bethany Tech Center • Suite 190
400 W. Bethany Rd. • Allen, Texas 75013

State Certifications

Arkansas: 88-0647
Oklahoma: 8727



Louisiana: 02007
Texas: T104704232-08D-TX

Report of Sample Analysis

Southwest Geoscience
8620 N. New Braunfels Ave, Suite 531
San Antonio, TX 78217
ATTN: Chris Mitchell

Page: Page 11 of 11
Project: Hobbs Station
Project #: 0105013
Print Date/Time: 03/06/09 10:17

Notes and Definitions

The results presented in this report were generated using those methods given in 40 CFR Part 136 for Water and Wastewater samples and in SW-846 for RCRA/Solid Waste samples.

Q-16	An insufficient volume or mass of sample was available for matrix spikes.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
LCS/LCSD	Laboratory Control Sample/Laboratory Control Sample Duplicate
MS/MSD	Matrix Spike/Matrix Spike Duplicate
RPD	Relative Percent Difference
mg/kg	milligrams per kilogram
mg/l	milligrams per liter
ug/kg	micrograms per kilogram
ug/l	micrograms per liter
exc	Not covered under scope of NELAP accreditation.
F*	Calculated factor rounded to 3 significant figures. Concentration factor when <1.00 and dilution factor when >1.00.
Anlst	Analyst Initials
SRL	Sample Reporting Limit
MRL	Method Reporting Limit
naa	This analysis/parameter is not accreditable under the current NELAP program



P.O. BOX 940303
PLANO, TX 75094-0303
(972) 881-7577

NOTARY SERVICE AVAILABLE

NAME	Southwest Express
ADDRESS	2351 North West
CITY	Dallas
REFERENCE NO.	
NAME	Edna Robinson
ADDRESS	4000 Bottom Rd
CITY	Allen
STATE	TX
ZIP	75001

DATE	2-26-09
TIME	3:25
WEIGHT	
CHARGES	
INSURANCE	
COLLECT	
POUND	
WARRANT	
RECEIPT	

MOBILE	
1 (000 211)	
WAITING TIME	
NOT RESPONSIBLE FOR DAMAGE TO OR LOSS OF GOODS. NOT RESPONSIBLE FOR CONCEALED DAMAGE. OFF AND REMOVED FROM COUNTRIES. TEXAS	
DRIVER NAME & NO.	Edna Robinson
DRIVER SIGNATURE	
RECEIVED BY	

WEIGHT	
CHARGES	
INSURANCE	
COLLECT	
POUND	
WARRANT	
RECEIPT	

ERMI

Custody Seal
Sample I.D. No. 019501360106204 Date 2/26/09
Signature _____

ERMI

X-484

Lab Number(s): 0902744

ERMI

Sample Preservation Documentation*

On Ice (Circle One): YES OR NO (check if on Dry Ice _____)

Parameters	Containers #	Size	Required Preservation	Sample Container	Circle pH Note any discrepancy
Metals			pH < 2	Glass or Plastic	pH < 2
Dissolved Metals			Unpreserved prior to being filtered, Cool**	Glass or Plastic	
Hexavalent Chromium			CWA - pH 9.3-9.7, Cool; RCRA - Cool	Glass or Plastic	
Semivolatiles, Pesticides, PCBs, Herbicides			Cool	Glass only with Teflon lid	Chlorine <input type="checkbox"/> yes <input type="checkbox"/> no
VOA (BTEX , MTBE, 624, 8260, TPH-GRO)	24	40 ml	Cool, pH < 2 Zero Head Space <i>0.16/0.26 has head space</i>	40 ml VOA vial	
VOA (TPH-1005)			Cool, Zero Head Space Please check if collected in pre-weighed vials	40 ml VOA vial	
Phos., NO ₃ /NO ₂ , NH ₃ N, COD, TKN, TOC			Cool, pH < 2	Glass or Plastic	pH < 2
TDS, BOD, CBOD, Cond, pH, TSS, F, SO ₄ , Cl, Alk, Sulfite			Cool	Glass or Plastic, Plastic only if F	
Phenols, TPH-DRO	4	1L	Cool, pH < 2	Glass only Teflon lid <input checked="" type="checkbox"/> Foil lid	pH < 2
Oil & Grease, TPH (by 1664a)			Cool, pH < 2	Glass only Teflon lid Foil lid	
Cyanide			Cool, pH > 12	Glass or Plastic	pH > 12 Chlorine <input type="checkbox"/> yes <input type="checkbox"/> no Sulfide <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> na
Sulfide			Cool, pH > 9	Glass or Plastic	pH > 9
Bacteria			Cool	Plastic Sterile Cup	
Soil, Sludge, Solid, Oil, Liquid			Cool Note: please check if collected in pre-weighed vials		

Metals Preserved By Logon ☐yes ☐no

Trip Blanks Received ☐yes ☒no

COMMENTS: _____

*This form is used to document sample preservation. Circle parameter requested. Fill in number and size of containers received. Check pH (adjust if needed) and note if different from what is required and make a notation of any samples not received on ice. Note any incorrect sample containers or preservation on chain-of-custody.

**Cool means cooled to ≤6°C but not frozen.

Preservation Checked By [Signature]

KW

2-27-09
Date

1405
Time

1000.0-3.2

2/17/09

kdy 7/10/08

Q:\Form Masters\1000.0-3.2 Sample Preservation Form



Environmental Laboratories
Bethany Tech Center • Suite 190
400 W. Bethany Rd. • Allen, Texas 75013

State Certifications

Arkansas: 88-0647
Oklahoma: 8727



Louisiana: 02007
Kansas: E-10388
Texas: T104704232-09-TX

Report of Sample Analysis

Southwest Geoscience
8620 N. New Braunfels Ave, Suite 531
San Antonio, TX 78217
ATTN: Chris Mitchell

Page: Page 1 of 11
Project: Hobbs Station
Project #: 0105013
Print Date/Time: 08/28/09 15:54

Attached is our analytical report for the samples received for your project. Below is a list of your individual sample descriptions with our corresponding laboratory number. We also have enclosed a copy of the Chain of Custody that was received with your samples and a form documenting the condition of your samples upon arrival. Please note any unused portion of the samples may be discarded upon expiration of the EPA holding time for the analysis performed or after 30 days from the above report date, unless you have requested otherwise.

ERMI Environmental Laboratories certifies that all results contained in this report were produced in accordance with the requirements of the National Environmental Laboratory Accreditation Program (NELAP) unless otherwise noted. The results presented apply to the samples analyzed in accordance with the chain-of-custody document(s) furnished with the samples. This report is intended for the sole use of the customer for whom the work was performed and must be reproduced, without modification, in its entirety.

Sample Identification

<u>Laboratory ID #</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Sampled Date/Time</u>	<u>Received Date/Time</u>
0908579-01	MW-4	Aqueous	08/20/09 11:45	08/21/09 12:15
0908579-02	MW-1	Aqueous	08/20/09 13:35	08/21/09 12:15
0908579-03	MW-2	Aqueous	08/20/09 15:10	08/21/09 12:15
0908579-04	MW-3R	Aqueous	08/20/09 16:25	08/21/09 12:15

Case Narrative

This project does not require TRRP specifications.



Environmental Laboratories
Bethany Tech Center • Suite 190
400 W. Bethany Rd. • Allen, Texas 75013

State Certifications
Arkansas: 88-0647
Oklahoma: 8727



Louisiana: 02007
Kansas: E-10388
Texas: T104704232-09-TX

Report of Sample Analysis

Southwest Geoscience
8620 N. New Braunfels Ave, Suite 531
San Antonio, TX 78217
ATTN: Chris Mitchell

Page: Page 2 of 11
Project: Hobbs Station
Project #: 0105013
Print Date/Time: 08/28/09 15:54

The analytical data and results contained in this report, as well as their supporting data, conform with Texas Risk Reduction Program (TRRP), 30 TAC, Section 350, requirements and are of sufficient and documented quality to meet both TRRP objectives, TCEQ regulatory guidance No. RG-366/TRRP-13 and the project-based objective of achieving the lowest method detection limit (i.e., the TRRP Critical PCL where reasonably achievable or, if not reasonably achievable, the MQL). All information concerning analytical parameters, methods and protocols that might bear upon or otherwise affect the accuracy of the analytical data in this report have been provided or otherwise disclosed herein. The data were obtained using applicable and appropriate EPA SW-846 or Texas Commission on Environmental Quality approved analytical protocols, methodologies and quality assurance/quality control standards. **ERMI Environmental Laboratories** certifies that its quality control program is substantially and materially consistent with the International Organization for Standardization "Guide 25: General Requirements the Competence of Calibration and Testing Laboratories (ISO 25 3rd Edition, 1990)," as amended or the quality standards outlined in the National Environmental Laboratory Accreditation Program, as amended. The entire analytical data package for this report, including the supporting quality control data, will be retained and maintained for at least five (5) years (or such longer period of time as may be required by TRRP) from the report date at the offices of **ERMI Environmental Laboratories, 400 W. Bethany, Suite 190, Allen, Texas 75013.**

I am responsible for the release of this laboratory data package. This data package has been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

Thank you for the opportunity to serve your environmental chemistry analysis needs. If you have any questions or concerns regarding this report please contact our Customer Service Department at the phone number below.

Respectfully submitted,

Kendall K. Brown
President



Environmental Laboratories
Bethany Tech Center • Suite 190
400 W. Bethany Rd. • Allen, Texas 75013

State Certifications
Arkansas: 88-0647
Oklahoma: 8727



Louisiana: 02007
Kansas: E-10388
Texas: T104704232-09-TX

Report of Sample Analysis

Southwest Geoscience
8620 N. New Braunfels Ave, Suite 531
San Antonio, TX 78217
ATTN: Chris Mitchell

Page: Page 3 of 11
Project: Hobbs Station
Project #: 0105013
Print Date/Time: 08/28/09 15:54

<u>Laboratory ID #:</u> 0908579-01	<u>Sample Type</u> Grab	<u>Matrix</u> Aqueous	<u>Sample Collected By</u> Tim Zoch	<u>Customer</u>
<u>Sample Description</u> MW-4		<u>Sample Date/Time</u> 08/20/09 1145		

Analyte(s)	Result	SRL	MRL	Units	F*	Method	Batch	Analysis Date/Time	Anlst	Flag
Total Petroleum Hydrocarbons - DRO										C-01
Separatory Funnel Liquid-Liquid Extraction	Completed	N/A	N/A	N/A	1.00	EPA 3510C	9H25009	08/25/09 1000	WC	
TPH Diesel	0.212	0.100	0.1	mg/l	1.00	EPA 8015B mod	9H25009	08/27/09 1116	SMH	
Surrogate: <i>a</i> -Pinene		42 %	12-94			EPA 8015B mod	9H25009	08/27/09 1116	SMH	
Surrogate: Triacontane		73 %	40-140			EPA 8015B mod	9H25009	08/27/09 1116	SMH	
Total Petroleum Hydrocarbons - GRO										
TPH Gasoline	ND	0.050	0.05	mg/l	1.00	EPA 8015B mod	9H24037	08/25/09 1652	TA	
Surrogate: 4-Bromofluorobenzene		93 %	62-130			EPA 8015B mod	9H24037	08/25/09 1652	TA	
BTEX										
Benzene	ND	1.00	1	ug/l	1.00	EPA 8021B	9H24037	08/25/09 1652	TA	
Ethyl Benzene	ND	1.00	1	ug/l	1.00	EPA 8021B	9H24037	08/25/09 1652	TA	
Toluene	ND	1.00	1	ug/l	1.00	EPA 8021B	9H24037	08/25/09 1652	TA	
Xylenes (total)	ND	3.00	3	ug/l	1.00	EPA 8021B	9H24037	08/25/09 1652	TA	
Surrogate: 4-Bromofluorobenzene		103 %	38-149			EPA 8021B	9H24037	08/25/09 1652	TA	



Environmental Laboratories
Bethany Tech Center • Suite 190
400 W. Bethany Rd. • Allen, Texas 75013

State Certifications

Arkansas: 88-0647
Oklahoma: 8727



Louisiana: 02007
Kansas: E-10388
Texas: T104704232-09-TX

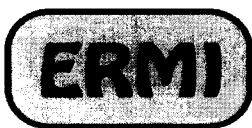
Report of Sample Analysis

Southwest Geoscience
8620 N. New Braunfels Ave, Suite 531
San Antonio, TX 78217
ATTN: Chris Mitchell

Page: Page 4 of 11
Project: Hobbs Station
Project #: 0105013
Print Date/Time: 08/28/09 15:54

<u>Laboratory ID #:</u> 0908579-02	<u>Sample Type</u> Grab	<u>Matrix</u> Aqueous	<u>Sample Collected By</u> Tim Zoch	<u>Customer</u>
<u>Sample Description</u> MWV-1		<u>Sample Date/Time</u> 08/20/09 1335		

Analyte(s)	Result	SRL	MRL	Units	F*	Method	Batch	Analysis Date/Time	Anlst	Flag
Total Petroleum Hydrocarbons - DRO										
Separatory Funnel Liquid-Liquid Extraction	Completed	N/A	N/A	N/A	1.03	EPA 3510C	9H25009	08/25/09 1000	WC	
TPH Diesel	0.135	0.103	0.1	mg/l	1.03	EPA 8015B mod	9H25009	08/27/09 1129	SMH	
Surrogate: <i>a-Pinene</i>		46 %	12-94			EPA 8015B mod	9H25009	08/27/09 1129	SMH	
Surrogate: <i>Triacontane</i>		79 %	40-140			EPA 8015B mod	9H25009	08/27/09 1129	SMH	
Total Petroleum Hydrocarbons - GRO										
TPH Gasoline	ND	0.050	0.05	mg/l	1.00	EPA 8015B mod	9H24037	08/25/09 1717	TA	
Surrogate: <i>4-Bromofluorobenzene</i>		92 %	62-130			EPA 8015B mod	9H24037	08/25/09 1717	TA	
BTEX										
Benzene	ND	1.00	1	ug/l	1.00	EPA 8021B	9H24037	08/25/09 1717	TA	
Ethyl Benzene	ND	1.00	1	ug/l	1.00	EPA 8021B	9H24037	08/25/09 1717	TA	
Toluene	ND	1.00	1	ug/l	1.00	EPA 8021B	9H24037	08/25/09 1717	TA	
Xylenes (total)	ND	3.00	3	ug/l	1.00	EPA 8021B	9H24037	08/25/09 1717	TA	
Surrogate: <i>4-Bromofluorobenzene</i>		102 %	38-149			EPA 8021B	9H24037	08/25/09 1717	TA	



Environmental Laboratories
Bethany Tech Center • Suite 190
400 W. Bethany Rd. • Allen, Texas 75013

State Certifications

Arkansas: 88-0647
Oklahoma: 8727



Louisiana: 02007
Kansas: E-10388
Texas: T104704232-09-TX

Report of Sample Analysis

Southwest Geoscience
8620 N. New Braunfels Ave, Suite 531
San Antonio, TX 78217
ATTN: Chris Mitchell

Page: Page 5 of 11
Project: Hobbs Station
Project #: 0105013
Print Date/Time: 08/28/09 15:54

<u>Laboratory ID #:</u> 0908579-03	<u>Sample Type</u> Grab	<u>Matrix</u> Aqueous	<u>Sample Collected By</u> Tim Zoch	<u>Customer</u>
<u>Sample Description</u> MW-2		<u>Sample Date/Time</u> 08/20/09 1510		

Analyte(s)	Result	SRL	MRL	Units	F*	Method	Batch	Analysis Date/Time	Anlst	Flag
Total Petroleum Hydrocarbons - DRO										
Separatory Funnel Liquid-Liquid Extraction	Completed	N/A	N/A	N/A	1.00	EPA 3510C	9H25009	08/25/09 1000	WC	
TPH Diesel	0.809	0.100	0.1	mg/l	1.00	EPA 8015B mod	9H25009	08/27/09 1142	SMH	
Surrogate: a-Pinene		52 %	12-94			EPA 8015B mod	9H25009	08/27/09 1142	SMH	
Surrogate: Triacontane		97 %	40-140			EPA 8015B mod	9H25009	08/27/09 1142	SMH	
Total Petroleum Hydrocarbons - GRO										
TPH Gasoline	ND	0.050	0.05	mg/l	1.00	EPA 8015B mod	9H24037	08/25/09 1743	TA	
Surrogate: 4-Bromofluorobenzene		94 %	62-130			EPA 8015B mod	9H24037	08/25/09 1743	TA	
BTEX										
Benzene	ND	1.00	1	ug/l	1.00	EPA 8021B	9H24037	08/25/09 1743	TA	
Ethyl Benzene	ND	1.00	1	ug/l	1.00	EPA 8021B	9H24037	08/25/09 1743	TA	
Toluene	ND	1.00	1	ug/l	1.00	EPA 8021B	9H24037	08/25/09 1743	TA	
Xylenes (total)	ND	3.00	3	ug/l	1.00	EPA 8021B	9H24037	08/25/09 1743	TA	
Surrogate: 4-Bromofluorobenzene		103 %	38-149			EPA 8021B	9H24037	08/25/09 1743	TA	



Environmental Laboratories
Bethany Tech Center • Suite 190
400 W. Bethany Rd. • Allen, Texas 75013

State Certifications
Arkansas: 88-0647
Oklahoma: 8727



Louisiana: 02007
Kansas: E-10388
Texas: T104704232-09-TX

Report of Sample Analysis

Southwest Geoscience
8620 N. New Braunfels Ave, Suite 531
San Antonio, TX 78217
ATTN: Chris Mitchell

Page: Page 6 of 11
Project: Hobbs Station
Project #: 0105013
Print Date/Time: 08/28/09 15:54

<u>Laboratory ID #:</u> 0908579-04	<u>Sample Type</u> Grab	<u>Matrix</u> Aqueous	<u>Sample Collected By</u> Tim Zoch	<u>Customer</u>
<u>Sample Description</u> MW-3R		<u>Sample Date/Time</u> 08/20/09 1625		

Analyte(s)	Result	SRL	MRL	Units	F*	Method	Batch	Analysis Date/Time	Anlst	Flag
Total Petroleum Hydrocarbons - DRO										
Separatory Funnel Liquid-Liquid Extraction	Completed	N/A	N/A	N/A	1.00	EPA 3510C	9H25009	08/25/09 1000	WC	
TPH Diesel	2.63	0.100	0.1	mg/l	1.00	EPA 8015B mod	9H25009	08/27/09 1154	SMH	
Surrogate: <i>a-Pinene</i>		42 %	12-94			EPA 8015B mod	9H25009	08/27/09 1154	SMH	
Surrogate: <i>Triacotane</i>		75 %	40-140			EPA 8015B mod	9H25009	08/27/09 1154	SMH	
Total Petroleum Hydrocarbons - GRO										
TPH Gasoline	0.231	0.050	0.05	mg/l	1.00	EPA 8015B mod	9H24037	08/25/09 1900	TA	
Surrogate: <i>4-Bromofluorobenzene</i>		116 %	62-130			EPA 8015B mod	9H24037	08/25/09 1900	TA	
BTEX										
Benzene	ND	1.00	1	ug/l	1.00	EPA 8021B	9H24037	08/25/09 1900	TA	
Ethyl Benzene	5.63	1.00	1	ug/l	1.00	EPA 8021B	9H24037	08/25/09 1900	TA	
Toluene	ND	1.00	1	ug/l	1.00	EPA 8021B	9H24037	08/25/09 1900	TA	
Xylenes (total)	ND	3.00	3	ug/l	1.00	EPA 8021B	9H24037	08/25/09 1900	TA	
Surrogate: <i>4-Bromofluorobenzene</i>		105 %	38-149			EPA 8021B	9H24037	08/25/09 1900	TA	



Environmental Laboratories
Bethany Tech Center • Suite 190
400 W. Bethany Rd. • Allen, Texas 75013

State Certifications

Arkansas: 88-0647
Oklahoma: 8727



Louisiana: 02007
Kansas: E-10388
Texas: T104704232-09-TX

Report of Sample Analysis

Southwest Geoscience
8620 N. New Braunfels Ave, Suite 531
San Antonio, TX 78217
ATTN: Chris Mitchell

Page: Page 7 of 11
Project: Hobbs Station
Project #: 0105013
Print Date/Time: 08/28/09 15:54

Total Petroleum Hydrocarbons - DRO - Quality Control

Analyte(s)	Result	*SRI	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch 9H25009 - EPA 3510C Separatory Funnel Extraction										
Blank (9H25009-BLK1)										
Prepared & Analyzed: 08/25/09 10:00										
Separatory Funnel Liquid-Liquid Extraction	Completed	N/A	N/A							
TPH Diesel	ND	0.100	mg/l							
Surrogate: <i>a-Pinene</i>	0.0506		mg/l	0.111		46	12-94			
Surrogate: <i>Triacontane</i>	0.0796		mg/l	0.104		77	40-140			
Laboratory Control Sample (9H25009-BS1)										
Prepared & Analyzed: 08/25/09 10:00										
Separatory Funnel Liquid-Liquid Extraction	Completed	N/A	N/A				0-0			
TPH Diesel	1.07	0.100	mg/l	1.00		107	51-140			
Surrogate: <i>a-Pinene</i>	0.0539		mg/l	0.111		49	12-94			
Surrogate: <i>Triacontane</i>	0.110		mg/l	0.104		106	40-140			
Laboratory Control Sample Duplicate (9H25009-BSD1)										
Prepared & Analyzed: 08/25/09 10:00										
Separatory Funnel Liquid-Liquid Extraction	Completed	N/A	N/A				0-0		0	
TPH Diesel	1.12	0.100	mg/l	1.00		112	51-140	4	32	
Surrogate: <i>a-Pinene</i>	0.0377		mg/l	0.111		34	12-94			
Surrogate: <i>Triacontane</i>	0.113		mg/l	0.104		108	40-140			
Matrix Spike (9H25009-MS1)										
Prepared & Analyzed: 08/25/09 10:00										
Separatory Funnel Liquid-Liquid Extraction	Completed	N/A	N/A		Source: 0908579-01		0-0			
TPH Diesel	2.40	0.108	mg/l	2.15	ND	0.212	102	29-140		
Surrogate: <i>a-Pinene</i>	0.0787		mg/l	0.119		66	12-94			
Surrogate: <i>Triacontane</i>	0.213		mg/l	0.112		190	40-140			Q-03, Q-14
Matrix Spike Duplicate (9H25009-MSD1)										
Prepared & Analyzed: 08/25/09 10:00										
Separatory Funnel Liquid-Liquid Extraction	Completed	N/A	N/A		Source: 0908579-01		0-0		0	
TPH Diesel	1.35	0.111	mg/l	1.11	ND	0.212	102	29-140	56	35
Surrogate: <i>a-Pinene</i>	0.0563		mg/l	0.123		46	12-94			Q-04
Surrogate: <i>Triacontane</i>	0.120		mg/l	0.116		104	40-140			



Environmental Laboratories
Bethany Tech Center • Suite 190
400 W. Bethany Rd. • Allen, Texas 75013

State Certifications
Arkansas: 88-0647
Oklahoma: 8727



Louisiana: 02007
Kansas: E-10388
Texas: T104704232-09-TX

Report of Sample Analysis

Southwest Geoscience
8620 N. New Braunfels Ave, Suite 531
San Antonio, TX 78217
ATTN: Chris Mitchell

Page: Page 8 of 11
Project: Hobbs Station
Project #: 0105013
Print Date/Time: 08/28/09 15:54

Total Petroleum Hydrocarbons - GRO - Quality Control

Analyte(s)	Result	*SRI	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch 9H24037 - EPA 5030B Purge-and-Trap for Aqueous Samples										
Blank (9H24037-BLK1)										
Prepared: 08/24/09 17:15 Analyzed: 08/25/09 13:53										
TPH Gasoline	ND	0.050	mg/l							
Surrogate: 4-Bromofluorobenzene	0.0959		mg/l	0.100		96	62-130			
Laboratory Control Sample (9H24037-BS1)										
Prepared: 08/24/09 17:15 Analyzed: 08/25/09 14:18										
TPH Gasoline	0.376	0.050	mg/l	0.500		75	66-132			
Surrogate: 4-Bromofluorobenzene	0.0948		mg/l	0.100		95	62-130			
Laboratory Control Sample Duplicate (9H24037-BSD1)										
Prepared: 08/24/09 17:15 Analyzed: 08/25/09 14:44										
TPH Gasoline	0.380	0.050	mg/l	0.500		76	66-132	1	18	
Surrogate: 4-Bromofluorobenzene	0.0950		mg/l	0.100		95	62-130			
Matrix Spike (9H24037-MS1)										
Prepared: 08/24/09 17:15 Analyzed: 08/25/09 15:10										
Source: 0908578-01										
TPH Gasoline	0.362	0.050	mg/l	0.500	0.066	59	20-170			
Surrogate: 4-Bromofluorobenzene	0.0958		mg/l	0.100		96	62-130			
Matrix Spike Duplicate (9H24037-MSD1)										
Prepared: 08/24/09 17:15 Analyzed: 08/25/09 15:35										
Source: 0908578-01										
TPH Gasoline	0.334	0.050	mg/l	0.500	0.066	54	20-170	8	11	
Surrogate: 4-Bromofluorobenzene	0.0972		mg/l	0.100		97	62-130			



Environmental Laboratories
Bethany Tech Center • Suite 190
400 W. Bethany Rd. • Allen, Texas 75013

State Certifications
Arkansas: 88-0647
Oklahoma: 8727



Louisiana: 02007
Kansas: E-10388
Texas: T104704232-09-TX

Report of Sample Analysis

Southwest Geoscience
8620 N. New Braunfels Ave, Suite 531
San Antonio, TX 78217
ATTN: Chris Mitchell

Page: Page 9 of 11
Project: Hobbs Station
Project #: 0105013
Print Date/Time: 08/28/09 15:54

BTEX - Quality Control

Analyte(s)	Result	*SRI	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch 9H24037 - EPA 5030B Purge-and-Trap for Aqueous Samples										
Blank (9H24037-BLK1)										
Prepared: 08/24/09 17:15 Analyzed: 08/25/09 13:53										
Benzene	ND	1.00	ug/l							
Ethyl Benzene	ND	1.00	ug/l							
Toluene	ND	1.00	ug/l							
Xylenes (total)	ND	3.00	ug/l							
Surrogate: 4-Bromofluorobenzene	103		ug/l	100		103	38-149			
Laboratory Control Sample (9H24037-BS1)										
Prepared: 08/24/09 17:15 Analyzed: 08/25/09 14:18										
Benzene	42.0	1.00	ug/l	50.0		84	82-127			
Ethyl Benzene	44.6	1.00	ug/l	50.0		89	85-128			
Toluene	46.4	1.00	ug/l	50.0		93	85-124			
Xylenes (total)	131	3.00	ug/l	150		87	86-130			
Surrogate: 4-Bromofluorobenzene	102		ug/l	100		102	38-149			
Laboratory Control Sample Duplicate (9H24037-BSD1)										
Prepared: 08/24/09 17:15 Analyzed: 08/25/09 14:44										
Benzene	42.5	1.00	ug/l	50.0		85	82-127	1	16	
Ethyl Benzene	45.1	1.00	ug/l	50.0		90	85-128	1	16	
Toluene	47.4	1.00	ug/l	50.0		95	85-124	2	16	
Xylenes (total)	132	3.00	ug/l	150		88	86-130	0.9	16	
Surrogate: 4-Bromofluorobenzene	102		ug/l	100		102	38-149			
Matrix Spike (9H24037-MS1)										
Prepared: 08/24/09 17:15 Analyzed: 08/25/09 15:10										
					Source: 0908578-01					
Benzene	42.6	1.00	ug/l	50.0	ND	85	46-155			
Ethyl Benzene	12.7	1.00	ug/l	50.0	ND	25	44-160			Q-02, Q-15
Toluene	27.9	1.00	ug/l	50.0	ND	56	30-168			
Xylenes (total)	69.6	3.00	ug/l	150	ND	46	34-165			
Surrogate: 4-Bromofluorobenzene	99.9		ug/l	100		100	38-149			



Environmental Laboratories
Bethany Tech Center • Suite 190
400 W. Bethany Rd. • Allen, Texas 75013

State Certifications
Arkansas: 88-0647
Oklahoma: 8727



Louisiana: 02007
Kansas: E-10388
Texas: T104704232-09-TX

Report of Sample Analysis

Southwest Geoscience
8620 N. New Braunfels Ave, Suite 531
San Antonio, TX 78217
ATTN: Chris Mitchell

Page: Page 10 of 11
Project: Hobbs Station
Project #: 0105013
Print Date/Time: 08/28/09 15:54

BTEX - Quality Control

Analyte(s)	Result	*SRI	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
------------	--------	------	-------	-------------	---------------	------	-------------	-----	-----------	------

Batch 9H24037 - EPA 5030B Purge-and-Trap for Aqueous Samples (continued)

Matrix Spike Duplicate (9H24037-MSD1)

Prepared: 08/24/09 17:15 Analyzed: 08/25/09 15:35

Source: 0908578-01

Benzene	42.2	1.00	ug/l	50.0	ND	84	46-155	1	12	
Ethyl Benzene	12.1	1.00	ug/l	50.0	ND	24	44-160	5	17	Q-02, Q-15
Toluene	25.7	1.00	ug/l	50.0	ND	51	30-168	8	11	
Xylenes (total)	62.3	3.00	ug/l	150	ND	42	34-165	11	20	
Surrogate: 4-Bromofluorobenzene	98.3		ug/l	100		98	38-149			



Environmental Laboratories
Bethany Tech Center • Suite 190
400 W. Bethany Rd. • Allen, Texas 75013

State Certifications
Arkansas: 88-0647
Oklahoma: 8727



Louisiana: 02007
Kansas: E-10388
Texas: T104704232-09-TX

Report of Sample Analysis

Southwest Geoscience
8620 N. New Braunfels Ave, Suite 531
San Antonio, TX 78217
ATTN: Chris Mitchell

Page: Page 11 of 11
Project: Hobbs Station
Project #: 0105013
Print Date/Time: 08/28/09 15:54

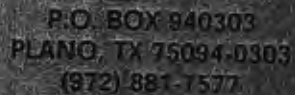
Notes and Definitions

The results presented in this report were generated using those methods given in 40 CFR Part 136 for Water and Wastewater samples and in SW-846 for RCRA/Solid Waste samples.

C-01	There was a peak in the sample not indicative of hydrocarbon that contributed to the reported concentration.
C-01a	There was a peak in the sample not indicative of hydrocarbon that contributed to the reporting concentration.
Q-02	The recovery of an analyte(s) in the MSs was outside the acceptable range due to interference, large dilutions required for analysis or a combination of these factors. The recovery of this analyte(s) in the LCSs was within the required limits.
Q-03	The recovery of the surrogate(s) were outside of the acceptable range due to matrix interferences and/or large dilutions required for the analysis of this sample. The results presented should, therefore, be considered an estimated concentration(s).
Q-04	The RPD of the target analyte(s) in the MS/MSD is outside of established limits. The RPD of this same analyte(s) in the LCS/LCSD is within acceptable limits. Therefore, the data were reported and are acceptable.
Q-14	The recovery was higher than expected. This may indicate a high bias to results presented.
Q-15	The recovery was lower than expected. This may indicate a low bias to results presented.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
LCS/LCSD	Laboratory Control Sample/Laboratory Control Sample Duplicate
MS/MSD	Matrix Spike/Matrix Spike Duplicate
RPD	Relative Percent Difference
mg/kg	milligrams per kilogram
mg/l	milligrams per liter
ug/kg	micrograms per kilogram
ug/l	micrograms per liter
exc	Not covered under scope of NELAP accreditation.
F*	Calculated factor rounded to 3 significant figures. Concentration factor when <1.00 and dilution factor when >1.00.
Anlst	Analyst Initials
SRL	Sample Reporting Limit
MRL	Method Reporting Limit
naa	This analysis/parameter is not accreditable under the current NELAP program

CHAIN OF CUSTODY RECORD

<h1 style="margin:0;">Southwest</h1> <h2 style="margin:0;">GEOSCIENCE</h2> <p style="margin:0;">Environmental & Hydrogeologic Consultants</p>				Laboratory: <u>ERMI</u> Address: <u>Allen, TX</u> Contact: _____ Phone: _____				ANALYSIS REQUESTED <div style="transform: rotate(-45deg); display: inline-block; border: 1px solid black; padding: 5px;"> BTEX 8021B TPH GRQ/DRO 8015B </div>												Lab use only Due Date: _____ Temp. of coolers when received (C°): <div style="display: flex; justify-content: space-between;"> 3624345 </div> Page <u>1</u> of <u>1</u>							
				Office Location <u>Dallas, TX</u> Project Manager <u>B. Chris Mitchell</u> Sampler's Name <u>Tim Zach</u> Proj. No. <u>0105013</u> Project Name <u>Hobbs Station</u> No/Type of Containers _____																PO/SO #: <u>0105013</u> Sampler's Signature <u>[Signature]</u>							
Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth	End Depth	VOA	A/G 1 L.	250 ml	P/O	Lab Sample ID (Lab Use Only)															
W	8/20	1145		X	MW-4			6	3			<div style="border: 1px solid black; padding: 10px; transform: rotate(-45deg); display: inline-block;"> BTEX 8021B TPH GRQ/DRO 8015B </div>															
W	8/20	1335		X	MW-1			6	1																		
W	8/20	1510		X	MW-2			6	1																		
W	8/20	1625		X	MW-3R			6	1																		
No Further Entry TTX 8/20/01																											
Turn around time <input checked="" type="checkbox"/> Normal <input type="checkbox"/> 25% Rush <input type="checkbox"/> 50% Rush <input type="checkbox"/> 100% Rush																											
Relinquished by (Signature) <u>[Signature]</u>				Date: <u>8/21</u>		Time: <u>1135</u>		Received by (Signature) <u>Victor Falcon</u>				Date: <u>8/21</u>		Time: <u>1135</u>		NOTES:											
Relinquished by (Signature) <u>Victor Torres</u>				Date: <u>8/21</u>		Time: <u>12:15</u>		Received by (Signature) _____				Date: _____		Time: _____													
Relinquished by (Signature) _____				Date: _____		Time: _____		Received by (Signature) _____				Date: _____		Time: _____													
Relinquished by (Signature) _____				Date: <u>8/21/01</u>		Time: <u>12:15</u>		Received by (Signature) <u>CON/Lea Smith</u>				Date: <u>8/21/01</u>		Time: <u>12:15</u>													
Matrix Container: WW - Wastewater, VOA - 40 ml vial, W - Water, S - Soil, SD - Solid, L - Liquid, A - Air Bag, C - Charcoal tube, SL - sludge, O - Oil A/G - Amber / Or Glass 1 Liter, 250 ml - Glass wide mouth, P/O - Plastic or other																											



No

Lab Number(s): 0908579

ERMI

Sample Preservation Documentation*

On Ice (Circle One) YES OR NO (check if on Dry Ice _____)

Parameters	Containers #	Size	Required Preservation	Sample Container	Circle pH Note any discrepancy
Metals			pH < 2	Glass or Plastic	pH < 2
Dissolved Metals			Unpreserved prior to being filtered, Cool**	Glass or Plastic	
Hexavalent Chromium			CWA - pH 9.3-9.7, Cool; RCRA - Cool	Glass or Plastic	
Semivolatiles, Pesticides, PCBs, Herbicides			Cool	Glass only with Teflon lid	Chlorine <input type="checkbox"/> yes <input type="checkbox"/> no
VOA (BTEX, MTBE, 624, 8260, TPH-GRO)	24	40	Cool, <u>pH < 2</u> Zero Head Space <i>OH F had Gaseous then</i>	<u>40 ml VOA via</u> <i>per size label</i> 40 ml VOA vial	
VOA (TPH-1005)			Cool, Zero Head Space Please check if collected in pre-weighed vials		
Phos., NO ₃ /NO ₂ , NH ₃ N, COD, TKN, TOC			Cool, pH < 2	Glass or Plastic	pH < 2
TDS, BOD, CBOD, Cond, pH, TSS, F, SO ₄ , Cl, Alk, Sulfite			Cool	Glass or Plastic, Plastic only if F	
Phenols, TPH-DRO	6	10	Cool, pH < 2	<u>Glass only</u> <u>Teflon lid</u> <u>Foil lid</u>	<u>pH < 2</u>
Oil & Grease, TPH (by 1664a)			Cool, pH < 2	Glass only Teflon lid Foil lid	
Cyanide			Cool, pH > 12	Glass or Plastic	pH > 12 Chlorine <input type="checkbox"/> yes <input type="checkbox"/> no Sulfide <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> na
Sulfide			Cool, pH > 9	Glass or Plastic	pH > 9
Bacteria			Cool	Plastic Sterile Cup	
Soil, Sludge, Solid, Oil, Liquid			Cool Note: please check if collected in pre-weighed vials		

Metals Preserved By Login ☐yes ☐no

Trip Blanks Received ☐yes ☒no

COMMENTS: _____

*This form is used to document sample preservation. Circle parameter requested. Fill in number and size of containers received. Check pH (adjust if needed) and note if different from what is required and make a notation of any samples not received on ice. Note any incorrect sample containers or preservation on chain-of-custody.

**Cool means cooled to ≤6°C but not frozen.

Preservation Checked By [Signature]

Date

8-21-09

Time

1412

1000.0-3.2

2/17/09

kdy 7/10/08

Q:\Form Masters\1000.0-3.2 Sample Preservation Form