AP - 29

ANNUAL MONITORING REPORT

YEAR(S): 2009

TALON LPE
"All the Pieces"

AMARILLO
921 North Bivins
Amarillo, Texas 79107
Phone 806.467.0607
Fax 806.467.0622

AUSTIN
3003 Tom Gary Cove
Building C-100
Round Rock, Texas 78664
Phone 512.989.3428
Fax 512.989.3487

MIDLAND
2901 State Highway 349
Midland, Texas 79706
Phone 432.522.2133
Fax 432.522.2180

SAN ANTONIO
17170 Jordan Road
Suite 102
Selma, Texas 78154
Phone 210.579.0235
Fax 210.568.2191

TULSA
9906 East 43rd Street
Suite G
Tulsa, Oklahoma 74146
Phone 918.742.0871
Fax 918.742.0876

HOBBS
318 East Taylor Street
Hobbs, New Mexico 88241
Phone 505.393.4261
Fax 505.393.4658

TYLER
719 West Front Street
Suite 255
Tyler, Texas 75702
Phone 903.531.9971
Fax 903.531.9979

HOUSTON
3233 West 11th Street
Suite 400
Houston, Texas 77008
Phone 713.861.0081
Fax 713.868.3208

ENVIRONMENTAL CONSULTING
ENGINEERING
DRILLING
CONSTRUCTION
EMERGENCY RESPONSE

Toll Free: 866.742.0742
www.talonlpe.com

2009 ANNUAL GROUNDWATER MONITORING REPORT
KIMBROUGH SWEET 8"
SECTION 3, TOWNSHIP 18 SOUTH, RANGE 37 EAST
LEA COUNTY, NEW MEXICO
PLAINS SRS #2000-10757
NMOCD REF. # AP-0029

RECEIVED
APR 12 2010
Environmental Bureau
Oil Conservation Division

PREPARED FOR:

PLAINS PIPELINE, L.P.
333 CLAY STREET
SUITE 1600
HOUSTON, TEXAS 77002

PREPARED BY:

TALON/LPE
2901 S. STATE HIGHWAY 349
MIDLAND, TEXAS 79706

DISTRIBUTION:
Copy 1 – Plains Denver City
Copy 2 – Plains Houston
Copy 3 – NMOCD Santa Fe
Copy 4 – NMOCD Hobbs
Copy 5 – NMSLO Santa Fe
Copy 6 – Talon/LPE

March 20, 2010

PLAINS
ALL AMERICAN

RECEIVED
APR 12 2010
Environmental Bureau
Oil Conservation Division

March 29, 2010

Mr. Edward Hansen
New Mexico Oil Conservation Division
Environmental Bureau
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Re: Plains All American – 2009 Annual Monitoring Reports
6 Sites in Lea County, New Mexico

Dear Mr. Hansen:

Plains All American is an operator of crude oil pipelines and terminal facilities in the state of New Mexico. Plains All American actively monitors certain historical release sites exhibiting groundwater impacts, consistent with assessments and work plans developed in consultation with the New Mexico Oil Conservation Division (NMOCD). In accordance with the rules and regulations of the NMOCD, Plains All American hereby submits our Annual Monitoring reports for the following sites:

8-inch Moore to Jal #1	1R-0380	AP-91	Section 16, T17S, R37E, Lea County
8-inch Moore to Jal #2	1R-0381	AP-92	Section 16, T17S, R37E, Lea County
C.S. Cayler	AP-052		Section 06, T17S, R37E, Lea County
Hobbs Junction Mainline	AP-054		Section 26, T18S, R37E, Lea County
Kimbrough Sweet 8-inch	AP-0029		Section 03, T18S, R37E, Lea County
Lovington Deep 6-inch	AP-037		Section 03, T18S, R37E, Lea County

Talon/LPE (Talon) prepared these documents and has vouched for their accuracy and completeness, and on behalf of Plains All American, I have personally reviewed the documents and interviewed Talon personnel in order to verify the accuracy and completeness of these documents. It is based upon these inquiries and reviews that Plains All American submits the enclosed Annual Monitoring Reports for the above facilities.

If you have any questions or require further information, please contact me at (575) 441-1099.

Sincerely,

Jason Henry

Jason Henry
Remediation Coordinator
Plains All American

CC: Larry Johnson, NMOCD, Hobbs, NM

Enclosures

2009 ANNUAL GROUNDWATER MONITORING REPORT

KIMBROUGH SWEET 8"
LEA COUNTY, NEW MEXICO
SRS #2000 - 10757
NMOCD REF. # AP-0029

RECEIVED
APR 12 2010
Environmental Bureau
Oil Conservation Division

PLAINS PIPELINE, L.P.
333 CLAY STREET, SUITE 1600
HOUSTON, TEXAS

TALON/LPE PROJECT NO. 700376.050.01

Prepared by:

Steven R. Killingsworth, P.G.
Senior Project Manager

Kyle Waggoner, P. G.
Division Manager

STATE OF TEXAS
KYLE J. WAGGONER
GEOLOGY
5858
LICENSED
PROFESSIONAL GEOSCIENTIST

TALON/LPE
2901 S. State Highway 349
Midland, Texas 79706

March 2010

Distribution List

Name	Title	Company or Agency	Mailing Address	e-mail
Ed Hansen	Environmental Engineer	NMOCD	1220 South St. Francis Drive Santa Fe, NM 87505	edwardj.hansen@state.nm.us
Larry Johnson	Environmental Engineer	NMOCD	1625 French Dr. Hobbs, NM 88231	lwjohnson@state.nm.us
Brian Henington	Environmental Engineer	NMSLO – Santa Fe	P.O. Box 1148 Santa Fe, NM 87504	bhenington@slo.state.nm.us
Jason Henry	Remediation Coordinator	Plains Pipeline	2530 Highway 214 Denver City, TX 79323	jhenry@paalp.com
Jeff Dann	Senior Environmental Specialist	Plains Pipeline	P. O. Box 4648 Houston, TX 77210-4648	jpdann@paalp.com
File		Talon/LPE	318 East Taylor Street Hobbs, New Mexico 88240	skillingsworth@talonlpe.com

NMOCD - New Mexico Oil Conservation Division
NMSLO – New Mexico State Land Office

TABLE OF CONTENTS

APPENDICES

1.0 INTRODUCTION AND OBJECTIVES

1.1 Objectives and Site Background

The Kimbrough Sweet 8" (site) is located approximately seven (7) miles northwest of Hobbs, Lea County, New Mexico, on property owned by the State of New Mexico. There are no residences, groundwater wells, or surface water bodies within a 1,000-foot radius of the site. The initial release occurred from the 8" steel pipeline on October 25, 2000. At the time of the release, the pipeline was under the ownership of EOTT Energy Pipeline. Subsequently, EOTT changed its name to Link Energy in October 2003, and Plains Marketing, L.P. (Plains) purchased the assets of Link Energy on April 1, 2004. Initial reports estimated that 60 barrels (bbls) of crude oil were released and impacted approximately 15,613 feet of surface area. Approximately 22 bbls of crude oil was recovered during initial remediation activities.

The site is situated within a physiographic region that is on the extreme south-western portion of the Southern High Plains as it grades into the Edwards Plateau to the south and southeast and the Chihuahuan Desert of the Trans-Pecos Region to the southwest.

The topography proximal to the site is typical of the Southern High Plains, essentially flat with shallow depressions, or playa lakes, dotting the landscape. The prominent surface features on the Southern High Plains are the approximately 19,250 ephemeral playa lakes; however the density of the playa lakes diminishes toward the southern extent of the Southern High Plains. During periods of rainfall, the playas accumulate sheet runoff from watershed areas ranging in size from less than one square mile to several square miles. Only a small portion of drainage from rainfall occurs by streams. Playa lakes that collect storm water runoff can act as a recharge mechanism for groundwater.

The average elevation of the site area is approximately 3,720-feet above mean sea level with a slight slope to the southeast. The regional slope of the land surface in the Southern High Plains is approximately 100 feet per mile in a southeasterly direction.

On February 5, 2007, Talon/LPE (Talon) was retained by Plains to assume remediation activities at the site. Remediation activities at the site were previously conducted by Environmental Plus, Inc. (EPI).

1.2 Site Geology

The surface deposits in Lea County are composed of Blackwater Draw (Illinoian) sediments, Ogallala sediments and undivided Quaternary alluvium, which is also termed 'cover sands'. The soil in the upper two (2) feet at the site composed of gravelly loam that contains abundant eroded gravel to cobble size caliche fragments. Below the top soil is predominately unconsolidated sand to weakly cemented sandstone which has undergone calichification of varying extent.

Below the Blackwater Draw Formation is the Ogallala Formation of Miocene to Pliocene age. The Ogallala Formation was deposited from sediments eroded from the Southern Rockies and consists mostly of eolian sediments, silty to very fine sand or loess. During the middle to late Miocene, the Ogallala was deposited by fluvial mechanism as paleovalley fill composed of

gravelly to sandy braided stream deposits that trended west to east across the Southern High Plains. During the late Miocene the west to east drainage was diverted (captured) by the Pecos River. Subsequently, the Pecos River basin has experienced deflation, which facilitated eolian deposition on the Southern High Plains during the Pliocene.

1.2 Previous Environmental Investigations

A total of thirteen (13) groundwater monitor wells have been installed in the vicinity of the release (see Figure 1). With New Mexico Oil Conservation Division (NMOCD) approval and landowner concurrence, groundwater monitor wells MW-1, MW-2, MW-3, and MW-4 were installed in January 2002. Groundwater monitor wells MW-5, MW-7, MW-8, and MW-9 were installed in July 2004, and monitor wells MW-6, MW-10, and MW-11 were installed in December 2004. Subsequently, monitor wells MW-12 and MW-13 were installed on March 11, 2009.

PSH recovery operations have been performed at the site since January 2002, initially by hand bailing. Currently, there are seven (7) pneumatic skimmer pumps in operation. Approximately 166 bbls of phase-separated hydrocarbon (PSH) has been recovered to date.

1.4 Regulatory Framework

Groundwater analytical data from this site was evaluated to the New Mexico Water Quality Control Commission (NMWQCC) groundwater standards.

New Mexico Water Quality Control Commission (NMWQCC) groundwater standards	
Compound	**mg/L**
Benzene	0.010
Toluene	0.750
Ethylbenzene	0.750
Total Xylenes	0.620
PAH (Naphthalene)	0.030
PAH (Benzo[a]-pyrene)	0.007

The following sections provide summaries of the groundwater monitoring activities conducted at the site as well as analytical results from each groundwater sampling event of 2009. Analytical results for the four sampling events are summarized in Table 2, Table 3, and Table 4 in Appendix B, and Figures 3a through 3d in Appendix A. Laboratory analytical data reports and chains of custody documentation are included in Appendix C. In addition, cumulative historical tables are on the attached CD, which is an adjunct to this report.

2 SITE ACTIVITIES

The sections that follow summarize groundwater monitoring and PSH recovery activities conducted at the subject site during 2009. The primary function of groundwater monitoring is to measure the depths to fluids and to collect groundwater samples from monitor wells for laboratory analysis. The objective of groundwater monitoring is to evaluate the status of the dissolved-phase and PSH plumes in order to verify the effectiveness of the remediation system as to inhibiting plume migration, reducing the volume of PSH impacting the groundwater and determining if modifications to the remediation system would improve its performance and efficiency.

2.1 Groundwater Monitoring Activities

A total of four (4) groundwater monitoring events were conducted by Talon during the year 2009 on February 5, May 19, August 27, and December 14. During all of the groundwater monitoring events, the depths to fluids were measured in all of the monitoring wells (MW-1 through MW-13) using an oil/water interface probe.

During the first quarter, February 2009, sampling event, groundwater samples were collected from monitor wells MW-1, MW-3, MW-4, and MW-10. Samples were not collected from monitor wells MW-2, MW-5 through MW-9 and MW-11, due to the presence of PSH and MW-12 and MW-13 had not been installed.

During the second quarter, May 2009, sampling event, groundwater samples were collected from monitor wells MW-3, MW-10, MW-12 and MW-13. Samples were not collected from monitor wells MW-2, MW-5 through MW-9 and MW-11, due to the presence of PSH. Samples were not collected from monitor wells MW-1 and MW-4 since those wells were not on the sampling schedule for the second quarter.

During the August groundwater monitoring event, five (5) monitor wells (MW-3, MW-4, MW-10, MW-12, and MW-13) were purged a minimum of three (3) casing volumes and groundwater samples were collected. Pursuant to the NMOCD directive that samples will be collected from the groundwater below the PSH caps in monitor wells impacted with PSH, groundwater samples were also collected from four (4) monitor wells (MW-6 through MW-9). Monitor wells impacted with PSH were not purged of three (3) casing volumes prior to sample collection; however, a minimal purge was performed to ensure that the pump effluent tubing was cleared of any PSH. Samples were not collected from monitor wells MW-1, MW-2, MW-5, and MW-11 because there was not enough water present in the casing to allow for sample collection.

Details of the gauging, purging, and sample collection activities are presented in Section 2.2 below.

2.2 Groundwater Gauging, Purging, and Sample Collection Procedures

During each groundwater monitoring event, all monitor wells were measured with an oil/water interface probe to determine static water levels and to determine the thickness of PSH accumulations if present. The data collected from measurements was used to construct groundwater gradient maps and PSH thickness maps. The results of the measured depths to fluids collected during the four (4) events are incorporated in Table 1 – Summary of Historical Fluid Level Measurements.

Subsequent to gauging, all monitor wells not impacted with PSH were purged using a down-hole pump equipped with vinyl tubing. The pump and tubing were decontaminated with Alconox® detergent and rinsed with distilled water after each use. Recovered purge water and water used in the decontamination process was contained in on-site 55-gallon drums. After the groundwater monitoring event, all retained water was removed with a vacuum truck. Approximately 60 gallons of purged groundwater and decontamination water during the monitoring events of 2009.

Groundwater samples were collected from all monitor wells using dedicated disposable polyethylene bailers, except for the monitor wells impacted with PSH during the August groundwater monitoring event. Groundwater samples were collected from wells impacted with PSH using a pump and vinyl tubing. Each groundwater sample was contained in laboratory supplied sample containers with the appropriate preservative required for the analysis requested. The groundwater samples were maintained on ice, in the custody of Talon personnel, until they were delivered to TraceAnalysis, Inc. in Midland, Texas for analyses.

The groundwater samples collected during all four events were quantified for benzene, toluene, ethylbenzene, and xylene (BTEX) by EPA Method SW-846 8021B. During the August event, samples collected from monitor wells both impacted and not impacted with PSH were also quantified for and polynuclear aromatic hydrocarbons (PAH) using EPA Method SW-846 8270C. Also during the August event, groundwater samples collected from wells impacted with PSH were quantified for total petroleum hydrocarbons (TPH) gasoline range organics (GRO) and diesel range organics (DRO) by EPA Method SW-846 8015B.

2.3 Phase Separated Hydrocarbon Recovery

PSH recovery has been conducted at the site since 2002, initially by hand bailing. In 2007, an automated skimmer recovery system was installed at the site. Currently, the system utilizes seven (7) skimmers in monitor wells MW-2, MW-5, MW-6, MW-7, MW-8, MW-9 and MW-11 to recover PSH and to inhibit migration of the PSH plume. The skimmer assembly consists of bladder pumps combined with 24-inch traveling float specific gravity skimmer attachments. Since there is no electricity at the site, the skimmer system is powered by six nitrogen filled cylinders. Fluid, recovered by the pumps, is retained in a 3,000-gallon poly tank. The poly tank is equipped with a high level shut off switch to prevent overflow and it is located within a secondary recovery compound that is outfitted with a poly-liner. Periodically, recovered groundwater is removed from the poly tank and transported to an NMOCD approved disposal facility. PSH is also periodically removed with a vacuum truck and is re-introduced to the Plains' pipeline system at the Scharb Station and/or 34 Junction South pipeline.

During 2009 the quarterly PSH recovery totals are as followed:

- 1st Quarter – 1.0 bbls PSH, 1.1 bbls water
- 2nd Quarter – 4.0 bbls PSH, 15 bbls water
- 3rd Quarter – 7.0 bbls PSH, 25 bbls water
- 4th Quarter – 8.0 bbls PSH, 2.4 bbls water

Approximately 166 bbls of PSH have been recovered to date from the site.

3 GROUNDWATER MONITORING RESULTS

The results of the laboratory analyses are summarized in Table 2 – Summary of Groundwater Analytical Data in Appendix B. Laboratory analytical data reports and chains of custody documentation are provided in Appendix C. In addition, cumulative historical analytical results are included in the tables section on the attached CD that is an adjunct to this report.

3.1 Groundwater Monitoring Results

The following sections present the results from the monitoring of the first water-bearing zone underlying the site.

3.1.1 Physical Characteristics of the First Water-Bearing Zone

The primary groundwater resource under the Southern High Plains, including the site, is referred to as the Ogallala Aquifer or High Plains Aquifer. The Southern portion of the Ogallala aquifer underlies an area of about 29,000 square miles (mi^2) in western Texas and eastern New Mexico, encompassing all or part of 31 counties in Texas and six (6) counties in New Mexico.

The Ogallala Aquifer has experienced acute depletion from extensive irrigation and urban demand, which have exceeded the average annual recharge rate. Recharge of the Ogallala Aquifer on the Southern High Plains occurs predominately from rainfall runoff that accumulates in ephemeral streams and playa lakes as well as direct recharge in areas that contain permeable soils such as sand hills. Recharge rates vary depending on mechanism, but averages from 0 to 1.6 inches per year.

The Ogallala Aquifer is generally unconfined and the poteniometric surface generally mirrors the land surface elevation with the regional flow direction from the northwest to the southeast. The mean regional gradient is 15 feet per mile and the typical groundwater velocity averages seven inches per day. The regional hydraulic conductivity averages 17 gallons per day per square-foot and specific yield averages 16%. The depth to groundwater at the site has historically ranged from 62 to 66 feet below ground surface (bgs) and the groundwater flow direction ranges from the east southeast to the east northeast an average of 12 feet per mile. The saturated thickness of the Ogallala formation on the High Plains ranges from 25 feet to 175 feet. The variable thickness is due to the irregularly eroded Triassic surface that underlies it.

The composition of Ogallala groundwater is defined as mixed-cation-HCO_3, therefore, Ogallala groundwater is considered hard. Problems with scale have occurred with residential and commercial water systems that use Ogallala groundwater and often treatment strategies are employed to reduce the effects of scale. The typical total dissolved solids of Ogallala groundwater in the Hobbs-Lovington area is generally less than 1,000 mg/L (ppm) in areas not impacted by oil-field brines. The pH of Ogallala water averages 7.3.

3.1.2 Groundwater Gradient and Flow Direction

The depth to fluid measurements was collected during each of the four (4) groundwater monitoring events during the year 2009. The results of the fluid level measurements are summarized in Table 1, Appendix B - Summary of Historical Fluid Level Measurements. In

addition, cumulative historical gauging data is located in the tables section on the CD that is an adjunct to this report.

The collected data was used to construct potentiometric surface maps in order to interpret the groundwater gradient and flow direction. The maps, designated Figures 2a through 2d, are presented in Appendix A.

The potentiometric surface maps constructed for each of the four (4) groundwater monitoring events indicates that the groundwater flow direction ranges from east southeast to east northeast with average gradient of 0.0023 feet/foot or approximately 12 feet per mile. Groundwater levels at the subject site have exhibited a steady decline of an average of 0.54 feet for the year that appears to be associated with a regional trend of declining groundwater levels for the Ogallala Aquifer.

3.1.3 Phase Separated Hydrocarbon (PSH)

An oil/water interface probe was used to determine the thicknesses of PSH during the four (4) groundwater monitoring events. Generally, PSH thicknesses have fluctuated from quarter to quarter during the year 2009 but have exhibited overall declines in thicknesses averaging 3.60 feet.

In addition to potentiometric surface maps, isopleth maps were prepared depicting the measured PSH thicknesses and PSH plume geometry. PSH plume delineation and thickness maps are presented in Appendix A as Figures 3a through 3d. Currently, the PSH plume is not well delineated to the northeast and to the northwest.

- In February of 2009, PSH was observed in monitor wells MW-2, MW-5 through MW-9, and MW-11. PSH thickness ranged from 2.39 feet to 6.58 feet.
- In May of 2009, PSH was observed in monitor wells MW-2, MW-5 through MW-9, and MW-11. PSH thickness ranged from 2.04 feet to 7.84 feet.
- In August of 2009, PSH was observed in monitor wells MW-2, MW-5 through MW-9, and MW-11. PSH thickness ranged from 0.91 feet to 6.19 feet.
- In December of 2009, PSH was observed in monitor wells MW-2, MW-5 through MW-9, and MW-11. PSH thickness ranged from 0.18 feet to 3.46 feet.

PSH isopleths maps are presented as Figure 3a through 3d in Appendix A. The measurements indicate that the PSH plume thicknesses have declined significantly over the year 2009 with an overall average decrease of 3.60 feet. The largest decreases in PSH thicknesses occurred in monitor wells MW-5, MW-7 and MW-8, which are located near the perimeter of the plume indicating that the plume may be contracting.

PSH recovery operations have been performed at the site since 2002. Currently, there are a total of seven (7) skimmers with bladder pumps in operation in monitor wells MW-2, MW-5 through MW-9, and MW-11. A summary of the historical groundwater and PSH gauging is provided in Table 1 in Appendix B. Approximately 166 bbls of PSH have been recovered to date.

3.1.4 Groundwater Sampling Results

During the first quarter, February 2009, sampling event, groundwater samples were collected from monitor wells MW-1, MW-3, MW-4, and MW-10. Samples were not collected from

monitor wells MW-2, MW-5 through MW-9 and MW-11, due to the presence of PSH and MW-12 and MW-13 had not been installed. Laboratory analytical results of the groundwater samples exhibited the following findings:

- Benzene concentrations ranged from <0.00100 mg/L to 16.7 mg/L. The benzene concentration exceeded the NMWQCC groundwater standard of 0.010 mg/L in the groundwater sample collected from monitor well MW-3.
- Toluene was not detected in any groundwater sample collected during the first quarter groundwater monitoring event.
- Ethylbenzene concentrations ranged from <0.00100 mg/L to 0.196 mg/L. Ethylbenzene concentrations did not exceed the NMWQCC groundwater standard of 0.750 mg/L in any groundwater sample collected during the first quarter groundwater monitoring event.
- Xylene concentrations ranged from <0.00100 mg/L to 0.271 mg/L. Xylene concentrations did not exceed the NMWQCC groundwater standard of 0.620 mg/L in any groundwater sample collected during the first quarter groundwater monitoring event.

During the second quarter, May 2009, sampling event, groundwater samples were collected from monitor wells MW-3, MW-10, MW-12 and MW-13. Samples were not collected from monitor wells MW-2, MW-5 through MW-9 and MW-11, due to the presence of PSH. Samples were not collected from monitor wells MW-1 and MW-4 since those wells were not on the sampling schedule for the second quarter. Laboratory analytical results of the groundwater samples exhibited the following findings:

- Benzene concentrations ranged from <0.00100 mg/L to 20.7 mg/L. Benzene concentrations exceeded the NMWQCC groundwater standard of 0.010 mg/L in the groundwater samples collected from monitor wells MW-3, MW-12 and MW-13.
- Toluene was not detected in any groundwater sample collected during the second quarter groundwater monitoring event.
- Ethylbenzene was not detected in any groundwater sample collected during the second quarter groundwater monitoring event.
- Xylene concentrations ranged from <0.00100 mg/L to 0.457 mg/L. All xylene concentrations were below the NMWQCC groundwater standard of 0.620 mg/L.

During the August 2009 sampling event, groundwater samples were collected from nine (9) monitor wells including wells impacted with PSH (MW-6 through MW-9). Samples were not collected from monitor wells, MW-1, MW-2, MW-5, and MW-11 due to insufficient water in the casing of those wells to allow for sample collection. The samples that were collected from each monitor well were quantified for PAH as well as BTEX. In addition, groundwater samples collected from monitor wells impacted with PSH were quantified for total petroleum hydrocarbons (TPH) by EPA Method 8015.

Laboratory analytical results for the groundwater samples collected from monitor wells not impacted with PSH exhibited the following findings:

- Benzene concentrations ranged from <0.00100 mg/L to 16.0 mg/L. Benzene concentrations exceeded the NMWQCC groundwater standard of 0.010 mg/L in groundwater samples collected from monitor well MW-3 and MW-12.
- Toluene was not detected in any groundwater sample collected from monitor wells not

impacted with PSH during the third quarter groundwater monitoring event.

- Ethylbenzene was not detected in any groundwater sample collected from monitor wells not impacted with PSH during the third quarter groundwater monitoring event.
- Xylene concentrations ranged from <0.00100 mg/L to 1.97 mg/L. The xylene concentration exceeded the NMWQCC groundwater standard of 0.620 mg/L in groundwater sample collected from monitor well MW-3.
- Naphthalene concentrations ranged from <0.000187 mg/L to 0.0440 mg/L. The naphthalene concentration exceeded the NMWQCC groundwater standard of 0.030 in the groundwater sample collected from monitor well MW-3. PAH analytical results from monitor wells not impacted with PAH are summarized in Tables 3 in Appendix B.

Laboratory analytical results for the groundwater samples collected from monitor wells that were impacted with PSH exhibited the following findings:

- Benzene concentrations ranged from 15.3 mg/L to 17.8 mg/L. Benzene concentrations exceeded the NMWQCC groundwater standard of 0.010 mg/L in groundwater samples collected from all monitor wells impacted with PSH.
- Toluene concentrations ranged from 9.38 mg/L to 10.9 mg/L. Toluene concentrations exceeded the NMWQCC groundwater standard of 0.750 mg/L in groundwater samples collected from all monitor wells impacted with PSH.
- Ethylbenzene concentrations ranged from 1.78 mg/L to 2.19 mg/L. Ethylbenzene concentrations exceeded the NMWQCC groundwater standard of 0.750 mg/L in groundwater samples collected from all monitor wells impacted with PSH.
- Xylene concentrations ranged from 4.32 mg/L to 5.29 mg/L. Xylene concentration exceeded the NMWQCC groundwater standard of 0.620 mg/L in all groundwater samples collected from all monitor wells impacted with PSH
- Naphthalene concentrations ranged from 1.36 mg/L to 9.02 mg/L. Naphthalene concentrations exceed the NMWQCC groundwater standard of 0.030 in all groundwater samples collected from monitor wells impacted with PAH. PAH analytical results from monitor wells impacted with PSH are summarized in Tables 4 in Appendix B.

During the fourth quarter, December 2009, sampling event, groundwater samples were collected from monitor wells MW-3, MW-4, MW-10, MW-12 and MW-13. Samples were not collected from monitor wells MW-2, MW-5 through MW-9 and MW-11, due to the presence of PSH. A sample was not collected from monitor well MW-1 due to insufficient water in the casing to allow for sample collection. Laboratory analytical results of the groundwater samples exhibited the following findings:

- Benzene concentrations ranged from <0.00100 mg/L to 19.1 mg/L. Benzene concentrations exceeded the NMWQCC groundwater standard of 0.010 mg/L in the groundwater samples collected from monitor wells MW-3 and MW-12.
- Toluene was not detected in any groundwater sample collected during the fourth quarter groundwater monitoring event.
- Ethylbenzene was not detected in any groundwater sample collected during the fourth quarter groundwater monitoring event.
- Xylene was not detected in any groundwater sample collected during the fourth quarter groundwater monitoring event.

The dissolved-phase plume is delineated to NMWQCC groundwater standards in all directions as depicted on the groundwater concentration maps 3a through 3d in Appendix A. The results of the laboratory analyses are summarized in Table 2 – Summary of Groundwater Analytical Results in Appendix B. Laboratory analytical data reports and chains of custody documentation are provided in Appendix C. In addition, cumulative historical analytical results are located on the attached CD that is an adjunct to this report.

4 CONCLUSIONS AND RECOMMENDATIONS

The following section presents a summary of the four groundwater monitoring events conducted at the Kimbrough Sweet 8" site and Section 4.2 provides recommendations for future corrective action.

4.1 Summary of Findings

- The groundwater flow direction ranged from east southeast to east northeast with an average gradient of 0.0023 ft/ft or approximately 12 feet per mile based on the water level measurement data collected in 2009.

- PSH is impacting monitor wells MW-2, MW-5 through MW-9, and MW-11. Skimmers and bladder pumps are installed in those wells.

- The PSH plume underlying this site has not been well delineated by the current monitor well geometry to the northeast and northwest.

- PSH thicknesses have declined significantly over the year 2009 indicting that the plume may be contracting. Approximately 20 bbls of PSH was recovered during the year 2009 indicating that the PSH recovery system is performing its function.

- Monitor wells MW-3 and MW-12 exhibited increases in dissolved-phase concentrations over the year 2009 indicating that the dissolved-phase plume may be migrating down-gradient.

4.2 Recommendations

Based upon the results of the quarterly groundwater monitoring and PSH recovery efforts, Talon proposes the following actions:

- Continue operation and maintenance of the skimmer/bladder pump PSH recovery system. Monitor the system on a weekly basis to optimize PSH recovery efficiency.
- Add or reposition pumps as necessary to optimize PSH recovery and inhibit plume migration.
- Perform quarterly groundwater monitoring events in accordance with NMOCD directives. A sample will be collected from monitor well MW-1 and analyzed for BTEX semi-annually and for PAH annually if enough groundwater is present in the casing to allow for sample collection.
- Since up-gradient monitor well MW-10 and cross-gradient monitor well MW-4 have predominately not detected BTEX analytes, Talon LPE recommends that those wells be sampled and analyzed for BTEX annually.
- Based on the results of the PAH analyses over the past several years, Talon/LPE recommends that further PAH analyses be conducted only on those monitor wells which have historically exhibited previous concentrations of PAH constituents near or above the NMWQCC standards.

APPENDIX A

Drawings

Figure 1 - Site Plan with Proposed Monitor Well Locations Map

Figure 2a - Groundwater Gradient Map - 02/05/2009

Figure 2b - Groundwater Gradient Map - 05/19/2009

Figure 2c - Groundwater Gradient Map - 08/27/2009

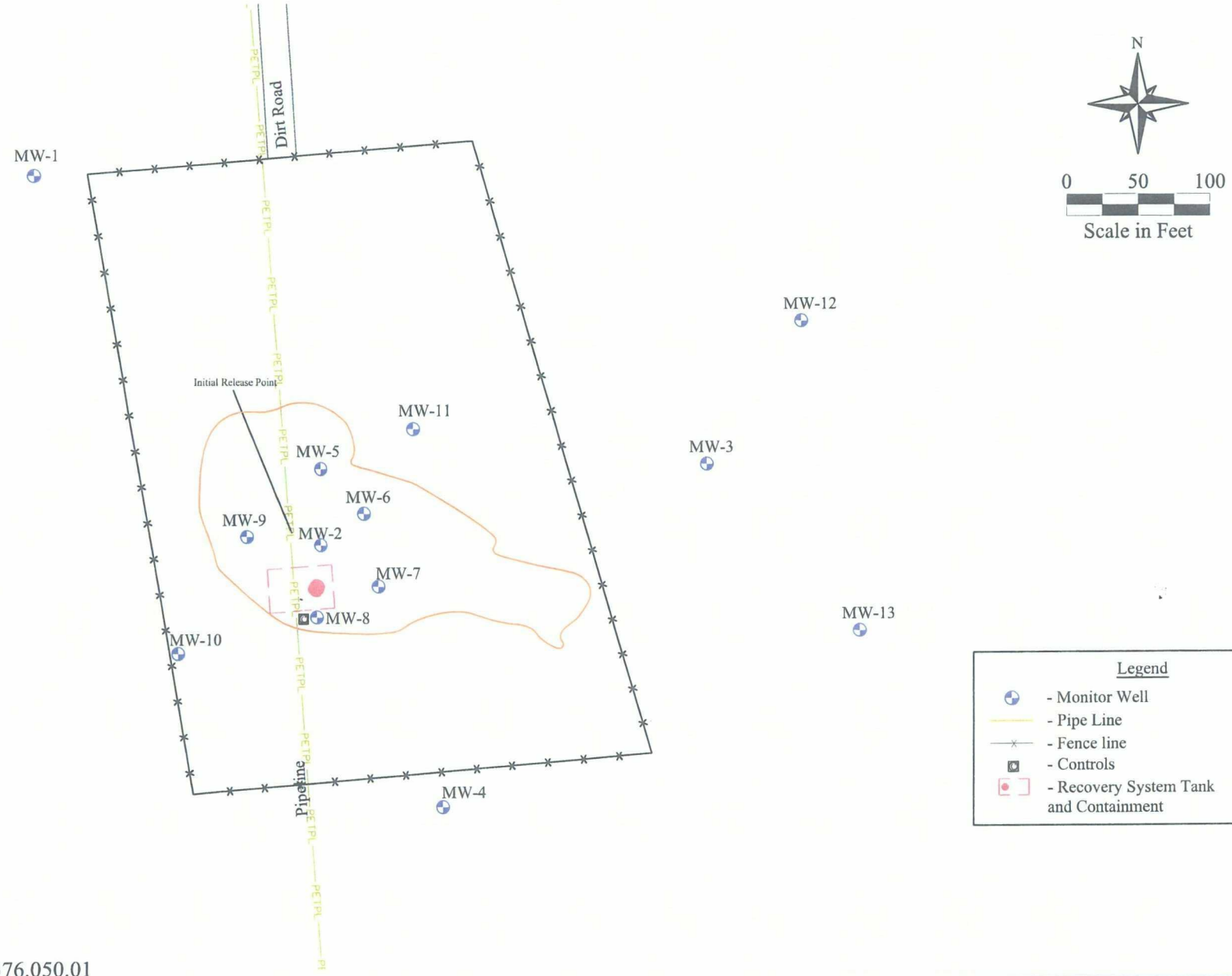
Figure 2d - Groundwater Gradient Map - 12/14/2009

Figure 3a - PSH Thickness & Groundwater Concentration Map - 02/05/2009

Figure 3b - PSH Thickness & Groundwater Concentration Map - 05/19/2009

Figure 3c - PSH Thickness & Groundwater Concentration Map - 08/27/2009

Figure 3d - PSH Thickness & Groundwater Concentration Map - 12/14/2009

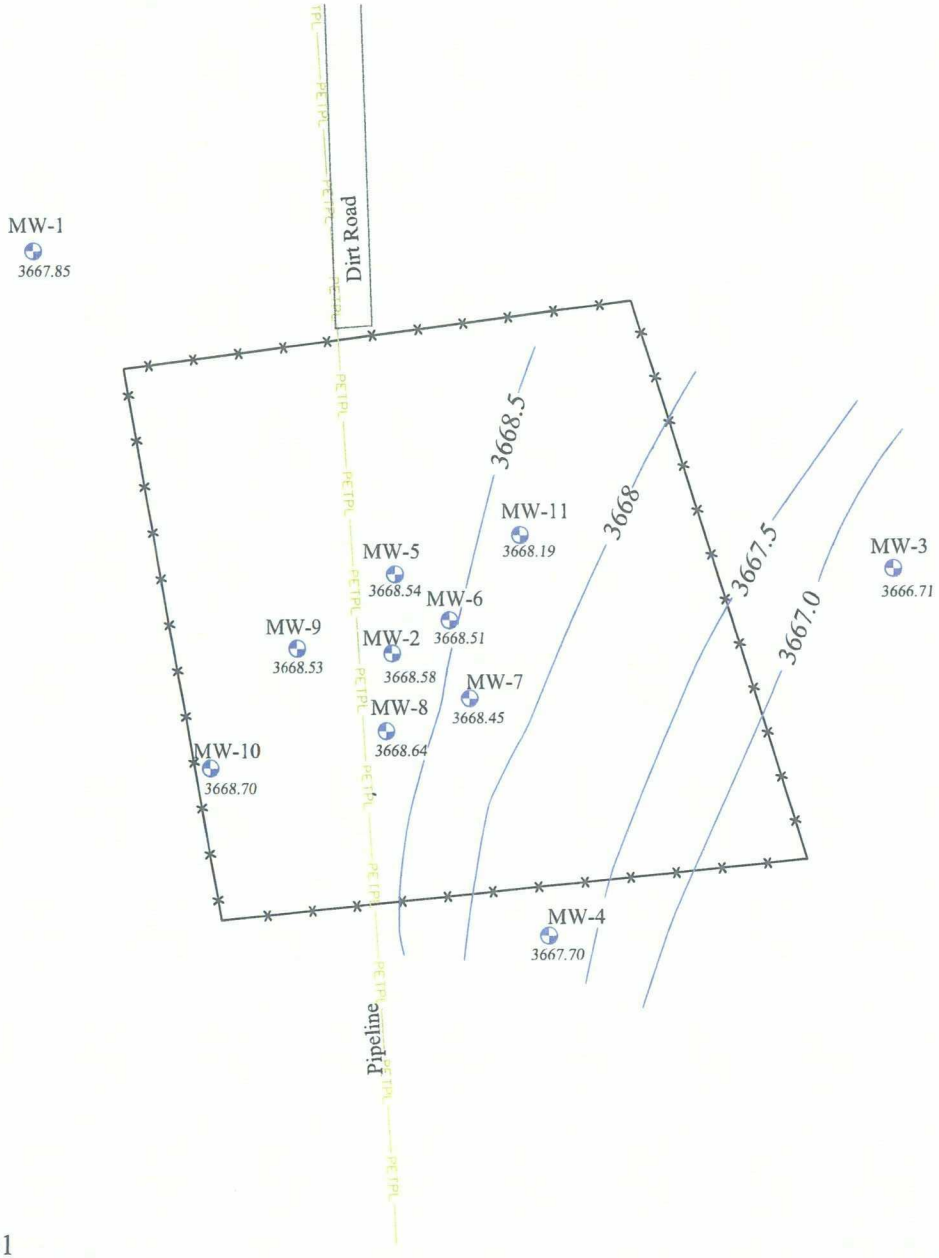


Project # 700376.050.01

TALON LPE

Date: 07/9/2009
Scale: 1" = 100'
Drawn By: HDJ

Kimbrough Sweet 8"
SRS # 2000-10757, NMOCD REF. # AP-0029
SW 1/4 of the NE 1/4, Sec. 3, T18S, R37E, Lea County, New Mexico
Figure 1 - Site Map



Project # 700376.050.01

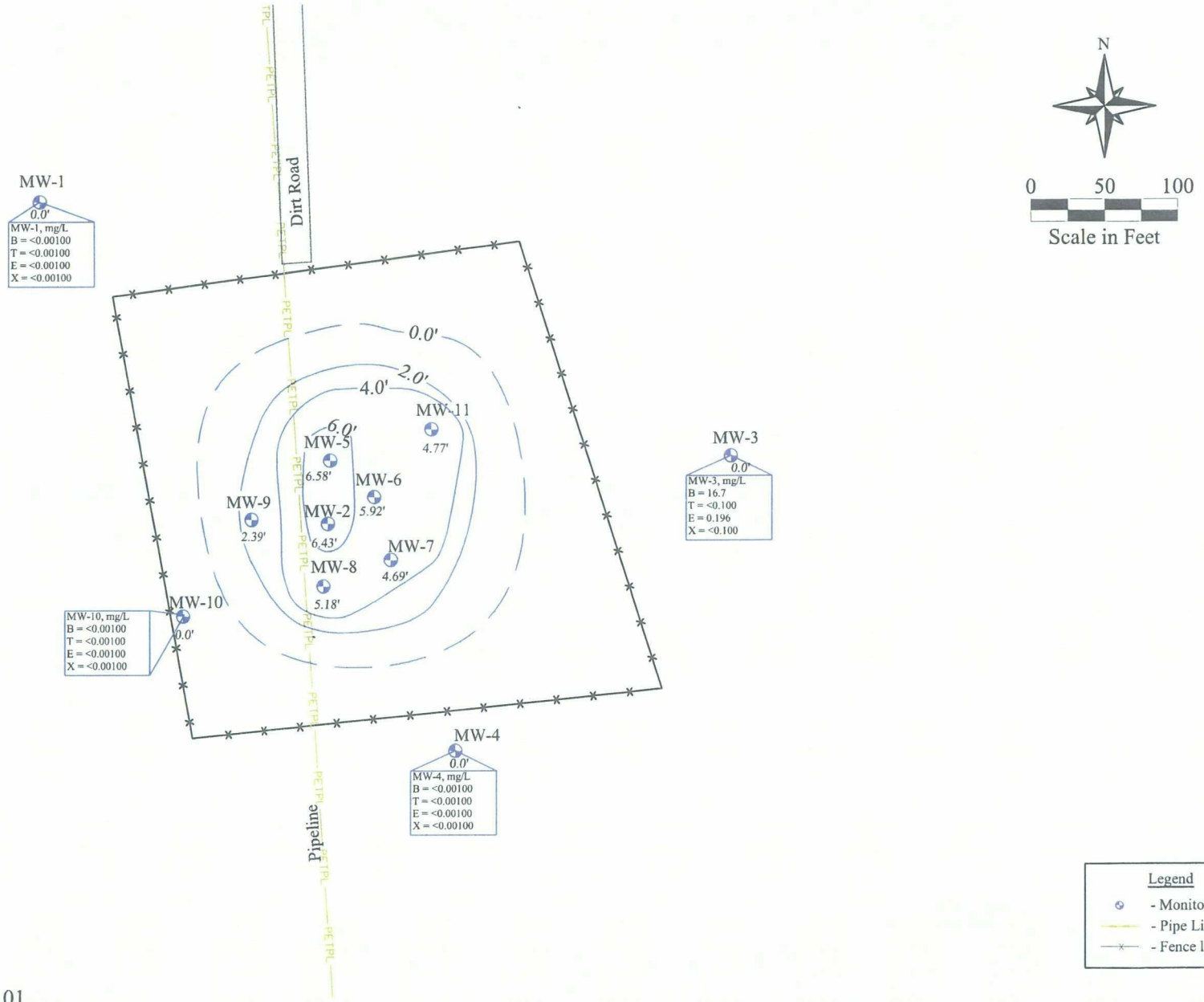
Date:	03/25/2009
Scale:	1" = 100'
Drawn By:	SJA

Kimbrough Sweet 8"

SRS # 2000-10757, NMOCD REF. # AP-0029

SW 1/4 of the NE 1/4, Sec. 3, T18S, R37E, Lea County, New Mexico

Figure 2a - Groundwater Gradient Map - 2/5/09



Project # 700376.050.01

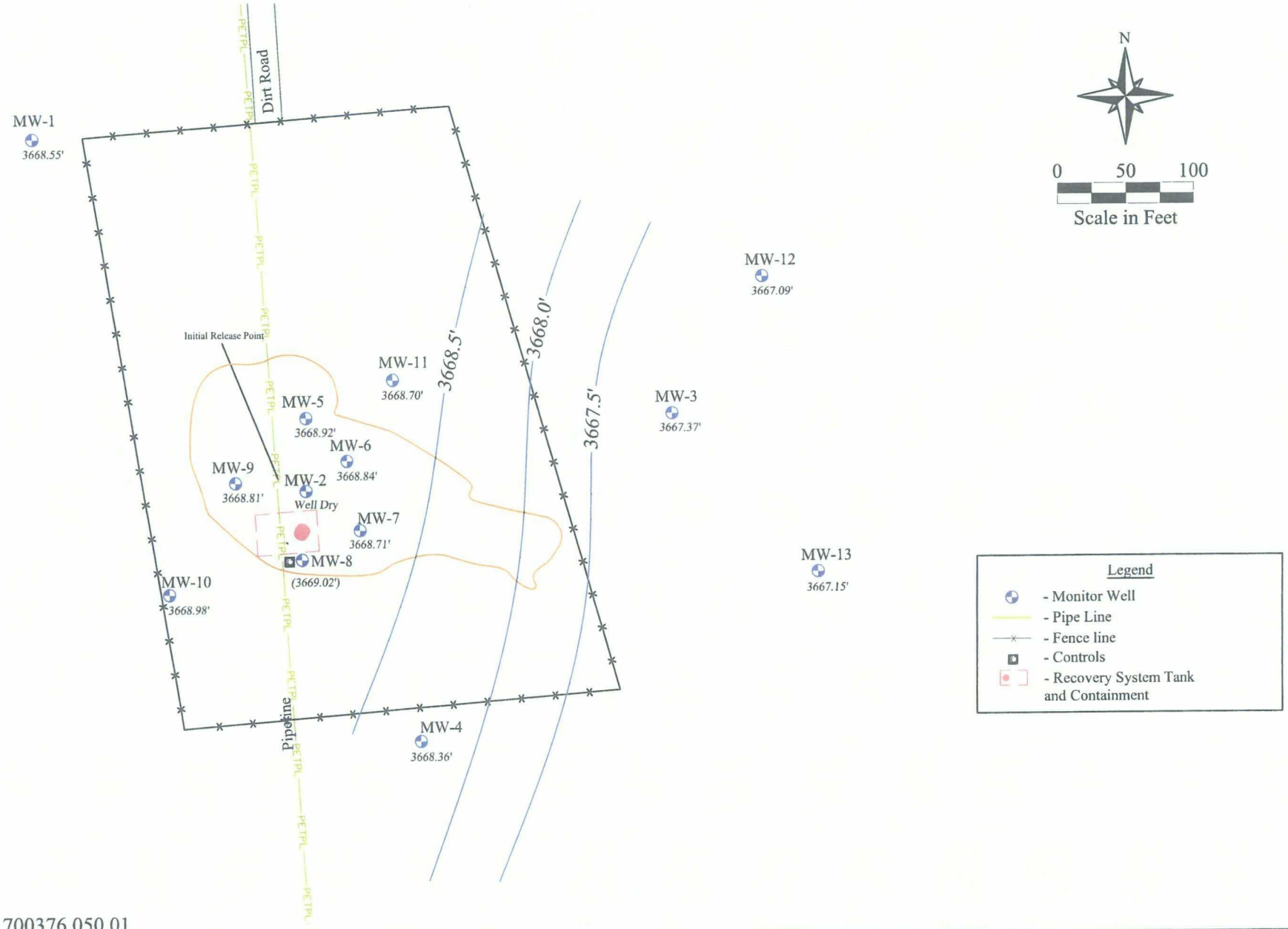
Date:	03/25/2009
Scale:	1" = 100'
Drawn By:	SJA

Kimbrough Sweet 8"

SRS # 2000-10757, NMOCD REF. # AP-0029

SW 1/4 of the NE 1/4, Sec. 3, T18S, R37E, Lea County, New Mexico

Figure 3a - PSH Thickness & Groundwater Concentration Map - 2/5/09



Project # 700376.050.01

TALON LPE

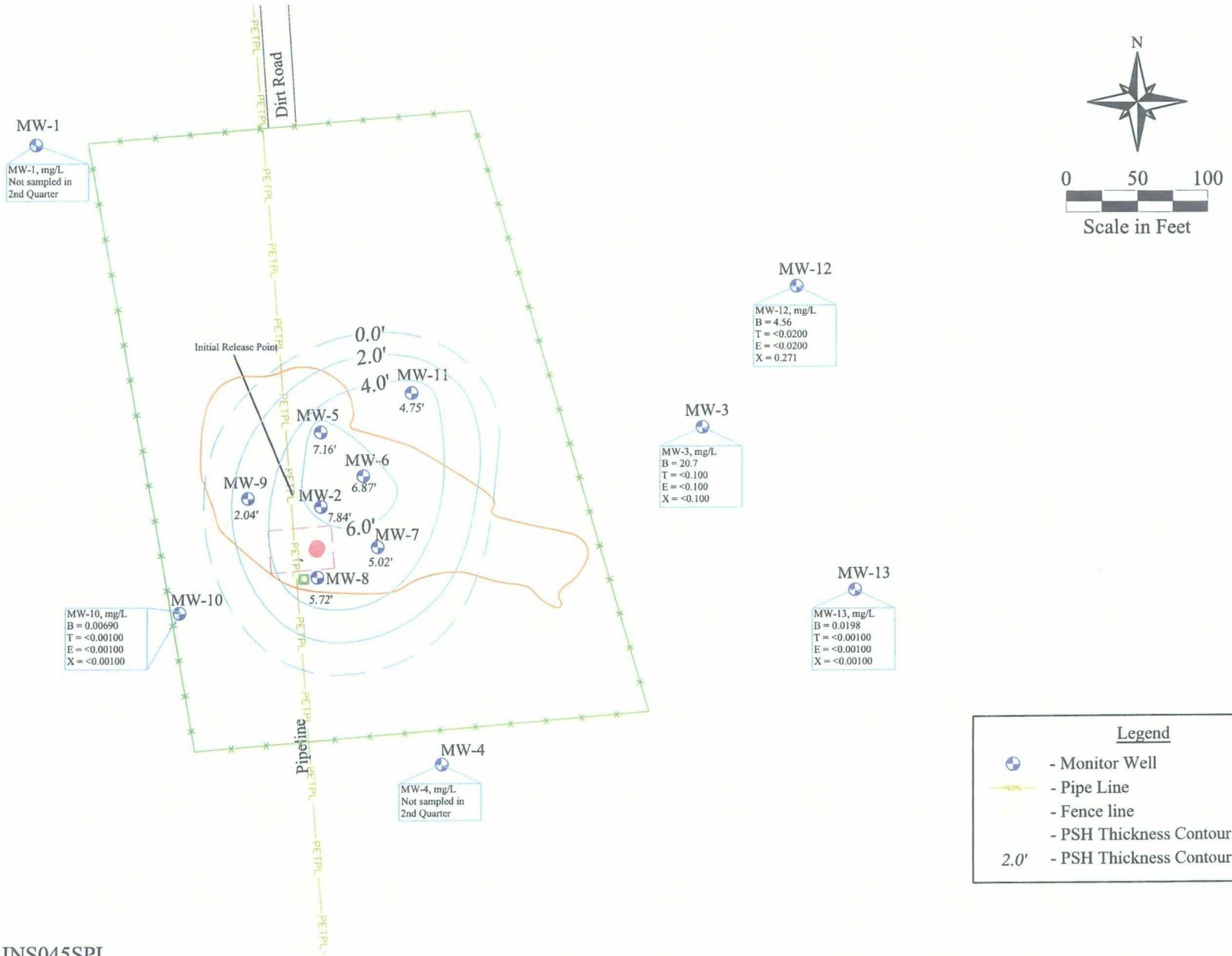
Date:	01/13/2010
Scale:	1" = 100'
Drawn By:	TJS

Kimbrough Sweet 8"

SRS # 2000-10757, NMOCD REF. # AP-0029

SW 1/4 of the NE 1/4, Sec. 3, T18S, R37E, Lea County, New Mexico

Figure 2b - Groundwater Gradient Map - 5/19/09



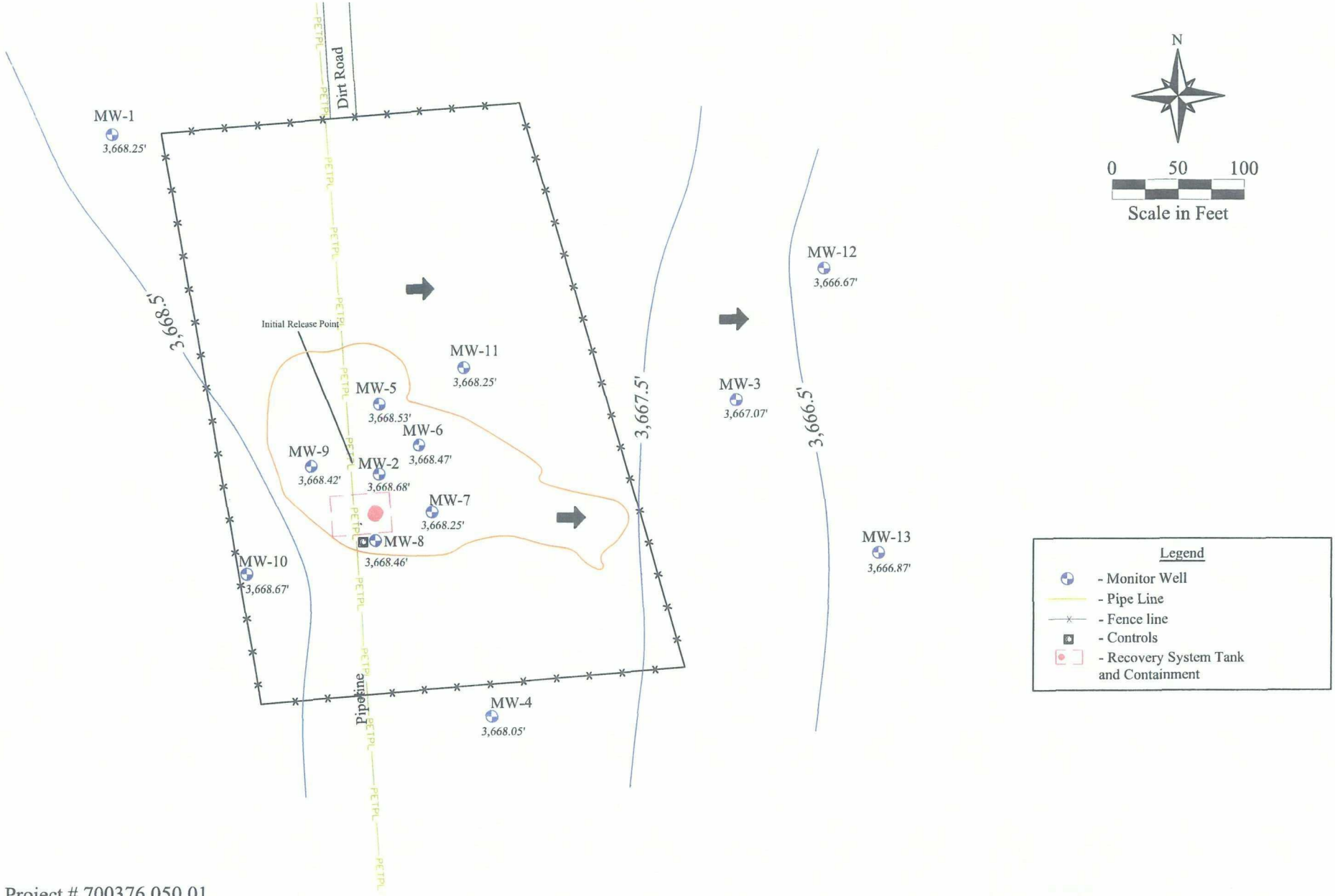
Project # PLAINS045SPL

TALON LPE

Date: 07/09/2009
Scale: 1" = 100'
Drawn By: HDJ

Kimbrough Sweet 8"

SRS # 2000-10757, NMOCD REF. # AP-0029
SW 1/4 of the NE 1/4, Sec. 3, T18S, R37E, Lea County, New Mexico
Figure 3b - PSH Thickness & Groundwater Concentration (5/19/2009)



Project # 700376.050.01

TALON LPE

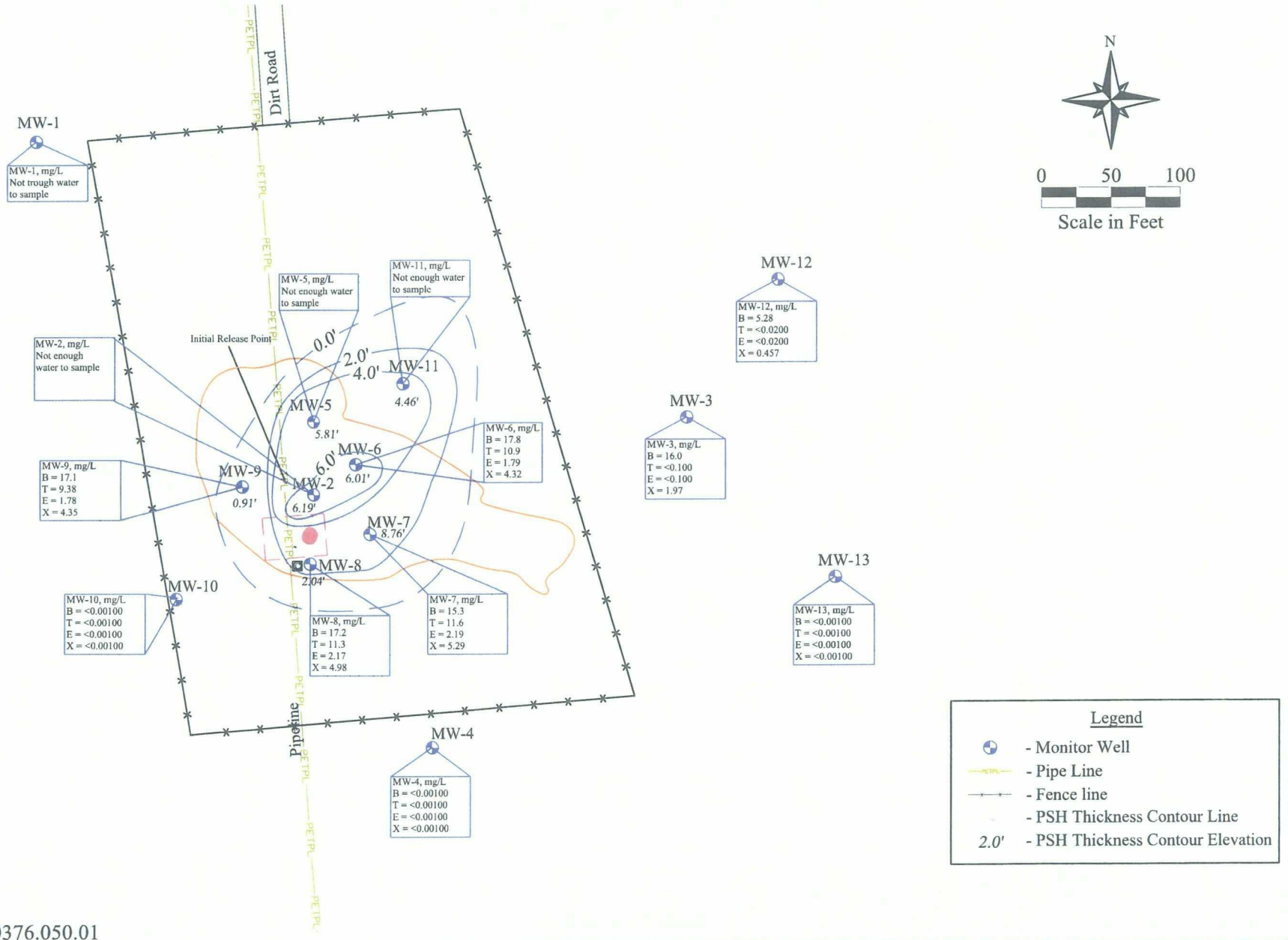
Date:	01/13/2010
Scale:	1" = 100'
Drawn By:	TJS

Kimbrough Sweet 8"

SRS # 2000-10757, NMOCD REF. # AP-0029

SW 1/4 of the NE 1/4, Sec. 3, T18S, R37E, Lea County, New Mexico

Figure 2c - Groundwater Gradient Map - 8/27/09



Project # 700376.050.01

TALON LPE

Date: 01/13/2010
Scale: 1" = 100'
Drawn By: TJS

Kimbrough Sweet 8"

SRS # 2000-10757, NMOCD REF. # AP-0029
SW 1/4 of the NE 1/4, Sec. 3, T18S, R37E, Lea County, New Mexico
Figure 3c - PSH Thickness & Groundwater Concentration Map - 8/27/2009

Project # 700376.050.01

TALON LPE

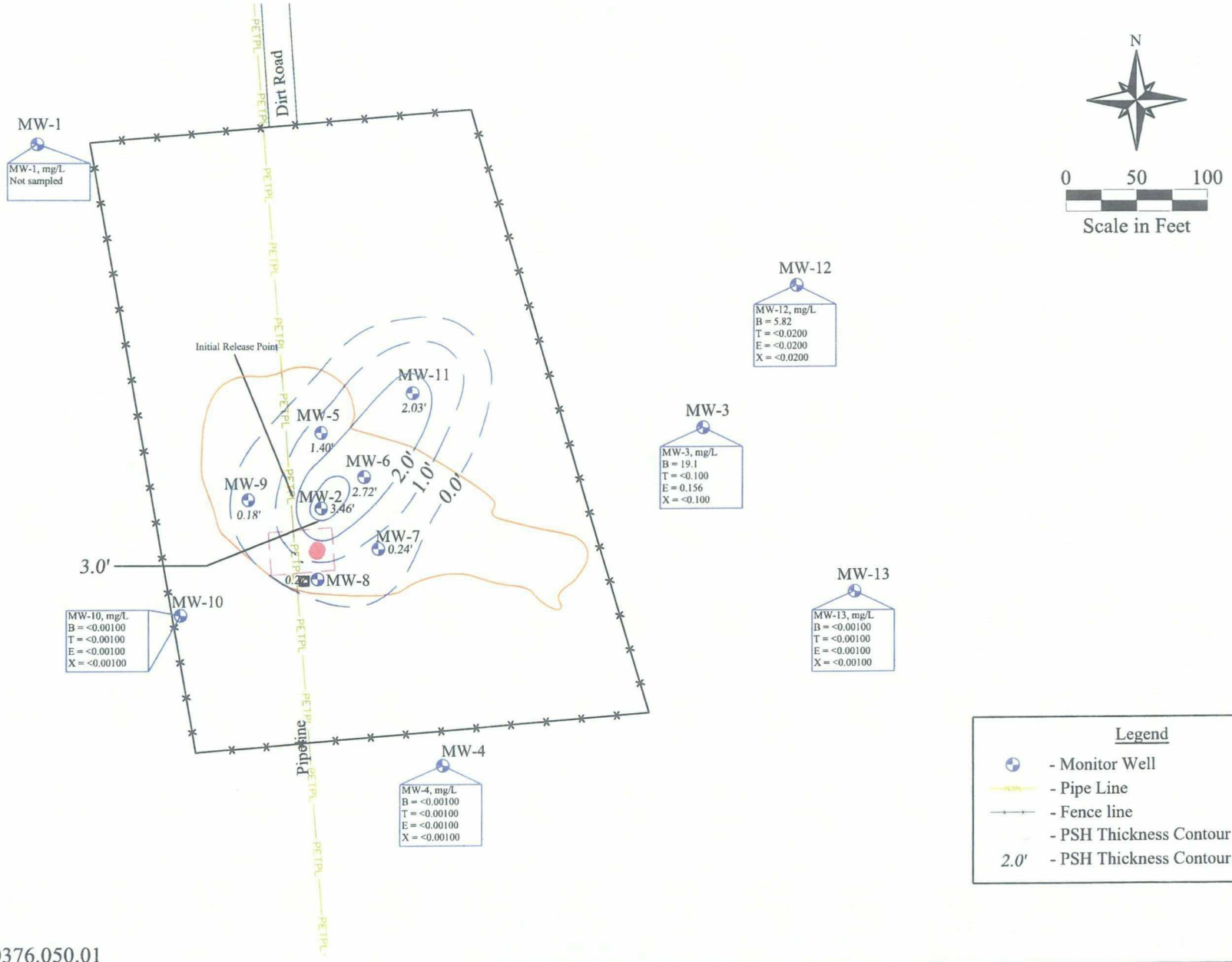
Date:	01/13/2010
Scale:	1" = 100'
Drawn By:	TJS

Kimbrough Sweet 8"

SRS # 2000-10757, NMOCD REF. # AP-0029

SW 1/4 of the NE 1/4, Sec. 3, T18S, R37E, Lea County, New Mexico

Figure 2d - Groundwater Gradient Map, - (12/14/2009)



Project # 700376.050.01

TALON LPE

Date:	01/13/2010
Scale:	1" = 100'
Drawn By:	TJS

Kimbrough Sweet 8"

SRS # 2000-10757, NMOCD REF. # AP-0029

SW 1/4 of the NE 1/4, Sec. 3, T18S, R37E, Lea County, New Mexico

Figure 3d - PSH Thickness & Groundwater Concentration (12/14/2009)

APPENDIX B

Tables

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P. - SRS# 2000-10757
KIMBROUGH SWEET 8"
NMOCD REF. # AP-0029
LEA COUNTY, NEW MEXICO
TALONLPE PROJECT NUMBER 700376.050.01

Monitor Well#	Date Gauged	Relative Top of Casing Elevation	Depth to PSH	Depth to Water	PSH Thickness	Corrected Relative Groundwater Elevation
		feet amsl*	feet btoc*	feet btoc	feet	feet amsl
MW-1	01/24/02	Well Installed 24 January 2002				
MW-1	10/04/02	3,723.13		51.26		3,671.87
MW-1	12/11/02			51.43		3,671.70
MW-1	02/20/03			51.62		3,671.51
MW-1	02/11/04			52.45		3,670.68
MW-1	08/16/04			53.15		3,669.98
MW-1	03/22/05			52.70		3,670.43
MW-1	03/31/05			52.65		3,670.48
MW-1	04/22/05			52.69		3,670.44
MW-1	05/12/05			52.73		3,670.40
MW-1	05/25/05			52.73		3,670.40
MW-1	06/28/05			52.81		3,670.32
MW-1	07/25/05			52.91		3,670.22
MW-1	08/22/05			52.98		3,670.15
MW-1	11/14/05			53.18		3,669.95
MW-1	11/30/05			53.47		3,669.66
MW-1	02/06/06			53.67		3,669.46
MW-1	03/01/06			53.21		3,669.92
MW-1	05/02/06			52.34		3,670.79
MW-1	05/25/06			51.45		3,671.68
MW-1	08/10/06			53.45		3,669.68
MW-1	11/29/06			53.60		3,669.53
MW-1	12/06/06			53.63		3,669.50
MW-1	01/10/07			53.71		3,669.42
MW-1	02/08/07			53.58		3,669.55
MW-1	03/01/07			53.91		3,669.22
MW-1	03/06/07			53.62		3,669.51
MW-1	03/14/07			53.85		3,669.28
MW-1	04/02/07			53.67		3,669.46
MW-1	04/09/07			53.89		3,669.24

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P. - SRS# 2000-10757
KIMBROUGH SWEET 8"
NMOCD REF. # AP-0029
LEA COUNTY, NEW MEXICO
TALONLPE PROJECT NUMBER 700376.050.01

Monitor Well#	Date Gauged	Relative Top of Casing Elevation	Depth to PSH	Depth to Water	PSH Thickness	Corrected Relative Groundwater Elevation
		feet amsl*	feet btoc*	feet btoc	feet	feet amsl
MW-1	04/16/07			53.92		3,669.21
MW-1	05/01/07			53.93		3,669.20
MW-1	05/21/07			53.99		3,669.14
MW-1	06/13/07			53.90		3,669.23
MW-1	06/26/07			53.92		3,669.21
MW-1	07/18/07			54.02		3,669.11
MW-1	09/13/07			54.13		3,669.00
MW-1	10/24/07			54.19		3,668.94
MW-1	12/03/07			54.32		3,668.81
MW-1	01/29/08			54.51		3,668.62
MW-1	03/13/08			54.52		3,668.61
MW-1	05/14/08			54.64		3,668.49
MW-1	06/03/08			54.67		3,668.46
MW-1	06/18/08			54.79		3,668.34
MW-1	07/01/08			54.73		3,668.40
MW-1	07/02/08			54.82		3,668.31
MW-1	08/28/08			54.89		3,668.24
MW-1	09/26/08			54.98		3,668.15
MW-1	10/27/08			55.06		3,668.07
MW-1	12/02/08			55.14		3,667.99
MW-1	01/15/09			55.25		3,667.88
MW-1	02/05/09			55.28		3,667.85
MW-1	04/06/09			55.42		3,667.71
MW-1	05/19/09	3,724.09		55.54		3,668.55
MW-1	08/27/09			55.84		3,668.25
MW-1	12/14/09			56.03		3,668.06
MW-2	01/08/02	Well Installed 8 January 2002				
MW-2	01/09/02	3,722.90	49.20	53.60	4.40	3,673.26
MW-2	10/04/02		49.21	56.33	7.12	3,672.98

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P. - SRS# 2000-10757
KIMBROUGH SWEET 8"
NMOCD REF. # AP-0029
LEA COUNTY, NEW MEXICO
TALONLPE PROJECT NUMBER 700376.050.01

Monitor Well#	Date Gauged	Relative Top of Casing Elevation	Depth to PSH	Depth to Water	PSH Thickness	Corrected Relative Groundwater Elevation
		feet amsl*	feet btoc*	feet btoc	feet	feet amsl
MW-2	11/11/02		49.25	56.30	7.05	3,672.95
MW-2	12/11/02		49.25	56.34	7.09	3,672.94
MW-2	02/20/03		49.57	56.30	6.73	3,672.66
MW-2	03/26/03		49.66	58.09	8.43	3,672.40
MW-2	04/08/03		49.68	58.11	8.43	3,672.38
MW-2	04/23/03		50.00	56.90	6.90	3,672.21
MW-2	04/24/03		49.75	58.10	8.35	3,672.32
MW-2	04/25/03		49.78	57.95	8.17	3,672.30
MW-2	05/03/03		49.77	58.10	8.33	3,672.30
MW-2	05/06/03		49.75	58.08	8.33	3,672.32
MW-2	06/09/03		49.83	58.13	8.30	3,672.24
MW-2	06/30/03		49.95	58.04	8.09	3,672.14
MW-2	04/12/04		50.58	58.91	8.33	3,671.49
MW-2	06/04/04		50.85	57.62	6.77	3,671.37
MW-2	06/21/04		50.74	59.01	8.27	3,671.33
MW-2	10/21/04		50.59	58.20	7.61	3,671.55
MW-2	03/22/05		51.02	55.90	4.88	3,671.39
MW-2	03/31/05		51.02	55.90	4.88	3,671.39
MW-2	04/22/05		50.98	56.50	5.52	3,671.37
MW-2	05/25/05		51.23	55.61	4.38	3,671.23
MW-2	07/25/05		51.11	57.74	6.63	3,671.13
MW-2	11/30/05		51.50	58.85	7.35	3,670.67
MW-2	02/06/06		51.64	56.19	4.55	3,670.81
MW-2	03/01/06		51.67	59.20	7.53	3,670.48
MW-2	05/02/06		51.91	58.86	6.95	3,670.30
MW-2	05/25/06		51.19	58.62	7.43	3,670.97
MW-2	08/10/06		51.45	59.00	7.55	3,670.70
MW-2	11/29/06		51.63	59.18	7.55	3,670.52
MW-2	12/06/06		51.67	59.11	7.44	3,670.49
MW-2	01/10/07		51.78	58.03	6.25	3,670.50

TALON LPE

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P. - SRS# 2000-10757
KIMBROUGH SWEET 8"
NMOCD REF. # AP-0029
LEA COUNTY, NEW MEXICO
TALONLPE PROJECT NUMBER 700376.050.01

Monitor Well#	Date Gauged	Relative Top of Casing Elevation	Depth to PSH	Depth to Water	PSH Thickness	Corrected Relative Groundwater Elevation
		feet amsl*	feet btoc*	feet btoc	feet	feet amsl
MW-2	03/01/07		52.41	60.05	7.64	3,669.73
MW-2	03/06/07		52.92	61.25	8.33	3,669.15
MW-2	03/14/07		52.14	60.43	8.29	3,669.93
MW-2	04/02/07		51.93	59.22	7.29	3,670.24
MW-2	04/09/07		52.95	58.44	5.49	3,669.40
MW-2	04/16/07		51.92	59.09	7.17	3,670.26
MW-2	05/01/07		50.58	60.17	9.59	3,671.36
MW-2	05/21/07		57.42	59.03	1.61	3,665.32
MW-2	06/26/07		52.68	57.24	4.56	3,669.76
MW-2	06/28/07		52.64	56.53	3.89	3,669.87
MW-2	07/18/07		52.55	57.79	5.24	3,669.83
MW-2	08/21/07		52.50	57.65	5.15	3,669.89
MW-2	08/30/07		52.51	57.50	4.99	3,669.89
MW-2	09/13/07		52.40	58.20	5.80	3,669.92
MW-2	10/09/07		53.11	57.17	4.06	3,669.38
MW-2	10/17/07		52.81	56.67	3.86	3,669.70
MW-2	10/24/07		52.76	57.88	5.12	3,669.63
MW-2	11/02/07		53.01	56.52	3.51	3,669.54
MW-2	11/12/07		53.02	56.51	3.49	3,669.53
MW-2	12/03/07		52.74	57.37	4.63	3,669.70
MW-2	01/03/08		52.80	59.21	6.41	3,669.46
MW-2	01/07/08		53.05	59.11	6.06	3,669.24
MW-2	01/22/08		52.69	59.19	6.50	3,669.56
MW-2	01/29/08		53.08	56.87	3.79	3,669.44
MW-2	02/06/08		53.02	58.09	5.07	3,669.37
MW-2	02/12/08		53.00	58.07	5.07	3,669.39
MW-2	03/13/08		52.89	58.58	5.69	3,669.44
MW-2	03/19/08		52.95	59.12	6.17	3,669.33
MW-2	03/27/08		53.82	55.64	1.82	3,668.90
MW-2	04/01/08		53.31	58.17	4.86	3,669.10

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P. - SRS# 2000-10757
KIMBROUGH SWEET 8"
NMOCD REF. # AP-0029
LEA COUNTY, NEW MEXICO
TALONLPE PROJECT NUMBER 700376.050.01

Monitor Well#	Date Gauged	Relative Top of Casing Elevation	Depth to PSH	Depth to Water	PSH Thickness	Corrected Relative Groundwater Elevation
		feet amsl*	feet btoc*	feet btoc	feet	feet amsl
MW-2	04/11/08		53.53	58.09	4.56	3,668.91
MW-2	04/16/08		54.84	55.59	0.75	3,667.99
MW-2	04/30/08		52.95	59.29	6.34	3,669.32
MW-2	05/14/08		53.51	57.82	4.31	3,668.96
MW-2	06/03/08		54.36	54.98	0.62	3,668.48
MW-2	06/10/08		54.49	55.20	0.71	3,668.34
MW-2	06/18/08		54.12	55.72	1.60	3,668.62
MW-2	07/01/08		54.31	56.91	2.60	3,668.33
MW-2	07/02/08		53.92	55.16	1.24	3,668.86
MW-2	07/24/08		54.87	55.18	0.31	3,668.00
MW-2	08/06/08		54.32	57.93	3.61	3,668.22
MW-2	08/28/08		53.57	57.82	4.25	3,668.91
MW-2	09/26/08		53.44	59.05	5.61	3,668.90
MW-2	10/27/08		53.56	59.04	5.48	3,668.79
MW-2	12/02/08		53.51	59.60	6.09	3,668.78
MW-2	01/15/09		53.57	59.99	6.42	3,668.69
MW-2	02/05/09		53.68	60.11	6.43	3,668.58
MW-2	04/06/09		53.87	60.48	6.61	3,668.37
MW-2	05/19/09	3,723.32	53.66	*61.5	7.84	
MW-2	07/13/09		53.90	59.27	5.37	3,668.88
MW-2	08/27/09		54.02	60.21	6.19	3,668.68
MW-2	12/14/09		55.12	58.58	3.46	3,667.63
MW-3	01/24/02	Well Installed 24 January 2002				
MW-3	10/04/02	3,720.60		49.77		3,670.83
MW-3	12/11/02			49.93		3,670.67
MW-3	02/20/03			50.13		3,670.47
MW-3	02/11/04			50.98		3,669.62
MW-3	08/16/04			51.64		3,668.96
MW-3	03/22/05			51.14		3,669.46

TALON LPE

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P. - SRS# 2000-10757
KIMBROUGH SWEET 8"
NMOCD REF. # AP-0029
LEA COUNTY, NEW MEXICO
TALONLPE PROJECT NUMBER 700376.050.01

Monitor Well#	Date Gauged	Relative Top of Casing Elevation	Depth to PSH	Depth to Water	PSH Thickness	Corrected Relative Groundwater Elevation
		feet amsl*	feet btoc*	feet btoc	feet	feet amsl
MW-3	03/31/05			51.16		3,669.44
MW-3	04/22/05			51.18		3,669.42
MW-3	05/12/05			51.26		3,669.34
MW-3	05/25/05			51.26		3,669.34
MW-3	06/28/05			51.38		3,669.22
MW-3	07/25/05			51.48		3,669.12
MW-3	08/22/05			51.52		3,669.08
MW-3	11/14/05			51.63		3,668.97
MW-3	11/30/05			51.92		3,668.68
MW-3	02/06/06			52.15		3,668.45
MW-3	03/01/06			51.77		3,668.83
MW-3	05/02/06			53.90		3,666.70
MW-3	05/25/06			53.48		3,667.12
MW-3	08/10/06			51.45		3,669.15
MW-3	11/29/06			51.67		3,668.93
MW-3	12/06/06			51.70		3,668.90
MW-3	01/10/07			51.80		3,668.80
MW-3	02/08/07			52.14		3,668.46
MW-3	03/01/07			52.40		3,668.20
MW-3	03/06/07			51.96		3,668.64
MW-3	03/14/07			52.43		3,668.17
MW-3	04/02/07			52.22		3,668.38
MW-3	04/09/07			52.45		3,668.15
MW-3	04/16/07			52.48		3,668.12
MW-3	05/01/07			52.61		3,667.99
MW-3	05/21/07			52.55		3,668.05
MW-3	06/13/07			52.46		3,668.14
MW-3	06/26/07			52.50		3,668.10
MW-3	07/18/07			52.59		3,668.01
MW-3	09/13/07			52.69		3,667.91

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P. - SRS# 2000-10757
KIMBROUGH SWEET 8"
NMOCD REF. # AP-0029
LEA COUNTY, NEW MEXICO
TALONLPE PROJECT NUMBER 700376.050.01

Monitor Well#	Date Gauged	Relative Top of Casing Elevation	Depth to PSH	Depth to Water	PSH Thickness	Corrected Relative Groundwater Elevation
		feet amsl*	feet btoc*	feet btoc	feet	feet amsl
MW-3	10/24/07			52.80		3,667.80
MW-3	12/03/07			52.89		3,667.71
MW-3	01/29/08			53.03		3,667.57
MW-3	03/13/08			53.10		3,667.50
MW-3	05/14/08			53.23		3,667.37
MW-3	06/03/08			53.27		3,667.33
MW-3	06/18/08			53.37		3,667.23
MW-3	07/01/08			53.33		3,667.27
MW-3	07/02/08			53.41		3,667.19
MW-3	08/28/08			53.47		3,667.13
MW-3	09/26/08			53.58		3,667.02
MW-3	10/27/08			53.62		3,666.98
MW-3	12/02/08			53.74		3,666.86
MW-3	01/15/09			53.85		3,666.75
MW-3	02/05/09			53.89		3,666.71
MW-3	04/06/09			54.03		3,666.57
MW-3	05/19/09	3,721.52		54.15		3,667.37
MW-3	08/27/09			54.45		3,667.07
MW-3	12/14/09			54.66		3,666.86
MW-4	01/24/02	Well Installed 24 January 2002				
MW-4	10/04/02	3,721.03		49.35		3,671.68
MW-4	12/11/02			49.50		3,671.53
MW-4	02/20/03			49.69		3,671.34
MW-4	02/11/04			50.51		3,670.52
MW-4	08/16/04			50.91		3,670.12
MW-4	03/22/05			50.67		3,670.36
MW-4	03/31/05			50.70		3,670.33
MW-4	04/22/05			50.71		3,670.32
MW-4	05/12/05			50.80		3,670.23

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P. - SRS# 2000-10757
KIMBROUGH SWEET 8"
NMOCD REF. # AP-0029
LEA COUNTY, NEW MEXICO
TALONLPE PROJECT NUMBER 700376.050.01

Monitor Well#	Date Gauged	Relative Top of Casing Elevation	Depth to PSH	Depth to Water	PSH Thickness	Corrected Relative Groundwater Elevation
		feet amsl*	feet btoc*	feet btoc	feet	feet amsl
MW-4	05/25/05			50.80		3,670.23
MW-4	06/28/05			50.92		3,670.11
MW-4	07/25/05			51.02		3,670.01
MW-4	08/22/05			51.06		3,669.97
MW-4	11/14/05			51.15		3,669.88
MW-4	11/30/05			51.43		3,669.60
MW-4	02/06/06			51.68		3,669.35
MW-4	03/01/06			51.21		3,669.82
MW-4	05/02/06			51.88		3,669.15
MW-4	05/25/06			50.17		3,670.86
MW-4	08/10/06			51.96		3,669.07
MW-4	11/29/06			52.16		3,668.87
MW-4	12/06/06			52.19		3,668.84
MW-4	01/10/07			52.27		3,668.76
MW-4	02/08/07			51.65		3,669.38
MW-4	03/01/07			51.97		3,669.06
MW-4	03/06/07			52.45		3,668.58
MW-4	03/14/07			51.93		3,669.10
MW-4	04/02/07			51.73		3,669.30
MW-4	04/09/07			51.95		3,669.08
MW-4	04/16/07			51.46		3,669.57
MW-4	05/01/07			52.04		3,668.99
MW-4	05/21/07			52.05		3,668.98
MW-4	06/13/07			51.96		3,669.07
MW-4	06/26/07			51.96		3,669.07
MW-4	07/18/07			52.09		3,668.94
MW-4	09/13/07			52.20		3,668.83
MW-4	10/24/07			52.25		3,668.78
MW-4	12/03/07			52.36		3,668.67
MW-4	01/29/08			52.44		3,668.59

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P. - SRS# 2000-10757
KIMBROUGH SWEET 8"
NMOCD REF. # AP-0029
LEA COUNTY, NEW MEXICO
TALONLPE PROJECT NUMBER 700376.050.01

Monitor Well#	Date Gauged	Relative Top of Casing Elevation	Depth to PSH	Depth to Water	PSH Thickness	Corrected Relative Groundwater Elevation
		feet amsl*	feet btoc*	feet btoc	feet	feet amsl
MW-4	03/13/08			52.54		3,668.49
MW-4	05/14/08			52.70		3,668.33
MW-4	06/03/08			52.75		3,668.28
MW-4	06/18/08			52.84		3,668.19
MW-4	07/01/08			52.81		3,668.22
MW-4	07/02/08			52.89		3,668.14
MW-4	08/28/08			52.93		3,668.10
MW-4	09/26/08			53.04		3,667.99
MW-4	10/27/08			53.14		3,667.89
MW-4	12/02/08			53.20		3,667.83
MW-4	01/15/09			53.30		3,667.73
MW-4	02/05/09			53.33		3,667.70
MW-4	04/06/09			53.47		3,667.56
MW-4	05/19/09	3,721.94		53.58		3,668.36
MW-4	8/27/209			53.89		3,668.05
MW-4	12/14/09			54.09		3,667.85
MW-5	07/28/04	Well Installed 28 July 2004				
MW-5	08/16/04	3,723.58	51.65	59.86	8.21	3,671.11
MW-5	10/21/04		51.26	58.76	7.50	3,671.57
MW-5	03/22/05		51.46	59.00	7.54	3,671.37
MW-5	03/31/05		51.46	59.00	7.54	3,671.37
MW-5	04/22/05		52.62	55.95	3.33	3,670.63
MW-5	05/25/05		52.18	56.23	4.05	3,671.00
MW-5	07/25/05		52.06	57.97	5.91	3,670.93
MW-5	11/30/05		52.17	60.20	8.03	3,670.61
MW-5	02/06/06		52.44	60.51	8.07	3,670.33
MW-5	03/01/06		52.45	60.53	8.08	3,670.32
MW-5	05/02/06		52.68	59.94	7.26	3,670.17
MW-5	05/25/06		52.30	59.89	7.59	3,670.52

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P. - SRS# 2000-10757
KIMBROUGH SWEET 8"
NMOCD REF. # AP-0029
LEA COUNTY, NEW MEXICO
TALONLPE PROJECT NUMBER 700376.050.01

Monitor Well#	Date Gauged	Relative Top of Casing Elevation	Depth to PSH	Depth to Water	PSH Thickness	Corrected Relative Groundwater Elevation
		feet amsl*	feet btoc*	feet btoc	feet	feet amsl
MW-5	08/10/06		52.33	60.28	7.95	3,670.46
MW-5	11/29/06		52.45	60.24	7.79	3,670.35
MW-5	12/06/06		52.44	60.19	7.75	3,670.37
MW-5	01/10/07		52.48	58.87	6.39	3,670.46
MW-5	03/01/07		52.75	60.48	7.73	3,670.06
MW-5	03/06/07		52.70	60.48	7.78	3,670.10
MW-5	03/14/07		51.85	61.25	9.40	3,670.79
MW-5	04/02/07		52.70	60.55	7.85	3,670.10
MW-5	04/09/07		52.74	60.50	7.76	3,670.06
MW-5	04/16/07		52.74	60.55	7.81	3,670.06
MW-5	05/01/07		52.81	60.49	7.68	3,670.00
MW-5	05/21/07		52.85	60.57	7.72	3,669.96
MW-5	06/26/07		53.90	55.68	1.78	3,669.50
MW-5	06/28/07		54.07	54.71	0.64	3,669.45
MW-5	07/18/07		53.80	56.97	3.17	3,669.46
MW-5	08/21/07		54.19	54.47	0.28	3,669.36
MW-5	08/30/07		52.90	60.12	7.22	3,669.96
MW-5	09/13/07		53.11	58.74	5.63	3,669.91
MW-5	10/09/07		54.39	54.79	0.40	3,669.15
MW-5	10/17/07		53.10	60.32	7.22	3,669.76
MW-5	10/24/07		54.10	55.55	1.45	3,669.34
MW-5	11/02/07		54.38	54.71	0.33	3,669.17
MW-5	11/12/07		53.16	60.33	7.17	3,669.70
MW-5	12/03/07		53.65	58.43	4.78	3,669.45
MW-5	01/03/08		54.64	55.57	0.93	3,668.85
MW-5	01/07/08		54.43	55.56	1.13	3,669.04
MW-5	01/22/08		54.87	58.53	3.66	3,668.34
MW-5	01/29/08		53.89	58.47	4.58	3,669.23
MW-5	02/06/08		53.87	58.69	4.82	3,669.23
MW-5	02/12/08		53.89	58.70	4.81	3,669.21

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P. - SRS# 2000-10757
KIMBROUGH SWEET 8"
NMOCD REF. # AP-0029
LEA COUNTY, NEW MEXICO
TALONLPE PROJECT NUMBER 700376.050.01

Monitor Well#	Date Gauged	Relative Top of Casing Elevation	Depth to PSH	Depth to Water	PSH Thickness	Corrected Relative Groundwater Elevation
		feet amsl*	feet btoc*	feet btoc	feet	feet amsl
MW-5	03/13/08		53.94	58.77	4.83	3,669.16
MW-5	03/19/08		53.78	59.98	6.20	3,669.18
MW-5	03/27/08		54.44	57.16	2.72	3,668.87
MW-5	04/01/08		54.11	59.06	4.95	3,668.98
MW-5	04/11/08		54.37	58.07	3.70	3,668.84
MW-5	04/16/08		54.85	55.80	0.95	3,668.64
MW-5	04/30/08		54.37	58.16	3.79	3,668.83
MW-5	05/12/08		54.47	57.89	3.42	3,668.77
MW-5	06/03/08		53.92	61.08	7.16	3,668.94
MW-5	06/10/08		55.92	57.66	1.74	3,667.49
MW-5	06/18/08		54.64	58.12	3.48	3,668.59
MW-5	07/01/08		54.80	59.00	4.20	3,668.36
MW-5	07/02/08		54.35	58.15	3.80	3,668.85
MW-5	07/07/08		54.22	60.41	6.19	3,668.74
MW-5	07/24/08		55.40	57.16	1.76	3,668.00
MW-5	08/06/08		54.93	59.62	4.69	3,668.18
MW-5	08/28/08		54.55	57.54	2.99	3,668.73
MW-5	09/26/08		54.18	60.03	5.85	3,668.82
MW-5	10/27/08		54.41	59.34	4.93	3,668.68
MW-5	12/02/08		54.26	60.42	6.16	3,668.70
MW-5	01/15/09		54.35	60.91	6.56	3,668.57
MW-5	02/05/09		54.38	60.96	6.58	3,668.54
MW-5	04/06/09		54.63	61.41	6.78	3,668.27
MW-5	05/19/09	3,724.08	54.44	61.60	7.16	3,668.92
MW-5	07/13/09		55.55	61.58	6.03	3,667.93
MW-5	08/27/09		54.97	60.78	5.81	3,668.15
MW-5	12/14/09		56.24	57.64	1.40	3,667.61
MW-6	12/08/04	Well installed 8 December 2004				
MW-6	12/15/04	3,721.68	49.49	56.62	7.13	3,671.48

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P. - SRS# 2000-10757
KIMBROUGH SWEET 8"
NMOCD REF. # AP-0029
LEA COUNTY, NEW MEXICO
TALONLPE PROJECT NUMBER 700376.050.01

Monitor Well#	Date Gauged	Relative Top of Casing Elevation	Depth to PSH	Depth to Water	PSH Thickness	Corrected Relative Groundwater Elevation
		feet amsl*	feet btoc*	feet btoc	feet	feet amsl
MW-6	03/22/05		49.55	56.86	7.31	3,671.40
MW-6	03/31/05		49.55	56.86	7.31	3,671.40
MW-6	04/22/05		50.82	51.66	0.84	3,670.78
MW-6	05/25/05		50.61	53.11	2.50	3,670.82
MW-6	06/28/05		49.83	57.69	7.86	3,671.06
MW-6	07/25/05		50.30	55.50	5.20	3,670.86
MW-6	11/30/05		50.33	58.35	8.02	3,670.55
MW-6	02/06/06		50.65	58.80	8.15	3,670.22
MW-6	03/01/06		50.63	58.64	8.01	3,670.25
MW-6	05/02/06		50.82	58.10	7.28	3,670.13
MW-6	05/25/06		50.21	58.12	7.91	3,670.68
MW-6	08/10/06		50.47	59.55	9.08	3,670.30
MW-6	11/29/06		50.63	58.33	7.70	3,670.28
MW-6	12/06/06		50.60	58.33	7.73	3,670.31
MW-6	01/10/07		50.71	57.36	6.65	3,670.31
MW-6	02/08/07		50.71	58.38	7.67	3,670.20
MW-6	02/19/07		58.36	58.87	0.51	3,663.27
MW-6	03/01/07		50.89	58.45	7.56	3,670.03
MW-6	03/06/07		50.86	58.58	7.72	3,670.05
MW-6	03/14/07		52.80	58.51	5.71	3,668.31
MW-6	04/02/07		50.86	58.54	7.68	3,670.05
MW-6	04/09/07		50.87	58.56	7.69	3,670.04
MW-6	04/16/07		50.92	58.54	7.62	3,670.00
MW-6	05/01/07		50.91	58.57	7.66	3,670.00
MW-6	05/21/07		50.96	58.62	7.66	3,669.95
MW-6	06/26/07		52.20	53.25	1.05	3,669.38
MW-6	06/28/07		52.10	53.10	1.00	3,669.48
MW-6	07/18/07		51.89	54.61	2.72	3,669.52
MW-6	08/21/07		52.32	52.56	0.24	3,669.34
MW-6	08/30/07		51.23	57.72	6.49	3,669.80

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P. - SRS# 2000-10757
KIMBROUGH SWEET 8"
NMOCD REF. # AP-0029
LEA COUNTY, NEW MEXICO
TALONLPE PROJECT NUMBER 700376.050.01

Monitor Well#	Date Gauged	Relative Top of Casing Elevation	Depth to PSH	Depth to Water	PSH Thickness	Corrected Relative Groundwater Elevation
		feet amsl*	feet btoc*	feet btoc	feet	feet amsl
MW-6	09/13/07		51.88	54.85	2.97	3,669.50
MW-6	10/09/07		52.45	52.65	0.20	3,669.21
MW-6	10/17/07		51.61	58.61	7.00	3,669.37
MW-6	10/24/07		51.24	58.30	7.06	3,669.73
MW-6	11/02/07		52.04	54.86	2.82	3,669.36
MW-6	11/12/07		52.10	54.91	2.81	3,669.30
MW-6	12/03/07		51.78	56.60	4.82	3,669.42
MW-6	01/03/08		51.94	56.64	4.70	3,669.27
MW-6	01/07/08		52.19	56.62	4.43	3,669.05
MW-6	01/22/08		51.89	57.06	5.17	3,669.27
MW-6	01/29/08		51.92	56.70	4.78	3,669.28
MW-6	02/06/08		51.97	57.79	5.82	3,669.13
MW-6	02/12/08		51.99	57.81	5.82	3,669.11
MW-6	03/13/08		52.09	56.82	4.73	3,669.12
MW-6	03/19/08		51.99	57.37	5.38	3,669.15
MW-6	03/27/08		52.40	55.83	3.43	3,668.94
MW-6	04/01/08		52.39	55.93	3.54	3,668.94
MW-6	04/11/08		52.58	55.63	3.05	3,668.80
MW-6	04/16/08		53.04	53.26	0.22	3,668.62
MW-6	04/30/08		52.79	54.57	1.78	3,668.71
MW-6	05/14/08		52.51	56.20	3.69	3,668.80
MW-6	05/23/08		53.49	53.89	0.40	3,668.15
MW-6	06/03/08		52.52	57.19	4.67	3,668.69
MW-6	06/10/08		52.51	57.59	5.08	3,668.66
MW-6	06/18/08		52.47	57.93	5.46	3,668.66
MW-6	07/01/08		53.01	56.07	3.06	3,668.36
MW-6	07/02/08		52.90	54.18	1.28	3,668.65
MW-6	07/24/08		53.43	55.22	1.79	3,668.07
MW-6	08/06/08		53.20	56.80	3.60	3,668.12
MW-6	08/28/08		52.50	56.46	3.96	3,668.78

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P. - SRS# 2000-10757
KIMBROUGH SWEET 8"
NMOCD REF. # AP-0029
LEA COUNTY, NEW MEXICO
TALONLPE PROJECT NUMBER 700376.050.01

Monitor Well#	Date Gauged	Relative Top of Casing Elevation	Depth to PSH	Depth to Water	PSH Thickness	Corrected Relative Groundwater Elevation
		feet amsl*	feet btoc*	feet btoc	feet	feet amsl
MW-6	09/26/08		52.37	57.67	5.30	3,668.78
MW-6	10/27/08		52.52	57.24	4.72	3,668.69
MW-6	12/02/08		52.45	58.17	5.72	3,668.66
MW-6	01/15/09		52.51	58.50	5.99	3,668.57
MW-6	02/05/09		52.58	58.50	5.92	3,668.51
MW-6	04/06/09		52.73	58.96	6.23	3,668.33
MW-6	05/19/09	3,722.16	52.63	59.50	6.87	3,668.84
MW-6	07/13/09		52.89	59.34	6.45	3,668.63
MW-6	08/27/09		53.09	59.10	6.01	3,668.08
MW-6	12/14/09		54.12	56.84	2.72	3,667.59
MW-7	07/28/04	Well Installed 28 July 2004				
MW-7	08/16/04	3,722.74	52.14	52.70	0.56	3,670.54
MW-7	10/21/04		51.00	55.23	4.23	3,671.32
MW-7	03/22/05		50.78	57.48	6.70	3,671.29
MW-7	03/31/05		50.78	57.48	6.70	3,671.29
MW-7	04/22/05		51.92	57.31	5.39	3,670.28
MW-7	05/25/05		51.78	53.44	1.66	3,670.79
MW-7	06/28/05		51.53	55.39	3.86	3,670.82
MW-7	07/25/05		52.07	53.35	1.28	3,670.54
MW-7	11/30/05		51.50	58.48	6.98	3,670.54
MW-7	02/06/06		51.75	58.71	6.96	3,670.29
MW-7	03/01/06		52.10	57.31	5.21	3,670.12
MW-7	05/02/06		52.35	56.91	4.56	3,669.93
MW-7	05/25/06		52.79	58.60	5.81	3,669.37
MW-7	08/10/06		51.56	58.61	7.05	3,670.48
MW-7	11/29/06		51.76	58.86	7.10	3,670.27
MW-7	12/06/06		51.78	58.91	7.13	3,670.25
MW-7	01/10/07		51.86	56.96	5.10	3,670.37
MW-7	02/08/07		51.92	58.85	6.93	3,670.13

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P. - SRS# 2000-10757
KIMBROUGH SWEET 8"
NMOCD REF. # AP-0029
LEA COUNTY, NEW MEXICO
TALONLPE PROJECT NUMBER 700376.050.01

Monitor Well#	Date Gauged	Relative Top of Casing Elevation	Depth to PSH	Depth to Water	PSH Thickness	Corrected Relative Groundwater Elevation
		feet amsl*	feet btoc*	feet btoc	feet	feet amsl
MW-7	02/19/07		52.35	56.42	4.07	3,669.98
MW-7	03/01/07		52.21	58.13	5.92	3,669.94
MW-7	03/06/07		52.14	58.56	6.42	3,669.96
MW-7	03/14/07		52.07	58.86	6.79	3,669.99
MW-7	04/02/07		52.03	59.06	7.03	3,670.01
MW-7	04/09/07		52.09	59.11	7.02	3,669.95
MW-7	04/16/07		52.08	59.16	7.08	3,669.95
MW-7	05/01/07		52.16	58.82	6.66	3,669.91
MW-7	05/21/07		52.14	59.11	6.97	3,669.90
MW-7	06/26/07		52.20	58.98	6.78	3,669.86
MW-7	06/28/07		52.20	58.73	6.53	3,669.89
MW-7	07/18/07		52.24	58.77	6.53	3,669.85
MW-7	08/21/07		52.30	58.79	6.49	3,669.79
MW-7	08/30/07		52.30	58.83	6.53	3,669.79
MW-7	09/13/07		52.35	58.89	6.54	3,669.74
MW-7	10/09/07		52.37	58.96	6.59	3,669.71
MW-7	10/17/07		52.40	59.02	6.62	3,669.68
MW-7	10/24/07		52.39	58.98	6.59	3,669.69
MW-7	11/02/07		52.47	59.05	6.58	3,669.61
MW-7	11/12/07		52.49	57.99	5.50	3,669.70
MW-7	12/03/07		52.57	59.12	6.55	3,669.52
MW-7	01/03/08		52.39	59.12	6.73	3,669.68
MW-7	01/07/08		52.57	59.08	6.51	3,669.52
MW-7	01/22/08		52.71	59.09	6.38	3,669.39
MW-7	01/29/08		52.74	59.21	6.47	3,669.35
MW-7	02/06/08		52.77	59.13	6.36	3,669.33
MW-7	02/12/08		52.75	59.10	6.35	3,669.36
MW-7	03/13/08		52.86	59.79	6.93	3,669.19
MW-7	03/19/08		52.88	59.26	6.38	3,669.22
MW-7	03/27/08		52.96	59.29	6.33	3,669.15

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P. - SRS# 2000-10757
KIMBROUGH SWEET 8"
NMOCD REF. # AP-0029
LEA COUNTY, NEW MEXICO
TALONLPE PROJECT NUMBER 700376.050.01

Monitor Well#	Date Gauged	Relative Top of Casing Elevation	Depth to PSH	Depth to Water	PSH Thickness	Corrected Relative Groundwater Elevation
		feet amsl*	feet btoc*	feet btoc	feet	feet amsl
MW-7	04/01/08		52.93	59.53	6.40	3,668.97
MW-7	04/11/08		53.01	59.39	6.38	3,669.09
MW-7	04/16/08		53.02	59.41	6.39	3,669.08
MW-7	04/30/08		53.05	59.46	6.41	3,669.05
MW-7	05/14/08		53.12	59.43	6.31	3,668.99
MW-7	05/23/08		53.31	59.61	6.30	3,668.80
MW-7	06/03/08		53.29	59.53	6.24	3,668.83
MW-7	06/10/08		53.33	59.58	6.25	3,668.79
MW-7	06/18/08		54.16	55.95	1.79	3,668.40
MW-7	07/01/08		54.28	55.76	1.48	3,668.31
MW-7	07/02/08		53.90	55.50	1.60	3,668.68
MW-7	07/24/08		54.59	55.36	0.77	3,668.07
MW-7	08/06/08		54.71	55.54	0.83	3,667.95
MW-7	08/28/08		54.01	55.30	1.29	3,668.60
MW-7	09/26/08		53.51	58.01	4.50	3,668.78
MW-7	10/27/08		54.05	56.02	1.97	3,668.49
MW-7	12/02/08		53.96	57.00	3.04	3,668.48
MW-7	01/15/09		53.72	58.71	4.99	3,668.52
MW-7	02/05/09		53.82	58.51	4.69	3,668.45
MW-7	04/06/09		53.82	59.41	5.59	3,668.36
MW-7	05/19/09	3,723.23	54.02	59.04	5.02	3,668.71
MW-7	07/13/09		54.20	59.21	5.01	3,668.53
MW-7	08/27/09		54.70	57.46	2.76	3,668.07
MW-7	12/14/09		55.61	55.85	0.24	3,667.58
MW-8	07/30/04	Well Installed 30 July 2004				
MW-8	08/16/04	3,722.85	53.96	54.41	0.45	3,668.85
MW-8	10/21/04		51.15	54.38	3.23	3,671.38
MW-8	03/22/05		50.78	57.15	6.37	3,671.43
MW-8	03/31/05		50.78	57.15	6.37	3,671.43

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P. - SRS# 2000-10757
KIMBROUGH SWEET 8"
NMOCD REF. # AP-0029
LEA COUNTY, NEW MEXICO
TALONLPE PROJECT NUMBER 700376.050.01

Monitor Well#	Date Gauged	Relative Top of Casing Elevation	Depth to PSH	Depth to Water	PSH Thickness	Corrected Relative Groundwater Elevation
		feet amsl*	feet btoc*	feet btoc	feet	feet amsl
MW-8	04/22/05		51.90	57.08	5.18	3,670.43
MW-8	05/25/05		51.99	52.15	0.16	3,670.84
MW-8	06/28/05		50.04	57.31	7.27	3,672.08
MW-8	07/25/05		51.82	54.14	2.32	3,670.80
MW-8	11/30/05		51.47	58.47	7.00	3,670.68
MW-8	02/06/06		51.75	57.80	6.05	3,670.50
MW-8	03/01/06		51.91	57.90	5.99	3,670.34
MW-8	05/02/06		52.26	56.95	4.69	3,670.12
MW-8	05/25/06		51.47	57.61	6.14	3,670.77
MW-8	08/10/06		52.28	54.69	2.41	3,670.33
MW-8	11/29/06		51.98	57.22	5.24	3,670.35
MW-8	12/06/06		52.48	55.71	3.23	3,670.05
MW-8	01/10/07		51.84	57.01	5.17	3,670.49
MW-8	02/08/07		52.10	58.61	6.51	3,670.10
MW-8	02/19/07		52.48	56.67	4.19	3,669.95
MW-8	03/01/07		52.25	57.13	4.88	3,670.11
MW-8	03/06/07		52.17	57.92	5.75	3,670.11
MW-8	03/14/07		52.06	58.21	6.15	3,670.18
MW-8	04/02/07		52.07	58.42	6.35	3,670.15
MW-8	04/09/07		52.08	58.49	6.41	3,670.13
MW-8	04/16/07		52.11	58.54	6.43	3,670.10
MW-8	05/01/07		52.17	58.40	6.23	3,670.06
MW-8	05/21/07		52.19	58.51	6.32	3,670.03
MW-8	06/26/07		53.10	54.80	1.70	3,669.58
MW-8	06/28/07		53.09	54.52	1.43	3,669.62
MW-8	07/18/07		52.52	57.55	5.03	3,669.83
MW-8	08/21/07		52.96	55.52	2.56	3,669.63
MW-8	08/30/07		53.20	55.17	1.97	3,669.45
MW-8	09/13/07		52.90	55.67	2.77	3,669.67
MW-8	10/09/07		52.41	57.00	4.59	3,669.98

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P. - SRS# 2000-10757
KIMBROUGH SWEET 8"
NMOCD REF. # AP-0029
LEA COUNTY, NEW MEXICO
TALONLPE PROJECT NUMBER 700376.050.01

Monitor Well#	Date Gauged	Relative Top of Casing Elevation	Depth to PSH	Depth to Water	PSH Thickness	Corrected Relative Groundwater Elevation
		feet amsl*	feet btoc*	feet btoc	feet	feet amsl
MW-8	10/17/07		52.80	56.87	4.07	3,669.64
MW-8	10/24/07		52.78	57.10	4.32	3,669.64
MW-8	11/02/07		53.52	53.71	0.19	3,669.31
MW-8	12/03/07		52.61	58.39	5.78	3,669.66
MW-8	01/03/08		53.70	53.89	0.19	3,669.13
MW-8	01/07/08		53.61	53.91	0.30	3,669.21
MW-8	01/22/08		53.70	54.19	0.49	3,669.10
MW-8	01/29/08		53.21	56.43	3.22	3,669.32
MW-8	02/06/08		53.06	56.79	3.73	3,669.42
MW-8	02/12/08		53.03	56.82	3.79	3,669.44
MW-8	03/13/08		52.69	54.80	2.11	3,669.95
MW-8	03/19/08		53.54	55.73	2.19	3,669.09
MW-8	03/27/08		53.92	54.45	0.53	3,668.88
MW-8	04/01/08		53.57	56.94	3.37	3,668.94
MW-8	04/11/08		54.23	55.48	1.25	3,668.50
MW-8	04/16/08		54.01	54.20	0.19	3,668.82
MW-8	04/30/08		54.04	54.28	0.24	3,668.79
MW-8	05/14/08		53.52	57.24	3.72	3,668.96
MW-8	05/23/08		54.37	54.59	0.22	3,668.46
MW-8	06/03/08		54.28	54.49	0.21	3,668.55
MW-8	06/10/08		54.37	54.54	0.17	3,668.46
MW-8	06/18/08		54.31	54.68	0.37	3,668.50
MW-8	07/01/08		54.53	54.68	0.15	3,668.31
MW-8	07/02/08		53.98	54.56	0.58	3,668.81
MW-8	07/24/08		54.50	55.85	1.35	3,668.22
MW-8	08/06/08		54.71	55.05	0.34	3,668.11
MW-8	08/28/08		54.13	54.39	0.26	3,668.69
MW-8	09/26/08		53.77	58.45	4.68	3,668.61
MW-8	10/27/08		54.14	55.22	1.08	3,668.60
MW-8	12/02/08		53.61	58.24	4.63	3,668.78

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P. - SRS# 2000-10757
KIMBROUGH SWEET 8"
NMOCD REF. # AP-0029
LEA COUNTY, NEW MEXICO
TALONLPE PROJECT NUMBER 700376.050.01

Monitor Well#	Date Gauged	Relative Top of Casing Elevation	Depth to PSH	Depth to Water	PSH Thickness	Corrected Relative Groundwater Elevation
		feet amsl*	feet btoc*	feet btoc	feet	feet amsl
MW-8	01/15/09		53.63	58.75	5.12	3,668.71
MW-8	02/05/09		53.69	58.87	5.18	3,668.64
MW-8	04/06/09		53.91	59.18	5.27	3,668.41
MW-8	05/19/09	3,723.41	53.82	59.54	5.72	3,669.02
MW-8	07/13/09		54.29	58.90	4.61	3,668.66
MW-8	08/27/09		54.75	56.79	2.04	3,668.32
MW-8	12/14/09		55.52	55.74	0.22	3,667.85
MW-9	07/30/04	Well Installed 30 July 2004				
MW-9	08/16/04	3,722.80	53.92	54.65	0.73	3,668.81
MW-9	10/21/04		50.95	53.99	3.04	3,671.55
MW-9	03/22/05		51.04	54.53	3.49	3,671.41
MW-9	03/31/05		51.04	54.53	3.49	3,671.41
MW-9	04/22/05		51.71	51.77	0.06	3,671.08
MW-9	05/25/05		51.70	52.22	0.52	3,671.05
MW-9	06/28/05		50.95	55.84	4.89	3,671.36
MW-9	07/25/05		51.74	52.89	1.15	3,670.95
MW-9	11/30/05		51.24	57.92	6.68	3,670.89
MW-9	02/06/06		51.47	58.25	6.78	3,670.65
MW-9	03/01/06		51.99	56.32	4.33	3,670.38
MW-9	05/02/06		52.12	56.23	4.11	3,670.27
MW-9	05/25/06		51.42	55.99	4.57	3,670.92
MW-9	08/10/06		51.41	58.20	6.79	3,670.71
MW-9	11/29/06		51.56	58.24	6.68	3,670.57
MW-9	12/06/06		51.61	58.30	6.69	3,670.52
MW-9	01/10/07		51.63	57.17	5.54	3,670.62
MW-9	02/08/07		51.72	58.31	6.59	3,670.42
MW-9	02/19/07		52.31	56.42	4.11	3,670.08
MW-9	03/01/07		51.95	57.59	5.64	3,670.29
MW-9	03/06/07		51.89	58.01	6.12	3,670.30

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P. - SRS# 2000-10757
KIMBROUGH SWEET 8"
NMOCD REF. # AP-0029
LEA COUNTY, NEW MEXICO
TALONLPE PROJECT NUMBER 700376.050.01

Monitor Well#	Date Gauged	Relative Top of Casing Elevation	Depth to PSH	Depth to Water	PSH Thickness	Corrected Relative Groundwater Elevation
		feet amsl*	feet btoc*	feet btoc	feet	feet amsl
MW-9	03/14/07		51.82	58.24	6.42	3,670.34
MW-9	04/02/07		51.81	58.33	6.52	3,670.34
MW-9	04/09/07		51.88	58.40	6.52	3,670.27
MW-9	04/16/07		51.88	58.45	6.57	3,670.26
MW-9	05/01/07		51.93	58.09	6.16	3,670.25
MW-9	05/21/07		51.98	58.45	6.47	3,670.17
MW-9	06/26/07		52.04	58.52	6.48	3,670.11
MW-9	06/28/07		52.04	58.50	6.46	3,670.11
MW-9	07/18/07		51.93	58.41	6.48	3,670.22
MW-9	08/21/07		52.03	58.50	6.47	3,670.12
MW-9	08/30/07		53.15	53.45	0.30	3,669.62
MW-9	09/13/07		52.24	57.67	5.43	3,670.02
MW-9	10/09/07		52.15	58.48	6.33	3,670.02
MW-9	10/17/07		53.31	58.52	5.21	3,668.97
MW-9	11/02/07		52.38	57.82	5.44	3,669.88
MW-9	11/12/07		53.39	53.55	0.16	3,669.39
MW-9	12/03/07		52.42	58.14	5.72	3,669.81
MW-9	01/03/08		52.38	58.59	6.21	3,669.80
MW-9	01/07/08		52.47	58.56	6.09	3,669.72
MW-9	01/22/08		52.86	56.67	3.81	3,669.56
MW-9	01/29/08		52.71	57.84	5.13	3,669.58
MW-9	02/06/08		52.54	58.38	5.84	3,669.68
MW-9	02/12/08		52.56	58.41	5.85	3,669.66
MW-9	03/13/08		52.66	58.83	6.17	3,669.52
MW-9	03/19/08		52.57	58.78	6.21	3,669.61
MW-9	03/27/08		52.64	58.87	6.23	3,669.54
MW-9	04/01/08		52.66	58.83	6.17	3,669.52
MW-9	04/11/08		52.74	58.39	5.65	3,669.50
MW-9	04/16/08		53.73	58.96	5.23	3,668.55
MW-9	05/14/08		52.82	59.04	6.22	3,669.36

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P. - SRS# 2000-10757
KIMBROUGH SWEET 8"
NMOCD REF. # AP-0029
LEA COUNTY, NEW MEXICO
TALONLPE PROJECT NUMBER 700376.050.01

Monitor Well#	Date Gauged	Relative Top of Casing Elevation	Depth to PSH	Depth to Water	PSH Thickness	Corrected Relative Groundwater Elevation
		feet amsl*	feet btoc*	feet btoc	feet	feet amsl
MW-9	06/03/08		54.09	54.99	0.90	3,668.62
MW-9	06/10/08		53.50	59.81	6.31	3,668.67
MW-9	06/18/08		53.29	58.17	4.88	3,669.02
MW-9	07/01/08		53.20	59.06	5.86	3,669.01
MW-9	07/02/08		53.75	58.94	5.19	3,668.53
MW-9	07/07/08		53.26	59.25	5.99	3,668.94
MW-9	07/24/08		53.36	59.48	6.12	3,668.83
MW-9	08/06/08		54.43	55.08	0.65	3,668.31
MW-9	08/28/08		53.43	56.83	3.40	3,669.03
MW-9	09/26/08		54.01	54.76	0.75	3,668.72
MW-9	10/27/08		54.03	55.01	0.98	3,668.67
MW-9	12/02/08		53.89	55.93	2.04	3,668.71
MW-9	01/15/09		53.96	56.27	2.31	3,668.61
MW-9	02/05/09		54.03	56.42	2.39	3,668.53
MW-9	04/06/09		53.87	58.72	4.85	3,668.45
MW-9	05/19/09	3,723.25	54.24	56.28	2.04	3,668.81
MW-9	07/13/09		54.35	56.80	2.45	3,668.66
MW-9	08/27/09		54.74	55.65	0.91	3,668.36
MW-9	12/14/09		55.32	55.50	0.18	3,667.90
MW-10	12/07/04	Well installed 7 December 2004				
MW-10	12/15/04	3,723.62		52.17		3,671.45
MW-10	03/22/05			52.28		3,671.34
MW-10	03/31/05			52.31		3,671.31
MW-10	04/22/05			52.36		3,671.26
MW-10	05/12/05			52.41		3,671.21
MW-10	05/25/05			52.42		3,671.20
MW-10	06/28/05			52.52		3,671.10
MW-10	07/25/05			52.61		3,671.01
MW-10	08/22/05			52.67		3,670.95

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P. - SRS# 2000-10757
KIMBROUGH SWEET 8"
NMOCD REF. # AP-0029
LEA COUNTY, NEW MEXICO
TALONLPE PROJECT NUMBER 700376.050.01

Monitor Well#	Date Gauged	Relative Top of Casing Elevation	Depth to PSH	Depth to Water	PSH Thickness	Corrected Relative Groundwater Elevation
		feet amsl*	feet btoc*	feet btoc	feet	feet amsl
MW-10	11/14/05			52.76		3,670.86
MW-10	11/30/05			53.05		3,670.57
MW-10	02/06/06			53.29		3,670.33
MW-10	03/01/06			53.85		3,669.77
MW-10	05/02/06			53.47		3,670.15
MW-10	05/25/06			53.08		3,670.54
MW-10	08/10/06			53.07		3,670.55
MW-10	11/29/06			53.29		3,670.33
MW-10	12/06/06			53.32		3,670.30
MW-10	01/10/07			53.38		3,670.24
MW-10	02/08/07			53.24		3,670.38
MW-10	03/01/07			53.73		3,669.89
MW-10	03/06/07			53.51		3,670.11
MW-10	03/14/07			53.52		3,670.10
MW-10	04/02/07			53.35		3,670.27
MW-10	04/09/07			53.57		3,670.05
MW-10	04/16/07			53.58		3,670.04
MW-10	05/01/07			53.63		3,669.99
MW-10	05/21/07			53.65		3,669.97
MW-10	06/13/07			53.57		3,670.05
MW-10	06/26/07			53.60		3,670.02
MW-10	07/18/07			53.69		3,669.93
MW-10	09/13/07			53.79		3,669.83
MW-10	10/24/07			53.86		3,669.76
MW-10	12/03/07			53.98		3,669.64
MW-10	01/29/08			54.06		3,669.56
MW-10	03/13/08			54.18		3,669.44
MW-10	05/14/08			54.28		3,669.34
MW-10	06/03/08			54.31		3,669.31
MW-10	06/18/08			54.43		3,669.19

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P. - SRS# 2000-10757
KIMBROUGH SWEET 8"
NMOCD REF. # AP-0029
LEA COUNTY, NEW MEXICO
TALONLPE PROJECT NUMBER 700376.050.01

Monitor Well#	Date Gauged	Relative Top of Casing Elevation	Depth to PSH	Depth to Water	PSH Thickness	Corrected Relative Groundwater Elevation
		feet amsl*	feet btoc*	feet btoc	feet	feet amsl
MW-10	07/01/08			54.38		3,669.24
MW-10	07/02/08			54.47		3,669.15
MW-10	08/28/08			54.54		3,669.08
MW-10	09/26/08			54.63		3,668.99
MW-10	10/27/08			54.70		3,668.92
MW-10	12/02/08			54.77		3,668.85
MW-10	01/15/09			54.88		3,668.74
MW-10	02/05/09			54.92		3,668.70
MW-10	04/06/09			55.06		3,668.56
MW-10	05/19/09	3,724.14		55.16		3,668.98
MW-10	08/27/09			55.47		3,668.67
MW-10	12/14/09			55.65		3,668.49
MW-11	12/07/04	Well installed 7 December 2004				
MW-11	12/15/04	3,722.03	50.49	55.54	5.05	3,671.04
MW-11	03/22/05		50.33	56.71	6.38	3,671.06
MW-11	03/31/05		50.33	56.71	6.38	3,671.06
MW-11	04/22/05		50.34	56.95	6.61	3,671.03
MW-11	05/25/05		51.34	53.06	1.72	3,670.52
MW-11	06/28/05		50.67	57.07	6.40	3,670.72
MW-11	07/25/05		51.06	55.54	4.48	3,670.52
MW-11	11/30/05		51.11	57.79	6.68	3,670.25
MW-11	02/03/06		51.35	58.06	6.71	3,670.01
MW-11	03/01/06		51.39	58.16	6.77	3,669.96
MW-11	05/02/06		51.54	58.25	6.71	3,669.82
MW-11	05/25/06		51.12	57.97	6.85	3,670.23
MW-11	08/10/06		51.10	57.97	6.87	3,670.24
MW-11	11/29/06		51.32	58.24	6.92	3,670.02
MW-11	12/06/06		52.33	53.48	1.15	3,669.59
MW-11	01/10/07		51.37	57.98	6.61	3,670.00

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P. - SRS# 2000-10757
KIMBROUGH SWEET 8"
NMOCD REF. # AP-0029
LEA COUNTY, NEW MEXICO
TALONLPE PROJECT NUMBER 700376.050.01

Monitor Well#	Date Gauged	Relative Top of Casing Elevation	Depth to PSH	Depth to Water	PSH Thickness	Corrected Relative Groundwater Elevation
		feet amsl*	feet btoc*	feet btoc	feet	feet amsl
MW-11	02/08/07		51.47	58.49	7.02	3,669.86
MW-11	02/19/07		51.57	58.38	6.81	3,669.78
MW-11	03/01/07		51.61	58.38	6.77	3,669.74
MW-11	03/06/07		51.57	58.39	6.82	3,669.78
MW-11	03/14/07		51.57	58.34	6.77	3,669.78
MW-11	04/02/07		51.62	58.41	6.79	3,669.73
MW-11	04/09/07		52.63	58.38	5.75	3,668.83
MW-11	04/16/07		51.64	58.38	6.74	3,669.72
MW-11	05/01/07		51.68	58.39	6.71	3,669.68
MW-11	05/21/07		51.90	58.62	6.72	3,669.46
MW-11	06/26/07		51.80	58.44	6.64	3,669.57
MW-11	06/28/07		51.80	58.38	6.58	3,669.57
MW-11	07/18/07		51.76	58.31	6.55	3,669.62
MW-11	10/24/07		51.94	58.26	6.32	3,669.46
MW-11	11/02/07		52.00	58.32	6.32	3,669.40
MW-11	11/12/07		52.01	58.30	6.29	3,669.39
MW-11	12/03/07		52.58	56.55	3.97	3,669.05
MW-11	01/03/08		53.19	54.23	1.04	3,668.74
MW-11	01/07/08		52.96	54.22	1.26	3,668.94
MW-11	01/22/08		52.77	56.36	3.59	3,668.90
MW-11	01/29/08		54.02	55.34	1.32	3,667.88
MW-11	02/06/08		52.51	57.88	5.37	3,668.98
MW-11	02/12/08		52.53	57.90	5.37	3,668.96
MW-11	03/13/08		52.93	56.50	3.57	3,668.74
MW-11	03/19/08		52.71	57.58	4.87	3,668.83
MW-11	04/01/08		53.35	54.89	1.54	3,668.53
MW-11	04/11/08		53.16	56.08	2.92	3,668.58
MW-11	04/16/08		53.65	53.83	0.18	3,668.36
MW-11	05/14/08		53.18	56.64	3.46	3,668.50
MW-11	05/23/08		53.85	54.01	0.16	3,668.16

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P. - SRS# 2000-10757
KIMBROUGH SWEET 8"
NMOCD REF. # AP-0029
LEA COUNTY, NEW MEXICO
TALONLPE PROJECT NUMBER 700376.050.01

Monitor Well#	Date Gauged	Relative Top of Casing Elevation	Depth to PSH	Depth to Water	PSH Thickness	Corrected Relative Groundwater Elevation
		feet amsl*	feet btoc*	feet btoc	feet	feet amsl
MW-11	06/03/08		53.87	54.16	0.29	3,668.13
MW-11	06/10/08		53.92	54.11	0.19	3,668.09
MW-11	06/18/08		53.94	54.43	0.49	3,668.04
MW-11	07/01/08		54.06	54.25	0.19	3,667.95
MW-11	07/02/08		53.69	53.92	0.23	3,668.32
MW-11	07/24/08		53.76	56.96	3.20	3,667.95
MW-11	08/06/08		54.37	54.59	0.22	3,667.64
MW-11	08/28/08		53.75	54.13	0.38	3,668.24
MW-11	09/26/08		53.32	56.89	3.57	3,668.35
MW-11	10/27/08		53.17	57.75	4.58	3,668.40
MW-11	12/02/08		53.19	58.12	4.93	3,668.35
MW-11	01/15/09		53.35	58.14	4.79	3,668.20
MW-11	02/05/09		53.36	58.13	4.77	3,668.19
MW-11	04/06/09		53.48	58.14	4.66	3,668.08
MW-11	05/19/09	3,722.55	53.38	58.13	4.75	3,668.70
MW-11	07/13/09		53.78	58.21	4.43	3,668.33
MW-11	08/27/09		53.75	58.21	4.46	3,668.06
MW-11	12/14/09		55.71	57.74	2.03	3,666.51
MW-12			Well installed March 11, 2009			
MW-12	04/06/09			57.01		
MW-12	05/19/09	3,724.11		57.02		3,667.09
MW-12	08/27/09			57.44		3,666.67
MW-12	12/14/09			57.65		3,666.46
MW-13			Well installed March 11, 2009			
MW-13	04/06/09			55.92		
MW-13	05/19/09	3,723.19		56.04		3,667.15
MW-13	08/27/09			56.32		3,666.87
MW-13	12/14/09			56.65		3,666.54

TABLE 1
SUMMARY OF HISTORICAL FLUID LEVEL MEASUREMENTS
PLAINS PIPELINE, L.P. - SRS# 2000-10757
KIMBROUGH SWEET 8"
NMOCD REF. # AP-0029
LEA COUNTY, NEW MEXICO
TALONLPE PROJECT NUMBER 700376.050.01

Monitor Well#	Date Gauged	Relative Top of Casing Elevation	Depth to PSH	Depth to Water	PSH Thickness	Corrected Relative Groundwater Elevation
		feet amsl*	feet btoc*	feet btoc	feet	feet amsl

Corrected Groundwater Elevation = Top of Casing Elevation - (Depth to Water Below Top of Casing - (SG)(PSH Thickness))).
SG = 0.835
amsl - above mean sea level
btoc - below top of casing

TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
PLAINS PIPELINE, L.P. - SRS# 2000-10757
KIMBROUGH SWEET 8"
NMOCD REF. #AP-0029
LEA COUNTY, NEW MEXICO
TALON/LPE PROJECT NUMBER 700376.050.01

All concentrations are in mg/L

Sample Location	Sample Date	Benzene	Toluene	Ethyl-benzene	Xylene
MW-1	02/05/09	<0.00100	<0.00100	<0.00100	<0.00100
	05/19/09	Not sampled in 2nd Quarter			
	08/27/09	Not Enough Water to Sample			
	12/14/10	Not Enough Water to Sample			
MW-2	02/05/09	Not sampled Due to Presence of Phase Separated Hydrocarbons			
	05/19/09	Not sampled Due to Presence of Phase Separated Hydrocarbons			
	08/27/09	Not Enough Water to Sample			
	12/14/10	Not sampled Due to Presence of Phase Separated Hydrocarbons			
MW-3	02/05/09	**16.7**	<0.100	0.196	<0.100
	05/19/09	**20.7**	<0.100	<0.100	<0.100
	08/27/09	**16.0**	<0.100	<0.100	**1.97**
	12/14/10	**19.1**	<0.100	0.156	<0.100
MW-4	02/05/09	<0.00100	<0.00100	<0.00100	<0.00100
	05/19/09	Not sampled in 2nd Quarter			
	08/27/09	<0.00100	<0.00100	<0.00100	<0.00100
	12/14/10	<0.00100	<0.00100	<0.00100	<0.00100
MW-5	02/05/09	Not sampled Due to Presence of Phase Separated Hydrocarbons			
	05/19/09	Not sampled Due to Presence of Phase Separated Hydrocarbons			
	08/27/09	Not Enough Water to Sample			
	12/14/10	Not sampled Due to Presence of Phase Separated Hydrocarbons			
MW-6	02/05/09	Not sampled Due to Presence of Phase Separated Hydrocarbons			
	05/19/09	Not sampled Due to Presence of Phase Separated Hydrocarbons			
	08/27/09	**17.8**	**10.9**	**1.79**	**4.32**
	12/14/10	Not sampled Due to Presence of Phase Separated Hydrocarbons			

TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
PLAINS PIPELINE, L.P. - SRS# 2000-10757
KIMBROUGH SWEET 8"
NMOCD REF. #AP-0029
LEA COUNTY, NEW MEXICO
TALON/LPE PROJECT NUMBER 700376.050.01

All concentrations are in mg/L

Sample Location	Sample Date	Benzene	Toluene	Ethyl-benzene	Xylene
MW-7	02/05/09	Not sampled Due to Presence of Phase Separated Hydrocarbons			
	05/19/09	Not sampled Due to Presence of Phase Separated Hydrocarbons			
	08/27/09	**15.3**	**11.6**	**2.19**	**5.29**
	12/14/10	Not sampled Due to Presence of Phase Separated Hydrocarbons			
MW-8	02/05/09	Not sampled Due to Presence of Phase Separated Hydrocarbons			
	05/19/09	Not sampled Due to Presence of Phase Separated Hydrocarbons			
	08/27/09	**17.2**	**11.3**	**2.17**	**4.98**
	12/14/10	Not sampled Due to Presence of Phase Separated Hydrocarbons			
MW-9	02/05/09	Not sampled Due to Presence of Phase Separated Hydrocarbons			
	05/19/09	Not sampled Due to Presence of Phase Separated Hydrocarbons			
	08/27/09	**17.1**	**9.38**	**1.78**	**4.35**
	12/14/10	Not sampled Due to Presence of Phase Separated Hydrocarbons			
MW-10	02/05/09	<0.00100	<0.00100	<0.00100	<0.00100
	05/19/09	0.00690	<0.00100	<0.00100	<0.00100
	08/27/09	<0.00100	<0.00100	<0.00100	<0.00100
	12/14/10	<0.00100	<0.00100	<0.00100	<0.00100
MW-11	02/05/09	Not sampled Due to Presence of Phase Separated Hydrocarbons			
	05/19/09	Not sampled Due to Presence of Phase Separated Hydrocarbons			
	08/27/09	Not Enough Water to Sample			
	12/14/10	Not sampled Due to Presence of Phase Separated Hydrocarbons			
MW-12		Installed 3/11/09			
	05/19/09	**4.56**	<0.0200	<0.0200	0.271
	8/27/09	**5.28**	<0.0200	<0.0200	0.457
	12/14/10	**5.82**	<0.0200	<0.0200	<0.0200

TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
PLAINS PIPELINE, L.P. - SRS# 2000-10757
KIMBROUGH SWEET 8"
NMOCD REF. #AP-0029
LEA COUNTY, NEW MEXICO
TALON/LPE PROJECT NUMBER 700376.050.01

All concentrations are in mg/L

Sample Location	Sample Date	Benzene	Toluene	Ethyl-benzene	Xylene
MW-13		Installed 3/11/09			
	05/19/09	**0.0198**	<0.00100	<0.00100	<0.00100
	08/27/09	<0.00100	<0.00100	<0.00100	<0.00100
	12/14/10	<0.00100	<0.00100	<0.00100	<0.00100
NMWQCC Remedial Limits		0.010	0.750	0.750	0.620

[1] ***Bolded*** *values are in excess of the NMWQCC Remediation Thresholds*

TABLE 3
SUMMARY OF GROUNDWATER POLY-AROMATIC HYDROCARBON (PAH) ANALYTICAL RESULTS
PLAINS PIPELINE, L.P.
KIMBROUGH SWEET 8"
NMOCD REF. # AP-0029
LEA COUNTY, NEW MEXICO - SRS# 2000-10757
Talon/LPE Project Number 700376.050.01

All concentrations are in mg/L

Sample Location	Sample Date	Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]-anthracene	Benzo[a]-pyrene	Benzo[b]-fluoranthene	Benzo[g,h,i]-perylene	Benzo[k]-fluoranthene	Chrysene	Dibenz[a,h]-anthracene	Dibenzofuran	Fluoranthene	Fluorene	Indeno[1,2,3-cd]-pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene
MW-3	08/27/09	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	<0.000183	0.00153	<0.000183	0.00172	<0.000183	0.0308	0.00505	**0.0440**	0.00135	<0.000183
MW-4	08/27/09	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	<0.000184	0.000315	0.000322	0.000282	<0.000184	<0.000184
MW-10	08/27/09	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187	<0.000187
NMWQCC Remedial Limits						0.007												0.030		

[1] ***Bolded*** *values are in excess of the NMWQCC Remediation Thresholds*

TABLE 4
SUMMARY GROUNDWATER ANALYTICAL RESULTS
(Monitor Wells Impacted with PSH)
PLAINS PIPELINE, L.P.
KIMBROUGH SWEET 8"
NMOCD REF. # AP-0029
LEA COUNTY, NEW MEXICO - SRS# 2000-10757
Talon/LPE Project Number 700376.050.01

All concentrations are in mg/L

Sample Location	Sample Date	Benzene	Toluene	Ethylbenzene	Xylene	TPH DRO	TPH GRO	Total TPH	Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]-anthracene	Benzo[a]-pyrene	Benzo[b]-fluoranthene	Benzo[g,h,i]-perylene	Benzo[k]-fluoranthene	Chrysene	Dibenzo[a,h]-anthracene	Dibenzofuran	Fluoranthene	Fluorene	Indeno[1,2,3-cd]-pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene
MW-6	08/27/09	**17.8**	**10.90**	**1.79**	**4.32**	1200.0	101.0	1301.0	<0.00184	<0.00184	<0.00184	<0.00184	<0.00184	<0.00184	<0.00184	<0.000184	0.211	<0.00184	0.900	<0.00184	1.49	<0.00184	18.3	21.5	**9.02**	1.75	<0.00184
MW-7	08/27/09	**15.3**	**11.6**	**2.19**	**5.29**	920	85.9	1005.9	<0.00939	<0.00939	<0.00939	<0.00939	<0.00939	<0.00939	<0.00939	<0.00939	0.0408	<0.00939	0.193	<0.00939	0.313	<0.00939	2.90	3.48	**1.36**	0.337	<0.00939
MW-8	08/27/09	**17.2**	**11.3**	**2.17**	**4.98**	851	87.6	938.6	<0.000930	<0.000930	<0.000930	<0.000930	<0.000930	<0.000930	<0.000930	<0.000930	0.0562	<0.000930	0.331	<0.000930	0.525	<0.000930	5.20	6.05	**2.48**	0.540	<0.000930
MW-9	08/27/09	**17.1**	**9.38**	**1.780**	**4.35**	82.5	75.7	158.2	<0.00188	<0.00188	<0.00188	<0.00188	<0.00188	<0.00188	<0.00188	<0.00188	0.0960	<0.00188	0.414	<0.00188	0.708	<0.00188	8.72	10.6	**4.14**	0.896	<0.00188
NMWQCC Remedial Limits		0.01	0.75	0.75	0.62								0.0007												0.030		

*"**Bolded** values are in excess of the NMWQCC Remediation Thresholds*
BTEX, TPH and PAH analysis per the NMOCD in monitor wells that contain PSH

APPENDIX C

Laboratory Analytical Data Reports and Chains of Custody Documentation

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
200 East Sunset Road, Suite E El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
6015 Harris Parkway, Suite 110 Ft. Worth, Texas 76132 817•201•5260
E-Mail: lab@traceanalysis.com

Certifications

WBENC: 237019 **HUB:** 1752439743100-86536 **DBE:** VN 20657
NCTRCA WFWB38444Y0909

NELAP Certifications

Lubbock: T104704219-08-TX LELAP-02003 Kansas E-10317 **El Paso:** T104704221-08-TX LELAP-02002 **Midland:** T104704392-08-TX

Analytical and Quality Control Report

Shanna Smith
Talon LPE-Amarillo
921 North Bivins
Amarillo, TX, 79107

Report Date: February 10, 2009

Work Order: 9020606

Project Location: Hobbs, NM
Project Name: Kimbrough
Project Number: Plains045SPL
SRS #: 2000-10757

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
186785	MW-1	water	2009-02-05	13:07	2009-02-06
186786	MW-3	water	2009-02-05	13:14	2009-02-06
186787	MW-4	water	2009-02-05	13:19	2009-02-06
186788	MW-10	water	2009-02-05	13:24	2009-02-06

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Standard Flags

B - The sample contains less than ten times the concentration found in the method blank.

Case Narrative

Samples for project Kimbrough were received by TraceAnalysis, Inc. on 2009-02-06 and assigned to work order 9020606. Samples for work order 9020606 were received intact without headspace and at a temperature of 9.1 deg. C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
BTEX	S 8021B	48433	2009-02-06 at 12:00	56694	2009-02-07 at 21:20
BTEX	S 8021B	48464	2009-02-09 at 09:00	56722	2009-02-09 at 11:45

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 9020606 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Analytical Report

Sample: 186785 - MW-1

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	56722	Date Analyzed:	2009-02-09	Analyzed By:	AG
Prep Batch:	48464	Sample Preparation:	2009-02-09	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0985	mg/L	1	0.100	98	77.8 - 121.1
4-Bromofluorobenzene (4-BFB)		0.0929	mg/L	1	0.100	93	40.1 - 136

Sample: 186786 - MW-3

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	56694	Date Analyzed:	2009-02-07	Analyzed By:	AG
Prep Batch:	48433	Sample Preparation:	2009-02-06	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		**16.7**	mg/L	100	0.00100
Toluene		<0.100	mg/L	100	0.00100
Ethylbenzene		**0.196**	mg/L	100	0.00100
Xylene		<0.100	mg/L	100	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		10.6	mg/L	100	10.0	106	77.8 - 121.1
4-Bromofluorobenzene (4-BFB)		6.76	mg/L	100	10.0	68	40.1 - 136

Sample: 186787 - MW-4

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	56694	Date Analyzed:	2009-02-07	Analyzed By:	AG
Prep Batch:	48433	Sample Preparation:	2009-02-06	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.105	mg/L	1	0.100	105	77.8 - 121.1
4-Bromofluorobenzene (4-BFB)		0.0671	mg/L	1	0.100	67	40.1 - 136

Sample: 186788 - MW-10

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	56694	Date Analyzed:	2009-02-07	Analyzed By:	AG
Prep Batch:	48433	Sample Preparation:	2009-02-06	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.101	mg/L	1	0.100	101	77.8 - 121.1
4-Bromofluorobenzene (4-BFB)		0.0667	mg/L	1	0.100	67	40.1 - 136

Method Blank (1) QC Batch: 56694

QC Batch:	56694	Date Analyzed:	2009-02-07	Analyzed By:	AG
Prep Batch:	48433	QC Preparation:	2009-02-06	Prepared By:	AG

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.000300	mg/L	0.001
Toluene		<0.000200	mg/L	0.001
Ethylbenzene		<0.000500	mg/L	0.001
Xylene		<0.000400	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.102	mg/L	1	0.100	102	77.2 - 129.1
4-Bromofluorobenzene (4-BFB)		0.0828	mg/L	1	0.100	83	69.1 - 132.3

Method Blank (1) QC Batch: 56722

QC Batch: 56722 | Date Analyzed: 2009-02-09 | Analyzed By: AG
Prep Batch: 48464 | QC Preparation: 2009-02-09 | Prepared By: AG

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.000300	mg/L	0.001
Toluene		<0.000200	mg/L	0.001
Ethylbenzene		<0.000500	mg/L	0.001
Xylene		<0.000400	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0987	mg/L	1	0.100	99	77.2 - 129.1
4-Bromofluorobenzene (4-BFB)		0.0892	mg/L	1	0.100	89	69.1 - 132.3

Laboratory Control Spike (LCS-1)

QC Batch: 56694 | Date Analyzed: 2009-02-07 | Analyzed By: AG
Prep Batch: 48433 | QC Preparation: 2009-02-06 | Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.0951	mg/L	1	0.100	<0.00110	95	84 - 119.7
Toluene	0.0979	mg/L	1	0.100	<0.00100	98	84.9 - 118.2
Ethylbenzene	0.0962	mg/L	1	0.100	<0.00100	96	84.4 - 118.6
Xylene	0.289	mg/L	1	0.300	<0.00290	96	84.8 - 117.8

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	0.0966	mg/L	1	0.100	<0.00110	97	84 - 119.7	2	20
Toluene	0.0995	mg/L	1	0.100	<0.00100	100	84.9 - 118.2	2	20
Ethylbenzene	0.100	mg/L	1	0.100	<0.00100	100	84.4 - 118.6	4	20
Xylene	0.299	mg/L	1	0.300	<0.00290	100	84.8 - 117.8	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.103	0.103	mg/L	1	0.100	103	103	80 - 128.3
4-Bromofluorobenzene (4-BFB)	0.0849	0.0849	mg/L	1	0.100	85	85	59.7 - 136.3

Laboratory Control Spike (LCS-1)

QC Batch: 56722 | Date Analyzed: 2009-02-09 | Analyzed By: AG
Prep Batch: 48464 | QC Preparation: 2009-02-09 | Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.0989	mg/L	1	0.100	<0.00110	99	84 - 119.7
Toluene	0.0988	mg/L	1	0.100	<0.00100	99	84.9 - 118.2
Ethylbenzene	0.0986	mg/L	1	0.100	<0.00100	99	84.4 - 118.6
Xylene	0.293	mg/L	1	0.300	<0.00290	98	84.8 - 117.8

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	0.102	mg/L	1	0.100	<0.00110	102	84 - 119.7	3	20
Toluene	0.103	mg/L	1	0.100	<0.00100	103	84.9 - 118.2	4	20
Ethylbenzene	0.104	mg/L	1	0.100	<0.00100	104	84.4 - 118.6	5	20
Xylene	0.311	mg/L	1	0.300	<0.00290	104	84.8 - 117.8	6	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0996	0.0999	mg/L	1	0.100	100	100	80 - 128.3
4-Bromofluorobenzene (4-BFB)	0.0939	0.0951	mg/L	1	0.100	94	95	59.7 - 136.3

Matrix Spike (MS-1) Spiked Sample: 186786

QC Batch: 56694 | Date Analyzed: 2009-02-07 | Analyzed By: AG
Prep Batch: 48433 | QC Preparation: 2009-02-06 | Prepared By: AG

Param		MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	[1]	21.5	mg/L	100	10.0	16.7004	48	77.5 - 121.1
Toluene		7.86	mg/L	100	10.0	<0.100	79	78.8 - 119.6
Ethylbenzene		8.15	mg/L	100	10.0	0.1964	80	77.9 - 120.5
Xylene	[2]	22.6	mg/L	100	30.0	<0.290	75	78 - 119.4

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

[1]Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.
[2]Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.

Param		MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	[3]	23.2	mg/L	100	10.0	16.7004	65	77.5 - 121.1	8	20
Toluene		8.52	mg/L	100	10.0	<0.100	85	78.8 - 119.6	8	20
Ethylbenzene		8.88	mg/L	100	10.0	0.1964	87	77.9 - 120.5	9	20
Xylene		25.0	mg/L	100	30.0	<0.290	83	78 - 119.4	10	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate		MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)		9.31	10.2	mg/L	100	10	93	102	86.6 - 118.9
4-Bromofluorobenzene (4-BFB)	[4] [5]	4.61	5.19	mg/L	100	10	46	52	59.4 - 127.3

Standard (CCV-1)

QC Batch: 56694 Date Analyzed: 2009-02-07 Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.0922	92	85 - 115	2009-02-07
Toluene		mg/L	0.100	0.0951	95	85 - 115	2009-02-07
Ethylbenzene		mg/L	0.100	0.0948	95	85 - 115	2009-02-07
Xylene		mg/L	0.300	0.274	91	85 - 115	2009-02-07

Standard (CCV-2)

QC Batch: 56694 Date Analyzed: 2009-02-07 Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.0859	86	85 - 115	2009-02-07
Toluene		mg/L	0.100	0.0891	89	85 - 115	2009-02-07
Ethylbenzene		mg/L	0.100	0.0918	92	85 - 115	2009-02-07
Xylene		mg/L	0.300	0.262	87	85 - 115	2009-02-07

Standard (ICV-1)

QC Batch: 56722 Date Analyzed: 2009-02-09 Analyzed By: AG

[3]MSD analyte out of range. MS/MSD has a RPD within limits. Therfore, MS shows extraction occured properly.
[4]Surrogate out due to peak interference.
[5]Surrogate out due to peak interference.

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.0900	90	85 - 115	2009-02-09
Toluene		mg/L	0.100	0.0912	91	85 - 115	2009-02-09
Ethylbenzene		mg/L	0.100	0.0942	94	85 - 115	2009-02-09
Xylene		mg/L	0.300	0.270	90	85 - 115	2009-02-09

Standard (CCV-1)

QC Batch: 56722 Date Analyzed: 2009-02-09 Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.0940	94	85 - 115	2009-02-09
Toluene		mg/L	0.100	0.0948	95	85 - 115	2009-02-09
Ethylbenzene		mg/L	0.100	0.0952	95	85 - 115	2009-02-09
Xylene		mg/L	0.300	0.279	93	85 - 115	2009-02-09

Page 1 of 1

6701 Aberdeen Ave, Ste. 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296
email: lab@traceanalysis.com

TraceAnalysis, Inc.

155 McCutcheon, Suite H
El Paso, Texas 79932
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # 9020606

Company Name: Talon/LPE
Phone #: (432) 522-2133
Address: (Street, City, Zip) 2901 Rankin Hwy.
Fax #:
Contact Person: Shanna Smith
E-mail: ssmith@talonlpe.com
Invoice to: (If different from above) PLAINS Jason Henry SRS#2000-10757
Project #: PLAINS045SPL
Project Name: Kimbrough
Project Location (including state): Hobbs, New Mexico
Sampler Signature: Carl Vessels

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME	MTBE 8021B / 602 / 8260B / 624	BTEX 8021B / 602 / 8260B / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270C / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C / 625	PCB's 8082 / 608	Pesticides 8081A / 608	BOD, TSS, pH	Moisture Content	Turn Around Time if different from standard	Hold
86785	MW-1	3	VOA	X				X				X		2/5/09	1307	X																	
786	MW-3	3	VOA	X				X				X		2/5/09	1314	X																	
787	MW-4	3	VOA	X				X				X		2/5/09	1319	X																	
788	MW-10	3	VOA	X				X				X		2/5/09	1324	X																	

Relinquished by: Date: Time:
4/6/09 0850

Received by: Date: Time:
Lindsay Wilson 2-6-09 8:50

Relinquished by: Date: Time:

Received by: Date: Time:

Relinquished by: Date: Time:

Received at Laboratory by: Date: Time:

LAB USE ONLY
Intact (Y) / N
Headspace Y (N)
Temp. 0.1 °C
Log-in-Review

REMARKS:
All tests Midland

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Carrier # Carry-in

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

ORIGINAL COPY

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
200 East Sunset Road, Suite E El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
6015 Harris Parkway, Suite 110 Ft. Worth, Texas 76132 817•201•5260
E-Mail: lab@traceanalysis.com

Certifications

WBENC: 237019 **HUB:** 1752439743100-86536 **DBE:** VN 20657
NCTRCA WFWB38444Y0909

NELAP Certifications

Lubbock: T104704219-08-TX LELAP-02003 Kansas E-10317 **El Paso:** T104704221-08-TX LELAP-02002 **Midland:** T104704392-08-TX

Analytical and Quality Control Report

Shanna Smith
Talon LPE-Amarillo
921 North Bivins
Amarillo, TX, 79107

Report Date: May 22, 2009

Work Order: 9052002

Project Location: Hobbs, NM
Project Name: Kimbrough Sweet 8 inch
Project Number: PLAINS045SPL
SRS#: 2000-10757

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
196417	MW-12	water	2009-05-19	13:50	2009-05-20
196418	MW-13	water	2009-05-19	14:05	2009-05-20
196419	MW-3	water	2009-05-19	14:15	2009-05-20
196420	MW-10	water	2009-05-19	14:25	2009-05-20

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Standard Flags

B - The sample contains less than ten times the concentration found in the method blank.

Case Narrative

Samples for project Kimbrough Sweet 8 inch were received by TraceAnalysis, Inc. on 2009-05-20 and assigned to work order 9052002. Samples for work order 9052002 were received intact without headspace and at a temperature of 6.0 deg. C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
BTEX	S 8021B	50932	2009-05-20 at 09:03	59672	2009-05-20 at 09:03
BTEX	S 8021B	50982	2009-05-21 at 09:42	59722	2009-05-21 at 09:42

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 9052002 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Analytical Report

Sample: 196417 - MW-12

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	59722	Date Analyzed:	2009-05-21	Analyzed By:	ME
Prep Batch:	50982	Sample Preparation:	2009-05-21	Prepared By:	ME

Parameter	Flag	Result	RL Result	Units	Dilution	RL
Benzene		**4.56**		mg/L	20	0.00100
Toluene		<0.0200		mg/L	20	0.00100
Ethylbenzene		<0.0200		mg/L	20	0.00100
Xylene		**0.271**		mg/L	20	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.15	mg/L	20	2.00	108	77.8 - 121.1
4-Bromofluorobenzene (4-BFB)		1.80	mg/L	20	2.00	90	40.1 - 136

Sample: 196418 - MW-13

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	59672	Date Analyzed:	2009-05-20	Analyzed By:	ME
Prep Batch:	50932	Sample Preparation:	2009-05-20	Prepared By:	ME

Parameter	Flag	Result	RL Result	Units	Dilution	RL
Benzene		**0.0198**		mg/L	1	0.00100
Toluene		<0.00100		mg/L	1	0.00100
Ethylbenzene		<0.00100		mg/L	1	0.00100
Xylene		<0.00100		mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0982	mg/L	1	0.100	98	77.8 - 121.1
4-Bromofluorobenzene (4-BFB)		0.0860	mg/L	1	0.100	86	40.1 - 136

Sample: 196419 - MW-3

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	59672	Date Analyzed:	2009-05-20	Analyzed By:	ME
Prep Batch:	50932	Sample Preparation:	2009-05-20	Prepared By:	ME

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		**20.7**	mg/L	100	0.00100
Toluene		<0.100	mg/L	100	0.00100
Ethylbenzene		<0.100	mg/L	100	0.00100
Xylene		<0.100	mg/L	100	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		10.0	mg/L	100	10.0	100	77.8 - 121.1
4-Bromofluorobenzene (4-BFB)		8.61	mg/L	100	10.0	86	40.1 - 136

Sample: 196420 - MW-10

Laboratory: Midland
Analysis: BTEX | Analytical Method: S 8021B | Prep Method: S 5030B
QC Batch: 59672 | Date Analyzed: 2009-05-20 | Analyzed By: ME
Prep Batch: 50932 | Sample Preparation: 2009-05-20 | Prepared By: ME

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		**0.00690**	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.103	mg/L	1	0.100	103	77.8 - 121.1
4-Bromofluorobenzene (4-BFB)		0.0833	mg/L	1	0.100	83	40.1 - 136

Method Blank (1) QC Batch: 59672

QC Batch: 59672 | Date Analyzed: 2009-05-20 | Analyzed By: ME
Prep Batch: 50932 | QC Preparation: 2009-05-20 | Prepared By: ME

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.000300	mg/L	0.001
Toluene		<0.000200	mg/L	0.001
Ethylbenzene		<0.000500	mg/L	0.001
Xylene		<0.000400	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0954	mg/L	1	0.100	95	77.2 - 129.1
4-Bromofluorobenzene (4-BFB)		0.0771	mg/L	1	0.100	77	69.1 - 132.3

Method Blank (1) QC Batch: 59722

QC Batch: 59722 Date Analyzed: 2009-05-21 Analyzed By: ME
Prep Batch: 50982 QC Preparation: 2009-05-21 Prepared By: ME

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.000300	mg/L	0.001
Toluene		<0.000200	mg/L	0.001
Ethylbenzene		<0.000500	mg/L	0.001
Xylene		<0.000400	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0947	mg/L	1	0.100	95	77.2 - 129.1
4-Bromofluorobenzene (4-BFB)		0.0747	mg/L	1	0.100	75	69.1 - 132.3

Laboratory Control Spike (LCS-1)

QC Batch: 59672 Date Analyzed: 2009-05-20 Analyzed By: ME
Prep Batch: 50932 QC Preparation: 2009-05-20 Prepared By: ME

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.0924	mg/L	1	0.100	<0.00110	92	84 - 119.7
Toluene	0.0929	mg/L	1	0.100	<0.00100	93	84.9 - 118.2
Ethylbenzene	0.0915	mg/L	1	0.100	<0.00100	92	84.4 - 118.6
Xylene	0.267	mg/L	1	0.300	<0.00290	89	84.8 - 117.8

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	0.0908	mg/L	1	0.100	<0.00110	91	84 - 119.7	2	20
Toluene	0.0893	mg/L	1	0.100	<0.00100	89	84.9 - 118.2	4	20
Ethylbenzene	0.0872	mg/L	1	0.100	<0.00100	87	84.4 - 118.6	5	20
Xylene	0.257	mg/L	1	0.300	<0.00290	86	84.8 - 117.8	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0968	0.0989	mg/L	1	0.100	97	99	80 - 128.3
4-Bromofluorobenzene (4-BFB)	0.0841	0.0797	mg/L	1	0.100	84	80	59.7 - 136.3

Laboratory Control Spike (LCS-1)

QC Batch: 59722 | Date Analyzed: 2009-05-21 | Analyzed By: ME
Prep Batch: 50982 | QC Preparation: 2009-05-21 | Prepared By: ME

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.0894	mg/L	1	0.100	<0.00110	89	84 - 119.7
Toluene	0.0893	mg/L	1	0.100	<0.00100	89	84.9 - 118.2
Ethylbenzene	0.0848	mg/L	1	0.100	<0.00100	85	84.4 - 118.6
Xylene	0.255	mg/L	1	0.300	<0.00290	85	84.8 - 117.8

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	0.0949	mg/L	1	0.100	<0.00110	95	84 - 119.7	6	20
Toluene	0.0935	mg/L	1	0.100	<0.00100	94	84.9 - 118.2	5	20
Ethylbenzene	0.0930	mg/L	1	0.100	<0.00100	93	84.4 - 118.6	9	20
Xylene	0.275	mg/L	1	0.300	<0.00290	92	84.8 - 117.8	8	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.101	0.0989	mg/L	1	0.100	101	99	80 - 128.3
4-Bromofluorobenzene (4-BFB)	0.0769	0.0817	mg/L	1	0.100	77	82	59.7 - 136.3

Matrix Spike (MS-1) Spiked Sample: 196419

QC Batch: 59672 | Date Analyzed: 2009-05-20 | Analyzed By: ME
Prep Batch: 50932 | QC Preparation: 2009-05-20 | Prepared By: ME

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	31.1	mg/L	100	10.0	20.7127	104	77.5 - 121.1
Toluene	9.84	mg/L	100	10.0	<0.100	98	78.8 - 119.6
Ethylbenzene	9.37	mg/L	100	10.0	<0.100	94	77.9 - 120.5
Xylene	27.4	mg/L	100	30.0	<0.290	91	78 - 119.4

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	29.6	mg/L	100	10.0	20.7127	89	77.5 - 121.1	5	20
Toluene	9.39	mg/L	100	10.0	<0.100	94	78.8 - 119.6	5	20
Ethylbenzene	9.45	mg/L	100	10.0	<0.100	94	77.9 - 120.5	1	20
Xylene	27.7	mg/L	100	30.0	<0.290	92	78 - 119.4	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	9.82	10.3	mg/L	100	10	98	103	86.6 - 118.9
4-Bromofluorobenzene (4-BFB)	8.51	8.57	mg/L	100	10	85	86	59.4 - 127.3

Matrix Spike (MS-1) Spiked Sample: 196539

QC Batch: 59722 | Date Analyzed: 2009-05-21 | Analyzed By: ME
Prep Batch: 50982 | QC Preparation: 2009-05-21 | Prepared By: ME

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene [1]	2.41	mg/L	5	0.500	2.0542	71	77.5 - 121.1
Toluene	0.464	mg/L	5	0.500	<0.00500	93	78.8 - 119.6
Ethylbenzene	0.621	mg/L	5	0.500	0.2193	80	77.9 - 120.5
Xylene	1.43	mg/L	5	1.50	0.143	86	78 - 119.4

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	2.46	mg/L	5	0.500	2.0542	81	77.5 - 121.1	2	20
Toluene	0.525	mg/L	5	0.500	<0.00500	105	78.8 - 119.6	12	20
Ethylbenzene	0.655	mg/L	5	0.500	0.2193	87	77.9 - 120.5	5	20
Xylene	1.52	mg/L	5	1.50	0.143	92	78 - 119.4	6	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.521	0.484	mg/L	5	0.5	104	97	86.6 - 118.9
4-Bromofluorobenzene (4-BFB)	0.456	0.461	mg/L	5	0.5	91	92	59.4 - 127.3

Standard (CCV-2)

QC Batch: 59672 | Date Analyzed: 2009-05-20 | Analyzed By: ME

[1] Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.0992	99	80 - 120	2009-05-20
Toluene		mg/L	0.100	0.0963	96	80 - 120	2009-05-20
Ethylbenzene		mg/L	0.100	0.0922	92	80 - 120	2009-05-20
Xylene		mg/L	0.300	0.273	91	80 - 120	2009-05-20

Standard (CCV-3)

QC Batch: 59672 Date Analyzed: 2009-05-20 Analyzed By: ME

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.100	100	80 - 120	2009-05-20
Toluene		mg/L	0.100	0.0945	94	80 - 120	2009-05-20
Ethylbenzene		mg/L	0.100	0.0936	94	80 - 120	2009-05-20
Xylene		mg/L	0.300	0.279	93	80 - 120	2009-05-20

Standard (CCV-1)

QC Batch: 59722 Date Analyzed: 2009-05-21 Analyzed By: ME

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.0949	95	80 - 120	2009-05-21
Toluene		mg/L	0.100	0.0908	91	80 - 120	2009-05-21
Ethylbenzene		mg/L	0.100	0.0900	90	80 - 120	2009-05-21
Xylene		mg/L	0.300	0.270	90	80 - 120	2009-05-21

Standard (CCV-2)

QC Batch: 59722 Date Analyzed: 2009-05-21 Analyzed By: ME

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.0998	100	80 - 120	2009-05-21
Toluene		mg/L	0.100	0.0993	99	80 - 120	2009-05-21
Ethylbenzene		mg/L	0.100	0.0998	100	80 - 120	2009-05-21
Xylene		mg/L	0.300	0.290	97	80 - 120	2009-05-21

LAB Order 9052007 Page 1 of

TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

5002 Basin Street, Suite A1
Midland, Texas 79703
Tel (432) 689-6301
Fax (432) 689-6313

200 East Sunset Rd., Suite E
El Paso, Texas 79922
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

8808 Camp Bowie Blvd. West, Suite 180
Ft. Worth, Texas 76116
Tel (817) 201-5260
Fax (817) 560-4336

Company Name: Talon LPE
Phone #: (432) 522-2133
Address: (Street, City, Zip) 2901 Rankin Hwy
Fax #: (432) 522-2180
Contact Person: Shanna Smith
E-mail:
Invoice to:
(If different from above)
Project #: PLAINS045SAL SRS 2000-10757
Project Name: Kimbrough
Project Location (including state): Hobbs New Mexico
Sampler Signature: Bill D. Smith

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME	MTBE 8021B / 602 / 8260B / 624	BTEX 8021B / 602 / 8260B / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270C / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C / 625	PCB's 8082 / 608	Pesticides 8081A / 608	BOD, TSS, pH	Moisture Content	Turn Around Time if different from standard	Hold
412	MW-12	3	40ml VOA	✓				✓				✓		5-19-09	1350		✓																	
413	MW-13	3	40ml VOA	✓				✓				✓		5-19-09	1405		✓																	
414	MW-3	3	40ml VOA	✓				✓				✓		5-19-09	1415		✓																	
415	MW-10	3	40ml VOA	✓				✓				✓		5-19-09	1425		✓																	

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	Temp°c:
Bill D. Smith		5-20-09	0835	ZD	Trace	5.20.09	0835	

LAB USE ONLY
Intact Y N
Headspace Y N NA
C °C
Log-in-Review

REMARKS:
All tests - Midland

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Carrier # Courier

ORIGINAL COPY

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
200 East Sunset Road, Suite E El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
6015 Harris Parkway, Suite 110 Ft. Worth, Texas 76132 817•201•5260
E-Mail: lab@traceanalysis.com

Certifications

WBENC: 237019 **HUB:** 1752439743100-86536 **DBE:** VN 20657
NCTRCA WFWB38444Y0909

NELAP Certifications

Lubbock: T104704219-08-TX LELAP-02003 Kansas E-10317 **El Paso:** T104704221-08-TX LELAP-02002 **Midland:** T104704392-08-TX

Analytical and Quality Control Report

Shanna Smith
Talon LPE-Midland
2901 State Highway 349
Midland, TX, 79706

Report Date: September 8, 2009

Work Order: 9082801

Project Location: Hobbs, NM
Project Name: Kimbrough Sweet 8 inch
Project Number: 700376.016.01
SRS#: 2000-10757

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
208311	MW-3	water	2009-08-27	12:20	2009-08-28
208312	MW-4	water	2009-08-27	13:15	2009-08-28
208313	MW-6	water	2009-08-27	14:26	2009-08-28
208314	MW-7	water	2009-08-27	14:10	2009-08-28
208315	MW-8	water	2009-08-27	13:55	2009-08-28
208316	MW-9	water	2009-08-27	15:08	2009-08-28
208317	MW-10	water	2009-08-27	13:30	2009-08-28
208318	MW-12	water	2009-08-27	12:55	2009-08-28
208319	MW-13	water	2009-08-27	12:45	2009-08-28

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 29 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

Standard Flags

B - The sample contains less than ten times the concentration found in the method blank.

Case Narrative

Samples for project Kimbrough Sweet 8 inch were received by TraceAnalysis, Inc. on 2009-08-28 and assigned to work order 9082801. Samples for work order 9082801 were received intact without headspace and at a temperature of 2.1 deg. C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
BTEX	S 8021B	53904	2009-09-01 at 13:00	63151	2009-09-01 at 21:57
PAH	S 8270C	53918	2009-08-27 at 15:00	63169	2009-09-02 at 11:32
PAH	S 8270C	54047	2009-09-03 at 15:00	63320	2009-09-08 at 09:48
TPH DRO	Mod. 8015B	53766	2009-08-28 at 11:05	63005	2009-08-28 at 11:05
TPH GRO	S 8015B	53904	2009-09-01 at 13:00	63150	2009-09-01 at 22:25

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 9082801 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Analytical Report

Sample: 208311 - MW-3

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	63151	Date Analyzed:	2009-09-01	Analyzed By:	AG
Prep Batch:	53904	Sample Preparation:	2009-09-01	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		**16.0**	mg/L	100	0.00100
Toluene		<0.100	mg/L	100	0.00100
Ethylbenzene		<0.100	mg/L	100	0.00100
Xylene		**1.97**	mg/L	100	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		9.28	mg/L	100	10.0	93	87 - 105.2
4-Bromofluorobenzene (4-BFB)		6.61	mg/L	100	10.0	66	49.8 - 130.8

Sample: 208311 - MW-3

Laboratory:	Lubbock				
Analysis:	PAH	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	63169	Date Analyzed:	2009-09-02	Analyzed By:	MN
Prep Batch:	53918	Sample Preparation:	2009-08-27	Prepared By:	MN

Parameter	Flag	RL Result	Units	Dilution	RL
Naphthalene		**0.0440**	mg/L	0.917	0.000200
2-Methylnaphthalene		**0.00505**	mg/L	0.917	0.000200
1-Methylnaphthalene		**0.0308**	mg/L	0.917	0.000200
Acenaphthylene		<0.000183	mg/L	0.917	0.000200
Acenaphthene		<0.000183	mg/L	0.917	0.000200
Dibenzofuran		**0.00153**	mg/L	0.917	0.000200
Fluorene		**0.00172**	mg/L	0.917	0.000200
Anthracene		<0.000183	mg/L	0.917	0.000200
Phenanthrene		**0.00135**	mg/L	0.917	0.000200
Fluoranthene		<0.000183	mg/L	0.917	0.000200
Pyrene		<0.000183	mg/L	0.917	0.000200
Benzo(a)anthracene		<0.000183	mg/L	0.917	0.000200
Chrysene		<0.000183	mg/L	0.917	0.000200
Benzo(b)fluoranthene		<0.000183	mg/L	0.917	0.000200
Benzo(k)fluoranthene		<0.000183	mg/L	0.917	0.000200
Benzo(a)pyrene		<0.000183	mg/L	0.917	0.000200

continued ...

sample 208311 continued ...

Parameter	Flag	Result	RL	Units	Dilution	RL
Indeno(1,2,3-cd)pyrene		<0.000183		mg/L	0.917	0.000200
Dibenzo(a,h)anthracene		<0.000183		mg/L	0.917	0.000200
Benzo(g,h,i)perylene		<0.000183		mg/L	0.917	0.000200

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		0.0280	mg/L	0.917	0.0800	35	25.9 - 97.5
2-Fluorobiphenyl		0.0340	mg/L	0.917	0.0800	42	13.9 - 100
Terphenyl-d14		0.0467	mg/L	0.917	0.0800	58	37.7 - 114

Sample: 208312 - MW-4

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	63151	Date Analyzed:	2009-09-01	Analyzed By:	AG
Prep Batch:	53904	Sample Preparation:	2009-09-01	Prepared By:	AG

Parameter	Flag	Result	RL	Units	Dilution	RL
Benzene		<0.00100		mg/L	1	0.00100
Toluene		<0.00100		mg/L	1	0.00100
Ethylbenzene		<0.00100		mg/L	1	0.00100
Xylene		<0.00100		mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0912	mg/L	1	0.100	91	87 - 105.2
4-Bromofluorobenzene (4-BFB)		0.0607	mg/L	1	0.100	61	49.8 - 130.8

Sample: 208312 - MW-4

Laboratory:	Lubbock				
Analysis:	PAH	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	63169	Date Analyzed:	2009-09-02	Analyzed By:	MN
Prep Batch:	53918	Sample Preparation:	2009-08-27	Prepared By:	MN

Parameter	Flag	Result	RL	Units	Dilution	RL
Naphthalene		**0.000282**		mg/L	0.922	0.000200
2-Methylnaphthalene		**0.000322**		mg/L	0.922	0.000200
1-Methylnaphthalene		**0.000315**		mg/L	0.922	0.000200

continued ...

sample 208312 continued ...

Parameter	Flag	Result	RL	Units	Dilution	RL
Acenaphthylene		<0.000184		mg/L	0.922	0.000200
Acenaphthene		<0.000184		mg/L	0.922	0.000200
Dibenzofuran		<0.000184		mg/L	0.922	0.000200
Fluorene		<0.000184		mg/L	0.922	0.000200
Anthracene		<0.000184		mg/L	0.922	0.000200
Phenanthrene		<0.000184		mg/L	0.922	0.000200
Fluoranthene		<0.000184		mg/L	0.922	0.000200
Pyrene		<0.000184		mg/L	0.922	0.000200
Benzo(a)anthracene		<0.000184		mg/L	0.922	0.000200
Chrysene		<0.000184		mg/L	0.922	0.000200
Benzo(b)fluoranthene		<0.000184		mg/L	0.922	0.000200
Benzo(k)fluoranthene		<0.000184		mg/L	0.922	0.000200
Benzo(a)pyrene		<0.000184		mg/L	0.922	0.000200
Indeno(1,2,3-cd)pyrene		<0.000184		mg/L	0.922	0.000200
Dibenzo(a,h)anthracene		<0.000184		mg/L	0.922	0.000200
Benzo(g,h,i)perylene		<0.000184		mg/L	0.922	0.000200

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		0.0302	mg/L	0.922	0.0800	38	25.9 - 97.5
2-Fluorobiphenyl		0.0327	mg/L	0.922	0.0800	41	13.9 - 100
Terphenyl-d14		0.0461	mg/L	0.922	0.0800	58	37.7 - 114

Sample: 208313 - MW-6

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	63151	Date Analyzed:	2009-09-01	Analyzed By:	AG
Prep Batch:	53904	Sample Preparation:	2009-09-01	Prepared By:	AG

Parameter	Flag	Result	RL	Units	Dilution	RL
Benzene		**17.8**		mg/L	50	0.00100
Toluene		**10.9**		mg/L	50	0.00100
Ethylbenzene		**1.79**		mg/L	50	0.00100
Xylene		**4.32**		mg/L	50	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		4.55	mg/L	50	5.00	91	87 - 105.2
4-Bromofluorobenzene (4-BFB)		3.60	mg/L	50	5.00	72	49.8 - 130.8

Sample: 208313 - MW-6

Laboratory:	Lubbock				
Analysis:	PAH	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	63169	Date Analyzed:	2009-09-02	Analyzed By:	MN
Prep Batch:	53918	Sample Preparation:	2009-08-27	Prepared By:	MN

Parameter	Flag	RL Result	Units	Dilution	RL
Naphthalene	[1]	**9.02**	mg/L	9.217	0.000200
2-Methylnaphthalene	[2]	**21.5**	mg/L	9.217	0.000200
1-Methylnaphthalene	[3]	**18.3**	mg/L	9.217	0.000200
Acenaphthylene		<0.00184	mg/L	9.217	0.000200
Acenaphthene		<0.00184	mg/L	9.217	0.000200
Dibenzofuran		**0.900**	mg/L	9.217	0.000200
Fluorene	[4]	**1.49**	mg/L	9.217	0.000200
Anthracene		<0.00184	mg/L	9.217	0.000200
Phenanthrene	[5]	**1.75**	mg/L	9.217	0.000200
Fluoranthene		<0.00184	mg/L	9.217	0.000200
Pyrene		<0.00184	mg/L	9.217	0.000200
Benzo(a)anthracene		<0.00184	mg/L	9.217	0.000200
Chrysene		**0.211**	mg/L	9.217	0.000200
Benzo(b)fluoranthene		<0.00184	mg/L	9.217	0.000200
Benzo(k)fluoranthene		<0.00184	mg/L	9.217	0.000200
Benzo(a)pyrene		<0.00184	mg/L	9.217	0.000200
Indeno(1,2,3-cd)pyrene		<0.00184	mg/L	9.217	0.000200
Dibenzo(a,h)anthracene		<0.00184	mg/L	9.217	0.000200
Benzo(g,h,i)perylene		<0.00184	mg/L	9.217	0.000200

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5	[6]	0.343	mg/L	9.217	0.0800	429	25.9 - 97.5
2-Fluorobiphenyl	[7]	0.0962	mg/L	9.217	0.0800	120	13.9 - 100
Terphenyl-d14		0.0781	mg/L	9.217	0.0800	98	37.7 - 114

Sample: 208313 - MW-6

Laboratory:	Midland				
Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	63005	Date Analyzed:	2009-08-28	Analyzed By:	kg
Prep Batch:	53766	Sample Preparation:	2009-08-28	Prepared By:	kg

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**1200**	mg/L	5	5.00

[1]Estimated concentration value greater than standard range.
[2]Estimated concentration value greater than standard range.
[3]Estimated concentration value greater than standard range.
[4]Estimated concentration value greater than standard range.
[5]Estimated concentration value greater than standard range.
[6]8270 Only - Two basic surrogates are out of control limits. The other basic surrogate shows extraction was performed properly.
[7]8270 Only - Two basic surrogates are out of control limits. The other basic surrogate shows extraction was performed properly.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[8]	81.1	mg/L	5	10.0	811	70 - 130

Sample: 208313 - MW-6

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	63150	Date Analyzed:	2009-09-01	Analyzed By:	AG
Prep Batch:	53904	Sample Preparation:	2009-09-01	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**101**	mg/L	50	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		4.42	mg/L	50	5.00	88	70 - 130
4-Bromofluorobenzene (4-BFB)		4.31	mg/L	50	5.00	86	70 - 130

Sample: 208314 - MW-7

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	63151	Date Analyzed:	2009-09-01	Analyzed By:	AG
Prep Batch:	53904	Sample Preparation:	2009-09-01	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		**15.3**	mg/L	100	0.00100
Toluene		**11.6**	mg/L	100	0.00100
Ethylbenzene		**2.19**	mg/L	100	0.00100
Xylene		**5.29**	mg/L	100	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		9.16	mg/L	100	10.0	92	87 - 105.2
4-Bromofluorobenzene (4-BFB)		6.95	mg/L	100	10.0	70	49.8 - 130.8

Sample: 208314 - MW-7

Laboratory:	Lubbock				
Analysis:	PAH	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	63320	Date Analyzed:	2009-09-08	Analyzed By:	MN
Prep Batch:	54047	Sample Preparation:	2009-09-03	Prepared By:	MN

[8]High surrogate recovery due to peak interference.

Parameter	Flag	RL Result	Units	Dilution	RL
Naphthalene	[9]	**1.36**	mg/L	4.695	0.000200
2-Methylnaphthalene	[10]	**3.48**	mg/L	4.695	0.000200
1-Methylnaphthalene	[11]	**2.90**	mg/L	4.695	0.000200
Acenaphthylene		<0.000939	mg/L	4.695	0.000200
Acenaphthene		<0.000939	mg/L	4.695	0.000200
Dibenzofuran		**0.193**	mg/L	4.695	0.000200
Fluorene		**0.313**	mg/L	4.695	0.000200
Anthracene		<0.000939	mg/L	4.695	0.000200
Phenanthrene		**0.337**	mg/L	4.695	0.000200
Fluoranthene		<0.000939	mg/L	4.695	0.000200
Pyrene		<0.000939	mg/L	4.695	0.000200
Benzo(a)anthracene		<0.000939	mg/L	4.695	0.000200
Chrysene		**0.0408**	mg/L	4.695	0.000200
Benzo(b)fluoranthene		<0.000939	mg/L	4.695	0.000200
Benzo(k)fluoranthene		<0.000939	mg/L	4.695	0.000200
Benzo(a)pyrene		<0.000939	mg/L	4.695	0.000200
Indeno(1,2,3-cd)pyrene		<0.000939	mg/L	4.695	0.000200
Dibenzo(a,h)anthracene		<0.000939	mg/L	4.695	0.000200
Benzo(g,h,i)perylene		<0.000939	mg/L	4.695	0.000200

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		0.0608	mg/L	4.695	0.0800	76	25.9 - 97.5
2-Fluorobiphenyl		0.0375	mg/L	4.695	0.0800	47	13.9 - 100
Terphenyl-d14		0.0378	mg/L	4.695	0.0800	47	37.7 - 114

Sample: 208314 - MW-7

Laboratory:	Midland				
Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	63005	Date Analyzed:	2009-08-28	Analyzed By:	kg
Prep Batch:	53766	Sample Preparation:	2009-08-28	Prepared By:	kg

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**920**	mg/L	5	5.00

continued ...

[9]Estimated concentration value greater than standard range.
[10]Estimated concentration value greater than standard range.
[11]Estimated concentration value greater than standard range.

sample continued ...

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[12]	95.5	mg/L	5	10.0	955	70 - 130

Sample: 208314 - MW-7

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	63150	Date Analyzed:	2009-09-01	Analyzed By:	AG
Prep Batch:	53904	Sample Preparation:	2009-09-01	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**85.9**	mg/L	100	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		8.70	mg/L	100	10.0	87	70 - 130
4-Bromofluorobenzene (4-BFB)		7.73	mg/L	100	10.0	77	70 - 130

Sample: 208315 - MW-8

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	63151	Date Analyzed:	2009-09-01	Analyzed By:	AG
Prep Batch:	53904	Sample Preparation:	2009-09-01	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		**17.2**	mg/L	100	0.00100
Toluene		**11.3**	mg/L	100	0.00100
Ethylbenzene		**2.17**	mg/L	100	0.00100
Xylene		**4.98**	mg/L	100	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		9.04	mg/L	100	10.0	90	87 - 105.2
4-Bromofluorobenzene (4-BFB)		6.82	mg/L	100	10.0	68	49.8 - 130.8

[12]High surrogate recovery due to peak interference.

Sample: 208315 - MW-8

Laboratory:	Lubbock				
Analysis:	PAH	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	63320	Date Analyzed:	2009-09-08	Analyzed By:	MN
Prep Batch:	54047	Sample Preparation:	2009-09-03	Prepared By:	MN

Parameter	Flag	RL Result	Units	Dilution	RL
Naphthalene	[13]	**2.48**	mg/L	4.651	0.000200
2-Methylnaphthalene	[14]	**6.05**	mg/L	4.651	0.000200
1-Methylnaphthalene	[15]	**5.20**	mg/L	4.651	0.000200
Acenaphthylene		<0.000930	mg/L	4.651	0.000200
Acenaphthene		<0.000930	mg/L	4.651	0.000200
Dibenzofuran		**0.331**	mg/L	4.651	0.000200
Fluorene	[16]	**0.525**	mg/L	4.651	0.000200
Anthracene		<0.000930	mg/L	4.651	0.000200
Phenanthrene	[17]	**0.540**	mg/L	4.651	0.000200
Fluoranthene		<0.000930	mg/L	4.651	0.000200
Pyrene		<0.000930	mg/L	4.651	0.000200
Benzo(a)anthracene		<0.000930	mg/L	4.651	0.000200
Chrysene		**0.0562**	mg/L	4.651	0.000200
Benzo(b)fluoranthene		<0.000930	mg/L	4.651	0.000200
Benzo(k)fluoranthene		<0.000930	mg/L	4.651	0.000200
Benzo(a)pyrene		<0.000930	mg/L	4.651	0.000200
Indeno(1,2,3-cd)pyrene		<0.000930	mg/L	4.651	0.000200
Dibenzo(a,h)anthracene		<0.000930	mg/L	4.651	0.000200
Benzo(g,h,i)perylene		<0.000930	mg/L	4.651	0.000200

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5	[18]	0.0990	mg/L	4.651	0.0800	124	25.9 - 97.5
2-Fluorobiphenyl		0.0387	mg/L	4.651	0.0800	48	13.9 - 100
Terphenyl-d14		0.0376	mg/L	4.651	0.0800	47	37.7 - 114

Sample: 208315 - MW-8

Laboratory:	Midland				
Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	63005	Date Analyzed:	2009-08-28	Analyzed By:	kg
Prep Batch:	53766	Sample Preparation:	2009-08-28	Prepared By:	kg

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		**851**	mg/L	5	5.00

[13]Estimated concentration value greater than standard range.
[14]Estimated concentration value greater than standard range.
[15]Estimated concentration value greater than standard range.
[16]Estimated concentration value greater than standard range.
[17]Estimated concentration value greater than standard range.
[18]8270 Only - One basic surrogate is out of control limits. The other two basic surrogates show extraction was performed properly.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[19]	77.8	mg/L	5	10.0	778	70 - 130

Sample: 208315 - MW-8

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	63150	Date Analyzed:	2009-09-01	Analyzed By:	AG
Prep Batch:	53904	Sample Preparation:	2009-09-01	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**87.6**	mg/L	100	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		8.59	mg/L	100	10.0	86	70 - 130
4-Bromofluorobenzene (4-BFB)		6.96	mg/L	100	10.0	70	70 - 130

Sample: 208316 - MW-9

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	63151	Date Analyzed:	2009-09-01	Analyzed By:	AG
Prep Batch:	53904	Sample Preparation:	2009-09-01	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		**17.1**	mg/L	100	0.00100
Toluene		**9.38**	mg/L	100	0.00100
Ethylbenzene		**1.78**	mg/L	100	0.00100
Xylene		**4.35**	mg/L	100	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		8.99	mg/L	100	10.0	90	87 - 105.2
4-Bromofluorobenzene (4-BFB)		7.12	mg/L	100	10.0	71	49.8 - 130.8

Sample: 208316 - MW-9

Laboratory:	Lubbock				
Analysis:	PAH	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	63320	Date Analyzed:	2009-09-08	Analyzed By:	MN
Prep Batch:	54047	Sample Preparation:	2009-09-03	Prepared By:	MN

[19] High surrogate recovery due to peak interference.

Parameter	Flag	Result	RL	Units	Dilution	RL
Naphthalene	[20]	**4.14**		mg/L	9.39	0.000200
2-Methylnaphthalene	[21]	**10.6**		mg/L	9.39	0.000200
1-Methylnaphthalene	[22]	**8.72**		mg/L	9.39	0.000200
Acenaphthylene		<0.00188		mg/L	9.39	0.000200
Acenaphthene		<0.00188		mg/L	9.39	0.000200
Dibenzofuran		**0.414**		mg/L	9.39	0.000200
Fluorene		**0.708**		mg/L	9.39	0.000200
Anthracene		<0.00188		mg/L	9.39	0.000200
Phenanthrene		**0.896**		mg/L	9.39	0.000200
Fluoranthene		<0.00188		mg/L	9.39	0.000200
Pyrene		<0.00188		mg/L	9.39	0.000200
Benzo(a)anthracene		<0.00188		mg/L	9.39	0.000200
Chrysene		**0.0960**		mg/L	9.39	0.000200
Benzo(b)fluoranthene		<0.00188		mg/L	9.39	0.000200
Benzo(k)fluoranthene		<0.00188		mg/L	9.39	0.000200
Benzo(a)pyrene		<0.00188		mg/L	9.39	0.000200
Indeno(1,2,3-cd)pyrene		<0.00188		mg/L	9.39	0.000200
Dibenzo(a,h)anthracene		<0.00188		mg/L	9.39	0.000200
Benzo(g,h,i)perylene		<0.00188		mg/L	9.39	0.000200

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5	[23]	0.176	mg/L	9.39	0.0800	220	25.9 - 97.5
2-Fluorobiphenyl		0.0642	mg/L	9.39	0.0800	80	13.9 - 100
Terphenyl-d14		0.0849	mg/L	9.39	0.0800	106	37.7 - 114

Sample: 208316 - MW-9

Laboratory:	Midland				
Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	63005	Date Analyzed:	2009-08-28	Analyzed By:	kg
Prep Batch:	53766	Sample Preparation:	2009-08-28	Prepared By:	kg

Parameter	Flag	Result	RL	Units	Dilution	RL
DRO		**82.5**		mg/L	1	5.00

[20]Estimated concentration value greater than standard range.
[21]Estimated concentration value greater than standard range.
[22]Estimated concentration value greater than standard range.
[23]8270 Only - One basic surrogate is out of control limits. The other two basic surrogates show extraction was performed properly.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[24]	16.1	mg/L	1	10.0	161	70 - 130

Sample: 208316 - MW-9

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5030B
QC Batch:	63150	Date Analyzed:	2009-09-01	Analyzed By:	AG
Prep Batch:	53904	Sample Preparation:	2009-09-01	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		**75.7**	mg/L	100	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		8.84	mg/L	100	10.0	88	70 - 130
4-Bromofluorobenzene (4-BFB)		7.48	mg/L	100	10.0	75	70 - 130

Sample: 208317 - MW-10

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	63151	Date Analyzed:	2009-09-01	Analyzed By:	AG
Prep Batch:	53904	Sample Preparation:	2009-09-01	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0908	mg/L	1	0.100	91	87 - 105.2
4-Bromofluorobenzene (4-BFB)		0.0614	mg/L	1	0.100	61	49.8 - 130.8

Sample: 208317 - MW-10

Laboratory:	Lubbock				
Analysis:	PAH	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	63320	Date Analyzed:	2009-09-08	Analyzed By:	MN
Prep Batch:	54047	Sample Preparation:	2009-09-03	Prepared By:	MN

[24] High surrogate recovery due to peak interference.

Parameter	Flag	RL Result	Units	Dilution	RL
Naphthalene		<0.000187	mg/L	0.935	0.000200
2-Methylnaphthalene		<0.000187	mg/L	0.935	0.000200
1-Methylnaphthalene		<0.000187	mg/L	0.935	0.000200
Acenaphthylene		<0.000187	mg/L	0.935	0.000200
Acenaphthene		<0.000187	mg/L	0.935	0.000200
Dibenzofuran		<0.000187	mg/L	0.935	0.000200
Fluorene		<0.000187	mg/L	0.935	0.000200
Anthracene		<0.000187	mg/L	0.935	0.000200
Phenanthrene		<0.000187	mg/L	0.935	0.000200
Fluoranthene		<0.000187	mg/L	0.935	0.000200
Pyrene		<0.000187	mg/L	0.935	0.000200
Benzo(a)anthracene		<0.000187	mg/L	0.935	0.000200
Chrysene		<0.000187	mg/L	0.935	0.000200
Benzo(b)fluoranthene		<0.000187	mg/L	0.935	0.000200
Benzo(k)fluoranthene		<0.000187	mg/L	0.935	0.000200
Benzo(a)pyrene		<0.000187	mg/L	0.935	0.000200
Indeno(1,2,3-cd)pyrene		<0.000187	mg/L	0.935	0.000200
Dibenzo(a,h)anthracene		<0.000187	mg/L	0.935	0.000200
Benzo(g,h,i)perylene		<0.000187	mg/L	0.935	0.000200

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		0.0540	mg/L	0.935	0.0800	68	25.9 - 97.5
2-Fluorobiphenyl		0.0527	mg/L	0.935	0.0800	66	13.9 - 100
Terphenyl-d14		0.0600	mg/L	0.935	0.0800	75	37.7 - 114

Sample: 208318 - MW-12

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	63151	Date Analyzed:	2009-09-01	Analyzed By:	AG
Prep Batch:	53904	Sample Preparation:	2009-09-01	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		**5.28**	mg/L	20	0.00100
Toluene		<0.0200	mg/L	20	0.00100
Ethylbenzene		<0.0200	mg/L	20	0.00100
Xylene		**0.457**	mg/L	20	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.82	mg/L	20	2.00	91	87 - 105.2

continued ...

sample continued ...

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
4-Bromofluorobenzene (4-BFB)		1.33	mg/L	20	2.00	66	49.8 - 130.8

Sample: 208318 - MW-12

Laboratory:	Lubbock				
Analysis:	PAH	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	63320	Date Analyzed:	2009-09-08	Analyzed By:	MN
Prep Batch:	54047	Sample Preparation:	2009-09-03	Prepared By:	MN

Parameter	Flag	RL Result	Units	Dilution	RL
Naphthalene		**0.00330**	mg/L	0.926	0.000200
2-Methylnaphthalene	*B*	**0.00375**	mg/L	0.926	0.000200
1-Methylnaphthalene		**0.00848**	mg/L	0.926	0.000200
Acenaphthylene		<0.000185	mg/L	0.926	0.000200
Acenaphthene		<0.000185	mg/L	0.926	0.000200
Dibenzofuran		**0.000328**	mg/L	0.926	0.000200
Fluorene		<0.000185	mg/L	0.926	0.000200
Anthracene		<0.000185	mg/L	0.926	0.000200
Phenanthrene		<0.000185	mg/L	0.926	0.000200
Fluoranthene		<0.000185	mg/L	0.926	0.000200
Pyrene		<0.000185	mg/L	0.926	0.000200
Benzo(a)anthracene		<0.000185	mg/L	0.926	0.000200
Chrysene		<0.000185	mg/L	0.926	0.000200
Benzo(b)fluoranthene		<0.000185	mg/L	0.926	0.000200
Benzo(k)fluoranthene		<0.000185	mg/L	0.926	0.000200
Benzo(a)pyrene		<0.000185	mg/L	0.926	0.000200
Indeno(1,2,3-cd)pyrene		<0.000185	mg/L	0.926	0.000200
Dibenzo(a,h)anthracene		<0.000185	mg/L	0.926	0.000200
Benzo(g,h,i)perylene		<0.000185	mg/L	0.926	0.000200

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		0.0294	mg/L	0.926	0.0800	37	25.9 - 97.5
2-Fluorobiphenyl		0.0327	mg/L	0.926	0.0800	41	13.9 - 100
Terphenyl-d14		0.0446	mg/L	0.926	0.0800	56	37.7 - 114

Sample: 208319 - MW-13

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	63151	Date Analyzed:	2009-09-01	Analyzed By:	AG
Prep Batch:	53904	Sample Preparation:	2009-09-01	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0920	mg/L	1	0.100	92	87 - 105.2
4-Bromofluorobenzene (4-BFB)		0.0635	mg/L	1	0.100	64	49.8 - 130.8

Sample: 208319 - MW-13

Laboratory:	Lubbock				
Analysis:	PAH	Analytical Method:	S 8270C	Prep Method:	S 3510C
QC Batch:	63320	Date Analyzed:	2009-09-08	Analyzed By:	MN
Prep Batch:	54047	Sample Preparation:	2009-09-03	Prepared By:	MN

Parameter	Flag	RL Result	Units	Dilution	RL
Naphthalene		<0.000188	mg/L	0.939	0.000200
2-Methylnaphthalene		<0.000188	mg/L	0.939	0.000200
1-Methylnaphthalene		<0.000188	mg/L	0.939	0.000200
Acenaphthylene		<0.000188	mg/L	0.939	0.000200
Acenaphthene		<0.000188	mg/L	0.939	0.000200
Dibenzofuran		<0.000188	mg/L	0.939	0.000200
Fluorene		<0.000188	mg/L	0.939	0.000200
Anthracene		<0.000188	mg/L	0.939	0.000200
Phenanthrene		<0.000188	mg/L	0.939	0.000200
Fluoranthene		<0.000188	mg/L	0.939	0.000200
Pyrene		<0.000188	mg/L	0.939	0.000200
Benzo(a)anthracene		<0.000188	mg/L	0.939	0.000200
Chrysene		<0.000188	mg/L	0.939	0.000200
Benzo(b)fluoranthene		<0.000188	mg/L	0.939	0.000200
Benzo(k)fluoranthene		<0.000188	mg/L	0.939	0.000200
Benzo(a)pyrene		<0.000188	mg/L	0.939	0.000200
Indeno(1,2,3-cd)pyrene		<0.000188	mg/L	0.939	0.000200
Dibenzo(a,h)anthracene		<0.000188	mg/L	0.939	0.000200

continued ...

sample 208319 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL
Benzo(g,h,i)perylene		<0.000188	mg/L	0.939	0.000200

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		0.0462	mg/L	0.939	0.0800	58	25.9 - 97.5
2-Fluorobiphenyl		0.0463	mg/L	0.939	0.0800	58	13.9 - 100
Terphenyl-d14		0.0582	mg/L	0.939	0.0800	73	37.7 - 114

Method Blank (1) QC Batch: 63005

QC Batch: 63005 Date Analyzed: 2009-08-28 Analyzed By: kg
Prep Batch: 53766 QC Preparation: 2009-08-28 Prepared By: kg

Parameter	Flag	MDL Result	Units	RL
DRO		<0.801	mg/L	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		11.6	mg/L	1	10.0	116	70 - 160

Method Blank (1) QC Batch: 63150

QC Batch: 63150 Date Analyzed: 2009-09-01 Analyzed By: AG
Prep Batch: 53904 QC Preparation: 2009-09-01 Prepared By: AG

Parameter	Flag	MDL Result	Units	RL
GRO		<0.0351	mg/L	0.1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0921	mg/L	1	0.100	92	70 - 130
4-Bromofluorobenzene (4-BFB)		0.0819	mg/L	1	0.100	82	70 - 130

Method Blank (1) QC Batch: 63151

QC Batch: 63151 Date Analyzed: 2009-09-01 Analyzed By: AG
Prep Batch: 53904 QC Preparation: 2009-09-01 Prepared By: AG

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.000300	mg/L	0.001
Toluene		<0.000200	mg/L	0.001
Ethylbenzene		<0.000500	mg/L	0.001
Xylene		<0.000400	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0964	mg/L	1	0.100	96	85.4 - 105.2
4-Bromofluorobenzene (4-BFB)		0.0805	mg/L	1	0.100	80	52.8 - 124.2

Method Blank (1) QC Batch: 63169

QC Batch: 63169 | Date Analyzed: 2009-09-02 | Analyzed By: MN
Prep Batch: 53918 | QC Preparation: 2009-08-27 | Prepared By: MN

Parameter	Flag	MDL Result	Units	RL
Naphthalene		<0.0000784	mg/L	0.0002
2-Methylnaphthalene		<0.0000747	mg/L	0.0002
1-Methylnaphthalene		<0.0000575	mg/L	0.0002
Acenaphthylene		<0.0000963	mg/L	0.0002
Acenaphthene		<0.0000617	mg/L	0.0002
Dibenzofuran		<0.0000952	mg/L	0.0002
Fluorene		<0.000134	mg/L	0.0002
Anthracene		<0.000441	mg/L	0.0002
Phenanthrene		<0.000435	mg/L	0.0002
Fluoranthene		<0.000476	mg/L	0.0002
Pyrene		<0.000590	mg/L	0.0002
Benzo(a)anthracene		<0.000118	mg/L	0.0002
Chrysene		<0.0000766	mg/L	0.0002
Benzo(b)fluoranthene		<0.000146	mg/L	0.0002
Benzo(k)fluoranthene		<0.000141	mg/L	0.0002
Benzo(a)pyrene		<0.000132	mg/L	0.0002
Indeno(1,2,3-cd)pyrene		<0.0000702	mg/L	0.0002
Dibenzo(a,h)anthracene		<0.0000534	mg/L	0.0002
Benzo(g,h,i)perylene		<0.0000473	mg/L	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		0.0225	mg/L	1	0.0800	28	25.9 - 97.5
2-Fluorobiphenyl		0.0234	mg/L	1	0.0800	29	13.9 - 100
Terphenyl-d14		0.0392	mg/L	1	0.0800	49	37.7 - 114

Method Blank (1) QC Batch: 63320

QC Batch:	63320	Date Analyzed:	2009-09-08	Analyzed By:	MN
Prep Batch:	54047	QC Preparation:	2009-09-03	Prepared By:	MN

Parameter	Flag	MDL Result	Units	RL
Naphthalene		<0.0000784	mg/L	0.0002
2-Methylnaphthalene		0.000415	mg/L	0.0002
1-Methylnaphthalene		<0.0000575	mg/L	0.0002
Acenaphthylene		<0.0000963	mg/L	0.0002
Acenaphthene		<0.0000617	mg/L	0.0002
Dibenzofuran		<0.0000952	mg/L	0.0002
Fluorene		<0.000134	mg/L	0.0002
Anthracene		<0.000441	mg/L	0.0002
Phenanthrene		<0.000435	mg/L	0.0002
Fluoranthene		<0.000476	mg/L	0.0002
Pyrene		<0.000590	mg/L	0.0002
Benzo(a)anthracene		<0.000118	mg/L	0.0002
Chrysene		<0.0000766	mg/L	0.0002
Benzo(b)fluoranthene		<0.000146	mg/L	0.0002
Benzo(k)fluoranthene		<0.000141	mg/L	0.0002
Benzo(a)pyrene		<0.000132	mg/L	0.0002
Indeno(1,2,3-cd)pyrene		<0.0000702	mg/L	0.0002
Dibenzo(a,h)anthracene		<0.0000534	mg/L	0.0002
Benzo(g,h,i)perylene		<0.0000473	mg/L	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		0.0426	mg/L	1	0.0800	53	25.9 - 97.5
2-Fluorobiphenyl		0.0369	mg/L	1	0.0800	46	13.9 - 100
Terphenyl-d14		0.0567	mg/L	1	0.0800	71	37.7 - 114

Laboratory Control Spike (LCS-1)

QC Batch:	63005	Date Analyzed:	2009-08-28	Analyzed By:	kg
Prep Batch:	53766	QC Preparation:	2009-08-28	Prepared By:	kg

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	20.3	mg/L	1	25.0	<0.801	81	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

continued ...

control spikes continued ...

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	21.5	mg/L	1	25.0	<0.801	86	70 - 130	6	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Triacontane	11.0	9.71	mg/L	1	10.0	110	97	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 63150 | Date Analyzed: 2009-09-01 | Analyzed By: AG
Prep Batch: 53904 | QC Preparation: 2009-09-01 | Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	0.721	mg/L	1	1.00	<0.0351	72	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO [25]	0.667	mg/L	1	1.00	<0.0351	67	70 - 130	8	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0962	0.0954	mg/L	1	0.100	96	95	70 - 130
4-Bromofluorobenzene (4-BFB)	0.0863	0.0839	mg/L	1	0.100	86	84	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 63151 | Date Analyzed: 2009-09-01 | Analyzed By: AG
Prep Batch: 53904 | QC Preparation: 2009-09-01 | Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.0932	mg/L	1	0.100	<0.00110	93	74.3 - 123.4
Toluene	0.0920	mg/L	1	0.100	<0.00100	92	70.1 - 126.2
Ethylbenzene	0.0883	mg/L	1	0.100	<0.00100	88	68.6 - 124.7

continued ...

[25]LCSD analyte out of range. LCS/LCSD has a RPD within limits. Therfore, LCS shows extraction occured properly.

control spikes continued ...

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Xylene	0.247	mg/L	1	0.300	<0.00290	82	64.8 - 127.2

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	0.0939	mg/L	1	0.100	<0.00110	94	74.3 - 123.4	1	20
Toluene	0.0933	mg/L	1	0.100	<0.00100	93	70.1 - 126.2	1	20
Ethylbenzene	0.0922	mg/L	1	0.100	<0.00100	92	68.6 - 124.7	4	20
Xylene	0.260	mg/L	1	0.300	<0.00290	87	64.8 - 127.2	5	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0972	0.0966	mg/L	1	0.100	97	97	84.8 - 110.8
4-Bromofluorobenzene (4-BFB)	0.0825	0.0837	mg/L	1	0.100	82	84	51.7 - 134.7

Laboratory Control Spike (LCS-1)

QC Batch: 63169 | Date Analyzed: 2009-09-02 | Analyzed By: MN
Prep Batch: 53918 | QC Preparation: 2009-08-27 | Prepared By: MN

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Naphthalene	0.0271	mg/L	1	0.0800	<0.0000784	34	22.2 - 87.9
2-Methylnaphthalene	0.0333	mg/L	1	0.0800	<0.0000747	42	23.3 - 86.1
1-Methylnaphthalene	0.0348	mg/L	1	0.0800	<0.0000575	44	24.6 - 87.8
Acenaphthylene	0.0403	mg/L	1	0.0800	<0.0000963	50	27.4 - 114
Acenaphthene	0.0409	mg/L	1	0.0800	<0.0000617	51	27.2 - 111
Dibenzofuran	0.0389	mg/L	1	0.0800	<0.0000952	49	27.3 - 100
Fluorene	0.0488	mg/L	1	0.0800	<0.000134	61	31.5 - 122
Anthracene	0.0513	mg/L	1	0.0800	<0.000441	64	32.4 - 115
Phenanthrene	0.0493	mg/L	1	0.0800	<0.000435	62	34.2 - 111
Fluoranthene	0.0558	mg/L	1	0.0800	<0.000476	70	40.1 - 114
Pyrene	0.0485	mg/L	1	0.0800	<0.000590	61	39.2 - 124
Benzo(a)anthracene	0.0481	mg/L	1	0.0800	<0.000118	60	39.4 - 114
Chrysene	0.0514	mg/L	1	0.0800	<0.0000766	64	38.2 - 116
Benzo(b)fluoranthene	0.0506	mg/L	1	0.0800	<0.000146	63	34.5 - 118
Benzo(k)fluoranthene	0.0629	mg/L	1	0.0800	<0.000141	79	38.7 - 133
Benzo(a)pyrene	0.0659	mg/L	1	0.0800	<0.000132	82	38 - 134
Indeno(1,2,3-cd)pyrene	0.0579	mg/L	1	0.0800	<0.0000702	72	34.6 - 124
Dibenzo(a,h)anthracene	0.0590	mg/L	1	0.0800	<0.0000534	74	33.9 - 120
Benzo(g,h,i)perylene	0.0572	mg/L	1	0.0800	<0.0000473	72	33.8 - 138

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Naphthalene	0.0265	mg/L	1	0.0800	<0.0000784	33	22.2 - 87.9	2	20
2-Methylnaphthalene	0.0332	mg/L	1	0.0800	<0.0000747	42	23.3 - 86.1	0	20
1-Methylnaphthalene	0.0344	mg/L	1	0.0800	<0.0000575	43	24.6 - 87.8	1	20
Acenaphthylene	0.0392	mg/L	1	0.0800	<0.0000963	49	27.4 - 114	3	20
Acenaphthene	0.0397	mg/L	1	0.0800	<0.0000617	50	27.2 - 111	3	20
Dibenzofuran	0.0375	mg/L	1	0.0800	<0.0000952	47	27.3 - 100	4	20
Fluorene	0.0468	mg/L	1	0.0800	<0.000134	58	31.5 - 122	4	20
Anthracene	0.0504	mg/L	1	0.0800	<0.000441	63	32.4 - 115	2	20
Phenanthrene	0.0487	mg/L	1	0.0800	<0.000435	61	34.2 - 111	1	20
Fluoranthene	0.0552	mg/L	1	0.0800	<0.000476	69	40.1 - 114	1	20
Pyrene	0.0482	mg/L	1	0.0800	<0.000590	60	39.2 - 124	1	20
Benzo(a)anthracene	0.0482	mg/L	1	0.0800	<0.000118	60	39.4 - 114	0	20
Chrysene	0.0508	mg/L	1	0.0800	<0.0000766	64	38.2 - 116	1	20
Benzo(b)fluoranthene	0.0531	mg/L	1	0.0800	<0.000146	66	34.5 - 118	5	20
Benzo(k)fluoranthene	0.0678	mg/L	1	0.0800	<0.000141	85	38.7 - 133	8	20
Benzo(a)pyrene	0.0646	mg/L	1	0.0800	<0.000132	81	38 - 134	2	20
Indeno(1,2,3-cd)pyrene	0.0556	mg/L	1	0.0800	<0.0000702	70	34.6 - 124	4	20
Dibenzo(a,h)anthracene	0.0563	mg/L	1	0.0800	<0.0000534	70	33.9 - 120	5	20
Benzo(g,h,i)perylene	0.0552	mg/L	1	0.0800	<0.0000473	69	33.8 - 138	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Nitrobenzene-d5	0.0273	0.0286	mg/L	1	0.0800	34	36	25.9 - 97.5
2-Fluorobiphenyl	0.0319	0.0307	mg/L	1	0.0800	40	38	13.9 - 100
Terphenyl-d14	0.0489	0.0485	mg/L	1	0.0800	61	61	37.7 - 114

Laboratory Control Spike (LCS-1)

QC Batch: 63320 | Date Analyzed: 2009-09-08 | Analyzed By: MN
Prep Batch: 54047 | QC Preparation: 2009-09-03 | Prepared By: MN

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Naphthalene	0.0357	mg/L	1	0.0800	<0.0000784	45	22.2 - 87.9
2-Methylnaphthalene	0.0393	mg/L	1	0.0800	0.000415	49	23.3 - 86.1
1-Methylnaphthalene	0.0395	mg/L	1	0.0800	<0.0000575	49	24.6 - 87.8
Acenaphthylene	0.0445	mg/L	1	0.0800	<0.0000963	56	27.4 - 114
Acenaphthene	0.0447	mg/L	1	0.0800	<0.0000617	56	27.2 - 111
Dibenzofuran	0.0412	mg/L	1	0.0800	<0.0000952	52	27.3 - 100
Fluorene	0.0521	mg/L	1	0.0800	<0.000134	65	31.5 - 122
Anthracene	0.0580	mg/L	1	0.0800	<0.000441	72	32.4 - 115
Phenanthrene	0.0552	mg/L	1	0.0800	<0.000435	69	34.2 - 111
Fluoranthene	0.0640	mg/L	1	0.0800	<0.000476	80	40.1 - 114

continued ...

control spikes continued ...

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Pyrene	0.0553	mg/L	1	0.0800	<0.000590	69	39.2 - 124
Benzo(a)anthracene	0.0533	mg/L	1	0.0800	<0.000118	67	39.4 - 114
Chrysene	0.0579	mg/L	1	0.0800	<0.0000766	72	38.2 - 116
Benzo(b)fluoranthene	0.0622	mg/L	1	0.0800	<0.000146	78	34.5 - 118
Benzo(k)fluoranthene	0.0724	mg/L	1	0.0800	<0.000141	90	38.7 - 133
Benzo(a)pyrene	0.0759	mg/L	1	0.0800	<0.000132	95	38 - 134
Indeno(1,2,3-cd)pyrene	0.0635	mg/L	1	0.0800	<0.0000702	79	34.6 - 124
Dibenzo(a,h)anthracene	0.0629	mg/L	1	0.0800	<0.0000534	79	33.9 - 120
Benzo(g,h,i)perylene	0.0616	mg/L	1	0.0800	<0.0000473	77	33.8 - 138

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Naphthalene	0.0365	mg/L	1	0.0800	<0.0000784	46	22.2 - 87.9	2	20
2-Methylnaphthalene	0.0399	mg/L	1	0.0800	0.000415	49	23.3 - 86.1	2	20
1-Methylnaphthalene	0.0409	mg/L	1	0.0800	<0.0000575	51	24.6 - 87.8	4	20
Acenaphthylene	0.0462	mg/L	1	0.0800	<0.0000963	58	27.4 - 114	4	20
Acenaphthene	0.0463	mg/L	1	0.0800	<0.0000617	58	27.2 - 111	4	20
Dibenzofuran	0.0430	mg/L	1	0.0800	<0.0000952	54	27.3 - 100	4	20
Fluorene	0.0548	mg/L	1	0.0800	<0.000134	68	31.5 - 122	5	20
Anthracene	0.0611	mg/L	1	0.0800	<0.000441	76	32.4 - 115	5	20
Phenanthrene	0.0563	mg/L	1	0.0800	<0.000435	70	34.2 - 111	2	20
Fluoranthene	0.0653	mg/L	1	0.0800	<0.000476	82	40.1 - 114	2	20
Pyrene	0.0569	mg/L	1	0.0800	<0.000590	71	39.2 - 124	3	20
Benzo(a)anthracene	0.0552	mg/L	1	0.0800	<0.000118	69	39.4 - 114	4	20
Chrysene	0.0590	mg/L	1	0.0800	<0.0000766	74	38.2 - 116	2	20
Benzo(b)fluoranthene	0.0654	mg/L	1	0.0800	<0.000146	82	34.5 - 118	5	20
Benzo(k)fluoranthene	0.0796	mg/L	1	0.0800	<0.000141	100	38.7 - 133	10	20
Benzo(a)pyrene	0.0796	mg/L	1	0.0800	<0.000132	100	38 - 134	5	20
Indeno(1,2,3-cd)pyrene	0.0650	mg/L	1	0.0800	<0.0000702	81	34.6 - 124	2	20
Dibenzo(a,h)anthracene	0.0653	mg/L	1	0.0800	<0.0000534	82	33.9 - 120	4	20
Benzo(g,h,i)perylene	0.0640	mg/L	1	0.0800	<0.0000473	80	33.8 - 138	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Nitrobenzene-d5	0.0410	0.0383	mg/L	1	0.0800	51	48	25.9 - 97.5
2-Fluorobiphenyl	0.0384	0.0399	mg/L	1	0.0800	48	50	13.9 - 100
Terphenyl-d14	0.0570	0.0586	mg/L	1	0.0800	71	73	37.7 - 114

Matrix Spike (MS-1) Spiked Sample: 208309

QC Batch: 63005 | Date Analyzed: 2009-08-28 | Analyzed By: kg
Prep Batch: 53766 | QC Preparation: 2009-08-28 | Prepared By: kg

Param		MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	[26]	195	mg/L	1	25.0	162	132	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	186	mg/L	1	25.0	162	96	70 - 130	5	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate		MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Triacontane	[27] [28]	17.5	15.0	mg/L	1	10	175	150	70 - 130

Matrix Spike (MS-1) Spiked Sample: 208316

QC Batch: 63150 | Date Analyzed: 2009-09-01 | Analyzed By: AG
Prep Batch: 53904 | QC Preparation: 2009-09-01 | Prepared By: AG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	160	mg/L	100	100	75.7	84	70 - 130

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	159	mg/L	100	100	75.7	83	70 - 130	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	8.84	8.78	mg/L	100	10	88	88	70 - 130
4-Bromofluorobenzene (4-BFB)	8.11	8.16	mg/L	100	10	81	82	70 - 130

Matrix Spike (MS-1) Spiked Sample: 208624

QC Batch: 63151 | Date Analyzed: 2009-09-01 | Analyzed By: AG
Prep Batch: 53904 | QC Preparation: 2009-09-01 | Prepared By: AG

continued ...

[26] Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.
[27] High surrogate recovery due to peak interference.
[28] High surrogate recovery due to peak interference.

matrix spikes continued ...

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.0829	mg/L	1	0.100	<0.00110	83	61 - 130
Toluene	0.0806	mg/L	1	0.100	<0.00100	81	69.2 - 121.4
Ethylbenzene	0.0756	mg/L	1	0.100	<0.00100	76	56.3 - 124.9
Xylene	0.208	mg/L	1	0.300	<0.00290	69	60.2 - 122.9

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	0.0844	mg/L	1	0.100	<0.00110	84	61 - 130	2	20
Toluene	0.0829	mg/L	1	0.100	<0.00100	83	69.2 - 121.4	3	20
Ethylbenzene	0.0805	mg/L	1	0.100	<0.00100	80	56.3 - 124.9	6	20
Xylene	0.225	mg/L	1	0.300	<0.00290	75	60.2 - 122.9	8	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0925	0.0926	mg/L	1	0.1	92	93	85.6 - 108.1
4-Bromofluorobenzene (4-BFB)	0.0670	0.0685	mg/L	1	0.1	67	68	53.7 - 127.3

Standard (CCV-2)

QC Batch: 63005 Date Analyzed: 2009-08-28 Analyzed By: kg

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	209	84	80 - 120	2009-08-28

Standard (CCV-3)

QC Batch: 63005 Date Analyzed: 2009-08-28 Analyzed By: kg

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	210	84	80 - 120	2009-08-28

Standard (CCV-2)

QC Batch: 63150 Date Analyzed: 2009-09-01 Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.818	82	80 - 120	2009-09-01

Standard (CCV-3)

QC Batch: 63150 Date Analyzed: 2009-09-01 Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.870	87	80 - 120	2009-09-01

Standard (CCV-2)

QC Batch: 63151 Date Analyzed: 2009-09-01 Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.0917	92	80 - 120	2009-09-01
Toluene		mg/L	0.100	0.0936	94	80 - 120	2009-09-01
Ethylbenzene		mg/L	0.100	0.0895	90	80 - 120	2009-09-01
Xylene		mg/L	0.300	0.252	84	80 - 120	2009-09-01

Standard (CCV-3)

QC Batch: 63151 Date Analyzed: 2009-09-01 Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.0947	95	80 - 120	2009-09-01
Toluene		mg/L	0.100	0.0948	95	80 - 120	2009-09-01
Ethylbenzene		mg/L	0.100	0.0925	92	80 - 120	2009-09-01
Xylene		mg/L	0.300	0.262	87	80 - 120	2009-09-01

Standard (CCV-2)

QC Batch: 63169 Date Analyzed: 2009-09-02 Analyzed By: MN

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Naphthalene		mg/L	60.0	57.7	96	80 - 120	2009-09-02
2-Methylnaphthalene		mg/L	60.0	64.9	108	80 - 120	2009-09-02
1-Methylnaphthalene		mg/L	60.0	64.8	108	80 - 120	2009-09-02
Acenaphthylene		mg/L	60.0	58.5	98	80 - 120	2009-09-02
Acenaphthene		mg/L	60.0	58.8	98	80 - 120	2009-09-02
Dibenzofuran		mg/L	60.0	61.8	103	80 - 120	2009-09-02
Fluorene		mg/L	60.0	63.6	106	80 - 120	2009-09-02
Anthracene		mg/L	60.0	59.4	99	80 - 120	2009-09-02
Phenanthrene		mg/L	60.0	57.2	95	80 - 120	2009-09-02
Fluoranthene		mg/L	60.0	58.0	97	80 - 120	2009-09-02
Pyrene		mg/L	60.0	57.0	95	80 - 120	2009-09-02
Benzo(a)anthracene		mg/L	60.0	55.8	93	80 - 120	2009-09-02
Chrysene		mg/L	60.0	56.4	94	80 - 120	2009-09-02
Benzo(b)fluoranthene		mg/L	60.0	63.4	106	80 - 120	2009-09-02
Benzo(k)fluoranthene		mg/L	60.0	59.4	99	80 - 120	2009-09-02
Benzo(a)pyrene		mg/L	60.0	67.9	113	80 - 120	2009-09-02
Indeno(1,2,3-cd)pyrene		mg/L	60.0	57.9	96	80 - 120	2009-09-02
Dibenzo(a,h)anthracene		mg/L	60.0	59.4	99	80 - 120	2009-09-02
Benzo(g,h,i)perylene		mg/L	60.0	56.7	94	80 - 120	2009-09-02

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
Nitrobenzene-d5		60.9	mg/L	1	60.0	102	80 - 120
2-Fluorobiphenyl		56.4	mg/L	1	60.0	94	80 - 120
Terphenyl-d14		54.4	mg/L	1	60.0	91	80 - 120

Standard (CCV-1)

QC Batch: 63320 Date Analyzed: 2009-09-08 Analyzed By: MN

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Naphthalene		mg/L	60.0	58.2	97	80 - 120	2009-09-08
2-Methylnaphthalene		mg/L	60.0	64.8	108	80 - 120	2009-09-08
1-Methylnaphthalene		mg/L	60.0	64.9	108	80 - 120	2009-09-08
Acenaphthylene		mg/L	60.0	59.6	99	80 - 120	2009-09-08
Acenaphthene		mg/L	60.0	58.8	98	80 - 120	2009-09-08
Dibenzofuran		mg/L	60.0	61.8	103	80 - 120	2009-09-08
Fluorene		mg/L	60.0	64.9	108	80 - 120	2009-09-08
Anthracene		mg/L	60.0	59.7	100	80 - 120	2009-09-08
Phenanthrene		mg/L	60.0	57.4	96	80 - 120	2009-09-08
Fluoranthene		mg/L	60.0	57.6	96	80 - 120	2009-09-08
Pyrene		mg/L	60.0	56.9	95	80 - 120	2009-09-08

continued ...

standard continued ...

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzo(a)anthracene		mg/L	60.0	55.9	93	80 - 120	2009-09-08
Chrysene		mg/L	60.0	56.8	95	80 - 120	2009-09-08
Benzo(b)fluoranthene		mg/L	60.0	50.8	85	80 - 120	2009-09-08
Benzo(k)fluoranthene		mg/L	60.0	65.0	108	80 - 120	2009-09-08
Benzo(a)pyrene		mg/L	60.0	67.7	113	80 - 120	2009-09-08
Indeno(1,2,3-cd)pyrene		mg/L	60.0	57.5	96	80 - 120	2009-09-08
Dibenzo(a,h)anthracene		mg/L	60.0	58.2	97	80 - 120	2009-09-08
Benzo(g,h,i)perylene		mg/L	60.0	56.7	94	80 - 120	2009-09-08

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limit
Nitrobenzene-d5		63.0	mg/L	1	60.0	105	80 - 120
2-Fluorobiphenyl		54.5	mg/L	1	60.0	91	80 - 120
Terphenyl-d14		54.5	mg/L	1	60.0	91	80 - 120

LAB Order ID 9082801

Page 1 of

TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9, Lubbock, Texas 79424, Tel (806) 794-1296, Fax (806) 794-1298, 1 (800) 378-1296

5002 Basin Street, Suite A1, Midland, Texas 79703, Tel (432) 689-6301, Fax (432) 689-6313

200 East Sunset Rd., Suite E, El Paso, Texas 79922, Tel (915) 585-3443, Fax (915) 585-4944, 1 (888) 588-3443

8808 Camp Bowie Blvd. West, Suite 180, Ft. Worth, Texas 76116, Tel (817) 201-5260, Fax (817) 560-4336

Company Name: TALON LPE

Phone #: 432-522-2122

Address: (Street, City, Zip) RANKIN HWY MIDLAND TX

Fax #:

Contact Person: SHANNA SMITH

E-mail: SSmith@TALONLPE.com

Invoice to: (If different from above) PLAINS Jason Henry Kimbrough Street

Project #: 200376.016.01

Project Name: SRSU 2000-10057

Project Location (Including state): HOBBS, NM

Sampler Signature:

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME	MTBE 8021 / 602 / 8260 / 624	BTEX 8021 / 602 / 8260 / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270 / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260 / 624	GC/MS Semi. Vol. 8270 / 625	PCB's 8082 / 608	Pesticides 8081 / 608	BOD, TSS, pH	Moisture Content								Turn Around Time if different from standard	Hold
308311	MW-3	4		X				X				X		8/27/09	1220		X			X																				
312	MW-4	4													1315		X			X																				
313	MW-6	7													1426		X		X	X																				
314	MW-7	7													1410		X		X	X																				
315	MW-8	7													1355		X		X	X																				
316	MW-9	7													1508		X		X	X																				
317	MW-10	7													1330		X		X	X																				
318	MW-12	4													1255		X			X																				
319	MW-13	4		V				V				V		V	1245		X			X																				

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	
	TALON LPE	8/28/09	8:00		TRACE	8/28/09	8:00	INST ___ OBS 2.1 °C COR 2.1 °C
	TRACE	8/28/09	17:00					INST ___ OBS ___ °C COR ___ °C
								INST ___ OBS ___ °C COR ___ °C

LAB USE ONLY

Intact Y / N

Headspace Y / N / NA

Log-in-Review

REMARKS:

BTEX, TPH 8015 – Midland

PAH – Lubbock

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

ORIGINAL COPY

Carrier # Courier

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
200 East Sunset Road, Suite E El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
6015 Harris Parkway, Suite 110 Ft. Worth, Texas 76132 817•201•5260
E-Mail: lab@traceanalysis.com

Certifications

WBENC: 237019 **HUB:** 1752439743100-86536 **DBE:** VN 20657
NCTRCA WFWB38444Y0909

NELAP Certifications

Lubbock: T104704219-08-TX LELAP-02003 Kansas E-10317 **El Paso:** T104704221-08-TX LELAP-02002 **Midland:** T104704392-08-TX

Analytical and Quality Control Report

Steve Killingsworth
Talon LPE-Midland
2901 State Highway 349
Midland, TX, 79706

Report Date: December 29, 2009

Work Order: 9121612

Project Location: Hobbs, NM
Project Name: Kimbrough Sweet 8 inch
Project Number: 700376.016.01
SRS#: 2000-10757

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
217395	MW-3	water	2009-12-14	16:05	2009-12-16
217396	MW-4	water	2009-12-14	16:33	2009-12-16
217397	MW-10	water	2009-12-14	16:45	2009-12-16
217398	MW-12	water	2009-12-14	15:15	2009-12-16
217399	MW-13	water	2009-12-14	15:56	2009-12-16

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 8 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

Standard Flags

B - The sample contains less than ten times the concentration found in the method blank.

Case Narrative

Samples for project Kimbrough Sweet 8 inch were received by TraceAnalysis, Inc. on 2009-12-16 and assigned to work order 9121612. Samples for work order 9121612 were received intact at a temperature of 3.4 deg. C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
BTEX	S 8021B	56543	2009-12-18 at 10:00	66149	2009-12-19 at 00:28

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 9121612 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Analytical Report

Sample: 217395 - MW-3

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	66149	Date Analyzed:	2009-12-19	Analyzed By:	AG
Prep Batch:	56543	Sample Preparation:	2009-12-18	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		**19.1**	mg/L	100	0.00100
Toluene		<0.100	mg/L	100	0.00100
Ethylbenzene		**0.156**	mg/L	100	0.00100
Xylene		<0.100	mg/L	100	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		10.8	mg/L	100	10.0	108	70.9 - 129.8
4-Bromofluorobenzene (4-BFB)		9.25	mg/L	100	10.0	92	57.1 - 118.8

Sample: 217396 - MW-4

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	66149	Date Analyzed:	2009-12-19	Analyzed By:	AG
Prep Batch:	56543	Sample Preparation:	2009-12-18	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.115	mg/L	1	0.100	115	70.9 - 129.8
4-Bromofluorobenzene (4-BFB)		0.0948	mg/L	1	0.100	95	57.1 - 118.8

Sample: 217397 - MW-10

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	66149	Date Analyzed:	2009-12-19	Analyzed By:	AG
Prep Batch:	56543	Sample Preparation:	2009-12-18	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.114	mg/L	1	0.100	114	70.9 - 129.8
4-Bromofluorobenzene (4-BFB)		0.0954	mg/L	1	0.100	95	57.1 - 118.8

Sample: 217398 - MW-12

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	66149	Date Analyzed:	2009-12-19	Analyzed By:	AG
Prep Batch:	56543	Sample Preparation:	2009-12-18	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		**5.82**	mg/L	20	0.00100
Toluene		<0.0200	mg/L	20	0.00100
Ethylbenzene		<0.0200	mg/L	20	0.00100
Xylene		<0.0200	mg/L	20	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.18	mg/L	20	2.00	109	70.9 - 129.8
4-Bromofluorobenzene (4-BFB)		1.88	mg/L	20	2.00	94	57.1 - 118.8

Sample: 217399 - MW-13

Laboratory:	Midland				
Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	66149	Date Analyzed:	2009-12-19	Analyzed By:	AG
Prep Batch:	56543	Sample Preparation:	2009-12-18	Prepared By:	AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.114	mg/L	1	0.100	114	70.9 - 129.8
4-Bromofluorobenzene (4-BFB)		0.0954	mg/L	1	0.100	95	57.1 - 118.8

Method Blank (1) QC Batch: 66149

QC Batch: 66149 | Date Analyzed: 2009-12-19 | Analyzed By: AG
Prep Batch: 56543 | QC Preparation: 2009-12-18 | Prepared By: tn

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.000300	mg/L	0.001
Toluene		<0.000200	mg/L	0.001
Ethylbenzene		<0.000200	mg/L	0.001
Xylene		<0.000900	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.108	mg/L	1	0.100	108	73.6 - 126.6
4-Bromofluorobenzene (4-BFB)		0.0859	mg/L	1	0.100	86	70.6 - 117.5

Laboratory Control Spike (LCS-1)

QC Batch: 66149 | Date Analyzed: 2009-12-19 | Analyzed By: AG
Prep Batch: 56543 | QC Preparation: 2009-12-18 | Prepared By: tn

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.0891	mg/L	1	0.100	<0.000300	89	79.4 - 111.8
Toluene	0.0907	mg/L	1	0.100	<0.000200	91	79.3 - 110
Ethylbenzene	0.0901	mg/L	1	0.100	<0.000200	90	73.8 - 113.1
Xylene	0.269	mg/L	1	0.300	<0.000900	90	73.9 - 113.6

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	0.0898	mg/L	1	0.100	<0.000300	90	79.4 - 111.8	1	20
Toluene	0.0916	mg/L	1	0.100	<0.000200	92	79.3 - 110	1	20
Ethylbenzene	0.0911	mg/L	1	0.100	<0.000200	91	73.8 - 113.1	1	20
Xylene	0.272	mg/L	1	0.300	<0.000900	91	73.9 - 113.6	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.109	0.112	mg/L	1	0.100	109	112	76.2 - 129.6
4-Bromofluorobenzene (4-BFB)	0.0971	0.0986	mg/L	1	0.100	97	99	77.9 - 119.8

Matrix Spike (MS-1) Spiked Sample: 217395

QC Batch: 66149 | Date Analyzed: 2009-12-19 | Analyzed By: AG
Prep Batch: 56543 | QC Preparation: 2009-12-18 | Prepared By: tn

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	28.8	mg/L	100	10.0	19.1081	97	77.3 - 117.4
Toluene	9.58	mg/L	100	10.0	<0.0200	96	75 - 111.8
Ethylbenzene	9.78	mg/L	100	10.0	0.156	96	78.8 - 106.6
Xylene	28.5	mg/L	100	30.0	<0.0900	95	68.9 - 114

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	27.8	mg/L	100	10.0	19.1081	87	77.3 - 117.4	4	20
Toluene	9.26	mg/L	100	10.0	<0.0200	93	75 - 111.8	3	20
Ethylbenzene	9.48	mg/L	100	10.0	0.156	93	78.8 - 106.6	3	20
Xylene	27.6	mg/L	100	30.0	<0.0900	92	68.9 - 114	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	10.9	10.8	mg/L	100	10	109	108	76.3 - 129.8
4-Bromofluorobenzene (4-BFB)	10.1	9.94	mg/L	100	10	101	99	75.2 - 112.8

Standard (CCV-2)

QC Batch: 66149 | Date Analyzed: 2009-12-19 | Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.0848	85	80 - 120	2009-12-19
Toluene		mg/L	0.100	0.0862	86	80 - 120	2009-12-19
Ethylbenzene		mg/L	0.100	0.0853	85	80 - 120	2009-12-19
Xylene		mg/L	0.300	0.254	85	80 - 120	2009-12-19

Standard (CCV-3)

QC Batch: 66149 | Date Analyzed: 2009-12-19 | Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.0906	91	80 - 120	2009-12-19
Toluene		mg/L	0.100	0.0922	92	80 - 120	2009-12-19
Ethylbenzene		mg/L	0.100	0.0914	91	80 - 120	2009-12-19
Xylene		mg/L	0.300	0.272	91	80 - 120	2009-12-19

LAB ID # 9121612 Page 1 / 1

TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

5002 Basin Street, Suite A1
Midland, Texas 79703
Tel (432) 689-6301
Fax (432) 689-6313

200 East Sunset Rd., Suite E
El Paso, Texas 79922
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

8808 Camp Bowie Blvd. West, Suite 180
Ft. Worth, Texas 76116
Tel (817) 201-5260
Fax (817) 560-4336

Company Name: Talon/LPE
Phone #: 432-522-2133
Address: (Street, City, Zip) 2901 Rankin Hwy
Fax #:
Contact Person: Steve Killingsworth
E-mail: SKillingsworth@talonlpe.com
Invoice to: (If different from above) PLAINS Jason Henry SRS# 2000-10757
Project #: 700376.016.01
Project Name: Kimbrough
Project Location (including state): Hobbs, N.M.
Sampler Signature:

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
91395	mw-3	3	VOA	X				X				X		12/14/09	1605
396	mw-11	3													1633
397	mw-10	3													1645
398	mw-12	3													1515
399	mw-13	3													1556

MTBE 8021B / 602 / 8260B / 624	BTEX 8021B / 602 / 8260B / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270C / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C / 625	PCB's 8082 / 608	Pesticides 8081A / 608	BOD, TSS, pH	Moisture Content	Turn Around Time if different from standard	Hold
	X																	
	X																	
	X																	
	X																	
	X																	

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	Temp°c:
	Talon/LPE	12/15/09	0800			12/15/09	0800	
		12/16/09	0830		TRACE	12/16/09	8:30	3.4

LAB USE ONLY
Intact (Y) / N
Headspace Y / N / NA
3.4 °C
Log-In-Review

REMARKS:
All tests Midland

- [ ] Dry Weight Basis Required
- [ ] TRRP Report Required
- [ ] Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Carrier # carry in

ORIGINAL COPY

APPENDIX D

NMOCD C-141

APPENDIX D

NMOCD C-141