

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

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised October 10, 2003

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

Release Notification and Corrective Action

OPERATOR

Initial Report Final Report

Name of Company	Plains Pipeline, LP	Contact	Jason Henry
Address	2530 Hwy 214 - Denver City, Tx 79323	Telephone No.	(575) 441-1099
Facility Name	E.K. Queen 6 Inch BLM	Facility Type	6 Inch Steel Pipeline

Surface Owner	BLM	Mineral Owner		Lease No.	
---------------	-----	---------------	--	-----------	--

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
N	19	18S	34E					Lea

Latitude N 32° 43' 44.1" Longitude W 103° 36' 01.3"

NATURE OF RELEASE

Type of Release	Crude Oil	Volume of Release	55 bbls	Volume Recovered	40 bbls
Source of Release	6" steel pipeline	Date and Hour of Occurrence	03/27/2008 @ 11:00	Date and Hour of Discovery	03/27/2008 @ 12:46
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	Larry Johnson		
By Whom?	Camille Bryant	Date and Hour	03/27//2008 @ 15:56		
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

Internal corrosion of the 6 mch steel pipeline resulted in release of sweet crude oil The line is a 6-mch steel gathering line that produces approximately 300 bbls of oil per day. The pressure on the line is approximately 90 psi and the gravity of the sweet crude is 42. The sweet crude has an H₂S concentration of <10 ppm The line is approximately 3 feet bgs at the release point.

Describe Area Affected and Cleanup Action Taken.*

Please see the attached Talon/LPE Soils Closure Report for details of remedial activities conducted for site closure

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

Signature:	<i>Jason Henry</i>	OIL CONSERVATION DIVISION	
Printed Name:	Jason Henry	<i>L. Johnson</i> Approved by District Supervisor ENVIRONMENTAL ENGINEER	
Title	Remediation Coordinator	Approval Date:	1-29-09
E-mail Address:	jhenry@paalp.com	Expiration Date:	_____
Date:	01/29/2009	Conditions of Approval:	_____
Phone:	(575) 441-1099	Attached	<input type="checkbox"/>

* Attach Additional Sheets If Necessary

1RP-1831

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Surface Owner	BLM	Mineral Owner		Lease No.	
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By Whom?	Camille Bryant	Date and Hour	03/27/2008 @ 15:56		
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Describe Cause of Problem and Remedial Action Taken *

Internal corrosion of the 6 inch steel pipeline resulted in release of sweet crude oil. The line is a 6-inch steel gathering line that produces approximately 300 bbls of oil per day. The pressure on the line is approximately 90 psi and the gravity of the sweet crude is 42. The sweet crude has an H₂S concentration of <10 ppm. The line is approximately 3 feet bgs at the release point

Describe Area Affected and Cleanup Action Taken.*

Please see the attached Talon/LPE Soils Closure Report for details of remedial activities conducted for site closure

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Signature.	<i>Jason Henry</i>	OIL CONSERVATION DIVISION	
Printed Name	Jason Henry	Approved by District Supervisor	<i>L. Johnson</i> ENVIRONMENTAL ENGINEER
Title: Remediation Coordinator		Approval Date: 1-29-09	Expiration Date: _____
E-mail Address: jhenry@paalp.com		Conditions of Approval.	Attached <input type="checkbox"/>
Date: 01/29/2009	Phone (575) 441-1099	—	

* Attach Additional Sheets If Necessary

IRP-1831



SOILS CLOSURE REPORT
E.K. QUEEN 6" BLM SITE
LEA COUNTY, NEW MEXICO
NMOCD REF. # 1RP-1831
SRS# 2008-078

AMARILLO
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Amarillo, Texas 79107
Phone 806.467.0607
Fax 806.467.0622

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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
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Suite 102
Selma, Texas 78154
Phone 210.579.0235
Fax 210.568.2191

TULSA
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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
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Suite 400
Houston, Texas 77008
Phone 713.861.0081
Fax 713.868.3208

Prepared for:

PLAINS PIPELINE, L.P.
333 Clay Street
Suite 1600
Houston, Texas 77002

Prepared by:

Talon/LPE
2901 State Highway 349
Midland, Texas 79706

RECEIVED

JAN 29 2009

HOBBSOCD

Distribution:

- Copy 1 – Plains Lovington
- Copy 2 – Plains Houston
- Copy 3 – NMOCD Hobbs
- Copy 4 – BLM Carlsbad
- Copy 5 – Talon/LPE

ENVIRONMENTAL CONSULTING
ENGINEERING
DRILLING
CONSTRUCTION
EMERGENCY RESPONSE

December 5, 2008

Toll Free: 866.742.0742
www.talonlpe.com

**Soils Closure Report
E.K. Queen 6" BLM**

**Plains Pipeline, L.P.
Houston, Texas**

Talon/LPE PROJECT NO. PLAINS071SPL

Prepared by:



**Eb Taylor
Project Manager**

Reviewed by:



**Kyle Waggoner, P. G.
Regional Manager**

**Talon/LPE
2901 State Highway 349
Midland, Texas 79706**

December 2008

Distribution List

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Jason Henry	Remediation Coordinator	Plains Pipeline	2530 State 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	2901 State Highway 349 Midland, TX 79706	etaylor@talonlpe.com

NMOCD - New Mexico Oil Conservation Division

BLM – New Mexico Bureau of Land Management

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Initial C-141 Report

Final C-141 Report

1.0 INTRODUCTION

1.1 Purpose and Background

Talon/LPE was retained by Plains Pipeline, L.P. (Plains) to conduct a soils investigation at the E.K. Queen 6" BLM crude oil pipeline release site in Lea County, New Mexico. The purpose of this report is to summarize the assessment and remediation activities conducted at this site and to document the conditions supporting closure of this site.

The E.K. Queen BLM release site is located approximately 25 miles east of Loco Hills in Lea County, New Mexico in Section 19, Township 18 South, Range 34 East. The GPS coordinates for the site are 32°43'44.1"N latitude and 103°36'01.3"W longitude. The release occurred on property owned by the United States Department of Interior Bureau of Land Management (BLM) and is utilized as pasture land. The site is located in a rural area with no residences or surface water within a 1,000 foot radius of the facility. A topographic map is provided as Figure 1 in Appendix A.

Previously, in January 2007, a release of approximately 90 barrels of crude oil occurred at this location (NMOCD Ref. #RP-1167). During the remediation activities, a total of 2,800 cubic yards of soil was excavated and transported to an NMOCD approved landfarm. A soils closure report dated December 6, 2007 was submitted to the NMOCD documenting the investigation and remediation activities.

In March 2008, a release of approximately 55 barrels of crude oil occurred at the site due to internal corrosion of the pipeline, of which approximately 40 barrels were recovered. Approximately 9,000 square feet of surface area was impacted by the release. Based on excavation and over-excavation activities, approximately 2,000 cubic yards of soil were excavated and placed on a plastic liner.

1.2 Regulatory Framework

The NMOCD has developed guidance for all federal, state, and fee lands in New Mexico for remediating contaminants resulting from leaks, spills, and releases of oilfield wastes or products. This guidance assigns ranking scores to sites based on depth to groundwater, distance from water supply sources, and distance to surface water bodies, and provides remediation/clean-up targets for benzene, Total BTEX (benzene, toluene, ethylbenzene, and xylenes), and total petroleum hydrocarbons (TPH). Based on site visits, the E.K. Queen BLM site is located in a rural area with no permanent residence or surface water within a 1,000 foot radius of the release point. According to information available from the New Mexico Office of the State Engineer, the nearest water well is not within 1,000 feet of the site. Based on this groundwater elevation data, the approximate depth from land surface to groundwater at the site is greater than 100 feet below ground surface (bgs). However, because the final excavation exhibited a total depth of eighteen (18) feet bgs, a more conservative depth to groundwater value of 50-99 feet was utilized for ranking purposes.

According to NMOCD guidance, and based on depth to groundwater, distance from water supply sources, and distance to surface water bodies the site ranking for this site is ten (10). The ranking process is summarized below:

<u>Criteria:</u>	<u>Site Condition:</u>	<u>Ranking Score:</u>
Depth to Groundwater	50-99 Feet	10
<1,000 Feet to Water Source?	No	0
<200 Feet to Private Domestic Water Source?	No	0
Distance to Surface Water Body	>1,000 feet	0
<hr/>		
Total Ranking:		10

Based on the calculated rating, the applicable remediation guidelines for this site are as follows:

Benzene	10 ppm
Total BTEX	50 ppm
TPH	1000 ppm

1.3 Archeological Survey

An archeological survey was performed by Mr. Danny Boone on August 21, 2007, as part of the initial site investigation activities at this location. The survey was intended to identify and inventory archeological evidence in the immediate area (3.77 acres centered at the release). The location, footage and acres are estimates based on a hand held global positioning satellite (GPS) unit. A 100 foot buffer was surveyed around the impacted area and marked with a combination of pink and orange tape. This study did not identify/document any archeological evidence in the surveyed area. The archeological survey is provided as Appendix F of this report.

2.0 FIELD ACTIVITIES

2.1 Soil Assessment Activities

Talon/LPE commenced excavation activities at the site in March 2008 in order to remove soil impacted above the NMOCD remedial threshold limits. Approximately 2,000 cubic yards of soil were excavated and placed on a plastic liner. The excavated area was approximately 150 feet long, 60 feet wide, and six feet in depth on average, and approximately eighteen feet in depth at the deepest excavation location (reference Figure 2).

2.2 Soil Sampling Activities

Confirmation soil samples were collected from the excavation. Each soil sample was collected utilizing new, disposable nitrile gloves, eliminating the need for decontamination between sample points. The soil samples were collected and placed in laboratory prepared glassware appropriate for the analyses requested. The soil samples were maintained on ice in the custody of Talon/LPE until delivery to TraceAnalysis in Midland, Texas for analysis. The soils were analyzed for BTEX using EPA method 8021B and TPH by EPA method 8015. The chain-of-custody forms and laboratory data sheets are provided in Appendix C.

Upon the completion of excavation activities, grab samples were collected from the sidewalls (SW-1, SW-2, SW-3, SW-4, SW-5, SW-6, SW-7, and SW-8) to document the successful removal of soil impacted above NMOCD remedial thresholds (reference Figure 2). In addition, grab samples were also collected from the bottom of the excavation (BH-1, BH-2, BH-3, BH-4, BH-5, and BH-6) and from the stockpile (SP-1, SP-2, SP-3, SP-4) as referenced in Figure 2. Laboratory analyses of the samples collected on April 8, 2008 indicated stockpile samples SP-1 and SP-3, to be above the NMOCD remedial thresholds for concentrations of BTEX and TPH, while soil samples BH-5, SP-4 and SW-7 were above NMOCD remedial thresholds for concentrations of TPH (reference Figure 2 and Table 1).

2.3 Over-Excavation Activities

On April 17, 2008, upon completion of the over-excavation activities, grab samples were collected from the over-excavation locations of SW-7, BH-2, BH-4, BH-5, and BH-6 as referenced in Figure 2. The samples were collected upon over-excavating an additional three feet in depth bringing the excavation depth to eighteen feet at the deepest point. Analytical data for the soil samples collected from the over-excavated areas indicated that BTEX and TPH concentrations were below the NMOCD remedial thresholds (reference Table 1).

The excavated soil was blended with surrounding clean material beginning on August 6, 2008. Blended backfill confirmation samples were collected at the rate of one sample per 500 cubic yards. Backfilling commenced once backfill material analytical was received verifying constituent concentrations of BTEX and TPH were below NMOCD remedial threshold values. The sample results for BF-8 and BF-9 (collected September 08, 2008) were elevated above NMOCD remedial threshold limits for Total TPH only. Larry Johnson with the NMOCD subsequently approved these values as acceptable to complete backfilling at the

site. Blending, backfilling, and contouring to original grade activities were completed on September 10, 2008. The site was then reseeded with a BLM approved seed mixture.

2.4 Site Restoration Activities

The over-excavation confirmation soil samples indicated that TPH and Total BTEX concentrations were below NMOCD guidelines. Approval to backfill the site was granted by NMOCD based on sample results for the excavated and blended soil.

Subsequent to soil remediation activities and verbal approval from the NMOCD and BLM, the excavated area was backfilled with remediated soil. A bull dozer was utilized to restore the site to natural grade. The entire site was then seeded with a seed mix recommended by the BLM.

3.0 CONCLUSIONS

Based upon the findings of this investigation, Talon/LPE makes no further recommendations for future actions related to this release. Talon/LPE proposes that this report be the final action in regards to the soil investigation and remediation activities at the site and recommends that Plains submit a copy of this report to the NMOCD. Furthermore, Talon/LPE requests that this report be the final document in regard to soil activities related to this release and that the NMOCD issue a no further action letter to Plains.

Appendix A

Drawings

Figure 1 – Topographic Map

Figure 2 – Site Plan with Confirmation Sample Location Map

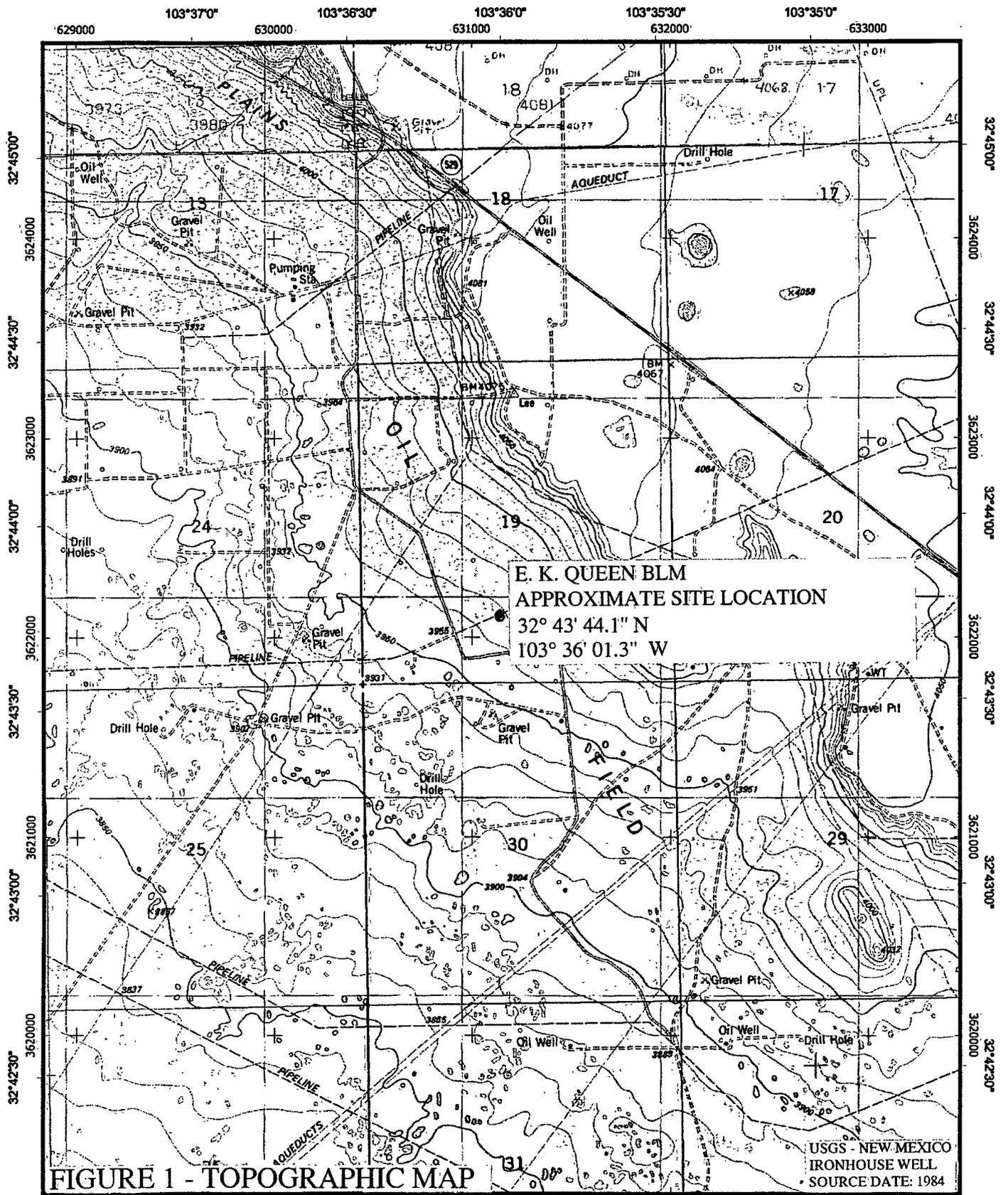


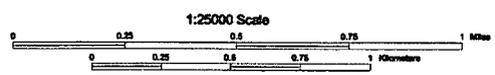
FIGURE 1 - TOPOGRAPHIC MAP

**E. K. QUEEN BLM
APPROXIMATE SITE LOCATION**
 32° 43' 44.1" N
 103° 36' 01.3" W

**USGS - NEW MEXICO
IRONHOUSE WELL**
 SOURCE DATE: 1984

629000 103°37°0' 630000 103°36°30" 631000 103°36°0" 632000 103°35°30" 633000 103°35°0'

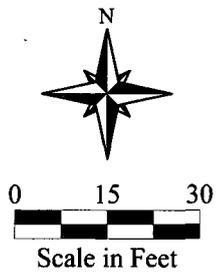
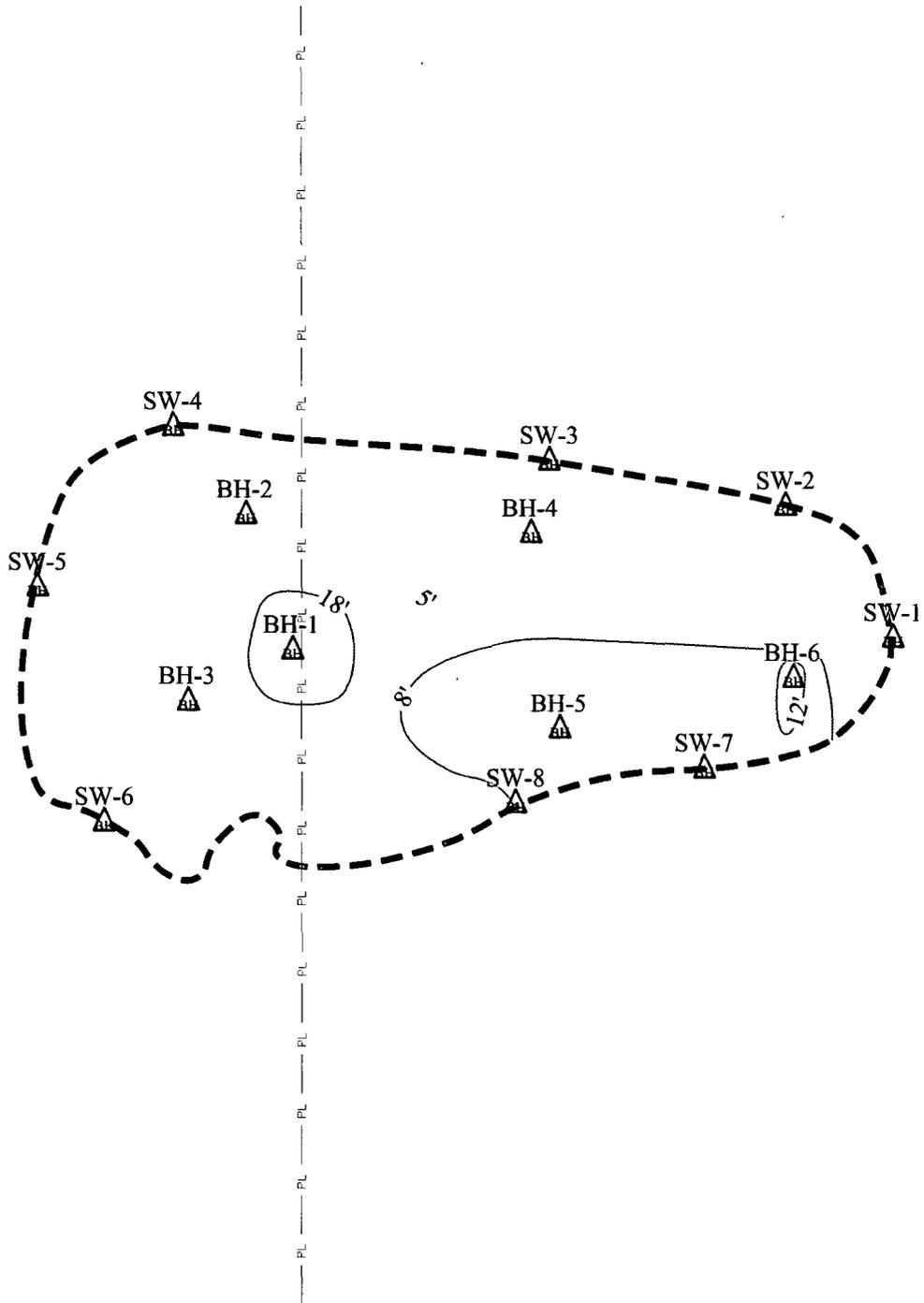
32°45°00" 3624000 32°44°30" 3623000 32°44°00" 3622000 32°43°30" 3621000 32°43°00" 3620000 32°42°30" 3620000



Universal Transverse Mercator (UTM) Projection Zone13
 North American Datum of 1983 (NAD83)
 UTM Grid shown in Blue



Magnetic declination at center of map on
 November 5, 2008



<u>Legend</u>	
△(BH)	- Bottom Samples
△(SW)	- Sidewall Samples
---	- Excavation Area



Date: 11/20/2008
Scale: 1" = 30'
Drawn By: SJA

E. K. Queen BLM (PLAINS071SPL)
 SRS # 2008-078
 Lea County, New Mexico
 Figure 2 - Site Plan with Confirmation Sample Location Map

APPENDIX B

Tables

Table 1 – Summary of Soil Analytical Data



Table 1
Summary of Soil Analytical Data
PLAINS PIPELINE, L.P.
E.K. QUEEN 6" BLM
NMOCD Ref.# 1R-1831
LEA COUNTY, NEW MEXICO SRS# 2008-078
Talon/LPE Project Number PLAINS071SPL

All concentrations are in mg/Kg

Sample Designation	Date Sampled	Depth (feet bgs)	Status	DRO	GRO	Total TPH	Benzene	Toluene	Ethyl benzene	Xylenes	Total BTEX
BH-1	04/07/08	18		<50.0	<1.00	<51.0	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
BH-2	04/08/08	2	Excavated	160	<1.00	160	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
BH-3	04/08/08	5		<50.0	2.50	2.50	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
BH-4	04/08/08	2	Excavated	905	80.2	985.2	<0.0200	0.182	0.244	0.436	0.862
BH-5	04/08/08	5	Excavated	3,590	234	3,824	<0.100	<0.100	<0.100	<0.100	<0.100
BH-6	04/08/08	8	Excavated	598	12.2	610.20	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200
SP-1	04/08/08			11,000	1,840	12,840	2.50	51.4	66.8	110	230.70
SP-2	04/08/08			830	138	968	0.199	3.04	3.18	4.86	11.279
SP-3	04/08/08			10,000	900	10,900	3.38	35.4	29.5	45.9	114.18
SP-4	04/08/08			1,330	148	1,478	0.112	2.94	3.20	4.93	11.182
SW-1	04/08/08	3		<50.0	6.68	6.68	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
SW-2	04/08/08	2.5		<50.0	10.1	10.1	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
SW-3	04/08/08	1		60.8	3.59	64.39	<0.0100	0.0380	0.0246	0.0414	0.1040
SW-4	04/08/08	1		<50.0	2.07	2.07	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
SW-5	04/08/08	2.5		<50.0	1.00	1.00	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
SW-6	04/08/08	2.5		<50.0	<1.00	<51.0	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
SW-7	04/08/08	2.5	Excavated	2,460	119	2,579	<0.0200	0.0412	0.312	0.974	1.3272
SW-8	04/08/08	2.5		<50.0	2.27	2.27	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Over-Excavation Results											
SW-7	04/17/08	4		94.9	45.5	140.4	<0.0100	<0.0100	<0.0100	0.0361	0.0361
BH-2	04/17/08	5		<50.0	1.43	1.43	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
BH-4	04/17/08	5		<50.0	1.76	1.76	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
BH-5	04/17/08	8		<50.0	45.1	45.10	<0.0100	<0.0100	0.0660	0.171	0.2370
BH-6	04/17/08	12		<50.0	4.37	4.37	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Soil Blending Results											
BF-1	08/11/08			784	1.65	785.65	<0.0100	<0.0100	<0.0100	0.0195	0.0195
BF-2	08/11/08			827	2.06	829.06	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
BF-3	08/15/08			879	162	1041	<0.0500	<0.0500	<0.0500	1.51	1.51
BF-4	08/15/08			305	162	467	<0.0500	0.0876	0.0852	2.19	2.3628
BF-5	08/15/08			197	9.14	206.14	<0.0100	<0.0100	<0.0100	0.0113	0.0113
BF-6	08/20/08			158	39.3	197.3					
BF-7	08/20/08			171	62.3	233.3					
BF-8	08/26/08			1100	17.0	1117.0					
BF-9	08/26/08			1530	36.9	1566.9					
BF-10	08/26/08			892	18.0	910.0	<0.0200	<0.0200	0.0887	0.266	0.3547
BF-8	09/08/08			2420	188	2608	<0.0200	0.0312	<0.0200	0.305	0.3362
BF-9	09/08/08			1100	27.2	1127.2	<0.0100	<0.0100	<0.0100	0.0478	0.0478
NMOCD Remediation Guidelines						1,000	10				50

¹ **Bolded values are in excess of the NMOCD Remediation Thresholds**
2BGS = Below Ground Surface

APPENDIX C

Laboratory Analytical Data Sheets and Chain of Custody Documentation



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@traccanalysis.com

Analytical and Quality Control Report

Eb Taylor
Talon LPE-Hobbs
318 E Taylor
Hobbs, NM, 88240

Report Date: April 11, 2008

Work Order: 8040821



Project Location: Lea County, NM
Project Name: EK Queen BLM
Project Number: Plains071SPL

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
156033	BH-1	soil	2008-04-07	11:00	2008-04-08
156034	BH-2	soil	2008-04-08	11:04	2008-04-08
156035	BH-3	soil	2008-04-08	11:06	2008-04-08
156036	BH-4	soil	2008-04-08	11:10	2008-04-08
156037	BH-5	soil	2008-04-08	11:13	2008-04-08
156038	BH-6	soil	2008-04-08	11:20	2008-04-08
156039	SP-1	soil	2008-04-08	11:56	2008-04-08
156040	SP-2	soil	2008-04-08	12:00	2008-04-08
156041	SP-3	soil	2008-04-08	12:04	2008-04-08
156042	SP-4	soil	2008-04-08	12:10	2008-04-08
156043	SW-1	soil	2008-04-08	11:24	2008-04-08
156044	SW-2	soil	2008-04-08	11:30	2008-04-08
156045	SW-3	soil	2008-04-08	11:33	2008-04-08
156046	SW-4	soil	2008-04-08	11:37	2008-04-08
156047	SW-5	soil	2008-04-08	11:39	2008-04-08
156048	SW-6	soil	2008-04-08	11:44	2008-04-08
156049	SW-7	soil	2008-04-08	11:48	2008-04-08
156050	SW-8	soil	2008-04-08	11:50	2008-04-08

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.

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TraceAnalysis, Inc.

A handwritten signature in black ink that reads "Blair Leftwich". The signature is written in a cursive style and is positioned above a horizontal line.

Dr. Blair Leftwich, Director

Standard Flags

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

Analytical Report

Sample: 156033 - BH-1

Analysis: BTEX	Analytical Method: S 8021B	Prep Method: S 5035
QC Batch: 47265	Date Analyzed: 2008-04-09	Analyzed By: DC
Prep Batch: 40652	Sample Preparation: 2008-04-09	Prepared By: DC

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		<0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	1	1.10	mg/Kg	1	1.00	110	89 - 107.2
4-Bromofluorobenzene (4-BFB)		0.792	mg/Kg	1	1.00	79	66.7 - 153.3

Sample: 156033 - BH-1

Analysis: TPH DRO	Analytical Method: Mod. 8015B	Prep Method: N/A
QC Batch: 47272	Date Analyzed: 2008-04-09	Analyzed By: LD
Prep Batch: 40655	Sample Preparation: 2008-04-09	Prepared By: LD

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		135	mg/Kg	1	100	135	10 - 250.4

Sample: 156033 - BH-1

Analysis: TPH GRO	Analytical Method: S 8015B	Prep Method: S 5035
QC Batch: 47266	Date Analyzed: 2008-04-09	Analyzed By: DC
Prep Batch: 40652	Sample Preparation: 2008-04-09	Prepared By: DC

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	2	1.05	mg/Kg	1	1.00	105	84.4 - 101.7
4-Bromofluorobenzene (4-BFB)		1.08	mg/Kg	1	1.00	108	74.9 - 140.5

¹High surrogate recovery. Sample non-detect, result bias high.

²High surrogate recovery. Sample non-detect, result bias high.

Sample: 156036 - BH-4

Analysis: BTEX	Analytical Method: S 8021B	Prep Method: S 5035
QC Batch: 47265	Date Analyzed: 2008-04-09	Analyzed By: DC
Prep Batch: 40652	Sample Preparation: 2008-04-09	Prepared By: DC

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0200	mg/Kg	2	0.0100
Toluene		0.182	mg/Kg	2	0.0100
Ethylbenzene		0.244	mg/Kg	2	0.0100
Xylene		0.436	mg/Kg	2	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.15	mg/Kg	2	2.00	108	89 - 107.2
4-Bromofluorobenzene (4-BFB)		1.74	mg/Kg	2	2.00	87	66.7 - 153.3

Sample: 156036 - BH-4

Analysis: TPH DRO	Analytical Method: Mod. 8015B	Prep Method: N/A
QC Batch: 47272	Date Analyzed: 2008-04-09	Analyzed By: LD
Prep Batch: 40655	Sample Preparation: 2008-04-09	Prepared By: LD

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		905	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		150	mg/Kg	1	100	150	10 - 250.4

Sample: 156036 - BH-4

Analysis: TPH GRO	Analytical Method: S 8015B	Prep Method: S 5035
QC Batch: 47266	Date Analyzed: 2008-04-09	Analyzed By: DC
Prep Batch: 40652	Sample Preparation: 2008-04-09	Prepared By: DC

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		80.2	mg/Kg	2	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	⁷	2.14	mg/Kg	2	2.00	107	84.4 - 101.7
4-Bromofluorobenzene (4-BFB)		2.54	mg/Kg	2	2.00	127	74.9 - 140.5

⁷High surrogate recovery due to peak interference.

Sample: 156037 - BH-5

Analysis: BTEX	Analytical Method: S 8021B	Prep Method: S 5035
QC Batch: 47265	Date Analyzed: 2008-04-09	Analyzed By: DC
Prep Batch: 40652	Sample Preparation: 2008-04-09	Prepared By: DC

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.100	mg/Kg	10	0.0100
Toluene		<0.100	mg/Kg	10	0.0100
Ethylbenzene		<0.100	mg/Kg	10	0.0100
Xylene		<0.100	mg/Kg	10	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	⁸	11.0	mg/Kg	10	10.0	110	89 - 107.2
4-Bromofluorobenzene (4-BFB)		8.01	mg/Kg	10	10.0	80	66.7 - 153.3

Sample: 156037 - BH-5

Analysis: TPH DRO	Analytical Method: Mod. 8015B	Prep Method: N/A
QC Batch: 47272	Date Analyzed: 2008-04-09	Analyzed By: LD
Prep Batch: 40655	Sample Preparation: 2008-04-09	Prepared By: LD

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		3590	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	⁹	444	mg/Kg	1	100	444	10 - 250.4

Sample: 156037 - BH-5

Analysis: TPH GRO	Analytical Method: S 8015B	Prep Method: S 5035
QC Batch: 47266	Date Analyzed: 2008-04-09	Analyzed By: DC
Prep Batch: 40652	Sample Preparation: 2008-04-09	Prepared By: DC

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		234	mg/Kg	10	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	¹⁰	10.8	mg/Kg	10	10.0	108	84.4 - 101.7
4-Bromofluorobenzene (4-BFB)		11.0	mg/Kg	10	10.0	110	74.9 - 140.5

⁸High surrogate recovery. Sample non-detect, result bias high.

⁹High surrogate recovery due to peak interference.

¹⁰High surrogate recovery due to peak interference.

Sample: 156038 - BH-6

Analysis: BTEX	Analytical Method: S 8021B	Prep Method: S 5035
QC Batch: 47265	Date Analyzed: 2008-04-09	Analyzed By: DC
Prep Batch: 40652	Sample Preparation: 2008-04-09	Prepared By: DC

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0200	mg/Kg	2	0.0100
Toluene		<0.0200	mg/Kg	2	0.0100
Ethylbenzene		<0.0200	mg/Kg	2	0.0100
Xylene		<0.0200	mg/Kg	2	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.13	mg/Kg	2	2.00	106	89 - 107.2
4-Bromofluorobenzene (4-BFB)		1.58	mg/Kg	2	2.00	79	66.7 - 153.3

Sample: 156038 - BH-6

Analysis: TPH DRO	Analytical Method: Mod. 8015B	Prep Method: N/A
QC Batch: 47272	Date Analyzed: 2008-04-09	Analyzed By: LD
Prep Batch: 40655	Sample Preparation: 2008-04-09	Prepared By: LD

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		598	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		181	mg/Kg	1	100	181	10 - 250.4

Sample: 156038 - BH-6

Analysis: TPH GRO	Analytical Method: S 8015B	Prep Method: S 5035
QC Batch: 47266	Date Analyzed: 2008-04-09	Analyzed By: DC
Prep Batch: 40652	Sample Preparation: 2008-04-09	Prepared By: DC

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		12.2	mg/Kg	2	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	¹¹	2.10	mg/Kg	2	2.00	105	84.4 - 101.7
4-Bromofluorobenzene (4-BFB)		2.10	mg/Kg	2	2.00	105	74.9 - 140.5

¹¹ High surrogate recovery due to peak interference.

Sample: 156039 - SP-1

Analysis: BTEX	Analytical Method: S 8021B	Prep Method: S 5035
QC Batch: 47265	Date Analyzed: 2008-04-09	Analyzed By: DC
Prep Batch: 40652	Sample Preparation: 2008-04-09	Prepared By: DC

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		2.50	mg/Kg	20	0.0100
Toluene		51.4	mg/Kg	20	0.0100
Ethylbenzene		66.8	mg/Kg	20	0.0100
Xylene		110	mg/Kg	20	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	¹²	21.6	mg/Kg	20	20.0	108	89 - 107.2
4-Bromofluorobenzene (4-BFB)		26.4	mg/Kg	20	20.0	132	66.7 - 153.3

Sample: 156039 - SP-1

Analysis: TPH DRO	Analytical Method: Mod. 8015B	Prep Method: N/A
QC Batch: 47272	Date Analyzed: 2008-04-09	Analyzed By: LD
Prep Batch: 40655	Sample Preparation: 2008-04-09	Prepared By: LD

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		11000	mg/Kg	10	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	¹³	838	mg/Kg	10	100	838	10 - 250.4

Sample: 156039 - SP-1

Analysis: TPH GRO	Analytical Method: S 8015B	Prep Method: S 5035
QC Batch: 47266	Date Analyzed: 2008-04-09	Analyzed By: DC
Prep Batch: 40652	Sample Preparation: 2008-04-09	Prepared By: DC

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		1840	mg/Kg	20	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		20.1	mg/Kg	20	20.0	100	84.4 - 101.7
4-Bromofluorobenzene (4-BFB)	¹⁴	58.9	mg/Kg	20	20.0	294	74.9 - 140.5

¹²High surrogate recovery due to peak interference.

¹³High surrogate recovery due to peak interference.

¹⁴High surrogate recovery due to peak interference.

Sample: 156040 - SP-2

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035
 QC Batch: 47265 Date Analyzed: 2008-04-09 Analyzed By: DC
 Prep Batch: 40652 Sample Preparation: 2008-04-09 Prepared By: DC

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		0.199	mg/Kg	2	0.0100
Toluene		3.04	mg/Kg	2	0.0100
Ethylbenzene		3.18	mg/Kg	2	0.0100
Xylene		4.86	mg/Kg	2	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	¹⁵	2.17	mg/Kg	2	2.00	108	89 - 107.2
4-Bromofluorobenzene (4-BFB)		2.05	mg/Kg	2	2.00	102	66.7 - 153.3

Sample: 156040 - SP-2

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A
 QC Batch: 47272 Date Analyzed: 2008-04-09 Analyzed By: LD
 Prep Batch: 40655 Sample Preparation: 2008-04-09 Prepared By: LD

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		830	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	¹⁶	267	mg/Kg	1	100	267	10 - 250.4

Sample: 156040 - SP-2

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035
 QC Batch: 47266 Date Analyzed: 2008-04-09 Analyzed By: DC
 Prep Batch: 40652 Sample Preparation: 2008-04-09 Prepared By: DC

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		138	mg/Kg	2	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.94	mg/Kg	2	2.00	97	84.4 - 101.7
4-Bromofluorobenzene (4-BFB)	¹⁷	3.85	mg/Kg	2	2.00	192	74.9 - 140.5

¹⁵High surrogate recovery due to peak interference.

¹⁶High surrogate recovery due to peak interference.

¹⁷High surrogate recovery due to peak interference.

Sample: 156042 - SP-4

Analysis: BTEX	Analytical Method: S 8021B	Prep Method: S 5035
QC Batch: 47350	Date Analyzed: 2008-04-10	Analyzed By: DC
Prep Batch: 40717	Sample Preparation: 2008-04-09	Prepared By: DC

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		0.112	mg/Kg	2	0.0100
Toluene		2.94	mg/Kg	2	0.0100
Ethylbenzene		3.20	mg/Kg	2	0.0100
Xylene		4.93	mg/Kg	2	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.24	mg/Kg	2	2.00	112	82.9 - 125.1
4-Bromofluorobenzene (4-BFB)		2.13	mg/Kg	2	2.00	106	48.9 - 160.4

Sample: 156042 - SP-4

Analysis: TPH DRO	Analytical Method: Mod. 8015B	Prep Method: N/A
QC Batch: 47272	Date Analyzed: 2008-04-09	Analyzed By: LD
Prep Batch: 40655	Sample Preparation: 2008-04-09	Prepared By: LD

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		1330	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	²⁰	278	mg/Kg	1	100	278	10 - 250.4

Sample: 156042 - SP-4

Analysis: TPH GRO	Analytical Method: S 8015B	Prep Method: S 5035
QC Batch: 47351	Date Analyzed: 2008-04-10	Analyzed By: DC
Prep Batch: 40717	Sample Preparation: 2008-04-09	Prepared By: DC

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		148	mg/Kg	2	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.07	mg/Kg	2	2.00	104	75 - 117.2
4-Bromofluorobenzene (4-BFB)	²¹	3.68	mg/Kg	2	2.00	184	66 - 142.8

²⁰High surrogate recovery due to peak interference.

²¹High surrogate recovery due to peak interference.

Sample: 156044 - SW-2

Analysis: BTEX	Analytical Method: S 8021B	Prep Method: S 5035
QC Batch: 47350	Date Analyzed: 2008-04-10	Analyzed By: DC
Prep Batch: 40717	Sample Preparation: 2008-04-09	Prepared By: DC

Parameter	Flag	RL		Dilution	RL
		Result	Units		
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		<0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.14	mg/Kg	1	1.00	114	82.9 - 125.1
4-Bromofluorobenzene (4-BFB)		0.834	mg/Kg	1	1.00	83	48.9 - 160.4

Sample: 156044 - SW-2

Analysis: TPH DRO	Analytical Method: Mod. 8015B	Prep Method: N/A
QC Batch: 47272	Date Analyzed: 2008-04-09	Analyzed By: LD
Prep Batch: 40655	Sample Preparation: 2008-04-09	Prepared By: LD

Parameter	Flag	RL		Dilution	RL
		Result	Units		
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		85.7	mg/Kg	1	100	86	10 - 250.4

Sample: 156044 - SW-2

Analysis: TPH GRO	Analytical Method: S 8015B	Prep Method: S 5035
QC Batch: 47351	Date Analyzed: 2008-04-10	Analyzed By: DC
Prep Batch: 40717	Sample Preparation: 2008-04-09	Prepared By: DC

Parameter	Flag	RL		Dilution	RL
		Result	Units		
GRO		10.1	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.05	mg/Kg	1	1.00	105	75 - 117.2
4-Bromofluorobenzene (4-BFB)		1.15	mg/Kg	1	1.00	115	66 - 142.8

Sample: 156045 - SW-3

Analysis: BTEX	Analytical Method: S 8021B	Prep Method: S 5035
QC Batch: 47350	Date Analyzed: 2008-04-10	Analyzed By: DC
Prep Batch: 40717	Sample Preparation: 2008-04-09	Prepared By: DC

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		0.0380	mg/Kg	1	0.0100
Ethylbenzene		0.0246	mg/Kg	1	0.0100
Xylene		0.0414	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.14	mg/Kg	1	1.00	114	82.9 - 125.1
4-Bromofluorobenzene (4-BFB)		0.833	mg/Kg	1	1.00	83	48.9 - 160.4

Sample: 156045 - SW-3

Analysis: TPH DRO	Analytical Method: Mod. 8015B	Prep Method: N/A
QC Batch: 47272	Date Analyzed: 2008-04-09	Analyzed By: LD
Prep Batch: 40655	Sample Preparation: 2008-04-09	Prepared By: LD

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		60.8	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		102	mg/Kg	1	100	102	10 - 250.4

Sample: 156045 - SW-3

Analysis: TPH GRO	Analytical Method: S 8015B	Prep Method: S 5035
QC Batch: 47351	Date Analyzed: 2008-04-10	Analyzed By: DC
Prep Batch: 40717	Sample Preparation: 2008-04-09	Prepared By: DC

Parameter	Flag	RL Result	Units	Dilution	RL
GRO	<i>B</i>	3.59	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.06	mg/Kg	1	1.00	106	75 - 117.2
4-Bromofluorobenzene (4-BFB)		1.13	mg/Kg	1	1.00	113	66 - 142.8

Sample: 156046 - SW-4

Analysis: BTEX	Analytical Method: S 8021B	Prep Method: S 5035
QC Batch: 47350	Date Analyzed: 2008-04-10	Analyzed By: DC
Prep Batch: 40717	Sample Preparation: 2008-04-09	Prepared By: DC

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		<0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.13	mg/Kg	1	1.00	113	82.9 - 125.1
4-Bromofluorobenzene (4-BFB)		0.823	mg/Kg	1	1.00	82	48.9 - 160.4

Sample: 156046 - SW-4

Analysis: TPH DRO	Analytical Method: Mod. 8015B	Prep Method: N/A
QC Batch: 47272	Date Analyzed: 2008-04-09	Analyzed By: LD
Prep Batch: 40655	Sample Preparation: 2008-04-09	Prepared By: LD

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		108	mg/Kg	1	100	108	10 - 250.4

Sample: 156046 - SW-4

Analysis: TPH GRO	Analytical Method: S 8015B	Prep Method: S 5035
QC Batch: 47351	Date Analyzed: 2008-04-10	Analyzed By: DC
Prep Batch: 40717	Sample Preparation: 2008-04-09	Prepared By: DC

Parameter	Flag	RL Result	Units	Dilution	RL
GRO	B	2.07	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.05	mg/Kg	1	1.00	105	75 - 117.2
4-Bromofluorobenzene (4-BFB)		1.06	mg/Kg	1	1.00	106	66 - 142.8

Sample: 156047 - SW-5

Analysis: BTEX	Analytical Method: S 8021B	Prep Method: S 5035
QC Batch: 47350	Date Analyzed: 2008-04-10	Analyzed By: DC
Prep Batch: 40717	Sample Preparation: 2008-04-09	Prepared By: DC

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		<0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.14	mg/Kg	1	1.00	114	82.9 - 125.1
4-Bromofluorobenzene (4-BFB)		0.825	mg/Kg	1	1.00	82	48.9 - 160.4

Sample: 156047 - SW-5

Analysis: TPH DRO	Analytical Method: Mod. 8015B	Prep Method: N/A
QC Batch: 47272	Date Analyzed: 2008-04-09	Analyzed By: LD
Prep Batch: 40655	Sample Preparation: 2008-04-09	Prepared By: LD

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		81.6	mg/Kg	1	100	82	10 - 250.4

Sample: 156047 - SW-5

Analysis: TPH GRO	Analytical Method: S 8015B	Prep Method: S 5035
QC Batch: 47351	Date Analyzed: 2008-04-10	Analyzed By: DC
Prep Batch: 40717	Sample Preparation: 2008-04-09	Prepared By: DC

Parameter	Flag	RL Result	Units	Dilution	RL
GRO	B	1.00	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.05	mg/Kg	1	1.00	105	75 - 117.2
4-Bromofluorobenzene (4-BFB)		1.09	mg/Kg	1	1.00	109	66 - 142.8

Sample: 156048 - SW-6

Analysis: BTEX	Analytical Method: S 8021B	Prep Method: S 5035
QC Batch: 47350	Date Analyzed: 2008-04-10	Analyzed By: DC
Prep Batch: 40717	Sample Preparation: 2008-04-09	Prepared By: DC

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		<0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.13	mg/Kg	1	1.00	113	82.9 - 125.1
4-Bromofluorobenzene (4-BFB)		0.822	mg/Kg	1	1.00	82	48.9 - 160.4

Sample: 156048 - SW-6

Analysis: TPH DRO	Analytical Method: Mod. 8015B	Prep Method: N/A
QC Batch: 47272	Date Analyzed: 2008-04-09	Analyzed By: LD
Prep Batch: 40655	Sample Preparation: 2008-04-09	Prepared By: LD

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		108	mg/Kg	1	100	108	10 - 250.4

Sample: 156048 - SW-6

Analysis: TPH GRO	Analytical Method: S 8015B	Prep Method: S 5035
QC Batch: 47351	Date Analyzed: 2008-04-10	Analyzed By: DC
Prep Batch: 40717	Sample Preparation: 2008-04-09	Prepared By: DC

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.06	mg/Kg	1	1.00	106	75 - 117.2
4-Bromofluorobenzene (4-BFB)		1.08	mg/Kg	1	1.00	108	66 - 142.8

Sample: 156049 - SW-7

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035
 QC Batch: 47350 Date Analyzed: 2008-04-10 Analyzed By: DC
 Prep Batch: 40717 Sample Preparation: 2008-04-09 Prepared By: DC

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0200	mg/Kg	2	0.0100
Toluene		0.0412	mg/Kg	2	0.0100
Ethylbenzene		0.312	mg/Kg	2	0.0100
Xylene		0.974	mg/Kg	2	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.28	mg/Kg	2	2.00	114	82.9 - 125.1
4-Bromofluorobenzene (4-BFB)		1.94	mg/Kg	2	2.00	97	48.9 - 160.4

Sample: 156049 - SW-7

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A
 QC Batch: 47272 Date Analyzed: 2008-04-09 Analyzed By: LD
 Prep Batch: 40655 Sample Preparation: 2008-04-09 Prepared By: LD

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		2460	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	²²	298	mg/Kg	1	100	298	10 - 250.4

Sample: 156049 - SW-7

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035
 QC Batch: 47351 Date Analyzed: 2008-04-10 Analyzed By: DC
 Prep Batch: 40717 Sample Preparation: 2008-04-09 Prepared By: DC

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		119	mg/Kg	2	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.13	mg/Kg	2	2.00	106	75 - 117.2
4-Bromofluorobenzene (4-BFB)	²³	3.10	mg/Kg	2	2.00	155	66 - 142.8

²²High surrogate recovery due to peak interference.

²³High surrogate recovery due to peak interference.

Sample: 156050 - SW-8

Analysis: BTEX	Analytical Method: S 8021B	Prep Method: S 5035
QC Batch: 47350	Date Analyzed: 2008-04-10	Analyzed By: DC
Prep Batch: 40717	Sample Preparation: 2008-04-09	Prepared By: DC

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		<0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.11	mg/Kg	1	1.00	111	82.9 - 125.1
4-Bromofluorobenzene (4-BFB)		0.806	mg/Kg	1	1.00	81	48.9 - 160.4

Sample: 156050 - SW-8

Analysis: TPH DRO	Analytical Method: Mod. 8015B	Prep Method: N/A
QC Batch: 47272	Date Analyzed: 2008-04-09	Analyzed By: LD
Prep Batch: 40655	Sample Preparation: 2008-04-09	Prepared By: LD

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		81.5	mg/Kg	1	100	82	10 - 250.4

Sample: 156050 - SW-8

Analysis: TPH GRO	Analytical Method: S 8015B	Prep Method: S 5035
QC Batch: 47351	Date Analyzed: 2008-04-10	Analyzed By: DC
Prep Batch: 40717	Sample Preparation: 2008-04-09	Prepared By: DC

Parameter	Flag	RL Result	Units	Dilution	RL
GRO	B	2.27	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.07	mg/Kg	1	1.00	107	75 - 117.2
4-Bromofluorobenzene (4-BFB)		1.07	mg/Kg	1	1.00	107	66 - 142.8

Method Blank (1) QC Batch: 47265

QC Batch: 47265	Date Analyzed: 2008-04-09	Analyzed By: DC
Prep Batch: 40652	QC Preparation: 2008-04-09	Prepared By: DC

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.0110	mg/Kg	0.01
Toluene		<0.0109	mg/Kg	0.01
Ethylbenzene		<0.0109	mg/Kg	0.01
Xylene		<0.0331	mg/Kg	0.01

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.08	mg/Kg	1	1.00	108	82.3 - 121.6
4-Bromofluorobenzene (4-BFB)		0.721	mg/Kg	1	1.00	72	72 - 123

Method Blank (1) QC Batch: 47266

QC Batch: 47266
Prep Batch: 40652

Date Analyzed: 2008-04-09
QC Preparation: 2008-04-09

Analyzed By: DC
Prepared By: DC

Parameter	Flag	MDL Result	Units	RL
GRO		0.753	mg/Kg	1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.09	mg/Kg	1	1.00	109	70 - 130
4-Bromofluorobenzene (4-BFB)		0.991	mg/Kg	1	1.00	99	70 - 130

Method Blank (1) QC Batch: 47272

QC Batch: 47272
Prep Batch: 40655

Date Analyzed: 2008-04-09
QC Preparation: 2008-04-09

Analyzed By: LD
Prepared By: LD

Parameter	Flag	MDL Result	Units	RL
DRO		<15.8	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		93.4	mg/Kg	1	100	93	30.9 - 146.4

Method Blank (1) QC Batch: 47350

QC Batch: 47350
Prep Batch: 40717

Date Analyzed: 2008-04-10
QC Preparation: 2008-04-09

Analyzed By: DC
Prepared By: DC

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.0110	mg/Kg	0.01
Toluene		<0.0109	mg/Kg	0.01
Ethylbenzene		<0.0109	mg/Kg	0.01

continued ...

method blank continued ...

Parameter	Flag	MDL Result	Units	RL
Xylene		<0.0331	mg/Kg	0.01

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.09	mg/Kg	1	1.00	109	82.3 - 121.6
4-Bromofluorobenzene (4-BFB)		0.779	mg/Kg	1	1.00	78	72 - 123

Method Blank (1) QC Batch: 47351

QC Batch: 47351 Date Analyzed: 2008-04-10 Analyzed By: DC
Prep Batch: 40717 QC Preparation: 2008-04-09 Prepared By: DC

Parameter	Flag	MDL Result	Units	RL
GRO		0.798	mg/Kg	1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.09	mg/Kg	1	1.00	109	70 - 130
4-Bromofluorobenzene (4-BFB)		1.07	mg/Kg	1	1.00	107	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 47265 Date Analyzed: 2008-04-09 Analyzed By: DC
Prep Batch: 40652 QC Preparation: 2008-04-09 Prepared By: DC

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	1.02	mg/Kg	1	1.00	<0.0110	102	72.7 - 129.8
Toluene	1.01	mg/Kg	1	1.00	<0.0109	101	71.6 - 129.6
Ethylbenzene	1.00	mg/Kg	1	1.00	<0.0109	100	70.8 - 129.7
Xylene	2.98	mg/Kg	1	3.00	<0.0331	99	70.9 - 129.4

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

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	1.02	mg/Kg	1	1.00	<0.0110	102	72.7 - 129.8	0	20
Toluene	1.02	mg/Kg	1	1.00	<0.0109	102	71.6 - 129.6	1	20
Ethylbenzene	1.01	mg/Kg	1	1.00	<0.0109	101	70.8 - 129.7	1	20
Xylene	3.00	mg/Kg	1	3.00	<0.0331	100	70.9 - 129.4	1	20

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

Surrogate	LCS Result	LCS Result	Units	Dil.	Spike Amount	LCS Rec.	LCS Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.09	1.08	mg/Kg	1	1.00	109	108	82.9 - 122.8
4-Bromofluorobenzene (4-BFB)	0.742	0.738	mg/Kg	1	1.00	74	74	73.8 - 122.4

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	1130	mg/Kg	1	250	904.64	90	18 - 179.5	4	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	131	142	mg/Kg	1	100	131	142	34.1 - 158

Matrix Spike (MS-1) Spiked Sample: 156050

QC Batch: 47350
Prep Batch: 40717

Date Analyzed: 2008-04-10
QC Preparation: 2008-04-09

Analyzed By: DC
Prepared By: DC

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	²⁶ 1.77	mg/Kg	1	1.00	<0.0110	177	58.6 - 165.2
Toluene	²⁷ 1.80	mg/Kg	1	1.00	<0.0109	180	64.2 - 153.8
Ethylbenzene	²⁸ 1.81	mg/Kg	1	1.00	<0.0109	181	61.6 - 159.4
Xylene	²⁹ 5.47	mg/Kg	1	3.00	<0.0331	182	64.4 - 155.3

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	³⁰ 1.71	mg/Kg	1	1.00	<0.0110	171	58.6 - 165.2	3	20
Toluene	³¹ 1.74	mg/Kg	1	1.00	<0.0109	174	64.2 - 153.8	3	20
Ethylbenzene	³² 1.78	mg/Kg	1	1.00	<0.0109	178	61.6 - 159.4	2	20
Xylene	³³ 5.37	mg/Kg	1	3.00	<0.0331	179	64.4 - 155.3	2	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)	1.12	1.12	mg/Kg	1	1	112	112	76.5 - 127.9
4-Bromofluorobenzene (4-BFB)	0.805	0.804	mg/Kg	1	1	80	80	72 - 127.8

Matrix Spike (MS-1) Spiked Sample: 156048

QC Batch: 47351
Prep Batch: 40717

Date Analyzed: 2008-04-10
QC Preparation: 2008-04-09

Analyzed By: DC
Prepared By: DC

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	13.2	mg/Kg	1	10.0	<0.171	132	22.3 - 134.6

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

²⁶Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
²⁷Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
²⁸Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
²⁹Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
³⁰Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
³¹Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
³²Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
³³Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.

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 Contact Person: ES TAYLOR E-mail:
 Invoice to: PIAINS
 Project #: PIAINS071SPL Project Name: EK ABEEN BLM
 Project Location (including state): LEA COUNTY NM Sampler Signature: R

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB USE ONLY	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX				PRESERVATIVE METHOD				SAMPLING		MTBE 8021B / 602 / 8260B / 624 BTX 8021B / 602 / 8260B / 624 TPH 418.1 / TX1005 / TX1005 Ext(C35) TPH 8015 / GRG / 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		
				WATER	SOIL	AIR	SLUDGE	HCl	HNO ₃	H ₂ SO ₄	NaOH	ICE	NONE				DATE	TIME
				5633	BH-1	1		X									X	
034	BH-2	1		X						X			4/8	11:04				
035	BH-3	1		X						X			4/8	11:06				
036	BH-4	1		X						X			4/8	11:10				
037	BH-5	1		X						X			4/8	11:13				
038	BH-6	1		X						X			4/8	11:20				
039	SP-1	1		X						X			4/8	11:56				
040	SP-2	1		X						X			4/8	12:00				
041	SP-3	1		X						X			4/8	12:04				
042	SP-4	1		X						X			4/8	12:10				

Relinquished by: Ray Denny TAYLOR Company: TAION Date: 4/8/08 Time: 2:30 Temp °C:
 Received by: Waymon Taylor TAYLOR Company: TAION Date: 4-8-08 Time: 2:30 Temp °C:
 Relinquished by: Waymon Taylor TAYLOR Company: TAION Date: 4-8-08 Time: 5:00 Temp °C:
 Received by: [Signature] Company: Trace Date: 4-8-08 Time: 11:00 Temp °C:

LAB USE ONLY
 [Stamp/Signature Area]

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 # _____



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Analytical and Quality Control Report

Eb Taylor
Talon LPE-Hobbs
318 E Taylor
Hobbs, NM, 88240

Report Date: April 22, 2008

Work Order: 8042108



Project Location: Lea County, NM
Project Name: EK Queen BLM
Project Number: Plains071SPL

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
157423	SW-7	soil	2008-04-17	12:15	2008-04-21
157424	BH-2	soil	2008-04-17	12:24	2008-04-21
157425	BH-4	soil	2008-04-17	12:35	2008-04-21
157426	BH-5	soil	2008-04-17	12:48	2008-04-21
157427	BH-6	soil	2008-04-17	12:57	2008-04-21

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 11 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Standard Flags

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

Analytical Report

Sample: 157423 - SW-7

Analysis: BTEX	Analytical Method: S 8021B	Prep Method: S 5035
QC Batch: 47663	Date Analyzed: 2008-04-21	Analyzed By: AG
Prep Batch: 40980	Sample Preparation: 2008-04-21	Prepared By: AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		0.0361	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.08	mg/Kg	1	1.00	108	82.9 - 125.1
4-Bromofluorobenzene (4-BFB)		1.12	mg/Kg	1	1.00	112	48.9 - 160.4

Sample: 157423 - SW-7

Analysis: TPH DRO	Analytical Method: Mod. 8015B	Prep Method: N/A
QC Batch: 47649	Date Analyzed: 2008-04-21	Analyzed By: LD
Prep Batch: 40940	Sample Preparation: 2008-04-21	Prepared By: LD

Parameter	Flag	RL Result	Units	Dilution	RL
DRO	<i>B</i>	94.9	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		131	mg/Kg	1	100	131	10 - 250.4

Sample: 157423 - SW-7

Analysis: TPH GRO	Analytical Method: S 8015B	Prep Method: S 5035
QC Batch: 47664	Date Analyzed: 2008-04-21	Analyzed By: AG
Prep Batch: 40980	Sample Preparation: 2008-04-21	Prepared By: AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		45.5	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.15	mg/Kg	1	1.00	115	75 - 117.2
4-Bromofluorobenzene (4-BFB)		1.24	mg/Kg	1	1.00	124	66 - 142.8

Sample: 157424 - BH-2

Analysis: BTEX	Analytical Method: S 8021B	Prep Method: S 5035
QC Batch: 47663	Date Analyzed: 2008-04-21	Analyzed By: AG
Prep Batch: 40980	Sample Preparation: 2008-04-21	Prepared By: AG

Parameter	Flag	RL		Dilution	RL
		Result	Units		
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		<0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.08	mg/Kg	1	1.00	108	82.9 - 125.1
4-Bromofluorobenzene (4-BFB)		1.10	mg/Kg	1	1.00	110	48.9 - 160.4

Sample: 157424 - BH-2

Analysis: TPH DRO	Analytical Method: Mod. 8015B	Prep Method: N/A
QC Batch: 47649	Date Analyzed: 2008-04-21	Analyzed By: LD
Prep Batch: 40940	Sample Preparation: 2008-04-21	Prepared By: LD

Parameter	Flag	RL		Dilution	RL
		Result	Units		
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		125	mg/Kg	1	100	125	10 - 250.4

Sample: 157424 - BH-2

Analysis: TPH GRO	Analytical Method: S 8015B	Prep Method: S 5035
QC Batch: 47664	Date Analyzed: 2008-04-21	Analyzed By: AG
Prep Batch: 40980	Sample Preparation: 2008-04-21	Prepared By: AG

Parameter	Flag	RL		Dilution	RL
		Result	Units		
GRO	B	1.43	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.16	mg/Kg	1	1.00	116	75 - 117.2
4-Bromofluorobenzene (4-BFB)		1.20	mg/Kg	1	1.00	120	66 - 142.8

Sample: 157425 - BH-4

Analysis: BTEX	Analytical Method: S 8021B	Prep Method: S 5035
QC Batch: 47663	Date Analyzed: 2008-04-21	Analyzed By: AG
Prep Batch: 40980	Sample Preparation: 2008-04-21	Prepared By: AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		<0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.08	mg/Kg	1	1.00	108	82.9 - 125.1
4-Bromofluorobenzene (4-BFB)		1.11	mg/Kg	1	1.00	111	48.9 - 160.4

Sample: 157425 - BH-4

Analysis: TPH DRO	Analytical Method: Mod. 8015B	Prep Method: N/A
QC Batch: 47649	Date Analyzed: 2008-04-21	Analyzed By: LD
Prep Batch: 40940	Sample Preparation: 2008-04-21	Prepared By: LD

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		135	mg/Kg	1	100	135	10 - 250.4

Sample: 157425 - BH-4

Analysis: TPH GRO	Analytical Method: S 8015B	Prep Method: S 5035
QC Batch: 47664	Date Analyzed: 2008-04-21	Analyzed By: AG
Prep Batch: 40980	Sample Preparation: 2008-04-21	Prepared By: AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO	B	1.76	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.17	mg/Kg	1	1.00	117	75 - 117.2
4-Bromofluorobenzene (4-BFB)		1.21	mg/Kg	1	1.00	121	66 - 142.8

Sample: 157426 - BH-5

Analysis: BTEX	Analytical Method: S 8021B	Prep Method: S 5035
QC Batch: 47663	Date Analyzed: 2008-04-21	Analyzed By: AG
Prep Batch: 40980	Sample Preparation: 2008-04-21	Prepared By: AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		0.0660	mg/Kg	1	0.0100
Xylene		0.171	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.08	mg/Kg	1	1.00	108	82.9 - 125.1
4-Bromofluorobenzene (4-BFB)		1.23	mg/Kg	1	1.00	123	48.9 - 160.4

Sample: 157426 - BH-5

Analysis: TPH DRO	Analytical Method: Mod. 8015B	Prep Method: N/A
QC Batch: 47649	Date Analyzed: 2008-04-21	Analyzed By: LD
Prep Batch: 40940	Sample Preparation: 2008-04-21	Prepared By: LD

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		115	mg/Kg	1	100	115	.10 - 250.4

Sample: 157426 - BH-5

Analysis: TPH GRO	Analytical Method: S 8015B	Prep Method: S 5035
QC Batch: 47664	Date Analyzed: 2008-04-21	Analyzed By: AG
Prep Batch: 40980	Sample Preparation: 2008-04-21	Prepared By: AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		45.1	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.16	mg/Kg	1	1.00	116	75 - 117.2
4-Bromofluorobenzene (4-BFB)	¹	1.46	mg/Kg	1	1.00	146	66 - 142.8

¹High surrogate recovery due to peak interference.

Sample: 157427 - BH-6

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035
 QC Batch: 47663 Date Analyzed: 2008-04-21 Analyzed By: AG
 Prep Batch: 40980 Sample Preparation: 2008-04-21 Prepared By: AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		<0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.08	mg/Kg	1	1.00	108	82.9 - 125.1
4-Bromofluorobenzene (4-BFB)		1.11	mg/Kg	1	1.00	111	48.9 - 160.4

Sample: 157427 - BH-6

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A
 QC Batch: 47649 Date Analyzed: 2008-04-21 Analyzed By: LD
 Prep Batch: 40940 Sample Preparation: 2008-04-21 Prepared By: LD

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		112	mg/Kg	1	100	112	10 - 250.4

Sample: 157427 - BH-6

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035
 QC Batch: 47664 Date Analyzed: 2008-04-21 Analyzed By: AG
 Prep Batch: 40980 Sample Preparation: 2008-04-21 Prepared By: AG

Parameter	Flag	RL Result	Units	Dilution	RL
GRO	B	4.37	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.16	mg/Kg	1	1.00	116	75 - 117.2
4-Bromofluorobenzene (4-BFB)		1.23	mg/Kg	1	1.00	123	66 - 142.8

Method Blank (1) QC Batch: 47649

QC Batch: 47649 Date Analyzed: 2008-04-21 Analyzed By: LD
 Prep Batch: 40940 QC Preparation: 2008-04-21 Prepared By: LD

Parameter	Flag	MDL Result	Units	RL
DRO		21.6	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		94.8	mg/Kg	1	100	95	30.9 - 146.4

Method Blank (1) QC Batch: 47663

QC Batch: 47663 Date Analyzed: 2008-04-21 Analyzed By: AG
Prep Batch: 40980 QC Preparation: 2008-04-21 Prepared By: AG

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.0110	mg/Kg	0.01
Toluene		<0.0109	mg/Kg	0.01
Ethylbenzene		<0.0109	mg/Kg	0.01
Xylene		<0.0331	mg/Kg	0.01

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.08	mg/Kg	1	1.00	108	82.3 - 121.6
4-Bromofluorobenzene (4-BFB)		1.09	mg/Kg	1	1.00	109	72 - 123

Method Blank (1) QC Batch: 47664

QC Batch: 47664 Date Analyzed: 2008-04-21 Analyzed By: AG
Prep Batch: 40980 QC Preparation: 2008-04-21 Prepared By: AG

Parameter	Flag	MDL Result	Units	RL
GRO		0.872	mg/Kg	1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.22	mg/Kg	1	1.00	122	70 - 130
4-Bromofluorobenzene (4-BFB)		1.22	mg/Kg	1	1.00	122	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 47649 Date Analyzed: 2008-04-21 Analyzed By: LD
Prep Batch: 40940 QC Preparation: 2008-04-21 Prepared By: LD

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	274	mg/Kg	1	250	21.6	101	27.8 - 152.1

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
DRO	260	mg/Kg	1	250	21.6	95	27.8 - 152.1	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
n-Triacontane	115	111	mg/Kg	1	100	115	111	38 - 130.4

Laboratory Control Spike (LCS-1)

QC Batch: 47663
 Prep Batch: 40980

Date Analyzed: 2008-04-21
 QC Preparation: 2008-04-21

Analyzed By: AG
 Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	1.09	mg/Kg	1	1.00	<0.0110	109	72.7 - 129.8
Toluene	1.09	mg/Kg	1	1.00	<0.0109	109	71.6 - 129.6
Ethylbenzene	1.10	mg/Kg	1	1.00	<0.0109	110	70.8 - 129.7
Xylene	3.35	mg/Kg	1	3.00	<0.0331	112	70.9 - 129.4

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	1.04	mg/Kg	1	1.00	<0.0110	104	72.7 - 129.8	5	20
Toluene	1.04	mg/Kg	1	1.00	<0.0109	104	71.6 - 129.6	5	20
Ethylbenzene	1.06	mg/Kg	1	1.00	<0.0109	106	70.8 - 129.7	4	20
Xylene	3.21	mg/Kg	1	3.00	<0.0331	107	70.9 - 129.4	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)	1.09	1.08	mg/Kg	1	1.00	109	108	82.9 - 122.8
4-Bromofluorobenzene (4-BFB)	1.09	1.09	mg/Kg	1	1.00	109	109	73.8 - 122.4

Laboratory Control Spike (LCS-1)

QC Batch: 47664
 Prep Batch: 40980

Date Analyzed: 2008-04-21
 QC Preparation: 2008-04-21

Analyzed By: AG
 Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	9.44	mg/Kg	1	10.0	0.872	86	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	9.90	mg/Kg	1	10.0	0.872	90	70 - 130	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)	1.22	1.22	mg/Kg	1	1.00	122	122	70 - 130
4-Bromofluorobenzene (4-BFB)	1.24	1.25	mg/Kg	1	1.00	124	125	70 - 130

Matrix Spike (MS-1) Spiked Sample: 157426

QC Batch: 47649 Date Analyzed: 2008-04-21 Analyzed By: LD
Prep Batch: 40940 QC Preparation: 2008-04-21 Prepared By: LD

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	351	mg/Kg	1	250	48.38	121	18 - 179.5

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	353	mg/Kg	1	250	48.38	122	18 - 179.5	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
n-Triacontane	115	127	mg/Kg	1	100	115	127	34.1 - 158

Matrix Spike (MS-1) Spiked Sample: 157505

QC Batch: 47663 Date Analyzed: 2008-04-21 Analyzed By: AG
Prep Batch: 40980 QC Preparation: 2008-04-21 Prepared By: AG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	1.09	mg/Kg	1	1.00	<0.0110	109	58.6 - 165.2
Toluene	1.10	mg/Kg	1	1.00	<0.0109	110	64.2 - 153.8
Ethylbenzene	1.13	mg/Kg	1	1.00	<0.0109	113	61.6 - 159.4
Xylene	3.44	mg/Kg	1	3.00	<0.0331	115	64.4 - 155.3

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	1.08	mg/Kg	1	1.00	<0.0110	108	58.6 - 165.2	1	20
Toluene	1.10	mg/Kg	1	1.00	<0.0109	110	64.2 - 153.8	0	20
Ethylbenzene	1.13	mg/Kg	1	1.00	<0.0109	113	61.6 - 159.4	0	20
Xylene	3.43	mg/Kg	1	3.00	<0.0331	114	64.4 - 155.3	0	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)	1.09	1.08	mg/Kg	1	1	109	108	76.5 - 127.9
4-Bromofluorobenzene (4-BFB)	1.13	1.11	mg/Kg	1	1	113	111	72 - 127.8

Matrix Spike (MS-1) Spiked Sample: 157505

QC Batch: 47664 Date Analyzed: 2008-04-21 Analyzed By: AG
Prep Batch: 40980 QC Preparation: 2008-04-21 Prepared By: AG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	11.1	mg/Kg	1	10.0	1.56	95	22.3 - 134.6

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	11.0	mg/Kg	1	10.0	1.56	94	22.3 - 134.6	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)	² 1.15	³ 1.14	mg/Kg	1	1	115	114	68.4 - 113.1
4-Bromofluorobenzene (4-BFB)	1.26	1.25	mg/Kg	1	1	126	125	66.7 - 134.3

Standard (ICV-1)

QC Batch: 47649 Date Analyzed: 2008-04-21 Analyzed By: LD

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	265	106	85 - 115	2008-04-21

Standard (CCV-1)

QC Batch: 47649 Date Analyzed: 2008-04-21 Analyzed By: LD

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	286	114	85 - 115	2008-04-21

Standard (ICV-1)

QC Batch: 47663 Date Analyzed: 2008-04-21 Analyzed By: AG

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.107	107	85 - 115	2008-04-21
Toluene		mg/Kg	0.100	0.108	108	85 - 115	2008-04-21
Ethylbenzene		mg/Kg	0.100	0.109	109	85 - 115	2008-04-21
Xylene		mg/Kg	0.300	0.332	111	85 - 115	2008-04-21

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

³Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.

Standard (CCV-1)

QC Batch: 47663

Date Analyzed: 2008-04-21

Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.110	110	85 - 115	2008-04-21
Toluene		mg/Kg	0.100	0.111	111	85 - 115	2008-04-21
Ethylbenzene		mg/Kg	0.100	0.111	111	85 - 115	2008-04-21
Xylene		mg/Kg	0.300	0.337	112	85 - 115	2008-04-21

Standard (ICV-1)

QC Batch: 47664

Date Analyzed: 2008-04-21

Analyzed By: AG

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	1.04	104	85 - 115	2008-04-21

Standard (CCV-1)

QC Batch: 47664

Date Analyzed: 2008-04-21

Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	1.08	108	85 - 115	2008-04-21



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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

Eb Taylor
Talon LPE-Hobbs
318 E Taylor
Hobbs, NM, 88240

Report Date: August 13, 2008

Work Order: 8081204



Project Location: Lea County, NM
Project Name: EK Queen BLM
Project Number: Plains075SPL

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
170234	BF-1	soil	2008-08-11	11:30	2008-08-12
170235	BF-2	soil	2008-08-11	11:35	2008-08-12

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 11 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Blair Leftwich

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 EK Queen BLM were received by TraceAnalysis, Inc. on 2008-08-12 and assigned to work order 8081204. Samples for work order 8081204 were received intact at a temperature of 3.3 deg. C.

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

<u>Test</u>	<u>Method</u>
BTEX	S 8021B
TPH DRO	Mod. 8015B
TPH GRO	S 8015B

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 8081204 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: 170234 - BF-1

Laboratory: Midland	Analytical Method: S 8021B	Prep Method: S 5035
Analysis: BTEX	Date Analyzed: 2008-08-12	Analyzed By: DC
QC Batch: 51389	Sample Preparation: 2008-08-12	Prepared By: DC
Prep Batch: 44052		

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		0.0195	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.754	mg/Kg	1	1.00	75	68 - 136.9
4-Bromofluorobenzene (4-BFB)		0.810	mg/Kg	1	1.00	81	48.2 - 155

Sample: 170234 - BF-1

Laboratory: Midland	Analytical Method: Mod. 8015B	Prep Method: N/A
Analysis: TPH DRO	Date Analyzed: 2008-08-12	Analyzed By: LD
QC Batch: 51363	Sample Preparation: 2008-08-12	Prepared By: LD
Prep Batch: 44047		

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		784	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	¹	296	mg/Kg	1	100	296	10 - 250.4

Sample: 170234 - BF-1

Laboratory: Midland	Analytical Method: S 8015B	Prep Method: S 5035
Analysis: TPH GRO	Date Analyzed: 2008-08-12	Analyzed By: DC
QC Batch: 51390	Sample Preparation: 2008-08-12	Prepared By: DC
Prep Batch: 44052		

continued ...

¹High surrogate recovery due to peak interference.

sample 170234 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL
Parameter	Flag	RL Result	Units	Dilution	RL
GRO	B	1.65	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.871	mg/Kg	1	1.00	87	67.5 - 135.2
4-Bromofluorobenzene (4-BFB)		0.879	mg/Kg	1	1.00	88	63.8 - 141

Sample: 170235 - BF-2

Laboratory: Midland
 Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035
 QC Batch: 51389 Date Analyzed: 2008-08-12 Analyzed By: DC
 Prep Batch: 44052 Sample Preparation: 2008-08-12 Prepared By: DC

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		<0.0100	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.792	mg/Kg	1	1.00	79	68 - 136.9
4-Bromofluorobenzene (4-BFB)		0.826	mg/Kg	1	1.00	83	48.2 - 155

Sample: 170235 - BF-2

Laboratory: Midland
 Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A
 QC Batch: 51363 Date Analyzed: 2008-08-12 Analyzed By: LD
 Prep Batch: 44047 Sample Preparation: 2008-08-12 Prepared By: LD

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		827	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	²	336	mg/Kg	1	100	336	10 - 250.4

Sample: 170235 - BF-2

Laboratory: Midland
 Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035
 QC Batch: 51390 Date Analyzed: 2008-08-12 Analyzed By: DC
 Prep Batch: 44052 Sample Preparation: 2008-08-12 Prepared By: DC

Parameter	Flag	RL Result	Units	Dilution	RL
GRO	^B	2.06	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.920	mg/Kg	1	1.00	92	67.5 - 135.2
4-Bromofluorobenzene (4-BFB)		0.891	mg/Kg	1	1.00	89	63.8 - 141

Method Blank (1) QC Batch: 51363

QC Batch: 51363 Date Analyzed: 2008-08-12 Analyzed By: LD
 Prep Batch: 44047 QC Preparation: 2008-08-12 Prepared By: LD

Parameter	Flag	MDL Result	Units	RL
DRO		<15.8	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		85.3	mg/Kg	1	100	85	30.9 - 146.4

Method Blank (1) QC Batch: 51389

QC Batch: 51389 Date Analyzed: 2008-08-12 Analyzed By: DC
 Prep Batch: 44052 QC Preparation: 2008-08-12 Prepared By: DC

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.00580	mg/Kg	0.01
Toluene		<0.00470	mg/Kg	0.01

continued ...

²High surrogate recovery due to peak interference.

method blank continued ...

Parameter	Flag	MDL Result	Units	RL
Ethylbenzene		<0.00530	mg/Kg	0.01
Xylene		<0.0136	mg/Kg	0.01

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.724	mg/Kg	1	1.00	72	48.3 - 132.5
4-Bromofluorobenzene (4-BFB)		0.723	mg/Kg	1	1.00	72	37.7 - 128.9

Method Blank (1) QC Batch: 51390

QC Batch: 51390 Date Analyzed: 2008-08-12 Analyzed By: DC
 Prep Batch: 44052 QC Preparation: 2008-08-12 Prepared By: DC

Parameter	Flag	MDL Result	Units	RL
GRO		0.872	mg/Kg	1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.866	mg/Kg	1	1.00	87	39.2 - 135.2
4-Bromofluorobenzene (4-BFB)		0.809	mg/Kg	1	1.00	81	16.8 - 138.1

Laboratory Control Spike (LCS-1)

QC Batch: 51363 Date Analyzed: 2008-08-12 Analyzed By: LD
 Prep Batch: 44047 QC Preparation: 2008-08-12 Prepared By: LD

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	261	mg/Kg	1	250	<15.8	104	27.8 - 152.1

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
DRO	267	mg/Kg	1	250	<15.8	107	27.8 - 152.1	2	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	85.1	89.3	mg/Kg	1	100	85	89	38 - 130.4

Matrix Spike (MS-1) Spiked Sample: 170234

QC Batch: 51363 Date Analyzed: 2008-08-12 Analyzed By: LD
Prep Batch: 44047 QC Preparation: 2008-08-12 Prepared By: LD

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	³ 613	mg/Kg	1	250	613	0	18 - 179.5

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	⁴ 600	mg/Kg	1	250	613	0	18 - 179.5	2	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	^{5 6} 188	166	mg/Kg	1	100	188	166	34.1 - 158

Matrix Spike (MS-1) Spiked Sample: 170117

QC Batch: 51389 Date Analyzed: 2008-08-12 Analyzed By: DC
Prep Batch: 44052 QC Preparation: 2008-08-12 Prepared By: DC

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	1.21	mg/Kg	1	1.00	<0.00580	121	62.2 - 134.3
Toluene	1.26	mg/Kg	1	1.00	<0.00470	126	62.6 - 145.4
Ethylbenzene	1.27	mg/Kg	1	1.00	0.0517	122	64.6 - 146.4
Xylene	3.82	mg/Kg	1	3.00	0.0743	125	64.3 - 148.8

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	1.31	mg/Kg	1	1.00	<0.00580	131	62.2 - 134.3	8	20
Toluene	1.36	mg/Kg	1	1.00	<0.00470	136	62.6 - 145.4	8	20
Ethylbenzene	1.37	mg/Kg	1	1.00	0.0517	132	64.6 - 146.4	8	20
Xylene	4.14	mg/Kg	1	3.00	0.0743	136	64.3 - 148.8	8	20

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

³Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.
⁴Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.
⁵High surrogate recovery due to peak interference.
⁶High surrogate recovery due to peak interference.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.756	0.762	mg/Kg	1	1	76	76	38.8 - 127.5
4-Bromofluorobenzene (4-BFB)	0.784	0.780	mg/Kg	1	1	78	78	49.3 - 142.4

Matrix Spike (MS-1) Spiked Sample: 170110

QC Batch: 51390 Date Analyzed: 2008-08-12 Analyzed By: DC
Prep Batch: 44052 QC Preparation: 2008-08-12 Prepared By: DC

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	10.6	mg/Kg	1	10.0	1.9169	87	10 - 139.3

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	7.50	mg/Kg	1	10.0	1.9169	56	10 - 139.3	34	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)	0.868	0.917	mg/Kg	1	1	87	92	21.3 - 119
4-Bromofluorobenzene (4-BFB)	0.891	0.927	mg/Kg	1	1	89	93	52.5 - 154

Standard (ICV-1)

QC Batch: 51363 Date Analyzed: 2008-08-12 Analyzed By: LD

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	269	108	85 - 115	2008-08-12

Standard (CCV-1)

QC Batch: 51363 Date Analyzed: 2008-08-12 Analyzed By: LD

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	268	107	85 - 115	2008-08-12

⁷MS/MSD RPD out of RPD Limits. Use LCS/LCSD to demonstrate analysis is under control.



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NELAP Certifications

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

Analytical and Quality Control Report

Eb Taylor
 Talon LPE-Hobbs
 318 E Taylor
 Hobbs, NM, 88240

Report Date: August 19, 2008

Work Order: 8081502



Project Location: Lea County, NM
 Project Name: EK Queen BLM
 Project Number: Plains071SPL

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
170732	BF-3	soil	2008-08-15	12:00	2008-08-15
170733	BF-4	soil	2008-08-15	12:10	2008-08-15
170734	BF-5	soil	2008-08-15	12:15	2008-08-15

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 12 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Blair Leftwich

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 EK Queen BLM were received by TraceAnalysis, Inc. on 2008-08-15 and assigned to work order 8081502. Samples for work order 8081502 were received intact at a temperature of 3.0 deg. C.

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

<u>Test</u>	<u>Method</u>
BTEX	S 8021B
TPH DRO	Mod. 8015B
TPH GRO	S 8015B

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 8081502 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: 170732 - BF-3

Laboratory: Lubbock
Analysis: BTEX
QC Batch: 51537
Prep Batch: 44194
Analytical Method: S 8021B
Date Analyzed: 2008-08-18
Sample Preparation: 2008-08-18
Prep Method: S 5035
Analyzed By: ER
Prepared By: ER

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene	1	<0.0500	mg/Kg	5	0.0100
Toluene		<0.0500	mg/Kg	5	0.0100
Ethylbenzene		<0.0500	mg/Kg	5	0.0100
Xylene		1.51	mg/Kg	5	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.22	mg/Kg	5	1.00	122	59 - 136.1
4-Bromofluorobenzene (4-BFB)		1.12	mg/Kg	5	1.00	112	54.4 - 176.2

Sample: 170732 - BF-3

Laboratory: Midland
Analysis: TPH DRO
QC Batch: 51484
Prep Batch: 44133
Analytical Method: Mod. 8015B
Date Analyzed: 2008-08-15
Sample Preparation: 2008-08-15
Prep Method: N/A
Analyzed By: LD
Prepared By: LD

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		879	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	2	263	mg/Kg	1	100	263	10 - 250.4

Sample: 170732 - BF-3

Laboratory: Lubbock
Analysis: TPH GRO
QC Batch: 51538
Prep Batch: 44194
Analytical Method: S 8015B
Date Analyzed: 2008-08-18
Sample Preparation: 2008-08-18
Prep Method: S 5035
Analyzed By: ER
Prepared By: ER

continued ...

¹Sample ran at dilution due to hydrocarbons with a retention time greater than xylene.

²High surrogate recovery due to peak interference.

sample 170732 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL
Parameter	Flag	RL Result	Units	Dilution	RL
GRO		162	mg/Kg	5	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.36	mg/Kg	5	1.00	136	55.3 - 161.9
4-Bromofluorobenzene (4-BFB)	³	5.91	mg/Kg	5	1.00	591	45.6 - 214.7

Sample: 170733 - BF-4

Laboratory: Lubbock	Analytical Method: S 8021B	Prep Method: S 5035
Analysis: BTEX	Date Analyzed: 2008-08-18	Analyzed By: ER
QC Batch: 51537	Sample Preparation: 2008-08-18	Prepared By: ER
Prep Batch: 44194		

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene	⁴	<0.0500	mg/Kg	5	0.0100
Toluene		0.0876	mg/Kg	5	0.0100
Ethylbenzene		0.0852	mg/Kg	5	0.0100
Xylene		2.19	mg/Kg	5	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.01	mg/Kg	5	1.00	101	59 - 136.1
4-Bromofluorobenzene (4-BFB)		1.08	mg/Kg	5	1.00	108	54.4 - 176.2

Sample: 170733 - BF-4

Laboratory: Midland	Analytical Method: Mod. 8015B	Prep Method: N/A
Analysis: TPH DRO	Date Analyzed: 2008-08-15	Analyzed By: LD
QC Batch: 51484	Sample Preparation: 2008-08-15	Prepared By: LD
Prep Batch: 44133		

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		305	mg/Kg	1	50.0

³High surrogate recovery due to peak interference.

⁴Sample ran at dilution due to hydrocarbons with a retention time greater than xylene.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		97.2	mg/Kg	1	100	97	10 - 250.4

Sample: 170733 - BF-4

Laboratory: Lubbock
 Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035
 QC Batch: 51538 Date Analyzed: 2008-08-18 Analyzed By: ER
 Prep Batch: 44194 Sample Preparation: 2008-08-18 Prepared By: ER

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		162	mg/Kg	5	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.966	mg/Kg	5	1.00	97	55.3 - 161.9
4-Bromofluorobenzene (4-BFB)	⁵	5.13	mg/Kg	5	1.00	513	45.6 - 214.7

Sample: 170734 - BF-5

Laboratory: Lubbock
 Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035
 QC Batch: 51537 Date Analyzed: 2008-08-18 Analyzed By: ER
 Prep Batch: 44194 Sample Preparation: 2008-08-18 Prepared By: ER

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		0.0113	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.11	mg/Kg	1	1.00	111	59 - 136.1
4-Bromofluorobenzene (4-BFB)		1.29	mg/Kg	1	1.00	129	54.4 - 176.2

Sample: 170734 - BF-5

Laboratory: Midland
 Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A
 QC Batch: 51484 Date Analyzed: 2008-08-15 Analyzed By: LD
 Prep Batch: 44133 Sample Preparation: 2008-08-15 Prepared By: LD

⁵High surrogate recovery due to peak interference.

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		197	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		89.3	mg/Kg	1	100	89	10 - 250.4

Sample: 170734 - BF-5

Laboratory: Lubbock
 Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035
 QC Batch: 51538 Date Analyzed: 2008-08-18 Analyzed By: ER
 Prep Batch: 44194 Sample Preparation: 2008-08-18 Prepared By: ER

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		9.14	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.27	mg/Kg	1	1.00	127	55.3 - 161.9
4-Bromofluorobenzene (4-BFB)		1.97	mg/Kg	1	1.00	197	45.6 - 214.7

Method Blank (1) QC Batch: 51484

QC Batch: 51484 Date Analyzed: 2008-08-15 Analyzed By: LD
 Prep Batch: 44133 QC Preparation: 2008-08-15 Prepared By: LD

Parameter	Flag	MDL Result	Units	RL
DRO		<15.8	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		141	mg/Kg	1	100	141	30.9 - 146.4

Method Blank (1) QC Batch: 51537

QC Batch: 51537 Date Analyzed: 2008-08-18 Analyzed By: ER
 Prep Batch: 44194 QC Preparation: 2008-08-18 Prepared By: ER

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.00347	mg/Kg	0.01
Toluene		<0.00525	mg/Kg	0.01
Ethylbenzene		<0.00607	mg/Kg	0.01
Xylene		<0.00724	mg/Kg	0.01

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.920	mg/Kg	1	1.00	92	69.3 - 110.2
4-Bromofluorobenzene (4-BFB)		0.731	mg/Kg	1	1.00	73	24.4 - 114.6

Method Blank (1) QC Batch: 51538

QC Batch: 51538 Date Analyzed: 2008-08-18 Analyzed By: ER
 Prep Batch: 44194 QC Preparation: 2008-08-18 Prepared By: ER

Parameter	Flag	MDL Result	Units	RL
GRO		<0.144	mg/Kg	1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.03	mg/Kg	1	1.00	103	83.3 - 108.5
4-Bromofluorobenzene (4-BFB)		0.836	mg/Kg	1	1.00	84	34.5 - 105.8

Laboratory Control Spike (LCS-1)

QC Batch: 51484 Date Analyzed: 2008-08-15 Analyzed By: LD
 Prep Batch: 44133 QC Preparation: 2008-08-15 Prepared By: LD

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	260	mg/Kg	1	250	<15.8	104	27.8 - 152.1

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

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	247	mg/Kg	1	250	<15.8	99	27.8 - 152.1	5	20

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

Surrogate	LCS Result	LCS Result	Units	Dil.	Spike Amount	LCS Rec.	LCS Rec.	Rec. Limit
n-Triacontane	106	97.8	mg/Kg	1	100	106	98	38 - 130.4

Laboratory Control Spike (LCS-1)

QC Batch: 51537
 Prep Batch: 44194

Date Analyzed: 2008-08-18
 QC Preparation: 2008-08-18

Analyzed By: ER
 Prepared By: ER

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.897	mg/Kg	1	1.00	<0.00347	90	80.5 - 115.5
Toluene	0.922	mg/Kg	1	1.00	<0.00525	92	80 - 114.7
Ethylbenzene	0.914	mg/Kg	1	1.00	<0.00607	91	77.1 - 114.2
Xylene	2.74	mg/Kg	1	3.00	<0.00724	91	77.6 - 114.5

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

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	0.871	mg/Kg	1	1.00	<0.00347	87	80.5 - 115.5	3	20
Toluene	0.896	mg/Kg	1	1.00	<0.00525	90	80 - 114.7	3	20
Ethylbenzene	0.891	mg/Kg	1	1.00	<0.00607	89	77.1 - 114.2	2	20
Xylene	2.67	mg/Kg	1	3.00	<0.00724	89	77.6 - 114.5	3	20

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

Surrogate	LCS Result	LCS Result	Units	Dil.	Spike Amount	LCS Rec.	LCS Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.904	0.901	mg/Kg	1	1.00	90	90	74.2 - 114.7
4-Bromofluorobenzene (4-BFB)	0.902	0.887	mg/Kg	1	1.00	90	89	69.7 - 118.7

Laboratory Control Spike (LCS-1)

QC Batch: 51538
 Prep Batch: 44194

Date Analyzed: 2008-08-18
 QC Preparation: 2008-08-18

Analyzed By: ER
 Prepared By: ER

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	9.14	mg/Kg	1	10.0	<0.144	91	73.1 - 114.7

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

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	10.0	mg/Kg	1	10.0	<0.144	100	73.1 - 114.7	10	20

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

Surrogate	LCS Result	LCS Result	Units	Dil.	Spike Amount	LCS Rec.	LCS Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.954	0.978	mg/Kg	1	1.00	95	98	77.4 - 111.4
4-Bromofluorobenzene (4-BFB)	0.970	0.987	mg/Kg	1	1.00	97	99	70.3 - 116.1

Matrix Spike (MS-1) Spiked Sample: 170732

QC Batch: 51484 Date Analyzed: 2008-08-15 Analyzed By: LD
Prep Batch: 44133 QC Preparation: 2008-08-15 Prepared By: LD

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	1020	mg/Kg	1	250	879	56	18 - 179.5

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	1000	mg/Kg	1	250	879	48	18 - 179.5	2	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 ^{6 7}	261	234	mg/Kg	1	100	261	234	34.1 - 158

Matrix Spike (MS-1) Spiked Sample: 170824

QC Batch: 51537 Date Analyzed: 2008-08-18 Analyzed By: ER
Prep Batch: 44194 QC Preparation: 2008-08-18 Prepared By: ER

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	1.01	mg/Kg	1	1.00	<0.00347	101	42.9 - 130.7
Toluene	1.07	mg/Kg	1	1.00	<0.00525	107	46.9 - 135.4
Ethylbenzene	1.12	mg/Kg	1	1.00	<0.00607	112	48.3 - 149.3
Xylene	3.39	mg/Kg	1	3.00	<0.00724	113	48.8 - 150.9

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	1.02	mg/Kg	1	1.00	<0.00347	102	42.9 - 130.7	1	20
Toluene	1.09	mg/Kg	1	1.00	<0.00525	109	46.9 - 135.4	2	20
Ethylbenzene	1.15	mg/Kg	1	1.00	<0.00607	115	48.3 - 149.3	3	20
Xylene	3.49	mg/Kg	1	3.00	<0.00724	116	48.8 - 150.9	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)	1.10	1.12	mg/Kg	1	1	110	112	63.2 - 128.3

continued ...

⁶High surrogate recovery due to peak interference.

⁷High surrogate recovery due to peak interference.



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 6015 Harris Parkway Suite 110 Ft Worth, Texas 76132 817•201•5760
 E-Mail lab@traceanalysis.com

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

Eb Taylor
 Talon LPE-Hobbs
 318 E Taylor
 Hobbs, NM, 88240

Report Date: August 25, 2008

Work Order: 8082204



Project Location: Lea County, NM
 Project Name: EK Queen BLM
 Project Number: Plains071SPL

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
171420	BF-6	soil	2008-08-20	17:00	2008-08-22
171421	BF-7	soil	2008-08-20	17:05	2008-08-22

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.

Michael Abel

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 EK Queen BLM were received by TraceAnalysis, Inc. on 2008-08-22 and assigned to work order 8082204. Samples for work order 8082204 were received intact at a temperature of 2.6 deg. C.

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

<u>Test</u>	<u>Method</u>
TPH DRO	Mod. 8015B
TPH GRO	S 8015B

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 8082204 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: 171420 - BF-6

Laboratory: Midland	Analytical Method: Mod. 8015B	Prep Method: N/A
Analysis: TPH DRO	Date Analyzed: 2008-08-22	Analyzed By: LD
QC Batch: 51699	Sample Preparation: 2008-08-22	Prepared By: LD
Prep Batch: 44325		

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		158	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		137	mg/Kg	1	100	137	10 - 250.4

Sample: 171420 - BF-6

Laboratory: Midland	Analytical Method: S 8015B	Prep Method: S 5035
Analysis: TPH GRO	Date Analyzed: 2008-08-25	Analyzed By: DC
QC Batch: 51763	Sample Preparation: 2008-08-25	Prepared By: DC
Prep Batch: 44347		

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		39.3	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.06	mg/Kg	1	1.00	106	67.5 - 135.2
4-Bromofluorobenzene (4-BFB)		1.06	mg/Kg	1	1.00	106	63.8 - 141

Sample: 171421 - BF-7

Laboratory: Midland	Analytical Method: Mod. 8015B	Prep Method: N/A
Analysis: TPH DRO	Date Analyzed: 2008-08-22	Analyzed By: LD
QC Batch: 51699	Sample Preparation: 2008-08-22	Prepared By: LD
Prep Batch: 44325		

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		171	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		120	mg/Kg	1	100	120	10 - 250.4

Sample: 171421 - BF-7

Laboratory: Midland
 Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035
 QC Batch: 51763 Date Analyzed: 2008-08-25 Analyzed By: DC
 Prep Batch: 44347 Sample Preparation: 2008-08-25 Prepared By: DC

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		62.3	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.03	mg/Kg	1	1.00	103	67.5 - 135.2
4-Bromofluorobenzene (4-BFB)		0.988	mg/Kg	1	1.00	99	63.8 - 141

Method Blank (1) QC Batch: 51699

QC Batch: 51699 Date Analyzed: 2008-08-22 Analyzed By: LD
 Prep Batch: 44325 QC Preparation: 2008-08-22 Prepared By: LD

Parameter	Flag	MDL Result	Units	RL
DRO		<15.8	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		64.3	mg/Kg	1	100	64	30.9 - 146.4

Method Blank (1) QC Batch: 51763

QC Batch: 51763 Date Analyzed: 2008-08-25 Analyzed By: DC
 Prep Batch: 44347 QC Preparation: 2008-08-25 Prepared By: DC

Parameter	Flag	MDL Result	Units	RL
GRO		0.984	mg/Kg	.1

Matrix Spike (MS-1) Spiked Sample: 171420

QC Batch: 51699 Date Analyzed: 2008-08-22 Analyzed By: LD
Prep Batch: 44325 QC Preparation: 2008-08-22 Prepared By: LD

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	309	mg/Kg	1	250	158.14	60	18 - 179.5

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	311	mg/Kg	1	250	158.14	61	18 - 179.5	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
n-Triacontane	97.3	96.7	mg/Kg	1	100	97	97	34.1 - 158

Matrix Spike (MS-1) Spiked Sample: 171420

QC Batch: 51763 Date Analyzed: 2008-08-25 Analyzed By: DC
Prep Batch: 44347 QC Preparation: 2008-08-25 Prepared By: DC

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	52.3	mg/Kg	1	10.0	39.2946	130	10 - 139.3

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	50.5	mg/Kg	1	10.0	39.2946	112	10 - 139.3	4	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)	1.05	0.984	mg/Kg	1	1	105	98	21.3 - 119
4-Bromofluorobenzene (4-BFB)	1.03	1.08	mg/Kg	1	1	103	108	52.5 - 154

Standard (ICV-1)

QC Batch: 51699 Date Analyzed: 2008-08-22 Analyzed By: LD



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E-Mail: lab@traceanalysis.com

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

Eb Taylor
Talon LPE-Hobbs
318 E Taylor
Hobbs, NM, 88240

Report Date: September 4, 2008

Work Order: 8082924



Project Location: Lea County, NM
Project Name: EK Queen BLM
Project Number: Plains071SPL

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
172368	BF-8	soil	2008-08-26	16:30	2008-08-29
172369	BF-9	soil	2008-08-26	16:48	2008-08-29
172370	BF-10	soil	2008-08-26	17:00	2008-08-29

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 12 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Blair Leftwich

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 EK Queen BLM were received by TraceAnalysis, Inc. on 2008-08-29 and assigned to work order 8082924. Samples for work order 8082924 were received intact at a temperature of 2.8 deg. C.

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

<u>Test</u>	<u>Method</u>
BTEX	S 8021B
TPH DRO	Mod. 8015B
TPH GRO	S 8015B

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 8082924 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: 172368 - BF-8

Laboratory: Lubbock
Analysis: TPH DRO
QC Batch: 51983
Prep Batch: 44578

Analytical Method: Mod. 8015B
Date Analyzed: 2008-09-02
Sample Preparation: 2008-09-02

Prep Method: N/A
Analyzed By: MN
Prepared By: MN

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		1100	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	1	340	mg/Kg	1	100	340	49.5 - 185

Sample: 172368 - BF-8

Laboratory: Lubbock
Analysis: TPH GRO
QC Batch: 51974
Prep Batch: 44568

Analytical Method: S 8015B
Date Analyzed: 2008-09-02
Sample Preparation: 2008-09-02

Prep Method: S 5035
Analyzed By: ER
Prepared By: ER

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		17.0	mg/Kg	2	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.966	mg/Kg	2	1.00	97	55.3 - 161.9
4-Bromofluorobenzene (4-BFB)		2.06	mg/Kg	2	1.00	206	45.6 - 214.7

Sample: 172369 - BF-9

Laboratory: Lubbock
Analysis: TPH DRO
QC Batch: 51983
Prep Batch: 44578

Analytical Method: Mod. 8015B
Date Analyzed: 2008-09-02
Sample Preparation: 2008-09-02

Prep Method: N/A
Analyzed By: MN
Prepared By: MN

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		1530	mg/Kg	1	50.0

¹High surrogate recovery due to peak interference.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	2	466	mg/Kg	1	100	466	49.5 - 185

Sample: 172369 - BF-9

Laboratory: Lubbock
 Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035
 QC Batch: 51974 Date Analyzed: 2008-09-02 Analyzed By: ER
 Prep Batch: 44568 Sample Preparation: 2008-09-02 Prepared By: ER

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		36.9	mg/Kg	2	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.14	mg/Kg	2	1.00	114	55.3 - 161.9
4-Bromofluorobenzene (4-BFB)		2.02	mg/Kg	2	1.00	202	45.6 - 214.7

Sample: 172370 - BF-10

Laboratory: Lubbock
 Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035
 QC Batch: 51972 Date Analyzed: 2008-09-02 Analyzed By: ER
 Prep Batch: 44568 Sample Preparation: 2008-09-02 Prepared By: ER

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene	3	<0.0200	mg/Kg	2	0.0100
Toluene		<0.0200	mg/Kg	2	0.0100
Ethylbenzene		0.0887	mg/Kg	2	0.0100
Xylene		0.266	mg/Kg	2	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.29	mg/Kg	2	1.00	129	59 - 136.1
4-Bromofluorobenzene (4-BFB)		1.37	mg/Kg	2	1.00	137	54.4 - 176.2

Sample: 172370 - BF-10

Laboratory: Lubbock
 Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A
 QC Batch: 51983 Date Analyzed: 2008-09-02 Analyzed By: MN
 Prep Batch: 44578 Sample Preparation: 2008-09-02 Prepared By: MN

²High surrogate recovery due to peak interference.

³Sample ran at dilution due to hydrocarbons with a retention time greater than xylene.

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		892	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	⁴	285	mg/Kg	1	100	285	49.5 - 185

Sample: 172370 - BF-10

Laboratory: Lubbock
 Analysis: TPH GRO
 QC Batch: 51974
 Prep Batch: 44568

Analytical Method: S 8015B
 Date Analyzed: 2008-09-02
 Sample Preparation: 2008-09-02

Prep Method: S 5035
 Analyzed By: ER
 Prepared By: ER

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		18.0	mg/Kg	2	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.22	mg/Kg	2	1.00	122	55.3 - 161.9
4-Bromofluorobenzene (4-BFB)	⁵	2.24	mg/Kg	2	1.00	224	45.6 - 214.7

Method Blank (1) QC Batch: 51972

QC Batch: 51972
 Prep Batch: 44568

Date Analyzed: 2008-09-02
 QC Preparation: 2008-09-02

Analyzed By: ER
 Prepared By: ER

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.00347	mg/Kg	0.01
Toluene		<0.00525	mg/Kg	0.01
Ethylbenzene		<0.00607	mg/Kg	0.01
Xylene		<0.00724	mg/Kg	0.01

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.945	mg/Kg	1	1.00	94	69.3 - 110.2
4-Bromofluorobenzene (4-BFB)		0.673	mg/Kg	1	1.00	67	24.4 - 114.6

⁴High surrogate recovery due to peak interference.

⁵High surrogate recovery due to peak interference.

Method Blank (1) QC Batch: 51974

QC Batch: 51974 Date Analyzed: 2008-09-02 Analyzed By: ER
 Prep Batch: 44568 QC Preparation: 2008-09-02 Prepared By: ER

Parameter	Flag	MDL Result	Units	RL
GRO		<0.144	mg/Kg	1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.914	mg/Kg	1	1.00	91	83.3 - 108.5
4-Bromofluorobenzene (4-BFB)		0.771	mg/Kg	1	1.00	77	34.5 - 105.8

Method Blank (1) QC Batch: 51983

QC Batch: 51983 Date Analyzed: 2008-09-02 Analyzed By: MN
 Prep Batch: 44578 QC Preparation: 2008-09-02 Prepared By: MN

Parameter	Flag	MDL Result	Units	RL
DRO		<6.77	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		96.7	mg/Kg	1	100	97	49.5 - 185

Laboratory Control Spike (LCS-1)

QC Batch: 51972 Date Analyzed: 2008-09-02 Analyzed By: ER
 Prep Batch: 44568 QC Preparation: 2008-09-02 Prepared By: ER

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.978	mg/Kg	1	1.00	<0.00347	98	80.5 - 115.5
Toluene	0.990	mg/Kg	1	1.00	<0.00525	99	80 - 114.7
Ethylbenzene	1.02	mg/Kg	1	1.00	<0.00607	102	77.1 - 114.2
Xylene	3.01	mg/Kg	1	3.00	<0.00724	100	77.6 - 114.5

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

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	1.01	mg/Kg	1	1.00	<0.00347	101	80.5 - 115.5	3	20
Toluene	1.01	mg/Kg	1	1.00	<0.00525	101	80 - 114.7	2	20

continued ...

control spikes continued . . .

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec. Rec.	Rec. Limit	RPD	RPD Limit
Ethylbenzene	0.994	mg/Kg	1	1.00	<0.00607	99	77.1 - 114.2	3	20
Xylene	2.99	mg/Kg	1	3.00	<0.00724	100	77.6 - 114.5	1	20

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

Surrogate	LCS Result	LCS Result	Units	Dil.	Spike Amount	LCS Rec.	LCS Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.897	1.00	mg/Kg	1	1.00	90	100	74.2 - 114.7
4-Bromofluorobenzene (4-BFB)	0.887	0.954	mg/Kg	1	1.00	89	95	69.7 - 118.7

Laboratory Control Spike (LCS-1)

QC Batch: 51974
 Prep Batch: 44568

Date Analyzed: 2008-09-02
 QC Preparation: 2008-09-02

Analyzed By: ER
 Prepared By: ER

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	10.6	mg/Kg	1	10.0	<0.144	106	73.1 - 114.7

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

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	10.8	mg/Kg	1	10.0	<0.144	108	73.1 - 114.7	2	20

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

Surrogate	LCS Result	LCS Result	Units	Dil.	Spike Amount	LCS Rec.	LCS Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.09	0.972	mg/Kg	1	1.00	109	97	77.4 - 111.4
4-Bromofluorobenzene (4-BFB)	1.02	0.944	mg/Kg	1	1.00	102	94	70.3 - 116.1

Laboratory Control Spike (LCS-1)

QC Batch: 51983
 Prep Batch: 44578

Date Analyzed: 2008-09-02
 QC Preparation: 2008-09-02

Analyzed By: MN
 Prepared By: MN

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	289	mg/Kg	1	250	<6.77	116	73.9 - 138

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

continued . . .

Report Date: September 4, 2008
Plains071SPL

Work Order: 8082924
EK Queen BLM

Page Number: 12 of 12
Lea County, NM

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	281	112	85 - 115	2008-09-02

Standard (CCV-1)

QC Batch: 51983

Date Analyzed: 2008-09-02

Analyzed By: MN

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	223	89	85 - 115	2008-09-02



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 6015 Harris Parkway Suite 110 Ft. Worth, Texas 76132 817•201•5260
 E-Mail lab@traceanalysis.com

Certifications

WBE: 237019 **HUB:** 1752439743100-86536 **DBE:** VN 20657

NELAP Certifications

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

Analytical and Quality Control Report

Eb Taylor
 Talon LPE-Hobbs
 318 E Taylor
 Hobbs, NM, 88240

Report Date: September 11, 2008

Work Order: 8091001



Project Location: Lea County, NM
 Project Name: EK Queen BLM
 Project Number: Plains071SPL
 SRS#: 2008-078

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
172984	BF 9	soil	2008-09-08	13:05	2008-09-10
172985	BF 8	soil	2008-09-08	13:12	2008-09-10

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 12 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Michael Abel

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 EK Queen BLM were received by TraceAnalysis, Inc. on 2008-09-10 and assigned to work order 8091001. Samples for work order 8091001 were received intact at a temperature of 3.0 deg. C.

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

<u>Test</u>	<u>Method</u>
BTEX	S 8021B
TPH DRO	Mod. 8015B
TPH GRO	S 8015B

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 8091001 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: 172984 - BF 9

Laboratory: Midland
Analysis: BTEX
QC Batch: 52250
Prep Batch: 44790

Analytical Method: S 8021B
Date Analyzed: 2008-09-10
Sample Preparation: 2008-09-10

Prep Method: S 5035
Analyzed By: DC
Prepared By: DC

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	1	0.0100
Toluene		<0.0100	mg/Kg	1	0.0100
Ethylbenzene		<0.0100	mg/Kg	1	0.0100
Xylene		0.0478	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.02	mg/Kg	1	1.00	102	82.9 - 125.1
4-Bromofluorobenzene (4-BFB)		0.926	mg/Kg	1	1.00	93	48.9 - 160.4

Sample: 172984 - BF 9

Laboratory: Midland
Analysis: TPH DRO
QC Batch: 52252
Prep Batch: 44789

Analytical Method: Mod. 8015B
Date Analyzed: 2008-09-10
Sample Preparation: 2008-09-10

Prep Method: N/A
Analyzed By: LD
Prepared By: LD

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		1100	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	¹	412	mg/Kg	1	100	412	10 - 250.4

Sample: 172984 - BF 9

Laboratory: Midland
Analysis: TPH GRO
QC Batch: 52251
Prep Batch: 44790

Analytical Method: S 8015B
Date Analyzed: 2008-09-10
Sample Preparation: 2008-09-10

Prep Method: S 5035
Analyzed By: DC
Prepared By: DC

continued ...

¹High surrogate recovery due to peak interference.

sample 172984 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		27.2	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.887	mg/Kg	1	1.00	89	75 - 117.2
4-Bromofluorobenzene (4-BFB)		0.864	mg/Kg	1	1.00	86	66 - 142.8

Sample: 172985 - BF 8

Laboratory: Midland	Analytical Method: S 8021B	Prep Method: S 5035
Analysis: BTEX	Date Analyzed: 2008-09-10	Analyzed By: DC
QC Batch: 52250	Sample Preparation: 2008-09-10	Prepared By: DC
Prep Batch: 44790		

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0200	mg/Kg	2	0.0100
Toluene		0.0312	mg/Kg	2	0.0100
Ethylbenzene		<0.0200	mg/Kg	2	0.0100
Xylene		0.305	mg/Kg	2	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.99	mg/Kg	2	2.00	100	82.9 - 125.1
4-Bromofluorobenzene (4-BFB)		1.93	mg/Kg	2	2.00	96	48.9 - 160.4

Sample: 172985 - BF 8

Laboratory: Midland	Analytical Method: Mod. 8015B	Prep Method: N/A
Analysis: TPH DRO	Date Analyzed: 2008-09-10	Analyzed By: LD
QC Batch: 52252	Sample Preparation: 2008-09-10	Prepared By: LD
Prep Batch: 44789		

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		2420	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	²	630	mg/Kg	1	100	630	10 - 250.4

Sample: 172985 - BF 8

Laboratory: Midland
 Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035
 QC Batch: 52251 Date Analyzed: 2008-09-10 Analyzed By: DC
 Prep Batch: 44790 Sample Preparation: 2008-09-10 Prepared By: DC

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		188	mg/Kg	5	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		4.57	mg/Kg	5	5.00	91	75 - 117.2
4-Bromofluorobenzene (4-BFB)		5.50	mg/Kg	5	5.00	110	66 - 142.8

Method Blank (1) QC Batch: 52250

QC Batch: 52250 Date Analyzed: 2008-09-10 Analyzed By: DC
 Prep Batch: 44790 QC Preparation: 2008-09-10 Prepared By: DC

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.0110	mg/Kg	0.01
Toluene		<0.0109	mg/Kg	0.01
Ethylbenzene		<0.0109	mg/Kg	0.01
Xylene		<0.0331	mg/Kg	0.01

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.994	mg/Kg	1	1.00	99	82.3 - 121.6
4-Bromofluorobenzene (4-BFB)		0.910	mg/Kg	1	1.00	91	72 - 123

Method Blank (1) QC Batch: 52251

QC Batch: 52251 Date Analyzed: 2008-09-10 Analyzed By: DC
 Prep Batch: 44790 QC Preparation: 2008-09-10 Prepared By: DC

²High surrogate recovery due to peak interference.

Matrix Spike (MS-1) Spiked Sample: 172985

QC Batch: 52250 Date Analyzed: 2008-09-10 Analyzed By: DC
 Prep Batch: 44790 QC Preparation: 2008-09-10 Prepared By: DC

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	2.16	mg/Kg	2	2.00	<0.0220	108	58.6 - 165.2
Toluene	2.12	mg/Kg	2	2.00	0.0312	104	64.2 - 153.8
Ethylbenzene	2.38	mg/Kg	2	2.00	<0.0218	119	61.6 - 159.4
Xylene	6.69	mg/Kg	2	6.00	0.3049	106	64.4 - 155.3

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/Kg	2	2.00	<0.0220	123	58.6 - 165.2	13	20
Toluene	2.46	mg/Kg	2	2.00	0.0312	121	64.2 - 153.8	15	20
Ethylbenzene	2.74	mg/Kg	2	2.00	<0.0218	137	61.6 - 159.4	14	20
Xylene	7.88	mg/Kg	2	6.00	0.3049	126	64.4 - 155.3	16	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)	1.97	1.96	mg/Kg	2	2	98	98	76.5 - 127.9
4-Bromofluorobenzene (4-BFB)	1.95	1.96	mg/Kg	2	2	98	98	72 - 127.8

Matrix Spike (MS-1) Spiked Sample: 172985

QC Batch: 52251 Date Analyzed: 2008-09-10 Analyzed By: DC
 Prep Batch: 44790 QC Preparation: 2008-09-10 Prepared By: DC

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	249	mg/Kg	5	50.0	188.473	121	22.3 - 134.6

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	³ 276	mg/Kg	5	50.0	188.473	175	22.3 - 134.6	10	20

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

continued ...

³MSD analyte out of range. MS/MSD has a RPD within limits. Therefore, MS shows extraction occurred properly.

matrix spikes continued ...

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	5.04	5.11	mg/Kg	5	5	101	102	68.4 - 113.1
4-Bromofluorobenzene (4-BFB)	5.77	5.75	mg/Kg	5	5	115	115	66.7 - 134.3

Matrix Spike (MS-1) Spiked Sample: 172984

QC Batch: 52252 Date Analyzed: 2008-09-10 Analyzed By: LD
Prep Batch: 44789 QC Preparation: 2008-09-10 Prepared By: LD

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	⁴ 1060	mg/Kg	1	250	1060	0	18 - 179.5

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	⁵ 1050	mg/Kg	1	250	1060	0	18 - 179.5	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
n-Triacontane	^{6 7} 297	292	mg/Kg	1	100	297	292	34.1 - 158

Standard (ICV-1)

QC Batch: 52250 Date Analyzed: 2008-09-10 Analyzed By: DC

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.100	100	85 - 115	2008-09-10
Toluene		mg/Kg	0.100	0.0986	99	85 - 115	2008-09-10
Ethylbenzene		mg/Kg	0.100	0.0980	98	85 - 115	2008-09-10
Xylene		mg/Kg	0.300	0.282	94	85 - 115	2008-09-10

⁴Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.

⁵Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.

⁶High surrogate recovery due to peak interference.

⁷High surrogate recovery due to peak interference.

Report Date: September 11, 2008
Plains071SPL

Work Order: 8091001
EK Queen BLM

Page Number: 12 of 12
Lea County, NM

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	266	106	85 - 115	2008-09-10

APPENDIX D

Photograph Documentation



PHOTOGRAPHIC DOCUMENTATION

Facility Name: E.K. Queen BLM
Location: Lea County, New Mexico
Project Number: PLAINS071SPL

Prepared by: Kyle J. Waggoner

Photograph No. 1

Description: View looking north at the flow path.



Photograph No. 2

Description: View looking northeast at the flow path.





PHOTOGRAPHIC DOCUMENTATION

Facility Name: E.K. Queen BLM
Location: Lea County, New Mexico
Project Number: PLAINS071SPL

Prepared by: Kyle J. Waggoner

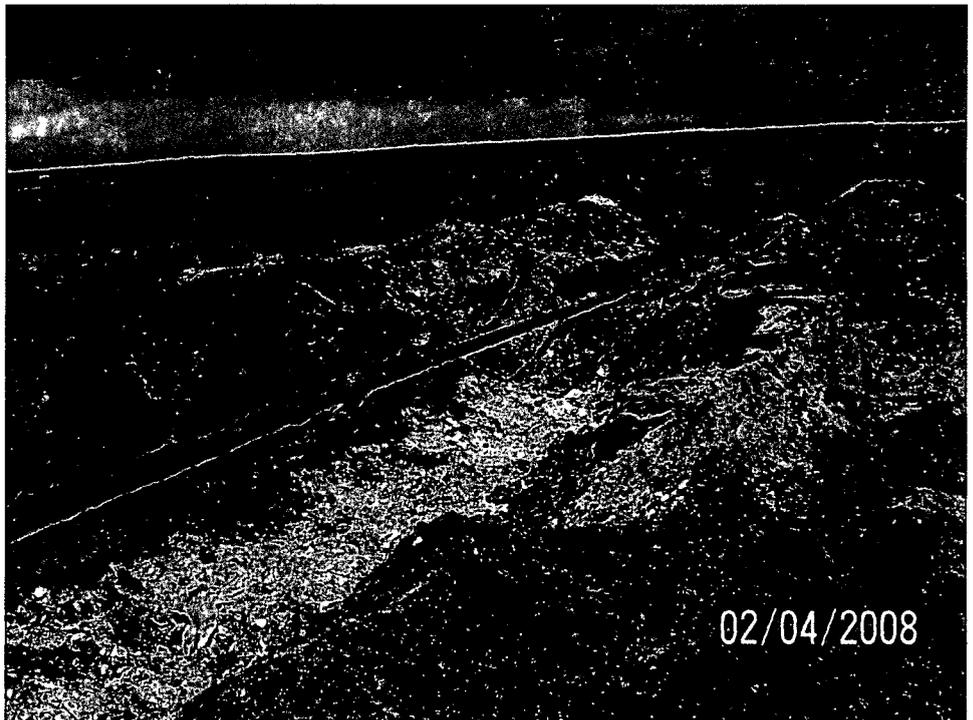
Photograph No. 3

Description: Source area.



Photograph No. 4

Description: Source area.





PHOTOGRAPHIC DOCUMENTATION

Facility Name: E.K. Queen BLM
Location: Lea County, New Mexico
Project Number: PLAINS071SPL

Prepared by: Kyle J. Waggoner

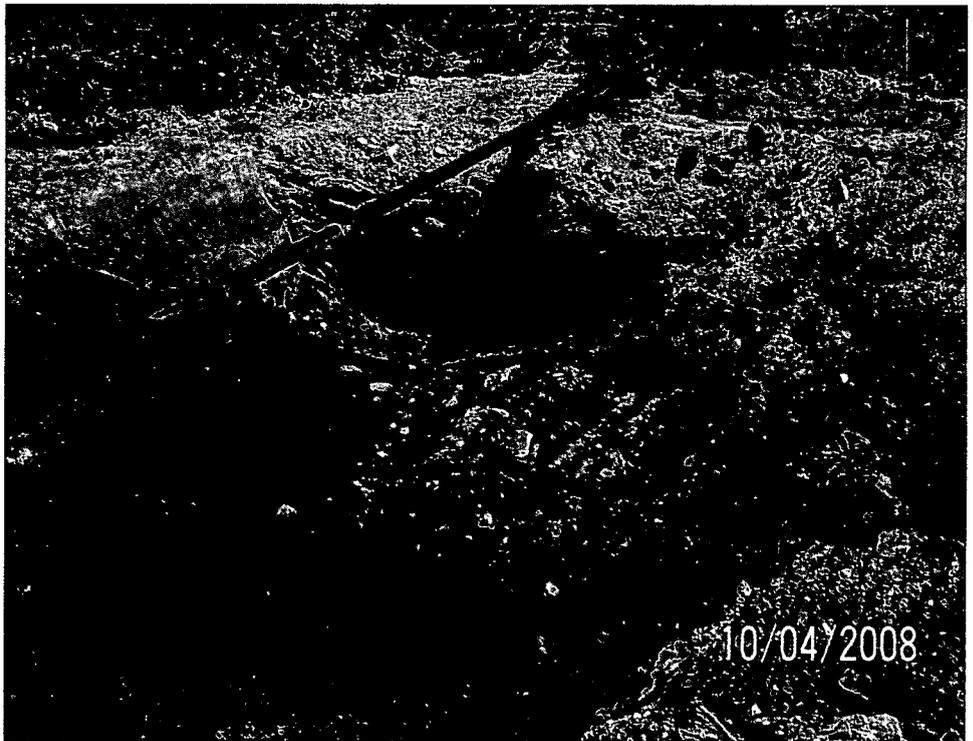
Photograph No. 5

Description: During excavation activities.



Photograph No. 6

Description: During excavation activities.





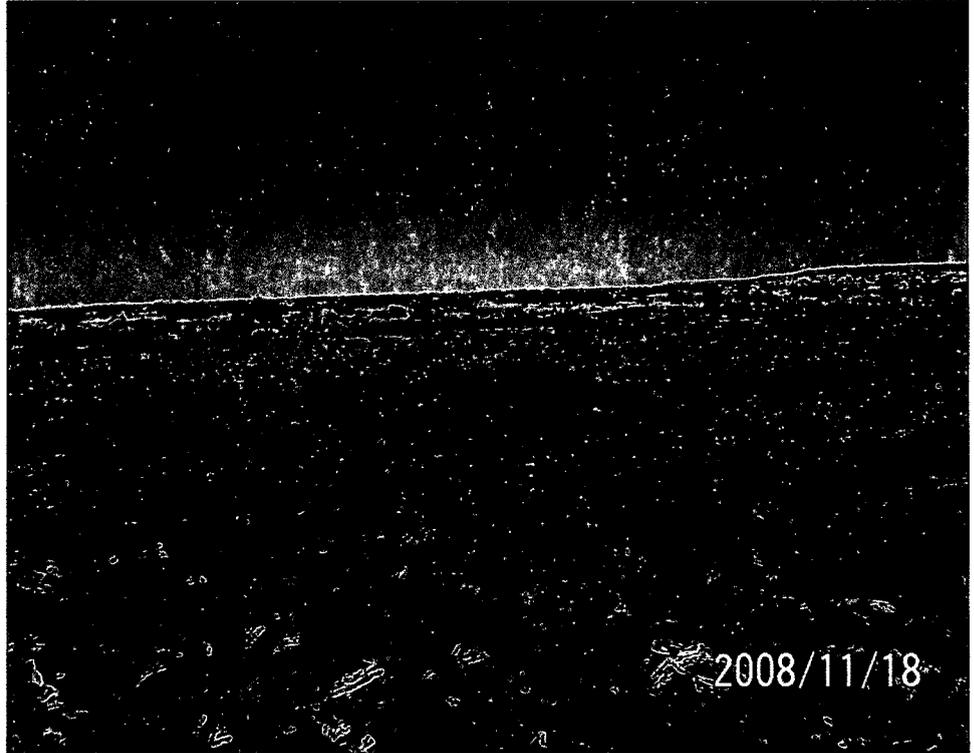
PHOTOGRAPHIC DOCUMENTATION

Facility Name: E.K. Queen BLM
Location: Lea County, New Mexico
Project Number: PLAINS071SPL

Prepared by: Kyle J. Waggoner

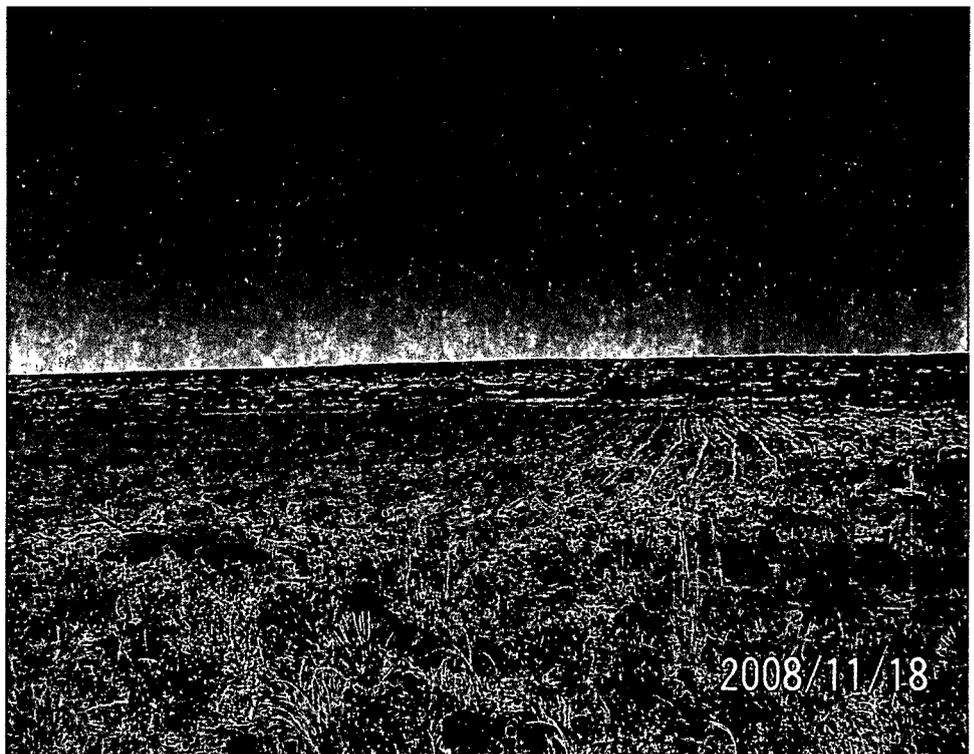
Photograph No. 7

Description: Site Restoration.



Photograph No. 8

Description: Site Restoration



APPENDIX E

BLM Undesirable Event Form

UNITED STATES DEPARTMENT OF THE INTERIOR
Bureau of Land Management
New Mexico State Office

REPORT OF UNDESIRABLE EVENT

DATE OF OCCURRENCE/DISCOVERY: 3/27/08 TIME OF OCCURRENCE: 11:00

DATE REPORTED TO BLM: 3/27/08 TIME REPORTED: 11:00

BLM OFFICE REPORTED TO: (FIELD/DISTRICT/OTHER) Carlsbad Office (Jim Amos)

LOCATION: (1/4 1/2) SE, SW SECTION 19 T. 18S R. 8E MERIDIAN New Mexico Prime

COUNTY: Deer STATE: NM WELL NAME _____

OPERATOR: COMPANY NAME Pains Pipeline PHONE NO. (505) 441-0965
CONTACT PERSON'S NAME Camille Reynolds

SURFACE OWNER: BLM MINERAL OWNER: _____
(FEDERAL/INDIAN/FEE/STATE)

LEASE NO.: _____ RIGHT-OF-WAY NO.: NM 60175

UNIT NAME / COMMUNITIZATION AGREEMENT NO.: _____

TYPE OF EVENT, CIRCLE APPROPRIATE ITEM (S):

BLOWOUT, FIRE, FATALITY, INJURY, PROPERTY DAMAGE, OIL SPILL SALTWATER SPILL, OIL AND
SALTWATER SPILL, TOXIC FLUID SPILL, HAZARDOUS MATERIAL SPILL, UNCONTROLLED FLOW
OF WELLBORE FLUIDS, OTHER (SPECIFY):

CAUSE OF EVENT: Internal corrosion of launch
steel pipeline

HazMat Notified: (for spills) _____

Law Enforcement Notified: (for thefts) _____

CAUSE AND EXTENT OF PERSONAL INJURIES/CAUSE OF DEATH(S):

Safety Officer Notified: None

EFFECTS OF EVENT: Hydrocarbon impacted soil

ACTION TAKEN TO CONTROL EVENT: Clamp placed on line

LENGTH OF TIME TO CONTROL BLOWOUT OR FIRE: _____

VOLUMES DISCHARGED: OIL 55 barrels WATER _____ GAS _____

OTHER AGENCIES NOTIFIED: Larry Johnson, NMOC
Hobbs Office

ACTION TAKEN OR TO BE TAKEN TO PREVENT RECURRENCE: _____

FINAL INVESTIGATION:

TEAM NAME(S) _____

FIELD INSPECTION DATE _____

SUMMARY OF RESULTS OF INSPECTION _____

RESOURCE LOSS WAS (CIRCLE ITEM): AVOIDABLE UNAVOIDABLE

DATE OF MEMO NOTIFYING MINERALS MANAGEMENT SERVICE THAT LOSS WAS AVOIDABLE:

DATE/TIME/PERSON NOTIFIED:

DISTRICT OFFICE _____

STATE OFFICE _____

WASHINGTON OFFICE _____

SUMMARY OF RESULTS OF RECLAMATION/CORRECTIVE ACTION:

REMARKS: _____

SIGNATURE OF AUTHORIZED OFFICER _____

DATE: _____ TITLE: _____

APPENDIX F

Archeological Survey

NMCRI INVESTIGATION ABSTRACT FORM (NIAF)

1. NMCRIS Activity No.: 107423	2a. Lead (Sponsoring) Agency: BLM, CFO	2b. Other Permitting Agency(ies):	3. Lead Agency Report No.:
4. Title of Report: EK Queen Trunk location. Author(s) Ann and Danny Boone			5. Type of Report <input checked="" type="checkbox"/> Negative <input type="checkbox"/> Positive
6. Investigation Type <input type="checkbox"/> Research Design <input checked="" type="checkbox"/> Survey/Inventory <input type="checkbox"/> Test Excavation <input type="checkbox"/> Excavation <input type="checkbox"/> Collections/Non-Field Study <input type="checkbox"/> Overview/Lit Review <input type="checkbox"/> Monitoring <input type="checkbox"/> Ethnographic study <input type="checkbox"/> Site specific visit <input type="checkbox"/> Other			
7. Description of Undertaking (what does the project entail?): An excavated area were a buried pipeline leaked petroleum fluids.			
8. . Dates of Investigation: (from: 8/21/2007 to:))		9. Report Date: 08/27/2007	
10. Performing Agency/Consultant: Boone Archaeological Services, LLC Principal Investigator: Danny Boone Field Supervisor: Danny Boone Field Personnel Names: Danny Boone		11. Performing Agency/Consultant Report No.: BAS 08-07-12	
13. Client/Customer (project proponent): Plains All American Pipeline, L.P. Contact: Ed Taylor (Agent) Address: 1301 S Country Road 1150 Midland, Texas 79706-4476 Phone: (432) 682-5392		12. Applicable Cultural Resource Permit No(s): BLM: 190-2920-06-J	
14. Client/Customer Project No.:		14. Client/Customer Project No.:	
15. Land Ownership Status (<i>Must be indicated on project map</i>):			
Land Owner	Acres Surveyed	Acres in APE	
BLM	3.77 (+/-)	2.33 (-/+)	
TOTALS	3.77 (-/+)	2.33 (+/-)	
16 Records Search(es):			
Date(s) of ARMS File Review: 08/20/2007	Name of Reviewer(s): Danny Boone		
Date(s) of NR/SR File Review:	Name of Reviewer(s):		
Date(s) of Other Agency File Review: 08/20/2007	Name of Reviewer(s): Danny Boone		Agency: BLM, CFO
Findings: LA 152393, 49626, 35674, 29418, and 49784 are with 0.25 mile			
17. Survey Data:			
a. Source Graphics <input checked="" type="checkbox"/> NAD 27 <input type="checkbox"/> NAD 83			
<input checked="" type="checkbox"/> USGS 7.5' (1:24,000) topo map <input type="checkbox"/> Other topo map, Scale:			
<input checked="" type="checkbox"/> GPS Unit Accuracy <input type="checkbox"/> <1.0m <input checked="" type="checkbox"/> 1-10m <input type="checkbox"/> 10-100m <input type="checkbox"/> >100m			
b. USGS 7.5' Topographic Map Name USGS Quad Code			
IRONHOUSE WELL, NM (1984)	32103G8		
c. County(ies): Lea			

17. Survey Data (continued):
 d. Nearest City or Town: Buckeye, NM
 e. Legal Description:

Township (N/S)	Range (E/W)	Section	¼	¼	¼
18S	34E	19	SE	SW	.
			.	.	.
			.	.	.
			.	.	.
			.	.	.
			.	.	.
			.	.	.
			.	.	.

Projected legal description? Yes , No Unplatted
 f. Other Description (e.g. well pad footages, mile markers, plats, land grant name, etc.):

18. Survey Field Methods:
 Intensity: 100% coverage <100% coverage
 Configuration: block survey units linear survey units (l x w): other survey units (specify):
 Scope: non-selective (all sites recorded) selective/thematic (selected sites recorded)
 Coverage Method: systematic pedestrian coverage other method (describe)
 Survey Interval (m): 15 Crew Size: 1 Fieldwork Dates: 28 Aug. 2007
 Survey Person Hours: 1.5 Recording Person Hours: 0 Total Hours: 1.5
 Additional Narrative: Location, footage and acres are estimates based on a hand held GPS Unit. A 100 foot buffer was surveyed around the impacted area and marked with a combination of pink and orange tape.

19. Environmental Setting (NRCS soil designation; vegetative community; elevation; etc.):
 Topography: Mildly rolling dunal plain.
 Vegetative community: Shinoak, sage brush, mesquite, broom snakeweed, assorted grasses and other flora.
 NRCS: Peyote-Maljamar-Kermit association: Gently undulating and rolling, deep, sandy soils
 Elevation: 3,970 feet.

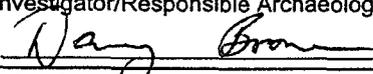
20. a. Percent Ground Visibility: 90 b. Condition of Survey Area (grazed, bladed, undisturbed, etc.): Impacted area excavated around buried pipeline.

21. CULTURAL RESOURCE FINDINGS Yes, See Page 3 No, Discuss Why: Unknown

22. Required Attachments (check all appropriate boxes):
 USGS 7.5 Topographic Map with sites, isolates, and survey area clearly drawn
 Copy of NMCRIS Mapserver Map Check
 LA Site Forms - new sites (*with sketch map & topographic map*)
 LA Site Forms (update) - previously recorded & un-relocated sites (*first 2 pages minimum*)
 Historic Cultural Property Inventory Forms
 List and Description of isolates, if applicable
 List and Description of Collections, if applicable

23. Other Attachments:
 Photographs and Log
 Other Attachments
 (Describe):

24. I certify the information provided above is correct and accurate and meets all applicable agency standards.

Principal Investigator/Responsible Archaeologist: Danny Boone
 Signature  Date: 08/27/2007 Title (if not PI):

25. Reviewing Agency:
 Reviewer's Name/Date
 Accepted () Rejected ()
 Tribal Consultation (if applicable): Yes No

26. SHPO
 Reviewer's Name/Date:
 HPD Log #:
 SHPO File Location:
 Date sent to ARMS:

CULTURAL RESOURCE FINDINGS

[fill in appropriate section(s)]

1. NMCRIS Activity No.: 107423	2. Lead (Sponsoring) Agency: BLM, CFO	3. Lead Agency Report No.:
--	---	-----------------------------------

SURVEY RESULTS:
 Sites discovered and registered: 0
 Sites discovered and NOT registered: 0
 Previously recorded sites revisited (*site update form required*): 0
 Previously recorded sites not relocated (*site update form required*): 0
 TOTAL SITES VISITED: 0
 Total isolates recorded: 0 Non-selective isolate recording?
 Total structures recorded (*new and previously recorded, including acequias*): 0

MANAGEMENT SUMMARY: No cultural resources were encountered during the survey therefore clearance of the EK Queen Trunk location for Plains All American Pipeline, L.P. is recommended as presently flagged. If cultural resources are encountered at any time all activity should cease and the BLM Archaeologist notified immediately.
IF REPORT IS NEGATIVE YOU ARE DONE AT THIS POINT.

SURVEY LA NUMBER LOG
 Sites Discovered:

LA No.	Field/Agency No.	Eligible? (Y/N, applicable criteria)

Previously recorded revisited sites:

LA No.	Field/Agency No.	Eligible? (Y/N, applicable criteria)

MONITORING LA NUMBER LOG (*site form required*)

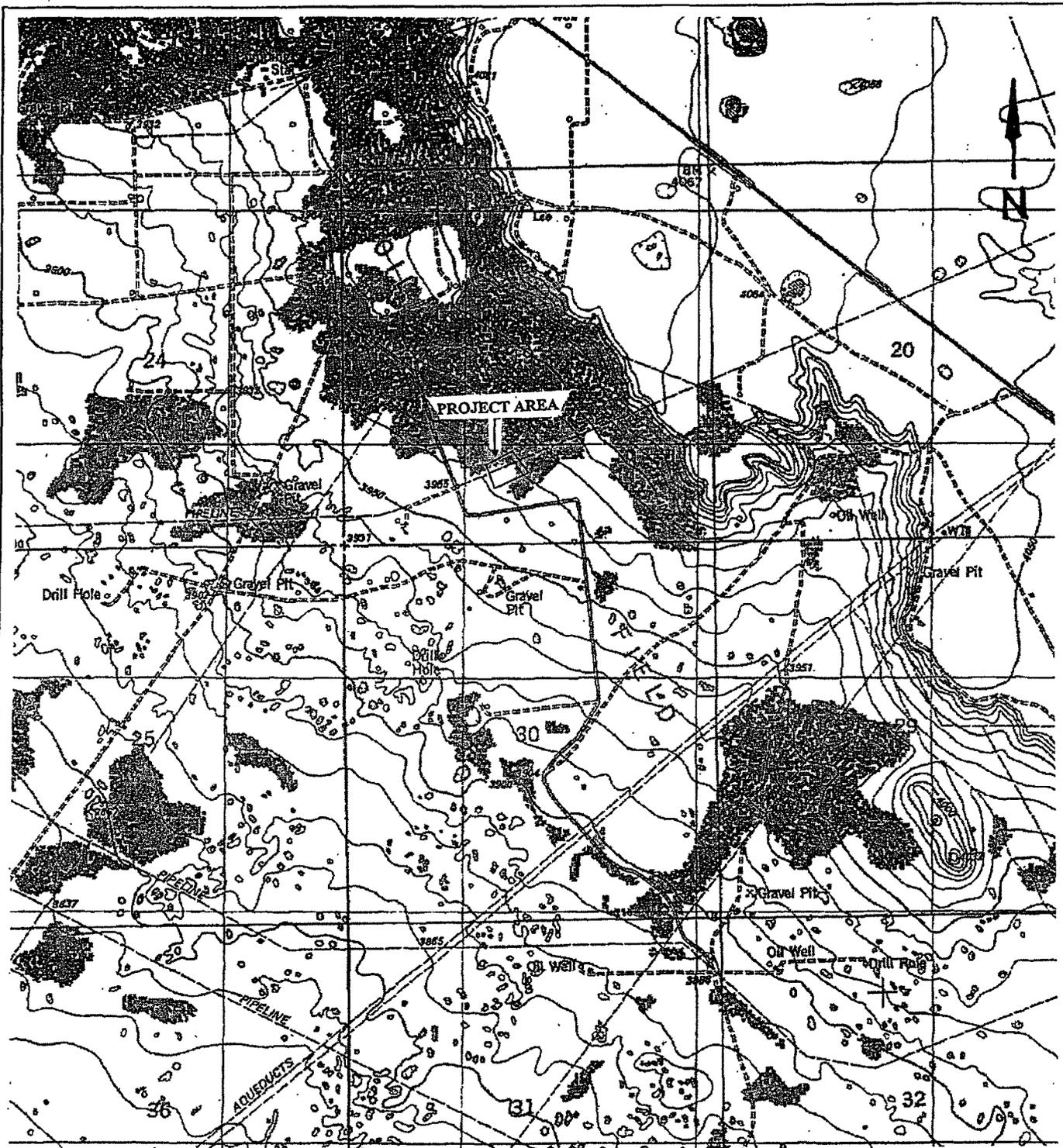
Sites Discovered (*site form required*): Previously recorded sites (*Site update form required*):

LA No.	Field/Agency No.	LA No.	Field/Agency No.

Areas outside known nearby site boundaries monitored? Yes , No If no explain why:

TESTING & EXCAVATION LA NUMBER LOG (*site form required*)

Tested LA number(s)	Excavated LA number(s)



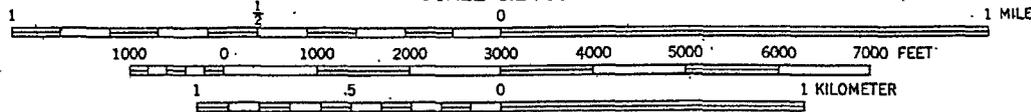
Location Map

BAS 08-07-12

EK Queen Trunk location for Plains All American Pipeline in Section 19, T 18S, R 34E, NMPM, Lea County, New Mexico.

Map Reference: USGS 7.5' Series; IRONHOUSE WELL, NM (1984) 32103-G8

SCALE 1:24 000



APPENDIX G

NMOCD C-141 Reports

Initial C-141 Report

Final C-141 Report

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

State of New Mexico
Energy Minerals and Natural Resources

Form C-141
Revised October 10, 2003

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

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

Release Notification and Corrective Action

OPERATOR

x Initial Report Final Report

Name of Company Plains Pipeline	Contact Camille Reynolds
Address 3112 W. US Hwy 82, Lovington, NM 88260	Telephone No. 505-441-0965
Facility Name E.K. Queen 6 Inch BLM	Facility Type 6"Steel Pipeline
Surface Owner BLM	Mineral Owner
Lease No.	

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
N	19	18S	34E					Lea

Latitude 32° 43' 44.1" Longitude 103° 36' 01.3"

WTR 100'

NATURE OF RELEASE

Type of Release Crude Oil	Volume of Release 55 barrels	Volume Recovered 40 barrels
Source of Release 6" Steel Pipeline	Date and Hour of Occurrence 03/27/08 @ 11:00	Date and Hour of Discovery 03/27/08 @ 12:46
Was Immediate Notice Given? X Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Larry Johnson	RECEIVED
By Whom? Camille Reynolds	Date and Hour 03/27/08 @ 15:56	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	3.31.08

If a Watercourse was Impacted, Describe Fully.*
HOBBS OCL

Describe Cause of Problem and Remedial Action Taken Internal corrosion of the 6 inch steel pipeline resulted in release of sweet crude oil. The line is a 6-inch steel gathering line that produces approximately 300 barrels of oil per day. The pressure on the line is approximately 90 psi and the gravity of the sweet crude oil is 42. The sweet crude has an H₂S content of <10 ppm. The line is approximately 3 feet bgs at the release point.

Describe Area Affected and Cleanup Action Taken.* The impacted soil was excavated and stockpiled on plastic.

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

Signature: <i>Camille Reynolds</i>	OIL CONSERVATION DIVISION	
Printed Name: Camille Reynolds	Approved by District Supervisor: <i>L. Johnson</i> ENVIRONMENTAL ENGINEER	
Title: Remediation Coordinator	Approval Date: 4.2.08	Expiration Date: 6.6.08
E-mail Address: cireynolds@paalp.com	Conditions of Approval: <i>Submit Closure 34</i>	
Date: 03/28/2008	Phone: 505-441-0965	Attached <input type="checkbox"/> IRR-1831

Attach Additional Sheets If Necessary

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