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£08282128

PRELIMINARY SITE INVESTIGATION REPORT and REMEDIATION PLAN

PLAINS MARKETING, L.P. (231735)

McKee 6"

Lea County, New Mexico

Plains SRS # LF-1999-20

UNIT E (SW/NW), Section 29, Township 20 South, Range 38 East

Latitude 32°, 32', 49.2" North, Longitude 103°, 10', 29.7" West

NMOCD File Number: 1RP-

Prepared For:

PLAINS

Plains Marketing, L.P. 333 Clay Street Suite 1600 Houston, Texas 77002

Prepared By:
Basin Environmental Service Technologies, LLC

25 October 2007

Ken Dutton

Basin Environmental Service Technologies, LLC

TABLE OF CONTENTS

Introduction		1
Summary of	Field Activities	1
Archeologica	l Survey Results	2
New Mexico Soil Classific	Oil Conservation Division (NMOCD) ation	2
Distribution o	of Hydrocarbons in the Unsaturated Zone	2
Recommend	ations for Remediation	4
Decon	edures ampling ntamination of Equipment atory Protocol	5 5 5
Limitations		5
Distribution		7
	Tables	
Table 1:	Soil Chemistry Results	
	Figures	
Figure 1: Figure 2: Figure 3: Figure 4: Figure 5:	Site Location Map Excavation Site Map Excavation Site Map – Soil Sampling & Soil Boring Location Digital Photos Installation of 20-mil Poly Liner	ons
	Appendices	
Appendix B: Appendix C: Appendix D: Appendix E:	New Mexico Office of the State Engineer Water Well Database Report Trace Analysis Analytical Results BLM Report of Undesirable Incident Boone Archeological Survey Results Soil Boring Logs Initial NMOCD C-141	

INTRODUCTION

Basin Environmental Service Technologies, LLC (Basin), at the request of Plains Marketing, L.P. (Plains), has assumed oversight responsibilities for the remedial activities at the historical McKee 6" release site. The McKee 6" Pipeline is located on land owned by the United States Department of the Interior, Bureau of Land Management (BLM).

This site is located in Unit E (SW½/NW½) Section 29, Township 20 South, Range 38 East, in Lea County, New Mexico (topographic Site Location Map is attached as Figure 1). The site latitude is 32°, 32, 49.2" North and site longitude is 103°, 10, 29.7" West. The site is characterized by a pipeline right-of-way in a pasture utilized for cattle grazing with numerous crude oil and natural gas producing facilities in the vicinity. The initial visible surface stained area includes the release point and flow path area covering an area approximately 50 feet long by 50 feet wide. A total of 50 barrels of crude oil were estimated to have been released from the crude oil receiver trap and 30 barrels were recovered.

A standard One-Call was initiated prior to excavation of the McKee 6" and all responding companies either cleared or marked their respective lines. Subsequent renewals of the one-call have been accomplished as required.

Ms. Syliva Dickey, New Mexico Oil Conservation Division (NMOCD), Hobbs, New Mexico District 1, was verbally notified of the release on 09 March 1999. A C-141 form, dated 18 March 1999 was completed by EOTT Energy and submitted to the NMOCD, Hobbs, New Mexico Office (see Appendix F, NMOCD C-141). A BLM Report of Undesirable Event report was submitted on 10 March 1999, to the Carlsbad BLM office (see Appendix C, BLM Report of Undesirable Event Form).

SUMMARY OF FIELD ACTIVITIES

In May 2007, Basin mobilized to the McKee 6" crude oil release site responding to a request from Plains to initiate remediation of the historical site. Upon arrival at the release site, Basin initiated excavation of the release point and flow path area with the impacted soil stockpiled on a 6-mil poly liner adjacent to the excavation for future remedial action. The final dimensions of the excavated area are approximately 140 feet long by 75 feet wide and approximately 15 feet below ground surface (bgs) (See Figure 2, Excavation Site Map). Approximately 6000 cubic yards of impacted soil has been stockpiled on-site commensurate remediation activities.

On 14 June 2007, nine (9) confirmation soil samples were collected from the floor and walls of the excavation ranging in depth from approximately 6 to 15 feet bgs. Additionally, a delineation trench was installed adjacent to the release point to a depth of approximately 27 feet bgs below the base of the excavation with two (2) soil samples collected at approximately 17 and 27 feet bgs, respectively.

On 14 and 22 August 2007, soil boring SB-1 and soil boring SB-2 were installed to evaluate the vertical extent of crude oil impact. The soil borings were installed on the excavation floor adjacent to the release point at approximately fifteen (15) feet bgs and soil samples were collected at five (5) feet intervals. The soil borings were installed to a true subsurface depth of approximately 45 and 80 feet bgs, respectively.

ARCHEOLOGICAL SURVEY RESULTS

At the request of the BLM, Plains contacted Boone Archeological Services, LLC, Carlsbad, New Mexico, to conduct an archeological survey of the site prior to initiating remediation activities, in accordance with BLM directives. Results of the archeological survey did not find evidence of cultural resources present, and therefore, recommended archeological clearance. Results of the survey were discussed with the BLM and a copy of the archeological survey is included in Appendix D.

NEW MEXICO OIL CONSERVATION DIVISION (NMOCD) SOIL CLASSIFICATION

A search of the New Mexico State Engineers database revealed no groundwater data available for that section; however, the depth to groundwater map utilized by NMOCD, Hobbs District I, indicates an average depth to groundwater to the north in the same township and range to be approximately 81 to 85 feet bgs and to the south in the same township and range to be approximately 35 to 40 feet bgs. During the installation of Soil Boring 2 (SB-2) to a true subsurface depth of approximately 80 feet bgs, groundwater was not encountered. There are no surface water bodies or water wells within 1000 feet of the release site. Based on this data, the site has an NMOCD Ranking Score of >19, which sets the remediation levels at:

Benzene:

10 ppm

TOTAL BTEX:

50 ppm

TPH:

100 ppm

DISTRIBUTION OF HYDROCARBONS IN THE UNSATURATED ZONE

The final dimensions of the excavation which includes the release point and flow path area are approximately 140 feet long by 75 feet wide and approximately 15 feet bgs. Approximately 6000 cubic yards of impacted soil has been stockpiled on-site commensurate with remediation activities conducted.

On 14 June 2007, nine (9) confirmation soil samples were collected from the floor and walls of the excavation ranging in depth from approximately 5 to 15 feet bgs. Soil samples were analyzed for constituent concentrations of BTEX and TPH-GRO/DRO.

Laboratory results indicated that constituent concentrations of BTEX were not detected above laboratory method detection limits for the nine (9) soil samples. Laboratory results indicated that constituent concentrations of TPH-GRO/DRO were not detected above laboratory method detection limits for the north floor #2, ramp, east wall #2, and south floor #1 soil samples and the west wall #2, west floor #2, north floor #2, east floor #2 and south wall #1 soil samples reported TPH-GRO/DRO concentrations below NMOCD regulatory standards.

On 14 June 2007, a delineation trench was installed adjacent to the release point on the excavation floor. Soil samples collected at depths of approximately 17 and 27 feet below the base of the excavation were submitted for analysis. Laboratory results reported that constituent concentrations of BTEX were below NMOCD regulatory standards for the two (2) soil samples. Laboratory results reported constituent concentrations of TPH-DRO/GRO exceeded NMOCD regulatory standards for the two (2) soil samples at 5180 mg/kg and 4190 mg/kg, respectively.

On 14 and 22 August 2007, Basin installed two (2) soil borings utilizing an air rotary drill rig operated by Straub Corporation, Stanton, Texas, to evaluate the vertical extent of crude oil impact at the release point on the floor of the excavation. The two soil borings ranged in depth from approximately 30 to 65 feet bgs with a true subsurface depth of approximately 45 and 80 feet bgs, respectively. Subsurface soil samples were collected at five (5) feet intervals and field screened with a Photoionization Detector (PID). No visual observations of free phase hydrocarbons (PSH) or groundwater were encountered during the installation of the soil borings. The selected samples were analyzed for constituent concentrations of BTEX and TPH-GRO/DRO. Laboratory data sheets and chain-of-custody forms are attached (Appendix B).

Soil Boring 1, as depicted on the Excavation Site Map & Soil Boring Locations (Figure 3), was installed on the floor of the excavation at a depth of approximately 30 feet bgs. The soil boring was installed to a true subsurface depth of approximately 45 feet bgs. Soil samples collected at depths of 5, 10, 20 and 30 feet below the base of the excavation were submitted for analysis. Laboratory results indicated that constituent concentrations of BTEX and TPH-GRO/DRO were not detected above laboratory method detection limits for the four (4) soil samples.

Soil Boring 2 was installed to further evaluate the vertical extent of crude oil impact on the excavation floor approximately eight (8) feet north northeast of SB-1 at approximately fifteen (15) feet bgs. Soil samples were collected at five (5) feet intervals and field screened with a PID. The soil boring was installed to a true subsurface depth of approximately 80 feet bgs. Soil samples collected at depths of 5, 10, 20, 30, 40, 50, 60 and 65 feet bgs below the base of the excavation were submitted for analysis. Laboratory results indicated that constituent concentrations of BTEX were reported below NMOCD regulatory standards for the 5, 10, 20, 30 and 40 feet soil samples and were not detected above laboratory method detection limits for the 50, 60 and 65 feet bgs soil samples. Laboratory results indicated that

constituent concentrations of TPH-GRO/DRO were reported to exceed NMOCD regulatory standards for the 5, 10, 20, 30, 40 and 50 feet bgs soil samples at 1646 mg/kg, 1029 mg/kg, 1432 mg/kg, 2122 mg/kg, 2196 mg/kg and 374 mg/kg, respectively. Laboratory results indicated that constituent concentrations of TPH-GRO/DRO were reported below NMOCD regulatory standards for the 60 and 65 feet bgs soil samples. Based on the results of the laboratory data, soil impacts appear to be limited in lateral extent and to a subsurface depth of less than 65 feet.

RECOMMENDATIONS FOR REMEDIATION

Approximately 6000 cubic yards of impacted soil and clean overburden have been excavated and stockpiled on-site resulting from the emergency response and remediation activities. Basin and Plains propose to blend the excavated impacted soils with the clean overburden. The blended soil will be divided into equal cell grids of approximately 500 cubic yards. Confirmation soil samples from the blended material will be collected to ensure TPH-GRO/DRO concentrations of less than 500 mg/kg.

Due to the limited vertical crude oil impact derived from analytical results commensurate with excavation and drilling activities, Plains recommends than an impermeable barrier consisting of a 20-mil poly liner be permanently installed at the base of the excavation to inhibit vertical migration of contaminants in soil left in place below the cap (see Figure 5, Installation Diagram of 20-mil Poly Liner). The barrier will extend to a minimum of three (3) feet beyond the edges of soil impacted above NMOCD remedial thresholds. A 6-inch layer of fine cushion sand will be installed beneath and above the 20-mil poly liner to prevent degrading the integrity of the poly liner. Installation of the 20-mil poly liner at a depth of approximately 15 feet bgs will protect the barrier from erosion and human intrusion for a term sufficient to allow natural attenuation of contaminates in the soil.

Once the installation of the 20-mil poly liner is completed, backfilling of the excavation will be initiated with the blended material which has met the 500 mg/kg THP-GRO/DRO threshold. Once backfilling has been completed, the backfilled excavation will be contoured to the original grade surrounding the site and reseeded with approved BLM grass seed.

Upon completion of backfilling the excavation, Basin on behalf of Plains, will submit a closure request for NMOCD approval. Basin on behalf of Plains, request approval from NMOCD, Hobbs District I, to implement these proposed final remediation and site closure activities based on the remediation activities conducted at the McKee 6" crude oil release site.

QA/QC PROCEDURES

Soil Sampling

Soil samples were delivered to Trace Analysis, Inc., in Midland, Texas for BTEX, TPH-GRO/DRO analyses using the methods described below. Soil samples were analyzed for BTEX, TPH-GRO/DRO within fourteen days following the collection date.

The soil samples were analyzed as follows:

- BTEX concentrations in accordance with EPA Method 8021B, 5030
- TPH concentrations in accordance with modified EPA Method 8015M GRO/DRO

Decontamination Of Equipment

Cleaning of the sampling equipment will be the responsibility of the environmental technician. Prior to use, and between each sample, the sampling equipment will be cleaned with Liqui-Nox® detergent and rinsed with distilled water.

Laboratory Protocol

The laboratory will be responsible for proper QA/QC procedures after signing the chain-of-custody form. These procedures will be either transmitted with the laboratory reports or are on file at the laboratory.

LIMITATIONS

Basin Environmental Service Technologies, LLC, has prepared this Preliminary Investigation Report and Remediation/Closure Plan to the best of its ability. No other warranty, expressed or implied, is made or intended.

Basin Environmental Service Technologies, LLC, has examined and relied upon documents referenced in the report and has relied on oral statements made by certain individuals. Basin Environmental Service Technologies, LLC, has not conducted an independent examination of the facts contained in referenced materials and statements. We have presumed the genuineness of the documents and that the information provided in documents or statements is true and accurate. Basin Environmental Service Technologies, LLC, has prepared this report in a professional manner, using the degree of skill and care exercised by similar environmental consultants. Basin Environmental Service Technologies, LLC, also notes that the facts and conditions referenced in this report may change over time and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

This report has been prepared for the benefit of Plains Marketing, L.P. The information contained in this report including all exhibits and attachments, may not be used by any other party without the express consent of Basin Environmental Service Technologies, LLC, and Plains Marketing, L.P.

DISTRIBUTION

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Copy 1: Jeff Dann Plains All American 333 Clay Street **Suite 1600** Houston, Texas 77002 ipdann@paalp.com Copy 2: Camille Reynolds Plains All American 3112 W. Highway 82 Lovington, New Mexico 88260 cireynolds@paalp.com Copy 3: Mr. Larry Johnson New Mexico Oil Conservation Division 1625 N. French Drive Hobbs, New Mexico 88240 Larry.Johnson@state.nm.us Copy 4: Mr. Jim Amos U. S. Department of the Interior **Bureau of Land Management** 620 E. Greene St. P. O. Box 1778 Carlsbad, New Mexico 88220 James Amos@nm.blm.gov Copy 5: Basin Environmental Service Technologies LLC P. O. Box 301 Lovington, New Mexico 88260 kdutton@basinenv.com

TABLE 1

SOIL CHEMISTRY RESULTS

PLAINS MARKETING, L.P. MCKEE 6-INCH LEA COUNTY, NEW MEXICO SRS: LF-1999-20

SAMPLE	SAMPLE	SAMPLE	SOIL	METH	IOD: EPA S	METHOD:	8015M	TOTAL		
LOCATION	DEPTH	DATE	STATUS	BENZENE	TOLUENE	ETHYL-	XYLENE	GRO	DRO	TPH
	(Below					BENZENE				1
	normal									1
	surface	ĺ				1]
	grade)									
				(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
West Wall # 2	6' bgs	06/14/07	In-Situ	<0.010	<0.010	<0.010	< 0.010	57	6	63
West Floor # 2	15' bgs	06/14/07	In-Situ	<0.010	<0.010	<0.010	<0.010	<50	1.35	1.35
North Wall # 2	6' bgs	06/14/07	In-Situ	<0.010	< 0.010	<0.010	<0.010	<50	1.03	1.03
North Floor # 2	15' bgs	06/14/07	In-Situ	<0.010	<0.010	<0.010	<0.010	<50	<1.0	<1.0
Ramp	12' bgs	06/14/07	In-Situ	<0.010	<0.010	<0.010	<0.010	<50	<1.0	<1.0
East Wall # 2	6' bgs	06/14/07	In-Situ	<0.010	<0.010	<0.010	<0.010	<50	<1.0	<1.0
East Floor # 2	15' bgs	06/14/07	In-Situ	<0.010	<0.010	<0.010	<0.010	<50	1.64	1.64
South Wall # 1	6' bgs	06/14/07	In-Situ	<0.010	< 0.010	<0.010	<0.010	<50	1.04	1.04
South Floor # 1	15' bgs	06/14/07	In-Situ	<0.010	<0.010	<0.010	<0.010	<50	<1.0	<1.0
Trench 17'	17' bgs	06/14/07	In-Situ	0.155	2.12	2.75	9.28	2040	3140	5180
Trench 27'	27' bgs	06/14/07	In-Situ	<0.010	0.342	0.467	7.51	2190	2000	4190
North Stock Pile	N/A	06/15/07	Stockpile	<0.010	0.098	0.052	1.42	614	1820	2434
South Stock Pile	N/A	06/15/07	Stockpile	<0.010	<0.010	<0.010	0.157	277	44	321
East Stock Pile	N/A	06/15/07	Stockpile	<0.010	0.047	<0.010	0.239	991	62	1053
West Stock Pile	N/A	06/15/07	Stockpile	<0.010	<0.010	<0.010	<0.010	625	36	661
CONTRACTOR ON THE	使的性态	1437	THE THE WAY		KLANKE I	16 32 AL 34	Maria	A. A. A. C. C.	36423	经逐渐
N S/P	N/A	05/07/07	Stockpile					29	1300	1329

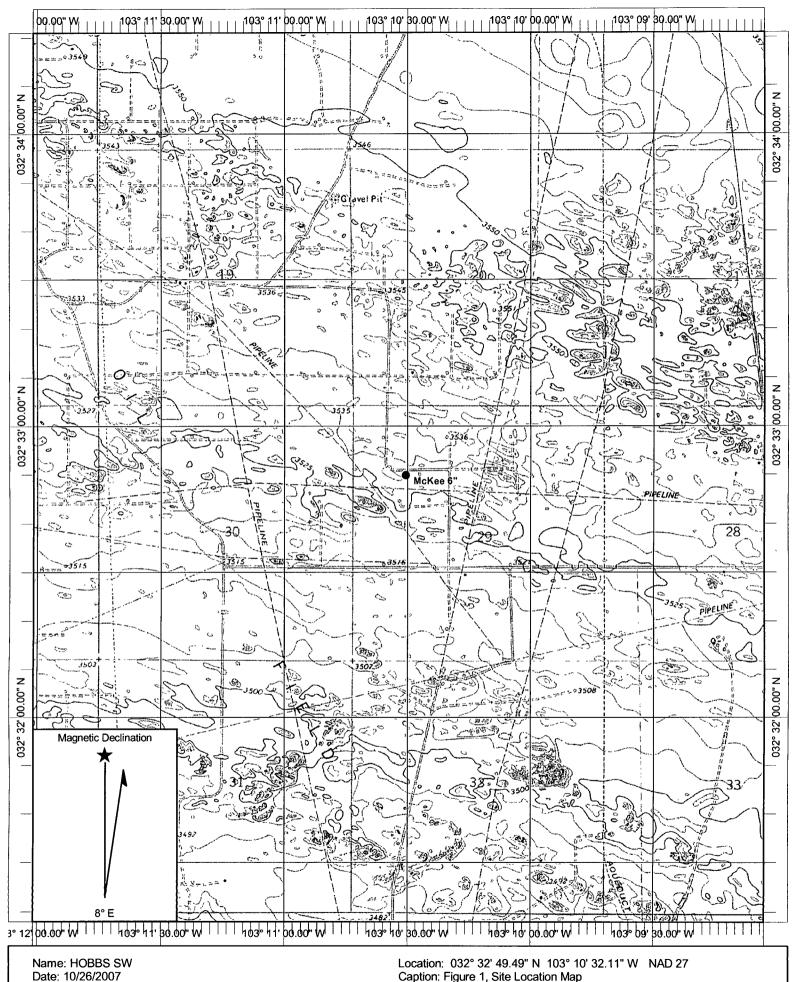
TABLE 1 (cont)

SOIL CHEMISTRY RESULTS

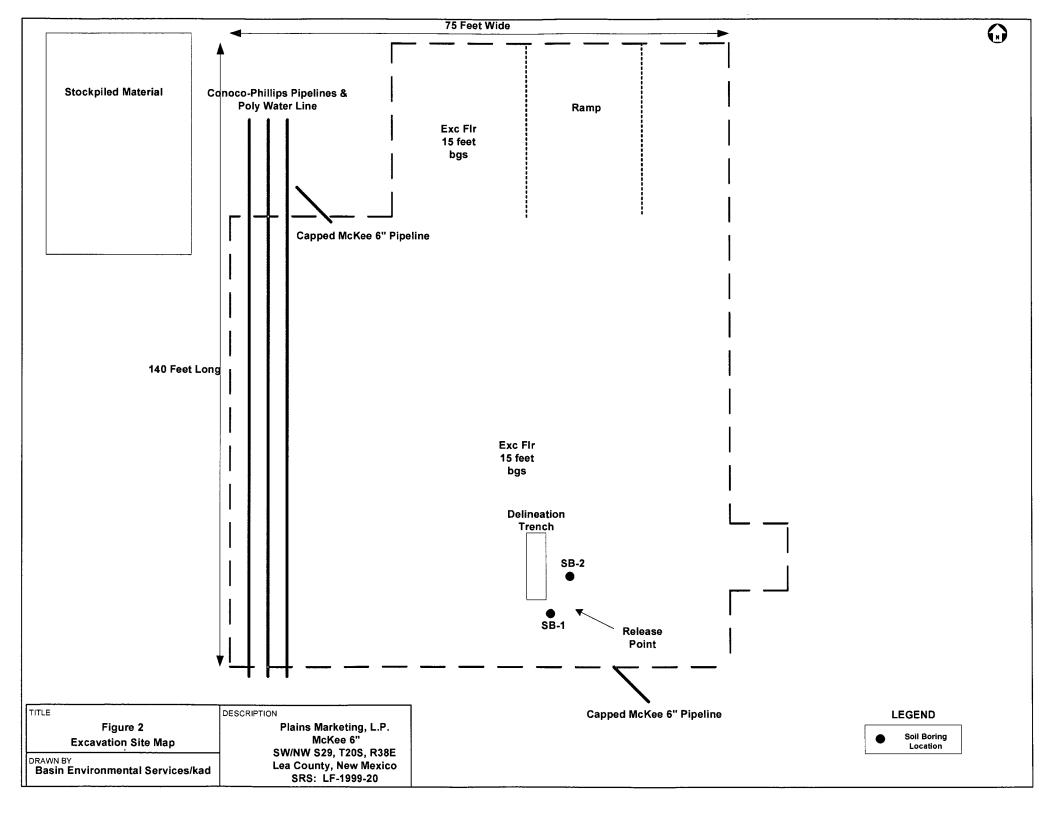
PLAINS MARKETING, L.P. MCKEE 6-INCH LEA COUNTY, NEW MEXICO

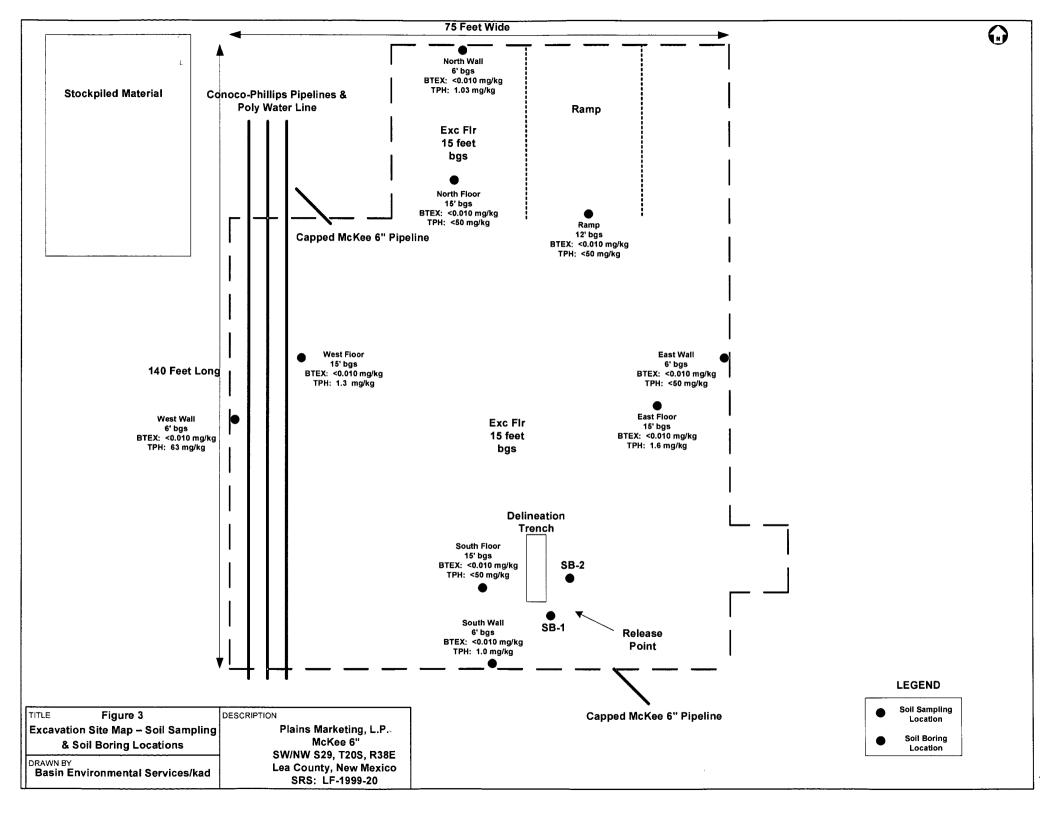
SRS: LF-1999-20

SAMPLE	SAMPLE	SOIL	METH	METHOD:	8015M	TOTAL			
DEPTH (Below	DATE	STATUS	BENZENE	TOLUENE	ETHYL- BENZENE	XYLENE	GRO	DRO	TPH
surface									
grade)	i		(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
20' bgs	08/14/07	In-Situ	<0.010	<0.010	<0.010	<0.010	<1	<50	<50
25' bgs	08/14/07	In-Situ	<0.010	<0.010	<0.010	<0.010	<1	<50	<50
35' bgs	08/14/07	In-Situ	<0.010	<0.010	<0.010	<0.010	<1	<50	<50
45' bgs	08/14/07	In-Situ	<0.010	<0.010	<0.010	<0.010	<1	<50	<50
		基金性性的	学完整了数	2000 TO 1000 T				為情報的	新华·新
20' bgs	08/22/07	In-Situ	<0.020	<0.020	<0.020	0.503	126	1520	1646
25' bgs	08/22/07	In-Situ	<0.020	<0.020	<0.020	0.863	132	897	1029
35' bgs	08/22/07	In-Situ	<0.020	<0.020	<0.020	3.91	222	1210	1432
45' bgs	08/22/07	In-Situ	<0.020	0.709	1.06	6.26	262	1860	2122
55' bgs	08/22/07	In-Situ	<0.020	<0.020	0.267	1.21	146	2050	2196
65' bgs	08/22/07	In-Situ	<0.010	<0.010	<0.010	<0.010	18	356	374
75' bgs	08/22/07	In-Situ	<0.010	<0.010	<0.010	<0.010	3	<50	3
80' bgs	08/22/07	In-Situ	<0.010	<0.010	<0.010	<0.010	3	<50	3
				-					
			10	T	OTAL BTEX	3 50			100
	DEPTH (Below normal surface grade) 20' bgs 25' bgs 35' bgs 45' bgs 20' bgs 25' bgs 35' bgs 45' bgs 55' bgs 65' bgs 75' bgs	DEPTH (Below normal surface grade) 20' bgs 08/14/07 25' bgs 08/14/07 35' bgs 08/14/07 45' bgs 08/22/07 25' bgs 08/22/07 25' bgs 08/22/07 35' bgs 08/22/07 45' bgs 08/22/07 55' bgs 08/22/07 75' bgs 08/22/07 75' bgs 08/22/07	DEPTH (Below normal surface grade) DATE STATUS 20' bgs (Day 14/07) In-Situ (Day 15/15) In-Situ (Day 15/15) 25' bgs (Day 14/07) In-Situ (Day 15/15) In-Situ (Day 15/15) 35' bgs (Day 14/07) In-Situ (Day 15/15) In-Situ (Day 15/15) 20' bgs (Day 14/07) In-Situ (Day 15/15) In-Situ (Day 15/15) 25' bgs (Day 22/07) In-Situ (Day 15/15) In-Situ (Day 15/15) 45' bgs (Day 22/07) In-Situ (Day 15/15) In-Situ (Day 15/15) 55' bgs (Day 22/07) In-Situ (Day 15/15) In-Situ (Day 15/15) 75' bgs (Day 22/07) In-Situ (Day 15/15) In-Situ (Day 15/15) 75' bgs (Day 22/07) In-Situ (Day 15/15) In-Situ (Day 15/15)	DEPTH (Below normal surface grade) DATE STATUS BENZENE 20' bgs (Market) 08/14/07 (Market) In-Situ (Market) <0.010	DEPTH (Below normal surface grade)				

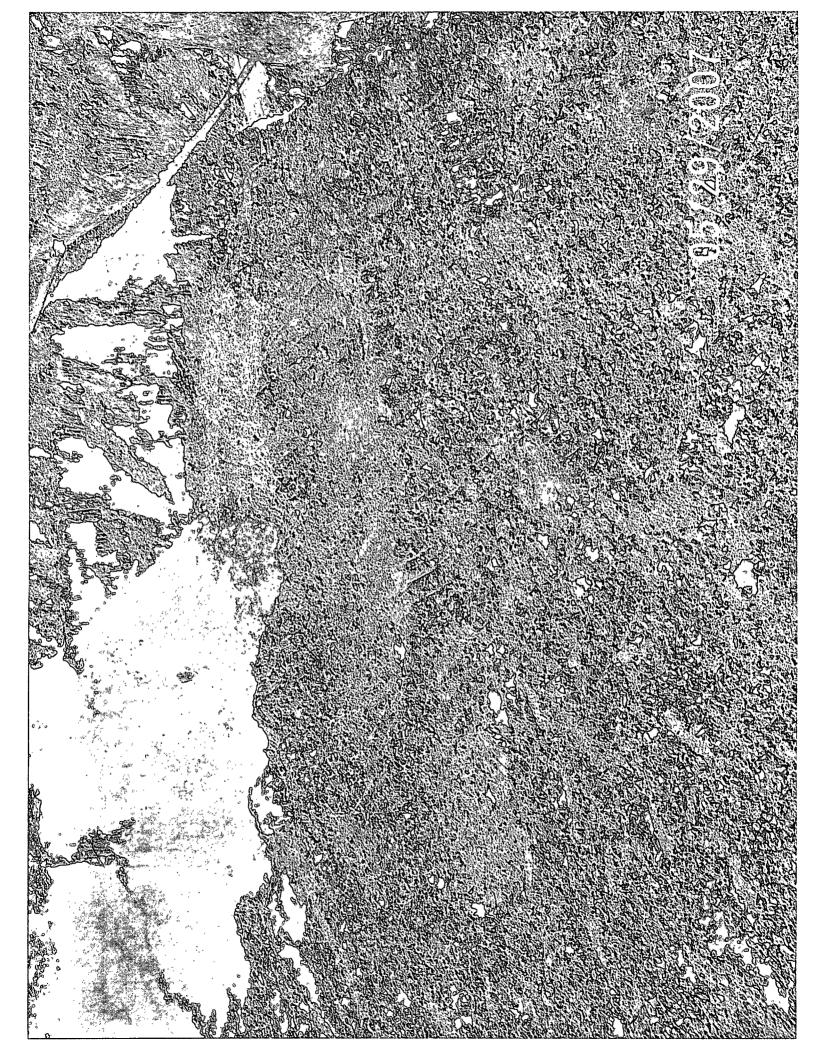


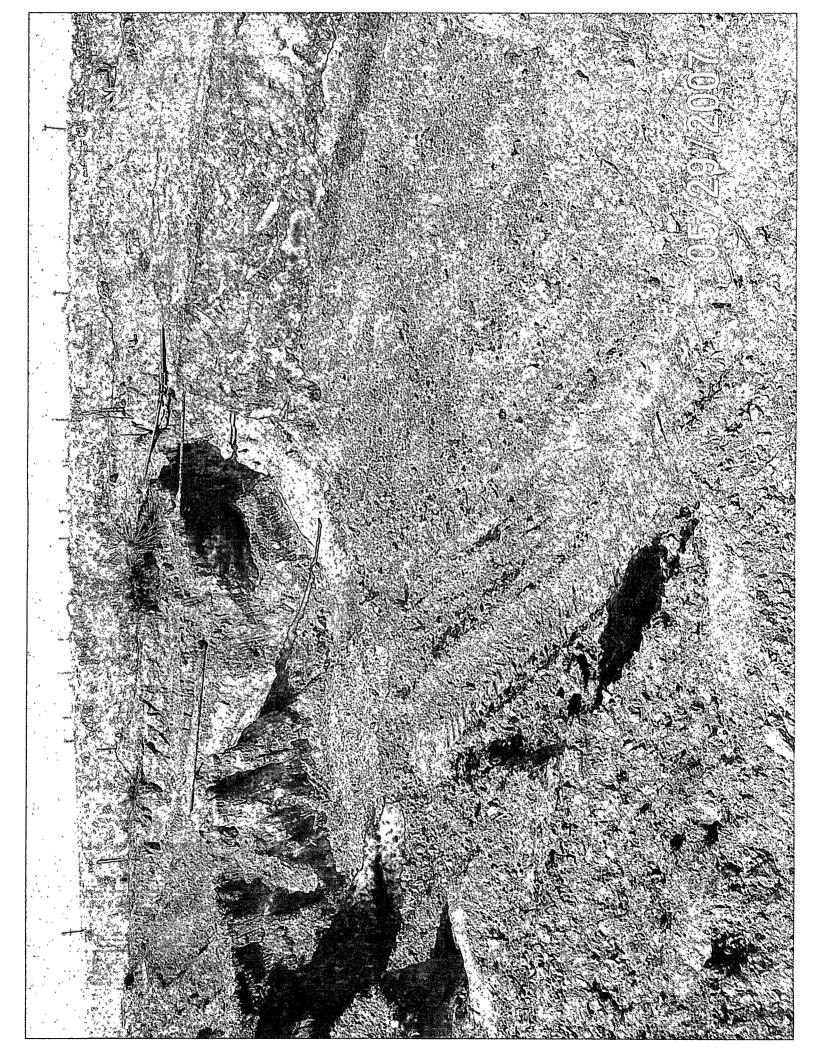
Date: 10/26/2007 Scale: 1 inch equals 2000 feet Location: 032° 32' 49.49" N 103° 10' 32.11" W NAD 2' Caption: Figure 1, Site Location Map Plains Marketing, L. P. McKee 6"

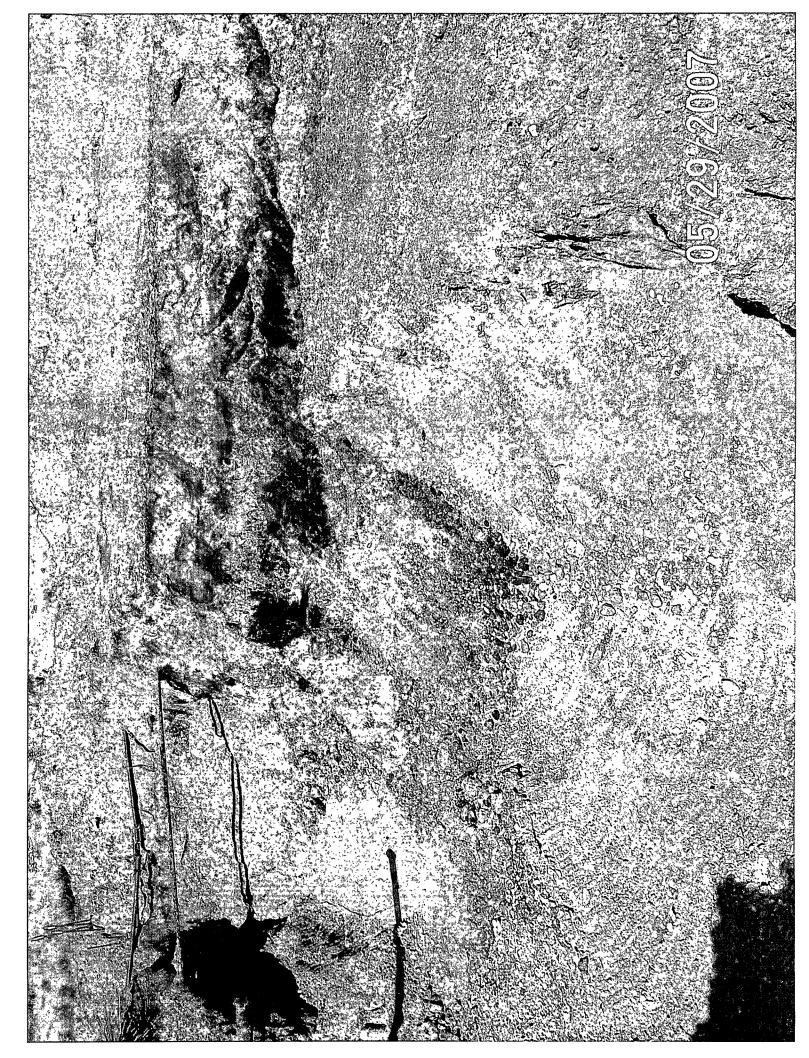






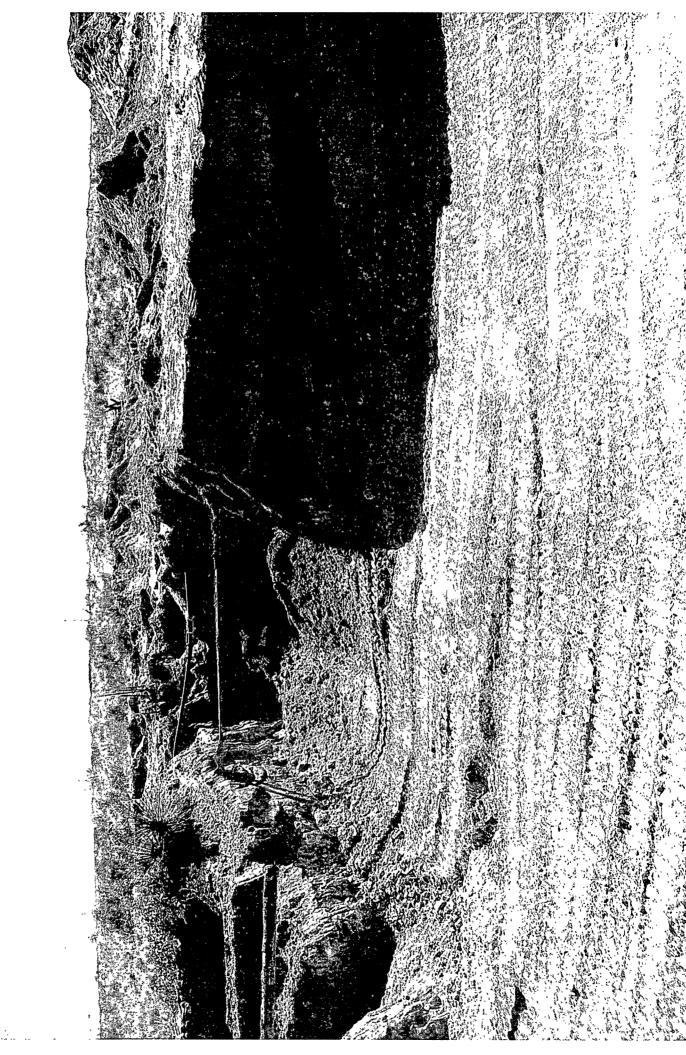


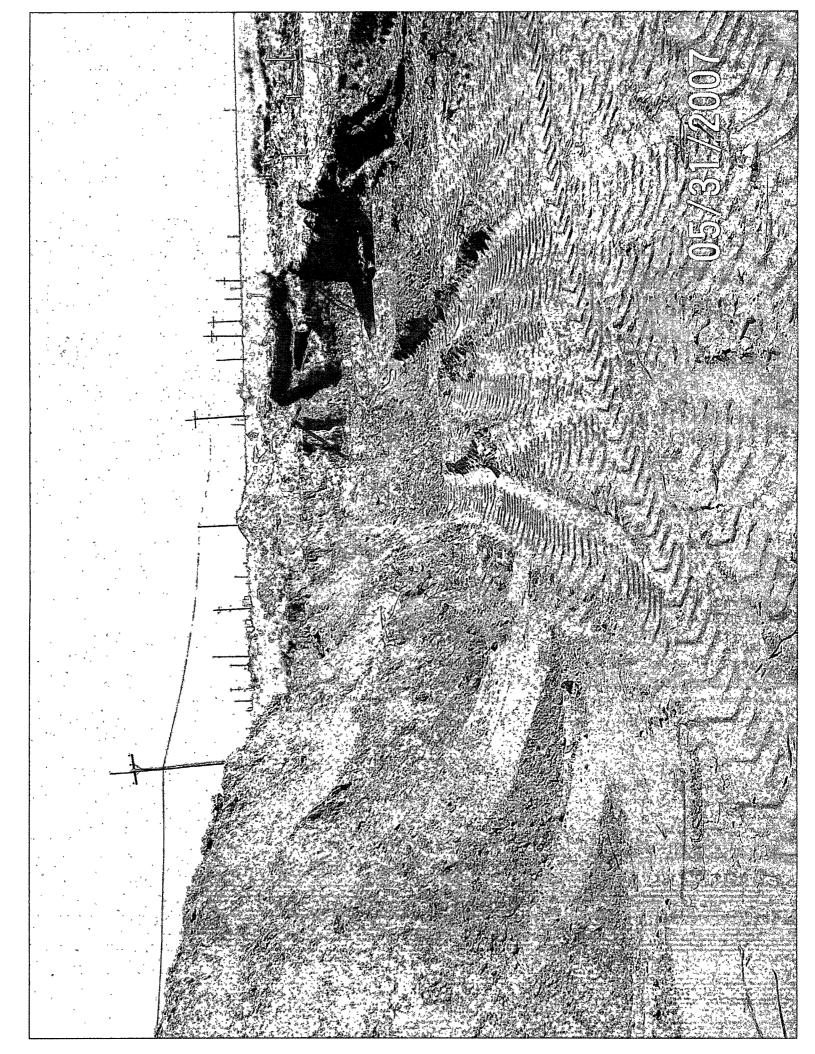


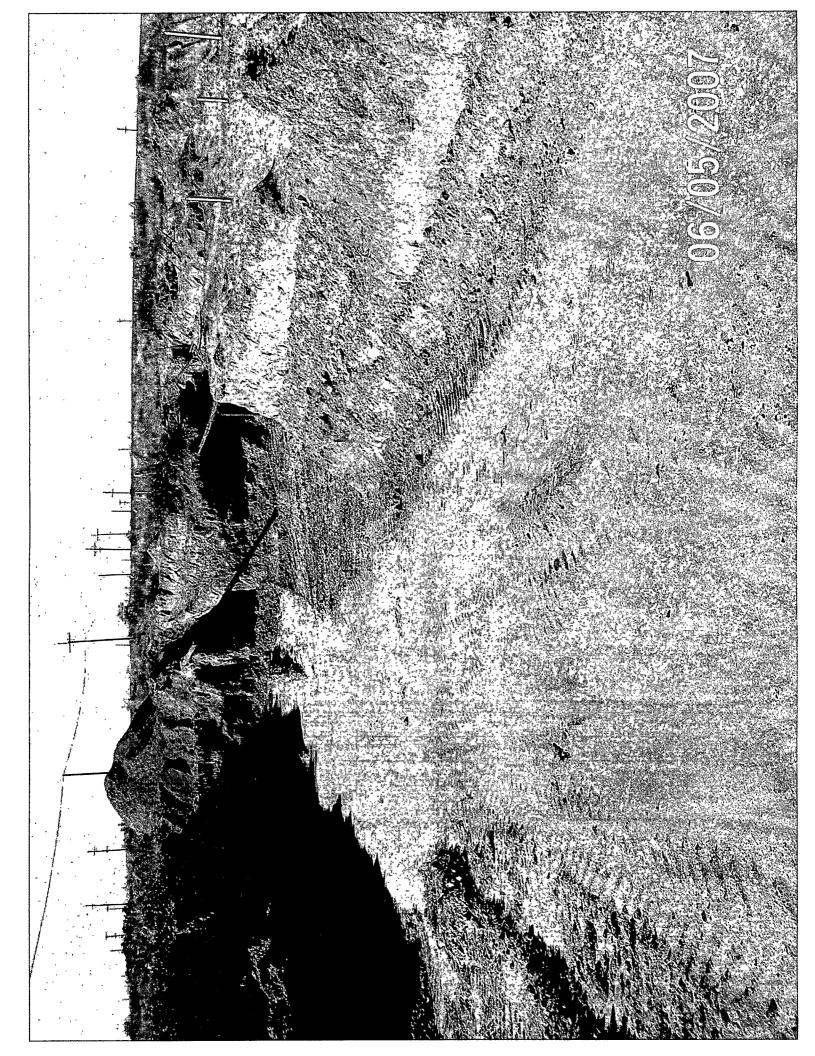


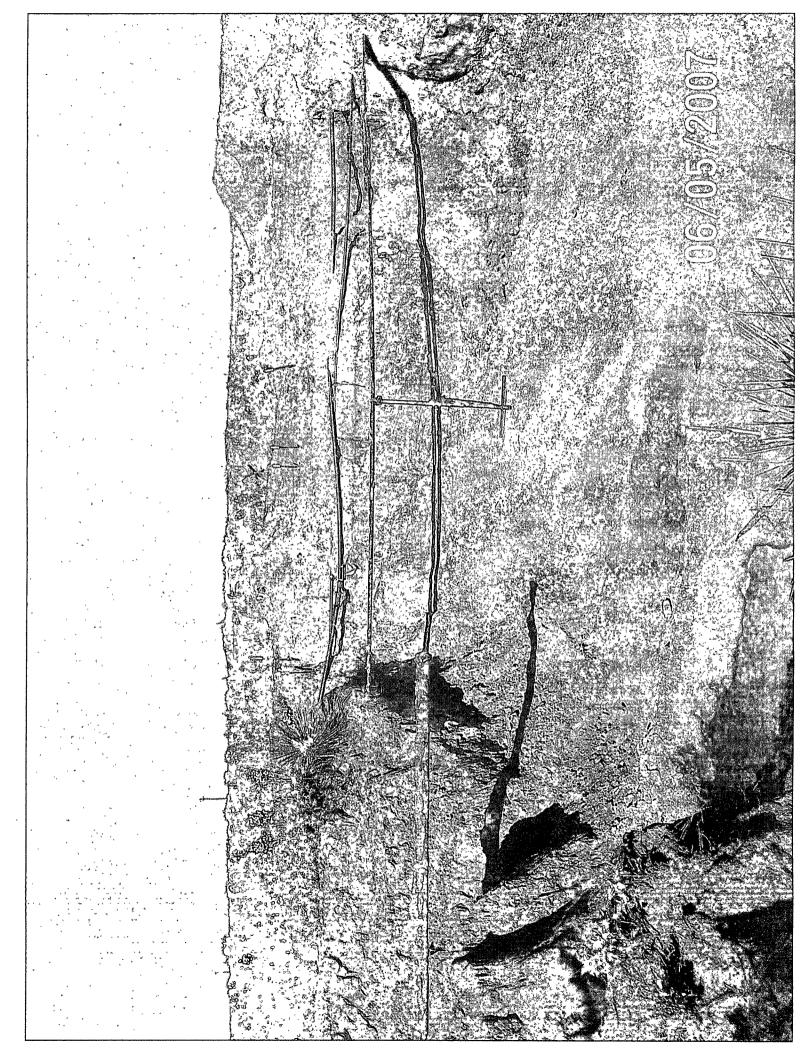




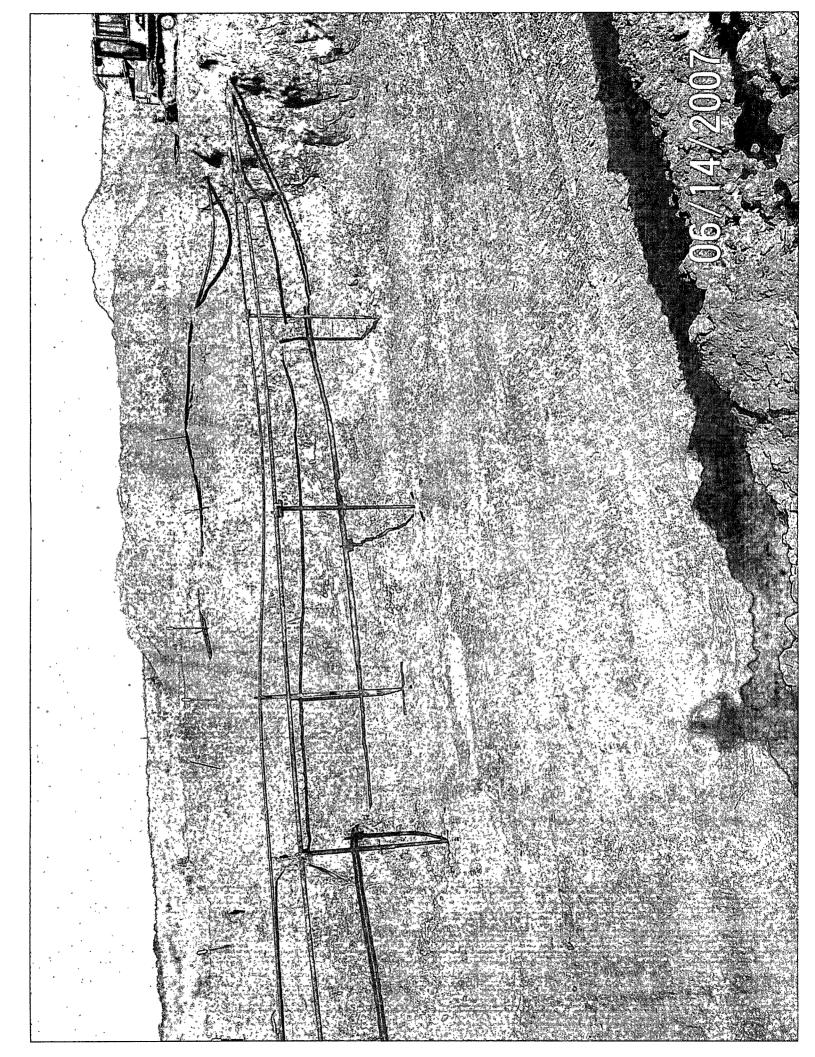




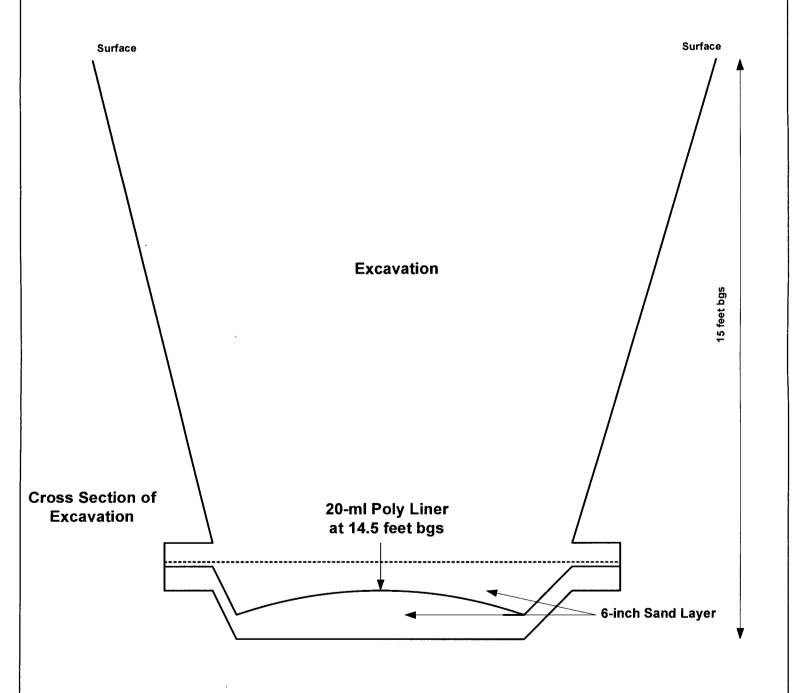








McKee 6" SRS: LF-1999-20 20-ml Poly-Liner Installation



TITLE	Figure 5	DATE		
ļ	McKee 6"	22 October 2007		
DRAWN B	<u> </u>	LABEL		
Basin	Environmental Services	Installation of 20 ml Poly		
	KAD	Liner		

Nen	w Mexico Office of the State Engineer POD Reports and Downloads
Township: 20s	Range: Sections: P9
NAD27 X:	Y: Zone: Li Search Radius:
County: Basin:	Number: Suffix:
Owner Name: (First)	(Last) ○ Non-Domestic ○ Domestic ● All
POD / Surface Data F	Report Avg Depth to Water Report Water Column Report
-	Clear Form (WATERS Menu Help)
POD / SURFACE DATA REPORT (acre ft per annum)	05/18/2007 (quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are biggest to smallest X Y are in Feet UTM are in Feet)
DB File Nbr Use Diversion Owner	POD Number Source Tws Rng Sec q q q Zone X Y UTM_Zone E
No Records found, try again	

1 of 1



6701 Aberdeen Avenue, Suite 9 200 East Sunset Road, Suite E. 5002 Basin Street, Strite A1 6015 Harris Parkway, Suite 110 - Ft Worth Texas 76132

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915 • 585 • 3443 432 • 689 • 6301 FAX 800 • 794 • 1298 FAX 915 • 585 • 4944

817 • 201 • 5260

FAX 432 • 689 • 6313

E-Mail, labi@traceanalysis.com

Analytical and Quality Control Report

Ken Dutton

Basin Environmental Service Tech LLC

P.O. Box 301

Lovington, NM, 88260

Report Date: August 29, 2007

Work Order:

7082428

Project Location: Lea County, NM

Project Name:

McKee 6

Project Number:

SRS# LF-1999-20

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

			Date	Time	Date
Sample	Description	Matrix	Taken	Taken	Received
134344	SB-2 5'	soil	2007-08-22	09:05	2007-08-24
134345	SB-2 10'	soil	2007-08-22	09:10	2007-08-24
134346	SB-2 20'	soil	2007-08-22	09:32	2007-08-24
134347	SB-2 30'	soil	2007-08-22	09:54	2007-08-24
134348	SB-2 40'	soil	2007-08-22	10:06	2007-08-24
134349	SB-2 50'	soil	2007-08-22	10:22	2007-08-24
134350	SB-2 60'	soil	2007-08-22	10:28	2007-08-24
134351	SB-2 65'	soil	2007-08-22	10:32	2007-08-24

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 14 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.

Report Date: August 29, 2007 Work Order: 7082428 Page Number: 2 of 14 SRS# LF-1999-20 McKee 6 Lea County, NM

Analytical Report

Sample: 134344 - SB-2 5'

Analysis: BTEX QC Batch: 40496 Prep Batch: 35014 Analytical Method: S 8021B Date Analyzed: 2007-08-24 Sample Preparation: 2007-08-24

Prep Method: S 5035 Analyzed By: Prepared By:

		\mathbf{R} . \mathbf{L}			
Parameter	Flag	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		0.503	mg/Kg	2	0.0100

					\mathbf{Spike}	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.79	mg/Kg	2	2.00	90	39.6 - 116
4-Bromofluorobenzene (4-BFB)		2.47	mg/Kg	2	2.00	124	47.3 - 144.2

Sample: 134344 - SB-2 5'

Analysis: TPH DRO QC Batch: 40468 Prep Batch: 35011 Analytical Method: Mod. 8015B Date Analyzed: 2007-08-27 Sample Preparation: 2007-08-27

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

					\mathbf{Spike}	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane	1	388	mg/Kg	1	150	259	17.3 - 169.6

Sample: 134344 - SB-2 5'

Analysis: TPH GRO QC Batch: 40540 Prep Batch: 35014 Analytical Method: S 8015B
Date Analyzed: 2007-08Sample Preparation: 2007-08-

S 8015B Prep Method: S 5035 2007-08-24 Analyzed By: 2007-08-24 Prepared By:

 RL

 Parameter
 Flag
 Result
 Units
 Dilution
 RL

 GRO
 126
 mg/Kg
 2
 1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.65	mg/Kg	2	2.00	82	50.2 - 89.3
4-Bromofluorobenzene (4-BFB)	2	3.30	mg/Kg	2	2.00	165	50.8 - 131.6

¹High surrogate recovery due to peak interference.

²High surrogate recovery due to peak interference.

Report Date: August 29, 2007 Work Order: 7082428 Page Number: 3 of 14 SRS# LF-1999-20 McKee 6 Lea County, NM

Sample: 134345 - SB-2 10'

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035 QC Batch: 40496 Date Analyzed: 2007-08-24 Analyzed By:

Prep Batch: 35014 Sample Preparation: 2007-08-24 Prepared By:

RLDilution Parameter Flag Result Units RL0.0100 < 0.0200 2 Benzene mg/Kg 2 0.0100 Toluene < 0.0200 mg/Kg 2 Ethylbenzene < 0.0200 mg/Kg 0.01002 0.863 mg/Kg 0.0100 Xylene

					\mathbf{Spike}	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.70	mg/Kg	2	2.00	85	39.6 - 116
4-Bromofluorobenzene (4-BFB)		2.51	mg/Kg	2	2.00	126	47.3 - 144.2

Sample: 134345 - SB-2 10'

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A

QC Batch: 40468 Date Analyzed: 2007-08-27 Analyzed By: Prep Batch: 35011 Sample Preparation: 2007-08-27 Prepared By:

					\mathbf{Spike}	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		256	mg/Kg	1	150	171	17.3 - 169.6

Sample: 134345 - SB-2 10'

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035 QC Batch: 40540 Date Analyzed: 2007-08-24 Analyzed By:

Prep Batch: 35014 Sample Preparation: 2007-08-24 Prepared By:

					\mathbf{Spike}	Percent	Recovery
Surrogate	Flag	Result	$_{ m Units}$	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.59	mg/Kg	2	2.00	80	50.2 - 89.3
4-Bromofluorobenzene (4-BFB)	3	3.55	mg/Kg	2	2.00	178	50.8 - 131.6

³High surrogate recovery due to peak interference.

Report Date: August 29, 2007 Work Order: 7082428 Page Number: 4 of 14 SRS# LF-1999-20 McKee 6 Lea County, NM

Sample: 134346 - SB-2 20'

Prep Method: S 5035 Analysis: BTEX Analytical Method: S 8021B QC Batch: 40496 2007-08-24

Date Analyzed: Analyzed By: Prep Batch: 35014 Sample Preparation: 2007-08-24 Prepared By:

		m RL			
Parameter	Flag	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		3.91	mg/Kg	2	0.0100

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.40	mg/Kg	2	2.00	70	39.6 - 116
4-Bromofluorobenzene (4-BFB)	4	2.94	mg/Kg	2	2.00	147	47.3 - 144.2

Sample: 134346 - SB-2 20'

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A

QC Batch: 40468 Date Analyzed: 2007-08-27 Analyzed By: Prep Batch: 35011 Sample Preparation: 2007-08-27 Prepared By:

RLParameter Flag Result Units Dilution RLDR() 1210 50.0 mg/Kg

					\mathbf{Spike}	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane	5	280	mg/Kg	1	150	187	17.3 - 169.6

Sample: 134346 - SB-2 20'

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035

QC Batch: 40540 Date Analyzed: 2007-08-24 Analyzed By: Prep Batch: 35014 Sample Preparation: 2007-08-24 Prepared By:

RLParameter Flag Units Dilution Result RL \overline{GRO} 222 mg/Kg 2 1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.37	mg/Kg	2	2.00	68	50.2 - 89.3
4-Bromofluorobenzene (4-BFB)	6	5.65	mg/Kg	2	2.00	282	50.8 - 131.6

⁴High surrogate recovery due to peak interference.

⁵High surrogate recovery due to peak interference.

⁶High surrogate recovery due to peak interference.

Sample: 134347 - SB-2 30'

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035

QC Batch: 40496 Date Analyzed: 2007-08-24 Analyzed By: Prep Batch: 35014 Sample Preparation: 2007-08-24 Prepared By:

RLDilution RLParameter Flag Units Result 0.0100 $\overline{2}$ Benzene < 0.0200 mg/Kg 2 Toluene 0.709 mg/Kg 0.0100 2 Ethylbenzene mg/Kg 0.0100 1.06 2 0.0100 Xylene 6.26 mg/Kg

					\mathbf{Spike}	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.33	mg/Kg	2	2.00	66	39.6 - 116
4-Bromofluorobenzene (4-BFB)	7	3.87	mg/Kg	2	2.00	194	47.3 - 144.2

Sample: 134347 - SB-2 30'

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A

QC Batch: 40468 Date Analyzed: 2007-08-27 Analyzed By:
Prep Batch: 35011 Sample Preparation: 2007-08-27 Prepared By:

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane	8	401	mg/Kg	1	150	267	17.3 - 169.6

Sample: 134347 - SB-2 30'

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035

QC Batch: 40540 Date Analyzed: 2007-08-24 Analyzed By:
Prep Batch: 35014 Sample Preparation: 2007-08-24 Prepared By:

				•	Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.15	mg/Kg	2	2.00	58	50.2 - 89.3
4-Bromofluorobenzene (4-BFB)	9	7.78	mg/Kg	2	2.00	389	50.8 - 131.6

⁷High surrogate recovery due to peak interference.

⁸High surrogate recovery due to peak interference.

⁹High surrogate recovery due to peak interference.

Report Date: August 29, 2007 Work Order: 7082428 Page Number: 6 of 14 SRS# LF-1999-20 McKee 6 Lea County, NM

Sample: 134348 - SB-2 40'

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035 QC Batch: 40496 Date Analyzed: 2007-08-24 Analyzed By: Prep Batch: 35014 Sample Preparation: 2007-08-24 Prepared By:

RLDilution RLParameter Flag Result Units 0.0100 Benzene < 0.0200 mg/Kg 2 2 0.0100 Toluene < 0.0200 mg/Kg 2 0.267 0.0100 Ethylbenzene mg/Kg 2 Xylene 1.21 mg/Kg 0.0100

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.66	mg/Kg	2	2.00	83	39.6 - 116
4-Bromofluorobenzene (4-BFB)		2.73	mg/Kg	2	2.00	136	47.3 - 144.2

Sample: 134348 - SB-2 40'

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A QC Batch: 40468 Date Analyzed: 2007-08-27 Analyzed By: Prep Batch: 35011 Sample Preparation: 2007-08-27 Prepared By:

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane	10	745	mg/Kg	1	150	497	17.3 - 169.6

Sample: 134348 - SB-2 40'

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035 QC Batch: 40540 Date Analyzed: 2007-08-24 Analyzed By: Prep Batch: 35014 Sample Preparation: 2007-08-24 Prepared By:

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.70	mg/Kg	2	2.00	85	50.2 - 89.3
4-Bromofluorobenzene (4-BFB)	11	4.52	mg/Kg	2	2.00	226	50.8 - 131.6

¹⁰High surrogate recovery due to peak interference.

¹¹ High surrogate recovery due to peak interference.

Report Date: August 29, 2007 Work Order: 7082428 Page Number: 7 of 14 SRS# LF-1999-20 McKee 6 Lea County, NM

Sample: 134349 - SB-2 50'

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035 QC Batch: 40496 Date Analyzed: 2007-08-24 Analyzed By:

Prep Batch: 35014 Sample Preparation: 2007-08-24 Prepared By:

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

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.987	mg/Kg	1	1.00	99	39.6 - 116
4-Bromofluorobenzene (4-BFB)		1.11	mg/Kg	1	1.00	111	47.3 - 144.2

Sample: 134349 - SB-2 50'

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A QC Batch: 40468 Date Analyzed: 2007-08-27 Analyzed By:

QC Batch: 40468 Date Analyzed: 2007-08-27 Analyzed By:
Prep Batch: 35011 Sample Preparation: 2007-08-27 Prepared By:

					\mathbf{Spike}	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		200	mg/Kg	1	150	133	17.3 - 169.6

Sample: 134349 - SB-2 50'

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035

QC Batch: 40540 Date Analyzed: 2007-08-24 Analyzed By:
Prep Batch: 35014 Sample Preparation: 2007-08-24 Prepared By:

					\mathbf{Spike}	Percent	Recovery
Surrogate	Flag	Result	\mathbf{Units}	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.827	mg/Kg	1	1.00	83	50.2 - 89.3
4-Bromofluorobenzene (4-BFB)		1.07	mg/Kg	1	1.00	107	50.8 - 131.6

Report Date: August 29, 2007 Work Order: 7082428 Page Number: 8 of 14 SRS# LF-1999-20 McKee 6 Lea County, NM

Sample: 134350 - SB-2 60'

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035 QC Batch: 40496 Date Analyzed: 2007-08-24 Analyzed By: Prep Batch: 35014 Sample Preparation: 2007-08-24 Prepared By:

RLParameter Flag Result Units Dilution RL0.0100 Benzene < 0.0100 mg/Kg 1 Toluene 1 0.0100 < 0.0100 mg/Kg Ethylbenzene 1 0.0100< 0.0100 mg/Kg < 0.0100 mg/Kg 1 0.0100Xylene

					$_{ m Spike}$	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.952	mg/Kg	1	1.00	95	39.6 - 116
4-Bromofluorobenzene (4-BFB)		1.05	mg/Kg	1	1.00	105	47.3 - 144.2

Sample: 134350 - SB-2 60'

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A QC Batch: 40468 Date Analyzed: 2007-08-27 Analyzed By: Prep Batch: 35011 Sample Preparation: 2007-08-27 Prepared By:

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		150	mg/Kg	1	150	100	17.3 - 169.6

Sample: 134350 - SB-2 60'

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035 QC Batch: 40540 Date Analyzed: 2007-08-24 Analyzed By: Prep Batch: 35014 Sample Preparation: 2007-08-24 Prepared By:

					\mathbf{Spike}	Percent	Recovery
Surrogate	Flag	Result	\mathbf{Units}	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)	12	0.911	mg/Kg	1	1.00	91	50.2 - 89.3
4-Bromofluorobenzene (4-BFB)		1.18	mg/Kg	1	1.00	118	50.8 - 131.6

¹²High surrogate recovery due to peak interference.

Report Date: August 29, 2007 Work Order: 7082428 Page Number: 9 of 14 SRS# LF-1999-20 McKee 6 Lea County, NM

Sample: 134351 - SB-2 65'

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035

QC Batch: 40496 Date Analyzed: 2007-08-24 Analyzed By:
Prep Batch: 35014 Sample Preparation: 2007-08-24 Prepared By:

RL

Parameter	Flag	Result	Units	Dilution	R.L
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

					\mathbf{Spike}	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.954	mg/Kg	1	1.00	95	39.6 - 116
4-Bromofluorobenzene (4-BFB)		1.07	mg/Kg	1	1.00	107	47.3 - 144.2

Sample: 134351 - SB-2 65'

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A

QC Batch: 40468 Date Analyzed: 2007-08-27 Analyzed By:
Prep Batch: 35011 Sample Preparation: 2007-08-27 Prepared By:

					\mathbf{Spike}	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		143	mg/Kg	1	150	95	17.3 - 169.6

Sample: 134351 - SB-2 65'

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035

QC Batch: 40540 Date Analyzed: 2007-08-24 Analyzed By: Prep Batch: 35014 Sample Preparation: 2007-08-24 Prepared By:

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.769	mg/Kg	1	1.00	77	50.2 - 89.3
4-Bromofluorobenzene (4-BFB)		1.10	mg/Kg	1	1.00	110	50.8 - 131.6

Method Blank (1) QC Batch: 40468

QC Batch: 40468 Date Analyzed: 2007-08-27 Analyzed By: Prep Batch: 35011 QC Preparation: 2007-08-27 Prepared By:

Report Date: August 29, 2007

SRS# LF-1999-20

Work Order: 7082428 McKee 6

Page Number: 10 of 14 Lea County, NM

Parameter		Flag		MDL Result		Units	m RL
DRO				<13.4		ng/Kg	50
Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	0	98.3	mg/Kg	1	150	66	32.9 - 156.1

Method Blank (1)

QC Batch: 40496

QC Batch: 40496 Prep Batch: 35014 Date Analyzed: 2007-08-24 QC Preparation: 2007-08-24

Analyzed By: Prepared By:

		MDL		
Parameter	Flag	Result	Units	m R.L
Benzene		< 0.00110	mg/Kg	0.01
Toluene		< 0.00150	${ m mg/Kg}$	0.01
Ethylbenzene		< 0.00160	$\mathrm{mg/Kg}$	0.01
Xylene		< 0.00410	mg/Kg	0.01

					\mathbf{Spike}	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.933	mg/Kg	1	1.00	93	58.2 - 121.3
4-Bromofluorobenzene (4-BFB)		0.993	mg/Kg	1	1.00	99	53.1 - 111.6

Method Blank (1)

QC Batch: 40540

QC Batch: 40540 Prep Batch: 35014 Date Analyzed: 2007-08-24 QC Preparation: 2007-08-24 Analyzed By: Prepared By:

MDLParameter Flag Result \overline{GRO} < 0.739

Units RLmg/Kg 1

				$_{ m Spike}$	Percent	Recovery
Surrogate Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)	1.02	mg/Kg	1	1.00	102	67.8 - 103
4-Bromofluorobenzene (4-BFB)	0.965	mg/Kg	1	1.00	96	55.4 - 111.8

Laboratory Control Spike (LCS-1)

QC Batch: Prep Batch: 35011

40468

Date Analyzed:

2007-08-27 QC Preparation: 2007-08-27 Analyzed By: Prepared By:

	LCS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	\mathbf{Limit}
DRO	174	mg/Kg	1	250	<13.4	70	49.1 - 142.3

Report Date: August 29, 2007 SRS# LF-1999-20

Work Order: 7082428 McKee 6

Page Number: 11 of 14 Lea County, NM

	LCSD			Spike	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
DRO	170	mg/Kg	1	250	<13.4	68	49.1 - 142.3	2	20

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

	LCS	LCSD			Spike	LCS	LCSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
n-Triacontane	96.9	99.6	mg/Kg	1	150	65	66	49 - 133.2

Laboratory Control Spike (LCS-1)

QC Batch: 40496 Prep Batch: 35014 Date Analyzed: 2007-08-24 QC Preparation: 2007-08-24

Analyzed By: Prepared By:

	LCS			Spike	Matrix		Rec.
Param	Result	\mathbf{Units}	Dil.	Amount	Result	Rec.	$_{ m Limit}$
Benzene	0.943	mg/Kg	1	1.00	< 0.00110	94	71.2 - 119
Toluene	0.987	mg/Kg	1	1.00	< 0.00150	99	76.3 - 116.5
Ethylbenzene	0.988	mg/Kg	1	1.00	< 0.00160	99	77.6 - 114
Xylene	2.93	mg/Kg	1	3.00	< 0.00410	98	78.8 - 113.9

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

	LCSD			Spike	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Benzene	0.957	mg/Kg	1	1.00	< 0.00110	96	71.2 - 119	2	20
Toluene	1.00	mg/Kg	1	1.00	< 0.00150	100	76.3 - 116.5	1	20
Ethylbenzene	0.990	mg/Kg	1	1.00	< 0.00160	99	77.6 - 114	0	20
Xylene	2.99	mg/Kg	1	3.00	< 0.00410	100	78.8 - 113.9	2	20

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

	LCS	LCSD			Spike	LCS	LCSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	0.909	0.898	mg/Kg	1	1.00	91	90	56.1 - 107.8
4-Bromofluorobenzene (4-BFB)	0.945	0.956	mg/Kg	1	1.00	94	96	56.2 - 118.8

Laboratory Control Spike (LCS-1)

QC Batch: 40540 Prep Batch: 35014

Date Analyzed: 2007-08-24 QC Preparation: 2007-08-24 Analyzed By: Prepared By:

	LCS			Spike	Matrix		Rec.
Param	Result	${f Units}$	Dil.	Amount	Result	Rec.	$_{ m Limit}$
GR()	8.21	mg/Kg	1	10.0	< 0.739	82	56 - 105.2

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

	$_{ m LCSD}$			\mathbf{Spike}	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
GRO	9.12	mg/Kg	1	10.0	< 0.739	91	56 - 105.2	10	20

Report Date: August 29, 2007

SRS# LF-1999-20

Work Order: 7082428 McKee 6

Page Number: 12 of 14 Lea County, NM

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.970	0.970	mg/Kg	1	1.00	97	97	61.1 - 148.1
4-Bromofluorobenzene (4-BFB)	0.990	0.993	mg/Kg	1	1.00	99	99	67.2 - 119.2

Matrix Spike (MS-1)

Spiked Sample: 134346

QC Batch: Prep Batch: 35011

Date Analyzed: 40468

2007-08-27

QC Preparation: 2007-08-27

Analyzed By: Prepared By:

	MS			\mathbf{Spike}	Matrix		Rec.
Param	Result	Units	$\mathbf{Dil}.$	Amount	Result	Rec.	Limit
DRO	1380	mg/Kg	1	250	1210	68	30.2 - 201.4

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

		MSD			\mathbf{Spike}	Matrix		Rec.	-	RPD
Param		Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
DRO	13	909	mg/Kg	1	250	1210	0	30.2 - 201.4	41	20

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

	MS	MSD			Spike	MS	MSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
n-Triacontane	247	199	mg/Kg	1	150	165	133	10 - 194

Matrix Spike (MS-1)

Spiked Sample: 133920

QC Batch: 40496 Prep Batch: 35014 Date Analyzed: 2007-08-24 QC Preparation: 2007-08-24 Analyzed By: Prepared By:

	MS			$\mathbf{S}_{\mathbf{P}ike}$	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
Benzene	0.884	mg/Kg	1	1.00	< 0.00110	88	65.7 - 119.1
Toluene	0.916	mg/Kg	1	1.00	< 0.00150	92	47.7 - 153.8
Ethylbenzene	0.944	mg/Kg	1	1.00	< 0.00160	94	73.5 - 126.3
Xylene	2.82	mg/Kg	1	3.00	< 0.00410	94	73.6 - 125.9

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

	MSD			Spike	Matrix		Rec.		RPD
Param	Result	Units	$\mathbf{Dil}.$	Amount	Result	Rec.	Limit	RPD	Limit
Benzene	0.946	mg/Kg	1	1.00	< 0.00110	95	65.7 - 119.1	7	20
Toluene	0.968	mg/Kg	1	1.00	< 0.00150	97	47.7 - 153.8	6	20
Ethylbenzene	0.962	mg/Kg	1	1.00	< 0.00160	96	73.5 - 126.3	2	20
Xylene	2.85	mg/Kg	1	3.00	< 0.00410	95	73.6 - 125.9	1	20

	MS	MSD			Spike	MS	MSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	0.946	0.892	mg/Kg	1	1	95	89	51 - 109.6
4-Bromofluorobenzene (4-BFB)	1.03	0.912	mg/Kg	1	1	103	91	60.3 - 124.3

¹³Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.

Report Date: August 29, 2007 SRS# LF-1999-20 Work Order: 7082428 McKee 6 Page Number: 13 of 14 Lea County, NM

Matrix	Spike ((MS-1)	Spiked	Sample:	134125
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QC Batch: 40540 Prep Batch: 35014 Date Analyzed: 2007-08-24 QC Preparation: 2007-08-24 Analyzed By: Prepared By:

	MS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
GRO	8.22	mg/Kg	1	10.0	< 0.739	77	10 - 102.2

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

	MSD			$\mathbf{S}_{\mathbf{pike}}$	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
GRO	6.85	mg/Kg	1	10.0	< 0.739	63	10 - 102.2	18	20

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

	MS	MSD			Spike	MS	MSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	0.791	0.747	mg/Kg	1	1	79	75	47.2 - 84.2
4-Bromofluorobenzene (4-BFB)	1.04	1.03	mg/Kg	1	1	104	103	58 - 162.6

Standard (ICV-1)

QC Batch: 40468

Date Analyzed: 2007-08-27

Analyzed By:

			ICVs	ICVs	ICVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DR.O		mg/Kg	250	243	97	85 - 115	2007-08-27

Standard (CCV-1)

QC Batch: 40468

Date Analyzed: 2007-08-27

Analyzed By:

			CCVs True	CCVs Found	$rac{ ext{CCVs}}{ ext{Percent}}$	Percent Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		mg/Kg	250	217	87	85 - 115	2007-08-27

Standard (CCV-2)

QC Batch: 40468

Date Analyzed: 2007-08-27

Analyzed By:

			CCVs True	CCVs Found	CCVs Percent	Percent Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		mg/Kg	250	228	91	85 - 115	2007-08-27

Standard (ICV-1)

QC Batch: 40496

Date Analyzed: 2007-08-24

Analyzed By:

Report Date: August 29, 2007

SRS# LF-1999-20

Work Order: 7082428 McKee 6 Page Number: 14 of 14 Lea County, NM

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.104	104	85 - 115	2007-08-24
Toluene		mg/Kg	0.100	0.108	108	85 - 115	2007-08-24
Ethylbenzene		mg/Kg	0.100	0.107	107	85 - 115	2007-08-24
Xylene		mg/Kg	0.300	0.320	107	85 - 115	2007-08-24

Standard (CCV-1)

QC Batch: 40496

Date Analyzed: 2007-08-24

Analyzed By:

			CCVs True	CCVs Found	$rac{ ext{CCVs}}{ ext{Percent}}$	Percent Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Benzene		mg/Kg	0.100	0.0967	97	85 - 115	2007-08-24
Toluene		mg/Kg	0.100	0.104	104	85 - 115	2007-08-24
Ethylbenzene		mg/Kg	0.100	0.0967	97	85 - 115	2007-08-24
Xylene		mg/Kg	0.300	0.290	97	85 - 115	2007-08-24

Standard (ICV-1)

QC Batch: 40540

Date Analyzed: 2007-08-24

Analyzed By:

			ICVs	ICVs	ICVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		mg/Kg	1.00	1.02	102	85 - 115	2007-08-24

Standard (CCV-1)

QC Batch: 40540

Date Analyzed: 2007-08-24

Analyzed By:

			CCVs	CCVs	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		mg/Kg	1.00	0.954	95	85 - 115	2007-08-24

TRACE ANALYSIS, INC.

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

5002 Basin Street, Suite A1 Midland, Texas 79703 Phone: 432-689-6301 Fax: 432-689-6313

	Project Manager:	Ken Dutton			PAGE 01	OF 01										Pro	ject	Nan	ne: <u>l</u>	ACI	ŒE	6"								
	Company Name	Basin Environment	tal Service T	echnol	ogles, LLC											ı.	Pro	oject	#: _5	SRS	: L	F-1	999-	20			_,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	·		
	Company Address:	P. O. Box 301														Р	roje	ct L	oc: <u>l</u>	.ea (Cour	ıty, I	NM							
	City/State/Zip:	Lovington, NM 882	60															PC	#: <u>I</u>	NVC	ICE	то	PLA	INS A	MAR	KET	nNG	i		
	Telephone No:	(505) 441-2124				Fax No:		(50	5) 39)6-1 ₋	129					Report	For	mat	: [X s	Stand	lard			TRF	₹P		□ NI	PDES	
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use only)	#:	,	Beginning Depth	Depth	Sampled	Time Sampled	ened	Total #. of Containers	Pre	eserv	atio			contair		OW - Ornking Water SL - Sludge CW - Croundwater S - Solison PR NP - Non-Potable Specify Other	4181 8015M 8015B	TX 1005 TX 1006	Catons (Ca, Mg. Na. K)	Anions (Cl, SO4, Alkalinity)	P/CEC	Metals: As Ag tia Cd Cr Po rig Se	lles	BTEX 80218/5030 or BTEX 8260			Chlorides EPA 300.0		RUSH TAT (Pre-Schedule) 24, 48,	1 TAT
LAB#(lab	FIE	LD CODE	Beglnni	Ending Depth	Date Si	Time S	Field Screened	Total #. of	lce	HNO3	포	H ₂ SO ₂	NaOH	Na ₂ S ₂ O ₃	Other (Spacify)	OW - Drinking Wa GW - Groundwa NP - Non-Potable		TPH: T	Cattons ((Anions (C	SAR / ESP / CEC	Metals: A	Semivolatiles	BTEX 802	RCI	N.O.R.M.	Chlorid		RUSH T.	Standard TAT
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E-Mail lab@traceanalysis.com

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806 • 794 • 1296 915 • 585 • 3443 432 • 689 • 6301

FAX 806 • 794 • 1298 FAX 915 • 5R5 • 4944 FAX 432 • 683 • 6313

817 • 201 • 5260

Analytical and Quality Control Report

Ken Dutton

Basin Environmental Service Tech LLC

P.O. Box 301

Lovington, NM, 88260

Report Date: August 21, 2007

Work Order:

7081731

Project Location: Lea County, NM

Project Name: McKee 6

SRS# LF-1999-20 Project Number:

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

			Date	${f Time}$	Date
Sample	Description	Matrix	Taken	Taken	Received
133619	SB-1, 5'	soil	2007-08-14	11:49	2007-08-17
133620	SB-1, 10'	soil	2007-08-14	11:52	2007-08-17
133621	SB-1, 20'	soil	2007-08-14	12:03	2007-08-17
133622	SB-1, 30'	soil	2007-08-14	12:07	2007-08-17

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 10 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.

Report Date: August 21, 2007 Work Order: 7081731 Page Number: 2 of 10 SRS# LF-1999-20 McKee 6 Lea County, NM

Analytical Report

Sample: 133619 - SB-1, 5'

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035

QC Batch: 40257 Date Analyzed: 2007-08-20 Analyzed By: Prep Batch: 34840 Sample Preparation: 2007-08-20 Prepared By:

		\mathbf{RL}			
Parameter	Flag	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
Xvlene		< 0.0100	mg/Kg	1	0.0100

					\mathbf{Spike}	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.998	mg/Kg	1	1.00	100	39.6 - 116
4-Bromofluorobenzene (4-BFB)		1.13	mg/Kg	1	1.00	113	47.3 - 144.2

Sample: 133619 - SB-1, 5'

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A
OC Batch: 40189 Date Analyzed: 2007-08-17 Analyzed By:

QC Batch: 40189 Date Analyzed: 2007-08-17 Analyzed By:
Prep Batch: 34780 Sample Preparation: 2007-08-17 Prepared By:

					\mathbf{Spike}	Percent	Recovery
Surrogate	\mathbf{Flag}	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		234	mg/Kg	1	150	156	17.3 - 169.6

Sample: 133619 - SB-1, 5'

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035 QC Batch: 40261 Date Analyzed: 2007-08-20 Analyzed By:

Prep Batch: 34840 Sample Preparation: 2007-08-20 Prepared By:

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)	1 "	0.915	mg/Kg	1	1.00	92	50.2 - 89.3
4-Bromofluorobenzene (4-BFB)		1.06	mg/Kg	1	1.00	106	50.8 - 131.6

 $^{^1\}mathrm{High}$ surrogate recovery. Sample non-detect, result bias high.

Report Date: August 21, 2007 Work Order: 7081731 Page Number: 3 of 10 SRS# LF-1999-20 McKee 6 Lea County, NM

Sample: 133620 - SB-1, 10'

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035 QC Batch: 40257 Date Analyzed: 2007-08-20 Analyzed By:

Prep Batch: 34840 Sample Preparation: 2007-08-20 Prepared By:

< 0.0100

RLParameter Flag Result Units Dilution RL0.0100 Benzene < ().()1()() mg/Kg 1 0.0100 Toluene < 0.0100 mg/Kg 1 0.0100Ethylbenzene < 0.0100 mg/Kg 1

					\mathbf{Spike}	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.963	mg/Kg	1	1.00	96	39.6 - 116
4-Bromofluorobenzene (4-BFB)		1.11	mg/Kg	1	1.00	111	47.3 - 144.2

mg/Kg

0.0100

1

Sample: 133620 - SB-1, 10'

Xylene

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A

QC Batch: 40189 Date Analyzed: 2007-08-17 Analyzed By:
Prep Batch: 34780 Sample Preparation: 2007-08-17 Prepared By:

					\mathbf{Spike}	$\operatorname{Percent}$	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		220	mg/Kg	1	150	147	17.3 - 169.6

Sample: 133620 - SB-1, 10'

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035 QC Batch: 40261 Date Analyzed: 2007-08-20 Analyzed By:

QC Batch: 40261 Date Analyzed: 2007-08-20 Analyzed By:
Prep Batch: 34840 Sample Preparation: 2007-08-20 Prepared By:

					Spike	Percent	Recovery
Surrogate	Flag	Result	\mathbf{Units}	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.826	mg/Kg	1	1.00	83	50.2 - 89.3
4-Bromofluorobenzene (4-BFB)		1.05	mg/Kg	1	1.00	105	50.8 - 131.6

Report Date: August 21, 2007 Work Order: 7081731 Page Number: 4 of 10 SRS# LF-1999-20 McKee 6 Lea County, NM

Sample: 133621 - SB-1, 20'

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	40257	Date Analyzed:	2007-08-20	Analyzed By:	
Prep Batch:	34840	Sample Preparation:	2007-08-20	Prepared By:	

		m R.L			
Parameter	Flag	Result	Units	Dilution	R.L
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
21,910110		2010100	6/8		0.020

					\mathbf{S} pike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.973	mg/Kg	1	1.00	97	39.6 - 116
4-Bromofluorobenzene (4-BFB)		1.09	mg/Kg	1	1.00	109	47.3 - 144.2

Sample: 133621 - SB-1, 20'

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method: N	N/A
QC Batch:	40189	Date Analyzed:	2007-08-17	Analyzed By:	
Pren Ratch	34780	Sample Preparations	2007-08-17	Propored Ry	

ac nuchi.	10100	Deally Milliang Mills	2001 00 11	remay was 11.y.
Prep Batch:	34780	Sample Preparation:	2007-08-17	Prepared By:

		\mathbf{R} L			
Parameter	Flag	Result	Units	Dilution	RL
DRO		< 50.0	mg/Kg	1	50.0

					\mathbf{Spike}	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		192	mg/Kg	1	150	128	17.3 - 169.6

Sample: 133621 - SB-1, 20'

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method: S 5035
QC Batch:	40261	Date Analyzed:	2007-08-20	Analyzed By:
Prep Batch:	34840	Sample Preparation:	2007-08-20	Prepared By:

		$\mathbf{R}.\mathbf{L}$			
Parameter	Flag	Result	Units	Dilution	m R.L
GRO		<1.00	mg/Kg	1	1.00

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)	2	0.950	mg/Kg	1	1.00	95	50.2 - 89.3
4-Bromofluorobenzene (4-BFB)		1.04	${ m mg/Kg}$	1	1.00	104	50.8 - 131.6

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

Report Date: August 21, 2007 Work Order: 7081731 Page Number: 5 of 10 SRS# LF-1999-20 McKee 6 Lea County, NM

Sample: 133622 - SB-1, 30'

Analysis: Prep Method: S 5035 BTEX Analytical Method: S_{8021B} QC Batch: 40257 Date Analyzed: 2007-08-20 Analyzed By:

Prep Batch: 34840 Sample Preparation: 2007-08-20 Prepared By:

		m RL			
Parameter	Flag	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

					\mathbf{Spike}	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.975	mg/Kg	1	1.00	98	39.6 - 116
4-Bromofluorobenzene (4-BFB)		1.10	mg/Kg	1	1.00	110	47.3 - 144.2

Sample: 133622 - SB-1, 30'

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A 2007-08-17 QC Batch: 40189 Analyzed By: Date Analyzed:

Prep Batch: 34780 Sample Preparation: 2007-08-17 Prepared By:

		\mathbf{R} .L			
Parameter	Flag	Result	Units	Dilution	RL
DR()		< 50.0	mg/Kg	1	50.0

					\mathbf{Spike}	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		180	mg/Kg	1	150	120	17.3 - 169.6

Sample: 133622 - SB-1, 30'

TPH GRO Analysis: Analytical Method: S 8015B Prep Method: S 5035 QC Batch: 40261 Date Analyzed: 2007-08-20 Analyzed By:

Prep Batch: 34840 Sample Preparation: 2007-08-20 Prepared By:

		m RL			
Parameter	Flag	Result	Units	Dilution	m R.L
GRO		<1.00	mg/Kg	1	1.00

					\mathbf{Spike}	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	· Limits
Trifluorotoluene (TFT)	3	0.936	mg/Kg	1	1.00	94	50.2 - 89.3
4-Bromofluorobenzene (4-BFB)		1.04	mg/Kg	1	1.00	104	50.8 - 131.6

³High surrogate recovery. Sample non-detect, result bias high.

Report Date: August 21, 2007

SRS# LF-1999-20

Work Order: 7081731 McKee 6 Page Number: 6 of 10 Lea County, NM

Method Blank (1)

QC Batch: 40189

QC Batch: 40189 Prep Batch: 34780 Date Analyzed: 2007-08-17 QC Preparation: 2007-08-17 Analyzed By: Prepared By:

MDL

					\mathbf{S} pike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		203	mg/Kg	1	150	135	32.9 - 156.1

Method Blank (1)

QC Batch: 40257

QC Batch: 40257 Prep Batch: 34840 Date Analyzed: 2007-08-20 QC Preparation: 2007-08-20 Analyzed By: Prepared By:

· · · ·

MDLResult Units RLParameter Flag Benzene < 0.00110 mg/Kg 0.01 Toluene < 0.00150 mg/Kg 0.01Ethylbenzene < 0.00160 mg/Kg 0.01 < 0.00410 mg/Kg 0.01Xylene

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.01	mg/Kg	1	1.00	101	58.2 - 121.3
4-Bromofluorobenzene (4-BFB)		1.05	mg/Kg	1	1.00	105	53.1 - 111.6

Method Blank (1)

QC Batch: 40261

QC Batch: 40261 Prep Batch: 34840 Date Analyzed: 2007-08-20 QC Preparation: 2007-08-20 Analyzed By: Prepared By:

MDL

					$_{ m Spike}$	Percent	Recovery
Surrogate	\mathbf{Flag}	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.02	mg/Kg	1	1.00	102	67.8 - 103
4-Bromofluorobenzene (4-BFB)		1.00	mg/Kg	1	1.00	100	55.4 - 111.8

Laboratory Control Spike (LCS-1)

QC Batch: 40189 Prep Batch: 34780 Date Analyzed: 2007-08-17 QC Preparation: 2007-08-17

Analyzed By: Prepared By:

Report Date: August 21, 2007

SRS# LF-1999-20

Work Order: 7081731McKee 6 Page Number: 7 of 10 Lea County, NM

	LCS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
DRO	291	mg/Kg	1	250	<13.4	116	49.1 - 142.3

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

	LCSD			\mathbf{S} pike	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	R.PD	Limit
DRO	283	mg/Kg	1	250	<13.4	113	49.1 - 142.3	3	20

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

	LCS	LCSD			Spike	LCS	LCSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
n-Triacontane	181	188	mg/Kg	1	150	121	125	49 - 133.2

Laboratory Control Spike (LCS-1)

QC Batch: 40257 Prep Batch: 34840 Date Analyzed: 2007-08-20 QC Preparation: 2007-08-20 Analyzed By: Prepared By:

	LCS			\mathbf{Spike}	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
Benzene	0.978	mg/Kg	1	1.00	< 0.00110	98	71.2 - 119
Toluene	1.03	mg/Kg	1	1.00	< 0.00150	103	76.3 - 116.5
Ethylbenzene	1.04	mg/Kg	1	1.00	< 0.00160	104	77.6 - 114
Xylene	3.11	mg/Kg	1	3.00	< 0.00410	104	78.8 - 113.9

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

	LCSD			Spike	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Benzene	().944	mg/Kg	1	1.00	< 0.00110	94	71.2 - 119	4	20
Toluene	1.00	mg/Kg	1	1.00	< 0.00150	100	76.3 - 116.5	3	20
Ethylbenzene	1.02	mg/Kg	1	1.00	< 0.00160	102	77.6 - 114	2	20
Xylene	3.01	mg/Kg	1	3.00	< 0.00410	100	78.8 - 113.9	3	20

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

	$_{ m LCS}$	LCSD			Spike	LCS	LCSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	1.00	1.06	mg/Kg	1	1.00	100	106	56.1 - 107.8
4-Bromofluorobenzene (4-BFB)	1.01	0.996	mg/Kg	1	1.00	101	100	56.2 - 118.8

Laboratory Control Spike (LCS-1)

QC Batch: 40261 Prep Batch: 34840 Date Analyzed: 2007-08-20 QC Preparation: 2007-08-20

Analyzed By: Prepared By:

	LCS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
GRO	8.50	mg/Kg	1	10.0	< 0.739	85	56 - 105.2

Work Order: 7081731 McKee 6 Page Number: 8 of 10 Lea County, NM

	LCSD			Spike	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	$_{ m Limit}$
GRO	9.43	mg/Kg	1	10.0	< 0.739	94	56 - 105.2	10	20

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

	LCS	LCSD			Spike	LCS	LCSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	1.01	0.994	mg/Kg	1	1.00	101	99	61.1 - 148.1
4-Bromofluorobenzene (4-BFB)	1.05	1.03	mg/Kg	1	1.00	105	103	67.2 - 119.2

Matrix Spike (MS-1) Spiked Sample: 133542

QC Batch: 40189 Prep Batch: 34780 Date Analyzed: 2007-08-17 QC Preparation: 2007-08-17 Analyzed By: Prepared By:

	MS			\mathbf{S} pike	Matrix		${ m Rec.}$
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
DRO	226	mg/Kg	1	250	<13.4	90	30.2 - 201.4

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

	MSD			Spike	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
DRO	246	mg/Kg	1	250	<13.4	98	30.2 - 201.4	8	20

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

	MS	MSD			Spike	MS	MSD	Rec.
Surrogate	\mathbf{Result}	Result	Units	Dil.	Amount	Rec.	Rec.	${f Limit}$
n-Triacontane	190	168	mg/Kg	1	150	127	112	10 - 194

Matrix Spike (MS-1) Spiked Sample: 133622

QC Batch: 40257 Prep Batch: 34840 Date Analyzed: 2007-08-20 QC Preparation: 2007-08-20

Analyzed By: Prepared By:

	MS			Spike	Matrix		Rec.
Param	${ m Result}$	\mathbf{Units}	Dil.	Amount	Result	Rec.	Limit
Benzene	1.03	mg/Kg	1	1.00	< 0.00110	103	65.7 - 119.1
Toluene	1.12	mg/Kg	1	1.00	< 0.00150	112	47.7 - 153.8
Ethylbenzene	1.17	mg/Kg	1	1.00	< 0.00160	117	73.5 - 126.3
Xylene	3.47	mg/Kg	1	3.00	< 0.00410	116	73.6 - 125.9

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

	MSD			\mathbf{Spike}	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Benzene	1.13	mg/Kg	1	1.00	< 0.00110	113	65.7 - 119.1	9	20
Toluene	1.20	mg/Kg	1	1.00	< 0.00150	120	47.7 - 153.8	7	20
Ethylbenzene	1.24	mg/Kg	1	1.00	< 0.00160	124	73.5 - 126.3	6	20
Xylene	3.72	mg/Kg	1	3.00	< 0.00410	124	73.6 - 125.9	7	20

Report Date: August 21, 2007

SRS# LF-1999-20

Work Order: 7081731McKee 6 Page Number: 9 of 10 Lea County, NM

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.962	0.970	mg/Kg	1	1	96	97	51 - 109.6
4-Bromofluorobenzene (4-BFB)	1.04	1.02	mg/Kg	1	1	104	102	60.3 - 124.3

Matrix Spike (MS-1) Spiked Sample: 133622

QC Batch: 40261 Prep Batch: 34840 Date Analyzed: 2007-08-20 QC Preparation: 2007-08-20 Analyzed By: Prepared By:

	MS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
GRO	9.56	mg/Kg	1	10.0	< 0.739	89	10 - 102.2

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

	MSD			\mathbf{S} pike	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
GRO	10.3	mg/Kg	1	10.0	< 0.739	97	10 - 102.2	8	20

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

		MS	MSD			$\mathbf{S}_{\mathbf{pike}}$	MS	MSD	Rec.
Surrogate		Result	Result	Units	Dil.	Amount	Rec.	Rec.	$_{ m Limit}$
Trifluorotoluene (TFT)	4	0.982	0.844	mg/Kg	1	1	98	84	47.2 - 84.2
4-Bromofluorobenzene (4-BFB)		1.06	1.04	mg/Kg	1	1	106	104	58 - 162.6

Standard (CCV-2)

QC Batch: 40189

Date Analyzed: 2007-08-17

Analyzed By:

			CCVs True	CCVs	CCVs	Percent	Data
Param	Flag	Units	Conc.	Found Conc.	Percent Recovery	Recovery Limits	Date Analyzed
DRO	1 lag	mg/Kg	250	268	107	85 - 115	2007-08-17

Standard (CCV-3)

QC Batch: 40189

Date Analyzed: 2007-08-17

Analyzed By:

			CCVs	CCVs	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		mg/Kg	250	277	111	85 - 115	2007-08-17

Standard (ICV-1)

QC Batch: 40257

Date Analyzed: 2007-08-20

Analyzed By:

⁴High surrogate recovery due to peak interference.

Work Order: 7081731 McKee 6

Page Number: 10 of 10 Lea County, NM

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0917	92	85 - 115	2007-08-20
Toluene		mg/Kg	0.100	0.0953	95	85 - 115	2007-08-20
Ethylbenzene		mg/Kg	0.100	0.0969	97	85 - 115	2007-08-20
Xylene		mg/Kg	0.300	0.288	96	85 - 115	2007-08-20

Standard (CCV-1)

QC Batch: 40257

Date Analyzed: 2007-08-20

Analyzed By:

D.	T)	T7 *1	CCVs True	CCVs Found	CCVs Percent	Percent Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Benzene		mg/Kg	0.100	0.0973	97	85 - 115	2007-08-20
Toluene		mg/Kg	0.100	0.102	102	85 - 115	2007-08-20
Ethylbenzene		mg/Kg	0.100	0.104	1()4	85 - 115	2007-08-20
Xylene		mg/Kg	0.300	0.306	102	85 - 115	2007-08-20

Standard (ICV-1)

QC Batch: 40261

Date Analyzed: 2007-08-20

Analyzed By:

			ICVs	ICVs	$_{ m ICVs}$	Percent	.
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		mg/Kg	1.00	1.04	104	85 - 115	2007-08-20

Standard (CCV-1)

QC Batch: 40261

Date Analyzed: 2007-08-20

Analyzed By:

			\mathbf{CCVs}	CCVs	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		mg/Kg	1.00	1.05	105	85 - 115	2007-08-20

TRACE ANALYSIS, INC.

Work order: 7081731

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST



5002 Basin Street, Suite A1 Midland, Texas 79703

Phone: 432-689-6301 Fax: 432-689-6313

	Project Manager:	Ken Dutton			PAGE 01	OF 01											Pro	ject	Nan	ne: <u> </u>	VI CI	KEF	E 6"								
	Company Name	Basin Environmental Ser	vice Te	chnolo	ogles, LLC													Pr	oject	#:_	SRS	3: L	_F-1	999	9-20	!					
	Company Address:	P. O. Box 301	-		· · · · · · · · · · · · · · · · · · ·												P	roje	ct L	oc: l	ea.	Cou	ınty,	NM.							
	City/State/Zip:	Lovington, NM 88260			•														PO	#: 1	NVC	OICE	<u> </u>	PL	AINS	MA	RKE	TING	3		
	Telephone No:	(505) 441-2124				Fax No:		(50	5) 39	96-1	429						Report	For	mat:		X s	Stan	dard	ı	Ε]`ŤF	RP		D •	NPDE:	s
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LAB # (lab use onty)		-D CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Screened	Total #. of Containers					НОВИ				DW-Drinking Water SL-Skudg CW = Croundwater S-Solifsol P-Non-Potable Specify Oth	TPH: 418.1 8015M 8015E	TPH: TX 1005 TX 1008	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalınlty)	CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles RTEX 8021B/5030 or RTEX 8250	BIEX 80216/3030 of BIEX 8260	NO.R.M.	Chlorides EPA 300.0		RUSH TAT (Pre-Schedule) 24, 4	Standard TAT
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6701 Aberdoen Avenue, Suite 9 200 East Sunset Road, Suite E 5002 Basin Street, Suite A1 6015 Harris Parkway, Suite 110

El Paso, Texas 79922 Midland Texas 79703 Ft Worth Texas 76132 800 • 378 • 1.296 888 • 588 • 3443 806 • 794 • 1296 915 • 585 • 3443 432 • 689 • 6301 817 • 201 • 5260 FAX 806 • 794 • 1298 FAX 915 • 585 • 4944 FAX 432 • 689 • 6313

E-Mail, labi@traceanalysis.com

Analytical and Quality Control Report

Ken Dutton
Basin Environmental Service Tech LLC
P.O. Box 301
Lovington, NM, 88260

Project Location: Lea County, NM

McKee 6

Project Number: SRS# LF-1999-20

Project Name:

Report Date: June 26, 2007

Work Order: 7061534

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

			${f Date}$	Time	Date
Sample	Description	Matrix	Taken	Taken	Received
127628	West Wall #2	soil	2007-06-14	14:10	2007-06-15
127629	West Floor #2	soil	2007-06-14	14:15	2007-06-15
127630	North Wall #2	soil	2007-06-14	14:40	2007-06-15
127631	North Floor #2	soil	2007-06-14	14:45	2007-06-15
127632	Ramp	soil	2007-06-14	14:50	2007-06-15
127633	East Wall #2	soil	2007-06-14	15:10	2007-06-15
127634	East Floor #2	soil	2007-06-14	15:15	2007-06-15
127635	South Wall #1	soil	2007-06-14	15:25	2007-06-15
127636	South Floor #1	soil	2007-06-14	15:20	2007-06-15
127637	Trench 17'	soil	2007-06-14	15:35	2007-06-15
127638	Trench 27'	soil	2007-06-14	15:55	2007-06-15
127639	North Stock Pile	soil	2007-06-15	10:00	2007-06-15
127640	South Stock Pile	soil	2007-06-15	10:10	2007-06-15
127641	East Stock Pile	soil	2007-06-15	10:20	2007-06-15
127642	West Stock Pile	soil	2007-06-15	10:30	2007-06-15

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

Dr. Blair Leftwich, Director

Standard Flags

 ${\bf B}$ - The sample contains less than ten times the concentration found in the method blank.

Report Date: June 26, 2007 SRS# LF-1999-20

Work Order: 7061534 McKee 6

Page Number: 3 of 29 Lea County, NM

Analytical Report

Sample: 127628 - West Wall #2

Analysis: BTEX QC Batch: 38458 Prep Batch: 33282

S 8021B Analytical Method: Date Analyzed: Sample Preparation:

2007-06-22

Prep Method: S 5035 Analyzed By: JWPrepared By: JW

JW

JW

		\mathbf{RL}			
Parameter	Flag	Result	Units	Dilution	RL
Benzene		< 0.0100	mg/Kg		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

					\mathbf{Spike}	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.901	mg/Kg	1	1.00	90	26 - 117.8
4-Bromofluorobenzene (4-BFB)		0.970	mg/Kg	1	1.00	97	51.1 - 119.1

Sample: 127628 - West Wall #2

Analysis: TPH DRO QC Batch: 38384 Prep Batch: 33157

Analytical Method: Mod. 8015B Date Analyzed: Sample Preparation: 2007-06-18

Prep Method: N/A 2007-06-20 Analyzed By: Prepared By:

		m RL			
Parameter	Flag	Result	Units	Dilution	m R.L
DRO		57.6	mg/Kg	1	50.0

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane	1	309	mg/Kg	1	150	206	32.9 - 167

Sample: 127628 - West Wall #2

TPH GRO Analysis: QC Batch: 38460 Prep Batch: 33284

Analytical Method: Date Analyzed: Sample Preparation:

S 8015B Prep Method: S 5035 2007-06-22 Analyzed By: Prepared By:

		RL			
Parameter	Flag	Result	Units	Dilution	RL
GRO		5.75	mg/Kg	1	1.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.824	mg/Kg	1	1.00	82	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		1.07	mg/Kg	1	1.00	107	67.5 - 140.3

¹ High surrogate recovery due to peak interference.

Report Date: June 26, 2007 SRS# LF-1999-20

Work Order: 7061534 McKee 6 Page Number: 4 of 29 Lea County, NM

Sample: 127629 - West Floor #2

Analysis: BTEX QC Batch: 38458 Prep Batch: 33282 Analytical Method: S 8021B Date Analyzed: 2007-06-22 Sample Preparation:

 Prep Method:
 S 5035

 Manalyzed By:
 JW

 Prepared By:
 JW

		m RL			
Parameter	Flag	Result	Units	Dilution	R.L
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

					\mathbf{S} pike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.899	mg/Kg	1	1.00	90	26 - 117.8
4-Bromofluorobenzene (4-BFB)		0.974	${ m mg/Kg}$	1	1.00	97	51.1 - 119.1

Sample: 127629 - West Floor #2

Analysis: TPH DRO QC Batch: 38400 Prep Batch: 33157 Analytical Method:
Date Analyzed:
Sample Preparation:

Mod. 8015B 2007-06-20 2007-06-18 Prep Method: N/A Analyzed By:

Prepared By:

		m R.L			
Parameter	Flag	Result	Units	Dilution	$\mathbf{R}\mathbf{L}$
DR()		<50.0	mg/Kg	1	50.0

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		137	mg/Kg	1	150	91	32.9 - 167

Sample: 127629 - West Floor #2

Analysis: TPH GRO QC Batch: 38460 Prep Batch: 33284 Analytical Method: S 8
Date Analyzed: 200

Sample Preparation:

S 8015B 2007-06-22 Prep Method: S 5035 Analyzed By: JW Prepared By: JW

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.817	mg/Kg	1	1.00	82	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		0.939	mg/Kg	1	1.00	94	67.5 - 140.3

Report Date: June 26, 2007 Work Order: 7061534 Page Number: 5 of 29 SRS# LF-1999-20 McKee 6 Lea County, NM

Sample: 127630 - North Wall #2

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035 QC Batch: 38458 Date Analyzed: 2007-06-22 Analyzed By: JW Prep Batch: 33282 Sample Preparation: Prepared By: JW

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

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.919	mg/Kg	1	1.00	92	26 - 117.8
4-Bromofluorobenzene (4-BFB)		1.00	mg/Kg	1	1.00	100	51.1 - 119.1

Sample: 127630 - North Wall #2

Analysis: QC Batch: Prep Batch:		Analytical Method: Date Analyzed: Sample Preparation:	Mod. 8015B 2007-06-20 2007-06-18	Prep Method: Analyzed By: Prepared By:	N/A
---------------------------------------	--	-------------------------------------------------------------	----------------------------------------	----------------------------------------------	-----

			R.L					
Parameter	er Flag		Result	Units		Dilution	m RL	
DRO			< 50.0	mg/I	ζg	1	50.0	
					Spike	Percent	Recovery	
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits	
n-Triacontane		176	mg/Kg	1	150	117	32.9 - 167	

Sample: 127630 - North Wall #2

Analysis: QC Batch: Prep Batch:	TPH GRO 38460 33284	Analytical Method: Date Analyzed: Sample Preparation:	S 8015B 2007-06-22	Prep Method: Analyzed By: Prepared By:	$_{ m JW}$
		\mathbf{RL}	_		

		\mathbf{R} . \mathbf{L}	,		
Parameter	Flag	Result	Units	Dilution	RL
GRO		1.03	mg/Kg	1	1.00

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.795	mg/Kg	1	1.00	80	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		0.991	mg/Kg	1	1.00	99	67.5 - 140.3

Report Date: June 26, 2007 Work Order: 7061534 Page Number: 6 of 29 SRS# LF-1999-20 McKee 6 Lea County, NM

Sample: 127631 - North Floor #2

Prep Method: S 5035 BTEX Analytical Method: S 8021B Analysis: QC Batch: Date Analyzed: Analyzed By: JW38458 2007-06-22 Prep Batch: 33282 Sample Preparation: Prepared By: JW

		m RL			
Parameter	Flag	Result	Units	Dilution	\mathbf{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	m mg/Kg	1	0.0100

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.908	mg/Kg	1	1.00	91	26 - 117.8
4-Bromofluorobenzene (4-BFB)		0.985	mg/Kg	1	1.00	98	51.1 - 119.1

Sample: 127631 - North Floor #2

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A QC Batch: 38400 Date Analyzed: 2007-06-20 Analyzed By: Prep Batch: 33157 Sample Preparation: 2007-06-18 Prepared By:

					\mathbf{Spike}	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		209	mg/Kg	1	150 ,	139	32.9 - 167

Sample: 127631 - North Floor #2

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035 QC Batch: 38460 Date Analyzed: 2007-06-22 Analyzed By: JWPrep Batch: 33284 Sample Preparation: Prepared By: JWRL

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	$egin{array}{c} ext{Recovery} \ ext{Limits} \end{array}$
Trifluorotoluene (TFT)		0.812	mg/Kg	1	1.00	81	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		0.964	mg/Kg	1	1.00	96	67.5 - 140.3

 Report Date: June 26, 2007
 Work Order: 7061534
 Page Number: 7 of 29

 SRS# LF-1999-20
 McKee 6
 Lea County, NM

Sample: 127632 - Ramp

BTEX Analytical Method: S 8021B Prep Method: S 5035 Analysis: Analyzed By: QC Batch: 38458 Date Analyzed: 2007-06-22 JW33282 Sample Preparation: Prepared By: JWPrep Batch:

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

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.912	mg/Kg	1	1.00	91	26 - 117.8
4-Bromofluorobenzene (4-BFB)		0.997	mg/Kg	1	1.00	100	51.1 - 119.1

Sample: 127632 - Ramp

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A QC Batch: 38400 Date Analyzed: 2007-06-20 Analyzed By: Prep Batch: 33157 Sample Preparation: 2007-06-18 Prepared By:

					\mathbf{Spike}	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		157	mg/Kg	1	150	105	32.9 - 167

Sample: 127632 - Ramp

TPH GRO Prep Method: S 5035 Analysis: Analytical Method: S 8015B QC Batch: 38460 Date Analyzed: 2007-06-22 Analyzed By: JWSample Preparation: Prep Batch: 33284 Prepared By: JW

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.807	mg/Kg	1	1.00	81	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		0.972	mg/Kg	1	1.00	97	67.5 - 140.3

Report Date: June 26, 2007 Work Order: 7061534 Page Number: 8 of 29 SRS# LF-1999-20 McKee 6 Lea County, NM

Sample: 127633 - East Wall #2

BTEX Analysis: Analytical Method: S 8021B Prep Method: S 5035 QC Batch: 38458 Date Analyzed: 2007-06-22 Analyzed By: JWPrep Batch: 33282 Sample Preparation: Prepared By: JW

RLParameter Flag Units Dilution RLResult Benzene < 0.0100 mg/Kg 1 0.0100 Toluene < 0.0100 mg/Kg 1 0.0100 Ethylbenzene < 0.0100 mg/Kg 1 0.0100Xylene < 0.0100 mg/Kg 1 0.0100

					\mathbf{Spike}	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits .
Trifluorotoluene (TFT)		0.913	mg/Kg	1	1.00	91	26 - 117.8
4-Bromofluorobenzene (4-BFB)		0.971	${ m mg/Kg}$	1	1.00	97	51.1 - 119.1

Sample: 127633 - East Wall #2

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A QC Batch: 38400 Date Analyzed: 2007-06-20 Analyzed By:

Prep Batch: 33157 Sample Preparation: 2007-06-18 Prepared By:

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		146	mg/Kg	1	150	97	32.9 - 167

Sample: 127633 - East Wall #2

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035 QC Batch: 38460 Date Analyzed: 2007-06-22 Analyzed By: JWPrep Batch: 33284 Sample Preparation: Prepared By: JW

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.821	mg/Kg	1	1.00	82	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		0.952	mg/Kg	1	1.00	95	67.5 - 140.3

 Report Date: June 26, 2007
 Work Order: 7061534
 Page Number: 9 of 29

 SRS# LF-1999-20
 McKee 6
 Lea County, NM

Sample: 127634 - East Floor #2

Analysis: Prep Method: S 5035 BTEX Analytical Method: S 8021B QC Batch: 38458 Date Analyzed: 2007-06-22 Analyzed By: JWPrep Batch: 33282 Sample Preparation: Prepared By: JW

RLUnits Dilution RLParameter Flag Result 0.0100 < 0.0100 mg/Kg Benzene 1 0.0100 1 mg/Kg Toluene < 0.0100 1 0.0100Ethylbenzene < 0.0100 mg/Kg < 0.0100 mg/Kg 0.0100 Xylene

					\mathbf{Spike}	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.889	mg/Kg	1	1.00	89	26 - 117.8
4-Bromofluorobenzene (4-BFB)		1.00	mg/Kg	1	1.00	100	51.1 - 119.1

Sample: 127634 - East Floor #2

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A QC Batch: 38400 Date Analyzed: 2007-06-20 Analyzed By: Prep Batch: 33157 Sample Preparation: 2007-06-18 Prepared By:

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane	·	169	mg/Kg	1	150	113	32.9 - 167

Sample: 127634 - East Floor #2

TPH GRO Analysis: Analytical Method: S 8015B Prep Method: S 5035 QC Batch: 38460 2007-06-22 Date Analyzed: Analyzed By: JWPrep Batch: 33284 Sample Preparation: Prepared By: JW

					\mathbf{Spike}	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.797	mg/Kg	1	1.00	80	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		0.980	mg/Kg	1	1.00	98	67.5 - 140.3

Report Date: June 26, 2007 Work Order: 7061534 Page Number: 10 of 29 SRS# LF-1999-20 McKee 6 Lea County, NM

Sample: 127635 - South Wall #1

S 5035 BTEX Analytical Method: S 8021B Prep Method: Analysis: 2007-06-22 Analyzed By: JWQC Batch: 38458 Date Analyzed: Prep Batch: 33282 Sample Preparation: Prepared By: JW

		R.L			
Parameter	Flag	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

					Spike	Percent	Recovery
Surrogate	Flag	Result	\mathbf{Units}	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.911	mg/Kg	1	1.00	91	26 - 117.8
4-Bromofluorobenzene (4-BFB)		0.976	mg/Kg	1	1.00	98	51.1 - 119.1

Sample: 127635 - South Wall #1

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A QC Batch: 38400 Date Analyzed: 2007-06-20 Analyzed By:

Prep Batch: 33157 Sample Preparation: 2007-06-18 Prepared By:

					\mathbf{Spike}	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		155	mg/Kg	1	150	103	32.9 - 167

Sample: 127635 - South Wall #1

TPH GRO Analytical Method: S 8015B Prep Method: S 5035 Analysis: QC Batch: Analyzed By: JW38460 Date Analyzed: 2007-06-22 Prep Batch: 33284 Sample Preparation: Prepared By: JW

 Parameter
 Flag
 Result
 Units
 Dilution
 RL

 GRO
 1.04
 mg/Kg
 1
 1.00

Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Recovery Limits
Dilliograms	ring	1000010	Omio	Dimeron	Amount	Thecovery	DIIIIOS
Trifluorotoluene (TFT)		0.803	mg/Kg	1	1.00	80	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		0.954	mg/Kg	1	1.00	95	67.5 - 140.3

Sample: 127636 - South Floor #1

Analytical Method: S 8021B Prep Method: S 5035 Analysis: **BTEX** JWQC Batch: 38458 Date Analyzed: 2007-06-22 Analyzed By: Prepared By: JWPrep Batch: 33282 Sample Preparation:

		m R.L			
Parameter	Flag	Result	Units	Dilution	R.L
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

					\mathbf{S} pike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.886	mg/Kg	1	1.00	89	26 - 117.8
4-Bromofluorobenzene (4-BFB)		0.982	mg/Kg	1	1.00	98	51.1 - 119.1

Sample: 127636 - South Floor #1

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A QC Batch: 38400 Date Analyzed: 2007-06-20 Analyzed By: Prep Batch: 33157 Sample Preparation: 2007-06-18 Prepared By:

					$\mathbf{S}_{\mathbf{p}ike}$	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		150	mg/Kg	1	150	100	32.9 - 167

Sample: 127636 - South Floor #1

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035 QC Batch: 38460 2007-06-22 Date Analyzed: Analyzed By: JWPrep Batch: 33284 Sample Preparation: Prepared By: JW

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.809	mg/Kg	1	1.00	81	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		0.954	mg/Kg	1	1.00	95	67.5 - 140.3

Sample: 127637 - Trench 17'

BTEX Prep Method: S 5035 Analysis: Analytical Method: S 8021B JWAnalyzed By: QC Batch: 38458 Date Analyzed: 2007-06-22 Prepared By: JWPrep Batch: 33282 Sample Preparation:

		m R.L			
Parameter	Flag	Result	Units	Dilution	RL
Benzene		0.155	mg/Kg	1	0.0100
Toluene		2.12	mg/Kg	1	0.0100
Ethylbenzene		2.75	mg/Kg	1	0.0100
Xvlene	2	9.28	mg/Kg	1	0.0100

					\mathbf{Spike}	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.665	mg/Kg	1	1.00	66	26 - 117.8
4-Bromofluorobenzene (4-BFB)	3	1.30	mg/Kg	1	1.00	130	51.1 - 119.1

Sample: 127637 - Trench 17'

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A QC Batch: 38400 Date Analyzed: 2007-06-20 Analyzed By: Prep Batch: 33157 Sample Preparation: 2007-06-18 Prepared By:

		m RL			
Parameter	Flag	Result	Units	Dilution	RL
DRO		2040	mg/Kg	1	50.0

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		250	mg/Kg	1	150	167	32.9 - 167

Sample: 127637 - Trench 17'

TPH GRO Analysis: Analytical Method: S 8015B Prep Method: S 5035 QC Batch: 38482 Date Analyzed: 2007-06-25 Analyzed By: JWPrep Batch: 33303 Sample Preparation: Prepared By: JW

GRO		3140	mg/Kg	50	1.00
Parameter	Flag	Result	Units	Dilution	RL
		\mathbf{R} .L			

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		27.6	mg/Kg	50	50.0	55	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)	4	157	${ m mg/Kg}$	50	50.0	314	67.5 - 140.3

²Estimated concentration value greater than standard range.

³High surrogate recovery due to peak interference.

⁴High surrogate recovery due to peak interference.

Work Order: 7061534 McKee 6 Page Number: 13 of 29 Lea County, NM

S 5035

JW

JW

Sample: 127638 - Trench 27'

Analysis:BTEXAnalytical Method:S 8021BPrep Method:QC Batch:38458Date Analyzed:2007-06-22Analyzed By:Prep Batch:33282Sample Preparation:Prepared By:

		m R.L			
Parameter	Flag	Result	Units	Dilution	RL
Benzene	-	< 0.0100	mg/Kg	1	0.0100
Toluene		$\boldsymbol{0.342}$	mg/Kg	1	0.0100
Ethylbenzene		0.467	mg/Kg	1	0.0100
Xylene	5	7.51	mg/Kg	1	0.0100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.728	mg/Kg	1	1.00	73	26 - 117.8
4-Bromofluorobenzene (4-BFB)		0.676	mg/Kg	1	1.00	68	51.1 - 119.1

Sample: 127638 - Trench 27'

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A QC Batch: 38400 Date Analyzed: 2007-06-20 Analyzed By: Prep Batch: 33157 Sample Preparation: 2007-06-18 Prepared By:

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		184	mg/Kg	1	150	123	32.9 - 167

Sample: 127638 - Trench 27'

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035 QC Batch: 38482 Date Analyzed: 2007-06-25 Analyzed By: JWPrep Batch: 33303 Sample Preparation: Prepared By: JW

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		33.0	mg/Kg	50	50.0	66	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)	6	85.9	mg/Kg	50	50.0	172	67.5 - 140.3

 $^{^5\}mathrm{Estimated}$ concentration value greater than standard range.

⁶High surrogate recovery due to peak interference.

Work Order: 7061534 McKee 6 Page Number: 14 of 29 Lea County, NM

Sample: 127639 - North Stock Pile

Analysis:	BTEX
QC Batch:	38458
Pren Batch:	33282

Analytical Method: S
Date Analyzed: 20
Sample Preparation:

S 8021B 2007-06-22 Prep Method: S 5035 Analyzed By: JW Prepared By: JW

		m R.L			
Parameter	Flag	\mathbf{Result}	Units	Dilution	RL
Benzene		< 0.0100	mg/Kg	1	0.0100
Toluene		0.0985	mg/Kg	1	0.0100
Ethylbenzene		0.0529	mg/Kg	1	0.0100
Xylene		1.42	mg/Kg	1	0.0100

					$_{ m Spike}$	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.648	mg/Kg	1	1.00	65	26 - 117.8
4-Bromofluorobenzene (4-BFB)	7	1.23	${ m mg/Kg}$	1	1.00	123	51.1 - 119.1

Sample: 127639 - North Stock Pile

Analysis: TPH DRO QC Batch: 38400 Prep Batch: 33157 Analytical Method: Date Analyzed:

Sample Preparation:

Mod. 8015B 2007-06-20 2007-06-18 Prep Method: N/A Analyzed By: Prepared By:

		m R.L			
Parameter	Flag	Result	Units	Dilution	RL
DR()		614	mg/Kg	1	50.0

					\mathbf{S} pike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		235	mg/Kg	1	150	157	32.9 - 167

Sample: 127639 - North Stock Pile

Analysis: TPH GRO QC Batch: 38482 Prep Batch: 33303 Analytical Method: S 8015B Date Analyzed: 2007-06-25 Sample Preparation:

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

		RL			
Parameter	Flag	Result	Units	Dilution	RL
GR.O		1820	mg/Kg	50	1.00

					Spike	Percent	Recovery
Surrogate	Flag	Result	$\mathbf{U}\mathbf{nits}$	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		4().4	mg/Kg	50	50.0	81	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)	8	86.6	mg/Kg	50	50.0	173	67.5 - 140.3

⁷High surrogate recovery due to peak interference.

⁸High surrogate recovery due to peak interference.

Report Date: June 26, 2007 Work Order: 7061534 Page Number: 15 of 29 SRS# LF-1999-20 McKee 6 Lea County, NM

Sample: 127640 - South Stock Pile

BTEX Analytical Method: S 8021B Prep Method: S 5035 Analysis: QC Batch: 38458 Date Analyzed: 2007-06-22 Analyzed By: JWPrep Batch: 33282 Sample Preparation: Prepared By: JW

		m RL			
Parameter	Flag	Result	Units	Dilution	m R.L
Benzene		< 0.0100	mg/Kg	1	0.0100
Toluene		< 0.0100	m mg/Kg	1	0.0100
Ethylbenzene		< 0.0100	mg/Kg	1	0.0100
Xylene		0.157	mg/Kg	1	0.0100

					\mathbf{Spike}	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.857	mg/Kg	1	1.00	86	26 - 117.8
4-Bromofluorobenzene (4-BFB)		1.08	mg/Kg	1	1.00	108	51.1 - 119.1

Sample: 127640 - South Stock Pile

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A QC Batch: 38400 Date Analyzed: 2007-06-20 Analyzed By: Prep Batch: 33157 Sample Preparation: 2007-06-18 Prepared By:

		m R.L			
Parameter	Flag	Result	Units	Dilution	m RL
DR()		277	mg/Kg	1	50.0

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		159	mg/Kg	1	150	106	32.9 - 167

Sample: 127640 - South Stock Pile

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035 QC Batch: 38460 Date Analyzed: 2007-06-22 Analyzed By: JW33284 Prep Batch: Sample Preparation: Prepared By: JW

		RL			
Parameter	Flag	Result	Units	Dilution	R.L
GRO		44.0	mg/Kg	1	1.00

					$\mathbf{S}_{\mathbf{p}ike}$	Percent	Recovery
Surrogate	\mathbf{Flag}	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)	•	0.803	mg/Kg	1	1.00	80	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)	9	1.84	mg/Kg	1	1.00	184	67.5 - 140.3

⁹ High surrogate recovery due to peak interference.

Report Date: June 26, 2007 SRS# LF-1999-20

Work Order: 7061534 McKee 6

Page Number: 16 of 29 Lea County, NM

Sample: 127641 - East Stock Pile

Analysis: QC Batch: Prep Batch:

BTEX 38458 33282

Analytical Method: Date Analyzed: Sample Preparation:

S 8021B 2007-06-22 Prep Method: S 5035 Analyzed By: JW Prepared By: JW

RT.

		14.13			
Parameter	Flag	Result	Units	Dilution	RL
Benzene		< 0.0100	mg/Kg	1	0.0100
Toluene		0.0474	mg/Kg	1	0.0100
Ethylbenzene		< 0.0100	mg/Kg	1	0.0100
Xylene		0.239	mg/Kg	1	0.0100

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.734	mg/Kg	1	1.00	73	26 - 117.8
4-Bromofluorobenzene (4-BFB)		1.13	mg/Kg	1	1.00	113	51.1 - 119.1

Sample: 127641 - East Stock Pile

Analysis: QC Batch: TPH DRO 38400

Analytical Method: Date Analyzed:

RL

Mod. 8015B 2007-06-20

Prep Method: N/A Analyzed By:

Prepared By:

Prep Batch:

33157

Sample Preparation: 2007-06-18

Parameter	Flag	Result	Units	Dilution	RL
DRO		991	mg/Kg	1	50.0

					$\mathbf{S}_{\mathbf{p}ike}$	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		181	mg/Kg	1	150	121	32.9 - 167

Sample: 127641 - East Stock Pile

Analysis: QC Batch: Prep Batch:

TPH GRO 38460 33284

Analytical Method: Date Analyzed:

S 8015B 2007-06-22 Prep Method: S 5035 Analyzed By: JWPrepared By: JW

Sample Preparation:

RLFlag Parameter Dilution Result Units RL $\overline{\text{GRO}}$ 62.4 mg/Kg 1.00

					Spike	Percent	Recovery
Surrogate	Flag	Result	\mathbf{Units}	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.717	mg/Kg	1	1.00	72	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)	10	3.04	mg/Kg	1	1.00	304	67.5 - 140.3

¹⁰High surrogate recovery due to peak interference.

Sample: 127642 - West Stock Pile

S 8021B Prep Method: S 5035 Analysis: BTEX Analytical Method: Analyzed By: JWQC Batch: 38402 Date Analyzed: 2007-06-21 Prepared By: JWPrep Batch: 33238 Sample Preparation:

		m RL			
Parameter	Flag	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

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.879	mg/Kg	1	1.00	88	26 - 117.8
4-Bromofluorobenzene (4-BFB)		0.983	mg/Kg	1	1.00	98	51.1 - 119.1

Sample: 127642 - West Stock Pile

Analysis: TPH DRO Analytical Method: Mod. 8015B Prep Method: N/A QC Batch: 38400 Date Analyzed: 2007-06-20 Analyzed By: Prep Batch: 33157 Sample Preparation: 2007-06-18 Prepared By:

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		171	mg/Kg	1	150	114	32.9 - 167

Sample: 127642 - West Stock Pile

Analysis: TPH GRO Analytical Method: S 8015B Prep Method: S 5035 QC Batch: 38457 Date Analyzed: 2007-06-21 Analyzed By: JW Prep Batch: 33281 Sample Preparation: 2007-06-21 Prepared By: JW

					\mathbf{Spike}	Percent	Recovery
Surrogate	Flag	Result	\mathbf{Units}	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.803	mg/Kg	1	1.00	80	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)	11	1.52	${ m mg/Kg}$	1	1.00	152	67.5 - 140.3

¹¹High surrogate recovery due to peak interference.

SRS# LF-1999-20

Work Order: 7061534 McKee 6

Page Number: 18 of 29 Lea County, NM

Method Blank (1)

QC Batch: 38384

QC Batch: Prep Batch: 33157

38384

Date Analyzed: 2007-06-20 QC Preparation: 2007-06-18 Analyzed By: Prepared By:

MDL

Parameter DRO

Flag Result <14.6

Units RLmg/Kg 50

					Spike	Percent	Recovery
Surrogate	\mathbf{Flag}	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		116	mg/Kg	1	150	77	44.7 - 133.6

Method Blank (1)

QC Batch: 38400

QC Batch:

38400

Date Analyzed:

2007-06-20

Analyzed By:

Prep Batch:

33157

QC Preparation: 2007-06-18 Prepared By:

MDL

Flag Parameter $\overline{\mathrm{DRO}}$

Result Units RL50 <14.6 mg/Kg

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		156	mg/Kg	1	150	104	44.7 - 133.6

Method Blank (1)

QC Batch: 38402

QC Batch: 38402 Prep Batch: 33238 Date Analyzed: QC Preparation:

2007-06-21 2007-06-21

Analyzed By: JW Prepared By: JW

MDI

		VIDL		
Parameter	Flag	Result	Units	m RL
Benzene		< 0.00110	mg/Kg	0.01
Toluene		< 0.00150	$_{ m mg/Kg}$	0.01
Ethylbenzene		< 0.00160	mg/Kg	0.01
Xylene		< 0.00410	mg/Kg	0.01

					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.904	mg/Kg	1	1.00	90	62.6 - 117.6
4-Bromofluorobenzene (4-BFB)		0.854	mg/Kg	1	1.00	85	53.9 - 125.1

Method Blank (1)

QC Batch: 38457

QC Batch:

38457

Date Analyzed:

2007-06-21

Analyzed By: JW

Prep Batch: 33281

QC Preparation:

2007-06-21

Prepared By: JW

Report Date: June 26, 2007 SRS# LF-1999-20

Method Blank (1)

Prep Batch: 33303

38482

QC Batch:

Parameter

GRO

QC Batch: 38482

Flag

Date Analyzed:

QC Preparation: 2007-06-25

MDL

Result

< 0.739

2007-06-25

Work Order: 7061534 McKee 6 Page Number: 19 of 29

Analyzed By: JW

Prepared By: JW

RL

1

Units

mg/Kg

Lea County, NM

51.5# DF-1333-20			-11()17(
Parameter	Flag		MD Resu		Un	its	R.I
GRO	1 IAS		< 0.73		mg/		1
C/4///					6/	8	
Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.929	mg/Kg	1	1.00	93	52.4 - 123.
4-Bromofluorobenzene (4	4-BFB)	0.835	mg/Kg	1	1.00	84	67.5 - 140.3
Method Blank (1)	QC Batch: 38458						
C Batch: 38458 rep Batch: 33282		Date Analyzed: 2007-06-22 QC Preparation: 2007-06-22					yzed By: JW ared By: JW
Parameter	Flag			ADL esult	II+	nits	RL
Benzene	ring		<0.00		mg	0.0	
Foluene			<0.00			/Kg /Kg	0.0
Tomene Ethylbenzene			<0.00			/Kg /Kg	0.0
Xylene			<0.00			/Kg	0.0
Aylene			<u> </u>	741()	1118,	/ Kg	0.0
					Spike	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		0.0884	mg/Kg	1	0.100	88	62.6 - 117.
4-Bromofluorobenzene (4	4-BFB)	0.0882	mg/Kg	1	0.100	88	53.9 - 125.
Method Blank (1)	QC Batch: 38460						
QC Batch: 38460		Date An	alvzed:	2007-06-22		Analy	zed By: JW
Prep Batch: 33284		QC Prep	•/	2007-06-22			ared By: JW
Parameter	Flag		MD Resu		Uni	ite	RI
GRO	1 1mg		<0.73		mg/		1
~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~			νο.τε	,,,	1118/	<u>6</u>	
		Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Surrogate	Flag			Difficult	1 1111(/1111)	100000101.9	AJIIII (II)
Surrogate Trifluorotoluene (TFT) 4-Bromofluorobenzene (4		0.0900 0.0852	mg/Kg	1	0.100	90	52.4 - 123.

SRS# LF-1999-20

Work Order: 7061534 McKee 6

Page Number: 20 of 29 Lea County, NM

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.882	mg/Kg	1	1.00	88	52.4 - 123.7
4-Bromofluorobenzene (4-BFB)		0.841	mg/Kg	1	1.00	84	67.5 - 140.3

Laboratory Control Spike (LCS-1)

QC Batch:

38384

Prep Batch: 33157

Date Analyzed:

2007-06-20

QC Preparation: 2007-06-18

Analyzed By: Prepared By:

	LCS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
DRO	250	mg/Kg	1	250	<14.6	100	47.5 - 144.1

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

	LCSD			$\mathbf{S}_{\mathbf{p}ike}$	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	R.PD	Limit
DRO	263	mg/Kg	1	250	<14.6	105	47.5 - 144.1	5	20

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

	LCS	LCSD			\mathbf{S} pike	LCS	LCSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
n-Triacontane	153	166	mg/Kg	1	150	102	111	57.3 - 131.6

Laboratory Control Spike (LCS-1)

QC Batch:

Prep Batch: 33157

38400

Date Analyzed:

2007-06-20

Analyzed By: Prepared By:

	LCS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	\mathbf{Limit}
DRO	246	mg/Kg	1	250	<14.6	98	47.5 - 144.1

QC Preparation: 2007-06-18

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

	LCSD			Spike	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
DRO	239	me/Ke	1	250	<14.6	96	47.5 - 144.1	3	20

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

	LCS	LCSD			Spike	LCS	LCSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	\mathbf{Limit}
n-Triacontane	153	151	mg/Kg	1	150	102	101	57.3 - 131.6

Laboratory Control Spike (LCS-1)

QC Batch: 38402 Prep Batch: 33238

Date Analyzed:

QC Preparation:

2007-06-21 2007-06-21 Analyzed By: JW

Prepared By: JW

Report Date: June 26, 2007 SRS# LF-1999-20

Work Order: 7061534 McKee 6

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.939	mg/Kg	1	1.00	< 0.00110	94	68.6 - 123.4
Toluene	0.961	mg/Kg	1	1.00	< 0.00150	96	74.6 - 119.3
Ethylbenzene	0.933	mg/Kg	1	1.00	< 0.00160	93	72.3 - 126.2
Xylene	2.82	mg/Kg	1	3.00	< 0.00410	94	76.5 - 121.6

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

	LCSD			$\mathbf{S}_{\mathbf{pike}}$	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Benzene	0.786	mg/Kg	1	1.00	< 0.00110	79	68.6 - 123.4	18	20
Toluene	0.926	mg/Kg	1	1.00	< 0.00150	93	74.6 - 119.3	4	20
Ethylbenzene	0.925	mg/Kg	1	1.00	< 0.00160	92	72.3 - 126.2	1	20
Xylene	2.79	mg/Kg	1	3.00	< 0.00410	93	76.5 - 121.6	1	20

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

	LCS	LCSD			Spike	LCS	LCSD	${ m Rec.}$
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	${f Limit}$
Trifluorotoluene (TFT)	0.815	0.817	mg/Kg	1	1.00	82	82	64.1 - 118.2
4-Bromoffuorobenzene (4-BFB)	0.920	0.913	mg/Kg	1	1.00	92	91	68.7 - 125.8

Laboratory Control Spike (LCS-1)

QC Batch: 38457

Date Analyzed: 2007-06-21 Analyzed By: JW Prepared By: JW

Page Number: 21 of 29

Lea County, NM

Prep Batch: 33281

QC Preparation: 2007-06-21

LCS Spike Matrix Rec. Dil. Limit Param Result Units Amount Result Rec. GRO 9.23 mg/Kg 10.0 < 0.739 $\overline{92}$ 57.7 - 102.5 1

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

	LCSD			\mathbf{Spike}	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	$_{ m Limit}$	RPD	Limit
GRO	9.60	mg/Kg	1	10.0	< 0.739	96	57.7 - 102.5	4	20

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

	LCS	LCSD			Spike	LCS	LCSD	Rec.
Surrogate	Result	Result	\mathbf{Units}	Dil.	Amount	Rec.	Rec.	\mathbf{Limit}
Trifluorotoluene (TFT)	1.16	1.14	mg/Kg	1	1.00	116	114	36.8 - 152.5
4-Bromofluorobenzene (4-BFB)	0.998	1.00	mg/Kg	1	1.00	100	100	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 38458 Prep Batch: 33282

2007-06-22 Date Analyzed: QC Preparation: 2007-06-22

Analyzed By: JW Prepared By: JW

	LCS			$\mathbf{S}_{\mathbf{pike}}$	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
Benzene	0.0874	mg/Kg	1	0.100	< 0.00110	87	68.6 - 123.4
Toluene	0.0894	mg/Kg	1	0.100	< 0.00150	89	74.6 - 119.3

continued . . .

Work Order: 7061534 McKee 6

Page Number: 22 of 29 Lea County, NM

	ol spikes continued \dots
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	LCS			Spike	Matrix		$\mathrm{Rec}.$
Param	Result	\mathbf{Units}	Dil.	Amount	Result	Rec.	Limit
Ethylbenzene	0.0863	mg/Kg	1	0.100	< 0.00160	86	72.3 - 126.2
Xylene	0.260	mg/Kg	1	0.300	< 0.00410	87	76.5 - 121.6

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

	LCSD			\mathbf{S} pike	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Вепzепе	0.0905	mg/Kg	1	0.100	< 0.00110	90	68.6 - 123.4	4	20
Toluene	0.0933	mg/Kg	1	0.100	< 0.00150	93	74.6 - 119.3	4	20
Ethylbenzene	0.0908	mg/Kg	1	0.100	< 0.00160	91	72.3 - 126.2	5	20
Xylene	0.274	mg/Kg	1	0.300	< 0.00410	91	76.5 - 121.6	5	20

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

	LCS	LCSD			\mathbf{S} pike	LCS	LCSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	\mathbf{Limit}
Trifluorotoluene (TFT)	0.0800	0.0802	mg/Kg	1	0.100	80	80	64.1 - 118.2
4-Bromofluorobenzene (4-BFB)	0.0887	0.0891	mg/Kg	1	0.100	89	89	68.7 - 125.8

Laboratory Control Spike (LCS-1)

38460 QC Batch:

Date Analyzed: 2007-06-22 Analyzed By: JW

Prep Batch: 33284

QC Preparation: 2007-06-22

Prepared By: JW

	LCS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	\mathbf{Result}	Rec.	Limit
GRO	7.90	mg/Kg	1	10.0	< 0.739	79	57.7 - 102.5

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

	LCSD			\mathbf{Spike}	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
GR.O	7.43	mg/Kg	1	10.0	< 0.739	74	57.7 - 102.5	6	20

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

	LCS	LCSD			Spike	LCS	LCSD	Rec.
Surrogate	Result	${f Result}$	${f Units}$	Dil .	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	1.18	0.809	mg/Kg	1	1.00	118	81	36.8 - 152.5
4-Bromofluorobenzene (4-BFB)	0.912	0.921	mg/Kg	1	1.00	91	92	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 38482 33303 Prep Batch:

Date Analyzed: 2007-06-25 QC Preparation: 2007-06-25

Analyzed By: JW Prepared By: JW

	LCS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
GRO	7.79	mg/Kg	1	10.0	< 0.739	78	57.7 - 102.5

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

SRS# LF-1999-20

Work Order: 7061534

 $McKee\ 6$

Page Number: 23 of 29 Lea County, NM

_		LCSD			Spike	Mat				Rec.		RPD
Param		Result	Units	Dil.	Amount			Rec.		Limit	RPD	Limit
GR()		7.13	mg/Kg	1	10.0	<0.	739	71	57.	7 - 102.5	9	20
Percent recovery is based on	the spil	ke result.	RPD is	based c	on the spike	e and sp	oike d	uplicate	resi	ılt.		
		LCS	LC	SD			Spi	ke	LCS	LCSD]	Rec.
Surrogate		Resul	t Res	ult	Units	Dil.	Amo		Rec.	Rec.	Ι	Limit
Trifluorotoluene (TFT)		1.17	0.8	04	mg/Kg	1	1.0	00	117	80	36.8	- 152.5
4-Bromofluorobenzene (4-BF	'B)	0.939	0.9	30	mg/Kg	1	1.0)()	94	93	70	- 130
Matrix Spike (MS-1)	Spiked S	ample: 12	7573									
QC Batch: 38384			Date /	Analyze	ed: 2007	-06-20				A	.nalyzed	l Bv:
Prep Batch: 33157				reparat		-06-18					repared	**
•			•	•							-	
		MS				Spi	ke	Mat	rix		1	Rec.
Param		Resul	lt. I	Jnits	Dil.	Amo		Res		Rec.		imit
DRO		251		g/Kg	1	25		<14		100		- 152.3
Percent recovery is based on	the spil	ze result		***	on the spike	e and sr	oike d	uplicate	resi	ılt.		
1 (20011) 1000/02 y 15 Diant (711	one, opii		ILI IS II,	LTELLICITE (_	_		применя	1 (2)			
_		MSD			Spike	Mat		_		Rec.		RPD
Param		Result	Units	Dil.	Amount			Rec.		Limit	R.P.D	Limit
<u>DRO</u>			mg/Kg	1	250	<14		110		7 - 152.3	10	20
Percent recovery is based on	the spil	ke result.	RPD is	based o	on the spike	e and sp	oike d	uplicate	resi	ılt.		
	MS	MSD				$\mathbf{S}_{\mathbf{I}}$	oike	λ	IS	MSD		Rec.
Surrogate R	esult	Result	. T	Juits	Dil.	Am	ount	\mathbf{R}_{ℓ}	ec.	Rec.		Limit
n-Triacontane	136	145	III	g/Kg	1	1	50	9	1	97	17	- 163.1
Matrix Spike (MS-1)	Spiked S	ample: 12	7634									
QC Batch: 38400 Prep Batch: 33157				Analyze reparati		-()6-2() -06-18					nalyzed repared	.,
_		MS	_			Spi		Mat		_		Rec.
Param		Resul		Jnits	Dil.	Amo		Res		Rec.		imit
DR()		265		g/Kg	1	25		<14		106	11.7	- 152.3
Percent recovery is based on	the spil	ke result.	RPD is	based o	on the spike	e and sp	oike d	uplicate	resi	ılt.		
		MSD			Spike	Mat	trix			Rec.		RPD
					•							
Param	12	Result	Units	Dil.	Amoun	t Res	sult	Rec.		Limit	RPD	Limit

mg/Kg ¹²Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.

Units

Spike

Amount

150

Dil.

MS

Rec.

97

MSD

Rec.

127

Rec.

Limit

17 - 163.1

MS

Result

145

Surrogate

n-Triacontane

MSD

Result

190

SRS# LF-1999-20

Work Order: 7061534 McKee 6

Page Number: 24 of 29 Lea County, NM

Matrix Spike (MS-1)

Spiked Sample: 127642

QC Batch: Prep Batch: 33238

38402

Date Analyzed: 2007-06-21

Analyzed By: JW Prepared By: JW

QC Preparation: 2007-06-21

	MS			\mathbf{Spike}	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
Вепzене	1.10	mg/Kg	1	1.00	< 0.00110	110	64.4 - 115.7
Toluene	1.16	mg/Kg	1	1.00	< 0.00150	116	57.8 - 124.4
Ethylbenzene	1.18	mg/Kg	1	1.00	< 0.00160	118	64.8 - 125.8
Xylene	3.59	mg/Kg	1	3.00	< 0.00410	120	65.2 - 121.8

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

	MSD			\mathbf{Spike}	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Benzene	0.973	mg/Kg	1	1.00	< 0.00110	97	64.4 - 115.7	12	20
Toluene	1.03	mg/Kg	1	1.00	< 0.00150	103	57.8 - 124.4	12	20
Ethylbenzene	1.03	mg/Kg	1	1.00	< 0.00160	103	64.8 - 125.8	14	20
Xylene	3.26	mg/Kg	1	3.00	< 0.00410	109	65.2 - 121.8	10	20

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

	MS	MSD			Spike	MS	MSD	Rec.
Surrogate	Result	Result	Units	$\mathbf{Dil}.$	Amount	Rec.	$\mathrm{Rec}.$	Limit
Trifluorotoluene (TFT)	0.791	0.797	mg/Kg	1	1	79	80	52.8 - 121.7
4-Bromofluorobenzene (4-BFB)	0.950	0.972	mg/Kg	1	1	95	97	66.7 - 131.9

Matrix Spike (MS-1)

Spiked Sample: 127642

QC Batch:

38457

Date Analyzed:

2007-06-21

Analyzed By: JW

Prep Batch: 33281 QC Preparation: 2007-06-21

Prepared By: JW

	MS			\mathbf{Spike}	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
GRO	41.4	mg/Kg	1	10.0	36.6192	48	10 - 141.5

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

	MSD			Spike	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
GRO	43.4	mg/Kg	1	10.0	36.6192	68	10 - 141.5	5	20

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

		MS	MSD			$\mathbf{S}_{\mathbf{P}i\mathbf{k}\mathbf{e}}$	MS	MSD	Rec.
Surrogate		Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)		0.666	0.616	mg/Kg	1	1	67	62	40 - 125.3
4-Bromofluorobenzene (4-BFB)	13 14	1.49	1.52	mg/Kg	1	1	149	152	86.7 - 144.5

¹³ High surrogate recovery due to peak interference.

¹⁴ High surrogate recovery due to peak interference.

Report Date: June 26, 2007 SRS# LF-1999-20 Work Order: 7061534 McKee 6 Page Number: 25 of 29 Lea County, NM

Matrix Spike (MS-1) Spiked Sample: 127628

QC Batch: 38458 Prep Batch: 33282 Date Analyzed: 2007-06-22 QC Preparation: 2007-06-22 Analyzed By: JW Prepared By: JW

	MS			Spike	Matrix		Rec.
Param	Result	\mathbf{Units}	Dil.	Amount	Result	Rec.	Limit
Benzene	0.849	mg/Kg	1	1.00	< 0.00110	85	64.4 - 115.7
Toluene	0.896	mg/Kg	1	1.00	< 0.00150	90	57.8 - 124.4
Ethylbenzene	0.896	mg/Kg	1	1.00	< 0.00160	90	64.8 - 125.8
Xylene	2.71	mg/Kg	1	3.00	< 0.00410	90	65.2 - 121.8

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

	MSD			Spike	Matrix		Rec.		RPD
Param	Result	$_{ m Units}$	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Benzene	0.833	mg/Kg	1	1.00	< 0.00110	83	64.4 - 115.7	2	20
Toluene	0.888	mg/Kg	1	1.00	< 0.00150	89	57.8 - 124.4	1	20
Ethylbenzene	0.892	mg/Kg	1	1.00	< 0.00160	89	64.8 - 125.8	0	20
\mathbf{X} ylene	2.70	mg/Kg	1	3.00	< 0.00410	90	65.2 - 121.8	0	20

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

	MS	MSD			Spike	MS	MSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	0.783	0.784	mg/Kg	1	1	78	78	52.8 - 121.7
4-Bromofluorobenzene (4-BFB)	0.966	0.943	mg/Kg	1	1	97	94	66.7 - 131.9

Matrix Spike (MS-1) Spiked Sample: 127628

QC Batch: 38460 Prep Batch: 33284 Date Analyzed: 2007-06-22 QC Preparation: 2007-06-22 Analyzed By: JW Prepared By: JW

	MS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
GRO	7.27	mg/Kg	1	10.0	5.75	15	10 - 141.5

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

	MSD			Spike	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	$_{ m Limit}$
GRO	7.38	mg/Kg	1	10.0	5.75	16	10 - 141.5	$\overline{}$	20

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

	MS	MSD			Spike	MS	MSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	0.763	0.716	mg/Kg	1	1	76	72	40 - 125.3
4-Bromofluorobenzene (4-BFB)	1.01	1.03	mg/Kg	1	1	101	103	86.7 - 144.5

Matrix Spike (MS-1) Spiked Sample: 127639

QC Batch: 38482 Prep Batch: 33303 Date Analyzed: 2007-06-25 QC Preparation: 2007-06-25 Analyzed By: JW Prepared By: JW

SRS# LF-1999-20

Work Order: 7061534

McKee 6

Page Number: 26 of 29 Lea County, NM

SRS# LF-	1999-20 				Lea County, NM							
			MS			Spi		A atrix			Rec.	
Param			Result	Units Dil.		Amo		Result	Rec.		Limit	
GRO			1970	mg/Kg	50	500 183		816.24	31	10	- 141.5	
Percent rec	overy is based	d on the spike re	esult. RPD	is based o	n the spike a	and sp	ike duplica	te result.				
		М	SD		Spike	Ма	trix	R	ec.		RPD	
Param		Re	sult Uni	its Dil.	Amount	Re	sult Rec	:. Li	mit	RPD	Limit	
GRO		¹⁵ 18	850 mg/	Kg 50	500	181	6.24 7	10 -	141.5	6	20	
Percent rec	overy is based	on the spike re	esult. RPD	is based o	n the spike a	and sp	ike duplica	te result.				
			MS	MSD			Spike	MS	MSD]	Rec.	
Surrogate			Result	Result	Units	Dil.	Amount	Rec.	Rec.	Ι	Limit	
	uene (TFT)		32.6	31.8	mg/Kg	50	50	65	64	40	- 125.3	
	orobenzene (4	⊢BFB) ¹⁶ ¹⁷	85.8	80.2	mg/Kg	50	50	172	160	86.7	- 144.5	
n.	T)	** **	CCVs True	F	CCVs ound	Per	CVs cent	Perce Recov	ery		Date	
Param	Flag	Units	Conc.		Conc.	Reco		Limi			nalyzed	
DRO		mg/Kg	250		272	10)9	85 - 1	.15	200	07-06-20	
Standard	(CCV-2)											
QC Batch:	38384		Date Analyzed: 2007-06-20						Analyzed By:			
			CCVs		CVs		v_{s}	Perce	ent			
			True		ound	Per		Recov	•		Date	
Param	Flag	Units	Conc.		Conc.	Reco		Limi			alyzed	
DRO		mg/Kg	250		250	10)()	85 - 1	.15	200	7-()6-2()	
Standard	(ICV-1)											
QC Batch:	38400		Dat	e Analyze	d: 2007-06-	-20			A	nalyzed	By:	
			ICVs	I	CVs	IC	Vs	Perce	nt,			
			m	***		-		-				

Standard (CCV-1)

Flag

Param

 $\overline{\mathrm{DRO}}$

QC Batch: 38400

Date Analyzed: 2007-06-20

Found

Conc.

284

Percent

Recovery

114

Recovery

Limits

85 - 115

Analyzed By:

Date

Analyzed

2007-06-20

True

Conc.

250

Units

mg/Kg

¹⁵Matrix spike recovery out of control limits due to peak interference. Use LCS/LCSD to demonstrate analysis is under control.
¹⁶High surrogate recovery due to peak interference.
¹⁷High surrogate recovery due to peak interference.

SRS# LF-1999-20

Work Order: 7061534 McKee 6 Page Number: 27 of 29 Lea County, NM

Dunass	Elna	Ilmito	CCVs True	CCVs Found	CCVs Percent Recovery	Percent Recovery Limits	Date
Param	Flag	Units	Conc.	Conc.	Recovery	DIIIIIS	Analyzed
DRO		mg/Kg	250	271	108	85 - 115	2007-06-20

Standard (CCV-2)

QC Batch: 38400

Date Analyzed: 2007-06-20

Analyzed By:

			CCVs	CCVs	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		mg/Kg	250	264	106	85 - 115	2007-06-20

Standard (ICV-1)

QC Batch: 38402

Date Analyzed: 2007-06-21

Analyzed By: JW

			ICVs True	ICVs Found	ICVs Percent	Percent Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Benzene	18	mg/Kg	1.00	0.767	77	85 - 115	2007-06-21
Toluene		mg/Kg	1.00	0.906	91	85 - 115	2007-06-21
Ethylbenzene		mg/Kg	1.00	0.879	88	85 - 115	2007-06-21
Xylene		mg/Kg	3.00	2.64	88	85 - 115	2007-06-21

Standard (CCV-1)

QC Batch: 38402

Date Analyzed: 2007-06-21

Analyzed By: JW

			CCVs True	$\begin{array}{c} { m CCVs} \\ { m Found} \end{array}$	$\begin{array}{c} \text{CCVs} \\ \text{Percent} \end{array}$	Percent Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	$\operatorname{Limits}^{"}$	Analyzed
Benzene		mg/Kg	1.00	0.867	87	85 - 115	2007-06-21
Toluene		mg/Kg	1.00	0.882	88	85 - 115	2007-06-21
Ethylbenzene		mg/Kg	1.00	0.847	85	85 - 115	2007-06-21
Xylene		mg/Kg	3.00	2.55	85	85 - 115	2007-06-21

Standard (ICV-1)

QC Batch: 38457

Date Analyzed: 2007-06-21

Analyzed By: JW

			ICVs	ICVs	ICVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		mg/Kg	1.00	0.874	87	85 - 115	2007-06-21

¹⁸Benzene outside of control limits on CCV(ICV). CCV(ICV) component average is 0.85 which is within acceptable range. This is acceptable by Method 8000.

Report Date: June 26, 2007 Work Order: 7061534 Page Number: 28 of 29 SRS# LF-1999-20 McKee 6 Lea County, NM

Standard (CCV-1)

QC Batch: 38457 Date Analyzed: 2007-06-21 Analyzed By: JW

CCVsCCVsCCVsPercent Recovery Date True Found Percent Units Recovery Limits Analyzed Param Flag Conc. Conc. 2007-06-21 GRO mg/Kg 1.00 0.971 97 85 - 115

Standard (ICV-1)

QC Batch: 38458 Date Analyzed: 2007-06-22 Analyzed By: JW

			ICVs	ICVs	ICVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Benzene		mg/Kg	0.100	0.0905	90	85 - 115	2007-06-22
Toluene		mg/Kg	0.100	0.0923	92	85 - 115	2007-06-22
Ethylbenzene		mg/Kg	0.100	0.0888	89	85 - 115	2007-06-22
Xylene		mg/Kg	0.300	0.267	89	85 - 115	2007-06-22

Standard (CCV-1)

QC Batch: 38458 Date Analyzed: 2007-06-22 Analyzed By: JW

			CCVs	CCVs	CCVs	Percent		
			True	Found	Percent	Recovery	Date	
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed	
Benzene		mg/Kg	0.100	0.0896	90	85 - 115	2007-06-22	
Toluene		mg/Kg	0.100	0.0916	92	85 - 115	2007-06-22	
Ethylbenzene		mg/Kg	0.100	0.0865	86	85 - 115	2007-06-22	
Xylene		mg/Kg	0.300	0.261	87	85 - 115	2007-06-22	

Standard (ICV-1)

QC Batch: 38460 Date Analyzed: 2007-06-22 Analyzed By: JW

ICVs ICVs ICVs Percent True Found Percent Recovery Date Param Units Flag Conc. Conc. Recovery Limits Analyzed GRO mg/Kg 1.00 1.11 111 85 - 115 2007-06-22

Standard (CCV-1)

QC Batch: 38460 Date Analyzed: 2007-06-22 Analyzed By: JW

CCVs CCVs CCVs Percent True Found Percent Recovery Date Param Flag Units Conc. Conc. Recovery Limits Analyzed GRO 1.00 0.917 mg/Kg 92 2007-06-22 85 - 115

Report Date: June 26, 2007 Work Order: 7061534 Page Number: 29 of 29 SRS# LF-1999-20 McKee 6 Lea County, NM

Standard (ICV-1)

QC Batch: 38482 Date Analyzed: 2007-06-25 Analyzed By: JW

ICVsICVsICVsPercent True Found Percent Recovery Date Units Analyzed Param Flag Conc. Conc. Recovery Limits 2007-06-25 GRO mg/Kg 1.00 0.963 96 85 - 115

Standard (CCV-1)

QC Batch: 38482 Date Analyzed: 2007-06-25 Analyzed By: JW

 \mathbf{CCVs} \mathbf{CCVs} CCVsPercent True Found Percent Recovery Date Conc. Param Flag Units Conc. Limits Analyzed Recovery GRO mg/Kg 1.00 1.01 101 85 - 115 2007-06-25

HOIG Dispess mort freeth it amit benorA muT Camille Reymolds @ Pleins CHAIN-OF-CUSTODY AND ANALYSIS REQUEST (Circle or Specify Method No.) Sent an report to Dry Weight Basis Required Check If Special Reporting Limits Are Needed TRRP Report Required InejnoO etutsioM ANALYSIS REQUEST Hq. SST GOB LAB Order ID # 7061534 803 \ A1806 asbicutes9 ECB.2 8085 \ 608 GC/WS Sens Vol 8270C / 625 GC/W2 APT 85808 \ 854 RC TCLP Pesticides TCLP Semi Volatives LCFb Volatiles TCLP Metals Ag As Ba Cd Cr Pb Se Hg LAB USE ONLY Tols! Metals Ag As Ba Cd Cr Pb Se Hg 6010B/2207 Conier # Cours PAH 8270C / 625 og-in-Review TPH 8015 GROMORO) TENCHAT Temp PTEX 80318 (802 / 82608 / 8348 80218 / 602 / 82608 / 624 39TM 0-14073:20 नाप की न्यांक 4012:50 14073:10 .IUT 3:35 Kdutton @bosinenv.com 01: 6 Taple 14.67 21.15 18/2.ts 10-14-073:55 14.3/25 PI SAMPLING TIME 155 McCuttheon, Suite H El Paso, Tense 20930 Tel (916) 585-3443 Fax (915) 585-3944 1 (888) 580-345 亭 e-mall: 505) 396-1429 16:50 Service Tech. UC "505) 394-23-78 **∃TA**Œ Project Name: MC Kee PRESERVATIVE NONE Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of ${\sf C},{\sf O},{\sf C}$ METHOD 3Ot ロノンターグ Date HOEN Date: OS[®]H ORIGINAL COPY Frace Analysis, Inc. ONH HCI Received at Laboratory by Lovington NM 88260 SCUDGE ЯІА TIOS MATER Received by invoice to: Junoine / Amount # CONTAINERS F-1999 - 30 なぶ Time: Time: Dasin Environmental North Floor #2 \$1 #7 井 すっ 2 FIELD CODE 615.07 South Ploor Sast floor South Mal North Wal Streat, City, Zip) West Floor Date East Wall Contact Person. West Wal Tanch emiail lac@haceanalysis com anch Komp 700 Project #: COS# Rollnquished by: Relinquished by Refinquished by <u>.</u> 32 639 CAB USE) 537 कु 7428 (37 8 629 3 LAB#

bredness mon inerettic it emil bruonA mul Camille Reymonoths @ Plains CHAIN-OF-CUSTODY AND ANALYSIS REQUEST or Specify Method No.) Dry Weight Basis Required Check If Special Reporting Limits Are Needed TRRP Report Required Send, report to Moisture Content ANALYSIS REQUEST Hq.88T.GOB 148 Order 10 # 100 153 H 808 | A1808 gabio:/299 REMARK& 210 5CB.€ 9085 \ 608 GC/MS Semi Vol. 8270C / 625 GC/WZ ASI 9560B / 62¢ HOH TCLP Pesticid∈s TCLP Semi Volatites La James (Circle ICLP Volables TCLP Metals Ag As Ga Ca Cr Pb Se Hg LAB USE Total Metals Ag As Ba Cu Cr Pb Se Hg 60108/2007 ONEY -эн**∨т ч о(**г/Дояэ агов нат Cariler # Intact Log-in-Re TPH 418 1 / TX1005 / TX1005 Ext(C35) Temp BIEX 80518; 605; 8560B; 654 2021B (602 ; 8260B / 624 38TM 0.50/10:30 15.07 10:20 E-mail: KduttoneDbasinen.com 0150/10:10 1507 10:30 155 MidDurcheon, Suite II El Paso, Texas, 20923 Tel (1915) 565-2443 Fan (915) 585-4344 1 (988) 598-5443 TIME SAMPLING Phone #: 525 394-2378 **BTAQ** 505) 394. 1429 Time: Project Name: NONE PRESERVATIVE Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C METHOD ICE 10 11 P Date: HOEN Date: °OS⁴H ORIGINAL COPY TraceAnalysis, Inc. HNO Basin Environmental Service Tech UC HCI Received at Laboratory by 300n3s MATRIX AiA Lovington N M Sosies 1105 **RETER** Received by fivolce to:
(If allforent from above) Plains Marketins TOUGHT A SITUATION # CONTRINERS 4:46 Time: Project Location (Including state): Time: FIELD CODE Date: Date: 320C 640 South Stock 27639 North Stock Dutton emial lab@traceanalysis.com 301 6424VILST Past Contact Person: Relinquished by: Relinquished by: clinquished by ompany Name 3 LAB USE) χ Υ LAB#

PAGE 82

REPORT OF UNDESTRABLE EVENT CHECKLIST

DATE OF OCCURRENCE 3-9-99 TIME OF OCCURRENCE 3:45 pm
DATE REPORTED TO BLN: 3-10-99 TIME REPORTED 9:15am
BLM OFFICE REPORTED TO (RESOURCE AREA/DISTRICT/OTHER): Hobbs
LOCATION: 1/4 1/4 NW SEC. 29 T. 20 S. 38E MERIDIAN
COUNTY: LOC STATE NM WELL NAME
OPERATOR: NAME FOTT Energy PHONE NO. 505 392-1992.
SURFACE OWNER: Federal MINERAL OWNER: (FEDERAL/INDIAN/FEE/STATE)
·
LEASE NO:UNIT NAME/CA 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):
CAUBE OF EVENT: Internal Corrosion
HazHat Notified: (for spills)
CAUSE AND EXTENT OF PERSONAL INJURIES/CAUSE OF DEATH(S):
Safety Officer Notified:
EFFECTS OF EVENT:
replace pipe ASAP
LENGTH OF TIME TO CONTROL EVENT: 3 hrs
SUBSEQUENT CLEAN-UP: Spilt 50 bbls recovered 30
CLUMES DISCHARGED: OIL 50 bbs WATER GAS
OTHER AGENCIES NOTIFIED: NMOCD, MED
SITION TAKEN OR TO BE TAKEN TO PREVENT RECURRENCE: Clamped Line

.... . - . - . - . - . - . - .

03/15/1999 15:50 505-39 16 EOTT HOBBS PIP : PAGE 03
MAR-10-1999 10:14 FROM HOBBS NM 093 TO 3522545 -. CLL

FINAL REPORT OF UNDESTRABLE EVENT CHECKLIST
INVESTIGATION: Lennah Frost, Terry Diel
FIELD INSPECTION DATE 3-16-99 SUMMARY OF RESULTS OF INSPECTION
RESOURCE LOSS WAS (CIRCLE ITEM): AVOIDABLE UNAVOIDABLE
DATE OF MEMO NOTIFYING MMS THAT LOSS WAS AVOIDABLE: DATE/TIME/PERSON NOTIFIED: 3/9/99- BLM-Hobbs DISTRICT OFFICE
STATE OFFICE
headquarters
sunnary of results of reclamation/corrective action: Met w/ Steve Caffrey - Aobbs BlM act Leaksite, He approved on-site. Vernediation
REMARKS:
SIGNATURE OF AUTHORIZED OFFICER: HUND FROM DATE: 3-18-99 TITLE: 3R. ENV. ENGINEER

NMCRIS INVESTIGATION ABSTRACT FORM (NIAF)

1. NMCRIS Activity No.:	2a. Lead (Sponsoring) Agency:	2b. Othe	er Permit	ting Agency(i	es):	3. Lead /	Agency	Report No.:
107166	BLM, CFO				J - J - J - J - J - J - J - J - J - J -	,			•
4. Title of Report: McKee	e 6" oil spill.		1				5. Type o	of Repo	rt
Author(s) Ann and Da	inny Boone						Nega	ative	☐ Positive
6. Investigation Type						<u>'</u>			
Research Design	•	Test Exc		_	_		ctions/Nor	n-Field S	Study
Overview/Lit Review	Monitoring		•		te specific vis]Other		
7. Description of Undertak accompanying photos.	ting (what does the project e	ntail?): The s	survey are	a is whe	re a pipeline l	leaked a	ınd has be	en exc	avated, see
8. Dates of Investigation: (from: 8/6/2007 to:) 9. Report Date: 7 Aug, 2007									
10. Performing Agency/0 Principal Investigato Field Supervisor: Da	or: Danny Boone	-C	11. Perform BAS 07-07-		ency/Cons	sultant F	Report No.:		
Field Personnel Na					12. Applica	ble Cult	ural Reso	urce Pe	ermit No(s):
	•		BLM: 190-2				. ,		
13. Client/Customer (pro	ject proponent): Plains A	II American	Pipeline,	L.P.	14. Client/C	Custome	r Project	No.:	
Contact: Ken Duttor									
Address: 1301 S Co	Fexas 79706-4476								
Phone: (432) 682-53									
15. Land Ownership Sta	tus (Must be indicated on pr	roject map):				, , , , , , , , , , , , , , , , , , , 			
Land Owner				Acres S	urveyed Ad	cres in A	\PE		
BLM	, <u> </u>			3.8 (+/-	-)	2.2 (-/+)		
						•			
			TOTALS	3.8 (-/+	-)	2.2 (+/-)		
40. D (. C)		1							
16 Records Search(es): Date(s) of ARMS File Re		Name o	f Reviewe	er(s). Ann	Roone				
Date(s) of NR/SR File R			f Reviewe		Loone				
Date(s) of Other Agency	/ File Review: 6 Aug. 07	Name o	f Reviewe	er(s): Dar	nny Boone	Agen	cy: BLM,	CFO	
Findings: No previously possible others are within	recorded sites were loca 1.0 mile.	ated within 0).25 mile,	LA 1059	36, 19987, 10)6325, 1	06324, 36	3574, 2	0889 and
17. Survey Data:a. Sourc	e Graphics 🛛 NAD 2	27 🗌 NAD	83				· · · ·		
	🛛 USGS 7.5' (1:24,000)	topo map		Other to	po map, Scal	e:			
		racy		1-10m	☐ 10-100m	ı 🗀>	100m		
b.USGS 7.5' Topographic HOBBS SW, NM		SGS Quad C 32103-E2	ode						
HOBBS SW, NW	1909	DZ 103-EZ							

17. Survey Data (d. Nassast City of									
e. Legal Descript	Town: Nadine, NM								
0. 2090. 2001	Township (N/S)	Range (E/W)	Section	1/4 1/4	1/4				
	20\$	38E	29	sw nw, se nw	/, .				
					,				
					· · ·				
				, , , , , , , , , , , , , , , , , , , ,	; :				
				<u> </u>	,				
									
					, .				
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 ı	units (I x w):] other survey unit	s (specify):				
Scope: 🛭 non-sel	lective (all sites record	led) 🗌 selectiv	ve/thematic (selected site	es recorded)					
Coverage Method	: X systematic pedes	strian coverage	other method (descr	ibe)					
· -): 15 Crew Size: 1	-	-						
Survey Person Hours: 1.0 Recording Person Hours: 0 Total Hours: 1.0									
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.									
19. Environmental Setting (NRCS soil designation; vegetative community; elevation; etc.):									
Topography: Plain of mildly rolling dunes.									
Vegetative community: Shinoak, sun flowers, soapberry trees, yucca cactus, assorted grasses and other flora.									
NRCS: Berino-C indurated		early level and g	gently sloping, sandy soil	s that are deep and	moderately de	ep to soft or			
Elevation: 3,545	feet.	-							
	und Visibility: 85 b. Co and is bordered on th		y Area (grazed, bladed, u che capped road.	indisturbed, etc.):	Area has seve	ral buried			
21. CULTURAL RI	ESOURCE FINDINGS	Yes, See F	Page 3 No, Dis	cuss Why:					
			-		T				
☐ USGS 7.5 Topo ☐ Copy of NMCR ☐ LA Site Forms ☐ LA Site Forms ☐ Historic Cultura	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 23. Other Attachments: ☐ Photographs and Log ☐ Other Attachments ☐ (Describe): Photos								
	ption of isolates, if app ption of Collections, if								
24. I certify the inf	ormation provided abo	ove is correct an	d accurate and meets all	applicable agency	standards.				
Principal Investiga	tor/Responsible Archa	eologist: Danny	Boone						
Signature 🕢 🧷	2 Brone		Date: 7 Aug. 20	07 Title (if not Pl):				
25. Reviewing Agency: Reviewer's Name/Date 26. SHPO Reviewer's Name/Date:									
Accepted ()	Accepted () Rejected () HPD Log #:								
Tribal Consultation	(if applicable): 🗌 Ye	es 🗆 No	SHPO File Location: Date sent to ARMS:						

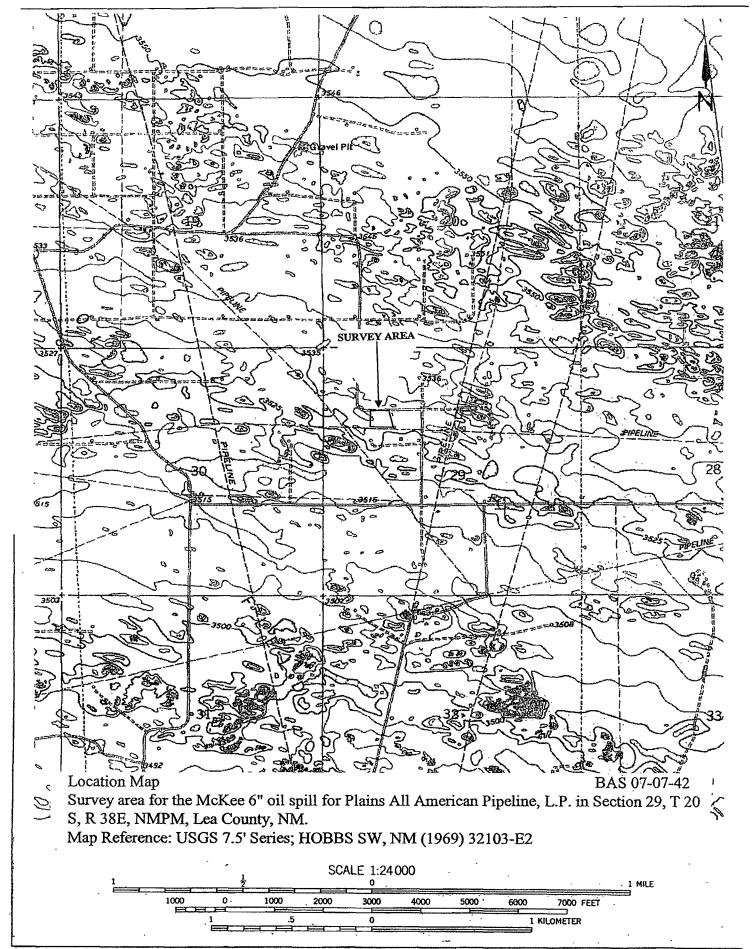
NIAF Version 1 7 25 06 2

CULTURAL RESOURCE FINDINGS

[fill in appropriate section(s)]

1. NMCRIS Activity No.: 107166	Lead (Sponsoring) Agency: BLM 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?					
MANAGEMENT SUMMARY: No cultural resources were encounteredduring the survey therefore clearance of an area for the McKee 6" oil spill for Plains All American Pipeline, L.P. is recommended. 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): 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)					

NIAF Version 1 7 25 06



NMCRIS Number: 107166 Project Number: BAS 07-07-42

Photo 1 View Northwest

-.

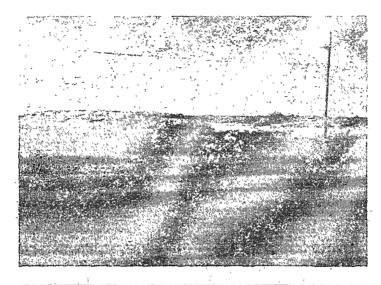


Photo 2 View North

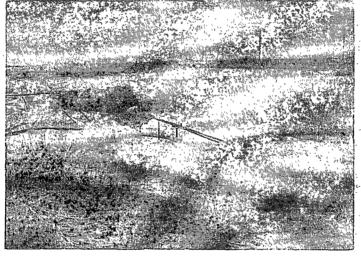


Photo 3 View Southwest



Depth	Soil Colum	n PID Reading	Petroleum Odor	Petroleum Stain	Soil Description	Plains Marke McKe Lea County, N SW/NW S29, SRS: LF-	e 6" New Mexico T20S, R38E
						Soil	Boring Completion Data
						TD: 3	0 Feet bgs
						Ва	lled 14 August 2007 sin Environmental vice Technologies
	5	0.0 ppm	None	None	Sand (SP) White-Brown, Very Fir Grained, Well Sorted, Dry	ne	Samples selected for analysis
						Soil Bor	ing Completion Data
	10	0.0 ppm	None	None			12 bags of hydrated Bentonite Plug, Surface to 30' bgs
	15	0.0 ppm	None	None			
	20	0.0 ppm	None	None	Sand (SP) Red-Brown, Very Fine Grained, Well Sorted, Dry		
	25	0.0 ppm	None	None			
	30 то	0.0 ppm	None	None		TITLE Appendix E McKee 6"	DESCRIPTION Soil Boring 1
				-		DRAWN BY KAD	DATE 22 October 2007

Depti		Soil Column	PID Reading	Petroleum Odor	Petroleum Stain	Soil Description	Plains Mark McKe Lea County, I SW/NW S29, SRS: LF-	e 6" New Mexico T20S, R38E
	5		259 ppm	Moderate	Moderate	Sand (SP) White-Brown, Very Fine Grained, Well Sorted, Dry	5	Boring Completion Data
	10		388 ppm	Moderate	Moderate	Clairiou, vvoii Gollou, 2.ly	Insta Ba	lled 22 August 2007 sin Environmental rvice Technologies
	15		321 ppm	Moderate	Moderate			Samples selected for analysis
	20		852 ppm	Moderate	Moderate		Soil Bo	ring Plugging Data Hydrated Bentonite Plug,
	25		455 ppm	None	None	Sand (SP) Red-Brown, Very Fine Grained, Well Sorted, Dry		Surface to 65' bgs
	30		851 ppm	None	None			
<u> </u>	35		524 ppm	None	None			
	40		691 ppm	None	None			
	45		269 ppm	Slight	None			
	50		60.1 ppm	Slight	None			
	55		8.0 ppm	None	None			
	60		0.1 ppm	None	None			Lind
	65 TE		1.4 ppm	None	None	Т	TITLE Appendix E McKee 6"	DESCRIPTION SB-2
		-,-					DRAWN BY KAD	DATE 22 October 2007

Oil Conservation Division 2040 South Pacheco Street 'Santa Fe, New Mexico 87505 (505) 827-7131



Submit 2 copies to Appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action						
OP	ERATOR					
LOTT ENERGY Pipeline	Lennah Frost					
10 B0 4 1660, Midland Tx 79702	2 Telephone No 915/684-3467					
McKee 6" gathering Syste	M Facility Type PIPE LINE					
Surface Owner BLM Mineral Owner	Lease No.					
LOCATION	OF RELEASE					
Una Letter Section Township Range Feet from the North/South Lin	r Feet fauna the Eart/West Line Country Lea-					
NATURE (OF RELEASE					
type of Nelcone Crudeoi	Volume of Release 50 bb / Volume Recovered 30 bb /					
Internal Corrosion Leak	Date and Hour of Occurrence 3/9/99 3:45 PM 3/9/99 3:45 DI					
Was Issumediate Notice Gaven? Yes No Not Required	if YES, In Whomas O.					
Jim Henry	3/10/99 8:15 (Cst) am					
as a Vibranumene Reached?	If YES! Volume impacting the Wittercoturae.					
if a Winescourse was Impacted, Describe Fully. (Attach Additional Sheets If Necess	ary)					
Describe Cause of Problem and Remedial Action Taken. (Attach Additional Sheets If Necesque)						
Internal Corrosion lean. Pipe to be heplaced						
week of, 3/22/99.						
Describe Area Affected and Cleamup Action Taken (Attach Additional Sheets If Necessary) Will be lichemediated on Site using						
microbses - BLMapproves						
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 purse a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 seport does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.						
	OIL CONSERVATION DIVISION					
Princed Name. Lennah Frost	Approved by					
	District Supervisor: Apparoral Date: Expension Date:					
= JR. ENU. ENG KLEr	Conditions of Approval Attached					