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\* Attach Additional Sheets If Necessary

### State of New Mexico **Energy Minerals and Natural Resources**

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

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Form C-141 Revised October 10, 2003

HOBBSOCD

SEP 2 2 2010 Submit 2 Copies to appropriate

District Office in accordance with Rule 116 on back side of form

	Release Notification and Corrective Action											
						OPERA'	<b>TOR</b>	□ I	nitial Report	$\boxtimes$	Final Report	
Name of Co						Contact Jen						
			ox 2521 H	louston, TX 77	252	Telephone No. 432-23()-1414						
Facility Nat	ne C-13 Li	ne	~			Facility Typ	e Pipeline					
Surface Ow	ner Brian I	Jssery		Mineral (	Owner	N/A		Lea	se No.N/A			
				LOCA	ATIO	N OF REI	LEASE					
Unit Letter	Letter Section Township Range Feet from the No					h/South Line	Feet from the	East/West Li	ne County			
P	31	195	39E					1				
	l		<u></u>	Latitude 1	N32.6	10 Longitu	de W103.0763					
						OF REL						
Type of Rele	ase Crude O	oil					Release 10 bbls	Volu	e No.N/A  e County  e Recovered 1bbls  nd Hour of Discovery 5-10-10  d  5-20-10, the leak appeared to be began 5-20-2010. Please find  ursuant to NMOCD rules and releases which may endanger relieve the operator of liability ater, surface water, human health recompliance with any other			
	Source of Release Pipeline					Date and F 5-10-10 5:	lour of Occurrenc		□ Initial Report ☑ Final Report ☑ F			
Was Immedia	nte Notice G		l Vac [7]	No 🛛 Not R	aguirad		If YES, To Whom? Geoffery Leking					
				NO M NOCK	equirec						·	
By Whom? Kyle Waggoner, Talon LPE Was a Watercourse Reached?						lour 5-20-10 10:						
Yes No				H 163, V(	nume impacting t	ne watercours	<b>.</b>					
If a Watercou	rse was Imp	pacted, Descr	ibe Fully.*									
N/A												
Describe Cau	se of Proble	m and Reme	dial Actior	Taken.*								
Leak was dev	eloped due	to pipeline co	orrosion. L	eak was initially	though	nt to be under 5	bbls, once excav	ations began o	15-20-10, the	leak app	peared to be	
attached repo	rtabte quant rt for all ren	ities. Excavat redial activiti	tions begar es.	on the 5-19-201	IU for p	npeline excava	tions, actually rer	nedial activitie	began 5-20-2	.010. PR	case find	
Describe Area				en.*				******************************				
See attached i	enort.											
I hereby certif	y that the in	formation gi	ven above	is true and comp	lete to	the best of my	knowledge and u	nderstand that	oursuant to NA	10CD r	ules and	
public health	operators a	onment. The	acceptance	e of a C-141 repo	ort by th	nonneanons ar ne NMOCD ma	io perioriii correc arked as "Final R	tive actions to: eport" does not	relieve the on-	n may e erator o	ndanger f liability	
should their o	perations ha	ve failed to a	dequately	investigate and r	emedia	te contamination	on that pose a thre	eat to ground w	ater, surface w	ater, hu	ıman health	
or the environ federal, state,	menty in ad or local law	diylon, NMO sand/oraceu	CD accept lations.	ance of a C-141	report o	does not relieve	e the operator of i	esponsibility f	or compliance	with an	y other	
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Signature:	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	M						4				
1		·	<u> </u>				ENV ENGLHES District Superviso		Ja .			
Printed Name	Jennifer Co	orser	1	······				7960A	my Jak	My_		
Title: Field Er	vironmenta	l Scientist		,		Approval Date	01/24/10	Expirati	on Date:			
E-mail Addres	s: jhcorser@	Deprod.com				Conditions of Approval:						
Date: 9-22-20	10	Dh	one: 432-2	30.1414			÷ •				7537	



**AMARILLO** 

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SEP 2 2 2010 HOBBSOCD

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Helf Edzing

Enr. Engineer

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09129110

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# SITE CLOSURE REPORT

# ENTERPRISE HOBBS C-13 8" PIPELINE LEA COUNTY, NEW MEXICO

ENTERPRISE CRUDE PIPELINE, LLC 4500 EAST HIGHWAY 80 MIDLAND, TEXAS 79706

TALON/LPE PROJECT NO. 700348.009.01

Prepared by:

Shyla Harris

**Environmental Scientist** 

Steve Killingworth Senior Project Manager

Talon/LPE 2901 State Highway 349 Midland, Texas 79706

**SEPTEMBER 21, 2010** 

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Table 2 – Summary of Soil Analytical Data

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Appendix D Photographic Documentation

Appendix E Boring Logs

Appendix F Disposal Documentation

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#### 1.0 INTRODUCTION

#### 1.1 Objectives and Site Background

Talon/LPE (Talon) was retained by Enterprise Crude Pipeline, LLC (Enterprise) to conduct an assessment and remediation activities at the Hobbs C-13 8" pipeline release site located in Lea County, New Mexico. The purpose of this report is to summarize the assessment and remediation activities conducted at this site and to document the current conditions supporting closure of this site.

The Hobbs C-13 8" pipeline release site is located approximately eight (8) miles southeast of Hobbs in Lea County, New Mexico. The GPS coordinates for the site are 32.61047° N latitude and 103.07596° W longitude. The site is located in a rural area with no residences or surface water within a 1,000 foot radius. A Site Location and Topographic Map is provided as Figure 1. The aerial photograph of the location is provided as Figure 2.

A crude oil release occurred at the site on May 10, 2010. Initially the release was thought to be under five (5) bbls, but once excavation began on May 20, 2010, the release appeared to be of a reportable quantity. Enterprise personnel estimated that 10 bbls of crude oil was released and one (1) bbl was recovered during emergency response activities. The release was verbally reported to the New Mexico Oil Conservation Division (NMOCD) on May 20, 2010, and the initial C-141 Form was submitted to the NMOCD on May 20, 2010 (see Appendix H). The final C-141 Form is located in Appendix H. The release was the result of internal corrosion on the Enterprise Hobbs C-13 8" steel pipeline.

#### 1.2 Regulatory Framework

#### 1.2.1 Soil Delineation and Remediation

The NMOCD has developed guidance for all federal, state, and fee lands in New Mexico for remediating contaminants resulting from leaks, spills, and releases of oilfield wastes or products. In accordance to the NMOCD guidance and approval from Mr. Geoffrey Leking (NMOCD), the remedial thresholds for benzene, Total BTEX (benzene, toluene, ethylbenzene, and xylenes), and total petroleum hydrocarbons (TPH) were based on depth to groundwater, distance from water supply sources, and distance to surface water bodies. Based on site visits, the Hobbs C-13 8" pipeline site is located in a rural area with no permanent residence or surface water within a 1,000 foot radius of the release point. According to information available from the New Mexico Office of the State Engineer, the nearest water well is not within 1,000 feet of the site. The depth to groundwater at the site is 85.97 feet below ground surface (bgs) as measured in the boring installed at the site. The final excavation measured a total depth of 20 feet bgs, and the final vertical extent of hydrocarbon impact to the soil determined during soil boring activities measured a total depth of 25 feet bgs (see Section 3.3).

According to NMOCD guidance and with approval from Mr. Geoffrey Leking (NMOCD), the following NMOCD assessment limits were used to define the extent of the investigation and/or excavation were required:

Constituent	Regulatory Limits
Constituent	(mg/Kg)
Total TPH	1,000
Benzene	10
BTEX	50
Chlorides	250

# 2.0 INITIAL SITE ACTIVITIES

#### 2.1 Soil Excavation Activities

Enterprise retained Lobo's Services Inc. (Lobo) to assist in pipeline repair and provide heavy equipment for the initial site activities. The initial response activities began on May 10, 2010. One (1) bbl of the estimated 10 bbl of released crude oil was recovered utilizing a vacuum truck. Lobo scraped the crude oil affected surface soils and began locating and uncovering the damaged pipeline. General aerial photograph of the location is provided as Figure 2. Photographs of the release area are provided in Appendix D.

While recovery and response activities were being conducted, Enterprise and Lobo personnel repaired the 8" pipeline, which was subsequently placed back into service.

#### 3.0 SOIL EXCAVATION AND REMEDIATION ACTIVITIES

#### 3.1 Remedial Excavation Activities

Enterprise retained TalonLPE (Talon) to conduct environmental over-site, and Lobo to provide heavy equipment for excavation and remediation activities. Lobos conducted soil excavation activities on May 20 to 21, 2009. The final limits of the excavation measured approximately 20 feet in width, 28 feet in length, and a depth ranging between 4 to 20 feet in the source area and 4 feet in width, 260 feet in length, and an approximate 2.5 feet in depth along the flow path. The Excavation Details Map, Figure 3, depicts the final excavation limits. Photographic documentation is presented in Appendix D.

The excavation limits were determined during excavation activities using visual and olfactory indicators. Laboratory analyses of the soil samples collected at side walls and bottom of excavation were used to determine when cleanup levels were achieved. Details of the soil sampling activities and certified laboratory results are presented in Section 4.0 of this report.

Excavated soil was immediately loaded into dump trucks for transport. Approximately 220 yards of affected soil was excavated, transported, and disposed of at Sundance Services, Inc. (Sundance). Disposal documentation is presented in Appendix F.

#### 3.2 Backfill, Compaction and Site Grading Activities

Following verbal approval from Mr. Geoffrey Leking (NMOCD) on May 20, 2010, the excavation was backfilled and compacted since the spill area was located on an industrious lease road. The soil cover consisted of approximately 220 yards of compacted non-impacted containing, earthen material obtained from an off-site source. The area was compacted with heavy tracked equipment and the lease road was subsequently placed back into service.

#### 3.3 Limited Site Assessment Activities

On July 23, 2010, Talon conducted a limited site assessment to vertically delineate the extent of the crude oil impact. During the site investigation Mr. Geoffrey Leking (NMOCD) was on location. Talon utilized an air rotary drill equipped with an eight (8) inch bit to advance three (3) borings. Boring location BH-3, total depth of 10 bgs, and the boring location BH-5, total depth of 50 feet bgs, were advanced to determine the vertical extent of the crude oil impact. Soil samples were field screened with a photo-ionization detector (PID). PID readings ranged zero parts per million (ppm) to 42.1 ppm. Due to the uncertainty of the depth to groundwater, another boring (BH-6) was advanced to 90 feet. The depth to groundwater was measured at 85.97 feet bgs. Soil samples were collected with a split spoon sampler. Details of the soil sampling activities and certified laboratory results are presented in Section 4.0 of this report. The locations of the soil borings are presented on Figure 3. Soil boring logs are provided as Appendix E.

#### 4.0 SOIL SAMPLING ACTIVITIES

#### 4.1 Soil Characterization Sampling

#### 4.1.1 Sample Collection

On May 19, 2010, a composite soil characterization sample (SP) was collected from the excavated soil stockpile for disposal at the landfill (Sundance). The soil sample was collected by Talon using industry accepted standard operating procedures. These procedures include wearing new, clean nitrile gloves, and collecting laboratory samples using disposable hand tools (when applicable) to prevent cross-contamination.

The collected waste soil characterization sample was packed in laboratory provided sample container, immediately placed on ice, and transported to TraceAnalysis in Midland, Texas for quantification of benzene, toluene, ethylbenzene, xylenes (BTEX) by EPZ SW-846 Method-8021B. All analytical testing was performed on a standard turn-around basis.

#### 4.1.2 Analytical Results

Analytical results indicate the sample was acceptable for soil disposal at Sundance. Copies of the laboratory analytical results and chain of custody documentation are presented in Appendix C. A summary of the characterization soil sample analytical results for the landfill is presented as Table 1.

#### 4.2 Excavation Confirmation Soil Sampling

#### 4.2.1 Sample Collection

Seven (7) discrete confirmation soil samples were collected from five (5) locations within the excavation. During soil boring activities, the confirmation soil samples were collected at a deeper depth where necessary to achieve the required concentrations at tow (2) sample locations (BH-3 and BH-5). With the approval from Mr. Geoffrey Leking (NMOCD) the constituents sampled on the soil borings were only analyzed for the constituents that were above the NMOCD remedial thresholds. Additional soil samples were collected form the soil borings. Boring samples from the split spoons were collected every five (5) feet below the bottom of the excavation. The boring samples that did not exceed the NMOCD remedial thresholds were collected five (5) feet below the base of the excavation so the samples collected at deeper depths were not analyzed. Confirmation soil samples were collected by Talon personnel using a minimum headspace technique by the procedure presented in Section 4.1.1. Confirmation soil sampling locations are depicted on Figure 3.

The collected samples were placed in laboratory provided sample containers, immediately placed in an ice-chilled cooler, and transported to TraceAnalysis in Midland, Texas. The samples were analyzed for was benzene, toluene, ethylbenzene, xylenes (BTEX) by EPA SW-846 Method 8021B, TPH analysis using Method TX1005 extended to C<sub>35</sub>, and chlorides (titration) by EPA Method 4500-Cl B.

#### 4.2.2 Analytical Results

Laboratory analytical results indicate chloride concentrations did not exceed laboratory

reporting limit of <200 mg/Kg.

Laboratory analytical results indicate that no TPH concentrations (C<sub>6</sub>-C<sub>35</sub>) exceeded the NMOCD remedial threshold of 1,000 mg/Kg. The final TPH concentrations ranged from below the laboratory reporting limit (<50.0 mg/Kg) to 766 mg/Kg (BH-2).

Laboratory analytical results indicate that no BTEX or benzene concentrations exceeded the NMOCD remedial thresholds of 50 mg/Kg for total BTEX and 10 mg/Kg for benzene. The laboratory analytical results indicate total BTEX for concentrations did not exceed the laboratory reporting limits (<0.0100 to <0.100 mg/kg). The laboratory analytical results indicate the benzene concentration ranged from below the laboratory reporting limits (<0.0200 to <0.0600 mg/Kg) to 2.27 mg/Kg (BH-3).

Copies of the laboratory analytical results and chain of custody documentation are presented in Appendix C. A summary of the excavation confirmation soil sample analytical results are presented as Table 2.

#### 5.0 CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Conclusions

- A crude oil release occurred at the site on May 10, 2010. Enterprise personnel estimated that one (1) bbl of the estimated ten (10) bbl were recovered during emergency response activities.
- Approximately 220 cubic yards of crude oil affected soil was hauled to Sundance.
   Approximately 220 cubic yards of soil was transported on location and utilized as backfill material.
- Soil samples were collected from the excavated soil for disposal and the excavated soil throughout the soil remediation activities.
- All final soil samples indicate benzene (10 mg/Kg), Total BTEX (50 mg/Kg), TPH (1,000 mg/Kg), and chloride (250 mg/Kg) concentrations are below the NMOCD Remedial Thresholds.

#### 5.2 Recommendations

Based on laboratory analytical results for soil samples collected from the excavation and during the limited site assessment, the benzene, Total BTEX, TPH, and chloride concentrations are below NMOCD Remedial Thresholds. On August 11, 2010, Mr. Geoffrey Leking (NMOCD) gave approval for a closure report to be submitted to the NMOCD.

# APPENDIX A

# **FIGURES**

# **APPENDIX B**

# **TABLES**

# APPENDIX C

# LABORATORY ANALYTICAL DATA REPORTS AND CHAIN OF CUSTODY DOCUMENTATION

# APPENDIX D

# PHOTOGRAPHIC DOCUMENTATION

# APPENDIX E

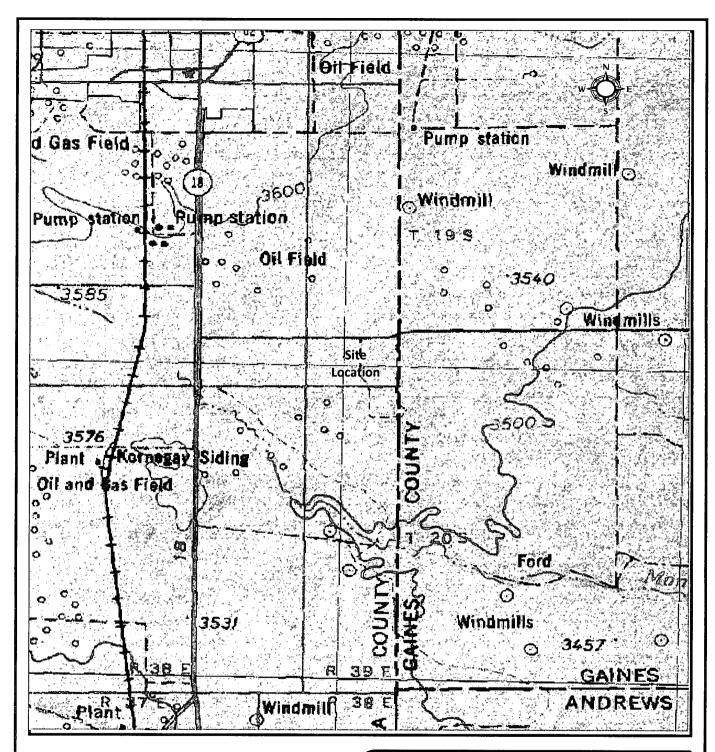
# **BORING LOGS**

# APPENDIX F

# **DISPOSAL DOCUMENATION**

# **APPENDIX G**

# NMOCD DOCUMENTATION FORM C-141





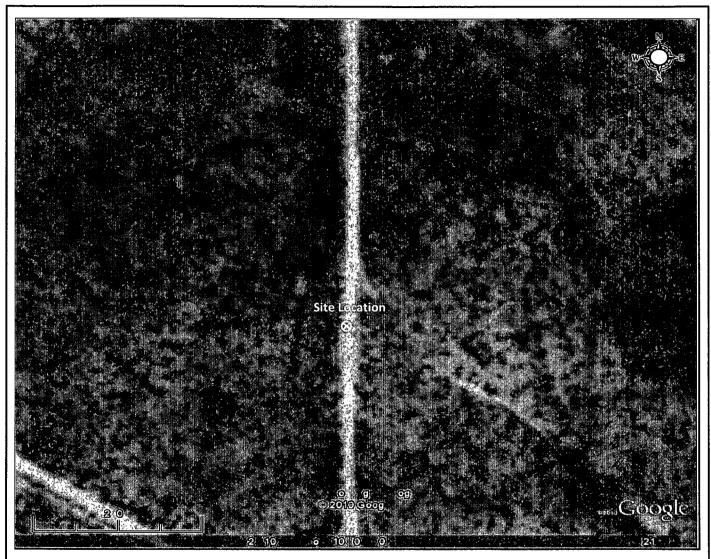
Quad: USGS Hobbs Source Scale: 1:250,000

Site Location: 32.61047°N, 103.07596 °W

C-13 Hobbs Line 8"

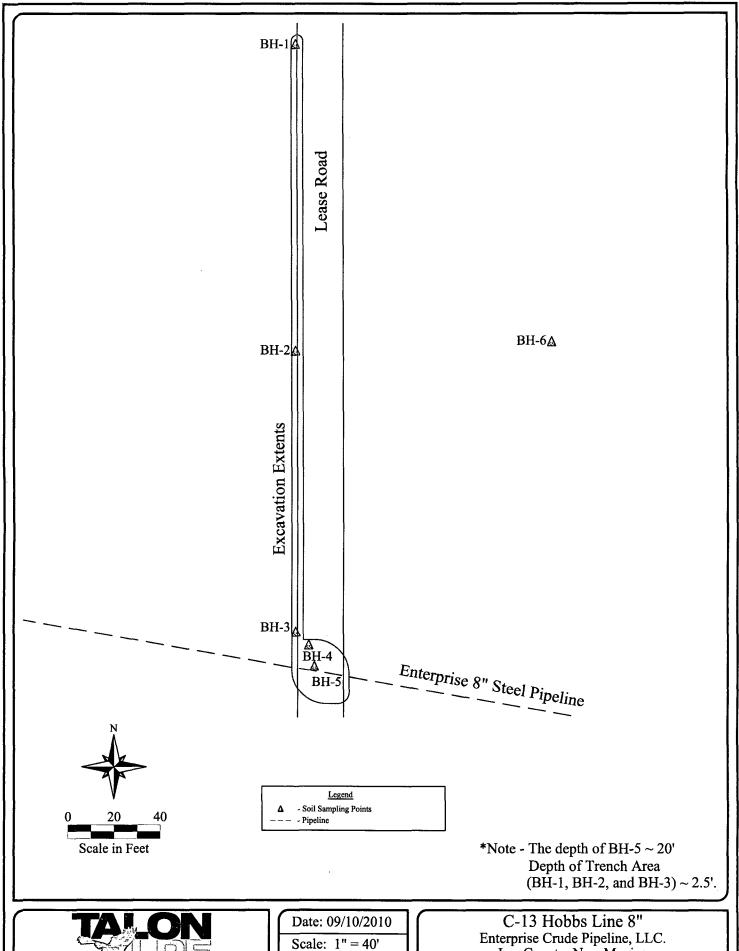
Enterprise Crude Pipeline, LLC. Lea County, NM

Figure 1 - Site Location and Topographic Map





C-13 Hobbs Line 8"
Enterprise Crude Pipeline, LLC.
Lea County, NM
Figure 2- Aerial Photograph



Drawn By: WBS

Lea County, New Mexico Figure 3 - Excavation Details Map



# TABLE 1 SUMMARY OF SOIL CHARACTERIZATION ANALYTICAL DATA Enterprise C-13 Hobbs Line 8" TalonLPE Project Number 700348.009.01

Sample ID	Sample Date	Benzene (mg/Kg)	Toluene	Ethylbenzene (mg/Kg)	Xylenes (mg/Kg)	BTEX (mg/Kg)
SP	05/19/10	<0.0100	0.334	0.901	2.48	3.72



# TABLE 2 SUMMARY OF SOIL ANALYTICAL DATA Enterprise C-13 Hobbs Line 8" TalonLPE Project Number 700348.009.01

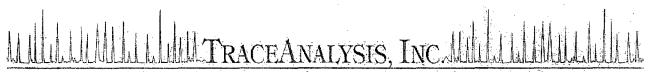
Sample Location (BH)	Sample ID	Sample Depth (bgs)	Sample Date	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylenes (mg/Kg)	BTEX (mg/Kg)	Chloride (mg/Kg)	TPH <sup>4</sup> (C6-G12) (mg/Kg)	TPH <sup>4</sup> (>C12-C35) (mg/Kg)	TPH <sup>4</sup> (mg/Kg)
BH-1	BH-1	2.5	5/20/2010	< 0.0100	< 0.0100	<0.0100	< 0.0100	< 0.0600	<200	<50.0	83	83
BH-2	BH-2	2.5	5/20/2010	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0600	<200	<50.0	766	766
ВН3	BH-3	2.5	5/20/2010	<0.100	0.134	0.459	1.68	2.27	<200	93	1566.5	1,659.5
DIIJ	BH-3-5'	5	7/23/2010	NA	NA	NA	NA	NA	NA	<50.0	<50.0	<50.0
BH4	BH-4	2.5	5/20/2010	< 0.0100	< 0.0100	< 0.0100	0.0576	< 0.0600	<200	<50.0	<50.0	<50.0
BH5	BH-5	20	5/20/2010	1.24	27.3	21.4	50.3	100	<200	507	972	1,479
DHO	BH-5-25'	25	7/23/2010	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	NA	<50.0	<50.0	<50.0
	NMO	CD Remedi	al Thresholds	10	4.44572573	<b>\$</b> 40.00000000000000000000000000000000000		为"50点。	250			1,000

Bolded values are in excess of the NMOCD Remediation Thresholds

<sup>&</sup>lt;sup>2</sup>NA: Not Analyzed

<sup>&</sup>lt;sup>3</sup> bgs : feet below ground surface

<sup>&</sup>lt;sup>4</sup> TPH: Total Petroleum Hydrocarbons



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817 • 201 • 5260 E-Mail: lab@traceanalysis.com

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1752439743100-86536

**DBE:** VN 20657

**NCTRCA** WFWB38444Y0909

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Lubbock: T104704219-08-TX

LELAP-02003 Kansas E-10317 **El Paso:** T104704221-08-TX

LELAP-02002

Midland: T104704392-08-TX

# **Analytical and Quality Control Report**

Kyle Waggoner Talon LPE-Midland 2901 State Highway 349 Midland, TX, 79706

Report Date: May 26, 2010

Work Order: 10052422

Project Name:

Teppco C-13 Hobbs Line 8 in.

Project Number: 700348.009.01

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
232649	SP	soil	2010-05-19	15:30	2010-05-24

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

Michael april

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

#### Standard Flags

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

# Case Narrative

Samples for project Teppco C-13 Hobbs Line 8 in. were received by TraceAnalysis, Inc. on 2010-05-24 and assigned to work order 10052422. Samples for work order 10052422 were received intact at a temperature of 4.0 C.

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

		$\mathbf{Prep}$	Prep	QC	Analysis
Test	Method	Batch	Date	Batch	Date
$\overline{ ext{BTEX}}$	S 8021B	60276	2010-05-25 at 15:30	70391	2010-05-25 at 16:50
Total BTEX	S 8021B	60276	2010-05-25 at 15:30	70391	2010-05-25 at 16:50

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

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 10052422 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

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

Report Date: May 26, 2010

700348.009.01

Work Order: 10052422 Teppco C-13 Hobbs Line 8 in.

# **Analytical Report**

Sample: 232649 - SP

Laboratory: Midland

Analysis:

BTEX, Total BTEX

QC Batch: 70391 Prep Batch: 60276 Analytical Method:

S 8021B Date Analyzed:

Sample Preparation: 2010-05-25

2010-05-25

Prep Method: S 5035 Analyzed By: AGPrepared By: AG

Page Number: 4 of 6

RI

		$\kappa_{ m L}$			
Parameter	$\operatorname{Flag}$	Result	Units	Dilution	RL
Benzene		< 0.0100	mg/Kg	1	0.0100
Toluene		0.334	${ m mg/Kg}$	1	0.0100
Ethylbenzene		0.901	${ m mg/Kg}$	1	0.0100
Xylene		2.48	mg/Kg	1	0.0100
Total BTEX		3.72	${ m mg/Kg}$	1	0.0600

					Spike	Percent	Recovery
Surrogate	$\mathbf{Flag}$	Result	$\mathbf{Units}$	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)	1	0.974	mg/Kg	1	2.00	49	60.4 - 141.2
4-Bromofluorobenzene (4-BFB)		1.52	mg/Kg	1	2.00	76	43.1 - 158.4

Method Blank (1)

QC Batch: 70391

QC Batch: Prep Batch: 60276

70391 Date Analyzed:

2010-05-25 QC Preparation: 2010-05-25 Analyzed By: AG Prepared By: AG

MDL

Parameter	Flag	Result	Units	$\mathrm{RL}$
Benzene		< 0.00410	mg/Kg	0.01
Toluene		< 0.00310	${ m mg/Kg}$	0.01
Ethylbenzene		< 0.00240	${ m mg/Kg}$	0.01
Xylene		< 0.00650	mg/Kg	0.01

					$\mathbf{Spike}$	Percent	Recovery
Surrogate	$\mathbf{Flag}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.30	mg/Kg	1	2.00	65	64.9 - 142.7
4-Bromofluorobenzene (4-BFB)		1.25	mg/Kg	1	2.00	62	43.9 - 141.9

#### Laboratory Control Spike (LCS-1)

QC Batch:

70391

Prep Batch: 60276

Date Analyzed:

2010-05-25

QC Preparation: 2010-05-25

Analyzed By: AG Prepared By: AG

<sup>&</sup>lt;sup>1</sup>Surrogate out due to peak interference.

Report Date: May 26, 2010 700348.009.01

Work Order: 10052422

Teppco C-13 Hobbs Line 8 in.

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	1.97	mg/Kg	1	2.00	< 0.00410	98	75.4 - 115.7
Toluene	1.97	$_{ m mg/Kg}$	1	2.00	< 0.00310	98	78.4 - 113.6
Ethylbenzene	1.98	$_{ m mg/Kg}$	1	2.00	< 0.00240	99	76 - 114.2
Xylene	5.96	mg/Kg	1	6.00	< 0.00650	99	76.9 - 113.6

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.	${f Limit}$	RPD	Limit
Benzene	1.95	mg/Kg	1	2.00	< 0.00410	98	75.4 - 115.7	1	20
Toluene	1.96	mg/Kg	1	2.00	< 0.00310	98	78.4 - 113.6	0	20
Ethylbenzene	1.97	mg/Kg	1	2.00	< 0.00240	98	76 - 114.2	0	20
Xylene	5.94	mg/Kg	1	6.00	< 0.00650	99	76.9 - 113.6	0	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)	1.91	1.70	mg/Kg	1	2.00	96	85	65 - 142.9
4-Bromofluorobenzene (4-BFB)	1.94	1.73	mg/Kg	1	2.00	97	86	43.8 - 144.9

Matrix Spike (MS-1) Spiked Sample: 232653

QC Batch: 70391 Prep Batch: 60276 Date Analyzed: 2010-05-25 QC Preparation: 2010-05-25

Analyzed By: AG Prepared By: AG

Page Number: 5 of 6

Param	MS Result	Units	Dil.	$\begin{array}{c} {\bf Spike} \\ {\bf Amount} \end{array}$	Matrix Result	Rec.	${ m Rec.} \ { m Limit}$
Benzene	1.84	mg/Kg	1	2.00	< 0.00410	92	57.7 - 140.7
Toluene	1.85	mg/Kg	1	2.00	< 0.00310	92	53.4 - 146.6
Ethylbenzene	1.93	mg/Kg	1	2.00	< 0.00240	96	62.1 - 141.6
Xylene	5.78	mg/Kg	1	6.00	0.0576	95	61.2 - 142.7

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
Benzene	2	2.35	mg/Kg	1	2.00	< 0.00410	118	57.7 - 140.7	24	20
Toluene	3	2.37	mg/Kg	1	2.00	< 0.00310	118	53.4 - 146.6	25	20
Ethylbenzene	4	2.46	mg/Kg	1	2.00	< 0.00240	123	62.1 - 141.6	24	20
Xylene	5	7.42	mg/Kg	1	6.00	0.0576	123	61.2 - 142.7	25	20

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

<sup>&</sup>lt;sup>2</sup>MS/MSD RPD out of RPD Limits. Use LCS/LCSD to demonstrate analysis is under control.

<sup>&</sup>lt;sup>3</sup>MS/MSD RPD out of RPD Limits. Use LCS/LCSD to demonstrate analysis is under control.

<sup>&</sup>lt;sup>4</sup>MS/MSD RPD out of RPD Limits. Use LCS/LCSD to demonstrate analysis is under control. <sup>5</sup>MS/MSD RPD out of RPD Limits. Use LCS/LCSD to demonstrate analysis is under control.

Report Date: May 26, 2010

700348.009.01

Work Order: 10052422 Teppco C-13 Hobbs Line 8 in. Page Number: 6 of 6

Surrogate	$rac{ ext{MS}}{ ext{Result}}$	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.47	1.63	mg/Kg	1	2	74	82	61.7 - 139.6
4-Bromofluorobenzene (4-BFB)	1.49	1.64	mg/Kg	1	2	74	82	49.6 - 146.7

# Standard (CCV-1)

QC Batch: 70391

Date Analyzed: 2010-05-25

Analyzed By: AG

	FII	*** **	CCVs True	CCVs Found	CCVs Percent	Percent Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Benzene		$_{ m mg/Kg}$	0.100	0.0917	92	80 - 120	2010-05-25
Toluene		$_{ m mg/Kg}$	0.100	0.0932	93	80 - 120	2010-05-25
Ethylbenzene		$_{ m mg/Kg}$	0.100	0.0939	94	80 - 120	2010 - 05 - 25
Xylene		mg/Kg	0.300	0.284	95	80 - 120	2010 - 05 - 25

# Standard (CCV-2)

QC Batch: 70391

Date Analyzed: 2010-05-25

Analyzed By: AG

			CCVs	CCVs	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	$\operatorname{Flag}$	Units	Conc.	Conc.	Recovery	Limits	${f Analyzed}$
Benzene		mg/Kg	0.100	0.0968	97	80 - 120	2010-05-25
Toluene		mg/Kg	0.100	0.0975	98	80 - 120	2010-05-25
Ethylbenzene		$_{ m mg/Kg}$	0.100	0.0968	97	80 - 120	2010-05-25
Xylene		mg/Kg	0.300	0.291	97	80 - 120	2010-05-25

LAB Order ID#	10052422
LAB Order ID #	1000000

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TraceAnal email: lab@tracea	•	-		c.			670	Lubb	ock	Tex	venue (as 79 (4-129 (4-129 (8-129	e, Suite 9 <b>9424</b> 96 298	9	5002 Ba Midla Tel ( Fax	nd. To	treet, exas 689-6 689-6	7970	3	20	EI P	st Sur <b>aso,</b> I (915 k (91! (888)	Texa	s 79	Suite 1 <b>922</b> 43 44 3	Ε	8808	3 Car F	Tel (	817) 2	lvd. We exas 7 201-52 560-43	260	uite 1	80
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6701 Aberdeen Avenue, Stifte 9 200 East Sunset Road, Suite E 5002 Basin Street Suite Al -6015 Harris Parkway, Suite 110 Lubbock, Texas 79424 800 • 378 • 1296 El Paso, Texas 79922 888 • 588 • 3443 Midland, Texas 79703

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: lab@traceanalysis.com

# Certifications

**WBENC:** 237019

HUB:

1752439743100-86536

DBE: VN 20657

Ft. Worth, Texas 76132

NCTRCA WFWB38444Y0909

**LELAP-02002** 

# **NELAP Certifications**

Lubbock:

T104704219-08-TX

El Paso:

T104704221-08-TX

Midland:

T104704392-08-TX

LELAP-02003

Kansas E-10317

# Analytical and Quality Control Report

Kyle Waggoner Talon LPE-Midland 2901 State Highway 349 Midland, TX, 79706

Report Date: May 26, 2010

Work Order:

10052423

Project Name:

Teppco C-13 Hobbs Line 8 in.

Project Number:

700348.009.01

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
232650	BH-1	soil	2010-05-20	09:30	2010-05-24
232651	BH-2	soil	2010-05-20	09:35	2010-05-24
232652	BH-3	soil	2010-05-20	09:40	2010-05-24
232653	BH-4	soil	2010-05-20	09:45	2010-05-24
232654	BH-5	soil	2010-05-20	15:45	2010-05-24

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

Michael abel

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

#### Standard Flags

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

# Case Narrative

Samples for project Teppco C-13 Hobbs Line 8 in. were received by TraceAnalysis, Inc. on 2010-05-24 and assigned to work order 10052423. Samples for work order 10052423 were received intact at a temperature of 4.0 C.

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

		$\operatorname{Prep}$	Prep	QC	Analysis
Test	Method	Batch	Date	Batch	Date
BTEX	S 8021B	60276	2010-05-25 at 15:30	70391	2010-05-25 at 16:50
Chloride (Titration)	SM 4500-Cl B	60199	2010-05-24 at 09:13	70333	2010-05-25 at $09:55$
Total BTEX	S 8021B	60276	2010-05-25 at 15:30	70391	2010-05-25 at 16:50
TPH - Extended Ranges New	TX1005	60203	2010-05-24 at 14:17	70310	2010-05-24 at 14:17

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

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 10052423 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

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

Report Date: May 26, 2010

700348.009.01

Work Order: 10052423 Teppco C-13 Hobbs Line 8 in.

# **Analytical Report**

Sample: 232650 - BH-1

Laboratory: Midland

Analysis: BTEX, Total BTEX QC Batch: 70391 Prep Batch: 60276

Analytical Method: Date Analyzed:

Sample Preparation:

S 8021B 2010-05-25

2010-05-25

Prep Method: S 5035 Analyzed By:

Prepared By:

AG AG

Page Number: 4 of 15

RL

RL
0.0100
0.0100
0.0100
0.0100
0.0600
•

					$\mathbf{Spike}$	Percent	Recovery
Surrogate	$\mathbf{Flag}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.94	mg/Kg	1	2.00	97	60.4 - 141.2
4-Bromofluorobenzene (4-BFB)		1.92	mg/Kg	1	2.00	96	43.1 - 158.4

Sample: 232650 - BH-1

Laboratory:

Midland

Analysis: Chloride (Titration) QC Batch: 70333 Prep Batch: 60199

Analytical Method: Date Analyzed:

Sample Preparation:

SM 4500-Cl B 2010-05-25 2010-05-25

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

RL

Parameter	Flag	Result	Units	Dilution	RL
Chloride		< 200	mg/Kg	50	4.00

Sample: 232650 - BH-1

Laboratory: Midland Analysis: QC Batch:

70310 Prep Batch: 60203

TPH - Extended Ranges New

Analytical Method: Date Analyzed: Sample Preparation: 2010-05-24

TX1005 2010-05-24 Prep Method: N/AAnalyzed By: kg Prepared By:

RL

		1012			
Parameter	$\operatorname{Flag}$	Result	Units	Dilution	RL
C6-C12		< 50.0	mg/Kg	1	50.0
>C12-C28		< 50.0	$\mathrm{mg}/\mathrm{Kg}$	1	50.0
>C28-C35		83.0	m mg/Kg	1	50.0

Report Date: May 26, 2010

700348.009.01

Work Order: 10052423 Teppco C-13 Hobbs Line 8 in. Page Number: 5 of 15

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		125	mg/Kg	1	100	125	10 - 239
n-Octane		107	mg/Kg	1	100	107	10 - 239
n-Tricosane		105	${ m mg/Kg}$	1	100	105	10 - 239

#### Sample: 232651 - BH-2

Laboratory: Midland

Analysis: QC Batch:

BTEX, Total BTEX

Analytical Method: Date Analyzed:

S 8021B 2010-05-25 Sample Preparation: 2010-05-25 Prep Method: S 5035 Analyzed By: AGPrepared By: AG

70391 Prep Batch: 60276

		m RL			
Parameter	$\operatorname{Flag}$	Result	Units	Dilution	$\operatorname{RL}$
Benzene		< 0.0100	mg/Kg	1	0.0100
Toluene		< 0.0100	$\mathrm{mg}/\mathrm{Kg}$	1	0.0100
Ethylbenzene		< 0.0100	mg/Kg	1	0.0100
Xylene		< 0.0100	mg/Kg	1	0.0100
Total BTEX		< 0.0600	$\mathrm{mg}/\mathrm{Kg}$	1	0.0600

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.63	mg/Kg	1	2.00	82	60.4 - 141.2
4-Bromofluorobenzene (4-BFB)		1.60	mg/Kg	1	2.00	80	43.1 - 158.4

#### Sample: 232651 - BH-2

Laboratory:

Midland

Analysis:

Chloride (Titration)

Analytical Method: Date Analyzed:

SM 4500-Cl B 2010-05-25

Prep Method: N/A Analyzed By: AR

QC Batch: 70333 Prep Batch:

60199

Sample Preparation:

2010-05-25

Prepared By: AR

RL

4.00

kg

Parameter Result Flag Units Dilution <200 Chloride 50 mg/Kg

RL

#### Sample: 232651 - BH-2

Laboratory:

Midland

Analysis:

TPH - Extended Ranges New

Analytical Method: Date Analyzed: Sample Preparation: 2010-05-24

TX1005 2010-05-24 Prep Method: N/AAnalyzed By: kg Prepared By:

QC Batch: Prep Batch:

70310 60203

700348.009.01

Work Order: 10052423

Page Number: 6 of 15 Teppco C-13 Hobbs Line 8 in.

Parameter	Flag	$rac{ ext{RL}}{ ext{Result}}$	Units	Dilution	RL
C6-C12		< 50.0	mg/Kg	1	50.0
>C12-C28		766	mg/Kg	. 1	50.0
>C28-C35		< 50.0	m mg/Kg	1	50.0

					Spike	Percent	Recovery
Surrogate	Flag	Result	$\mathbf{Units}$	Dilution	Amount	Recovery	Limits
n-Triacontane		156	mg/Kg	1	100	156	10 - 239
n-Octane		116	mg/Kg	1	100	116	10 - 239
n-Tricosane		207	${ m mg/Kg}$	1	100	207	10 - 239

Sample: 232652 - BH-3

Laboratory: Midland

BTEX, Total BTEX Analysis: 70391 QC Batch: Prep Batch: 60276

Analytical Method: S 8021B Date Analyzed: 2010-05-25

Prep Method: S 5035  $\mathbf{AG}$ Analyzed By: Sample Preparation: 2010-05-25 Prepared By: AG

		$\mathrm{RL}$			
Parameter	$\operatorname{Flag}$	Result	Units	Dilution	$\mathrm{RL}$
Benzene		< 0.100	mg/Kg	10	0.0100
Toluene		0.134	mg/Kg	10	0.0100
Ethylbenzene		0.459	mg/Kg	10	0.0100
Xylene		1.68	mg/Kg	10	0.0100
Total BTEX		2.27	mg/Kg	1	0.0600

					Spike	Percent	Recovery
Surrogate	$\operatorname{Flag}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		10.3	mg/Kg	10	10.0	103	60.4 - 141.2
4-Bromofluorobenzene (4-BFB)		10.5	${ m mg/Kg}$	10	10.0	105	43.1 - 158.4

Sample: 232652 - BH-3

Laboratory: Midland

Prep Batch: 60199

Analysis: Chloride (Titration) QC Batch: 70333

Analytical Method: SM 4500-Cl B Date Analyzed: 2010-05-25 Sample Preparation: 2010-05-25

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

RLParameter Flag Result Units Dilution RLChloride <200 mg/Kg 50 4.00 700348.009.01

Work Order: 10052423 Teppco C-13 Hobbs Line 8 in. Page Number: 7 of 15

#### Sample: 232652 - BH-3

Laboratory: Midland

Analysis:

TPH - Extended Ranges New

QC Batch: 70310 Prep Batch: 60203

Analytical Method: Date Analyzed:

Sample Preparation: 2010-05-24

TX1005 2010-05-24 Prep Method: N/A Analyzed By: kg Prepared By: kg

		$\mathrm{RL}$			
Parameter	Flag	Result	Units	Dilution	RL
C6-C12		93.0	mg/Kg	1	50.0
>C12-C28		1480	$\mathrm{mg}/\mathrm{Kg}$	1	50.0
>C28-C35		86.5	$\mathrm{mg}/\mathrm{Kg}$	1	50.0

Surrogate	Flag	Result	Units	Dilution	$\begin{array}{c} {\rm Spike} \\ {\rm Amount} \end{array}$	Percent Recovery	$\begin{array}{c} {\rm Recovery} \\ {\rm Limits} \end{array}$
n-Triacontane	1165	179	mg/Kg	1	100	179	10 - 239
n-Octane		111	${ m mg/Kg}$	1	100	111	10 - 239
n-Tricosane	1	273	$_{ m mg/Kg}$	1	100	273	10 - 239

#### Sample: 232653 - BH-4

Laboratory:

Midland

Analysis: BTEX, Total BTEX QC Batch: 70391 Prep Batch: 60276

Analytical Method: Date Analyzed:

S 8021B 2010-05-25 Sample Preparation: 2010-05-25 Prep Method: S 5035 Analyzed By:  $\mathbf{AG}$ Prepared By: AG

		m RL		•	
Parameter	$\operatorname{Flag}$	Result	Units	Dilution	RL
Benzene		< 0.0100	mg/Kg	1	0.0100
Toluene		< 0.0100	mg/Kg	1	0.0100
Ethylbenzene		< 0.0100	$\mathrm{mg}/\mathrm{Kg}$	1	0.0100
Xylene		$\boldsymbol{0.0576}$	$\mathrm{mg}/\mathrm{Kg}$	1	0.0100
Total BTEX		< 0.0600	mg/Kg	1	0.0600

					Spike	Percent	Recovery
Surrogate	Flag	Result	$\mathbf{Units}$	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		2.34	mg/Kg	1	2.00	117	60.4 - 141.2
4-Bromofluorobenzene (4-BFB)		2.30 °	mg/Kg	1	2.00	115	43.1 - 158.4

#### Sample: 232653 - BH-4

Laboratory:

Midland

Analysis: Chloride (Titration) QC Batch: 70333 Prep Batch: 60199

Analytical Method: Date Analyzed:

SM 4500-Cl B 2010-05-25 Sample Preparation: 2010-05-25

Prep Method: N/A Analyzed By: ARPrepared By: AR

<sup>&</sup>lt;sup>1</sup>High surrogate recovery due to peak interference.

700348.009.01

Work Order: 10052423 Teppco C-13 Hobbs Line 8 in. Page Number: 8 of 15

		RL			
Parameter	Flag	Result	Units	Dilution	RL
Chloride		< 200	mg/Kg	50	4.00

#### Sample: 232653 - BH-4

Laboratory: Midland

TPH - Extended Ranges New 70310

Analytical Method: Date Analyzed:

TX1005

Prep Method: N/A

QC Batch: Prep Batch: 60203

Analysis:

2010-05-24 Sample Preparation: 2010-05-24

Analyzed By: kg Prepared By:

		$\mathrm{RL}$			
Parameter	$\operatorname{Flag}$	$\mathbf{Result}$	Units	Dilution	RL
C6-C12		< 50.0	mg/Kg	1	50.0
>C12-C28		< 50.0	${ m mg/Kg}$	1	50.0
>C28-C35		< 50.0	mg/Kg	1	50.0

					Spike	Percent	Recovery
Surrogate	$\operatorname{Flag}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane	*	120	mg/Kg	1	100	120	10 - 239
n-Octane		123	mg/Kg	1	100	123	10 - 239
n-Tricosane		99.4	${ m mg/Kg}$	1	100	99	10 - 239

#### Sample: 232654 - BH-5

Laboratory:

Midland

BTEX, Total BTEX Analysis: QC Batch: 70391 Prep Batch: 60276

Analytical Method: S 8021B Date Analyzed:

2010-05-25 Sample Preparation: 2010-05-25 Prep Method: S 5035 Analyzed By: AG

AG

Prepared By:

RLParameter Flag Result Units Dilution RLBenzene 1.24 mg/Kg 20 0.0100 Toluene 27.3 mg/Kg 20 0.0100 Ethylbenzene 21.4 mg/Kg20 0.0100Xylene 50.3 mg/Kg 20 0.0100Total BTEX 100 mg/Kg 1 0.0600

					$\mathbf{Spike}$	Percent	Recovery
Surrogate	$\operatorname{Flag}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		21.3	mg/Kg	20	20.0	106	60.4 - 141.2
4-Bromofluorobenzene (4-BFB)		28.8	mg/Kg	20	20.0	144	43.1 - 158.4

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Work Order: 10052423 Teppco C-13 Hobbs Line 8 in. Page Number: 9 of 15

Sample: 232654 - BH-5

Laboratory:

Midland

Analysis: QC Batch: Chloride (Titration)

70333 60199 Prep Batch:

Analytical Method: Date Analyzed:

Sample Preparation:

SM 4500-Cl B

2010-05-25 2010-05-25

Prep Method: N/A Analyzed By: ARPrepared By: AR

RL

Parameter Chloride

Flag Result <200

Units mg/Kg Dilution 50

RL

Sample: 232654 - BH-5

Laboratory: Midland

TPH - Extended Ranges New Analysis:

QC Batch: 70310 Analytical Method: Date Analyzed:

TX1005 2010-05-24 Prep Method: N/A Analyzed By:

kg

4.00

Prep Batch:

60203

Sample Preparation: 2010-05-24

Prepared By: kg

RL

Parameter	$\mathbf{Flag}$	Result	Units	Dilution	$\mathrm{RL}$
C6-C12		507	mg/Kg	1	50.0
>C12-C28		972	mg/Kg	1	50.0
>C28-C35		< 50.0	m mg/Kg	1	50.0

					$\mathbf{Spike}$	Percent	Recovery
Surrogate	$\mathbf{Flag}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		130	mg/Kg	1	100	130	10 - 239
n-Octane		139	mg/Kg	1	100	139	10 - 239
n-Tricosane		193	${ m mg/Kg}$	1	100	193	10 - 239

Method Blank (1)

QC Batch: 70310

QC Batch: 70310 Prep Batch: 60203

Date Analyzed: 2010-05-24 QC Preparation: 2010-05-24 Analyzed By: kg Prepared By:

MDL

Parameter	$\operatorname{Flag}$	Result	Units	RL
C6-C12		<4.86	mg/Kg	50
>C12-C28		< 8.55	m mg/Kg	50
>C28-C35		< 8.55	${ m mg/Kg}$	50

					Spike	Percent	Recovery
Surrogate	$\operatorname{Flag}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		115	mg/Kg	1	100	115	10 - 239
n-Octane		133	mg/Kg	1	100	133	10 - 239

continued ...

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Work Order: 10052423 Teppco C-13 Hobbs Line 8 in.

Page Number: 10 of 15

method blank continu	ued					Spike	Percent	Rec	overy
Surrogate	Flag	Result	Units	-	Dilution	Amount	Recovery		$_{ m mits}$
n-Tricosane		97.4	mg/Kg		1	100	97		- 239
Method Blank (1)	$_{ m QC}$	Batch: 70333							
QC Batch: 70333 Prep Batch: 60199			Date Ana QC Prepa		2010-05-25 2010-05-24		-	yzed By: ared By:	AR AR
Parameter		Flag		MI Res		T T-	nits		RI
Chloride		Tag		<2.			Kg/Kg		4
Method Blank (1)  QC Batch: 70391  Prep Batch: 60276	·	Batch: 70391	Date Ana QC Prepa	٧.	2010-05-25 2010-05-25			yzed By: ared By:	AG AG
-					MDL				
Parameter		Flag			esult		nits		RI
Benzene					00410		g/Kg		0.0
Toluene Ethylbenzene					00310 00240		g/Kg g/Kg		0.0
Xylene					00650		g/Kg		0.0
_						Spike	Percent	Reco	•.
Surrogate	<u>m</u> )	Flag	Result	Units	Dilution		Recovery	Lim	
Trifluorotoluene (TF		<b>)</b>	1.30	mg/Kg		2.00	65	64.9 -	
4-Bromofluorobenzer	1e (4 <b>-15</b> F b	3)	1.25	mg/Kg	g 1	2.00	62	43.9 -	141

#### Laboratory Control Spike (LCS-1)

QC Batch: Prep Batch: 60203

70310

Date Analyzed:

2010-05-24

QC Preparation: 2010-05-24

Analyzed By: kg

Prepared By: kg

	$_{ m LCS}$			$\mathbf{Spike}$	Matrix		$\mathrm{Rec}.$
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
C6-C12	298	mg/Kg	1	250	<4.86	119	43.2 - 123
>C12-C28	294	mg/Kg	1	250	< 8.55	118	53.6 - 137

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

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Work Order: 10052423 Teppco C-13 Hobbs Line 8 in. Page Number: 11 of 15

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
C6-C12	293	mg/Kg	1	250	<4.86	117	43.2 - 123	2	20
>C12-C28	308	mg/Kg	1	250	< 8.55	123	53.6 - 137	5	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	116	131	mg/Kg	1	100	116	131	28.4 - 177
n-Octane	150	173	mg/Kg	1	100	150	173	28.4 - 177
n-Tricosane	105	112	${ m mg/Kg}$	1	100	105	112	28.4 - 177

#### Laboratory Control Spike (LCS-1)

QC Batch:

70333

Date Analyzed:

2010-05-25

Analyzed By: AR

Prep Batch: 60199

QC Preparation:

2010-05-24

Prepared By:

	LCS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
Chloride	98.4	mg/Kg	1	100	<2.18	98	85 - 115

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	$\operatorname{Limit}$
Chloride	100	mg/Kg	1	100	< 2.18	100	85 - 115	2	20

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

#### Laboratory Control Spike (LCS-1)

QC Batch:

70391 Prep Batch: 60276

Date Analyzed:

2010-05-25 QC Preparation: 2010-05-25 Analyzed By: AG Prepared By: AG

LCS Spike Matrix Rec. Param Units Dil. Rec. Result Amount Result Limit Benzene 1.97 mg/Kg 1 2.00 < 0.00410 75.4 - 115.7 98 Toluene 1.97 mg/Kg 1 2.00 < 0.00310 98 78.4 - 113.6 Ethylbenzene 1.98 mg/Kg 1 2.00 < 0.00240 99 76 - 114.2 Xylene 5.96 mg/Kg 6.00 76.9 - 113.6 1 < 0.00650 99

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

D	LCSD	TT 14	Dil	Spike	Matrix	D	Rec.	DDD	RPD
Param	Result	Units	Dil.	Amount	$\operatorname{Result}$	$\operatorname{Rec}$ .	Limit	RPD	$\mathbf{Limit}$
Benzene	1.95	mg/Kg	1	2.00	< 0.00410	98	75.4 - 115.7	1	20
Toluene	1.96	mg/Kg	1	2.00	< 0.00310	98	78.4 - 113.6	0	20

continued ...

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Work Order: 10052423 Teppco C-13 Hobbs Line 8 in. Page Number: 12 of 15

control	snikes	continued			
COTTOIL OF	Spenco	COMMENTALE	٠	٠	•

	LCSD			Spike	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Ethylbenzene	1.97	mg/Kg	1	2.00	< 0.00240	98	76 - 114.2	0	20
Xylene	5.94	mg/Kg	1	6.00	< 0.00650	99	76.9 - 113.6	0	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)	1.91	1.70	mg/Kg	1	2.00	96	85	65 - 142.9
4-Bromofluorobenzene (4-BFB)	1.94	1.73	$_{ m mg/Kg}$	1	2.00	97	86	43.8 - 144.9

Matrix Spike (MS-1)

QC Batch:

70310

Spiked Sample: 232653

Date Analyzed:

2010-05-24

Analyzed By: kg

Prep Batch: 60203

QC Preparation: 2010-05-24

Prepared By: kg

	MS			Spike	Matrix		Rec.
Param	Result	${f Units}$	Dil.	Amount	Result	Rec.	Limit
C6-C12	243	mg/Kg	1	250	< 4.86	97	18.8 - 121
>C12-C28	250	$_{ m mg/Kg}$	1	250	< 8.55	100	10 - 196

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
C6-C12	245	mg/Kg	1	250	<4.86	98	18.8 - 121	1	20
>C12-C28	257	mg/Kg	1	250	< 8.55	103	10 - 196	3	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	$\mathbf{Units}$	Dil.	Amount	Rec.	Rec.	$\mathbf{Limit}$
n-Triacontane	113	115	mg/Kg	1	100	113	115	30.8 - 176
n-Octane	121	122	mg/Kg	1	100	121	122	30.8 - 176
n-Tricosane	92.9	96.0	$_{ m mg/Kg}$	1	100	93	96	30.8 - 176

Matrix Spike (MS-1) Spiked Sample: 231598

QC Batch:

70333

Date Analyzed:

2010-05-25

Analyzed By: AR

Prep Batch: 60199

QC Preparation: 2010-05-24

Prepared By: AR

	MS			Spike	Matrix		${ m Rec.}$
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
Chloride	10700	mg/Kg	100	10000	470	102	85 - 115

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

700348.009.01

Work Order: 10052423 Teppco C-13 Hobbs Line 8 in.

Page Number: 13 of 15

	MSD			Spike	Matrix		Rec.		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride	10900	mg/Kg	100	10000	470	104	85 - 115	2	20

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

Matrix Spike (MS-1)

Spiked Sample: 232653

QC Batch: 70391

Date Analyzed:

2010-05-25

Analyzed By: AG

Prep Batch: 60276

QC Preparation: 2010-05-25

Prepared By: AG

	MS			Spike	Matrix		Rec.
Param	Result	$\mathbf{Units}$	Dil.	Amount	Result	Rec.	Limit
Benzene	1.84	mg/Kg	1	2.00	< 0.00410	92	57.7 - 140.7
Toluene	1.85	$_{ m mg/Kg}$	1	2.00	< 0.00310	92	53.4 - 146.6
Ethylbenzene	1.93	${ m mg/Kg}$	1	2.00	< 0.00240	96	62.1 - 141.6
Xylene	5.78	mg/Kg	1	6.00	0.0576	95	61.2 - 142.7

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
Benzene	2	2.35	mg/Kg	1	2.00	< 0.00410	118	57.7 - 140.7	24	20
Toluene	3	2.37	mg/Kg	1	2.00	< 0.00310	118	53.4 - 146.6	25	20
Ethylbenzene	4	2.46	mg/Kg	1	2.00	< 0.00240	123	62.1 - 141.6	24	20
Xylene	5	7.42	mg/Kg	1	6.00	0.0576	123	61.2 - 142.7	25	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	$\operatorname{Rec}$ .	Rec.	Limit
Trifluorotoluene (TFT)	1.47	1.63	mg/Kg	1	2	74	82	61.7 - 139.6
4-Bromofluorobenzene (4-BFB)	1.49	1.64	mg/Kg	1	2	74	82	49.6 - 146.7

#### Standard (CCV-1)

QC Batch: 70310

Date Analyzed: 2010-05-24

Analyzed By: kg

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
C6-C12		mg/Kg	250	282	113	75 - 125	2010-05-24
>C12-C28		m mg/Kg	250	258	103	75 - 125	2010-05-24

<sup>&</sup>lt;sup>2</sup>MS/MSD RPD out of RPD Limits. Use LCS/LCSD to demonstrate analysis is under control.

<sup>&</sup>lt;sup>3</sup>MS/MSD RPD out of RPD Limits. Use LCS/LCSD to demonstrate analysis is under control. <sup>4</sup>MS/MSD RPD out of RPD Limits. Use LCS/LCSD to demonstrate analysis is under control.

<sup>&</sup>lt;sup>5</sup>MS/MSD RPD out of RPD Limits. Use LCS/LCSD to demonstrate analysis is under control.

700348.009.01

Work Order: 10052423 Teppco C-13 Hobbs Line 8 in. Page Number: 14 of 15

Standard (CCV-2)

QC Batch: 70310

Date Analyzed: 2010-05-24

Analyzed By: kg

			CCVs	CCVs	$\mathrm{CCVs}$	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
C6-C12		mg/Kg	250	277	111	75 - 125	2010-05-24
>C12-C28		${ m mg/Kg}$	250	294	118	75 - 125	2010-05-24
<u>&gt;C28-C35</u>		mg/Kg	0.00	26.9		75 - 125	2010-05-24

Standard (CCV-3)

QC Batch: 70310

Date Analyzed: 2010-05-24

Analyzed By: kg

			CCVs	$\mathbf{CCVs}$	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	${f Analyzed}$
$\overline{\text{C6-C12}}$		mg/Kg	250	260	104	75 - 125	2010-05-24
>C12-C28		${ m mg/Kg}$	250	264	106	75 - 125	2010-05-24

Standard (ICV-1)

QC Batch: 70333

Date Analyzed: 2010-05-25

Analyzed By: AR

			ICVs	ICVs	ICVs	Percent	
			$\mathbf{True}$	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride		mg/Kg	100	99.3	99	85 - 115	2010-05-25

Standard (CCV-1)

QC Batch: 70333

Date Analyzed: 2010-05-25

Analyzed By: AR

			$rac{ ext{CCVs}}{ ext{True}}$	${ m CCVs} \ { m Found}$	$rac{ ext{CCVs}}{ ext{Percent}}$	Percent Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride		mg/Kg	100	101	101	85 - 115	2010-05-25

Standard (CCV-1)

QC Batch: 70391

Date Analyzed: 2010-05-25

Analyzed By: AG

700348.009.01

Work Order: 10052423 Teppco C-13 Hobbs Line 8 in.

CCVsCCVs**CCVs** Percent True Found Percent Recovery Date Limits Param Flag Units Conc. Conc. Recovery Analyzed 80 - 120 2010-05-25 Benzene mg/Kg 0.1000.0917 92 80 - 120 2010 - 05 - 25Toluene 0.1000.093293 mg/Kg 80 - 120 Ethylbenzene 2010-05-25 mg/Kg 0.100 0.093994 2010 - 05 - 25Xylene mg/Kg 0.3000.28495 80 - 120

#### Standard (CCV-2)

QC Batch: 70391

Date Analyzed: 2010-05-25

Analyzed By: AG

Page Number: 15 of 15

			CCVs	$\operatorname{CCVs}$	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Benzene		mg/Kg	0.100	0.0968	97	80 - 120	2010-05-25
Toluene		mg/Kg	0.100	0.0975	98	80 - 120	2010-05-25
Ethylbenzene		mg/Kg	0.100	0.0968	97	80 - 120	2010-05-25
Xylene		mg/Kg	0.300	0.291	97	80 - 120	2010-05-25

#### Standard (CCV-3)

QC Batch: 70391

Date Analyzed: 2010-05-25

Analyzed By: AG

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Benzene		mg/Kg	0.100	0.0975	98	80 - 120	2010-05-25
Toluene		mg/Kg	0.100	0.0973	97	80 - 120	2010-05-25
Ethylbenzene		mg/Kg	0.100	0.0955	96	80 - 120	2010-05-25
Xylene		mg/Kg	0.300	0.287	96	80 - 120	2010-05-25

LAB Order ID # 100 704 0 -	LAB Order ID#	10052423	3
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Page \ of \

TraceAnalysis, email: lab@traceanalysis.com	Fax (806) 794-1298	9 5002 Basin Street, Suite A: Midland, Texas 79703 Tel (432) 689-6301 Fax (432) 689-6313	1 200 East Sunset Rd., Suite E EI Paso, Texas 79922 Tel (915) 585-3443 Fax (915) 585-4944 1 (888) 588-3443	8808 Camp Bowie Blvd. West, Suite 180 <b>Ft. Worth, Texas 76116</b> Tel (817) 201-5260 Fax (817) 560-4336
Company Name: TOLON LPE Address: (Street, City, Zip)	Phone #: 432-522-2133 Fax #:		ANALYSIS RE (Circle or Specify	EQUEST Method No.)
2901 Hate How 349	432-522-2180 E-mail:		00.7	
Contact Person: Kyle WłagoNer	kwaggoner@taloni	re.com	Se Hg	andar
(If different from above)	33	/624 624 624 C	Pb Se	mo mo
Project #: 700348.009.01	Project Name: TelDEO - C-12 Hobbs L	7 8 11   S   S   S   S   S   S   S   S   S	d Cr P	ent fre
Project Location (including state):	Sampler Signeture:	7 8260B	Ba Cd Ba Cd Pt	608
S H	MATRIX PRESERVATIVE S	TIME		me   HA/
FAB# FIELD CODE		8021B 8021BV 18.1 / TX 015 GRO	lls Ag / lls	SS, pt.
/LAB USE\	WATER SOIL AIR SIUDGE SLUDGE HCI HNO <sub>3</sub> H <sub>2</sub> SO <sub>4</sub> NAOH ICE	MTBE 8021B / OME 8	Total Metals Ag As B TCLP Metals Ag As B TCLP Volatiles TCLP Semi Volati TCLP Pesticides RCI GC/MS Vol. 82601 GC/MS Semi. Vol PCB's 8082 / 608	Pesticides 8081A/BOD, TSS, pH Moisture Content Moisture Content Turn Around Time I
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652 BH-3	<del></del>	9:40		
653 BH-4	<del>                                       </del>	9:45		
654 BH-5 L L	<del>                                      </del>	V 15:45 VV		<del>                                     </del>
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Relinquished by: Company: Date: Time:	Received by: Company: Date: T	me: Temp°c:		port Required
		Log-in-Re		Special Reporting Needed
Submittal of samples constitutes agreement to Terms and Con-	ditions listed on reverse side of C. O. C.	Carrier #	any	



6701 Aberdeen Avenue, Suite 9 200 East Sunset fload, Suite E 5002 Basin Street, Suite Al

Lubback Texas 79424 El Paso, Texas 79922 Midland, Texas 79703

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6015 Harris Parkway, Suite 110 Ft. Worth, Texas 76132

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E-Mail; lab@traceanalysis.com

#### Certifications

WBENC: 237019 HUB:

1752439743100-86536

DBE: VN 20657

NCTRCA WFWB38444Y0909

### **NELAP Certifications**

Lubbock: T104704219-08-TX

LELAP-02003

El Paso:

T104704221-08-TX LELAP-02002

Midland:

T104704392-08-TX

Kansas E-10317

### **Analytical and Quality Control Report**

Kyle Waggoner Talon LPE-Midland 2901 State Highway 349 Midland, TX, 79706

Report Date:

July 29, 2010

Work Order:

10072716

Project Name:

Teppco C-13 Hobbs Line 8 in.

Project Number:

700348.009.01

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
238737	BH-5-25'	soil	2010-07-23	09:50	2010-07-27
238743	BH-3-5'	soil	2010-07-23	09:00	2010-07-27

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

Michael april

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

#### Standard Flags

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

#### Case Narrative

Samples for project Teppco C-13 Hobbs Line 8 in. were received by TraceAnalysis, Inc. on 2010-07-27 and assigned to work order 10072716. Samples for work order 10072716 were received intact at a temperature of 0.8 C.

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

		$\mathbf{Prep}$	Prep	$\mathbf{QC}$	Analysis
Test	Method	Batch	Date	Batch	Date
BTEX	S 8021B	61819	2010-07-28 at 08:30	72137	2010-07-28 at 10:41
TX1005 Extended - NEW	TX1005	61817	2010-07-28 at 09:37	72135	2010-07-28 at 09:37

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

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 10072716 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

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

700348.009.01

Work Order: 10072716 Teppco C-13 Hobbs Line 8 in.

### **Analytical Report**

Sample: 238737 - BH-5-25'

Laboratory: Midland

Analysis: QC Batch: BTEX

72137

Prep Batch: 61819

Analytical Method: Date Analyzed:

S 8021B

2010-07-28 2010-07-28 Prep Method: S 5035 Analyzed By:

Prepared By:

Page Number: 4 of 9

AG AG

RL

Sample Preparation:

		2023			
Parameter	Flag	Result	$\mathbf{Units}$	Dilution	RL
Benzene		< 0.0200	mg/Kg	1	0.0200
Toluene		< 0.0200	mg/Kg	1	0.0200
Ethylbenzene		< 0.0200	mg/Kg	1	0.0200
Xylene		< 0.0200	mg/Kg	1	0.0200

					$\mathbf{Spike}$	Percent	Recovery
Surrogate	$\operatorname{Flag}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		1.60	mg/Kg	1	2.00	80	52.8 - 137
4-Bromofluorobenzene (4-BFB)		1.55	mg/Kg	1	2.00	78	38.4 - 157

Sample: 238737 - BH-5-25'

Laboratory:

Prep Batch:

Midland

72135

61817

Analysis: QC Batch: TX1005 Extended - NEW

Analytical Method: Date Analyzed:

Sample Preparation:

TX1005 2010-07-28 2010-07-28 Prep Method: N/A kg

Analyzed By: Prepared By:

RL

Parameter	Flag	Result	Units	Dilution	$\operatorname{RL}$
C6-C12		< 50.0	mg/Kg	1	50.0
>C12-C35		<50.0	mg/Kg	1	50.0

			•		$\mathbf{Spike}$	Percent	Recovery
Surrogate	Flag	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		93.8	mg/Kg	1	100	94	70 - 130
n-Octane		111	$_{ m mg/Kg}$	1	100	111	70 - 130
n-Tricosane		97.6	mg/Kg	1	100	98	70 - 130

Sample: 238743 - BH-3-5'

Laboratory: Midland

Analysis: QC Batch: TX1005 Extended - NEW

72135 Prep Batch: 61817

Date Analyzed:

TX1005 2010-07-28 Prep Method: N/A Analyzed By: kg

Sample Preparation:

Analytical Method:

2010-07-28

Prepared By: kg

700348.009.01

Work Order: 10072716 Teppco C-13 Hobbs Line 8 in.

Page Number: 5 of 9

		$\operatorname{RL}$			
Parameter	$\operatorname{Flag}$	Result	Units	Dilution	RL
C6-C12		< 50.0	mg/Kg	1	50.0
>C12-C35		< 50.0	m mg/Kg	1	50.0

					$\mathbf{Spike}$	Percent	Recovery
Surrogate	$\operatorname{Flag}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		91.1	mg/Kg	1	100	91	70 - 130
n-Octane		110	mg/Kg	1	100	110	70 - 130
n-Tricosane		95.8	mg/Kg	1	100	96	70 - 130

Method Blank (1)

QC Batch: 72135

QC Batch: 72135 Date Analyzed:

2010-07-28

Analyzed By: kg

Prep Batch: 61817

QC Preparation: 2010-07-28

Prepared By: kg

		MDL		
Parameter	$\operatorname{Flag}$	Result	${f Units}$	m RL
C6-C12		<10.5	mg/Kg	50
>C12-C35		<13.0	m mg/Kg	50

					$\operatorname{Spike}$	Percent	Recovery
Surrogate	$\operatorname{Flag}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane		79.3	mg/Kg	1	100	79	70 - 130
n-Octane		90.6	mg/Kg	1	100	91	70 - 130
n-Tricosane		87.2	${ m mg/Kg}$	1	100	87	70 - 130

Method Blank (1)

QC Batch: 72137

QC Batch: 72137 Prep Batch: 61819 Date Analyzed: QC Preparation: 2010-07-28

2010-07-28

Analyzed By: AG Prepared By: AG

MDL Flag

Parameter Units Result RLBenzene < 0.0150 mg/Kg 0.02 mg/Kg Toluene < 0.00950 0.02Ethylbenzene < 0.0106 mg/Kg 0.02Xylene < 0.00930 mg/Kg 0.02

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.91	mg/Kg	1	2.00	96	66.6 - 122
4-Bromofluorobenzene (4-BFB)		1.75	mg/Kg	1	2.00	88	55.4 - 132

700348.009.01

Work Order: 10072716 Teppco C-13 Hobbs Line 8 in. Page Number: 6 of 9

#### Laboratory Control Spike (LCS-1)

QC Batch:

72135 Prep Batch: 61817 Date Analyzed:

2010-07-28

QC Preparation: 2010-07-28

Analyzed By: kg

Prepared By: kg

	LCS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
C6-C12	280	mg/Kg	1	250	<10.5	112	75 - 125
>C12-C35	257	mg/Kg	1	250	<13.0	103	75 - 125

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	$\mathbf{Units}$	Dil.	Amount	Result	Rec.	$\mathbf{Limit}$	RPD	Limit
C6-C12	285	mg/Kg	1	250	<10.5	114	75 - 125	2	20
>C12-C35	262	mg/Kg	1	250	<13.0	105	75 - 125	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	91.4	96.1	mg/Kg	1	100	91	96	70 - 130
n-Octane	125	128	mg/Kg	1	100	125	128	70 - 130
n-Tricosane	104	107	${ m mg/Kg}$	1	100	104	107	70 - 130

#### Laboratory Control Spike (LCS-1)

QC Batch:

Prep Batch: 61819

72137

Date Analyzed:

2010-07-28

QC Preparation: 2010-07-28

Analyzed By: AG

Prepared By: AG

	LCS			Spike	Matrix		Rec.
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit
Benzene	2.00	mg/Kg	1	2.00	< 0.0150	100	81.9 - 108
Toluene	1.98	${ m mg/Kg}$	1	2.00	< 0.00950	99	81.9 - 107
Ethylbenzene	1.95	mg/Kg	1	2.00	< 0.0106	98	78.4 - 107
Xylene	5.86	mg/Kg	1	6.00	< 0.00930	98	79.1 - 107

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

Param	$egin{array}{c}  ext{LCSD} \  ext{Result} \end{array}$	Units	Dil.	$\begin{array}{c} {\rm Spike} \\ {\rm Amount} \end{array}$	$\begin{array}{c} {\rm Matrix} \\ {\rm Result} \end{array}$	Rec.	Rec. Limit	RPD	$\begin{array}{c} \text{RPD} \\ \text{Limit} \end{array}$
Benzene	1.99	mg/Kg	1	2.00	< 0.0150	100	81.9 - 108	0	20
Toluene	1.98	mg/Kg	1	2.00	< 0.00950	99	81.9 - 107	0	20
Ethylbenzene	1.94	mg/Kg	1	2.00	< 0.0106	97	78.4 - 107	0	20
Xylene	5.86	m mg/Kg	1	6.00	< 0.00930	98	79.1 - 107	0	20

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

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Work Order: 10072716 Teppco C-13 Hobbs Line 8 in. Page Number: 7 of 9

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.84	1.80	mg/Kg	1	2.00	92	90	70.2 - 114
4-Bromofluorobenzene (4-BFB)	1.78	1.80	${ m mg/Kg}$	1	2.00	89	90	69.8 - 121

Matrix Spike (MS-1) Spiked Sample: 238737

QC Batch: 72135 Date Analyzed:

2010-07-28

Analyzed By: kg Prepared By: kg

Prep Batch: 61817

QC Preparation:

2010-07-28

	MS			Spike	Matrix		${ m Rec.}$
Param	Result	${ m Units}$	Dil.	Amount	Result	Rec.	Limit
C6-C12	249	mg/Kg	1	250	<10.5	100	18.8 - 120.7
>C12-C35	238	mg/Kg	1	250	<13.0	95	10 - 196.2

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
C6-C12	250	mg/Kg	1	250	<10.5	100	18.8 - 120.7	0	20
>C12-C35	240	mg/Kg	1	250	<13.0	96	10 - 196.2	1	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.	$\operatorname{Limit}$
n-Triacontane	88.8	85.5	mg/Kg	1	100	89	86	70 - 130
n-Octane	113	. 111	mg/Kg	1	100	113	111	70 - 130
n-Tricosane	96.6	94.2	mg/Kg	1	100	97	94	70 - 130

Matrix Spike (MS-1) Spiked Sample: 238784

QC Batch: 72137 Prep Batch: 61819 Date Analyzed: QC Preparation: 2010-07-28

2010-07-28

Analyzed By: AG Prepared By: AG

MS Spike Matrix Rec. Param Result Units Dil. Amount Result Limit Rec. Benzene 2.09 mg/Kg 2.00 0.031 10380.5 - 112 1 Toluene 2.06 mg/Kg 2.00< 0.00950 103 82.4 - 113 1 Ethylbenzene 2.05mg/Kg 1 2.00 83.9 - 114 < 0.0106 102 6.20Xylene mg/Kg 1 6.00 < 0.00930 103 84 - 114

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.	$\operatorname{Limit}$	RPD	Limit
Benzene	2.21	mg/Kg	1	2.00	0.031	109	80.5 - 112	6	20

 $continued \dots$ 

700348.009.01

Work Order: 10072716 Teppco C-13 Hobbs Line 8 in. Page Number: 8 of 9

matrix	enikee	continued		
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	MSD			Spike	Matrix		${ m Rec.}$		RPD
Param	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Toluene	2.20	mg/Kg	1	2.00	< 0.00950	110	82.4 - 113	7	20
Ethylbenzene	2.21	mg/Kg	1	2.00	< 0.0106	110	83.9 - 114	8	20
Xylene	6.69	mg/Kg	1	6.00	< 0.00930	112	84 - 114	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	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	1.17	1.60	mg/Kg	1	2	58	80	41.3 - 117
4-Bromofluorobenzene (4-BFB)	1.21	1.59	mg/Kg	1	2	60	80	35.5 - 129

#### Standard (CCV-2)

QC Batch: 72135

Date Analyzed: 2010-07-28

Analyzed By: kg

			$\mathbf{CCVs}$	CCVs	CCVs	Percent	
			True	Found	Percent	Recovery	Date
Param	$\mathbf{Flag}$	Units	Conc.	Conc.	Recovery	Limits	Analyzed
C6-C12		mg/Kg	250	263	105	75 - 125	2010-07-28
>C12-C35		$\mathrm{mg}/\mathrm{Kg}$	250	237	95	75 - 125	2010-07-28

#### Standard (CCV-3)

QC Batch: 72135

Date Analyzed: 2010-07-28

Analyzed By: kg

			CCVs	CCVs	CCVs	Percent	
			$\operatorname{True}$	Found	Percent	Recovery	Date
Param	$\operatorname{Flag}$	Units	Conc.	Conc.	Recovery	Limits	Analyzed
C6-C12		mg/Kg	250	278	111	75 - 125	2010-07-28
>C12-C35		mg/Kg	250	262	105	75 - 125	2010-07-28

#### Standard (CCV-4)

QC Batch: 72135

Date Analyzed: 2010-07-28

Analyzed By: kg

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\operatorname{CCVs}$	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
C6-C12		mg/Kg	250	268	107	75 - 125	2010-07-28
>C12-C35		mg/Kg	250	257	103	75 - 125	2010-07-28

#### Standard (CCV-1)

QC Batch: 72137

Date Analyzed: 2010-07-28

Analyzed By: AG

700348.009.01

Work Order: 10072716 Teppco C-13 Hobbs Line 8 in. Page Number: 9 of 9

Param	$\operatorname{Flag}$	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0979	98	80 - 120	2010-07-28
Toluene		mg/Kg	0.100	0.0972	97	80 - 120	2010-07-28
Ethylbenzene		$_{ m mg/Kg}$	0.100	0.0925	92	80 - 120	2010-07-28
Xylene		mg/Kg	0.300	0.282	94	80 - 120	2010-07-28

### Standard (CCV-2)

QC Batch: 72137

Date Analyzed: 2010-07-28

Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	$\begin{array}{c} \text{Date} \\ \text{Analyzed} \end{array}$
Benzene		mg/Kg	0.100	0.0970	97	80 - 120	2010-07-28
Toluene		mg/Kg	0.100	0.0959	96	80 - 120	2010-07-28
Ethylbenzene		mg/Kg	0.100	0.0929	93	80 - 120	2010-07-28
Xylene		${ m mg/Kg}$	0.300	0.280	93	80 - 120	2010-07-28

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#### TALON/LPE

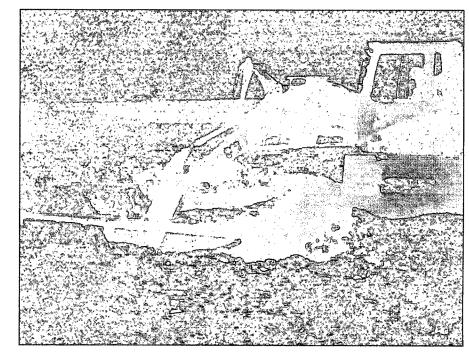
Client: Enterprise Crude Pipeline, LLC Location: Hobbs C-13 8" Pipeline Project Number: 700348.009.01

Photographic Documentation

Prepared by: Shyla Harris Photographer: Shyla Harris

Photograph No. 1

**Direction:**North



#### Description:

Excavation activities adjacent to the pipeline and along the flow path

Photograph No. 2

Direction:

NA

**Description:** 

Excavation beneath the source area of the pipeline



#### TALON/LPE

Photographic Documentation

Client: Enterprise Crude Pipeline, LLC Location: Hobbs C-13 8" Pipeline Project Number: 700348.009.01

Prepared by: Shyla Harris Photographer: Shyla Harris

Photograph No. 3

**Direction:** East

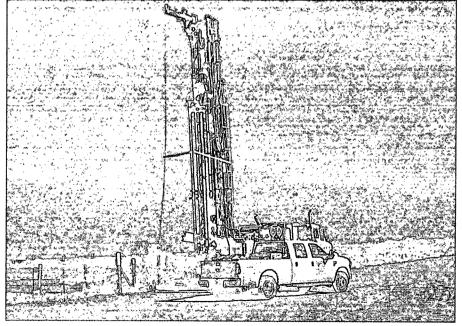
**Description:**Removal of soil stockpiles into trucks for disposal



Photograph No. 4

**Direction:** Northwest

**Description:**Drilling rig utilized for soil borings during the limited site assessment



#### TALON/LPE

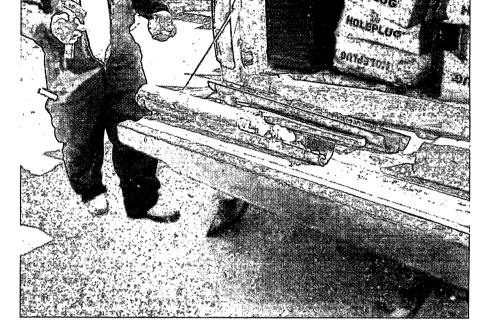
Client: Enterprise Crude Pipeline, LLC Location: Hobbs C-13 8" Pipeline Project Number: 700348.009.01

## Photographic Documentation

Prepared by: Shyla Harris Photographer: Shyla Harris

Photograph No. 5

**Direction:** NA



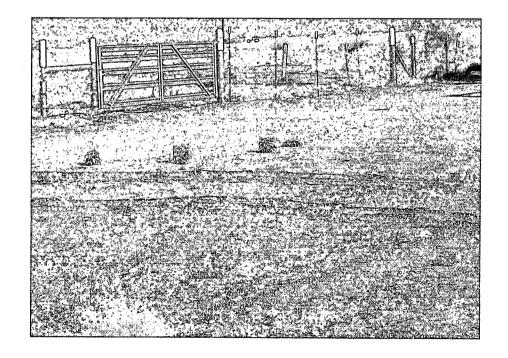
**Description:** 

Split spoon core during soil boring activities

Photograph No. 6

**Direction:** West

**Description:** Reclaimed site



#### **SOIL BORING / MONITORING WELL LOG**

PROJEC	Т: Терро	co Hobbs C-13 F	Pipeline				DRILLING COMPANY: Talon/LPE		
		ER: <u>700348.009</u>							
		Crude Pipeline,							
1		NUMBER: <u>BH-3</u>							-
TOTAL D									-
GEOLOG		ATION: <u>NA</u> vla Harris					DATE DON'T DE TIONIO		
020200		<u>Jia i iaiiio</u>						3E 1	of 1
		on							
Depth (FT.)		Well Construction	sbu			_			
oth (	_	onst	PID Readings	န္ဓ	n —	Description Interval	Description of Stratum	ļ	Depth (FT.)
Del	Soil Symbol	Ŭ ₩	%	Samples	Sample Interval	scrip			pth
	Syl	×	l l	Sa	Sai	ng p			De
0	22.54			Н			Convert Well granded design calcite consentation light house (EVD C/A)		0_
			0.0				Gravel. Well graded, dense, calcite cementation, light brown (5YR 6/4). No odor.		
	25		0.0			10'			
							Bottom of hole.		
15									15
								$\exists$	
30								$\dashv$	30
45								+	45
								_	
60	•							$\dashv$	60
+									
									75
75	1								73
		,							1
+-								$\dashv$	
90									90
30									
+						İ		$\dashv$	
REMAR	SKS.								_
· VEIVIAI		THIS ROD	ING LOG	SHO	אם חוות	TRELIE	ED SEPARATELY FROM THE ORIGINAL REPORT.		
		A HO BOK		J. 10	JLU NO	. 55 03	SEL MATLET HOW THE ORIGINAL REPORT.	15	======================================

#### **SOIL BORING / MONITORING WELL LOG**

PROJECT	T: Teppe	co Hobbs C-13 F	Pipeline				DRILLING COMPANY: Talon/LPE									
PROJECT	T NUMBI	ER: 700348.009	9.01				DRILLER: Jose Salas									
CLIENT:	Террсо	Crude Pipeline,	LLC				DRILLING METHOD: air rotary									
BORING	/ WELL N	NUMBER: BH-5	<u> </u>				BORE HOLE DIAMETER: 7 7/8"									
TOTAL D	_						SCREEN: Diam. NA Length NA Slot Size NA									
		TION: NA							<del></del>							
GEOLOG	IST: <u>Sh</u>	yla Harris		<del></del>			DATE DRILLED: 7/23/10	<u></u>	1 of 1							
				П		<u> </u>	170		1 01 1							
Depth (FT.)	Soil Symbol	Well Construction	PID Readings	Samples	Sample Interval	Description Interval	Description of Stratum		Depth (FT.)							
0	XXXX								0							
30			39.1 42.1 38.5 16.5 20.5 0.0			20' 21' 25'	Sandy Gravel. Well graded, dry, calcite cementation, moderate orange pink (5YR 8/4). Slight hydrocarbon odor. Gravel. Poorly graded, dry, calcite cementation, grayish orange (10YR 7/4). No odor. Sand. Well graded. Less than 25% silt and gravel. Dry, light brown (5YR 6/4) sand. No odor.  Bottom of hole.		30 45 60							
90									90							
							j									
								$\exists$								
REMARKS:  THIS BORING LOG SHOULD NOT BE USED SEPARATELY FROM THE ORIGINAL REPORT.																

#### **SOIL BORING / MONITORING WELL LOG**

PROJEC <sup>*</sup>	T: Teppo	co Hobbs C-13 F	Pipeline				DRILLING COMPANY: Talon/LPE								
PROJEC <sup>*</sup>	T NUMBI	ER: <u>700348.009</u>	9.01				DRILLER: Jose Salas								
CLIENT:	Террсо	Crude Pipeline,	LLC				DRILLING METHOD: air rotary								
BORING	/ WELL N	NUMBER: BH-6	3				BORE HOLE DIAMETER: 7 7/8"								
TOTAL D	EPTH: 9	90'					SCREEN: Diam. NA Length NA Slot Size N	4							
SURFACI	E ELEVA	TION: NA					CASING: Diam. NA Length NA Type NA								
GEOLOG	IST: <u>Sh</u>	yla Harris				······································	DATE DRILLED: 7/23/10								
	[		·		<u> </u>	1	PA	GE 1	1 of 1						
Depth (FT.)	Soil Symbol	Well Construction	PID Readings	Samples	Sample Interval	Description Interval	Description of Stratum		Depth (FT.)						
0	n canno						(40.8.7%)	Ľ	0						
	1.61300						Silty Sand. Poorly graded, dry, grayish orange (10yR 7/4). No odor.		-						
l <del> </del>	1 13 12 1		0.0						1						
	1111111								1						
15			١ , ,	l				_	15						
"	1.63.66		0.0												
<del>                                     </del>				$\vdash$		20'	Sandy Gravel. Well graded, dry, calcite cementation, moderate orange	$\vdash$	1						
							pink (5YR 8/4). No odor.								
	<b>***</b>		0.0					Н							
30	A C					30'			30						
50							Sand. Poorly graded, fine grained, dry, light brown (5YR 6/4). No odor.								
-	77.53		0.0												
			0.0												
								H							
45									45						
45		4	0.0												
-		3,							ĺ						
	1332														
+			0.0												
co									60						
60								П							
-			0.0												
	(ii);;;;;;		0.0	Н		70'									
1				Н		70	Limestone. Dry, grayish orange (10YR 7/4). No odor.	Н							
75				H					75						
/3 ] ]			0.0					П							
-				П				Ш							
		er.													
+			0.0					H							
						90'			90						
90							Bottom of hole.	П							
$\perp$															
DEMA	21/0														
REMAI	KKS:						TALC	)[	V						
		THIS BOR	ING LOG	SHC	OULD NO	II BE US	SED SEPARATELY FROM THE ORIGINAL REPORT.								

## **KEY TO SYMBOLS**

Symbol Description

Strata symbols

Well graded gravel



Fill



Well graded gravel and sand



Poorly graded gravel



Well graded sand



Poorly graded sand with silt



Poorly graded sand



Limestone

Monitor Well Details



No pipe, sealed

#### Sundance Services, Inc. TICKET NO 1000 100 P.O. Box 1737 \* Eunice, New Mexico 88231 (575) 394-2511 LEASE OPERATOR/SHIPPER/COMPANY: TRANSPORTER COMPANY: / /// AM/PM TIME GENERATOR COMPANY //YEHICLE NO.: 文章 MAN'S NAME: **RIG NAME CHARGE TO:** AND NUMBER TYPE OF MATERIAL [ ] Production Water [ ] Drilling Fluids [] Rinsate Y Contaminated Soil [ ] Tank Bottoms [ ] Jet Out [ ] Solids [ ] Call Out Description: RRC or API # VOLUME OF MATERIAL [ ] BBLS. AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET, OPERATOR/SHIPPER REPRESENTS AND WARRANTS THAT THE WASTE MATERIAL SHIPPED HEREWITH IS MATERIAL EXEMPT FROM THE RESOURCE, CONSERVATION AND RECOVERY ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. § 6901, ct seq., THE NM HEALTH AND SAF. CODE § 361,001 ct seq., AND REGULATIONS RELATED THERETO, BY VIRTUE OF THE EXEMPTION AFFORDED DRILLING FLUIDS, PRODUCED WATERS, AND OTHER WASTE ASSOCIATED WITH THE EXPLORATION, DEVELOPMENT OR PRODUCTION OF CRUDE OIL OR NATURAL GAS OR GEOTHERMAL ENERGY. ALSO AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET, TRANSPORTER REPRESENTS AND WARRANTS THAT ONLY THE MATERIAL DELIVERED BY OPERATOR/SHIPPER TO TRANSPORTER IS NOW DELIVERED BY TRANSPORTER TO SUNDANCE SERVICES, INC.'S FACILITY FOR DISPOSAL. THIS WILL CERTIFY that the above Transporter loaded the material represented by this Transporter Statement at the above described location, and that it was tendered by the above described shipper. This will certify that no additional materials were added to this load, and that the material was delivered without incident. DRIVER: (SIGNATÚŘE FACILITY REPRESENTATIVE: (SIGNATURE)

White - Sundance

Revised 09/09

Canary - Sundance Acct #1

Pink - Transporter

Superior Printing Service, Inc.

## Sundance Services, Inc. P.O. Box 1737 \* Eunice, New Mexico 88231

TICKET N.C. 198311

	(575) 394-2511	
LEASE OPERATOR	/SHIPPER/COMPANY:	namentary Portugues de Communication de la Com
LEASE NAME: 🔏	13 Holyba-Hid	Vand -
TRANSPORTER CO	Carlotte State Sta	TIME /:/ 8 AM/PM
DATE: 0/20/10 V	EHICLE NO.: 64	GENERATOR COMPANY SKULO Harris
CHARGE TO:	a.16n_	RIG NAME AND NUMBER
Victor 631-222 Joe (432)557	2) -1917 TYPE OF 1	MATERIAL
[ ] Production Water	[ ] Drilling Fluids	[ ] Rinsate
[ ] Tank Bottoms	[ ] BS&W Content:	
	<u> </u>	× ×
Description:	010	Company of the Compan
RRC or API #		
VOLUME OF MATER	IAL [ ] BBLS.	_: M YARD <u> </u>
JOB TICKET, OPERATOR/S MATERIAL EXEMPT FROM TO TIME, 40 U.S.C. § 6901, THERETO, BY VIRTUE OF	HIPPER REPRESENTS AND WARRA I THE RESOURCE, CONSERVATION ct seq., THE NM HEALTH AND SAF. THE EXEMPTION AFFORDED DRIL	CEPTANCE OF THE MATERIALS SHIPPED WITH THIS NOTS THAT THE WASTE MATERIAL SHIPPED HEREWITH IS I AND RECOVERY ACT OF 1976, AS AMENDED FROM TIME CODE § 361.001 et seq., AND REGULATIONS RELATED LING FLUIDS, PRODUCED WATERS, AND OTHER WASTE PRODUCTION OF CRUDE OIL OR NATURAL GAS OR
JOB TICKET, TRANSPORTI	R REPRESENTS AND WARRANTS	L'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS THAT ONLY THE MATERIAL DELIVERED BY BY TRANSPORTER TO SUNDANCE SERVICES, INC.'S
Trànsporter Statement	at the above described location that no additional materials	er loaded the material represented by this n, and that it was tendered by the above described were added to this load, and that the material was
DRIVER: (SIGNATURE) FACILITY REPRESENTATI		my
White - Sundance Canary - S	(SIGNATURE) Sundance Acct #1 Pink - Transporter	
Revised 09/09	Fine Hauspones	Superior Printing Service, Inc.

## Sundance Services, Inc. P.O. Box 1737 \* Eunice, New Mexico 88231

TICKET NO. 139366

	(575) 394-2511		
LEASE OPERATOR/SH	160	lon	
LEASE NAME:	3 Hobbs-Min	Hand	. Agricultura
TRANSPORTER COMP	<del>,,</del>	TIME	3/38 AM/PM)
DATE: ちかんO VEHI	CLE NO.:	GENERATOR COMPANY MAN'S NAME:	Kula Harri
CHARGE TO: 70	lon	RIG NAME AND NUMBER	<u> </u>
	TYPE OF MA	TERIAL	
[ ] Production Water	[ ],Drilling Fluids	[]Rinsal	e
[ ] Tank Bottoms	Contaminated Soil	[ ] Jet Ou	
[ ] Solids	[ ] BS&W Content:	[ ] Call O	ut
Description:	)		
RRC or API #			
VOLUME OF MATERIAL	. [ ] BBLS	: ¡X YARD _&	<u> </u>
JOB TICKET, OPERATOR/SHIPP MATERIAL EXEMPT FROM THE TO TIME, 40 U.S.C. § 6901, et sec THERETO, BY VIRTUE OF THE	NDANCE SERVICES, INC.'S ACCEPER REPRESENTS AND WARRANTS E RESOURCE, CONSERVATION AN A., THE NM HEALTH AND SAF, COI EXEMPTION AFFORDED DRILLIN DRATION, DEVELOPMENT OR PRO	S THAT THE WASTE MATERIA D RECOVERY ACT OF 1976, A DE § 361.001 et seq., AND REGU IG FLUIDS, PRODUCED WATE	L SHIPPED HEREWITH IS S AMENDED FROM TIME JLATIONS RELATED RS, AND OTHER WASTE
JOB TICKET, TRANSPORTER RI	TO SUNDANCE SERVICES, INC.'S A SPRESENTS AND WARRANTS THA SPORTER IS NOW DELIVERED BY	T ONLY THE MATERIAL DEL	IVERED BY
Trànsporter Statement at th	Y that the above Transporter l te above described location, a at no additional materials we	and that it was tendered by	the above described
DRIVER:	2		
(SIGNATURE) FACILITY REPRESENTATIVE:	Ada Sta	Cruss.	
	(SIGNATURE)	7)	
White, Sundance Canary - Sundar Revised 09/09	nce Acct #1 Pink - Transporter	Camerado	Superior Printing Service, Inc.

#### Sundance Services, Inc. TICKET NO 139389 P.O. Box 1737 ★ Eunice, New Mexico 88231 (575) 394-2511 LEASE OPERATOR/SHIPPER/COMPANY: LEASE NAME: (1-13 TRANSPORTER COMPANY: TIME DATE: ちんない VEHICLE NO.: MAN'S NAME: RIG NAME AND NUMBER **CHARGE TO:** alon TYPE OF MATERIAL [ ] Drilling Fluids [ ] Production Water [] Rinsate [ ] Tank Bottoms (/) Contaminated Soil [ ] Jet Out [ ] Solids BS&W Content: \_\_ [ ] Call Out Description: RRC or API # **VOLUME OF MATERIAL [ ] BBLS.** KIYARD 📈: [] AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET, OPERATOR/SHIPPER REPRESENTS AND WARRANTS THAT THE WASTE MATERIAL SHIPPED HEREWITH IS MATERIAL EXEMPT FROM THE RESOURCE, CONSERVATION AND RECOVERY ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. § 6901, ct seq., THE NM HEALTH AND SAF. CODE § 361.001 ct seq., AND REGULATIONS RELATED THERETO, BY VIRTUE OF THE EXEMPTION AFFORDED DRILLING FLUIDS, PRODUCED WATERS, AND OTHER WASTE ASSOCIATED WITH THE EXPLORATION, DEVELOPMENT OR PRODUCTION OF CRUDE OIL OR NATURAL GAS OR GEOTHERMAL ENERGY. ALSO AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET, TRANSPORTER REPRESENTS AND WARRANTS THAT ONLY THE MATERIAL DELIVERED BY OPERATOR/SHIPPER TO TRANSPORTER IS NOW DELIVERED BY TRANSPORTER TO SUNDANCE SERVICES, INC.'S FACILITY FOR DISPOSAL. THIS WILL CERTIFY that the above Transporter loaded the material represented by this

Transporter Statement at the above described location, and that it was tendered by the above described shipper. This will certify that no additional materials were added to this load, and that the material was

Superior Printing Service, Inc.

(SIGNATURE)

Pink - Transporter

delivered without incident.

**FACILITY REPRESENTATIVE:** 

Canary - Sundance Acct #1

White - Sundance

Revised 09/09

## Sundance Services, Inc. P.O. Box 1737 \* Eunice, New Mexico 88231

(575) 394-2511

TICKET NO. 199385

L			
LEASE OPERATOR/SHIPPE	R/COMPANY: TALLO	i	
LEASE NAME: ( - / ?	Hill M.	Hant	
TRANSPORTER COMPANY	Libro Servi	C ( )	TIME STORE AM/PM
DATE: 5-20-10 VEHICLE	NO.: 🤗 🤈 GEN	IERATOR COMPANY MAN'S NAME	
CHARGE TO:		RIG NAME AND NUMBER	R
	TYPE OF MATE	RIAL	
[ ] Production Water	[ ] Drilling Fluids	[]	Rinsate
[ ] Tank Bottoms	[[/] Contaminated Soil	[]	Jet Out
[ ] Solids	[ ] BS&W Content:	[]	Call Out
Description: 0/1			
RRC or API #			
VOLUME OF MATERIAL [ ]	BBLS:	[V] YARD _	<del>20:[]</del>
AS A CONDITION TO SUNDAN JOB TICKET, OPERATOR/SHIPPER REMATERIAL EXEMPT FROM THE RESO TO TIME, 40 U.S.C. § 6901, at seq., THE THERETO, BY VIRTUE OF THE EXEM ASSOCIATED WITH THE EXPLORATIOGEOTHERMAL ENERGY.	OURCE, CONSERVATION AND REC ENM HEALTH AND SAF. CODE § 3 IPTION AFFORDED DRILLING FLA	T THE WASTE M. COVERY ACT OF 161.001 et seq., AN JIDS, PRODUCEE	ATERIAL SHIPPED HEREWITH IS 1976, AS AMENDED FROM TIME D REGULATIONS RELATED D WATERS, AND OTHER WASTE
ALSO AS A CONDITION TO SUI JOB TICKET, TRANSPORTER REPRES. OPERATOR/SHIPPER TO TRANSPORT. FACILITY FOR DISPOSAL.		LY THE MATERIA	AL DELIVERED BY
Trànsporter Statement at the abo shipper. This wift certify that no delivered without incident.	the above Transporter loade ove described location, and the additional materials were add	iat it was tende	ered by the above described
(SIĞNATURÉ) FACILITY REPRESENTATIVE:	(SIGNATURE)		
White - Sundance Canary - Sundance Acct Revised 09/09	#1 Pink - Transporter		Superior Printing Service, Inc.

#### Sundance Services, Inc. TICKET 313 139388 P.O. Box 1737 \* Eunice, New Mexico 88231 (575) 394-2511 LEASE OPERATOR/SHIPPER/COMPANY: LEASE NAME: AM/PM TRANSPORTER COMPANY: TIME / GENERATOR COMPANY MAN'S NAME: RIG NAME **CHARGE TO:** AND NUMBER TYPE OF MATERIAL [ ] Drilling Fluids [ ] Production Water [ ] Rinsate [ ] Tank Bottoms [x] Contaminated Soil [ ] Jet Out [ ] BS&W Content: [ ] Solids [ ] Call Out Description: RRC or API# VOLUME OF MATERIAL [ ] BBLS. [Y] YARD & .: []\_ AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET, OPERATOR/SHIPPER REPRESENTS AND WARRANTS THAT THE WASTE MATERIAL SHIPPED HEREWITH IS MATERIAL EXEMPT FROM THE RESOURCE, CONSERVATION AND RECOVERY ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. § 6901, et seq., THE NM HEALTH AND SAF. CODE § 361.001 et seq., AND REGULATIONS RELATED THERETO, BY VIRTUE OF THE EXEMPTION AFFORDED DRILLING FLUIDS, PRODUCED WATERS, AND OTHER WASTE ASSOCIATED WITH THE EXPLORATION, DEVELOPMENT OR PRODUCTION OF CRUDE OIL OR NATURAL GAS OR GEOTHERMAL ENERGY. ALSO AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET, TRANSPORTER REPRESENTS AND WARRANTS THAT ONLY THE MATERIAL DELIVERED BY OPERATOR/SHIPPER TO TRANSPORTER IS NOW DELIVERED BY TRANSPORTER TO SUNDANCE SERVICES, INC.'S FACILITY FOR DISPOSAL. THIS WILL CERTIFY that the above Transporter loaded the material represented by this Transporter Statement at the above described location, and that it was tendered by the above described

shipper. This will certify that no additional materials were added to this load, and that the material was

Superior Printing Service, Inc.

(SIGNATURE)

Pink - Transporter

delivered without incident.

White - Sundance

Revised 09/09

FACILITY REPRESENTATIVE: ( 5) 11

Canary - Sundance Acci #1

## Sundance Services, Inc. P.O. Box 1737 \* Eunice, New Mexico 88231

(575) 394-2511

TICKET NO. 199401

\									
LEASE OPERATOR/SHIPP	ER/COMPANY: Te	lon							
LEASE NAME:	11.11.15 40	Alichard							
TRANSPORTER COMPANY	1: 10 mm	POYCES TIME (152 AMPM							
DATE: 5-20-18 VEHICLE	NO.: 627	GENERATOR COMPANY MAN'S NAME:							
CHARGE TO: TOLLOW		RIG NAME AND NUMBER							
	TYPE OF M	IATERIAL							
[ ] Production Water	[ ] Drilling Fluids	[ ] Rinsate							
[ ] Tank Bottoms	[√] Contaminated Soil	[ ] Jet Out							
[ ] Solids	[ ] BS&W Content:	[ ] Call Out							
Description:	<u>}</u>								
RRC or API #									
VOLUME OF MATERIAL [ ]	BBLS.	_: [X YARD <u>2</u> : []							
JOB TICKET, OPERATOR/SHIPPER R MATERIAL EXEMPT FROM THE RES TO TIME, 40 U.S.C. § 6901, ct seq., TH THERETO, BY VIRTUE OF THE EXE ASSOCIATED WITH THE EXPLORAT GEOTHERMAL ENERGY.	EPRESENTS AND WARRAN SOURCE, CONSERVATION A IE NM HEALTH AND SAF. COMPTION AFFORDED DRILLE TON, DEVELOPMENT OR PI	EPTANCE OF THE MATERIALS SHIPPED WITH THIS ITS THAT THE WASTE MATERIAL SHIPPED HEREWITH IS AND RECOVERY ACT OF 1976, AS AMENDED FROM TIME CODE § 361.001 et seq., AND REGULATIONS RELATED LING FLUIDS, PRODUCED WATERS, AND OTHER WASTE RODUCTION OF CRUDE OIL OR NATURAL GAS OR							
JOB TICKET, TRANSPORTER REPRE	SENTS AND WARRANTS TH	S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS HAT ONLY THE MATERIAL DELIVERED BY TRANSPORTER TO SUNDANCE SERVICES, INC.'S							
THIS WILL CERTIFY that the above Transporter loaded the material represented by this Transporter Statement at the above described location, and that it was tendered by the above described shipper. This will certify that no additional materials were added to this load, and that the material was delivered without incident.  DRIVER: (SIGNATURE)									
	SIGNATURE)								
White - Sundance Canary - Sundance Ac Revised 09/09	ct #1 Pink - Transporter	Superior Printing Service, Inc.							

## Sundance Services, Inc. P.O. Box 1737 \* Eunice, New Mexico 88231

(575) 394-2511

TICKET NO 139403

LEASE OPERATOR/SH	IPPER/COMPANY: 72	LON		
LEASE NAME:	C-73 //asa	S- ALIDEAN	0	
TRANSPORTER COMP	ANY: LOBO Selection	\$\frac{1}{2}	NE 203	AM/PM
DATE:5/20 VEHI	CLE NO.: 6 K	GENERATOR COMPANY MAN'S NAME:	hylaska	د المالية
CHARGE TO: 7AC	01	RIG NAME AND NUMBER		
	TYPE OF MA	ATERIAL		
[ ] Production Water	[ ] Drilling Fluids	[ ] Rin	sate	
[ ] Tank Bottoms	{-[] Contaminated Soil	[ ] Jet	Out	
[ ] Solids	[ ] BS&W Content:	[ ] Cal	Out	
Description:	0/0			
RRC or API #				
VOLUME OF MATERIAL	[ ] BBLS	: A YARD	<u> </u>	
JOB TICKET, OPERATOR/SHIPP, MATERIAL EXEMPT FROM THI TO TIME, 40 U.S.C. § 6901, et seq THERETO, BY VIRTUE OF THE	NDANCE SERVICES, INC.'S ACCE ER REPRESENTS AND WARRANT E RESOURCE, CONSERVATION AT THE NM HEALTH AND SAF. CO EXEMPTION AFFORDED DRILLI DRATION, DEVELOPMENT OR PR	'S THAT THE WASTE MATE: ND RECOVERY ACT OF 1970 DDE § 361.001 et seq., AND RI NG FLUIDS, PRODUCED WA	RIAL SHIPPED HI S, AS AMENDED F EGULATIONS REI TERS, AND OTHI	EREWITH IS FROM TIME LATED ER WASTE
JOB TICKET, TRANSPORTER RE	O SUNDANCE SERVICES, INC.'S PRESENTS AND WARRANTS TH PORTER IS NOW DELIVERED BY	AT ONLY THE MATERIAL D	ELIVERED BY	
Trànsporter Statement at th	I that the above Transporter e above described location, at no additional materials we	and that it was tendered	by the above of	described
DRIVER: (SIGNATURE)				
FACILITY REPRESENTATIVE:			:	
	(SIGNATURE)	i Gij		
White - Sundance Canary - Sundan Revised 09/09	ce Acet #1 Pink - Transporter		Superior Print	ing Service, Inc.

### Sundance Services, Inc.

P.O. Box 1737 \* Eunice, New Mexico 88231

TICKET \$10 108410

(575) 394-2511 LEASE OPERATOR/SHIPPER/COMPANY: LEASE NAME: TRANSPORTER COMPANY: TIME AM/PM 18 7 W.C. 8 " GENERATOR COMPANY DATE: 501.10 VEHICLE NO.: 9 MAN'S NAME: RIG NAME AND NUMBER **CHARGE TO:** TYPE OF MATERIAL [ ] Production Water [ ] Drilling Fluids [ ] Rinsate Contaminated Soil [ ] Tank Bottoms [ ] Jet Out [ ] Solids BS&W Content: f ] Call Out Description: \_\_\_ RRC or API# VOLUME OF MATERIAL [ ] BBLS. \_ AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET, OPERATOR/SHIPPER REPRESENTS AND WARRANTS THAT THE WASTE MATERIAL SHIPPED HEREWITH IS MATERIAL EXEMPT FROM THE RESOURCE, CONSERVATION AND RECOVERY ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. § 6901, ct seq., THE NM HEALTH AND SAF, CODE § 361,001 et seq., AND REGULATIONS RELATED THERETO, BY VIRTUE OF THE EXEMPTION AFFORDED DRILLING FLUIDS, PRODUCED WATERS, AND OTHER WASTE ASSOCIATED WITH THE EXPLORATION, DEVELOPMENT OR PRODUCTION OF CRUDE OIL OR NATURAL GAS OR GEOTHERMAL ENERGY. ALSO AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET, TRANSPORTER REPRESENTS AND WARRANTS THAT ONLY THE MATERIAL DELIVERED BY OPERATOR/SHIPPER TO TRANSPORTER IS NOW DELIVERED BY TRANSPORTER TO SUNDANCE SERVICES, INC.'S FACILITY FOR DISPOSAL. THIS WILL CERTIFY that the above Transporter loaded the material represented by this Trànsporter Statement at the above described location, and that it was tendered by the above described shipper. This will certify that no additional materials were added to this load, and that the material was delivered without incident. DRIVER: (SIGNATURE) FACILITY REPRESENTATIVE: (SIGNATURE) White - Sundance Canary - Sundance Acct #1 Pink - Transporter Revised 09/09 Superior Printing Service, Inc.

# Sundance Services, Inc. P.O. Box 1737 \* Eunice, New Mexico 88231 (575) 394-2511

TICKET NO. 139417

	(575) 394-2511	
LEASE OPERATOR/SHI	PPER/COMPANY: 7	1 .
LEASE NAME:	2 Holder as Ale	Maria I
TRANSPORTER COMPA	<u> </u>	VICES TIME / / AM/PM
DATE: 5.21.10 VEHIC	CLE NO.: // L/	MERATOR COMPANY MAN'S NAME:
CHARGE TO:	7,	RIG NAME AND NUMBER
	TYPE OF MATE	RIAL
[ ] Production Water [ ] Tank Bottoms [ ] Solids	[ ] Drilling Fluids [ ] Contaminated Soil [ ] BS&W Content:	[ ] Rinsate [ ] Jet Out [ ] Call Out
Description:		
RRC or API #		
VOLUME OF MATERIAL	[ ] BBLS:	M YARD: []
JOB TICKET, OPERATOR/SHIPPE MATERIAL EXEMPT FROM THE TO TIME, 40 U.S.C. § 6901, ct seq. THERETO, BY VIRTUE OF THE I	R REPRESENTS AND WARRANTS TH. RESOURCE, CONSERVATION AND RE , THE NM HEALTH AND SAF. CODE § EXEMPTION AFFORDED DRILLING FI	CE OF THE MATERIALS SHIPPED WITH THIS AT THE WASTE MATERIAL SHIPPED HEREWITH IS ECOVERY ACT OF 1976, AS AMENDED FROM TIME 361.001 et seq., AND REGULATIONS RELATED LUIDS, PRODUCED WATERS, AND OTHER WASTE CTION OF CRUDE OIL OR NATURAL GAS OR
JOB TICKET, TRANSPORTER RE	PRESENTS AND WARRANTS THAT ON	EPTANCE OF THE MATERIALS SHIPPED WITH THIS NLY THE MATERIAL DELIVERED BY NSPORTER TO SUNDANCE SERVICES, INC.'S
Trànsporter Statement at the	e above described location, and t	led the material represented by this that it was tendered by the above described dded to this load, and that the material was
DRIVER: (SIGNATURE)	Sujan	
FACILITY REPRESENTATIVE:	(SIGNATURE)	
White - Sundance Canary - Sundance Revised 09/09	ee Acct #1 Pink - Transporter	Superior Printing Service, Inc.

#### Sundance Services, Inc. TICKET !!! 110455 P.O. Box 1737 \* Eunice, New Mexico 88231 (575) 394-2511 LEASE OPERATOR/SHIPPER/COMPANY: LEASE NAME: TRANSPORTER COMPANY: TIME / AM/PM GENERATOR COMPANY DATE: 5.71.10 VEHICLE NO.: MAN'S NAME: RIG NAME AND NUMBER CHARGE TO: TYPE OF MATERIAL [ ] Production Water [ ] Drilling Fluids [] Rinsate [ ] Tank Bottoms Contaminated Soil [ ] Jet Out [ ] BS&W Content: \_\_\_\_\_ [ ] Solids [ ] Call Out Description: \_\_ RRC or API# VOLUME OF MATERIAL [ ] BBLS. \_\_ []] YARD AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET, OPERATOR/SHIPPER REPRESENTS AND WARRANTS THAT THE WASTE MATERIAL SHIPPED HEREWITH IS MATERIAL EXEMPT FROM THE RESOURCE, CONSERVATION AND RECOVERY ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. § 6901, et seq., THE NM HEALTH AND SAF. CODE § 361.001 et seq., AND REGULATIONS RELATED THERETO, BY VIRTUE OF THE EXEMPTION AFFORDED DRILLING FLUIDS, PRODUCED WATERS, AND OTHER WASTE ASSOCIATED WITH THE EXPLORATION, DEVELOPMENT OR PRODUCTION OF CRUDE OIL OR NATURAL GAS OR GEOTHERMAL ENERGY. ALSO AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET, TRANSPORTER REPRESENTS AND WARRANTS THAT ONLY THE MATERIAL DELIVERED BY OPERATOR/SHIPPER TO TRANSPORTER IS NOW DELIVERED BY TRANSPORTER TO SUNDANCE SERVICES, INC.'S FACILITY FOR DISPOSAL. THIS WILL CERTIFY that the above Transporter loaded the material represented by this Transporter Statement at the above described location, and that it was tendered by the above described shipper. This will certify that no additional materials were added to this load, and that the material was delivered without incident.

FACILITY REPRESENTATIVE:

Canary - Sundance Acct #1

White - Sundance

Revised 09/09

(SIGNATURE)

Pink - Transporter

Superior Printing Service, Inc.

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

#### State of New Mexico **Energy Minerals and Natural Resources**

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

Form C-141

Revised October 10, 2003

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

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Release Notification and Corrective Action															
						OPERA'	TOR		Initi	al Report		Final Report			
Name of Co	ompany E	nterprise Cn	ude Pipel	ine		Contact Jen	nifer Corser					*,			
Address c/c	Environ.	Dept. PO Bo	x 2521 F	louston, TX 772	252	Telephone 1	No. 432-230-14	14							
Facility Na					]	Facility Typ	e Pipeline								
Surface Ow	ner Brian	Ussery		Mineral (	Owner	er N/A Lease No.N/A									
				LOCA	TIO	N OF RE	FACE	***************************************	-t			***************************************			
Unit Letter	Sectio	Township	Range	Feet from the		/South Line	**************************************	***************************************							
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	Latitude N32.6110 Longitude W103.0763  NATURE OF RELEASE														
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Type of Rele Source of Re							Hour of Occurrence			Recovered 1 Hour of Dis		5 10 10			
	•					5-10-10 5:	30PM		6:00PM	nom of Di	scovery	3-10-10			
Was Immediate Notice Given? If YES, To Whom?															
	☐ Yes ☐ No ☒ Not Required Geoffery Leking														
By Whom? Kyle Waggoner, Talon LPE Date and Hour 5-20-10 10:00 AM										<del></del>					
Was a Water	Was a Watercourse Reached? If YES, Volume Impacting the Watercourse.														
			Yes 🛚	No											
If a Watercon	ırse was Im	pacted, Descri	ibe Fully.	•											
N/A															
IVA															
Describe Cau								····		11 710 Wile Billion					
							bbls, once excav			20-10, the 1	eak app	peared to be			
Describe Are					port wi	ll be submitted	d once clean up is	complete	e						
Describe Aire	a Allecteu a	and Creamup A	ACHOII 1 AM	.cai.											
I hereby certi	fy that the i	nformation gi	ven above	is true and comp	lete to t	the best of my	knowledge and u	nderstand	d that pur	suant to NM	OCD r	ules and			
regulations al	l operators	are required to	report ar	d/or file certain r	elease r	notifications at	nd perform correc	tive actio	ons for rel	eases which	may e	ndanger			
public nealth	or the envir	onment. Ji ne	acceptano	investigate and r	on by u	te contominati	arked as "Final Ro on that pose a thro	eport" de	es not rel	ieve the ope	rator o	l liability			
or the enviror	ment In a	adition NMO	CD accen	tance of a C-141	renort <i>é</i>	le comaninau loes not reliev	e the operator of r	eat to gro	ound water	r, surrace wa omnliance v	ater, nu with one	man nealth			
federal, state,				unice of a C-147	opore e	ocs not lenev	c une operator of r	∞ponsio	mity ioi c	omphance v	viui aui	/ Other			
	11 11	7 V I					OIL CONS	SERVA	ATION	DIVISIO	)N				
at		401													
Signature:	// 4//														
Printed Name	: Jennifer C	orser .				Approved by	District Superviso	OF:							
THE PLAN	/	-1 Cain 41 4			Ţ	A 3									
Title: Field E	nvironment	ai Scientist	<del></del> -		$\dashv$	Approval Dat	e:	E	xpiration	Date:					
E-mail Addre	ss: jhcorsen	@eprod.com				Conditions of	Approval:			Attachad					

Phone: 432-230-1414

Date: 5-20-2010

<sup>\*</sup> Attach Additional Sheets If Necessary