## **APPROVED**

By Olivia Yu at 3:24 pm, Jun 01, 2017

NMOCD approves 1RP-4420 for closure.

#### 1RP-4420

# REMEDIATION REPORT David Bilbrey 8 Inch Pipeline Release Site #3

Lea County, New Mexico

33° 32' 04.816" North 103° 05' 32.604" West

LAI Project No. 15-0171-03

March 2, 2017

Prepared for:

Targa Midstream Services, LLC 6 Desta Drive, Suite 3200 Midland, Texas 79705

Prepared by:

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Certified Professional Geologist #10490



### **Contents**

1.0	INTRODUCTION	1
1.1	Physical Setting	1
	Remediation Action Levels	
	Assessment	
	REMEDIATION	
4.0	CONCLUSIONS	3

#### **Tables**

Table 1	Assessment Soil Sample Analytical Data Summary
Table 2	Remediation Soil Sample Analytical Data Summary

#### **Figures**

Figure 1	Topographic Map
Figure 2	Aerial Map
Figure 2a	General Aerial Photograph
Figure 3	Site Map Showing Assessment Sample Locations
Figure 4	Site Map Showing Remediation Area and Confirmation Sample Locations

#### Attachments

Appendix A	<b>Laboratory Reports</b>
Appendix B	Boring Logs
Appendix C	Photographs
Appendix D	Waste Manifests
Appendix E	Initial & Final C-141

#### 1.0 INTRODUCTION

Larson & Associates, Inc. (LAI) has prepared this remediation report on behalf of Targa Midstream Services, LLC (Targa) for a natural gas liquids release at the David Bilbrey 8" pipeline (Site #3) in Unit F (NE/4, SW/4), Section 18, Township 9 South, Range 38 East, in Lea County, New Mexico (the Site). The Site is located about 22 miles northeast of Tatum, New Mexico. The release was discovered on January 12, 2016, when the landowner, David Bilbrey, observed an area in the pasture that was void of vegetation adjacent to the right of way for the underground 8 inch steel line. Targa representatives suspected a release had occurred at the location approximately 3 years earlier however the date and volume of the release was unknown. The segment of pipeline was replaced with poly line during remediation of the release.

On August 24, 2016, the initial C-141 (Release Notification and Corrective Action) form was submitted to the NMOCD District 1 in Hobbs, New Mexico. The OCD assigned the release remediation permit number 1RP-4420. Remediation was performed between April 26, 2016 and May 10, 2016. The geodetic position is 33° 32′ 04.816″ North and 103° 05′ 32.604″ West. Figure 1 presents a topographic map. Figure 2 presents an aerial map. Figure 2a presents a general aerial map.

#### 1.1 Physical Setting

The physical setting is as follows:

The surface elevation is about 3,970 feet above mean sea level (MSL). The topography is slightly undulating and regionally slopes to the southwest. No surface water features are present within 1 mile of the Site. The soils are designated as "Amarillo fine sandy loam, 0 to 1 percent slopes", consisting of loamy eolian deposits derived from reworking the Blackwater Draw (Pleistocene) and Ogallala (Pliocene) formations, in descending order. The soil developed over sandy clay loam that extends to depths greater than about 6 feet below ground surface (bgs). Groundwater occurs at about 40 feet bgs according to records from the New Mexico Office of the State Engineer (NMOSE), and the nearest fresh water well is located in Unit F (SE/4, NW/4), Section 5, Township 9 South, Range 38 East about 2.5 miles north of the Site (L03881).

#### 1.2 Remediation Action Levels

Remediation action levels (RRALs) were calculated for benzene, BTEX and TPH based on the following criteria established by the New Mexico Oil Conservation Division (OCD) in "Guidelines for Remediation of Leaks, Spills and Releases, August 13, 1993":

Criteria	Result	Score
Depth-to-Groundwater	<50 feet	20
Wellhead Protection Area	No	0
Distance to Surface Water Body	>1000 Horizontal Feet	0

The following RRAL apply to the release for ranking score: 20

Benzene 10 mg/Kg
 BTEX 50 mg/Kg
 TPH 100 mg/Kg

#### 2.0 Assessment

On January 12, 2016, personnel from LAI visited the Site to investigate the non-vegetated area where the leak was suspected. On January 25, 2016, LAI personnel collected initial soil samples with a stainless steel hand auger at four (4) locations (HA-1 through HA-4) around the perimeter of the Site. Soil samples were collected from about 1 foot and 2 feet bgs. Samples HA-1 and HA-3 were collected near the southern and northern extents of the release. Samples HA-2 and HA-4 were collected near the eastern and western extents of the release. The samples were screened for headspace vapors with a calibrated photoionization detector (PID) in 8 ounce glass jars and sealed with aluminum foil. The PID readings were below the New Mexico Oil Conservation Division (OCD) action level of 100 parts per million (ppm). Therefore laboratory analysis for benzene, toluene, ethylbenzene and xylenes (BTEX) was not required according to OCD guideline 7b Section IV Part 2b (Guidelines for Remediation of Leaks, Spills and Releases, August 13, 1993). The laboratory samples were delivered under preservation and chain of custody to Trace Analysis, Inc., in Lubbock, Texas, and analyzed for total petroleum hydrocarbons (TPH) by EPA SW-846 Method 8015 including gasoline (GRO), diesel (DRO) and oil (ORO) range organics and chloride by Method 300. Table 1 presents the assessment soil sample analytical data summary. Figure 3 presents the hand auger soil sample location map. Appendix A presents the laboratory report.

All assessment soil samples collected, except HA-3, 2 feet, reported TPH below the test method reporting limit (see Table 1). TPH was detected at 108 milligrams per kilogram (mg/Kg) in sample HA-3 at 2 feet bgs and exceeded the RRAL (100 mg/Kg). Chloride was less than the reporting limit in all samples except HA-3, 1 feet (45.4 mg/Kg) and HA-3, 2 feet (45.5 mg/Kg).

On February 15, 2016, previous boring location HA-3 (DP-1) was extended to about eight (8) feet bgs with a Terraprobe® direct push rig owned by LAI. Samples were collected from approximately 3, 4, 6, 7 and 8 feet bgs and analyzed for headspace vapors with a calibrated PID. Samples from 4, 6, 7 and 8 feet bgs recorded headspace vapors above 100 ppm and were analyzed for BTEX. Benzene was below the RRAL (10 mg/Kg) however BTEX exceeded the RRAL (50 mg/Kg) in samples from 4 feet bgs (50.71 mg/Kg), 6 feet bgs (352.76 mg/Kg), 7 feet bgs (235.26 mg/Kg) and 8 feet bgs (210.88 mg/Kg). TPH concentrations were above the RRAL (100 mg/Kg) in samples from 4 feet bgs (2,555 mg/Kg), 6 feet bgs (8,870 mg/Kg), 7 feet bgs (5,200 mg/Kg) and 8 feet bgs (4,340 mg/Kg). Chloride ranged from 638 mg/Kg in the sample from 4 feet bgs to 2,450 mg/Kg in sample from 8 feet bgs. Table 1 presents the assessment soil sample analytical data summary. Figure 3 presents the direct push boring location map. Appendix A presents the laboratory report.

On March 9 and 10, 2016, Scarborough Drilling, Inc. (SDI) used an air rotary rig to drill four borings (SB-1 through SB-4) to collect soil samples to delineate the release. Borings SB-1 and SB-4 were drilled north and south of the affected area. Boring SB-2 was drilled near the center of the affected area. Boring SB-3 was drilled near sample location HA-3 (DP-1). Figure The borings were drilled to about 25 feet bgs with soil samples collected every five (5) feet with a jam tube sampler approximately 1 foot in length. The samples were screened for headspace vapors as previously discussed and recorded PID readings below 100 ppm in all samples except SB-3, 10 feet bgs (1,040 ppm). The samples were delivered under chain of custody and preservation to Trace and analyzed for BTEX (SB-2, 10 and 15 feet bgs and SB-3, 10 feet bgs). Benzene and BTEX were below the RRALs of 10 mg/Kg and 50 mg/Kg, respectively, in samples SB-2, 10 and 15 feet bgs. Trace reported benzene (15.8 mg/Kg) and BTEX (352.6 mg/Kg) above RRALs of 10 mg/Kg and 50 mg/Kg, respectively, in sample SB-3, 10 feet bgs. TPH was below the method reporting

1RP-4420 Remediation Report David Bilbrey 8 Inch Pipeline Release Site #3 March 2, 2017

limit in all samples analyzed except SB-3, 10 feet bgs (5,660 mg/Kg) which exceeded the RRAL (100 mg/Kg). Based on the laboratory analysis of soil samples the release was delineated vertically and horizontally. Table 1 presents the analytical data summary. Figure 3 presents the air rotary boring location map. Appendix A presents the laboratory report. Appendix B presents the boring logs.

#### 3.0 REMEDIATION

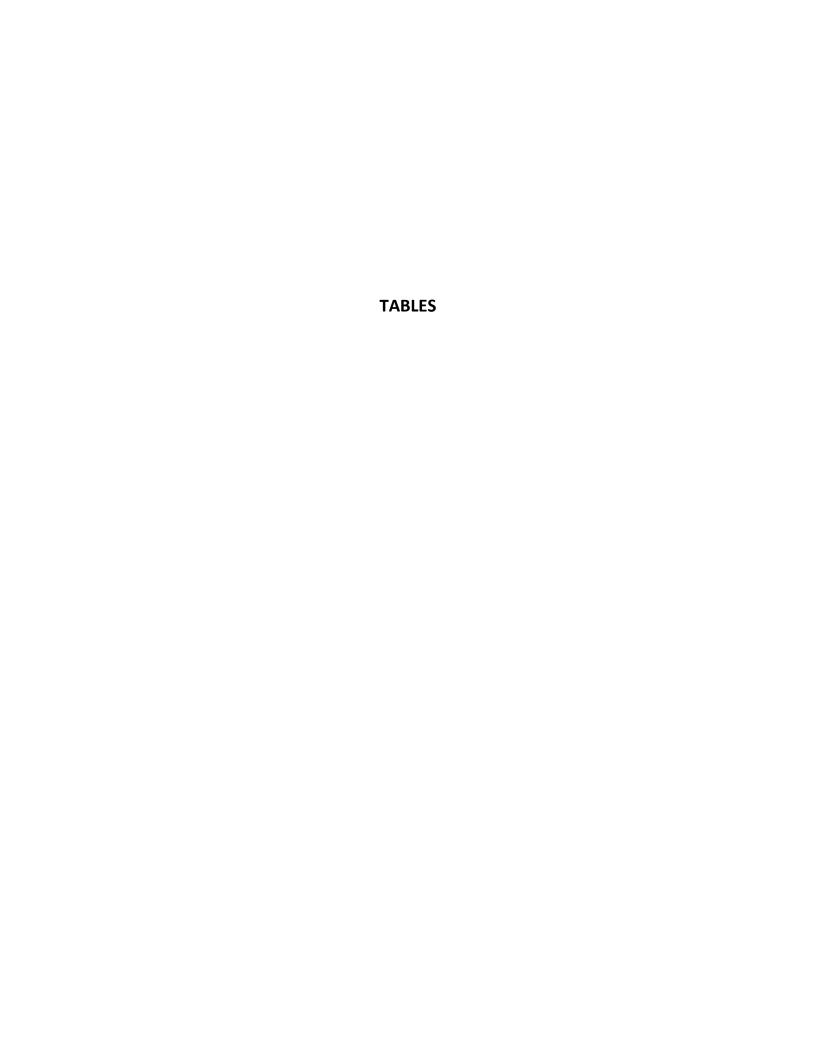
Between April 26 and May 10, 2016, Targa personnel used a backhoe to excavate soil to approximately 12 feet bgs in the area of SB-3. Targa personnel removed the steel pipeline to install a new poly line and allow safe working conditions for excavating soil. Soil was excavated until laboratory analysis showed TPH was below the RRAL in sidewall and bottom samples. Soil was excavated over an area measuring approximately 1,000 square feet or about 0.02 acres. Approximately 408 cubic yards of soil was excavated and disposed at the Gandy-Marley landfill located west of Tatum, in Chaves County, New Mexico. Appendix C presents photographs. Appendix D presents waste manifests.

On April 27, 2016, LAI personnel collected confirmation soil samples from the excavation sidewalls 3 feet, 6 feet and 12 feet bgs and bottom at about 13 feet bgs. Samples were tested in the field with a PID and reported concentrations below 100 ppm. The samples were submitted to Trace and analyzed for TPH by EPA SW-846 Method 8015, including GRO, DRO and ORO, and chloride by Method 300. TPH was below the method reporting limit and RRAL in the sidewall and bottom samples. Chloride was 127 mg/Kg in the bottom sample which meets the OCD guidance for vertical delineation. Table 2 presents the remediation soil sample analytical data summary. Figure 4 presents the excavation area and confirmation soil sample locations. Appendix A presents the laboratory reports.

Between May 2 and 10, 2016, Targa personnel backfilled the excavation with clean soil acquired from the landowner, David Bilbrey. The Site will be seeded according to the landowner specifications.

#### 4.0 CONCLUSIONS

Targa has remediated the releases below the RRAL and requests no further action for RP1-4420. Appendix E presents the initial and final C-141.



# Table 1 Assessment Soil Sample Analytical Data Summary Targa Midstream Services, LLC, David Bilbrey 8" Pipeline Release - Site #3 1RP No. 4420

#### Lea County, New Mexico 33°32'04.84" N 103°05'32.64" W

Sample	Collection	Location	Depth	Status	PID	Benzene	BTEX	GRO	DRO	ORO	TPH	Chloride
Jampic	Date	Location	(Feet)	Status	(ppm)	(mg/Kg)						
OCD RRAL:			, ,		,	10	50	( 0, 0,	( 0, 0,	, o. o.	100	250*
HA-1	1/25/2016	South	1	In-situ	0.0			<4.00	<50.0	<50.0	<50.0	<25.0
	1/25/2016	South	2	In-situ	0.0			<4.00	<50.0	<50.0	<50.0	<25.0
	_,,		_									
HA-2	1/25/2016	East	1	In-situ	1.1			<4.00	<50.0	<50.0	<50.0	<25.0
	1/25/2016	East	2	In-situ	0.5			<4.00	<50.0	<50.0	<50.0	<25.0
HA-3	1/25/2016	North	1	In-situ	6.1			<4.00	<50.0	<50.0	<50.0	45.4
(DP-1)	1/25/2016	North	2	In-situ	13.4			<4.00	108	<50.0	108	45.5
	2/15/2016	North	3	In-situ	33.8	<0.0200	0.1008	<4.00	<50.0	<50.0	<50.0	55.7
	2/15/2016	North	4	In-situ	130.2	1.92	50.71	775	1,780	<500	2,555	638
	2/15/2016	North	6	In-situ	130.1	4.96	352.76	3,660	5,210	<500	8,870	2,030
	2/15/2016	North	7	In-situ	129.5	2.86	235.26	2,470	2,730	<500	5,200	2,030
	2/15/2016	North	8	In-situ	129.5	3.68	210.88	1,990	2,350	<250	4,340	2,450
HA-4	1/25/2016	West	1	In-situ	13.6			<4.00	<50.0	<50.0	<50.0	31.3
	1/25/2016	West	2	In-situ	40.4			<4.00	<50.0	<50.0	<50.0	<25.0
SB-1	3/9/2016		5	In-situ	0.8			<4.00	<50.0		<50.0	53
			10	In-situ	6.1			<4.00	<50.0		<50.0	48.50
			15	In-situ	0.8			<4.00	<50.0		<50.0	<25.0
SB-2	3/9/2016		10	In-situ	16.8	<0.0200	1.4811	<4.00	<50.0		<50.0	109
			15	In-situ	4.4	<0.0200	<0.0200	<4.00	<50.0		<50.0	29.5
			20	In-situ	4.4			<4.00	<50.0		<50.0	<25.0
			25	In-situ	0.8			<4.00	<50.0		<54.0	<25.0

#### Table 1

# Assessment Soil Sample Analytical Data Summary Targa Midstream Services, LLC, David Bilbrey 8" Pipeline Release - Site #3

#### 1RP No. 4420

#### Lea County, New Mexico 33°32'04.84" N 103°05'32.64" W

SB-3	3/9/2016	5	In-situ	62.3			<8.00	<50.0	 <58.0	<25.0
(DP-1)		10	In-situ	1040	15.8	352.6	3840	1,820	 5,660	40.5
		15	In-situ	27.2			<4.00	<50.0	 <54.0	<25.0
		20	In-situ	53.2			5.31	79.3	 84.61	<25.0
		25	In-situ	2.6			<4.00	<50.0	 <54.0	<25.0
SB-4	3/10/2016	5	In-situ	29.2			14.1	<50.0	 14.1	<25.0
		10	In-situ	0.8					 	<25.0
		15	In-situ	0.8					 	<25.0

Notes: Laboratory analysis performed by Trace Analysis, Inc., Lubbock, Texas, by methods SW-846-8021B (BTEX), 8015 (TPH) and 300 (chloride)

Depth in feet below ground surface (bgs)

-: No analysis performed

\*: OCD delineation level

mg/Kg: milligrams per kilogram equivalent to parts per million (ppm)

above the OCD recommended remediation action level (RRAL)

Table 2
Remediation Sample Analytical Data Summary
Targa Midstream Services, LLC, David Bilbrey 8" Pipeline Release - Site #3
Lea County, New Mexico
1RP-4420

Sample	Collection	Depth	Status	PID	GRO	DRO	ORO	TPH	Chloride
	Date	(Feet)		(ppm)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
OCD RRAL:								100	250*
North Wall	4/29/2016	3	In- Situ	0.0	<4.00	<50.0	<50.0	<50.0	40.2
	4/29/2016	6	In- Situ	0.1	<4.00	<50.0	<50.0	<50.0	**337
South Wall	4/29/2016	3	In- Situ	0.0	<4.00	<50.0	<50.0	<50.0	<25.0
	4/29/2016	6	In- Situ	0.0	<4.00	<50.0	<50.0	<50.0	37.9
E Wall N	4/27/2016	3	In- Situ	6.3	<4.00	<50.0	<50.0	<50.0	<25.0
	4/27/2016	6	In- Situ	0.4	<4.00	<50.0	<50.0	<50.0	<25.0
	4/29/2016	12	In- Situ	9.7	<4.00	<50.0	<50.0	<50.0	<25.0
E Wall S	4/27/2016	3	In- Situ	0.3	<4.00	<50.0	<50.0	<50.0	<25.0
	4/27/2016	6	In- Situ	0.0	<4.00	<50.0	<50.0	<50.0	<25.0
	4/29/2016	12	In- Situ	0.1	<4.00	<50.0	<50.0	<50.0	<25.0
W Wall N	4/27/2016	3	In- Situ	0.0	<4.00	<50.0	<50.0	<50.0	<25.0
	4/28/2016	6	In- Situ	1.3	<4.00	<50.0	<50.0	<50.0	25.9
	4/28/2016	12	In- Situ	0.3	<4.00	<50.0	<50.0	<50.0	<25.0
W Wall S	4/27/2016	3	In- Situ	0.2	<4.00	<50.0	<50.0	<50.0	<25.0
	4/28/2016	6	In- Situ	0.0	<4.00	<50.0	<50.0	<50.0	<25.0
	4/28/2016	12	In- Situ	1.6	<4.00	<50.0	<50.0	<50.0	25.5
Bottom 12' N	4/28/2016	12	In- Situ	3.7	<4.00	<50.0	<50.0	<50.0	127
Bottom 12' S	4/28/2016	12	In- Situ	12.3	<4.00	<50.0	<50.0	<50.0	55.8

Notes: Laboratory analysis performed by Trace Analysis, Inc., Lubbock, Texas, by EPA SW-846 Method 8015 (TPH) and 300 (chloride) Depth in feet below ground surface (bgs)

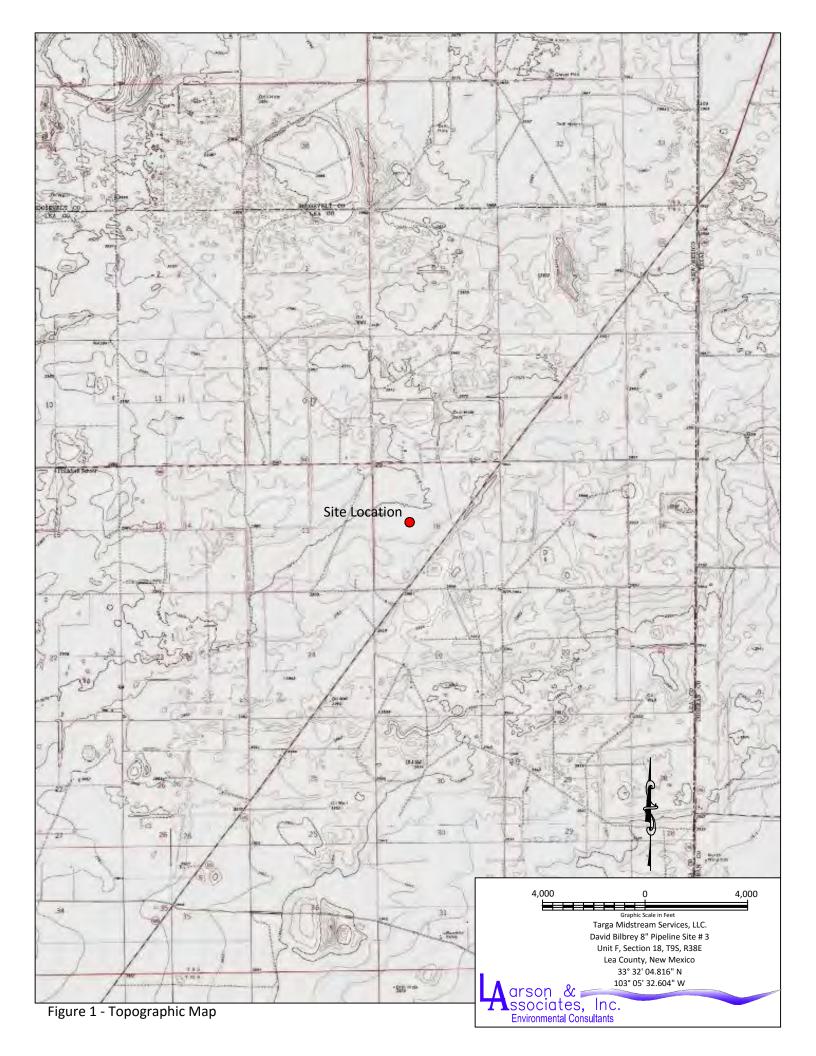
mg/Kg: milligrams per kilogram equivalent to parts per million (ppm)

Bold denotes concentration above the method reporting limit but below the RRAL or delineation limit

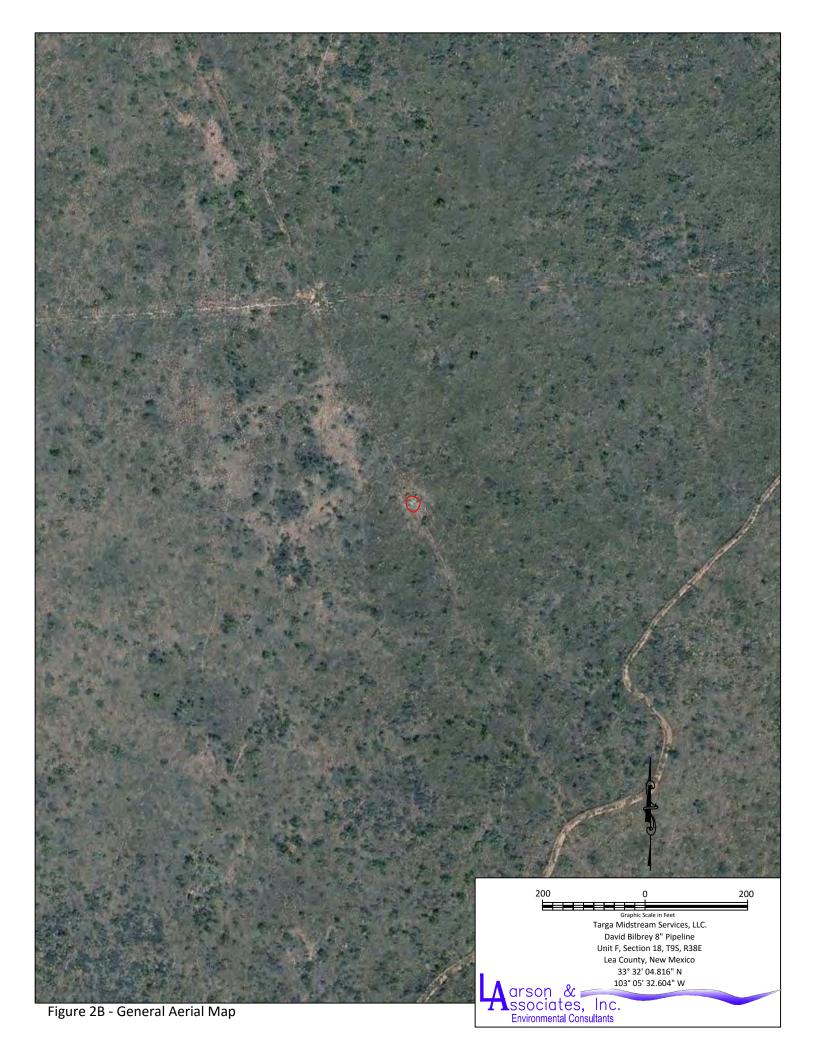
<sup>\*:</sup> indicates the OCD delineation level

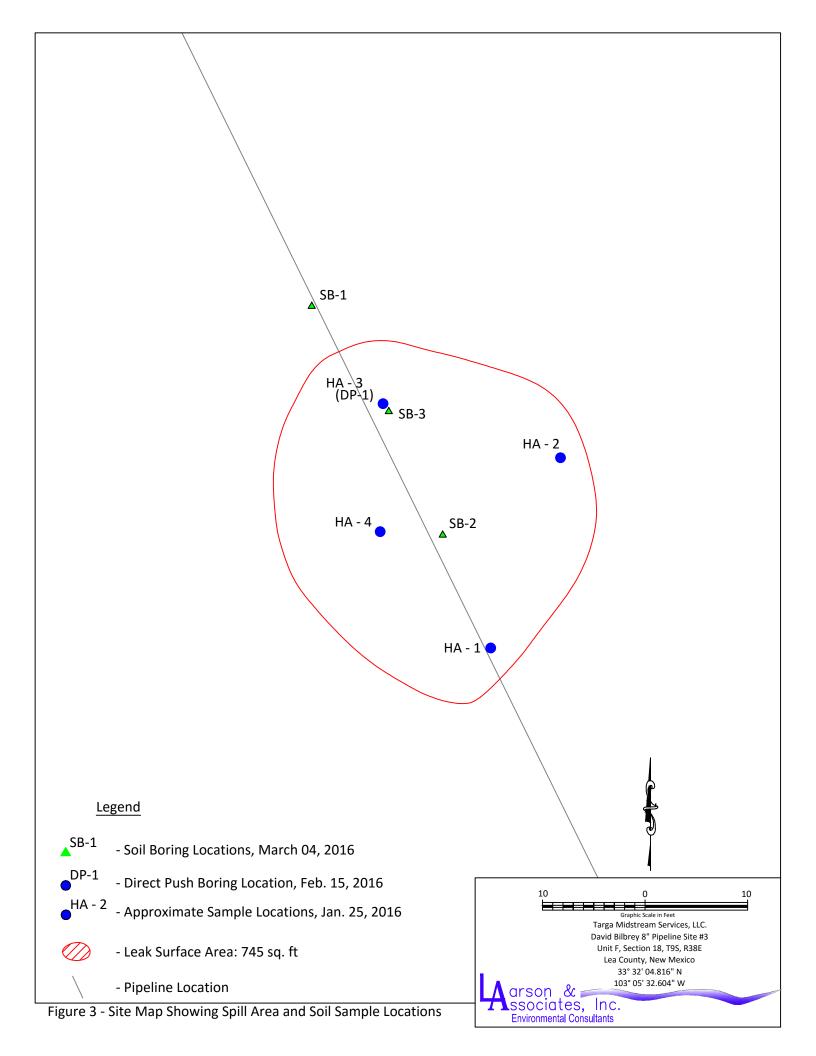
<sup>\*\*:</sup> Concentratoion delineated vertically in bottoom samples











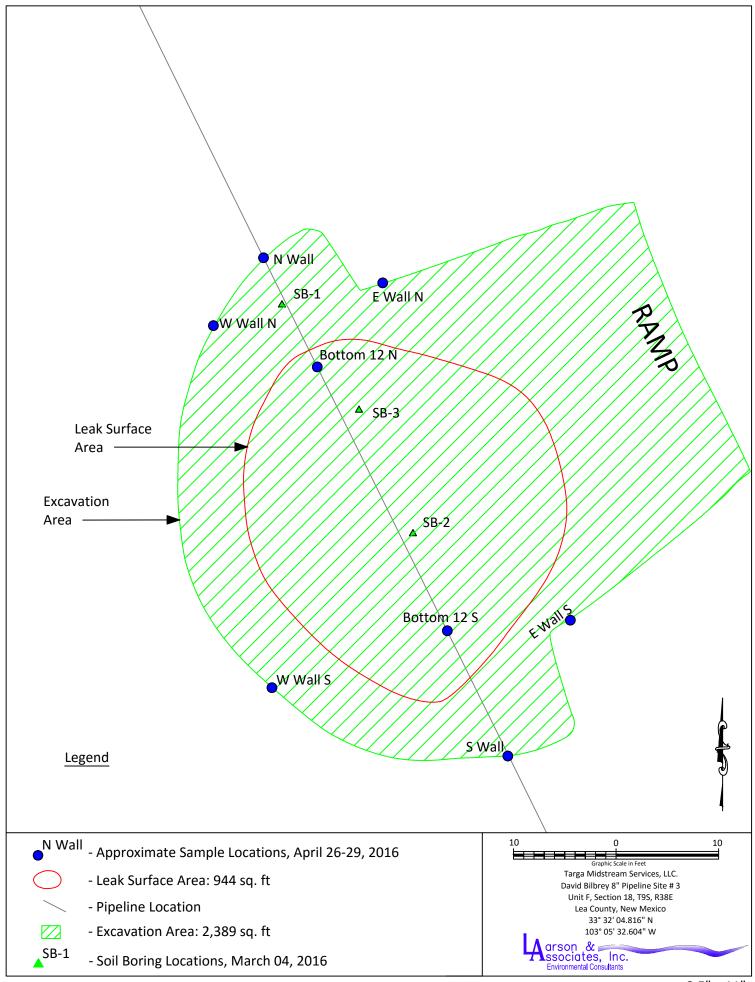
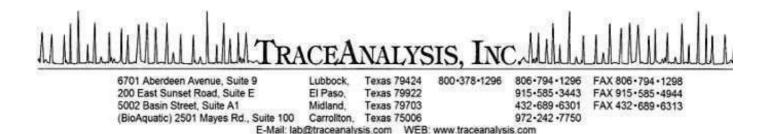


Figure 4 - Site Map Showing Excavation Area and Soil Sample Locations

# APPENDIX A Laboratory Reports



#### Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

# Analytical and Quality Control Report

Report Date: February 24, 2016

16021602

Work Order:

Travis Williams Larson and Associates, Inc.

P. O. Box 50685 Midland, TX, 79710

Project Name: David Bilbrey 8" Pipeline

Project Number: 15-0171-03

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

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2-16
)

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

TraceAnalysis, Inc. uses the attached chain of custody (COC) as the laboratory check-in documentation which includes sample receipt, temperature, sample preservation method and condition, collection date and time, testing requested, company, sampler, contacts and any special remarks.

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

Dr. Blair Leftwich, Director James Taylor, Assistant Director Brian Pellam, Operations Manager

# **Report Contents**

Case Narrative								
Analytical Report								
Sample 414381 (HA 3-3)								
Sample 414382 (HA 3-4)								
Sample 414383 (HA 3-6)								
Sample 414384 (HA 3-7)								
Sample 414385 (HA 3-8)								
Sample 414000 (1111 0 0)								
Method Blanks								
QC Batch 128267 - Method Blank (1)								
QC Batch 128268 - Method Blank (1)								
QC Batch 128315 - Method Blank (1)								
QC Batch 128316 - Method Blank (1)								
QC Batch 128347 - Method Blank (1)								
QC Batch 128416 - Method Blank (1)								
<b>4</b> • - • • • • • • • • • • • • • • • • •								
Laboratory Control Spikes								
QC Batch 128267 - LCS (1)								
QC Batch 128268 - LCS (1)								
QC Batch 128315 - LCS (1)								
QC Batch 128316 - LCS (1)								
QC Batch 128347 - LCS (1)								
QC Batch 128416 - LCS (1)								
<b>4 a a a a a a a a a a</b>								
Matrix Spikes 2								
QC Batch 128267 - xMS (1)								
QC Batch 128268 - xMS (1)								
QC Batch 128315 - MS (1)								
QC Batch 128316 - MS (1)								
QC Batch 128347 - MS (1)								
QC Batch 128416 - MS (1)								
Calibration Standards 2								
QC Batch 128267 - CCV (1)								
QC Batch 128267 - CCV (2)								
QC Batch 128315 - CCV (1)								
QC Batch 128315 - CCV (2)								
QC Batch 128316 - CCV (1)								
QC Batch 128316 - CCV (2)								
QC Batch 128347 - CCV (1)								
QC Batch 128347 - CCV (2)								
QC Batch 128416 - CCV (1)								
QC Batch 128416 - CCV (2)								
Appendix 28								
Report Definitions								
Report Definitions								

Laboratory Certifications	28
Standard Flags	28
Result Comments	28
Attachments	29

## Case Narrative

Samples for project David Bilbrey 8" Pipeline were received by TraceAnalysis, Inc. on 2016-02-16 and assigned to work order 16021602. Samples for work order 16021602 were received intact at a temperature of 3.4 C.

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

		Prep	$\operatorname{Prep}$	QC	Analysis
Test	Method	Batch	Date	Batch	Date
BTEX	S 8021B	108639	2016-02-18 at 11:17	128315	2016-02-19 at 09:25
Chloride (IC)	E 300.0	108679	2016-02-19 at 12:00	128347	2016-02-19 at $13:49$
Chloride (IC)	E 300.0	108739	2016-02-23 at 10:00	128416	2016-02-23 at $10:08$
TPH DRO	S 8015 $D$	108612	2016-02-17 at $13:17$	128267	2016-02-17 at $14:41$
TPH GRO	S 8015 $D$	108639	2016-02-18 at 11:17	128316	2016-02-19 at $09:28$
TPH ORO	S $8015 D$	108612	2016-02-17 at $13:17$	128268	2016-02-17 at $14:43$

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 16021602 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: February 24, 2016 Work Order: 16021602 Page Number: 6 of 29

15-0171-03 David Bilbrey 8" Pipeline

## **Analytical Report**

Sample: 414381 - HA 3-3

Laboratory: Midland

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035 QC Batch: 128315 Date Analyzed: 2016-02-19 Analyzed By: AK Prep Batch: 108639 Sample Preparation: 2016-02-18 Prepared By: AK

			$\operatorname{RL}$			
Parameter	Flag	Cert	Result	Units	Dilution	RL
Benzene	U	3	< 0.0200	m mg/Kg	1	0.0200
Toluene	U	3	< 0.0200	m mg/Kg	1	0.0200
Ethylbenzene		3	0.0411	$\mathrm{mg}/\mathrm{Kg}$	1	0.0200
Xylene		3	0.0597	mg/Kg	1	0.0200

						$\operatorname{Spike}$	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			1.71	mg/Kg	1	2.00	86	70 - 130
4-Bromofluorobenzene (4-BFB)			1.83	mg/Kg	1	2.00	92	70 - 130

Sample: 414381 - HA 3-3

Laboratory: Lubbock

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A QC Batch: 128416 Date Analyzed: 2016-02-23 Analyzed By: RL Prep Batch: 108739 Sample Preparation: Prepared By: RL

			RL			
Parameter	Flag	$\operatorname{Cert}$	Result	Units	Dilution	RL
Chloride	Qr	1,2,4	55.7	$\mathrm{mg/Kg}$	1	25.0

Sample: 414381 - HA 3-3

Laboratory: Midland

Analysis: TPH DRO Analytical Method: S 8015 D Prep Method: N/A QC Batch: 128267 Date Analyzed: 2016-02-17 Analyzed By: JL Prep Batch: 108612 Sample Preparation: Prepared By: JL

			RL			
Parameter	Flag	$\operatorname{Cert}$	Result	Units	Dilution	RL
DRO	$_{ m Qr,U}$	3	< 50.0	m mg/Kg	1	50.0

Report Date: February 24, 2016 Work Order: 16021602 Page Number: 7 of 29

15-0171-03 David Bilbrey 8" Pipeline

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			50.2	mg/Kg	1	50.0	100	70 - 130

#### Sample: 414381 - HA 3-3

Laboratory: Midland

Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035 QC Batch: 128316 Date Analyzed: 2016-02-19 Analyzed By: AKPrep Batch: 108639 Sample Preparation: 2016-02-18 Prepared By: AK

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			1.85	mg/Kg	1	2.00	92	70 - 130
4-Bromofluorobenzene (4-BFB)			2.04	mg/Kg	1	2.00	102	70 - 130

#### Sample: 414381 - HA 3-3

Laboratory: Midland

TPH ORO Analysis: Analytical Method: S 8015 D Prep Method: N/AQC Batch: 128268 Date Analyzed: 2016-02-17 Analyzed By: JLPrep Batch: 108612 Sample Preparation: Prepared By: JL

MDL MQL PQL RLParameter Flag Cert Result Result Result Result  ${\rm Units}$ Dilution MDLMQLPQL RL50.0 ORO 0.00 < 50.0 < 50.0 50.0 < 50.0mg/Kg 0.0050.0

Surrogate	Flag	Cert	Result	Units	Dilution	$\begin{array}{c} {\rm Spike} \\ {\rm Amount} \end{array}$	Percent Recovery	Recovery Limits
Dairogaic	1 145	CCIU	resure	Omos	Dilution	Tilloulle	recovery	11111105
n-Tricosane			50.2	$\mathrm{mg/Kg}$	1	50.0	100	70 - 130
n-Triacontane			54.5	mg/Kg	1	50.0	109	37.1 - 162

#### Sample: 414382 - HA 3-4

Laboratory: Midland

Analysis: **BTEX** Analytical Method:  $S_{8021B}$ Prep Method: S 5035 QC Batch: 128315 Date Analyzed: 2016-02-19 Analyzed By: AKPrep Batch: 108639 Sample Preparation: 2016-02-18 Prepared By: AK

Report Date: February 24, 2016 Work Order: 16021602 Page Number: 8 of 29

15-0171-03 David Bilbrey 8" Pipeline

			RL			
Parameter	Flag	$\operatorname{Cert}$	Result	Units	Dilution	RL
Benzene		3	1.92	m mg/Kg	50	0.0200
Toluene		3	$\bf 5.99$	$\mathrm{mg}/\mathrm{Kg}$	50	0.0200
Ethylbenzene		3	14.6	$\mathrm{mg}/\mathrm{Kg}$	50	0.0200
Xylene		3	28.2	mg/Kg	50	0.0200

						$_{ m Spike}$	Percent	Recovery	
Surrogate	Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits	
Trifluorotoluene (TFT)			92.8	mg/Kg	50	100	93	70 - 130	
4-Bromofluorobenzene (4-BFB)			89.2	mg/Kg	50	100	89	70 - 130	

#### Sample: 414382 - HA 3-4

Laboratory: Lubbock

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/AQC Batch: Date Analyzed: 128347 2016-02-19 Analyzed By: RLPrep Batch: 108679 Sample Preparation: Prepared By: RL

#### Sample: 414382 - HA 3-4

Laboratory: Midland

Analysis: TPH DRO Analytical Method: S 8015 D Prep Method: N/AQC Batch: 128267 Date Analyzed: 2016 - 02 - 17Analyzed By: JLPrep Batch: Sample Preparation: Prepared By: 108612 JL

						$\operatorname{Spike}$	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			56.1	m mg/Kg	10	50.0	112	70 - 130

#### Sample: 414382 - HA 3-4

Laboratory: Midland

Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035 QC Batch: 128316 Date Analyzed: 2016-02-19 Analyzed By: AKPrep Batch: 108639 Sample Preparation: 2016-02-18 Prepared By: AK

Report Date: February 24, 2016 Work Order: 16021602 Page Number: 9 of 29

15-0171-03 David Bilbrey 8" Pipeline

					RL				
Parameter	Flag		$\operatorname{Cert}$		Result	$\operatorname{Uni}$	ts	Dilution	RL
GRO			3		775	mg/K	Ţg.	50	4.00
Surrogate		Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)				97.8	mg/Kg	50	100	98	70 - 130
4-Bromofluorobenzene (4-BFB)				116	mg/Kg	50	100	116	70 - 130
4-Dromondorobenzene (4-Dr D)	<u> </u>			110	mg/Kg	50	100	110	70 - 130

#### Sample: 414382 - HA 3-4

Laboratory: Midland

Analysis: TPH ORO Analytical Method: S 8015 D Prep Method: N/A QC Batch: 128268 Date Analyzed: 2016-02-17 Analyzed By: JL Prep Batch: 108612 Sample Preparation: Prepared By: JL

			MDL	MQL	PQL	RL						
Parameter	Flag	Cert	Result	Result	Result	Result	Units	Dilution	MDL	MQL	PQL	RL
ORO			0.00	< 500	< 500	< 500	mg/Kg	10	0.00	50.0	50.0	50.0

						$\operatorname{Spike}$	Percent	Recovery
Surrogate	Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			56.1	mg/Kg	10	50.0	112	70 - 130
n-Triacontane			53.8	mg/Kg	10	50.0	108	37.1 - 162

#### Sample: 414383 - HA 3-6

Laboratory: Midland

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035 QC Batch: 128315 Date Analyzed: 2016-02-19 Analyzed By: AK Prep Batch: 108639 Sample Preparation: 2016-02-18 Prepared By: AK

			RL			
Parameter	Flag	$\operatorname{Cert}$	Result	Units	Dilution	RL
Benzene	Qs	3	4.96	m mg/Kg	100	0.0200
Toluene	Qs	3	58.8	$\mathrm{mg}/\mathrm{Kg}$	100	0.0200
Ethylbenzene	Qs	3	145	$\mathrm{mg}/\mathrm{Kg}$	100	0.0200
Xylene	$_{ m Qs}$	3	144	mg/Kg	100	0.0200

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			179	mg/Kg	100	200	90	70 - 130
4-Bromofluorobenzene (4-BFB)			204	mg/Kg	100	200	102	70 - 130

Report Date: February 24, 2016 Work Order: 16021602 Page Number: 10 of 29

15-0171-03 David Bilbrey 8" Pipeline

#### Sample: 414383 - HA 3-6

Laboratory: Lubbock

Analytical Method: Analysis: Chloride (IC) E 300.0 Prep Method: N/AQC Batch: 128347 Date Analyzed: 2016-02-19 Analyzed By: RLPrep Batch: Sample Preparation: Prepared By: 108679 RL

#### Sample: 414383 - HA 3-6

Laboratory: Midland

S 8015 D Analysis: TPH DRO Analytical Method: Prep Method: N/AQC Batch: 128267Analyzed By: JLDate Analyzed: 2016-02-17Prep Batch: 108612 Sample Preparation: Prepared By: JL

							Spike	Percent	Recovery
Surrogate		Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane	Qsr	Qsr		117	mg/Kg	10	50.0	234	70 - 130

#### Sample: 414383 - HA 3-6

Laboratory: Midland

 $\le 5035$ Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: QC Batch: 128316 Date Analyzed: 2016-02-19 Analyzed By: AK Prep Batch: 108639 Sample Preparation: Prepared By: AK 2016-02-18

						$_{ m Spike}$	Percent	Recovery
Surrogate	Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			192	mg/Kg	100	200	96	70 - 130
4-Bromofluorobenzene (4-BFB)	lsr Qsr		280	mg/Kg	100	200	140	70 - 130

Report Date: February 24, 2016 Work Order: 16021602 Page Number: 11 of 29

15-0171-03 David Bilbrey 8" Pipeline

#### Sample: 414383 - HA 3-6

Laboratory: Midland

Analysis: TPH ORO Analytical Method: S 8015 D Prep Method: N/AQC Batch: 128268 Date Analyzed: 2016-02-17 Analyzed By: JLPrep Batch: 108612 Sample Preparation: Prepared By: JL

MDLMQLPQLRLParameter Flag Cert Result Result Result Units Dilution MDLMQL PQL Result RLORO 0.00 < 500< 500 < 500  $\overline{\mathrm{mg/Kg}}$ 10 0.00 50.0 50.0 50.0

							$\operatorname{Spike}$	Percent	Recovery
Surrogate		Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane	Qsr	Qsr		117	mg/Kg	10	50.0	234	70 - 130
n-Triacontane				67.4	mg/Kg	10	50.0	135	37.1 - 162

#### Sample: 414384 - HA 3-7

Laboratory: Midland

Analysis: **BTEX** Analytical Method:  $S_{8021B}$ Prep Method: S 5035QC Batch: 128315 Date Analyzed: 2016-02-19 Analyzed By: AK2016-02-18 Prep Batch: 108639 Sample Preparation: Prepared By: AK

RLFlag Parameter Cert Result Units Dilution RL2.860.0200 Benzene mg/Kg 5 3 Toluene 42.4 mg/Kg5 0.0200 3 Je 97.2 Ethylbenzene mg/Kg5 0.0200Je 3 Xylene 92.8 mg/Kg5 0.0200

Surrogate		Flag	Cert	Result	Units	Dilution	$\begin{array}{c} {\rm Spike} \\ {\rm Amount} \end{array}$	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)				7.80	mg/Kg	5	10.0	78	70 - 130
4-Bromofluorobenzene (4-BFB)	Qsr	$_{\mathrm{Qsr}}$		23.4	mg/Kg	5	10.0	234	70 - 130

#### Sample: 414384 - HA 3-7

Laboratory: Lubbock

Analysis: Chloride (IC) Analytical Method: E 300.0Prep Method: N/AQC Batch: 128347 Date Analyzed: 2016-02-19 Analyzed By: RLPrep Batch: 108679 Sample Preparation: Prepared By: RL

 $\overline{continued \dots}$ 

Report Date: February 24, 2016 Work Order: 16021602 Page Number: 12 of 29

David Bilbrey 8" Pipeline

sample 414384 continued ...

15-0171-03

			RL			
Parameter	Flag	Cert	Result	Units	Dilution	RL
			$\operatorname{RL}$			
Parameter	Flag	Cert	Result	Units	Dilution	RL
Chloride		1,2,4	2030	mg/Kg	5	25.0

#### Sample: 414384 - HA 3-7

Laboratory: Midland

Analysis: TPH DRO QC Batch: 128267 Prep Batch: 108612 Analytical Method: S 8015 D Date Analyzed: 2016-02-17

Sample Preparation:

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

			RL			
Parameter	Flag	$\operatorname{Cert}$	Result	Units	Dilution	RL
DRO	Qr	3	2730	$\mathrm{mg/Kg}$	10	50.0
				Spike	Percent	Recovery

							Spike	Percent	Recovery
Surrogate		Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane	Qsr	Qsr		94.0	mg/Kg	10	50.0	188	70 - 130

#### Sample: 414384 - HA 3-7

Laboratory: Midland

Analysis: TPH GRO QC Batch: 128316 Prep Batch: 108639 Analytical Method: S 8015 D Date Analyzed: 2016-02-19 Sample Preparation: 2016-02-18

 8 8015 D
 Prep Method: S 5035

 1016-02-19
 Analyzed By: AK

 1016-02-18
 Prepared By: AK

			RL			
Parameter	Flag	Cert	Result	Units	Dilution	RL
GRO		3	2470	m mg/Kg	50	4.00
-						,

							Spike	Percent	Recovery
Surrogate		Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)				95.2	mg/Kg	50	100	95	70 - 130
4-Bromofluorobenzene (4-BFB)	$_{\mathrm{Qsr}}$	$_{ m Qsr}$		146	$\mathrm{mg}/\mathrm{Kg}$	50	100	146	70 - 130

Report Date: February 24, 2016 Work Order: 16021602 Page Number: 13 of 29

15-0171-03 David Bilbrey 8" Pipeline

#### Sample: 414384 - HA 3-7

Laboratory: Midland

Analysis: TPH ORO Analytical Method: S 8015 D Prep Method: N/AQC Batch: 128268 Date Analyzed: 2016-02-17 Analyzed By: JLPrep Batch: 108612 Sample Preparation: Prepared By: JL

MDLMQLPQLRLParameter Flag Cert Result Result Result Units Dilution MDLMQL PQL Result RLORO 0.00 < 500< 500 < 500  $\overline{\mathrm{mg/Kg}}$ 10 0.00 50.0 50.0 50.0

							$_{ m Spike}$	Percent	Recovery
Surrogate		Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane	Qsr	Qsr		94.0	mg/Kg	10	50.0	188	70 - 130
n-Triacontane				55.0	mg/Kg	10	50.0	110	37.1 - 162

#### Sample: 414385 - HA 3-8

Laboratory: Midland

Analysis: **BTEX** Analytical Method:  $S_{8021B}$ Prep Method: S 5035QC Batch: 128315 Date Analyzed: 2016-02-19 Analyzed By: AK2016-02-18 Prep Batch: 108639 Sample Preparation: Prepared By: AK

RLFlag Parameter Cert Result Units Dilution RL3.68 0.0200 Benzene mg/Kg 5 3 Toluene 44.2 mg/Kg5 0.0200 3 Je 0.0200 Ethylbenzene 84.2 mg/Kg5 Je 3 Xylene 78.8 mg/Kg5 0.0200

							$\operatorname{Spike}$	Percent	Recovery
Surrogate		Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)				7.61	mg/Kg	5	10.0	76	70 - 130
4-Bromofluorobenzene (4-BFB)	$_{\mathrm{Qsr}}$	$_{\mathrm{Qsr}}$		22.8	mg/Kg	5	10.0	228	70 - 130

#### Sample: 414385 - HA 3-8

Laboratory: Lubbock

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A QC Batch: 128347 Date Analyzed: 2016-02-19 Analyzed By: RLPrep Batch: 108679 Sample Preparation: Prepared By: RL

 $\overline{continued}$  . . .

Report Date: February 24, 2016 Work Order: 16021602 Page Number: 14 of 29

David Bilbrey 8" Pipeline

sample 414385 continued ...

15-0171-03

			RL			
Parameter	Flag	Cert	Result	Units	Dilution	RL
			$\operatorname{RL}$			
Parameter	Flag	Cert	Result	Units	Dilution	RL
Chloride		1,2,4	2450	mg/Kg	5	25.0

#### Sample: 414385 - HA 3-8

Laboratory: Midland

Analysis: TPH DRO QC Batch: 128267 Prep Batch: 108612 Analytical Method: S 8015 D Date Analyzed: 2016-02-17

Sample Preparation:

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

Parameter	Flag	Cert	$\operatorname{RL}$ Result	Units	Dilution	$\operatorname{RL}$
DRO	Qr	3	2350	mg/Kg	5	50.0
				Spike	Percent	Recovery

Surrogate		Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane	Qsr	Qsr		108	mg/Kg	5	50.0	216	70 - 130

#### Sample: 414385 - HA 3-8

Laboratory: Midland

Analysis: TPH GRO Analytical Method: S 8015 D QC Batch: 128316 Date Analyzed: 2016-02-19 Prep Batch: 108639 Sample Preparation: 2016-02-18

S 8015 D Prep Method: S 5035 2016-02-19 Analyzed By: AK 2016-02-18 Prepared By: AK

			RL			
Parameter	Flag	$\operatorname{Cert}$	Result	Units	Dilution	RL
GRO		3	1990	m mg/Kg	50	4.00

						$\operatorname{Spike}$	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			88.3	mg/Kg	50	100	88	70 - 130
4-Bromofluorobenzene (4-BFB)			119	mg/Kg	50	100	119	70 - 130

Report Date: February 24, 2016 Work Order: 16021602 Page Number: 15 of 29

15-0171-03 David Bilbrey 8" Pipeline

Sample: 414385 - HA 3-8

Laboratory: Midland

Analysis: TPH ORO Analytical Method: S 8015 D Prep Method: N/A QC Batch: 128268 Date Analyzed: 2016-02-17 Analyzed By: JL Prep Batch: 108612 Sample Preparation: Prepared By: JL

 $\operatorname{MDL}$ MQLPQLRLParameter Flag  $\operatorname{Cert}$ Result Result Result Result Units Dilution MDL $\mathrm{MQL}$  $\operatorname{PQL}$ RL $\overline{ORO}$ 0.00 <250 <250 <250 mg/Kg 5 0.00 50.0 50.0 50.0

							Spike	Percent	Recovery
Surrogate		Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane	Qsr	Qsr		108	mg/Kg	5	50.0	216	70 - 130
n-Triacontane				59.9	$\mathrm{mg}/\mathrm{Kg}$	5	50.0	120	37.1 - 162

Report Date: February 24, 2016 Work Order: 16021602 Page Number: 16 of 29

15-0171-03 David Bilbrey 8" Pipeline

### Method Blanks

Method Blank (1) QC Batch: 128267

QC Batch: 128267 Date Analyzed: 2016-02-17 Analyzed By: JL Prep Batch: 108612 QC Preparation: 2016-02-17 Prepared By: JL

						Spike	Percent	Recovery
Surrogate	Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			47.0	mg/Kg	1	50.0	94	70 - 130

Method Blank (1) QC Batch: 128268

QC Batch: 128268 Date Analyzed: 2016-02-17 Analyzed By: JL Prep Batch: 108612 QC Preparation: 2016-02-17 Prepared By: JL

Surrogate	Flag	Cert	Result	Units	Dilution	$\begin{array}{c} {\rm Spike} \\ {\rm Amount} \end{array}$	Percent Recovery	Recovery Limits
n-Tricosane			47.0	mg/Kg	1	50.0	94	70 - 130
n-Triacontane			53.0	$\mathrm{mg}/\mathrm{Kg}$	1	50.0	106	37.1 - 162

Method Blank (1) QC Batch: 128315

QC Batch: 128315 Date Analyzed: 2016-02-19 Analyzed By: AK Prep Batch: 108639 QC Preparation: 2016-02-18 Prepared By: AK

MDLParameter Units Flag Cert Result RLBenzene < 0.0100 mg/Kg 0.02 3 Toluene 3 < 0.0156mg/Kg 0.02Ethylbenzene < 0.0151 mg/Kg0.02 3

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Report Date: February 24, 2016

15-0171-03

Work Order: 16021602 David Bilbrey 8" Pipeline

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					MDL			
Parameter	Flag		$\operatorname{Cert}$		Result		Units	RL
Xylene			3		< 0.00430	]	mg/Kg	0.02
						Spike	Percent	Recovery
Surrogate	$\operatorname{Flag}$	$\operatorname{Cert}$	Result	$\operatorname{Units}$	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			1.46	mg/Kg	1	2.00	73	70 - 130
4-Bromofluorobenzene (4-BFR)			1 41	mg/Kg	1	2.00	70	70 - 130

Method Blank (1) QC Batch: 128316

QC Batch: 128316 Date Analyzed: 2016-02-19 Prep Batch: 108639 QC Preparation: 2016-02-18

Analyzed By: AK Prepared By: AK

Page Number: 17 of 29

			MDL		
Parameter	Flag	Cert	Result	Units	RL
GRO		3	< 1.76	m mg/Kg	4

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			1.50	mg/Kg	1	2.00	75	70 - 130
4-Bromofluorobenzene (4-BFB)			1.41	mg/Kg	1	2.00	70	70 - 130

Method Blank (1) QC Batch: 128347

QC Batch: 128347 Date Analyzed: 2016-02-19 Analyzed By: RL Prep Batch: 108679 QC Preparation: 2016-02-19 Prepared By: RL

			MDL		
Parameter	Flag	Cert	Result	Units	RL
Chloride		1,2,4	< 8.34	m mg/Kg	25

Method Blank (1) QC Batch: 128416

QC Batch: 128416 Date Analyzed: 2016-02-23 Analyzed By: RL Prep Batch: 108739 QC Preparation: 2016-02-23 Prepared By: RL

Report Date: February 24, 2016 15-0171-03

Work Order: 16021602

Page Number: 18 of 29

David Bilbrey 8" Pipeline

			$\mathrm{MDL}$		
Parameter	$\operatorname{Flag}$	Cert	Result	Units	RL
Chloride		1,2,4	< 8.34	mg/Kg	25

Report Date: February 24, 2016 Work Order: 16021602 Page Number: 19 of 29

15-0171-03 David Bilbrey 8" Pipeline

# Laboratory Control Spikes

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

QC Batch: 128267 Date Analyzed: 2016-02-17 Analyzed By: JL Prep Batch: 108612 QC Preparation: 2016-02-17 Prepared By: JL

			LCS			Spike	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	$\operatorname{Limit}$
DRO		3	220	mg/Kg	1	250	< 7.41	88	70 - 130

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

			LCSD			Spike	Matrix		Rec.		RPD
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
DRO		3	209	mg/Kg	1	250	< 7.41	84	70 - 130	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-Tricosane	53.3	50.9	mg/Kg	1	50.0	107	102	70 - 130

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

QC Batch: 128268 Date Analyzed: 2016-02-17 Analyzed By: JL Prep Batch: 108612 QC Preparation: 2016-02-17 Prepared By: JL

	LCS	LCSD			Spike	LCS	LCSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
n-Tricosane	53.3	50.9	mg/Kg	1	50.0	107	102	70 - 130
n-Triacontane	57.0	53.9	mg/Kg	1	50.0	114	108	54.8 - 164

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

QC Batch: 128315 Date Analyzed: 2016-02-19 Analyzed By: AK Prep Batch: 108639 QC Preparation: 2016-02-18 Prepared By: AK Report Date: February 24, 2016 Work Order: 16021602Page Number: 20 of 29 David Bilbrey 8" Pipeline

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			LCS			Spike	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	$\operatorname{Limit}$
Benzene		3	2.07	mg/Kg	1	2.00	< 0.0100	104	70 - 130
Toluene		3	2.05	mg/Kg	1	2.00	< 0.0156	102	70 - 130
Ethylbenzene		3	2.08	mg/Kg	1	2.00	< 0.0151	104	70 - 130
Xylene		3	5.95	mg/Kg	1	6.00	< 0.00430	99	70 - 130

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

			LCSD			Spike	Matrix		Rec.		RPD
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Benzene		3	2.05	mg/Kg	1	2.00	< 0.0100	102	70 - 130	1	20
Toluene		3	2.02	mg/Kg	1	2.00	< 0.0156	101	70 - 130	2	20
Ethylbenzene		3	2.09	mg/Kg	1	2.00	< 0.0151	104	70 - 130	0	20
Xylene		3	5.85	mg/Kg	1	6.00	< 0.00430	98	70 - 130	2	20

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

	LCS	LCSD			Spike	LCS	LCSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	1.74	1.91	mg/Kg	1	2.00	87	96	70 - 130
4-Bromofluorobenzene (4-BFB)	1.81	1.86	mg/Kg	1	2.00	90	93	70 - 130

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

QC Batch: Date Analyzed: Analyzed By: AK 128316 2016-02-19 Prep Batch: 108639 QC Preparation: 2016-02-18 Prepared By: AK

			LCS			Spike	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit
GRO		3	19.2	mg/Kg	1	20.0	< 1.76	96	70 - 130

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

			LCSD			Spike	Matrix		Rec.		RPD
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
GRO		3	18.5	mg/Kg	1	20.0	< 1.76	92	70 - 130	4	20

	LCS	LCSD			$_{ m Spike}$	LCS	LCSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	2.06	1.92	mg/Kg	1	2.00	103	96	70 - 130
4-Bromofluorobenzene (4-BFB)	1.85	1.74	mg/Kg	1	2.00	92	87	70 - 130

Report Date: February 24, 2016 Work Order: 16021602 Page Number: 21 of 29

15-0171-03 David Bilbrey 8" Pipeline

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

QC Batch: 128347 Date Analyzed: 2016-02-19 Analyzed By: RL Prep Batch: 108679 QC Preparation: 2016-02-19 Prepared By: RL

LCS Spike Matrix Rec. Param F  $\mathbf{C}$ Result Dil. Amount Result Limit Units Rec. Chloride 256 250 < 8.34 90 - 110 1,2,4 mg/Kg 102

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

			LCSD			Spike	Matrix		Rec.		RPD
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride		1,2,4	254	mg/Kg	1	250	< 8.34	102	90 - 110	1	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: 128416 Date Analyzed: 2016-02-23 Analyzed By: RL Prep Batch: 108739 QC Preparation: 2016-02-23 Prepared By: RL

			LCS			Spike	Matrix		Rec.
Param	$\mathbf{F}$	$^{\mathrm{C}}$	Result	Units	Dil.	Amount	Result	Rec.	$\operatorname{Limit}$
Chloride		1,2,4	252	mg/Kg	1	250	< 8.34	101	90 - 110

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

			LCSD			$_{ m Spike}$	Matrix		Rec.		RPD
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride		1,2,4	255	mg/Kg	1	250	< 8.34	102	90 - 110	1	20

Report Date: February 24, 2016 Work Order: 16021602 Page Number: 22 of 29

David Bilbrey 8" Pipeline

15-0171-03

# Matrix Spikes

Matrix Spike (xMS-1) Spiked Sample: 414350

QC Batch: 128267 Date Analyzed: 2016-02-17 Analyzed By: JL Prep Batch: 108612 QC Preparation: 2016-02-17 Prepared By: JL

				MS			$\operatorname{Spike}$	Matrix		Rec.
Param		$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit
DRO	Qs	Qs	3	419	mg/Kg	1	250	73.2	138	70 - 130

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

				MSD			Spike	Matrix		Rec.		RPD	
Param		$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit	
DRO	Or	Or	3	288	mg/Kg	1	250	73.2	86	70 - 130	37	20	

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

	MS	MSD			Spike	MS	MSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
n-Tricosane	58.8	49.4	mg/Kg	1	50	118	99	70 - 130

Matrix Spike (xMS-1) Spiked Sample: 414350

QC Batch: 128268 Date Analyzed: 2016-02-17 Analyzed By: JL Prep Batch: 108612 QC Preparation: 2016-02-17 Prepared By: JL

	MS	MSD			Spike	MS	MSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
n-Tricosane	58.8	49.4	mg/Kg	1	50	118	99	70 - 130
n-Triacontane	53.7	49.2	mg/Kg	1	50	107	98	10 - 258

Matrix Spike (MS-1) Spiked Sample: 414383

QC Batch: 128315 Date Analyzed: 2016-02-19 Analyzed By: AK
Prep Batch: 108639 QC Preparation: 2016-02-18 Prepared By: AK

Report Date: February 24, 2016 Work Order: 16021602 Page Number: 23 of 29

David Bilbrey 8" Pipeline

15 - 0171 - 03

				MS			Spike	Matrix		Rec.
Param		$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit
Benzene	$1_{\mathrm{Qs}}$	Qs	3	5.56	mg/Kg	100	2.00	4.96	30	70 - 130
Toluene	$_{\mathrm{Qs}}$	$_{\mathrm{Qs}}$	3	37.8	$\mathrm{mg}/\mathrm{Kg}$	100	2.00	58.8	-1050	70 - 130
Ethylbenzene	Qs	$_{\mathrm{Qs}}$	3	96.7	mg/Kg	100	2.00	145	-2415	70 - 130
Xylene	$_{\mathrm{Qs}}$	$_{\mathrm{Qs}}$	3	101	mg/Kg	100	6.00	144	-715	70 - 130

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

				MSD			Spike	Matrix		Rec.		RPD
Param		F	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Benzene	$^{2}$ Qs	Qs	3	4.90	mg/Kg	100	2.00	4.96	-3	70 - 130	13	20
Toluene	Qs	$_{\mathrm{Qs}}$	3	32.3	mg/Kg	100	2.00	58.8	-1325	70 - 130	16	20
Ethylbenzene	Qs	$_{\mathrm{Qs}}$	3	93.0	mg/Kg	100	2.00	145	-2600	70 - 130	4	20
Xylene	$_{\mathrm{Qs}}$	$_{\mathrm{Qs}}$	3	97.1	mg/Kg	100	6.00	144	-780	70 - 130	4	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)	Qsr	Qsr	168	163	mg/Kg	100	100	168	82	70 - 130
4-Bromofluorobenzene (4-BFB)	$_{\mathrm{Qsr}}$	$_{\mathrm{Qsr}}$	183	171	mg/Kg	100	100	183	86	70 - 130

Matrix Spike (MS-1) Spiked Sample: 414383

QC Batch: 128316 Date Analyzed: 2016-02-19 Analyzed By: AK Prep Batch: 108639 QC Preparation: 2016-02-18 Prepared By: AK

				MS			Spike	Matrix		Rec.
Param		$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit
GRO	$^{3}$ Qs	Qs	3	3060	mg/Kg	100	20.0	3661	-3005	70 - 130

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

				MSD			Spike	Matrix		Rec.		RPD
Param		$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
GRO	4 <sub>Qs</sub>	Qs	3	2510	mg/Kg	100	20.0	3661	-5755	70 - 130	20	20

	MS	MSD			$_{\mathrm{Spike}}$	MS	MSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	197	178	mg/Kg	100	200	98	89	70 - 130
4-Bromofluorobenzene (4-BFB)	252	235	mg/Kg	100	200	126	118	70 - 130

Report Date: February 24, 2016 Work Order: 16021602 Page Number: 24 of 29

David Bilbrey 8" Pipeline

15-0171-03

Matrix Spike (MS-1) Spiked Sample: 414538

QC Batch: 128347 Date Analyzed: 2016-02-19 Analyzed By: RL Prep Batch: 108679 QC Preparation: 2016-02-19 Prepared By: RL

MS Spike Matrix Rec. F  $\mathbf{C}$ Param Result Units Dil. Amount Result Rec. Limit 1350 1720 Chloride 1,2,4 mg/Kg 5 250 -14880 - 120 Qs Qs

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

RPD MSD Spike Matrix Rec. F Param  $\mathbf{C}$ Result Units Dil. Amount Result Rec. Limit RPD Limit Chloride 1350 mg/Kg 250 1720 -148 80 - 120 0 20 5 Qs Qs 1,2,4

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

Matrix Spike (MS-1) Spiked Sample: 413932

QC Batch: 128416 Date Analyzed: 2016-02-23 Analyzed By: RL Prep Batch: 108739 QC Preparation: 2016-02-23 Prepared By: RL

MSSpike Matrix Rec. F Param  $\mathbf{C}$ Result Units Dil. Amount Result Rec. Limit Chloride 168 485mg/Kg 250 64.180 - 120 Qs 1,2,4 1

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

MSD RPD Spike Matrix Rec.  $\mathbf{C}$ Param F Result Units Dil. Amount Result Rec. Limit RPDLimit Chloride 301 mg/Kg 250 64.1 95 80 - 120 47 20  $_{
m Qr}$ Qr 1,2,4

Report Date: February 24, 2016 Work Order: 16021602 Page Number: 25 of 29

15-0171-03 David Bilbrey 8" Pipeline

### Calibration Standards

#### Standard (CCV-1)

QC Batch: 128267 Date Analyzed: 2016-02-17 Analyzed By: JL

				CCVs	CCVs	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		3	mg/Kg	250	211	84	80 - 120	2016-02-17

#### Standard (CCV-2)

QC Batch: 128267 Date Analyzed: 2016-02-17 Analyzed By: JL

				CCVs	CCVs	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		3	mg/Kg	250	258	103	80 - 120	2016-02-17

#### Standard (CCV-1)

QC Batch: 128315 Date Analyzed: 2016-02-19 Analyzed By: AK

				CCVs	CCVs	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Benzene		3	mg/kg	0.100	0.101	101	80 - 120	2016-02-19
Toluene		3	mg/kg	0.100	0.0992	99	80 - 120	2016-02-19
Ethylbenzene		3	$\mathrm{mg/kg}$	0.100	0.103	103	80 - 120	2016-02-19
Xylene		3	mg/kg	0.300	0.280	93	80 - 120	2016-02-19

#### Standard (CCV-2)

QC Batch: 128315 Date Analyzed: 2016-02-19 Analyzed By: AK

Report Date: February 24, 2016 Work Order: 16021602 Page Number: 26 of 29

15-0171-03 David Bilbrey 8" Pipeline

				CCVs True	$\begin{array}{c} {\rm CCVs} \\ {\rm Found} \end{array}$	CCVs Percent	Percent Recovery	Date
Param	Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Benzene		3	mg/kg	0.100	0.0965	96	80 - 120	2016-02-19
Toluene		3	mg/kg	0.100	0.0979	98	80 - 120	2016-02-19
Ethylbenzene		3	mg/kg	0.100	0.0992	99	80 - 120	2016-02-19
Xylene		3	mg/kg	0.300	0.275	92	80 - 120	2016-02-19

#### Standard (CCV-1)

QC Batch: 128316 Date Analyzed: 2016-02-19 Analyzed By: AK

				CCVs	CCVs	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		3	mg/Kg	1.00	0.981	98	80 - 120	2016-02-19

#### Standard (CCV-2)

QC Batch: 128316 Date Analyzed: 2016-02-19 Analyzed By: AK

				CCVs	CCVs	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		3	mg/Kg	1.00	1.09	109	80 - 120	2016-02-19

#### Standard (CCV-1)

QC Batch: 128347 Date Analyzed: 2016-02-19 Analyzed By: RL

				$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	$\operatorname{Cert}$	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride		1,2,4	mg/Kg	25.0	25.4	102	90 - 110	2016-02-19

#### Standard (CCV-2)

QC Batch: 128347 Date Analyzed: 2016-02-19 Analyzed By: RL

Report Date: February 24, 2016 Work Order: 16021602 Page Number: 27 of 29

15-0171-03 David Bilbrey 8" Pipeline

				$\begin{array}{c} { m CCVs} \\ { m True} \end{array}$	CCVs Found	$rac{ ext{CCVs}}{ ext{Percent}}$	Percent Recovery	Date
Param	Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride		1,2,4	mg/Kg	25.0	25.5	102	90 - 110	2016-02-19

#### Standard (CCV-1)

QC Batch: 128416 Date Analyzed: 2016-02-23 Analyzed By: RL

				CCVs	CCVs	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride		1,2,4	mg/Kg	25.0	25.5	102	90 - 110	2016-02-23

#### Standard (CCV-2)

QC Batch: 128416 Date Analyzed: 2016-02-23 Analyzed By: RL

				CCVs	CCVs	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	$\operatorname{Cert}$	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride		1,2,4	mg/Kg	25.0	25.4	102	90 - 110	2016-02-23

Report Date: February 24, 2016 Work Order: 16021602 Page Number: 28 of 29

15-0171-03 David Bilbrey 8" Pipeline

### Appendix

#### Report Definitions

Name	Definition
MDL	Method Detection Limit
MQL	Minimum Quantitation Limit
SDL	Sample Detection Limit

#### **Laboratory Certifications**

	Certifying	Certification	Laboratory
$\mathbf{C}$	Authority	Number	Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	LELAP	LELAP-02003	Lubbock
2	NELAP	T104704219-15-11	Lubbock
3	NELAP	T104704392-14-8	Midland
4		2015-066	Lubbock

### Standard Flags

- F Description
- B Analyte detected in the corresponding method blank above the method detection limit
- H Analyzed out of hold time
- J Estimated concentration
- Jb The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less then ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
- Je Estimated concentration exceeding calibration range.
- MI1 Split peak or shoulder peak
- MI2 Instrument software did not integrate
- MI3 Instrument software misidentified the peak
- MI4 Instrument software integrated improperly
- MI5 Baseline correction
- Qc Calibration check outside of laboratory limits.
- Qr RPD outside of laboratory limits
- Qs Spike recovery outside of laboratory limits.
- Qsr Surrogate recovery outside of laboratory limits.
  - U The analyte is not detected above the SDL

Report Date: February 24, 2016 Work Order: 16021602 Page Number: 29 of 29 15-0171-03 David Bilbrey 8" Pipeline

Result Comments

- 1 Analyst prep error, no spike. LCS/LCSD shows recovery for batch.
- 2 Analyst prep error, no spike. LCS/LCSD shows recovery for batch.
- 3 Analyst prep error, no spike. LCS/LCSD shows recovery for batch.
- 4 Analyst prep error, no spike. LCS/LCSD shows recovery for batch.

#### Attachments

The scanned attachments will follow this page.

Please note, each attachment may consist of more than one page.

CHAIN-OF-CUSTODY Pireling COLLECTOR: Travis Luillians OF CUSTODY SEALS - GBROKEN GINTACT GINOT USED GARRIER BILL # \$5: CT & 33818 41 FIELDINOTES 414385 Vde 28274 か多かけ 11-12-87 11-12-87 PAGE THERM #: 7 ( Bilbrey LAB WORK ORDER #: LABORATORY USE ONLY: RECEIVING TEMP: 5 .-THAND DELIVERED PROJECT LOCATION OR NAME: David LAI PROJECT #: 15-0171-03 116/2016 TURN AROUND TIME OTHER [] NORMAL 1 DAY [] 2 DAY DATE: PO #: DATE/TIME

RECEIVED BY: (Signature)

DATE/TIME

RECEIVED BY (Signature) RECOMPEDEN: (Signature) AMITHU 507 N. Marienfeld, Ste. 200 Midland, TX 79701 **PRESERVATION** NUPRESERVED 432-687-0901 400 1000 1: HOCA ICE X □ HOBN □ OSSH HNO HCI # of Containers 8hill 91/21/6 Matrix DATE/TIME 北地 12:46 12:35 17:41 13:78 2012/10/12/20 Time SL=SLUDGE OT=OTHER P=PAINT Date A Grson & Ssociates, Inc. Environmental Consultants S-SOIL W=WATER A=AIR Lab # RELINGUISHED BY (Signature) RELINQUISHED BY:(Signature) RELINQUISHEB BY: (Signature) Data Reported to: TRRP report? 2 Time zone/State: TIME ZONE: / rower 20 5 Sample I.D. Field HA3-4 H 3-3 HA3-7 HA3-8 4A3-6 4.5~ RSP TOTAL



#### Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

## Analytical and Quality Control Report

Report Date: February 1, 2016

16012606

Work Order:

Michael Gant Larson and Associates, Inc.

P. O. Box 50685 Midland, TX, 79710

Project Name: David Bilbrey 8" Pipeline

Project Number: 15-0171-03

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

			Date	1 ime	Date
Sample	Description	Matrix	Taken	Taken	Received
412628	HA-1-1'	soil	2016-01-25	13:15	2016-01-26
412629	HA-1-2'	soil	2016-01-25	13:25	2016-01-26
412630	HA-2-1'	soil	2016-01-25	13:38	2016-01-26
412631	HA-2-2'	soil	2016-01-25	13:48	2016-01-26
412632	HA-3-1'	soil	2016-01-25	14:00	2016-01-26
412633	HA-3-2'	soil	2016-01-25	14:08	2016-01-26
412634	HA-4-1'	soil	2016-01-25	14:17	2016-01-26
412635	HA-4-2'	soil	2016-01-25	14:25	2016-01-26

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

TraceAnalysis, Inc. uses the attached chain of custody (COC) as the laboratory check-in documentation which includes sample receipt, temperature, sample preservation method and condition, collection date and time, testing requested, company, sampler, contacts and any special remarks.

This report consists of a total of 30 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director James Taylor, Assistant Director Brian Pellam, Operations Manager

# Report Contents

Case Narrative
Analytical Report  Sample 412628 (HA-1-1')  Sample 412629 (HA-1-2')  Sample 412630 (HA-2-1')  Sample 412631 (HA-2-2')  Sample 412632 (HA-3-1')  Sample 412633 (HA-3-2')  Sample 412634 (HA-4-1')  Sample 412635 (HA-4-2')  1
Method Blanks         QC Batch 127766 - Method Blank (1)       1         QC Batch 127767 - Method Blank (1)       1         QC Batch 127788 - Method Blank (1)       1         QC Batch 127841 - Method Blank (1)       1         QC Batch 127864 - Method Blank (1)       1
Laboratory Control Spikes       2d         QC Batch 127766 - LCS (1)       2         QC Batch 127767 - LCS (1)       2         QC Batch 127788 - LCS (1)       2         QC Batch 127841 - LCS (1)       2         QC Batch 127864 - LCS (1)       2
Matrix Spikes       2         QC Batch 127766 - xMS (1)       2         QC Batch 127767 - xMS (1)       2         QC Batch 127788 - MS (1)       2         QC Batch 127841 - MS (1)       2         QC Batch 127864 - MS (1)       2
Calibration Standards         QC Batch 127766 - CCV (1)       2         QC Batch 127766 - CCV (2)       2         QC Batch 127766 - CCV (3)       2         QC Batch 127788 - CCV (1)       2         QC Batch 127788 - CCV (2)       2         QC Batch 127841 - CCV (1)       2         QC Batch 127841 - CCV (2)       2         QC Batch 127864 - CCV (2)       2         QC Batch 127864 - CCV (2)       2
Appendix2Report Definitions2Laboratory CertificationsPage 3 of 30

Standard Flags		 																						2
Attachments .		 																						2

### Case Narrative

Samples for project David Bilbrey 8" Pipeline were received by TraceAnalysis, Inc. on 2016-01-26 and assigned to work order 16012606. Samples for work order 16012606 were received intact at a temperature of 4.7 C.

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

		Prep	$\operatorname{Prep}$	QC	Analysis
Test	Method	Batch	Date	Batch	Date
Chloride (IC)	E 300.0	108227	2016-01-26 at 11:10	127841	2016-01-28 at 08:53
Chloride (IC)	E 300.0	108248	2016-01-29 at 15:00	127864	2016-01-30 at $10:58$
TPH DRO	S 8015 $D$	108162	2016-01-27 at $08:51$	127766	2016-01-27 at $08:57$
TPH GRO	S 8015 $D$	108163	2016-01-26 at 14:30	127788	2016-01-28 at $07:15$
TPH ORO	S 8015 D	108162	2016-01-27 at $08:51$	127767	2016-01-27 at $08:59$

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 16012606 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: February 1, 2016 Work Order: 16012606 Page Number: 6 of 30

15-0171-03 David Bilbrey 8" Pipeline

### **Analytical Report**

Sample: 412628 - HA-1-1'

Laboratory: Lubbock

Prep Method: Analysis: Chloride (IC) Analytical Method: E 300.0 N/AQC Batch: 127841 Date Analyzed: 2016-01-28 Analyzed By: RLPrep Batch: 108227 Sample Preparation: Prepared By: RL

Sample: 412628 - HA-1-1'

Laboratory: Midland

TPH DRO Analysis: Analytical Method: S 8015 D Prep Method: N/AQC Batch: 127766 Date Analyzed: 2016-01-27 Analyzed By: JLPrep Batch: 108162 Sample Preparation: 2016-01-27 Prepared By: JL

Spike Percent Recovery Surrogate Flag Cert Result Units Dilution Amount Recovery Limits n-Tricosane 56.1 mg/Kg 50.0 112 70 - 130 1

Sample: 412628 - HA-1-1'

Laboratory: Midland

Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035 QC Batch: 127788 Date Analyzed: 2016-01-28 Analyzed By: AK Prep Batch: 108163 Sample Preparation: 2016-01-26 Prepared By: AK

Percent Recovery Spike Surrogate Flag Cert Result Units Dilution Amount Recovery Limits 70 - 130 Trifluorotoluene (TFT) 92 1.83 mg/Kg 2.00

 $continued \dots$ 

Report Date: February 1, 2016 Work Order: 16012606 Page Number: 7 of 30

15-0171-03	David Bilbrey 8" Pipeline
sample continued	

sample commutate								
						$_{\mathrm{Spike}}$	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
4-Bromofluorobenzene (4-BFB)			2.08	mg/Kg	1	2.00	104	70 - 130

#### Sample: 412628 - HA-1-1'

Laboratory:	Midland				
Analysis:	TPH ORO	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	127767	Date Analyzed:	2016-01-27	Analyzed By:	$\operatorname{JL}$
Prep Batch:	108162	Sample Preparation:	2016-01-27	Prepared By:	$\operatorname{JL}$

			MDL	MQL	PQL	RL						
Parameter	Flag	$\operatorname{Cert}$	Result	Result	Result	Result	Units	Dilution	MDL	MQL	PQL	RL
ORO			0.00	< 50.0	< 50.0	< 50.0	mg/Kg	1	0.00	50.0	50.0	50.0

						$\operatorname{Spike}$	Percent	Recovery
Surrogate	Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			56.1	mg/Kg	1	50.0	112	70 - 130
n-Triacontane			58.6	$\mathrm{mg}/\mathrm{Kg}$	1	50.0	117	37.1 - 162

#### Sample: 412629 - HA-1-2'

Laboratory:	Lubbock
-------------	---------

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	127864	Date Analyzed:	2016-01-30	Analyzed By:	RL
Prep Batch:	108248	Sample Preparation:		Prepared By:	RL

			RL			
Parameter	Flag	$\operatorname{Cert}$	Result	Units	Dilution	RL
Chloride		1,2,4	<25.0	m mg/Kg	1	25.0

#### Sample: 412629 - HA-1-2'

	3 54 11	-
Laboratory:	Midlan	d

Analysis:	TPH DRO	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	127766	Date Analyzed:	2016-01-27	Analyzed By:	JL
Prep Batch:	108162	Sample Preparation:	2016-01-27	Prepared By:	JL

			RL			
Parameter	$\operatorname{Flag}$	Cert	Result	Units	Dilution	RL
DRO	B,U	3	< 50.0	mg/Kg	1	50.0

Report Date: February 1, 2016 Work Order: 16012606 Page Number: 8 of 30

15-0171-03 David Bilbrey 8" Pipeline

						Spike	Percent	Recovery
Surrogate	Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			49.6	mg/Kg	1	50.0	99	70 - 130

#### Sample: 412629 - HA-1-2'

Laboratory: Midland

Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035 QC Batch: 127788 Date Analyzed: 2016-01-28 Analyzed By: AKPrep Batch: 108163 Sample Preparation: 2016-01-26 Prepared By: AK

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			1.63	mg/Kg	1	2.00	82	70 - 130
4-Bromofluorobenzene (4-BFB)			1.68	$\mathrm{mg}/\mathrm{Kg}$	1	2.00	84	70 - 130

#### Sample: 412629 - HA-1-2'

Laboratory: Midland

TPH ORO Analysis: Analytical Method: S 8015 D Prep Method: N/AQC Batch: 127767 Date Analyzed: Analyzed By: JL2016-01-27 Prep Batch: 108162 Sample Preparation: 2016-01-27 Prepared By: JL

MDL MQL PQL RLParameter Flag Cert Result Result Result Result  ${\rm Units}$ Dilution MDLMQLPQL RL50.0 ORO 0.00 < 50.0 < 50.0 50.0 < 50.0mg/Kg 0.0050.0

						$\operatorname{Spike}$	Percent	Recovery
Surrogate	$\operatorname{Flag}$	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			49.6	mg/Kg	1	50.0	99	70 - 130
n-Triacontane			58.6	$\mathrm{mg}/\mathrm{Kg}$	1	50.0	117	37.1 - 162

#### Sample: 412630 - HA-2-1'

Laboratory: Lubbock

Chloride (IC) Analysis: Analytical Method: E 300.0 Prep Method: N/A QC Batch: 127864 Date Analyzed: 2016-01-30 Analyzed By: RLPrep Batch: 108248 Sample Preparation: Prepared By: RL

Report Date: February 1, 2016 Work Order: 16012606 Page Number: 9 of 30

15-0171-03 David Bilbrey 8" Pipeline

			RL			
Parameter	Flag	$\operatorname{Cert}$	Result	Units	Dilution	RL
Chloride		1,2,4	<25.0	mg/Kg	1	25.0

#### Sample: 412630 - HA-2-1'

Laboratory: Midland

Analysis: TPH DRO Analytical Method: S 8015 D QC Batch: 127766 Date Analyzed: 2016-01-27 Prep Batch: 108162 Sample Preparation: 2016-01-27

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			50.7	mg/Kg	1	50.0	101	70 - 130

#### Sample: 412630 - HA-2-1'

Laboratory: Midland

Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035 QC Batch: 127788 Date Analyzed: 2016-01-28 Analyzed By: AK Prep Batch: 108163 Sample Preparation: 2016-01-26 Prepared By: AK

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
	riag	OCIU	rttsurt	Omos	Dilution	Timount	recovery	Lilling
Trifluorotoluene (TFT)			1.80	${ m mg/Kg}$	1	2.00	90	70 - 130
4-Bromofluorobenzene (4-BFB)			2.02	mg/Kg	1	2.00	101	70 - 130

#### Sample: 412630 - HA-2-1'

Laboratory: Midland

TPH ORO Prep Method: N/A Analysis: Analytical Method: S 8015 D QC Batch: 127767 Date Analyzed: 2016-01-27 Analyzed By: JL108162 Prep Batch: Sample Preparation: 2016-01-27 Prepared By: JL

 $continued \dots$ 

Prep Method: N/A

JL

JL

Analyzed By:

Prepared By:

Report Date: February 1, 2016 Work Order: 16012606 Page Number: 10 of 30

David Bilbrey 8" Pipeline

sample 412630 continued ...

15-0171-03

Parameter	Flag	Cert	MDL Result	MQL Result	PQL Result	RL Result	Units	Dilution	MDL	MQL	PQL	RL
			MDL	MQL	PQL	RL						
Parameter	Flag	$\operatorname{Cert}$	Result	Result	Result	Result	Units	Dilution	MDL	MQL	PQL	RL
ORO			0.00	< 50.0	< 50.0	< 50.0	mg/Kg	1	0.00	50.0	50.0	50.0
			_					Spike		ercent		overy
Surrogate		Flag	Cert	Resu	lt U	Inits	Dilution	Amount	Re	ecovery	Li	mits
n-Tricosane				50	.7 m	g/Kg	1	50.0		101	70	- 130
n-Triacontane				55	.4 m	g/Kg	1	50.0		111	37.1	- 162

#### Sample: 412631 - HA-2-2'

Laboratory: Lubbock

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A QC Batch: 127864Analyzed By: RLDate Analyzed: 2016-01-30 Prep Batch: 108248 Sample Preparation: Prepared By: RL

#### Sample: 412631 - HA-2-2'

Laboratory: Midland

S 8015 D Analysis: TPH DRO Analytical Method: Prep Method: N/A QC Batch: 127766Date Analyzed: 2016-01-27 Analyzed By: JLPrep Batch: 108162 Sample Preparation: 2016-01-27 Prepared By: JL

n-Tricosane			48.5	mg/Kg	1	50.0	97	70 - 130
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
						$\operatorname{Spike}$	Percent	Recovery

Report Date: February 1, 2016 Work Order: 16012606 Page Number: 11 of 30

15-0171-03 David Bilbrey 8" Pipeline

#### Sample: 412631 - HA-2-2'

Laboratory: Midland

 $\le 5035$ Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: QC Batch: 127788 Date Analyzed: 2016-01-28 Analyzed By: AK Prep Batch: 108163 Sample Preparation: 2016-01-26 Prepared By: AK

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			1.66	mg/Kg	1	2.00	83	70 - 130
4-Bromofluorobenzene (4-BFB)			1.90	$\mathrm{mg}/\mathrm{Kg}$	1	2.00	95	70 - 130

#### Sample: 412631 - HA-2-2'

Laboratory: Midland

Analysis: TPH ORO Prep Method: Analytical Method: S 8015 D N/AQC Batch: JL127767 Date Analyzed: 2016-01-27 Analyzed By: Prep Batch: 108162 Sample Preparation: 2016-01-27 Prepared By: JL

MDL MQL PQL RLParameter Flag Cert Result Result Result Result Units Dilution MDL MQLPQL RL0.00 < 50.0 50.0 ORO < 50.0 < 50.0 0.00 50.0 50.0 mg/Kg

						$\operatorname{Spike}$	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			48.5	mg/Kg	1	50.0	97	70 - 130
n-Triacontane			50.8	$\mathrm{mg}/\mathrm{Kg}$	1	50.0	102	37.1 - 162

#### Sample: 412632 - HA-3-1'

Laboratory: Lubbock

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A QC Batch: RL127864Date Analyzed: 2016-01-30 Analyzed By: Prep Batch: 108248 Sample Preparation: Prepared By: RL

Report Date: February 1, 2016 Work Order: 16012606 Page Number: 12 of 30

15-0171-03 David Bilbrey 8" Pipeline

#### Sample: 412632 - HA-3-1'

Laboratory: Midland

TPH DRO Analysis: Analytical Method: S 8015 D Prep Method: N/AQC Batch: 127766 Date Analyzed: 2016-01-27 Analyzed By: JLPrep Batch: 108162 Sample Preparation: Prepared By: 2016-01-27 JL

						Spike	Percent	Recovery
Surrogate	Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			50.7	mg/Kg	1	50.0	101	70 - 130

#### Sample: 412632 - HA-3-1'

Laboratory: Midland

Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035 QC Batch: Date Analyzed: Analyzed By: 127788 2016-01-28 AKPrep Batch: 108163 Sample Preparation: 2016-01-26 Prepared By: AK

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			1.50	mg/Kg	1	2.00	75	70 - 130
4-Bromofluorobenzene (4-BFB)			1.67	mg/Kg	1	2.00	84	70 - 130

#### Sample: 412632 - HA-3-1'

Laboratory: Midland

TPH ORO Prep Method: N/A Analysis: Analytical Method: S 8015 D QC Batch: 127767 Date Analyzed: 2016-01-27 Analyzed By: JLPrep Batch: 108162 Sample Preparation: Prepared By: 2016-01-27 JL

MDLMQL PQLRLResult MDLPQL RLParameter Flag Cert Result Result Result Units Dilution MQL0.00 50.0 ORO 0.00 < 50.0 < 50.0 < 50.0 mg/Kg 50.0 50.0

						Spike	Percent	Recovery
Surrogate	Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			51.8	mg/Kg	1	50.0	104	70 - 130

 $continued \dots$ 

Report Date: February 1, 2016 Work Order: 16012606 Page Number: 13 of 30

David Bilbrey 8" Pipeline

$sample\ continued\ \dots$								
1						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane			51.8	mø/Kø	1	50.0	104	37.1 - 162

#### Sample: 412633 - HA-3-2'

Laboratory: Lu	.bbock
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15-0171-03

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A QC Batch: 127864 Date Analyzed: 2016-01-30 Analyzed By: RL Prep Batch: 108248 Sample Preparation: Prepared By: RL

			RL			
Parameter	Flag	Cert	Result	Units	Dilution	RL
Chloride		1,2,4	45.5	mg/Kg	1	25.0

#### Sample: 412633 - HA-3-2'

Laboratory: Midland

Analysis: TPH DRO Analytical Method: S 8015 D Prep Method: N/A QC Batch: 127766 Date Analyzed: 2016-01-27 Analyzed By: JL Prep Batch: 108162 Sample Preparation: 2016-01-27 Prepared By: JL

					RL			
Parameter		Flag	Cert	Re	esult	Units	Dilution	RL
DRO		В	3		108	mg/Kg	1	50.0
Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits

mg/Kg

123

70 - 130

50.0

61.3

#### Sample: 412633 - HA-3-2'

Laboratory: Midland

n-Tricosane

Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035 QC Batch: 127788 Date Analyzed: 2016-01-28 Analyzed By: AK Prep Batch: 108163 Sample Preparation: 2016-01-26 Prepared By: AK

			RL			
Parameter	Flag	Cert	Result	Units	Dilution	RL
GRO	$_{\rm Qr,U}$	3	< 4.00	$\mathrm{mg}/\mathrm{Kg}$	1	4.00

Report Date: February 1, 2016 Work Order: 16012606 Page Number: 14 of 30

15-0171-03 David Bilbrey 8" Pipeline

a			~			<b>5</b> .1	Spike	Percent	Recovery
Surrogate		$\operatorname{Flag}$	$\operatorname{Cert}$	Result	$\operatorname{Units}$	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)	Qsr	Qsr		1.37	mg/Kg	1	2.00	68	70 - 130
4-Bromofluorobenzene (4-BFB)				1.64	mg/Kg	1	2.00	82	70 - 130

#### Sample: 412633 - HA-3-2'

Laboratory: Midland

Analysis: TPH ORO Analytical Method: S 8015 D Prep Method: N/A QC Batch: 127767 Date Analyzed: 2016-01-27 Analyzed By: JLPrep Batch: 108162 Sample Preparation: 2016-01-27 Prepared By: JL

 $\operatorname{MDL}$ MQLPQLRLParameter Flag Cert Result Result Result Result Units Dilution MDLMQL PQL RLORO 0.00 < 50.0 < 50.0 < 50.0 0.00 50.0 50.0 50.0 mg/Kg

						$\operatorname{Spike}$	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			61.3	mg/Kg	1	50.0	123	70 - 130
n-Triacontane			57.6	$\mathrm{mg}/\mathrm{Kg}$	1	50.0	115	37.1 - 162

#### Sample: 412634 - HA-4-1'

Laboratory: Lubbock

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A QC Batch: 127864 Date Analyzed: 2016-01-30 Analyzed By: RL Prep Batch: 108248 Sample Preparation: Prepared By: RL

#### Sample: 412634 - HA-4-1'

Laboratory: Midland

S 8015 D Analysis: TPH DRO Analytical Method: Prep Method: N/AQC Batch: 127766 Date Analyzed: 2016-01-27 Analyzed By: JLSample Preparation: 2016-01-27 Prepared By: Prep Batch: 108162 JL

Report Date: February 1, 2016 Work Order: 16012606 Page Number: 15 of 30

15-0171-03 David Bilbrey 8" Pipeline

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			56.9	mg/Kg	1	50.0	114	70 - 130

#### Sample: 412634 - HA-4-1'

Laboratory: Midland

Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035 QC Batch: 127788 Date Analyzed: 2016-01-28 Analyzed By: AKPrep Batch: 108163 Sample Preparation: 2016-01-26 Prepared By: AK

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			1.53	mg/Kg	1	2.00	76	70 - 130
4-Bromofluorobenzene (4-BFB)			1.53	$\mathrm{mg}/\mathrm{Kg}$	1	2.00	76	70 - 130

#### Sample: 412634 - HA-4-1'

Laboratory: Midland

TPH ORO Analysis: Analytical Method: S 8015 D Prep Method: N/AQC Batch: 127767 Date Analyzed: Analyzed By: JL2016-01-27 Prep Batch: 108162 Sample Preparation: 2016-01-27 Prepared By: JL

MDL MQL PQL RLParameter Flag Cert Result Result Result Result  ${\rm Units}$ Dilution MDLMQLPQL RL50.0 ORO 0.00 < 50.0 < 50.0 50.0 < 50.0mg/Kg 0.0050.0

						$\operatorname{Spike}$	Percent	Recovery
Surrogate	Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			56.9	mg/Kg	1	50.0	114	70 - 130
n-Triacontane			55.0	mg/Kg	1	50.0	110	37.1 - 162

#### Sample: 412635 - HA-4-2'

Laboratory: Lubbock

Chloride (IC) Analysis: Analytical Method: E 300.0 Prep Method: N/A QC Batch: 127864 Date Analyzed: 2016-01-30 Analyzed By: RLPrep Batch: 108248 Sample Preparation: Prepared By: RL

Report Date: February 1, 2016 Work Order: 16012606 Page Number: 16 of 30

15-0171-03 David Bilbrey 8" Pipeline

			RL			
Parameter	Flag	Cert	Result	Units	Dilution	RL
Chloride		1,2,4	<25.0	mg/Kg	1	25.0

#### Sample: 412635 - HA-4-2'

Laboratory: Midland

Analysis: TPH DRO QC Batch: 127766 Prep Batch: 108162 

							Spike	Percent	Recovery
Surrogate		Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane	Qsr	Qsr		74.6	mg/Kg	1	50.0	149	70 - 130

#### Sample: 412635 - HA-4-2'

Laboratory: Midland

Analysis: TPH GRO Analytical Method: S 8015 D QC Batch: 127788 Date Analyzed: 2016-01-28 Prep Batch: 108163 Sample Preparation: 2016-01-26 Prep Method: S 5035 Analyzed By: AK Prepared By: AK

						$\operatorname{Spike}$	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			1.72	mg/Kg	1	2.00	86	70 - 130
4-Bromofluorobenzene (4-BFB)			1.95	mg/Kg	1	2.00	98	70 - 130

#### Sample: 412635 - HA-4-2'

Laboratory: Midland

TPH ORO Prep Method: N/A Analysis: Analytical Method: S 8015 D QC Batch: 127767 Date Analyzed: 2016-01-27 Analyzed By: JLPrep Batch: 108162 Sample Preparation: 2016-01-27 Prepared By: JL

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Report Date: February 1, 2016 15-0171-03Work Order: 16012606 David Bilbrey 8" Pipeline Page Number: 17 of 30

Parameter	Flag	Cert	MDL Result	MQL Result	PQL Result	RL Result	Units	Dilution	MDL	MQL	PQL	RL
			MDL	MQL	PQL	RL						
Parameter	Flag	$\operatorname{Cert}$	Result	Result	Result	Result	Units	Dilution	MDL	MQL	PQL	RL
ORO			0.00	< 50.0	< 50.0	< 50.0	mg/Kg	1	0.00	50.0	50.0	50.0
								Spike	F	Percent	Rec	overy
Surrogate		Flag	Cert	Res	ult	Units	Dilution	Amoun	t R	ecovery	Li	mits
n-Tricosane	Qsr	Qsr		7	4.6	ng/Kg	1	50.0		149	70	- 130
n-Triacontane				7	9.2	ng/Kg	1	50.0		158	37.1	- 162

Report Date: February 1, 2016 Work Order: 16012606 Page Number: 18 of 30

15-0171-03 David Bilbrey 8" Pipeline

### Method Blanks

Method Blank (1) QC Batch: 127766

QC Batch: 127766 Date Analyzed: 2016-01-27 Analyzed By: JL Prep Batch: 108162 QC Preparation: 2016-01-27 Prepared By: JL

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			48.6	mg/Kg	1	50.0	97	70 - 130

Method Blank (1) QC Batch: 127767

QC Batch: 127767 Date Analyzed: 2016-01-27 Analyzed By: JL Prep Batch: 108162 QC Preparation: 2016-01-27 Prepared By: JL

						Spike	Percent	Recovery
Surrogate	Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			48.6	mg/Kg	1	50.0	97	70 - 130
n-Triacontane			54.7	mg/Kg	1	50.0	109	37.1 - 162

Method Blank (1) QC Batch: 127788

QC Batch: 127788 Date Analyzed: 2016-01-28 Analyzed By: AK Prep Batch: 108163 QC Preparation: 2016-01-26 Prepared By: AK

Report Date: February 1, 2016 Work Order: 16012606 Page Number: 19 of 30

15-0171-03 David Bilbrey 8" Pipeline

						$_{ m Spike}$	Percent	Recovery
Surrogate	$\operatorname{Flag}$	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			1.69	mg/Kg	1	2.00	84	70 - 130
4-Bromofluorobenzene (4-BFB)			1.94	mg/Kg	1	2.00	97	70 - 130

Method Blank (1) QC Batch: 127841

QC Batch: 127841 Date Analyzed: 2016-01-28 Analyzed By: RL Prep Batch: 108227 QC Preparation: 2016-01-26 Prepared By: RL

Method Blank (1) QC Batch: 127864

QC Batch: 127864 Date Analyzed: 2016-01-30 Analyzed By: RL Prep Batch: 108248 QC Preparation: 2016-01-29 Prepared By: RL

Report Date: February 1, 2016 Work Order: 16012606 Page Number: 20 of 30

15-0171-03 David Bilbrey 8" Pipeline

# Laboratory Control Spikes

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

QC Batch: 127766 Date Analyzed: 2016-01-27 Analyzed By: JL Prep Batch: 108162 QC Preparation: 2016-01-27 Prepared By: JL

			LCS			Spike	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	$\operatorname{Limit}$
DRO		3	263	mg/Kg	1	250	8.83	102	70 - 130

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

			LCSD			Spike	Matrix		Rec.		RPD
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
DRO		3	262	mg/Kg	1	250	8.83	101	70 - 130	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
n-Tricosane	56.2	55.9	mg/Kg	1	50.0	112	112	70 - 130

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

QC Batch: 127767 Date Analyzed: 2016-01-27 Analyzed By: JL Prep Batch: 108162 QC Preparation: 2016-01-27 Prepared By: JL

	LCS	LCSD			Spike	LCS	LCSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
n-Tricosane	56.2	55.9	mg/Kg	1	50.0	112	112	70 - 130
n-Triacontane	54.2	52.8	mg/Kg	1	50.0	108	106	54.8 - 164

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

QC Batch: 127788 Date Analyzed: 2016-01-28 Analyzed By: AK Prep Batch: 108163 QC Preparation: 2016-01-26 Prepared By: AK

Report Date: February 1, 2016 Work Order: 16012606 Page Number: 21 of 30

15-0171-03 David Bilbrey 8" Pipeline

			LCS			Spike	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	$\operatorname{Limit}$
GRO		3	21.1	mg/Kg	1	20.0	< 1.76	106	70 - 130

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

			LCSD			Spike	Matrix		Rec.		RPD
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
GRO		3	22.3	mg/Kg	1	20.0	< 1.76	112	70 - 130	6	20

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

	LCS	LCSD			Spike	LCS	LCSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	1.87	1.90	mg/Kg	1	2.00	94	95	70 - 130
4-Bromofluorobenzene (4-BFB)	2.06	2.07	mg/Kg	1	2.00	103	104	70 - 130

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

QC Batch: 127841 Date Analyzed: 2016-01-28 Analyzed By: RL Prep Batch: 108227 QC Preparation: 2016-01-26 Prepared By: RL

			LCS			$\operatorname{Spike}$	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit
Chloride		1,2,4	250	mg/Kg	1	250	< 8.34	100	90 - 110

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

			LCSD			Spike	Matrix		Rec.		RPD
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride		1,2,4	249	mg/Kg	1	250	< 8.34	100	90 - 110	0	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: 127864 Date Analyzed: 2016-01-30 Analyzed By: RL Prep Batch: 108248 QC Preparation: 2016-01-29 Prepared By: RL

			LCS			Spike	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	$\operatorname{Limit}$
Chloride		1,2,4	246	mg/Kg	1	250	< 8.34	98	90 - 110

Report Date: February 1, 2016 Work Order: 16012606 Page Number: 22 of 30

15-0171-03 David Bilbrey 8" Pipeline

			LCSD			Spike	Matrix		Rec.		RPD
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride		1,2,4	242	mg/Kg	1	250	< 8.34	97	90 - 110	2	20

Report Date: February 1, 2016 Work Order: 16012606 Page Number: 23 of 30 15-0171-03 David Bilbrey 8" Pipeline

Matrix Spikes

Matrix Spike (xMS-1) Spiked Sample: 412391

QC Batch: 127766 Date Analyzed: 2016-01-27 Analyzed By: JL Prep Batch: 108162 QC Preparation: 2016-01-27 Prepared By: JL

			MS			Spike	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	$\operatorname{Limit}$
DRO		3	296	mg/Kg	1	250	< 7.41	118	70 - 130

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

			MSD			Spike	Matrix		Rec.		RPD
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
DRO		3	269	mg/Kg	1	250	< 7.41	108	70 - 130	10	20

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

	MS	MSD			Spike	MS	MSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
n-Tricosane	62.0	58.5	mg/Kg	1	50	124	117	70 - 130

Matrix Spike (xMS-1) Spiked Sample: 412391

QC Batch: 127767 Date Analyzed: 2016-01-27 Analyzed By: JL Prep Batch: 108162 QC Preparation: 2016-01-27 Prepared By: JL

	MS	MSD			Spike	MS	MSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
n-Tricosane	62.0	58.5	mg/Kg	1	50	124	117	70 - 130
n-Triacontane	58.4	54.9	mg/Kg	1	50	117	110	10 - 258

Matrix Spike (MS-1) Spiked Sample: 412628

QC Batch: 127788 Date Analyzed: 2016-01-28 Analyzed By: AK Prep Batch: 108163 QC Preparation: 2016-01-26 Prepared By: AK

Report Date: February 1, 2016 Work Order: 16012606 Page Number: 24 of 30

15-0171-03

				MS			Spike	Matrix		Rec.
Param		$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	$\operatorname{Limit}$
GRO	Qs	Qs	3	11.4	mg/Kg	1	20.0	< 1.76	57	70 - 130

David Bilbrey 8" Pipeline

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

				MSD			Spike	Matrix		Rec.		RPD
Param		$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
GRO	Qr	Qr	3	15.3	mg/Kg	1	20.0	< 1.76	76	70 - 130	29	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)	1.74	1.86	mg/Kg	1	2	87	93	70 - 130
4-Bromofluorobenzene (4-BFB)	2.11	2.17	mg/Kg	1	2	106	108	70 - 130

#### Matrix Spike (MS-1) Spiked Sample: 412628

QC Batch: 127841 Date Analyzed: 2016-01-28 Analyzed By: RL Prep Batch: 108227 QC Preparation: 2016-01-26 Prepared By: RL

			MS			$\operatorname{Spike}$	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit
Chloride		1,2,4	249	mg/Kg	1	250	< 8.34	100	80 - 120

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

			MSD			Spike	Matrix		Rec.		RPD
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride		1,2,4	248	mg/Kg	1	250	< 8.34	99	80 - 120	0	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: 412635

QC Batch: 127864 Date Analyzed: 2016-01-30 Analyzed By: RL Prep Batch: 108248 QC Preparation: 2016-01-29 Prepared By: RL

			MS			Spike	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	$\operatorname{Limit}$
Chloride		1,2,4	252	mg/Kg	1	250	19.3	93	80 - 120

Report Date: February 1, 2016 Work Order: 16012606 Page Number: 25 of 30

15-0171-03 David Bilbrey 8" Pipeline

			MSD			Spike	Matrix		Rec.		RPD
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride		1,2,4	262	mg/Kg	1	250	19.3	97	80 - 120	4	20

Report Date: February 1, 2016 Work Order: 16012606 Page Number: 26 of 30

15-0171-03 David Bilbrey 8" Pipeline

## Calibration Standards

#### Standard (CCV-1)

QC Batch: 127766 Date Analyzed: 2016-01-27 Analyzed By: JL

				CCVs	CCVs	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	$\operatorname{Cert}$	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		3	mg/Kg	250	255	102	80 - 120	2016-01-27

#### Standard (CCV-2)

QC Batch: 127766 Date Analyzed: 2016-01-27 Analyzed By: JL

				CCVs	CCVs	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	$\operatorname{Cert}$	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		3	mg/Kg	250	265	106	80 - 120	2016-01-27

#### Standard (CCV-3)

QC Batch: 127766 Date Analyzed: 2016-01-27 Analyzed By: JL

				$\mathrm{CCVs}$	$\operatorname{CCVs}$	$\mathrm{CCVs}$	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	$\operatorname{Cert}$	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		3	mg/Kg	250	262	105	80 - 120	2016-01-27

#### Standard (CCV-1)

QC Batch: 127788 Date Analyzed: 2016-01-28 Analyzed By: AK

				CCVs	CCVs	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		3	mg/Kg	1.00	0.952	95	80 - 120	2016-01-28

Report Date: February 1, 2016 Work Order: 16012606 Page Number: 27 of 30

15-0171-03 David Bilbrey 8" Pipeline

Standard (CCV-2)

QC Batch: 127788 Date Analyzed: 2016-01-28 Analyzed By: AK

				CCVs	CCVs	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		3	mg/Kg	1.00	0.855	86	80 - 120	2016-01-28

Standard (CCV-1)

QC Batch: 127841 Date Analyzed: 2016-01-28 Analyzed By: RL

				$\overset{ ext{CCVs}}{=}$	CCVs	$_{ m CCVs}$	Percent	
				True	Found	$\operatorname{Percent}$	Recovery	Date
Param	Flag	$\operatorname{Cert}$	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride		1,2,4	mg/Kg	25.0	25.1	100	90 - 110	2016-01-28

Standard (CCV-2)

QC Batch: 127841 Date Analyzed: 2016-01-28 Analyzed By: RL

				CCVs	CCVs	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	$\operatorname{Cert}$	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride		1,2,4	mg/Kg	25.0	24.6	98	90 - 110	2016-01-28

Standard (CCV-1)

QC Batch: 127864 Date Analyzed: 2016-01-30 Analyzed By: RL

				CCVs	CCVs	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	$\operatorname{Cert}$	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride		1,2,4	mg/Kg	25.0	25.4	102	90 - 110	2016-01-30

Standard (CCV-2)

QC Batch: 127864 Date Analyzed: 2016-01-30 Analyzed By: RL

Report Date: February 1, 2016 15-0171-03 Work Order: 16012606 David Bilbrey 8" Pipeline Page Number: 28 of 30

				CCVs True	CCVs Found	CCVs Percent	Percent	Date
				rrue	round	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Cert}$	$\operatorname{Units}$	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride		1,2,4	mg/Kg	25.0	24.1	96	90 - 110	2016-01-30

Report Date: February 1, 2016 Work Order: 16012606 Page Number: 29 of 30 15-0171-03 David Bilbrey 8" Pipeline

# **Appendix**

## Report Definitions

Name	Definition
MDL	Method Detection Limit
MQL	Minimum Quantitation Limit
SDL	Sample Detection Limit

## **Laboratory Certifications**

	Certifying	Certification	Laboratory
$\mathbf{C}$	Authority	Number	Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	LELAP	LELAP-02003	Lubbock
2	NELAP	T104704219-15-11	Lubbock
3	NELAP	T104704392-14-8	Midland
4		2015-066	Lubbock

## Standard Flags

- F Description
- B Analyte detected in the corresponding method blank above the method detection limit
- H Analyzed out of hold time
- J Estimated concentration
- Jb The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less then ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
- Je Estimated concentration exceeding calibration range.
- MI1 Split peak or shoulder peak
- MI2 Instrument software did not integrate
- MI3 Instrument software misidentified the peak
- MI4 Instrument software integrated improperly
- MI5 Baseline correction
- Qc Calibration check outside of laboratory limits.
- Qr RPD outside of laboratory limits
- Qs Spike recovery outside of laboratory limits.
- Qsr Surrogate recovery outside of laboratory limits.
  - U The analyte is not detected above the SDL

Report Date: February 1, 2016 Work Order: 16012606 Page Number: 30 of 30 15-0171-03 David Bilbrey 8" Pipeline

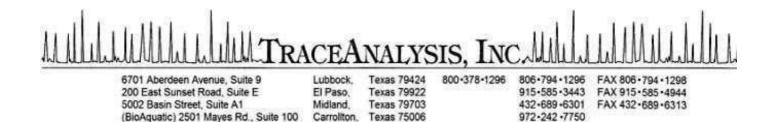
## Attachments

The scanned attachments will follow this page.

Please note, each attachment may consist of more than one page.

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#### Certifications

E-Mail: lab@traceanalysis.com WEB: www.traceanalysis.com

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

# Analytical and Quality Control Report

Report Date: March 18, 2016

16031006

Work Order:

Michael Gant Larson and Associates, Inc.

P. O. Box 50685 Midland, TX, 79710

Project Name: David Bilbrey 8" Pipeline

Project Number: 15-0171-03

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

			Date	$\operatorname{Time}$	Date
Sample	Description	Matrix	Taken	Taken	Received
415718	SB-1-5'	soil	2016-03-09	11:47	2016-03-10
415719	SB-1-10'	soil	2016-03-09	11:52	2016-03-10
415720	SB-1-15'	soil	2016-03-09	12:08	2016-03-10
415723	SB-2-10'	soil	2016-03-09	12:39	2016-03-10
415724	SB-2-15'	soil	2016-03-09	12:52	2016-03-10
415725	SB-2-20'	soil	2016-03-09	13:02	2016-03-10
415726	SB-2-25'	soil	2016-03-09	13:18	2016-03-10
415728	SB-3-5'	soil	2016-03-09	13:34	2016-03-10
415729	SB-3-10'	soil	2016-03-09	13:39	2016-03-10
415730	SB-3-15'	soil	2016-03-09	13:42	2016-03-10
415731	SB-3-20'	soil	2016-03-09	14:47	2016-03-10
415732	SB-3-25'	soil	2016-03-09	14:03	2016-03-10

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

TraceAnalysis, Inc. uses the attached chain of custody (COC) as the laboratory check-in documentation which includes sample receipt, temperature, sample preservation method and condition, collection date and time, testing requested, company,

sampler, contacts and any special remarks.

This report consists of a total of 33 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director James Taylor, Assistant Director Johnny Grindstaff, Operations Manager

# Report Contents

Case Narrative	5
Analytical Report	6
Sample 415718 (SB-1-5')	6
Sample 415719 (SB-1-10')	7
Sample 415720 (SB-1-15')	8
Sample 415723 (SB-2-10')	9
Sample 415724 (SB-2-15')	10
Sample 415725 (SB-2-20')	11
Sample 415726 (SB-2-25')	12
Sample 415728 (SB-3-5')	13
Sample 415729 (SB-3-10')	14
Sample 415730 (SB-3-15')	16
Sample 415731 (SB-3-20')	17
Sample 415732 (SB-3-25')	18
Method Blanks	20
QC Batch 128785 - Method Blank (1)	20
QC Batch 128789 - Method Blank (1)	20
QC Batch 128822 - Method Blank (1)	20
QC Batch 128895 - Method Blank (1)	21
QC Batch 128896 - Method Blank (1)	21
QC Batch 128899 - Method Blank (1)	21
Laboratory Control Spikes	22
QC Batch 128785 - LCS (1)	22
QC Batch 128789 - LCS (1)	22
QC Batch 128822 - LCS (1)	23
QC Batch 128895 - LCS (1)	23
QC Batch 128896 - LCS (1)	24
QC Batch 128899 - LCS (1)	24
Matrix Spikes	<b>25</b>
QC Batch 128785 - MS (1)	
QC Batch 128789 - xMS (1)	
QC Batch 128822 - MS (1)	
QC Batch 128895 - MS (1)	
QC Batch 128896 - MS (1)	27
QC Batch 128899 - MS (1)	27
	00
Calibration Standards	28
QC Batch 128785 - CCV (1)	28
QC Batch 128785 - CCV (1)	28 28
QC Batch 128785 - CCV (1)	28 28 28
QC Batch 128785 - CCV (1)	28 28

QC Batch 128822 - CCV (1)	<u> 2</u> 9
QC Batch 128822 - CCV (2)	29
QC Batch 128822 - CCV (3)	
QC Batch 128895 - CCV (1)	30
QC Batch 128895 - CCV (2)	30
QC Batch 128896 - CCV (1)	30
QC Batch 128896 - CCV (2)	30
QC Batch 128899 - CCV (1)	
QC Batch 128899 - CCV (2)	31
Appendix	32
Report Definitions	32
Laboratory Certifications	
· ·	32
	33
Attachments	23

## Case Narrative

Samples for project David Bilbrey 8" Pipeline were received by TraceAnalysis, Inc. on 2016-03-10 and assigned to work order 16031006. Samples for work order 16031006 were received intact at a temperature of 6.0 C.

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

		Prep	Prep	QC	Analysis
Test	Method	Batch	Date	Batch	Date
BTEX	S 8021B	109054	2016-03-10 at 11:05	128785	2016-03-11 at 08:19
Chloride (IC)	E 300.0	109162	2016-03-15 at 14:26	128895	2016-03-15 at $15:26$
Chloride (IC)	E 300.0	109163	2016-03-15 at 14:26	128896	2016-03-15 at $12:07$
Chloride (IC)	E 300.0	109170	2016-03-16 at 09:00	128899	2016-03-16 at $09:06$
TPH DRO	S 8015 D	109068	2016-03-11 at 08:51	128789	2016-03-11 at $08:58$
TPH GRO	S 8015 D	109069	2016-03-11 at 09:26	128822	2016-03-12 at $06:20$

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 16031006 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: March 18, 2016 Work Order: 16031006 Page Number: 6 of 33

15-0171-03 David Bilbrey 8" Pipeline

# **Analytical Report**

Sample: 415718 - SB-1-5'

Laboratory: Lubbock

Analytical Method: Prep Method: Analysis: Chloride (IC) E 300.0N/AQC Batch: 128895 Date Analyzed: 2016-03-15 Analyzed By: RLPrep Batch: 109162 Sample Preparation: 2016-03-15 Prepared By: RL

Sample: 415718 - SB-1-5'

Laboratory: Midland

TPH DRO Prep Method: Analysis: Analytical Method: S 8015 D N/AQC Batch: 128789 Date Analyzed: 2016-03-11 Analyzed By: JLPrep Batch: 109068 Sample Preparation: 2016-03-11 Prepared By: JL

						Spike	Percent	Recovery
Surrogate	Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			50.4	mg/Kg	1	50.0	101	70 - 130

Sample: 415718 - SB-1-5'

Laboratory: Midland

Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035 QC Batch: 128822 Date Analyzed: 2016-03-12 Analyzed By: AKPrep Batch: 109069 Sample Preparation: 2016-03-11Prepared By: AK

						$_{ m Spike}$	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			2.10	mg/Kg	1	2.00	105	70 - 130

 $continued \dots$ 

Report Date: March 18, 2016 Work Order: 16031006 Page Number: 7 of 33

David Bilbrey 8" Pipeline

$sample\ continued\ \dots$								
•						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
4-Bromofluorobenzene (4-BFR)			1.85	mg/Kg	1	2.00	92	70 - 130

# Laboratory: Lubbock Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A QC Batch: 128895 Date Analyzed: 2016-03-15 Analyzed By: RL Prep Batch: 109162 Sample Preparation: 2016-03-15 Prepared By: RL

			RL			
Parameter	Flag	Cert	Result	Units	Dilution	RL
Chloride		5,7,9	48.5	m mg/Kg	1	25.0

#### Sample: 415719 - SB-1-10'

Sample: 415719 - SB-1-10

15-0171-03

Laboratory:	Midland				
Analysis:	TPH DRO	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	128789	Date Analyzed:	2016-03-11	Analyzed By:	JL
Prep Batch:	109068	Sample Preparation:	2016-03-11	Prepared By:	JL

			RL			
Parameter	Flag	Cert	Result	Units	Dilution	RL
DRO	B,Qr,U	8	< 50.0	$\mathrm{mg}/\mathrm{Kg}$	1	50.0
				Q •1	D .	D

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			48.3	mg/Kg	1	50.0	97	70 - 130

## Sample: 415719 - SB-1-10

Laboratory:	Midland				
Analysis:	TPH GRO	Analytical Method:	S 8015 D	Prep Method:	S 5035
QC Batch:	128822	Date Analyzed:	2016-03-12	Analyzed By:	AK
Prep Batch:	109069	Sample Preparation:	2016-03-11	Prepared By:	AK
			RL.		

			RL			
Parameter	Flag	$\operatorname{Cert}$	Result	Units	Dilution	RL
GRO	U	8	< 4.00	mg/Kg	1	4.00

Report Date: March 18, 2016 Work Order: 16031006 Page Number: 8 of 33

15-0171-03 David Bilbrey 8" Pipeline

Surrogate	Flag	Cert	Result	Units	Dilution	$\begin{array}{c} {\rm Spike} \\ {\rm Amount} \end{array}$	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.14	mg/Kg	1	2.00	107	70 - 130
4-Bromofluorobenzene (4-BFB)			1.93	mg/Kg	1	2.00	96	70 - 130

#### Sample: 415720 - SB-1-15

Laboratory: Lubbock

E 300.0 Analysis: Chloride (IC) Analytical Method: Prep Method: N/A QC Batch: 128895Date Analyzed: 2016 - 03 - 15Analyzed By: RLPrep Batch: 109162 Sample Preparation: 2016-03-15 Prepared By: RL

#### Sample: 415720 - SB-1-15'

Laboratory: Midland

TPH DRO Analytical Method: S 8015 D Prep Method: N/AAnalysis: QC Batch: 128789 Date Analyzed: 2016-03-11 Analyzed By: JLPrep Batch: 109068 Sample Preparation: 2016-03-11 Prepared By: JL

						Spike	Percent	Recovery
Surrogate	Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			48.3	mg/Kg	1	50.0	97	70 - 130

#### Sample: 415720 - SB-1-15'

Laboratory: Midland

TPH GRO Analytical Method: S 8015 D Prep Method: S 5035 Analysis: QC Batch: 128822 2016-03-12 Analyzed By: AKDate Analyzed: Prep Batch: 109069 Sample Preparation: 2016-03-11 Prepared By: AK

Report Date: March 18, 2016 Work Order: 16031006 Page Number: 9 of 33

15-0171-03 David Bilbrey 8" Pipeline

Surrogate	Flag	Cert	Result	Units	Dilution	$\begin{array}{c} {\rm Spike} \\ {\rm Amount} \end{array}$	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.08	mg/Kg	1	2.00	104	70 - 130
4-Bromofluorobenzene (4-BFB)			1.70	mg/Kg	1	2.00	85	70 - 130

#### Sample: 415723 - SB-2-10'

Laboratory: Midland

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035 QC Batch: 128785 Date Analyzed: 2016-03-11 Analyzed By: AK Prep Batch: 109054 Sample Preparation: 2016-03-10 Prepared By: AK

			$\operatorname{RL}$			
Parameter	Flag	Cert	Result	Units	Dilution	RL
Benzene	U	8	< 0.0200	m mg/Kg	1	0.0200
Toluene		8	0.0381	m mg/Kg	1	0.0200
Ethylbenzene		8	0.113	mg/Kg	1	0.0200
Xylene		8	1.33	mg/Kg	1	0.0200

						$\operatorname{Spike}$	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			2.57	mg/Kg	1	2.00	128	70 - 130
4-Bromofluorobenzene (4-BFB) Q	sr Qsr		2.88	mg/Kg	1	2.00	144	70 - 130

#### Sample: 415723 - SB-2-10'

Laboratory: Lubbock

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A QC Batch: 128899 Date Analyzed: 2016-03-16 Analyzed By: RL Prep Batch: 109170 Sample Preparation: 2016-03-16 Prepared By: RL

			RL			
Parameter	Flag	Cert	Result	Units	Dilution	RL
Chloride		5,7,9	109	m mg/Kg	1	25.0

#### Sample: 415723 - SB-2-10'

Laboratory: Midland

Analysis: TPH DRO Analytical Method: S 8015 D Prep Method: N/A QC Batch: 128789 Date Analyzed: 2016-03-11 Analyzed By: JL Prep Batch: 109068 Sample Preparation: 2016-03-11 Prepared By: JL

Report Date: March 18, 2016 Work Order: 16031006 Page Number: 10 of 33

15-0171-03 David Bilbrey 8" Pipeline

					RL			
Parameter		Flag	Cert	Re	sult	Units	Dilution	RL
DRO		$_{\mathrm{B,Qr,U}}$	8	<	50.0	mg/Kg	1	50.0
Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			48.4	mg/Kg	1	50.0	97	70 - 130

#### Sample: 415723 - SB-2-10

Laboratory: Midland

Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035 QC Batch: 128822 Date Analyzed: 2016-03-12 Analyzed By: AK Prep Batch: 109069 Sample Preparation: 2016-03-11 Prepared By: AK

			$\operatorname{RL}$			
Parameter	Flag	Cert	Result	Units	Dilution	RL
GRO	TT	8	< 4.00	mg/Kg	1	4.00

						$_{ m Spike}$	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			2.10	mg/Kg	1	2.00	105	70 - 130
4-Bromofluorobenzene (4-BFB)			1.95	mg/Kg	1	2.00	98	70 - 130

#### Sample: 415724 - SB-2-15'

Laboratory: Midland

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035 QC Batch: 128785 Date Analyzed: 2016-03-11 Analyzed By: AK Prep Batch: 109054 Sample Preparation: 2016-03-10 Prepared By: AK

			RL			
Parameter	Flag	Cert	Result	Units	Dilution	RL
Benzene	U	8	< 0.0200	m mg/Kg	1	0.0200
Toluene	U	8	< 0.0200	$\mathrm{mg}/\mathrm{Kg}$	1	0.0200
Ethylbenzene	U	8	< 0.0200	$\mathrm{mg}/\mathrm{Kg}$	1	0.0200
Xylene	U	8	< 0.0200	$\mathrm{mg}/\mathrm{Kg}$	1	0.0200

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			2.20	mg/Kg	1	2.00	110	70 - 130
4-Bromofluorobenzene (4-BFB)			2.24	mg/Kg	1	2.00	112	70 - 130

Report Date: March 18, 2016 Work Order: 16031006 Page Number: 11 of 33

15-0171-03 David Bilbrey 8" Pipeline

#### Sample: 415724 - SB-2-15'

Laboratory: Lubbock

Analytical Method: Analysis: Chloride (IC) E 300.0 Prep Method: N/AQC Batch: 128899 Date Analyzed: 2016-03-16 Analyzed By: RLPrep Batch: Sample Preparation: Prepared By: 109170 2016-03-16 RL

#### Sample: 415724 - SB-2-15'

Laboratory: Midland

Analysis: TPH DRO Analytical Method: S 8015 D Prep Method: N/AQC Batch: Analyzed By: JL128789Date Analyzed: 2016-03-11Prep Batch: 109068 Sample Preparation: 2016-03-11 Prepared By: JL

						$_{ m Spike}$	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			47.0	mg/Kg	1	50.0	94	70 - 130

#### Sample: 415724 - SB-2-15'

Laboratory: Midland

 $\le 5035$ Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: QC Batch: 128822 Date Analyzed: 2016-03-12 Analyzed By: AK Prep Batch: 109069 Sample Preparation: Prepared By: AK 2016-03-11

						$\operatorname{Spike}$	Percent	Recovery
Surrogate	Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			2.06	mg/Kg	1	2.00	103	70 - 130
4-Bromofluorobenzene (4-BFB)			1.79	mg/Kg	1	2.00	90	70 - 130

Report Date: March 18, 2016 Work Order: 16031006 Page Number: 12 of 33

15-0171-03 David Bilbrey 8" Pipeline

#### Sample: 415725 - SB-2-20'

Laboratory: Lubbock

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/AQC Batch: 128895 Date Analyzed: 2016-03-15 Analyzed By: RLPrep Batch: 109162 Sample Preparation: Prepared By: 2016-03-15 RL

#### Sample: 415725 - SB-2-20'

Laboratory: Midland

Analysis: TPH DRO Analytical Method: S 8015 D Prep Method: N/AQC Batch: Analyzed By: JL128789Date Analyzed: 2016-03-11Prep Batch: 109068 Sample Preparation: 2016-03-11 Prepared By: JL

						Spike	Percent	Recovery
Surrogate	Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			51.5	${ m mg/Kg}$	1	50.0	103	70 - 130

#### Sample: 415725 - SB-2-20'

Laboratory: Midland

Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035 QC Batch: 128822 Date Analyzed: 2016-03-12 Analyzed By: AK Prep Batch: 109069 Sample Preparation: Prepared By: AK 2016-03-11

						$\operatorname{Spike}$	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			2.11	mg/Kg	1	2.00	106	70 - 130
4-Bromofluorobenzene (4-BFB)			1.70	mg/Kg	1	2.00	85	70 - 130

Report Date: March 18, 2016 Work Order: 16031006 Page Number: 13 of 33

15-0171-03 David Bilbrey 8" Pipeline

Sample: 415726 - SB-2-25'

Laboratory: Lubbock

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/AQC Batch: 128895 Date Analyzed: 2016-03-15 Analyzed By: RLSample Preparation: Prep Batch: 109162 2016-03-15 Prepared By: RL

Sample: 415726 - SB-2-25'

Laboratory: Midland

Analysis: TPH DRO Analytical Method: S 8015 D Prep Method: N/AQC Batch: Analyzed By: JL128789 Date Analyzed: 2016-03-11Prep Batch: 109068 Sample Preparation: 2016-03-11 Prepared By: JL

Spike Percent Recovery Surrogate Flag Cert Result Units Dilution Amount Recovery Limits 70 - 130 n-Tricosane 42.5 mg/Kg 1 50.0 85

Sample: 415726 - SB-2-25'

Laboratory: Midland

Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035 QC Batch: 128822 Date Analyzed: 2016-03-12 Analyzed By: AK Prep Batch: 109069 Sample Preparation: 2016-03-11 Prepared By: AK

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			2.08	mg/Kg	1	2.00	104	70 - 130
4-Bromofluorobenzene (4-BFB)			1.76	mg/Kg	1	2.00	88	70 - 130

Report Date: March 18, 2016 Work Order: 16031006 Page Number: 14 of 33

15-0171-03 David Bilbrey 8" Pipeline

#### Sample: 415728 - SB-3-5'

Laboratory: Lubbock

Analysis: Analytical Method: Chloride (IC)  $\to 300.0$ Prep Method: N/AQC Batch: 128899 Date Analyzed: 2016-03-16 Analyzed By: RLPrep Batch: 109170 Sample Preparation: 2016-03-16 Prepared By: RL

			RL			
Parameter	Flag	Cert	Result	Units	Dilution	RL
Chloride		5,7,9	<25.0	mg/Kg	1	25.0

#### Sample: 415728 - SB-3-5'

Laboratory: Midland

Analysis: TPH DRO Analytical Method: S 8015 D Prep Method: N/A QC Batch: 128789Analyzed By: JLDate Analyzed: 2016-03-11Prep Batch: 109068 Sample Preparation: 2016-03-11 Prepared By: JL

			RL			
Parameter	Flag	Cert	Result	Units	Dilution	RL
DRO	$_{ m B,Jb,Qr}$	8	< 50.0	$\mathrm{mg}/\mathrm{Kg}$	1	50.0

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			55.0	mg/Kg	1	50.0	110	70 - 130

#### Sample: 415728 - SB-3-5'

Laboratory: Midland

Analysis: TPH GRO Analytical Method: S 8015 DPrep Method: S 5035 QC Batch: 128822 Date Analyzed: 2016-03-12 Analyzed By: AK Prep Batch: 109069 Sample Preparation: Prepared By: AK2016-03-11

				RL			
Parameter		Flag	Cert	Result	Units	Dilution	RL
GRO	1		8	< 8.00	m mg/Kg	2	4.00

						$\operatorname{Spike}$	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			4.06	mg/Kg	2	4.00	102	70 - 130
4-Bromofluorobenzene (4-BFB)			4.75	mg/Kg	2	4.00	119	70 - 130

Report Date: March 18, 2016 Work Order: 16031006 Page Number: 15 of 33

15-0171-03 David Bilbrey 8" Pipeline

#### Sample: 415729 - SB-3-10'

Laboratory: Midland

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035 QC Batch: 128785 Date Analyzed: 2016-03-11 Analyzed By: AK Prep Batch: 109054 Sample Preparation: 2016-03-10 Prepared By: AK

			$\operatorname{RL}$			
Parameter	Flag	Cert	Result	Units	Dilution	RL
Benzene		8	15.8	m mg/Kg	5	0.0200
Toluene	Je	8	90.8	$\mathrm{mg}/\mathrm{Kg}$	5	0.0200
Ethylbenzene	Je	8	129	$\mathrm{mg}/\mathrm{Kg}$	5	0.0200
Xylene		8	117	$\mathrm{mg}/\mathrm{Kg}$	5	0.0200

							$\operatorname{Spike}$	Percent	Recovery
Surrogate		Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)				10.2	mg/Kg	5	10.0	102	70 - 130
4-Bromofluorobenzene (4-BFB)	$_{\mathrm{Qsr}}$	$_{\mathrm{Qsr}}$		37.6	mg/Kg	5	10.0	376	70 - 130

#### Sample: 415729 - SB-3-10'

Laboratory: Lubbock

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A QC Batch: 128899 Date Analyzed: 2016-03-16 Analyzed By: RLPrep Batch: 109170 Sample Preparation: Prepared By: 2016-03-16 RL

			RL			
Parameter	Flag	Cert	Result	Units	Dilution	RL
Chloride		5,7,9	40.5	$\mathrm{mg}/\mathrm{Kg}$	1	25.0

#### Sample: 415729 - SB-3-10'

Laboratory: Midland

Analysis: TPH DRO Analytical Method: S 8015 D Prep Method: N/A QC Batch: 128789 Date Analyzed: 2016-03-11 Analyzed By: JL Prep Batch: 109068 Sample Preparation: 2016-03-11 Prepared By: JL

			RL			
Parameter	Flag	Cert	Result	Units	Dilution	RL
DRO	$_{ m B,Qr}$	8	1820	mg/Kg	5	50.0

							Spike	Percent	Recovery
Surrogate		Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane	Qsr	Qsr		107	mg/Kg	5	50.0	214	70 - 130

Report Date: March 18, 2016 Work Order: 16031006 Page Number: 16 of 33

15-0171-03 David Bilbrey 8" Pipeline

#### Sample: 415729 - SB-3-10'

Laboratory: Midland

S 5035Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: QC Batch: 128822 Date Analyzed: 2016-03-12 Analyzed By: AK Sample Preparation: Prep Batch: 109069 2016-03-11 Prepared By: AK

							Spike	Percent	Recovery
Surrogate		Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)				94.1	mg/Kg	50	100	94	70 - 130
4-Bromofluorobenzene (4-BFB)	$_{\mathrm{Qsr}}$	$_{\mathrm{Qsr}}$		169	mg/Kg	50	100	169	70 - 130

#### Sample: 415730 - SB-3-15'

Laboratory: Lubbock

Analysis: Chloride (IC) Analytical Method:  $\to 300.0$ Prep Method: N/AQC Batch: 128899 Date Analyzed: 2016-03-16 Analyzed By: RLPrep Batch: 109170 Sample Preparation: 2016-03-16 Prepared By: RL

#### Sample: 415730 - SB-3-15'

Laboratory: Midland

Analysis: TPH DRO Analytical Method: S 8015 D Prep Method: N/A QC Batch: Analyzed By: 128789 Date Analyzed: 2016-03-11 JLPrep Batch: 109068 Sample Preparation: 2016-03-11 Prepared By: JL

						Spike	Percent	Recovery
Surrogate	Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			48.3	mg/Kg	1	50.0	97	70 - 130

Report Date: March 18, 2016 Work Order: 16031006 Page Number: 17 of 33

15-0171-03 David Bilbrey 8" Pipeline

Sample: 415730 - SB-3-15'

Laboratory: Midland

Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: QC Batch: 128822 Date Analyzed: 2016-03-12 Analyzed By: Prep Batch: 109069 Sample Preparation: 2016-03-11 Prepared By:

S 5035

AK

AK

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			2.04	mg/Kg	1	2.00	102	70 - 130
4-Bromofluorobenzene (4-BFB)			1.76	mg/Kg	1	2.00	88	70 - 130

Sample: 415731 - SB-3-20'

Laboratory: Lubbock

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/AQC Batch: 128899 Date Analyzed: 2016-03-16 Analyzed By: RLPrep Batch: 109170 Sample Preparation: 2016-03-16 Prepared By: RL

Sample: 415731 - SB-3-20'

Laboratory: Midland

Analysis: TPH DRO Analytical Method: S 8015 D Prep Method: N/A QC Batch: Analyzed By: 128789 Date Analyzed: 2016-03-11 JLPrep Batch: 109068 Sample Preparation: 2016-03-11 Prepared By: JL

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			46.0	mg/Kg	1	50.0	92	70 - 130

Report Date: March 18, 2016 Work Order: 16031006 Page Number: 18 of 33

15-0171-03 David Bilbrey 8" Pipeline

Sample: 415731 - SB-3-20'

Laboratory: Midland

TPH GRO S 5035Analysis: Analytical Method: S 8015 D Prep Method: QC Batch: 128822 Date Analyzed: 2016-03-12 Analyzed By: AK Prep Batch: Sample Preparation: 109069 2016-03-11 Prepared By: AK

						$_{ m Spike}$	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			2.02	mg/Kg	1	2.00	101	70 - 130
4-Bromofluorobenzene (4-BFB)			1.85	mg/Kg	1	2.00	92	70 - 130

Sample: 415732 - SB-3-25'

Laboratory: Lubbock

Analysis: Chloride (IC) Analytical Method:  $\to 300.0$ Prep Method: N/AQC Batch: 128896 Date Analyzed: 2016-03-15 Analyzed By: RLPrep Batch: 109163 Sample Preparation: 2016-03-15 Prepared By: RL

Sample: 415732 - SB-3-25'

Laboratory: Midland

Analysis: TPH DRO Analytical Method: S 8015 D Prep Method: N/A QC Batch: Analyzed By: 128789 Date Analyzed: 2016-03-11 JLPrep Batch: 109068 Sample Preparation: 2016-03-11 Prepared By: JL

						Spike	Percent	Recovery
Surrogate	Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			35.0	${ m mg/Kg}$	1	50.0	70	70 - 130

Report Date: March 18, 2016 Work Order: 16031006 Page Number: 19 of 33

15-0171-03 David Bilbrey 8" Pipeline

Sample: 415732 - SB-3-25'

4-Bromofluorobenzene (4-BFB)

Laboratory: Midland

 $\overline{GRO}$ 

Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035 QC Batch: 128822 Date Analyzed: Analyzed By: AK2016-03-12 Prep Batch: 109069 Sample Preparation: 2016-03-11 Prepared By: AK

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			2.07	mg/Kg	1	2.00	104	70 - 130

1.65

< 4.00

mg/Kg

mg/Kg

2.00

82

RL

4.00

70 - 130

Report Date: March 18, 2016 Work Order: 16031006 Page Number: 20 of 33

15-0171-03 David Bilbrey 8" Pipeline

## Method Blanks

Method Blank (1) QC Batch: 128785

QC Batch: 128785 Date Analyzed: 2016-03-11 Analyzed By: AK Prep Batch: 109054 QC Preparation: 2016-03-10 Prepared By: AK

MDL  ${\bf Parameter}$ Flag Cert Result Units RLBenzene < 0.0100 mg/Kg 0.02 mg/KgToluene < 0.0156 0.02 Ethylbenzene mg/Kg0.02 < 0.0151mg/KgXylene < 0.00430 0.02

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			2.19	mg/Kg	1	2.00	110	70 - 130
4-Bromofluorobenzene (4-BFB)			1.78	mg/Kg	1	2.00	89	70 - 130

Method Blank (1) QC Batch: 128789

QC Batch: 128789 Date Analyzed: 2016-03-11 Analyzed By: JL Prep Batch: 109068 QC Preparation: 2016-03-11 Prepared By: JL

						Spike	Percent	Recovery
Surrogate	Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			44.8	mg/Kg	1	50.0	90	70 - 130

Method Blank (1) QC Batch: 128822

QC Batch: 128822 Date Analyzed: 2016-03-12 Analyzed By: AK Prep Batch: 109069 QC Preparation: 2016-03-11 Prepared By: AK Report Date: March 18, 2016 Work Order: 16031006 Page Number: 21 of 33

David Bilbrey 8" Pipeline

15-0171-03

Parameter

 $\overline{\text{Chloride}}$ 

Parameter GRO	Flag	Cert		<1.76 mg/		Units mg/Kg	RL 4
Surrogate	Flag	Cert Result	Units	Dilution	Spike Amount		Recovery Limits
Trifluorotoluene (TFT) 4-Bromofluorobenzene (4-BFB)		2.08 1.91	mg/Kg mg/Kg	1 1	2.00 2.00		70 - 130 70 - 130
+Diomondoroschizene (+Di D)		1.31		1	2.00	30 1	10 - 150
Method Blank (1) QC Batch:	128895						
QC Batch: 128895		Date Analyzed:	2016-03-15			Analyzed B	
Prep Batch: 109162		QC Preparation:	2016-03-15	)		Prepared By	y: LQ
Parameter	Flag	Cert		MDL Result		Units	$\operatorname{RL}$
Chloride	1 148	5,7,9		< 8.34		mg/Kg	25
Method Blank (1) QC Batch:	128896						
QC Batch: 128896 Prep Batch: 109163		Date Analyzed: QC Preparation:	2016-03-15 2016-03-15			Analyzed By Prepared By	
Parameter	Flag	Cert		MDL Result		Units	RL
Chloride		5,7,9		< 8.34		mg/Kg	25
Method Blank (1) QC Batch:  QC Batch: 128899 Prep Batch: 109170	128899	Date Analyzed: QC Preparation:	2016-03-16 2016-03-16			Analyzed B Prepared B	

 $\operatorname{Cert}$ 

5,7,9

Flag

MDL

Result

< 8.34

Units

mg/Kg

RL

Report Date: March 18, 2016 Work Order: 16031006 Page Number: 22 of 33

15-0171-03 David Bilbrey 8" Pipeline

# Laboratory Control Spikes

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

QC Batch: 128785 Date Analyzed: 2016-03-11 Analyzed By: AK Prep Batch: 109054 QC Preparation: 2016-03-10 Prepared By: AK

			LCS			Spike	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit
Benzene		8	2.23	mg/Kg	1	2.00	< 0.0100	112	70 - 130
Toluene		8	2.20	mg/Kg	1	2.00	< 0.0156	110	70 - 130
Ethylbenzene		8	2.31	mg/Kg	1	2.00	< 0.0151	116	70 - 130
Xylene		8	6.81	mg/Kg	1	6.00	< 0.00430	114	70 - 130

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

			LCSD			Spike	Matrix		Rec.		RPD
Param	F	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Benzene		8	2.24	mg/Kg	1	2.00	< 0.0100	112	70 - 130	0	20
Toluene		8	2.17	mg/Kg	1	2.00	< 0.0156	108	70 - 130	1	20
Ethylbenzene		8	2.30	mg/Kg	1	2.00	< 0.0151	115	70 - 130	0	20
Xylene		8	6.78	mg/Kg	1	6.00	< 0.00430	113	70 - 130	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)	2.30	2.14	mg/Kg	1	2.00	115	107	70 - 130
4-Bromofluorobenzene (4-BFB)	2.34	2.19	mg/Kg	1	2.00	117	110	70 - 130

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

QC Batch: 128789 Date Analyzed: 2016-03-11 Analyzed By: JL Prep Batch: 109068 QC Preparation: 2016-03-11 Prepared By: JL

			LCS			Spike	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit
DRO		8	199	mg/Kg	1	250	13.5	74	70 - 130

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

 $continued \dots$ 

Report Date: March 18, 2016

15 - 0171 - 03

Work Order: 16031006 David Bilbrey 8" Pipeline

control spikes continued											
-			LCSD			Spike	Matrix		Rec.		RPD
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
			LCSD			$_{ m Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
DRO		8	194	mg/Kg	1	250	13.5	72	70 - 130	2	20

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

	LCS	LCSD			$_{ m Spike}$	LCS	LCSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
n-Tricosane	51.4	51.0	mg/Kg	1	50.0	103	102	70 - 130

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

QC Batch: 128822 Date Analyzed: 2016-03-12 Prep Batch: 109069 QC Preparation: 2016-03-11 Analyzed By: AK Prepared By: AK

Page Number: 23 of 33

			LCS			Spike	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit
GRO		8	18.1	mg/Kg	1	20.0	< 1.76	90	70 - 130

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

			LCSD			$_{\rm Spike}$	Matrix		Rec.		RPD
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
GRO		8	16.5	mg/Kg	1	20.0	< 1.76	82	70 - 130	9	20

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

	LCS	LCSD			$\operatorname{Spike}$	LCS	LCSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	2.03	1.94	mg/Kg	1	2.00	102	97	70 - 130
4-Bromofluorobenzene (4-BFB)	1.84	1.77	$\mathrm{mg}/\mathrm{Kg}$	1	2.00	92	88	70 - 130

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

QC Batch: 128895 Date Analyzed: 2016-03-15 Analyzed By: RL Prep Batch: 109162 QC Preparation: 2016-03-15 Prepared By: LQ

			LCS			$\operatorname{Spike}$	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	$\operatorname{Limit}$
Chloride		5,7,9	263	mg/Kg	1	250	< 8.34	105	90 - 110

Report Date: March 18, 2016 Work Order: 16031006 Page Number: 24 of 33

David Bilbrey 8" Pipeline

15-0171-03

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

			LCSD			Spike	Matrix		Rec.		RPD
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride		5,7,9	263	mg/Kg	1	250	< 8.34	105	90 - 110	0	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: 128896 Date Analyzed: 2016-03-15 Analyzed By: RL Prep Batch: 109163 QC Preparation: 2016-03-15 Prepared By: LQ

			LCS			Spike	Matrix		Rec.
Param	F	$^{\mathrm{C}}$	Result	Units	Dil.	Amount	Result	Rec.	Limit
Chloride		5,7,9	265	mg/Kg	1	250	< 8.34	106	90 - 110

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

			LCSD			Spike	Matrix		Rec.		RPD
Param	F	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride		5,7,9	264	mg/Kg	1	250	< 8.34	106	90 - 110	0	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: 128899 Date Analyzed: 2016-03-16 Analyzed By: RL Prep Batch: 109170 QC Preparation: 2016-03-16 Prepared By: RL

			LCS			$_{ m Spike}$	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit
Chloride		5,7,9	264	mg/Kg	1	250	< 8.34	106	90 - 110

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

			LCSD			Spike	Matrix		Rec.		RPD
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride		5,7,9	263	mg/Kg	1	250	< 8.34	105	90 - 110	0	20

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

Report Date: March 18, 2016 Work Order: 16031006 Page Number: 25 of 33

15-0171-03 David Bilbrey 8" Pipeline

# Matrix Spikes

Matrix Spike (MS-1) Spiked Sample: 415724

QC Batch: 128785 Date Analyzed: 2016-03-11 Analyzed By: AK Prep Batch: 109054 QC Preparation: 2016-03-10 Prepared By: AK

			MS			$\operatorname{Spike}$	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit
Benzene		8	1.69	mg/Kg	1	2.00	< 0.0100	84	70 - 130
Toluene		8	1.75	$\mathrm{mg}/\mathrm{Kg}$	1	2.00	< 0.0156	88	70 - 130
Ethylbenzene		8	1.97	mg/Kg	1	2.00	< 0.0151	98	70 - 130
Xylene		8	5.82	mg/Kg	1	6.00	< 0.00430	97	70 - 130

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

			MSD			Spike	Matrix		Rec.		RPD
Param	F	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Benzene		8	1.56	mg/Kg	1	2.00	< 0.0100	78	70 - 130	8	20
Toluene		8	1.57	mg/Kg	1	2.00	< 0.0156	78	70 - 130	11	20
Ethylbenzene		8	1.78	mg/Kg	1	2.00	< 0.0151	89	70 - 130	10	20
Xylene		8	5.27	mg/Kg	1	6.00	< 0.00430	88	70 - 130	10	20

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

	MS	MSD			$\operatorname{Spike}$	MS	MSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	2.27	2.23	mg/Kg	1	2	114	112	70 - 130
4-Bromofluorobenzene (4-BFB)	2.42	2.43	mg/Kg	1	2	121	122	70 - 130

Matrix Spike (xMS-1) Spiked Sample: 415711

QC Batch: 128789 Date Analyzed: 2016-03-11 Analyzed By: JL Prep Batch: 109068 QC Preparation: 2016-03-11 Prepared By: JL

				MS			Spike	Matrix		Rec.
Param		$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit
DRO	Qs	Qs	8	1280	mg/Kg	1	250	1400	-48	70 - 130

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

 $continued \dots$ 

Report Date: March 18, 2016 Work Order: 16031006 Page Number: 26 of 33

15-0171-03 David Bilbrey 8" Pipeline

matrix spikes continued												
				MSD			Spike	Matrix		Rec.		RPD
Param		$\mathbf{F}$	С	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
				MSD			$\operatorname{Spike}$	Matrix		$\operatorname{Rec}$ .		RPD
Param		$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
DRO	Qr,Qs	Qr,Qs	8	2270	mg/Kg	1	250	1400	348	70 - 130	56	20

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

			MS	MSD			Spike	MS	MSD	Rec.
Surrogate			Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
n-Tricosane	Qsr	Qsr	70.4	110	mg/Kg	1	50	141	220	70 - 130

Matrix Spike (MS-1) Spiked Sample: 415718

QC Batch: 128822 Date Analyzed: 2016-03-12 Analyzed By: AK Prep Batch: 109069 QC Preparation: 2016-03-11 Prepared By: AK

			MS			Spike	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	$\operatorname{Limit}$
GRO		8	17.9	mg/Kg	1	20.0	< 1.76	90	70 - 130

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

			MSD			$_{\rm Spike}$	Matrix		Rec.		RPD
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
GRO		8	17.9	mg/Kg	1	20.0	< 1.76	90	70 - 130	0	20

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

	MS	MSD			Spike	MS	MSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	1.99	2.06	mg/Kg	1	2	100	103	70 - 130
4-Bromofluorobenzene (4-BFB)	1.81	1.91	mg/Kg	1	2	90	96	70 - 130

Matrix Spike (MS-1) Spiked Sample: 415720

QC Batch: 128895 Date Analyzed: 2016-03-15 Analyzed By: RL Prep Batch: 109162 QC Preparation: 2016-03-15 Prepared By: LQ

			MS			$_{ m Spike}$	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit
Chloride		5,7,9	292	mg/Kg	1	250	13.9	111	80 - 120

Report Date: March 18, 2016 Work Order: 16031006 Page Number: 27 of 33

David Bilbrey 8" Pipeline

15 - 0171 - 03

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

			MSD			Spike	Matrix		Rec.		RPD
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride		5,7,9	294	mg/Kg	1	250	13.9	112	80 - 120	1	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: 415881

QC Batch: 128896 Date Analyzed: 2016-03-15 Analyzed By: RL Prep Batch: 109163 QC Preparation: 2016-03-15 Prepared By: LQ

			MS			Spike	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit
Chloride		5.7.9	454	mg/Kg	5	250	171	113	80 - 120

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

				MSD			Spike	Matrix		Rec.		RPD
Param		$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride	Qs	Qs	5,7,9	496	mg/Kg	5	250	171	130	80 - 120	9	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: 415914

QC Batch: 128899 Date Analyzed: 2016-03-16 Analyzed By: RL Prep Batch: 109170 QC Preparation: 2016-03-16 Prepared By: RL

			MS			Spike	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit
Chloride		5,7,9	303	mg/Kg	5	250	69.8149	93	80 - 120

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

			MSD			Spike	Matrix		Rec.		RPD
Param	F	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride		5,7,9	316	mg/Kg	5	250	69.8149	98	80 - 120	4	20

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

Report Date: March 18, 2016 Work Order: 16031006 Page Number: 28 of 33

15-0171-03 David Bilbrey 8" Pipeline

## Calibration Standards

#### Standard (CCV-1)

QC Batch: 128785 Date Analyzed: 2016-03-11 Analyzed By: AK

				CCVs True	$\begin{array}{c} {\rm CCVs} \\ {\rm Found} \end{array}$	$\begin{array}{c} { m CCVs} \\ { m Percent} \end{array}$	Percent Recovery	Date
Param	Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Benzene		8	mg/kg	0.100	0.106	106	80 - 120	2016-03-11
Toluene		8	mg/kg	0.100	0.104	104	80 - 120	2016-03-11
Ethylbenzene		8	mg/kg	0.100	0.109	109	80 - 120	2016-03-11
Xylene		8	mg/kg	0.300	0.320	107	80 - 120	2016-03-11

#### Standard (CCV-2)

QC Batch: 128785 Date Analyzed: 2016-03-11 Analyzed By: AK

				CCVs	CCVs	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Benzene		8	mg/kg	0.100	0.117	117	80 - 120	2016-03-11
Toluene		8	$\mathrm{mg/kg}$	0.100	0.112	112	80 - 120	2016-03-11
Ethylbenzene		8	mg/kg	0.100	0.119	119	80 - 120	2016-03-11
Xylene		8	mg/kg	0.300	0.344	115	80 - 120	2016-03-11

#### Standard (CCV-1)

QC Batch: 128789 Date Analyzed: 2016-03-11 Analyzed By: JL

COLL

				CCVs	CCVs	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		8	mg/Kg	250	200	80	80 - 120	2016-03-11

#### Standard (CCV-2)

QC Batch: 128789 Date Analyzed: 2016-03-11 Analyzed By: JL

Report Date: March 18, 2016 Work Order: 16031006 Page Number: 29 of 33

15-0171-03 David Bilbrey 8" Pipeline

				CCVs	CCVs	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		8	mg/Kg	250	208	83	80 - 120	2016-03-11

#### Standard (CCV-3)

QC Batch: 128789 Date Analyzed: 2016-03-11 Analyzed By: JL

				CCVs	CCVs	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		8	mg/Kg	250	199	80	80 - 120	2016-03-11

#### Standard (CCV-1)

QC Batch: 128822 Date Analyzed: 2016-03-12 Analyzed By: AK

				CCVs	CCVs	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	$\operatorname{Cert}$	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		8	mg/Kg	1.00	0.986	99	80 - 120	2016-03-12

#### Standard (CCV-2)

QC Batch: 128822 Date Analyzed: 2016-03-12 Analyzed By: AK

				CCVs	CCVs	$\mathrm{CCVs}$	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		8	mg/Kg	1.00	0.841	84	80 - 120	2016-03-12

#### Standard (CCV-3)

QC Batch: 128822 Date Analyzed: 2016-03-12 Analyzed By: AK

Report Date: March 18, 2016 Work Order: 16031006 Page Number: 30 of 33

15-0171-03 David Bilbrey 8" Pipeline

				CCVs	CCVs	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	$\operatorname{Cert}$	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		8	mg/Kg	1.00	0.823	82	80 - 120	2016-03-12

#### Standard (CCV-1)

QC Batch: 128895 Date Analyzed: 2016-03-15 Analyzed By: RL

				CCVs	CCVs	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	$\operatorname{Cert}$	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride		5,7,9	mg/Kg	25.0	26.6	106	90 - 110	2016-03-15

#### Standard (CCV-2)

QC Batch: 128895 Date Analyzed: 2016-03-15 Analyzed By: RL

				CCVs	CCVs	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride		579	mg/Kg	25.0	26.6	106	90 - 110	2016-03-15

#### Standard (CCV-1)

QC Batch: 128896 Date Analyzed: 2016-03-15 Analyzed By: RL

				CCVs	CCVs	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	$\operatorname{Cert}$	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride		5,7,9	mg/Kg	25.0	26.6	106	90 - 110	2016-03-15

#### Standard (CCV-2)

QC Batch: 128896 Date Analyzed: 2016-03-15 Analyzed By: RL

Report Date: March 18, 2016 Work Order: 16031006 Page Number: 31 of 33

15-0171-03 David Bilbrey 8" Pipeline

				CCVs True	CCVs Found	$\begin{array}{c} { m CCVs} \\ { m Percent} \end{array}$	Percent Recovery	Date
Param	Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride		5,7,9	mg/Kg	25.0	26.7	107	90 - 110	2016-03-15

### Standard (CCV-1)

QC Batch: 128899 Date Analyzed: 2016-03-16 Analyzed By: RL

				CCVs	CCVs	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride		5.7.9	mg/Kg	25.0	26.5	106	90 - 110	2016-03-16

### Standard (CCV-2)

QC Batch: 128899 Date Analyzed: 2016-03-16 Analyzed By: RL

				CCVs	CCVs	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	$\operatorname{Cert}$	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride		5,7,9	mg/Kg	25.0	25.9	104	90 - 110	2016-03-16

Report Date: March 18, 2016 Work Order: 16031006 Page Number: 32 of 33

15-0171-03 David Bilbrey 8" Pipeline

## Appendix

### Report Definitions

Name	Definition
MDL	Method Detection Limit
MQL	Minimum Quantitation Limit
SDL	Sample Detection Limit

### **Laboratory Certifications**

	Certifying	Certification	Laboratory
$\mathbf{C}$	Authority	Number	Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	L-A-B	L2418.01	El Paso
2	L-A-B	L2418	Lubbock
3	Kansas	Kansas E- $10317$	Lubbock
4	LELAP	LELAP-02002	El Paso
5	LELAP	LELAP-02003	Lubbock
6	NELAP	T104704221-15-6	El Paso
7	NELAP	T104704219-15-11	Lubbock
8	NELAP	T104704392-14-8	Midland
9		2015-066	Lubbock

### Standard Flags

- F Description
- B Analyte detected in the corresponding method blank above the method detection limit
- H Analyzed out of hold time
- J Estimated concentration
- Jb The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less then ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
- Je Estimated concentration exceeding calibration range.
- MI1 Split peak or shoulder peak
- MI2 Instrument software did not integrate
- MI3 Instrument software misidentified the peak
- MI4 Instrument software integrated improperly
- MI5 Baseline correction

Report Date: March 18, 2016 Work Order: 16031006 Page Number: 33 of 33 15-0171-03 David Bilbrey 8" Pipeline

F Description	

- Qc Calibration check outside of laboratory limits.Qr RPD outside of laboratory limits
- Qs Spike recovery outside of laboratory limits.
- Qsr Surrogate recovery outside of laboratory limits.
  - U The analyte is not detected above the SDL

### **Result Comments**

1 Dilution due to hydrocarbons.

### Attachments

The scanned attachments will follow this page.

Please note, each attachment may consist of more than one page.

900001:#0

CHAIN-OF-CUSTODY 730 ☐ JNTACT ☐ NOT USED Take The State of 730 200 KKU CITOH 724 732 FIELD NOTES 731 The line 4011 JA 000 LAB WORK ORDER #: 1603/CO 6 COLLECTOR: Michael 419 17 718 07 THERM #: PAGE CUSTODY SEALS - D BROKEN PROJECT LOCATION OR NAME: David Bilbrey LABORATORY USE ONLY: RECEIVING TEMP: 6.0 A HAND DELIVERED X CARRIER BILL# LAI PROJECT #: 15-0171-07 TURN AROUND TIME NORMAL [ OTHER [] 2 DAY 1 DAY DATE: 3/1/ PO #: 507 N. Marienfeld, Ste. 200 RECEIVED BY: (Signature) RECEIVED BY: (Signature) (Signature Midland, TX 79701 PRESERVATION UNPRESERVED 432-687-0901 X ICE □ HosN □ possH HNO HCI # of Containers Matrix SIGNE 9711 DATE/TIME DATE/TIME 2:08 12.24 12:39 :34 2:03 135 Ch. 1 20: - X 1:39 147 Time SL=SLUDGE OT=OTHER P=PAINT Date SSOCIATES, Inc. Environmental Consultants W=WATER RELINQUISHED BY: (Signature) RELINQUISHED BY: (Signature) RELINQUISHED BY:(Signature) S=SOIL Lab# A=AIR arson & Data Reported to: NN □ Yes □ No Time zone/State: 1-25 58-2-20 TRRP report? TIME ZONE: SB-3-10" 58-3-15 SB-3-15 Sample I.D. SR-2-10 1 SR-1-20 58-1-15 SB-7-8 Field SB-2 S8-1-TOTAL SB

WOH: 1602186

CHAIN-OF-CUSTODY	LAB WORK ORDER #: [LOC3 CO6] : David Bilbsey 8' Pipeline	THE SHOP SHOP	SAM FIELD NOTES	C 5 1 5 12 0 10 11 11 11 11 11 11 11 11 11 11 11 1	wet .	125 25/69 THERM #: IR	CUSTODY SEALS - G BROKEN G INTACT G NOT USED G CARRIER BILL # 15. 21515 869
CHAIN	1   6 , 2	1 2 1 1 0 0 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0					CUSTODY SEALS - G BROI G CARRIER BILL #
	DATE: 3/10/2016 PO #: LAB WORK PROJECT LOCATION OR NAME: David LAI PROJECT #: 15-017 1-03	C 3001 141 C 3100	1015 2 000 000 000 000 000 000 000 000 000			TURN AROUND TIME NORMAL	9:11 OTHER W
900	507 N. Marienfeld, Ste. 200 P. Midland, TX 79701 P. 432-687-0901 L.	PRESERVATION USOH CO	NAPRESE ICE			RECEIVED BY: (Signature) RECEIVED BY: (Signature)	RECEIVED BY: (Signature)
T-1000		P=PAINT SL=SLUDGE OT=OTHER	te Time Matrix			DATE/TIME DATE/TIME	410116 9:11
	A Grson & Ssociates, Inc. Environmental Consultants	TRRP report?    Yes   No   A=AIR   TIME ZONE: Time zone/State:	Field Sample I.D. Lab # Date			RELINQUISHED BY:(Signature) RELINQUISHED BY:(Signature)	ELINGUISHED/BY:(Signature)



### Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

## Analytical and Quality Control Report

Report Date: March 22, 2016

16031101

Work Order:

Michael Gant Larson and Associates, Inc.

P. O. Box 50685 Midland, TX, 79710

Project Name: David Bilbrey 8" Pipeline

Project Number: 15-0171-03

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

			Date	$_{ m 1ime}$	Date
Sample	Description	Matrix	Taken	Taken	Received
415786	SB-4-5'	soil	2016-03-10	10:52	2016-03-11
415787	SB-4-10'	soil	2016-03-10	10:59	2016-03-11
415788	SB-4-15'	soil	2016-03-10	11:04	2016-03-11

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

TraceAnalysis, Inc. uses the attached chain of custody (COC) as the laboratory check-in documentation which includes sample receipt, temperature, sample preservation method and condition, collection date and time, testing requested, company, sampler, contacts and any special remarks.

This report consists of a total of 15 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director James Taylor, Assistant Director

Johnny Grindstaff, Operations Manager

# Report Contents

Case Narrative	4
Analytical Report	5
Sample 415786 (SB-4-5')	
Sample 415787 (SB-4-10')	
Sample 415788 (SB-4-15')	(
Method Blanks	7
QC Batch 128822 - Method Blank (1)	7
QC Batch 128896 - Method Blank (1)	7
QC Batch 128987 - Method Blank (1)	7
Laboratory Control Spikes	8
QC Batch 128822 - LCS (1)	8
QC Batch 128896 - LCS (1)	
QC Batch 128987 - LCS (1)	8
Matrix Spikes	10
QC Batch 128822 - MS (1)	10
QC Batch 128896 - MS (1)	
QC Batch 128987 - xMS (1)	
Calibration Standards	12
QC Batch 128822 - CCV (1)	
QC Batch 128822 - CCV (2)	
QC Batch 128896 - CCV (1)	
QC Batch 128896 - CCV (2)	
QC Batch 128987 - CCV (1)	
QC Batch 128987 - CCV (2)	
Appendix	14
Report Definitions	
Laboratory Certifications	
Standard Flags	
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### Case Narrative

Samples for project David Bilbrey 8" Pipeline were received by TraceAnalysis, Inc. on 2016-03-11 and assigned to work order 16031101. Samples for work order 16031101 were received intact at a temperature of 3.8 C.

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

		Prep	Prep	QC	Analysis
Test	Method	Batch	Date	Batch	Date
Chloride (IC)	E 300.0	109163	2016-03-15 at 14:26	128896	2016-03-15 at 12:07
TPH DRO	S 8015 $D$	109238	2016-03-21 at 12:00	128987	2016-03-22 at $12:51$
TPH GRO	S 8015 D	109069	2016-03-11 at 09:26	128822	2016-03-12 at $06:20$

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 16031101 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: March 22, 2016 Work Order: 16031101 Page Number: 5 of 15

15-0171-03 David Bilbrey 8" Pipeline

## **Analytical Report**

Sample: 415786 - SB-4-5'

Laboratory: Lubbock

Analytical Method: Prep Method: Analysis: Chloride (IC) E 300.0N/AQC Batch: 128896 Date Analyzed: 2016-03-15 Analyzed By: RLPrep Batch: 109163 Sample Preparation: 2016-03-15 Prepared By: RL

Sample: 415786 - SB-4-5'

Laboratory: Lubbock

TPH DRO Prep Method: Analysis: Analytical Method: S 8015 D N/AQC Batch: 128987 Date Analyzed: 2016-03-22 Analyzed By: HJPrep Batch: 109238 Sample Preparation: 2016-03-21 Prepared By: HJ

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane		3	34.1	mg/Kg	1	25.0	136	58.2 - 150

Sample: 415786 - SB-4-5'

Laboratory: Midland

Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035 QC Batch: 128822 Date Analyzed: 2016-03-12 Analyzed By: AKPrep Batch: 109069 Sample Preparation: 2016-03-11Prepared By: AK

						$_{ m Spike}$	Percent	Recovery
Surrogate	Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			2.12	mg/Kg	1	2.00	106	70 - 130

 $continued \dots$ 

Report Date: March 22, 2016 Work Order: 16031101 Page Number: 6 of 15

15-0171-03 David Bilbrey 8" Pipeline

sample continued	sample	$e\ continued$			
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						эріке	Percent	Recovery	
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits	
4-Bromofluorobenzene (4-BFB)			2.50	mg/Kg	1	2.00	125	70 - 130	

### Sample: 415787 - SB-4-10'

Laboratory: Lubbock

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A QC Batch: Analyzed By: 128896Date Analyzed: 2016 - 03 - 15 $\operatorname{RL}$ Prep Batch: 109163 Sample Preparation: 2016-03-15 Prepared By:  $\operatorname{RL}$ 

### Sample: 415788 - SB-4-15'

Laboratory: Lubbock

Chloride (IC) Analysis: Analytical Method: E 300.0 Prep Method: N/AQC Batch: 128896Date Analyzed: 2016-03-15 Analyzed By: RLPrep Batch: 109163 Sample Preparation: 2016-03-15 Prepared By: RL

Report Date: March 22, 2016 Work Order: 16031101 Page Number: 7 of 15

15-0171-03 David Bilbrey 8" Pipeline

### Method Blanks

Method Blank (1) QC Batch: 128822

QC Batch: 128822 Date Analyzed: 2016-03-12 Analyzed By: AK Prep Batch: 109069 QC Preparation: 2016-03-11 Prepared By: AK

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			2.08	mg/Kg	1	2.00	104	70 - 130
4-Bromofluorobenzene (4-BFB)			1.91	$\mathrm{mg}/\mathrm{Kg}$	1	2.00	96	70 - 130

Method Blank (1) QC Batch: 128896

QC Batch: 128896 Date Analyzed: 2016-03-15 Analyzed By: RL Prep Batch: 109163 QC Preparation: 2016-03-15 Prepared By: LQ

Method Blank (1) QC Batch: 128987

QC Batch: 128987 Date Analyzed: 2016-03-22 Analyzed By: HJ Prep Batch: 109238 QC Preparation: 2016-03-21 Prepared By: HJ

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	$\operatorname{Units}$	Dilution	Amount	Recovery	Limits
n-Tricosane		3	28.7	$\mathrm{mg/Kg}$	1	25.0	115	58.2 - 150

Report Date: March 22, 2016 Work Order: 16031101 Page Number: 8 of 15

15-0171-03 David Bilbrey 8" Pipeline

## Laboratory Control Spikes

### Laboratory Control Spike (LCS-1)

QC Batch: 128822 Date Analyzed: 2016-03-12 Analyzed By: AK Prep Batch: 109069 QC Preparation: 2016-03-11 Prepared By: AK

			LCS			Spike	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	$\operatorname{Limit}$
GRO		5	18.1	mg/Kg	1	20.0	< 1.76	90	70 - 130

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

			LCSD			Spike	Matrix		Rec.		RPD
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
GRO		5	16.5	mg/Kg	1	20.0	< 1.76	82	70 - 130	9	20

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

	LCS	LCSD			$\operatorname{Spike}$	LCS	LCSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	2.03	1.94	mg/Kg	1	2.00	102	97	70 - 130
4-Bromofluorobenzene (4-BFB)	1.84	1.77	$\mathrm{mg}/\mathrm{Kg}$	1	2.00	92	88	70 - 130

### Laboratory Control Spike (LCS-1)

QC Batch: 128896 Date Analyzed: 2016-03-15 Analyzed By: RL Prep Batch: 109163 QC Preparation: 2016-03-15 Prepared By: LQ

			LCS			Spike	Matrix		Rec.
Param	F	$^{\mathrm{C}}$	Result	Units	Dil.	Amount	Result	Rec.	Limit
Chloride		3.4.6	265	mg/Kg	1	250	< 8.34	106	90 - 110

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

			LCSD			Spike	Matrix		Rec.		RPD
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride		3,4,6	264	mg/Kg	1	250	< 8.34	106	90 - 110	0	20

Report Date: March 22, 2016 Work Order: 16031101 Page Number: 9 of 15

15-0171-03 David Bilbrey 8" Pipeline

### Laboratory Control Spike (LCS-1)

QC Batch: 128987 Date Analyzed: 2016-03-22 Analyzed By: HJ
Prep Batch: 109238 QC Preparation: 2016-03-21 Prepared By: HJ

LCS Spike Matrix Rec. F  $\mathbf{C}$ Param Result Units Dil. Amount Result Limit Rec.  $\overline{\mathrm{DRO}}$ 68.5 - 136 623 mg/Kg 500 < 8.47125 1,2,3,4

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

			LCSD			Spike	Matrix		Rec.		RPD
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
DRO		1,2,3,4	612	mg/Kg	1	500	< 8.47	122	68.5 - 136	2	20

		LCS	LCSD			Spike	LCS	LCSD	Rec.
Surrogate		Result	Result	Units	Dil.	Amount	Rec.	Rec.	$\operatorname{Limit}$
n-Tricosane	3	29.7	30.3	mg/Kg	1	25.0	119	121	58.2 - 150

Report Date: March 22, 2016 Work Order: 16031101 Page Number: 10 of 15

15-0171-03 David Bilbrey 8" Pipeline

## Matrix Spikes

Matrix Spike (MS-1) Spiked Sample: 415718

QC Batch: 128822 Date Analyzed: 2016-03-12 Analyzed By: AK Prep Batch: 109069 QC Preparation: 2016-03-11 Prepared By: AK

			MS			$\operatorname{Spike}$	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	$\operatorname{Limit}$
GRO		5	17.9	mg/Kg	1	20.0	< 1.76	90	70 - 130

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

			MSD			Spike	Matrix		Rec.		RPD
Param	F	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
GRO		5	17.9	mg/Kg	1	20.0	< 1.76	90	70 - 130	0	20

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

	MS	MSD			$\operatorname{Spike}$	MS	MSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	1.99	2.06	mg/Kg	1	2	100	103	70 - 130
4-Bromofluorobenzene (4-BFB)	1.81	1.91	mg/Kg	1	2	90	96	70 - 130

Matrix Spike (MS-1) Spiked Sample: 415881

QC Batch: 128896 Date Analyzed: 2016-03-15 Analyzed By: RL Prep Batch: 109163 QC Preparation: 2016-03-15 Prepared By: LQ

			MS			$_{ m Spike}$	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit
Chloride		3,4,6	454	mg/Kg	5	250	171	113	80 - 120

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

				MSD			$_{\mathrm{Spike}}$	Matrix		Rec.		RPD
Param		$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride	Qs	Qs	3,4,6	496	mg/Kg	5	250	171	130	80 - 120	9	20

Report Date: March 22, 2016 Work Order: 16031101 Page Number: 11 of 15

15-0171-03 David Bilbrey 8" Pipeline

Matrix Spike (xMS-1) Spiked Sample: 416149

QC Batch: 128987 Date Analyzed: 2016-03-22 Analyzed By: HJ Prep Batch: 109238 QC Preparation: 2016-03-21 Prepared By: HJ

MSSpike Matrix Rec.  $\mathbf{F}$  $\mathbf{C}$ Param Result Units Dil. Amount Result Limit Rec.  $\overline{\mathrm{DRO}}$ 49.3 - 138 624 mg/Kg500 < 8.47125 1,2,3,4

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

			MSD			$_{\rm Spike}$	Matrix		Rec.		RPD
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
DRO		1,2,3,4	615	mg/Kg	1	500	< 8.47	123	49.3 - 138	1	20

		MS	MSD			$_{\rm Spike}$	MS	MSD	Rec.
Surrogate		Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
n-Tricosane	3	32.3	32.9	mg/Kg	1	25	129	132	58.2 - 150

Report Date: March 22, 2016 Work Order: 16031101 Page Number: 12 of 15

15-0171-03 David Bilbrey 8" Pipeline

## Calibration Standards

### Standard (CCV-1)

QC	Batch:	128822	Date Analyzed:	2016-03-12	Analyze	d By:	AK
----	--------	--------	----------------	------------	---------	-------	----

				$\mathrm{CCVs}$	$\operatorname{CCVs}$	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		5	mg/Kg	1.00	0.986	99	80 - 120	2016-03-12

### Standard (CCV-2)

QC Batch: 128822 Date Analyzed: 2016-03-12 Analyzed By: AK

				CCVs	CCVs	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		5	mg/Kg	1.00	0.841	84	80 - 120	2016-03-12

### Standard (CCV-1)

QC Batch: 128896 Date Analyzed: 2016-03-15 Analyzed By: RL

				$\mathrm{CCVs}$	CCVs	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	$\operatorname{Cert}$	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride		3,4,6	mg/Kg	25.0	26.6	106	90 - 110	2016-03-15

### Standard (CCV-2)

QC Batch: 128896 Date Analyzed: 2016-03-15 Analyzed By: RL

				$\operatorname{CCVs}$	CCVs	CCVs	Percent	D 4
				True	Found	Percent	Recovery	Date
Param	$\operatorname{Flag}$	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride		3,4,6	$\mathrm{mg/Kg}$	25.0	26.7	107	90 - 110	2016-03-15

Report Date: March 22, 2016 Work Order: 16031101 Page Number: 13 of 15

15-0171-03 David Bilbrey 8" Pipeline

Standard (CCV-1)

QC Batch: 128987 Date Analyzed: 2016-03-22 Analyzed By: HJ

				CCVs	$\mathrm{CCVs}$	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		1,2,3,4	mg/Kg	500	507	101	80 - 120	2016-03-22

Standard (CCV-2)

QC Batch: 128987 Date Analyzed: 2016-03-22 Analyzed By: HJ

				CCVs	CCVs	$\operatorname{CCVs}$	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		1,2,3,4	mg/Kg	500	568	114	80 - 120	2016-03-22

Report Date: March 22, 2016 Work Order: 16031101 Page Number: 14 of 15

15-0171-03 David Bilbrey 8" Pipeline

## Appendix

### Report Definitions

Name	Definition
MDL	Method Detection Limit
MQL	Minimum Quantitation Limit
SDL	Sample Detection Limit

### **Laboratory Certifications**

	Certifying	Certification	Laboratory
$\mathbf{C}$	Authority	Number	Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	L-A-B	L2418	Lubbock
2	Kansas	Kansas E-10317	Lubbock
3	LELAP	LELAP-02003	Lubbock
4	NELAP	T104704219-15-11	Lubbock
5	NELAP	T104704392-14-8	Midland
6		2015-066	Lubbock

### Standard Flags

- F Description
- B Analyte detected in the corresponding method blank above the method detection limit
- H Analyzed out of hold time
- J Estimated concentration
- Jb The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less then ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
- Je Estimated concentration exceeding calibration range.
- MI1 Split peak or shoulder peak
- MI2 Instrument software did not integrate
- MI3 Instrument software misidentified the peak
- MI4 Instrument software integrated improperly
- MI5 Baseline correction
  - Qc Calibration check outside of laboratory limits.
  - Qr RPD outside of laboratory limits
  - Qs Spike recovery outside of laboratory limits.

Report Date: March 22, 2016 Work Order: 16031101 Page Number: 15 of 15 15-0171-03 David Bilbrey 8" Pipeline

F Description

Qsr Surrogate recovery outside of laboratory limits.

U The analyte is not detected above the SDL

### Attachments

The scanned attachments will follow this page.

Please note, each attachment may consist of more than one page.

10/150gl: #0001

CHAIN-OF-CUSTODY

Sack CUSTODY SEALS - C BROKEN INTACT IN NOT USED FIELD NOTES COLLECTOR: Michae PAGE 1

PROJECT LOCATION OR NAME: David Bilbrey 8" Pionis LABORATORY USE ONLY: RECEIVING TEMP 5.8 1 1 THAND DELIVERED CARBIER BILL# **TURN AROUND TIME** NORMALAT OTHER 🗓 2 DAY □ 1 DAY DATE: 3/II RECEIVED SIGNATURE 7.00 507 N. Marienfeld, Ste. 200 RECEIVED BY: (Signature) RECEIVED BY: (Signature) Midland, TX 79701 **PRESERVATION** UNPRESERVED 432-687-0901 ICE □ HO<sup>®</sup>N. □ <sup>®</sup>OS<sup>®</sup>H HNO<sup>3</sup> HCI # of Containers Matrix DATE/TIME DATE/TIME 10:52 97:11 3/10 10559 たのこ Time SL=SLUDGE OT=OTHER P=PAINT <u>8</u> 3 3 3 3 Date W=WATER RELINQUISHED BY:(Signature) RELINGUISHED BY: (Signature) RELINQUISHED BY:(Signature) S=SOIL A=AIR Lab# Data Reported to: □ Yes □ No TIME ZONE: Time zone/State: N-4-10 B-4-30 TRRP report? 38-4-15 Sample I.D. S-4-8S TOTAL

01/20/11/10/2/10

Sac CHAIN-OF-CUSTODY CUSTODY SEALS - TI BROKEN TINTACT TINDIT USED FIELD NOTES P COLLECTOR: Michae THERM #: LAB WORK ORDER #: 16031 PROJECT LOCATION OR NAME: DOVIN BILLERY CARRIER BILL # A LABORATORY USE ONLY: RECEIVING TEMPS . 8 7 LA HAND DELIVERED LAI PROJECT #: 15-0171-0 TURN AROUND TIME NORMAL OTHER [] 2 DAY 1 DAY DATE PO #: 507 N. Marienfeld, Ste. 200 RECEIVED BY: (Signature) RECEIVED BY: (Signature) Midland, TX 79701 **PRESERVATION** UNPRESERVED 432-687-0901 ICE □ HOBN □ 408sH HNO3 HCI # of Containers Matrix DATE/TIME DATE/TIME DATE/TIME 6350 97:1 10: Time SL=SLUDGE OT=OTHER P=PAINT 3/10 Date W=WATER RELINQUISHED BY:(Signature) RELINGUISHED BY: (Signature) RELINQUISHED BY: (Signature) S=SOIL Lab# A=AIR Data Reported to: TIME ZONE: Time zone/State: □ Yes □ No TRRP report? SR-4-10 Sample I.D. Field SB-4 TOTAL



## Certifications

Carroliton,

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

Texas 75006

E-Mail: lab@traceanalysis.com WEB: www.traceanalysis.com

972-242-7750

Report Date: May 6, 2016

16050212

Work Order:

## Analytical and Quality Control Report

Michael Gant Larson and Associates, Inc.

P. O. Box 50685 Midland, TX, 79710

Project Location: Lea, NM

Project Name: David Bilbrey Site 3

(BioAquatic) 2501 Mayes Rd., Suite 100

Project Number: 15-0171-03

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
418413	E Wall N 3'	soil	2016-04-27	11:47	2016-05-02
418414	E Wall N 6'	soil	2016-04-27	12:45	2016-05-02
418415	E Wall N 12'	soil	2016-04-29	12:15	2016-05-02
418416	E Wall S 3'	soil	2016-04-27	11:42	2016-05-02
418417	E Wall S 6'	soil	2016-04-27	11:50	2016-05-02
418418	E Wall S 12'	soil	2016-04-29	12:18	2016-05-02
418419	W Wall N 3'	soil	2016-04-27	14:01	2016-05-02
418420	W Wall N 6'	soil	2016-04-28	11:15	2016-05-02
418421	W Wall N 12'	soil	2016-04-28	13:43	2016-05-02
418422	W Wall S 3'	soil	2016-04-27	13:15	2016-05-02
418423	W Wall S 6'	soil	2016-04-28	11:05	2016-05-02
418424	W Wall S 12'	soil	2016-04-28	13:50	2016-05-02
418425	N Wall 3'	soil	2016-04-29	11:02	2016-05-02
418426	N Wall 6'	soil	2016-04-29	10:56	2016-05-02
418427	Bottom 12' N	soil	2016-04-28	14:00	2016-05-02
418428	S Wall 3'	soil	2016-04-29	11:23	2016-05-02
418429	S Wall 6'	soil	2016-04-29	11:12	2016-05-02

			Date	$\operatorname{Time}$	Date
Sample	Description	Matrix	Taken	Taken	Received
418430	Bottom 12' S	soil	2016-04-28	14:03	2016-05-02

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

TraceAnalysis, Inc. uses the attached chain of custody (COC) as the laboratory check-in documentation which includes sample receipt, temperature, sample preservation method and condition, collection date and time, testing requested, company, sampler, contacts and any special remarks.

This report consists of a total of 44 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director James Taylor, Assistant Director Johnny Grindstaff, Operations Manager

# Report Contents

Case Narrative	
Analytical Report	
Sample 418413 (E Wall N 3')	
Sample 418414 (E Wall N 6')	
Sample 418415 (E Wall N 12')	
Sample 418416 (E Wall S 3')	
Sample 418417 (E Wall S 6')	
Sample 418418 (E Wall S 12')	
Sample 418419 (W Wall N 3')	
Sample 418420 (W Wall N 6')	
Sample 418421 (W Wall N 12')	
Sample 418422 (W Wall S 3')	
Sample 418423 (W Wall S 6')	
Sample 418424 (W Wall S 12')	
Sample 418425 (N Wall 3')	
Sample 418426 (N Wall 6')	
Sample 418427 (Bottom 12' N)	
Sample 418428 (S Wall 3')	
Sample 418429 (S Wall 6')	
Sample 418430 (Bottom 12' S)	
Method Blanks	
QC Batch 129854 - Method Blank (1)	
QC Batch 12989 - Method Blank (1)	
QC Batch 129882 - Method Blank (1)	
QC Batch 129942 - Method Blank (1)	
QC Batch 129943 - Method Blank (1)	
QC Batter 1255 15 Method Blank (1)	•
Laboratory Control Spikes	
QC Batch 129854 - LCS (1)	
QC Batch 129880 - LCS (1)	
QC Batch 129882 - LCS (1)	
QC Batch 129942 - LCS (1)	
QC Batch 129943 - LCS (1)	
Matrix Spikes	
QC Batch 129854 - MS (1)	
QC Batch 129890 - MS (1)	
QC Batch 129882 - MS (1)	
QC Batch 129942 - MS (1)	
QC Batch 129943 - MS (1)	
Q Davon 120040 - 100 (1)	•
Calibration Standards	
QC Batch 129854 - CCV (1)	
OC Batch 120854 - CCV (2)	

	Batch 129854 - CCV (3)	40
	Batch 129880 - CCV (1)	40
	Batch 129880 - CCV (2)	40
	Batch 129882 - CCV (1)	41
	Batch 129882 - CCV (2)	41
	Batch 129942 - CCV (1)	41
	Batch 129942 - CCV (2)	41
	Batch 129943 - CCV (1)	42
	Batch 129943 - CCV (2)	42
Аp	ndix	43
	port Definitions	43
	poratory Certifications	43
	ndard Flags	43
		4.4

### Case Narrative

Samples for project David Bilbrey Site 3 were received by TraceAnalysis, Inc. on 2016-05-02 and assigned to work order 16050212. Samples for work order 16050212 were received intact at a temperature of 2.2 C.

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

		Prep	$\operatorname{Prep}$	QC	Analysis
Test	Method	Batch	Date	Batch	Date
Chloride (IC)	E 300.0	110084	2016-05-05 at 13:00	129942	2016-05-05 at 15:35
Chloride (IC)	E 300.0	110085	2016-05-05 at $13:00$	129943	2016-05-05 at $15:35$
TPH DRO	S 8015 $D$	110031	2016-05-03 at $13:00$	129880	2016-05-04 at $09:59$
TPH GRO	S 8015 $D$	109994	2016-05-02 at $14:33$	129854	2016-05-03 at $10:18$
TPH ORO	S 8015 D	110031	2016-05-03 at $13:00$	129882	2016-05-04 at $10:15$

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 16050212 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 6, 2016 Work Order: 16050212 Page Number: 6 of 44 15-0171-03 David Bilbrey Site 3 Lea, NM

## **Analytical Report**

Sample: 418413 - E Wall N 3'

Laboratory: Lubbock

Analytical Method: Prep Method: Analysis: Chloride (IC) E 300.0N/AQC Batch: 129942 Date Analyzed: 2016-05-05 Analyzed By: RLPrep Batch: 110084 Sample Preparation: 2016-05-05 Prepared By: RL

Sample: 418413 - E Wall N 3'

Laboratory: Lubbock

TPH DRO Prep Method: Analysis: Analytical Method: S 8015 D N/AQC Batch: 129880Date Analyzed: 2016-05-04 Analyzed By: HJPrep Batch: 110031 Sample Preparation: 2016-05-03 Prepared By: HJ

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane		3	16.5	mg/Kg	1	25.0	66	58.2 - 150

Sample: 418413 - E Wall N 3

Laboratory: Midland

Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035 QC Batch: 129854 Date Analyzed: 2016-05-03 Analyzed By: AKPrep Batch: 109994 Sample Preparation: 2016-05-02Prepared By: AK

						$_{ m Spike}$	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			2.02	mg/Kg	1	2.00	101	70 - 130

 $continued \dots$ 

Report Date: May 6, 2016 Work Order: 16050212 Page Number: 7 of 44
15-0171-03 David Bilbrey Site 3 Lea, NM

_	_		
sample	continued		

						$_{ m Spike}$	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
4-Bromofluorobenzene (4-BFB)			1.77	mg/Kg	1	2.00	88	70 - 130

### Sample: 418413 - E Wall N 3'

Laboratory: Lubbock

Analysis: TPH ORO Analytical Method: S 8015 D Prep Method: N/A QC Batch: 129882 Date Analyzed: 2016-05-04 Analyzed By: HJPrep Batch: 110031 Sample Preparation: 2016-05-03 Prepared By: HJ

MDLMQLPQLRLParameter Flag Cert Result Result Result Result Units Dilution MDLMQL PQL RLORO < 7.48< 50.0 < 50.0 < 50.0 mg/Kg 7.48 50.0 50.0 50.0  $_{\mathrm{Qc,U}}$ 

						$\operatorname{Spike}$	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			18.9	mg/Kg	1	25.0	76	70 - 130
n-Triacontane			20.4	$\mathrm{mg}/\mathrm{Kg}$	1	25.0	82	70 - 130

#### Sample: 418414 - E Wall N 6'

Laboratory: Lubbock

#### Sample: 418414 - E Wall N 6'

Laboratory: Lubbock

Analysis: TPH DRO Analytical Method: S 8015 DPrep Method: N/AQC Batch: 129880 Date Analyzed: 2016-05-04 Analyzed By: HJPrep Batch: 110031 Sample Preparation: 2016-05-03 Prepared By: HJ

Report Date: May 6, 2016 Work Order: 16050212 Page Number: 8 of 44 15-0171-03 David Bilbrey Site 3 Lea, NM

Surrogate	Flag	Cert	Result	Units	Dilution	$\begin{array}{c} {\rm Spike} \\ {\rm Amount} \end{array}$	Percent Recovery	Recovery Limits
n-Tricosane		3	16.3	mg/Kg	1	25.0	65	58.2 - 150

### Sample: 418414 - E Wall N 6'

Laboratory: Midland

Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035 QC Batch: 129854 Date Analyzed: 2016-05-03 Analyzed By: AK Prep Batch: 109994 Sample Preparation: 2016-05-02 Prepared By: AK

			RL			
Parameter	Flag	Cert	Result	Units	Dilution	RL
GRO	IJ	5	< 4.00	mg/Kg	1	4.00

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			1.91	mg/Kg	1	2.00	96	70 - 130
4-Bromofluorobenzene (4-BFB)			1.83	$\mathrm{mg}/\mathrm{Kg}$	1	2.00	92	70 - 130

### Sample: 418414 - E Wall N 6'

Laboratory: Lubbock

Analysis: TPH ORO Analytical Method: S 8015 D Prep Method: N/A QC Batch: 129882 Date Analyzed: 2016-05-04 Analyzed By: HJ Prep Batch: 110031 Sample Preparation: 2016-05-03 Prepared By: HJ

			MDL	MQL	PQL	RL						
Parameter	Flag	$\operatorname{Cert}$	Result	Result	Result	Result	Units	Dilution	MDL	MQL	PQL	RL
ORO	Qc,U		< 7.48	< 50.0	< 50.0	< 50.0	mg/Kg	1	7.48	50.0	50.0	50.0

						$\operatorname{Spike}$	Percent	Recovery
Surrogate	$\operatorname{Flag}$	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			18.3	mg/Kg	1	25.0	73	70 - 130
n-Triacontane			20.3	$\mathrm{mg}/\mathrm{Kg}$	1	25.0	81	70 - 130

### Sample: 418415 - E Wall N 12'

Laboratory: Lubbock

Report Date: May 6, 2016 Work Order: 16050212 Page Number: 9 of 44 15-0171-03 David Bilbrey Site 3 Lea, NM

			RL			
Parameter	Flag	Cert	Result	Units	Dilution	RL
Chloride		3,4,6	<25.0	mg/Kg	1	25.0

### Sample: 418415 - E Wall N 12'

Laboratory: Lubbock

TPH DRO Analysis: Analytical Method: S 8015 D Prep Method: N/A QC Batch: 129880 Date Analyzed: 2016-05-04 Analyzed By: HJPrep Batch: 110031 Sample Preparation: Prepared By: 2016-05-03 HJ

			RL			
Parameter	Flag	$\operatorname{Cert}$	Result	Units	Dilution	RL
DRO	U	1,2,3,4	< 50.0	mg/Kg	1	50.0

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane		3	16.4	mg/Kg	1	25.0	66	58.2 - 150

### Sample: 418415 - E Wall N 12'

Laboratory: Midland

Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035 QC Batch: 129854 Date Analyzed: 2016-05-03 Analyzed By: AK Prep Batch: 109994 Sample Preparation: 2016-05-02 Prepared By: AK

			RL			
Parameter	Flag	Cert	Result	Units	Dilution	RL
GRO	TT	5	< 4.00	mg/Kg	1	4 00

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			2.04	mg/Kg	1	2.00	102	70 - 130
4-Bromofluorobenzene (4-BFB)			1.97	mg/Kg	1	2.00	98	70 - 130

### Sample: 418415 - E Wall N 12'

Laboratory: Lubbock

Prep Method: N/A Analysis: TPH ORO Analytical Method: S 8015 D QC Batch: 129882 Date Analyzed: 2016-05-04 Analyzed By: HJPrep Batch: 110031 Sample Preparation: 2016-05-03 Prepared By: HJ

 $continued \dots$ 

Report Date: May 6, 2016 Work Order: 16050212 Page Number: 10 of 44 15-0171-03 David Bilbrey Site 3 Lea, NM

sample 418415 continued ...

Parameter	Flag	Cert	MDL Result	MQL Result	PQL Result	RL Result	Units	Dilution	MDL	MQL	PQL	RL
			MDL	MQL	PQL	RL						
Parameter	Flag	$\operatorname{Cert}$	Result	Result	Result	Result	Units	Dilution	MDL	MQL	PQL	RL
ORO	Qc,U		< 7.48	< 50.0	< 50.0	< 50.0	mg/Kg	1	7.48	50.0	50.0	50.0
Surrogate		Flag	Cert	Resu	ılt. I	Units	Dilution	Spike Amoun		Percent Recovery		covery
$\frac{\text{n-Tricosane}}{\text{n-Tricosane}}$		1100		18		ıg/Kg	1	25.0		73		- 130
n-Triacontane				20		$_{ m ig/Kg}$	1	25.0		84		- 130

### Sample: 418416 - E Wall S 3'

Laboratory: Lubbock

Chloride (IC) Analysis: Analytical Method: Prep Method: N/A E 300.0 QC Batch: RL129942 Date Analyzed: 2016 - 05 - 05Analyzed By: Prep Batch: 110084 Sample Preparation: 2016-05-05 Prepared By: RL

### Sample: 418416 - E Wall S 3'

Laboratory: Lubbock

Analysis: TPH DRO Analytical Method: S 8015 D Prep Method: N/A QC Batch: 129880 Date Analyzed: 2016-05-04 Analyzed By: HJPrep Batch: 110031 Sample Preparation: 2016-05-03 Prepared By: HJ

n-Tricosane		3	16.6	mg/Kg	1	25.0	66	58.2 - 150
Surrogate	Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
						$\operatorname{Spike}$	Percent	Recovery

Report Date: May 6, 2016 Work Order: 16050212 Page Number: 11 of 44 15-0171-03 David Bilbrey Site 3 Lea, NM

#### Sample: 418416 - E Wall S 3'

Laboratory: Midland

TPH GRO  $\le 5035$ Analysis: Analytical Method: S 8015 D Prep Method: QC Batch: 129854 Date Analyzed: 2016-05-03 Analyzed By: AK Prep Batch: 109994 Sample Preparation: 2016-05-02 Prepared By: AK

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			1.98	mg/Kg	1	2.00	99	70 - 130
4-Bromofluorobenzene (4-BFB)			1.91	$\mathrm{mg}/\mathrm{Kg}$	1	2.00	96	70 - 130

#### Sample: 418416 - E Wall S 3'

Laboratory: Lubbock

Analysis: TPH ORO Prep Method: Analytical Method: S 8015 D N/AQC Batch: 129882 Date Analyzed: 2016-05-04 Analyzed By: HJPrep Batch: 110031 Sample Preparation: 2016-05-03 Prepared By: HJ

MDL MQL PQL RLParameter Flag Cert Result Result Result Result Units Dilution MDL MQLPQL RL< 7.48< 50.0 7.48 50.0 ORO < 50.0 < 50.0 50.0 50.0 mg/Kg Qc,U

						$_{ m Spike}$	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			18.4	mg/Kg	1	25.0	74	70 - 130
n-Triacontane			21.0	$\mathrm{mg}/\mathrm{Kg}$	1	25.0	84	70 - 130

### Sample: 418417 - E Wall S 6'

Laboratory: Lubbock

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A RLQC Batch: 129942 Date Analyzed: 2016-05-05 Analyzed By: Prep Batch: 110084 Sample Preparation: 2016-05-05 Prepared By: RL

Report Date: May 6, 2016 Work Order: 16050212 Page Number: 12 of 44 15-0171-03 David Bilbrey Site 3 Lea, NM

#### Sample: 418417 - E Wall S 6'

Laboratory: Lubbock

TPH DRO Analysis: Analytical Method: S 8015 D Prep Method: N/AQC Batch: 129880 Date Analyzed: 2016-05-04 Analyzed By: HJPrep Batch: 110031 Sample Preparation: Prepared By: 2016-05-03 HJ

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane		3	18.3	mg/Kg	1	25.0	73	58.2 - 150

### Sample: 418417 - E Wall S 6'

Laboratory: Midland

Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035 QC Batch: 129854 Date Analyzed: Analyzed By: 2016-05-03 AKPrep Batch: 109994 Sample Preparation: 2016-05-02 Prepared By: AK

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			1.91	mg/Kg	1	2.00	96	70 - 130
4-Bromofluorobenzene (4-BFB)			1.84	mg/Kg	1	2.00	92	70 - 130

### Sample: 418417 - E Wall S 6

Laboratory: Lubbock

TPH ORO Prep Method: N/A Analysis: Analytical Method: S 8015 D QC Batch: 129882 Date Analyzed: 2016-05-04 Analyzed By: HJPrep Batch: 110031 Sample Preparation: Prepared By: 2016-05-03 HJ

MDLMQLPQL RLResult MDLPQL RLParameter Flag Cert Result Result Result Units Dilution MQL7.48 50.0 ORO < 7.48< 50.0 < 50.0 < 50.0 mg/Kg 50.0 50.0  $_{\mathrm{Qc,Qs,U}}$ 

						Spike	Percent	Recovery
Surrogate	Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			18.9	mg/Kg	1	25.0	76	70 - 130

 $continued \dots$ 

Report Date: May 6, 2016 Work Order: 16050212 Page Number: 13 of 44

Result

21.4

15-0171-03	David Bilbrey Site 3					
sample continued		Spike	Percent	Recovery		

Units

mg/Kg

Dilution

1

Amount

25.0

Recovery

86

Limits

70 - 130

### Sample: 418418 - E Wall S 12'

Flag

Cert

т 1 ,	T 11 1
Laboratory:	Lubbock

Surrogate

n-Triacontane

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A 2016 - 05 - 05QC Batch: 129942Date Analyzed: Analyzed By: RLPrep Batch: 110084 2016-05-05 Prepared By: Sample Preparation: RL

			RL			
Parameter	Flag	Cert	Result	Units	Dilution	RL
Chloride		3,4,6	<25.0	m mg/Kg	1	25.0

#### Sample: 418418 - E Wall S 12'

Laboratory: Lubbock

TPH DRO Analytical Method: Prep Method: N/A Analysis: S 8015 D QC Batch: 129880 Date Analyzed: 2016-05-04 Analyzed By: HJPrep Batch: 110031 Sample Preparation: 2016-05-03 Prepared By: HJ

Danamatan		Ela m	Cert	D.	RL	Units	Dilution	DI
Parameter		$\operatorname{Flag}$	Cert	$\Gamma$	esult	Units	Dilution	RL
DRO			1,2,3,4	<	50.0	$\mathrm{mg/Kg}$	1	50.0
Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits

mg/Kg

1

25.0

84

58.2 - 150

21.1

3

### Sample: 418418 - E Wall S 12'

Laboratory: Midland

n-Tricosane

Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035 QC Batch: 129854 Date Analyzed: 2016-05-03 Analyzed By: AK Prep Batch: 109994 Sample Preparation: 2016-05-02 Prepared By: AK

			$\operatorname{RL}$			
Parameter	Flag	Cert	Result	Units	Dilution	$\operatorname{RL}$
GRO	U	5	< 4.00	m mg/Kg	1	4.00

Report Date: May 6, 2016 Work Order: 16050212 Page Number: 14 of 44 15-0171-03 David Bilbrey Site 3 Lea, NM

Surrogate	Flag	Cert	Result	Units	Dilution	$\begin{array}{c} {\rm Spike} \\ {\rm Amount} \end{array}$	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.02	mg/Kg	1	2.00	101	70 - 130
4-Bromofluorobenzene (4-BFB)			1.91	mg/Kg	1	2.00	96	70 - 130

### Sample: 418418 - E Wall S 12'

Laboratory: Lubbock

Analysis: TPH ORO Analytical Method: S 8015 D Prep Method: N/A QC Batch: 129882 Date Analyzed: 2016-05-04 Analyzed By: HJPrep Batch: 110031 Sample Preparation: 2016-05-03 Prepared By: HJ

MDLMQLPQLRLParameter Flag Cert Result Result Result Result Units Dilution MDLMQL PQL RLORO < 7.48< 50.0 < 50.0 < 50.0 mg/Kg 7.48 50.0 50.0 50.0  $_{\mathrm{Qc,U}}$ 

						$\operatorname{Spike}$	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			21.7	mg/Kg	1	25.0	87	70 - 130
n-Triacontane			23.2	$\mathrm{mg}/\mathrm{Kg}$	1	25.0	93	70 - 130

#### Sample: 418419 - W Wall N 3'

Laboratory: Lubbock

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A QC Batch: 129942 Date Analyzed: 2016-05-05 Analyzed By: RL Prep Batch: 110084 Sample Preparation: 2016-05-05 Prepared By: RL

#### Sample: 418419 - W Wall N 3'

Laboratory: Lubbock

Analysis: TPH DRO Analytical Method: S 8015 D Prep Method: N/AQC Batch: 129880 Date Analyzed: 2016-05-04 Analyzed By: HJPrep Batch: 110031 Sample Preparation: 2016-05-03 Prepared By: HJ

Report Date: May 6, 2016

15 - 0171 - 03

Work Order: 16050212 David Bilbrey Site 3 Page Number: 15 of 44

Lea, NM

						Spike	Percent	Recovery
Surrogate	Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane		3	16.0	${ m mg/Kg}$	1	25.0	64	58.2 - 150

#### Sample: 418419 - W Wall N 3'

Laboratory: Midland

Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035 QC Batch: 129854 Date Analyzed: 2016-05-03 Analyzed By: AK Prep Batch: 109994 Sample Preparation: 2016-05-02 Prepared By: AK

			RL			
Parameter	Flag	Cert	Result	Units	Dilution	RL
GRO	U	5	< 4.00	mg/Kg	1	4.00

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			2.00	mg/Kg	1	2.00	100	70 - 130
4-Bromofluorobenzene (4-BFB)			1.91	$\mathrm{mg}/\mathrm{Kg}$	1	2.00	96	70 - 130

#### Sample: 418419 - W Wall N 3'

Laboratory: Lubbock

Analysis: TPH ORO Analytical Method: S 8015 D Prep Method: N/A QC Batch: 129882 Date Analyzed: 2016-05-04 Analyzed By: HJ Prep Batch: 110031 Sample Preparation: 2016-05-03 Prepared By: HJ

			MDL	MQL	$_{ m PQL}$	RL						
Parameter	Flag	Cert	Result	Result	Result	Result	Units	Dilution	MDL	MQL	PQL	RL
ORO	$_{\mathrm{Qc,U}}$		< 7.48	< 50.0	< 50.0	< 50.0	mg/Kg	1	7.48	50.0	50.0	50.0

Surrogate	Flag	Cert	Result	Units	Dilution	$egin{array}{c}  ext{Spike} \  ext{Amount} \end{array}$	Percent Recovery	Recovery Limits
n-Tricosane			18.0	mg/Kg	1	25.0	72	70 - 130
n-Triacontane			22.1	mg/Kg	1	25.0	88	70 - 130

## Sample: 418420 - W Wall N 6'

Laboratory: Lubbock

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A QC Batch: 129942 Date Analyzed: 2016-05-05 Analyzed By: RL Prep Batch: 110084 Sample Preparation: 2016-05-05 Prepared By: RL

Report Date: May 6, 2016 Work Order: 16050212 Page Number: 16 of 44 15-0171-03 David Bilbrey Site 3 Lea, NM

			RL			
Parameter	Flag	Cert	Result	Units	Dilution	RL
Chloride		3.4.6	25.9	mg/Kg	1	25.0

#### Sample: 418420 - W Wall N 6'

Laboratory: Lubbock

Analysis: TPH DRO Analytical Method: S 8015 D Prep Method: N/A QC Batch: 129880 Date Analyzed: 2016-05-04 Analyzed By: HJ Prep Batch: 110031 Sample Preparation: 2016-05-03 Prepared By: HJ

			$\operatorname{RL}$			
Parameter	Flag	Cert	Result	Units	Dilution	RL
DRO		1.2.3.4	< 50.0	mg/Kg	1	50.0

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane		3	18.9	mg/Kg	1	25.0	76	58.2 - 150

#### Sample: 418420 - W Wall N 6'

Laboratory: Midland

Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035 QC Batch: 129854 Date Analyzed: 2016-05-03 Analyzed By: AK Prep Batch: 109994 Sample Preparation: 2016-05-02 Prepared By: AK

			$\operatorname{RL}$			
Parameter	Flag	Cert	Result	Units	Dilution	RL
GRO	U	5	< 4.00	mg/Kg	1	4.00

						Spike	Percent	Recovery
Surrogate	$\operatorname{Flag}$	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			1.95	mg/Kg	1	2.00	98	70 - 130
4-Bromofluorobenzene (4-BFB)			1.88	mg/Kg	1	2.00	94	70 - 130

#### Sample: 418420 - W Wall N 6'

Laboratory: Lubbock

Prep Method: N/A Analysis: TPH ORO Analytical Method: S 8015 D QC Batch: 129882 Date Analyzed: 2016-05-04 Analyzed By: HJPrep Batch: 110031 Sample Preparation: 2016-05-03 Prepared By: HJ

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Report Date: May 6, 2016 Work Order: 16050212 Page Number: 17 of 44 15-0171-03 David Bilbrey Site 3 Lea, NM

sample	118120	continued		
Sample	410420	Continued		

Parameter	Flag	Cert	MDL Result	MQL Result	PQL Result	RL Result	Units	Dilution	MDL	MQL	PQL	RL
			MDL	MQL	PQL	RL						
Parameter	$\operatorname{Flag}$	$\operatorname{Cert}$	Result	Result	Result	Result	Units	Dilution	MDL	MQL	PQL	RL
ORO	Qc,U		< 7.48	< 50.0	< 50.0	< 50.0	mg/Kg	1	7.48	50.0	50.0	50.0
Surrogate		Flag	Cert	Resu	ılt (	Units	Dilution	Spike Amour		Percent Recovery		covery mits
n-Tricosane				19	.1 m	ıg/Kg	1	25.0		76	70	- 130
n-Triacontane				19	.9 m	ıg/Kg	1	25.0		80	70	- 130

#### Sample: 418421 - W Wall N 12'

Laboratory: Lubbock

#### Sample: 418421 - W Wall N 12'

Laboratory: Lubbock

Analysis: TPH DRO Analytical Method: S 8015 D Prep Method: N/A QC Batch: 129880 Date Analyzed: 2016-05-04 Analyzed By: HJPrep Batch: 110031 Sample Preparation: 2016-05-03 Prepared By: HJ

						$\operatorname{Spike}$	Percent	Recovery
Surrogate	Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane		3	15.9	${ m mg/Kg}$	1	25.0	64	58.2 - 150

Report Date: May 6, 2016 Work Order: 16050212 Page Number: 18 of 44 15-0171-03 David Bilbrey Site 3 Lea, NM

#### Sample: 418421 - W Wall N 12'

Laboratory: Midland

TPH GRO  $\le 5035$ Analysis: Analytical Method: S 8015 D Prep Method: QC Batch: 129854 Date Analyzed: 2016-05-03 Analyzed By: AK Prep Batch: 109994 Sample Preparation: 2016-05-02 Prepared By: AK

						$_{ m Spike}$	Percent	Recovery
Surrogate	Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			1.97	mg/Kg	1	2.00	98	70 - 130
4-Bromofluorobenzene (4-BFB)			1.89	mg/Kg	1	2.00	94	70 - 130

#### Sample: 418421 - W Wall N 12'

Laboratory: Lubbock

Analysis: TPH ORO Prep Method: Analytical Method: S 8015 D N/AQC Batch: 129882 Date Analyzed: 2016-05-04 Analyzed By: HJPrep Batch: 110031 Sample Preparation: 2016-05-03 Prepared By: HJ

MDL MQL PQL RLParameter Flag Cert Result Result Result Result Units Dilution MDL MQLPQL RL< 7.48< 50.0 7.48 50.0 ORO < 50.0 < 50.0 50.0 50.0 mg/Kg Qc,U

						$_{ m Spike}$	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			17.7	mg/Kg	1	25.0	71	70 - 130
n-Triacontane			18.4	$\mathrm{mg}/\mathrm{Kg}$	1	25.0	74	70 - 130

#### Sample: 418422 - W Wall S 3'

Laboratory: Lubbock

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/ARLQC Batch: 129942 Date Analyzed: 2016-05-05 Analyzed By: Prep Batch: 110084 Sample Preparation: 2016-05-05 Prepared By: RL

Report Date: May 6, 2016 Work Order: 16050212 Page Number: 19 of 44 15-0171-03 David Bilbrey Site 3 Lea, NM

#### Sample: 418422 - W Wall S 3'

Laboratory: Lubbock

TPH DRO Analysis: Analytical Method: S 8015 D Prep Method: N/AQC Batch: 129880 Date Analyzed: 2016-05-04 Analyzed By: HJPrep Batch: 110031 Sample Preparation: Prepared By: 2016-05-03 HJ

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane		3	16.9	mg/Kg	1	25.0	68	58.2 - 150

#### Sample: 418422 - W Wall S 3'

Laboratory: Midland

Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035 QC Batch: 129854 Date Analyzed: Analyzed By: 2016-05-03 AKPrep Batch: 109994 Sample Preparation: 2016-05-02 Prepared By: AK

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			1.97	mg/Kg	1	2.00	98	70 - 130
4-Bromofluorobenzene (4-BFB)			1.86	mg/Kg	1	2.00	93	70 - 130

#### Sample: 418422 - W Wall S 3'

Laboratory: Lubbock

TPH ORO Prep Method: N/A Analysis: Analytical Method: S 8015 D QC Batch: 129882 Date Analyzed: 2016-05-04 Analyzed By: HJPrep Batch: 110031 Sample Preparation: Prepared By: 2016-05-03 HJ

MDLMQL PQLRLResult MDLPQL RLParameter Flag Cert Result Result Result Units Dilution MQL7.48 50.0 ORO < 7.48 < 50.0 < 50.0 < 50.0 mg/Kg 50.0 50.0  $_{\mathrm{Qc,U}}$ 

						Spike	Percent	Recovery
Surrogate	Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			19.2	mg/Kg	1	25.0	77	70 - 130

 $continued \dots$ 

Report Date: May 6, 2016

Work Order: 16050212 David Bilbrey Site 3 Page Number: 20 of 44

Lea, NM

 $sample\ continued\ \dots$ 

15-0171-03

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane			20.9	mg/Kg	1	25.0	84	70 - 130

#### Sample: 418423 - W Wall S 6'

Laboratory: Lubbock

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A QC Batch: 129943Date Analyzed: 2016-05-05 Analyzed By: RLPrep Batch: 110085 Sample Preparation: 2016-05-05 Prepared By: RL

#### Sample: 418423 - W Wall S 6'

Laboratory: Lubbock

TPH DRO Analytical Method: S 8015 D Prep Method: N/AAnalysis: QC Batch: 129880 Date Analyzed: 2016-05-04 Analyzed By: HJPrep Batch: 110031 Sample Preparation: 2016-05-03 Prepared By: HJ

						Spike	Percent	Recovery
Surrogate	Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane		3	17.5	mg/Kg	1	25.0	70	58.2 - 150

#### Sample: 418423 - W Wall S 6'

Laboratory: Midland

TPH GRO Analytical Method: S 8015 D Prep Method: S 5035 Analysis: QC Batch: 129854 2016-05-03 Analyzed By: AKDate Analyzed: Prep Batch: 109994 Sample Preparation: 2016-05-02 Prepared By: AK

Report Date: May 6, 2016 Work Order: 16050212 Page Number: 21 of 44 15-0171-03 David Bilbrey Site 3 Lea, NM

Surrogate	Flag	Cert	Result	Units	Dilution	$\begin{array}{c} {\rm Spike} \\ {\rm Amount} \end{array}$	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.86	mg/Kg	1	2.00	93	70 - 130
4-Bromofluorobenzene (4-BFB)			1.83	mg/Kg	1	2.00	92	70 - 130

#### Sample: 418423 - W Wall S 6'

Laboratory: Lubbock

Analysis: TPH ORO Analytical Method: S 8015 D Prep Method: N/A QC Batch: 129882 Date Analyzed: 2016-05-04 Analyzed By: HJPrep Batch: 110031 Sample Preparation: 2016-05-03 Prepared By: HJ

MDLMQLPQLRLParameter Flag Cert Result Result Result Result Units Dilution MDLMQL PQL RLORO < 7.48< 50.0 < 50.0 < 50.0 mg/Kg 7.48 50.0 50.0 50.0  $_{\mathrm{Qc,U}}$ 

						$\operatorname{Spike}$	Percent	Recovery
Surrogate	Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			19.0	mg/Kg	1	25.0	76	70 - 130
n-Triacontane			21.0	$\mathrm{mg}/\mathrm{Kg}$	1	25.0	84	70 - 130

#### Sample: 418424 - W Wall S 12'

Laboratory: Lubbock

#### Sample: 418424 - W Wall S 12'

Laboratory: Lubbock

Analysis: TPH DRO Analytical Method: S 8015 D Prep Method: N/AQC Batch: 129880 Date Analyzed: 2016-05-04 Analyzed By: HJPrep Batch: 110031 Sample Preparation: 2016-05-03 Prepared By: HJ

Report Date: May 6, 2016

15 - 0171 - 03

Work Order: 16050212 David Bilbrey Site 3 Page Number: 22 of 44

Lea, NM

						Spike	Percent	Recovery
Surrogate	$\operatorname{Flag}$	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane		3	18.0	mg/Kg	1	25.0	72	58.2 - 150

#### Sample: 418424 - W Wall S 12'

Laboratory: Midland

Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035 QC Batch: 129854 Date Analyzed: 2016-05-03 Analyzed By: AK Prep Batch: 109994 Sample Preparation: 2016-05-02 Prepared By: AK

			RL			
Parameter	Flag	Cert	Result	Units	Dilution	RL
GRO	U	5	< 4.00	mg/Kg	1	4.00

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			1.92	mg/Kg	1	2.00	96	70 - 130
4-Bromofluorobenzene (4-BFB)			1.83	$\mathrm{mg}/\mathrm{Kg}$	1	2.00	92	70 - 130

#### Sample: 418424 - W Wall S 12'

Laboratory: Lubbock

			MDL	MQL	PQL	RL						
Parameter	Flag	$\operatorname{Cert}$	Result	Result	Result	Result	Units	Dilution	MDL	MQL	PQL	RL
ORO	Qc,U		<7.48	< 50.0	< 50.0	< 50.0	mg/Kg	1	7.48	50.0	50.0	50.0

						$\operatorname{Spike}$	Percent	Recovery
Surrogate	$\operatorname{Flag}$	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			19.2	mg/Kg	1	25.0	77	70 - 130
n-Triacontane			22.3	$\mathrm{mg}/\mathrm{Kg}$	1	25.0	89	70 - 130

### Sample: 418425 - N Wall 3'

Laboratory: Lubbock

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A QC Batch: 129943 Date Analyzed: 2016-05-05 Analyzed By: RL Prep Batch: 110085 Sample Preparation: 2016-05-05 Prepared By: RL

Report Date: May 6, 2016 Work Order: 16050212 Page Number: 23 of 44 15-0171-03 David Bilbrey Site 3 Lea, NM

			RL			
Parameter	Flag	Cert	Result	Units	Dilution	RL
Chloride		3,4,6	40.2	mg/Kg	1	25.0

#### Sample: 418425 - N Wall 3'

Laboratory: Lubbock

Analysis: TPH DRO Analytical Method: S 8015 D Prep Method: N/A QC Batch: 129880 Date Analyzed: 2016-05-04 Analyzed By: HJPrep Batch: 110031 Sample Preparation: Prepared By: 2016-05-03 HJ

			RL			
Parameter	Flag	Cert	Result	Units	Dilution	RL
DRO		1,2,3,4	< 50.0	mg/Kg	1	50.0

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane		3	16.2	mg/Kg	1	25.0	65	58.2 - 150

#### Sample: 418425 - N Wall 3'

Laboratory: Midland

Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035 QC Batch: 129854 Date Analyzed: 2016-05-03 Analyzed By: AK Prep Batch: 109994 Sample Preparation: 2016-05-02 Prepared By: AK

			RL			
Parameter	Flag	Cert	Result	Units	Dilution	RL
GRO	II	5	<4.00	mg/Kg	1	4 00

Cumagata	Ela m	Cont	Dogult	IIn:ta	Dilution	Spike	Percent	Recovery
Surrogate	$\operatorname{Flag}$	$\operatorname{Cert}$	Result	$\operatorname{Units}$	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			1.93	mg/Kg	1	2.00	96	70 - 130
4-Bromofluorobenzene (4-BFB)			1.86	mg/Kg	1	2.00	93	70 - 130

#### Sample: 418425 - N Wall 3

Laboratory: Lubbock

Prep Method: N/A Analysis: TPH ORO Analytical Method: S 8015 D QC Batch: 129882 Date Analyzed: 2016-05-04 Analyzed By: HJPrep Batch: 110031 Sample Preparation: 2016-05-03 Prepared By: HJ

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Report Date: May 6, 2016 Work Order: 16050212 Page Number: 24 of 44
15-0171-03 David Bilbrey Site 3 Lea, NM

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samble	410420	continued.	

Parameter	Flag	Cert	MDL Result	MQL Result	PQL Result	RL Result	Units	Dilution	MDL	MQL	PQL	RL
			MDL	MQL	PQL	RL						
Parameter	Flag	Cert	Result	Result	Result	Result	Units	Dilution	MDL	MQL	PQL	RL
ORO	$_{\mathrm{Qc,U}}$		< 7.48	< 50.0	< 50.0	< 50.0	mg/Kg	1	7.48	50.0	50.0	50.0
Surrogate		Flag	Cert	Resu	ılt U	Units	Dilution	Spike Amour		Percent Recovery		covery
n-Tricosane				18		ıg/Kg	1	25.0		76		- 130
n-Triacontane				22		ıg/Kg	1	25.0		90	70	- 130

#### Sample: 418426 - N Wall 6'

Laboratory: Lubbock

Analysis: Chloride (IC)

QC Batch: 129943

Prep Batch: 110085

Analytical Method: E 300.0

Date Analyzed: 2016-05-05

Sample Preparation: 2016-05-05

Prep Method: N/A

Analyzed By: RL

Prepared By: RL

## Sample: 418426 - N Wall 6'

Laboratory: Lubbock

Analysis: TPH DRO Analytical Method: S 8015 D Prep Method: N/A QC Batch: 129880 Date Analyzed: 2016-05-04 Analyzed By: HJPrep Batch: 110031 Sample Preparation: 2016-05-03 Prepared By: HJ

						$\operatorname{Spike}$	Percent	Recovery
Surrogate	Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane		3	16.3	${ m mg/Kg}$	1	25.0	65	58.2 - 150

Report Date: May 6, 2016 Work Order: 16050212 Page Number: 25 of 44 15-0171-03 David Bilbrey Site 3 Lea, NM

#### Sample: 418426 - N Wall 6'

Laboratory: Midland

 $\le 5035$ Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: QC Batch: 129854 Date Analyzed: 2016-05-03 Analyzed By: AK Prep Batch: 109994 Sample Preparation: 2016-05-02 Prepared By: AK

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			1.94	mg/Kg	1	2.00	97	70 - 130
4-Bromofluorobenzene (4-BFB)			1.85	$\mathrm{mg}/\mathrm{Kg}$	1	2.00	92	70 - 130

#### Sample: 418426 - N Wall 6'

Laboratory: Lubbock

Analysis: TPH ORO Prep Method: Analytical Method: S 8015 D N/AQC Batch: 129882 Date Analyzed: 2016-05-04 Analyzed By: HJPrep Batch: 110031 Sample Preparation: 2016-05-03 Prepared By: HJ

MDL MQL PQL RLParameter Flag Cert Result Result Result Result Units Dilution MDL MQLPQL RL< 7.48< 50.0 7.48 50.0 ORO < 50.0 < 50.0 50.0 50.0 mg/Kg Qc,U

						$_{ m Spike}$	Percent	Recovery
Surrogate	Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			19.0	mg/Kg	1	25.0	76	70 - 130
n-Triacontane			23.2	$\mathrm{mg}/\mathrm{Kg}$	1	25.0	93	70 - 130

#### Sample: 418427 - Bottom 12' N

Laboratory: Lubbock

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/ARLQC Batch: 129943 Date Analyzed: 2016-05-05 Analyzed By: Prep Batch: 110085 Sample Preparation: 2016-05-05 Prepared By: RL

Report Date: May 6, 2016 Work Order: 16050212 Page Number: 26 of 44 15-0171-03 David Bilbrey Site 3 Lea, NM

#### Sample: 418427 - Bottom 12' N

Laboratory: Lubbock

TPH DRO Analysis: Analytical Method: S 8015 D Prep Method: N/AQC Batch: 129880 Date Analyzed: 2016-05-04 Analyzed By: HJPrep Batch: 110031 Sample Preparation: Prepared By: 2016-05-03 HJ

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane		3	17.1	mg/Kg	1	25.0	68	58.2 - 150

#### Sample: 418427 - Bottom 12' N

Laboratory: Midland

Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035 QC Batch: 129854 Date Analyzed: Analyzed By: 2016-05-03 AKPrep Batch: 109994 Sample Preparation: 2016-05-02 Prepared By: AK

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			1.91	mg/Kg	1	2.00	96	70 - 130
4-Bromofluorobenzene (4-BFB)			1.84	mg/Kg	1	2.00	92	70 - 130

#### Sample: 418427 - Bottom 12' N

Laboratory: Lubbock

TPH ORO Prep Method: N/A Analysis: Analytical Method: S 8015 D QC Batch: 129882 Date Analyzed: 2016-05-04 Analyzed By: HJPrep Batch: 110031 Sample Preparation: Prepared By: 2016-05-03 HJ

MDLMQL PQLRLResult MDLPQL RLParameter Flag Cert Result Result Result Units Dilution MQL7.48 50.0 ORO < 7.48 < 50.0 < 50.0 < 50.0 mg/Kg 50.0 50.0  $_{\mathrm{Qc,U}}$ 

						Spike	Percent	Recovery
Surrogate	Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			19.0	mg/Kg	1	25.0	76	70 - 130

 $continued \dots$ 

Report Date: May 6, 2016

Work Order: 16050212 David Bilbrey Site 3 Page Number: 27 of 44

Lea, NM

 $sample\ continued\ \dots$ 

15-0171-03

						$\operatorname{Spike}$	Percent	Recovery
Surrogate	Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane			22.5	mg/Kg	1	25.0	90	70 - 130

#### Sample: 418428 - S Wall 3'

Laboratory: Lubbock

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A QC Batch: 129943Date Analyzed: 2016-05-05 Analyzed By: RLPrep Batch: 110085 Sample Preparation: 2016-05-05 Prepared By: RL

#### Sample: 418428 - S Wall 3'

Laboratory: Lubbock

TPH DRO Analytical Method: S 8015 D Prep Method: N/AAnalysis: QC Batch: 129880 Date Analyzed: 2016-05-04 Analyzed By: HJPrep Batch: 110031 Sample Preparation: 2016-05-03 Prepared By: HJ

						Spike	Percent	Recovery
Surrogate	Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane		3	18.6	mg/Kg	1	25.0	74	58.2 - 150

#### Sample: 418428 - S Wall 3'

Laboratory: Midland

TPH GRO Analytical Method: S 8015 D Prep Method: S 5035 Analysis: QC Batch: 129854 2016-05-03 Analyzed By: AKDate Analyzed: Prep Batch: 109994 Sample Preparation: 2016-05-02 Prepared By: AK

Report Date: May 6, 2016 Work Order: 16050212 Page Number: 28 of 44 15-0171-03 David Bilbrey Site 3 Lea, NM

Surrogate	Flag	Cert	Result	Units	Dilution	$\begin{array}{c} {\rm Spike} \\ {\rm Amount} \end{array}$	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			1.91	mg/Kg	1	2.00	96	70 - 130
4-Bromofluorobenzene (4-BFB)			1.84	$\mathrm{mg}/\mathrm{Kg}$	1	2.00	92	70 - 130

#### Sample: 418428 - S Wall 3'

Laboratory: Lubbock

Analysis: TPH ORO Analytical Method: S 8015 D Prep Method: N/A QC Batch: 129882 Date Analyzed: 2016-05-04 Analyzed By: HJPrep Batch: 110031 Sample Preparation: 2016-05-03 Prepared By: HJ

 $\operatorname{MDL}$ MQLPQLRLParameter Flag Cert Result Result Result Result Units Dilution MDLMQL PQL RLORO < 7.48< 50.0 < 50.0 < 50.0 mg/Kg 7.48 50.0 50.0 50.0  $_{\mathrm{Qc,U}}$ 

						$\operatorname{Spike}$	Percent	Recovery
Surrogate	Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			17.7	mg/Kg	1	25.0	71	70 - 130
n-Triacontane			21.1	$\mathrm{mg}/\mathrm{Kg}$	1	25.0	84	70 - 130

#### Sample: 418429 - S Wall 6'

Laboratory: Lubbock

#### Sample: 418429 - S Wall 6'

Laboratory: Lubbock

Analysis: TPH DRO Analytical Method: S 8015 D Prep Method: N/AQC Batch: 129880 Date Analyzed: 2016-05-04 Analyzed By: HJPrep Batch: 110031 Sample Preparation: Prepared By: 2016-05-03 HJ

			RL			
Parameter	Flag	Cert	Result	Units	Dilution	RL
DRO	U	1,2,3,4	< 50.0	mg/Kg	1	50.0

Report Date: May 6, 2016

Work Order: 16050212 David Bilbrey Site 3 Page Number: 29 of 44

Lea, NM

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15-0171-03

Spike Percent Recovery Flag Cert Units Dilution Amount Recovery Limits Surrogate Result n-Tricosane 16.5 25.0 66 58.2 - 150 mg/Kg 1

#### Sample: 418429 - S Wall 6'

Laboratory: Midland

Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: QC Batch: 129854 Date Analyzed: 2016-05-03 Analyzed By: Prep Batch: 109994 Sample Preparation: 2016-05-02 Prepared By:

						Spike	Percent	Recovery
Surrogate	$\operatorname{Flag}$	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			2.07	mg/Kg	1	2.00	104	70 - 130
4-Bromofluorobenzene (4-BFB)			1.96	$\mathrm{mg}/\mathrm{Kg}$	1	2.00	98	70 - 130

#### Sample: 418429 - S Wall 6'

Laboratory: Lubbock

TPH ORO Analysis: Analytical Method: S 8015 D Prep Method: N/AQC Batch: 129882 Date Analyzed: 2016-05-04 Analyzed By: HJPrep Batch: 110031 Sample Preparation: 2016-05-03 Prepared By: HJ

MDL MQL PQL RLParameter Flag Cert Result Result Result Result Units Dilution MDL MQLPQL RL< 7.48ORO < 50.0 < 50.0 7.48 50.0 < 50.0mg/Kg 50.0 50.0 Qc,U

						$\operatorname{Spike}$	Percent	Recovery
Surrogate	Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			19.2	mg/Kg	1	25.0	77	70 - 130
n-Triacontane			22.2	$\mathrm{mg}/\mathrm{Kg}$	1	25.0	89	70 - 130

### Sample: 418430 - Bottom 12' S

Laboratory: Lubbock

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/AQC Batch: 129943 Date Analyzed: 2016-05-05 Analyzed By: RLPrep Batch: 110085 Sample Preparation: 2016-05-05 Prepared By: RL

Report Date: May 6, 2016 Work Order: 16050212 Page Number: 30 of 44 15-0171-03 David Bilbrey Site 3 Lea, NM

			$\operatorname{RL}$			
Parameter	Flag	Cert	Result	Units	Dilution	RL
Chloride		3,4,6	55.8	mg/Kg	1	25.0

#### Sample: 418430 - Bottom 12' S

Laboratory: Lubbock

TPH DRO Analysis: Analytical Method: S 8015 D Prep Method: N/A QC Batch: 129880 Date Analyzed: 2016-05-04 Analyzed By: HJPrep Batch: 110031 Sample Preparation: Prepared By: 2016-05-03 HJ

			RL			
Parameter	Flag	$\operatorname{Cert}$	Result	Units	Dilution	RL
DRO	U	1,2,3,4	< 50.0	mg/Kg	1	50.0

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane		3	27.4	mg/Kg	1	25.0	110	58.2 - 150

## Sample: 418430 - Bottom 12' S

Laboratory: Midland

Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035 QC Batch: 129854 Date Analyzed: 2016-05-03 Analyzed By: AK Prep Batch: 109994 Sample Preparation: 2016-05-02 Prepared By: AK

			$\operatorname{RL}$			
Parameter	Flag	Cert	Result	Units	Dilution	RL
GRO	U	5	< 4.00	mg/Kg	1	4.00

	E1	<b>Q</b> .	D 1:	TT 1.	D11	Spike	Percent	Recovery
Surrogate	$\operatorname{Flag}$	$\operatorname{Cert}$	Result	$\operatorname{Units}$	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			2.00	mg/Kg	1	2.00	100	70 - 130
4-Bromofluorobenzene (4-BFB)			1.92	mg/Kg	1	2.00	96	70 - 130

#### Sample: 418430 - Bottom 12' S

Laboratory: Lubbock

Prep Method: N/A Analysis: TPH ORO Analytical Method: S 8015 D QC Batch: 129882 Date Analyzed: 2016-05-04 Analyzed By: HJPrep Batch: 110031 Sample Preparation: 2016-05-03 Prepared By: HJ

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Report Date: May 6, 2016 Work Order: 16050212 Page Number: 31 of 44 15-0171-03 David Bilbrey Site 3 Lea, NM

Sumble Albabe Communacu	sample	418430	continued			
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			MDL	MQL	PQL	RL						
Parameter	Flag	Cert	Result	Result	Result	Result	Units	Dilution	MDL	MQL	PQL	RL
			MDI	MOT	DOI	DI						
			MDL	MQL	PQL	RL						
Parameter	$\operatorname{Flag}$	$\operatorname{Cert}$	Result	Result	Result	Result	Units	Dilution	MDL	MQL	PQL	RL
ORO	$_{\mathrm{Qc,U}}$		< 7.48	< 50.0	< 50.0	< 50.0	mg/Kg	1	7.48	50.0	50.0	50.0
								Spike		Percent	Rec	covery
Surrogate		Flag	Cert	Resu	ılt	Units	Dilution	Amoun	t F	Recovery	Li	mits
n-Tricosane				26	5.9 n	ng/Kg	1	25.0		108	70	- 130
n-Triacontane				32	2.6 n	ng/Kg	1	25.0		130	70	- 130

Report Date: May 6, 2016 Work Order: 16050212 Page Number: 32 of 44 15-0171-03 David Bilbrey Site 3 Lea, NM

## **Method Blanks**

Method Blank (1) QC Batch: 129854

QC Batch: 129854 Date Analyzed: 2016-05-03 Analyzed By: AK Prep Batch: 109994 QC Preparation: 2016-05-02 Prepared By: AK

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			1.89	mg/Kg	1	2.00	94	70 - 130
4-Bromofluorobenzene (4-BFB)			1.42	mg/Kg	1	2.00	71	70 - 130

Method Blank (1) QC Batch: 129880

QC Batch: 129880 Date Analyzed: 2016-05-04 Analyzed By: HJ
Prep Batch: 110031 QC Preparation: 2016-05-03 Prepared By: HJ

						Spike	Percent	Recovery
Surrogate	Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane		3	23.8	mg/Kg	1	25.0	95	58.2 - 150

Method Blank (1) QC Batch: 129882

			MDL		
Parameter	Flag	$\operatorname{Cert}$	Result	Units	RL
ORO			< 7.48	$\mathrm{mg}/\mathrm{Kg}$	50

Report Date: May 6, 2016 15-0171-03

Work Order: 16050212 David Bilbrey Site 3 Page Number: 33 of 44

Lea, NM

Surrogate	Flag	Cert	Result	Units	Dilution	$\begin{array}{c} {\rm Spike} \\ {\rm Amount} \end{array}$	Percent Recovery	Recovery Limits
n-Tricosane			27.3	mg/Kg	1	25.0	109	70 - 130
n-Triacontane			29.4	$\mathrm{mg/Kg}$	1	25.0	118	70 - 130

Method Blank (1) QC Batch: 129942

QC Batch: 129942 Date Analyzed: 2016-05-05 Analyzed By: RL Prep Batch: 110084 QC Preparation: 2016-05-05 Prepared By: RL

Method Blank (1) QC Batch: 129943

QC Batch: 129943 Date Analyzed: 2016-05-05 Analyzed By: RL Prep Batch: 110085 QC Preparation: 2016-05-05 Prepared By: RL

Report Date: May 6, 2016 Work Order: 16050212 Page Number: 34 of 44 15-0171-03 David Bilbrey Site 3 Lea, NM

# Laboratory Control Spikes

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

QC Batch: 129854 Date Analyzed: 2016-05-03 Analyzed By: AK Prep Batch: 109994 QC Preparation: 2016-05-02 Prepared By: AK

			LCS			Spike	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	$\operatorname{Limit}$
GRO		5	20.6	mg/Kg	1	20.0	< 1.76	103	70 - 130

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

			LCSD			Spike	Matrix		Rec.		RPD
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
GRO		5	20.5	mg/Kg	1	20.0	< 1.76	102	70 - 130	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)	1.92	1.95	mg/Kg	1	2.00	96	98	70 - 130
4-Bromofluorobenzene (4-BFB)	1.83	1.85	$\mathrm{mg}/\mathrm{Kg}$	1	2.00	92	92	70 - 130

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

QC Batch: 129880 Date Analyzed: 2016-05-04 Analyzed By: HJ Prep Batch: 110031 QC Preparation: 2016-05-03 Prepared By: HJ

			LCS			Spike	Matrix		Rec.
Param	$\mathbf{F}$	$^{\mathrm{C}}$	Result	Units	Dil.	Amount	Result	Rec.	Limit
DRO		1,2,3,4	495	mg/Kg	1	500	< 8.47	99	68.5 - 136

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

			LCSD			Spike	Matrix		Rec.		RPD
Param	F	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
DRO		1,2,3,4	469	mg/Kg	1	500	< 8.47	94	68.5 - 136	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-Tricosane	3	29.6	28.1	mg/Kg	1	25.0	118	112	58.2 - 150

Report Date: May 6, 2016 Work Order: 16050212 Page Number: 35 of 44 15-0171-03 David Bilbrey Site 3 Lea, NM

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

QC Batch: 129882 Date Analyzed: 2016-05-04 Analyzed By: HJ
Prep Batch: 110031 QC Preparation: 2016-05-03 Prepared By: HJ

				LCS			$\operatorname{Spike}$	Matrix		Rec.
Param		F	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	$\operatorname{Limit}$
ORO	Qs	Qs		< 7.48	mg/Kg	1	500	< 7.48	0	70 - 130

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

				LCSD			Spike	Matrix		Rec.		RPD
Param		$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
ORO	Qs	Qs		< 7.48	mg/Kg	1	500	<7.48	0	70 - 130	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
n-Tricosane	31.1	28.6	mg/Kg	1	25.0	124	114	70 - 130
n-Triacontane	30.3	28.4	$\mathrm{mg}/\mathrm{Kg}$	1	25.0	121	114	70 - 130

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

QC Batch: 129942 Date Analyzed: 2016-05-05 Analyzed By: RL Prep Batch: 110084 QC Preparation: 2016-05-05 Prepared By: RL

			LCS			$\operatorname{Spike}$	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit
Chloride		3,4,6	256	mg/Kg	1	250	< 4.44	102	90 - 110

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

			LCSD			Spike	Matrix		Rec.		RPD
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride		3,4,6	254	mg/Kg	1	250	< 4.44	102	90 - 110	1	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: 129943 Date Analyzed: 2016-05-05 Analyzed By: RL Prep Batch: 110085 QC Preparation: 2016-05-05 Prepared By: RL

Report Date: May 6, 2016 Work Order: 16050212 Page Number: 36 of 44 15-0171-03 David Bilbrey Site 3 Lea, NM

			LCS			Spike	Matrix		Rec.
Param	$\mathbf{F}$	$^{\mathrm{C}}$	Result	Units	Dil.	Amount	Result	Rec.	Limit
Chloride		3,4,6	253	mg/Kg	1	250	< 4.44	101	90 - 110

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

			LCSD			$_{ m Spike}$	Matrix		Rec.		RPD
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride		3,4,6	262	mg/Kg	1	250	< 4.44	105	90 - 110	4	20

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

Report Date: May 6, 2016 Work Order: 16050212 Page Number: 37 of 44 15-0171-03 David Bilbrey Site 3 Lea, NM

# Matrix Spikes

Matrix Spike (MS-1) Spiked Sample: 418414

QC Batch: 129854 Date Analyzed: 2016-05-03 Analyzed By: AK Prep Batch: 109994 QC Preparation: 2016-05-02 Prepared By: AK

			MS			$\operatorname{Spike}$	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	$\operatorname{Limit}$
GRO		5	16.9	mg/Kg	1	20.0	< 1.76	84	70 - 130

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

			MSD			Spike	Matrix		Rec.		RPD
Param	F	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
GRO		5	18.7	mg/Kg	1	20.0	< 1.76	94	70 - 130	10	20

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

	MS	MSD			Spike	MS	MSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	1.82	1.85	mg/Kg	1	2	91	92	70 - 130
4-Bromofluorobenzene (4-BFB)	1.95	1.92	mg/Kg	1	2	98	96	70 - 130

#### Matrix Spike (MS-1) Spiked Sample:

QC Batch: 129880 Date Analyzed: 2016-05-04 Analyzed By: HJ Prep Batch: 110031 QC Preparation: 2016-05-03 Prepared By: HJ

			MS			Spike	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit
DRO		1,2,3,4	454	mg/Kg	1	500	< 8.47	91	49.3 - 138

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

			MSD			$_{ m Spike}$	Matrix		Rec.		RPD
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
DRO		1,2,3,4	431	mg/Kg	1	500	< 8.47	86	49.3 - 138	5	20

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

		MS	MSD			Spike	MS	MSD	Rec.
Surrogate		Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
n-Tricosane	3	23.7	25.7	mg/Kg	1	25	95	103	58.2 - 150

Report Date: May 6, 2016 Work Order: 16050212 Page Number: 38 of 44 15-0171-03 David Bilbrey Site 3 Lea, NM

Matrix Spike (MS-1) Spiked Sample: 418417

QC Batch: 129882 Date Analyzed: 2016-05-04 Analyzed By: HJ Prep Batch: 110031 QC Preparation: 2016-05-03 Prepared By: HJ

Spike MS Matrix Rec. F  $\mathbf{C}$ Units Param Result Dil. Amount Result Rec. Limit ORO 70 - 130 mg/Kg 500 < 7.480 Qs Qs

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

RPD MSD Spike Matrix Rec. F Param  $\mathbf{C}$ Result Units Dil. Amount Result Rec. Limit RPD Limit ORO < 7.48500 < 7.4870 - 130 20 mg/Kg 1 0 0 Qs

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

	MS	MSD			$_{ m Spike}$	MS	MSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
n-Tricosane	_	29.9	mg/Kg	1	25	102	120	70 - 130
n-Triacontane	_	22.6	mg/Kg	1	25	84	90	70 - 130

Matrix Spike (MS-1) Spiked Sample: 418422

QC Batch: 129942 Date Analyzed: 2016-05-05 Analyzed By: RL Prep Batch: 110084 QC Preparation: 2016-05-05 Prepared By: RL

MSSpike Matrix Rec. Param  $\mathbf{F}$  $\mathbf{C}$ Result Units Dil. Amount Result Rec. Limit Chloride 264 mg/Kg 1 250 7 103 80 - 120 3,4,6

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

Spike MSD RPD Matrix Rec. Param RPD F C Result Units Dil. Amount Result Rec. Limit Limit Chloride 271 mg/Kg 250106 80 - 120 3 20 3,4,6

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

Matrix Spike (MS-1) Spiked Sample: 418430

QC Batch: 129943 Date Analyzed: 2016-05-05 Analyzed By: RL Prep Batch: 110085 QC Preparation: 2016-05-05 Prepared By: RL

Report Date: May 6, 2016 Work Order: 16050212 Page Number: 39 of 44 15-0171-03 David Bilbrey Site 3 Lea, NM

				MS			Spike	Matrix		Rec.
Param		$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	$\operatorname{Limit}$
Chloride	Qs	Qs	3,4,6	242	mg/Kg	1	250	55.8	74	80 - 120

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

			MSD			$_{ m Spike}$	Matrix		Rec.		RPD
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride		3,4,6	278	mg/Kg	1	250	55.8	89	80 - 120	14	20

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

Report Date: May 6, 2016 Work Order: 16050212 Page Number: 40 of 44 15-0171-03 David Bilbrey Site 3 Lea, NM

# Calibration Standards

#### Standard (CCV-1)

QC Batch:	129854	Date Analyzed:	2016-05-03		Analyzed By: AK
		$CCV_{c}$	$CCV_{\sigma}$	$CCV_{G}$	Dargant

				$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	$\operatorname{Cert}$	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		5	mg/Kg	1.00	0.984	98	80 - 120	2016-05-03

## Standard (CCV-2)

QC Batch: 129854 Date Analyzed: 2016-05-03 Analyzed By: AK

				$\begin{array}{c} { m CCVs} \\ { m True} \end{array}$	$\begin{array}{c} { m CCVs} \\ { m Found} \end{array}$	$\begin{array}{c} { m CCVs} \\ { m Percent} \end{array}$	Percent Recovery	Date
				Hue	Found	1 ercent	necovery	Date
Param	Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		5	mg/Kg	1.00	0.913	91	80 - 120	2016-05-03

#### Standard (CCV-3)

QC Batch: 129854 Date Analyzed: 2016-05-03 Analyzed By: AK

				CCVs	$\mathrm{CCVs}$	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	$\operatorname{Cert}$	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		5	mg/Kg	1.00	0.828	83	80 - 120	2016-05-03

## Standard (CCV-1)

QC Batch: 129880 Date Analyzed: 2016-05-04 Analyzed By: HJ

				$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		1,2,3,4	mg/Kg	500	486	97	80 - 120	2016-05-04

 Report Date: May 6, 2016
 Work Order: 16050212
 Page Number: 41 of 44

 15-0171-03
 David Bilbrey Site 3
 Lea, NM

## Standard (CCV-2)

QC Batch: 129880 Date Analyzed: 2016-05-04 Analyzed By: HJ

				CCVs	$\mathrm{CCVs}$	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		1,2,3,4	mg/Kg	500	436	87	80 - 120	2016-05-04

## Standard (CCV-1)

QC Batch: 129882 Date Analyzed: 2016-05-04 Analyzed By: HJ

					CCVs True	CCVs Found	$\begin{array}{c} { m CCVs} \\ { m Percent} \end{array}$	Percent Recovery	Date
Param		Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
ORO	Qc	Qc		mg/Kg	500	5.79	1	80 - 120	2016-05-04

## Standard (CCV-2)

QC Batch: 129882 Date Analyzed: 2016-05-04 Analyzed By: HJ

					CCVs	CCVs	CCVs	Percent	
					True	Found	Percent	Recovery	Date
Param		Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
ORO	Qc	Qc		mg/Kg	500	7.14	1	80 - 120	2016-05-04

## Standard (CCV-1)

QC Batch: 129942 Date Analyzed: 2016-05-05 Analyzed By: RL

				CCVs	CCVs	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	$\operatorname{Cert}$	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride		3,4,6	mg/Kg	25.0	25.5	102	90 - 110	2016-05-05

## Standard (CCV-2)

QC Batch: 129942 Date Analyzed: 2016-05-05 Analyzed By: RL

Report Date: May 6, 2016 Work Order: 16050212 Page Number: 42 of 44 15-0171-03 David Bilbrey Site 3 Lea, NM

				CCVs	CCVs	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	$\operatorname{Cert}$	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride		3,4,6	mg/Kg	25.0	25.4	102	90 - 110	2016-05-05

## Standard (CCV-1)

QC Batch: 129943 Date Analyzed: 2016-05-05 Analyzed By: RL

				CCVs	CCVs	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	$\operatorname{Cert}$	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride		3.4.6	mg/Kg	25.0	25.4	102	90 - 110	2016-05-05

## Standard (CCV-2)

QC Batch: 129943 Date Analyzed: 2016-05-05 Analyzed By: RL

				CCVs	CCVs	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	$\operatorname{Cert}$	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride		3,4,6	mg/Kg	25.0	25.6	102	90 - 110	2016-05-05

Report Date: May 6, 2016 Work Order: 16050212 Page Number: 43 of 44 15-0171-03 David Bilbrey Site 3 Lea, NM

# Appendix

## Report Definitions

Name	Definition
MDL	Method Detection Limit
MQL	Minimum Quantitation Limit
SDL	Sample Detection Limit

## **Laboratory Certifications**

	Certifying	Certification	Laboratory
$\mathbf{C}$	Authority	Number	Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	L-A-B	L2418	Lubbock
2	Kansas	Kansas E-10317	Lubbock
3	LELAP	LELAP-02003	Lubbock
4	NELAP	T104704219-16-12	Lubbock
5	NELAP	T104704392-14-8	Midland
6		2015-066	Lubbock

## Standard Flags

- F Description
- B Analyte detected in the corresponding method blank above the method detection limit
- H Analyzed out of hold time
- J Estimated concentration
- Jb The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less then ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
- Je Estimated concentration exceeding calibration range.
- MI1 Split peak or shoulder peak
- MI2 Instrument software did not integrate
- MI3 Instrument software misidentified the peak
- MI4 Instrument software integrated improperly
- MI5 Baseline correction
  - Qc Calibration check outside of laboratory limits.
- Qr RPD outside of laboratory limits
- Qs Spike recovery outside of laboratory limits.

Report Date: May 6, 2016 Work Order: 16050212 Page Number: 44 of 44 15-0171-03 David Bilbrey Site 3 Lea, NM

F Description

Qsr Surrogate recovery outside of laboratory limits.

U The analyte is not detected above the SDL

## Attachments

The scanned attachments will follow this page.

Please note, each attachment may consist of more than one page.

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**APPENDIX B** 

**Boring Logs** 

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ON	BLE ( TIME (	OF BORING	i )									171-01 David Bilbrey 8" Pipe						
ST	ORY TEST LO			HOLE DIAMETER : 5"  LOCATION : Lea County, New Mex														
	IS/ SQ. FT )			_AI GEOLOGIST :MG														
— w	ERY BORING N	JI IMRED ·																
Agrson & DRILL DATE : 03-09-2016					B - 1		DRILLING CONTRACTOR . SDC  DRILLING METHOD : Air Rotary											

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					DESCRIPTION USCS	9	PID READING							,	SAI	MP	LE	REMARKS
					Ĕχ	GRAPHIC LOG	DDM V 1								Ľ	2 >	-	BACKGROUND
GEOLOGIC	DEPTH	DES	CRIPTION LITHOLOGIC		SC	\(\frac{1}{2}\)		PPM X1						—   <u>[</u>	בן בוע		Ī	DID DE ADIAGO
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	5 —	fine Sand	y Clay, well sorted, olive gra	ray	SC		-								1 2.	.6	5	12:32   2.6
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	10	fine Sandy	<sup>,</sup> Clay, well sorted, slight od le yellow tan, 5 YR 8/4	dor,	SC								♪	-	+	+	10	16.8
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	15	fine Sand	with some Clay, well sorte	, h	SC				1						3 4.	.4	15	12:52
	15—	rec	reddish yellow, 5 YR 6/8	,u,	30													4.4
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	25—	very line o	8/4	''\	Olvi		١١											0.8
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ONE CONTINUOUS AUGER SAMPLER — WATER TABL						OF BORING												
STANDARD PENETRATION TEST LABORATORY TEST LOCAT								HOLE DIAMETER : 5"							5"			
UNDISTURBED SAMPLE + PENETROMETER (TONS/								LOCATION : Lea County, New Mexico							nty, New Mexico			
<u> </u>	RY	,		LAI GEOLOGIST : MG						MG								
A green & -	IDDII I DATE							DRILLING CONTRACTOR : SE										
Agrson & O3-09-2016					S	SB - 2												Air Rotary

				BORING	RECORE	)											
				Z O	F00		PID READING							SAN			REMARKS
05010015	DEDT	<b>.</b>	ODIDTION CONTRACTOR	DESCRIPTION USCS			PPM X52					_	) N	RECOVERY		BACKGROUND	
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	10 — Sandy Cla	y, well sorted, 2.5 YR 4/2, dark gray brown, odor		sc								$\mathbb{X}^2$	2 104		10	01:39   1040	
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	45	very fine S	Sand with some Clay, 5 YR 5/8,				1						3	3 27.	2	15	01:42
	15	we	Il sorted, yellowish red												Ī,		27.2
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	20 —	very fine Stone.	Sand with some friable Sand well sorted, 5 YR 8/3, pink		SM								F	53	_	20	01:47 53.2
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	_		ty Sand with friable Sandstone, I sorted, 5 YR 8/3, pink										6	0.8	3	30	
	30 —			† <del></del> ,		† †	$\vdash$	-	† †	-  -	1-	† †	- -	┪-	†	00	0.8
	-		TD: 30'														_
	-	No G	roundwater Observed														_
	-																_
			$\dashv$	JOB NUMBER : 15-0171-01 David Bilbrey 8" Pipeline							id Rilhrey 8" Pineline						
Or	BLE ( TIME (	OF BORING	,	JOB NUMBER : <u>13-0171-01 David Bilbley 6 Pipe</u> HOLE DIAMETER : <u>5"</u>													
S1	RY TEST LO		l.	LOCATION : Lea County, New Mexico													
UN	METER (TON	IS/ SQ. FT )		LAI GEOLOGIST : MG													
_ w	WATER TABLE (24 HRS) NR NO RECOVE																
Aarson & Ssociates, Environmental Consult	nc.		DRILL DATE : 03-09-2016	1	NUMBER : SB - 3												
Environmental Consult	ants		03-08-2010		, U	ΙĽ	ואכ	LLI	ΝG	M	⊏ I F	ıΟĽ	) : <u> </u>				Air Rotary

				E	BORING	RECOR	D											
					DESCRIPTION USCS	9		I	PID	RE.	AD	ING	ì	S	ΑM		- 1	REMARKS
GEOLOGIC	DEPTH	DES	CRIPTION LITHOLOG	IC.	SS	GRAPHIC LOG		PPN	v >	<u> </u>	1	.5		~	ING	RY		BACKGROUND
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	5 —	fine Sand	/ Loam, well sorted, 5 Y	'R 3/4									,	1	29.2		5	10:52
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	10	very fine S	Sandy Loam Clay, well s	orted,		SC								_			10	10:59 0.8
	_	7.5	YR 7/6, reddish yellow															_
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	15	very fine 9	Sandy Clay, well sorted,	5 VP	· <del></del>									3	8.0		15	11:04
	13	5/6	5, yellowish red, plastic	, 5 110		SC												0.8
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	_		and with some Clay San											4	0.8			_
	20	well sort	ed, <u>5 YR 6/6,</u> reddish ye	ellow _			╂┤	-  -	-	+	- -	-∤	┝┝	_	-	Ļ .	20	11:20 0.8
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		JOUS AUGER			BLE ( TIME (		<i>)</i>											id Bilbrey 8" Pipeline 5"
	LABORATORY TEST LOCATION Loc County New Mov																	
		E ( 24 HRS )		ENETROM D RECOVE		3/3U.FI)	<i>'</i>											MG
			DRILL DATE :		BORING N													SDC
Agrson & ssociates, Environmental Consul	nc. ants		03-10-2016		s	B - 4												Air Rotary

## **APPENDIX C**



Barren Area Viewing Northeast, January 26, 2016



Barren Area Viewing Southeast, January 26, 2016



Barren Area Viewing Southwest, January 26, 2016



Barren Area Viewing Northwest, January 26, 2016



Initial Excavation Viewing North, April 27, 2016



Initial Excavation and Sidewall Sample Location Viewing Northwest, April 27, 2016



Initial Excavation and Sidewall Sample Location Viewing Southwest, April 27, 2016



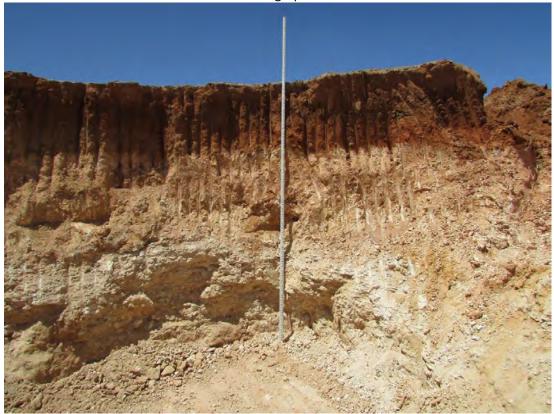
Initial Excavation Viewing North, April 27, 2016



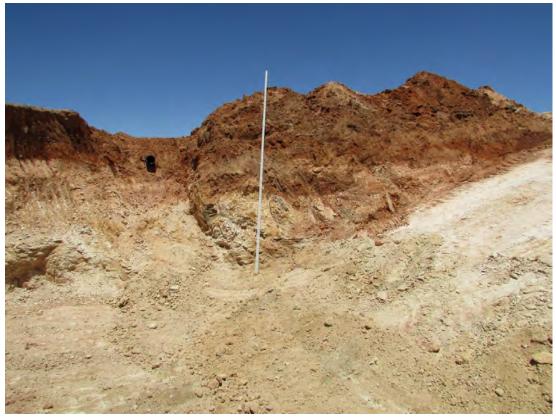
Contaminated Soil Pile from Initial Excavation Viewing West, April 27, 2016



Sample Collection from Southwest Side, April 28, 2016 Note: Approximate depth 12 feet



Sample Collection from Northwest Side, April 28, 2016 Note: Approximate depth 12 feet



Sample Collection from Northeast, April 28, 2016 Note: Approximate depth 12 feet



Sample Collection from Southeast Side, April 28, 2016 Note: Approximate depth 11 feet



Sample Collection from West Side, April 28, 2016 Note: Approximate depth 12 feet



Excavation Prior to Backfilling Viewing North, April 28, 2016



Contaminated Soil Disposed at Gandy-Marlet Landfill Viewing Southeast, April 28, 2016



Excavation Prior to Backfilling Viewing South, April 28, 2016



Excavation Following Backfilling Viewing East, May 10, 2017



Excavation Following Backfilling Viewing South, May 10, 2016



Excavation Following Backfilling Viewing West, May 10, 2016



Excavation Following Backfilling Viewing North, May 10, 2016

### **APPENDIX D**

**Waste Manifests** 



P.O. Box 1658 Roswell, NM 88202 Phone 575-347-0434 Fax 575-347-0435 Targa Midstream Services PO Box 1689 Lovington, NM 88260

Detailed Report of material for Invoices 23895 thru 23895

#### EXEMPT OCD

Origin:	DB CLEAN UP #2					
Date:	Ticket No:	Description	Transporter:	Colt	Units	Unit Type:
4/29/2016	32066		Gandy Inc.	ŲF.	12	YARDS
4/29/2016	32087		Gandy Inc.	LF	12	YARDS
4/29/2016	32068		Gandy Inc.	LF	12	YARDS
4/29/2016	32059		Gandy Inc.	LF	12	YARDS
4/29/2016	32070		Gandy Inc.	LF	12	YARDS
4/29/2016	32073		Gandy Inc.	1.F	12	YARDS
4/29/2018	32074		Gandy Inc.	LF	12	YARDS
4/29/2015	32075		Gandy Inc.	<b>LF</b>	12	YARDS
4/29/2018	32085		Gandy Inc.	LF .	12	YARDS
4/29/2015	32068		Gandy Inc.	ŲF.	12	YARDS
4/29/2018	32102		Gandy Inc.	LF	12	YAROS
4/29/2015	32103		Gandy Inc.	LF	12	YARDS
4/29/2018	32104		Gandy Inc.	LF	12	YARDS
4/29/2016	32125		Gandy Inc.	LF	12	YARDS
4/29/2018	32127		Gandy Inc.	LF	12	YARDS
		DB CLEAN U	IP#2 Total YARDS.		180 YAR	DS
		EXE	MPT OCD Total YARDS.		180 YAR	DS
		EXE	MPT OCD Total Units.		180 Units	5
Targa M	lidstream Sen	vices Total Units.			180 Units	

GANDY•MARLEY, INC.
P.O. Box 1658
Roswell, NM 88202
(575) 347-0434
Fax (675) 347-0435

LEASE OPERATOR/SHIPPER/COMPANY: TARGA	
LEASE NAME: SUNDERS CIST 1500 \$ 0 No MICE	_
TRANSPORTER COMPANY: Candy TIME: 9:45 AMPM	-
DATE: 4- 29-16 VEHICLE NO .: 326 DRIVER NO .:	
CHARGE TO: TARGE	
TYPE OF MATERIAL	
OCD	
[ ] Other Material: [ ] Contaminated soil [ ] C-117 No.:	
Description:	
COMPANY CONTACT:	
VOLUME OF MATERIAL [ ]: YARDS 12 : CELL# L.F :[ ]	-
AS A CONDITION TO GANDY-MARLEY, 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, 61 Seq., THE NM HEALTH AND SAF. CODE, \$381,001, 61 Seq. AND REGULATIONS RELATED THERETO, BY VIRTUE OF THE EXEMPTION AFFORDED CONTAMINATED SOILS AND OTHER WASTE ASSOCIATED WITH THE EXPLORATION, DEVELOPMENT OR PRODUCTION OF CRUDE OIL OR NATURAL GAS OR GEOTHERMAL ENERGY.  ALSD AS A CONDITION TO GANDY-MARLEY, 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 GANDY-MARLEY, INC.'S FACILITY FOR DISPOSAL.  THIS WILL CERTIFY that the above Transporter loaded the material represented by this Transporter Statemost all the above described location, and that it was tendered by the above described shipper. This will certify that no above described location, and that it was tendered by the above described without incident.  ORIVER:  PIAL GLIE GOID TRANSPORTER  FACILITY REPRESENTATIVE:  WITH CAMPY Shipper  PIAL GLIE GOID TRANSPORTER  GOID TRANSPORTER  GOID TRANSPORTER  GOID TRANSPORTER  FACILITY REPRESENTATIVE:	

# GANDY-MARLEY, INC. P.O. Box 1658 Roswell, NM 88202

(575) 347-0434 Fax (575) 347-0435

LEASE OPERATOR/SHIPPER/COMPANY: TARS	Δ.
LEASE NAME: DB CLAN 10 # 2	
TRANSPORTER COMPANY: C Andy	TIME: C+'SCAMPM
DATE: LOS STYL- STAVEHICLE NO.: 517	DRIVER NO.:
CHARGE TO: TARGE	
TYPE OF MATERIAL	
OCD	
[ ] Other Material: [ ] Conteminated soit [ ] BS&W content:	[ ] C-117 No.:
Description:	
COMPANY CONTACT:	
VOLUME OF MATERIAL [ ]: YARDS 12 : CELL	ــــــــــــــــــــــــــــــــــــــ
AS A CONDITION TO GANDY-MARLEY, INC. S ACCEPTANCE THIS JOB TICKET, OPERATOR/SHIPPER REPRESENTS AND WARRY SHIPPED HEREWITH IS MATERIAL EXEMPT FROM THE RESOURCE ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. \$6901. CODE, \$361,001, of seq. AND REGULATIONS RELATED THERETO, AFFORDED CONTAMINATED SOILS AND OTHER WASTE ASSOCIUTED OF CRUDE OIL OR NATURAL GAS ALSO AS A CONDITION OF CRUDE OIL OR NATURAL GAS WITH THIS JOB TICKET, TRANSPORTER REPRESENTS AND WARR DELIVERED BY OPERATOR/SHIPPER TO TRANSPORTER IS NOW E GANDY-MARLEY, INC.'S FACILITY FOR DISPOSAL.  THIS WILL CERTIFY that the above Transporter loaded the master of the above described location, and that it was tendered by the certify that no additional materials were added to this load, and that the materials were added to this load, and that the materials were added to this load, and that the materials were added to this load, and that the materials were added to this load, and that the materials were added to this load, and that the materials were added to this load, and that the materials were added to this load, and that the materials were added to this load, and that the materials were added to this load.	NTS THAT THE WASTE MATERIAL CONSERVATION AND RECOVERY et seq., THE NM HEALTH AND SAF. BY VIRTUE OF THE EXEMPTION CATED WITH THE EXPLORATION, OR GEOTHERMAL ENERGY. UNCE OF THE MATERIALS SHIPPED LANTS THAT ONLY THE MATERIAL DELIVERED BY TRANSPORTER TO  Medial represented by this Transporter the above described shipper. This will

# GANDY-MARLEY, INC. P.O. Box 1658

P.O. Box 1658 Roswell, NM 88202 (575) 347-0434 Fax (575) 347-0435

LEASE OPERATOR/SH	IPPER/COMPANY: TAE	QA-	
LEASE NAME: DB	Clean up # 2	7	
TRANSPORTER COMP	ANY: Gandy	TIME:10	ARVPM
01-06-1-STAD	VEHICLE NOT 516	DRIVER N	O.:
CHARGE TO: TAO			
	TYPE OF MATERIAL		
	OCD		
[ ] Other Material:	[   BS&W content:	[ ] C-117 No.:	
Description:			
COMPANY CONTACT:			
VOLUME OF MATERIAL	.[]: YARDS 12-: CE	LL LE:	]
THIS JOB TICKET, OPERATOR SHIPPED KEREWITH IS MATE ACT OF 1976, AS AMENDED F CODE, §361.001, et sog. AND ASSORBED CONTAMINATED	NANDY-MARLEY, INC.'S ACCEPTANG VISHIPPER REPRESENTS AND WAR RIAL EXEMPT FROM THE RESOUR HOM TIME TO TIME, 40 U.S.C. §690 REGULATIONS RELATED THERE SOILS AND OTHER WASTE ASS TION OF CRUDE OIL OR NATURAL G	RRANTS THAT THE W CE, CONSERVATION D1, 01 60Q., THE NM H TO, BY VIRTUE OF T OCIATED WITH THE	AND RECOVERY LEALTH AND SAF. THE EXEMPTION EXPLORATION,
WITH THIS JOB TICKET TRA	N TO GANDY-MARLEY, INC.'S ACCEI NSPORTER REPRESENTS AND WA HIPPER TO TRANSPORTER IS NOV 1TY FOR DISPOSAL.	VARANTS THAT ONL	Y THE MATERIAL
Continuent at the above describ	hat the above Transporter leaded the ed location, and that it was tendered is were added to this load, and that the	by the above describe	а впиррег. Тага илт
White - GMI Canary - Shipper	Plnk-CUIT Gold-Transpo	rter	

# GANDY MARLEY, INC.

P.O. Box 1658 Roswell, NM 88202 (575) 347-0434 Fax (576) 347-0435

LEASE OPERATOR/SHI	PPER/COMPANY: TAR	
LEASE NAME: DB	CLEAN UD #	3
TRANSPORTER COMPA	NY: QANdy	TIME: \ O @M/PM
DATE: 4-29-16	VEHICLE NO.: 333	DRIVER NO.:
CHARGE TO: TARO	- Av	
	TYPE OF MATERIAL	
	OCD	
[ ] Other Meterial:	[ ] Contaminated soil [ ] BS&W content:	[ ] C-117 No.:
Description: 🗘		
COMPANY CONTACT:		
VOLUME OF MATERIAL	[ ]: YARDS <u>\</u> : CI	LL#1E:[]
THIS JOB TICKET, OPERATORAS SHIPPED HEREWITH IS MATER ACT OF 1976, AS AMENDED FR CODE, §361.001. et seq. AND AFFORDED CONTAMINATED SIDEVELOPMENT OR PRODUCTION ALSO AS A CONDITION WITH THIS JOB TICKET. TRANS	SHIPPER REPRESENTS AND WAI LAL EXEMPT FROM THE RESOUP OM TIME TO TIME, 40 U.S.C. \$69 REGULATIONS RELATED THERE COILS AND OTHER WASTE ASS ON OF CRUDE OIL OR NATURAL O TO GANDY-MARLEY, INC.'S ACCE SPORTER REPRESENTS AND WA	CE OF THE MATERIALS SHIPPED WITH RRANTS THAT THE WASTE MATERIAL RCE, CONSERVATION AND RECOVERY 01, 01 600. THE NM HEALTH AND SAF. TO, BY VIRTUE OF THE EXEMPTION SOCIATED WITH THE EXPLORATION, 3AS OR GEOTHERMAL ENERGY.  EPTANCE OF THE MATERIALS SHIPPED ARRANTS THAT ONLY THE MATERIAL W DELIVERED BY TRANSPORTER TO
THIS WILL CERTIFY the	it the above Transporter loaded the Location, and that it was tendered	material represented by this Transporter by the above described shipper. This will e material was delivered without incident.

# GANDY-MARLEY, INC. P.O. Box 1658 Roswell, NM 68202

(575) 347-0434 Fax (575) 347-0435

LEASE C	PERATORISH	IPPER/COMPANY:	Agga
LEASE N	IAME: Daw	d Bulba a	11
TRANSP	ORTER COMP	ANY: GANGU	TIME: 10 AMPM
DATE: 4	- 29- 11	VEHICLE NO : 30	T DRIVER NO.:
CHARGE			PHINEH MO.:
	TO: TARC		
		TYPE OF MATERIA	AL
		OCD	
[ ] Other Ma	itorial:	[ TContaminated soil	[ ] C-117 No.:
Description	on: CL	[ ] BS&W content:	
COMPAN	Y CONTACT:		
VOLUME	OF MATERIAL	[ ]: YARDS 1-) : (	CELL# LF :[]
SHIPPED HEI ACT OF 1978 CODE, §381.1 AFFORDED ( DEVELOPME)	REWITH IS MATER  AS AMENDED FR  OOT, OF SOO, AND I  CONTAMINATED S  NT OR PRODUCTION  AS A CONDITION	TO GANDY-MARIEY INC 'S ACC	INCE OF THE MATERIALS SHIPPED WITH VARRANTS THAT THE WASTE MATERIAL URCE, CONSERVATION AND RECOVERY 5901, of seq., The NM HEALTH AND SAFRETO, BY VIRTUE OF THE EXEMPTION SSOCIATED WITH THE EXPLORATION. GAS OR GEOTHERMAL ENERGY.
DELIVER <b>E</b> D 8		PPER TO TRANSPORTED IS NO	WARRANTS THAT ONLY THE MATERIAL OW DELIVERED BY TRANSPORTER TO
A-MINING OF R	A COALD REPRESENTED	BESILESI, JUNI 17711 IZ WED TORATORA	ne material represented by this Transporter of by the above described shipper. This will the material was delivered without incident.
FACILITY REPR	ESENTATIVE:X	ale de	
Mile - GIU	Cenary - Shipper	Pink - Citi Gold - Transo	Marker .

GANDY-MARLEY, INC.
P.O. Box 1658
Roswell, NM 88202
(575) 347-0434
Fox (575) 347-0435

LEASE OPERATOR/SHIPPER/COMPANY: TARSAL  LEASE NAME: DB CICAD UP # 3  TRANSPORTER COMPANY: CANDY  DATE: 4-29-16 VEHICLE NO.: 333  CHARGE TO: CARGA  TYPE OF MATERIAL	
TRANSPORTER COMPANY: CANDY  DATE: 4-29-16 VEHICLE NO.: 333  CHARGE TO: CARGE	
DATE: 4-29-16 VEHICLE NO.: 333 CHARGE TO: CARGE	
CHARGE TO: TARGE	TIME-ILL ANDER
CHARGE TO: CARGE	TIME:[:30 AM/EM)
9	DUIAER MO".
TYPE OF MATERIAL	
[ ] Other Material: [ †Contaminated soil [ ] BS&W content:	J C-117 No.:
COMPANY CONTACT:	
VOLUME OF MATERIAL [ ]: YARDS 12 : CELL#	_LE_:[]
AS A CONDITION TO GANDY-MARLEY, INC.'S ACCEPTANCE OF THIS JOB TICKET, OPERATOR/SHIPPER REPRESENTS AND WARRANT SHIPPED HEREWITH IS MATERIAL EXEMPT FROM THE RESOURCE, CACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. §6901, 61 SECODE, §381.001, 61 SEC. AND REGULATIONS RELATED THERETO, BY AFFORDED CONTAMINATED SOILS AND OTHER WASTE ASSOCIATED SEVELOPMENT OR PRODUCTION OF CRUDE OIL OR NATURAL GAS OF ALSO AS A CONDITION TO GANDY-MARLEY, INC.'S ACCEPTANCE WITH THIS JOB TICKET, TRANSPORTER REPRESENTS AND WARRANT THIS JOB TICKET, TRANSPORTER TO TRANSPORTER IS NOW DELIVERED BY OPERATOR/SHIPPER TO TRANSPORTER IS NOW DELIVERED BY OPERATOR/SHIPPER TO TRANSPORTER IS NOW DELIVERED BY THE WILL CERTIFY that the above Transporter loaded the majorial statement at the above described location, and that it was tendered by the certify that no additional majorials was a related to this feath.	IS THAT THE WASTE MATERIAL ONSERVATION AND RECOVERY SEQ THE NM HEALTH AND SAF. Y VIRTUE OF THE EXEMPTION ED WITH THE EXPLORATION. IS GEOTHERMAL ENERGY.  SEE OF THE MATERIALS SHIPPED ITS THAT ONLY THE MATERIAL IVERED BY TRANSPORTER TO SELECT TO TRANSPORTER TO SELECT TO TRANSPORTER TO SELECT TRANSPORTER TRANS
ertify that no additional materials were added to this load, and that the materi	nbove described shipper. This will be was delivered without incident.
COLUTY REPRESENTATIVE: Pink - Gill Cold - Transporter	

# GANDY • MARLEY, INC. P.O. Box 1658

P.O. Box 1658 Roswell, NM 88202 (575) 347-0434 Fax (575) 347-0435

LEASE OPERATOR/SHIE		Aega
LEASE NAME: $O-B$	10000	THE TO AMERICA
TRANSPORTER COMPA		TIME:1:30 AN/PM
DATE: 4-24-16	VEHICLE NO: 5	T DRIVER NO.:
CHARGE TO: TARG	A	
	TYPE OF MATE	RIAL
	OCD	*
[ ] Other Material:	[ ] Contaminated soil	[ ] C-117 No.:
Description:		
COMPANY CONTACT:		
VOLUME OF MATERIAL	[ ]: YARDS 18	: CELL# LE :[]
THIS JOB TICKET, OPERATOR SHIPPED HEREWITH IS MATER ACT OF 1978, AS AMENDED FOODE, §381.001, 81 Seq. AND AFFORDED CONTAMINATED DEVELOPMENT OR PRODUCT ALSO AS A CONDITION WITH THIS JOB TICKET, TRAIN DELIVERED BY OPERATOR'S GANDY-MARLEY, INC.'S FACILITY WILL CERTIFY IS	ASHIPPER HEPRESENTS A RIAL EXEMPT FROM THE F ROM TIME TO TIME, 40 U.S REGULATIONS RELATED SOILS AND OTHER WAS TON OF CRUDE OIL OR NA NOTO GANDY-MARLEY, INC. NSPORTER REPRESENTS HIPPER TO TRANSPORTE TO FOR DISPOSAL. THE THO ABOVE TRANSPORTER THE THOSE TRANSPORT THE THOSE TRANSPORTER THE THOSE TRANSPORTER THE THOSE TRANSPORT	SEPTANCE OF THE MATERIALS SHIPPED WITH ND WARRANTS THAT THE WASTE MATERIAL RESOURCE, CONSERVATION AND RECOVERY S.C. \$6901, et sog., THE NM HEALTH AND SAF. THERETO, BY VIRTUE OF THE EXEMPTION ITE ASSOCIATED WITH THE EXPLORATION, TURAL GAS OR GEOTHERMAL ENERGY.  SACCEPTANCE OF THE MATERIALS SHIPPED AND WARRANTS THAT ONLY THE MATERIAL R IS NOW DELIVERED BY TRANSPORTER TO Reded the material represented by this Transporter rendered by the above described shipper. This will not that the material was delivered without incident.
White-Gill Centry-Shippe	Pink-CLD Gol	id - Transporter

# GANDY MARLEY, INC.

P.O. Box 1658 Roswell, NM 88202 (575) 347-0434 Fax (575) 347-0435

LEASE OPERATOR/SHIPPER/COMPANY: TARGE
LEASE NAME: DAVED BZIBREY CLOW DO #2
TRANSPORTER COMPANY: GANDY TIME: 1.35 AM/RM
DATE: 4-29-16 VEHICLE NO. 327 DRIVER NO.:
CHARGE TO: TARGA
TYPE OF MATERIAL
OCD
[ ] Other Material: [ ) Contaminated soil [ ] C-117 No.:
Description C.L.
COMPANY CONTACT:
VOLUME OF MATERIAL [ ]: YARDS 12 : CELL# LE :[ ]
AS A CONDITION TO GANDY-MARLEY, 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, 01 600., THE NM HEALTH AND SAF, CODE, \$361.001, 01 600, AND REGULATIONS RELATED THERETO, BY VIRTUE OF THE EXEMPTION AFFORDED CONTAMINATED SOILS AND OTHER WASTE ASSOCIATED WITH THE EXPLORATION, DEVELOPMENT OR PRODUCTION OF CRUDE OIL OR NATURAL GAS OR GEOTHERMAL ENERGY.
ALSO AS A CONDITION TO GANDY-MARLEY, 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 GANDY-MARLEY, 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:
FACILITY REPRESENTATIVE: Told pl
White - GLIQ Censry - Shipper Pink - Gild Gold - Transporter

# GANDY MARLEY, INC.

P.O. Box 1658 Roswell, NM 88202 (575) 347-0434 Fax (575) 347-0435

LEASE OPERATOR/S	HIPPER/COMPANY: Tan	95
LEASE NAME: D	B Cletin up #	2
TRANSPORTER COM	PANY: Gandy	TIME: 4:15 AMPM
DATE: 4-29-14		DRIVER NO.:
CHARGE TO:		
	TYPE OF MATERIA	L
	OCD	
[ ] Other Material:	[ 4 Contaminated soil [ ] BS&W content:	[ ] C-117 No.;
Description:		
COMPANY CONTACT	n	
VOLUME OF MATER	IAL[]: YARDS:	CELL#
THIS JOB TICKET, OPERATE SHIPPED HEREWITH IS MY ACT OF 1976, AS AMENDE CODE, §381.001, 81 689. AFFORDED CONTAMINATION OF PRODUCE ALSO AS A CONDITION OF PRODUCE AS A CONDI	TORISHIPPER REPRESENTS AND WATERIAL EXEMPT FROM THE RESOLD FROM TIME TO TIME, 40 U.S.C. § U.D. REGULATIONS RELATED THEFED SOILS AND OTHER WASTE A LICTION OF CRUDE OIL OR NATURAL TION TO GANDY-MARLEY, INC. SACTOR OF THE RESOLUTION OF CRUDE OIL OR NATURAL TION TO GANDY-MARLEY, INC. SACTOR OF THE REPRESENTS AND THE RESOLUTION TO THE RE	CEPTANCE OF THE MATERIALS SHIPPED
GANDY-MARLEY, INC.'S FA	RISHIPPER TO TRANSPORTER IS I CILITY FOR DISPOSAL	NOW DEGREE OF THURST OFFICE TO
and the second s	to-olion and that it was torrior	the material represented by this Transporter and by the above described shipper. This will the material was delivered without incident.
FACILITY REPRESENTATIVE:		14
White-Citi Cenary-Shi	pper Pink - CMI Gold - Tran	sporter

# GANDY-MARLEY, INC. P.O. Box 1658

P.O. Box 1658 Roswell, NM 68202 (575) 347-0434 Fax (575) 347-0435

LEASE OPERATOR/SHIPPER/COMPANY: Toys
LEASE NAME: D.B. Clean Up. 122
TRANSPORTER COMPANY: Gandy TIME: 1/1 BAMPM
DATE: 4-29-14 VEHICLE NO.: 5/7 DRIVER NO.:
CHARGE TO:
TYPE OF MATERIAL
OCD
[ ] Other Material: [ ] Conteminated soil [ ] C-117 No.:
Description: _cel
COMPANY CONTACT:
VOLUME OF MATERIAL []: YARDS / Z _: CELL# _LE :[]
AS A CONDITION TO GANDY-MARLEY, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITTHIS JOB TICKET, OPERATOR/SHIPPER REPRESENTS AND WARRANTS THAT THE WASTE MATERIAL SHIPPED HEREWITH IS MATERIAL EXEMPT FROM THE RESOURCE, CONSERVATION AND RECOVER ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. §6901, 81 SQ., THE NM HEALTH AND S/CODE, §381.001, 61 SQ. AND REGULATIONS RELATED THERETO, BY VIRTUE OF THE EXEMPTICAL AFFORDED CONTAMINATED SOILS AND OTHER WASTE ASSOCIATED WITH THE EXPLORATION DEVELOPMENT OR PRODUCTION OF CRUDE OIL OR NATURAL GAS OR GEOTHERMAL ENERGY.
ALSO AS A CONDITION TO GANDY-MARLEY, INC.'S ACCEPTANCE OF THE MATERIALS SHIPP: WITH THIS JOB TICKET, TRANSPORTER REPRESENTS AND WARRANTS THAT ONLY THE MATERI DELIVERED BY OPERATOR/SHIPPER TO TRANSPORTER IS NOW DELIVERED BY TRANSPORTER GANDY-MARLEY, 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 certify that no additional materials were added to this load, and that the material was delivered without incide
FACILITY REPRESENTATIVE:  Substance Child Contract Child Contract

# GANDY MARLEY, INC.

P.O. Box 1658 Roswell, NM 88202 (575) 347-0434 Fax (575) 347-0435

LEASE OPERATOR/S	HIPPER/COMPANY: To-	
		2
	B. Clean of #	TIME: 4: 25 AMPM
TRANSPORTER COM		DRIVER NO.:
DATE: 1/- 29-11	VENIOLE NO. 16-7	
CHARGE TO:		
	TYPE OF MATERIAL	
	OCD	
[ ] Other Material:	(-) Contaminated soil [ ] BS&W content:	[ ] C-117 No.:
Description: CL		
COMPANY CONTACT		
VOLUME OF MATERI	AL[]: YARDS 12 : CE	11. LE:[]
THIS JOB TICKET, OPERAT SHIPPED HEREWITH IS MA ACT OF 1976, AS AMENDED CODE, §361.001, of 589, A AFFORDED CONTAMINATE DEVELOPMENT OR PRODU	OR/SHIPPER REPRESENTS AND THAT TERIAL EXEMPT FROM THE RESOUR O FROM TIME TO TIME, 40 U.S.C. §690 ND REGULATIONS RELATED THERE ED SOILS AND OTHER WASTE ASS ICTION OF CRUDE OIL OR NATURAL G	PTANCE OF THE MATERIALS SHIPPED
WITH THIS JOB TICKET, T DELIVERED BY OPERATOR GANDY-MARLEY, INC.'S FA	RANSPORTER REPRESENTS AND WAR ASHIPPER TO TRANSPORTER IS NO CILITY FOR DISPOSAL	W DELIVERED BY TRANSPORTER TO
THIS WILL CERTIF Statement at the above desi certify that no additional mal	Ty that the above Transporter loaded the prized location, and that it was tendered plats were added to this load, and that the	material represented by this Transporter by the above described shipper. This will be material was delivered without incident.
DRIVER:		IMO
FACILITY REPRESENTATIVE:		
White-Cit Canary - Shi	pper Pink - GIII Gold - Franspo	Driver

# GANDY MARLEY, INC.

P.O. Box 1658 Roswell, NM 88202 (575) 347-0434 Fax (575) 347-0435

LEASE OPERATOR/SHIPPER/COMPANY: Targs				
LEASE NAME: 72- B Class P #2				
TRANSPORTER COMPANY: Gandy TIME: 16-26AMEN				
DATE: 4-29-1C VEHICLE NO.: 324 DRIVER NO.:				
CHARGE TO:				
TYPE OF MATERIAL				
OCD				
[ ] Other Material: [ ] Contaminated soil [ ] C-117 No.:				
Description:CC				
COMPANY CONTACT:				
VOLUME OF MATERIAL [ ]: YARDS 12 : CELL# LF :[ ]				
AS A CONDITION TO GANDY-MARLEY, 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 1978, AS AMENDED FROM TIME TO TIME, 40 U.S.C. §6901, of 600. THE NM HEALTH AND SAF, CODE, §361.001, of 600. AND REGULATIONS RELATED THERETO, BY VIRTUE OF THE EXEMPTION AFFORDED CONTAMINATED SOILS AND OTHER WASTE ASSOCIATED WITH THE EXPLORATION, DEVELOPMENT OR PRODUCTION OF CRUDE OIL OR NATURAL GAS OR GEOTHERMAL ENERGY.				
ALSO AS A CONDITION TO GANDY-MARLEY, 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 GANDY-MARLEY, INC.'S FACILITY FOR DISPOSAL.				
THIS WILL CERTIFY that the above Transporter leaded 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 by this load, and that the material was delivered without incident.  DRIVER:				
FACILITY REPRESENTATIVE: FINK - GLID Gold - Transporter				

# GANDY-MARLEY, INC. P.O. Box 1658 Roswell, NM 88202

	Roswell, NM 88202 (575) 347-0434 Fax (575) 347-0435	n n
EASE OPERATOR/SHIP	PER/COMPANY: Ta	ide
EASENAME: D. B-	Clean U	TIME: 11:40 AM PM
TRANSPORTER COMPA DATE: 4-29-16	C-FINTEL	ALC: -
CHARGE TO:		
[ ] Other Material:  Description: CL	TYPE OF MATER OCD [*TContaminated soil [*] BS&W content:	( ) C-117 No.:
COMPANY CONTACT:	L[]: YARDS	: CELL# :[ ]
AS A CONDITION TO THIS JOB TICKET, OPERATO SHIPPED HEREWITH IS MATE ACT OF 1978, AS AMENDED CODE, \$361.001, 61 690. AN AFFORDED CONTAMINATED DEVELOPMENT OR PRODUCT ALSO AS A CONDITION WITH THIS JOB TICKET, THE DELIVERED BY OPERATOR GANDY-MARLEY, INC.'S FACTOR	GANDY-MARLEY, INC. SAUST RISHIPPER REPRESENTS AN ERIAL EXEMPT FROM THE R FROM TIME TO TIME, 40 U.S D REGULATIONS RELATED O SOILS AND OTHER WAS OTHON OF CRUDE OIL OR NAT CANSPORTER REPRESENTS ASHIPPER TO TRANSPORTE CILITY FOR DISPOSAL.	EPTANCE OF THE MATERIALS SHIPPED WITH NO WARRANTS THAT THE WASTE MATERIAL ESOURCE, CONSERVATION AND RECOVERY I.C. \$6901, et seq., THE NM HEALTH AND SAF, THERETO, BY VIRTUE OF THE EXEMPTION TE ASSOCIATED WITH THE EXPLORATION, TURAL GAS OR GEOTHERMAL ENERGY.  'S ACCEPTANCE OF THE MATERIALS SHIPPED AND WARRANTS THAT ONLY THE MATERIAL R IS NOW DELIVERED BY TRANSPORTER TO coded the material represented by this Trunsporter tendered by the above described shipper. This will tendered by the above described without incident.
DRIVER: RODELL O	leiber	AM.C
FACILITY REPRESENTATIVE:	opper Plots Guil G	563 - Transporter

# GANDY-MARLEY, INC. P.O. Box 1658

P.O. Box 1658 Roswell, NM 88202 (575) 347-0434 Fax (575) 347-0435

LEASE OPERATOR/SHIP	PER/COMPANY:	TARGA	
LEASE NAME: DO	MEAN US		
TRANSPORTER COMPAN	IX: CHNE		TIME: 1:35 AMPM
DATE: 4- 29-16	VEHICLE NO :: 3	396	DRIVER NO.:
CHARGE TO: TARG			
J	TYPE OF MATI	ERIAL	
	OCD		
[ ] Other Material:	[4] Contaminated soil [1] BS&W content:	ſ	] C-117 No.:
Description: QL			
COMPANY CONTACT:			
VOLUME OF MATERIAL [	]: YARDS 12	: CELLA	TE:II
THIS JOB TICKET, OPERATOR/SH SHIPPED HEREWITH IS MATERIA ACT OF 1976, AS AMENDED FROM CODE, \$361.001, of soq. AND RE AFFORDED CONTAMINATED SO DEVELOPMENT OR PRODUCTION ALSO AS A CONDITION TO WITH THIS JOB TICKET, TRANSP	(IPPER REPRESENTS A L EXEMPT FROM THE R M TIME TO TIME, 40 U.S EGULATIONS RELATED ILS AND OTHER WAS I OF CRUDE OIL OR NAT D GANDY-MARLEY, INC. 12 FORTER REPRESENTS (	ND WARRAI RESOURCE, S.C. \$6901, & THERETO, I TE ASSOCIA TURAL GAS ( S ACCEPTAN AND WARRA	CONSERVATION AND RECOVERY 1 SOQ., THE NM HEALTH AND SAF. BY VIRTUE OF THE EXEMPTION ATED WITH THE EXPLORATION, OR GEOTHERMAL ENERGY.  ICE OF THE MATERIALS SHIPPED UNTS THAT ONLY THE MATERIAL
DELIVERED BY OPERATOR/SHIP! GANDY-MARLEY, INC.'S FACILITY		t IS NOW DE	ELIVERED BY TRANSPORTER TO
Statement at the above described is certify that no additional materials ye	scation, and that it was te	ndered by th	ertal represented by this Transporter o above described shipper. This will ertal was delivered without incident.
White-GIB Canary - Shipper	Pink - GMI Gold	- Transporter	

# GANDY-MARLEY, INC. P.O. Box 1658 Roswoll, NM 88202

(575) 347-0434 Fax (575) 347-0435

LEASE ODERATO		
	PASHIPPER/COMPANY:	
LEASE NAME: 7	IR dies	wga
TRANSPORTER (	OMPANY: GANDY	tell and
DATE: 4-24-	TP AEHICLE NO' 2 IF	TIME: 145 AM/RM
CHARGE TO.		DRIVER NO.:
	APSA	
	TYPE OF MATERIA	L
	OCD	
[ ] Other Material;	( Contaminated soil	[ ] C-117 No.:
Description:	BS&W content:	
COMPANY CONTA	CT:	
AS A CONDITION	TO GANDY-MADI EV MIG TO THE	CE OF THE MATERIALS SHIPPED WITH
AS A CONDITION THIS JOB TICKET, OPER SHIPPED HEREWITH IS I ACT OF 1978, AS AMEND CODE, \$381.001, at seq. AFFORDED CONTAMINA DEVELOPMENT OR PROD  ALSO AS A COND WITH THIS JOB TICKET, DELIVERED BY OPERATO GANDY-MARLEY, INC. S FO	TO GANDY-MARLEY, INC.'S ACCEPTAN ATOR/SHIPPER REPRESENTS AND WA MATERIAL EXEMPT FROM THE RESOURED FROM TIME TO TIME, 40 U.S.C. §69 AND REGULATIONS RELATED THERE TED SOILS AND OTHER WASTE ASSOUCTION OF CRUDE OIL OR NATURAL OF THE CONTRACT	CE OF THE MATERIALS SHIPPED WITH RRANTS THAT THE WASTE MATERIAL RCE, CONSERVATION AND RECOVERY 01, 81 SOQ., THE NM HEALTH AND SAF TO, BY VIRTUE OF THE EXEMPTION COCIATED WITH THE EXPLORATION, SAS OR GEOTHERMAL ENERGY.  PTANCE OF THE MATERIALS SHIPPED ARRANTS THAT ONLY THE MATERIAL W DELIVERED BY TRANSPORTER TO
AS A CONDITION THIS JOB TICKET, OPER SHIPPED HEREWITH IS I ACT OF 1978, AS AMEND CODE, §381.001, at seq. AFFORDED CONTAMINA DEVELOPMENT OR PROD  ALSO AS A COND WITH THIS JOB TICKET, DELIVERED BY OPERATO GANDY-MARLEY, INC. 'S FATTIS WILL CERTIT Stalement at the above des certify that no additional mate	TO GANDY-MARLEY, INC.'S ACCEPTAN ATOR/SHIPPER REPRESENTS AND WAMATERIAL EXEMPT FROM THE RESOURED FROM TIME TO TIME, 40 U.S.C. \$69 AND REGULATIONS RELATED THERE TED SOILS AND OTHER WASTE ASSOUCTION OF CRUDE OIL OR NATURAL OF THE CONTROL OF CRUDE OIL OR NATURAL OF THE CONTROL O	CE OF THE MATERIALS SHIPPED WITH RRANTS THAT THE WASTE MATERIAL RCE, CONSERVATION AND RECOVERY 01, 81 SOQ., THE NM HEALTH AND SAF TO, BY VIRTUE OF THE EXEMPTION COCIATED WITH THE EXPLORATION, GAS OR GEOTHERMAL ENERGY.  PTANCE OF THE MATERIALS SHIPPED ARRANTS THAT ONLY THE MATERIAL W DELIVERED BY TRANSPORTER TO



Targa Midstream Services PO Box 1689 Lovington, NM 88260

Detailed Report of material for Invoices 23913 thru 23913

### EXEMPT OCD

Origin: DAVID BILBREY 2

Date:	Ticket No:	Panedett-	•			
5/2/2018		Description	Transporter: Gandy Inc.	Colt	Units	Unit Type:
5/2/2018			Gandy Inc.	UF.	12	YARDS
5/2/2016			• • • • • • • • • • • • • • • • • • •	LF	12	YARDS
5/2/2015			Gandy Inc.	LF.	12	YARDS
5/2/2016			Gandy Inc.	LF	12	YARDS
5/2/2016	_		Gandy Inc.	LF	12	YAROS
5/2/2016			Gandy Inc.	1.F	12	YARD\$
5/2/2018			Gandy Inc.	LF .	12	YARDS
			Gandy Inc.	ĻF	12	YARDS
5/2/2016			Gandy Inc.	LP .	12	YARDS
5/2/2016			Gandy Inc.	LF .	12	YARDS
5/2/2018			Gandy Inc.	LF .	t2	YARDS
5/2/2016			Gandy Inc.	LF	12	YARDS
5/3/2018			Gandy Inc.	ĿF	12	YAROS
S/3/2018			Gandy Inc.	LF	12	YARDS
6/3/2016			Gandy Inc.	LF	12	YARDS
5/3/2016	32149		Gandy Inc.	<b>LF</b>	12	YARDS
5/3/2016			Gandy Inc.	LIF	12	YARDS
5/3/2016			Gandy Inc.	LF	12	YARDS
5/3/2016	32152		Gandy Inc.	UF .	12	YARDS
5/3/2018	32153		Gandy Inc.	UF	12	YARDS
5/3/2016	32154		Gandy Inc.	LF	12	
5/3/2018	32155		Gandy Inc.	LF.	12	YARD\$
5/3/2016	32158		Gandy Inc.	LF		YARDS
5/3/2016	32157		Gandy Inc.	ᄩ	12	YARDS
5/3/2016	32158		Gandy Inc.	_ Lf	12	YARDS
5/3/2016	32159		Gandy Inc.	다 F	12	YARDS
5/3/2016	32160		Gandy Inc.	ᄕ	12	YAROS
5/4/2016	2181		Gandy Inc.	<del>_</del>	12	YARDS
\$/4/2018			-	LF	12	YARDS
5/4/2016			Gandy Inc.	LF	12	YARDS
	PW + 164		Gandy Inc.	LF	12	YARDS



Targa Midstream Services PO Box 1689 Lovington, NM 88260 5/10/2016

P.O. 80x 1658 Roswell, NM 88202 Phone 575-347-0434 Fax 575-347-0435

6/4/2016 32164 5/4/2016 32165 6/4/2016 32166

5/4/2016 32167

Gandy Inc. Gandy Inc. Gandy Inc.

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Detailed Report of material for Invoices 23913 thru 23913

12 YARDS 12 YARDS 12 YARDS 12 YARDS

DAVID BILBREY 2 Total YARDS.

EXEMPT OCD Total YARDS.

408 YARDS 408 Units

EXEMPT OCD Total Units.

408 Units

408 YARDS

Targa Midstream Services Total Units.

# GANDY-MARLEY, INC. P.O. Box 1658

P.O. Box 1658 Roswell, NM 68202 (575) 347-0434 Fax (575) 347-0435

LEASE OPERATOR/SHIPPER/COMPANY: TARGA MIDSTREAM
LEASE NAME: DAVID BILBREY # 2
TRANSPORTER COMPANY: 9 ANDY TIME:9:03 (AMPM
DATE: 05-02 - /6VEHICLE NO.: 333 DRIVER NO.:
CHARGE TO:
TYPE OF MATERIAL
OCD
[ ] Other Material: [ ] Contaminated soil [ ] C-117 No.:
[ ] BS&W content:
Description: CL
COMPANY CONTACT:
VOLUME OF MATERIAL [ ]: YARDS 12 : CELL# 4-F :[ ]
AS A CONDITION TO GANDY-MARLEY, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET, CPERATOR/SHIPPER REPRESENTS AND WARRANTS THAT THE WASTE MATERIAL SHIPPED HEREWITH IS MATERIAL EXEMPT FROM THE RESOURCE, CONSERVATION AND RECOVERY ACT OF 1978, AS AMENDED FROM TIME TO TIME, 40 U.S.C. §6901, of soq., THE NM HEALTH AND SAF. CODE. §381.001, of soq. AND REGULATIONS RELATED THERETO, BY VIRTUE OF THE EXEMPTION AFFORDED CONTAMINATED SOILS AND OTHER WASTE ASSOCIATED WITH THE EXPLORATION, DEVELOPMENT OR PRODUCTION OF CRUDE OIL OR NATURAL GAS OR GEOTHERMAL ENERGY.
ALSO AS A CONDITION TO GANDY-MARLEY, 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 GANDY-MARLEY, 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 edditional materials were redded to this load, and that the material was delivered without incident.  DRIVER:  FACILITY REPRESENTATIVE:  To Low
White - Quit Canary - Shipper Pink - Gill Gold - Transporter

# GANDY-MARLEY, INC.

P.O. Box 1658 Roswell, NM 88202 (575) 347-0434 Fax (575) 347-0435

LEASE OPERATOR/SHIPPE	R/COMPANY: 7	ARGA MIDSTREAM
	BILBREY	
TRANSPORTER COMPANY:		
DATE: 05-02-16 V	EHICLE NO.: 3	27 DRIVER NO.:
CHARGE TO:		
	TYPE OF MATER	RIAL
	OCD	
	Contaminated soil	[ ] C-117 No.:
• •	BS&W content:	
Description:		
COMPANY CONTACT:		
VOLUME OF MATERIAL [ ]:	YARDS /2	: CELL#:[ ]
THIS JOB TICKET, OPERATOR/SHIPF SHIPPED HEREWITH IS MATERIAL E ACT OF 1978, AS AMENDED FROM T CODE, §381.001, 81 809. AND REGULAFFORDED CONTAMINATED SOILS DEVELOPMENT OR PRODUCTION OF ALSO AS A CONDITION TO G. WITH THIS JOB TICKET, TRANSPORDELIVERED BY OPERATOR/SHIPPER GANDY-MARLEY, INC.'S FACILITY FO	ER REPRESENTS AND EMPT FROM THE REME TO TIME, 40 U.S.C. LATIONS RELATED TO AND OTHER WASTE FORUDE OIL OR NATURALLY, INC. S.C. TER REPRESENTS AND TRANSPORTER IN DISPOSAL.	PTANCE OF THE MATERIALS SHIPPED WITH D WARRANTS THAT THE WASTE MATERIAL SOURCE, CONSERVATION AND RECOVERY C. \$6901. et seq. THE NM HEALTH AND SAF. HERETO, BY VIRTUE OF THE EXEMPTION E ASSOCIATED WITH THE EXPLORATION, IRAL GAS OR GEOTHERMAL ENERGY.  ACCEPTANCE OF THE MATERIALS SHIPPED ND WARRANTS THAT ONLY THE MATERIAL IS NOW DELIVERED BY TRANSPORTER TO
Stotomont at the above described loca	llon, and that it was ten added to this load, and i	od the material represented by this Transporter dered by the above described shipper. This will that the material was delivered without incident.
FACILITY REPRESENTATIVE:	& Totton	
White - GMI Cenary - Shipper	Pink - GLB Gold - 1	Prensporter

# GANDY-MARLEY, INC. P.O. Box 1658

P.O. Box 1658 Roswell, NM 88202 (575) 347-0434 Fax (575) 347-0435

LEASE OPERATOR	SHIPPER/COMPANY: TARG	A MIDSTREAM
LEASE NAME: D	AVID BILBREY	
TRANSPORTER CO	MPANY: SAN 4-	TIME:9:13 (ANDPM
DATE: 0.5-02-	16 VEHICLE NO.: 517	DRIVER NO.:
CHARGE TO:		
	TYPE OF MATERIAL	
	OCD	
[ ] Other Material:	Contaminated soil BS&W content:	] C-117 No.:
Description: _ CL_		
COMPANY CONTAC	т:	
VOLUME OF MATER	RIAL [ ]: YARDS /2% : CE	LL#_ <i>LF</i> _:[]
THIS JOB TICKET, OPERA SHIPPED HEREWITH IS M ACT OF 1976, AS AMENDE CODE, \$361.001, ot soo. AFFORDED CONTAMINAT DEVELOPMENT OR PROD	TO GANDY-MARLEY, INC.'S ACCEPTANC TOR/SHIPPER REPRESENTS AND WAR ATERIAL EXEMPT FROM THE RESOUR! TO TIME, 40 U.S.C. \$690 AND REGULATIONS RELATED THERET TED SOILS AND OTHER WASTE ASSUUCTION OF CRUDE OIL OR NATURAL G.	CE, CONSERVATION AND RECOVERY II, 01 80Q., THE NM HEALTH AND SAF. CO, BY VIRTUE OF THE EXEMPTION OCIATED WITH THE EXPLORATION. AS OR GEOTHERMAL ENERGY.
WITH THIS JOB TICKET, 1	transporter represents and wa Drushipper to transporter is nov	RRANTS THAT ONLY THE MATERIAL
Etalomont at the above de-	FY that the above Transporter leaded the scribed location, and that it was tandered be lerials were added to this lead, and that the	NY the above described supper. I'm
FACILITY REPRESENTATIVE	9 Tolton	
	Delle Call Cold Transpor	tae

GANDY•MARLEY, INC.
P.O. Box 1658
Roswell, NM 88202
(575) 347-0434
Fax (575) 347-0435

LEASE OPERATOR/SHIPPER/COMPANY: TARGA MIDSTREAM
LEASE NAME: DAJID BILDREY "Z
TRANSPORTER COMPANY: SANDY TIME:9:27 AMPM
DATE: 05-02-16 VEHICLE NO.: 516 DRIVER NO.:
CHARGE TO:
TYPE OF MATERIAL
OCD
[ ] Other Material: [ ] Contaminated soil [ ] C-117 No.:
Description: EL
COMPANY CONTACT:
VOLUME OF MATERIAL [ ]: YARDS /Z : CELL# LF :[ ]
AS A CONDITION TO GANDY-MARLEY, 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, 41 seq., THE NM HEALTH AND SAF, CODE, §361.001, 61 seq. AND REGULATIONS RELATED THERETO, BY VIRTUE OF THE EXEMPTION AFFORDED CONTAMINATED SOILS AND OTHER WASTE ASSOCIATED WITH THE EXPLORATION, DEVELOPMENT OR PRODUCTION OF CRUDE OIL OR NATURAL GAS OR GEOTHERMAL ENERGY.
ALSO AS A CONDITION TO GANDY-MARLEY, 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 GANDY-MARLEY, 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.  ORIVER:
FACILITY REPRESENTATIVE: Total
White - Clatt Canary - Shipper Fink - Clatt Cold - Transporter

### GANDY-MARLEY, INC. P.O. Box 1658

P.O. Box 1658 Roswell, NM 88202 (575) 347-0434 Fax (575) 347-0435

LEASE OPERATOR/SHIPPER/COMPANY: TARGA MIDSTREAM
LEASE NAME: DAVID BILBREY # 2
TRANSPORTER COMPANY: SANJY TIME:/275 ANDPM)
DATE: 05-02 - 16 VEHICLE NO.: 327 DRIVER NO.:
CHARGE TO:
TYPE OF MATERIAL
OCD
[ ] Other Material: [ Contaminated soil [ ] C-117 No.:
Description: C L
COMPANY CONTACT:
VOLUME OF MATERIAL [ ]: YARDS /2 : CELL# LF :[]
AS A CONDITION TO GANDY-MARLEY, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET, OPERATORSHIPPER REPRESENTS AND WARRANTS THAT THE WASTE MATERIAL SHIPPED HEREWITH IS MATERIAL EXEMPT FROM THE RESOURCE. CONSERVATION AND RECOVERY ACT OF 1878, AS AMENDED FROM TIME TO TIME. 40 U.S.C. \$6901, 61 seq., THE NM HEALTH AND SAF. CODE, \$361.001, 61 seq. AND REGULATIONS RELATED THERETO, BY VIRTUE OF THE EXEMPTION AFFORDED CONTAMINATED SOILS AND OTHER WASTE ASSOCIATED WITH THE EXPLORATION. DEVELOPMENT OR PRODUCTION OF CRUDE OIL OR NATURAL GAS OR GEOTHERMAL ENERGY.  ALSO AS A CONDITION TO GANDY-MARLEY, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET, TRANSPORTER REPRESENTS AND WARRANTS THAT ONLY THE MATERIAL DELIVERED BY OPERATORSHIPPER TO TRANSPORTER IS NOW DELIVERED BY TRANSPORTER TO GANDY-MARLEY, 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:
FACILITY REPRESENTATIVE: & Tolton
White - Cuts Canany - Shipper Pink - Cut Cold - Transporter

GANDY•MARLEY, INC.
P.O. Box 1658
Roswell, NM 88202
(575) 347-0434
Fax (575) 347-0435

LEASE OPERATOR/SHIPPER/COMPANY: TARGA MIDSTREAM
LEASE NAME: DAVID BILBREY #2
TRANSPORTER COMPANY: 9 AU 44 TIME:/2-47 AMPM)
DATE: 05-02-/6 VEHICLE NO.: 333 DRIVER NO.:
CHARGE TO:
TYPE OF MATERIAL
OCD
[ ] Other Material: [ ] Contaminated soit [ ] C-117 No.:
Description: C.L
COMPANY CONTACT:
VOLUME OF MATERIAL []: YARDS _/2 : CELL# _4F []
AS A CONDITION TO GANDY-MARLEY, 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 CONTAMINATED SOILS AND OTHER WASTE ASSOCIATED WITH THE EXPLORATION, DEVELOPMENT OR PRODUCTION OF CRUDE OIL OR NATURAL GAS OR GEOTHERMAL ENERGY.  ALSO AS A CONDITION TO GANDY-MARLEY, 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 GANDY-MARLEY, 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 excitonal materials were crited to this load, and that the material was delivered without incident.  ORIVER:  FACILITY REPRESENTATIVE:  OF China
White-Gill Canary-Shipper Pink-Gill Gold-Transporter

GANDY-MARLEY, INC.
P.O. Box 1658
Roswell, NM 88202
(575) 347-0434 Fax (575) 347-0435

LEASE OPERATOR/SHIPPER/COMPANY: TARGA MIDSTREAM
LEASE NAME: DAVID BILBREY # Z
TRANSPORTER COMPANY: 94Ndy TIME: 12 TT AMPM
DATE: 05-02 -/6 VEHICLE NO.: 5/7 DRIVER NO.:
CHARGE TO:
TYPE OF MATERIAL
OCD
[ ] Other Material: [ ] Contaminated soil [ ] C-117 No.:
Description: CL
COMPANY CONTACT:
VOLUME OF MATERIAL [ ]: YARDS 12 : CELL# 4F :[ ]
AS A CONDITION TO GANDY-MARLEY, 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, 81 Seq., THE NM HEALTH AND SAF, CODE, §381.001, 81 Seq. AND REGULATIONS RELATED THERETO, BY VIFITUE OF THE EXEMPTION AFFORDED CONTAMINATED SOILS AND OTHER WASTE ASSOCIATED WITH THE EXPLORATION, DEVELOPMENT OR PRODUCTION OF CRUDE OIL OR NATURAL GAS OR GEOTHERMAL ENERGY.
ALSO AS A CONDITION TO GANDY-MARLEY, 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 GANDY-MARLEY, 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:
FACILITY REPRESENTATIVE: 7 Tolton
White - Gill Canary - Shipper Pink - Gill Gold - Transporter

### GANDY-MARLEY, INC. P.O. Box 1658

P.O. Box 1658 Roswell, NM 88202 (575) 347-0434 Fax (575) 347-0435

LEASE OPERATOR/SHI	PER/COMPANY:	TARGA MIDSTREAM
LEASE NAME: DAV	10 BILBRE	1 * 2
TRANSPORTER COMPA		
DATE: 05-02-11	VEHICLE NO .:	516 DRIVER NO.:
CHARGE TO:		
	TYPE OF MA	ATERIAL
	OCE	
[ ] Other Material:	Contaminated so	
Description: CL		
COMPANY CONTACT:		
VOLUME OF MATERIAL	[ ]: YARDS	: CELL# <u> </u>
THIS JOB TICKET, OPERATORAS SHIPPED HEREWITH IS MATER ACT OF 1978, AS AMENDED FR CODE, §381.001, ot seq. AND AFFORDED CONTAMINATED S DEVELOPMENT OR PRODUCTION WITH THIS JOB TICKET, TRAN DELIVERED BY OPERATOR/SH	SHIPPER REPRESENT IAL EXEMPT FROM TH IOM TIME TO TIME, 40 REGULATIONS RELATI SOILS AND OTHER W ON OF CRUDE OIL OR TO GANDY-MARLEY. IP SPORTER REPRESEN IPPER TO TRANSPOR	ACCEPTANCE OF THE MATERIALS SHIPPED WITH S AND WARRANTS THAT THE WASTE MATERIAL IE RESOURCE, CONSERVATION AND RECOVERY U.S.C. \$6901, of seq., The NM HEALTH AND SAFED THERETO, BY VIRTUE OF THE EXEMPTION WASTE ASSOCIATED WITH THE EXPLORATION, NATURAL GAS OR GEOTHERMAL ENERGY.  NC.'S ACCEPTANCE OF THE MATERIALS SHIPPED TO AND WARRANTS THAT ONLY THE MATERIAL TER IS NOW DELIVERED BY TRANSPORTER TO
GANDY-MARLEY, INC.'S FACILIT		
Statement at the above described certify that no additional materials DRIVER: 30best 3	d location, and that it was were added to this load,	r loaded the material represented by this Transporter as tendered by the above described shipper. This will , and that the material was delivered without incident.
FACILITY REPRESENTATIVE:	- 9 Toet	on
White - GMI Canary - SNipper	Finit - CIMB	Gold - Transporter

### GANDY-MARLEY, INC. P.O. Box 1658

P.O. Box 1658 Roswell, NM 88202 (575) 347-0434 Fax (575) 347-0435

LEASE OPERATOR/SHIPPER/COMPANY: TARGA MIDSTREAM
LEASE NAME: DAVID BILBREY # 2
TRANSPORTER COMPANY: 9 Andy TIME: 3:25 AMPM
DATE: 05-02-16 VEHICLE NO.: 327 DRIVER NO.:
CHARGE TO:
TYPE OF MATERIAL
OCD
[ ] Other Material: [ ] Contaminated soil [ ] C-117 No.:
Description: CL
COMPANY CONTACT:
VOLUME OF MATERIAL [ ]: YARDS '2: CELL# _LF :[ ]
AS A CONDITION TO GANDY-MARLEY, 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, 81 seq., THE NM HEALTH AND SAF. CODE, §361.001, 61 seq. AND REGULATIONS RELATED THERETO, BY VIRTUE OF THE EXEMPTION AFFORDED CONTAMINATED SOILS AND OTHER WASTE ASSOCIATED WITH THE EXPLORATION, DEVELOPMENT OR PRODUCTION OF CRUDE OIL OR NATURAL GAS OR GEOTHERMAL ENERGY.
ALSO AS A CONDITION TO GANDY-MARLEY, 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 GANDY-MARLEY, 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 cortify that no additional materials were added to this load, and that the material was delivered without incident.  **DRIVER:**
FACILITY REPRESENTATIVE: 9 Tolton

GANDY•MARLEY, INC.
P.O. 80x 1658
Roswell, NM 88202
(575) 347-0434
Fax (575) 347-0435

LEASE OPERATOR/S	SHIPPER/COMPANY: 77	ORGA MIDSTREAM
LEASE NAME: DA	oud Bribery "	2.
TRANSPORTER COM		TIME: 3:4/AMPMD
DATE: 05-02-	-/6 VEHICLE NO.: 33	3 DRIVER NO.:
CHARGE TO:		
	TYPE OF MATERI	AL
	OCD	
[ ] Other Material:	[ ] Contaminated soil [ ] BS&W content:	[ ] C-117 No.:
Description: CL		
COMPANY CONTACT	J:	
VOLUME OF MATERI	AL[]: YARDS /2 :	CELL#LF :[]
THIS JOB TICKET, OPERAT SHIPPED HEREWITH IS MA ACT OF 1976, AS AMENDED CODE, \$361.001. 81 589. A AFFORDED CONTAMINATE DEVELOPMENT OR PRODU	TOR/SHIPPER REPRESENTS AND TARRIAL EXEMPT FROM THE RESC OFROM TIME TO TIME, 40 U.S.C. NO REGULATIONS RELATED THE ED SOILS AND OTHER WASTE OF THE WASTE OF THE PROPERTY OF THE	TANCE OF THE MATERIALS SHIPPED WITH WARRANTS THAT THE WASTE MATERIAL DURCE, CONSERVATION AND RECOVERY §6901. et seq THE NM HEALTH AND SAF. ERETO, BY VIRTUE OF THE EXEMPTION ASSOCIATED WITH THE EXPLORATION, AL GAS OR GEOTHERMAL ENERGY.
WITH THIS JOB TICKET, TI	ransporter represents and Vshipper to transporter is	CCEPTANCE OF THE MATERIALS SHIPPED WARRANTS THAT ONLY THE MATERIAL NOW DELIVERED BY TRANSPORTER TO
Statement at the above desc	ribed location, and that it was lander	t the material represented by this Transporter and by the above described shipper. This will at the material was delivered without incident.
FACILITY REPRESENTATIVE:	Toreton	nsporter .

## GANDY-MARLEY, INC. P.O. Box 1658 Roswell, NM 88202

(575) 347-0434 Fax (575) 347-0435

	USBERIANTER TO	
LEASE OPERATOR/S	HIPPER/COMPANY: 1/ AR	GA MIDSTREAM
LEASE NAME: DA	VID BILBREY Z	
TRANSPORTER COM		TIME: 3:43 AMEM
DATE: 05-02-	/6 VEHICLE NO.: 517	DRIVER NO.:
CHARGE TO:		
	TYPE OF MATERIAL	
	OCD	
[ ] Other Material:	Contaminated soil	[ ] C-117 No.:
Description: _CL		
COMPANY CONTACT		. <u> </u>
VOLUME OF MATERIA	AL [ ]: YARDS CE	LI <u>LF:[]</u>
THIS JOB TICKET, OPERATO SHIPPED HEREWITH IS MAY ACT OF 1976, AS AMENDED CODE, §361.001, of seq. AN AFFORDED CONTAMINATE DEVELOPMENT OR PRODUCTION.	TERIAL EXEMPT FROM THE RESOURG FROM TIME TO TIME, 40 U.S.C. §690 ID REGULATIONS RELATED THERET D SOILS AND OTHER WASTE ASSO CTION OF CRUDE OIL OR NATURAL G	RANTS THAT THE WASTE MATERIAL CE. CONSERVATION AND RECOVERY 1. 01 SOQ., THE NM HEALTH AND SAP. O, BY VIRTUE OF THE EXEMPTION OCIATED WITH THE EXPLORATION, AS OR GEOTHERMAL ENERGY.
WITH THIS YOR TICKET TR	ansporter represents and wa Shipper to transporter is noy	TANCE OF THE MATERIALS SHIPPED BRANTS THAT ONLY THE MATERIAL V DELIVERED BY TRANSPORTER TO
Statement at the above descri	lbed location, and that it was tendered bials were added to this load, and that the	material represented by this Transporter ry the above described shipper. This will material was delivered without incident.
FACILITY REPRESENTATIVE: _	_ g Totton	
	as Dick GUE Gold Transpor	(ae

## GANDY • MARLEY, INC. P.O. Box 1658 Roswell, NM 68202

(575) 347-0434 Fax (575) 347-0435

LEASE OPERATOR/SHIPPER/COMPANY: TARGA MIDSTREAM
LEASE NAME: DAVID BILBREY #2
TRANSPORTER COMPANY: 9444 TIME3:45 AMPM
DATE: 05-02-16 VEHICLE NO.: 516 DRIVER NO.:
CHARGE TO:
TYPE OF MATERIAL
OCD
[ ] Other Material: [ ] Contaminated soil [ ] C-117 No.:
Description: CL
COMPANY CONTACT:
VOLUME OF MATERIAL []: YARDS 12 : CELL# 4月:[]
AS A CONDITION TO GANDY-MARLEY, 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. §8901, 01 800., THE NM HEALTH AND SAF. CODE, §361.001, 61 800, AND REGULATIONS RELATED THERETO, BY VIRTUE OF THE EXEMPTION AFFORDED CONTAMINATED SOILS AND OTHER WASTE ASSOCIATED WITH THE EXPLORATION, DEVELOPMENT OR PRODUCTION OF CHUDE OIL OR NATURAL GAS OR GEOTHERMAL ENERGY.  ALSO AS A CONDITION TO GANDY-MARLEY, 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 GANDY-MARLEY, 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:
FACILITY REPRESENTATIVE: 9 To Com

### GANDY MARLEY, INC.

P.O. Box 1658 Roswell, NM 88202 (575) 347-0434 Fax (575) 347-0435

LEASE OPERATOR/SHIPPER/COMPANY: TARGA MIDSTREAM
LEASE NAME: DAVID BILBREY "Z
TRANSPORTER COMPANY: SANCY TIME: 9:19 CAMPM
DATE: 05-03-16 VEHICLE NO.: 383 DRIVER NO.:
CHARGE TO:
TYPE OF MATERIAL
OCD
( ) Other Material: [ / Contaminated soil [ ] C-117 No.:
Description: CL
COMPANY CONTACT:
VOLUME OF MATERIAL [ ]: YARDS : CELL# : [ ]
AS A CONDITION TO GANDY-MARLEY, 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 1978, AS AMENDED FROM TIME TO TIME, 40 U.S.C. §6901, 61 869. THE NM HEALTH AND SAF, CODE, §361.001, 61 869. AND REGULATIONS RELATED THERETO, BY VIRTUE OF THE EXEMPTION AFFORDED CONTAMINATED SOILS AND OTHER WASTE ASSOCIATED WITH THE EXPLORATION, DEVELOPMENT OR PRODUCTION OF CRUDE OIL OR NATURAL GAS OR GEOTHERMAL ENERGY.
ALSO AS A CONDITION TO GANDY-MARLEY, 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 GANDY-MARLEY, 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 economic materials were added to this load, and that the material was delivered without incident.  DRIVER:
FACILITY REPRESENTATIVE:
White - GLID Cenary - Shipper Pink - GLID Gold - Trensporter

GANDY-MARLEY, INC.
P.O. Box 1658
Roswell, NM 88202
(575) 347-0434 Fax (575) 347-0435

LEASE OPERATOR/SHIPPER/COMPANY: TARGA MIDSTREAM
LEASE NAME: DAVID BILBREY
TRANSPORTER COMPANY: SANDY TIME:9:23 AMPM
DATE: 05-03-16 VEHICLE NO.: 516 DRIVER NO.:
CHARGE TO:
TYPE OF MATERIAL
OCD
[ ] Other Material:   Contaminated soil   [ ] C-117 No.:
Description: CL
COMPANY CONTACT:
VOLUME OF MATERIAL [ ]: YARDS : CELL#
AS A CONDITION TO GANDY-MARLEY, 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. §5901, 81 50Q. THE NM HEALTH AND SAF, CODE, §381.001, 61 50Q. AND REGULATIONS RELATED THERETO, BY VIRTUE OF THE EXEMPTION AFFORDED CONTAMINATED SOILS AND OTHER WASTE ASSOCIATED WITH THE EXPLORATION, DEVELOPMENT OR PRODUCTION OF CRUDE OIL OR NATURAL GAS OR GEOTHERMAL ENERGY.
ALSO AS A CONDITION TO GANDY-MARLEY, 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 GANDY-MARLEY, INC.'S FACILITY FOR DISPOSAL.
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FACILITY REPRESENTATIVE: 9 Tolton
MARIA CIAN CONTROL SHOOM POR GIRL GOID, CONTROL Transporter

## GANDY • MARLEY, INC. P.O. Box 1658 Roswell, NM 88202

(575) 347-0434 Fex (575) 347-0435

LEASE OPERATOR/SHIPPER/COMPANY: TARGA MIDSTREAM
LEASE NAME: DAVID BILDREY 72
TRANSPORTER COMPANY: 9ANGY TIME:9:31 AMPM
DATE: 05-03-16 VEHICLE NO.: 326 DRIVER NO.:
CHARGE TO:
TYPE OF MATERIAL
OCD
[ ] Other Material: [ ] Contaminated sell [ ] C-117 No.:
BS&W content:
Description: _C.L
COMPANY CONTACT:
VOLUME OF MATERIAL []: YARDS 12 : CELL# LF :[]
AS A CONDITION TO GANDY-MARLEY, 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, at seq., THE NM HEALTH AND SAF, CODE, §361.001, at seq. and regulations related thereto, by virtue of the exemption afforded contaminated soils and other waste associated with the exploration, development or production of crude oil or natural gas or geothermal energy.  ALSO AS A CONDITION TO GANDY-MARLEY, 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 GANDY-MARLEY, INC.'S FACILITY FOR DISPOSAL
THIS WILL CERTIFY that the above Transporter leaded 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 fib additional materials were adopt to this load, and that the material was delivered without incident.  ORIVER:  FACILITY REPRESENTATIVE:
Name of the Constant Shipper Blok City State Treasporter

### GANDY • MARLEY, INC. P.O. Box 1658

P.O. Box 1658 Roswell, NM 88202 (575) 347-0434 Fax (575) 347-0435

	NAMES OF THE PARTY	
LEASE OPERATOR/	SHIPPER/COMPANY: TAR	A MIDSTREAM
LEASE NAME: DA	UID BILBREY # Z	6
TRANSPORTER CO	MPANY: 9ANY	TIME: 9: 33 AMPM
DATE: 05-03-	16 VEHICLE NO.: 327	DRIVER NO.:
CHARGE TO:		
	TYPE OF MATERIAL	
	OCD	
[ ] Other Material:	Contaminated soil	[ ]C-117 No.: 250 379
Description: CL		
COMPANY CONTAC	T:	
VOLUME OF MATER	IAL[]: YARDS/2: CE	LLO <u>LF</u> :[]
THIS JOB TICKET, OPERA SHIPPED HEREWITH IS M ACT OF 1976, AS AMENDE CODE, \$381,001, of sog. / AFFORDED, CONTAMINAT	TOR/SKIPPER REPRESENTS AND WAI ATERIAL EXEMPT FROM THE RESOUR D FROM TIME TO TIME, 40 U.S.C. §69 IND REGULATIONS RELATED THERE	CE OF THE MATERIALS SHIPPED WITH ARANTS THAT THE WASTE MATERIAL ICE, CONSERVATION AND RECOVERY D1. OF SOQ., THE NM HEALTH AND SAF, TO, BY VIRTUE OF THE EXEMPTION COCIATED WITH THE EXPLORATION, BAS OR GEOTHERMAL ENERGY.
WITH THIS JOB TICKET, 1	ransporter represents and wa Ryshipper to transporter is no	PTANCE OF THE MATERIALS SHIPPED ARRANTS THAT ONLY THE MATERIAL W DELIVERED BY TRANSPORTER TO
Statement at the above dos	cribed location, and that it was landered	material represented by this Transporter by the above described shipper. This will a material was delivered without incident.
FACILITY REPRESENTATIVE:	1 Toeton	
White - GILL Canary - Shi	pper Pkik - (11st Gold - Transpo	rter

GANDY-MARLEY, INC.
P.O. Box 1658
Roswell, NM 88202
(575) 347-0434 Fax (575) 347-0435

LEASE OPERATOR/SHIPPER/COMPANY: TARGA MIDSTREAM				
LEASE NAME: DAVID BILBREY # 2				
TRANSPORTER COMPANY: 9ANDY TIME735 CAMPM				
DATE: 05-03 -/	6 VEHICLE NO.: 517	DRIVER NO.:		
CHARGE TO:				
	TYPE OF MATERIAL			
	OCD			
[ ] Other Material:	[ ] Contaminated soil	[ ] C-117 No.:		
Description: CL	( ) pogate content:			
COMPANY CONTACT:				
VOLUME OF MATERIAL	[]: YARDS <u>/2</u> : CE	LL#		
AS A CONDITION TO GANDY-MARLEY, 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, 61 Seq., THE NM HEALTH AND SAF. CODE, §381.001, 61 Seq. AND REGULATIONS RELATED THERETO, BY VIRTUE OF THE EXEMPTION AFFORDED CONTAMINATED SOILS AND OTHER WASTE ASSOCIATED WITH THE EXPLORATION, DEVELOPMENT OR PRODUCTION OF CRUDE OIL OR NATURAL GAS OR GEOTHERMAL ENERGY.				
ALSO AS A CONDITION TO GANDY-MARLEY, 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 GANDY-MARLEY, 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:				
FACILITY REPRESENTATIVE: 2 Toeton				
414 5 844 8 811	will man mail the and	·		

## GANDY-MARLEY, INC. P.O. Box 1658 Roswell, NM 88202

(575) 347-0434 Fax (575) 347-0435

LEASE OPERATOR/SHIPPER/COMPANY: TARGA MIDSTREAM			
LEASE NAME: DAVID BILBREY # 2			
TRANSPORTER COMPANY: 9ANdy TIME:/257 ANDM			
DATE: 05 - 0.3 /6 VEHICLE NO.: 5/7 DRIVER NO.:			
CHARGE TO:			
TYPE OF MATERIAL			
OCD			
[ ] Other Material: [ Contaminated soit [ ] C-117 No.:			
[ ] BS&W content: Description: CL			
COMPANY CONTACT:			
VOLUME OF MATERIAL []: YARDS 12 : CELLS 4F :[]			
AS A CONDITION TO GANDY-MARLEY, 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, 01 50Q., THE NM HEALTH AND SAF, CODE, §361.001, 01 50Q. AND REGULATIONS RELATED THERETO, BY VIRTUE OF THE EXEMPTION AFFORDED CONTAMINATED SOILS AND OTHER WASTE ASSOCIATED WITH THE EXPLORATION. DEVELOPMENT OR PRODUCTION OF CRUDE OIL OR NATURAL GAS OR GEOTHERMAL ENERGY.			
ALSO AS A CONDITION TO GANDY-MARLEY, 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 GANDY-MARLEY, 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 tundered 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.  ORIVER:			
FACILITY REPRESENTATIVE: 9 Tolton			
White - GMI Canary - Shipper Pink - GMI Gold - Transporter			

## GANDY-MARLEY, INC. P.O. Box 1658 Roswoll, NM 88202

(575) 347-0434 Fax (575) 347-0435

LEASE OPERATOR/SHIPPER/COMPANY: TARGA MIDSTREAM			
LEASE NAME: DAVID BILBREY #2			
TRANSPORTER COMPANY: 9 5 N 4 Y TIME: 1:0/ AMIPM			
DATE: 05-0,3-/6 VEHICLE NO.: 333 DRIVER NO.:			
CHARGE TO:			
TYPE OF MATERIAL			
OCD			
[ ] Other Material: [ ] Contaminated soil [ ] C-117 No.:			
Description:			
COMPANY CONTACT:			
VOLUME OF MATERIAL []: YARDS 12: CELL# 4F:[]			
AS A CONDITION TO GANDY-MARLEY, 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 1876. AS AMENDED FROM TIME TO TIME, 40 U.S.C. §6901, ot seq., THE NM HEALTH AND SAF. CODE, §381.001, ot seq. AND REGULATIONS RELATED THERETO, BY VIRTUE OF THE EXEMPTION AFFORDED CONTAMINATED SOILS AND OTHER WASTE ASSOCIATED WITH THE EXPLORATION. DEVELOPMENT OR PRODUCTION OF CRUDE OIL OR NATURAL GAS OR GEOTHERMAL ENERGY.  ALSO AS A CONDITION TO GANDY-MARLEY, 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 GANDY-MARLEY, INC.'S FACILITY FOR DISPOSAL.  THIS WILL GERTIFY that the above Transporter leaded the material represented by this Transporter			
Statement at the above described location, and that it was lendered 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.  ORIVER:			
FACILITY REPRESENTATIVE: g To-eton			
White - GLID Cenary - Shipper Pilik - GIII Gold - Transporter			

GANDY • MARLEY, INC.

P.O. Box 1658

Roswell, NM 88202

(575) 347-0434

Fax (575) 347-0436

LEASE OPERATOR/SH	IPPER/COMPANY: 7 A	RGA MIDSTREAM
	41	2.
TRANSPORTER COMP		TIME: 1:01 AMPND
DATE: 05-03-/6	6 VEHICLE NO.: 327	DRIVER NO.:
CHARGE TO:		
	TYPE OF MATERIA	L
	OCD	
( ) Other Material:	[ Contaminated soil [ ] BS&W content:	[ ] C-117 No.:
Description: CL		
COMPANY CONTACT:		
VOLUME OF MATERIA	L[]: YARDS/2 : 0	DELL#
THIS JOB TICKET, OPERATO SHIPPED HEREWITH IS MAT ACT OF 1976, AS AMENDED CODE, \$361,001, ot seq. AN AFFORDED CONTAMINATED DEVELOPMENT OR PRODUC	PAYSHIPPER REPRESENTS AND WE ERIAL EXEMPT FROM THE RESOL FROM TIME TO TIME, 40 U.S.C. §6 D REGULATIONS RELATED THER D SOILS AND OTHER WASTE AS CTION OF CRUDE OIL OR NATURAL	NCE OF THE MATERIALS SHIPPED WITH MARRANTS THAT THE WASTE MATERIAL URCE. CONSERVATION AND RECOVERY 5901, 81 Seq., THE NM HEALTH AND SAF. RETO, BY VIRTUE OF THE EXEMPTION SSOCIATED WITH THE EXPLORATION, I GAS OR GEOTHERMAL ENERGY.
WITH THIS JOB TICKET, TR DELIVERED BY OPERATOR/ GANDY-MARLEY, INC.'S FAC	ANSPORTER REPRESENTS AND SHIPPER TO TRANSPORTER IS N ILITY FOR DISPOSAL	CEPTANCE OF THE MATERIALS SHIPPED WARRANTS THAT ONLY THE MATERIAL NOW DELIVERED BY TRANSPORTER TO
THIS WILL CERTIFY Statement at the above describ corrify that no additional mater	that the above Transporter loaded to Sood location, and that it was tendent fals were added to this load, and that	the material represented by this Transporter od by the above described shipper. This will the material was delivered without incident.
FACILITY REPRESENTATIVE: _	& Toeton -	
White - Gill Canary - Bhipp	per Pink-GM Gold-Tren	aporter

## GANDY-MARLEY, INC. P.O. Box 1658 Roswell, NM 88202

(575) 347-0434 Fax (575) 347-0435

LEASE OPERATOR/SHIPPER/	COMPANY: TARGA MIDSTREAM
LEASE NAME: DAVID	BIL brey # 2
TRANSPORTER COMPANY:	3 A N 44 TIME: /:O/ AMPMD
DATE: 0.5-03-/6 VEH	HICLE NO.: 5/6 DRIVER NO.:
CHARGE TO:	
T	YPE OF MATERIAL
	OCD
Ť	nteminated soil [ ] C-117 No.:
Description: CL	-
COMPANY CONTACT:	
VOLUME OF MATERIAL [ ]: YA	RDS /2 : CELL#
THIS JOB TICKET, OPERATOR/SHIPPER SHIPPED KEREWITH IS MATERIAL EXEM ACT OF 1976, AS AMENDED FROM TIME CODE, §361.001, at seq. AND REGULAT AFFORDED CONTAMINATED SOILS AN	RLEY, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH IT REPRESENTS AND WARRANTS THAT THE WASTE MATERIAL MPT FROM THE RESOURCE, CONSERVATION AND RECOVERY E TO TIME, 40 U.S.C. \$6901, at 5eq., THE NM HEALTH AND SAF. TIONS RELATED THERETO, BY VIRTUE OF THE EXEMPTION NO OTHER WASTE ASSOCIATED WITH THE EXPLORATION, RUDE OIL OR NATURAL GAS OR GEOTHERMAL ENERGY.
WITH THIS JOB TICKET, TRANSPORTER	DY-MARLEY, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED R REPRESENTS AND WARRANTS THAT ONLY THE MATERIAL D TRANSPORTER TO DISPOSAL.
Statement at the above described location,	ove Transporter loaded the material represented by this Transporter, and that it was tendered by the above described shipper. This will led to this load, and that the material was delivered without incident.
FACILITY REPRESENTATIVE:9	Tolton
White-Gill Canary-Shipper Int	k - GLM Cold - Yransporter

## GANDY-MARLEY, INC. P.O. Box 1658 Roswoll, NM 88202

(575) 347-0434 Fax (575) 347-0435

LEASE OPERATOR/SHIPPER/COMPANY: '/ ARGA MIDSTREAM
LEASE NAME: DAVID BILBREY # Z
TRANSPORTER COMPANY: 9ANGY TIME: 1:23 AMPM
DATE: 0 5-03-16 VEHICLE NO.: 326 DRIVER NO.:
CHARGE TO:
TYPE OF MATERIAL
OCD
[ ] Other Material: [ ] Contaminated soil [ ] C-117 No.:
Description: CL
COMPANY CONTACT:
VOLUME OF MATERIAL []: YARDS /2 : CELL# LF :[]
AS A CONDITION TO GANDY-MARLEY, 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, ot soq., THE NM HEALTH AND SAF. CODE, \$381.001, ot soq. and regulations related Thereto, by Virtue of the exemption afforded contaminated soils and other waste associated with the exploration, development or production of crude oil or natural gas or geothermal energy.
ALSO AS A CONDITION TO GANDY-MARLEY, 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 GANDY-MARLEY, INC.'S FACILITY FOR DISPOSAL
THIS WILL CERTIFY that the above Transporter loaded the material represented by this Transporter Statement 21 the above described location, and that it was tendered by the above described shipper. This will certify there additional materials were added to this load, and that the material was delivered without incident.  DRIVER:
FACILITY REPRESENTATIVE: 9 To Clore
White - GUI Cenery - Shipper Pink - GUI Gold - Transporter

## GANDY-MARLEY, INC. P.O. Box 1658 Roswell, NM 88202

(575) 347-0434 Fax (575) 347-0435

LEASE OPERATOR/SHIPPER/COMPANY: TARGA MIDSTREAM
LEASE NAME: DAVID BILDREY #2
TRANSPORTER COMPANY: 9AN 44 TIME: 3:47 AMPM)
DATE: 05-03-/6 VEHICLE NO.: 327 DRIVER NO.:
CHARGE TO:
TYPE OF MATERIAL
OCD
[ ] Other Material: [ ] Contaminated soil [ ] C-117 No.: _2.56_379
Description: CL
COMPANY CONTACT:
VOLUME OF MATERIAL [ ]: YARDS 12 : CELL# 4F :[ ]
AS A CONDITION TO GANDY-MARLEY, 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, 81 56Q., THE NM HEALTH AND SAF, CODE, §361.001, 81 56Q. AND REGULATIONS RELATED THERETO, BY VIRTUE OF THE EXEMPTION AFFORDED CONTAMINATED SOILS AND OTHER WASTE ASSOCIATED WITH THE EXPLORATION, DEVELOPMENT OR PRODUCTION OF CRUDE OIL OR NATURAL GAS OR GEOTHERMAL ENERGY.  ALSO AS A CONDITION TO GANDY-MARLEY, 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 GANDY-MARLEY, 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 contify that no additional materials were added to this load, and that the material was delivered without incident.  DRIVER:
FACILITY REPRESENTATIVE:
White-Gill Canary-Shipper Vink-Gill Gold-Transporter

### GANDY-MARLEY, INC. P.O. Box 1658

P.O. Box 1658 Roswell, NM 68202 (575) 347-0434 Fax (575) 347-0435

LEASE OPERATOR/SHIPPER/COMPANY: TARGA MIDSTREAM		
LEASE NAME: DAVID BILDREY # 2-		
TRANSPORTER COMPANY: 9 ANdy TIME:3:57 AMPM		
DATE: 05-03-16 VEHICLE NO.: 517 DRIVER NO.:		
CHARGE TO:		
TYPE OF MATERIAL		
OCD		
[ ] Other Material: [ ] Contaminated soil [ ] C-117 No.:		
Description: CL		
COMPANY CONTACT:		
VOLUME OF MATERIAL []: YARDS 12 : CELLE 4F :[]		
AS A CONDITION TO GANDY-MARLEY, 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, dl soq., THE NM HEALTH AND SAF. CODE, §381.001, dl soq. AND REGULATIONS RELATED THERETO, BY VIRTUE OF THE EXEMPTION AFFORDED CONTAMINATED SOILS AND OTHER WASTE ASSOCIATED WITH THE EXPLORATION. DEVELOPMENT OR PRODUCTION OF CRUDE OIL OR NATURAL GAS OR GEOTHERMAL ENERGY.		
ALSO AS A CONDITION TO GANDY-MARLEY, 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 GANDY-MARLEY, 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:		
FACILITY REPRESENTATIVE: & Tolton		
White - Giff Cenery - Shipper Ink - Giff Gold - Transporter		

GANDY•MARLEY, INC.
P.O. Box 1658
Roswon, NM 88202
(575) 347-0434
Fax (675) 347-0435

LEASE OPERATOR/SHIPPER/COMPANY: "TARGA	MIDSTREAM
LEASE NAME: DAVID BILBREY # 2	
TRANSPORTER COMPANY: SANGY	TIME: 4:0/ AMCPM
DATE: 05-03-16 VEHICLE NO.: 333	DRIVER NO.:
CHARGE TO:	
TYPE OF MATERIAL	
OCD	
1 Olhor Metorial: [ Contaminated soil ] BS&W content:	] C-117 No.:
Description: CL	
COMPANY CONTACT:	
VOLUME OF MATERIAL [ ]: YARDS / 2 ; CELL	#_ <i>LF</i> :[]
AS A CONDITION TO GANDY-MARLEY, INC.'S ACCEPTANCE OF THIS JOB TICKET, OPERATOR/SHIPPER REPRESENTS AND WARRASHIPPED HEREWITH IS MATERIAL EXEMPT FROM THE RESOURCE, ACT OF 1978, AS AMENDED FROM TIME TO TIME, 40 U.S.C. §6901, CODE, §361.001, or seq. and regulations related Thereto, Afforded Contaminated Soils and Other Waste Associated Production of Crude Oil or Natural Gaster Contaminated Soils and Other Waste Associated Production of Crude Oil or Natural Gaster Contaminated Soils and Other Waste Associated Production of Crude Oil or Natural Gaster Contaminated Soils and Other Waste Associated Production of Crude Oil or Natural Gaster Contaminated Soils and Other Waste Associated Production Of Crude Oil or Natural Gaster Contaminated Soils Associated Production Of Crude Oil or Natural Caster Contaminated Soils Associated Production Of Crude Oil Or Natural Caster Contaminated Soils Associated Production Of Crude Oil Or Natural Caster Contaminated Soils Associated Production Of Crude Oil Or Natural Caster C	NTS THAT THE WASTE MATERIAL CONSERVATION AND RECOVERY of Seq., THE NM HEALTH AND SAF. BY VIRTUE OF THE EXEMPTION LATED WITH THE EXPLORATION.
ALSO AS A CONDITION TO GANDY-MARLEY, INC.'S ACCEPTA WITH THIS JOB TICKET, TRANSPORTER REPRESENTS AND WARR DELIVERED BY OPERATOR/SHIPPER TO TRANSPORTER IS NOW D GANDY-MARLEY, INC.'S FACILITY FOR DISPOSAL.	IANTS THAT ONLY THE MATERIAL
THIS WILL CERTIFY that the above Transporter loaded the ma Statement at the above described location, and that it was tendered by t certify that no additional materials were middle to this load, and that the ma	he above described shipper. This was I
FACILITY REPRESENTATIVE: 9 Toeton	
White - GLB Canary - Shipper Pink - GMI Gold - Transporter	

### GANDY•MARLEY, INC. P.O. Box 1658

P.O. Box 1658 Roswell, NM 88202 (675) 347-0434 Fax (575) 347-0435

LEASE OPERATOR/S	SHIPPER/COMPANY:	ARGA MIDSTREAM
LEASE NAME: DA	WID BILBREY	# 2
TRANSPORTER COM	MPANY: 9 ANDY	TIME:4,07 AMEM
DATE: 05-03-	16 VEHICLE NO.: 51	DRIVER NO.:
CHARGE TO:		
	TYPE OF MATER	RIAL
	QCD	
[ ] Other Material:	[ Contaminated soil [ 1884 content:	[ ] C-117 No.:
Description: CL		
COMPANY CONTACT	D.	
VOLUME OF MATER	AL[]: YARDS /2	: CELL# <u>LF</u> :[]
THIS JOB TICKET, OPERAT SKIPPED HEREWITH IS MA ACT OF 1976, AS AMENDE CODE, \$361.001, of soq. A AFFORDED CONTAMINATE DEVELOPMENT OR PRODU	TORISHIPPER REPRESENTS AND STERIAL EXEMPT FROM THE RES D FROM TIME TO TIME, 40 U.S.C NO REGULATIONS RELATED TO ED SOILS AND OTHER WASTE JICTION OF CRUDE OIL OR NATU	TTANCE OF THE MATERIALS SHIPPED WITH D WARRANTS THAT THE WASTE MATERIAL SOURCE, CONSERVATION AND RECOVERY 55901, of 600., THE NM HEALTH AND SAF. HERETO, BY VIRTUE OF THE EXEMPTION ASSOCIATED WITH THE EXPLORATION, RAL GAS OR GEOTHERMAL ENERGY.
WITH THIS IOR TICKET TO	ransporter represents an Rishipper to transporter !	ACCEPTANCE OF THE MATERIALS SHIPPED ID WARRANTS THAT ONLY THE MATERIAL S NOW DELIVERED BY TRANSPORTER TO
Cinterport at the above date	ribed location, and that it was lend orials were added to this load, and t	ed the material represented by this Transporter fered by the above described shipper. This will that the material was delivered without incident.
FACILITY REPRESENTATIVE:	g rolton	<del></del>
White - QMI Canary - SNI	oper Pink+Gilli Gold+1	Izansporter

GANDY•MARLEY, INC.
P.O. Box 1658
Roswell, NM 88202
(575) 347-0434
Fax (575) 347-0435

	Fax (575) 347-0435	
EASE OPERATOR/S	SHIPPER/COMPANY: TAR	GA MIDSTREAM
	TOTO DISTA	TIME:4:15 AMPM
RANSPORTER COM		DRIVER NO.:
DATE: 05-03 -	16 VEHICLE NO.: 326	
CHARGE TO:		
	TYPE OF MATERIAL	L !
	OCD	
Other Material:	[ ] BS&W content:	[ ] C-117 No.:
COMPANY CONTAC	Π:	15.11
VOLUME OF MATER	RIAL[ ]: YARDS/2; C	ELL#
AS A CONDITION THIS JOB TICKET, OPERA SHIPPED HEREWITH IS A ACT OF 1976, AS AMEND CODE, §361.001, 61 600. AFFORDED CONTAMINA DEVELOPMENT OR PROD  ALSO AS A COND WITH THIS JOB TICKET, DELIVERED BY OPERATI GANDY-MARLEY, INC. S 1	TO GANDY-MARLEY, INC.'S ACCEPTAL ATTOR/SHIPPER REPRESENTS AND WATERIAL EXEMPT FROM THE RESOLUTED FROM TIME TO TIME, 40 U.S.C. SI AND REGULATIONS RELATED THEF TED SOILS AND OTHER WASTE ADJUSTION OF CRUDE OIL OR NATURAL OTHION TO GANDY-MARLEY, INC.'S ACCITION TO GAN	NCE OF THE MATERIAL MARRANTS THAT THE WASTE MATERIAL URCE, CONSERVATION AND RECOVERY 6901, of soq. THE NM HEALTH AND SAF. RETO, BY VIRTUE OF THE EXEMPTION SSOCIATED WITH THE EXPLORATION, I GAS OR GEOTHERMAL ENERGY.  CEPTANCE OF THE MATERIALS SHIPPED WARRANTS THAT ONLY THE MATERIAL NOW DELIVERED BY TRANSPORTER TO
Statement at the above de contry that to indictional m	districts were added to this load, and the	the material represented by this Transporter and by the above described shipper. This will a the material was delivered without incident.
FACILITY REPRESENTATIV	1 Toeton	
White-Gift Cattary		nsporter

# GANDY-MARLEY, INC. P.O. Box 1658 Roswell, NM 88202

(575) 347-0434 Fax (575) 347-0435

	Pax (5/5) 5/7 2/5	
EASE OPERATOR/S	SHIPPER/COMPANY: TARG	A MIDSTREAM
LEASE NAME: D	OVID BILBREY 12	TIME:9:11 (ANOPM
TRANSPORTER CO	MPANY: 9AN44	
DATE: 05-04 -	16 VEHICLE NO.: 326	DRIVER NO.:
CHARGE TO:		
Official (1)	TYPE OF MATERIAL	
	OCD	[ ] C-117 No.:
[ ] Other Moterial:	[ Contaminated soil	[ ]Osta non
	] BS&W content:	<del></del> -
Description: _C 4_		
COMPANY CONTAC		
	RIAL[]: YARDS 12 : CE	L# 4E_:[]
VOLUME OF MATE	MAL! I MILES	THE CHIESEN WITH
THIS JOB TICKET, OPER. SHIPPED HEREWITH IS A ACT OF 1976, AS AMEND CODE, \$361.001, 61 569, AFFORDED CONTAMINA	TO GANDY-MARLEY, INC.'S ACCEPTANC ATOR/SHIPPER REPRESENTS AND WAR MATERIAL EXEMPT FROM THE RESOURI ED FROM TIME TO TIME, 40 U.S.C. \$690 AND REGULATIONS RELATED THERET TED SOILS AND OTHER WASTE ASSI DUCTION OF CRUDE OIL OR NATURAL G	CE. CONSERVATION AND RECOVERY III. OF SOQ., THE NM HEALTH AND SAF. IO. BY VIRTUE OF THE EXEMPTION OCIATED WITH THE EXPLORATION, IAS OR GEOTHERMAL ENERGY.
WITH THIS JOB TICKET. DELIVERED BY OPERAT	OITION TO GANDY-MARLEY, INC.'S ACCE TRANSPORTER REPRESENTS AND WA OR/SHIPPER TO TRANSPORTER IS NOT FACILITY FOR DISPOSAL.	W DELIVERED BY TRANSPORTER TO
THE WILL CER	TIFY that the above Transporter leaded the escribed location, and that it was tendered blorials were added to this load, and that th	material represented by this Transporter by the above described shipper. This will e material was delivered without incident.
DRIVER:	a Tollon	
FACILITY REPRESENTATIV	And Trees	erior
works - GMI Cenery -	Shloper Pink - Gull Gold - Transp	u—

## GANDY • MARLEY, INC. P.O. Box 1658 Roswoll, NM 88202

(575) 347-0434 Fax (576) 347-0435

LEASE OPERATOR/SHI		TARGA MIDSTREAM
LEASE NAME: DAVI	D BILBREY #	2
TRANSPORTER COMPA	INY: 9 ANdy	TIME:9:13 AMOPM
DATE: 05-04-16	VEHICLE NO.: 3	27 DRIVER NO.:
CHARGE TO:		
	TYPE OF MAT	ERIAL
	QCD	
[ ] Other Material:	Contaminated soil BS&W content:	[ ] C-117 No.:
Description: _C.L		
COMPANY CONTACT:		
VOLUME OF MATERIAL	1 1: YARDS /2	_: CELL#LF_:[]
THIS JOB TICKET. OPERATOR SHIPPED HEREWITH IS MATER ACT OF 1976, AS AMENDED FOODE, \$361.001, OLEOQ. AND AFFORDED CONTAMINATED DEVELOPMENT OR PRODUCT ALSO AS A CONDITION WITH THIS JOB TICKET, TRAUDELIVERED BY OPERATOR'S GANDY-MARLEY, INC.'S FACIL	ASHIPPER HEPRESENTS A RIAL EXEMPT FROM THE ROM TIME TO TIME, 40 U. REGULATIONS RELATED SOILS AND OTHER WAS TON OF CRUDE OIL OR NA IN TO GANDY-MARLEY, INC NSPORTER REPRESENTS HIPPER TO TRANSPORTE JTY FOR DISPOSAL	CEPTANCE OF THE MATERIALS SHIPPED WITH AND WARRANTS THAT THE WASTE MATERIAL RESOURCE, CONSERVATION AND RECOVERY S.C. §6901, 61 56Q., THE NM HEALTH AND SAF, THERETO, BY VIRTUE OF THE EXEMPTION STE ASSOCIATED WITH THE EXPLORATION, ATURAL GAS OR GEOTHERMAL ENERGY.  IS ACCEPTANCE OF THE MATERIALS SHIPPED AND WARRANTS THAT ONLY THE MATERIAL RIS NOW DELIVERED BY TRANSPORTER TO
THIS WILL CERTIFY I	hal the above Transporter k	paded the material represented by this Transporter tendered by the above described shipper. This will and that the material was delivered without incident.
1	o Toete	<i>m</i>
FACILITY REPRESENTATIVE:	Pink-GIE CH	old - Transporter

GANDY-MARLEY, INC.
P.O. Box 1658
Roswell, NM 68202
(575) 347-0434
Fax (575) 347-0435

			CTREAM
LEASE OPERATOR/SI	IPPER/COMPANY: 7	ARGA M	IDSTRETMI
LEASE NAME: D	AUID BILDREY	, 7	
- AMERICAN COM	DANY- a midd	LIMI	E: 9: 29 (AMPM
DATE: 0.5 -04 -	L VEHICLE NO.: 5	17 DRI	VER NO.:
CHARGE TO:			
Official 15	TYPE OF MATE	RIAL	
	OCD	3 3 3 4 4	
[ ] Other Material:	Contaminated soil	[]C-117	' No.:
Description: _CL			
COMPANY CONTACT			
	AL[]: YARDS 12	· CELLE L	F :
VOLUME OF MATERI	AL[ ]: YARDS		
THIS JOB TICKET, OPERATE SHIPPED HEREWITH IS MA ACT OF 1976, AS AMENDED CODE, \$381.001. OF 509. A AFFORDED CONTAMINATE DEVELOPMENT OR PRODUCE ALSO AS A CONDITION WITH THIS JOB TICKET, TO DELIVERED BY OPERATOR OF THE PROPERTY OF THE PROPER	OGANDY-MARLEY, INC.'S ACCORSHIPPER REPRESENTS A TERIAL EXEMPT FROM THE FOR FROM TIME TO TIME, 40 U.S. NO REGULATIONS RELATED ED SOILS AND OTHER WAS ICTION OF CRUDE OIL OR NATION TO GANDY-MARLEY, INC. RANSPORTER REPRESENTS RISHIPPER TO TRANSPORTE ICILITY FOR DISPOSAL.	RESOURCE, CONSE S.C. \$6901, et 809. THERETO, BY VIR TE ASSOCIATED I TURAL GAS OR GEI S ACCEPTANCE OF AND WARRANTS TO R IS NOW DELIVER	ERVATION AND RECOVERY THE NM HEALTH AND SAF, ITUE OF THE EXEMPTION WITH THE EXPLORATION, OTHERMAL ENERGY.  F THE MATERIALS SHIPPED THAT ONLY THE MATERIAL RED BY TRANSPORTER TO
THIS WILL CERTIF	ry that the above Transporter to cribed location, and that it was a erials were added to this load, a	aded the material re landered by the abou nd that the material w	prosented by this Transports re described shipper. This wi vas delivered without incident
FACILITY REPRESENTATIVE:		21	

GANDY-MARLEY, INC.
P.O. Box 1658
Roswoll, NM 88202
(575) 347-0434
Fax (575) 347-0435

Fax (5/5) 34/-0435
LEASE OPERATOR/SHIPPER/COMPANY: TARGA MIDSTREAM
LEASE NAME: DAVID BILBREY "2 TIME 0:20 (AM/PM
TO A NOTICE COMPANY: SHART
DATE: 05-04-16 VEHICLE NO.: 5/6 DRIVER NO.:
CHARGE TO:
TYPE OF MATERIAL
[] Other Material: [] Contaminated soil [] C-117 No.:  Description:
COMPANY CONTACT:
THE OF MATERIAL I VARDS / Z
AS A CONDITION TO GANDY-MARLEY, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WIT AS A CONDITION TO GANDY-MARLEY, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WIT THIS JOB TICKET, OPERATOR/SHIPPER REPRESENTS AND WARRANTS THAT THE WASTE MATERIAL SHIPPED HEREWITH IS MATERIAL EXEMPT FROM THE RESOURCE, CONSERVATION AND RECOVER SHIPPED HEREWITH IS MATERIAL EXEMPT TO TIME, 40 U.S.C. \$8901, 61 669. THE NM HEALTH AND SA ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. \$8901, 61 669. THE NM HEALTH AND SA ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. \$8901, 61 669. THE NM HEALTH AND SA ACT OF \$381.001, 61 669. AND REGULATIONS RELATED THERETO, BY VIRTUE OF THE EXPLORATION AFFORDED CONTAMINATED SOILS AND OTHER WASTE ASSOCIATED WITH THE EXPLORATION AFFORDED CONTAMINATED SOILS AND OTHER WASTE ASSOCIATED WITH THE EXPLORATION DEVELOPMENT OR PRODUCTION OF CRUDE OIL OR NATURAL GAS OR GEOTHERMAL ENERGY.
ALSO AS A CONDITION TO GANDY-MARLEY, INC.'S ACCEPTANCE OF THE MATERIAL WITH THIS JOB TICKET, TRANSPORTER REPRESENTS AND WARRANTS THAT ONLY THE MATERIAL WITH THIS JOB TICKET, TRANSPORTER TO TRANSPORTER IS NOW DELIVERED BY TRANSPORTER DELIVERED BY OPERATOR/SHIPPER TO TRANSPORTER IS NOW DELIVERED BY TRANSPORTER GANDY-MARLEY, INC.'S FACILITY FOR DISPOSAL.
THIS WILL CERTIFY that the above Transporter loaded the material represented by this Transporter loaded the material represented by this Transporter loaded to the above described shipper. This Statement at the above described location, and that it was tendered by the above described shipper. This statement at the above described location, and that the material was delivered without incide contify that no additional materials were added to this load, and that the material was delivered without incide the above t
FACILITY REPRESENTATIVE: 9 Toelon
FACILITY REPRESENTATIVE Shipper Pink - GMR Gold - Transporter

### GANDY-MARLEY, INC. P.O. Box 1658

P.O. Box 1658 Roswell, NM 68202 (575) 347-0434 Fex (575) 347-0435

		V. [7]	- AALA STOPPM
			A MIDSTREAM
	WID BILDA		TIME:22:09 AMPM
TRANSPORTER COM	PANY: 9A	NAA	
DATE: 0.5-04 -/	6 VEHICLE NO	.: 327	DRIVER NO.:
CHARGE TO:			
	TYPE OF	MATERIAL	
	O	CD	
[ ] Other Material:	( ) Contaminated		] C-117 No.:
Description:			
COMPANY CONTACT	:		
VOLUME OF MATER	AL[]: YARDSL	2 _: CELL	#_ <u>LF</u> []
THIS JOB TICKET, OPERAT SHIPPED HEREWITH IS MA ACT OF 1976. AS AMENDE CODE, §361.001, of soq. A AFFORDED CONTAMINATI DEVELOPMENT OR PRODU	ORISHIPPER HEPHESE STERIAL EXEMPT FROM D FROM TIME TO TIME, ND REGULATIONS REI ED SOILS AND OTHER JICTION OF CRUDE OIL	THE RESOURCE 40 U.S.C. §8901, ATED THERETO, WASTE ASSOC OR NATURAL GAS	OF THE MATERIALS SHIPPED WITH ANTS THAT THE WASTE MATERIAL. CONSERVATION AND RECOVERY OF SEC. THE NM HEALTH AND SAF. BY VIRTUE OF THE EXEMPTION MATERIAL WITH THE EXPLORATION. OR GEOTHERMAL ENERGY.
WITH THIS JOB TICKET, T DELIVERED BY OPERATO: GANDY-MARLEY, INC.'S FA	RANSPORTER REPRES R/SHIPPER TO TRANSF CILITY FOR DISPOSAL	ORTER IS NOW	ANCE OF THE MATERIALS SHIPPED RANTS THAT ONLY THE MATERIAL DELIVERED BY TRANSPORTER TO
Statement at the above des cortily that no additional mat	FY that the above Transp gribed location, and that l grials were edded to this t	orter loaded the mi t was tendered by oad, and that the m	alorial represented by this Transporter the above described shipper. This will naterial was delivered without incident.
DRIVER:		cton	
FACILITY REPRESENTATIVE:	-	Gold - Transporte	
White GMI Canary - Shi	bbee saus-eye	Com - rim who is	

GANDY • MARLEY, INC.

P.O. Box 1658

Roswell, NM 88202

(575) 347-0434

Fax (575) 347-0435

	Fax (575) 347-0435	
		GA MIDSTREAM
EASE OPERATOR/S		2_
	UID DILDES	TIME: /2'23AM(PM)
TRANSPORTER COM	PANY: SANDY	
DATE: 05-04-	6 VEHICLE NO.: 516	
CHARGE TO:		
	TYPE OF MATERIA	L
	OCD	
[ ] Other Material:	Contaminated soil	[ ] C-117 No.:
Description: CL		
	-	
COMPANY CONTAC	11:	4F:
	TIAL []: YARDS 12 :	
AS A CONDITION THIS JOB TICKET, OPER, SHIPPED HEREWITH IS A ACT OF 1976, AS AMEND CODE, §381.001, 81 SQL AFFORDED CONTAMINA DEVELOPMENT OR PRO	TO GANDY-MARLEY, INC. S AND INTOR/SHIPPER REPRESENTS AND OTHER WASTED DUCTION OF CRUDE OIL OR NATURAL DUCTION OIL OIL OR NATURAL DUCTION OIL OR NATURAL DUCTION OIL OR NATURAL DUCTION OIL OIL OR NATURAL DUCTION OIL OR NATURAL DUCTION OIL	WARRANTS THAT THE WASTE MATERIAL DURCE, CONSERVATION AND RECOVERY \$6901, of 80q., THE NM HEALTH AND SAF. ERETO, BY VIRTUE OF THE EXEMPTION ASSOCIATED WITH THE EXPLORATION. IAL GAS OR GEOTHERMAL ENERGY. CCEPTANCE OF THE MATERIALS SHIPPED
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AS A CONDITION THIS JOB TICKET, OPER, SHIPPED HEREWITH IS A ACT OF 1976, AS AMEND CODE, \$381.001, at soq. AFFORDED CONTAMINA DEVELOPMENT OR PRO  ALSO AS A CONI WITH THIS JOB TICKET, DELIVERED BY OPERAT GANDY-MARLEY, INC. S	TO GANDY-MARLEY, INC. SAND ATOR/SHIPPER REPRESENTS AND MATERIAL EXEMPT FROM THE RESCRED FROM TIME TO TIME, 40 U.S.C. AND REGULATIONS RELATED THE METED SOILS AND OTHER WASTEDUCTION OF CRUDE OIL OR NATURAL TRANSPORTER REPRESENTS AND TRANSPORTER TO TRANSPORTER IS FACILITY FOR DISPOSAL TRANSPORTER IS FACILITY	WARRANTS THAT THE WASTE MATERIAL DURCE, CONSERVATION AND RECOVERY \$6901, of soq., THE NM HEALTH AND SAF, ERETO, BY VIRTUE OF THE EXEMPTION ASSOCIATED WITH THE EXPLORATION, IAL GAS OR GEOTHERMAL ENERGY.  CCEPTANCE OF THE MATERIALS SHIPPED D WARRANTS THAT ONLY THE MATERIAL NOW DELIVERED BY TRANSPORTER TO

## GANDY-MARLEY, INC. P.O. Box 1658 Roswell, NM 88202

(575) 347-0434 Fax (575) 347-0435

LEASE OPERATOR/SHIPPER/COMPANY: TREGA MIDSTREAM
LEASE NAME: David Bilbest # 2
TRANSPORTER COMPANY: SANDY TIME: 12:31 AMPND
DATE: 0.5 -04 -/6 VEHICLE NO.: 517 DRIVER NO.:
CHARGE TO:
TYPE OF MATERIAL
OCD
[ ] Other Material: [ ] Contaminated soil [ ] C-117 No.:
Description:C_L
COMPANY CONTACT:
VOLUME OF MATERIAL [ ]: YARDS ; CELL#F :[ ]
AS A CONDITION TO GANDY-MARLEY, 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 1978, AS AMENDED FROM TIME TO TIME, 40 U.S.C. §6901, ot soq., THE NM HEALTH AND SAF. CODE, §361.001, ot soq. AND REGULATIONS RELATED THERETO, BY VIRTUE OF THE EXEMPTION AFFORDED CONTAMINATED SOILS AND OTHER WASTE ASSOCIATED WITH THE EXPLORATION, DEVELOPMENT OR PRODUCTION OF CRUDE OIL OR NATURAL GAS OR GEOTHERMAL ENERGY.
ALSO AS A CONDITION TO GANDY-MARLEY, 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 GANDY-MARLEY, 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 lendered 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:
FACILITY REPRESENTATIVE:
White-GMI Canary-Shipper Fink+GM Gold-Transporter

### APPENDIX E Initial and Final C-141

District I 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., 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 Mexic RECEIVED Energy Minerals and Natural I By JKeyes at 10:56 am, Aug 29, 2016

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

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

			Rele	ase Notific	cation	n and Co	rrective A	ction			
						OPERA'	ror	⊠ In	tial Report	☐ Final Repo	
Name of Co		Targa Midst					alph England				
						Telephone No. 575-441-4653					
Facility Name David Bilbrey 8" Pipeline - Site #3						Facility Type Natural Gas Pipeline					
Surface Owner David Bilbrey Mineral Owner						API No.					
				LOCA	ATIO	N OF RE	EASE				
· · · · · · · · · · · · · · · · · · ·			Feet from the		/South Line	East/West Lin	st/West Line County				
F	F 18 9S 38E 2505					N 1523 W Lea					
		1		Latitude 33°32	2'4 71"1	N Longitude	103° 5'32.62"\	λ			
								<u>u.</u>			
Type of Rele	ease Natu	ral Gas Conde	nsale	NAI	TUKE	Volume of		able Volum	e Recovered	0	
Source of Re		nch steel pipel					lour of Occurrence		d Hour of D		
						Unknown	09100519000	12/201			
Was Immedi	ate Notice (		Yes 🗵	No □ Not R	tequired	If YES, To	Whom?				
By Whom?						Date and I-	lour				
Was a Water	course Read		Yes 🛭	No		If YES, Vo	lume Impacting	he Watercourse.			
The release Borings were to about 10 for Describe Are	was caused e drilled to a eet bgs. Soi ea Affected	about 25 feet b I was excavate and Cleanup	of an 8" sto ogs to delined to about Action Tak	cel line transport neate horizontal a 1 13 feet bgs.	and verti	ical impacts. S	oil samples were	collected every	5 feet. Lab re	son & Associates, Inc. esults indicated impac	
I hereby certi regulations a public health should their or or the environ	ify that the i il operators or the environment. In a	information gi are required to ronment. The	ven above o report ar acceptance acceptance	is true and compador file certain the of a C-141 reprinted and control investigate and	plete to trelease reort by the	Figure 3).  the best of my notifications a me NMOCD mate contamination.	knowledge and und perform correctance as "Final R	inderstand that p ctive actions for teport" does not reat to ground we	ursuant to N releases whice relieve the op- ater, surface	MOCD rules and ch may endanger perator of liability water, human health	
	10	/					OIL CON	SERVATIO	N DIVIS	ION	
Signature:	lete by	Cham						Na	willyer		
Printed Name	e: Cal Wrai	ngham				Approved by	Environmental S	pecialist:			
Title: EHS N	/anager					Approval Da	08/29/2016 e:	Expiration	on Date: 10/2	9/2016	
E-mail Addre	ess: Calvin	Wrangham@t	argaresout	rces.com		Conditions of Discrete samp	Approval: les only. Delineat		Attach	ed 🗆	

NMOCD guidelines.

Phone: 432-688-0542

08/19/2016

<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 District II 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

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Form C-141

Revised August 8, 2011

Release Notification and Corrective Action														
						OPERATOR					⊠ F	inal Report		
Name of Co		Contact Ralph England												
Address P.O. Box 1689, Lovington, NM 88260						Telephone No. 575-441-4653								
Facility Name David Bilbrey 8" Pipeline – Site #3						Facility Type Natural Gas Pipeline								
Surface Ow	ner Dav	id Bilbrey		Mineral O	wner				API No					
				LOCA	TIO	ON OF RELEASE								
Unit Letter	Section	Township	Range	Feet from the	Nort	h/South Line	Feet from the	East/	West Line		County			
F	18	9S	38E	2505		N 1523			W		Lea			
	l				4.7111		10205122 621							
			L	atitude <u>33°32'</u>	4.71"	N Longitud	e <u>103°5'32.62"</u>	<u> W</u>						
				NAT	URE	E OF RELI	EASE							
Type of Rele Source of Re		ral Gas Conde				Volume of	Release 5-10 b		Volume F		0			
Source of Re	iease 8 in	ich steel pipel	ine			Unkown	iour of Occurrenc	e	12/2015	Hour of Dis	scovery			
Was Immedia	ate Notice C	_		. –		If YES, To	Whom?		•					
		Ш	Yes 🗵	No Not Re	quired									
By Whom? Was a Water	Pource Dance	shad?				Date and H	lour dume Impacting t	ho Wat	arcoursa					
was a water	course Reac		Yes 🗵	] No		II IES, VC	nume impacting t	ne wai	ercourse.					
	ırse was Im	pacted, Descri	ibe Fully.	k		ADDDO	VED							
N/A APPROVED														
					E	By Olivia	Yu at 3:2:	5 pn	n, Jun	01, 201	7			
Describe Cause of Problem and Remedial Action Taken.*  The release was caused by corrosion of an 8" steel line transporting natural gas. Release area was sampled on March 9, 2015 by Larson & Associates, Inc. Borings were drilled to about 25 feet bgs to delineate horizontal and vertical impacts. Soil samples were collected every 5 feet. Lab results indicated impact to about 10 feet bgs. Soil was excavated to about 13 feet bgs.														
Describe Area Affected and Cleanup Action Taken.*  Impacted soil was excavated to approximately 13 feet bgs and disposed at Gandy Marley Landfill (NM-711-1-0019). Discrete samples were collected from excavation bottom and sidewalls and were below RRAL for TPH. Chloride delineated to 250 mg/Kg in boring samples. Composite soil samples were collected from soil piles and analyzed for TPH and chloride, which was below the RRAL. Clean soil piles and additional soil from landowner was used to fill the excavation. Targa personnel seeded the site based off the landowner's recommendations.														
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.														
OIL CONSERVATION DIVISION														
Signature:									PU.					
Printed Name	e: Cal Wr	angham				Approved by	Environmental S	pecialis	st:					
Title: EHS	Manager					Approval Dat	6/1/2017 e:		Expiration 1	Date: XX/XX/XXXX				
E-mail Addre	ess: Calvi	nWrangham@	targareso	ources.com	Conditions of Approval:									

Phone:

432-688-0542

9/8/2016

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