### **APPROVED**

By Olivia Yu at 2:16 pm, Jun 01, 2017

NMOCD approves 1RP-4419 for closure.

#### 1RP-4419

# REMEDIATION REPORT David Bilbrey 8 Inch Pipeline Release Site #1

Lea County, New Mexico

33° 31' 50.1276" North 103° 05' 23.5860" West

LAI Project No. 15-0171-01

March 2, 2017

Prepared for:

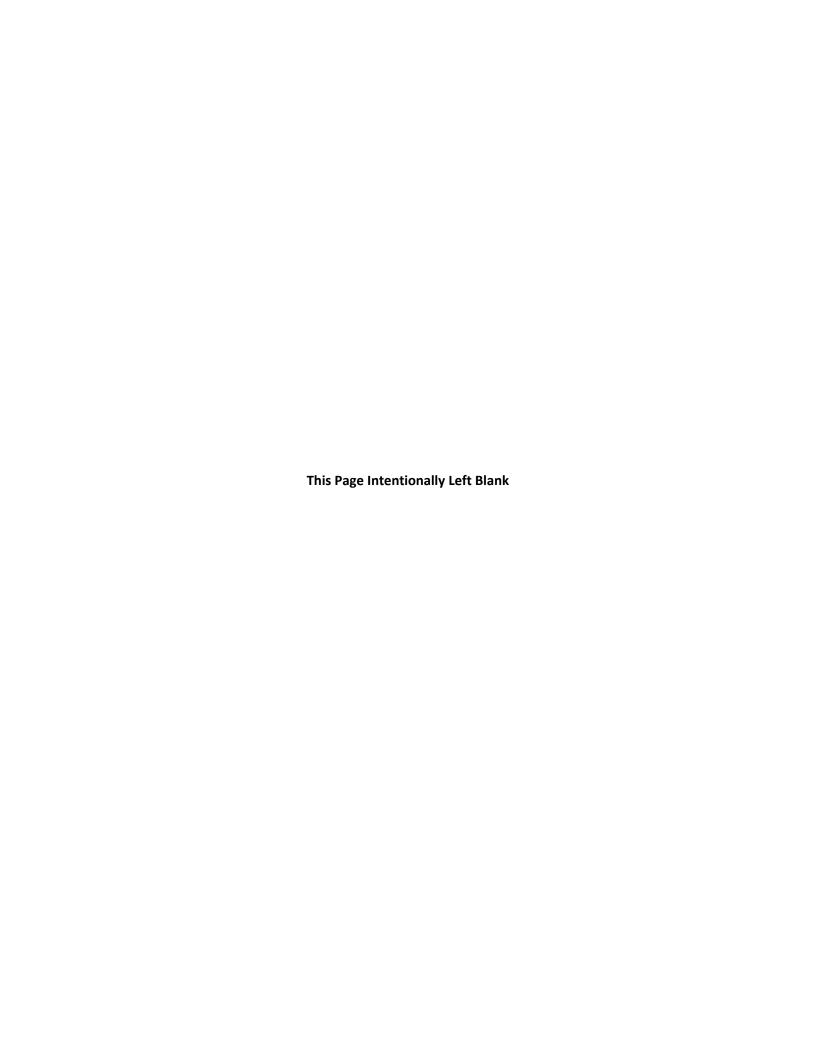
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#### 1RP-4419 Remediation Report David Bilbrey 8 Inch Pipeline Release Site #1 March 2, 2017

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#### 1.0 INTRODUCTION

Larson & Associates, Inc. (LAI) has prepared this report on behalf of Targa Midstream Services, LLC (Targa) for two (2) natural gas liquid releases from the David Bilbrey 8" pipeline in Unit K (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. On August 24, 2016, the initial C-141 was submitted to the New Mexico Oil Conservation Division (OCD) District 1 which assigned the release remediation permit number 1RP-4419. Targa personnel exposed the pipeline to placed temporary clamps on the pipeline to mitigate the releases. The segment of pipeline with the temporary clamps was replaced following remediation. The geodetic position is 33° 31′ 50.1276" North and 103° 05′ 23.5860" West. Figure 1 presents a topographic map. Figure 2 presents an aerial map. Figure 3 presents a Site drawing.

#### 1.1 Physical Setting

The surface elevation is about 3,970 feet above mean sea level (MSL) and topography is slightly undulating and regionally slopes to the southeast. 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 Recommended Remediation Action Levels

Recommended remediation action levels (RRAL) 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 December 21, 2015, personnel from LAI collected soil samples using hand augers (HA-1 through HA-8) from the bottom and sidewalls of the excavation made by Targa to expose the pipeline and repair the release. The samples were screened for headspace vapors with a calibrated photoionization detector (PID) in 8 ounce glass jars sealed with aluminum foil. Soil vapor headspace readings were above the OCD soil screening level of 100 parts per million (ppm) in all but two (2) samples: HA-5 (72.50 ppm) and HA-8 (6.70 ppm). The samples were delivered under preservation and chain of custody to Trace Analysis in Lubbock, Texas and were analyzed for benzene, toluene, ethylbenzene and xylenes (BTEX) by EPA SW-846 Method 8021B, total petroleum hydrocarbons (TPH) by Method 8015 including gasoline (GRO) and diesel (DRO) range organics and chloride by Method E300. The laboratory reported benzene above the RRAL of 10 milligrams per kilogram (mg/kg) in sample HA-2 (12.00 mg/kg). The laboratory reported BTEX and TPH above the RRAL of 50 mg/kg and 100 mg/kg, respectively, in samples HA-1, HA-2, HA-3, HA-4 and HA-7. Bottom samples HA-1 and HA-2 reported chloride at 1,870 mg/kg and 3,150 mg/kg, respectively, and above the OCD delineation limit of 250 mg/kg.

On January 11 – 12, 2016 and February 3, 2016, LAI personnel collected soil samples from six (6) air rotary borings (SB-1 through SB-6) drilled by Scarborough Drilling, Inc. Borings SB-5 and SB-6 were drilled in close proximity to leak 1 and leak 2, respectively. The soil samples were analyzed by Trace for BTEX by EPA SW-846 Method 8021B, TPH by Method 8015 and chloride by Method E300. Benzene exceeded the RRAL (10 mg/Kg) in samples SB-5 at 10 feet (177 mg/Kg) and SB-6 at 10 feet (273 mg/Kg). The laboratory reported BTEX and TPH above the RRAL of 50 mg/Kg and 100 mg/Kg, respectively, in samples SB-5 at 10 feet and SB-6 at 10 feet. Sample SB-2 at 0 feet reported TPH above the RRAL. Chloride was delineated vertically to 250 mg/Kg in borings SB-5 and SB-6. Table 1 presents the investigation sample analytical data summary. Figure 3 presents the sample locations. Appendix A presents the laboratory report.

#### 3.0 REMEDIATION

On March 10-11, 2016, Watson Construction Inc. (Watson), with supervision from LAI, excavated soil to approximately 12 feet bgs in the area of borings SB-5 and SB-6 where benzene exceeded the RRAL. On March 11, 2016, LAI personnel collected samples from the excavation bottom at about 12 feet bgs (SS-1, SS-2, SS-3 and SS-7) and sidewalls (SS-4, SS-5, SS-6, SS-8 and SS-9) from about 8 feet bgs. The samples were tested for headspace vapors with a PID and recorded low concentrations except bottom samples SS-2 (387 ppm) and SS-3 (828 ppm). Trace analyzed samples SS-2 and SS-3 for BTEX, TPH and chloride and reported benzene below the method reporting limit (RL) and BTEX below the RRAL. TPH was 20.0 mg/Kg in sample SS-2 and below the RL in sample SS-3. Chloride was 53.6 mg/Kg and 171 mg/kg in samples SS-2 and SS-3, respectively. Based on the PID readings additional the excavation was deepened to about 20 feet bgs on March 14, 2016. Samples were collected at 15, 18 and 20 feet bgs at SS-2 and SS-3, on March 14, 2016. The headspace readings ranged from 117 ppm in sample S-2, 20 feet to 503 ppm in sample S-2, 18 feet. The samples were analyzed by Trace and reported BTEX below the RRAL and TPH below the RL. Table 2a presents the preliminary remediation confirmation soil sample analytical data summary. Figure 3 presents the initial excavation and soil sample locations. Appendix A presents the laboratory report.

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On March 16, 2016, LAI personnel collected final remediation confirmation samples from the excavation. Samples were collected from the sidewalls and bottom of the excavation. The samples were delivered under preservation and chain of custody to Permian Basin Environmental Lab (PBEL) in Midland, Texas. PBEL analyzed the samples for TPH by EPA SW-846 Method 8015 including gasoline (C6 to C12), diesel (>C12 to C28) and oil (>C28 to C35) range organics and chloride by Method 3000. TPH was below the RRAL in but ten (10) samples (SEW-15, EW-5, EW-10, EW-15, EW-20, NEW-10, NEW-20, NW-15 and SW-20). Table 2b presents the final remediation soil sample analytical data summary. Appendix a presents the laboratory report.

Between March 16 and 22, 2016, Watson, without approval from Targa or supervision from LAI, extended the excavation laterally (east and west) about 20 feet and deepened the excavation to about 23 feet bgs. On March 22, 2016, LAI personnel arrived at the Site to collect GPS coordinates and discovered Watson personnel excavating soil, and promptly shut down the operation. LAI personnel collected composite soil samples from six (6) soil piles (Pile 1 through Pile 6) scattered around the perimeter of the excavation. The samples were analyzed by PBEL for TPH and chloride and reported concentrations below the RRAL in but one sample (Pile 5). Table 2b presents the composite sample analytical data summary. Figure 4 presents the final excavation drawing and soil sample locations. Appendix A presents the laboratory reports. Appendix B presents photographs.

Gandy Construction (Gandy) replaced Watson for completing the remediation. On March 24, 2016, LAI personnel collected samples at locations from the final excavation where previous samples on March 16, 2016, reported TPH above the RAL, including the southeast corner (SEW-15), east side center (EW-5, EW-10, EW-15, and EW-20), northeast corner (NEW-10 and NEW-20), north side center (NW-15) and south side center (SW-20). The samples were submitted to Trace and analyzed for TPH by EPA SW-846 Method 8015, including GRO, DRO and ORO, and chloride. TPH in the final confirmation samples was below the RRAL (see Table 2b). Chloride was 351 mg/Kg in the bottom sample (Bottom-23) and was delineated to 250 mg/Kg (SB-5, 25 feet).

Soil from Pile 1 through Pile 4 and Pile 6 with additional clean soil acquired from the surface owner (David Bilbrey) to fill the excavation. Between April 19 and 25, 2016, Gandy transported approximately 900 cubic yards of soil from Pile 5 and additional soil removed from the southwest corner of the excavation to the Gandy Marley Landfill (NM1-19-0) located west of Tatum, in Chaves County, New Mexico. The surface will be seeded to the landowner's requirements. Appendix C presents the waste manifests.

#### 4.0 CONCLUSION

Targa has remediated the releases below the RRAL and requests no further action for RP1-4419. Appendix D presents the initial and final C-141.



# Table 1 Assessment Soil Sample Analytical Data Summary Targa Midstream Services, LLC, David Bilbrey 8" Pipeline Site #1 Lea County, New Mexico 1RP-4419

#### 33° 31′ 50.1276″ N 103° 05′ 23.5860″ W

Sample	Collection Date	Location	Depth (Feet)	Status	PID (ppm)	Benzene (mg/Kg)	BTEX (mg/Kg)	GRO (mg/Kg)	DRO (mg/Kg)	ORO (mg/Kg)	TPH (mg/Kg)	Chloride (mg/Kg)
OCD RRAL:			,			10	50	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	( 0, 0,	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	100	250*
					Hand Au	ger Samples						
HA-1	12/21/2015	Bottom Leak (2)	5	In-situ	128.7	1.73	459.53	4,460	7,870		12,330	1,870
HA-2	12/21/2015	Bottom Leak (1)	5	In-situ	128.7	12.00	616.70	7,260	11,800		19,060	3,150
HA-3	12/21/2015	North Wall (2)	5	In-situ	129.4	1.56	308.06	4,150	11,200		15,350	<25.0
HA-4	12/21/2015	South Wall (2)	5	In-situ	129.2	<1.00	52.59	2,350	1,540		3,890	<25.0
HA-5	12/21/2015	North Wall (1)	5	In-situ	72.50	<0.004	0.06	<8.00	<50.0		<50.0	<25.0
HA-6	12/21/2015	South Wall (1)	5	In-situ	109.6	<0.0200	<0.0200	<4.00	<50.0		<50.0	45.80
HA-7	12/21/2015	East Wall	4	In-situ	128.7	9.08	655.08	6,450	9,790		16,240	73.50
HA-8	12/21/2015	West Wall	4	In-situ	6.70	<0.0200	<0.0200	<4.00	<50.0		<50.0	<25.0
Soil Boring Samples												
SB-1	1/11/2016	East	0	In-situ	13.6	-	-	-	-	-	-	-
	1/11/2016		5	In-situ	6.6	-	-	-	-	-	-	-
	1/11/2016		10	In-situ	10.8	-	-	-	-	-	-	-
	1/11/2016		15	In-situ	13.6	-	-	<4.00	<50.0	<50.0	<50.0	<25.0
	1/11/2016		20	In-situ	11.8	-	-	-	-	-	-	-
	1/11/2016		25	In-situ	13.1	-	-	-	-	-	-	-
SB-2	1/11/2016	North	0	In-situ	77.4	-	-	104	658	<250	762	73.7
	1/12/2016		5	In-situ	26.3	-	-	-	-		-	-
	1/12/2016		10	In-situ	14.6	-	-	<4.00	<50.0	<50.0	<50.0	25.5
	1/12/2016		15	In-situ	11.3	-	-	-	-	-	-	-
	1/12/2016		20	In-situ	9.3	-	-	-	-	-	-	-
	1/12/2016		25	In-situ	5.7	-	-	-	-	-	-	-
SB-3	1/12/2016	West	0	In-situ	29.8	-	-	-	-	-	-	-
	1/12/2016		5	In-situ	10.9	-	-	-	-	-	-	-
	1/12/2016		10	In-situ	7.1	-	-	-	-	-	-	-
	1/12/2016		15	In-situ	39.4	-	-	<4.00	<50.0	<50.0	<50.0	<25.0
	1/12/2016		20	In-situ	16.2	-	-	-	-	-	-	-
	1/12/2016		25	In-situ	15.1	-	-	-	-	-	-	-
SB-4	1/12/2016	South	0	In-situ	28.5	-	-	-	-	-	-	-

#### Table 1

# Assessment Soil Sample Analytical Data Summary Targa Midstream Services, LLC, David Bilbrey 8" Pipeline Site #1 Lea County, New Mexico

#### 1RP-4419

33° 31' 50.1276" N 103° 05' 23.5860" W

Sample	Collection	Location	Depth	Status	PID	Benzene	BTEX	GRO	DRO	ORO	TPH	Chloride
	Date		(Feet)		(ppm)	(mg/Kg)						
OCD RRAL:						10	50				100	250*
	1/12/2016		5	In-situ	3.8	-	-	-	-	-	-	-
	1/12/2016		10	In-situ	11.3	-	-	-	-	-	-	-
	1/12/2016		15	In-situ	11.3	-	-	-	-	-	-	-
	1/12/2016		20	In-situ	26.9	-	-	-	-	-	-	-
	1/12/2016		25	In-situ	12.1	-	-	<4.00	<50.0	<50.0	<50.0	<25.0
SB-5	2/3/2016	Leak 1	0	In-situ	-	-	-	-	-	-	-	-
	2/3/2016		5	In-situ	-	-	-	-	-	-	-	-
	2/3/2016		10	In-situ	128.4	177	798.8	4,930	4,880	<1,000	9,810	347
	2/3/2016		15	In-situ	75.1	<0.0200	0.7	16.4	<50.0	<50.0	16.4	334
	2/3/2016		20	In-situ	43.8	-	-	18.8	<50.0	<50.0	18.8	357
	2/3/2016		25	In-situ	21.2	<0.0200	<0.0200	<4.00	<50.0	<50.0	<50.0	254
SB-6	2/3/2016	Leak 2	0	In-situ	-	-	-	-	-	-	-	-
	2/3/2016		5	In-situ	-	-	-	-	-	-	-	-
	2/3/2016		10	In-situ	128.2	273	3,245	23,400	6,420	<1,000	29,820	274
	2/3/2016		15	In-situ	107.8	0.0	1.8	17.0	<50.0	<50.0	17.0	32.8
	2/3/2016		20	In-situ	8.7	<0.0200	0.2	<4.00	<50.0	<50.0	<50.0	33.1
	2/3/2016		25	In-situ	1.8	-	-	-	-	-	-	-
				S	oil Pile Sam	ples						
S-1	1/19/2016	Site1 First Pile		Excavated	117.2	-	-	9.44	323	<50.0	332	27.0
S-2	1/19/2016	Site1 North Pile		Excavated	75.8	-	-	<4.00	<50.0	<50.0	<50.0	<25.0
S-3	1/19/2016	Site1 South Pile		Excavated	27.4	-	-	<4.00	<50.0	<50.0	<50.0	<25.0
S-4	1/19/2016	New Exc. Pile		Excavated	2.6	-	-	<4.00	<50.0	<50.0	<50.0	<25.0

Notes: Laboratory analysis performed by Trace Analysis, Inc., Lubbock, Texas, by EPA SW-846 Methods 8021B (BTEX), 8015 (TPH) and E300 (chloride) Depth in feet below ground surface (bgs)

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

**Bold and highlighted indicates that analyte was detected above OCD recommended remediation action level (RRAL)** 

Bold and highlighted indicates that analyte was detected above OCD delineation level

<sup>-:</sup> indicates that analysis was not performed

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

#### Table 2a

# Preliminary Remediation Confirmation Soil Sample Analytical Data Summary Targa Midstream Services, LLC, David Bilbrey 8" Pipeline Site #1 Lea County, New Mexico 1RP-4419

33° 31′ 50.1276" N 103° 05′ 23.5860" W

Sample	Collection Date	Location	Depth (Feet)	Status	PID (ppm)	Benzene (mg/Kg)	BTEX (mg/Kg)	GRO (mg/Kg)	DRO (mg/Kg)	ORO (mg/Kg)	TPH (mg/Kg)	Chloride (mg/Kg)
OCD RRAL:											100	250*
SS-1	3/11/2016	Bottom	12	Excavated	9.7							
SS-2	3/11/2016	Bottom	12	Excavated	387	<0.0200	2.66	20.0	<50.0		20.0	53.6
SS-3	3/11/2016	Sidewall	8	Excavated	828	<0.0200	0.4356	<4.00	<50.0		<50.0	171
SS-4	3/11/2016	Sidewall	8	Excavated	0.8							
SS-5	3/11/2016	Sidewall	8	Excavated	68.1							
SS-6	3/11/2016	Sidewall	8	Excavated	2.6							
SS-7	3/11/2016	Bottom	12	Excavated	7.9							
SS-8	3/11/2016	Sidewall	8	Excavated	6.1							
SS-9	3/11/2016	Sidewall	8	Excavated	2.6							
S-2	3/14/2016	Bottom	15	Excavated	144	0.102	0.737	<4.00	<50.0		<50.0	
	3/14/2016	Bottom	18	Excavated	503	0.027	0.1237	<4.00	<50.0		<50.0	
	3/14/2016	Bottom	20	Excavated	117	<0.0200	0.0229	<4.00	<50.0		<50.0	
S-3	3/14/2016	Bottom	15	Excavated	186	<0.0200	<0.0200	<4.00	<50.0		<50.0	
	3/14/2016	Bottom	18	Excavated	495	0.100	0.4699	<4.00	<50.0		<50.0	
	3/14/2016	Bottom	20	Excavated	298	0.0604	0.185	<4.00	<50.0		<50.0	
						Soil Pile						
SP-1	3/11/2016			Excavated								249

Notes: Laboratory analysis performed by Trace Analysis, Inc., Lubbock, Texas, by EPA SW-846 Methods 8021B (BTEX), 8015 (TPH) and E300 (chloride)

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

P: Analysis pending

Bold and highlighted denotes analyte concentration exceeds OCD recommended remediation action level (RRAL)

Bold and highlighted indicates that analyte was detected above OCD delineation level

Depth in feet below ground surface (bgs)
\*: indicates the OCD delineation level

Table 2b
Remediation Confirmation Soil Sample Analytical Data Summary
Targa Midstream Services, LLC, David Bilbrey 8" Pipeline Site #1
Lea County, New Mexico
1RP-4419

#### 33° 31' 50.1276" N 103° 05' 23.5860" W

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Sample	Collection Date	Location	Depth (Feet)	Status	PID (ppm)	GRO (mg/Kg)	DRO (mg/Kg)	ORO (mg/Kg)	TPH (mg/Kg)	Chloride (mg/Kg)
OCD RRAL:	Date		(1001)		(ррііі)	(1116/116/	(1116/116)	(1116/116)	100	250**
SWW-5	3/16/2016	Southwest Corner	10	Excavated	4.0	<29.4	<29.4	<29.4	<29.4	60.1
SWW-10	3/16/2016	Southwest Corner	10	Excavated	15.0	<27.8	<27.8	<27.8	<27.8	109
SWW-15	3/16/2016	Southwest Corner	15	Excavated	25.0	<29.1	<29.1	<29.1	<29.1	111
SWW-20	3/16/2016	Southwest Corner	20	In-situ	13.0	<28.4	59.0	<28.4	59.9	1,200
NWW-5	3/16/2016	Northwest Corner	5	Excavated	2.6	<27.2	46.8	34.1	80.9	16.1
NWW-10	3/16/2016	Northwest Corner	10	Excavated	2.0	<27.8	<27.8	<27.8	<27.8	56.9
NWW-15	3/16/2016	Northwest Corner	15	Excavated	4.6	<28.1	<28.1	<28.1	<28.1	5.46
NWW-20	3/16/2016	Northwest Corner	20	In-situ	0.8	<27.8	<27.8	<27.8	<27.8	11.8
WW-5	3/16/2016	West Side Center	5	Excavated	13.2	<27.8	48.3	<27.8	48.3	3.43
WW-10	3/16/2016	West Side Center	10	Excavated	6.1	<28.4	<28.4	<28.4	<28.4	7.33
WW-15	3/16/2016	West Side Center	15	Excavated	11.7	<28.7	<28.7	<28.7	<28.7	4.51
WW-20	3/16/2016	West Side Center	20	In-situ	13.3	<29.1	34.2	<29.1	34.2	7.85
SEW-5	3/16/2016	Southeast Corner	5	Excavated	6.1	<26.9	47.2	45.6	92.8	16.9
SEW-10	3/16/2016	Southeast Corner	10	Excavated	4.4	<29.1	<29.1	<29.1	<29.1	16.4
SEW-15	3/16/2016	Southeast Corner	15	Excavated	2.6	<27.5	90.9	57.5	148.4	10.7
*SE Wall 15	3/24/2016	Southeast Corner	15	In-situ		<4.00	<50.0	<50.0	<50.0	<25.0
SEW-20	3/16/2016	Southeast Corner	20	In-situ	36.0	<28.4	36.7	<28.4	36.7	111
EW-5	3/16/2016	East Side Center	5	Excavated	2.6	<26.9	126	57.8	183.8	5.70
EW-10	3/16/2016	East Side Center	10	Excavated	110.7	<27.5	79.0	40.5	119.5	7.14
EW-15	3/16/2016	East Side Center	15	Excavated	27.0	<27.5	70	33.8	104	9.63
EW-20	3/16/2016	East Side Center	20	Excavated	15.0	<27.2	102	33.1	135.1	25.5
*E Wall 20	3/24/2016	East Side Center	20	In-Situ		<4.00	<50.0	<50.0	<50.0	<25.0

33° 31′ 50.1276″ N 103° 05′ 23.5860″ W

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Table 2b
Remediation Confirmation Soil Sample Analytical Data Summary
Targa Midstream Services, LLC, David Bilbrey 8" Pipeline Site #1
Lea County, New Mexico
1RP-4419

Sample	Collection Date	Location	Depth (Feet)	Status	PID (ppm)	GRO (mg/Kg)	DRO (mg/Kg)	ORO (mg/Kg)	TPH (mg/Kg)	Chloride (mg/Kg)
OCD RRAL:									100	250*
NEW-5	3/16/2016	Northeast Corner	5	Excavated	4.4	<28.1	43.1	<28.1	43.1	19.9
NEW-10	3/16/2016	Northeast Corner	10	Excavated	9.2	<27.2	84.5	40.3	124.8	3.67
NEW-15	3/16/2016	Northeast Corner	15	Excavated	22.4	<27.5	50.1	<27.5	50.1	11.3
NEW-20	3/16/2016	Northeast Corner	20	Excavated	154	43.9	462	104	610.9	70.7
*NE Wall 20	3/24/2016	Northeast Corner	20	In-situ		<4.00	<50.0	<50.0	<50.0	<25.0
NW-15	3/16/2016	North Side Center	15	Excavated	87.2	<27.2	92.4	42.9	135.3	100
*N Wall 15	3/24/2016	North Side Center	15	In-situ		<4.00	<50.0	<50.0	<50.0	550
NW-20	3/16/2016	North Side Center	20	In-situ	36.2	<28.1	58.8	<28.1	58	12.0
**N Wall 20	3/24/2016	North Side Center	20	In-situ		<4.00	<50.0	<50.0	<50.0	1,900
SW-15	3/16/2016	South Side Center	15	Excavated	89.3	<27.8	56.5	<27.8	56.5	877
SW-20	3/16/2016	South Side Center	20	Excavated	53.9	<28.1	143	41.9	184.9	2,170
**S Wall 20	3/24/2016	South Side Center	20	In-situ		<4.00	<50.0	<50.0	<50.0	3,120
Bottom-23	3/16/2016	Center	23	In-situ	144.2	<28.4	61.3	32.1	93.5	351
					Soil Pile					
Pile 1	3/23/2016			Excavated		<27.5	<27.5	<27.5	<27.5	9.52
Pile 2	3/23/2016			Excavated		<26.9	78.9	<26.9	78.9	75.4
Pile 3	3/23/2016			Excavated		<27.8	<27.8	<27.8	<27.8	365
Pile 4	3/23/2016			Excavated		<26.9	<26.9	<26.9	<26.9	8.44
Pile 5	3/24/2016			Excavated		<27.2	247	33.7	281.7	153
Pile 6	3/23/2016			Excavated		<27.5	<27.5	<27.5	<27.5	81.2
NE Pile	4/7/2016			Excavated		109	997	127	1,233	

33° 31' 50.1276" N 103° 05' 23.5860" W

Page 3 of 3

Notes: Laboratory analysis performed by Permian Basin Environmental Lab by EPA SW-846 Methods 8021B (BTEX), 8015 (TPH) and E300 (chloride)

#### Table 2b

# Remediation Confirmation Soil Sample Analytical Data Summary Targa Midstream Services, LLC, David Bilbrey 8" Pipeline Site #1 Lea County, New Mexico 1RP-4419

- \* Analysis performed by Trace Analysis, inc., Lubbock, Texas by EPA SW-846 Methods 8021B (BTEX), 8015 (TPH) and E300 (chloride) Depth in feet below ground surface (bgs)
- \*\*: indicates the OCD delineation level

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

P: Analysis pending

**Bold and highlighted denotes analyte concentration exceeds OCD recommended remediation action level (RRAL)** 



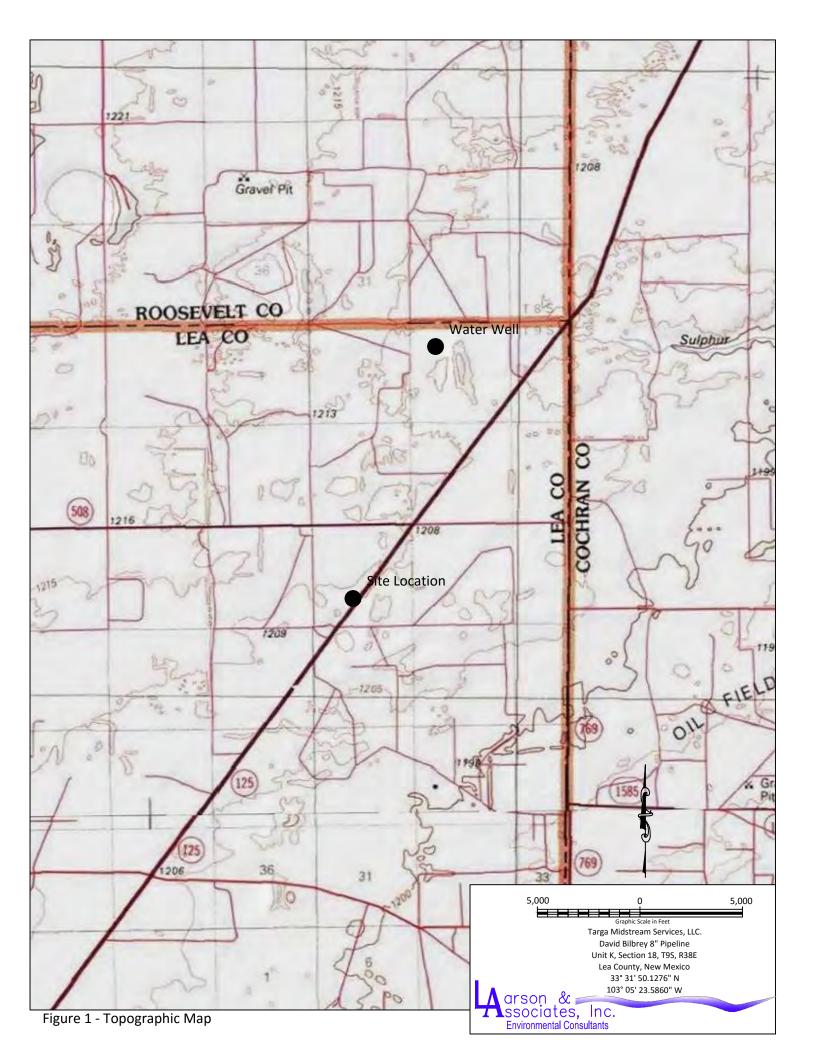




Figure 2a - Aerial Map

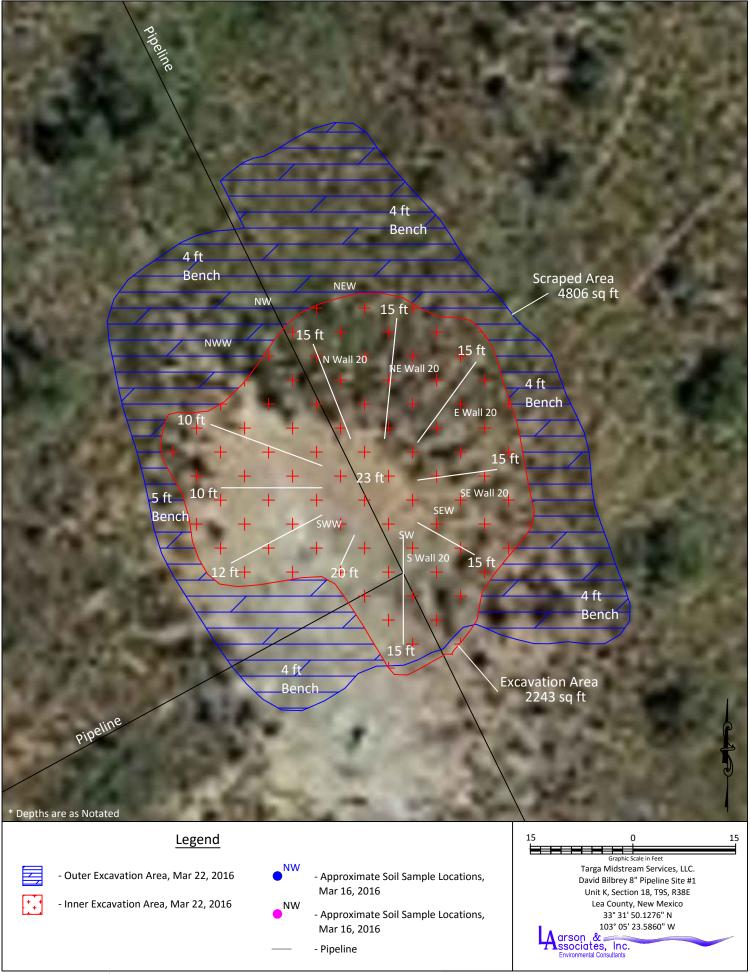


Figure 2 - Aerial Map 8.5" x 11"

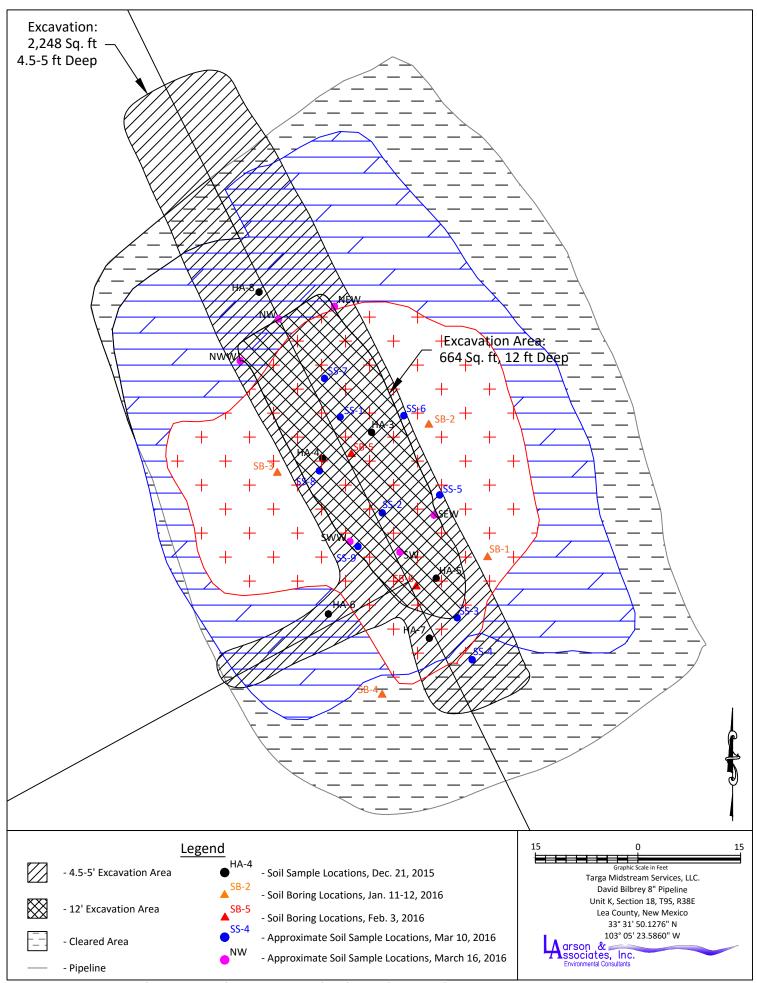


Figure 3 - Site Map Showing Initial Excavation and Soil Samples, March 16, 2016

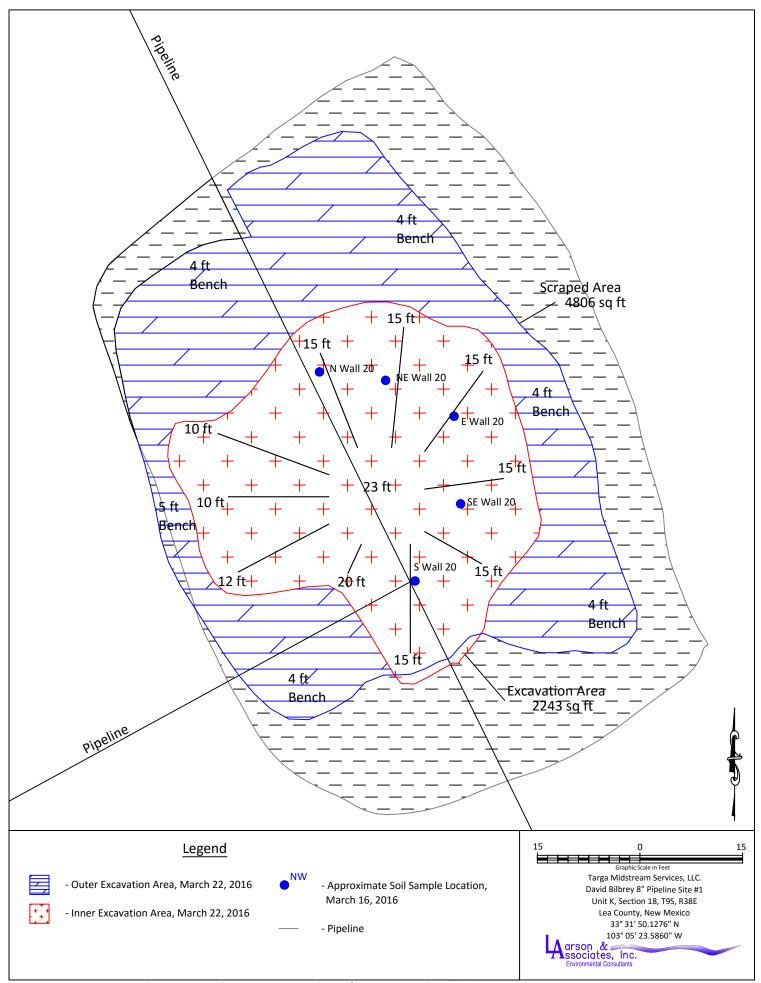


Figure 4 - Site Map Showing Final Excavation and Confirmation Soil Samples, March 16, 2016

# APPENDIX A Laboratory Reports



#### Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

## Analytical and Quality Control Report

Report Date: January 4, 2016

15122909

Work Order:

John White Larson and Associates, Inc.

 $\begin{array}{l} {\rm P.~O.~Box~50685} \\ {\rm Midland,~TX,~79710} \end{array}$ 

Project Name: David Bilbrey 8" Pipeline

Project Number: 15-0171-01

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

			Date	1 line	Date
Sample	Description	Matrix	Taken	Taken	Received
411056	HA-1	soil	2015-12-21	11:49	2015-12-29
411057	HA-2	soil	2015-12-21	11:55	2015-12-29
411058	HA-3	soil	2015-12-21	11:03	2015-12-29
411059	HA-4	soil	2015-12-21	11:07	2015-12-29
411060	HA-5	soil	2015-12-21	11:10	2015-12-29
411061	HA-6	soil	2015-12-21	11:16	2015-12-29
411062	HA-7	soil	2015-12-21	11:19	2015-12-29
411063	HA-8	soil	2015-12-21	11:24	2015-12-29

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

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

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### Case Narrative

Samples for project David Bilbrey 8" Pipeline were received by TraceAnalysis, Inc. on 2015-12-29 and assigned to work order 15122909. Samples for work order 15122909 were received intact at a temperature of 4.9 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	107711	2015-12-30 at 12:58	127247	2015-12-30 at 12:58
Chloride (IC)	E 300.0	107731	2016-01-04 at 08:30	127272	2016-01-04 at 09:27
TPH DRO	S 8015 $D$	107712	2015-12-30 at $14:00$	127252	2016-01-04 at $10:35$
TPH GRO	S 8015 $D$	107711	2015-12-30 at 12:58	127248	2015-12-30 at $12:58$

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 15122909 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: January 4, 2016 Work Order: 15122909 Page Number: 5 of 29

15-0171-01 David Bilbrey 8" Pipeline

### **Analytical Report**

Sample: 411056 - HA-1

Laboratory: Lubbock

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035 QC Batch: 127247 Date Analyzed: 2015-12-30 Analyzed By: MT Prep Batch: 107711 Sample Preparation: 2015-12-30 Prepared By: MT

			RL			
Parameter	Flag	Cert	Result	Units	Dilution	RL
Benzene		1,2,3,4,5	1.73	m mg/Kg	50	0.0200
Toluene		1,2,3,4,5	48.8	m mg/Kg	50	0.0200
Ethylbenzene		1,2,3,4,5	190	$\mathrm{mg}/\mathrm{Kg}$	50	0.0200
Xylene		1,2,3,4,5	<b>219</b>	$\mathrm{mg}/\mathrm{Kg}$	50	0.0200

							$_{ m Spike}$	Percent	Recovery
Surrogate		Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)	Qsr	Qsr	5	5.40	mg/Kg	50	2.00	270	77.1 - 120
4-Bromofluorobenzene (4-BFB)	$_{\mathrm{Qsr}}$	$_{\mathrm{Qsr}}$	5	11.9	mg/Kg	50	2.00	595	71.2 - 123

Sample: 411056 - HA-1

Laboratory: Lubbock

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A QC Batch: 127272 Date Analyzed: 2016-01-04 Analyzed By: RL Prep Batch: 107731 Sample Preparation: Prepared By: RL

			RL			
Parameter	Flag	Cert	Result	Units	Dilution	RL
Chloride		3,4,5	1870	$\mathrm{mg/Kg}$	5	25.0

Sample: 411056 - HA-1

Laboratory: Lubbock

			RL			
Parameter	Flag	Cert	Result	Units	Dilution	RL
DRO		1,2,3,4	7870	m mg/Kg	10	50.0

Report Date: January 4, 2016 Work Order: 15122909 Page Number: 6 of 29

15-0171-01 David Bilbrey 8" Pipeline

							Spike	Percent	Recovery
Surrogate		Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane	Qsr	Qsr	3	466	mg/Kg	10	25.0	1864	48.9 - 172

#### Sample: 411056 - HA-1

Laboratory: Lubbock

Analysis: TPH GRO Prep Method: S 5035 Analytical Method: S 8015 D QC Batch: 127248Date Analyzed: 2015-12-30 Analyzed By: MTPrep Batch: 107711 Sample Preparation: 2015-12-30 Prepared By: MT

			RL			
Parameter	Flag	Cert	Result	Units	Dilution	RL
GRO		1,2,3,4	4460	mg/Kg	50	4.00

							$_{ m Spike}$	Percent	Recovery
Surrogate		Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			3	2.22	mg/Kg	50	2.00	111	76.5 - 130
4-Bromofluorobenzene (4-BFB)	$_{\mathrm{Qsr}}$	$_{ m Qsr}$	3	55.1	mg/Kg	50	2.00	2755	68.4 - 120

#### Sample: 411057 - HA-2

Laboratory: Lubbock

S 5035 Analysis: BTEXAnalytical Method: S 8021B Prep Method: QC Batch: 127247 Analyzed By: Date Analyzed: 2015-12-30 MTPrep Batch: 107711 Sample Preparation: 2015-12-30 Prepared By: MT

			RL			
Parameter	Flag	$\operatorname{Cert}$	Result	Units	Dilution	RL
Benzene		1,2,3,4,5	12.0	m mg/Kg	50	0.0200
Toluene		1,2,3,4,5	73.7	$\mathrm{mg}/\mathrm{Kg}$	50	0.0200
Ethylbenzene		1,2,3,4,5	$\bf 252$	mg/Kg	50	0.0200
Xylene		1,2,3,4,5	<b>279</b>	mg/Kg	50	0.0200

							Spike	Percent	Recovery
Surrogate		Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)	Qsr	Qsr	5	22.3	mg/Kg	50	2.00	1115	77.1 - 120
4-Bromofluorobenzene (4-BFB)	$_{\mathrm{Qsr}}$	$_{\mathrm{Qsr}}$	5	16.2	mg/Kg	50	2.00	810	71.2 - 123

Report Date: January 4, 2016 Work Order: 15122909 Page Number: 7 of 29

15-0171-01 David Bilbrey 8" Pipeline

#### Sample: 411057 - HA-2

Laboratory: Lubbock

Analytical Method: Analysis: Chloride (IC) E 300.0 Prep Method: N/A QC Batch: 127272 Date Analyzed: 2016-01-04 Analyzed By: RLPrep Batch: 107731 Sample Preparation: Prepared By: RL

#### Sample: 411057 - HA-2

Laboratory: Lubbock

Analysis: TPH DRO Analytical Method: S 8015 D Prep Method: N/AQC Batch: Analyzed By: HJ127252Date Analyzed: 2016 - 01 - 04Prep Batch: 107712 Sample Preparation: 2015-12-30 Prepared By: HJ

							Spike	Percent	Recovery
Surrogate		Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane	Qsr	Qsr	3	621	mg/Kg	10	25.0	2484	48.9 - 172

#### Sample: 411057 - HA-2

Laboratory: Lubbock

Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035 QC Batch: 127248 Date Analyzed: 2015-12-30 Analyzed By: MT2015-12-30 Prep Batch: 107711 Sample Preparation: Prepared By: MT

							$_{ m Spike}$	Percent	Recovery
Surrogate		Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			3	2.39	mg/Kg	50	2.00	120	76.5 - 130
4-Bromofluorobenzene (4-BFB)	$_{\mathrm{Qsr}}$	$_{\mathrm{Qsr}}$	3	97.5	mg/Kg	50	2.00	4875	68.4 - 120

Report Date: January 4, 2016 Work Order: 15122909 Page Number: 8 of 29

15-0171-01 David Bilbrey 8" Pipeline

#### Sample: 411058 - HA-3

Laboratory: Lubbock

BTEXS 5035 Analysis: Analytical Method: S 8021BPrep Method: QC Batch: 127247 Date Analyzed: 2015-12-30 Analyzed By: MTPrep Batch: 107711 Sample Preparation: 2015-12-30 Prepared By: MT

			RL			
Parameter	Flag	Cert	Result	Units	Dilution	RL
Benzene		1,2,3,4,5	1.56	mg/Kg	50	0.0200
Toluene		1,2,3,4,5	30.5	$\mathrm{mg}/\mathrm{Kg}$	50	0.0200
Ethylbenzene		1,2,3,4,5	135	mg/Kg	50	0.0200
Xvlene		1.2.3.4.5	141	m mg/Kg	50	0.0200

							$_{ m Spike}$	Percent	Recovery
Surrogate		Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)	Qsr	Qsr	5	8.71	mg/Kg	50	2.00	436	77.1 - 120
4-Bromofluorobenzene (4-BFB)	$_{\mathrm{Qsr}}$	$_{\mathrm{Qsr}}$	5	10.4	mg/Kg	50	2.00	520	71.2 - 123

#### Sample: 411058 - HA-3

Laboratory: Lubbock

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A QC Batch: 127272 Date Analyzed: 2016-01-04 Analyzed By: RL Prep Batch: 107731 Sample Preparation: Prepared By: RL

			$\operatorname{RL}$			
Parameter	Flag	$\operatorname{Cert}$	Result	Units	Dilution	RL
Chloride	U	3,4,5	<25.0	$\mathrm{mg}/\mathrm{Kg}$	1	25.0

#### Sample: 411058 - HA-3

Laboratory: Lubbock

Analysis: TPH DRO Analytical Method: S 8015 D Prep Method: N/A QC Batch: 127252 Date Analyzed: 2016-01-04 Analyzed By: HJ Prep Batch: 107712 Sample Preparation: 2015-12-30 Prepared By: HJ

			$\operatorname{RL}$			
Parameter	Flag	Cert	Result	Units	Dilution	RL
DRO		1,2,3,4	11200	mg/Kg	10	50.0

							Spike	Percent	Recovery
Surrogate		Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane	Qsr	Qsr	3	515	mg/Kg	10	25.0	2060	48.9 - 172

Report Date: January 4, 2016 Work Order: 15122909 Page Number: 9 of 29

15-0171-01 David Bilbrey 8" Pipeline

#### Sample: 411058 - HA-3

Laboratory: Lubbock

Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035 QC Batch: 127248 Date Analyzed: 2015-12-30 Analyzed By: MT Prep Batch: 107711 Sample Preparation: 2015-12-30 Prepared By: MT

						$\operatorname{Spike}$	Percent	Recovery
Surrogate	Fla	g Cert	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		3	2.21	mg/Kg	50	2.00	110	76.5 - 130
4-Bromofluorobenzene (4-BFB)	Qsr Qs	. 3	46.0	mg/Kg	50	2.00	2300	68.4 - 120

#### Sample: 411059 - HA-4

Laboratory: Lubbock

Analysis: **BTEX** Analytical Method: S 8021BPrep Method: S 5035 QC Batch: 127247 Date Analyzed: 2015-12-30 Analyzed By: MTPrep Batch: 107711 Sample Preparation: 2015-12-30 Prepared By: MT

RLFlag Parameter Cert Result Units Dilution RL50 0.0200 Benzene < 1.00 mg/Kg U 1,2,3,4,5 Toluene 1.99 mg/Kg50 0.0200 1,2,3,4,5 50 Ethylbenzene < 1.00 mg/Kg0.0200U 1,2,3,4,550 Xylene 50.6mg/Kg0.02001,2,3,4,5

							Spike	Percent	Recovery
Surrogate		$\operatorname{Flag}$	$\operatorname{Cert}$	Result	$\operatorname{Units}$	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)	Qsr	Qsr	5	4.36	mg/Kg	50	2.00	218	77.1 - 120
4-Bromofluorobenzene (4-BFB)	Qsr	Qsr	5	10.1	mg/Kg	50	2.00	505	71.2 - 123

#### Sample: 411059 - HA-4

Laboratory: Lubbock

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/AQC Batch: 127272 Date Analyzed: 2016-01-04 Analyzed By: RLPrep Batch: 107731 Sample Preparation: Prepared By: RL

 $\overline{continued}$  . . .

Report Date: January 4, 2016

15-0171-01

Work Order: 15122909 David Bilbrey 8" Pipeline

 $sample\ 411059\ continued\ \dots$ 

			RL			
Parameter	Flag	Cert	Result	Units	Dilution	RL
			$\operatorname{RL}$			
Parameter	Flag	Cert	Result	Units	Dilution	RL
Chloride	U	3,4,5	<25.0	m mg/Kg	1	25.0

#### Sample: 411059 - HA-4

Laboratory: Lubbock

Analysis: TPH DRO QC Batch: 127252 Prep Batch: 107712 Analytical Method: S 8015 D Date Analyzed: 2016-01-04 Sample Preparation: 2015-12-30

Analyzed By: HJ Prepared By: HJ

Prep Method: N/A

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			RL			
Parameter	Flag	Cert	Result	Units	Dilution	RL
DRO		1,2,3,4	1540	m mg/Kg	2	50.0

							Spike	Percent	Recovery
Surrogate		Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane	Qsr	Qsr	3	105	${ m mg/Kg}$	2	25.0	420	48.9 - 172

#### Sample: 411059 - HA-4

Laboratory: Lubbock

Analysis: TPH GRO QC Batch: 127248 Prep Batch: 107711 Analytical Method: S 8015 D
Date Analyzed: 2015-12-30
Sample Preparation: 2015-12-30

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

			RL			
Parameter	Flag	$\operatorname{Cert}$	Result	Units	Dilution	RL
GRO		1,2,3,4	2350	m mg/Kg	50	4.00

							$_{ m Spike}$	Percent	Recovery
Surrogate		Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			3	2.58	mg/Kg	50	2.00	129	76.5 - 130
4-Bromofluorobenzene (4-BFB)	$_{\mathrm{Qsr}}$	$_{ m Qsr}$	3	64.2	mg/Kg	50	2.00	3210	68.4 - 120

Report Date: January 4, 2016 Work Order: 15122909 Page Number: 11 of 29

15-0171-01 David Bilbrey 8" Pipeline

#### Sample: 411060 - HA-5

Laboratory: Lubbock

BTEXS 5035 Analysis: Analytical Method: S 8021BPrep Method: QC Batch: 127247 Date Analyzed: 2015 - 12 - 30Analyzed By: MTPrep Batch: 107711 Sample Preparation: 2015-12-30 Prepared By: MT

				RL			
Parameter		Flag	Cert	Result	Units	Dilution	RL
Benzene	2	U	1,2,3,4,5	< 0.0400	m mg/Kg	2	0.0200
Toluene		U	1,2,3,4,5	< 0.0400	$\mathrm{mg}/\mathrm{Kg}$	2	0.0200
Ethylbenzene			1,2,3,4,5	0.0644	$\mathrm{mg}/\mathrm{Kg}$	2	0.0200
Xylene			1,2,3,4,5	< 0.0400	$\mathrm{mg}/\mathrm{Kg}$	2	0.0200

						$_{ m Spike}$	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		5	2.04	mg/Kg	2	2.00	102	77.1 - 120
4-Bromofluorobenzene (4-BFB)		5	2.06	mg/Kg	2	2.00	103	71.2 - 123

#### Sample: 411060 - HA-5

Laboratory: Lubbock

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A QC Batch: 127272 Date Analyzed: 2016-01-04 Analyzed By: RL Prep Batch: 107731 Sample Preparation: Prepared By: RL

			RL			
Parameter	Flag	Cert	Result	Units	Dilution	RL
Chloride		3,4,5	<25.0	$\mathrm{mg}/\mathrm{Kg}$	1	25.0

#### Sample: 411060 - HA-5

Laboratory: Lubbock

Analysis: TPH DRO Analytical Method: S 8015 D Prep Method: N/A QC Batch: 127252 Date Analyzed: 2016-01-04 Analyzed By: HJ Prep Batch: 107712 Sample Preparation: 2015-12-30 Prepared By: HJ

			$\Gamma$ L			
Parameter	Flag	$\operatorname{Cert}$	Result	Units	Dilution	RL
DRO	U	1,2,3,4	< 50.0	m mg/Kg	1	50.0

						Spike	Percent	Recovery
Surrogate	Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane		3	35.5	mg/Kg	1	25.0	142	48.9 - 172

Report Date: January 4, 2016 Work Order: 15122909 Page Number: 12 of 29

15-0171-01 David Bilbrey 8" Pipeline

#### Sample: 411060 - HA-5

Laboratory: Lubbock

Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035 QC Batch: 127248 Date Analyzed: 2015-12-30 Analyzed By: MT Prep Batch: 107711 Sample Preparation: 2015-12-30 Prepared By: MT

						$_{ m Spike}$	Percent	Recovery
Surrogate	Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		3	1.71	mg/Kg	2	2.00	86	76.5 - 130
4-Bromofluorobenzene (4-BFB)		3	2.05	mg/Kg	2	2.00	102	68.4 - 120

#### Sample: 411061 - HA-6

Laboratory: Lubbock

Analysis: **BTEX** Analytical Method: S 8021BPrep Method: S 5035 QC Batch: 127247 Date Analyzed: 2015-12-30 Analyzed By: MTPrep Batch: 107711 Sample Preparation: 2015-12-30 Prepared By: MT

RLFlag Parameter Cert Result Units Dilution RL0.0200 Benzene < 0.0200 mg/Kg 1 U 1,2,3,4,5 Toluene < 0.0200 mg/Kg1 0.0200 U 1,2,3,4,5 0.0200 Ethylbenzene < 0.0200 mg/Kg1 U 1,2,3,4,5 Xylene mg/Kg1 0.0200< 0.0200 U 1,2,3,4,5

						Spike	Percent	Recovery
Surrogate	$\operatorname{Flag}$	$\operatorname{Cert}$	Result	$\operatorname{Units}$	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		5	1.99	mg/Kg	1	2.00	100	77.1 - 120
4-Bromofluorobenzene (4-BFB)		5	1.92	mg/Kg	1	2.00	96	71.2 - 123

#### Sample: 411061 - HA-6

Laboratory: Lubbock

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A QC Batch: 127272 Date Analyzed: 2016-01-04 Analyzed By: RLPrep Batch: 107731 Sample Preparation: Prepared By: RL

 $\overline{continued}$  . . .

Report Date: January 4, 2016

Work Order: 15122909

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sample 411061 continued ...

			RL			
Parameter	Flag	Cert	Result	Units	Dilution	RL
			DI			
			RL			
Parameter	Flag	$\operatorname{Cert}$	Result	Units	Dilution	RL
Chloride		3,4,5	45.8	mg/Kg	1	25.0

#### Sample: 411061 - HA-6

Laboratory: Lubbock

Analysis: TPH DRO QC Batch: 127252Prep Batch: 107712

Flag

U

Parameter

 $\overline{\mathrm{DRO}}$ 

Analytical Method: S 8015 D Date Analyzed: 2016-01-04Sample Preparation: 2015-12-30

> RLResult Units Dilution RL< 50.0 mg/Kg 50.0

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Prep Method: N/A

HJ

HJ

Analyzed By:

Prepared By:

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane		3	35.1	mg/Kg	1	25.0	140	48.9 - 172

 $\operatorname{Cert}$ 

1,2,3,4

#### Sample: 411061 - HA-6

Laboratory: Lubbock

Analysis: TPH GRO QC Batch: 127248 Prep Batch: 107711

Analytical Method: S 8015 D Date Analyzed: 2015-12-30 Sample Preparation:

Prep Method: S 5035 Analyzed By: MTPrepared By: 2015-12-30 MT

			RL			
Parameter	Flag	Cert	Result	Units	Dilution	RL
GRO	U	1,2,3,4	< 4.00	m mg/Kg	1	4.00

						$_{ m Spike}$	Percent	Recovery
Surrogate	Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		3	1.86	mg/Kg	1	2.00	93	76.5 - 130
4-Bromofluorobenzene (4-BFB)		3	1.88	mg/Kg	1	2.00	94	68.4 - 120

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#### Sample: 411062 - HA-7

Laboratory: Lubbock

BTEXS 5035 Analysis: Analytical Method: S 8021BPrep Method: QC Batch: 127247 Date Analyzed: 2015 - 12 - 30Analyzed By: MTPrep Batch: 107711 Sample Preparation: 2015-12-30 Prepared By: MT

			RL			
Parameter	Flag	Cert	Result	Units	Dilution	RL
Benzene		1,2,3,4,5	9.08	m mg/Kg	100	0.0200
Toluene		1,2,3,4,5	143	$\mathrm{mg}/\mathrm{Kg}$	100	0.0200
Ethylbenzene		1,2,3,4,5	270	$\mathrm{mg}/\mathrm{Kg}$	100	0.0200
Xylene		1,2,3,4,5	233	mg/Kg	100	0.0200

							$_{ m Spike}$	Percent	Recovery
Surrogate		Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)	Qsr	Qsr	5	27.0	mg/Kg	100	2.00	1350	77.1 - 120
4-Bromofluorobenzene (4-BFB)	$_{\mathrm{Qsr}}$	$_{\mathrm{Qsr}}$	5	18.9	mg/Kg	100	2.00	945	71.2 - 123

#### Sample: 411062 - HA-7

Laboratory: Lubbock

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A QC Batch: 127272 Date Analyzed: 2016-01-04 Analyzed By: RL Prep Batch: 107731 Sample Preparation: Prepared By: RL

			RL			
Parameter	Flag	Cert	Result	Units	Dilution	RL
Chloride		3,4,5	73.5	m mg/Kg	1	25.0

#### Sample: 411062 - HA-7

Laboratory: Lubbock

Analysis: TPH DRO Analytical Method: S 8015 D Prep Method: N/A QC Batch: 127252 Date Analyzed: 2016-01-04 Analyzed By: HJ Prep Batch: 107712 Sample Preparation: 2015-12-30 Prepared By: HJ

			$\Gamma$ L			
Parameter	Flag	$\operatorname{Cert}$	Result	Units	Dilution	RL
DRO		1,2,3,4	9790	m mg/Kg	10	50.0

							Spike	Percent	Recovery
Surrogate		Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane	Qsr	Qsr	3	535	mg/Kg	10	25.0	2140	48.9 - 172

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#### Sample: 411062 - HA-7

Laboratory: Lubbock

Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035 QC Batch: 127248 Date Analyzed: 2015-12-30 Analyzed By: MT Prep Batch: 107711 Sample Preparation: 2015-12-30 Prepared By: MT

							$_{ m Spike}$	Percent	Recovery
Surrogate		Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			3	2.36	mg/Kg	100	2.00	118	76.5 - 130
4-Bromofluorobenzene (4-BFB)	$_{\mathrm{Qsr}}$	$_{\mathrm{Qsr}}$	3	146	mg/Kg	100	2.00	7300	68.4 - 120

#### Sample: 411063 - HA-8

Laboratory: Lubbock

Analysis: **BTEX** Analytical Method: S 8021BPrep Method: S 5035 QC Batch: 127247 Date Analyzed: 2015-12-30 Analyzed By: MTPrep Batch: 107711 Sample Preparation: 2015-12-30 Prepared By: MT

RLFlag Parameter Cert Result Units Dilution RL0.0200 Benzene < 0.0200 mg/Kg 1 U 1,2,3,4,5 Toluene < 0.0200 mg/Kg1 0.0200 1,2,3,4,5 0.0200 Ethylbenzene < 0.0200 mg/Kg1 1,2,3,4,5 Xylene mg/Kg1 0.0200< 0.0200 1,2,3,4,5

						Spike	Percent	Recovery
Surrogate	$\operatorname{Flag}$	$\operatorname{Cert}$	Result	$\operatorname{Units}$	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		5	1.89	mg/Kg	1	2.00	94	77.1 - 120
4-Bromofluorobenzene (4-BFB)		5	1.86	mg/Kg	1	2.00	93	71.2 - 123

#### Sample: 411063 - HA-8

Laboratory: Lubbock

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/AQC Batch: 127272 Date Analyzed: 2016-01-04 Analyzed By: RLPrep Batch: 107731 Sample Preparation: Prepared By: RL

 $\overline{continued \dots}$ 

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sample 411063 continued ...

			$\operatorname{RL}$			
Parameter	Flag	Cert	Result	Units	Dilution	RL
			DI			
			RL			
Parameter	Flag	$\operatorname{Cert}$	Result	Units	Dilution	RL
Chloride	U	3,4,5	<25.0	mg/Kg	1	25.0

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Prep Method: N/A

HJ

HJ

Analyzed By:

Prepared By:

#### Sample: 411063 - HA-8

Laboratory: Lubbock

Analysis: TPH DRO Analytical Method: S 8015 D QC Batch: 127252Date Analyzed: 2016-01-04Prep Batch: 107712 Sample Preparation: 2015-12-30

RLParameter Flag Cert Result Units Dilution RL $\overline{\mathrm{DRO}}$ < 50.0 mg/Kg 50.0 U 1,2,3,4

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane		3	34.2	mg/Kg	1	25.0	137	48.9 - 172

#### Sample: 411063 - HA-8

Laboratory: Lubbock

Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035 QC Batch: 127248 Date Analyzed: 2015-12-30 Analyzed By: MTPrep Batch: 107711 Sample Preparation: Prepared By: 2015-12-30 MT

RLParameter Flag Cert Result Units Dilution RL $\overline{GRO}$ < 4.00 mg/Kg 4.00 U 1,2,3,4

						$\operatorname{Spike}$	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		3	1.75	mg/Kg	1	2.00	88	76.5 - 130
4-Bromofluorobenzene (4-BFB)		3	1.79	mg/Kg	1	2.00	90	68.4 - 120

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## Method Blanks

Method Blank (1) QC Batch: 127247

QC Batch: 127247 Date Analyzed: 2015-12-30 Analyzed By: MT Prep Batch: 107711 QC Preparation: 2015-12-30 Prepared By: MT

MDL ${\bf Parameter}$ Flag Cert Result Units RLBenzene < 0.00444 mg/Kg0.02 1,2,3,4,5 Toluene < 0.00457mg/Kg 0.02 1,2,3,4,5 Ethylbenzene mg/Kg0.02 < 0.007621,2,3,4,5 Xylene mg/Kg0.021,2,3,4,5 < 0.00367

							$_{ m Spike}$	Percent	Recovery
Surrogate		Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)	Qsr	Qsr	5	2.40	mg/Kg	1	2.00	120	77.1 - 120
4-Bromofluorobenzene (4-BFB)			5	2.36	mg/Kg	1	2.00	118	71.2 - 123

Method Blank (1) QC Batch: 127248

QC Batch: 127248 Date Analyzed: 2015-12-30 Analyzed By: MT Prep Batch: 107711 QC Preparation: 2015-12-30 Prepared By: MT

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)		3	2.24	mg/Kg	1	2.00	112	76.5 - 130
4-Bromofluorobenzene (4-BFB)		3	2.18	mg/Kg	1	2.00	109	68.4 - 120

Method Blank (1) QC Batch: 127252

QC Batch: 127252 Date Analyzed: 2016-01-04 Analyzed By: HJ
Prep Batch: 107712 QC Preparation: 2015-12-30 Prepared By: HJ

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					N	IDL		
Parameter		Fla	ag	Cert	Re	sult	Units	RL
DRO				1,2,3,4	<	5.22	$\mathrm{mg}/\mathrm{Kg}$	50
Surrogate	$\operatorname{Flag}$	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane	1100	3	28.6	mg/Kg	1	25.0	114	48.9 - 172

Method Blank (1) QC Batch: 127272

QC Batch: 127272 Date Analyzed: 2016-01-04 Analyzed By: RL Prep Batch: 107731 QC Preparation: 2016-01-04 Prepared By: RL

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# Laboratory Control Spikes

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

			LCS			Spike	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit
Benzene		1,2,3,4,5	1.98	mg/Kg	1	2.00	< 0.00444	99	68.7 - 120
Toluene		1,2,3,4,5	1.88	mg/Kg	1	2.00	< 0.00457	94	76.1 - 120
Ethylbenzene		1,2,3,4,5	2.18	mg/Kg	1	2.00	< 0.00762	109	74.8 - 120
Xylene		1,2,3,4,5	6.38	mg/Kg	1	6.00	< 0.00367	106	75.3 - 120

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		1,2,3,4,5	1.97	mg/Kg	1	2.00	< 0.00444	98	68.7 - 120	0	20
Toluene		1,2,3,4,5	1.90	mg/Kg	1	2.00	< 0.00457	95	76.1 - 120	1	20
Ethylbenzene		1,2,3,4,5	2.21	mg/Kg	1	2.00	< 0.00762	110	74.8 - 120	1	20
Xylene		1,2,3,4,5	6.46	mg/Kg	1	6.00	< 0.00367	108	75.3 - 120	1	20

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

		LCS	LCSD			Spike	LCS	LCSD	Rec.
Surrogate		Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	5	2.17	2.26	mg/Kg	1	2.00	108	113	77.1 - 120
4-Bromofluorobenzene (4-BFB)	5	2.22	2.22	$\mathrm{mg}/\mathrm{Kg}$	1	2.00	111	111	71.2 - 123

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

QC Batch: 127248 Date Analyzed: 2015-12-30 Analyzed By: MT Prep Batch: 107711 QC Preparation: 2015-12-30 Prepared By: MT

			LCS			$_{ m Spike}$	Matrix		Rec.
Param	F	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit
GRO		1,2,3,4	16.0	mg/Kg	1	20.0	< 0.641	80	60.3 - 120

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

 $continued \dots$ 

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control spikes continued

control spines continued			LCSD			Spike	Matrix		Rec.		RPD
Param	F	С	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
			LCSD			Spike	Matrix		Rec.		RPD
Param	$\mathbf{F}$	С	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	${ m Rec.} \ { m Limit}$	RPD	$\begin{array}{c} \text{RPD} \\ \text{Limit} \end{array}$

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

		LCS	LCSD			$_{ m Spike}$	LCS	LCSD	$\mathrm{Rec}.$
Surrogate		Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	3	1.89	1.90	mg/Kg	1	2.00	94	95	76.5 - 130
4-Bromofluorobenzene (4-BFB)	3	2.06	2.06	mg/Kg	1	2.00	103	103	68.4 - 120

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

QC Batch: 127252 Prep Batch: 107712 Date Analyzed: 2016-01-04 QC Preparation: 2015-12-30 Analyzed By: HJ Prepared By: HJ

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			LCS			Spike	Matrix		Rec.
Param	F	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit
DRO		1,2,3,4	567	mg/Kg	1	500	< 5.22	113	60.9 - 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
DRO		1,2,3,4	587	mg/Kg	1	500	< 5.22	117	60.9 - 130	4	20

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

		LCS	LCSD			Spike	LCS	LCSD	Rec.
Surrogate		Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
n-Tricosane	3	33.3	35.2	mg/Kg	1	25.0	133	141	48.9 - 172

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

QC Batch: 127272 Prep Batch: 107731 Date Analyzed: 2016-01-04 QC Preparation: 2016-01-04 Analyzed By: RL Prepared By: RL

			LCS			$\operatorname{Spike}$	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	$\operatorname{Limit}$
Chloride		3,4,5	252	mg/Kg	1	250	< 8.34	101	90 - 110

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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		3,4,5	253	mg/Kg	1	250	< 8.34	101	90 - 110	0	20

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# Matrix Spikes

Matrix Spike (MS-1) Spiked Sample: 410988

			MS			Spike	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit
Benzene		1,2,3,4,5	1.87	mg/Kg	1	2.00	< 0.00444	94	61.8 - 120
Toluene		1,2,3,4,5	1.75	mg/Kg	1	2.00	< 0.00457	88	64.6 - 122
Ethylbenzene		1,2,3,4,5	2.28	mg/Kg	1	2.00	< 0.00762	114	62.2 - 130
Xylene		1,2,3,4,5	5.96	mg/Kg	1	6.00	< 0.00367	99	62.2 - 126

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
Benzene		1,2,3,4,5	1.87	mg/Kg	1	2.00	< 0.00444	94	61.8 - 120	0	20
Toluene		1,2,3,4,5	1.75	mg/Kg	1	2.00	< 0.00457	88	64.6 - 122	0	20
Ethylbenzene		1,2,3,4,5	2.04	mg/Kg	1	2.00	< 0.00762	102	62.2 - 130	11	20
Xylene		1,2,3,4,5	5.96	mg/Kg	1	6.00	< 0.00367	99	62.2 - 126	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)	5	2.12	2.13	mg/Kg	1	2	106	106	77.1 - 120
4-Bromofluorobenzene (4-BFB)	5	2.07	2.08	mg/Kg	1	2	104	104	71.2 - 123

Matrix Spike (MS-1) Spiked Sample: 411060

QC Batch: 127248 Date Analyzed: 2015-12-30 Analyzed By: MT Prep Batch: 107711 QC Preparation: 2015-12-30 Prepared By: MT

			MS			$_{ m Spike}$	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	$\operatorname{Limit}$
GRO		1,2,3,4	19.3	mg/Kg	2	20.0	1.61	88	25 - 139

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

 $continued \dots$ 

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matrix spikes continued ... MSD Spike Matrix Rec. RPD F  $\mathbf{C}$ Result Units Dil. Amount Result Rec. Limit RPDParam Limit MSD RPD Spike Matrix Rec. Param  $\mathbf{F}$  $\mathbf{C}$ Result Units Dil. Amount Result Rec. Limit RPDLimit  $\overline{GRO}$ 1,2,3,4 20.0 mg/Kg 20.0 1.61 92 25 - 139 20

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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
Trifluorotoluene (TFT)	3	1.55	1.92	mg/Kg	2	2	78	96	76.5 - 130
4-Bromofluorobenzene (4-BFB)	3	1.74	2.12	$\mathrm{mg}/\mathrm{Kg}$	2	2	87	106	68.4 - 120

Matrix Spike (MS-1) Spiked Sample: 410702

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QC Batch: 127252 Date Analyzed: 2016-01-04 Analyzed By: HJ Prep Batch: 107712 QC Preparation: 2015-12-30 Prepared By: HJ

			MS			Spike	Matrix		Rec.
Param	F	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit
DRO		1234	559	mg/Kg	1	500	< 5.22	112	47.9 - 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		1,2,3,4	599	mg/Kg	1	500	< 5.22	120	47.9 - 130	7	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	36.4	38.8	mg/Kg	1	25	146	155	48.9 - 172

Matrix Spike (MS-1) Spiked Sample: 411063

QC Batch: 127272 Date Analyzed: 2016-01-04 Analyzed By: RL Prep Batch: 107731 QC Preparation: 2016-01-04 Prepared By: RL

			MS			Spike	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	$\operatorname{Limit}$
Chloride		3,4,5	269	mg/Kg	1	250	< 8.34	108	80 - 120

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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		3,4,5	255	mg/Kg	1	250	< 8.34	102	80 - 120	5	20

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## Calibration Standards

#### Standard (CCV-1)

QC Batch: 127247 Date Analyzed: 2015-12-30 Analyzed By: MT

				CCVs True	$\begin{array}{c} {\rm CCVs} \\ {\rm Found} \end{array}$	CCVs Percent	Percent Recovery	Date
Param	Flag	$\operatorname{Cert}$	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Benzene		1,2,3,4,5	mg/kg	0.100	0.115	115	80 - 120	2015-12-30
Toluene		1,2,3,4,5	$\mathrm{mg/kg}$	0.100	0.0880	88	80 - 120	2015-12-30
Ethylbenzene		1,2,3,4,5	$\mathrm{mg/kg}$	0.100	0.0985	98	80 - 120	2015-12-30
Xylene		1,2,3,4,5	mg/kg	0.300	0.312	104	80 - 120	2015-12-30

#### Standard (CCV-2)

QC Batch: 127247 Date Analyzed: 2015-12-30 Analyzed By: MT

				CCVs	$\mathrm{CCVs}$	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Benzene		1,2,3,4,5	mg/kg	0.100	0.113	113	80 - 120	2015-12-30
Toluene		1,2,3,4,5	mg/kg	0.100	0.0896	90	80 - 120	2015-12-30
Ethylbenzene		1,2,3,4,5	mg/kg	0.100	0.0988	99	80 - 120	2015-12-30
Xylene		1,2,3,4,5	mg/kg	0.300	0.292	97	80 - 120	2015-12-30

#### Standard (CCV-1)

Analyzed By: MT QC Batch: 127248 Date Analyzed: 2015-12-30

				CCVs	CCVs	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		1,2,3,4	$\mathrm{mg}/\mathrm{Kg}$	1.00	1.05	105	80 - 120	2015-12-30

#### Standard (CCV-2)

QC Batch: 127248 Date Analyzed: 2015-12-30 Analyzed By: MT Report Date: January 4, 2016 Work Order: 15122909 Page Number: 26 of 29

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				CCVs	CCVs	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		1,2,3,4	mg/Kg	1.00	1.09	109	80 - 120	2015-12-30

#### Standard (CCV-1)

QC Batch: 127252 Date Analyzed: 2016-01-04 Analyzed By: HJ

				CCVs	CCVs	CCVs	Percent	
				$\operatorname{True}$	Found	Percent	Recovery	Date
Param	Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		1.2.3.4	mg/Kg	500	592	118	80 - 120	2016-01-04

### Standard (CCV-2)

QC Batch: 127252 Date Analyzed: 2016-01-04 Analyzed By: HJ

				CCVs	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	570	114	80 - 120	2016-01-04

#### Standard (CCV-1)

QC Batch: 127272 Date Analyzed: 2016-01-04 Analyzed By: RL

				CCVs	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride		3,4,5	mg/Kg	25.0	25.4	102	90 - 110	2016-01-04

### Standard (CCV-2)

QC Batch: 127272 Date Analyzed: 2016-01-04 Analyzed By: RL

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Report Date: January 4, 2016 15-0171-01 Work Order: 15122909 David Bilbrey 8" Pipeline

				CCVs	CCVs	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride		3,4,5	$\mathrm{mg}/\mathrm{Kg}$	25.0	25.6	102	90 - 110	2016-01-04

Report Date: January 4, 2016 Work Order: 15122909 Page Number: 28 of 29 15-0171-01 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		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.

Report Date: January 4, 2016 Work Order: 15122909 Page Number: 29 of 29 15-0171-01 David Bilbrey 8" Pipeline

F Description

U The analyte is not detected above the SDL

### **Result Comments**

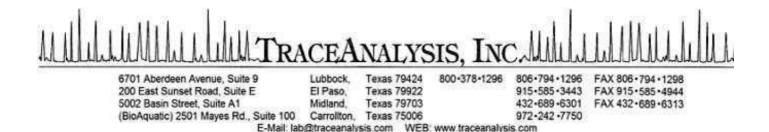
- 1 Sample dilution due to hydrocarbons.
- 2 Sample dilution due to hydrocarbons.
- 3 Dilution due to hydrocarbons and turbidity.

#### Attachments

The scanned attachments will follow this page.

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

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#### Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

# Analytical and Quality Control Report

Report Date: January 15, 2016

Work Order:

16011310

Michael Gant Larson and Associates, Inc.

P. O. Box 50685 Midland, TX, 79710

Project Name: David Bilbrey 8" Pipeline

Project Number: 15-0171-01

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
411571	SB-1 15'	soil	2015-01-11	13:22	2016-01-13
411574	SB-2 0'	soil	2015-01-12	08:45	2016-01-13
411576	SB-2 10'	soil	2015-01-12	08:57	2016-01-13
411583	SB-3 15'	soil	2015-01-12	10:07	2016-01-13
411590	SB-4 20'	soil	2015-01-12	11:32	2016-01-13

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 26 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

Appendix

Case Narrative	5
	6 7 8 10
QC Batch 127462 - Method Blank (1)         QC Batch 127464 - Method Blank (1)         QC Batch 127465 - Method Blank (1)         QC Batch 127493 - Method Blank (1)         QC Batch 127506 - Method Blank (1)	14 14 14 14 15 15
QC Batch 127462 - LCS (1)         QC Batch 127464 - LCS (1)         QC Batch 127465 - LCS (1)         QC Batch 127493 - LCS (1)         QC Batch 127506 - LCS (1)	16 16 17 17 17 18
QC Batch 127462 - MS (1)         QC Batch 127464 - MS (1)         QC Batch 127465 - MS (1)         QC Batch 127493 - MS (1)         QC Batch 127506 - xMS (1)	19 19 20 20 20 21
QC Batch 127462 - CCV (1) QC Batch 127462 - CCV (2) QC Batch 127464 - CCV (1) QC Batch 127464 - CCV (2) QC Batch 127465 - CCV (2) QC Batch 127493 - CCV (1) QC Batch 127493 - CCV (1) QC Batch 127506 - CCV (2) QC Batch 127506 - CCV (1) QC Batch 127506 - CCV (1) QC Batch 127507 - CCV (1)	22 22 22 22 22 23 23 23 24 24

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## Case Narrative

Samples for project David Bilbrey 8" Pipeline were received by TraceAnalysis, Inc. on 2016-01-13 and assigned to work order 16011310. Samples for work order 16011310 were received intact at a temperature of 3.3 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	107933	2016-01-14 at 14:00	127506	2016-01-14 at 15:39
Chloride (IC)	E 300.0	107944	2016-01-14 at 14:00	127517	2016-01-15 at 09:36
TPH DRO	S 8015 $D$	107892	2016-01-14 at 08:36	127464	2016-01-14 at $08:37$
TPH GRO	S 8015 $D$	107882	2016-01-13 at 14:48	127462	2016-01-14 at $08:33$
TPH GRO	S 8015 $D$	107893	2016-01-14 at 08:39	127493	2016-01-15 at $07:23$
TPH ORO	S 8015 D	107892	2016-01-14 at 08:36	127465	2016-01-14 at $08:50$

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

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 16011310 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: January 15, 2016 Work Order: 16011310 Page Number: 6 of 26 15-0171-01 David Bilbrey 8" Pipeline

## **Analytical Report**

Sample: 411571 - SB-1 15'

Laboratory: Lubbock

Prep Method: Analysis: Chloride (IC) Analytical Method: E 300.0 N/AQC Batch: 127506 Date Analyzed: 2016-01-14 Analyzed By: RLPrep Batch: 107933 Sample Preparation: Prepared By: RL

Sample: 411571 - SB-1 15'

Laboratory: Midland

TPH DRO Analysis: Analytical Method: S 8015 D Prep Method: N/AQC Batch: 127464 Date Analyzed: 2016-01-14 Analyzed By: JLPrep Batch: 107892 Sample Preparation: 2016-01-14 Prepared By: JL

Spike Percent Recovery Flag Surrogate Cert Result Units Dilution Amount Recovery Limits n-Tricosane 49.4 mg/Kg 50.0 99 70 - 130 1

Sample: 411571 - SB-1 15'

Laboratory: Midland

Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035 QC Batch: 127462 Date Analyzed: 2016-01-14 Analyzed By: AK Prep Batch: 107882 Sample Preparation: 2016-01-13 Prepared By: AK

Spike Percent Recovery Surrogate Flag Cert Result Units Dilution Amount Recovery Limits  $\overline{2.00}$ Trifluorotoluene (TFT) 70 - 130 1.89 mg/Kg 94

 $continued \dots$ 

Report Date: January 15, 2016 Work Order: 16011310 Page Number: 7 of 26 15-0171-01 David Bilbrey 8" Pipeline

sample continued								
-						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
1 Bromofluorobonzono (1 BFR)			1.05	mg/Kg	1	2.00	08	70 - 130

#### Sample: 411571 - SB-1 15'

Prep Batch: 107892

Laboratory:	Midland				
Analysis:	TPH ORO	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	127465	Date Analyzed:	2016-01-14	Analyzed 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

Sample Preparation: 2016-01-14

Prepared By: JL

						$\operatorname{Spike}$	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			49.4	mg/Kg	1	50.0	99	70 - 130
n-Triacontane			54.2	$\mathrm{mg}/\mathrm{Kg}$	1	50.0	108	37.1 - 162

#### Sample: 411574 - SB-2 0'

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

Analysis:	Chloride (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	127517	Date Analyzed:	2016-01-15	Analyzed By:	RL
Prep Batch:	107944	Sample Preparation:		Prepared By:	RL

			RL			
Parameter	$\operatorname{Flag}$	Cert	Result	Units	Dilution	RL
Chloride		1,2,4	73.7	mg/Kg	1	25.0

#### Sample: 411574 - SB-2 0'

Laboratory: Midland

Bassaratorj.	1/11/41/41/4				
Analysis:	TPH DRO	Analytical Method:	S 8015 D	Prep Method:	N/A
QC Batch:	127464	Date Analyzed:	2016-01-14	Analyzed By:	$\operatorname{JL}$
Prep Batch:	107892	Sample Preparation:	2016-01-14	Prepared By:	JL

			$\operatorname{RL}$			
Parameter	Flag	$\operatorname{Cert}$	Result	Units	Dilution	RL
DRO		3	658	mg/Kg	5	50.0

Report Date: January 15, 2016 Work Order: 16011310

15-0171-01 David Bilbrey 8" Pipeline

							Spike	Percent	Recovery
Surrogate		Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane	Qsr	Qsr		89.4	mg/Kg	5	50.0	179	70 - 130

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#### Sample: 411574 - SB-2 0'

Laboratory: Midland

Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035 QC Batch: 127493 Date Analyzed: 2016-01-15 Analyzed By: AKPrep Batch: 107893 Sample Preparation: 2016-01-14 Prepared By: AK

							$\operatorname{Spike}$	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)	$_{\mathrm{Qsr}}$	Qsr		5.95	$\mathrm{mg}/\mathrm{Kg}$	1	2.00	298	70 - 130

#### Sample: 411574 - SB-2 0'

Laboratory: Midland

TPH ORO Analysis: Analytical Method: S 8015 D Prep Method: N/AQC Batch: 127465 Date Analyzed: Analyzed By: JL2016-01-14 Prep Batch: 107892 Sample Preparation: 2016-01-14 Prepared By: JL

MDL MQL PQL RLParameter Flag Cert Result Result Result Result  ${\rm Units}$ Dilution MDLMQLPQL RL<250 50.0 ORO 0.00 <250 <250 50.0 mg/Kg 5 0.0050.0

							$\operatorname{Spike}$	Percent	Recovery
Surrogate		Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane	Qsr	Qsr		89.4	mg/Kg	5	50.0	179	70 - 130
n-Triacontane	$_{\mathrm{Qsr}}$	Qsr		110	mg/Kg	5	50.0	220	37.1 - 162

#### Sample: 411576 - SB-2 10'

Laboratory: Lubbock

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A QC Batch: 127506 Date Analyzed: 2016-01-14 Analyzed By: RL Prep Batch: 107933 Sample Preparation: Prepared By: RL

Report Date: January 15, 2016 Work Order: 16011310 David Bilbrey 8" Pipeline 15-0171-01

			$\operatorname{RL}$			
Parameter	Flag	Cert	Result	Units	Dilution	RL
Chloride		1,2,4	25.5	mg/Kg	1	25.0

#### Sample: 411576 - SB-2 10'

Laboratory: Midland

Analysis: TPH DRO QC Batch: 127464 Prep Batch: 107892

Analytical Method: S 8015 D Prep Method: N/A Date Analyzed: 2016-01-14 Analyzed By: Sample Preparation: 2016-01-14 Prepared By:

RLCert Parameter Flag Result Units Dilution RL $\overline{\text{DRO}}$ < 50.0 mg/Kg 50.0

						Spike	Percent	Recovery
Surrogate	Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			54.6	mg/Kg	1	50.0	109	70 - 130

#### Sample: 411576 - SB-2 10'

Laboratory: Midland

Analysis: TPH GRO QC Batch: 127462 Prep Batch: 107882

Analytical Method: S 8015 D Prep Method: S 5035 Analyzed By: Date Analyzed: 2016-01-14 AKSample Preparation: 2016-01-13 Prepared By: AK

RLParameter Flag  $\operatorname{Cert}$ Result Units Dilution RLmg/KgGRO < 4.00 4.00 U

						$_{\mathrm{Spike}}$	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			1.75	mg/Kg	1	2.00	88	70 - 130
4-Bromofluorobenzene (4-BFB)			1.89	mg/Kg	1	2.00	94	70 - 130

#### Sample: 411576 - SB-2 10'

Laboratory: Midland

Prep Method: N/A Analysis: TPH ORO Analytical Method: S 8015 D QC Batch: 127465 Date Analyzed: 2016-01-14 Analyzed By: JLPrep Batch: 107892 Sample Preparation: 2016-01-14Prepared By: JL

 $continued \dots$ 

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JL

JL

Report Date: January 15, 2016 Work Order: 16011310 Page Number: 10 of 26

David Bilbrey 8" Pipeline

sample 411576 continued ...

15-0171-01

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
Surrogate		Flag	Cert	Resu	lt U	Inits	Dilution	Spike Amount		Percent		overy
n-Tricosane				54.	.6 m	g/Kg	1	50.0		109	70 -	- 130
n-Triacontane				63.	.1 mg	g/Kg	1	50.0		126	37.1	- 162

#### Sample: 411583 - SB-3 15'

Laboratory: Lubbock

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A QC Batch: 127506 Date Analyzed: 2016-01-14 Analyzed By: RL Prep Batch: 107933 Sample Preparation: Prepared By: RL

#### Sample: 411583 - SB-3 15'

Laboratory: Midland

Analysis: TPH DRO Analytical Method: S 8015 D Prep Method: N/A QC Batch: 127464 Date Analyzed: 2016-01-14 Analyzed By: JLPrep Batch: 107892 Sample Preparation: 2016-01-14 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

Report Date: January 15, 2016 Work Order: 16011310 Page Number: 11 of 26

15-0171-01 David Bilbrey 8" Pipeline

#### Sample: 411583 - SB-3 15'

Laboratory: Midland

 $\le 5035$ Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: QC Batch: 127462 Date Analyzed: 2016-01-14 Analyzed By: AK Sample Preparation: Prep Batch: 107882 2016-01-13 Prepared By: AK

						$_{ m Spike}$	Percent	Recovery
Surrogate	Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			1.98	mg/Kg	1	2.00	99	70 - 130
4-Bromofluorobenzene (4-BFB)			2.01	mg/Kg	1	2.00	100	70 - 130

#### Sample: 411583 - SB-3 15'

Laboratory: Midland

Analysis: TPH ORO Prep Method: Analytical Method: S 8015 D N/AQC Batch: JL127465 Date Analyzed: 2016-01-14 Analyzed By: Prep Batch: 107892 Sample Preparation: 2016-01-14 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

						$_{\rm Spike}$	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			48.6	mg/Kg	1	50.0	97	70 - 130
n-Triacontane			56.7	$\mathrm{mg}/\mathrm{Kg}$	1	50.0	113	37.1 - 162

#### Sample: 411590 - SB-4 20'

Laboratory: Lubbock

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/AQC Batch: RL127517Date Analyzed: 2016-01-15 Analyzed By: Prep Batch: 107944 Sample Preparation: Prepared By: RL

Report Date: January 15, 2016 Work Order: 16011310 Page Number: 12 of 26

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#### Sample: 411590 - SB-4 20'

Laboratory: Midland

TPH DRO Analysis: Analytical Method: S 8015 D Prep Method: N/AQC Batch: 127464 Date Analyzed: 2016-01-14 Analyzed By: JLPrep Batch: 107892 Sample Preparation: Prepared By: 2016-01-14 JL

						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

#### Sample: 411590 - SB-4 20'

Laboratory: Midland

Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035 QC Batch: 127462 Date Analyzed: Analyzed By: 2016-01-14 AKPrep Batch: 107882 Sample Preparation: 2016-01-13 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)			1.94	mg/Kg	1	2.00	97	70 - 130

#### Sample: 411590 - SB-4 20'

Laboratory: Midland

TPH ORO Prep Method: N/A Analysis: Analytical Method: S 8015 D QC Batch: 127465 Date Analyzed: 2016-01-14 Analyzed By: JLPrep Batch: Sample Preparation: Prepared By: 107892 2016-01-14 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	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			48.5	mg/Kg	1	50.0	97	70 - 130

 $continued \dots$ 

Report Date: January 15, 2016 15-0171-01 Work Order: 16011310 Page Number: 13 of 26

David Bilbrey 8" Pipeline

 $sample\ continued\ \dots$ 

<b>r</b>						Spike	Percent	Recovery
Surrogate	Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane			53.8	mg/Kg	1	50.0	108	37.1 - 162

Report Date: January 15, 2016 Work Order: 16011310 Page Number: 14 of 26

15-0171-01 David Bilbrey 8" Pipeline

### Method Blanks

Method Blank (1) QC Batch: 127462

QC Batch: 127462 Date Analyzed: 2016-01-14 Analyzed By: AK Prep Batch: 107882 QC Preparation: 2016-01-13 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)			2.06	$\mathrm{mg}/\mathrm{Kg}$	1	2.00	103	70 - 130

Method Blank (1) QC Batch: 127464

QC Batch: 127464 Date Analyzed: 2016-01-14 Analyzed By: JL Prep Batch: 107892 QC Preparation: 2016-01-14 Prepared By: JL

						$_{\rm Spike}$	Percent	Recovery
Surrogate	$\operatorname{Flag}$	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			47.9	mg/Kg	1	50.0	96	70 - 130

Method Blank (1) QC Batch: 127465

QC Batch: 127465 Date Analyzed: 2016-01-14 Analyzed By: JL Prep Batch: 107892 QC Preparation: 2016-01-14 Prepared By: JL

 Report Date: January 15, 2016 Work Order: 16011310 15-0171-01 David Bilbrey 8" Pipeline

Result

 $\operatorname{Cert}$ 

QC Batch: 127517

Flag

Flag

 ${\bf Surrogate}$ 

 $\overline{\text{Chloride}}$ 

QC Batch:

Parameter

 $\overline{\text{Chloride}}$ 

Method Blank (1)

Prep Batch: 107944

127517

n-Tricosane		47.9	mg/Kg			50.0	96	70 - 130
n-Triacontane		56.3	mg/Kg	1		50.0	113	37.1 - 162
Method Blank (1) QC Bat	ch: 127493							
QC Batch: 127493 Prep Batch: 107893			nalyzed:	2016-01-15 2016-01-14			Analyzec Preparec	
Parameter	Flag		Cert		MDL Result		Units	RL
GRO			3		<2.32		mg/Kg	4
Surrogate	Flag	Cert	Result	Units	Dilution	$\begin{array}{c} {\rm Spike} \\ {\rm Amount} \end{array}$	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.00	mg/Kg	1	2.00	100	70 - 130
4-Bromofluorobenzene (4-BFB)			2.14	mg/Kg	1	2.00	107	70 - 130
Method Blank (1) QC Bat	ch: 127506							
QC Batch: 127506 Prep Batch: 107933			analyzed: eparation:	2016-01-14 2016-01-14			Analyze Prepare	
The state of the s	T21				MDL		TT 1:	
Parameter	$\operatorname{Flag}$		$\operatorname{Cert}$		Result		$\operatorname{Units}$	RL

1,2,4

Date Analyzed:

QC Preparation:

 $\operatorname{Cert}$ 

1,2,4

Units

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Recovery

Limits

25

RL

 $\operatorname{RL}$ 

25

Analyzed By: RL

Prepared By:

Percent

Recovery

mg/Kg

 ${\bf Units}$ 

mg/Kg

Spike

Amount

< 8.34

MDL

 ${\bf Result}$ 

< 8.34

2016-01-15

2016-01-14

Dilution

Report Date: January 15, 2016 Work Order: 16011310 Page Number: 16 of 26 15-0171-01 David Bilbrey 8" Pipeline

# Laboratory Control Spikes

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

QC Batch: 127462 Date Analyzed: 2016-01-14 Analyzed By: AK Prep Batch: 107882 QC Preparation: 2016-01-13 Prepared By: AK

			LCS			Spike	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	$\operatorname{Limit}$
GRO		3	21.8	mg/Kg	1	20.0	< 2.32	109	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	25.5	mg/Kg	1	20.0	< 2.32	128	70 - 130	16	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	1.96	mg/Kg	1	2.00	96	98	70 - 130
4-Bromofluorobenzene (4-BFB)	1.93	2.00	$\mathrm{mg}/\mathrm{Kg}$	1	2.00	96	100	70 - 130

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

QC Batch: 127464 Date Analyzed: 2016-01-14 Analyzed By: JL Prep Batch: 107892 QC Preparation: 2016-01-14 Prepared By: JL

			LCS			Spike	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit
DRO		3	270	mg/Kg	1	250	< 7.41	108	70 - 130

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

			LCSD			$\operatorname{Spike}$	Matrix		Rec.		RPD
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
DRO		3	268	mg/Kg	1	250	< 7.41	107	70 - 130	1	20

	LCS	LCSD			Spike	LCS	LCSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
n-Tricosane	52.9	53.2	mg/Kg	1	50.0	106	106	70 - 130

Report Date: January 15, 2016 Work Order: 16011310 Page Number: 17 of 26

15-0171-01 David Bilbrey 8" Pipeline

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

QC Batch: 127465 Date Analyzed: 2016-01-14 Analyzed By: JL Prep Batch: 107892 QC Preparation: 2016-01-14 Prepared By: JL

	LCS	LCSD			Spike	LCS	LCSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
n-Tricosane	52.9	53.2	mg/Kg	1	50.0	106	106	70 - 130
n-Triacontane	52.7	53.8	mg/Kg	1	50.0	105	108	54.8 - 164

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

QC Batch: 127493 Date Analyzed: 2016-01-15 Analyzed By: AK Prep Batch: 107893 QC Preparation: 2016-01-14 Prepared By: AK

			LCS			Spike	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	$\operatorname{Limit}$
GRO		3	20.5	mg/Kg	1	20.0	< 2.32	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
GRO		3	18.1	mø/Kø	1	20.0	< 2.32	90	70 - 130	12	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)	2.00	2.03	mg/Kg	1	2.00	100	102	70 - 130
4-Bromofluorobenzene (4-BFB)	1.98	1.93	$\mathrm{mg}/\mathrm{Kg}$	1	2.00	99	96	70 - 130

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

QC Batch: 127506 Date Analyzed: 2016-01-14 Analyzed By: RL Prep Batch: 107933 QC Preparation: 2016-01-14 Prepared By: RL

			LCS			Spike	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	$\operatorname{Limit}$
Chloride		1,2,4	266	mg/Kg	1	250	< 8.34	106	90 - 110

Report Date: January 15, 2016 Work Order: 16011310 Page Number: 18 of 26

David Bilbrey 8" Pipeline

15-0171-01

			LCSD			Spike	Matrix		Rec.		RPD
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride		1,2,4	250	mg/Kg	1	250	< 8.34	100	90 - 110	6	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: 127517 Date Analyzed: 2016-01-15 Analyzed By: RL Prep Batch: 107944 QC Preparation: 2016-01-14 Prepared By: RL

LCS Spike Matrix  ${\rm Rec.}$ Param F  $\mathbf{C}$ Result Units Dil. Amount Result Rec. Limit  $\overline{\text{Chloride}}$ 250 < 8.34 90 - 110 237 mg/Kg 95

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	238	mg/Kg	1	250	< 8.34	95	90 - 110	0	20

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# Matrix Spikes

Matrix Spike (MS-1) Spiked Sample: 411571

QC Batch: 127462 Date Analyzed: 2016-01-14 Analyzed By: AK Prep Batch: 107882 QC Preparation: 2016-01-13 Prepared By: AK

			MS			$\operatorname{Spike}$	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	$\operatorname{Limit}$
GRO		3	14.3	mg/Kg	1	20.0	< 2.32	72	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		3	15.9	mg/Kg	1	20.0	< 2.32	80	70 - 130	11	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)	1.85	1.98	mg/Kg	1	2	92	99	70 - 130
4-Bromofluorobenzene (4-BFB)	2.00	2.15	mg/Kg	1	2	100	108	70 - 130

Matrix Spike (MS-1) Spiked Sample: 411590

QC Batch: 127464 Date Analyzed: 2016-01-14 Analyzed By: JL Prep Batch: 107892 QC Preparation: 2016-01-14 Prepared By: JL

			MS			Spike	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit
DRO		3	253	mg/Kg	1	250	< 7.41	101	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	254	mg/Kg	1	250	< 7.41	102	70 - 130	0	20

	MS	MSD			Spike	MS	MSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	$\operatorname{Limit}$
n-Tricosane	49.7	51.2	mg/Kg	1	50	99	102	70 - 130

Report Date: January 15, 2016 Work Order: 16011310 Page Number: 20 of 26

David Bilbrey 8" Pipeline

15-0171-01

Matrix Spike (MS-1) Spiked Sample: 411590

QC Batch: 127465 Date Analyzed: 2016-01-14 Analyzed By: JL Prep Batch: 107892 QC Preparation: 2016-01-14 Prepared By: JL

MS Spike Matrix Rec.  $\mathbf{F}$  $\mathbf{C}$ Dil. Amount Result Param Result Units Rec. Limit ORO 0.00 250 mg/Kg 0 0 -

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
ORO			0.00	mg/Kg	1	250	0	0	-	0	

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	49.7	51.2	mg/Kg	1	50	99	102	70 - 130
n-Triacontane	51.2	51.7	$\mathrm{mg}/\mathrm{Kg}$	1	50	102	103	10 - 258

Matrix Spike (MS-1) Spiked Sample: 411574

QC Batch: 127493 Date Analyzed: 2016-01-15 Analyzed By: AK Prep Batch: 107893 QC Preparation: 2016-01-14 Prepared By: AK

MSSpike Matrix Rec. F  $\mathbf{C}$ Param Result Units Dil. Amount Result Rec. Limit  $\overline{\text{GRO}}$ 20.0 104 118 mg/Kg 70 70 - 130 Qs Qs

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	Qr,Qs	Qr,Qs	3	156	mg/Kg	1	20.0	104	260	70 - 130	28	20

	MS	MSD			Spike	MS	MSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	1.96	1.64	mg/Kg	1	2	98	82	70 - 130
4-Bromofluorobenzene (4-BFB) QST QST	5.94	6.75	mg/Kg	1	2	297	338	70 - 130

Report Date: January 15, 2016 Work Order: 16011310 Page Number: 21 of 26

David Bilbrey 8" Pipeline

15 - 0171 - 01

Matrix Spike (xMS-1) Spiked Sample: 411590

QC Batch: 127506 Date Analyzed: 2016-01-14 Analyzed By: RL Prep Batch: 107933 QC Preparation: 2016-01-14 Prepared By: RL

MSSpike Matrix Rec. Param  $\mathbf{F}$  $\mathbf{C}$ Dil. Amount Result Result Units Rec. Limit Chloride 225 45.2 80 - 120 1,2,4 mg/Kg 2 250 72Qs

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	259	mg/Kg	2	250	45.2	86	80 - 120	14	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: 411590

QC Batch: 127517 Date Analyzed: 2016-01-15 Analyzed By: RL Prep Batch: 107944 QC Preparation: 2016-01-14 Prepared By: RL

			MS			Spike	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	$\operatorname{Limit}$
Chloride		1,2,4	266	mg/Kg	1	250	14.1	101	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		1,2,4	253	mg/Kg	1	250	14.1	96	80 - 120	5	20

Report Date: January 15, 2016 Work Order: 16011310 Page Number: 22 of 26

David Bilbrey 8" Pipeline

15-0171-01

## Calibration Standards

#### Standard (CCV-1)

QC Batch: 127462 Date Analyzed: 2016-01-14 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	1.19	119	80 - 120	2016-01-14

#### Standard (CCV-2)

QC Batch: 127462 Date Analyzed: 2016-01-14 Analyzed By: AK

				CCVs	CCVs	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	$\operatorname{Cert}$	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		3	mg/Kg	1.00	0.819	82	80 - 120	2016-01-14

#### Standard (CCV-1)

QC Batch: 127464 Date Analyzed: 2016-01-14 Analyzed By: JL

				CCVs	$\operatorname{CCVs}$	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	$\operatorname{Cert}$	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		3	mg/Kg	250	260	104	80 - 120	2016-01-14

#### Standard (CCV-2)

QC Batch: 127464 Date Analyzed: 2016-01-14 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	267	107	80 - 120	2016-01-14

Report Date: January 15, 2016 Work Order: 16011310 Page Number: 23 of 26

15-0171-01 David Bilbrey 8" Pipeline

Standard (CCV-2)

QC Batch: 127465 Date Analyzed: 2016-01-14 Analyzed By: JL

				$\mathrm{CCVs}$	$\mathrm{CCVs}$	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
ORO			mg/Kg	250	0.00	0	-	2016-01-14

Standard (CCV-1)

QC Batch: 127493 Date Analyzed: 2016-01-15 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	1.02	102	80 - 120	2016-01-15

Standard (CCV-2)

QC Batch: 127493 Date Analyzed: 2016-01-15 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	1.20	120	80 - 120	2016-01-15

Standard (CCV-1)

QC Batch: 127506 Date Analyzed: 2016-01-14 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	26.2	105	90 - 110	2016-01-14

Standard (CCV-2)

QC Batch: 127506 Date Analyzed: 2016-01-14 Analyzed By: RL

Report Date: January 15, 2016 Work Order: 16011310 Page Number: 24 of 26

15-0171-01 David Bilbrey 8" Pipeline

				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	24.9	100	90 - 110	2016-01-14

### Standard (CCV-1)

QC Batch: 127517 Date Analyzed: 2016-01-15 Analyzed By: RL

				$\begin{array}{c} { m CCVs} \\ { m True} \end{array}$	$     \text{CCVs} \\     \text{Found} $	$\begin{array}{c} { m CCVs} \\ { m Percent} \end{array}$	Percent Recovery	Date
Param	$\operatorname{Flag}$	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride		1,2,4	mg/Kg	25.0	25.2	101	90 - 110	2016-01-15

### Standard (CCV-2)

QC Batch: 127517 Date Analyzed: 2016-01-15 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	24.2	97	90 - 110	2016-01-15

Report Date: January 15, 2016 Work Order: 16011310 Page Number: 25 of 26 15-0171-01 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: January 15, 2016 Work Order: 16011310 Page Number: 26 of 26 15-0171-01 David Bilbrey 8" Pipeline

### Attachments

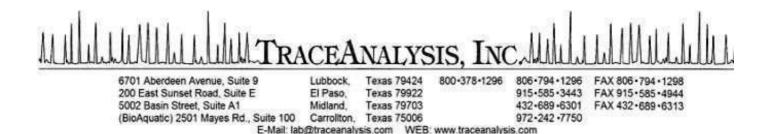
The scanned attachments will follow this page.

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

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CHAIN-OF-CUSTOD) Pipeline tags. 0 CUSTODY SEALS - GROKEN GINTACT GNOT USED GARRIER BILL# 13, AT 314530 FIELD NOTES OF THERM #: IR COLLECTOR: Michael PAGE Bilbrey 8" > > > > > LAB WORK ORDER #: CARRIER BILL # 1, 1 LABORATORY USE ONLY: RECEIVING TEMP: 3-3 > HAND DELIVERED > > PROJECT LOCATION OR NAME: Davic LAI PROJECT #: 15-0171-01 TURN AROUND TIME 3 days NORMAL 1 DAY 2 DAY □ DATE: In ling of the PO #: > > 507 N. Marienfeld, Ste. 200 REPEND BY: (Signature) Midland, TX 79701 **PRESERVATION** UNPRESERVED RECEIVED BY: (Signature) SECEIVED BY: (Signature) 432-687-0901 ICE □ HOBN □ POS2H ONH HCI repor # of Containers Matrix 50 100 1 DATE/TIME 1.510) DATE/TIME DATE/TIME 93:6 10:00 8:53 8:57 9:15 9:28 44 1:04 1:00 8:45 9:01 SL=SLUDGE OT=OTHER P=PAINT Date SSOCIOTES, Inc. Environmental Consultants W=WATER S=SOIL Irace Analysis RELINQUISHED BY:(Signature) A=AIR Lab# RELINGUISHED PT: Signature RELINQUISHED BY: (Signature Data Reported to: MST/NM 2 TIME ZONE: Time zone/State: 0 0 2 30 0 TRRP report? 0 Sample I.D. Field ☐ Yes SB-2 SB-2 SB-2 SB-2 SB-2 SB-1 SB-1 SB-1 SB-7 SB-1 SB-

CHAIN-OF-CUSTODY Saft S 6 CUSTODY SEALS - D BROKEN D INTACT D NOT USED 8" Pipeline FIELD NOTES 25.25 239 PAGE & OF 3 Wichael THERM #: TR COLLECTOR: Bilbrey LAB WORK ORDER #: CARRIER BILL # 5. 7 LABORATORY USE ONLY: RECEIVING TEMP: 3.2 > CHAND DELIVERED PROJECT LOCATION OR NAME: Davic LAI PROJECT #: 15-0171-0 TURN AROUND TIME 3 days NORMAL [] OTHER M 1 DAY 2 DAY DATE: 1100 507 N. Marienfeld, Ste. 200 REGENEY: (Signature) Midland, TX 79701 **PRESERVATION** NNPRESERVED RECEIVED BY: (Signature) ECEIVED BY. (Signature) 432-687-0901 ICE > > > □ HOBN □ POSSH HNO HCI report # of Containers Matrix 13/16 12:08 Verbal 13/16 BY DATE/TIME DATE/TIME 81.0 1:07 11:03 0:07 10:31 1.53 Time SL=SLUDGE OT=OTHER P=PAINT Date SSOCIATES, Inc. Environmental Consultants W=WATER S=SOIL A=AIR Lab# RELINQUISHED BY: (Signature) ISMED BY:(Signature) RELINQUISHED BY: (Signature) Imace Analysis Data Reported to: ☐ Yes ☐ No Time zone/State: Se O 0 TRRP report? 30 TIME ZONE: Sample I.D. Field 58-4 SB-4 SB-4 SB-4 SB-4 SB-3 TOTAL



### Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

## Analytical and Quality Control Report

Report Date:

Work Order:

January 26, 2016

16012005

Michael Gant Larson and Associates, Inc.

P. O. Box 50685 Midland, TX, 79710

Project Name: David Bilbrey 8" Pipeline

Project Number: 15-0171-02

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
412099	S-1	soil	2016-01-19	13:20	2016-01-20
412100	S-2	soil	2016-01-19	13:28	2016-01-20
412101	S-3	soil	2016-01-19	13:36	2016-01-20
412102	S-4	soil	2016-01-19	14:05	2016-01-20

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

TraceAnalysis, Inc. 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 20 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

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Sample 412099 (S-1)	5 6 7 9
QC Batch 127608 - Method Blank (1)       1         QC Batch 127640 - Method Blank (1)       1         QC Batch 127641 - Method Blank (1)       1         QC Batch 127696 - Method Blank (1)       1	11 11 11 11 12
QC Batch 127608 - LCS (1)       1         QC Batch 127640 - LCS (1)       1         QC Batch 127641 - LCS (1)       1         QC Batch 127696 - LCS (1)       1         QC Batch 127716 - LCS (1)       1	13 13 14 14 14
QC Batch 127608 - MS (1)       1         QC Batch 127640 - xMS (1)       1         QC Batch 127641 - xMS (1)       1         QC Batch 127696 - xMS (1)       1	15 15 16 16
QC Batch 127608 - CCV (1)       1         QC Batch 127608 - CCV (2)       1         QC Batch 127640 - CCV (1)       1         QC Batch 127696 - CCV (2)       1         QC Batch 127696 - CCV (2)       1         QC Batch 127716 - CCV (1)       1         QC Batch 127716 - CCV (2)       1         QC Batch 127716 - CCV (2)       1	17 17 17 17 17 17 18 18
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### Case Narrative

Samples for project David Bilbrey 8" Pipeline were received by TraceAnalysis, Inc. on 2016-01-20 and assigned to work order 16012005. Samples for work order 16012005 were received intact at a temperature of 5.8 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	108100	2016-01-22 at 13:00	127696	2016-01-22 at 15:20
Chloride (IC)	E 300.0	108123	2016-01-22 at 13:00	127716	2016-01-25 at $10:19$
TPH DRO	S 8015 $D$	108049	2016-01-21 at 15:15	127640	2016-01-21 at $15:22$
TPH GRO	S 8015 $D$	108017	2016-01-20 at 14:43	127608	2016-01-21 at $07:09$
TPH ORO	S 8015 D	108049	2016-01-21 at 15:15	127641	2016-01-21 at $15:23$

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 16012005 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.

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### **Analytical Report**

Sample: 412099 - S-1

Laboratory: Lubbock

Analytical Method: Prep Method: Analysis: Chloride (IC) E 300.0N/AQC Batch: Date Analyzed: 2016-01-25 Analyzed By: RL127716Prep Batch: 108123 Sample Preparation: Prepared By: RL

Sample: 412099 - S-1

Laboratory: Midland

TPH DRO Prep Method: Analysis: Analytical Method: S 8015 D N/AQC Batch: 127640 Date Analyzed: 2016-01-21 Analyzed By: JLPrep Batch: 108049 Sample Preparation: 2016-01-21 Prepared By: JL

							Spike	Percent	Recovery
Surrogate		Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane	Qsr	Qsr		75.2	mg/Kg	1	50.0	150	70 - 130

Sample: 412099 - S-1

Laboratory: Midland

Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035 QC Batch: 127608 Date Analyzed: 2016-01-21 Analyzed By: AKPrep Batch: 108017 Sample Preparation: 2016-01-20 Prepared By: AK

						$_{ m Spike}$	Percent	Recovery
Surrogate	Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			1.92	mg/Kg	1	2.00	96	70 - 130

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$sample\ continued\ \dots$								
•						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
1 Bromoffuorobonzono (1 BFR)			2.38	mg/Kg	1	2.00	110	70 - 130

### Sample: 412099 - S-1

Laboratory:	Midland
Analysis:	TPH ORG

Analysis: TPH ORO Analytical Method: S 8015 D Prep Method: N/A QC Batch: 127641 Date Analyzed: 2016-01-21 Analyzed By: JL Prep Batch: 108049 Sample Preparation: 2016-01-21 Prepared By: 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

							$_{ m Spike}$	Percent	Recovery
Surrogate		Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane	Qsr	Qsr		75.2	mg/Kg	1	50.0	150	70 - 130
n-Triacontane	$_{\mathrm{Qsr}}$	$_{\mathrm{Qsr}}$		105	$\mathrm{mg}/\mathrm{Kg}$	1	50.0	210	37.1 - 162

### Sample: 412100 - S-2

Laboratory: Lubbock

			RL			
Parameter	Flag	$\operatorname{Cert}$	Result	Units	Dilution	RL
Chloride	U	3,4,6	<25.0	mg/Kg	1	25.0

### Sample: 412100 - S-2

Laboratory: Midland

Analysis: TPH DRO Analytical Method: S 8015 DPrep Method: N/A QC Batch: 127640Date Analyzed: 2016-01-21 Analyzed By: JLPrep Batch: 108049 Sample Preparation: 2016-01-21 Prepared By: JL

			RL			
Parameter	Flag	Cert	Result	Units	Dilution	RL
DRO		5	< 50.0	mg/Kg	1	50.0

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						Spike	Percent	Recovery
Surrogate	Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			56.7	mg/Kg	1	50.0	113	70 - 130

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### Sample: 412100 - S-2

Laboratory: Midland

Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035 QC Batch: 127608 Date Analyzed: 2016-01-21 Analyzed By: AK Prep Batch: 108017 Sample Preparation: 2016-01-20 Prepared By: AK

			RL			
Parameter	Flag	Cert	Result	Units	Dilution	RL
GRO	Qr.U	5	< 4.00	mg/Kg	1	4.00

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			1.93	mg/Kg	1	2.00	96	70 - 130
4-Bromofluorobenzene (4-BFB)			2.29	$\mathrm{mg}/\mathrm{Kg}$	1	2.00	114	70 - 130

### Sample: 412100 - S-2

Laboratory: Midland

Analysis: TPH ORO Analytical Method: Prep Method: N/A S 8015 D QC Batch: Analyzed By: JL127641 Date Analyzed: 2016-01-21 Prep Batch: 108049 Sample Preparation: 2016-01-21 Prepared By: JL

			MDL	MQL	$_{\mathrm{PQL}}$	RL						
Parameter	Flag	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	$\operatorname{Flag}$	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			56.7	mg/Kg	1	50.0	113	70 - 130
n-Triacontane			74.1	mg/Kg	1	50.0	148	37.1 - 162

### Sample: 412101 - S-3

Laboratory: Lubbock

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A QC Batch: 127716 Date Analyzed: 2016-01-25 Analyzed By: RL Prep Batch: 108123 Sample Preparation: Prepared By: RL

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			RL			
Parameter	Flag	Cert	Result	Units	Dilution	RL
Chloride		3,4,6	<25.0	m mg/Kg	1	25.0

### Sample: 412101 - S-3

Laboratory: Midland

			RL			
Parameter	Flag	Cert	Result	Units	Dilution	RL
DRO		5	< 50.0	mg/Kg	1	50.0

						$_{ m Spike}$	Percent	Recovery
Surrogate	Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			54.6	mg/Kg	1	50.0	109	70 - 130

### Sample: 412101 - S-3

Laboratory: Midland

Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035 QC Batch: 127608 Date Analyzed: 2016-01-21 Analyzed By: AK Prep Batch: 108017 Sample Preparation: 2016-01-20 Prepared By: AK

			$\operatorname{RL}$			
Parameter	Flag	Cert	Result	Units	Dilution	RL
GRO	Or II	5	<4.00	mg/Kg	1	4 00

						Spike	Percent	Recovery
Surrogate	$\operatorname{Flag}$	$\operatorname{Cert}$	Result	$\operatorname{Units}$	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			1.53	mg/Kg	1	2.00	76	70 - 130
4-Bromofluorobenzene (4-BFB)			1.66	mg/Kg	1	2.00	83	70 - 130

### Sample: 412101 - S-3

Laboratory: Midland

TPH ORO Prep Method: N/A Analysis: Analytical Method: S 8015 D QC Batch: 127641 Date Analyzed: 2016-01-21 Analyzed By: JLPrep Batch: 108049 Sample Preparation: 2016-01-21 Prepared By: JL

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1	110101	, . 1	
samnle	1.12.1111	continued.	

Parameter	Flag	Cert	MDL Result	ootnotesize 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
Surrogate		Flag	Cert	Resul	t I	nits	Dilution	Spike Amount		ercent ecovery		overy
n-Tricosane		1148		54.		g/Kg	1	50.0	100	109		- 130
n-Triacontane				70.		g/Kg	1	50.0		140	37.1	- 162

### Sample: 412102 - S-4

Laboratory: Lubbock

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A QC Batch: 127696 Date Analyzed: 2016-01-22 Analyzed By: RL Prep Batch: 108100 Sample Preparation: Prepared By: RL

RL
Parameter Flor Cort Boylt Units Dilution PL

			$\kappa_{\rm L}$			
Parameter	Flag	$\operatorname{Cert}$	Result	Units	Dilution	RL
Chloride		3,4,6	<25.0	m mg/Kg	1	25.0

### Sample: 412102 - S-4

Laboratory: Midland

Analysis: TPH DRO Analytical Method: S 8015 DPrep Method: N/A QC Batch: 127640 Date Analyzed: 2016-01-21 Analyzed By: JLPrep Batch: 108049 Sample Preparation: 2016-01-21 Prepared By: JL

						$_{ m Spike}$	Percent	Recovery
Surrogate	Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			54.3	${ m mg/Kg}$	1	50.0	109	70 - 130

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### Sample: 412102 - S-4

Laboratory: Midland

TPH GRO Analytical Method: S 5035 Analysis: S 8015 D Prep Method: QC Batch: 127608 Date Analyzed: 2016-01-21 Analyzed By: AKPrep Batch: Sample Preparation: Prepared By: AK108017 2016-01-20

						$_{ m Spike}$	Percent	Recovery
Surrogate	Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			1.89	mg/Kg	1	2.00	94	70 - 130
4-Bromofluorobenzene (4-BFB)			1.91	mg/Kg	1	2.00	96	70 - 130

### Sample: 412102 - S-4

Laboratory: Midland

Analysis: TPH ORO Analytical Method: Prep Method: N/AS 8015 D QC Batch: 127641 Date Analyzed: Analyzed By: JL2016-01-21 Prep Batch: 108049 Sample Preparation: 2016-01-21 Prepared By: JL

MDL MQLPQL RL ${\bf Parameter}$ Cert Result Result Units MQL PQLRLFlag Result Result Dilution MDL $\overline{\text{ORO}}$ 0.00 < 50.0 < 50.0 50.0 50.0 < 50.0 mg/Kg 0.00 50.0

						$_{\rm Spike}$	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			54.3	mg/Kg	1	50.0	109	70 - 130
n-Triacontane			72.3	$\mathrm{mg}/\mathrm{Kg}$	1	50.0	145	37.1 - 162

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### Method Blanks

Method Blank (1) QC Batch: 127608

QC Batch: 127608 Date Analyzed: 2016-01-21 Analyzed By: AK Prep Batch: 108017 QC Preparation: 2016-01-20 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)			2.00	$\mathrm{mg}/\mathrm{Kg}$	1	2.00	100	70 - 130

Method Blank (1) QC Batch: 127640

QC Batch: 127640 Date Analyzed: 2016-01-21 Analyzed By: JL Prep Batch: 108049 QC Preparation: 2016-01-21 Prepared By: JL

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

Method Blank (1) QC Batch: 127641

QC Batch: 127641 Date Analyzed: 2016-01-21 Analyzed By: JL Prep Batch: 108049 QC Preparation: 2016-01-21 Prepared By: JL

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Surrogate	Flag	Cert	Result	Units	Dilution	$\begin{array}{c} {\rm Spike} \\ {\rm Amount} \end{array}$	Percent Recovery	Recovery Limits
n-Tricosane			50.0	mg/Kg	1	50.0	100	70 - 130
n-Triacontane			64.9	mg/Kg	1	50.0	130	37.1 - 162

QC Batch: 127696Method Blank (1)

QC Batch: 127696Date Analyzed: 2016-01-22 Analyzed By: RL Prep Batch: 108100 QC Preparation: 2016-01-22 Prepared By: RL

MDLParameter Units RLFlag  $\operatorname{Cert}$ Result  $\overline{\text{Chloride}}$ < 8.34 mg/Kg 25 3,4,6

Method Blank (1) QC Batch: 127716

QC Batch: Date Analyzed: Analyzed By: RL 1277162016-01-25 2016-01-22 Prep Batch: 108123 QC Preparation: Prepared By: RL

 $\operatorname{MDL}$ 

Parameter	Flag	Cert	Result	Units	RL
Chloride		3,4,6	< 8.34	$\mathrm{mg}/\mathrm{Kg}$	25

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### Laboratory Control Spikes

### Laboratory Control Spike (LCS-1)

QC Batch: 127608 Date Analyzed: 2016-01-21 Analyzed By: AK Prep Batch: 108017 QC Preparation: 2016-01-20 Prepared By: AK

			LCS			Spike	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	$\operatorname{Limit}$
GRO		5	21.0	mg/Kg	1	20.0	< 1.76	105	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	21.5	mg/Kg	1	20.0	< 1.76	108	70 - 130	2	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	1.99	mg/Kg	1	2.00	102	100	70 - 130
4-Bromofluorobenzene (4-BFB)	1.98	1.97	$\mathrm{mg}/\mathrm{Kg}$	1	2.00	99	98	70 - 130

### Laboratory Control Spike (LCS-1)

			LCS			Spike	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit
DRO		5	272	mg/Kg	1	250	< 7.41	109	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		5	280	mg/Kg	1	250	< 7.41	112	70 - 130	3	20

	LCS	LCSD			Spike	LCS	LCSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
n-Tricosane	58.1	57.7	mg/Kg	1	50.0	116	115	70 - 130

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	LCS	LCSD			Spike	LCS	LCSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
n-Tricosane	58.1	57.7	mg/Kg	1	50.0	116	115	70 - 130
n-Triacontane	66.0	65.4	mg/Kg	1	50.0	132	131	54.8 - 164

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

Laboratory Control Spike (LCS-1)

QC Batch: 127696 Date Analyzed: 2016-01-22 Analyzed By: RL Prep Batch: 108100 QC Preparation: 2016-01-22 Prepared By: RL

			LCS			Spike	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit
Chloride		3.4.6	256	mg/Kg	1	250	< 8.34	102	90 - 110

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

			LCSD			$_{\mathrm{Spike}}$	Matrix		Rec.		RPD
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride		3,4,6	259	mg/Kg	1	250	< 8.34	104	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: 127716 Date Analyzed: 2016-01-25 Analyzed By: RL Prep Batch: 108123 QC Preparation: 2016-01-22 Prepared By: RL

			LCS			Spike	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit
Chloride		3.4.6	255	mg/Kg	1	250	< 8.34	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	259	mg/Kg	1	250	< 8.34	104	90 - 110	2	20

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### Matrix Spikes

Matrix Spike (MS-1) Spiked Sample: 412102

QC Batch: 127608 Date Analyzed: 2016-01-21 Analyzed By: AK
Prep Batch: 108017 QC Preparation: 2016-01-20 Prepared By: AK

				MS			Spike	Matrix		Rec.
Param		$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	$\operatorname{Limit}$
GRO	Qs	Qs	5	6.60	mg/Kg	1	20.0	< 1.76	33	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	$_{ m Qr,Qs}$	$_{ m Qr,Qs}$	5	11.5	mg/Kg	1	20.0	< 1.76	58	70 - 130	54	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)	2.00	1.90	mg/Kg	1	2	100	95	70 - 130
4-Bromofluorobenzene (4-BFB)	2.01	2.03	mg/Kg	1	2	100	102	70 - 130

Matrix Spike (xMS-1) Spiked Sample: 412097

QC Batch: 127640 Date Analyzed: 2016-01-21 Analyzed By: JL Prep Batch: 108049 QC Preparation: 2016-01-21 Prepared By: JL

			MS			Spike	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit
DRO		5	248	mg/Kg	1	250	< 7.41	99	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		5	252	mg/Kg	1	250	< 7.41	101	70 - 130	2	20

	MS	MSD			Spike	MS	MSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
n-Tricosane	54.4	52.8	mg/Kg	1	50	109	106	70 - 130

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Matrix Spike (xMS-1) Spiked Sample: 412097

QC Batch: 127641 Date Analyzed: 2016-01-21 Analyzed By: JL Prep Batch: 108049 QC Preparation: 2016-01-21 Prepared By: JL

MS MSD Spike MSMSD Rec. Result Surrogate Result Units Dil. Amount Rec. Rec. Limit 70 - 130 n-Tricosane 54.452.8mg/Kg 1 50 109 106 50 137 10 - 258 n-Triacontane 65.468.7mg/Kg1 131

Matrix Spike (xMS-1) Spiked Sample: 412121

QC Batch: 127696 Date Analyzed: 2016-01-22 Analyzed By: RL Prep Batch: 108100 QC Preparation: 2016-01-22 Prepared By: RL

			MS			Spike	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	$\operatorname{Limit}$
Chloride		3,4,6	1110	mg/Kg	50	250	827	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	3,4,6	1140	mg/Kg	50	250	827	125	80 - 120	3	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: 412199

QC Batch: 127716 Date Analyzed: 2016-01-25 Analyzed By: RL Prep Batch: 108123 QC Preparation: 2016-01-22 Prepared By: RL

			MS			Spike	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit
Chloride		3.4.6	25.3	mg/Kg	0.1	25.0	5.11	81	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		3,4,6	27.2	mg/Kg	0.1	25.0	5.11	88	80 - 120	7	20

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David Bilbrey 8" Pipeline

15-0171-02

### Calibration Standards

### Standard (CCV-1)

QC	Batch:	127608	Date Analyzed:	2016-01-21	Analyze	ed By:	AK	
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				$\mathrm{CCVs}$	$\mathrm{CCVs}$	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		5	mg/Kg	1.00	1.05	105	80 - 120	2016-01-21

### Standard (CCV-2)

QC Batch: 127608 Date Analyzed: 2016-01-21 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	0.937	94	80 - 120	2016-01-21

### Standard (CCV-1)

QC Batch: 127640 Date Analyzed: 2016-01-21 Analyzed By: JL

				CCVs	$\operatorname{CCVs}$	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	$\operatorname{Cert}$	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		5	mg/Kg	250	286	114	80 - 120	2016-01-21

### Standard (CCV-2)

QC Batch: 127640 Date Analyzed: 2016-01-21 Analyzed By: JL

				CCVs	CCVs	CCVs	Percent	
				True	Found	$\operatorname{Percent}$	Recovery	Date
Param	Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		5	$\mathrm{mg/Kg}$	250	296	118	80 - 120	2016-01-21

Report Date: January 26, 2016 Work Order: 16012005 Page Number: 18 of 20 15-0171-02 David Bilbrey 8" Pipeline

Standard (CCV-1)			
QC Batch: 127696	Date Analyzed: 2016-01-22	Analyzed By:	RL

				CCVs	CCVs	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride		3,4,6	mg/Kg	25.0	25.6	102	90 - 110	2016-01-22

### Standard (CCV-2)

QC Batch:	127696			Date A	Analyzed:	2016-01-22		Analy	zed By: RL
					CCVs	CCVs	CCVs	Percent	
					$\operatorname{True}$	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	2016-01-22

### Standard (CCV-1)

QC Batch:	127716			Date 1	Analyzed:	2016-01-25		Analy	zed By: RL
					CCVs	CCVs	CCVs	Percent	
					True	Found	Percent	Recovery	Date
Param		Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride			3,4,6	mg/Kg	25.0	25.9	104	90 - 110	2016-01-25

### Standard (CCV-2)

QC Batch:	127716		Date .	Analyzed:	2016-01-25		Analy	vzed By: RL
				CCVs True	CCVs Found	CCVs Percent	Percent Recovery	Date
Param	Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride		3,4,6	m mg/Kg	25.0	25.7	103	90 - 110	2016-01-25

Report Date: January 26, 2016 Work Order: 16012005 Page Number: 19 of 20 15-0171-02 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: January 26, 2016 Work Order: 16012005 Page Number: 20 of 20 15-0171-02 David Bilbrey 8" Pipeline

F Description

Qsr Surrogate recovery outside of laboratory limits.

U The analyte is not detected above the SDL

### Attachments

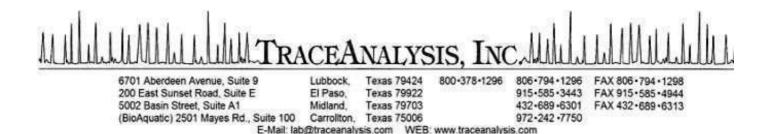
The scanned attachments will follow this page.

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

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### Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

## Analytical and Quality Control Report

Report Date: February 11, 2016

16020529

Work Order:

Michael Gant Larson and Associates, Inc.

 $\begin{array}{l} {\rm P.~O.~Box~50685} \\ {\rm Midland,~TX,~79710} \end{array}$ 

Project Name: David Bilbrey 8" Pipeline

Project Number: 15-0171-01

			Date	$\operatorname{Time}$	Date
Sample	Description	Matrix	Taken	Taken	Received
413838	SB-5-10'	soil	2016-02-03	10:39	2016-02-05
413839	SB-5-15'	soil	2016-02-03	10:45	2016-02-05
413840	SB-5-20'	soil	2016-02-03	10:55	2016-02-05
413842	SB-6-10'	soil	2016-02-03	11:20	2016-02-05
413843	SB-6-15'	soil	2016-02-03	11:24	2016-02-05
413844	SB-6-20'	soil	2016-02-03	11:45	2016-02-05

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

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

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### Case Narrative

Samples for project David Bilbrey 8" Pipeline were received by TraceAnalysis, Inc. on 2016-02-05 and assigned to work order 16020529. Samples for work order 16020529 were received intact at a temperature of 4.1 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	108459	2016-02-10 at 12:02	128118	2016-02-11 at 10:20
Chloride (IC)	E 300.0	108453	2016-02-09 at 14:30	128088	2016-02-09 at $16:56$
TPH DRO	S 8015 $D$	108423	2016-02-09 at $08:33$	128063	2016-02-09 at $10:33$
TPH GRO	S 8015 $D$	108459	2016-02-10 at 12:02	128119	2016-02-11 at 10:23
TPH ORO	S $8015 D$	108423	2016-02-09 at $08:33$	128064	2016-02-09 at $10:36$

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 16020529 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 11, 2016 Work Order: 16020529 Page Number: 6 of 29

15-0171-01 David Bilbrey 8" Pipeline

### **Analytical Report**

Sample: 413838 - SB-5-10'

Laboratory: Midland

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035 QC Batch: 128118 Date Analyzed: 2016-02-11 Analyzed By: AK Prep Batch: 108459 Sample Preparation: 2016-02-10 Prepared By: AK

			RL			
Parameter	Flag	$\operatorname{Cert}$	Result	Units	Dilution	RL
Benzene	Qr	5	177	m mg/Kg	50	0.0200
Toluene	$_{ m Qr}$	5	$\boldsymbol{402}$	m mg/Kg	50	0.0200
Ethylbenzene	$_{ m Qr}$	5	143	$\mathrm{mg}/\mathrm{Kg}$	50	0.0200
Xylene	$_{ m Qr}$	5	76.8	mg/Kg	50	0.0200

						$\operatorname{Spike}$	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			89.5	mg/Kg	50	100	90	70 - 130
4-Bromofluorobenzene (4-BFB)			100	mg/Kg	50	100	100	70 - 130

Sample: 413838 - SB-5-10'

Laboratory: Lubbock

			RL			
Parameter	Flag	Cert	Result	Units	Dilution	RL
Chloride		3,4,6	347	m mg/Kg	5	25.0

Sample: 413838 - SB-5-10'

Laboratory: Midland

Analysis: TPH DRO Analytical Method: S 8015 D Prep Method: N/A QC Batch: 128063 Date Analyzed: 2016-02-09 Analyzed By: JL Prep Batch: 108423 Sample Preparation: 2016-02-09 Prepared By: JL

			RL			
Parameter	Flag	$\operatorname{Cert}$	Result	Units	Dilution	RL
DRO		5	4880	m mg/Kg	20	50.0

Report Date: February 11, 2016 Work Order: 16020529 Page Number: 7 of 29 David Bilbrey 8" Pipeline

15-0171-01

							Spike	Percent	Recovery
Surrogate		Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane	Qsr	Qsr		287	mg/Kg	20	50.0	574	70 - 130

### Sample: 413838 - SB-5-10'

Laboratory: Midland

Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035 QC Batch: 128119 Date Analyzed: 2016-02-11 Analyzed By: AKPrep Batch: 108459 Sample Preparation: 2016-02-10 Prepared By: AK

RLParameter Flag  $\operatorname{Cert}$ Result Units Dilution RL $\overline{GRO}$ 4930 mg/Kg 50 4.00

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			97.5	mg/Kg	50	100	98	70 - 130
4-Bromofluorobenzene (4-BFB)			123	$\mathrm{mg}/\mathrm{Kg}$	50	100	123	70 - 130

#### Sample: 413838 - SB-5-10'

Laboratory: Midland

TPH ORO Analysis: Analytical Method: S 8015 D Prep Method: N/AQC Batch: 128064 Date Analyzed: Analyzed By: JL2016-02-09 Prep Batch: 108423 Sample Preparation: 2016-02-09 Prepared By: JL

MDL MQL PQL RLParameter Flag Cert Result Result Result Result  ${\rm Units}$ Dilution MDLMQLPQL RL50.0 ORO 0.00 <1000 <1000 20 50.0 < 1000mg/Kg 0.00 50.0

							$_{ m Spike}$	Percent	Recovery
Surrogate		Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane	Qsr	Qsr		287	mg/Kg	20	50.0	574	70 - 130
n-Triacontane	$_{\mathrm{Qsr}}$	$_{\mathrm{Qsr}}$		292	$\mathrm{mg}/\mathrm{Kg}$	20	50.0	584	37.1 - 162

### Sample: 413839 - SB-5-15'

Laboratory: Midland

Analysis: **BTEX** Analytical Method:  $S_{8021B}$ Prep Method: S 5035 QC Batch: 128118 Date Analyzed: 2016-02-11 Analyzed By: AKPrep Batch: 108459 Sample Preparation: 2016-02-10 Prepared By: AK

Report Date: February 11, 2016 Work Order: 16020529 Page Number: 8 of 29

David Bilbrey 8" Pipeline 15-0171-01

			RL			
Parameter	Flag	Cert	Result	Units	Dilution	RL
Benzene	Qr	5	< 0.0200	mg/Kg	1	0.0200
Toluene	$_{ m Qr}$	5	0.0975	$\mathrm{mg}/\mathrm{Kg}$	1	0.0200
Ethylbenzene	$_{ m Qr}$	5	0.325	mg/Kg	1	0.0200
Xylene	$_{ m Qr}$	5	0.319	mg/Kg	1	0.0200

						Spike	Percent	Recovery
Surrogate	Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			1.91	mg/Kg	1	2.00	96	70 - 130
4-Bromofluorobenzene (4-BFB)			2.22	mg/Kg	1	2.00	111	70 - 130

### Sample: 413839 - SB-5-15'

Laboratory: Lubbock

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/AQC Batch: Date Analyzed: 128088 2016-02-09 Analyzed By: RLPrep Batch: 108453 Sample Preparation: Prepared By: RL

RLCert Result Units Dilution RL

#### Parameter Flag 25.0 Chloride 334 mg/Kg 3,4,6 5

#### Sample: 413839 - SB-5-15'

Laboratory: Midland

Analysis: TPH DRO Analytical Method: S 8015 D Prep Method: N/AQC Batch: 128063 Date Analyzed: 2016-02-09 Analyzed By: JLPrep Batch: Prepared By: 108423 Sample Preparation: 2016-02-09JL

RLParameter Flag  $\operatorname{Cert}$ Result Units Dilution RL $\overline{\mathrm{DRO}}$ < 50.0 mg/Kg 50.0 5

						$\operatorname{Spike}$	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			47.9	${ m mg/Kg}$	1	50.0	96	70 - 130

#### Sample: 413839 - SB-5-15'

Laboratory: Midland

Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035 QC Batch: 128119 Date Analyzed: 2016-02-11 Analyzed By: AKPrep Batch: 108459 Sample Preparation: 2016-02-10 Prepared By: AK

Report Date: February 11, 2016 Work Order: 16020529 Page Number: 9 of 29

15-0171-01 David Bilbrey 8" Pipeline

					RL				
Parameter	Flag		Cert	F	Result	Unit	S	Dilution	RL
GRO			5		16.4	mg/K	g	1	4.00
Surrogate		Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		Flag	Cert	1.97	mg/Kg	1	2.00	98	70 - 130
4-Bromofluorobenzene (4-BFB)	Qsr	Qsr		2.98	mg/Kg	1	2.00	149	70 - 130

### Sample: 413839 - SB-5-15'

Laboratory: Midland

			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

Currogata	Flor	Cont	Dogult	Unita	Dilution	Spike	Percent	Recovery Limits
Surrogate	$\operatorname{Flag}$	$\operatorname{Cert}$	Result	$\operatorname{Units}$	Dilution	Amount	Recovery	LIIIIUS
n-Tricosane			47.9	mg/Kg	1	50.0	96	70 - 130
n-Triacontane			51.9	mg/Kg	1	50.0	104	37.1 - 162

### Sample: 413840 - SB-5-20'

Laboratory: Lubbock

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A QC Batch: 128088 Date Analyzed: 2016-02-09 Analyzed By: RL Prep Batch: 108453 Sample Preparation: Prepared By: RL

			$\operatorname{RL}$			
Parameter	Flag	Cert	Result	Units	Dilution	RL
Chloride		3,4,6	357	mg/Kg	5	25.0

### Sample: 413840 - SB-5-20'

Laboratory: Midland

Report Date: February 11, 2016 Work Order: 16020529 Page Number: 10 of 29

15-0171-01 David Bilbrey 8" Pipeline

					RL			
Parameter		Flag	Cert	Res	$\operatorname{sult}$	Units	Dilution	RL
DRO			5	<5	0.0	mg/Kg	1	50.0
Surrogate	$\operatorname{Flag}$	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane			48.3	mg/Kg	1	50.0	97	70 - 130

## Sample: 413840 - SB-5-20

Laboratory: Midland

Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035 QC Batch: 128119 Date Analyzed: 2016-02-11 Analyzed By: AK Prep Batch: 108459 Sample Preparation: 2016-02-10 Prepared By: AK

			$\operatorname{RL}$			
Parameter	Flag	Cert	Result	Units	Dilution	RL
GRO		5	18.8	mg/Kg	1	4.00

							$_{ m Spike}$	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)	$_{\mathrm{Qsr}}$	$_{\mathrm{Qsr}}$		3.36	$\mathrm{mg}/\mathrm{Kg}$	1	2.00	168	70 - 130

## Sample: 413840 - SB-5-20'

Laboratory: Midland

Analysis: TPH ORO Analytical Method: S 8015 D Prep Method: N/A QC Batch: 128064 Date Analyzed: 2016-02-09 Analyzed By: JL Prep Batch: 108423 Sample Preparation: 2016-02-09 Prepared By: JL

			MDL	MQL	PQL	RL						
Parameter	Flag	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	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			48.3	mg/Kg	1	50.0	97	70 - 130
n-Triacontane			52.9	$\mathrm{mg}/\mathrm{Kg}$	1	50.0	106	37.1 - 162

Report Date: February 11, 2016 Work Order: 16020529 Page Number: 11 of 29

15-0171-01 David Bilbrey 8" Pipeline

## Sample: 413842 - SB-6-10'

Laboratory: Midland

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035 QC Batch: 128118 Date Analyzed: 2016-02-11 Analyzed By: AK Prep Batch: 108459 Sample Preparation: 2016-02-10 Prepared By: AK

			RL			
Parameter	Flag	$\operatorname{Cert}$	Result	Units	Dilution	RL
Benzene	Qr	5	273	m mg/Kg	200	0.0200
Toluene	$_{ m Qr}$	5	966	m mg/Kg	200	0.0200
Ethylbenzene	$_{ m Qr}$	5	1410	$\mathrm{mg}/\mathrm{Kg}$	200	0.0200
Xylene	$_{ m Qr}$	5	<b>596</b>	$\mathrm{mg}/\mathrm{Kg}$	200	0.0200

						$_{ m Spike}$	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			512	mg/Kg	200	400	128	70 - 130
4-Bromofluorobenzene (4-BFB)			484	mg/Kg	200	400	121	70 - 130

#### Sample: 413842 - SB-6-10'

Laboratory: Lubbock

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A QC Batch: 128088 Date Analyzed: 2016-02-09 Analyzed By: RL Prep Batch: 108453 Sample Preparation: Prepared By: RL

			RL			
Parameter	Flag	Cert	Result	Units	Dilution	RL
Chloride		3,4,6	274	m mg/Kg	5	25.0

## Sample: 413842 - SB-6-10'

Laboratory: Midland

Analysis: TPH DRO Analytical Method: S 8015 D Prep Method: N/A QC Batch: 128063 Date Analyzed: 2016-02-09 Analyzed By: JL Prep Batch: 108423 Sample Preparation: 2016-02-09 Prepared By: JL

			RL			
Parameter	$\operatorname{Flag}$	Cert	Result	Units	Dilution	RL
DRO		5	6420	mg/Kg	20	50.0

							Spike	Percent	Recovery
Surrogate		Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane	Qsr	Qsr		296	mg/Kg	20	50.0	592	70 - 130

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### Sample: 413842 - SB-6-10'

Laboratory: Midland

Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035 QC Batch: 128119 Date Analyzed: 2016-02-11 Analyzed By: AK Prep Batch: 108459 Sample Preparation: 2016-02-10 Prepared By: AK

						$_{ m Spike}$	Percent	Recovery	
Surrogate	Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits	
Trifluorotoluene (TFT)			346	mg/Kg	200	400	86	70 - 130	_
4-Bromofluorobenzene (4-BFB)	Qsr Qsr		701	mg/Kg	200	400	175	70 - 130	

#### Sample: 413842 - SB-6-10'

Laboratory: Midland

TPH ORO Prep Method: Analysis: Analytical Method: S 8015 D N/AQC Batch: 128064 Date Analyzed: 2016-02-09 Analyzed By: JLPrep Batch: 108423 Sample Preparation: 2016-02-09 Prepared By: JL

MDL MQL PQL RLParameter Flag Cert Result Result Result Result Units Dilution MDL MQLPQL RL0.00 50.0 ORO <1000 <1000 <1000 20 0.00 50.0 50.0 mg/Kg

							Spike	Percent	Recovery
Surrogate		Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane	Qsr	Qsr		296	mg/Kg	20	50.0	592	70 - 130
n-Triacontane	$_{\mathrm{Qsr}}$	$_{\mathrm{Qsr}}$		268	$\mathrm{mg}/\mathrm{Kg}$	20	50.0	536	37.1 - 162

## Sample: 413843 - SB-6-15'

Laboratory: Midland

Analysis: **BTEX** Analytical Method: S 8021B Prep Method: S 5035 QC Batch: 128118 Date Analyzed: 2016-02-11 Analyzed By: AKPrep Batch: 108459 Sample Preparation: 2016-02-10 Prepared By: AK

RLParameter Flag Cert Result Units Dilution RLBenzene 0.0216 mg/Kg 0.0200 1 Qr 5 0.210 Toluene mg/Kg1 0.0200 Qr 5 mg/KgEthylbenzene 0.895 1 0.0200Qr 5

 $continued \dots$ 

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sample 413843 continued ...

				RL				
Parameter	Flag	Cert		Result	Unit	S	Dilution	RL
Xylene	$_{ m Qr}$	5		0.636	mg/K	g	1	0.0200
						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)			2.18	mg/Kg	1	2.00	109	70 - 130

## Sample: 413843 - SB-6-15'

Laboratory: Lubbock

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A QC Batch: 128088 Date Analyzed: 2016-02-09 Analyzed By: RLPrepared By: Prep Batch: 108453 Sample Preparation: RL

			RL			
Parameter	Flag	$\operatorname{Cert}$	Result	Units	Dilution	RL
Chloride		3,4,6	32.8	mg/Kg	1	25.0

### Sample: 413843 - SB-6-15'

Laboratory: Midland

Analysis: TPH DRO Analytical Method: S 8015 D Prep Method: N/AQC Batch: 128063 Date Analyzed: 2016-02-09 Analyzed By: JLPrep Batch: 108423 Sample Preparation: 2016-02-09 Prepared By: JL

			$\operatorname{RL}$			
Parameter	Flag	Cert	Result	Units	Dilution	RL
DRO		5	< 50.0	mg/Kg	1	50.0
				C:1	D	D

						Spike	Percent	Recovery
Surrogate	Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			45.4	${ m mg/Kg}$	1	50.0	91	70 - 130

#### Sample: 413843 - SB-6-15'

Laboratory: Midland

Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035 QC Batch: Date Analyzed: 128119 2016-02-11 Analyzed By: AKPrep Batch: 108459 Sample Preparation: Prepared By: 2016-02-10 AK

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					RL				
Parameter	Flag		Cert		Result	Unit	ts	Dilution	RL
GRO			5		17.0	mg/K	g	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)				2.37	mg/Kg	1	2.00	118	70 - 130

## Sample: 413843 - SB-6-15'

Laboratory: Midland

Analysis: TPH ORO Analytical Method: S 8015 D Prep Method: N/A QC Batch: 128064 Date Analyzed: 2016-02-09 Analyzed By: JL Prep Batch: 108423 Sample Preparation: 2016-02-09 Prepared By: JL

			MDL	MQL	PQL	RL						
Parameter	Flag	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

C .	T)	<b>C</b>	D 1	TT */	D:1 .:	Spike	Percent	Recovery
Surrogate	$\operatorname{Flag}$	$\operatorname{Cert}$	Result	$\operatorname{Units}$	Dilution	Amount	Recovery	Limits
n-Tricosane			45.4	mg/Kg	1	50.0	91	70 - 130
n-Triacontane			49.5	mg/Kg	1	50.0	99	37.1 - 162

## Sample: 413844 - SB-6-20'

Laboratory: Midland

Analysis: BTEXAnalytical Method: S 8021BPrep Method: S 5035 QC Batch: 128118Date Analyzed: 2016-02-11 Analyzed By: AKPrep Batch: 108459 Sample Preparation: 2016-02-10 Prepared By: AK

			RL			
Parameter	Flag	$\operatorname{Cert}$	Result	Units	Dilution	RL
Benzene	$_{ m Qr,U}$	5	< 0.0200	$\mathrm{mg/Kg}$	1	0.0200
Toluene	$_{ m Qr}$	5	0.0270	$\mathrm{mg}/\mathrm{Kg}$	1	0.0200
Ethylbenzene	$_{ m Qr}$	5	0.0427	$\mathrm{mg}/\mathrm{Kg}$	1	0.0200
Xylene	$_{ m Qr}$	5	0.0927	$\mathrm{mg}/\mathrm{Kg}$	1	0.0200

						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)			2.10	$\mathrm{mg}/\mathrm{Kg}$	1	2.00	105	70 - 130

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#### Sample: 413844 - SB-6-20'

Laboratory: Lubbock

Analytical Method: Analysis: Chloride (IC) E 300.0 Prep Method: N/AQC Batch: 128088 Date Analyzed: 2016-02-09 Analyzed By: RLPrepared By: RL

Prep Batch: Sample Preparation: 108453

RLParameter Flag  $\operatorname{Cert}$ Result Units Dilution RLChloride 33.1mg/Kg 25.0 3,4,6

#### Sample: 413844 - SB-6-20'

Laboratory: Midland

Analysis: TPH DRO Analytical Method: S 8015 D Prep Method: N/AQC Batch: Analyzed By: JL128063Date Analyzed: 2016 - 02 - 09Prep Batch: 108423 Sample Preparation: 2016-02-09 Prepared By: JL

RLParameter Flag Cert Result Units Dilution RL $\overline{\mathrm{DRO}}$ 5 < 50.0 mg/Kg 1 50.0

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			52.2	mg/Kg	1	50.0	104	70 - 130

## Sample: 413844 - SB-6-20'

Laboratory: Midland

Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035 QC Batch: 128119 Date Analyzed: 2016-02-11 Analyzed By: AK Prep Batch: 108459 Sample Preparation: Prepared By: AK 2016-02-10

RLCert Dilution Parameter Flag Result Units RLGRO < 4.00mg/Kg 4.00

						$\operatorname{Spike}$	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			1.82	mg/Kg	1	2.00	91	70 - 130
4-Bromofluorobenzene (4-BFB)			2.14	mg/Kg	1	2.00	107	70 - 130

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Sample: 413844 - SB-6-20'

Laboratory: Midland

Analysis: TPH ORO Analytical Method: S 8015 D Prep Method: N/A QC Batch: 128064 Analyzed By: JLDate Analyzed: 2016-02-09 Prep Batch: 108423 Sample Preparation: 2016-02-09 Prepared By: JL

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

						$\operatorname{Spike}$	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			52.2	mg/Kg	1	50.0	104	70 - 130
n-Triacontane			57.3	mg/Kg	1	50.0	115	37.1 - 162

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## Method Blanks

Method Blank (1) QC Batch: 128063

QC Batch: 128063 Date Analyzed: 2016-02-09 Analyzed By: JL Prep Batch: 108423 QC Preparation: 2016-02-09 Prepared By: JL

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			47.9	mg/Kg	1	50.0	96	70 - 130

Method Blank (1) QC Batch: 128064

QC Batch: 128064 Date Analyzed: 2016-02-09 Analyzed By: JL Prep Batch: 108423 QC Preparation: 2016-02-09 Prepared By: JL

						Spike	Percent	Recovery
Surrogate	Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			47.9	mg/Kg	1	50.0	96	70 - 130
n-Triacontane			52.6	mg/Kg	1	50.0	105	37.1 - 162

Method Blank (1) QC Batch: 128088

QC Batch: 128088 Date Analyzed: 2016-02-09 Analyzed By: RL Prep Batch: 108453 QC Preparation: 2016-02-09 Prepared By: RL

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Method Blank (1) QC Batch: 128118

QC Batch: 128118Date Analyzed: 2016-02-11Analyzed By: AK Prepared By: AK

Prep Batch: 108459 QC Preparation: 2016-02-10

			$\mathrm{MDL}$		
Parameter	Flag	$\operatorname{Cert}$	Result	Units	RL
Benzene		5	< 0.0100	m mg/Kg	0.02
Toluene		5	< 0.0156	$\mathrm{mg}/\mathrm{Kg}$	0.02
Ethylbenzene		5	< 0.0151	$\mathrm{mg}/\mathrm{Kg}$	0.02
Xylene		5	< 0.00430	mg/Kg	0.02

						$\operatorname{Spike}$	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			2.06	mg/Kg	1	2.00	103	70 - 130
4-Bromofluorobenzene (4-BFB)			1.96	$\mathrm{mg}/\mathrm{Kg}$	1	2.00	98	70 - 130

Method Blank (1) QC Batch: 128119

2016-02-11QC Batch: 128119 Date Analyzed: Analyzed By: AK Prep Batch: 108459 QC Preparation: 2016-02-10 Prepared By:  ${\rm AK}$ 

MDLRLParameter Cert Units Flag Result GRO < 1.76 mg/Kg 5

						$_{ m Spike}$	Percent	Recovery
Surrogate	$\operatorname{Flag}$	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			2.11	mg/Kg	1	2.00	106	70 - 130
4-Bromofluorobenzene (4-BFB)			1.94	mg/Kg	1	2.00	97	70 - 130

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## Laboratory Control Spikes

## Laboratory Control Spike (LCS-1)

QC Batch: 128063 Date Analyzed: 2016-02-09 Analyzed By: JL Prep Batch: 108423 QC Preparation: 2016-02-09 Prepared By: JL

			LCS			Spike	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	$\operatorname{Limit}$
DRO		5	243	mg/Kg	1	250	< 7.41	97	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		5	265	mg/Kg	1	250	< 7.41	106	70 - 130	9	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	48.2	50.6	mg/Kg	1	50.0	96	101	70 - 130

### Laboratory Control Spike (LCS-1)

QC Batch: 128064 Date Analyzed: 2016-02-09 Analyzed By: JL Prep Batch: 108423 QC Preparation: 2016-02-09 Prepared By: JL

	LCS	LCSD			Spike	LCS	LCSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
n-Tricosane	48.2	50.6	mg/Kg	1	50.0	96	101	70 - 130
n-Triacontane	47.0	48.8	mg/Kg	1	50.0	94	98	54.8 - 164

## Laboratory Control Spike (LCS-1)

QC Batch: 128088 Date Analyzed: 2016-02-09 Analyzed By: RL Prep Batch: 108453 QC Preparation: 2016-02-09 Prepared By: RL

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mg/Kg

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Param

Chloride

LCS			Spike	Matrix		Rec.
Result	Units	Dil.	Amount	Result	Rec.	Limit

250

< 8.34

103

90 - 110

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

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			LCSD			Spike	Matrix		Rec.		RPD
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride		3,4,6	255	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: 128118 Date Analyzed: 2016-02-11 Analyzed By: AK Prep Batch: 108459 QC Preparation: 2016-02-10 Prepared By: AK

			LCS			Spike	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit
Benzene		5	2.02	mg/Kg	1	2.00	< 0.0100	101	70 - 130
Toluene		5	2.05	$\mathrm{mg}/\mathrm{Kg}$	1	2.00	< 0.0156	102	70 - 130
Ethylbenzene		5	2.18	$\mathrm{mg}/\mathrm{Kg}$	1	2.00	< 0.0151	109	70 - 130
Xylene		5	6.02	$\mathrm{mg}/\mathrm{Kg}$	1	6.00	< 0.00430	100	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		5	2.05	mg/Kg	1	2.00	< 0.0100	102	70 - 130	2	20
Toluene		5	2.11	mg/Kg	1	2.00	< 0.0156	106	70 - 130	3	20
Ethylbenzene		5	2.14	mg/Kg	1	2.00	< 0.0151	107	70 - 130	2	20
Xylene		5	6.12	mg/Kg	1	6.00	< 0.00430	102	70 - 130	2	20

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

	LCS	LCSD			$_{\mathrm{Spike}}$	LCS	LCSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	1.98	1.85	mg/Kg	1	2.00	99	92	70 - 130
4-Bromofluorobenzene (4-BFB)	2.03	1.78	mg/Kg	1	2.00	102	89	70 - 130

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

QC Batch: 128119 Date Analyzed: 2016-02-11 Analyzed By: AK
Prep Batch: 108459 QC Preparation: 2016-02-10 Prepared By: AK

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			LCS			Spike	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	$\operatorname{Limit}$
GRO		5	20.2	mg/Kg	1	20.0	< 1.76	101	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	22.7	mg/Kg	1	20.0	< 1.76	114	70 - 130	12	20

	LCS	LCSD			Spike	LCS	LCSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	2.01	2.08	mg/Kg	1	2.00	100	104	70 - 130
4-Bromofluorobenzene (4-BFB)	1.96	1.91	mg/Kg	1	2.00	98	96	70 - 130

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## Matrix Spikes

Matrix Spike (MS-1) Spiked Sample: 413844

QC Batch: 128063 Date Analyzed: 2016-02-09 Analyzed By: JL Prep Batch: 108423 QC Preparation: 2016-02-09 Prepared By: JL

			MS			Spike	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	$\operatorname{Limit}$
DRO		5	256	mg/Kg	1	250	10.4	98	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		5	266	mg/Kg	1	250	10.4	102	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
n-Tricosane	46.9	48.6	mg/Kg	1	50	94	97	70 - 130

Matrix Spike (MS-1) Spiked Sample: 413844

QC Batch: 128064 Date Analyzed: 2016-02-09 Analyzed By: JL Prep Batch: 108423 QC Preparation: 2016-02-09 Prepared By: JL

	MS	MSD			Spike	MS	MSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
n-Tricosane	46.9	48.6	mg/Kg	1	50	94	97	70 - 130
n-Triacontane	45.5	47.8	mg/Kg	1	50	91	96	10 - 258

Matrix Spike (MS-1) Spiked Sample: 413937

QC Batch: 128088 Date Analyzed: 2016-02-09 Analyzed By: RL Prep Batch: 108453 QC Preparation: 2016-02-09 Prepared By: RL

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			MS			Spike	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	$\operatorname{Limit}$
Chloride		3,4,6	305	mg/Kg	1	250	23.1	113	80 - 120

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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		3,4,6	314	mg/Kg	1	250	23.1	116	80 - 120	3	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: 413844

QC Batch: 128118 Date Analyzed: 2016-02-11 Analyzed By: AK Prep Batch: 108459 QC Preparation: 2016-02-10 Prepared By: AK

				MS			Spike	Matrix		Rec.
Param		$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit
Benzene	Qs	Qs	5	1.24	mg/Kg	1	2.00	< 0.0100	62	70 - 130
Toluene	$_{\mathrm{Qs}}$	$_{\mathrm{Qs}}$	5	1.34	mg/Kg	1	2.00	0.027	66	70 - 130
Ethylbenzene			5	1.53	mg/Kg	1	2.00	0.0427	74	70 - 130
Xylene	$_{\mathrm{Qs}}$	$_{\mathrm{Qs}}$	5	4.28	mg/Kg	1	6.00	0.0927	70	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
Benzene	Qr	Qr	5	1.89	mg/Kg	1	2.00	< 0.0100	94	70 - 130	42	20
Toluene	$_{ m Qr}$	$_{ m Qr}$	5	2.14	mg/Kg	1	2.00	0.027	106	70 - 130	46	20
Ethylbenzene	$_{ m Qr}$	$_{ m Qr}$	5	2.57	mg/Kg	1	2.00	0.0427	126	70 - 130	51	20
Xylene	$_{ m Qr}$	$_{ m Qr}$	5	7.02	mg/Kg	1	6.00	0.0927	115	70 - 130	48	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)	2.05	1.92	mg/Kg	1	2	102	96	70 - 130
4-Bromofluorobenzene (4-BFB)	2.15	1.82	mg/Kg	1	2	108	91	70 - 130

Matrix Spike (MS-1) Spiked Sample: 413844

QC Batch: 128119 Date Analyzed: 2016-02-11 Analyzed By: AK
Prep Batch: 108459 QC Preparation: 2016-02-10 Prepared By: AK

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			MS			Spike	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit
GRO		5	21.3	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.

			MSD			Spike	Matrix		Rec.		RPD
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
GRO		5	19.3	mg/Kg	1	20.0	< 1.76	96	70 - 130	10	20

	MS	MSD			Spike	MS	MSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	1.95	1.89	mg/Kg	1	2	98	94	70 - 130
4-Bromofluorobenzene (4-BFB)	2.20	2.50	mg/Kg	1	2	110	125	70 - 130

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## Calibration Standards

## Standard (CCV-1)

QC Batch: 128063 Date Analyzed: 2016-02-09 Analyzed By: JL

				CCVs	CCVs	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		5	mg/Kg	250	276	110	80 - 120	2016-02-09

## Standard (CCV-2)

QC Batch: 128063Date Analyzed: 2016-02-09 Analyzed By: JL

				CCVs	CCVs	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		5	mg/Kg	250	262	105	80 - 120	2016-02-09

## Standard (CCV-3)

QC Batch: 128063 Date Analyzed: 2016-02-09 Analyzed By: JL

				$\mathrm{CCVs}$	$\operatorname{CCVs}$	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	$\operatorname{Cert}$	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		5	mg/Kg	250	256	102	80 - 120	2016-02-09

## Standard (CCV-2)

QC Batch: 128064 Date Analyzed: 2016-02-09 Analyzed By: JL

				$\operatorname{CCVs}$	CCVs	$_{ m CCVs}$	Percent	_
				True	Found	Percent	Recovery	$\operatorname{Date}$
Param	Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
ORO			mg/Kg	250	0.0100	0	-	2016-02-09

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Standard (CCV-3)

QC Batch: 128064 Date Analyzed: 2016-02-09 Analyzed By: JL

				CCVs	CCVs	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
ORO			mg/Kg	250	0.00	0	-	2016-02-09

Standard (CCV-1)

QC Batch: 128088 Date Analyzed: 2016-02-09 Analyzed By: RL

				CCVs	CCVs	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride		3,4,6	mg/Kg	25.0	25.8	103	90 - 110	2016-02-09

Standard (CCV-2)

QC Batch: 128088 Date Analyzed: 2016-02-09 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	2016-02-09

Standard (CCV-1)

QC Batch: 128118 Date Analyzed: 2016-02-11 Analyzed By: AK

				$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\operatorname{Percent}$	
				True	Found	Percent	Recovery	Date
Param	Flag	$\operatorname{Cert}$	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Benzene		5	mg/kg	0.100	0.104	104	80 - 120	2016-02-11
Toluene		5	mg/kg	0.100	0.105	105	80 - 120	2016-02-11
Ethylbenzene		5	$\mathrm{mg/kg}$	0.100	0.107	107	80 - 120	2016-02-11
Xylene		5	mg/kg	0.300	0.307	102	80 - 120	2016-02-11

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David Bilbrey 8" Pipeline

15-0171-01

## Standard (CCV-2)

	QC Batch:	128118	Date Analyzed:	2016-02-11	Analyzed By: AK
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				CCVs	CCVs	$\mathrm{CCVs}$	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Benzene		5	mg/kg	0.100	0.0982	98	80 - 120	2016-02-11
Toluene		5	$\mathrm{mg/kg}$	0.100	0.103	103	80 - 120	2016-02-11
Ethylbenzene		5	$\mathrm{mg/kg}$	0.100	0.101	101	80 - 120	2016-02-11
Xylene		5	mg/kg	0.300	0.286	95	80 - 120	2016-02-11

## Standard (CCV-1)

QC Batch: 128119 Date Analyzed: 2016-02-11 Analyzed By: AK

				CCVs	CCVs	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	$\operatorname{Cert}$	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		5	mg/Kg	1.00	0.990	99	80 - 120	2016-02-11

## Standard (CCV-2)

QC Batch: 128119 Date Analyzed: 2016-02-11 Analyzed By: AK

				$\mathrm{CCVs}$	$\operatorname{CCVs}$	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	$\operatorname{Cert}$	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		5	mg/Kg	1.00	1.19	119	80 - 120	2016-02-11

## Standard (CCV-3)

QC Batch: 128119 Date Analyzed: 2016-02-11 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	1.04	104	80 - 120	2016-02-11

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## 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.

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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.

beSoe031:井(XY

711 Pipeline CHAIN-OF-CUSTODY XS X1-403805 COLLECTOR: Michael Cant CUSTODY SEALS - C BROKEN CINTACT IN NOT USED FIELD NOTES OF 13843 ロると言 1528517 了級三 THERM #: PAGE PROJECT LOCATION OR NAME: David Bilbrey LAB WORK ORDER #: LABORATORY USE ONLY: RECEIVING TEMP: 4.1 Y HAND DELIVERED > 1 > ☐ CARRIER BILL # LAI PROJECT #: 15-0171-01 TURN AROUND TIME NORMAL [] OTHER くののか 2 DAY 1 DAY DATE: 2/41 2/5/2016 15:12 RECEIVED BY (Signature)/4/10 15:12 PO #: > > S 7 5 > 507 N. Marienfeld, Ste. 200 > RECEIVED BY: (Signature) RECENTED BY: (Signature) Midland, TX 79701 NNPRESERVED **PRESERVATION** 432-687-0901 ICE > > □ HOBN □ OS2H HNO HCI # of Containers Matrix 15/16 IV DATE/TIME 3,2 039 10:35 54:0 8:0 1.42 11:34 J. COLLYDUD Time SL=SLUDGE OT=OTHER P=PAINT Date Orson & SSOCIOTES, Inc. Environmental Consultants W=WATER S=SOIL ELINGUISHED BY: (Signature) RELINQUISHED BY: (Signature) RELINQUISHED BY: (Signature) A=AIR Lab# 200 Data Reported to: ☐ Yes ☐ No Time zone/State: TRRP report? SB-6-20 5B-6-25 TIME ZONE: SB-6-15 Sample I.D. SB-6-10 01-5-85 58-6 SB-6



## Certifications

WBE NCTRCA DBE**NELAP** DoD LELAP Oklahoma ISO 17025 Kansas

## Analytical and Quality Control Report

Report Date: March 16, 2016

16031402

Work Order:

Michael Gant Larson and Associates, Inc.

P. O. Box 50685 Midland, TX, 79710

Project Name: David Bilbrey 8" Pipeline

Project Number: 15-0171-01

			Date	Time	Date
Sample	Description	Matrix	Taken	Taken	Received
415880	SS-2	soil	2016-03-11	10:55	2016-03-14
415881	SS-3	soil	2016-03-11	11:20	2016-03-14
415888	SP-1	soil	2016-03-11	12:33	2016-03-14

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

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 19 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

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## Case Narrative

Samples for project David Bilbrey 8" Pipeline were received by TraceAnalysis, Inc. on 2016-03-14 and assigned to work order 16031402. Samples for work order 16031402 were received intact at a temperature of 5.7 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	109127	2016-03-15 at 09:55	128887	2016-03-16 at 09:21
Chloride (IC)	E 300.0	109163	2016-03-15 at 14:26	128896	2016-03-15 at $12:07$
TPH DRO	S 8015 $D$	109153	2016-03-16 at 09:02	128884	2016-03-16 at 09:04
TPH GRO	S 8015 $D$	109127	2016-03-15 at $09:55$	128889	2016-03-16 at $09:25$

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

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 16031402 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 16, 2016 Work Order: 16031402 Page Number: 5 of 19

15-0171-01 David Bilbrey 8" Pipeline

## **Analytical Report**

Sample: 415880 - SS-2

Laboratory: Midland

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035 QC Batch: 128887 Date Analyzed: 2016-03-16 Analyzed By: AK Prep Batch: 109127 Sample Preparation: 2016-03-15 Prepared By: AK

			$\operatorname{RL}$			
Parameter	Flag	$\operatorname{Cert}$	Result	Units	Dilution	RL
Benzene	U	3	< 0.0200	m mg/Kg	1	0.0200
Toluene	$_{ m Qr}$	3	0.233	$\mathrm{mg}/\mathrm{Kg}$	1	0.0200
Ethylbenzene	$_{ m Qr}$	3	1.57	$\mathrm{mg}/\mathrm{Kg}$	1	0.0200
Xylene	$_{ m Qr}$	3	0.857	mg/Kg	1	0.0200

						$\operatorname{Spike}$	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			2.31	mg/Kg	1	2.00	116	70 - 130
4-Bromofluorobenzene (4-BFB)			2.47	mg/Kg	1	2.00	124	70 - 130

Sample: 415880 - SS-2

Laboratory: Lubbock

			RL			
Parameter	Flag	$\operatorname{Cert}$	Result	Units	Dilution	RL
Chloride		1,2,4	53.6	$\mathrm{mg/Kg}$	2	25.0

Sample: 415880 - SS-2

Laboratory: Midland

Analysis: TPH DRO Analytical Method: S 8015 D Prep Method: N/A QC Batch: 128884 Date Analyzed: 2016-03-16 Analyzed By: JL Prep Batch: 109153 Sample Preparation: 2016-03-16 Prepared By: JL

			RL			
Parameter	Flag	Cert	Result	Units	Dilution	RL
DRO		3	< 50.0	m mg/Kg	1	50.0

Report Date: March 16, 2016 Work Order: 16031402 Page Number: 6 of 19

15-0171-01 David Bilbrey 8" Pipeline

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			52.6	mg/Kg	1	50.0	105	70 - 130

## Sample: 415880 - SS-2

Laboratory: Midland

Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035 QC Batch: 128889 Date Analyzed: 2016-03-16 Analyzed By: AKPrep Batch: 109127Sample Preparation: 2016-03-15Prepared By: AK

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			2.21	mg/Kg	1	2.00	110	70 - 130
4-Bromofluorobenzene (4-BFB)			2.33	$\mathrm{mg}/\mathrm{Kg}$	1	2.00	116	70 - 130

## Sample: 415881 - SS-3

Laboratory: Midland

Analysis: BTEXAnalytical Method: S 8021B Prep Method: S 5035 QC Batch: 128887 Date Analyzed: 2016 - 03 - 16Analyzed By: AKPrep Batch: 109127 2016 - 03 - 15Sample Preparation: Prepared By: AK

RLDilution Parameter Flag Cert Result Units RL0.0200 Benzene < 0.0200 mg/Kg 3 Toluene 0.0806mg/Kg1 0.0200 $_{
m Qr}$ 3 Ethylbenzene 1 0.02000.196mg/KgQr 3 0.159Xylene mg/Kg1 0.0200Qr

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			2.16	mg/Kg	1	2.00	108	70 - 130
4-Bromofluorobenzene (4-BFB)			2.29	$\mathrm{mg}/\mathrm{Kg}$	1	2.00	114	70 - 130

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### Sample: 415881 - SS-3

Laboratory: Lubbock

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

#### Sample: 415881 - SS-3

Laboratory: Midland

Analysis: TPH DRO Analytical Method: S 8015 D Prep Method: N/AQC Batch: Analyzed By: JL128884Date Analyzed: 2016 - 03 - 16Prep Batch: 109153 Sample Preparation: 2016-03-16 Prepared By: JL

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			49.4	mg/Kg	1	50.0	99	70 - 130

## Sample: 415881 - SS-3

Laboratory: Midland

Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035 QC Batch: 128889 Date Analyzed: 2016-03-16 Analyzed By: AK Prep Batch: 109127 Sample Preparation: Prepared By: AK 2016-03-15

						$\operatorname{Spike}$	Percent	Recovery
Surrogate	Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			2.07	mg/Kg	1	2.00	104	70 - 130
4-Bromofluorobenzene (4-BFB)			2.23	mg/Kg	1	2.00	112	70 - 130

Report Date: March 16, 2016 Work Order: 16031402 Page Number: 8 of 19

15-0171-01 David Bilbrey 8" Pipeline

Sample: 415888 - SP-1

Laboratory: Lubbock

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

RL Contact Description Health

Report Date: March 16, 2016 Work Order: 16031402 Page Number: 9 of 19

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## Method Blanks

Method Blank (1) QC Batch: 128884

QC Batch: 128884 Date Analyzed: 2016-03-16 Analyzed By: JL Prep Batch: 109153 QC Preparation: 2016-03-16 Prepared By: JL

MDLFlag Parameter Cert Result Units RL $\overline{\text{DRO}}$ < 7.41mg/Kg 50 3 Spike Percent Recovery Surrogate Flag Cert Result Units Dilution Amount Recovery Limits n-Tricosane 54.4 mg/Kg 50.0 109 70 - 130

Method Blank (1) QC Batch: 128887

QC Batch: 128887 Date Analyzed: 2016-03-16 Analyzed By: AK Prep Batch: 109127 QC Preparation: 2016-03-15 Prepared By: AK

MDLCert Units RLParameter Flag Result Benzene < 0.0100 mg/Kg 0.02 3 Toluene 0.02 < 0.0156mg/Kg3 Ethylbenzene 3 < 0.0151mg/Kg 0.02Xylene < 0.00430 mg/Kg 0.023

						$_{ m Spike}$	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			2.09	mg/Kg	1	2.00	104	70 - 130
4-Bromofluorobenzene (4-BFB)			1.85	mg/Kg	1	2.00	92	70 - 130

Method Blank (1) QC Batch: 128889

QC Batch: 128889 Date Analyzed: 2016-03-16 Analyzed By: AK Prep Batch: 109127 QC Preparation: 2016-03-15 Prepared By: AK Report Date: March 16, 2016

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					MDL			
Parameter	$\operatorname{Flag}$		$\operatorname{Cert}$		Result		Units	RL
GRO			3		< 1.76	1	mg/Kg	4
						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			2.05	mg/Kg	1	2.00	102	70 - 130
4-Bromofluorobenzene (4-BFB)			1.60	mg/Kg	1	2.00	80	70 - 130

Method Blank (1) QC Batch: 128896

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

MDLParameter Flag Cert Result Units RLChloride < 8.34 mg/Kg 25 1,2,4

Report Date: March 16, 2016 Work Order: 16031402 Page Number: 11 of 19 15-0171-01 David Bilbrey 8" Pipeline

## Laboratory Control Spikes

## Laboratory Control Spike (LCS-1)

QC Batch: 128884 Date Analyzed: 2016-03-16 Analyzed By: JL Prep Batch: 109153 QC Preparation: 2016-03-16 Prepared By: JL

			LCS			Spike	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	$\operatorname{Limit}$
DRO		3	230	mg/Kg	1	250	< 7.41	92	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	201	mg/Kg	1	250	< 7.41	80	70 - 130	13	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	55.4	47.9	mg/Kg	1	50.0	111	96	70 - 130

### Laboratory Control Spike (LCS-1)

QC Batch: 128887 Date Analyzed: 2016-03-16 Analyzed By: AK Prep Batch: 109127 QC Preparation: 2016-03-15 Prepared By: AK

			LCS			Spike	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit
Benzene		3	2.11	mg/Kg	1	2.00	< 0.0100	106	70 - 130
Toluene		3	2.01	$\mathrm{mg}/\mathrm{Kg}$	1	2.00	< 0.0156	100	70 - 130
Ethylbenzene		3	2.05	mg/Kg	1	2.00	< 0.0151	102	70 - 130
Xylene		3	6.10	mg/Kg	1	6.00	< 0.00430	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
Benzene		3	2.21	mg/Kg	1	2.00	< 0.0100	110	70 - 130	5	20
Toluene		3	2.08	mg/Kg	1	2.00	< 0.0156	104	70 - 130	3	20
Ethylbenzene		3	2.16	mg/Kg	1	2.00	< 0.0151	108	70 - 130	5	20
Xylene		3	6.39	mg/Kg	1	6.00	< 0.00430	106	70 - 130	5	20

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David Bilbrey 8" Pipeline

15-0171-01

	LCS	LCSD			Spike	LCS	LCSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	2.13	2.14	mg/Kg	1	2.00	106	107	70 - 130
4-Bromofluorobenzene (4-BFB)	2.18	2.17	mg/Kg	1	2.00	109	108	70 - 130

## Laboratory Control Spike (LCS-1)

QC Batch: 128889 Date Analyzed: 2016-03-16 Analyzed By: AK Prep Batch: 109127 QC Preparation: 2016-03-15 Prepared By: AK

			LCS			Spike	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	$\operatorname{Limit}$
GRO		3	17.4	mg/Kg	1	20.0	< 1.76	87	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	18.0	mg/Kg	1	20.0	< 1.76	90	70 - 130	3	20

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

	LCS	LCSD			Spike	LCS	LCSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	2.02	2.03	mg/Kg	1	2.00	101	102	70 - 130
4-Bromofluorobenzene (4-BFB)	1.76	1.76	mg/Kg	1	2.00	88	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			$\operatorname{Spike}$	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit
Chloride		1,2,4	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			$_{ m Spike}$	Matrix		Rec.		RPD
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride		1,2,4	264	mg/Kg	1	250	< 8.34	106	90 - 110	0	20

Report Date: March 16, 2016 Work Order: 16031402 Page Number: 13 of 19 15-0171-01 David Bilbrey 8" Pipeline

## Matrix Spikes

Matrix Spike (MS-1) Spiked Sample: 415880

QC Batch: 128884 Date Analyzed: 2016-03-16 Analyzed By: JL Prep Batch: 109153 QC Preparation: 2016-03-16 Prepared By: JL

			MS			$\operatorname{Spike}$	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	$\operatorname{Limit}$
DRO		3	239	mg/Kg	1	250	48.2	76	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	272	mg/Kg	1	250	48.2	90	70 - 130	13	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	49.2	51.2	mg/Kg	1	50	98	102	70 - 130

Matrix Spike (MS-1) Spiked Sample: 415880

QC Batch: 128887 Date Analyzed: 2016-03-16 Analyzed By: AK Prep Batch: 109127 QC Preparation: 2016-03-15 Prepared By: AK

				MS			Spike	Matrix		Rec.
Param		$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	$\operatorname{Limit}$
Benzene			3	1.94	mg/Kg	1	2.00	< 0.0100	97	70 - 130
Toluene	$_{\mathrm{Qs}}$	$_{ m Qs}$	3	6.34	mg/Kg	1	2.00	0.2326	305	70 - 130
Ethylbenzene	$_{ m Qs}$	$_{ m Qs}$	3	26.8	mg/Kg	1	2.00	1.5687	1262	70 - 130
Xylene	$_{ m Qs}$	$_{\mathrm{Qs}}$	3	26.0	mg/Kg	1	6.00	0.8574	419	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
Benzene			3	1.98	mg/Kg	1	2.00	< 0.0100	99	70 - 130	2	20
Toluene	$_{ m Qr}$	$_{ m Qr}$	3	2.18	mg/Kg	1	2.00	0.2326	97	70 - 130	98	20
Ethylbenzene	$_{ m Qr}$	$_{ m Qr}$	3	3.56	mg/Kg	1	2.00	1.5687	100	70 - 130	153	20
Xylene	$_{ m Qr}$	$_{ m Qr}$	3	7.68	mg/Kg	1	6.00	0.8574	114	70 - 130	109	20

Report Date: March 16, 2016 Work Order: 16031402 Page Number: 14 of 19

David Bilbrey 8" Pipeline

15-0171-01

	MS	MSD			Spike	MS	MSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	2.59	2.20	mg/Kg	1	2	130	110	70 - 130
4-Bromofluorobenzene (4-BFB) QSF QSF	5.27	2.44	mg/Kg	1	2	264	122	70 - 130

## Matrix Spike (MS-1) Spiked Sample: 415880

QC Batch: 128889 Date Analyzed: 2016-03-16 Analyzed By: AK Prep Batch: 109127 QC Preparation: 2016-03-15 Prepared By: AK

				MS			Spike	Matrix		Rec.
Param		$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	$\operatorname{Limit}$
GRO	Os	Os	3	55.1	mg/Kg	1	20.0	19.97	176	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		$\mathbf{F}$	С	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
GRO	Qr,Qs	Qr,Qs	3	33.1	mg/Kg	1	20.0	19.97	66	70 - 130	50	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)	1.92	1.99	mg/Kg	1	2	96	100	70 - 130
4-Bromofluorobenzene (4-BFB)	2.47	2.18	mg/Kg	1	2	124	109	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		1,2,4	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			$_{\rm Spike}$	Matrix		Rec.		RPD
Param		$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride	Qs	Qs	1,2,4	496	mg/Kg	5	250	171	130	80 - 120	9	20

Report Date: March 16, 2016 Work Order: 16031402 Page Number: 15 of 19

15-0171-01 David Bilbrey 8" Pipeline

## Calibration Standards

## Standard (CCV-1)

QC Batch: 128884 Date Analyzed: 2016-03-16 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	208	83	80 - 120	2016-03-16

## Standard (CCV-2)

QC Batch: 128884 Date Analyzed: 2016-03-16 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	203	81	80 - 120	2016-03-16

## Standard (CCV-1)

QC Batch: 128887 Date Analyzed: 2016-03-16 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	0.0976	98	80 - 120	2016-03-16
Toluene		3	mg/kg	0.100	0.0962	96	80 - 120	2016-03-16
Ethylbenzene		3	mg/kg	0.100	0.0948	95	80 - 120	2016-03-16
Xylene		3	mg/kg	0.300	0.282	94	80 - 120	2016-03-16

## Standard (CCV-2)

QC Batch: 128887 Date Analyzed: 2016-03-16 Analyzed By: AK

Report Date: March 16, 2016 Work Order: 16031402 Page Number: 16 of 19

15-0171-01 David Bilbrey 8" Pipeline

				CCVs True	CCVs Found	CCVs Percent	Percent Recovery	Date
Param	Flag	$\operatorname{Cert}$	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Benzene		3	mg/kg	0.100	0.108	108	80 - 120	2016-03-16
Toluene		3	mg/kg	0.100	0.100	100	80 - 120	2016-03-16
Ethylbenzene		3	mg/kg	0.100	0.103	103	80 - 120	2016-03-16
Xylene		3	mg/kg	0.300	0.303	101	80 - 120	2016-03-16

# Standard (CCV-1)

QC Batch: 128889 Date Analyzed: 2016-03-16 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	0.827	83	80 - 120	2016-03-16

# Standard (CCV-2)

QC Batch: 128889 Date Analyzed: 2016-03-16 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	0.885	88	80 - 120	2016-03-16

# Standard (CCV-1)

QC Batch: 128896 Date Analyzed: 2016-03-15 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	26.6	106	90 - 110	2016-03-15

# Standard (CCV-2)

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

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Report Date: March 16, 2016 15-0171-01Work Order: 16031402 David Bilbrey 8" Pipeline

				CCVs	CCVs	CCVs	Percent	
				True	Found	$\operatorname{Percent}$	Recovery	Date
Param	Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride		1,2,4	mg/Kg	25.0	26.7	107	90 - 110	2016-03-15

Report Date: March 16, 2016 Work Order: 16031402 Page Number: 18 of 19 15-0171-01 David Bilbrey 8" Pipeline

15-0171-01

# 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: March 16, 2016 Work Order: 16031402 Page Number: 19 of 19 15-0171-01 David Bilbrey 8" Pipeline

# Attachments

The scanned attachments will follow this page.

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

CHAIN-OF-CUSTODY

100 (Jent 8" Pipelme CUSTODY SEALS - BROKEN DINTACT DNOT USED FIELD NOTES 1 OF. COLLECTOR: MICHAEL 288 RECEIVING TEMP: 6.0/5.7 THERM #: 12-1 HS879 83 138 88 588 <del>%</del> **%** 188 れら Z Z PAGE PROJECT LOCATION OR NAME: David Billowy LAB WORK ORDER #: LABORATORY USE ONLY: HAND DELIVERED > À CARRIER BILL # 10-1210-51 2016 **TURN AROUND TIME** NORMAL [] LAI PROJECT #: OTHER 🗓 2 DA 1 DAY DATE: PO #: <u>ን</u> 8.6 7 5 7 RECEIVED BY: (Signature) 507 N. Marienfeld, Ste. 200 RECEIVED BY (Signature) RECEIVED BY: (Signature) Midland, TX 79701 **PRESERVATION** UNPRESERVED 432-687-0901 ICE □ HOBN □ POS2H €ОИН HCI # of Containers DATE/TIME 3/14// 6 9:00 Matrix DATE/TIME DATE/TIME 10:55 12:10 11:43 ٦٠. ١٦ 12.33 12127 **L**S:0 11:26 Sirs SL=SLUDGE OT=OTHER 08.61 Time P=PAINT 3/11/le Date arson & Sociates, Inc. Environmental Consultants S=SOIL) W=WATER RELINQUISHED BY:(Signature) RELINQUISHED BY: (SIGN ature) RELINQUISHED BY: (Signature) A=AIR Lab# Safe Data Reported to: ☐ Yes No TIME ZONE: Time zone/State: TRRP report? Sample I.D. Field 5-55 55-6 55 - W 55-7 6-55 8-55 55-3 55-2 105 55-1 <u>(186</u>) TOTAL

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# Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

# Analytical and Quality Control Report

Report Date: March 18, 2016

16031501

Work Order:

Travis Williams Larson and Associates, Inc.

 $\begin{array}{l} \text{P. O. Box } 50685 \\ \text{Midland, TX, } 79710 \end{array}$ 

Project Name: David Bilbrey 8" Pipeline

Project Number: 15-0171-01

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

			Date	Time	Date
Sample	Description	Matrix	Taken	Taken	Received
415914	S-2 15'	soil	2016-03-14	14:35	2016-03-15
415915	S-3 15'	soil	2016-03-14	14:45	2016-03-15
415916	S-2 18'	soil	2016-03-14	14:30	2016-03-15
415917	S-3 18'	soil	2016-03-14	14:40	2016-03-15
415918	S-2 20'	soil	2016-03-14	14:50	2016-03-15
415919	S-3 20'	soil	2016-03-14	14.55	2016-03-15

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

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 27 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

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# Case Narrative

Samples for project David Bilbrey 8" Pipeline were received by TraceAnalysis, Inc. on 2016-03-15 and assigned to work order 16031501. Samples for work order 16031501 were received intact at a temperature of -9.2 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	109127	2016-03-15 at 09:55	128887	2016-03-16 at 09:21
Chloride (IC)	E 300.0	109170	2016-03-16 at 09:00	128899	2016-03-16 at 09:06
Chloride (IC)	E 300.0	109171	2016-03-16 at 09:00	128900	2016-03-16 at 09:06
TPH DRO	S 8015 $D$	109153	2016-03-16 at 09:02	128884	2016-03-16 at 09:04
TPH GRO	S 8015 D	109127	2016-03-15 at $09:55$	128889	2016-03-16 at $09:25$

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

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 16031501 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: 16031501 Page Number: 6 of 27

15-0171-01 David Bilbrey 8" Pipeline

# **Analytical Report**

Sample: 415914 - S-2 15'

Laboratory: Midland

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035 QC Batch: 128887 Date Analyzed: 2016-03-16 Analyzed By: AK Prep Batch: 109127 Sample Preparation: 2016-03-15 Prepared By: AK

			RL			
Parameter	Flag	$\operatorname{Cert}$	Result	Units	Dilution	RL
Benzene		3	0.102	m mg/Kg	1	0.0200
Toluene	$_{ m Qr}$	3	0.198	$\mathrm{mg}/\mathrm{Kg}$	1	0.0200
Ethylbenzene	$_{ m Qr}$	3	0.247	$\mathrm{mg}/\mathrm{Kg}$	1	0.0200
Xylene	$_{ m Qr}$	3	0.190	$\mathrm{mg}/\mathrm{Kg}$	1	0.0200

						$\operatorname{Spike}$	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			2.28	mg/Kg	1	2.00	114	70 - 130
4-Bromofluorobenzene (4-BFB)			2.22	mg/Kg	1	2.00	111	70 - 130

Sample: 415914 - S-2 15'

Laboratory: Lubbock

			RL			
Parameter	Flag	$\operatorname{Cert}$	Result	Units	Dilution	RL
Chloride		1,2,4	67.0	$\mathrm{mg/Kg}$	1	25.0

Sample: 415914 - S-2 15'

Laboratory: Midland

Analysis: TPH DRO Analytical Method: S 8015 D Prep Method: N/A QC Batch: 128884 Date Analyzed: 2016-03-16 Analyzed By: JL Prep Batch: 109153 Sample Preparation: 2016-03-16 Prepared By: JL

			RL			
Parameter	Flag	Cert	Result	Units	Dilution	RL
DRO		3	< 50.0	m mg/Kg	1	50.0

Report Date: March 18, 2016 Work Order: 16031501 Page Number: 7 of 27

15-0171-01 David Bilbrey 8" Pipeline

						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: 415914 - S-2 15'

Laboratory: Midland

Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035 QC Batch: 128889 Date Analyzed: 2016-03-16 Analyzed By: AK Prep Batch: 109127 Sample Preparation: 2016-03-15 Prepared By: AK

			RL			
Parameter	Flag	Cert	Result	Units	Dilution	RL
GRO	Qr	3	< 4.00	mg/Kg	1	4.00

						Spike	Percent	Recovery
Surrogate	$\operatorname{Flag}$	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			2.19	mg/Kg	1	2.00	110	70 - 130
4-Bromofluorobenzene (4-BFB)			1.80	$\mathrm{mg}/\mathrm{Kg}$	1	2.00	90	70 - 130

## Sample: 415915 - S-3 15'

Laboratory: Midland

S 5035 Analysis: BTEXAnalytical Method: S 8021B Prep Method: QC Batch: 128887 Analyzed By: AKDate Analyzed: 2016-03-16 Prep Batch: 109127 Sample Preparation: 2016-03-15 Prepared By: AK

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

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			2.14	mg/Kg	1	2.00	107	70 - 130
4-Bromofluorobenzene (4-BFB)			2.03	$\mathrm{mg}/\mathrm{Kg}$	1	2.00	102	70 - 130

Report Date: March 18, 2016 Work Order: 16031501 Page Number: 8 of 27

15-0171-01 David Bilbrey 8" Pipeline

### Sample: 415915 - S-3 15'

Laboratory: Lubbock

			RL			
Parameter	Flag	Cert	Result	Units	Dilution	RL
Chloride		1,2,4	513	mg/Kg	5	25.0

### Sample: 415915 - S-3 15'

Laboratory: Midland

Analysis: TPH DRO Analytical Method: S 8015 D Prep Method: N/A QC Batch: 128884Date Analyzed: Analyzed By: JL2016 - 03 - 16Prep Batch: 109153 Sample Preparation: 2016-03-16 Prepared By: JL

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

						$_{ m Spike}$	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			42.7	mg/Kg	1	50.0	85	70 - 130

### Sample: 415915 - S-3 15'

Laboratory: Midland

Analysis: TPH GRO Analytical Method: S 8015 DPrep Method: S 5035 QC Batch: 128889 Date Analyzed: 2016-03-16 Analyzed By: AKPrep Batch: 109127 Sample Preparation: 2016-03-15 Prepared By: AK

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

						$\operatorname{Spike}$	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			2.05	mg/Kg	1	2.00	102	70 - 130
4-Bromofluorobenzene (4-BFB)			1.76	mg/Kg	1	2.00	88	70 - 130

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### Sample: 415916 - S-2 18'

Laboratory: Midland

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035 QC Batch: 128887 Date Analyzed: 2016-03-16 Analyzed By: AK Prep Batch: 109127 Sample Preparation: 2016-03-15 Prepared By: AK

			RL			
Parameter	Flag	Cert	Result	Units	Dilution	RL
Benzene		3	0.0270	mg/Kg	1	0.0200
Toluene	$_{ m Qr}$	3	0.0437	mg/Kg	1	0.0200
Ethylbenzene	$_{ m Qr}$	3	0.0297	mg/Kg	1	0.0200
Xylene	Or	3	0.0233	m mg/Kg	1	0.0200

						$\operatorname{Spike}$	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)			1.92	mg/Kg	1	2.00	96	70 - 130

### Sample: 415916 - S-2 18'

Laboratory: Lubbock

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A QC Batch: 128900 Date Analyzed: 2016-03-16 Analyzed By: RLPrep Batch: 109171 Sample Preparation: Prepared By: 2016-03-16 RL

			$\operatorname{RL}$			
Parameter	Flag	Cert	Result	Units	Dilution	RL
Chloride		1,2,4	26.9	$\mathrm{mg}/\mathrm{Kg}$	1	25.0

### Sample: 415916 - S-2 18'

Laboratory: Midland

Analysis: TPH DRO Analytical Method: S 8015 D Prep Method: N/A QC Batch: 128884 Date Analyzed: 2016-03-16 Analyzed By: JL Prep Batch: 109153 Sample Preparation: 2016-03-16 Prepared By: JL

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

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			48.0	m mg/Kg	1	50.0	96	70 - 130

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#### Sample: 415916 - S-2 18'

Laboratory: Midland

S 5035 Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: QC Batch: 128889 Date Analyzed: 2016-03-16 Analyzed By: AK Prep Batch: 109127 Sample Preparation: 2016-03-15 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)			1.67	mg/Kg	1	2.00	84	70 - 130

### Sample: 415917 - S-3 18'

Laboratory: Midland

Analysis: **BTEX** Analytical Method:  $S_{8021B}$ Prep Method: S 5035 QC Batch: 128887 Date Analyzed: 2016-03-16 Analyzed By: AK2016-03-15 Prep Batch: 109127 Sample Preparation: Prepared By: AK

RLParameter Flag Cert Result Units Dilution RL0.100 0.0200 Benzene mg/Kg 1 3 Toluene 0.0909 mg/Kg1 0.0200 Qr 3 0.0200 Ethylbenzene 0.166mg/Kg1 Qr 3 Xylene mg/Kg1 0.02000.113 $_{
m Qr}$ 

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	1 1005	CCIT	2.13	mg/Kg	1	2.00	106	70 - 130
4-Bromofluorobenzene (4-BFB)			2.11	mg/Kg	1	2.00	106	70 - 130

#### Sample: 415917 - S-3 18'

Laboratory: Lubbock

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/AQC Batch: 128900 Date Analyzed: 2016-03-16 Analyzed By: RLPrep Batch: 109171 Sample Preparation: 2016-03-16 Prepared By: RL

 $\overline{continued}$  . . .

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 $sample\ 415917\ continued\ \dots$ 

			RL			
Parameter	Flag	Cert	Result	Units	Dilution	RL
			$\operatorname{RL}$			
Parameter	Flag	Cert	Result	Units	Dilution	RL
Chloride		1,2,4	904	m mg/Kg	10	25.0

# Sample: 415917 - S-3 18'

Laboratory: Midland

Analysis: TPH DRO QC Batch: 128884 Prep Batch: 109153 Analytical Method: S 8015 D Date Analyzed: 2016-03-16 Sample Preparation: 2016-03-16

						$\operatorname{Spike}$	Percent	Recovery
Surrogate	Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			45.8	$\mathrm{mg}/\mathrm{Kg}$	1	50.0	92	70 - 130

# Sample: 415917 - S-3 18'

Laboratory: Midland

Analysis: TPH GRO Analytical Method: S 8015 D QC Batch: 128889 Date Analyzed: 2016-03-1 Prep Batch: 109127 Sample Preparation: 2016-03-1

Prep Method: N/A

JL

JL

Analyzed By:

Prepared By:

						$\operatorname{Spike}$	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)			1.94	mg/Kg	1	2.00	97	70 - 130

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### Sample: 415918 - S-2 20'

Laboratory: Midland

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035 QC Batch: 128887 Date Analyzed: 2016-03-16 Analyzed By: AK Prep Batch: 109127 Sample Preparation: 2016-03-15 Prepared By: AK

			$\operatorname{RL}$			
Parameter	Flag	Cert	Result	Units	Dilution	RL
Benzene		3	< 0.0200	$\mathrm{mg}/\mathrm{Kg}$	1	0.0200
Toluene	$_{ m Qr}$	3	0.0229	$\mathrm{mg}/\mathrm{Kg}$	1	0.0200
Ethylbenzene	$_{ m Qr,U}$	3	< 0.0200	mg/Kg	1	0.0200
Xylene	$_{ m Qr}$	3	< 0.0200	mg/Kg	1	0.0200

						$\operatorname{Spike}$	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			2.14	mg/Kg	1	2.00	107	70 - 130
4-Bromofluorobenzene (4-BFB)			2.04	mg/Kg	1	2.00	102	70 - 130

### Sample: 415918 - S-2 20'

Laboratory: Lubbock

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A QC Batch: 128900 Date Analyzed: 2016-03-16 Analyzed By: RLPrep Batch: 109171 Sample Preparation: Prepared By: 2016-03-16 RL

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

# Sample: 415918 - S-2 20'

Laboratory: Midland

Analysis: TPH DRO Analytical Method: S 8015 D Prep Method: N/A QC Batch: 128884 Date Analyzed: 2016-03-16 Analyzed By: JL Prep Batch: 109153 Sample Preparation: 2016-03-16 Prepared By: JL

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

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			46.5	mg/Kg	1	50.0	93	70 - 130

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#### Sample: 415918 - S-2 20'

Laboratory: Midland

S 5035 Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: QC Batch: 128889 Date Analyzed: 2016-03-16 Analyzed By: AK Prep Batch: 109127 Sample Preparation: 2016-03-15 Prepared By: 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)			1.78	$\mathrm{mg}/\mathrm{Kg}$	1	2.00	89	70 - 130

#### Sample: 415919 - S-3 20'

Laboratory: Midland

Analysis: **BTEX** Analytical Method:  $S_{8021B}$ Prep Method: S 5035 QC Batch: 128887 Date Analyzed: 2016-03-16 Analyzed By: AK2016-03-15 Prep Batch: 109127 Sample Preparation: Prepared By: AK

RLParameter Flag Cert Result Units Dilution RL0.06040.0200 Benzene mg/Kg 1 3 Toluene 0.0396 mg/Kg1 0.0200 Qr 3 0.0200 Ethylbenzene 0.0281mg/Kg1 Qr 3 Xylene 0.0340mg/Kg1 0.0200 $_{
m Qr}$ 

Surrogate	Flag	Cert	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)			2.09	mg/Kg	1	2.00	104	70 - 130
4-Bromofluorobenzene (4-BFB)			2.12	mg/Kg	1	2.00	106	70 - 130

#### Sample: 415919 - S-3 20'

Laboratory: Lubbock

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/AQC Batch: 128900 Date Analyzed: 2016-03-16 Analyzed By: RLPrep Batch: 109171 Sample Preparation: 2016-03-16 Prepared By: RL

 $\overline{continued}$  . . .

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sample 415919 continued ...

			RL			
Parameter	Flag	Cert	Result	Units	Dilution	RL
			$\operatorname{RL}$			
Parameter	Flag	Cert	Result	Units	Dilution	RL
Chloride		1,2,4	<125	mg/Kg	5	25.0

# Sample: 415919 - S-3 20'

Laboratory: Midland

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

						$_{ m Spike}$	Percent	Recovery
Surrogate	Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			49.5	${ m mg/Kg}$	1	50.0	99	70 - 130

# Sample: 415919 - S-3 20'

Laboratory: Midland

Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035 QC Batch: 128889 Date Analyzed: 2016-03-16 Analyzed By: AKPrep Batch: 109127 Sample Preparation: 2016-03-15 Prepared By: AK

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

						$\operatorname{Spike}$	Percent	Recovery
Surrogate	$\operatorname{Flag}$	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			2.00	mg/Kg	1	2.00	100	70 - 130
4-Bromofluorobenzene (4-BFB)			1.83	mg/Kg	1	2.00	92	70 - 130

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# Method Blanks

Method Blank (1) QC Batch: 128884

QC Batch: 128884 Date Analyzed: 2016-03-16 Analyzed By: JL Prep Batch: 109153 QC Preparation: 2016-03-16 Prepared By: JL

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane			54.4	mg/Kg	1	50.0	109	70 - 130

Method Blank (1) QC Batch: 128887

QC Batch: 128887 Date Analyzed: 2016-03-16 Analyzed By: AK Prep Batch: 109127 QC Preparation: 2016-03-15 Prepared By: AK

MDL Parameter Cert Result Units RLFlag Benzene 0.02 < 0.0100 mg/Kg 3 Toluene < 0.0156mg/Kg 0.023 Ethylbenzene mg/Kg0.02 < 0.01513 Xylene < 0.00430 mg/Kg0.02

						$_{ m Spike}$	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			2.09	mg/Kg	1	2.00	104	70 - 130
4-Bromofluorobenzene (4-BFB)			1.85	mg/Kg	1	2.00	92	70 - 130

Method Blank (1) QC Batch: 128889

QC Batch: 128889 Date Analyzed: 2016-03-16 Analyzed By: AK Prep Batch: 109127 QC Preparation: 2016-03-15 Prepared By: AK Report Date: March 18, 2016 Work Order: 16031501 Page Number: 16 of 27

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					MDL			
Parameter	Flag		$\operatorname{Cert}$		Result		Units	RL
GRO			3		< 1.76		m mg/Kg	4
						Spike	Percent	Recovery
Surrogate	Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			2.05	mg/Kg	1	2.00	102	70 - 130
4-Bromofluorobenzene (4-BFB)			1.60	mg/Kg	1	2.00	80	70 - 130

Method Blank (1) QC Batch: 128899

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

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

Method Blank (1) QC Batch: 128900

QC Batch: 128900 Date Analyzed: 2016-03-16 Analyzed By: RL Prep Batch: 109171 QC Preparation: 2016-03-16 Prepared By: RL

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# Laboratory Control Spikes

### Laboratory Control Spike (LCS-1)

QC Batch: 128884 Date Analyzed: 2016-03-16 Analyzed By: JL Prep Batch: 109153 QC Preparation: 2016-03-16 Prepared By: JL

			LCS			Spike	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	$\operatorname{Limit}$
DRO		3	230	mg/Kg	1	250	< 7.41	92	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	201	mg/Kg	1	250	< 7.41	80	70 - 130	13	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	55.4	47.9	mg/Kg	1	50.0	111	96	70 - 130

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

QC Batch: 128887 Date Analyzed: 2016-03-16 Analyzed By: AK Prep Batch: 109127 QC Preparation: 2016-03-15 Prepared By: AK

			LCS			Spike	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit
Benzene		3	2.11	mg/Kg	1	2.00	< 0.0100	106	70 - 130
Toluene		3	2.01	$\mathrm{mg}/\mathrm{Kg}$	1	2.00	< 0.0156	100	70 - 130
Ethylbenzene		3	2.05	mg/Kg	1	2.00	< 0.0151	102	70 - 130
Xylene		3	6.10	mg/Kg	1	6.00	< 0.00430	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
Benzene		3	2.21	mg/Kg	1	2.00	< 0.0100	110	70 - 130	5	20
Toluene		3	2.08	mg/Kg	1	2.00	< 0.0156	104	70 - 130	3	20
Ethylbenzene		3	2.16	mg/Kg	1	2.00	< 0.0151	108	70 - 130	5	20
Xylene		3	6.39	mg/Kg	1	6.00	< 0.00430	106	70 - 130	5	20

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	LCS	LCSD			Spike	LCS	LCSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	2.13	2.14	mg/Kg	1	2.00	106	107	70 - 130
4-Bromofluorobenzene (4-BFB)	2.18	2.17	mg/Kg	1	2.00	109	108	70 - 130

# Laboratory Control Spike (LCS-1)

QC Batch: 128889 Date Analyzed: 2016-03-16 Analyzed By: AK Prep Batch: 109127 QC Preparation: 2016-03-15 Prepared By: AK

			LCS			Spike	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	$\operatorname{Limit}$
GRO		3	17.4	mg/Kg	1	20.0	< 1.76	87	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	18.0	mg/Kg	1	20.0	< 1.76	90	70 - 130	3	20

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

	LCS	LCSD			Spike	LCS	LCSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	2.02	2.03	mg/Kg	1	2.00	101	102	70 - 130
4-Bromofluorobenzene (4-BFB)	1.76	1.76	mg/Kg	1	2.00	88	88	70 - 130

## 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			$\operatorname{Spike}$	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit
Chloride		1,2,4	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		1,2,4	263	mg/Kg	1	250	< 8.34	105	90 - 110	0	20

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# Laboratory Control Spike (LCS-1)

QC Batch: 128900 Date Analyzed: 2016-03-16 Analyzed By: RL Prep Batch: 109171 QC Preparation: 2016-03-16 Prepared By: RL

LCS Spike Matrix Rec. F Param  $\mathbf{C}$ Result Units Dil. Amount Result Limit Rec. 90 - 110 Chloride 258 mg/Kg 250 < 8.34 103 1,2,4

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
Chloride		1,2,4	258	mg/Kg	1	250	< 8.34	103	90 - 110	0	20

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Matrix Spikes

Matrix Spike (MS-1)

Spiked Sample: 415880

QC Batch: 128884 Date Analyzed: 2016-03-16 Analyzed By: JL Prep Batch: 109153 QC Preparation: 2016-03-16 Prepared By: JL

			MS			$\operatorname{Spike}$	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	$\operatorname{Limit}$
DRO		3	239	mg/Kg	1	250	48.2	76	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	272	mg/Kg	1	250	48.2	90	70 - 130	13	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	49.2	51.2	mg/Kg	1	50	98	102	70 - 130

Matrix Spike (MS-1) Spiked Sample: 415880

QC Batch: 128887 Date Analyzed: 2016-03-16 Analyzed By: AK Prep Batch: 109127 QC Preparation: 2016-03-15 Prepared By: AK

				MS			Spike	Matrix		Rec.
Param		$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit
Benzene			3	1.94	mg/Kg	1	2.00	< 0.0100	97	70 - 130
Toluene	$_{ m Qs}$	$_{ m Qs}$	3	6.34	mg/Kg	1	2.00	0.2326	305	70 - 130
Ethylbenzene	Qs	$_{ m Qs}$	3	26.8	mg/Kg	1	2.00	1.5687	1262	70 - 130
Xylene	$_{\mathrm{Qs}}$	$_{\mathrm{Qs}}$	3	26.0	mg/Kg	1	6.00	0.8574	419	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
Benzene			3	1.98	mg/Kg	1	2.00	< 0.0100	99	70 - 130	2	20
Toluene	$_{ m Qr}$	$_{ m Qr}$	3	2.18	mg/Kg	1	2.00	0.2326	97	70 - 130	98	20
Ethylbenzene	$_{ m Qr}$	$_{ m Qr}$	3	3.56	mg/Kg	1	2.00	1.5687	100	70 - 130	153	20
Xylene	$_{ m Qr}$	$_{ m Qr}$	3	7.68	mg/Kg	1	6.00	0.8574	114	70 - 130	109	20

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	MS	MSD			Spike	MS	MSD	Rec.
Surrogate	Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
Trifluorotoluene (TFT)	2.59	2.20	mg/Kg	1	2	130	110	70 - 130
4-Bromofluorobenzene (4-BFB) Qsr Qsr	5.27	2.44	mg/Kg	1	2	264	122	70 - 130

# Matrix Spike (MS-1) Spiked Sample: 415880

QC Batch: 128889 Date Analyzed: 2016-03-16 Analyzed By: AK Prep Batch: 109127 QC Preparation: 2016-03-15 Prepared By: AK

				MS			Spike	Matrix		Rec.
Param		$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	$\operatorname{Limit}$
GRO	Os	Os	3	55.1	mg/Kg	1	20.0	19.97	176	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		$\mathbf{F}$	С	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
GRO	Qr,Qs	Qr,Qs	3	33.1	mg/Kg	1	20.0	19.97	66	70 - 130	50	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)	1.92	1.99	mg/Kg	1	2	96	100	70 - 130
4-Bromofluorobenzene (4-BFB)	2.47	2.18	$\mathrm{mg}/\mathrm{Kg}$	1	2	124	109	70 - 130

## 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.	$\operatorname{Limit}$
Chloride		1,2,4	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	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride		1,2,4	316	mg/Kg	5	250	69.8149	98	80 - 120	4	20

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15-0171-01 David Bilbrey 8" Pipeline

Matrix Spike (MS-1) Spiked Sample: 415915

QC Batch: 128900 Date Analyzed: 2016-03-16 Analyzed By: RL Prep Batch: 109171 QC Preparation: 2016-03-16 Prepared By: RL

MSSpike Matrix Rec. F Param  $\mathbf{C}$ Result Units Dil. Amount Result Limit Rec. Chloride 719 mg/Kg 250 513 82 80 - 120 1,2,4 5

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

			MSD			Spike	Matrix		Rec.		RPD
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit	RPD	Limit
Chloride		1,2,4	771	mg/Kg	5	250	513	103	80 - 120	7	20

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# Calibration Standards

# Standard (CCV-1)

QC Batch: 128884 Date Analyzed: 2016-03-16 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	208	83	80 - 120	2016-03-16

# Standard (CCV-2)

QC Batch: 128884 Date Analyzed: 2016-03-16 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	203	81	80 - 120	2016-03-16

### Standard (CCV-1)

QC Batch: 128887 Date Analyzed: 2016-03-16 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	0.0976	98	80 - 120	2016-03-16
Toluene		3	mg/kg	0.100	0.0962	96	80 - 120	2016-03-16
Ethylbenzene		3	mg/kg	0.100	0.0948	95	80 - 120	2016-03-16
Xylene		3	mg/kg	0.300	0.282	94	80 - 120	2016-03-16

# Standard (CCV-2)

QC Batch: 128887 Date Analyzed: 2016-03-16 Analyzed By: AK

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15-0171-01 David Bilbrey 8" Pipeline

				CCVs True	$\begin{array}{c} {\rm CCVs} \\ {\rm Found} \end{array}$	CCVs Percent	Percent Recovery	Date
Param	Flag	$\operatorname{Cert}$	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Benzene		3	mg/kg	0.100	0.108	108	80 - 120	2016-03-16
Toluene		3	mg/kg	0.100	0.100	100	80 - 120	2016-03-16
Ethylbenzene		3	mg/kg	0.100	0.103	103	80 - 120	2016-03-16
Xylene		3	mg/kg	0.300	0.303	101	80 - 120	2016-03-16

# Standard (CCV-1)

QC Batch: 128889 Date Analyzed: 2016-03-16 Analyzed By: AK

				CCVs	$\mathrm{CCVs}$	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		3	mg/Kg	1.00	0.827	83	80 - 120	2016-03-16

# Standard (CCV-2)

QC Batch: 128889 Date Analyzed: 2016-03-16 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	0.885	88	80 - 120	2016-03-16

# Standard (CCV-1)

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

				$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride		1,2,4	m 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

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				CCVs True	CCVs Found	CCVs Percent	Percent Recovery	Date
Param	Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride		1,2,4	mg/Kg	25.0	25.9	104	90 - 110	2016-03-16

# Standard (CCV-1)

QC Batch: 128900 Date Analyzed: 2016-03-16 Analyzed By: RL

				$\operatorname{CCVs}$	CCVs	CCVs	Percent	_
				$\operatorname{True}$	Found	Percent	Recovery	Date
Param	Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride		1.2.4	mg/Kg	25.0	25.9	104	90 - 110	2016-03-16

# Standard (CCV-2)

QC Batch: 128900 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		1,2,4	mg/Kg	25.0	25.8	103	90 - 110	2016-03-16

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15-0171-01 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

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15-0171-01

# Attachments

The scanned attachments will follow this page.

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

CHAIN-OF-CUSTODY COLLECTOR: TOWNS Williams CUSTODY SEALS -  $\Box$  BROKEN  $\Box$  INTACT  $\Box$  NOT USED  $\Box$  CARRIER BILL# 15.4753071FIELD NOTES OF 2/62/17 とんので LAB WORK ORDER #: 16036 RECEIVING TEMP: -9.9 THERM #: 1 PAGE PROJECT LOCATION OR NAME: David B. Norey 8" LABORATORY USE ONLY: CARRIER BILL # A X CHAND DELIVERED LAI PROJECT #: 15-0171 -01 1683 TURN AROUND TIME 2-15-2016 110/110 Q'20 SHER [] 2 DAY NO 1 DAY DATE: PO #: 507 N. Marienfeld, Ste. 200 EIVED BY: (Signature) 3/ RECEIVED BY: (Signature) RECEIVED BY: (Signature) Midland, TX 79701 **PRESERVATION** NUPRESERVED 432-687-0901 ICE X □ HOPN □ OSZH ONH HCI # of Containers Matrix WETWE STEVEN 3/15/16 8:35 DATE/TIME 2:50 C.C. 2:45 2:55 2:40 2:30 SL=SLUDGE OT=OTHER P=PAINT 3/14/16 Date SSOCIATES, Inc. Environmental Consultants W=WATER SESOF RELINQUISHED BY: (Signature) RELINQUISHED BY:(Signature) RELINQUISHED BY: (Signature) A=AIR Lab# Data Reported to: TIME ZONE: Time zone/State: o<sub>N</sub> TRRP report? 20, 20 Sample I.D. 30 2 Yes 5-3 5-2 2 - 3 5-2 5-2 TOTAL

VOUCE THOUSE

# PERMIAN BASIN ENVIRONMENTAL LAB, LP 10014 SCR 1213 Midland, TX 79706



# Analytical Report

# **Prepared for:**

Mark Larson
Larson & Associates, Inc.
P.O. Box 50685
Midland, TX 79710

Project: David Bilbrey 8" Pipeline
Project Number: 15-0171-01
Location: New Mexico

Lab Order Number: 6C17001



NELAP/TCEQ # T104704156-13-3

Report Date: 03/21/16

Larson & Associates, Inc. Project: David Bilbrey 8" Pipeline Fax: (432) 687-0456

P.O. Box 50685 Project Number: 15-0171-01
Midland TX, 79710 Project Manager: Mark Larson

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SWW-10	6C17001-01	Soil	03/16/16 10:35	03-17-2016 08:45
SWW-15	6C17001-02	Soil	03/16/16 10:44	03-17-2016 08:45
SWW-20	6C17001-03	Soil	03/16/16 10:49	03-17-2016 08:45
SWW-5	6C17001-04	Soil	03/16/16 10:50	03-17-2016 08:45
NWW-10	6C17001-05	Soil	03/16/16 10:53	03-17-2016 08:45
NWW-15	6C17001-06	Soil	03/16/16 10:57	03-17-2016 08:45
NWW-20	6C17001-07	Soil	03/16/16 11:00	03-17-2016 08:45
NWW-5	6C17001-08	Soil	03/16/16 11:05	03-17-2016 08:45
WW-10	6C17001-09	Soil	03/16/16 11:11	03-17-2016 08:45
WW-15	6C17001-10	Soil	03/16/16 11:15	03-17-2016 08:45
WW-20	6C17001-11	Soil	03/16/16 11:16	03-17-2016 08:45
WW-5	6C17001-12	Soil	03/16/16 11:21	03-17-2016 08:45
Bottom-23	6C17001-13	Soil	03/16/16 13:57	03-17-2016 08:45
SEW-20	6C17001-14	Soil	03/16/16 14:00	03-17-2016 08:45
SEW-15	6C17001-15	Soil	03/16/16 14:02	03-17-2016 08:45
SEW-10	6C17001-16	Soil	03/16/16 14:05	03-17-2016 08:45
SEW-5	6C17001-17	Soil	03/16/16 14:06	03-17-2016 08:45
EW-20	6C17001-18	Soil	03/16/16 14:09	03-17-2016 08:45
EW-15	6C17001-19	Soil	03/16/16 14:12	03-17-2016 08:45
EW-10	6C17001-20	Soil	03/16/16 14:16	03-17-2016 08:45
EW-5	6C17001-21	Soil	03/16/16 14:20	03-17-2016 08:45
NEW-20	6C17001-22	Soil	03/16/16 14:22	03-17-2016 08:45
NEW-15	6C17001-23	Soil	03/16/16 14:25	03-17-2016 08:45
NEW-10	6C17001-24	Soil	03/16/16 14:28	03-17-2016 08:45
NEW-5	6C17001-25	Soil	03/16/16 14:30	03-17-2016 08:45
NW-20	6C17001-26	Soil	03/16/16 14:33	03-17-2016 08:45
NW-15	6C17001-27	Soil	03/16/16 14:37	03-17-2016 08:45
SW-20	6C17001-28	Soil	03/16/16 14:40	03-17-2016 08:45
SW-15	6C17001-29	Soil	03/16/16 14:43	03-17-2016 08:45

P.O. Box 50685 Project Number: 15-0171-01 Midland TX, 79710 Project Manager: Mark Larson

### SWW-10 6C17001-01 (Soil)

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Pern	nian Basin I	Environme	ntal Lab,	L.P.				
General Chemistry Parameters by EPA/	Standard Method	s							
Chloride	109	5.56	mg/kg dry	5	P6C1808	03/18/16	03/18/16	EPA 300.0	
% Moisture	10.0	0.1	%	1	P6C1703	03/17/16	03/17/16	% calculation	
Total Petroleum Hydrocarbons C6-C35 b	y EPA Method 80	15M							
C6-C12	ND	27.8	mg/kg dry	1	P6C1705	03/17/16	03/17/16	TPH 8015M	
>C12-C28	ND	27.8	mg/kg dry	1	P6C1705	03/17/16	03/17/16	TPH 8015M	
>C28-C35	ND	27.8	mg/kg dry	1	P6C1705	03/17/16	03/17/16	TPH 8015M	
Surrogate: 1-Chlorooctane		89.7 %	70-1	30	P6C1705	03/17/16	03/17/16	TPH 8015M	
Surrogate: o-Terphenyl		101 %	70-1	30	P6C1705	03/17/16	03/17/16	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	27.8	mg/kg dry	1	[CALC]	03/17/16	03/17/16	calc	

P.O. Box 50685 Project Number: 15-0171-01 Midland TX, 79710 Project Manager: Mark Larson

### SWW-15 6C17001-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Per	mian Basin F	Environme	ntal Lab,	L.P.				
<b>General Chemistry Parameters by EPA / Stand</b>	ard Metho	ds							
Chloride	111	1.16	mg/kg dry	1	P6C1808	03/18/16	03/18/16	EPA 300.0	
% Moisture	14.0	0.1	%	1	P6C1703	03/17/16	03/17/16	% calculation	
Total Petroleum Hydrocarbons C6-C35 by EPA	Method 8	015M							
C6-C12	ND	29.1	mg/kg dry	1	P6C1705	03/17/16	03/17/16	TPH 8015M	
>C12-C28	ND	29.1	mg/kg dry	1	P6C1705	03/17/16	03/17/16	TPH 8015M	
>C28-C35	ND	29.1	mg/kg dry	1	P6C1705	03/17/16	03/17/16	TPH 8015M	
Surrogate: 1-Chlorooctane		87.4 %	70	130	P6C1705	03/17/16	03/17/16	TPH 8015M	
Surrogate: o-Terphenyl		95.2 %	70-	130	P6C1705	03/17/16	03/17/16	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	29.1	mg/kg dry	1	[CALC]	03/17/16	03/17/16	calc	

P.O. Box 50685 Project Number: 15-0171-01 Midland TX, 79710 Project Manager: Mark Larson

### SWW-20 6C17001-03 (Soil)

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	D	: D: I	·•	4-1 T -L	ı n				
	reriii	ian basin i	Environmen	tai Lab,	L.r.				
<b>General Chemistry Parameters by EP</b>	A / Standard Methods	S							
Chloride	1200	5.68	mg/kg dry	5	P6C1808	03/18/16	03/18/16	EPA 300.0	
% Moisture	12.0	0.1	%	1	P6C1703	03/17/16	03/17/16	% calculation	
<b>Total Petroleum Hydrocarbons C6-C3</b>	5 by EPA Method 801	15M							
C6-C12	ND	28.4	mg/kg dry	1	P6C1705	03/17/16	03/17/16	TPH 8015M	
>C12-C28	59.0	28.4	mg/kg dry	1	P6C1705	03/17/16	03/17/16	TPH 8015M	
>C28-C35	ND	28.4	mg/kg dry	1	P6C1705	03/17/16	03/17/16	TPH 8015M	
Surrogate: 1-Chlorooctane		93.4 %	70-1.	30	P6C1705	03/17/16	03/17/16	TPH 8015M	
Surrogate: o-Terphenyl		98.7 %	70-1.	30	P6C1705	03/17/16	03/17/16	TPH 8015M	
Total Petroleum Hydrocarbon	59.0	28.4	mg/kg dry	1	[CALC]	03/17/16	03/17/16	calc	
C6-C35									

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### SWW-5 6C17001-04 (Soil)

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Perm	nian Basin I	Environme	ntal Lab, l	L.P.				
<b>General Chemistry Parameters by EPA / St</b>	andard Method	S							
Chloride	60.1	5.88	mg/kg dry	5	P6C1808	03/18/16	03/18/16	EPA 300.0	
% Moisture	15.0	0.1	%	1	P6C1703	03/17/16	03/17/16	% calculation	
Total Petroleum Hydrocarbons C6-C35 by	EPA Method 80	15M							
C6-C12	ND	29.4	mg/kg dry	1	P6C1705	03/17/16	03/17/16	TPH 8015M	
>C12-C28	ND	29.4	mg/kg dry	1	P6C1705	03/17/16	03/17/16	TPH 8015M	
>C28-C35	ND	29.4	mg/kg dry	1	P6C1705	03/17/16	03/17/16	TPH 8015M	
Surrogate: 1-Chlorooctane		78.6 %	70-1	30	P6C1705	03/17/16	03/17/16	TPH 8015M	
Surrogate: o-Terphenyl		85.6 %	70-1	30	P6C1705	03/17/16	03/17/16	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	29.4	mg/kg dry	1	[CALC]	03/17/16	03/17/16	calc	

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Midland TX, 79710 Project Manager: Mark Larson

### NWW-10 6C17001-05 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Pe	rmian Basin I	Environme	ntal Lab,	L.P.				
General Chemistry Parameters by EPA / Stand	ard Meth	ods							
Chloride	56.9	1.11	mg/kg dry	1	P6C1808	03/18/16	03/18/16	EPA 300.0	
% Moisture	10.0	0.1	%	1	P6C1703	03/17/16	03/17/16	% calculation	
Total Petroleum Hydrocarbons C6-C35 by EPA	Method 8	8015M							
C6-C12	ND	27.8	mg/kg dry	1	P6C1705	03/17/16	03/17/16	TPH 8015M	
>C12-C28	ND	27.8	mg/kg dry	1	P6C1705	03/17/16	03/17/16	TPH 8015M	
>C28-C35	ND	27.8	mg/kg dry	1	P6C1705	03/17/16	03/17/16	TPH 8015M	
Surrogate: 1-Chlorooctane		90.2 %	70	130	P6C1705	03/17/16	03/17/16	TPH 8015M	
Surrogate: o-Terphenyl		96.8 %	70	130	P6C1705	03/17/16	03/17/16	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	27.8	mg/kg dry	1	[CALC]	03/17/16	03/17/16	calc	

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### NWW-15 6C17001-06 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Perm	ian Basin F	Environme	ntal Lab,	L.P.				
General Chemistry Parameters by EPA/	Standard Method	s							
Chloride	5.46	1.12	mg/kg dry	1	P6C1808	03/18/16	03/18/16	EPA 300.0	
% Moisture	11.0	0.1	%	1	P6C1703	03/17/16	03/17/16	% calculation	
Total Petroleum Hydrocarbons C6-C35 b	y EPA Method 801	15M							
C6-C12	ND	28.1	mg/kg dry	1	P6C1705	03/17/16	03/17/16	TPH 8015M	
>C12-C28	ND	28.1	mg/kg dry	1	P6C1705	03/17/16	03/17/16	TPH 8015M	
>C28-C35	ND	28.1	mg/kg dry	1	P6C1705	03/17/16	03/17/16	TPH 8015M	
Surrogate: 1-Chlorooctane		84.0 %	70-1	30	P6C1705	03/17/16	03/17/16	TPH 8015M	
Surrogate: o-Terphenyl		90.6 %	70-1	30	P6C1705	03/17/16	03/17/16	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	28.1	mg/kg dry	1	[CALC]	03/17/16	03/17/16	calc	

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### NWW-20 6C17001-07 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Pern	nian Basin F	Environme	ntal Lab,	L.P.				
General Chemistry Parameters by EPA/	Standard Method	s							
Chloride	11.8	1.11	mg/kg dry	1	P6C1808	03/18/16	03/18/16	EPA 300.0	
% Moisture	10.0	0.1	%	1	P6C1703	03/17/16	03/17/16	% calculation	
Total Petroleum Hydrocarbons C6-C35 b	y EPA Method 80	15M							
C6-C12	ND	27.8	mg/kg dry	1	P6C1705	03/17/16	03/17/16	TPH 8015M	
>C12-C28	ND	27.8	mg/kg dry	1	P6C1705	03/17/16	03/17/16	TPH 8015M	
>C28-C35	ND	27.8	mg/kg dry	1	P6C1705	03/17/16	03/17/16	TPH 8015M	
Surrogate: 1-Chlorooctane		80.5 %	70-1	30	P6C1705	03/17/16	03/17/16	TPH 8015M	
Surrogate: o-Terphenyl		85.9 %	70-1	30	P6C1705	03/17/16	03/17/16	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	27.8	mg/kg dry	1	[CALC]	03/17/16	03/17/16	calc	

P.O. Box 50685 Project Number: 15-0171-01 Midland TX, 79710 Project Manager: Mark Larson

### NWW-5 6C17001-08 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
·	Perm	ian Basin I	Environmen	tal Lab.	L.P.	•			
General Chemistry Parameters by EP				un Euo,	2.1.				
Chloride	16.1	1.09	mg/kg dry	1	P6C1808	03/18/16	03/18/16	EPA 300.0	
% Moisture	8.0	0.1	%	1	P6C1703	03/17/16	03/17/16	% calculation	
Total Petroleum Hydrocarbons C6-C3	5 by EPA Method 80	15M							
C6-C12	ND	27.2	mg/kg dry	1	P6C1705	03/17/16	03/17/16	TPH 8015M	
>C12-C28	46.8	27.2	mg/kg dry	1	P6C1705	03/17/16	03/17/16	TPH 8015M	
>C28-C35	34.1	27.2	mg/kg dry	1	P6C1705	03/17/16	03/17/16	TPH 8015M	
Surrogate: 1-Chlorooctane		72.5 %	70-13	30	P6C1705	03/17/16	03/17/16	TPH 8015M	
Surrogate: o-Terphenyl		77.8 %	70-13	30	P6C1705	03/17/16	03/17/16	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	80.8	27.2	mg/kg dry	1	[CALC]	03/17/16	03/17/16	calc	

P.O. Box 50685 Project Number: 15-0171-01 Midland TX, 79710 Project Manager: Mark Larson

### WW-10 6C17001-09 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Perm	ian Basin F	Environme	ntal Lab,	L.P.				
<b>General Chemistry Parameters by EPA</b>	Standard Method	s							
Chloride	7.33	1.14	mg/kg dry	1	P6C1808	03/18/16	03/18/16	EPA 300.0	
% Moisture	12.0	0.1	%	1	P6C1703	03/17/16	03/17/16	% calculation	
Total Petroleum Hydrocarbons C6-C35 b	y EPA Method 801	15M							
C6-C12	ND	28.4	mg/kg dry	1	P6C1705	03/17/16	03/17/16	TPH 8015M	
>C12-C28	ND	28.4	mg/kg dry	1	P6C1705	03/17/16	03/17/16	TPH 8015M	
>C28-C35	ND	28.4	mg/kg dry	1	P6C1705	03/17/16	03/17/16	TPH 8015M	
Surrogate: 1-Chlorooctane		75.0 %	70-1	30	P6C1705	03/17/16	03/17/16	TPH 8015M	
Surrogate: o-Terphenyl		79.1 %	70-1	30	P6C1705	03/17/16	03/17/16	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	28.4	mg/kg dry	1	[CALC]	03/17/16	03/17/16	calc	

P.O. Box 50685 Project Number: 15-0171-01 Midland TX, 79710 Project Manager: Mark Larson

### WW-15 6C17001-10 (Soil)

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Perm	ian Basin F	Environme	ntal Lab, 1	L.P.				
<b>General Chemistry Parameters by EPA / St</b>	andard Method	S							
Chloride	4.51	1.15	mg/kg dry	1	P6C1808	03/18/16	03/18/16	EPA 300.0	
% Moisture	13.0	0.1	%	1	P6C1703	03/17/16	03/17/16	% calculation	
Total Petroleum Hydrocarbons C6-C35 by 1	EPA Method 80	15M							
C6-C12	ND	28.7	mg/kg dry	1	P6C1705	03/17/16	03/17/16	TPH 8015M	
>C12-C28	ND	28.7	mg/kg dry	1	P6C1705	03/17/16	03/17/16	TPH 8015M	
>C28-C35	ND	28.7	mg/kg dry	1	P6C1705	03/17/16	03/17/16	TPH 8015M	
Surrogate: 1-Chlorooctane		70.6 %	70-1	30	P6C1705	03/17/16	03/17/16	TPH 8015M	
Surrogate: o-Terphenyl		74.4 %	70-1	30	P6C1705	03/17/16	03/17/16	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	28.7	mg/kg dry	1	[CALC]	03/17/16	03/17/16	calc	

P.O. Box 50685 Project Number: 15-0171-01 Midland TX, 79710 Project Manager: Mark Larson

### WW-20 6C17001-11 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Perm	ian Basin I	Environmen	tal Lab,	L.P.				
<b>General Chemistry Parameters by EI</b>	PA / Standard Methods	1							
Chloride	7.85	1.16	mg/kg dry	1	P6C1808	03/18/16	03/18/16	EPA 300.0	
% Moisture	14.0	0.1	%	1	P6C1703	03/17/16	03/17/16	% calculation	
Total Petroleum Hydrocarbons C6-C	35 by EPA Method 801	5M							
C6-C12	ND	29.1	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
>C12-C28	34.2	29.1	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
>C28-C35	ND	29.1	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
Surrogate: 1-Chlorooctane		85.5 %	70-1.	30	P6C2103	03/17/16	03/18/16	TPH 8015M	
Surrogate: o-Terphenyl		95.0 %	70-1.	30	P6C2103	03/17/16	03/18/16	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	34.2	29.1	mg/kg dry	1	[CALC]	03/17/16	03/18/16	cale	

P.O. Box 50685 Project Number: 15-0171-01 Midland TX, 79710 Project Manager: Mark Larson

### WW-5 6C17001-12 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Pern	nian Basin I	Environmer	ıtal Lab,	L.P.				
General Chemistry Parameters by EI	PA / Standard Method	s							
Chloride	3.43	1.11	mg/kg dry	1	P6C1808	03/18/16	03/18/16	EPA 300.0	
% Moisture	10.0	0.1	%	1	P6C1703	03/17/16	03/17/16	% calculation	
Total Petroleum Hydrocarbons C6-C.	35 by EPA Method 80	15M							
C6-C12	ND	27.8	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
>C12-C28	48.3	27.8	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
>C28-C35	ND	27.8	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
Surrogate: 1-Chlorooctane		94.2 %	70-1	30	P6C2103	03/17/16	03/18/16	TPH 8015M	
Surrogate: o-Terphenyl		104 %	70-1	30	P6C2103	03/17/16	03/18/16	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	48.3	27.8	mg/kg dry	1	[CALC]	03/17/16	03/18/16	calc	

P.O. Box 50685 Project Number: 15-0171-01 Midland TX, 79710 Project Manager: Mark Larson

### Bottom-23 6C17001-13 (Soil)

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Perm	ian Basin F	Environme	ıtal Lab,	L.P.				
General Chemistry Parameters by EF	A / Standard Method	s							
Chloride	351	1.14	mg/kg dry	1	P6C1808	03/18/16	03/18/16	EPA 300.0	
% Moisture	12.0	0.1	%	1	P6C1703	03/17/16	03/17/16	% calculation	
Total Petroleum Hydrocarbons C6-C3	35 by EPA Method 80	15M							
C6-C12	ND	28.4	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
>C12-C28	61.3	28.4	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
>C28-C35	32.1	28.4	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
Surrogate: 1-Chlorooctane		91.6 %	70-1	30	P6C2103	03/17/16	03/18/16	TPH 8015M	
Surrogate: o-Terphenyl		100 %	70-1	30	P6C2103	03/17/16	03/18/16	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	93.5	28.4	mg/kg dry	1	[CALC]	03/17/16	03/18/16	calc	

P.O. Box 50685 Project Number: 15-0171-01 Midland TX, 79710 Project Manager: Mark Larson

### SEW-20 6C17001-14 (Soil)

		Donostino							
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Perm	nian Basin I	Environmen	tal Lab,	L.P.				
General Chemistry Parameters by El	PA / Standard Method	s							
Chloride	111	5.68	mg/kg dry	5	P6C1808	03/18/16	03/18/16	EPA 300.0	
% Moisture	12.0	0.1	%	1	P6C1703	03/17/16	03/17/16	% calculation	
Total Petroleum Hydrocarbons C6-C	35 by EPA Method 80	15M							
C6-C12	ND	28.4	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
>C12-C28	36.7	28.4	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
>C28-C35	ND	28.4	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
Surrogate: 1-Chlorooctane		96.2 %	70-1.	30	P6C2103	03/17/16	03/18/16	TPH 8015M	
Surrogate: o-Terphenyl		104 %	70-1.	30	P6C2103	03/17/16	03/18/16	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	36.7	28.4	mg/kg dry	1	[CALC]	03/17/16	03/18/16	calc	

P.O. Box 50685 Project Number: 15-0171-01 Midland TX, 79710 Project Manager: Mark Larson

### SEW-15 6C17001-15 (Soil)

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	D	: D: I	, <b>.</b>	4-1 T - L	ı n				
	Perm	iian basin i	Environmen	tai Lab,	L.P.				
General Chemistry Parameters by EP	A / Standard Method	s							
Chloride	10.7	1.10	mg/kg dry	1	P6C1808	03/18/16	03/18/16	EPA 300.0	
% Moisture	9.0	0.1	%	1	P6C1703	03/17/16	03/17/16	% calculation	
Total Petroleum Hydrocarbons C6-C3	35 by EPA Method 801	15M							
C6-C12	ND	27.5	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
>C12-C28	90.9	27.5	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
>C28-C35	57.5	27.5	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
Surrogate: 1-Chlorooctane		94.5 %	70-13	30	P6C2103	03/17/16	03/18/16	TPH 8015M	
Surrogate: o-Terphenyl		104 %	70-13	80	P6C2103	03/17/16	03/18/16	TPH 8015M	
Total Petroleum Hydrocarbon	148	27.5	mg/kg dry	1	[CALC]	03/17/16	03/18/16	calc	
C6-C35									

P.O. Box 50685 Project Number: 15-0171-01 Midland TX, 79710 Project Manager: Mark Larson

### SEW-10 6C17001-16 (Soil)

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Perm	ian Basin I	Environme	ntal Lab,	L.P.				
<b>General Chemistry Parameters by EPA / Sta</b>	andard Method:	S							
Chloride	16.4	1.16	mg/kg dry	1	P6C1808	03/18/16	03/18/16	EPA 300.0	
% Moisture	14.0	0.1	%	1	P6C1703	03/17/16	03/17/16	% calculation	
<b>Total Petroleum Hydrocarbons C6-C35 by I</b>	EPA Method 801	15M							
C6-C12	ND	29.1	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
>C12-C28	ND	29.1	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
>C28-C35	ND	29.1	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
Surrogate: 1-Chlorooctane		81.2 %	70-1	30	P6C2103	03/17/16	03/18/16	TPH 8015M	
Surrogate: o-Terphenyl		89.9 %	70-1	30	P6C2103	03/17/16	03/18/16	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	ND	29.1	mg/kg dry	1	[CALC]	03/17/16	03/18/16	calc	

P.O. Box 50685 Project Number: 15-0171-01 Midland TX, 79710 Project Manager: Mark Larson

### SEW-5 6C17001-17 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Pern	nian Basin F	Environmen	tal Lab,	L.P.				
General Chemistry Parameters by EP	A / Standard Method	s							
Chloride	16.9	1.08	mg/kg dry	1	P6C1809	03/18/16	03/18/16	EPA 300.0	
% Moisture	7.0	0.1	%	1	P6C1703	03/17/16	03/17/16	% calculation	
Total Petroleum Hydrocarbons C6-C3	35 by EPA Method 80	15M							
C6-C12	ND	26.9	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
>C12-C28	47.2	26.9	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
>C28-C35	45.6	26.9	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
Surrogate: 1-Chlorooctane		97.4 %	70-1.	30	P6C2103	03/17/16	03/18/16	TPH 8015M	
Surrogate: o-Terphenyl		104 %	70-1.	30	P6C2103	03/17/16	03/18/16	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	92.8	26.9	mg/kg dry	1	[CALC]	03/17/16	03/18/16	calc	

P.O. Box 50685 Project Number: 15-0171-01 Midland TX, 79710 Project Manager: Mark Larson

### EW-20 6C17001-18 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Pern	nian Basin I	Environmen	tal Lab,	L.P.				
General Chemistry Parameters by EP	A / Standard Method	s							
Chloride	25.5	1.09	mg/kg dry	1	P6C1809	03/18/16	03/18/16	EPA 300.0	
% Moisture	8.0	0.1	%	1	P6C1703	03/17/16	03/17/16	% calculation	
Total Petroleum Hydrocarbons C6-C3	5 by EPA Method 80	15M							
C6-C12	ND	27.2	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
>C12-C28	102	27.2	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
>C28-C35	33.1	27.2	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
Surrogate: 1-Chlorooctane		96.5 %	70-13	80	P6C2103	03/17/16	03/18/16	TPH 8015M	
Surrogate: o-Terphenyl		104 %	70-13	80	P6C2103	03/17/16	03/18/16	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	135	27.2	mg/kg dry	1	[CALC]	03/17/16	03/18/16	calc	

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### EW-15 6C17001-19 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Perm	ian Basin F	Environmer	ıtal Lab,	L.P.				
<b>General Chemistry Parameters by EPA</b>	/ Standard Methods	1							
Chloride	9.63	1.10	mg/kg dry	1	P6C1809	03/18/16	03/18/16	EPA 300.0	
% Moisture	9.0	0.1	%	1	P6C1703	03/17/16	03/17/16	% calculation	
Total Petroleum Hydrocarbons C6-C35	by EPA Method 801	5M							
C6-C12	ND	27.5	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
>C12-C28	70.0	27.5	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
>C28-C35	33.8	27.5	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
Surrogate: 1-Chlorooctane		88.3 %	70-1	30	P6C2103	03/17/16	03/18/16	TPH 8015M	
Surrogate: o-Terphenyl		93.9 %	70-1	30	P6C2103	03/17/16	03/18/16	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	104	27.5	mg/kg dry	1	[CALC]	03/17/16	03/18/16	calc	

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Midland TX, 79710 Project Manager: Mark Larson

### EW-10 6C17001-20 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Pern	nian Basin I	Environmen	tal Lab,	L.P.				
<b>General Chemistry Parameters by EP</b>	A / Standard Method	ls							
Chloride	7.14	1.10	mg/kg dry	1	P6C1809	03/18/16	03/18/16	EPA 300.0	
% Moisture	9.0	0.1	%	1	P6C1703	03/17/16	03/17/16	% calculation	
Total Petroleum Hydrocarbons C6-C3	35 by EPA Method 80	15M							
C6-C12	ND	27.5	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
>C12-C28	79.0	27.5	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
>C28-C35	40.5	27.5	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
Surrogate: 1-Chlorooctane		88.8 %	70-1.	30	P6C2103	03/17/16	03/18/16	TPH 8015M	
Surrogate: o-Terphenyl		95.1 %	70-1.	30	P6C2103	03/17/16	03/18/16	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	120	27.5	mg/kg dry	1	[CALC]	03/17/16	03/18/16	calc	

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### EW-5 6C17001-21 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Permi	an Basin F	Environment	al Lab,	L.P.				
<b>General Chemistry Parameters by EPA</b>	/ Standard Methods								
Chloride	5.70	1.08	mg/kg dry	1	P6C1809	03/18/16	03/18/16	EPA 300.0	
% Moisture	7.0	0.1	%	1	P6C1703	03/17/16	03/17/16	% calculation	
<b>Total Petroleum Hydrocarbons C6-C35</b>	by EPA Method 801	5M							
C6-C12	ND	26.9	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
>C12-C28	126	26.9	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
>C28-C35	57.8	26.9	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
Surrogate: 1-Chlorooctane		95.6 %	70-13	0	P6C2103	03/17/16	03/18/16	TPH 8015M	
Surrogate: o-Terphenyl		104 %	70-13	0	P6C2103	03/17/16	03/18/16	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	183	26.9	mg/kg dry	1	[CALC]	03/17/16	03/18/16	calc	

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### NEW-20 6C17001-22 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Perm	ian Basin I	Environmen	tal Lab,	L.P.				
General Chemistry Parameters by EP	A / Standard Method	s							
Chloride	70.7	5.49	mg/kg dry	5	P6C1809	03/18/16	03/18/16	EPA 300.0	
% Moisture	9.0	0.1	%	1	P6C1703	03/17/16	03/17/16	% calculation	
Total Petroleum Hydrocarbons C6-C3	5 by EPA Method 801	15M							
C6-C12	43.9	27.5	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
>C12-C28	463	27.5	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
>C28-C35	104	27.5	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
Surrogate: 1-Chlorooctane		97.8 %	70-1.	30	P6C2103	03/17/16	03/18/16	TPH 8015M	
Surrogate: o-Terphenyl		106 %	70-1.	30	P6C2103	03/17/16	03/18/16	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	612	27.5	mg/kg dry	1	[CALC]	03/17/16	03/18/16	calc	

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### NEW-15 6C17001-23 (Soil)

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	D	.: D: I	7 <b>:</b>	4-1 T - L	ı D				
	Perm	iian Basin i	Environmen	tai Lab,	L.P.				
<b>General Chemistry Parameters by EF</b>	A / Standard Method	S							
Chloride	11.3	1.10	mg/kg dry	1	P6C1809	03/18/16	03/18/16	EPA 300.0	
% Moisture	9.0	0.1	%	1	P6C1703	03/17/16	03/17/16	% calculation	
Total Petroleum Hydrocarbons C6-C3	35 by EPA Method 80	15M							
C6-C12	ND	27.5	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
>C12-C28	50.1	27.5	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
>C28-C35	ND	27.5	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
Surrogate: 1-Chlorooctane		79.4 %	70-1.	30	P6C2103	03/17/16	03/18/16	TPH 8015M	
Surrogate: o-Terphenyl		86.5 %	70-1.	30	P6C2103	03/17/16	03/18/16	TPH 8015M	
Total Petroleum Hydrocarbon	50.1	27.5	mg/kg dry	1	[CALC]	03/17/16	03/18/16	calc	
C6-C35									

P.O. Box 50685 Project Number: 15-0171-01 Midland TX, 79710 Project Manager: Mark Larson

### NEW-10 6C17001-24 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Permi	an Basin I	Environmen	tal Lab,	L.P.				
<b>General Chemistry Parameters by EPA</b>	/ Standard Methods								
Chloride	3.67	1.09	mg/kg dry	1	P6C1809	03/18/16	03/18/16	EPA 300.0	
% Moisture	8.0	0.1	%	1	P6C1703	03/17/16	03/17/16	% calculation	
<b>Total Petroleum Hydrocarbons C6-C35</b>	by EPA Method 801	5M							
C6-C12	ND	27.2	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
>C12-C28	84.5	27.2	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
>C28-C35	40.3	27.2	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
Surrogate: 1-Chlorooctane		92.1 %	70-1.	30	P6C2103	03/17/16	03/18/16	TPH 8015M	_
Surrogate: o-Terphenyl		99.2 %	70-1.	30	P6C2103	03/17/16	03/18/16	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	125	27.2	mg/kg dry	1	[CALC]	03/17/16	03/18/16	calc	

P.O. Box 50685 Project Number: 15-0171-01 Midland TX, 79710 Project Manager: Mark Larson

### NEW-5 6C17001-25 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Perm	nian Basin I	Environmen	tal Lab,	L.P.				
General Chemistry Parameters by EI	PA / Standard Method	s							
Chloride	19.9	5.62	mg/kg dry	5	P6C1809	03/18/16	03/18/16	EPA 300.0	
% Moisture	11.0	0.1	%	1	P6C1703	03/17/16	03/17/16	% calculation	
Total Petroleum Hydrocarbons C6-C.	35 by EPA Method 80	15M							
C6-C12	ND	28.1	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
>C12-C28	43.1	28.1	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
>C28-C35	ND	28.1	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
Surrogate: 1-Chlorooctane		87.8 %	70-13	30	P6C2103	03/17/16	03/18/16	TPH 8015M	
Surrogate: o-Terphenyl		94.8 %	70-13	30	P6C2103	03/17/16	03/18/16	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	43.1	28.1	mg/kg dry	1	[CALC]	03/17/16	03/18/16	calc	

P.O. Box 50685 Project Number: 15-0171-01 Midland TX, 79710 Project Manager: Mark Larson

### NW-20 6C17001-26 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Perm	ian Basin I	Environmer	ntal Lab,	L.P.				
<b>General Chemistry Parameters by El</b>	PA / Standard Method	s							
Chloride	12.0	1.12	mg/kg dry	1	P6C1809	03/18/16	03/18/16	EPA 300.0	
% Moisture	11.0	0.1	%	1	P6C1703	03/17/16	03/17/16	% calculation	
Total Petroleum Hydrocarbons C6-C	35 by EPA Method 80	15M							
C6-C12	ND	28.1	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
>C12-C28	58.0	28.1	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
>C28-C35	ND	28.1	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
Surrogate: 1-Chlorooctane		92.0 %	70-1	30	P6C2103	03/17/16	03/18/16	TPH 8015M	
Surrogate: o-Terphenyl		99.3 %	70-1	30	P6C2103	03/17/16	03/18/16	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	58.0	28.1	mg/kg dry	1	[CALC]	03/17/16	03/18/16	calc	

P.O. Box 50685 Project Number: 15-0171-01 Midland TX, 79710 Project Manager: Mark Larson

### NW-15 6C17001-27 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Perm	ian Basin I	Environmen	tal Lab,	L.P.				
General Chemistry Parameters by EP.	A / Standard Methods	S							
Chloride	100	1.09	mg/kg dry	1	P6C1809	03/18/16	03/18/16	EPA 300.0	
% Moisture	8.0	0.1	%	1	P6C1703	03/17/16	03/17/16	% calculation	
<b>Total Petroleum Hydrocarbons C6-C3</b>	5 by EPA Method 801	15M							
C6-C12	ND	27.2	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
>C12-C28	92.4	27.2	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
>C28-C35	42.9	27.2	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
Surrogate: 1-Chlorooctane		88.5 %	70-1.	30	P6C2103	03/17/16	03/18/16	TPH 8015M	
Surrogate: o-Terphenyl		95.3 %	70-1.	30	P6C2103	03/17/16	03/18/16	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	135	27.2	mg/kg dry	1	[CALC]	03/17/16	03/18/16	calc	

P.O. Box 50685 Project Number: 15-0171-01 Midland TX, 79710 Project Manager: Mark Larson

### SW-20 6C17001-28 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Perm	an Basin F	Environmen	tal Lab,	L.P.				
<b>General Chemistry Parameters by EPA</b>	/ Standard Methods								
Chloride	2170	11.2	mg/kg dry	10	P6C1809	03/18/16	03/18/16	EPA 300.0	
% Moisture	11.0	0.1	%	1	P6C1703	03/17/16	03/17/16	% calculation	
<b>Total Petroleum Hydrocarbons C6-C35</b>	by EPA Method 801	5M							
C6-C12	ND	28.1	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
>C12-C28	143	28.1	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
>C28-C35	41.9	28.1	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
Surrogate: 1-Chlorooctane		80.2 %	70-13	80	P6C2103	03/17/16	03/18/16	TPH 8015M	
Surrogate: o-Terphenyl		85.5 %	70-13	80	P6C2103	03/17/16	03/18/16	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	185	28.1	mg/kg dry	1	[CALC]	03/17/16	03/18/16	calc	

P.O. Box 50685 Project Number: 15-0171-01
Midland TX, 79710 Project Manager: Mark Larson

### SW-15 6C17001-29 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Pern	nian Basin I	Environmer	ıtal Lab,	L.P.				
General Chemistry Parameters by EP	PA / Standard Method	ls							
Chloride	877	5.56	mg/kg dry	5	P6C1809	03/18/16	03/18/16	EPA 300.0	
% Moisture	10.0	0.1	%	1	P6C1703	03/17/16	03/17/16	% calculation	
Total Petroleum Hydrocarbons C6-C3	35 by EPA Method 80	15M							
C6-C12	ND	27.8	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
>C12-C28	56.5	27.8	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
>C28-C35	ND	27.8	mg/kg dry	1	P6C2103	03/17/16	03/18/16	TPH 8015M	
Surrogate: 1-Chlorooctane		90.2 %	70-1	30	P6C2103	03/17/16	03/18/16	TPH 8015M	
Surrogate: o-Terphenyl		95.5 %	70-1	30	P6C2103	03/17/16	03/18/16	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	56.5	27.8	mg/kg dry	1	[CALC]	03/17/16	03/18/16	calc	

Larson & Associates, Inc. Project: David Bilbrey 8" Pipeline

P.O. Box 50685 Midland TX, 79710 Project Number: 15-0171-01 Project Manager: Mark Larson Fax: (432) 687-0456

# General Chemistry Parameters by EPA / Standard Methods - Quality Control Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Allaryte	Kesuit	Liiilt	Ullis	Level	Kesuit	/0KEC	Lillins	KLD	Lillit	notes
Batch P6C1703 - *** DEFAULT PREP ***										
Blank (P6C1703-BLK1)				Prepared &	& Analyzed:	03/17/16				
% Moisture	ND	0.1	%							
Duplicate (P6C1703-DUP1)	Sour	ce: 6C16007-	26	Prepared &	& Analyzed:	03/17/16				
% Moisture	14.0	0.1	%		14.0			0.00	20	
Duplicate (P6C1703-DUP2)	Sour	ce: 6C15004-	01	Prepared &	& Analyzed:	03/17/16				
% Moisture	1.0	0.1	%		1.0			0.00	20	
Duplicate (P6C1703-DUP3)	Sour	ce: 6C15011-	01	Prepared &	& Analyzed:	03/17/16				
% Moisture	6.0	0.1	%		6.0			0.00	20	
Duplicate (P6C1703-DUP4)	Sour	ce: 6C15011-	02	Prepared &	& Analyzed:	03/17/16				
% Moisture	5.0	0.1	%		5.0			0.00	20	
Duplicate (P6C1703-DUP5)	Sour	ce: 6C16003-	02	Prepared &	& Analyzed:	03/17/16				
% Moisture	4.0	0.1	%		4.0			0.00	20	
Duplicate (P6C1703-DUP6)	Sour	ce: 6C16005-	08	Prepared &	& Analyzed:	03/17/16				
% Moisture	9.0	0.1	%	*	10.0			10.5	20	
Duplicate (P6C1703-DUP7)	Sour	ce: 6C17001-	21	Prepared &	& Analyzed:	03/17/16				
% Moisture	7.0	0.1	%		7.0			0.00	20	
Batch P6C1808 - *** DEFAULT PREP ***										
Blank (P6C1808-BLK1)				Prepared &	& Analyzed:	03/18/16				
Chloride	ND	1.00	mg/kg we	t						

Larson & Associates, Inc. Project: David Bilbrey 8" Pipeline

P.O. Box 50685 Midland TX, 79710 Project Number: 15-0171-01

Fax: (432) 687-0456

# General Chemistry Parameters by EPA / Standard Methods - Quality Control Permian Basin Environmental Lab, L.P.

Project Manager: Mark Larson

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P6C1808 - *** DEFAULT PREP ***										
LCS (P6C1808-BS1)				Prepared &	k Analyzed:	03/18/16				
Chloride	177	1.00	mg/kg wet	170		104	80-120			
Duplicate (P6C1808-DUP1)	Sou	rce: 6C17001	-01	Prepared &	k Analyzed:	03/18/16				
Chloride	113	5.56	mg/kg dry		109			3.15	20	
Duplicate (P6C1808-DUP2)	Sou	rce: 6C17001	-11	Prepared &	ն Analyzed:	03/18/16				
Chloride	8.53	1.16	mg/kg dry		7.85			8.37	20	
Batch P6C1809 - *** DEFAULT PREP ***										
Blank (P6C1809-BLK1)				Prepared &	k Analyzed:	03/18/16				
Chloride	ND	1.00	mg/kg wet							
LCS (P6C1809-BS1)				Prepared &	ե Analyzed:	03/18/16				
Chloride	177	1.00	mg/kg wet	170		104	80-120			
LCS Dup (P6C1809-BSD1)				Prepared &	k Analyzed:	03/18/16				
Chloride	178	1.00	mg/kg wet	170		105	80-120	0.688	20	
Duplicate (P6C1809-DUP1)	Sou	rce: 6C17001	-21	Prepared &	k Analyzed:	03/18/16				
Chloride	5.03	1.08	mg/kg dry		5.70			12.4	20	
Duplicate (P6C1809-DUP2)	Sou	rce: 6C15006	5-05	Prepared &	k Analyzed:	03/18/16				
Chloride	2230	10.8	mg/kg dry		2280			2.15	20	

P.O. Box 50685 Project Number: 15-0171-01 Midland TX, 79710 Project Manager: Mark Larson

# Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P6C2103 - TX 1005										
Blank (P6C2103-BLK1)				Prepared: 0	)3/17/16 Aı	nalyzed: 03	/18/16			
C6-C12	ND	25.0	mg/kg wet							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	73.9		"	100		73.9	70-130			
Surrogate: o-Terphenyl	40.5		"	50.0		81.1	70-130			
LCS (P6C2103-BS1)				Prepared: 0	)3/17/16 Aı	nalyzed: 03	/18/16			
C6-C12	791	25.0	mg/kg wet	1000		79.1	75-125			
>C12-C28	968	25.0	"	1000		96.8	75-125			
Surrogate: 1-Chlorooctane	117		"	100		117	70-130			
Surrogate: o-Terphenyl	51.7		"	50.0		103	70-130			
LCS Dup (P6C2103-BSD1)				Prepared: 0	)3/17/16 Aı	nalyzed: 03	/18/16			
C6-C12	758	25.0	mg/kg wet	1000		75.8	75-125	4.18	20	
>C12-C28	941	25.0	"	1000		94.1	75-125	2.92	20	
Surrogate: 1-Chlorooctane	113		"	100		113	70-130			
Surrogate: o-Terphenyl	50.4		"	50.0		101	70-130			
Matrix Spike (P6C2103-MS1)	Sou	rce: 6C17001	-29	Prepared: 0	)3/17/16 Aı	nalyzed: 03	/18/16			
C6-C12	1020	27.8	mg/kg dry	1110	ND	92.2	75-125			
>C12-C28	1200	27.8	"	1110	56.5	103	75-125			
Surrogate: 1-Chlorooctane	135		"	111		122	70-130			
Surrogate: o-Terphenyl	58.5		"	55.6		105	70-130			
Matrix Spike Dup (P6C2103-MSD1)	Sou	rce: 6C17001	-29	Prepared: 0	)3/17/16 Aı	nalyzed: 03	/18/16			
C6-C12	1070	27.8	mg/kg dry	1110	ND	96.3	75-125	4.39	20	
>C12-C28	1240	27.8	"	1110	56.5	107	75-125	3.47	20	
Surrogate: 1-Chlorooctane	139		"	111		125	70-130			
Surrogue. 1 Chioroceune										

Larson & Associates, Inc.

Duplicate

Dup

Project: David Bilbrey 8" Pipeline

P.O. Box 50685 Midland TX, 79710 Project Number: 15-0171-01

Project Manager: Mark Larson

### **Notes and Definitions**

BULK	Samples received in Bulk soil containers
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
lry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
ИS	Matrix Spike

	Bun Barron		
Report Approved By:		Date:	3/21/2016

Brent Barron, Laboratory Director/Technical Director

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-686-7235.

Fax: (432) 687-0456

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SU - 15 Sw -20 NEW - 10 NEW - 20 EW - 15 SEW-5 NW- 15 NEW-K NW -20 Em - 10 Fw - 20 RELINQUISHED BY:(Signature) RELINQUISHED BY:(Signature) RELINQUISHED BY (Signature) TOTAL NEW-5 310 SEW -10 Data Reported to: Time zone/State: ☐Yes TRRP report? کر 3 TIME ZONE: Sample I.D. arson & ssociates, Inc. Environmental Consultants K N N ام W=WATER N A=AIR 2 N 23 22 20 σ Lab# 6 L 31161162:05 Date THIS DILLIE OT=OTHER SL=SLUDGE P=PAINT 2.28 2.22 2:20 2.16 7.8 **3**: 69 かにいる いての 2:37 2:33 2:30 2:25 2.06 DATE/TIME DATE/TIME Time Sh: 8 Matrix RECEIVED BY: (Signature) RECEIVED BY: (Signature) # of Containers 432-687-0901 **PRESERVATION** HNO<sub>3</sub> H₂SO₄ □ NaOH □ × UNPRESERVED LAI PROJECT #: 15-0171-01 2 DAY 💢 1 DAY OTHER 🗖 NORMAL TURN AROUND TIME LABORATORY USE ONLY: RECEIVING TEMP: 5,5 CUSTODY SEALS - ☐ BROKEN ☐ INTACT ☐ NOT USED HAND DELIVERED CARRIER BILL# COLLECTOR: Trains williest THERM #: L) FIELD NOTES

# CHAIN-OF-CUSTO

PAGE 2
LAB WORK ORDER #: (0C) (10) OF 2 37 of 37 Page

507 N. Marienfeld, Ste. 200

Midland, TX 79701

PO#: DATE:

PROJECT LOCATION OR NAME: David 13/16rey 8" Apeline

## PERMIAN BASIN ENVIRONMENTAL LAB, LP 10014 SCR 1213 Midland, TX 79706



# Analytical Report

### **Prepared for:**

Mark Larson
Larson & Associates, Inc.
P.O. Box 50685
Midland, TX 79710

Project: David Bilbrey 8" Pipeline
Project Number: 15-0171-01
Location: New Mexico

Lab Order Number: 6C24005



NELAP/TCEQ # T104704156-13-3

Report Date: 04/01/16

Larson & Associates, Inc. Project: David Bilbrey 8" Pipeline

P.O. Box 50685 Project Number: 15-0171-01
Midland TX, 79710 Project Manager: Mark Larson

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Pile 1	6C24005-01	Soil	03/23/16 12:27	03-24-2016 09:15
Pile 2	6C24005-02	Soil	03/23/16 12:43	03-24-2016 09:15
Pile 3	6C24005-03	Soil	03/23/16 12:50	03-24-2016 09:15
Pile 4	6C24005-04	Soil	03/23/16 13:01	03-24-2016 09:15
Pile 5	6C24005-05	Soil	03/23/16 12:56	03-24-2016 09:15
Pile 6	6C24005-06	Soil	03/23/16 12:54	03-24-2016 09:15

Fax: (432) 687-0456

P.O. Box 50685 Project Number: 15-0171-01 Midland TX, 79710 Project Manager: Mark Larson

> Pile 1 6C24005-01 (Soil)

Reporting												
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes			
	Perm	ian Basin F	Environme	ntal Lab, l	L.P.							
General Chemistry Parameters by EPA/	Standard Method	S										
Chloride	9.52	1.10	mg/kg dry	1	P6C3102	03/30/16	03/30/16	EPA 300.0				
% Moisture	9.0	0.1	%	1	P6C2901	03/29/16	03/29/16	% calculation				
Total Petroleum Hydrocarbons C6-C35 by	y EPA Method 80	15M										
C6-C12	ND	27.5	mg/kg dry	1	P6C2801	03/29/16	03/29/16	TPH 8015M				
>C12-C28	ND	27.5	mg/kg dry	1	P6C2801	03/29/16	03/29/16	TPH 8015M				
>C28-C35	ND	27.5	mg/kg dry	1	P6C2801	03/29/16	03/29/16	TPH 8015M				
Surrogate: 1-Chlorooctane		82.7 %	70-1	30	P6C2801	03/29/16	03/29/16	TPH 8015M				
Surrogate: o-Terphenyl		85.0 %	70-1	30	P6C2801	03/29/16	03/29/16	TPH 8015M				
Total Petroleum Hydrocarbon C6-C35	ND	27.5	mg/kg dry	1	[CALC]	03/29/16	03/29/16	calc				

P.O. Box 50685 Project Number: 15-0171-01 Midland TX, 79710 Project Manager: Mark Larson

#### Pile 2 6C24005-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Pern	nian Basin I	Environmer	ntal Lab,	L.P.				
General Chemistry Parameters by E	PA / Standard Method	s							
Chloride	75.4	5.38	mg/kg dry	5	P6C3102	03/30/16	03/30/16	EPA 300.0	
% Moisture	7.0	0.1	%	1	P6C2901	03/29/16	03/29/16	% calculation	
Total Petroleum Hydrocarbons C6-C	35 by EPA Method 80	15M							
C6-C12	ND	26.9	mg/kg dry	1	P6C2801	03/29/16	03/29/16	TPH 8015M	
>C12-C28	78.9	26.9	mg/kg dry	1	P6C2801	03/29/16	03/29/16	TPH 8015M	
>C28-C35	ND	26.9	mg/kg dry	1	P6C2801	03/29/16	03/29/16	TPH 8015M	
Surrogate: 1-Chlorooctane		81.9 %	70-1	30	P6C2801	03/29/16	03/29/16	TPH 8015M	
Surrogate: o-Terphenyl		84.1 %	70-1	30	P6C2801	03/29/16	03/29/16	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	78.9	26.9	mg/kg dry	1	[CALC]	03/29/16	03/29/16	calc	

P.O. Box 50685 Project Number: 15-0171-01 Midland TX, 79710 Project Manager: Mark Larson

#### Pile 3 6C24005-03 (Soil)

Reporting											
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes		
	Perm	ian Basin F	Environme	ntal Lab, l	L.P.						
General Chemistry Parameters by EPA / Standard Methods											
Chloride	365	5.56	mg/kg dry	5	P6D0104	03/31/16	03/31/16	EPA 300.0			
% Moisture	10.0	0.1	%	1	P6C2901	03/29/16	03/29/16	% calculation			
Total Petroleum Hydrocarbons C6-C35 by I	EPA Method 80	15M									
C6-C12	ND	27.8	mg/kg dry	1	P6C2801	03/29/16	03/29/16	TPH 8015M			
>C12-C28	ND	27.8	mg/kg dry	1	P6C2801	03/29/16	03/29/16	TPH 8015M			
>C28-C35	ND	27.8	mg/kg dry	1	P6C2801	03/29/16	03/29/16	TPH 8015M			
Surrogate: 1-Chlorooctane		89.2 %	70-1	30	P6C2801	03/29/16	03/29/16	TPH 8015M			
Surrogate: o-Terphenyl		93.4 %	70-1	30	P6C2801	03/29/16	03/29/16	TPH 8015M			
Total Petroleum Hydrocarbon C6-C35	ND	27.8	mg/kg dry	1	[CALC]	03/29/16	03/29/16	calc			

P.O. Box 50685 Project Number: 15-0171-01 Midland TX, 79710 Project Manager: Mark Larson

#### Pile 4 6C24005-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes		
Permian Basin Environmental Lab, L.P.											
<b>General Chemistry Parameters by EPA/</b>	Standard Methods	1									
Chloride	8.44	1.08	mg/kg dry	1	P6D0104	03/31/16	03/31/16	EPA 300.0			
% Moisture	7.0	0.1	%	1	P6C2901	03/29/16	03/29/16	% calculation			
Total Petroleum Hydrocarbons C6-C35 b	y EPA Method 801	5M									
C6-C12	ND	26.9	mg/kg dry	1	P6C2801	03/29/16	03/29/16	TPH 8015M			
>C12-C28	ND	26.9	mg/kg dry	1	P6C2801	03/29/16	03/29/16	TPH 8015M			
>C28-C35	ND	26.9	mg/kg dry	1	P6C2801	03/29/16	03/29/16	TPH 8015M			
Surrogate: 1-Chlorooctane		103 %	70-1	30	P6C2801	03/29/16	03/29/16	TPH 8015M			
Surrogate: o-Terphenyl		108 %	70-1	30	P6C2801	03/29/16	03/29/16	TPH 8015M			
Total Petroleum Hydrocarbon C6-C35	ND	26.9	mg/kg dry	1	[CALC]	03/29/16	03/29/16	calc			

P.O. Box 50685 Project Number: 15-0171-01 Midland TX, 79710 Project Manager: Mark Larson

#### Pile 5 6C24005-05 (Soil)

Reporting												
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes			
	Perm	ian Basin I	Environmen	tal Lab, l	L.P.							
<b>General Chemistry Parameters by EPA</b>	/ Standard Method	s										
Chloride	153	10.9	mg/kg dry	10	P6D0104	03/31/16	03/31/16	EPA 300.0				
% Moisture	8.0	0.1	%	1	P6C2901	03/29/16	03/29/16	% calculation				
Total Petroleum Hydrocarbons C6-C35	by EPA Method 80	15M										
C6-C12	ND	27.2	mg/kg dry	1	P6C2801	03/29/16	03/29/16	TPH 8015M				
>C12-C28	247	27.2	mg/kg dry	1	P6C2801	03/29/16	03/29/16	TPH 8015M				
>C28-C35	33.7	27.2	mg/kg dry	1	P6C2801	03/29/16	03/29/16	TPH 8015M				
Surrogate: 1-Chlorooctane		84.6 %	70-13	80	P6C2801	03/29/16	03/29/16	TPH 8015M				
Surrogate: o-Terphenyl		87.8 %	70-13	80	P6C2801	03/29/16	03/29/16	TPH 8015M				
Total Petroleum Hydrocarbon C6-C35	281	27.2	mg/kg dry	1	[CALC]	03/29/16	03/29/16	calc				

P.O. Box 50685 Project Number: 15-0171-01 Midland TX, 79710 Project Manager: Mark Larson

#### Pile 6 6C24005-06 (Soil)

Reporting												
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes			
Permian Basin Environmental Lab, L.P.												
<b>General Chemistry Parameters by EPA/S</b>	andard Method	s										
Chloride	81.2	5.49	mg/kg dry	5	P6D0104	03/31/16	03/31/16	EPA 300.0				
% Moisture	9.0	0.1	%	1	P6C2901	03/29/16	03/29/16	% calculation				
<b>Total Petroleum Hydrocarbons C6-C35 by</b>	EPA Method 80	15M										
C6-C12	ND	27.5	mg/kg dry	1	P6C2801	03/29/16	03/29/16	TPH 8015M				
>C12-C28	ND	27.5	mg/kg dry	1	P6C2801	03/29/16	03/29/16	TPH 8015M				
>C28-C35	ND	27.5	mg/kg dry	1	P6C2801	03/29/16	03/29/16	TPH 8015M				
Surrogate: 1-Chlorooctane		97.7 %	70-1	30	P6C2801	03/29/16	03/29/16	TPH 8015M				
Surrogate: o-Terphenyl		101 %	70-1	30	P6C2801	03/29/16	03/29/16	TPH 8015M				
Total Petroleum Hydrocarbon C6-C35	ND	27.5	mg/kg dry	1	[CALC]	03/29/16	03/29/16	calc				

Larson & Associates, Inc. Project: David Bilbrey 8" Pipeline

P.O. Box 50685 Project Number: 15-0171-01
Midland TX, 79710 Project Manager: Mark Larson

General Chemistry Parameters by EPA / Standard Methods - Quality Control Permian Basin Environmental Lab, L.P.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P6C2901 - *** DEFAULT PREP ***										
Datch PoC2901 - """ DEFAULT PREF """										
Blank (P6C2901-BLK1)				Prepared &	Analyzed:	03/29/16				
% Moisture	ND	0.1	%							
Duplicate (P6C2901-DUP1)	Source: 6C23013-01 P		Prepared &	: Analyzed:	03/29/16					
% Moisture	4.0	0.1	%		4.0			0.00	20	
Duplicate (P6C2901-DUP2)	Sour	ce: 6C23014-	20	Prepared &	: Analyzed:	03/29/16				
% Moisture	7.0	0.1	%		7.0			0.00	20	
Duplicate (P6C2901-DUP3)	Sour	ce: 6C24006-	01	Prepared &	: Analyzed:	03/29/16				
% Moisture	11.0	0.1	%		11.0			0.00	20	
Duplicate (P6C2901-DUP4)	Sour	ce: 6C28004-	03	Prepared &	: Analyzed:	03/29/16				
% Moisture	15.0	0.1	%		15.0			0.00	20	
Duplicate (P6C2901-DUP5)	Sour	ce: 6C28005-	01	Prepared & Analyzed: 03/29/16						
% Moisture	9.0	0.1	%		8.0			11.8	20	
Batch P6C3102 - *** DEFAULT PREP ***										
Blank (P6C3102-BLK1)				Prepared &	: Analyzed:	03/30/16				
Chloride	ND	1.00	mg/kg wet		•					
LCS (P6C3102-BS1)				Prepared &	: Analyzed:	03/30/16				
Chloride	184	1.00	mg/kg wet	200		91.8	80-120			
LCS Dup (P6C3102-BSD1)				Prepared &	: Analyzed:	03/30/16				
Chloride	189	1.00	mg/kg wet	200		94.6	80-120	2.98	20	

Fax: (432) 687-0456

Larson & Associates, Inc. Project: David Bilbrey 8" Pipeline

P.O. Box 50685 Project Number: 15-0171-01
Midland TX, 79710 Project Manager: Mark Larson

General Chemistry Parameters by EPA / Standard Methods - Quality Control Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P6C3102 - *** DEFAULT PREP ***										
Duplicate (P6C3102-DUP1)	Sou	rce: 6C23014	-07	Prepared &	& Analyzed:	03/30/16				
Chloride	235	1.06	mg/kg dry		226			4.16	20	
Duplicate (P6C3102-DUP2)	Source: 6C23014-17 Pr		Prepared &	& Analyzed:	03/30/16					
Chloride	1610	5.43	mg/kg dry		1600			0.746	20	
Matrix Spike (P6C3102-MS1)	Sou	rce: 6C23014	-07	Prepared &	& Analyzed:	03/30/16				
Chloride	372	1.06	mg/kg dry	160	226	91.9	80-120			
Batch P6D0104 - *** DEFAULT PREP ***										
Blank (P6D0104-BLK1)				Prepared &	& Analyzed:	03/31/16				
Chloride	ND	1.00	mg/kg wet							
LCS (P6D0104-BS1)				Prepared &	& Analyzed:	03/31/16				
Chloride	191	1.00	mg/kg wet	200		95.4	80-120			
LCS Dup (P6D0104-BSD1)				Prepared &	& Analyzed:	03/31/16				
Chloride	196	1.00	mg/kg wet	200	-	97.8	80-120	2.54	20	
Duplicate (P6D0104-DUP1)	Sou	rce: 6C24005	-03	Prepared &	k Analyzed:	03/31/16				
Chloride	424	5.56	mg/kg dry		365			14.9	20	
Duplicate (P6D0104-DUP2)	Sou	rce: 6C28003	-02	Prepared &	& Analyzed:	03/31/16	03/31/16			
Chloride	389	1.05	mg/kg dry		382			1.68	20	

Fax: (432) 687-0456

P.O. Box 50685 Project Number: 15-0171-01 Midland TX, 79710 Project Manager: Mark Larson

# Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P6C2801 - *** DEFAULT PREP ***										
Blank (P6C2801-BLK1)				Prepared &	& Analyzed:	03/29/16				
C6-C12	ND	25.0	mg/kg wet							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	96.1		"	100		96.1	70-130			
Surrogate: o-Terphenyl	49.3		"	50.0		98.7	70-130			
LCS (P6C2801-BS1)				Prepared &	& Analyzed:	03/29/16				
C6-C12	729	25.0	mg/kg wet	750		97.1	75-125			
>C12-C28	859	25.0	"	750		115	75-125			
Surrogate: 1-Chlorooctane	106		"	100		106	70-130			
Surrogate: o-Terphenyl	40.4		"	50.0		80.8	70-130			
LCS Dup (P6C2801-BSD1)				Prepared &	& Analyzed:	03/29/16				
C6-C12	713	25.0	mg/kg wet	750		95.0	75-125	2.20	20	
>C12-C28	834	25.0	"	750		111	75-125	2.90	20	
Surrogate: 1-Chlorooctane	106		"	100		106	70-130			
Surrogate: o-Terphenyl	42.7		"	50.0		85.4	70-130			
Matrix Spike (P6C2801-MS1)	Sou	rce: 6C24003	3-01	Prepared: (	03/29/16 A	nalyzed: 03	3/30/16			
C6-C12	4150	139	mg/kg dry	833	4230	NR	75-125			QM-05
>C12-C28	19500	139	"	833	18300	151	75-125			QM-05
Surrogate: 1-Chlorooctane	136		"	111		123	70-130			
Surrogate: o-Terphenyl	65.6		"	55.6		118	70-130			
Matrix Spike Dup (P6C2801-MSD1)	Sou	rce: 6C24003	3-01	Prepared: (	03/29/16 A	nalyzed: 03	3/30/16			
C6-C12	4170	139	mg/kg dry	833	4230	NR	75-125	NR	20	QM-05
>C12-C28	19700	139	"	833	18300	174	75-125	13.8	20	QM-05
Surrogate: 1-Chlorooctane	137		"	111		124	70-130			
Surrogate: o-Terphenyl	67.2		"	55.6		121	70-130			

P.O. Box 50685 Project Number: 15-0171-01 Midland TX, 79710 Project Manager: Mark Larson

#### **Notes and Definitions**

QM-05 The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

LCS Laboratory Control Spike

MS Matrix Spike

Dup Duplicate

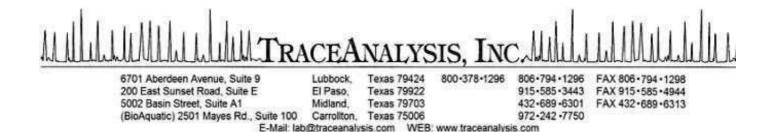
	Drew	Darror			
Report Approved By:			Date:	4/1/2016	

Brent Barron, Laboratory Director/Technical Director

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A GISON & 507 N. Marienfeld, Ste. 200 Midland, TX 79701 Environmental Consultants  SON N. Marienfeld, Ste. 200 Midland, TX 79701 PROJECT LOCATION OR NAME: 15-0171-01 David 13:16:16  LAB WORK ORDER #: 62 2 100 PROJECT LOCATION OR NAME: 15-0171-01 David 13:16:16  LAI PROJECT #: 15-0171-01 COLLECTOR: 17:46:46  PAGE   OF DATE: 31 24 12016 P



#### Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

# Analytical and Quality Control Report

Report Date: March 31, 2016

Work Order:

16032817

Michael Gant Larson and Associates, Inc.

 $\begin{array}{l} {\rm P.~O.~Box~50685} \\ {\rm Midland,~TX,~79710} \end{array}$ 

Project Name: David Bilbrey 8" Pipeline

Project Number: 15-0171-01

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

			Date	Time	Date
Sample	Description	Matrix	Taken	Taken	Received
416516	S Wall 20'	soil	2016-03-24	11:17	2016-03-28
416517	NE Wall 20'	soil	2016-03-24	11:45	2016-03-28
416518	SE Wall 15'	soil	2016-03-24	11:22	2016-03-28
416519	N Wall 20'	soil	2016-03-24	11:40	2016-03-28
416520	N Wall 15'	soil	2016-03-24	11:34	2016-03-28
416521	E Wall 20'	soil	2016-03-24	11:25	2016-03-28

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

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 27 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 416516 (S Wall 20')         Sample 416517 (NE Wall 20')         Sample 416518 (SE Wall 15')         Sample 416519 (N Wall 20')         Sample 416520 (N Wall 15')         Sample 416521 (E Wall 20')
Method Blanks       1         QC Batch 129118 - Method Blank (1)       1         QC Batch 129143 - Method Blank (1)       1         QC Batch 129144 - Method Blank (1)       1         QC Batch 129165 - Method Blank (1)       1         QC Batch 129166 - Method Blank (1)       1
Laboratory Control Spikes       1         QC Batch 129118 - LCS (1)       1         QC Batch 129143 - LCS (1)       1         QC Batch 129144 - LCS (1)       1         QC Batch 129165 - LCS (1)       1         QC Batch 129166 - LCS (1)       1         Matrix Spikes       2         QC Batch 129118 - MS (1)       2         QC Batch 129143 - MS (1)       2         QC Batch 129144 - xMS (1)       2         QC Batch 129165 - MS (1)       2         QC Batch 129166 - MS (1)       2
Calibration Standards       2         QC Batch 129118 - CCV (1)       2         QC Batch 129118 - CCV (2)       2         QC Batch 129143 - CCV (1)       2         QC Batch 129143 - CCV (2)       2         QC Batch 129144 - CCV (1)       2         QC Batch 129144 - CCV (2)       2         QC Batch 129165 - CCV (1)       2         QC Batch 129165 - CCV (2)       2         QC Batch 129166 - CCV (2)       2         QC Batch 129166 - CCV (2)       2         QC Batch 129166 - CCV (2)       2
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Attachments .																										27
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### Case Narrative

Samples for project David Bilbrey 8" Pipeline were received by TraceAnalysis, Inc. on 2016-03-28 and assigned to work order 16032817. Samples for work order 16032817 were received intact at a temperature of -7.4 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	109385	2016-03-29 at 15:00	129143	2016-03-29 at 15:23
Chloride (IC)	E 300.0	109387	2016-03-29 at 15:00	129144	2016-03-30 at $08:47$
TPH DRO	S 8015 $D$	109409	2016-03-30 at 15:00	129165	2016-03-31 at $10:31$
TPH GRO	S 8015 $D$	109352	2016-03-29 at $14:54$	129118	2016-03-30 at $07:38$
TPH ORO	S 8015 D	109409	2016-03-30 at $15:00$	129166	2016-03-31 at $10:33$

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 16032817 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 31, 2016 Work Order: 16032817 Page Number: 6 of 27

15-0171-01 David Bilbrey 8" Pipeline

## **Analytical Report**

Sample: 416516 - S Wall 20'

Laboratory: Lubbock

Analytical Method: Prep Method: Analysis: Chloride (IC) E 300.0N/AQC Batch: 129143 Date Analyzed: 2016-03-29 Analyzed By: RLPrep Batch: 109385 Sample Preparation: 2016-03-29 Prepared By: RL

Sample: 416516 - S Wall 20'

Laboratory: Lubbock

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane		3	33.5	mg/Kg	1	25.0	134	58.2 - 150

Sample: 416516 - S Wall 20'

Laboratory: Midland

Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035 QC Batch: 129118 Date Analyzed: 2016-03-30 Analyzed By: AKPrep Batch: 109352 Sample Preparation: Prepared By: AK

						$_{ m Spike}$	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			2.17	mg/Kg	1	2.00	108	70 - 130

 $continued \dots$ 

Report Date: March 31, 2016 Work Order: 16032817 Page Number: 7 of 27

David Bilbrey 8" Pipeline

Units

mg/Kg

Dilution

Amount

2.00

Recovery

101

Limits

70 - 130

sample continued . . .

Spike Percent Recovery

Result

2.02

Flag

Cert

#### Sample: 416516 - S Wall 20'

4-Bromofluorobenzene (4-BFB)

Laboratory: Lubbock

15-0171-01

Surrogate

Analysis: TPH ORO Analytical Method: S 8015 D Prep Method: N/A QC Batch: 129166 Date Analyzed: 2016-03-31 Analyzed By: HJPrep Batch: 109409 Sample Preparation: 2016-03-30 Prepared By: HJ

MDL MQLPQLRLParameter Flag Cert Result Result Result Result Units Dilution MDLMQL **PQL** RLORO < 7.48< 50.0 < 50.0 < 50.0 7.48 50.0 50.0 50.0 mg/Kg  $_{\mathrm{Qc,U}}$ 

							$\operatorname{Spike}$	Percent	Recovery
Surrogate		Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane				29.8	mg/Kg	1	25.0	119	70 - 130
n-Triacontane	$_{\mathrm{Qsr}}$	$_{\mathrm{Qsr}}$		32.6	$\mathrm{mg}/\mathrm{Kg}$	1	25.0	130	70 - 130

#### Sample: 416517 - NE Wall 20'

Laboratory: Lubbock

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A QC Batch: 129143 Date Analyzed: 2016-03-29 Analyzed By: RL Prep Batch: 109385 Sample Preparation: 2016-03-29 Prepared By: RL

#### Sample: 416517 - NE Wall 20'

Laboratory: Lubbock

Analysis: TPH DRO Analytical Method: S 8015 D Prep Method: N/AQC Batch: 129165 Date Analyzed: 2016-03-31 Analyzed By: HJPrepared By: Prep Batch: 109409 Sample Preparation: 2016-03-30 HJ

Report Date: March 31, 2016 Work Order: 16032817 Page Number: 8 of 27

David Bilbrey 8" Pipeline

15-0171-01

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane		3	32.5	mg/Kg	1	25.0	130	58.2 - 150

#### Sample: 416517 - NE Wall 20'

Laboratory: Midland

Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035 QC Batch: 129118 Date Analyzed: 2016-03-30 Analyzed By: AKPrep Batch: 109352 Sample Preparation: 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
4-Bromofluorobenzene (4-BFB)			1.68	$\mathrm{mg}/\mathrm{Kg}$	1	2.00	84	70 - 130

#### Sample: 416517 - NE Wall 20'

Laboratory: Lubbock

TPH ORO Analysis: Analytical Method: S 8015 D Prep Method: N/AQC Batch: 129166 Date Analyzed: Analyzed By: HJ2016-03-31 Prep Batch: 109409 Sample Preparation: 2016-03-30 Prepared By: HJ

MDL MQL PQL RLParameter Flag Cert Result Result Result Result  ${\rm Units}$ Dilution MDL MQLPQL RL $\overline{\mathrm{ORO}}$ < 7.48 < 50.0 < 50.0 7.48 50.0 < 50.0mg/Kg 50.0 50.0Qc,U

							$\operatorname{Spike}$	Percent	Recovery
Surrogate		Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane				30.1	mg/Kg	1	25.0	120	70 - 130
n-Triacontane	$_{\mathrm{Qsr}}$	$_{ m Qsr}$		34.5	$\mathrm{mg}/\mathrm{Kg}$	1	25.0	138	70 - 130

#### Sample: 416518 - SE Wall 15'

Laboratory: Lubbock

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A QC Batch: 129144 Date Analyzed: 2016-03-30 Analyzed By: RLPrep Batch: 109387 Sample Preparation: 2016-03-29 Prepared By: RL

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			$\operatorname{RL}$			
Parameter	Flag	Cert	Result	Units	Dilution	RL
Chloride		3,4,6	<25.0	mg/Kg	1	25.0

#### Sample: 416518 - SE Wall 15'

Laboratory: Lubbock

TPH DRO Analysis: Analytical Method: S 8015 D Prep Method: N/A QC Batch: 129165 Date Analyzed: 2016-03-31 Analyzed By: HJPrep Batch: 109409 Sample Preparation: Prepared By: 2016-03-30 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	30.6	mg/Kg	1	25.0	122	58.2 - 150

#### Sample: 416518 - SE Wall 15'

Laboratory: Midland

Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035 QC Batch: 129118 Date Analyzed: 2016-03-30 Analyzed By: AK Prep Batch: 109352 Sample Preparation: Prepared By: AK

			$\operatorname{RL}$			
Parameter	Flag	Cert	Result	Units	Dilution	RL
GRO	U	5	< 4.00	mg/Kg	1	4.00

						$\operatorname{Spike}$	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			2.03	mg/Kg	1	2.00	102	70 - 130
4-Bromofluorobenzene (4-BFB)			1.78	$\mathrm{mg}/\mathrm{Kg}$	1	2.00	89	70 - 130

#### Sample: 416518 - SE Wall 15'

Laboratory: Lubbock

TPH ORO Prep Method: N/A Analysis: Analytical Method: S 8015 D QC Batch: 129166 Date Analyzed: 2016-03-31 Analyzed By: HJPrep Batch: 109409 Sample Preparation: 2016-03-30 Prepared By: HJ

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Parameter	Flag	Cert	MDL Result	MQL Result	PQL Result	RL Result	Units	Dilution	MDL	MQL	PQL	RL
			MDL	MQL	PQL	$\operatorname{RL}$						
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
Surrogata		Flag	Cert	Res	l+	Units	Dilution	Spike		Percent		covery mits
Surrogate		riag	Cert				Dilution	Amour		Recovery		
n-Tricosane						mg/Kg	1	25.0		118		- 130
n-Triacontane	$_{\mathrm{Qsr}}$	$_{\mathrm{Qsr}}$		3	4.0	m mg/Kg	1	25.0		136	70	- 130

#### Sample: 416519 - N Wall 20'

Laboratory: Lubbock

			RL			
Parameter	Flag	Cert	Result	Units	Dilution	RL
Chloride		3,4,6	1900	m mg/Kg	5	25.0

#### Sample: 416519 - N Wall 20'

Laboratory: Lubbock

			RL			
Parameter	Flag	Cert	Result	Units	Dilution	RL
DRO	U	1,2,3,4	< 50.0	$\mathrm{mg/Kg}$	1	50.0

						$\operatorname{Spike}$	$\operatorname{Percent}$	Recovery
Surrogate	Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane		3	32.6	${ m mg/Kg}$	1	25.0	130	58.2 - 150

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#### Sample: 416519 - N Wall 20'

Laboratory: Midland

TPH GRO  $\le 5035$ Analysis: Analytical Method: S 8015 D Prep Method: QC Batch: 129118 Date Analyzed: 2016-03-30 Analyzed By: AK Sample Preparation: Prep Batch: 109352 Prepared By: AK

						$_{ m Spike}$	Percent	Recovery
Surrogate	Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			2.09	mg/Kg	1	2.00	104	70 - 130
4-Bromofluorobenzene (4-BFB)			1.78	mg/Kg	1	2.00	89	70 - 130

#### Sample: 416519 - N Wall 20'

Laboratory: Lubbock

Analysis: TPH ORO Prep Method: Analytical Method: S 8015 D N/AQC Batch: 129166 Date Analyzed: 2016-03-31 Analyzed By: HJPrep Batch: 109409 Sample Preparation: 2016-03-30 Prepared By: HJ

MDL MQL PQL RLParameter Flag Cert Result Result Result Result Units Dilution MDLMQL PQL RL< 7.48 < 50.0 7.48 50.0 ORO < 50.0 < 50.0 50.0 50.0 mg/Kg  $_{\mathrm{Qc,Qs,U}}$ 

							$_{ m Spike}$	Percent	Recovery
Surrogate		Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane				31.6	mg/Kg	1	25.0	126	70 - 130
n-Triacontane	$_{\mathrm{Qsr}}$	$_{\mathrm{Qsr}}$		35.8	$\mathrm{mg}/\mathrm{Kg}$	1	25.0	143	70 - 130

#### Sample: 416520 - N Wall 15'

Laboratory: Lubbock

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A QC Batch: RL129143Date Analyzed: 2016-03-29 Analyzed By: Prep Batch: 109385 Sample Preparation: 2016-03-29 Prepared By: RL

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#### Sample: 416520 - N Wall 15'

Laboratory: Lubbock

TPH DRO Analysis: Analytical Method: S 8015 D Prep Method: N/AQC Batch: 129165 Date Analyzed: 2016-03-31 Analyzed By: HJPrep Batch: Sample Preparation: Prepared By: 109409 2016-03-30 HJ

						Spike	Percent	Recovery
Surrogate	Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane		3	32.3	mg/Kg	1	25.0	129	58.2 - 150

#### Sample: 416520 - N Wall 15'

Laboratory: Midland

Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035 QC Batch: 129118 Date Analyzed: Analyzed By: 2016-03-30 AKPrep Batch: 109352 Sample Preparation: Prepared By: AK

						Spike	Percent	Recovery
Surrogate	$\operatorname{Flag}$	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			2.13	mg/Kg	1	2.00	106	70 - 130
4-Bromofluorobenzene (4-BFB)			1.82	mg/Kg	1	2.00	91	70 - 130

#### Sample: 416520 - N Wall 15'

Laboratory: Lubbock

TPH ORO Prep Method: N/A Analysis: Analytical Method: S 8015 D QC Batch: 129166 Date Analyzed: 2016-03-31 Analyzed By: HJPrep Batch: 109409 Sample Preparation: Prepared By: 2016-03-30 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			32.1	mg/Kg	1	25.0	128	70 - 130

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samnle	continued		

							Spike	Percent	Recovery
Surrogate		Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Triacontane	Qsr	Qsr		34.6	mg/Kg	1	25.0	138	70 - 130

#### Sample: 416521 - E Wall 20'

Laboratory: Lubbock

Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A 2016 - 03 - 29QC Batch: 129143Date Analyzed: Analyzed By: RLPrep Batch: 109385 Sample Preparation: 2016-03-29 Prepared By: RL

#### Sample: 416521 - E Wall 20'

Laboratory: Lubbock

TPH DRO Analytical Method: S 8015 D Prep Method: N/A Analysis: QC Batch: 129165 Date Analyzed: 2016-03-31 Analyzed By: HJPrep Batch: 109409 Sample Preparation: 2016-03-30 Prepared By: HJ

						$_{ m Spike}$	Percent	Recovery
Surrogate	Flag	Cert	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane		3	33.0	mg/Kg	1	25.0	132	58.2 - 150

#### Sample: 416521 - E Wall 20'

Laboratory: Midland

Analysis: TPH GRO Analytical Method: S 8015 D Prep Method: S 5035 QC Batch: 129118 Date Analyzed: 2016-03-30 Analyzed By: AK Prep Batch: 109352 Sample Preparation: Prepared By: AK

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	D)	<b>a</b> .	<b></b>	TT 1:	D.1	Spike	Percent	Recovery
Surrogate	$\operatorname{Flag}$	$\operatorname{Cert}$	Result	$\operatorname{Units}$	Dilution	Amount	Recovery	Limits
Trifluorotoluene (TFT)			2.03	mg/Kg	1	2.00	102	70 - 130
4-Bromofluorobenzene (4-BFB)			1.79	mg/Kg	1	2.00	90	70 - 130

#### Sample: 416521 - E Wall 20

Laboratory: Lubbock

Analysis: TPH ORO Analytical Method: S 8015 D Prep Method: N/A QC Batch: 129166 Date Analyzed: 2016-03-31 Analyzed By: HJ Prep Batch: 109409 Sample Preparation: 2016-03-30 Prepared By: HJ

 $\operatorname{MDL}$ MQL $\operatorname{PQL}$ RL $\mathrm{MQL}$  $\operatorname{PQL}$ Parameter Flag Cert Result Result Result Result Units Dilution MDLRL $\overline{\text{ORO}}$ < 7.48 < 50.0 < 50.0 < 50.0 7.48 50.0 50.0 50.0 mg/Kg  $_{\rm Qc,U}$ 

							$\operatorname{Spike}$	Percent	Recovery
Surrogate		Flag	$\operatorname{Cert}$	Result	Units	Dilution	Amount	Recovery	Limits
n-Tricosane	Qsr	Qsr		32.6	mg/Kg	1	25.0	130	70 - 130
n-Triacontane	$_{ m Qsr}$	$_{\mathrm{Qsr}}$		37.2	$\mathrm{mg}/\mathrm{Kg}$	1	25.0	149	70 - 130

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### Method Blanks

Method Blank (1) QC Batch: 129118

QC Batch: 129118 Date Analyzed: 2016-03-30 Analyzed By: AK Prep Batch: 109352 QC Preparation: 2016-03-29 Prepared By: 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

Method Blank (1) QC Batch: 129143

QC Batch: 129143 Date Analyzed: 2016-03-29 Analyzed By: RL Prep Batch: 109385 QC Preparation: 2016-03-29 Prepared By: RL

			$\mathrm{MDL}$		
Parameter	Flag	Cert	Result	Units	RL
Chloride		3,4,6	< 8.34	m mg/Kg	25

Method Blank (1) QC Batch: 129144

QC Batch: 129144 Date Analyzed: 2016-03-30 Analyzed By: RL Prep Batch: 109387 QC Preparation: 2016-03-29 Prepared By: RL

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Method Blank (1) QC Batch: 129165

QC Batch: 129165 Date Analyzed: 2016-03-31 Analyzed By: HJ

Spike Percent Recovery  $\operatorname{Cert}$ Units Dilution Amount Recovery Limits Surrogate Flag Result 58.2 - 150 n-Tricosane 26.5 25.0 106 mg/Kg 3

Method Blank (1) QC Batch: 129166

QC Batch: 129166 Date Analyzed: 2016-03-31 Analyzed By: HJ Prep Batch: 109409 QC Preparation: 2016-03-30 Prepared By: HJ

 $\mathrm{MDL}$ 

Surrogate	Flag	Cert	Result	Units	Dilution	$\begin{array}{c} {\rm Spike} \\ {\rm Amount} \end{array}$	Percent Recovery	Recovery Limits
n-Tricosane			26.5	mg/Kg	1	25.0	106	70 - 130
n-Triacontane			30.4	mg/Kg	1	25.0	122	70 - 130

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## Laboratory Control Spikes

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

QC Batch: 129118 Date Analyzed: 2016-03-30 Analyzed By: AK Prep Batch: 109352 QC Preparation: 2016-03-29 Prepared By: AK

			LCS			Spike	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	$\operatorname{Limit}$
GRO		5	17.0	mg/Kg	1	20.0	< 1.76	85	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	19.2	mg/Kg	1	20.0	< 1.76	96	70 - 130	12	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)	1.99	2.11	mg/Kg	1	2.00	100	106	70 - 130
4-Bromofluorobenzene (4-BFB)	1.67	1.78	$\mathrm{mg}/\mathrm{Kg}$	1	2.00	84	89	70 - 130

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

QC Batch: 129143 Date Analyzed: 2016-03-29 Analyzed By: RL Prep Batch: 109385 QC Preparation: 2016-03-29 Prepared By: RL

			LCS			Spike	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit
Chloride		3.4.6	249	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		3,4,6	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.

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

QC Batch: 129144 Date Analyzed: 2016-03-30 Analyzed By: RL Prep Batch: 109387 QC Preparation: 2016-03-29 Prepared By: RL

			LCS			$\operatorname{Spike}$	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	$\operatorname{Limit}$
Chloride		3,4,6	245	mg/Kg	1	250	< 8.34	98	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	246	mg/Kg	1	250	< 8.34	98	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: 129165 Date Analyzed: 2016-03-31 Analyzed By: HJ Prep Batch: 109409 QC Preparation: 2016-03-30 Prepared By: HJ

			LCS			Spike	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit
DRO		1,2,3,4	560	mg/Kg	1	500	< 8.47	112	68.5 - 136

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
DRO		1,2,3,4	550	mg/Kg	1	500	< 8.47	110	68.5 - 136	2	20

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

		LCS	LCSD			Spike	LCS	LCSD	Rec.
Surrogate		Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
n-Tricosane	3	30.2	29.8	mg/Kg	1	25.0	121	119	58.2 - 150

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

QC Batch: 129166 Date Analyzed: 2016-03-31 Analyzed By: HJ Prep Batch: 109409 QC Preparation: 2016-03-30 Prepared By: HJ Report Date: March 31, 2016 Work Order: 16032817 Page Number: 19 of 27

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				LCS			Spike	Matrix		Rec.
Param		$\mathbf{F}$	$\mathbf{C}$	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		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	30.2	29.8	mg/Kg	1	25.0	121	119	70 - 130
n-Triacontane	26.9	26.2	mg/Kg	1	25.0	108	105	70 - 130

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# Matrix Spikes

Matrix Spike (MS-1) Spiked Sample: 416517

QC Batch: 129118 Date Analyzed: 2016-03-30 Analyzed By: AK Prep Batch: 109352 QC Preparation: 2016-03-29 Prepared By: AK

			MS			Spike	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	$\operatorname{Limit}$
GRO		5	15.2	mg/Kg	1	20.0	< 1.76	76	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		5	15.9	mg/Kg	1	20.0	< 1.76	80	70 - 130	4	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)	2.00	1.89	mg/Kg	1	2	100	94	70 - 130
4-Bromofluorobenzene (4-BFB)	1.90	1.75	mg/Kg	1	2	95	88	70 - 130

Matrix Spike (MS-1) Spiked Sample: 416451

QC Batch: 129143 Date Analyzed: 2016-03-29 Analyzed By: RL Prep Batch: 109385 QC Preparation: 2016-03-29 Prepared By: RL

			MS			$_{ m Spike}$	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit
Chloride		3,4,6	291	mg/Kg	1	250	17.6	109	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		3,4,6	282	mg/Kg	1	250	17.6	106	80 - 120	3	20

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

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Matrix Spike (xMS-1) Spiked Sample: 416451

QC Batch: 129144 Date Analyzed: 2016-03-30 Analyzed By: RL Prep Batch: 109387 QC Preparation: 2016-03-29 Prepared By: RL

MS Spike Matrix Rec. F  $\mathbf{C}$ Param Result Units Dil. Amount Result Rec. Limit Chloride 13.8 80 - 120 3,4,6 285mg/Kg 250 108

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		3,4,6	272	mg/Kg	1	250	13.8	103	80 - 120	5	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: 416519

QC Batch: 129165 Date Analyzed: 2016-03-31 Analyzed By: HJ Prep Batch: 109409 QC Preparation: 2016-03-30 Prepared By: HJ

			MS			$\operatorname{Spike}$	Matrix		Rec.
Param	$\mathbf{F}$	$\mathbf{C}$	Result	Units	Dil.	Amount	Result	Rec.	Limit
DRO		1,2,3,4	542	mg/Kg	1	500	< 8.47	108	49.3 - 138

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	528	mg/Kg	1	500	< 8.47	106	49.3 - 138	3	20

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

		MS	MSD			Spike	MS	MSD	Rec.
Surrogate		Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
n-Tricosane	3	34.7	35.2	mg/Kg	1	25	139	141	58.2 - 150

Matrix Spike (MS-1) Spiked Sample: 416519

QC Batch: 129166 Date Analyzed: 2016-03-31 Analyzed By: HJ Prep Batch: 109409 QC Preparation: 2016-03-30 Prepared By: HJ Report Date: March 31, 2016 Work Order: 16032817 Page Number: 22 of 27

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				MS			Spike	Matrix		Rec.
Param		$\mathbf{F}$	$\mathbf{C}$	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.

				MSD			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.

			MS	MSD			$\operatorname{Spike}$	MS	MSD	$\mathrm{Rec.}$
Surrogate			Result	Result	Units	Dil.	Amount	Rec.	Rec.	Limit
n-Triacontane	Qsr	Qsr	34.1	34.9	mg/Kg	1	25	136	140	70 - 130

Report Date: March 31, 2016 Work Order: 16032817 Page Number: 23 of 27

15-0171-01 David Bilbrey 8" Pipeline

# Calibration Standards

#### Standard (CCV-1)

QC Batch: 129118 Date Analyzed: 2016-03-30 Analyzed By: AK

				$\mathrm{CCVs}$	CCVs	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		5	mg/Kg	1.00	0.894	89	80 - 120	2016-03-30

#### Standard (CCV-2)

QC Batch: 129118 Date Analyzed: 2016-03-30 Analyzed By: AK

				CCVs	CCVs	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	$\operatorname{Cert}$	Units	Conc.	Conc.	Recovery	Limits	Analyzed
GRO		5	mg/Kg	1.00	0.879	88	80 - 120	2016-03-30

#### Standard (CCV-1)

QC Batch: 129143 Date Analyzed: 2016-03-29 Analyzed By: RL

				$\mathrm{CCVs}$	$\mathrm{CCVs}$	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	25.1	100	90 - 110	2016-03-29

#### Standard (CCV-2)

QC Batch: 129143 Date Analyzed: 2016-03-29 Analyzed By: RL

				CCVs	CCVs	CCVs	Percent	Data
Param	Flag	Cert	Units	True Conc.	Found Conc.	Percent Recovery	$\begin{array}{c} { m Recovery} \\ { m Limits} \end{array}$	$egin{array}{c} { m Date} \\ { m Analyzed} \end{array}$
Chloride		3,4,6	mg/Kg	25.0	24.9	100	90 - 110	2016-03-29

Report Date: March 31, 2016 Work Order: 16032817 Page Number: 24 of 27

15-0171-01 David Bilbrey 8" Pipeline

Standard (CCV-1)

QC Batch: 129144 Date Analyzed: 2016-03-30 Analyzed By: RL

				CCVs	CCVs	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Chloride		3,4,6	mg/Kg	25.0	25.1	100	90 - 110	2016-03-30

Standard (CCV-2)

QC Batch: 129144 Date Analyzed: 2016-03-30 Analyzed By: RL

				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		3,4,6	mg/Kg	25.0	24.6	98	90 - 110	2016-03-30

Standard (CCV-1)

QC Batch: 129165 Date Analyzed: 2016-03-31 Analyzed By: HJ

				CCVs	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	558	112	80 - 120	2016-03-31

Standard (CCV-2)

QC Batch: 129165 Date Analyzed: 2016-03-31 Analyzed By: HJ

				CCVs	CCVs	CCVs	Percent	
				True	Found	Percent	Recovery	Date
Param	Flag	$\operatorname{Cert}$	Units	Conc.	Conc.	Recovery	Limits	Analyzed
DRO		1,2,3,4	mg/Kg	500	572	114	80 - 120	2016-03-31

Standard (CCV-1)

QC Batch: 129166 Date Analyzed: 2016-03-31 Analyzed By: HJ

Report Date: March 31, 2016 Work Order: 16032817 Page Number: 25 of 27

15-0171-01 David Bilbrey 8" Pipeline

					CCVs True	CCVs Found	CCVs Percent	Percent Recovery	Date
Param		Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
ORO	Qc	Qc		mg/Kg	500	0.00	0	80 - 120	2016-03-31

Standard (CCV-2)

QC Batch: 129166 Date Analyzed: 2016-03-31 Analyzed By: HJ

					CCVs	CCVs	CCVs	Percent	D 4
					True	Found	Percent	Recovery	Date
Param		Flag	Cert	Units	Conc.	Conc.	Recovery	Limits	Analyzed
ORO	Os	Os		mø/Kø	500	0.00	0	80 - 120	2016-03-31

Report Date: March 31, 2016 Work Order: 16032817 Page Number: 26 of 27

15-0171-01 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 31, 2016 Work Order: 16032817 Page Number: 27 of 27 15-0171-01 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.

U0#: 16032817

CHAIN-OF-CLISTODY	PAGE OF	SILBORY 8" P. Peline COLLECTOR: Michael Cont	CARRO	3. 10. 2. 3. 10. 10. 10. 10. 10. 10. 10. 10. 10. 10	STATES OF THE PLANTES	מוני	シごと	ンググ	2/3		12				0	THERM #: THE	15 27571520	
CHAIN		Javid F	100/05/05/05/05/05/05/05/05/05/05/05/05/0	111005 N			X	X	×	×	X				LABORATORY USE ONLY:	RECEIVING TEMP: 7,4 THERM #: TECUSTODY SEALS - D BROKEN D INTACT D NOT USED	CARRIER BILL# 15 2	M HAND DELIVERED
	DATE: 3/28/201(	ECT LOCATION C	4	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$				X	×	×	×					1 DAY []	other □	
	200	Midland, TX 79701 19 19 432-687-0901 PF	PRESERVATION	RVED □	NO SEE HOO?  H'SO! □  HOO?	×	X	X	X	X	X				WEB BY: (Signature), 4 3/28 (5:15	RECEIVED BY: (Signature)	IVED BY: (Signature)	
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### PERMIAN BASIN ENVIRONMENTAL LAB, LP 10014 SCR 1213 Midland, TX 79706



## Analytical Report

#### **Prepared for:**

Mark Larson
Larson & Associates, Inc.
P.O. Box 50685
Midland, TX 79710

Project: David Bilbrey 8" Pipeline
Project Number: 15-0171-01
Location: New Mexico

Lab Order Number: 6D08002



NELAP/TCEQ # T104704156-13-3

Report Date: 04/13/16

Larson & Associates, Inc. Project: David Bilbrey 8" Pipeline

P.O. Box 50685 Project Number: 15-0171-01
Midland TX, 79710 Project Manager: Mark Larson

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
NE Soil Pile	6D08002-01	Soil	04/07/16 12:00	04-07-2016 17:00

Fax: (432) 687-0456

P.O. Box 50685 Project Number: 15-0171-01 Midland TX, 79710 Project Manager: Mark Larson

> NE Soil Pile 6D08002-01 (Soil)

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Perm	ian Basin I	Environmen	tal Lab,	L.P.				
<b>General Chemistry Parameters by EPA</b>	A / Standard Methods	S							
% Moisture	6.0	0.1	%	1	P6D1203	04/12/16	04/12/16	% calculation	
Total Petroleum Hydrocarbons C6-C3	5 by EPA Method 801	5M							
C6-C12	109	26.6	mg/kg dry	1	P6D1204	04/11/16	04/11/16	TPH 8015M	
>C12-C28	997	26.6	mg/kg dry	1	P6D1204	04/11/16	04/11/16	TPH 8015M	
>C28-C35	127	26.6	mg/kg dry	1	P6D1204	04/11/16	04/11/16	TPH 8015M	
Surrogate: 1-Chlorooctane		124 %	70-1.	30	P6D1204	04/11/16	04/11/16	TPH 8015M	
Surrogate: o-Terphenyl		130 %	70-1.	30	P6D1204	04/11/16	04/11/16	TPH 8015M	S-GC
Total Petroleum Hydrocarbon C6-C35	1230	26.6	mg/kg dry	1	[CALC]	04/11/16	04/11/16	calc	

P.O. Box 50685 Project Number: 15-0171-01 Midland TX, 79710 Project Manager: Mark Larson

# General Chemistry Parameters by EPA / Standard Methods - Quality Control Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P6D1203 - *** DEFAULT PREP ***										
Blank (P6D1203-BLK1)				Prepared: (	04/12/16 A	nalyzed: 04	/13/16			
% Moisture	ND	0.1	%							
Duplicate (P6D1203-DUP1)	Sour	ce: 6D08004-	05	Prepared: (	04/12/16 A	nalyzed: 04	/13/16			
% Moisture	6.0	0.1	%		6.0			0.00	20	
Duplicate (P6D1203-DUP2)	Sour	ce: 6D08011-	01	Prepared: (	04/12/16 A	nalyzed: 04	/13/16			
% Moisture	11.0	0.1	%		10.0			9.52	20	

P.O. Box 50685 Project Number: 15-0171-01 Midland TX, 79710 Project Manager: Mark Larson

## Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control Permian Basin Environmental Lab, L.P.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P6D1204 - TX 1005										
Blank (P6D1204-BLK1)				Prepared &	Analyzed:	04/11/16				
C6-C12	ND	25.0	mg/kg wet							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	111		"	100		111	70-130			
Surrogate: o-Terphenyl	59.6		"	50.0		119	70-130			
LCS (P6D1204-BS1)				Prepared &	Analyzed:	04/11/16				
C6-C12	794	25.0	mg/kg wet	1000		79.4	75-125			
>C12-C28	883	25.0	"	1000		88.3	75-125			
Surrogate: 1-Chlorooctane	119		"	100		119	70-130			
Surrogate: o-Terphenyl	56.3		"	50.0		113	70-130			
LCS Dup (P6D1204-BSD1)				Prepared &	k Analyzed:	04/11/16				
C6-C12	770	25.0	mg/kg wet	1000		77.0	75-125	3.07	20	
>C12-C28	843	25.0	"	1000		84.3	75-125	4.65	20	
Surrogate: 1-Chlorooctane	115		"	100		115	70-130			
Surrogate: o-Terphenyl	57.2		"	50.0		114	70-130			

P.O. Box 50685 Project Number: 15-0171-01 Midland TX, 79710 Project Manager: Mark Larson

#### **Notes and Definitions**

S-GC	Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate
	P AR
Damant	Bren Barron
Keport A	Approved By: Date: 4/13/2016
Brent B	arron, Laboratory Director/Technical Director

If you have received this material in error, please notify us immediately at 432-686-7235.

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain

information that is privileged and confidential.

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#### **APPENDIX B**

Photographs



Leak Repair and Initial Soil Samples Viewing North, December 22, 2015



Leak Repair and Initial Soil Samples Viewing South, December 22, 2015



Excavation by Watson Construction Viewing North, March 23, 2016



Excavation by Watson Construction Viewing South, March 23, 2016



Excavation Backfilling Viewing South, April 8, 2016 Note: staining in center removed prior to backfilling



Excavation Backfilling Viewing North, April 8, 2016



Excavation Backfilling Viewing East, April 8, 2016



Finished Excavation Viewing North, April 26, 2016



Finished Excavation Viewing South, April 26, 2016

#### **APPENDIX C**

**Waste Manifests** 



Gandy Marley, Inc. 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 invokes 23885 thru 23885

#### EXEMPT OCO

Origin:	DAVID BILBREY					
Date:	Ticket No:	Description	Transporter:	Celt 1	Inits	Unit Type:
4/19/2018			Gandy Inc.	LF	20	YARDS
4/19/2010	31702		Gandy Inc.	LF.	20	YARDS
4/19/2016	31703		Gandy Inc.	LF .	20	YARDS
4/18/2010	31704		Gandy Inc.	LF .	20	YARDS
4/19/2016	3 31705		Gandy Inc.	U <sup>‡</sup>	20	YARDS
4/19/2016	3 31708		Gandy Inc.	LF	20	YARDS
4/19/2015	31707		Gandy Inc.	LF	20	YARDS
4/19/2016	3 31708		Gandy Inc.	<b>近</b>	20	YARDS
4/19/2016	3 31709		Gandy Inc.	LF	20	YARDS
4/19/2016	31710		Gandy Inc.	LF	20	YARDS
4/20/2016	31711		Gandy Inc.	LF	20	YARDS
4/20/2016	31712		Gandy Inc.	LF	20	YARDS
4/20/2010	31713		Gandy Inc.	LF	20	YARDS
4/20/2016	3 317t4		Gandy Inc.	LF	20	YARDS
4/20/2016	3 31717		Gandy Inc.	LF	20	YARDS
4/20/2011	3 31718		Gandy Inc.	LF	20	YARDS
4/20/2016	31719		Gandy Inc.	LF	20	YAROS
4/20/2010	3 31720		Gandy Inc.	(F	20	YARDS
4/20/2010	3 31721		Gandy Inc.	tF	20	YARDS
4/20/2016	3 31722		Gandy Inc.	LF .	20	YARDS
4/20/2016	31723		Gandy Inc.	LF.	20	YARDS
4/20/2010	31724		Gandy Inc.	<b>LF</b>	20	YARDS
4/20/2010	3 31725		Gandy Inc.	ľ	20	YARDS
4/20/2010	3 31728		Gandy Inc.	LF	20	YARDS
4/20/2011	3 31727		Gandy Inc.	LF	20	YARDS
4/20/2010	31728		Gandy Inc.	LF	20	YARDS
4/20/2010	3 31729		Gandy Inc.	LF	20	YARDS
4/20/2010	5 31730		Gandy Inc.	ĮF.	20	YARDS
4/21/2011	3 31731		Gandy Inc.	LF .	20	YARDS
4/21/2011	3 31732		Gandy Inc.	ᄕ	20	YARDS

900 YARDS

900 Units



Targa Midstream Services PO Box 1689 Lovington, NM 88260

Detailed Report of material for Invoices 23885 thru 23885

P.O. B	ox 1658	Roswell	I, NM 88	202
Phone	575-347	7-0434 F	Fax 575-	347-0435

4/21/2016	31733	Gandy Inc.	ᄕ	20	YARD\$
4/21/2016	31734	Gandy Inc.	LF.	20	YARDS
4/21/2016	31735	Gandy Inc.	LF	20	YARDS
4/21/2016	31736	Gandy Inc.	냐	20	YARDS
4/21/2016	31737	Gandy Inc.	ᄕ	20	YARDS
4/21/2016	31738	Gandy Inc.	LF	20	YARDS
4/21/2016	31739	Gandy Inc.	<b>년</b>	20	YARDŞ
4/21/2016	31740	Gandy Inc.	ţ.F	20	YARDS
4/21/2015	31741	Gandy Inc.	LF	20	YARDS
4/21/2015	31742	Gandy Inc.	LF	20	YARDS
4/21/2015	31743	Gandy Inc.	ᄕ	20	YARDS
4/25/2018	31744	Gandy Inc.	UF	20	YARDS
4/25/2015	31745	Gandy Inc.	UF	20	YARDS
4/25/2018	31746	Gandy Inc.	LF	20	YARDS
4/25/2016	31751	Gandy Inc.	LF.	20	YARD\$
		DAVID BILBREY Total YARDS.		900 YAR	DS

EXEMPT OCD Total YARDS.

**EXEMPT OCD Total Units.** 

900 Units

Targa Midstream Services Total Units.

GANDY-MARLEY, INC.
P.O. Box 1658
Roswell, NM 88202
(575) 347-0434
Fax (575) 347-0435

	Fax (575) 347-0	435	
STATE OF THE STATE	HIPPER/COMPANY:	TARGA	MIDSTREAM
EASE OPERATURES	MIPPEROGIA		
LEASE NAME: DA	WID BILBREY		TIME: 105 CAMIPM
TRANSPORTER CO	MPANY: 9ANdy		DRIVER NO.:
DATE: 04-19-1	VEHICLE NO.: 2	368	
CHARGE TO:			
	TYPE OF MAT	ERIAL	
	OCD		
[ ] Other Material:	[ 1 Contaminated soil 1 ] BS&W content:	[]	C-117 No.:
Description: OLLY			
TOTAL AND CONTAC	TP		
		CE11#	LF :
VOLUME OF MATE	RIAL [ ]: YARDS 20	CEPTANCE OF	THE MATERIALS SHIPPED WITH TS THAT THE WASTE MATERIAL
THIS JOB TICKET, OPER SHIPPED HEREWITH IS I ACT OF 1976, AS AMENIC CODE, §361.001, of seq. AFFORDED CONTAMINA	MATERIAL EXEMPT FROM THE DED FROM TIME TO TIME, 40 L AND REGULATIONS RELATED STED SOILS AND OTHER WA	RESOURCE, C J.S.C. §6901, 61 D THERETO, B ASTE ASSOCIA IATURAL GAS C	SONSERVATION AND SAF.  SCQ., THE NM HEALTH AND SAF.  Y VIRTUE OF THE EXEMPTION  TED WITH THE EXPLORATION,  OR GEOTHERMAL ENERGY.
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	corn that the above Transporter	loaded the males tendered by the and that the ma	erial represented by this Transporte to above described shipper. This w terial was delivered without incident
FACILITY REPRESENTATI	1 7 Tolla	27	
	Shipper Pink - GHI	Gold - Transporter	

# GANDY-MARLEY, INC. P.O. 80x 1658 Roswoll, NM 88202 (575) 347-0434 Fax (575) 347-0435

	Fax (575) 3	347-0435	
- Aronn	HIPPER/COMPAN	TAR	SA MIDSTREAM
EASE OPERATORS	Shire Electric	- 7	
EASE NAME: D	AUID BIRBIC	7	TIME: 10 53 ANDM
TRANSPORTER COL	MPANY: 9A	N D7	DRIVER NO.:
DATE: 04-19-	16 VEHICLE NO		
CHARGE TO:			
	TYPE OF	MATERIAL	
	Of	CD	
	Contaminated	t soil	[ ] C-117 No.:
[ ] Other Material:	[ ] BS&W conter	11:	
4.55			
Description: OLLY			
COMPANY CONTA	CT:		
COMPART CONTIN			E11# 4F :[]
VOLUME OF MATE	RIAL[ ]: YARDS	20	ELL# :[ ]
THIS JOB TICKET, OPER SHIPPED HEREWITH IS ACT OF 1978, AS AMEN CODE, \$381,001, 01 SEC AFFORDED CONTAMIN DEVELOPMENT OR PROPERTY OF THE STORY OF THE	MATERIAL EXEMPT FROM DED FROM TIME TO TIME I. AND REGULATIONS RI ATED SOILS AND OTHE DUCTION OF CRUDE ON IDITION TO GANDY-MARI T. TRANSPORTER REPRI ATOR/SHIPPER TO TRANS FACILITY FOR DISPOSA	M THE RESOLUTION THE	ARRANTS THAT THE WASTE MATERIAL PROCE, CONSERVATION AND RECOVER 1901, or sog., THE NM HEALTH AND SAMETO, BY VIRTUE OF THE EXEMPTION OF SOCIATED WITH THE EXPLORATION OF THE EXPLORATION OF THE MATERIAL SHIPPE WARRANTS THAT ONLY THE MATERIAL PROCESS OF THE MATERIAL PROCESS
cortify that no additional	materials were about		
DRIVER:	of ten	oten	
FACILITY REPRESENTAT	/	eton_	ineporter
Montes GLD Care	- Shipper (PSAK - CHI		

GANDY-MARLEY, INC.
P.O. Box 1658
Roswell, NM 88202
(575) 347-0434
Fax (575) 347-0435

	Fax (575) 347	-0435		
TO DOUBLE ATODIS	HIPPER/COMPANY:	TARG	A MIDSTRE	BM_
	Dian	= 1		
EASE NAME: D	AVID BILBE	57	TIME: 11:09 AN	WPM
TRANSPORTER COL	MPANY: SANd	7/1/2	DRIVER NO.:	
DATE: 04-19-1	VEHICLE NO.:	540	-	
CHARGE TO:				
	TYPE OF MA	TERIAL		
	OCD			
			[ ] C-117 No.:	
[ ] Other Material:	Conteminated so			
•				
Description: OLLY				
COMPANY CONTA	ST:			
COMMITMENT	RIAL[]: YARDS _ 34	· CEI	L LF	
THIS JOB TICKET, OPEN SHIPPED HEREWITH IS ACT OF 1976, AS AMENI CODE, §381.001, 01 500 AFFORDED CONTAMIN DEVELOPMENT OR PROPERTY OF THE STATE OF THE	TO GANDY-MARLEY, INC.'S ATOR/SHIPPER REPRESEN MATERIAL EXEMPT FROM TO DED FROM TIME TO TIME. 4 AND REGULATIONS RELA ATED SOILS AND OTHER DOUCTION OF CRUDE OIL OIL IDITION TO GANDY-MARLEY IT, TRANSPORTER REPRESE TOR/SHIPPER TO TRANSPORTER FACILITY FOR DISPOSAL.	HE RESOURCE OU.S.C. \$690 ATED THERET WASTE ASSI- R NATURAL G INC.'S ACCE ENTS AND WI DRITER IS NO	I. 01 SOQ THE NM HEAD O. BY VIRTUE OF THE OCIATED WITH THE E AS OR GEOTHERMAL E PTANCE OF THE MATER ARRANTS THAT ONLY 1 W DELIVERED BY TRANS	EXEMPTION EXEMPTION EXPLORATION NERGY.  IALS SHIPPED THE MATERIAL ASPORTER TO
Statement at the above certify that no additional DRIVER:	ATTFY that the above Transpo described location, and that it materials ayore added to this k	eter loaded the was tendered oad, and that the	material represented by by the ebove described a e-material was delivered	shipper. This wi without incident
FACILITY HEPRESENTAL		Gold - Transi	orter	
Cener	i- Sinbber blek - Gilli	Series (1. Tital)		

GANDY-MARLEY, INC.
P.O. Box 1658
Roswell, NM 88202
(575) 347-0434
Fax (575) 347-0435

		Fax (5/5) 34			
LEASE OPERATO	PA/SHIPPER	COMPANY:	TARG	A MID	STREAM
LEASE NAME:	Devie	BILBE	EY		: 15 AMDPM
TRANSPORTER	COMPANY:	a Aud	4	DRIVER	
DATE: 04-19	1-14 VE	HICLE NO.	364	DHIVEN	140.1
CHARGE TO:					
		TYPE OF M	ATERIAL		
[ ] Other Material:  Description:	. []E	OC Contaminated s 3S&W content:	ioil	[ ] C-117 No.:	241 820
COMPANY CON	ITACT:			15	.1.1
VOLUME OF MA	ATERIAL [ ]	YARDS	CEI		TO WINDER WITH
THIS JOB TICKET. O SHIPPED HEREWITH ACT OF 1978. AS AM CODE. §381 001. of AFFORDED CONTA DEVELOPMENT OR  ALSO AS AN WITH THIS JOB TIC DELIVERED BY OP GANDY-MARLEY, IN	HENDED FROM TO SERVICE SOUTH TO SERVICE SOUTH TO SERVICE SOUTH TO SERVICE SOUTH TO SERVICE SER	XEMPT FROM TIME TO TIME, JUATIONS RELIGIOUS AND OTHER F CRUDE OIL COMMENT AND MARKEN TER REPRES TO TRANSPORD DISPOSAL	THE RESOURI 40 U.S.C. \$690 ATED THERET WASTE ASSI OR NATURAL G (INC. SACCE ENTS AND W/ ORTER IS NO	CE, CONSERVATION OF THE INC. BY VIRTUE OCIATED WITH AS OR GEOTHE OTTANCE OF THE IRRANTS THAT IN DELIVERED I	ONLY THE MATERIA BY TRANSPORTER TO
-0.50	acourty that the	a ebovo Transpo etion, and that it g added to this k	oad, and that th	material repress by the above de o material was de	ented by this Transport scribed shipper. This w allvared without inciden
FACILITY REPRESEN	TATIVE:	& Total	<u> </u>	-	
	riary - Shipper	PINK - GLE	Gold - Transp	OCINE	

# GANDY-MARLEY, INC. P.O. Box 1658 Roswell, NM 88202 (575) 347-0434

EASE OPERATOR/SHIPPE	BILBREY	TIME: // 38(AM/PM
TRANSPORTER COMPANY:	gandy	DRIVER NO.:
DATE: 04-19-16	EHICLE NO.: 353	
CHARGE TO:		
	TYPE OF MATERIAL	
ı.	OCD  Contaminated soil	[ ] C-117 No.:
[ ] Other Material:	BS&W content:	
Description: _214		
COMPANY CONTACT:		15.
	LVADDE 20 : C	
	]: YARDS 20 : CI	WINETE MAIRING
AS A CONDITION TO GANG THIS JOB TICKET, OPERATOR/SH SHIPPED HEREWITH IS MATERIAL ACT OF 1978. AS AMENDED FROM CODE, \$381.001. 61 660. AND RE AFFORDED CONTAMINATED SO DEVELOPMENT OR PRODUCTION ALSO AS A CONDITION TO WITH THIS JOB TICKET. THANS DELIVERED BY OPERATOR/SHIP GANDY-MARLEY, INC.'S FACILITY	DY-MARLEY, INC.'S ACCEPTANCE INPER REPRESENTS AND WA L EXEMPT FROM THE RESOUL M TIME TO TIME, 40 U.S.C. §6: GULATIONS RELATED THERI OILS AND OTHER WASTE AS N OF CRUDE OIL OR NATURAL O GANDY-MARLEY, INC.'S ACCEPTANCE REPRESENTS AND IN OPER TO TRANSPORTER IS NO Y FOR DISPOSAL.	RRANTS THAT THE WASTE MATERIAL RCE. CONSERVATION AND RECOVERY 901, et soq. THE NM HEALTH AND SAF. ETO. BY VIRTUE OF THE EXEMPTION SOCIATED WITH THE EXPLORATION. GAS OR GEOTHERMAL ENERGY. SEPTANCE OF THE MATERIALS SHIPPED WARRANTS THAT ONLY THE MATERIAL OW DELIVERED BY TRANSPORTER TO THE MATERIAL OW DELIVERED BY TRANSPORTER TO THE MATERIAL REPRESENTED BY TRANSPORTER TO BE ARRESTED BY THE MATERIAL REPRESENTED BY TRANSPORTER TO BE ARRESTED BY TRANSPORTER BY BY TRANSPORTER BY
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AS A CONDITION TO GANG THIS JOB TICKET, OPERATOR/SH SHIPPED HEREWITH IS MATERIAL ACT OF 1978. AS AMENDED FROM CODE, §381.001, of seq. and re AFFORDED CONTAMINATED SO DEVELOPMENT OR PRODUCTION ALSO AS A CONDITION TO WITH THIS JOB TICKET, THANS: DELIVERED BY OPERATOR/SHIP GANDY-MARLEY, INC.'S FACILITY	DY-MARLEY, INC.'S ACCEPTANCE INPER REPRESENTS AND WA L EXEMPT FROM THE RESOUL M TIME TO TIME, 40 U.S.C. §6: GULATIONS RELATED THERI OILS AND OTHER WASTE AS N OF CRUDE OIL OR NATURAL O GANDY-MARLEY, INC.'S ACCEPTANCE REPRESENTS AND IN OPER TO TRANSPORTER IS NO Y FOR DISPOSAL.	RRANTS THAT THE WASTE MATERIAL RCE. CONSERVATION AND RECOVERY 901, et soq. THE NM HEALTH AND SAF. ETO. BY VIRTUE OF THE EXEMPTION SOCIATED WITH THE EXPLORATION. GAS OR GEOTHERMAL ENERGY. SEPTANCE OF THE MATERIALS SHIPPED WARRANTS THAT ONLY THE MATERIAL OW DELIVERED BY TRANSPORTER TO THE MATERIAL OW DELIVERED BY TRANSPORTER TO THE MATERIAL REPRESENTED BY TRANSPORTER TO BE ARRESTED BY THE MATERIAL REPRESENTED BY TRANSPORTER TO BE ARRESTED BY TRANSPORTER BY BY TRANSPORTER BY

# GANDY-MARLEY, INC. P.O. Box 1658 Roswell, NM 88202 (575) 347-0434 Equ 4676) 247-0435

	(575) 347-043 Fax (575) 347-0	435		
	HIPPER/COMPANY:	TARGA N	1 ID STREAM	
	AVID BILBREY	τ	ME: 2:23 ANDPM	2
TRANSPORTER COM	APANY: SANGT	368 D	RIVER NO.:	
DATE:04-19-	VEHICLE NO.:			
CHARGE TO:				1
	TYPE OF MAT	ERIAL		- 1
[ ] Other Material:	OCD Contaminated soil	[]0	-117 No.:	-
1 1 Quiot more	BS&W content:			
Description: _a/L:	<del>/</del>			
COMPANY CONTAC	RIAL [ ]: YARDS 20			
THIS JOB TICKET, OPER SHIPPED HEREWITH IS ACT OF 1976, AS AMENI CODE, \$381.001, 01 600 AFFORDED CONTAMIN DEVELOPMENT OR PRIVATE THIS JOB TICKE DELIVERED BY OPERA GANDY-MARLEY, INC. Statement at the above centily there additional DRIVER: The control of the additional DRIVER: The control of the above centily there additional DRIVER: The control of the above centily there additional DRIVER: The control of the above centily there additional DRIVER: The control of the above centily there additional DRIVER: The control of the contr	HIAL J: YARDS  ITO GANDY-MARLEY, INC.'S AN LATOR/SHIPPER REPRESENTS MATERIAL EXEMPT FROM THE DED FROM TIME TO TIME, 40 AND REGULATIONS RELATED SOILS AND OTHER WODUCTION OF GRUDE OIL OR INTERPORTER REPRESENTOR/SHIPPER TO TRANSPORTER FACILITY FOR DISPOSAL.  PATIFY that the above Transported described location, and that it was nationals were added to this load.	U.S.C. \$6901, of SED THERETO, BY MASTE ASSOCIATINATURAL GAS OF NC. SACCEPTANKITS AND WARRANTER IS NOW DE	OR. THE NM HEALTH AND VIRTUE OF THE EXPLORED WITH THE EXPLORED GEOTHERMAL ENERGY OF THE MATERIALS.  TO THAT ONLY THE NUMBER OF TRANSPORTATION OF THE MATERIALS.  THE THAT ONLY THE NUMBER OF TRANSPORTATION OF THE MATERIALS.	ND SAF. MIPTION HATION. BY. SHIPFED HATERIAL HTER TO
FACILITY REPRESENTAT	- Shipper Pick - GMI	Gold - Transporter		
White - Gut Canan	- dushka.			

## GANDY-MARLEY, INC.

P.O. Box 1658 Roswell, NM 88202 (575) 347-0434 Fax (575) 347-0435

LEASE OPERATOR	SHIPPER/COMPANY: TAK	GA MIDSTREAM
FASE NAME: I	DAVID BILBREY	
TO ANSPORTER CO	MPANY: 9AUdy	TIME:2:23 AMPM
DATE: 011 10	-16 VEHICLE NO.: 376	DRIVER NO.:
CHARGE TO:		
CHANGE TO.	OF MATERIAL	
	TYPE OF MATERIAL	•
	OCD	4 4 0 447 110 4
[ ] Other Material:		[ ] C-117 No.:
1.0	[ ] BS&W CONTENT	
Description:		
COMPANY CONTA	CT:	
		mild LF .
AS A CONDITIO	ERIAL []: YARDS 20 : C	ICE OF THE MATERIALS SHIPPED THE
AS A CONDITION THIS JOB TICKET, OPEN SHIPPED HEREWITH IS ACT OF 1976, AS AMEN CODE, \$361,001, of 500 AFFORDED CONTAMIN	N TO GANDY-MARLEY, INC.'S ACCEPTAN RATOR/SHIPPER REPRESENTS AND WA MATERIAL EXEMPT FROM THE RESOU IDED FROM TIME TO TIME, 40 U.S.C. §6 Q. AND REGULATIONS RELATED THER MATED SOILS AND OTHER WASTE AS DOUCTION OF CRUDE OIL OR NATURAL	ACE OF THE MATERIALS SHIPPED WHAT ARRANTS THAT THE WASTE MATERIAL BRCE, CONSERVATION AND RECOVERY 1901, of 60Q., THE NM HEALTH AND SAF, ETO, BY VIRTUE OF THE EXEMPTION ESOCIATED WITH THE EXPLORATION. GAS OR GEOTHERMAL ENERGY.
AS A CONDITION THIS JOB TICKET, OPEN SHIPPED HEREWITH IS ACT OF 1976, AS AMEN CODE, \$361,001, 01 500 AFFORDED CONTAMIN DEVELOPMENT OR PRI ALSO AS A CON WITH THIS JOB TICKE DELIVERED BY OPEN CANDY MARIEY INC. 15	N TO GANDY-MARLEY, INC.'S ACCEPTANGED FROM TIME REPRESENTS AND WARDEN FROM THE RESOURCE OF THE PROPERTY OF THE RESOURCE OF THE PROPERTY OF THE	ARRANTS THAT THE WASTE MATERIAL RRCE, CONSERVATION AND RECOVERY 1901, of 50Q., THE NM HEALTH AND SAF, 1901, of 50Q., THE NM HEALTH AND SAF, 1901, of 50Q. THE NM HEALTH AND SAF, 1900, BY VIRTUE OF THE EXEMPTION, 1903 OR GEOTHERMAL ENERGY.  SEPTANCE OF THE MATERIALS SHIPPED WARRANTS THAT ONLY THE MATERIAL IOW DELIVERED BY TRANSPORTER TO
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AS A CONDITION THIS JOB TICKET, OPEN SHIPPED HEREWITH IS ACT OF 1976, AS AMEN CODE. \$381.001, at 500 AFFORDED CONTAMIN DEVELOPMENT OR PRI  ALSO AS A CON WITH THIS JOB TICKE DELIVERED BY OPERA GANDY-MARLEY, INC. S THIS WILL CEN Statement at the above certify that no additional	N TO GANDY-MARLEY, INC.'S ACCEPTANT RATOR/SHIPPER REPRESENTS AND WATERIAL EXEMPT FROM THE RESOUR MATERIAL EXEMPT FROM THE RESOURCE OF THE PROPERTY OF THE PROP	ARRANTS THAT THE WASTE MATERIAL RECE, CONSERVATION AND RECOVERY 1901, of 500. THE NM HEALTH AND SAF, ETO, BY VIRTUE OF THE EXEMPTION 1903 OF GEOTHERMAL ENERGY.  CEPTANCE OF THE MATERIALS SHIPPED

GANDY • MARLEY, INC.

P.O. Box 1658

Roswell, NM 68202

(575) 347-0434

Fax (575) 347-0435

TRANSPORTER COMPANY: 9 4 M d 1 Transporter RANSPORTER COMPANY: 9 4 M d 1 Transporter Represents and Warrants that the Materials Shipped With This Job Ticket. Transporter Represents and Warrants That Only the Materials.  ALSO AS A CONDITION TO GANDY-MARLEY, INC. S ACCEPTANCE OF THE MATERIALS SHIPPED WITH AND SIDE TICKET. OPERATORSHIPPER REPRESENTS AND WARRANTS THAT THE WASTE MATERIAL THIS JOB TICKET. OPERATORSHIPPER REPRESENTS AND WARRANTS THAT THE WASTE MATERIAL SHIPPED HEREWITH IS MATERIAL EXEMPT FROM THE RESOURCE, CONSERVATION AND RECOVERY SHIPPED HEREWITH IS MATERIAL EXEMPT FROM THE RESOURCE, CONSERVATION AND RECURSTONS RELATED HERETO. BY VIRTUE OF THE EXEMPTION AND REGULATIONS RELATED HERETO. BY VIRTUE OF THE EXEMPTION 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 EXERGY.  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 with the above described shipper. This will certify that on additional materials were added to this load, and that the material was delivered without incident described associated without incident described		Fax (575) 347-0435	
EASE NAME: DAVID BILB/SEY  TRANSPORTER COMPANY: 9 A M d 4 TIME: 2: 3 AMPM)  DATE: 0 4 - 19 - 16 VEHICLE NO.: 346 DRIVER NO.:  TYPE OF MATERIAL  OCD  (Contaminated soil [1C-117 No.:  [1BS&W content:  Description: 01L4  COMPANY CONTACT:  VOLUME OF MATERIAL []: YARDS 20 : CELLS 4: []  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  SHIPPED HEREWITH IS MATERIAL EXEMPT FROM THE RESOURCE, CONSERVATION AND RECURSIONS RELATED HERETO, BY VIRTUE OF THE EXEMPTION  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.  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 Transporte  Statement at the above described location, and that it was tendent 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: A DAVID.		HIPPER/COMPANY: TA	REA MIDSTREAM
TRANSPORTER COMPANY:  OATE: 04-19-16 VEHICLE NO.: 346  DRIVER NO.:  TYPE OF MATERIAL  OCD  (Contaminated soi)  (1C-117 No.:  Description: 01LY  COMPANY CONTACT:  VOLUME OF MATERIAL  (I): YARDS  COMPANY CONTACT:  AS A CONDITION TO GANDY-MARLEY, INC.: S ACCEPTANCE OF THE MATERIALS SHIPPED HEREWITH IS MATERIAL EXEMPT FROM THE RESOURCE, CONSERVATION AND RECOVERY SHIPPED HEREWITH IS MATERIAL EXEMPT FROM THE RESOURCE, CONSERVATION AND RECOVERY OF THE MATERIAL SHIPPED HERE OF THE AND AND REGULATIONS RELATED HERETO, BY VIRTUE OF THE EXEMPTION AFFORDED CONTAMINATED SOILS AND OTHER WASTE ASSOCIATED WITH THE EXELORATION. AFFORDED CONTAMINATED SOILS AND OTHER WASTE ASSOCIATED WITH THE EXPLORATION. AFFORDED CONTAMINATED SOILS AND OTHER WASTE ASSOCIATED WITH THE EXPLORATION. AFFORDED CONTAMINATED SOILS AND OTHER WASTE ASSOCIATED WITH THE EXPLORATION. AFFORDED CONTAMINATED SOILS AND OTHER WASTE ASSOCIATED WITH THE MATERIALS SHIPPED MATERIAL SHIPPED THAN AND AND AND AND AND AND AND AND AND A		0 :025/	
TYPE OF MATERIAL  OCD  OBSCRIPTION:  OCHARGE TO:  TYPE OF MATERIAL  OCD  OBSCRIPTION:  OCHARGE TO:  TYPE OF MATERIAL  OCD  OCD  OCHARGE TO:  OCHARGE TO:  TYPE OF MATERIAL  OCD  OCHARGE TO:  OCHARGE TO	EASE NAME: D	AVID BILBREY	TIME: 2: 3   AMPMD
TYPE OF MATERIAL  OCD  [ ] Cither Material:	TRANSPORTER CO	APANY: 9 A D C 344	110
TYPE OF MATERIAL  OCD  [ ] Cither Material:	DATE: 04-19	-/6 VEHICLE NO.: O A	
Description: DLY  COMPANY CONTACT:  VOLUME OF MATERIAL []: YARDS	CHARGE TO:		
Description: DLY  COMPANY CONTACT:  VOLUME OF MATERIAL []: YARDS 20 : CELL* LF : []  AS A CONDITION TO GANDY-MARLEY, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH MATERIALS ON THE PERSON OF THE MATERIALS SHIPPED WITH 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, of seq. THE NM HEALTH AND SAF, ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. \$6901, of seq. THE NM HEALTH AND SAF, ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. \$6901, of seq. THE NM HEALTH AND SAF, ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. \$6901, of seq. THE NM HEALTH AND SAF, ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. \$6901, of seq. THE NM HEALTH AND SAF, ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. \$6901, of seq. THE NM HEALTH AND SAF, ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. \$6901, of seq. THE NM HEALTH AND SAF, ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. \$6901, of seq. THE NM HEALTH AND SAF, ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. \$6901, of seq. THE NM HEALTH AND SAF, ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. \$6901, of seq. THE NM HEALTH AND SAF, ACT OF 1976, AS AMENDED FROM TIME TO TIME, AS CONSERVATION AND HEALTH AND SAF, AS CONSERVATION AND HEALTH AND THE EXEMPTION AND HEALTH AND THE EXEMPTION TO TIME, AS CONSERVATION AND HEALTH AND THE AMERICAL TIME TO TI		TYPE OF MATERI	AL
Description: OILY  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 SHIPPED HEREWITH IS MATERIAL EXEMPT FROM THE RESOURCE, CONSERVATION AND RECOVERY SHIPPED HORE, AS AMENDED FROM TIME TO TIME, 40 U.S.C. \$5901, 01 seq., THE NM HEALTH AND SAP. ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. \$5901, 01 seq., THE NM HEALTH AND SAP. ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. \$5901, 01 seq., THE EXEMPTION 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 MATERIALS SHIPPED WITH THIS JOB TICKET, TRANSPORTER REPRESENTS AND WARRANTS THAT ONLY THE MATERIAL 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 tendend by the above described without incident DRIVER:		OCD	
COMPANY CONTACT:  VOLUME OF MATERIAL []: YARDS: CELLE:[]  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 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 seq., THE NM HEALTH AND SAFACTOR OF 1976, AS AMENDED HOM TIME TO TIME, 40 U.S.C. §6901, 01 seq., THE NM HEALTH AND SAFACTOR OF 1976, AS AMENDED HOM TIME TO TIME, 40 U.S.C. §6901, 01 seq., THE NM HEALTH AND SAFACTOR OF SAFACTOR OF THE EXEMPTION CODE, \$361,001,01 to 600, AND REGULATIONS RELATED THERETO, BY VIRTUE OF THE EXEMPTION CODE, \$361,001,01 to 600, AND THE WASTE ASSOCIATED WITH THE EXPLORATION.  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 WITH THIS JOB TICKET, TRANSPORTER REPRESENTS AND WARRANTS THAT ONLY THE MATERIAL OF THE MATERIAL SHIPPED 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 tendened by the above described without incident certify that no additional materials were added to this load, and that the material was delivered without incident BRIVER:  DRIVER:	[ ] Other Material:	Contaminated soil BS&W content:	[ ] C-117 No.:
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 1676, AS AMENDED FROM TIME TO TIME, 40 U.S.C. §6901, of seq. THE NM HEALTH AND SAF. ACT OF 1676, AS AMENDED FROM TIME TO TIME, 40 U.S.C. §6901, of seq. THE NM HEALTH AND SAF. ACT OF 1676, AS AMENDED FROM TIME TO TIME, 40 U.S.C. §6901, of seq. THE NM HEALTH AND SAF. ACT OF 1676, AS AMENDED FROM TIME TO TIME, 40 U.S.C. §6901, of seq. THE NM HEALTH AND SAF. ACT OF THE EXEMPTION CODE, §361,001, of seq. AND REGULATIONS RELATED THERETO, BY VIRTUE OF 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 MATERIALS SHIPPED WITH THIS JOB TICKET, TRANSPORTER REPRESENTS AND WARRANTS THAT ONLY THE MATERIAL OF THE MATERIAL OF THE MATERIAL SHIPPED WITH THIS JOB TICKET, TRANSPORTER REPRESENTS AND WARRANTS THAT ONLY THE MATERIAL OF THE MATERIAL	Description: OILY		
AS A CONDITION TO GANDY-MARLEY, INC.'S ACCEPTANCE OF THE WASTE MATERIAL THIS JOB TICKET, OPERATOR/SHIPPER REPRESENTS AND WARRANTS THAT THE WASTE MATERIAL SHIPPED HEREWITH IS MATERIAL EXEMPT FROM THE RESOURCE, CONSERVATION AND RECOVERY SHIPPED HEREWITH IS MATERIAL EXEMPT FROM THE RESOURCE, CONSERVATION AND RECOVERY SHIPPED HEREWITH IS MATERIAL EXEMPT FROM TIME, 40 U.S.C. §6901, of seq. THE NM HEALTH AND SAF. ACT OF 1976, AS AMENDED FROM TIME TO THE 4. 40 U.S.C. §6901, of seq. THE NM HEALTH AND SAF. CODE, §381,001, of 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 WITH THIS JOB TICKET, TRANSPORTER REPRESENTS AND WARRANTS THAT ONLY THE MATERIAL WITH THIS JOB TICKET, TRANSPORTER TO TRANSPORTER IS NOW DELIVERED BY TRANSPORTER TO DELIVERED BY OPERATOR/SHIPPER TO TRANSPORTER IS NOW DELIVERED BY TRANSPORTER TO THIS WILL CERTIFY that the above Transporter loaded the material represented by this Transporter Statement at the above described location, and that it was tendented by the above described without incident certify that no additional materials were added to this load, and that the material was delivered without incident DRIVER: A JOURNAL WAS ARRESTED TO THE ADDITIONAL WAS DELIVERED WITHOUT INCIDENT.	COMPANY CONTAC	)T:	15. 11
AS A CONDITION TO GANDY-MARLEY, INC.'S ACCEPTANCE OF THE WASTE MATERIAL THIS JOB TICKET, OPERATOR/SHIPPER REPRESENTS AND WARRANTS THAT THE WASTE MATERIAL SHIPPED HEREWITH IS MATERIAL EXEMPT FROM THE RESOURCE, CONSERVATION AND RECOVERY SHIPPED HEREWITH IS MATERIAL EXEMPT FROM THE RESOURCE, CONSERVATION AND RECOVERY SHIPPED HEREWITH IS MATERIAL EXEMPT FROM TIME, 40 U.S.C. §6901, of seq. THE NM HEALTH AND SAF. ACT OF 1976, AS AMENDED FROM TIME TO THE 4. 40 U.S.C. §6901, of seq. THE NM HEALTH AND SAF. CODE, §381,001, of 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 WITH THIS JOB TICKET, TRANSPORTER REPRESENTS AND WARRANTS THAT ONLY THE MATERIAL WITH THIS JOB TICKET, TRANSPORTER TO TRANSPORTER IS NOW DELIVERED BY TRANSPORTER TO DELIVERED BY OPERATOR/SHIPPER TO TRANSPORTER IS NOW DELIVERED BY TRANSPORTER TO THIS WILL CERTIFY that the above Transporter loaded the material represented by this Transporter Statement at the above described location, and that it was tendented by the above described without incident certify that no additional materials were added to this load, and that the material was delivered without incident DRIVER: A JOURNAL WAS ARRESTED TO THE ADDITIONAL WAS DELIVERED WITHOUT INCIDENT.	VOLUME OF MATE	RIAL []: YARDS 20:	CELL#
DRIVER: JOHNA CEMAS  Totton	AS A CONDITION THIS JOB TICKET, OPER SHIPPED HEREWITH IS ACT OF 1976, AS AMENI CODE, \$381,001. 01 600 AFFORDED CONTAMINA DEVELOPMENT OR PRO ALSO AS A CON WITH THIS JOB TICKET DELIVERED BY OPERA GANDY-MARLEY, INC.'S	TO GANDY-MARLEY, INC.'S ACCEPTATOR/SHIPPER REPRESENTS AND MATERIAL EXEMPT FROM THE RESEARCH FROM TIME TO TIME, 40 U.S.C. AND REGULATIONS RELATED TO ATTENUATE SOILS AND OTHER WASTED DUCTION OF CRUDE OIL OR NATURAL TRANSPORTER REPRESENTS AND TORISHIPPER TO TRANSPORTER FACILITY FOR DISPOSAL.	WARRANTS THAT THE WASTE MATERIAL SOURCE, CONSERVATION AND RECOVERY SOURCE, CONSERVATION AND RECOVERY SERVED, of seq., THE NM HEALTH AND SAF, HERETO, BY VIRTUE OF THE EXEMPTION ASSOCIATED WITH THE EXPLORATION. IRAL GAS OR GEOTHERMAL ENERGY.  ACCEPTANCE OF THE MATERIALS SHIPPED NO WARRANTS THAT ONLY THE MATERIAL IS NOW DELIVERED BY TRANSPORTER TO SHOW THE MATERIAL SHIPPED BY TRANSPORTER TO SHIPPED BY THE SHIPPED BY TRANSPORTER TO SHIPPED BY TRANSPORTER TO SHIPPED BY TRANSPORTER TO SH
Jollon & Tollon	certify that no additions		
FACILITY REPRESENTATIVE:		12/5	n
MANUEL CARRY - Shipper Pink - CMI Bold - Transporter	FACILITY REPRESENTATI	Dalet	- Yransporter

GANDY•MARLEY, INC.
P.O. Box 1659
Roswell, NM 68202
(575) 347-0434
Fax (575) 347-0435

	Fax (575) 347-04	135
FASE OPERATOR/S	HIPPER/COMPANY: 7	ARGA MIDSTREAM
LEASE NAME: DA		A CONTRACTOR OF THE PROPERTY O
TRANSPORTER CON	PANY: 9AN 44	TIME: 2: 45 AMEM
TRANSPORTER COM	VENICLE NO.: 3	DRIVER NO.:
	VEHICLE NO.: 3	
CHARGE TO:		
	TYPE OF MATE	ERIAL
	OCD	
[ ] Other Material:	[ Contaminated soil ] BS&W contant:	[]C-117 No.: <u>341_8 20</u>
Description:	* -	
COMPANY CONTAC	T:	
VOLUME OF MATER	HAL : YARDS _20_	: CELL# LF :[]
THIS JOB TICKET, OPER- SHIPPED HEREWITH IS N ACT OF 1976, AS AMEND CODE, §381.001, 61 560, AFFORDED CONTAMINA DEVELOPMENT OR PROD	TORSHIPE THE TROM THE ED FROM TIME TO TIME, 40 U. AND REGULATIONS RELATED TED SOILS AND OTHER WAS DUCTION OF CRUDE OIL OR N.	CEPTANCE OF THE MATERIALS SHIPPED WITH AND WARRANTS THAT THE WASTE MATERIAL RESOURCE, CONSERVATION AND RECOVERY S.C. \$6901, of 600. THE NM HEALTH AND SAF. THERETO, BY VIRTUE OF THE EXEMPTION STE ASSOCIATED WITH THE EXPLORATION, ATURAL GAS OR GEOTHERMAL ENERGY.  C'S ACCEPTANCE OF THE MATERIALS SHIPPED S AND WARRANTS THAT ONLY THE MATERIAL
WITH THIS JOB TICKET.	OR/SHIPPER TO TRANSPORT	ER IS NOW DELIVERED BY THANSPORTER TO
1	TEV that the above Transporter	loaded the material represented by this Transporters tendered by the above described shipper. This will and that the material was delivered without incident.
DRIVER:	g/	
FACILITY REPRESENTATIV	E: g. Tollo	75
Yhlia - Gilli Canary -:		Jold - Transporter

GANDY-MARLEY, INC.
P.O. Box 1658
Roswell, NM 68202
(575) 347-0434

EASE OPERATOR	SHIPPER/COMPANY: 7	PARGA MIDSTREAM
EASE NAME: D	AUID BILBREY	TIME: 2:45 AMEM
RANSPORTER CO	MPANY: SANdy	
ATE: 04-19-	16 VEHICLE NO.:	
CHARGE TO:		
	TYPE OF MAT	ERIAL
Other Material:	OCD [/Contaminated soil []BS&W contont:	[ ] C-117 No.:
Description: Olly	·	
COMPANY CONTA	CT:	
	7.0	ACIDE LE :
VOLUME OF MATE	RIAL   YARDS NO SAC	CEPTANCE OF THE MATERIALS SHIPPED WITH
AS A CONDITION THIS JOB TICKET, OPEN SHIPPED HEREWITH IS ACT OF 1976, AS AMEN CODE, \$361.001, of 600 AFFORDED CONTAMIN DEVELOPMENT OR PRO ALSO AS A CON WITH THIS JOB TICKE DELIVERED BY OPEN GANDY-MARLEY, INC. 15	N TO GANDY-MARLEY, INC.'S ACTOR/SHIPPER REPRESENTS MATERIAL EXEMPT FROM THE DED FROM TIME TO TIME, 40 LI. AND REGULATIONS RELATED SOILS AND OTHER WOODUCTION OF CRUDE OIL OR NOT TRANSPORTER REPRESENT TO TRANSPORTS FACILITY FOR DISPOSAL.	CCEPTANCE OF THE MATERIALS SHIPPED WITH AND WARRANTS THAT THE WASTE MATERIAL RESOURCE, CONSERVATION AND RECOVERY J.S.C. §6901, et seq., THE NM HEALTH AND SAF. THE THE THE EXEMPTION ASTE ASSOCIATED WITH THE EXPLORATION, NATURAL GAS OR GEOTHERMAL ENERGY.  IC. S ACCEPTANCE OF THE MATERIALS SHIPPED ITS AND WARRANTS THAT ONLY THE MATERIAL TER IS NOW DELIVERED BY TRANSPORTER TO ITS LORDER TO THE MATERIAL SHIPPED BY TRANSPORTER TO ITS LORDER TO THE MATERIAL SHIPPED BY TRANSPORTER TO ITS LORDER TO THE MATERIAL SHIPPED BY TRANSPORTER TO ITS LORDER TO THE MATERIAL SHIPPED BY TRANSPORTER TO ITS LORDER TO THE MATERIAL SHIPPED BY TRANSPORTER TO ITS LORDER TO THE MATERIAL SHIPPED BY TRANSPORTER TO THE MATERIAL SHIPPED BY TRA

# GANDY MARLEY, INC.

P.O. Box 1658 Roswell, NM 68202 (575) 347-0434 Pax (575) 347-0435

LEASE OPERATOR/SHIPPER/COMPANY: TARGO MIDSTREAM  LEASE NAME: DAUID BILBREY  TRANSPORTER COMPANY: GANDY TIME: 9:2/ AMPM  DATE: 04-20-16 VEHICLE NO.: 368 DRIVER NO.:  CHARGE TO:  TYPE OF MATERIAL  OCD  [] Othor Meterial: [Contaminated soil [C-117 No.:  [] Description: 01LY  COMPANY CONTACT:  VOLUME OF MATERIAL []: YARDS 20 : CELLS F : []  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  ALSO AS A MANDED FROM TIME TO TIME, 40 U.S. C, 56901, of 160, THE NM HEALTH AND SAFA  ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S. C, 56901, of 160, THE NM HEALTH AND SAFA  CODE, 5631,001, of 609, AND REGULATIONS RELATED THERETO, BY VIRTUE OF 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 MATERIALS SHIPPED  WITH THIS JOB TICKET, TRANSPORTER REPRESENTS AND WARRANTS THAT ONLY THE MATERIAL  DELIVERED BY OPERATORISHIPPER TO TRANSPORTER IS NOW DELIVERED BY TRANSPORTER TO  GANDY-MARLEY, INC.'S FACILITY FOR DISPOSAL  THIS IDD TICKET. TRANSPORTER REPRESENTS AND WARRANTS THAT ONLY THE MATERIAL  DELIVERED BY OPERATORISHIPPER TO TRANSPORTER IS NOW DELIVERED BY TRANSPORTER TO  STATEMENT OF THE MATERIAL OF TRANSPORTER IS NOW DELIVERED BY TRANSPORTER TO  STATEMENT OF THE MATERIAL OF TRANSPORTER IS NOW DELIVERED BY TRANSPORTER TO  STATEMENT OF THE MATERIAL OF TRANSPORTER IS NOW DELIVERED BY TRANSPORTER TO  THAT THE PRESENTATIVE:  PROBLEM OF THE MATERIAL OF TRANSPORTER OF THE MATERIAL WAS DELIVERED BY TRANSPORTER TO TRANSPORTER IS NOW DELIVERED BY TRANSPORTER TO  THE ADDRIVER OF THE MATERIAL WAS DELIVERED BY TRANSPORTER TO TRANSPORTER TO TRANSPORTER TO TRANSPORTER TO TRANSPORTER TO TRANSPORTER OF TRANSPORTER OF THE MATERIAL WAS DELIVERED BY TRANSPORTER TO TRA		Fax (575) 347-0435	
TRANSPORTER COMPANY: SANGY TIME: 9:2/ AMPM  DATE: 04-20 - 1/6 VEHICLE NO.: 368 DRIVER NO.:  CHARGE TO:  TYPE OF MATERIAL  OCD  [] Other Material: [] Contaminated soil [] C-117 No.:  [] Description: 01LY  COMPANY CONTACT:  VOLUME OF MATERIAL []: YARDS 20 : CELLS 4 : []  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 THIS JOB TICKET, OPERATOR/SHIPPER REPRESENTS AND WARRANTS THAT THE WASTE MATERIAL SHIPPED HEREWITH IS MATERIAL EXEMPT FROM THE RESOURCE, CONSERVATION AND RECOVERY SHIPPED HEREWITH IS MATERIAL EXEMPT FROM THE RESOURCE, CONSERVATION AND RECOVERY OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. \$6501, of seq. THE NM HEALTH AND SAY ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. \$6501, of seq. THE NM HEALTH AND SAY ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. \$6501, of seq. THE NM HEALTH AND SAY ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. \$6501, of seq. THE NM HEALTH AND SAY ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. \$6501, of seq. THE NM HEALTH AND SAY ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. \$6501, of seq. THE NM HEALTH AND SAY ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. \$6501, of seq. THE NM HEALTH AND SAY ACT OF 1976, AS AMENDED FROM TIME TO THE WASTE WASTE WASTE OF THE MATERIALS SHIPPED CONTAMINATED SOILS AND OTHER WASTE ASSOCIATED WITH THE EXPLOPATION, 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 WITH THIS JOB TICKET. TRANSPORTER SPORTER SONG WARRANTS THAT ONLY THE MATERIAL WITH THIS JOB TICKET. TRANSPORTER TO TRANSPORTER IS NOW DELIVERED BY TRANSPORTER TO GANDY-MARLEY, INC. S PACILITY FOR DISPOSAL.  THIS WILL CERTIFY that the above Transporter loaded the material was dedicated without incident. DAY AND ADDRESSENT OF TRANSPORTER WASTER AND WARR	FASE OPERATOR	SHIPPER/COMPANY: TAP	BEA MIDSTREAM
TRANSPORTER COMPANY: SANGY TIME: 9.27 CENTER NO.:  DATE: 0.4-201/6 VEHICLE NO.: 368 DRIVER NO.:  TYPE OF MATERIAL  OCD  [] Othor Material: [] Contaminated soil [] C-117 No.:  [] Description: 0.1 Ly  COMPANY CONTACT:  VOLUME OF MATERIAL []: YARDS 20.: CELLS 4  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 WITH THIS JOB TICKET, OPERATOR/SHIPPER REPRESENTS AND WARRANTS THAT THE WASTE MATERIAL SHIPPED FROM THE RESOURCE, CONSERVATION AND RECOVERY SHIPPED HERMITH IS MATERIAL EXEMPT FROM THE RESOURCE, CONSERVATION AND RECOVERY ACT OF 1876, AS AMENDED FROM TIME TO TIME, 40 U.S.C. \$501, o1 604. THE NM HEALTH AND SAF, ACT OF 1876, AS AMENDED FROM TIME TO TIME, 40 U.S.C. \$501, o1 604. THE NM HEALTH AND SAF, ACT OF 1876, AS AMENDED FROM TIME TO TIME, 40 U.S.C. \$601, o1 604. THE NM HEALTH AND SAF, ACT OF 1876, AS AMENDED FROM TIME TO TIME, 40 U.S.C. \$601, o1 604. THE NM HEALTH AND SAF, ACT OF 1876, AS AMENDED FROM TIME TO TIME, 40 U.S.C. \$601, o1 604. 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 MATERIAL DELIVERED BY OPERATOR/SHIPPER TO TRANSPORTER IS NOW DELIVERED BY TRANSPORTER TO GANDY-MARLEY, INC.: S PACILITY FOR DISPOSAL.  THIS WILL CERTIFY that the above Transporter loaded the material represented by this Transporter Statement of described decallor, and that it was tendered by the above described shipper. This will certify that he above described sociation, and that it was tendered by the above described shipper. This will be above described location, and that it was tendered by the above described without incident.  PROBLEM OF TRANSPORTER SHIPPER TO TRANSPORTER IS NOW DELIVERED BY TRANSPORTER TO THE STATE OF TRANSPORTER WITH A BOOK DELIVERED BY TRANSPORTER TO THE STATE OF TRANSPORTER WITH A BOOK DELIVER DES		0 2001	
TRANSPORTER COMPANTS  DATE: 0 4-20 - 16 VEHICLE NO.: 368 DRIVER NO.:  CHARGE TO:  TYPE OF MATERIAL  OCD  [] Cithor Material:  [] Contaminated soil  [] C-117 No.:  [] BS&W content:  VOLUME OF MATERIAL  []: YARDS _20 : CELLS : []  AS A CONDITION TO GANDY-MARLEY, INC.: S ACCEPTANCE OF THE MATERIALS SHIPPED WITH  HIS JOB TICKET, OPERATORISHIPPER 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, e1 seq THE NM HEALTH AND SAR  ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. \$6901, e1 seq THE NM HEALTH AND SAR  ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. \$6901, e1 seq THE NM HEALTH AND AS ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. \$6901, e1 seq THE NM HEALTH AND ASFORDED 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 MATERIALS SHIPPED  WITH THIS JOB TICKET, TRANSPORTER REPRESENTS AND WARRANTS THAT ONLY THE MATERIAL  WITH THIS JOB TICKET, TRANSPORTER REPRESENTS AND WARRANTS THAT ONLY THE MATERIAL  DELIVERED BY OPERATORISHIPPER TO TRANSPORTER IS NOW DELIVERED BY TRANSPORTER TO  GANDY-MARLEY, INC.:S PACILITY FOR DISPOSAL  THIS WILL CERTIFY that the above described docation, and that if was tendered by the above described shippor. This will  Statempers at the above described location, and that if was tendered by the above described shippor. This will  Statempers at the above described location, and that if was tendered by the above described without incident.  DRIVERT:  ACT OF THE PROPERTY WITH THE PROPERTY INC.: SACCEPTANCE OF THE MATERIAL SHIPPED INCIDENT.  THIS WILL CERTIFY that the above described were added to this load, and that the material was delivered without incident.	EASE NAME: U	AUID PILBREY	TIME: 9:2/ AMPM
CHARGE TO:  TYPE OF MATERIAL  OCD  [ Other Material:	TRANSPORTER CO		
TYPE OF MATERIAL  OCD    Contaminated soil   C-117 No.:     IBS&W content:     Description: OLLY  COMPANY CONTACT:  VOLUME OF MATERIAL   YARDS 20 CELLS        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, of seq. THE NM HEALTH AND SAF, ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. \$6901, of seq. THE NM HEALTH AND SAF, ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. \$6901, of seq. THE NM HEALTH AND SAF, ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. \$6901, of seq. THE NM HEALTH AND SAF, ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. \$6901, of seq. THE NM HEALTH AND SAF, 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 MATERIALS SHIPPED WITH THIS JOB TICKET, TRANSPORTER REPRESENTS AND WARRANTS THAT ONLY THE MATERIAL DELIVERED BY OPERATORISHIPPER TO TRANSPORTER IS NOW DELIVERED BY TRANSPORTER TO GANDY-MARLEY, INC.: S PACILITY FOR DISPOSAL.  THIS WILL CERTIFY that the above Transporter loaded the material was described shipper. This will certify that no additione intradals were added to this lead, and that the material was described without incident.  DRIVER:  PAGILITY REPRESENTATIVE:	DATE: 04-20 -	16 VEHICLE NO.: 368	DRIVER
OCD    Contaminated soil   Contaminated	CHARGE TO:		
Description: OILY  COMPANY CONTACT:  VOLUME OF MATERIAL []: YARDS 20 : CELLS 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, ol seq., THE NM HEALTH AND SAF, ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. \$6901, ol seq., THE NM HEALTH AND SAF, ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. \$6901, ol seq., THE NM HEALTH AND SAF, CODE, \$381.001, ol seq. AND REGULATIONS RELATED THERETO, BY VIRTUE OF 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 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 of the above described location, and that it was tendered by the above described without incident.  DRIVER:  DRIVER:  AS A CONDITION TO GANDY Transporter  STATEMENT OF THE MATERIAL  Gold Transporter  FACILITY REPRESENTATIVE:  TO THE MATERIAL  GOLD TRANSPORTER  GOLD TRANSPORTER  GOLD TRANSPORTER  FACILITY REPRESENTATIVE:  TO TRANSPORTER  GOLD TRANSPORTER		TYPE OF MATERIA	T.
Description:OILY  COMPANY CONTACT:  VOLUME OF MATERIAL [ ]: YARDS _ 2Q : CELLS _ LF : [ ]		OCD	1
COMPANY CONTACT:  VOLUME OF MATERIAL []: YARDS 20 : CELLS 4  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 Seq., THE NM HEALTH AND SAF ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. §6901, 01 Seq., THE NM HEALTH AND SAF ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. §6901, 01 Seq., THE NM HEALTH AND SAF ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. §6901, 01 Seq., THE NM HEALTH AND SAF ACT OF THE EXEMPTION CODE, §381.001, 01 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 GEOTMERMAL 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 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 CENTIFY that the above Transporter loaded the material represented by this Transporter Statement of the above described location, and that it was tendered by the above described shipper. This will certify that no additional Timperials were added to this load, and that the material was delivered without incident.  FACILITY REPRESENTATIVE:  FACILITY REPRESENTATIVE:  FACILITY REPRESENTATIVE:  FACILITY REPRESENTATIVE:  FACILITY REPRESENTATIVE:	[ ] Other Meterial:	Contaminated soil	[ ]C-117 No.:
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 SHIPPED HEREWITH IS MATERIAL EXEMPT FROM THE RESOURCE, CONSERVATION AND RECOVERY SHIPPED HEREWITH IS MATERIAL EXEMPT FROM THE RESOURCE, CONSERVATION AND RECOVERY SHIPPED HEREWITH IS MATERIAL EXEMPT FROM THE RESOURCE OF THE MATERIAL AND SAP. ACT OF 1876, AS AMENDED FROM TIME TO TIME, 40 U.S.C. \$6901, of seq., THE MM HEALTH AND SAP. ACT OF 1876, AS AMENDED FROM TIME TO TIME, 40 U.S.C. \$6901, of seq., THE MM HEALTH AND SAP. ACT OF 1876, AS AMENDED FROM TIME, 40 U.S.C. \$6901, of seq., THE EXEMPTION 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 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 PACILITY FOR DISPOSAL.  THIS WILL CERTIFY that the above Transporter loaded the material represented by this Transporter Statement of the above described location, and that it was tendered by the above described shipper. This will Statement of the above described location, and that it was tendered by the above described without incident.  DRIVER:  THE SHIP CONTRACTOR OF TRANSPORTER  AS A CONDITION TO GANDY MARLEY, INC.'S ACCEPTANCE OF THE MATERIAL  AS A CONDITION TO GANDY MARLEY, INC.'S ACCEPTANCE OF THE MATERIAL  ALSO AS A CONDITION TO GANDY MARLEY, INC.'S ACCEPTANCE OF THE MATERIAL  ALSO AS A CONDITION TO GANDY MARLEY, INC.'S ACCEPTANCE OF THE MATERIAL  ALSO AS A CONDITION TO GANDY MARLEY, INC.'S ACCEPTANCE OF THE MATERIAL  ALSO AS A CONDITION TO GANDY MARLEY, INC.'S ACCEPTANCE OF THE MATERIAL  AS	Description: OIL.	<del></del>	
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, of seq., THE NM HEALTH AND SAF. ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. \$6901, of seq., THE NM HEALTH AND SAF. CODE, \$361.001, of 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 PACILITY FOR DISPOSAL.  THIS WILL CERTIFY that the above Transporter loaded the material represented by this Transporter Statement of the above described location, and that it was tendered by the above described shipper. This will Statement of the above described location, and that it was tendered by the above described without incident.  DRIVER!  THE WILL CERTIFY that the above Transporter loaded the material was delivered without incident.  DRIVER!  THE GALLETY REPRESENTATIVE:  THE COLD TRANSPORTER  GOID TRANSPORTER  GOID TRANSPORTER  GOID TRANSPORTER  THE MATERIAL  SAFETY OF THE MATERIAL  COLD TRANSPORTER  THE MATERIAL  AND THE MATERIAL  THE MATERIAL  AND THE MATERIAL  THE MATERIAL  THE MATERIAL  AND THE MATERIAL	COMPANY CONTA	CT:	
AS A CONDITION TO GANDY-MARLEY, INC.'S ACCEPTANCE OF THE WASTE MATERIAL 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, o1 seq., THE NM HEALTH AND SAF, ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. §6901, o1 seq., THE NM HEALTH AND SAF, CODE, §361.001, o1 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 WITH THIS JOB TICKET. TRANSPORTER REPRESENTS AND WARRANTS THAT ONLY THE MATERIAL OF LIVERED 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 Statemental the above described location, and that it was tendered by the above described without incident. Certify that no additional mitigrals were added in this load, and that the material was delivered without incident.  DRIVER:  ACCOMPTION TO BE ACCEPTANCE OF THE MATERIAL SHIPPED AND THE MATER		TALL THE PART 30 1	CELL# 4F:[]
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 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 statement if the above described location, and that it was tendered by the above described without incident. Certify that no additional materials were added to this load, and that the material was delivered without incident.  DRIVER: 1	THIS JOB TICKET, OPER SHIPPED HEREWITH IS ACT OF 1976, AS AMEN CODE, §361.001, of sec AFFORDED CONTAMIN	MATERIAL EXEMPT FROM THE RESO DED FROM TIME TO TIME, 40 U.S.C. § AND REGULATIONS RELATED THE JATED SOILS AND OTHER WASTE A DISCOUNTING OF CRUDE OIL OR NATURA	PURCE, CONSERVATION AND RECOVERING SAF. 56901. OI SOQ., THE NM HEALTH AND SAF. RETO, BY VIRTUE OF THE EXEMPTION ASSOCIATED WITH THE EXPLORATION. AL GAS OR GEOTHERMAL ENERGY.
Statement at the above described Relation and that the material was delivered without certify that no additional importants were added to this load, and that the material was delivered without the material was delivered with the	ALSO AS A CON WITH THIS JOB TICKE DELIVERED BY OPERA GANDY-MARLEY, INC. S	NOTION TO GANDY-MARLEY, INC.'S AC T. TRANSPORTER REPRESENTS AND NTOR/SHIPPER TO TRANSPORTER IS S PACILITY FOR DISPOSAL.	WARRANTS THAT ONLY THE MATERIAL NOW DELIVERED BY TRANSPORTER TO
FACILITY REPRESENTATIVE: Gold - Transporter	certify that no additional	motorials were added to this load, and the	or the material topic described shipper. This will not the material was delivered without incident.
	10	IVEI	anaporter

GANDY-MARLEY, INC.
P.O. Box 1658
Roswell, NM 68202
(575) 347-0434
Fax (575) 347-0435

	Pax (5/5) 347-0-05	
EASE OPERATOR/S	SHIPPER/COMPANY: T'A	RGA MIDSTREAM
LEASE NAME: D	AVID BILBREY	TIME: 9:2/AMPM
THANSPORTER COL	MPANY: 9 Au dy	DRIVER NO.:
DATE: 04- 20	-16 VEHICLE NO.: 376	DIMPER
CHARGE TO:		
	TYPE OF MATERIA	L.
[ ] Other Material:	OCD    Contaminated soil   BS&W content:	[ ] C-117 No.:
COMPANY CONTAC	CT: RIAL[]: YANDS _ 20:	CELL! LF_:[]
THIS JOB TICKET, OPER SHIPPED HEREWITH IS A ACT OF 1978, AS AMEND CODE, \$381.001, 81 889, AFFORDED CONTAMINA DEVELOPMENT OF PROPERTY OF PROPERTY OF THE SAME ALSO AS A CONTAMINA THIS JOB TICKET.	ATTENUL EXEMPT FROM THE RESONED FROM TIME TO TIME, 40 U.S.C. SAND REGULATIONS RELATED THE STED SOILS AND OTHER WASTE ADUCTION OF CRUDE OIL OR NATURAL TRANSPORTER REPRESENTS AND TRANSPORTER IS	ANCE OF THE MATERIALS SHIPPED WITH WARRANTS THAT THE WASTE MATERIAL DURCE, CONSERVATION AND RECOVERY 55901. OF SEQ., THE NM HEALTH AND SAF, RETO. BY VIRTUE OF THE EXEMPTION ASSOCIATED WITH THE EXPLORATION. ALGAS OR GEOTHERMAL ENERGY.  CCEPTANCE OF THE MATERIALS SHIPPED WARRANTS THAT ONLY THE MATERIAL NOW DELIVERED BY TRANSPORTER TO
GANDY-MARLEY, INC. S  THIS WILL CER  Statement at the above of cartify that no additional in	TIFY that the above Transporter loaded lescribed location, and that it was tende naterials were added to this load, and the	t the material represented by this Transporter ared by the above described shipper. This will at the material was delivered without incident.
FACILITY REPRESENTATIV		ansporter

# GANDY-MARLEY, INC. P.O. Box 1658 Roswell, NM 88202

(575) 347-0434 Fax (575) 347-0435

	182 (010) 011 0120	
LEASE OPERATOR/S	HIPPER/COMPANY: 728	GA MIDSTREAM
LEASE NAME: DA	win BILBREY	THE COUNTY
TRANSPORTER COM	SPANY: SANDY	TIME:929 CANDOM
DATE: OU GO	16 VEHICLE NO.: 369	DRIVER NO.:
CHARGE TO:		
	TYPE OF MATERIA	L
	QCD	_
[ ] Other Material:	Contaminated soil	[]C-117 No.: <u>241 82</u> ]
Description:		
COMPANY CONTAC		
VOLUME OF MATER	IAL[]:YARDS 20 :	CELL#_ <i>LF</i> _:[]
THIS JOB TICKET, OPERA' SHIPPED HEREWITH IS M ACT OF 1978, AS AMENDE CODE, §361.001, of 600. A AFFORDED CONTAMINAT DEVELOPMENT OR PROD	TORISHIPPER REPRESENTS AND TO ATERIAL EXEMPT FROM THE RESOL ED FROM TIME TO TIME, 40 U.S.C. § AND REGULATIONS RELATED THE ED SOILS AND OTHER WASTE A UCTION OF CRUDE OIL OR NATURA	NCE OF THE MATERIALS SHIPPED WITH MARRANTS THAT THE WASTE MATERIAL URCE, CONSERVATION AND RECOVERY 6901, of 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.  DELIVERED BY OPERATO GANDY-MARLEY, INC. S.F.	TRANSPORTER REPRESENTS AND PRISHIPPER TO TRANSPORTER IS I ACILITY FOR DISPOSAL.	CEPTANCE OF THE MATERIALS SHIPPED WARRANTS THAT ONLY THE MATERIAL NOW DELIVERED BY TRANSPORTER TO
THIS WILL CERTI Statement at the above de- certify that no additional ma	FY that the above Transporter loaded	the material represented by this Transporter ed by the above described shipper. This will the material was delivered without incident.
DRIVER:	· Teton	
FACILITY REPRESENTATIVE		nsporter
White-GM Canary-Si	Abber Navier days	

## GANDY-MARLEY, INC. P.O. Box 1658

P.O. Box 1658 Roswell, NM 88202 (575) 347-0434 Fax (575) 347-0435

		STATE OF THE STATE
LEASE OPERATOR/S	HIPPER/COMPANY: 7'A	RGA MIDSTREAM
LEASE NAME: DA	WID BILBREY	THE CHARLES
TRANSPORTER CON	MPANY: SANAY	TIME: 9:4/CANOPM
DATE: 04-20 =	16 VEHICLE NO.: 353	DRIVER NO.:
CHARGE TO:		
	TYPE OF MATERIA	L
	OCD	
[ ] Other Material:	Contaminated soil	[ ] C-117 No.:
Description: OiLy		
COMPANY CONTACT	T:	
	IAL[]: YARDS _2a:	CFI1# 4F :[]
AS A CONDITION T	O GANDY-MARLEY, INC.'S ACCEPT	ANCE OF THE MATERIALS SHIPPED WITH
AS A CONDITION THIS JOB TICKET, OPERA SHIPPED HEREWITH IS MACT OF 1976, AS AMENDE CODE, §361.001, et seq. AFFORDED CONTAMINAT DEVELOPMENT OR PRODUCT ALSO AS A CONDITION THIS JOB TICKET. DELIVERED BY OPERATO GANDY-MARLEY, INC.'S F.	TO GANDY-MARLEY, INC.'S ACCEPTATOR/SHIPPER REPRESENTS AND ATTERIAL EXEMPT FROM THE RESCRIPTION THE RESCRIPTION THE RESCRIPTION OF THE RESCRIPTION OF CRUDE CIL OR NATURAL TION TO GANDY-MARLEY, INC.'S ACT TRANSPORTER REPRESENTS AND PRISHIPPER TO TRANSPORTER IS ACILITY FOR DISPOSAL.	ANGE OF THE MATERIALS SHIPPED WITH WARRANTS THAT THE WASTE MATERIAL RURCE, CONSERVATION AND RECOVERY 56901, 81 Seq., THE NM HEALTH AND SAF, RETO, BY VIRTUE OF THE EXEMPTION ASSOCIATED WITH THE EXPLORATION, AL GAS OR GEOTHERMAL ENERGY.  CCEPTANCE OF THE MATERIALS SHIPPED WARRANTS THAT ONLY THE MATERIAL NOW DELIVERED BY TRANSPORTER TO
AS A CONDITION THIS JOB TICKET, OPERA SHIPPED HEREWITH IS MACT OF 1976, AS AMENDE CODE, §361.001, et seq. AFFORDED CONTAMINAT DEVELOPMENT OR PRODUCT OF THIS JOB TICKET.  THIS WILL CERT.	TO GANDY-MARLEY, INC.'S ACCEPTATOR/SHIPPER REPRESENTS AND ATERIAL EXEMPT FROM THE RESCRIPT FROM THE RESCRIPT FROM THE RESCRIPT FROM THE RESCRIPT FROM TIME, 40 U.S.C. I AND REGULATIONS RELATED THE TED SOILS AND OTHER WASTE AUCTION OF CRUDE CIL OR NATURAL TION TO GANDY-MARLEY, INC.'S ACTION TO GANDY-MARLEY, INC	ANGE OF THE MATERIALS SHIPPED WITH MARRANTS THAT THE WASTE MATERIAL PURCE, CONSERVATION AND RECOVERY \$6901, 81 Seq., THE NM HEALTH AND SAF, RETO, BY VIRTUE OF THE EXEMPTION ASSOCIATED WITH THE EXPLORATION, AL GAS OR GEOTHERMAL ENERGY.  CICEPTANCE OF THE MATERIALS SHIPPED

# GANDY-MARLEY, INC. P.O. Box 1658 Roswell, NM 88202 (575) 347-0434 Fax (575) 347-0435

No. 3171/

	Fax (575) 347-0435	
FACE ODERATOR/S	HIPPER/COMPANY: TAE	RGA MID STREAM
	AVID BILBREY	
EASE NAME: D	PANY: SANAY	TIME:9:57 (AMPM
FRANSPORTER COM	VEHICLE NO.: 37/	DRIVER NO.:
DATE: 04-20	// VEHICLE NO.: 37/	
CHARGE TO:		-
	TYPE OF MATERIA	
[ ] Other Material:  Description: OLY_	OCD  [ ] Contaminated soil  [ ] BS&W content:	[ ] C-117 No.:
COMPANY CONTAC	RIAL[]: YARDS 20	CELL# LF :[]
AS A CONDITION	TO GANDY MARLEY, INC. SACOLO	WARRANTS THAT THE WASTE MATERIAL
ALSO AS A CON WITH THIS JOB TICKET DELIVERED BY OPERA GANDY-MARLEY, INC. S	AND REGULATIONS RELATED THE AND REGULATIONS RELATED THE ATED SOILS AND OTHER WASTE DUCTION OF CRUDE OIL OR NATURE OTHER TO GANDY-MARLEY, INC.'S AND TRANSPORTER REPRESENTS AND TORYSHIPPER TO TRANSPORTER IS FACILITY FOR DISPOSAL.	WARRANTS THAT THE WASTE INCOVERY DURCE, CONSERVATION AND RECOVERY \$6901, at seq., the NM HEALTH AND SAF, ERETO, BY VIRTUE OF THE EXEMPTION ASSOCIATED WITH THE EXPLORATION, AL GAS OR GEOTHERMAL ENERGY.  CCEPTANCE OF THE MATERIALS SHIPPED OF WARRANTS THAT ONLY THE MATERIAL NOW DELIVERED BY TRANSPORTER TO Be the material represented by this Transporter for the material was delivered without incident.
ALSO AS A CON WITH THIS JOB TICKET DELIVERED BY OPERA GANDY-MARLEY, INC. S	AND REGULATIONS RELATED THE AND REGULATIONS RELATED THE ATED SOILS AND OTHER WASTE DUCTION OF CRUDE OIL OR NATURE OITION TO GANDY MARLEY, INC. SAIL TRANSPORTER REPRESENTS AND TORISHIPPER TO TRANSPORTER IS FACILITY FOR DISPOSAL.  THEY that the above Transporter loaded to that it was tand that it was tand that all was tand to this load, and the control of the	GESON. OLSON. THE NM HEALTH AND SAF. GESON. OLSON. THE NM HEALTH AND SAF. GESON. OLSON. THE NM HEALTH AND SAF. GESTON. BY VIRTUE OF THE EXEMPTION. ASSOCIATED WITH THE EXPLORATION. AL GAS OR GEOTHERMAL ENERGY. CCEPTANCE OF THE MATERIALS SHIPPED D WARRANTS THAT ONLY THE MATERIAL NOW DELIVERED BY TRANSPORTER TO  of the material represented by this Transporter.

# GANDY-MARLEY, INC. P.O. Box 1658 Roswell, NM 88202

(575) 347-0434 Fax (575) 347-0435

	100 (000)	
LEASE OPERATOR/	SHIPPER/COMPANY: 17/7R	GR MIDSTREAM
LEASE NAME: D	AVID BILBREY	1 of Problem
TRANSPORTER CO	MPANY: 9AN 47	TIME: /0:01 AMPM
DATE: 04 - 20 -	16 VEHICLE NO.: 346	DRIVER NO.:
CHARGE TO:		
	TYPE OF MATERIAL	
	OCD	
[ ] Other Material:	[   Contaminated soil [ ] BS&W content:	[ ] C-117 No.:
Description: OILY		
COMPANY CONTAC	)T:	
VOLUME OF MATE	RIAL [ ]: YARDS 20 : CE	LL#_ <i>LF</i> _:[]
THIS JOB TICKET, OPER, SHIPPED HEREWITH IS A ACT OF 1876, AS AMEND CODE, §381.001, et seq. AFFORDED CONTAMINA DEVELOPMENT OR PROPERTY OF THE STATE OF THE SEC. AS A CONTAMINATION OF THE S	TO GANDY-MARLEY, INC.'S ACCEPTANT ATOR/SHIPPER REPRESENTS AND WAI MATERIAL EXEMPT FROM THE RESOURCE OF FROM TIME TO TIME, 40 U.S.C. §69 AND REGULATIONS RELATED THERE ATED SOILS AND OTHER WASTE ASSOCIATION TO GANDY-MARLEY, INC.'S ACCEPTANSPORTER REPRESENTS AND WORKSHIPPER TO TRANSPORTER IS NO FACILITY FOR DISPOSAL.	CE, CONSERVATION AND RECOVERY 01, et seq., THE NM HEALTH AND SAF. TO, BY VIRTUE OF THE EXEMPTION SOCIATED WITH THE EXPLORATION, GAS OR GEOTHERMAL ENERGY.
THIS WILL CERT Statement at the above de certify that no additional m priver: 101104	FIFY that the above Transporter loaded the escribed location, and that it was tendered laterials were added to this load, and that the	o material represented by this Transporter I by the above described shipper. This will no material was delivered without incident.
FACILITY REPRESENTATIV	E: J Tolton	
CANAN-	Shipper Pink - Qua Gold - Transp	North.

(575) 347-0434 Fax (575) 347-0435

LEASE OPERATOR/	SHIPPER/COMPANY: 7/	ARGA MIDSTREAM
	DAVID BILBREY	
TRANSPORTER CO		TIME:/2:27 AMPM
DATE: 04-20-	/ VEHICLE NO.: 36	
CHARGE TO:		
	TYPE OF MATERIA	AL
	OCD	
[ ] Other Material:	[ ] Contaminated soil [ ] BS&W content:	[ ] C-117 No.:
Description: OILY	,	
COMPANY CONTACT	Tt:	
VOLUME OF MATER	NAL[]: YARDS	CELL# 4F :[]
THIS JOB TICKET, OPERATE SHIPPED HEREWITH IS MARCH OF 1978, AS AMENDE CODE, §381.001. of soc. A AFFORDED CONTAMINATE DEVELOPMENT OR PRODUCTS ALSO AS A CONDITIONAL THIS JOB TICKET, TO	TOR/SHIPPER REPRESENTS AND V ATERIAL EXEMPT FROM THE RESO ED FROM TIME TO TIME, 40 U.S.C. S AND REGULATIONS RELATED THEI ED SOILS AND OTHER WASTE A UCTION OF CRUDE OIL OR NATURA TION TO GANDY-MARLEY, INC.'S ACI TRANSPORTER REPRESENTS AND R/SHIPPER TO TRANSPORTER IS N	ANCE OF THE MATERIALS SHIPPED WITH WARRANTS THAT THE WASTE MATERIAL DURCE, CONSERVATION AND RECOVERY 6901, at 5eq., The NM HEALTH AND SAF, RETO, BY VIRTUE OF THE EXEMPTION ASSOCIATED WITH THE EXPLORATION, L GAS OR GEOTHERMAL ENERGY.  CEPTANCE OF THE MATERIALS SHIPPED WARRANTS THAT ONLY THE MATERIAL NOW DELIVERED BY TRANSPORTER TO
Statement at the above dasc	cribed location, and that it was tendore erists were added to this long, and that	the material represented by this Transporter and by the above described shipper. This will the material was delivered without incident.

## 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: 9 AN 4 TIME: /2:27AMPM
DATE: 04-20-/6 VEHICLE NO.: 376 DRIVER NO.:
CHARGE TO:
TYPE OF MATERIAL
OCD
[ ] Other Malerial: [ ] Contaminated soil [ ] C-117 No.:
Description: @114
COMPANY CONTACT:
VOLUME OF MATERIAL []: YARDS 20 : 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, ot 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 additional materials were added to this load, and that the material was delivered without incident.  DRIVER:
FACILITY REPRESENTATIVE: 7 Telli Gold - Transporter

LEASE OPERATOR/SHIPPER/COMPANY: TARGA MIDSTREAM
LEASE NAME: DAVID BILBREY
TRANSPORTER COMPANY: SANdy TIME: /2:49 AMPM)
DATE: 04-20-16 VEHICLE NO.: 346 DRIVER NO.:
CHARGE TO:
TYPE OF MATERIAL
OCD
[ ] Other Material: [ ] Contamineted soil [ ] C-117 No.:
Description: OILy
COMPANY CONTACT:
VOLUME OF MATERIAL []: YARDS 20 : 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. \$6301, 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 cortify that no additional materials were added to this load, and that the material was delivered without incident.  DRIVER:
FACILITY REPRESENTATIVE: 9 Totton
White - Citi Censry - Shipper Pink - Citi Gold - Transporter

(575) 347-0434 Fax (575) 347-0435

LEASE OPERATOR/SH	HPPER/COMPANY: 77	ARGA MIDSTREAM
LEASE NAME: DA	UID BILBREY	
TRANSPORTER COM		TIME: 12: 5/ AMPM
DATE: 04-20-16	VEHICLE NO.: 349	DRIVER NO.:
CHARGE TO:		
	TYPE OF MATERI	AL
	OCD	
[ ] Other Material:	Contaminated soil BS&W content:	[ ] C-117 No.: <u>24/ 82  </u>
Description: OILY		
COMPANY CONTACT:		
VOLUME OF MATERIA	L[]: YARDS:	CELL# [ ]
THIS JOB TICKET, OPERATO SHIPPED HEREWITH IS MATE ACT OF 1976, AS AMENDED IN CODE, §361.001, 91 690. ANI AFFORDED CONTAMINATED DEVELOPMENT OR PRODUCT ALSO AS A CONDITION WITH THIS JOB TICKET, TRADELIVERED BY OPERATOR'S GANDY-MARLEY, INC.'S FACILIES WILL CERTIFY.	RISHIPPER REPRESENTS AND TERIAL EXEMPT FROM THE RESC FROM TIME TO TIME, 40 U.S.C. ( D REGULATIONS RELATED THE SOILS AND OTHER WASTE A TION OF CRUDE OIL OR NATURA IN TO GANDY-MARLEY, INC. S AC UNSPORTER REPRESENTS AND SHIPPER TO TRANSPORTER IS LITY FOR DISPOSAL.	ANCE OF THE MATERIALS SHIPPED WITH WARRANTS THAT THE WASTE MATERIAL DURCE, CONSERVATION AND RECOVERY \$5901, of seq., The NM KEALTH AND SAF. RETO, BY VIRTUE OF THE EXEMPTION ASSOCIATED WITH THE EXPLORATION, AL GAS OR GEOTHERMAL ENERGY.  CEPTANCE OF THE MATERIALS SHIPPED WARRANTS THAT ONLY THE MATERIAL NOW DELIVERED BY TRANSPORTER TO
Statement at the above descrip-	ned location, and that it was tender his were added to this load, and that	red by the above described shipper. This will the material was delivered without incident.
FACILITY REPRESENTATIVE:	g Tolton	31.2 <del></del>
White - GUI Cenary - Shippe	r Plás - GMI Gold - Tras	raboures

LEASE OPERATOR	SHIPPER/COMPANY: 7	PRGA MIDSTREAM
	DAVID BILBREY	
TRANSPORTER CO		TIME:/:05 AMPM
DATE: 04-20-	16 VEHICLE NO.: 35	3 DRIVER NO.:
CHARGE TO:		
	TYPE OF MATERI	AL
	OCD	
[ ] Other Material:	Contaminated soil BS&W content:	[ ] C-117 No.:
Description: OILY		
COMPANY CONTAC	T:	
VOLUME OF MATER	RIAL [ ]: YARDS 20 :	CELL#
THIS JOB TICKET, OPERA SHIPPED HEREWITH IS M ACT OF 1978, AS AMENDE CODE, §361.001, ot seq. / AFFORDED CONTAMINAT	ITORISHIPPER REPRESENTS AND N INTERIAL EXEMPT FROM THE RESC ED FROM TIME TO TIME, 40 U.S.C. ( AND REGULATIONS RELATED THE TED SOILS AND OTHER WASTE /	ANCE OF THE MATERIALS SHIPPED WITH WARRANTS THAT THE WASTE MATERIAL DURCE, CONSERVATION AND RECOVERY \$6901, OLSOQ., THE NM HEALTH AND SAF, RETO, BY VIRTUE OF THE EXEMPTION ASSOCIATED WITH THE EXPLORATION, AL GAS OR GEOTHERMAL ENERGY.
WITH THIS JOB TICKET, T	Fransporter represents and IR/SHIPPER TO TRANSPORTER IS I	CEPTANCE OF THE MATERIALS SHIPPED WARRANTS THAT ONLY THE MATERIAL NOW DELIVERED BY TRANSPORTER TO
Statement at the above dos	cribed location, and that it was tender	the material represented by this Transporter red by the above described shipper. This will the material was delivered without incident.
FACILITY REPRESENTATIVE:	2 Totton	
White-GID Cinary-Shi	noor Pick - GNU Gold - Tran	unorlar

(575) 347-0434 Fax (575) 347-0435

LEASE OPERATOR/SHIPPER/COMPANY: TARGA MIDSTREAM
LEASE NAME: DAVID BILBREY
TRANSPORTER COMPANY: 3 AND TIME: 1://3 AMPM)
DATE: 04-20-16 VEHICLE NO.: 37/ DRIVER NO.:
CHARGE TO:
TYPE OF MATERIAL
OCD
[ ] Other Material: [ ] Contaminated soil [ ] C-117 No.:
Description: OILY
COMPANY CONTACT:
VOLUME OF MATERIAL []: YARDS 20 : 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 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. 9 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 will need to this load, and that the material was delivered without incident.  DRIVER:
FACILITY REPRESENTATIVE: 2 Tolton
White - GUI Canary - Shipper Fink - Gitt Gold - Transporter

(575) 347-0434 Fax (575) 347-0435

LEASE OPERATOR/SHIPPER/COMPANY: TARGA MIDSTREAM
LEASE NAME: DAVID BILBREY
TRANSPORTER COMPANY: 9ANdy TIME:3:27 AMPMD
DATE: 04-20 - 16 VEHICLE NO.: 369 DRIVER NO.:
CHARGE TO:
TYPE OF MATERIAL
OCD
[ ] Other Material:   Contaminated soil   C-117 No.:
Description: Othy
COMPANY CONTACT:
VOLUME OF MATERIAL [ ]: YARDS 20 : 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, §361.001, at 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 landered 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:
Mana All Canana Shipper Dah Gill Hald Transporter

(575) 347-0434 Fax (575) 347-0435

LEASE OPERATOR/SHIPPER/COMPANY: TARGE MID STREAM	
LEASE NAME: DAVID BILBREY	
TRANSPORTER COMPANY: 9ANdy TIME:3:39 AMED	
DATE: 04-20-16 VEHICLE NO.: 368 DRIVER NO.:	
CHARGE TO:	
TYPE OF MATERIAL	
OCD	
[ ] Other Material: [ ] Contaminated soil [ ] C-117 No.:	
Description: Othy	
COMPANY CONTACT:	
VOLUME OF MATERIAL []: YARDS 20 : 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, §381.001, 81 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.	LYENA. DLO
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:  Jackson	W I
White-Cill Conort Chicago Date Cill Coll Conorting	

(675) 347-0434 Fax (575) 347-0435

LEASE OPERATOR/SHIPPER/COMPANY: TARGA MIDSTREAM
LEASE NAME: DAULD BILBREY
THANSPORTER COMPANY: 5ANdy TIME:3:59 AMPMD
DATE: 04-20-16 VEHICLE NO.: 353 DRIVER NO.:
CHARGE TO:
TYPE OF MATERIAL
OCD
[ ] Other Material:
Description: Otby
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. §8901, 01 80Q., THE NM HEALTH AND SAF, CODE, §381.001, 01 80Q. 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 CENTIFY that the above Transporter loaded the material represented by this Transporter Statement of the object described location, and that it was tendered by the above described shipper. This will carrily that no additional materials were added to this load, and that the material was delivered without incident.  ORIVER:  FACILITY HEPRESENTATIVE:
White - GILL Canary - Shipper Pink - Gill Gold - Transporter

## GANDY-MARLEY, INC. P.O. Box 1658

P.O. Box 1658 Roswell, NM 88202 (\$75) 347-0434 Fax (\$75) 347-0435

LEASE OPERATOR/SH	IPPER/COMPANY: 74	RGA MIDSTREAM
LEASE NAME: DAV	ID BILBREY	
TRANSPORTER COMP.	ANY: gandy	TIME: 3:5/ AMPM
DATE: 04-20 -1	VEHICLE NO.: 346	DRIVER NO.:
CHARGE TO:		
	TYPE OF MATERIA	L,
	OCD	
[ ] Other Material:	Contaminated soil	[ ] C-117 No.:
Description: <u>0114</u>		
COMPANY CONTACT:		
VOLUME OF MATERIAL	[]: YARDS 20 : 0	ELLS
THIS JOB TICKET, OPERATOR, SHIPPED HEREWITH IS MATER ACT OF 1976, AS AMENDED FRODE, \$381.001, 01 soq. AND AFFORDED CONTAMINATED DEVELOPMENT OR PRODUCTION WITH THIS JOB TICKET, TRAN DELIVERED BY OPERATORISH GANDY-MARLEY, INC.'S FACILITY IN Statement at the above described.	SHIPPER REPRESENTS AND WARLAL EXEMPT FROM THE RESOUR TIME TO TIME, 40 U.S.C. §6 REGULATIONS RELATED THERISOILS AND OTHER WASTE AS ON OF CRUDE CIL OR NATURAL TO GANDY-MARLEY, INC. SACCI SPORTER REPRESENTS AND WILLIPPER TO TRANSPORTER IS NOT IT FOR DISPOSAL.  In the above Transporter leaded the location, and that it was tendered	ARRANTS THAT THE WASTE MATERIAL ARRANTS THAT THE WASTE MATERIAL ARCE, CONSERVATION AND RECOVERY 501, et seq., The NM HEALTH AND SAF 570, BY VIRTUE OF THE EXEMPTION SOCIATED WITH THE EXPLORATION, GAS OR GEOTHERMAL ENERGY.  EPTANCE OF THE MATERIALS SHIPPED MARRANTS THAT ONLY THE MATERIAL DW DELIVERED BY TRANSPORTER TO THE MATERIAL DW DELIVERED BY TRANSPORTER TO THE MATERIAL OF THE MATERIAL DW DELIVERED BY TRANSPORTER TO THE MATERIAL DW DELIVERED BY TRANSPORTER TO THE MATERIAL DW THE BOOKE DESCRIBED SHIPPER. This will be material was delivered without incident.
FACILITY REPRESENTATIVE:	9 Tolton	
White - GUI Canary - Shipper	Pink - GM Gold - Transp	orter

LEASE OPERATOR/SHIPPER/COMPANY: TARGE MIDSTREAM	
LEASE NAME: DAVID BILBREY	
TRANSPORTER COMPANY: 3 ANdy TIME: 4:0 / AMPM)	
DATE: 04-20-16 VEHICLE NO.: 376 DRIVER NO.:	
CHARGE TO:	
TYPE OF MATERIAL	
OCD	
[ ] Other Material: [ ] Contaminated soil [ ] C-117 No.:	
Description: Oily	
COMPANY CONTACT:	
VOLUME OF MATERIAL [ ]: YARDS 20 : 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, at seq., THE NIM 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 no additional materials were added to this load, and that the material was delivered without incident.	4>F.Z.; 010 #/8
DRIVER: Clingo force	
FACILITY REPRESENTATIVE: 0 To-CLO??	

LEASE OPERATOR/SHIPPER/COMPANY: TARGA MIDSTREAM
LEASE NAME: DAVID BILBREY
TRANSPORTER COMPANY: 34Ndy TIME: 4:17 AMPM)
DATE: 04-20 -16 VEHICLE NO.: 37/ DRIVER NO.:
CHARGE TO:
TYPE OF MATERIAL
OCD
[ ] Other Material: [ ] Contaminated soil [ ] C-117 No.:
Description: OILY
COMPANY CONTACT:
VOLUME OF MATERIAL [ ]: YARDS 20 : 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, 01 60Q., THE NM HEALTH AND SAF CODE, §361.001, 01 60Q. 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:
White Gill Cenary - Shipper Pink - Gill Gold - Transporter

LEASE OPERATOR/SHIPPER/COMPANY: "T' ARGA MIDSTREAM
LEASE NAME: DAVID BILBREY
THANSPORTER COMPANY: 9AN dy TIME: 927 CAMPM
DATE: 04-21-16 VEHICLE NO.: 368 DRIVER NO.:
CHARGE TO:
TYPE OF MATERIAL
OCD
[ ] Other Material: [ ] Conteminated sell [ ] C-117 No.:
Description: O(Ly
COMPANY CONTACT:
VOLUME OF MATERIAL []: YARDS 25 : 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, of 600. THE NM HEALTH AND SAF, CODE, §381.001, 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 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 contrib that no additional millerials were added to this load, and that the material was delivered without incident.  DRIVER:
FACILITY REPRESENTATIVE: 7 CT. Co. Co. Co. Co. Co. Co. Co. Co. Co. Co

## GANDY-MARLEY, INC. P.O. Box 1658

P.O. Box 1658 Roswell, NM 88202 (575) 347-0434 Fax (575) 347-0435

LEASE OPERATOR/S	HIPPER/COMPANY: 7%	AGA MIDSTREAM
LEASE NAME: DA	WID BILBREY	
TRANSPORTER COM		TIME:927 AMPM
DATE: 04-21-	16 VEHICLE NO.: 35	B DRIVER NO.:
CHARGE TO:	4 4	
	TYPE OF MATERIA	<b>1</b> L
	OCD	
[ ] Other Material:	Contaminated soil BS&W content:	[ ] C-117 No.:
Description: 614		
COMPANY CONTACT	•	
VOLUME OF MATERI	AL[]: YARDS _20 :	CELL# <u> </u>
THIS JOB TICKET, OPERATE SHIPPED HEREWITH IS MARKET OF 1978, AS AMENDED CODE, §361.001, of seq. AS AFFORDED CONTAMINATE	OR/SHIPPER REPRESENTS AND W TERIAL EXEMPT FROM THE RESO O FROM TIME TO TIME, 40 U.S.C. § ND REGULATIONS RELATED THEI D SOILS AND OTHER WASTE A	UNCE OF THE MATERIALS SHIPPED WITH VARRANTS THAT THE WASTE MATERIAL URCE, CONSERVATION AND RECOVERY 6901, of seq., The NM HEALTH AND SAF. RETO, BY VIRTUE OF THE EXEMPTION SSOCIATED WITH THE EXPLORATION, LIGAS OR GEOTHERMAL ENERGY.
WITH THIS JOB TICKET, TE	TANSPORTER REPRESENTS AND ISSUIPPER TO TRANSPORTER IS N	CEPTANCE OF THE MATERIALS SHIPPED WARRANTS THAT ONLY THE MATERIAL NOW DELIVERED BY TRANSPORTER TO
Statement at the above describy that no modellide of male.	ibed location, and that it was tendent rials were added to this load, and that	the material represented by this Transporter and by the above described shipper. This will the material was delivered without incident.
FACILITY REPRESENTATIVE:	g Tollon_	

(575) 347-0434 Fax (575) 347-0435

LEASE OPERATOR/S	HIPPER/COMPANY: TARG	A MIDETORON
	AUID BILBREY	H INDINSTREAM
TRANSPORTER COM		TIME:9:3/ AMPM
DATE: 04-21 _	16 VEHICLE NO.: 369	DRIVER NO.:
CHARGE TO:		
	TYPE OF MATERIAL	
	OCD	
[ ] Other Material:	[   Contaminated soil   ] BS&W content:	[]C-117 No.: 241 822
Description: O1Ly		
COMPANY CONTACT		
VOLUME OF MATERIA	AL[]: YARDS 20 : CEL	18 LF :[]
THIS JOB TICKET, OPERATE SHIPPED HEREWITH IS MAT ACT OF 1976, AS AMENDED CODE, \$381.001, of seq. AN AFFORDED CONTAMINATED DEVELOPMENT OR PRODUCT ALSO AS A CONDITI WITH THIS JOB TICKET, TRUDELIVERED BY OPERATOR GANDY-MARLEY, INC.'S FACTORIS WILL CERTIFY Statement at the above description.	that the above Transporter loaded the ma bed location, and that it was tendered by	ANTS THAT THE WASTE MATERIAL CONSERVATION AND RECOVERY 101 SOQ., THE NM HEALTH AND SAF. 101 SOQ. THE NM HEALTH AND SAF. 101 SOR GEOTHERMAL ENERGY.  ANCE OF THE MATERIALS SHIPPED RANTS THAT ONLY THE MATERIAL DELIVERED BY TRANSPORTER TO Catorial represented by this Transporter the above described shipper. This will
certify that no additional mater	lals were added to this load, and that the m	zateria) was delivered without incident.
FACILITY REPRESENTATIVE:	g Tector	
White - GMI Canary - Shloo	er Pink - 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: TARGE MIDSTREAM
LEASE NAME: DAVID BILBREY
TRANSPORTER COMPANY: 9 ANdy TIME: 9:33 AMPM
DATE: 04-21 -16 VEHICLE NO.: 376 DRIVER NO.:
CHARGE TO:
TYPE OF MATERIAL
OCD
[ ] Other Material: [ ] Contaminated soil [ ] C-117 No.:
Description: Oily
COMPANY CONTACT:
VOLUME OF MATERIAL []: YARDS <u>2</u> : CELL# <u>上</u> : []
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, §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 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 Tolton

LEASE OPERATOR/SHIPPER/COMPANY: TARGA MIDSTREAM LEASE NAME: DAVID BILBREY TRANSPORTER COMPANY: 3ANDY TIME: 9:41 (AMP)M
DATE: 04-2/ -/6 VEHICLE NO.: 346 DRIVER NO.:
CHARGE TO:
TYPE OF MATERIAL
OCD
[ ] Other Material:
Description: orly
COMPANY CONTACT:
VOLUME OF MATERIAL []: YARDS 20 : CELL# 4.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, 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 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: 0 To-Star

(575) 347-0434 Fax (575) 347-0435

LEASE O	PERATOR/SHIP	PER/COMPANY:	TARGA A	AIDSTREAM
LEASE N	AME: DA			LOSHIN
TRANSPO	ORTER COMPA	APNUE SANAY		E:/23/ AMPM)
DATE: 0	4-21 -16	VEHICLE NO.:		VER NO.:
CHARGE	TO:			
		TYPE OF MAT	ERIAL	
		OCD		
[ ] Other Ma	ileria):	[   Conteminated soil [ ] BS&W content:	[ ] C-117	No.:
Description	on: OLLY			
COMPAN	IY CONTACT:			
VOLUME	OF MATERIAL [	: YARDS 20	_: CELL#/	=
THIS JOB THE SHIPPED HE ACT OF 1976 CODE, \$381: AFFORDED DEVELOPME ALSO WITH THIS J DELIVERED I GANDY-MARI	CKET, OPERATORIS) REWITH IS MATERIA B, AS AMENDED FRO 001, 01 EQ. AND RE CONTAMINATED SO INT OR PRODUCTION DAS A CONDITION TO OB TICKET, TRANSP BY OPERATORISHIP LEY, INC.'S FACILITY WILL CERTIFY that is the above described a additional materials in	HIPPER REPRESENTS A LEXEMPT FROM THE R IM TIME TO TIME, 40 U.S EGULATIONS RELATED DILS AND OTHER WAS NOF CRUDE OIL OR NAT OGANDY-MARLEY, INC.: PORTER REPRESENTS I PER TO TRANSPORTER FOR DISPOSAL. the above Transporter los pocation, and that it was to	ND WARRANTS THA IESOURCE, CONSEA I.C. §6901, of seq., TO THERETO, BY VIRT TE ASSOCIATED W TURAL GAS OR GEOT S ACCEPTANCE OF TO AND WARRANTS THA I IS NOW DELIVERE  I God the material repre-	ATERIALS SHIPPED WITH IT THE WASTE MATERIAL RIVATION AND RECOVERY HE IMM HEALTH AND SAF. UE OF THE EXEMPTION ITH THE EXPLORATION, THERMAL ENERGY.  THE MATERIALS SHIPPED NAT ONLY THE MATERIAL D BY TRANSPORTER TO DESCRIBE BY this Transporter described shipper. This will delivered without incident.
White- GM	Canary - Shipper	Pink - GAD 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: DAUID BILIBREY
TRANSPORTER COMPANY: 9 ANdy TIME: 12 3' ANDEND
DATE: 04-21-16 VEHICLE NO.: 376 DRIVER NO.:
CHARGE TO:
TYPE OF MATERIAL
OCD
[ ] Other Material: [ ] Contaminated soil [ ] C-117 No.:
Description: OiLy
COMPANY CONTACT:
VOLUME OF MATERIAL [ ]: YARDS 20 : 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, 01 SOQ., THE NM HEALTH AND SAF. CODE, §561.001, 01 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.
FACILITY REPRESENTATIVE: 9 Totton
White - Gill Canary - Shipper Pink - Gill Gold - Transporter

(575) 347-0434 Fax (576) 347-0435

LEASE OPERATOR/SHIPPER/COMPANY: TARGA MIDSTREAM
LEASE NAME: DAVID BILBREY
TRANSPORTER COMPANY: SANDY TIME: /257 AMPM)
DATE: 04-21-16 VEHICLE NO.: 353 DRIVER NO.:
CHARGE TO:
TYPE OF MATERIAL
OCD
[ ] Other Material: [ ] Contaminated soil [ ] C-117 No.:
Description:
COMPANY CONTACT:
VOLUME OF MATERIAL [ ]: YARDS 20 : 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 1978, AS AMENDED FROM TIME TO TIME, 40 U.S.C. §6901, 01 seq., THE NM HEALTH AND SAF, CODE, §381.001, 01 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 et the object described location, and that it was tendered by the above described shipper. This will certify that no accident materials were added to this load, and that the material was delivered without incident.
FACILITY REPRESENTATIVE: 9 Tolton
White - Gill Cenary - Shipper Pink - Gill Gold - Transporter

LEASE OPERATOR/	SHIPPER/COMPANY: 77AR	GA MIDSTREAM
LEASE NAME: D	AUID BILBREY	
TRANSPORTER CO	MPANY: SANdy	TIME: 1:09 AMEMD
	16 VEHICLE NO.: 369	DRIVER NO.:
CHARGE TO:		
	TYPE OF MATERIAL	•
	OCD	
[ ] Other Material:	Contaminated soil BS&W content:	[ ] C-117 No.:
Description: OIL-		
COMPANY CONTAC	Т:	
VOLUME OF MATER	IAL[]: YARDS 20 : CE	LL#_ <i>LE</i> :[]
THIS JOB TICKET, OPERAL SHIPPED HEREWITH IS MU ACT OF 1976, AS AMENDE CODE, §361.001, et soq. A AFFORDED CONTAMINATIOEVELOPMENT OR PRODICULATION OF THIS JOB TICKET, TO DELIVERED BY OPERATOL GANDY-MARLEY, INC.'S FATHIS WILL CERTIF SINIUmoni, at the above desi	TOR/SHIPPER REPRESENTS AND WAI ATERIAL EXEMPT FROM THE RESOUR D FROM TIME TO TIME, 40 U.S.C. §69 UND REGULATIONS RELATED THERE ED SOILS AND OTHER WASTE ASS UCTION OF CRUDE OIL OR NATURAL OF HON TO GANDY-MARLEY, INC.'S ACCE TRANSPORTER REPRESENTS AND W. RISHIPPER TO TRANSPORTER IS NO CILITY FOR DISPOSAL.	CE OF THE MATERIALS SKIPPED WITH RRANTS THAT THE WASTE MATERIAL RCE, CONSERVATION AND RECOVERY 01, 01 sog THE NM HEALTH AND SAF. TO, BY VIRTUE OF THE EXEMPTION SOCIATED WITH THE EXPLORATION, SAS OR GEOTHERMAL ENERGY.  EPTANCE OF THE MATERIALS SHIPPED ARRANTS THAT ONLY THE MATERIAL IN DELIVERED BY TRANSPORTER TO In material represented by this Transporter by the above described shipper. This will be material was delivered without incident.
FACILITY REPRESENTATIVE:	- a Tollon	
Y/hita - Cliti Carvery - Ship	pper Pirk GMI Gold - Transpo	riter

(575) 347-0434 Fax (575) 347-0435

LEASE OPERATOR/SHIPPER/COMPANY: TARGE MIDSTREEM
LEASE NAME: DAVID BILBREY
TRANSPORTER COMPANY: 9AND TIME: 1:09 AMOM
DATE: 04-21-16 VEHICLE NO.: 346 DRIVER NO.:
CHARGE TO:
TYPE OF MATERIAL
OCD
[ ] Other Material: [/Contaminated soll [ ] C-117 No.:
Description: OILY
COMPANY CONTACT:
VOLUME OF MATERIAL []: YARDS : CELLE : []
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 S0Q., THE NM HEALTH AND SAF, CODE, §381.001, 61 S0Q. 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:
PACILITY REPRESENTATIVE: 76 To

LEASE OPERATOR/SHIPPER/COMPANY: TARGA MIDSTREAM
LEASE NAME: DAVID BILBREY
TRANSPORTER COMPANY: 9 ANdy TIME: 3:39 AMPM)
DATE: 04-2/-16 VEHICLE NO.: 353 DRIVER NO.:
CHARGE TO:
TYPE OF MATERIAL
OCD
[ ] Other Material: [ ] Contaminated soil [ ] C-117 No.:
Doscription: Or Ly
COMPANY CONTACT:
VOLUME OF MATERIAL [ ]: YARDS 20 ; CELL# 4-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, 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 carrily that no odd your materials were added to this load, and that the material was delivered without incident.
DIRIVER!
FACILITY REPRESENTATIVE: 2 Tolton
White - GLB Canary - Shipper Ark - GM Cold - Transporter

(575) 347-0434 Fax (575) 347-0435

LEASE OPERATOR/SHIPPER/COMPANY: TARGE MIDSTREAM
LEASE NAME: DAVID BILBREY
TRANSPORTER COMPANY: 9 AN CY TIME: 3:47 AMPM)
DATE: 04-21 - 16 VEHICLE NO.: 369 DRIVER NO.:
CHARGE TO:
TYPE OF MATERIAL
OCD
[ ] Other Material:     Contaminated soil       C-117 No.:
Description: Otto
COMPANY CONTACT:
VOLUME OF MATERIAL []: YARDS 20 : CELL# 4 :[]
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. §5901, at seq., THE NM HEALTH AND SAF, CODE, §381.001, 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 on 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:  PACILITY REPRESENTATIVE:  1 To Clay
VINIta - GIKI Cenary - Shipper Pink - Giki Gold - Transporter

(575) 347-0434 Fax (575) 347-0435

LEASE OPERATOR/SHIPPER/COMPANY: TARGE MIDSTREAM
LEASE NAME: DAVID BILBREY
TRANSPORTER COMPANY: 9 AND TIME: 3:49 AMPIN
DATE: 04-2/ _/6 VEHICLE NO.: 346 DRIVER NO.:
CHARGE TO:
TYPE OF MATERIAL
OCD
[ ] Other Material: [ ] Contaminated soil [ ] C-117 No.:
Description: Othy
COMPANY CONTACT:
VOLUME OF MATERIAL [ ]: YARDS 20 : CELLS 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 AMENOED FROM TIME TO TIME, 40 U.S.C. \$6901, et seq., THE NM HEALTH AND SAF, CODE. \$381.001, 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 additional materials were added to this load, and that the material was delivered without incident.  DRIVER:
FACILITY REPRESENTATIVE: 2 Tocton
White GM Cenery - Shipper Fink - GM Gold - Transporter

(575) 347-0434 Fax (575) 347-0435

LEASE OPERATOR/SHIPPER/COMPANY: TARGA MIDSTREAM
LEASE NAME: DAVID BILBREY
TRANSPORTER COMPANY: 9AN dy TIME:9:17 AMPM
DATE: 04-25 16VEHICLE NO.: 368 DRIVER NO.:
CHARGE TO:
TYPE OF MATERIAL
OCD
[ ] Other Material:
Description: OLLY
COMPANY CONTACT:
VOLUME OF MATERIAL []: YARDS 20 : 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, at seq THE NM HEALTH AND SAF. CODE, §381.001, 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 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 edded to this load, and that the material was delivered without incident.  DRIVER:
FACILITY REPRESENTATIVE: 7 Teles
White GID Canary - Shipper Pink - GM Gold - Transporter

GANDY-MARLEY, INC.
P.O. Box 1658
Roswell, NM 88202
(575) 347-0434
Fox (575) 247 0495 Fax (575) 347-0435

200		44 44
LEASE OPERATOR/	SHIPPER/COMPANY: 77	ARGA MIDSTREAM
LEASE NAME: DA	NID BILBREY	
TRANSPORTER CO		TIME: // 27 AMPM
DATE: 04-25-		16 DRIVER NO.:
CHARGE TO:		
	TYPE OF MATER	AL
	QCD	
[ ] Other Material:	[ ] Contaminated soil [ ] BS&W content:	[ ] C-117 No.:
Description:		
COMPANY CONTACT	T:	
VOLUME OF MATER	IAL [ ]: YARDS 20 :	CELL#
THIS JOB TICKET, OPERAT SHIPPED HEREWITH IS MY ACT OF 1978, AS AMENDE CODE. §381.001, 01 600. A AFFORDED CONTAMINATION DEVELOPMENT OR PRODUCT OF THIS JOB TICKET, TO ELIVERED BY OPERATOR GANDY-MARLEY, INC.'S FATHIS WILL CERTIF Stelement at the above design.	TORUSHIPPER REPRESENTS AND TATERIAL, EXEMPT FROM THE RESC D FROM TIME TO TIME, 40 U.S.C. IND REGULATIONS RELATED THE ED SOILS AND OTHER WASTE A JUSTION OF CRUDE OIL OR NATURA FROM TO GANDY-MARLEY, INC.'S AC TRANSPORTER REPRESENTS AND RASHIPPER TO TRANSPORTER IS ICILITY FOR DISPOSAL.	TANCE OF THE MATERIALS SHIPPED WITH 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, AL GAS OR GEOTHERMAL ENERGY.  CCEPTANCE OF THE MATERIALS SHIPPED WARRANTS THAT ONLY THE MATERIAL NOW DELIVERED BY TRANSPORTER TO the material represented by this Transporter and by the above described shipper. This will the material was delivered without incident.
DRIVER: DIMU	Quan	
FACILITY REPRESENTATIVE:		nsporter
ALIENE - Amil - Mari	Albert Al	

(575) 347-0434 Fax (575) 347-0435

LEASE O	PERATOR/SHI	PPER/COMPANY: 7	GA MIDSTREAM
LEASE N			
TRANSPO	ORTER COMP		TIME:/2:07AMPMD
DATE: 0	4-25-16	VEHICLE NO.: 368	DRIVER NO.:
CHARGE	TO:		
		TYPE OF MATERIA	
		OCD	
[ ] Other Ma	iterial:	Contaminated soli	[ ] C-117 No.:
Description	on: <u>סווא</u>		
COMPAN	IY CONTACT:		
VOLUME	OF MATERIAL	[ ]: YARDS <u>20</u> : C	ELL#_ <i>LF</i> _:[]
THIS JOB TIC SHIPPED HE ACT OF 1976 CODE, \$381. AFFORDED DEVELOPME ALSO WITH THIS J DELIVERED	CKET, OPÉRATORI REWITH IS MATER B, AS AMENDED FR 001. et seq. AND CONTAMINATED S INT OR PRODUCTI DAS A CONDITION OB TICKET, TRAN BY OPERATORISH	SHIPPER REPRESENTS AND WARLAL EXEMPT FROM THE RESOUR THE REPRESENTS AND WARLEY, INC. SACCIOUS SPORTER REPRESENTS AND WARLEY, INC.	ICE OF THE MATERIALS SHIPPED WITH IRRANTS THAT THE WASTE MATERIAL RCE. CONSERVATION AND RECOVERY 901, et seq., THE NM HEALTH AND SAF. 970, BY VIRTUE OF THE EXEMPTION SOCIATED WITH THE EXPLORATION, GAS OR GEOTHERMAL ENERGY.  EPTANCE OF THE MATERIALS SHIPPED MARRANTS THAT ONLY THE MATERIAL DW DELIVERED BY TRANSPORTER TO
Statement at	the above describe additional materials	d location, and that it was tendered	e material represented by this Transporter i by the above described shipper. This will be material was delivered without incident.
FACILITY REP		Pink - CHE Gold - Transco	
White - GMI	Canary - Shippor	Tink • GM Gold • Transp	CAN THE

(575) 347-0434 Fax (575) 347-0435

LEASE OPERATOR/SHIPPER/COMPANY: T'ARGA MIDSTRERM
LEASE NAME: DAVID BILBREY
TRANSPORTER COMPANY: 9 AN 44 TIME: 9:07 CAMPM
DATE: 04-25 - 16 VEHICLE NO.: 346 DRIVER NO.:
CHARGE TO:
TYPE OF MATERIAL
OCD
[ ] Other Material: [ ] Contaminated soil [ ] C-117 No.:
Description: OILY
COMPANY CONTACT:
VOLUME OF MATERIAL [ ]: YARDS 20 : 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 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 no additional materials with added to this load, and that the material was delivered without incident.  DRIVER:
FACILITY REPRESENTATIVE: 9 75-057

## **APPENDIX D**

Initial and Final C-141

District I 1625 N. French Dr., Hobbs, NM 88240 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 Mexico

RECEIVED Form C-141 Energy Minerals and Natural Res By JKeyes at 10:46 am, Aug 29, 2016

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

Submit I Copy to appropriate District Office in accordance with 19.15,29 NMAC.

pJXK1624238710

## **Release Notification and Corrective Action**

					01	<b>LKA</b>	IUR	∠ Initia	Report   Final Repor			
Name of Co		Targa Midst			Con		Ralph England					
Address P.O. Box 1689, Lovington, NM 88260 Facility Name David Bilbrey 8" Pipeline - Site #1						Telephone No. 575-441-4653						
Facility Nan	ne David	d Bilbrey 8"	Pipeline	- Site #1	Faci	lity Typ	e Natural Ga	s Pipeline				
Surface Owner David Bilbrey Mineral Owner						API No.						
				LOCA	ATION O	FRE	LEASE					
Unit Letter K	Section 18	Township 9S	Range 38E	Feet from the 1433	North/Sou S	lh Line	Feet from the 2153	East/West Line W	County Lea			
				Latitude <u> 33°31</u>	<u>'51.49"N</u> Lo	ngitud	e_103° 5'25.23"	<u>w</u>				
			-7	NAT	TURE OF							
Type of Relea		al Gas Conde					Release 5-10 b					
Source of Rel	ease 8 in	ch steel pipeli	ine			ite and l iknown	lour of Occurrence	Date and 1	Hour of Discovery			
Was Immedia	le Notice G	iven?					Whom?	12/2015				
			Yes 🗵	No 🔲 Not Re		1 100, 10						
3y Whom?					Da	ite and I	lour					
Was a Waterc	ourse Reacl				lf	YES, Vo	olume Impacting t	he Watercourse.				
			Yes 🛚	No								
inc. The horiz bgs. Describe Area Soil was excav	Affected at	ertical extents  nd Clennup A  ut 23 feet bgs	e were deli	incated with boring	ngs. Lab resu	lts indica	ated impact to abo	out 15 feet bgs. Soil	, 2015 by Larson & Associates, was excavated to about 23 feet esults from samples collected			
egulations all public health o hould their op	operators a r the envire erations ha nent. In ad	re required to nament. The average to a ve failed to a dition, NMO	report an acceptanc dequately CD accept	d/or file certain re c of a C-141 repo investigate and re	elease notific ort by the NM emediate con	ations a OCD m taminati	nd perform correct arked as "Final Room that pose a three	tive actions for rele eport" does not reli- eat to ground water	uant to NMOCD rules and eases which may endanger eve the operator of liability surface water, human health ompliance with any other			
(ale Wali						OII, CONSERVATION DIVISION						
rinted Name:	Cal Wrang	ham			Аррг	Approved by Environmental Specialist:						
itle: EHS Ma	nager					oval Dat	08/29/2016		10/20/2016			
-mail Address: CalvinWrangham@targaresources.com						Conditions of Approval: Discrete samples only. Delineate and remediate per NMOCD guidelines.  Altached  IRP 4419						
		If Necessa		102 000-0372	Transfor	'n Sma	intes.		nIXK1624238510			

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

\* Attach Additional Sheets If Necessary

## State of New Mexico Energy Minerals and Natural Resources

Form C-141 Revised August 8, 2011

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	atio	n and Co	orrective <b>A</b>	ctio	n			
				OPERATOR					inal Repor			
Name of Company Targa Midstream Services, LLC.					Contact Ralph England							
						Telephone No. 575-441-4653						
Facility Na	me Davi	d Bilbrey 8"	Pipeline	– Site #1		Facility Typ	e Natural Ga	s Pipe	line			
Surface Owner David Bilbrey Mineral Owner									API No	•		
				LOCA	TIO	N OF REI	LEASE					
Unit Letter K	Section 18	Township 9S	Range 38E	Feet from the 1433	North	/South Line N	Feet from the 2153	East	/West Line W	County Lea		
,			La				e <u>103°5'32.62"</u>	W				
Tues of Dolo	oco Matur	al Gas Conde	maata	NAT	URE	OF REL		ble	Volume R	ecovered 0		
Type of Rele Source of Re		ch steel pipel								Hour of Discovery		
Was Immedi	ate Notice G		Yes 🛛	No 🗌 Not Re	quired	If YES, To	Whom?					
By Whom?						Date and H						
Was a Water	course Reac	hed?	Yes 🛛	No		If YES, Volume Impacting the Watercourse.						
If a Watercou	ırse was Imp	pacted, Descri	be Fully.*			APPR	OVED					
N/A	•											
					l	By Oliv	⁄ia Yu at 2	2:36	pm, Ju	ın 01, 2017		
Describe Cau The release v Inc. The hori to about 15 fe	vas caused by zontal and ve	y corrosion o ertical extents	f an 8" stee were deli	el line transporting neated to 25 feet l	g natura bgs witl	al gas. Releason h borings. Soi	e area was sample il samples were co	d on I	December 21, d every 5 feet	, 2015 by Larson & A t. Lab results indicate	ssociates, d impact	
vertically to 2 5 was dispose	was excava 250 mg/Kg. ed at Gandy	ted to approx Composite so Marley Land	imately 23 il samples fill (NM-7	feet bgs. Discrete were collected fro 11-1-0019). Exca	om 4 of vation v	5 soil piles was filled with	vas below RRAL h soil from Piles 1	for TP throu	H and chlorions of the second	AL. Chloride delinea de. Contaminated soi itional soil acquired f further action reques	from Pile rom	
regulations al public health should their o	I operators a or the environment in administrations had need to be a contract. In administration administration in administration in administration in administration in administration in administration in administration administrat	are required to conment. The live failed to a ddition, NMO	report and acceptance dequately: CD accept	d/or file certain re e of a C-141 report investigate and re	lease northern the lease needing the lease needing to be the lease needing the lease needi	otifications ar NMOCD ma contamination	nd perform correct arked as "Final Re on that pose a thre	tive ac eport" eat to g	tions for rele does not relie ground water,	uant to NMOCD rule ases which may enda eve the operator of lia surface water, huma empliance with any of	nger bility n health	
							OIL CONS	SERV	VATION	DIVISION		
Signature:	_		4	Approved by Environmental Specialist:								
Printed Name	: Cal Wra	ingham				approved by	Environmental of	Journal	~ <u>\</u>	, ,	1	
Title: EHS	Manager					Approval Date	roval Date: 6/1/2017		Expiration I	Date XX/XX/XXXX		
E-mail Address: CalvinWrangham@targaresources.com					Conditions of Approval:				Attached			
Date: 9/8/2	016		Phon	e: 432-688-054								

1RP-4419