

July 07, 2014

**EMMANUEL LUJAN** 

PANTHER ENERGY

101 E. PANTHER

JAL, NM 88252

RE: TRUNK 'M' 20' LINE

Enclosed are the results of analyses for samples received by the laboratory on 07/01/14 12:50.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at <a href="https://www.tceq.texas.gov/field/qa/lab">www.tceq.texas.gov/field/qa/lab</a> accredited certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.4

Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

Celeg D. Keine

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Lab Director/Quality Manager



### Analytical Results For:

PANTHER ENERGY **EMMANUEL LUJAN** 101 E. PANTHER JAL NM, 88252

Fax To:

(575) 395-2162

Received:

07/01/2014

Reported:

07/07/2014

Project Name: Project Number: TRUNK 'M' 20' LINE NONE GIVEN

Project Location:

NOT GIVEN

Sampling Date:

07/01/2014

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

### Sample ID: S1 M4 - 2' (H401987-01)

BTEX 8260B	mg	/kg	Analyze	ed By: ms					
Analyte	Result Reporting Limit		Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/03/2014	ND	1.83	91.3	2.00	23.7	
Toluene*	<0.050	0.050	07/03/2014	ND	1.60	79.9	2.00	24.4	
Ethylbenzene*	<0.050	0.050	07/03/2014	ND	1.50	74.9	2.00	23.3	
Total Xylenes*	<0.150	0.150	07/03/2014	ND	4.68	78.0	6.00	25.1	
Total BTEX	<0.300	0.300	07/03/2014	ND					
urrogate: Dibromofluoromethane 99.7 % 61.3-14.		2							
Surrogate: Toluene-d8	106 % 71.3-12		9						
Surrogate: 4-Bromofluorobenzene	93.3 % 65.7-14		1						
Chloride, SM4500CI-B	mg/	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<b>272</b> 16.0		07/03/2014	ND	400	100	400	0.00	
TPH 8015M	Analyze	d By: MS							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/02/2014	ND	178	88.9	200	0.368	
DRO >C10-C28	<10.0	10.0	07/02/2014	ND	188	93.9	200	1.88	
EXT DRO >C28-C35	<10.0	10.0 07/02		ND					
Surrogate: 1-Chlorooctane	111 %	65.2-14	0						
Surrogate: 1-Chlorooctadecane	114 % 63.6-154		4						

### Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



### Analytical Results For:

PANTHER ENERGY EMMANUEL LUJAN 101 E. PANTHER JAL NM, 88252

Fax To:

(575) 395-2162

Received:

07/01/2014

Reported:

07/07/2014

Project Name: Project Number: TRUNK 'M' 20' LINE

Project Location:

NONE GIVEN NOT GIVEN Sampling Date:

07/01/2014

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

## Sample ID: S1 M4 - 3' (H401987-02)

BTEX 8260B	mg	kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/03/2014	ND	1.83	91.3	2.00	23.7	
Toluene*	<0.050	0.050	07/03/2014	ND	1.60	79.9	2.00	24.4	
Ethylbenzene*	<0.050	0.050	07/03/2014	ND	1.50	74.9	2.00	23.3	
Total Xylenes*	<0.150	0.150	07/03/2014	ND	4.68 78.0		6.00	25.1	
Total BTEX	<0.300	<0.300 0.300		ND					
Surrogate: Dibromofluoromethane	99.0	% 61.3-14	2						
Surrogate: Toluene-d8	103 9	71.3-12	9						
Surrogate: 4-Bromofluorobenzene	92.6	% 65.7-14	I						
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AP					
Analyte	Result Reporting Limit		Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<b>928</b> 16.0		07/03/2014	ND	400	100	400	0.00	
TPH 8015M	Analyze	d By: MS							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/02/2014	ND	178	88.9	200	0.368	
DRO >C10-C28	<10.0	10.0	07/02/2014	ND	188	93.9	200	1.88	
EXT DRO >C28-C35	<10.0	10.0	07/02/2014	ND					
Surrogate: 1-Chlorooctane	115 %	115 % 65.2-14							
Surrogate: 1-Chlorooctadecane	124 %	124 % 63.6-15							

### Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



#### **Notes and Definitions**

QR-02 The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC

batch were accepted based on percent recoveries and completeness of QC data.

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

\*\* Samples not received at proper temperature of 6°C or below.

\*\*\* Insufficient time to reach temperature.

- Chloride by SM4500Cl-B does not require samples be received at or below 6°C

Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keine

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST



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			sannas	250 977	11 ×081 1911 0 19025	1 : NO : N	i: A	Co Att Cit Sta Sta	- 7	291	88	538	g- diz	State: N.M. Fax #: 575. Project Owner.	M, Jun	Address:  City: 75-3  Project Name: 75-3  Project Name: 75-3
REQUEST					017	-		- Address - Control				1 /	371	1746 40190	1 477 7	Company Name:

Phillip. Little @ 565 EARCH 9 05. Com 2.20 Delivered By: (Circle One)

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-24\*















