

October 26, 2016

MIKE STUBBLEFIELD

R T HICKS CONSULTANTS

901 RIO GRANDE BLVD SUITE F-142

ALBUQUERQUE, NM 87104

RE: ASAU 149 TRUNK LINE RELEASE

Enclosed are the results of analyses for samples received by the laboratory on 10/25/16 14:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-16-8. 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 www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited 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.

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:

R T HICKS CONSULTANTS
MIKE STUBBLEFIELD
901 RIO GRANDE BLVD SUITE F-142
ALBUQUERQUE NM, 87104
Fax To: NONE

Received:	10/25/2016	Sampling Date:	10/24/2016
Reported:	10/26/2016	Sampling Type:	Soil
Project Name:	ASAU 149 TRUNK LINE RELEASE	Sampling Condition:	Cool & Intact
Project Number:	30.015.00204	Sample Received By:	Jodi Henson
Project Location:	UTO SEC. 14-T18S-R26E		

Sample ID: S-7 NORTH WALL (H602387-01)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3520	16.0	10/25/2016	ND	416	104	400	0.00	

Sample ID: S-8 WEST WALL (H602387-02)

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	10/26/2016	ND	197	98.3	200	3.72	
DRO >C10-C28	26.7	10.0	10/26/2016	ND	213	107	200	5.60	

Surrogate: 1-Chlorooctane 97.4 % 35-147

Surrogate: 1-Chlorooctadecane 114 % 28-171

Sample ID: S-9 SOUTH WALL (H602387-03)

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	10/26/2016	ND	197	98.3	200	3.72	
DRO >C10-C28	<10.0	10.0	10/26/2016	ND	213	107	200	5.60	

Surrogate: 1-Chlorooctane 82.3 % 35-147

Surrogate: 1-Chlorooctadecane 98.5 % 28-171

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

R T HICKS CONSULTANTS
MIKE STUBBLEFIELD
901 RIO GRANDE BLVD SUITE F-142
ALBUQUERQUE NM, 87104
Fax To: NONE

Received: 10/25/2016
Reported: 10/26/2016
Project Name: ASAU 149 TRUNK LINE RELEASE
Project Number: 30.015.00204
Project Location: UTO SEC. 14-T18S-R26E

Sampling Date: 10/24/2016
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S-10 B-14' N. DEP PIPELINE (H602387-04)

BTX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/25/2016	ND	1.82	90.9	2.00	0.937	
Toluene*	<0.050	0.050	10/25/2016	ND	2.18	109	2.00	1.70	
Ethylbenzene*	0.050	0.050	10/25/2016	ND	2.26	113	2.00	1.31	
Total Xylenes*	<0.150	0.150	10/25/2016	ND	6.90	115	6.00	1.38	
Total BTX	<0.300	0.300	10/25/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	2440	16.0	10/25/2016	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	10/26/2016	ND	197	98.3	200	3.72	
DRO >C10-C28	<10.0	10.0	10/26/2016	ND	213	107	200	5.60	

Surrogate: 1-Chlorooctane 83.0 % 35-147

Surrogate: 1-Chlorooctadecane 100 % 28-171

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 R T HICKS CONSULTANTS
 MIKE STUBBLEFIELD
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

 Received: 10/25/2016
 Reported: 10/26/2016
 Project Name: ASAU 149 TRUNK LINE RELEASE
 Project Number: 30.015.00204
 Project Location: UTO SEC. 14-T18S-R26E

 Sampling Date: 10/24/2016
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: S-11 B-15' S. DEP PIPELINE (H602387-05)

BTX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/25/2016	ND	1.82	90.9	2.00	0.937	
Toluene*	<0.050	0.050	10/25/2016	ND	2.18	109	2.00	1.70	
Ethylbenzene*	<0.050	0.050	10/25/2016	ND	2.26	113	2.00	1.31	
Total Xylenes*	<0.150	0.150	10/25/2016	ND	6.90	115	6.00	1.38	
Total BTX	<0.300	0.300	10/25/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	320	16.0	10/25/2016	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	10/26/2016	ND	197	98.3	200	3.72	
DRO >C10-C28	57.3	10.0	10/26/2016	ND	213	107	200	5.60	

Surrogate: 1-Chlorooctane 106 % 35-147

Surrogate: 1-Chlorooctadecane 118 % 28-171

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

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. Keene, Lab Director/Quality Manager



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(575) 393-2326 FAX (575) 393-2476

[illegible]

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	Total Ch	BTEX	TPH
H1602387																	
1	S-7 North wall	G				/				/			10/24/16	2:24p	/		
2	S-8 West wall	G				/				/			10/24/16	2:36p	/		
3	S-9 South wall	G				/				/			10/24/16	2:40p	/		
4	S-10 B-14' n. dep pipeline	G				/				/			10/24/16	2:50p	/		
5	S-11 B-15' s. dep pipeline	G				/				/			10/24/16	4:12p	/		

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Relinquished By: Dr. J. S. Miller Received By: [Signature]

Phone Result: ☐ Fax Result: ☐

Relinquished By: <u>Mass Transported</u>		Date: <u>6/25/16</u>		Received By: <u>Scott Jensen</u>		Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No		Add'l Phone #:	
Relinquished By:		Time: <u>2:00</u>		Date:		Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No		Add'l Fax #:	
Relinquished By:		Date:		Received By:		REMARKS: <u>RUST!!</u>			
Relinquished By:		Time:		Sample Condition		CHECKED BY: <u>RA</u>			
Delivered By: (Circle One)		3.90		Cool <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
Sampler - UPS - Bus - Other		3.90		Cool <input type="checkbox"/> Yes <input type="checkbox"/> No		Intact <input type="checkbox"/> Yes <input type="checkbox"/> No			