

September 26, 2016

R T HICKS CONSULTANTS
R T HICKS CONSULTANTS
901 RIO GRANDE BLVD SUITE F-142
ALBUQUERQUE, NM 87104

RE: ASAU TRUNK LINE RELEASE

Enclosed are the results of analyses for samples received by the laboratory on 09/23/16 11:05.

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 <a href="https://www.tceq.texas.gov/field/ga/lab\_accred\_certif.html">www.tceq.texas.gov/field/ga/lab\_accred\_certif.html</a>.

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.

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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,

Mike Snyder For Celey D. Keene

Lab Director/Quality Manager



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

A .. . l. ... . d D. .. MC

Received: 09/23/2016 Sampling Date: 09/21/2016
Reported: 09/26/2016 Sampling Type: Soil

Project Name: ASAU TRUNK LINE RELEASE Sampling Condition: \*\* (See Notes)
Project Number: 30.015.0028N Sample Received By: Jodi Henson

Project Location: ARTESIA

DTEV 0021D

## Sample ID: S-13 6' DEEP BOTTOM (H602140-01)

BTEX 8021B	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	09/25/2016	ND	2.26	113	2.00	1.18	
Toluene*	<0.050	0.050	09/25/2016	ND	2.30	115	2.00	1.47	
Ethylbenzene*	<0.050	0.050	09/25/2016	ND	2.20	110	2.00	1.07	
Total Xylenes*	<0.150	0.150	09/25/2016	ND	6.63	110	6.00	1.11	
Total BTEX	<0.300	0.300	09/25/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	99.4	% 73.6-14	0						
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	896	16.0	09/23/2016	ND	432	108	400	0.00	
TPH 8015M	mg/	kg	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	09/24/2016	ND	199	99.4	200	2.82	
DRO >C10-C28	<10.0	10.0	09/24/2016	ND	212	106	200	5.31	
EXT DRO >C28-C35	<10.0	10.0	09/24/2016	ND					
Surrogate: 1-Chlorooctane	81.5	% 35-147							
Surrogate: 1-Chlorooctadecane	96.5	% 28-171							

Cardinal Laboratories \*=Accredited Analyte

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Fax To: NONE

Received: 09/23/2016 Sampling Date: 09/21/2016
Reported: 09/26/2016 Sampling Type: Soil

Project Name: ASAU TRUNK LINE RELEASE Sampling Condition: \*\* (See Notes)
Project Number: 30.015.0028N Sample Received By: Jodi Henson

Project Location: ARTESIA

### Sample ID: S-14 S. SIDEWALL 5' BGS (H602140-02)

BTEX 8021B	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	09/25/2016	ND	2.26	113	2.00	1.18	
Toluene*	<0.050	0.050	09/25/2016	ND	2.30	115	2.00	1.47	
Ethylbenzene*	0.069	0.050	09/25/2016	ND	2.20	110	2.00	1.07	
Total Xylenes*	0.190	0.150	09/25/2016	ND	6.63	110	6.00	1.11	
Total BTEX	<0.300	0.300	09/25/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	98.8	% 73.6-14	10						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	416	16.0	09/23/2016	ND	432	108	400	0.00	
TPH 8015M	mg,	/kg	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	09/24/2016	ND	199	99.4	200	2.82	
DRO >C10-C28	<10.0	10.0	09/24/2016	ND	212	106	200	5.31	
EXT DRO >C28-C35	<10.0	10.0	09/24/2016	ND					
Surrogate: 1-Chlorooctane	82.4	% 35-147	7						
Surrogate: 1-Chlorooctadecane	95.9	% 28-171	!						

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Fax To: NONE

Received: 09/23/2016 Sampling Date: 09/21/2016

Reported: 09/26/2016 Sampling Type: Soil

Project Name: ASAU TRUNK LINE RELEASE Sampling Condition: \*\* (See Notes) Sample Received By: Project Number: 30.015.0028N Jodi Henson

Applyzod By: MC

Project Location: **ARTESIA** 

RTFY 8021R

### Sample ID: S-15 W. SIDEWALL 5' BGS (H602140-03)

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BIEX 8021B	mg/	/ Kg	Analyze	а ву: м5					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/25/2016	ND	2.26	113	2.00	1.18	
Toluene*	<0.050	0.050	09/25/2016	ND	2.30	115	2.00	1.47	
Ethylbenzene*	<0.050	0.050	09/25/2016	ND	2.20	110	2.00	1.07	
Total Xylenes*	<0.150	0.150	09/25/2016	ND	6.63	110	6.00	1.11	
Total BTEX	<0.300	0.300	09/25/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	97.2	% 73.6-14	0						
Chloride, SM4500CI-B	mg,	/kg	Analyze	ed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	224	16.0	09/23/2016	ND	432	108	400	0.00	
TPH 8015M	mg,	/kg	Analyze	ed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	09/24/2016	ND	199	99.4	200	2.82	
DRO >C10-C28	19.9	10.0	09/24/2016	ND	212	106	200	5.31	
EXT DRO >C28-C35	<10.0	10.0	09/24/2016	ND					
Surrogate: 1-Chlorooctane	86.8	% 35-147	7						
Surrogate: 1-Chlorooctadecane	101	% 28-171	,						

Surrogate: 1-Chlorooctadecane 101 % 28-171

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Received: 09/23/2016 Sampling Date: 09/21/2016

Reported: 09/26/2016 Sampling Type: Soil

Project Name: ASAU TRUNK LINE RELEASE Sampling Condition: \*\* (See Notes) Sample Received By: Project Number: 30.015.0028N Jodi Henson

Project Location: **ARTESIA** 

### Sample ID: S-16 E. SIDEWALL 5' BGS (H602140-04)

BTEX 8021B	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	09/25/2016	ND	2.26	113	2.00	1.18	
Toluene*	< 0.050	0.050	09/25/2016	ND	2.30	115	2.00	1.47	
Ethylbenzene*	<0.050	0.050	09/25/2016	ND	2.20	110	2.00	1.07	
Total Xylenes*	<0.150	0.150	09/25/2016	ND	6.63	110	6.00	1.11	
Total BTEX	<0.300	0.300	09/25/2016	ND					
Surrogate: 4-Bromofluorobenzene (PID	97.7	% 73.6-14	0						
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	608	16.0	09/23/2016	ND	432	108	400	0.00	
TPH 8015M	mg/	kg	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	09/24/2016	ND	199	99.4	200	2.82	
DRO >C10-C28	<10.0	10.0	09/24/2016	ND	212	106	200	5.31	
EXT DRO >C28-C35	<10.0	10.0	09/24/2016	ND					
Surrogate: 1-Chlorooctane	79.3	% 35-147	,						
Surrogate: 1-Chlorooctadecane	94.2	% 28-171							

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### **Notes and Definitions**

QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS

recovery.

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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# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476

	R.T. Huch Consult ants	BILL TO		
Project Manager: Pike Stu		P.O. #:	- AMACTOR	REQUEST
Address: 2411 S.	13th Strol	Company: LIME ROCK	7RC	
City: Prtotion	0,288	Attn: Mike Barrell		
Phone #: 37,365,508 4 Fax #:		SS:	+	
Project #:	Owner: Lime Rock Res.		20	
Project Name: 125 HW Tronk	Cine release	: Zip:	) 	
Project Location: Ut. & Sec. 15		#	- 1	
5			P C	
FOR LAB USE ONLY	MATRIX	PRESERV SAMPLING		
	RS TER		^	
Hwo2140	G)RAB OR ( # CONTAINE GROUNDWA WASTEWATI GOIL DIL GLUDGE	OTHER: CID/BASE: DE/COOL OTHER:	TPH- BTEX Chlor	
15-13 6 de		9/21/16		
7 5 11 5 5%	chall 5 kg G			
S Wash	a side wall site a	12:11/12/20		
0.10 K " 2/4( )) # [ 5	15 pt 5	1 3/21/16 2:350		
EASE NOTE: Liability and Damages. Cardinal's liability and cli-	nt's exclusive remedy for any daim arising which has been a			
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elinquished By:	of services hereunder, by Cardinal, regardless of whether such daim is based upon any of the above stated resons or otherwise.    Date   Date	sed upon any of the above stated reasons or otherwise.		
00: 180 :00	-		☐ Yes ☐ No Add'I Phone #:	
101 OCCX TUNDONOVOX	1:05/1/2	REMARKS:		

3.80

Sample Condition

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Mite Barrett 2 Line southers. com

105h 000

Sampler - UPS - Bus - Other:

Delivered By: (Circle One)

Time:

Relinquished By: