

Appendix A

Laboratory Analytical Reports

May 22, 2017

HARLEY EVERHART
AKA ENERGY GROUP, LLC
P. O. DRAWER 70
ARTESIA, NM 88211

RE: RHUMBUS STATE UNION #1

Enclosed are the results of analyses for samples received by the laboratory on 05/19/17 15:15.

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/ga/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:

AKA ENERGY GROUP, LLC
HARLEY EVERHART
P. O. DRAWER 70
ARTESIA NM, 88211
Fax To: (575) 677-5152

Received:	05/19/2017	Sampling Date:	05/19/2017
Reported:	05/22/2017	Sampling Type:	Soil
Project Name:	RHUMBUS STATE UNION #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Celey D. Keene
Project Location:	NOT GIVEN		

Sample ID: #1 (H701349-01)
BTEX 8021B

mg/kg

Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/20/2017	ND	1.87	93.3	2.00	1.63	
Toluene*	<0.050	0.050	05/20/2017	ND	1.86	92.8	2.00	1.34	
Ethylbenzene*	<0.050	0.050	05/20/2017	ND	1.94	96.9	2.00	1.70	
Total Xylenes*	<0.150	0.150	05/20/2017	ND	5.47	91.1	6.00	1.36	
Total BTEX	<0.300	0.300	05/20/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 99.8 % 72-148

Chloride, SM4500Cl-B

mg/kg

Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1630	16.0	05/20/2017	ND	448	112	400	7.41	

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	05/22/2017	ND	186	92.9	200	3.03	
DRO >C10-C28	285	10.0	05/22/2017	ND	188	93.8	200	3.70	
EXT DRO >C28-C36	80.4	10.0	05/22/2017	ND					

Surrogate: 1-Chlorooctane 84.4 % 28.3-164

Surrogate: 1-Chlorooctadecane 95.6 % 34.7-157

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

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HARLEY EVERHART
P. O. DRAWER 70
ARTESIA NM, 88211
Fax To: (575) 677-5152

Received:	05/19/2017	Sampling Date:	05/19/2017
Reported:	05/22/2017	Sampling Type:	Soil
Project Name:	RHUMBUS STATE UNION #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Celey D. Keene
Project Location:	NOT GIVEN		

Sample ID: #2 (H701349-02)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/20/2017	ND	1.87	93.3	2.00	1.63	
Toluene*	<0.050	0.050	05/20/2017	ND	1.86	92.8	2.00	1.34	
Ethylbenzene*	<0.050	0.050	05/20/2017	ND	1.94	96.9	2.00	1.70	
Total Xylenes*	<0.150	0.150	05/20/2017	ND	5.47	91.1	6.00	1.36	
Total BTX	<0.300	0.300	05/20/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 101 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3880	16.0	05/20/2017	ND	448	112	400	7.41	

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	05/20/2017	ND	185	92.4	200	4.63	
DRO >C10-C28	<10.0	10.0	05/20/2017	ND	186	92.8	200	5.81	
EXT DRO >C28-C36	<10.0	10.0	05/20/2017	ND					

Surrogate: 1-Chlorooctane 68.5 % 28.3-164

Surrogate: 1-Chlorooctadecane 70.2 % 34.7-157

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

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P. O. DRAWER 70
ARTESIA NM, 88211
Fax To: (575) 677-5152

Received: 05/19/2017
Reported: 05/22/2017
Project Name: RHUMBUS STATE UNION #1
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 05/19/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Caley D. Keene

Sample ID: #3 (H701349-03)
BTEX 8021B

mg/kg

Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/20/2017	ND	1.87	93.3	2.00	1.63	
Toluene*	<0.050	0.050	05/20/2017	ND	1.86	92.8	2.00	1.34	
Ethylbenzene*	<0.050	0.050	05/20/2017	ND	1.94	96.9	2.00	1.70	
Total Xylenes*	<0.150	0.150	05/20/2017	ND	5.47	91.1	6.00	1.36	
Total BTEX	<0.300	0.300	05/20/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 100 % 72-148

Chloride, SM4500Cl-B

mg/kg

Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	05/20/2017	ND	448	112	400	7.41	

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	05/20/2017	ND	185	92.4	200	4.63	
DRO >C10-C28	66.3	10.0	05/20/2017	ND	186	92.8	200	5.81	
EXT DRO >C28-C36	19.3	10.0	05/20/2017	ND					

Surrogate: 1-Chlorooctane 79.0 % 28.3-164

Surrogate: 1-Chlorooctadecane 81.8 % 34.7-157

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Caley D. Keene
Caley D. Keene, Lab Director/Quality Manager

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Received: 05/19/2017
Reported: 05/22/2017
Project Name: RHUMBUS STATE UNION #1
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 05/19/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Celey D. Keene

Sample ID: #4 (H701349-04)
BTEX 80218

mg/kg

Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/20/2017	ND	1.87	93.3	2.00	1.63	
Toluene*	<0.050	0.050	05/20/2017	ND	1.86	92.8	2.00	1.34	
Ethylbenzene*	<0.050	0.050	05/20/2017	ND	1.94	96.9	2.00	1.70	
Total Xylenes*	<0.150	0.150	05/20/2017	ND	5.47	91.1	6.00	1.36	
Total BTEX	<0.300	0.300	05/20/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 98.2 % 72-148

Chloride, SM4500Cl-B

mg/kg

Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	288	16.0	05/20/2017	ND	448	112	400	7.41	

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	05/20/2017	ND	185	92.4	200	4.63	
DRO >C10-C28	1900	10.0	05/20/2017	ND	186	92.8	200	5.81	
EXT DRO >C28-C36	344	10.0	05/20/2017	ND					

Surrogate: 1-Chlorooctane 67.0 % 28.3-164

Surrogate: 1-Chlorooctadecane 82.1 % 34.7-157

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Received: 05/19/2017
Reported: 05/22/2017
Project Name: RHUMBUS STATE UNION #1
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 05/19/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Celey D. Keene

Sample ID: #5 (H701349-05)
BTEX 8021B

mg/kg

Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/20/2017	ND	1.87	93.3	2.00	1.63	
Toluene*	<0.050	0.050	05/20/2017	ND	1.86	92.8	2.00	1.34	
Ethylbenzene*	<0.050	0.050	05/20/2017	ND	1.94	96.9	2.00	1.70	
Total Xylenes*	<0.150	0.150	05/20/2017	ND	5.47	91.1	6.00	1.36	
Total BTEX	<0.300	0.300	05/20/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 99.6 % 72-148

Chloride, SM4500Cl-B

mg/kg

Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1150	16.0	05/20/2017	ND	448	112	400	7.41	

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	05/20/2017	ND	185	92.4	200	4.63	
DRO >C10-C28	60.6	10.0	05/20/2017	ND	186	92.8	200	5.81	
EXT DRO >C28-C36	34.0	10.0	05/20/2017	ND					

Surrogate: 1-Chlorooctane 67.2 % 28.3-164

Surrogate: 1-Chlorooctadecane 66.1 % 34.7-157

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Celey D. Keene
Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 AKA ENERGY GROUP, LLC
 HARLEY EVERHART
 P. O. DRAWER 70
 ARTESIA NM, 88211
 Fax To: (575) 677-5152

 Received: 05/19/2017
 Reported: 05/22/2017
 Project Name: RHUMBUS STATE UNION #1
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 05/19/2017
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Caley D. Keene

Sample ID: #6 (H701349-06)
BTEX 8021B

mg/kg

Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/20/2017	ND	1.87	93.3	2.00	1.63	
Toluene*	<0.050	0.050	05/20/2017	ND	1.86	92.8	2.00	1.34	
Ethylbenzene*	<0.050	0.050	05/20/2017	ND	1.94	96.9	2.00	1.70	
Total Xylenes*	<0.150	0.150	05/20/2017	ND	5.47	91.1	6.00	1.36	
Total BTEX	<0.300	0.300	05/20/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIL)

102 %

72-148

Chloride, SM4500Cl-B

mg/kg

Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	11700	16.0	05/20/2017	ND	448	112	400	7.41	

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	05/20/2017	ND	185	92.4	200	4.63	
DRO >C10-C28	<10.0	10.0	05/20/2017	ND	186	92.8	200	5.81	
EXT DRO >C28-C36	<10.0	10.0	05/20/2017	ND					

Surrogate: 1-Chlorooctane

81.9 %

28.3-164

Surrogate: 1-Chlorooctadecane

84.9 %

34.7-157

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* = Accredited Analyte

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Caley D. Keene, Lab Director/Quality Manager

Analytical Results For:

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HARLEY EVERHART
P. O. DRAWER 70
ARTESIA NM, 88211
Fax To: (575) 677-5152

Received: 05/19/2017
Reported: 05/22/2017
Project Name: RHUMBUS STATE UNION #1
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 05/19/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Caley D. Keene

Sample ID: #7 (H701349-07)
BTEX 8021B

mg/kg

Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/20/2017	ND	1.87	93.3	2.00	1.63	
Toluene*	<0.050	0.050	05/20/2017	ND	1.86	92.8	2.00	1.34	
Ethylbenzene*	<0.050	0.050	05/20/2017	ND	1.94	96.9	2.00	1.70	
Total Xylenes*	<0.150	0.150	05/20/2017	ND	5.47	91.1	6.00	1.36	
Total BTEX	<0.300	0.300	05/20/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 103 % 72-148

Chloride, SM4500Cl-B

mg/kg

Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	05/20/2017	ND	448	112	400	7.41	

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	05/20/2017	ND	185	92.4	200	4.63	
DRO >C10-C28	977	10.0	05/20/2017	ND	186	92.8	200	5.81	
EXT DRO >C28-C36	480	10.0	05/20/2017	ND					

Surrogate: 1-Chlorooctane 71.0 % 28.3-164

Surrogate: 1-Chlorooctadecane 92.7 % 34.7-157

Cardinal Laboratories

*=Accredited Analyte

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Caley D. Keene
Caley D. Keene, Lab Director/Quality Manager

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 ARTESIA NM, 88211
 Fax To: (575) 677-5152

 Received: 05/19/2017
 Reported: 05/22/2017
 Project Name: RHUMBUS STATE UNION #1
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 05/19/2017
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Celey D. Keene

Sample ID: #8 (H701349-08)
BTEX 8021B

mg/kg

Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/20/2017	ND	1.87	93.3	2.00	1.63	
Toluene*	<0.050	0.050	05/20/2017	ND	1.86	92.8	2.00	1.34	
Ethylbenzene*	<0.050	0.050	05/20/2017	ND	1.94	96.9	2.00	1.70	
Total Xylenes*	<0.150	0.150	05/20/2017	ND	5.47	91.1	6.00	1.36	
Total BTEX	<0.300	0.300	05/20/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 101 % 72-148

Chloride, SM4500Cl-B

mg/kg

Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	384	16.0	05/20/2017	ND	448	112	400	7.41	

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	05/20/2017	ND	185	92.4	200	4.63	
DRO >C10-C28	1430	10.0	05/20/2017	ND	186	92.8	200	5.81	
EXT DRO >C28-C36	300	10.0	05/20/2017	ND					

Surrogate: 1-Chlorooctane 70.1 % 28.3-164

Surrogate: 1-Chlorooctadecane 87.4 % 34.7-157

Cardinal Laboratories

* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

AKA ENERGY GROUP, LLC
HARLEY EVERHART
P. O. DRAWER 70
ARTESIA NM, 88211
Fax To: (575) 677-5152

Received:	05/19/2017	Sampling Date:	05/19/2017
Reported:	05/22/2017	Sampling Type:	Soil
Project Name:	RHUMBUS STATE UNION #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Celey D. Keene
Project Location:	NOT GIVEN		

Sample ID: #9 (H701349-09)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/20/2017	ND	1.87	93.3	2.00	1.63	
Toluene*	<0.050	0.050	05/20/2017	ND	1.86	92.8	2.00	1.34	
Ethylbenzene*	<0.050	0.050	05/20/2017	ND	1.94	96.9	2.00	1.70	
Total Xylenes*	<0.150	0.150	05/20/2017	ND	5.47	91.1	6.00	1.36	
Total BTEX	<0.300	0.300	05/20/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIL)		98.6 %	72-148						
Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	496	16.0	05/20/2017	ND	448	112	400	7.41	

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	05/20/2017	ND	185	92.4	200	4.63	
DRO >C10-C28	1970	10.0	05/20/2017	ND	186	92.8	200	5.81	
EXT DRO >C28-C36	391	10.0	05/20/2017	ND					

Surrogate: 1-Chlorooctane 60.8 % 28.3-164

Surrogate: 1-Chlorooctadecane 77.5 % 34.7-157

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

AKA ENERGY GROUP, LLC
HARLEY EVERHART
P. O. DRAWER 70
ARTESIA NM, 88211
Fax To: (575) 677-5152

Received: 05/19/2017
Reported: 05/22/2017
Project Name: RHUMBUS STATE UNION #1
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 05/19/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Celey D. Keene

Sample ID: #10 (H701349-10)
BTEX 8021B

mg/kg

Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/20/2017	ND	1.87	93.3	2.00	1.63	
Toluene*	<0.050	0.050	05/20/2017	ND	1.86	92.8	2.00	1.34	
Ethylbenzene*	<0.050	0.050	05/20/2017	ND	1.94	96.9	2.00	1.70	
Total Xylenes*	<0.150	0.150	05/20/2017	ND	5.47	91.1	6.00	1.36	
Total BTEX	<0.300	0.300	05/20/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 101 % 72-148

Chloride, SM4500Cl-B

mg/kg

Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1500	16.0	05/20/2017	ND	448	112	400	7.41	

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	05/20/2017	ND	185	92.4	200	4.63	
DRO >C10-C28	14.1	10.0	05/20/2017	ND	186	92.8	200	5.81	
EXT DRO >C28-C36	23.1	10.0	05/20/2017	ND					

Surrogate: 1-Chlorooctane 74.1 % 28.3-164

Surrogate: 1-Chlorooctadecane 77.1 % 34.7-157

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 AKA ENERGY GROUP, LLC
 HARLEY EVERHART
 P. O. DRAWER 70
 ARTESIA NM, 88211
 Fax To: (575) 677-5152

 Received: 05/19/2017
 Reported: 05/22/2017
 Project Name: RHUMBUS STATE UNION #1
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 05/19/2017
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Celey D. Keene

Sample ID: X (H701349-11)

BTEX 80218

mg/kg

Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/20/2017	ND	1.87	93.3	2.00	1.63	
Toluene*	<0.050	0.050	05/20/2017	ND	1.86	92.8	2.00	1.34	
Ethylbenzene*	<0.050	0.050	05/20/2017	ND	1.94	96.9	2.00	1.70	
Total Xylenes*	<0.150	0.150	05/20/2017	ND	5.47	91.1	6.00	1.36	
Total BTEX	<0.300	0.300	05/20/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIL)

103 %

72-148

Chloride, SM4500Cl-B

mg/kg

Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	336	16.0	05/20/2017	ND	448	112	400	7.41	

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	05/20/2017	ND	185	92.4	200	4.63	
DRO >C10-C28	998	10.0	05/20/2017	ND	186	92.8	200	5.81	
EXT DRO >C28-C36	212	10.0	05/20/2017	ND					

Surrogate: 1-Chlorooctane

68.7 %

28.3-164

Surrogate: 1-Chlorooctadecane

80.3 %

34.7-157

Cardinal Laboratories

* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 AKA ENERGY GROUP, LLC
 HARLEY EVERHART
 P. O. DRAWER 70
 ARTESIA NM, 88211
 Fax To: (575) 677-5152

 Received: 05/19/2017
 Reported: 05/22/2017
 Project Name: RHUMBUS STATE UNION #1
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 05/19/2017
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Celey D. Keene

Sample ID: #11 (H701349-12)

BTEX 8021B

mg/kg

Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/20/2017	ND	1.87	93.3	2.00	1.63	
Toluene*	<0.050	0.050	05/20/2017	ND	1.86	92.8	2.00	1.34	
Ethylbenzene*	<0.050	0.050	05/20/2017	ND	1.94	96.9	2.00	1.70	
Total Xylenes*	<0.150	0.150	05/20/2017	ND	5.47	91.1	6.00	1.36	
Total BTEX	<0.300	0.300	05/20/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 103 % 72-148

Chloride, SM4500Cl-B

mg/kg

Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	272	16.0	05/20/2017	ND	448	112	400	7.41	

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	05/20/2017	ND	185	92.4	200	4.63	
DRO >C10-C28	22.3	10.0	05/20/2017	ND	186	92.8	200	5.81	
EXT DRO >C28-C36	31.7	10.0	05/20/2017	ND					

Surrogate: 1-Chlorooctane 83.2 % 28.3-164

Surrogate: 1-Chlorooctadecane 86.0 % 34.7-157

Cardinal Laboratories

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Celey D. Keene, Lab Director/Quality Manager

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

Cardinal Laboratories

**=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Alta Energy Project Manager: Alta Energy Address: 1001 Conoco Rd City: Midland State: NM Zip: 88280 Phone #: 575 513 4922 Fax #: 575 513 4922 Project #: 575 513 4922 Project Name: Phonbus Sick Union #1 Project Location: Phonbus Sick Union #1 Sample Name: Heavy Suckshot		P.O. #: 0612 Company: Alta Energy Attn: Alta Energy Address: 1001 Conoco Rd City: Midland State: NM Zip: 88280 Phone #: 575 513 4922 Fax #: 575 513 4922																		
Lab I.D.	Sample I.D.	MATRIX	PRESERV	SAMPLING	ANALYSIS REQUEST															
#10349	#1	GROUNDWATER	ICE / COOL	5-11-13 13:30	TPH															
#2	#2	GROUNDWATER	ICE / COOL	5-11-13 13:30	BTEX															
#3	#3	GROUNDWATER	ICE / COOL	5-11-13 13:30	Chlorides															
#4	#4	GROUNDWATER	ICE / COOL	5-11-13 13:30																
#5	#5	GROUNDWATER	ICE / COOL	5-11-13 13:30																
#6	#6	GROUNDWATER	ICE / COOL	5-11-13 13:30																
#7	#7	GROUNDWATER	ICE / COOL	5-11-13 13:30																
#8	#8	GROUNDWATER	ICE / COOL	5-11-13 13:30																
#9	#9	GROUNDWATER	ICE / COOL	5-11-13 13:30																
#10	#10	GROUNDWATER	ICE / COOL	5-11-13 13:30																

June 28, 2017

HARLEY EVERHART
FRONTIER FIELD SERVICES
4200 SKELLY DRIVE, SUITE 700
TULSA, OK 74135

RE: RHOMBUS

Enclosed are the results of analyses for samples received by the laboratory on 06/27/17 14:45.

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:

FRONTIER FIELD SERVICES
HARLEY EVERHART
4200 SKELLY DRIVE, SUITE 700
TULSA OK, 74135
Fax To: (575) 676-2401

Received: 06/27/2017
Reported: 06/28/2017
Project Name: RHOMBUS
Project Number: REMEDIATION PROJECT
Project Location: NONE GIVEN

Sampling Date: 06/27/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: 2-A (H701679-01)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	06/28/2017	ND	480	120	400	10.5	

Sample ID: 2-B (H701679-02)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	06/28/2017	ND	480	120	400	10.5	

Sample ID: 2-C (H701679-03)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	576	16.0	06/28/2017	ND	480	120	400	10.5	

Sample ID: 6-A (H701679-04)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	864	16.0	06/28/2017	ND	480	120	400	10.5	

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

FRONTIER FIELD SERVICES
HARLEY EVERHART
4200 SKELLY DRIVE, SUITE 700
TULSA OK, 74135
Fax To: (575) 676-2401

Received:	06/27/2017	Sampling Date:	06/27/2017
Reported:	06/28/2017	Sampling Type:	Soil
Project Name:	RHOMBUS	Sampling Condition:	Cool & Intact
Project Number:	REMEDATION PROJECT	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: 6-B (H701679-05)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	432	16.0	06/28/2017	ND	432	108	400	0.00	

Sample ID: 6-C (H701679-06)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	528	16.0	06/28/2017	ND	432	108	400	0.00	

Sample ID: 10-A (H701679-07)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	224	16.0	06/28/2017	ND	432	108	400	0.00	

Sample ID: 10-B (H701679-08)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	06/28/2017	ND	432	108	400	0.00	

Sample ID: 10-C (H701679-09)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1040	16.0	06/28/2017	ND	432	108	400	0.00	

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Celey D. Keene, Lab Director/Quality Manager

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

Cardinal Laboratories

* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

BILL TO

ANALYSIS REQUEST

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

† Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326

June 28, 2017

HARLEY EVERHART

FRONTIER FIELD SERVICES

4200 SKELLY DRIVE, SUITE 700

TULSA, OK 74135

RE: RHOMBUS

Enclosed are the results of analyses for samples received by the laboratory on 06/27/17 14:45.

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.

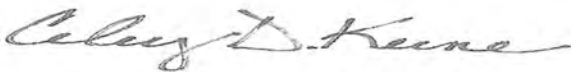
Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

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:

 FRONTIER FIELD SERVICES
 HARLEY EVERHART
 4200 SKELLY DRIVE, SUITE 700
 TULSA OK, 74135
 Fax To: (575) 676-2401

Received:	06/27/2017	Sampling Date:	06/27/2017
Reported:	06/28/2017	Sampling Type:	Soil
Project Name:	RHOMBUS	Sampling Condition:	Cool & Intact
Project Number:	REMEDATION PROJECT	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: REPEAT SAMPLE #1 (H701680-01)

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	688	16.0	06/28/2017	ND	432	108	400	0.00	

Sample ID: REPEAT SAMPLE #5 (H701680-02)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1310	16.0	06/28/2017	ND	432	108	400	0.00	

Cardinal Laboratories

*=Accredited Analyte

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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

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



CARDINAL
Laboratories

101 East Marland, Hobbs, NM 88240

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

Company Name: Twentier Field Services (Mile Group)
Project Manager: _____

Address: Pekey 1001 Lewis Rd

City: *Madison* State: *Ala* Zip: *38264*
Phone #: _____ Fax #: _____

Project #:	Project Owner:

Project Name: *Phacelia chlorita* *ReFS*
Project Location: *ReFS*

FOR LAB USE ONLY

Sampler Name: Hecky Suckoff

FOR LAB USE ONLY

Lab I.D.	Sample I.D.

14701680

- 1 Report Sample #1
- 2 Report Sample #5

(G)RAB OR (C)OMP.	
# CONTAINERS	
GROUNDWATER	
WASTEWATER	
SOIL	
OIL	
SLUDGE	
OTHER :	
ACID/BASE:	
CE / COOL	
OTHER :	

DATE	TIME
2017	

Chlorides

BILL TO

ANALYSIS REQUEST

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 4 of 4

PLEASE NOTE: Lobby and Direct, Corporate Lobby and Directs exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the claimant for the services. All claims involving money for negligence and any other cause whatsoever shall be limited to the amount paid by the claimant for the services. In no event shall Claimant be liable for individual or consequential damages, including without limitation, business interruption, loss of data, loss of profits, incurred by client, its subsidiaries, affiliates, successors, assigns and/or related to the performance of services. Networked by Cardinal

Reimbursement By: Cardinal (signature)
Date: 6-26-07 (date)

Relinquished By

Date:

Received By:

Reinquished By:

Date: _____

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Delivered By: (Circle One)

Time: 2:11

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Sampler - UPS - Bus - Other:

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† Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326

June 29, 2017

HARLEY EVERHART

FRONTIER FIELD SERVICES

4200 SKELLY DRIVE, SUITE 700

TULSA, OK 74135

RE: RHOMBUS

Enclosed are the results of analyses for samples received by the laboratory on 06/29/17 7:55.

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:

FRONTIER FIELD SERVICES
HARLEY EVERHART
4200 SKELLY DRIVE, SUITE 700
TULSA OK, 74135
Fax To: (575) 676-2401

Received: 06/29/2017
Reported: 06/29/2017
Project Name: RHOMBUS
Project Number: CHLORIDE RESAMPLES
Project Location: NONE GIVEN

Sampling Date: 06/29/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: 6- A (H701704-01)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	800	16.0	06/29/2017	ND	464	116	400	7.14	

Sample ID: 6- B (H701704-02)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1440	16.0	06/29/2017	ND	464	116	400	7.14	

Sample ID: 6- C (H701704-03)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	784	16.0	06/29/2017	ND	464	116	400	7.14	

Sample ID: 10- A (H701704-04)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	06/29/2017	ND	464	116	400	7.14	

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

FRONTIER FIELD SERVICES
HARLEY EVERHART
4200 SKELLY DRIVE, SUITE 700
TULSA OK, 74135
Fax To: (575) 676-2401

Received: 06/29/2017
Reported: 06/29/2017
Project Name: RHOMBUS
Project Number: CHLORIDE RESAMPLES
Project Location: NONE GIVEN

Sampling Date: 06/29/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: 10 - B (H701704-05)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	06/29/2017	ND	464	116	400	7.14	

Sample ID: 10 - C (H701704-06)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	06/29/2017	ND	464	116	400	7.14	

Sample ID: REPEAT SAMPLE #1 (H701704-07)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1220	16.0	06/29/2017	ND	464	116	400	7.14	

Sample ID: REPEAT SAMPLE #2 (H701704-08)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	480	16.0	06/29/2017	ND	464	116	400	7.14	

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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

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Frontier Field Service (H&E Energy)
Project Manager:

P.O. #:

ANALYSIS REQUEST

Address: 1001 Canoco Rd.

City: Maljamar State: NM Zip: 88244

Phone #: 575-5134522 Fax #:

Project #:

Project Name: Rhombus Elbert Reservoir

Project Location: Rhombus location

Sampler Name: Holly Runkle

FOR LAB USE ONLY

Company:

Attn:

Address:

City:

State:

Zip:

Phone #:

Fax #:

Lab I.D. Sample I.D.

4701704

1 C-A

2 C-B

3 C-C

4 C-D

5 C-E

6 C-F

7 Repeat Sample #1

8 Repeat Sample #2

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July 05, 2017

HARLEY EVERHART

FRONTIER FIELD SERVICES

4200 SKELLY DRIVE, SUITE 700

TULSA, OK 74135

RE: RHOMBUS

Enclosed are the results of analyses for samples received by the laboratory on 06/30/17 16:10.

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:

FRONTIER FIELD SERVICES
HARLEY EVERHART
4200 SKELLY DRIVE, SUITE 700
TULSA OK, 74135
Fax To: (575) 676-2401

Received: 06/30/2017
Reported: 07/05/2017
Project Name: RHOMBUS
Project Number: CHLORIDE RESAMPLE
Project Location: NONE GIVEN

Sampling Date: 06/30/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: REPEAT SAMPLE #1 (H701732-01)

Chloride, SM4500Cl-B			Analyzed By: AC							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	848	16.0	07/05/2017	ND	416	104	400	3.77		

Sample ID: 6- A (H701732-02)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	384	16.0	07/05/2017	ND	416	104	400	3.77	

Sample ID: 6- B (H701732-03)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	464	16.0	07/05/2017	ND	416	104	400	3.77	

Sample ID: 6- C (H701732-04)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	07/05/2017	ND	416	104	400	3.77	

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

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

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

July 07, 2017

HARLEY EVERHART

FRONTIER FIELD SERVICES

4200 SKELLY DRIVE, SUITE 700

TULSA, OK 74135

RE: RHOMBUS

Enclosed are the results of analyses for samples received by the laboratory on 07/06/17 15:06.

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/ga/lab_accred_certif.html.

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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,

Celest D. Keene

Lab Director/Quality Manager

Analytical Results For:

FRONTIER FIELD SERVICES
HARLEY EVERHART
4200 SKELLY DRIVE, SUITE 700
TULSA OK, 74135
Fax To: (575) 676-2401

Received: 07/06/2017
Reported: 07/07/2017
Project Name: RHOMBUS
Project Number: CHLORIDE REPEAT
Project Location: NONE GIVEN

Sampling Date: 07/06/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: CHLORIDE REPEAT SAMPLE #1 (H701745-01)

Chloride, SM4500CI-B

mg/kg

Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	07/06/2017	ND	432	108	400	0.00	

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

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

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

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PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

October 11, 2017

HARLEY EVERHART

FRONTIER FIELD SERVICES

4200 SKELLY DRIVE, SUITE 700

TULSA, OK 74135

RE: RHOMBUS

Enclosed are the results of analyses for samples received by the laboratory on 10/10/17 13:26.

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.

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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:

FRONTIER FIELD SERVICES
HARLEY EVERHART
4200 SKELLY DRIVE, SUITE 700
TULSA OK, 74135
Fax To: (575) 676-2401

Received:	10/10/2017	Sampling Date:	10/10/2017
Reported:	10/11/2017	Sampling Type:	Soil
Project Name:	RHOMBUS	Sampling Condition:	Cool & Intact
Project Number:	REMEDIATION PROJECT/ TPH CONC.	Sample Received By:	Jodi Henson
Project Location:	NONE GIVEN		

Sample ID: #4 - TPH CONCENTRATION LEVELS (H702723-01)

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	10/10/2017	ND	224	112	200	3.60	
DRO >C10-C28	<10.0	10.0	10/10/2017	ND	230	115	200	8.94	
EXT DRO >C28-C36	<10.0	10.0	10/10/2017	ND					
<hr/>									
Surrogate: 1-Chlorooctane	77.7 %	28.3-164							
Surrogate: 1-Chlorooctadecane	77.1 %	34.7-157							

Sample ID: #7 - TPH CONCENTRATION LEVELS (H702723-02)

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	10/10/2017	ND	224	112	200	3.60	
DRO >C10-C28	<10.0	10.0	10/10/2017	ND	230	115	200	8.94	
EXT DRO >C28-C36	<10.0	10.0	10/10/2017	ND					
<hr/>									
Surrogate: 1-Chlorooctane	70.9 %	28.3-164							
Surrogate: 1-Chlorooctadecane	67.7 %	34.7-157							

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

FRONTIER FIELD SERVICES
HARLEY EVERHART
4200 SKELLY DRIVE, SUITE 700
TULSA OK, 74135
Fax To: (575) 676-2401

Received:	10/10/2017	Sampling Date:	10/10/2017
Reported:	10/11/2017	Sampling Type:	Soil
Project Name:	RHOMBUS	Sampling Condition:	Cool & Intact
Project Number:	REMEDIATION PROJECT/ TPH CONC.	Sample Received By:	Jodi Henson
Project Location:	NONE GIVEN		

Sample ID: #8 - TPH CONCENTRATION LEVELS (H702723-03)

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	10/10/2017	ND	224	112	200	3.60	
DRO >C10-C28	<10.0	10.0	10/10/2017	ND	230	115	200	8.94	
EXT DRO >C28-C36	<10.0	10.0	10/10/2017	ND					
<hr/>									
Surrogate: 1-Chlorooctane	63.1 %	28.3-164							
Surrogate: 1-Chlorooctadecane	59.5 %	34.7-157							

Sample ID: #9 - TPH CONCENTRATION LEVELS (H702723-04)

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	10/10/2017	ND	224	112	200	3.60	
DRO >C10-C28	<10.0	10.0	10/10/2017	ND	230	115	200	8.94	
EXT DRO >C28-C36	<10.0	10.0	10/10/2017	ND					
<hr/>									
Surrogate: 1-Chlorooctane	66.4 %	28.3-164							
Surrogate: 1-Chlorooctadecane	61.4 %	34.7-157							

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

FRONTIER FIELD SERVICES
HARLEY EVERHART
4200 SKELLY DRIVE, SUITE 700
TULSA OK, 74135
Fax To: (575) 676-2401

Received:	10/10/2017	Sampling Date:	10/10/2017
Reported:	10/11/2017	Sampling Type:	Soil
Project Name:	RHOMBUS	Sampling Condition:	Cool & Intact
Project Number:	REMEDIATION PROJECT/ TPH CONC.	Sample Received By:	Jodi Henson
Project Location:	NONE GIVEN		

Sample ID: #X - TPH CONCENTRATION LEVELS (H702723-05)

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	10/10/2017	ND	224	112	200	3.60	
DRO >C10-C28	<10.0	10.0	10/10/2017	ND	230	115	200	8.94	
EXT DRO >C28-C36	<10.0	10.0	10/10/2017	ND					
<hr/>									
Surrogate: 1-Chlorooctane	55.6 %	28.3-164							
Surrogate: 1-Chlorooctadecane	55.9 %	34.7-157							

Cardinal Laboratories

*=Accredited Analyte

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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

Cardinal Laboratories

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Celey D. Keene, Lab Director/Quality Manager



CARDINAL Laboratories

Rush

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Frontier Field Services (Mtn Energy)
Project Manager: _____

BILL TO

ANALYSIS REQUEST

Address: 1001 Cenozo Rd.

P.O. #:

City: Mojave State: NM Zip: 88260

Company:

Phone #: 575 5134922 Fax #: _____

Attn:

Project #: _____ Project Owner: _____

City: g

Project Name: TPH Concentration

State: _____ Zip: _____

Project Location: Chem bus Remediation Project

Phone #: _____

Sampler Name: Andy Everhart

Fax #: _____

FOR LAB USE ONLY

Lab I.D.

Sample I.D.

HTD2723

(G)RAB OR (C)OMP.

CONTAINERS

GROUNDWATER

WASTEWATER

SOIL

OIL

SLUDGE

OTHER :

ACID/BASE:

ICE / COOL

OTHER :

DATE

TIME

TPH Concentrations

1	#4 - TPH Concentration	10/16	11:05	1
2	#7 - " "	10/16	11:11	1
3	#8 - " "	10/16	11:38	1
4	#9 - " "	10/16	12:27	1
5	#X - " "	10/16	11:40	1

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Relinquished By: _____ Date: 10-16-13

Received By: _____

Relinquished By: _____ Date: 1-26

Received By: Shari Jensen

Delivered By: (Circle One) #75 Date: 2.6.12.850

Sample Condition

CHECKED BY: _____

Sampler - UPS - Bus - Other: _____

Sample Condition

CHECKED BY: _____

Phone Result: ☐ Yes ☐ No Add'l Phone #: _____
Fax Result: ☐ Yes ☐ No Add'l Fax #: _____

REMARKS:

Email Result: _____

Never heard of akasenergy.com

Rush



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

October 11, 2017

HARLEY EVERHART

FRONTIER FIELD SERVICES

4200 SKELLY DRIVE, SUITE 700

TULSA, OK 74135

RE: RHOMBUS

Enclosed are the results of analyses for samples received by the laboratory on 10/10/17 13:26.

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,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

FRONTIER FIELD SERVICES
HARLEY EVERHART
4200 SKELLY DRIVE, SUITE 700
TULSA OK, 74135
Fax To: (575) 676-2401

Received:	10/10/2017	Sampling Date:	10/10/2017
Reported:	10/11/2017	Sampling Type:	Soil
Project Name:	RHOMBUS	Sampling Condition:	Cool & Intact
Project Number:	AUGERED SAMPLES (CHLORIDES)	Sample Received By:	Jodi Henson
Project Location:	NONE GIVEN		

Sample ID: #1 (AUGARED CHLORIDE SAMPLE) (H702724-01)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	10/11/2017	ND	432	108	400	3.64	

Sample ID: #5 (AUGARED CHLORIDE SAMPLE) (H702724-02)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	10/11/2017	ND	432	108	400	3.64	

Sample ID: #10 (AUGARED CHLORIDE SAMPLE) (H702724-03)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	10/11/2017	ND	432	108	400	3.64	

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

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

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 4 of 4



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

October 12, 2017

HARLEY EVERHART

FRONTIER FIELD SERVICES

4200 SKELLY DRIVE, SUITE 700

TULSA, OK 74135

RE: RHOMBUS

Enclosed are the results of analyses for samples received by the laboratory on 10/10/17 13:26.

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:

 FRONTIER FIELD SERVICES
 HARLEY EVERHART
 4200 SKELLY DRIVE, SUITE 700
 TULSA OK, 74135
 Fax To: (575) 676-2401

Received:	10/10/2017	Sampling Date:	10/10/2017
Reported:	10/12/2017	Sampling Type:	Soil
Project Name:	RHOMBUS	Sampling Condition:	Cool & Intact
Project Number:	E. OF THE RELEASE LOCATION	Sample Received By:	Jodi Henson
Project Location:	NONE GIVEN		

Sample ID: EAST OF LEAK LOCATION (H702725-01)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/11/2017	ND	1.97	98.4	2.00	0.444	
Toluene*	<0.050	0.050	10/11/2017	ND	1.78	89.1	2.00	0.693	
Ethylbenzene*	<0.050	0.050	10/11/2017	ND	1.83	91.5	2.00	0.604	
Total Xylenes*	<0.150	0.150	10/11/2017	ND	5.63	93.8	6.00	0.116	
Total BTX	<0.300	0.300	10/11/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID) 111 % 72-148

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	10/11/2017	ND	432	108	400	3.64		

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	10/10/2017	ND	224	112	200	3.60	
DRO >C10-C28	<10.0	10.0	10/10/2017	ND	230	115	200	8.94	
EXT DRO >C28-C36	<10.0	10.0	10/10/2017	ND					

Surrogate: 1-Chlorooctane 77.4 % 28.3-164

Surrogate: 1-Chlorooctadecane 81.1 % 34.7-157

Cardinal Laboratories

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

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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

Cardinal Laboratories

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Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Feather Field Service (Alba Energy)		BILL TO		ANALYSIS REQUEST	
Project Manager:		P.O. #:			
Address: 1001 Conoco Rd.		Company:			
City: Midland		Attn:			
State: NM Zip: 88280		Address:			
Phone #: 505 515-9222 Fax #:		City:			
Project #:		State:			
Project Owner:		Zip:			
Project Location: East of The Release location		Phone #:			
Sampler Name: Early Conduct		Fax #:			
FOR LAB USE ONLY					
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.			
H702728	East of leak location	# CONTAINERS			
		GROUNDWATER			
		WASTEWATER			
		SOIL			
		OIL			
		SLUDGE			
		OTHER :			
		ACID/BASE:			
		ICE / COOL			
		OTHER :			
		DATE	TIME		
		2017	10:10		
		X	TPH		
		X	STEX		
		X	Chlorides		
		X	Extended		

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Relinquished By:	Date: 10.10.17	Received By:	Date: 10.10.17
<i>[Signature]</i>		<i>[Signature]</i>	
Delivered By: (Circle One) #75	Time: 2.00 PM	Received By:	Time: 2.00 PM
Sampler - UPS - Bus - Other: 2.00 PM / 2.00 PM		<i>[Signature]</i>	

Sample Condition
Cool ☒ Intact ☒
Yes Yes
No No

CHECKED BY: (Initials) *[Signature]*

REMARKS:
Early results
Westward @ albaenergy.com

Phone Result: ☐ Yes ☐ No **Add'l Phone #:**
Fax Result: ☐ Yes ☐ No **Add'l Fax #:**



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

October 18, 2017

HARLEY EVERHART

FRONTIER FIELD SERVICES

4200 SKELLY DRIVE, SUITE 700

TULSA, OK 74135

RE: RHOMBUS

Enclosed are the results of analyses for samples received by the laboratory on 10/12/17 13:00.

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:

FRONTIER FIELD SERVICES
HARLEY EVERHART
4200 SKELLY DRIVE, SUITE 700
TULSA OK, 74135
Fax To: (575) 676-2401

Received:	10/12/2017	Sampling Date:	10/12/2017
Reported:	10/18/2017	Sampling Type:	Soil
Project Name:	RHOMBUS	Sampling Condition:	Cool & Intact
Project Number:	TPH CONCENTRATION 2FT AUGER HOLE	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: #4 - TPH CONCENTRATION AUGER HOLES (H702761-01)

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	10/13/2017	ND	216	108	200	4.83	
DRO >C10-C28	<10.0	10.0	10/13/2017	ND	229	114	200	8.00	
EXT DRO >C28-C36	<10.0	10.0	10/13/2017	ND					
<hr/>									
Surrogate: 1-Chlorooctane	74.8 %	28.3-164							
Surrogate: 1-Chlorooctadecane	76.1 %	34.7-157							

Sample ID: #7 - TPH CONCENTRATION AUGER HOLES (H702761-02)

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	10/13/2017	ND	216	108	200	4.83	
DRO >C10-C28	<10.0	10.0	10/13/2017	ND	229	114	200	8.00	
EXT DRO >C28-C36	<10.0	10.0	10/13/2017	ND					
<hr/>									
Surrogate: 1-Chlorooctane	70.1 %	28.3-164							
Surrogate: 1-Chlorooctadecane	65.9 %	34.7-157							

Cardinal Laboratories

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

FRONTIER FIELD SERVICES
HARLEY EVERHART
4200 SKELLY DRIVE, SUITE 700
TULSA OK, 74135
Fax To: (575) 676-2401

Received:	10/12/2017	Sampling Date:	10/12/2017
Reported:	10/18/2017	Sampling Type:	Soil
Project Name:	RHOMBUS	Sampling Condition:	Cool & Intact
Project Number:	TPH CONCENTRATION 2FT AUGER HOLE	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: #8 - TPH CONCENTRATION AUGER HOLES (H702761-03)

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	10/13/2017	ND	216	108	200	4.83	
DRO >C10-C28	<10.0	10.0	10/13/2017	ND	229	114	200	8.00	
EXT DRO >C28-C36	<10.0	10.0	10/13/2017	ND					
<hr/>									
Surrogate: 1-Chlorooctane	68.7 %	28.3-164							
Surrogate: 1-Chlorooctadecane	70.0 %	34.7-157							

Sample ID: #9 - TPH CONCENTRATION AUGER HOLES (H702761-04)

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	10/13/2017	ND	216	108	200	4.83	
DRO >C10-C28	<10.0	10.0	10/13/2017	ND	229	114	200	8.00	
EXT DRO >C28-C36	<10.0	10.0	10/13/2017	ND					
<hr/>									
Surrogate: 1-Chlorooctane	63.6 %	28.3-164							
Surrogate: 1-Chlorooctadecane	62.8 %	34.7-157							

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

FRONTIER FIELD SERVICES
HARLEY EVERHART
4200 SKELLY DRIVE, SUITE 700
TULSA OK, 74135
Fax To: (575) 676-2401

Received:	10/12/2017	Sampling Date:	10/12/2017
Reported:	10/18/2017	Sampling Type:	Soil
Project Name:	RHOMBUS	Sampling Condition:	Cool & Intact
Project Number:	TPH CONCENTRATION 2FT AUGER HOLE	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: #10 - TPH CONCENTRATION AUGER HOLES (H702761-05)

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	10/16/2017	ND	192	96.2	200	3.71		
DRO >C10-C28	<10.0	10.0	10/16/2017	ND	213	107	200	5.52		
EXT DRO >C28-C36	<10.0	10.0	10/16/2017	ND						
<hr/>										
Surrogate: 1-Chlorooctane	68.3 %	28.3-164								
Surrogate: 1-Chlorooctadecane	74.4 %	34.7-157								

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
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



Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: <u>Proter Field Services (aka Energy)</u>		P.O. #:		BILL TO												ANALYSIS REQUEST													
Project Manager:		Company:																											
Address: <u>1001 Emeco Rd.</u>		Attn:																											
City: <u>McAlister</u>		Address:																											
Phone #: <u>505 513 4922</u>		City:																											
Fax #: <u></u>		State:																											
Project #:		Zip:																											
Project Name: <u>TPH Concentration 2' Huger Lakes</u>		Phone #:																											
Project Location: <u>Pharmas Remediation Project</u>		Fax #:																											
Sampler Name: <u>Holly Burkhardt</u>		PRESERV:																											
FOR LAB USE ONLY		SAMPLING																											
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															
<u>H702761</u>	<u>44-TPH Concentration Huger Lakes</u>	<u>✓</u>	<u>1</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>10-12</u>	<u>7:45</u>	<u>✓</u>														
<u>1</u>	<u>44-TPH Concentration Huger Lakes</u>	<u>✓</u>	<u>1</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>10-12</u>	<u>7:50</u>	<u>✓</u>														
<u>2</u>	<u>44-TPH Concentration Huger Lakes</u>	<u>✓</u>	<u>1</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>10-12</u>	<u>8:00</u>	<u>✓</u>														
<u>3</u>	<u>44-TPH Concentration Huger Lakes</u>	<u>✓</u>	<u>1</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>10-12</u>	<u>8:06</u>	<u>✓</u>														
<u>4</u>	<u>44-TPH Concentration Huger Lakes</u>	<u>✓</u>	<u>1</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>10-12</u>	<u>8:17</u>	<u>✓</u>														
<u>5</u>	<u>44-TPH Concentration Huger Lakes</u>	<u>✓</u>	<u>1</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>10-12</u>	<u>8:17</u>	<u>✓</u>														
PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising from this contract or tort, shall be limited to the amount paid by the client for the analysis. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits, incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.																													
Relinquished By: <u>[Signature]</u>		Date: <u>10-12-17</u>		Received By: <u>[Signature]</u>		Date: <u>10-12-17</u>		Time: <u>1:00</u>		Sample Condition		CHECKED BY: <u>[Signature]</u>		REMARKS: <u>Emilio P. 115</u>		Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #: <u>Heuerhard@akenergy.com</u>													
Relinquished By: <u>[Signature]</u>		Date: <u>10-12-17</u>		Received By: <u>[Signature]</u>		Date: <u>10-12-17</u>		Time: <u>1:00</u>		Sample Condition		CHECKED BY: <u>[Signature]</u>		REMARKS: <u>Emilio P. 115</u>		Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #: <u>Heuerhard@akenergy.com</u>													
Delivered By: (Circle One) <u>2.52</u>		State: <u>NM</u> Zip: <u>88240</u>		City: <u>McAlister</u>		Address: <u>1001 Emeco Rd.</u>		Phone #: <u>505 513 4922</u>		Fax #: <u></u>		Project #:		Project Name: <u>TPH Concentration 2' Huger Lakes</u>		Project Location: <u>Pharmas Remediation Project</u>		Sampler - UPS - Bus - Other: <u>Corrected 2.752</u>											

† Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326

Appendix B

Initial C141 Form

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in
accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	Frontier Field Services, LLC	Contact	John Prentiss
Address	65 Mercado Street, Suite 250, Durango, CO 81301	Telephone No.	575-676-3528
Facility Name	Rhombus Union St Com 1	Facility Type	Gas/Condensate transport line
Surface Owner	Frontier Field Services, LLC	Mineral Owner	
		API No.	N/A

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
D	32	18S	34E					Lea

Latitude 32.709870 N Longitude -103.588519 W

NATURE OF RELEASE

Type of Release	LOPC of heavy condensate from buried pipeline	Volume of Release Estimated	~10-15bbl.	Volume Recovered:	0% liquids recovered from surface. Pipeline Repair Completed.
Source of Release	Pinhole leak discovered in buried heavy condensate pipeline	Date and Hour of Occurrence	Unknown	Date and Hour of Discovery	04/02/2017 @ 16:30 hrs.
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	olivia.yu@state.nm.us		
By Whom?	Harley Everhart - EHS Technician III	Date and Hour	04/04/2017 @ ~10:43 hrs.		
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	N/A		

RECEIVED

By Olivia Yu at 4:22 pm, Apr 07, 2017

If a Watercourse was Impacted, Describe Fully.*
N/A



Describe Cause of Problem and Remedial Action Taken.*

On 04/02/2017, Frontier received a call from a pumper in the area about a possible leak located in the PLSS. Frontier dispatched field personnel to identify the leak. When the pipeline was identified as Rhombus Union St Com 1, the pipeline was immediately blocked in. Notifications were made internally to the Environmental Group on 4/3/2017. On 04/04/2017 Frontier estimated the release ~10 - 15bbl and made immediate notifications to NMOCD. Excavation will be commenced to delineate and remove contaminated soils and to restore the integrity of the pipeline.

Describe Area Affected and Cleanup Action Taken.* OCD Pre-Approved Remediation Plan:

The cause and conditions of the leak were identified and alleviated by repairing a section of the Rhombus Union St Com 1 Pipeline. Excavation of impacted soils will continue until TPH, BTEX, and Benzene levels are below the levels outlined in the "NMOCD Guidelines for Remediation of Leaks, Spills, and Releases." Impacted soil will be transported to an OCD approved facility for disposal, and the area will be backfilled with clean soil. If the cap-rock (caliche) formation is reached, Frontier will discontinue excavating, obtain samples, and place a 20mil plastic liner over the area and backfill with clean soil. Should the depth of the excavation exceed six foot below the surface with a minimum of one foot under the pipeline, Frontier will discontinue excavating, collect samples, place a 20mil plastic liner over the area including under the pipeline and backfill with clean soil. Following completion, Frontier will submit a final C-141 requesting closure and including all supporting documentation.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: 	OIL CONSERVATION DIVISION	
Printed Name: Harley Everhart	Approved by Environmental Specialist: 	
Title: EHS Technician III	Approval Date: 4/7/2017	Expiration Date:
E-mail Address: heverhart@akaenergy.com	Conditions of Approval: see attached directive	Attached <input checked="" type="checkbox"/>
Date: 04/07/2017	Phone: 575-513-4922	

* Attach Additional Sheets If Necessary

1RP-4671

fOY1709759230

nOY1709759344

pOY1709759712

Operator/Responsible Party,

The OCD has received the form C-141 you provided on 4/7/2017 regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number 1R-4671 has been assigned. **Please refer to this case number in all future correspondence.**

It is the Division's obligation under both the Oil & Gas Act and Water Quality Act to provide for the protection of public health and the environment. Our regulations (19.15.29.11 NMAC) state the following,

The responsible person shall complete division-approved corrective action for releases that endanger public health or the environment. The responsible person shall address releases in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with 19.15.30 NMAC. [emphasis added]

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. **As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District 1 office in Hobbs on or before 5/7/2017. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.**

The goals of a characterization effort are: 1) determination of the lateral and vertical extents along with the magnitude of soil contamination. 2) determine if groundwater or surface waters have been impacted. 3) If groundwater or surface waters have been impacted, what are the extents and magnitude of that impact. 4) The characterization of any other adverse impacts that may have occurred (examples: impacts on vegetation, impacts on wildlife, air quality, loss of use of property, etc.). To meet these goals as quickly as possible, the following items must, at a minimum, be addressed in the release characterization workplan and subsequent reporting:

- Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C₆ thru C₃₆), and for chloride by Method 300. This is not an exclusive list of potential contaminants. Analyzed parameters should be modified based on the nature of the released substance(s). Soil sampling must be both within the impacted area and beyond.
- Vertical delineation of soil impacts. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C₆ thru C₃₆), and for chloride by Method 300. As above, this is not an exclusive list of potential contaminants and can be modified. Vertical characterization samples should be taken at depth intervals no greater than five feet apart. Lithologic description of encountered soils must also be provided. At least ten vertical feet of soils with contaminant concentrations at or below these values must be demonstrated as existing above the water table.
- Nominal detection limits for field and laboratory analyses must be provided.
- Composite sampling is not generally allowed.
- Field screening and assessment techniques are acceptable (headspace, titration, EC [include algorithm for validation purposes], EM, etc.), but the sampling and assay procedures must be clearly defined. Copies of field notes are highly desirable. A statistically significant set of split samples must be submitted for confirmatory laboratory analysis, including the laterally farthest and vertically deepest sets of soil samples. Make sure there are at least two soil samples submitted

for laboratory analysis from each borehole or test pit (highest observed contamination and deepest depth investigated). Copies of the actual laboratory results must be provided including chain of custody documentation.

- Probable depth to shallowest protectable groundwater and lateral distance to nearest surface water. If there is an estimate of groundwater depth, the information used to arrive at that estimate must be provided. If there is a reasonable assumption that the depth to protectable water is 50 feet or less, the responsible party should anticipate the need for at least one groundwater monitoring well to be installed in the area of likely maximum contamination.

- If groundwater contamination is encountered, an additional investigation workplan may be required to determine the extents of that contamination. Groundwater and/or surface water samples, if any, must be analyzed by a competent laboratory for volatile organic hydrocarbons (typically Method 8260 full list), total dissolved solids, pH, major anions and cations including chloride and sulfate, dissolved iron, and dissolved manganese. The investigation workplan must provide the groundwater sampling method(s) and sample handling protocols. To the fullest extent possible, aqueous analyses must be undertaken using nominal method detection limits. As with the soil analyses, copies of the actual laboratory results must be provided including chain of custody documentation.

- Accurately scaled and well-drafted site maps must be provided providing the location of borings, test pits, monitoring wells, potentially impacted areas, and significant surface features including roads and site infrastructure that might limit either the release characterization or remedial efforts. Field sketches may be included in subsequent reporting, but should not be considered stand-alone documentation of the site's layout. Digital photographic documentation of the location and fieldwork is recommended, especially if unusual circumstances are encountered.

Nothing herein should be interpreted to preclude emergency response actions or to imply immediate remediation by removal cannot proceed as warranted. Nonetheless, characterization of impacts and confirmation of the effectiveness of remedial efforts must still be provided to the OCD before any release incident will be closed.

Jim Griswold

OCD Environmental Bureau Chief
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
505-476-3465
jim.griswold@state.nm.us

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
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1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in
accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company Frontier Field Services, LLC	Contact John Prentiss	
Address 65 Mercado Street, Suite 250, Durango, CO 81301	Telephone No. 575-676-3528	
Facility Name Rhombus Union St Com 1	Facility Type Gas/Condensate transport line	
Surface Owner Frontier Field Services, LLC	Mineral Owner	API No. N/A

LOCATION OF RELEASE

Unit Letter	Section 29	Township 18S	Range 34E	Feet from the	North/South Line	Feet from the	East/West Line	County Lea
-------------	----------------------	------------------------	---------------------	---------------	------------------	---------------	----------------	----------------------

Latitude **32.709870 N** Longitude **-103.588519 W**

NATURE OF RELEASE

Type of Release LOPC of heavy condensate from buried pipeline	Volume of Release Estimated ~10-15bbl.	Volume Recovered: 0% liquids recovered from surface. Pipeline Repair Completed.
Source of Release Pinhole leak discovered in buried heavy condensate pipeline	Date and Hour of Occurrence Unknown	Date and Hour of Discovery 04/02/2017 @ 16:30 hrs.
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Alivia Yu – NMOCD Alivia.yu@state.nm.us	
By Whom? Harley Everhart – EHS Technician III	Date and Hour 04/04/2017 @ ~10:43 hrs.	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. N/A	
If a Watercourse was Impacted, Describe Fully.* N/A		

Describe Cause of Problem and Remedial Action Taken.*

On 04/02/2017, Frontier received a call from a pumper in the area about a possible leak located in the PLSS. Frontier dispatched field personnel to identify the leak. When the pipeline was identified as Rhombus Union St Com 1, the pipeline was immediately blocked in. Notifications were made internally to the Environmental Group on 4/3/2017. On 04/04/2017 Frontier estimated the release ~10 - 15bbl and made immediate notifications to NMOCD. Excavation will be commenced to delineate and remove contaminated soils and to restore the integrity of the pipeline.

Describe Area Affected and Cleanup Action Taken.*

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This remediation project will be completed upon final approval from NMOCD

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: <i>Harley Everhart</i>		<u>OIL CONSERVATION DIVISION</u>	
Printed Name: Harley Everhart			
Title: EHS Technician III	Approval Date:	Expiration Date:	
E-mail Address: heverhart@akaenergy.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: 07-13-2017	Phone: 575-513-4922		

* Attach Additional Sheets If Necessary

Appendix C

NMSE Well Data



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
L 10202	L	LE		4	4	28	18S	34E		635065	3620414*	2422	70	50	20
L 13563 POD1	L	LE		4	4	4	20	18S	34E	633506	3621920	2626	200		
L 10236	L	LE		3	3	27	18S	34E		635466	3620420*	2791			
L 10344 POD2	L	LE		3	3	27	18S	34E		635466	3620420*	2791	142	112	30
L 05851	L	LE			1	34	18S	34E		635681	3619816*	2837	240	85	155
L 10346	L	LE			3	20	18S	34E		632425	3622187*	2853	130		
L 10436	L	LE			3	20	18S	34E		632425	3622187*	2853	120	80	40
L 13634 POD1	L	LE		3	3	3	27	18S	34E	635304	3621051	2950	182	152	30

Average Depth to Water: **95 feet**

Minimum Depth: **50 feet**

Maximum Depth: **152 feet**

Record Count: 8

Basin/County Search:

Basin: Lea County

County: Lea

UTMNAD83 Radius Search (in meters):

Easting (X): 632879

Northing (Y): 3619370

Radius: 3000

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

5/23/17 12:58 PM

Page 1 of 1

WATER COLUMN/ AVERAGE
DEPTH TO WATER



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters)

No records found.

Basin/County Search:

Basin: Lea County

County: Lea

PLSS Search:

Section(s): 32

Township: 18S

Range: 34E

The data is furnished by the NAD83 ISC and is accepted by the recipient with the expressed understanding that the OSE ISC makes no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

4/10/17 9:12 AM

WATER COLUMN/ AVERAGE
DEPTH TO WATER