





Permian Basin

Customer: Frontier Field Services
Customer #: CRI2900
Ordered by: JESSE CUETO
AFE #:
PO #:
Manifest #: 66939
Manif. Date: 6/22/2015
Hauler: C & A
Driver: CLAUDIO
Truck #: 1
Card #
Job Ref #

Ticket #: 700-703076
Bid #: Walk-in Bid
Date: 6/22/2015
Generator: Frontier Field Services LLC
Generator #:
Well Ser. #: 999908
Well Name: 10" CEDAR BRECK
Well #:
Field:
Field #:
Rig: NON-DRILLING
County

Facility: CRI

Product/Service	Quantity/Units
Contaminated Soil (RCRA Exempt)	20.00 yards

Generator Certification Statement of Waste Status

I hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is:

☒ RCRA Exempt: Oil Field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste.

☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24 or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items):

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description above)

Driver/Agent Signature: _____ R360 Representative Signature: _____

Customer Approval: _____

THIS IS NOT AN INVOICE!

Approved By: _____

Date: 6-22-15

Cedar Break Sample Locations 8/12/2015

As instructed by BLM, sample are not composites.





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

August 18, 2015

HARLEY EVERHART

FRONTIER FIELD SERVICES

4200 SKELLY DRIVE, SUITE 700

TULSA, OK 74135

RE: CEDAR BREAK LATERAL 10"

Enclosed are the results of analyses for samples received by the laboratory on 08/12/15 11:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at 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:	08/12/2015	Sampling Date:	08/12/2015
Reported:	08/18/2015	Sampling Type:	Soil
Project Name:	CEDAR BREAK LATERAL 10"	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	CEDAR BREAK		

Sample ID: CBL #1 - NE WALL (H502098-01)

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	08/14/2015	ND	2.25	113	2.00	0.0430	
Toluene*	<0.050	0.050	08/14/2015	ND	2.15	107	2.00	0.127	
Ethylbenzene*	<0.050	0.050	08/14/2015	ND	2.34	117	2.00	0.668	
Total Xylenes*	<0.150	0.150	08/14/2015	ND	6.57	110	6.00	0.479	
Total BTX	<0.300	0.300	08/14/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 85.6-137

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	192	16.0	08/13/2015	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/13/2015	ND	182	91.2	200	0.0636	
DRO >C10-C28	<10.0	10.0	08/13/2015	ND	194	97.2	200	0.823	

Surrogate: 1-Chlorooctane 77.4 % 47.2-157

Surrogate: 1-Chlorooctadecane 85.8 % 52.1-176

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:	08/12/2015	Sampling Date:	08/12/2015
Reported:	08/18/2015	Sampling Type:	Soil
Project Name:	CEDAR BREAK LATERAL 10"	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	CEDAR BREAK		

Sample ID: CBL #2 - SE WALL (H502098-02)

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	08/14/2015	ND	2.25	113	2.00	0.0430		
Toluene*	<0.050	0.050	08/14/2015	ND	2.15	107	2.00	0.127		
Ethylbenzene*	<0.050	0.050	08/14/2015	ND	2.34	117	2.00	0.668		
Total Xylenes*	<0.150	0.150	08/14/2015	ND	6.57	110	6.00	0.479		
Total BTEx	<0.300	0.300	08/14/2015	ND						

Surrogate: 4-Bromofluorobenzene (PID) 103 % 85.6-137

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	08/13/2015	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/13/2015	ND	182	91.2	200	0.0636	
DRO >C10-C28	<10.0	10.0	08/13/2015	ND	194	97.2	200	0.823	

Surrogate: 1-Chlorooctane 74.8 % 47.2-157

Surrogate: 1-Chlorooctadecane 82.4 % 52.1-176

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:	08/12/2015	Sampling Date:	08/12/2015
Reported:	08/18/2015	Sampling Type:	Soil
Project Name:	CEDAR BREAK LATERAL 10"	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	CEDAR BREAK		

Sample ID: CBL #3 - S FLOOR (H502098-03)

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	08/14/2015	ND	2.25	113	2.00	0.0430	
Toluene*	<0.050	0.050	08/14/2015	ND	2.15	107	2.00	0.127	
Ethylbenzene*	<0.050	0.050	08/14/2015	ND	2.34	117	2.00	0.668	
Total Xylenes*	<0.150	0.150	08/14/2015	ND	6.57	110	6.00	0.479	
Total BTEx	<0.300	0.300	08/14/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 85.6-137

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	08/13/2015	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/13/2015	ND	182	91.2	200	0.0636	
DRO >C10-C28	<10.0	10.0	08/13/2015	ND	194	97.2	200	0.823	

Surrogate: 1-Chlorooctane 79.1 % 47.2-157

Surrogate: 1-Chlorooctadecane 82.0 % 52.1-176

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:	08/12/2015	Sampling Date:	08/12/2015
Reported:	08/18/2015	Sampling Type:	Soil
Project Name:	CEDAR BREAK LATERAL 10"	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	CEDAR BREAK		

Sample ID: CBL #4 - N FLOOR (H502098-04)

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	08/15/2015	ND	2.23	112	2.00	1.51	
Toluene*	<0.050	0.050	08/15/2015	ND	2.12	106	2.00	2.75	
Ethylbenzene*	<0.050	0.050	08/15/2015	ND	2.33	116	2.00	2.48	
Total Xylenes*	<0.150	0.150	08/15/2015	ND	6.49	108	6.00	2.28	
Total BTX	<0.300	0.300	08/15/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 85.6-137

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	08/13/2015	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/13/2015	ND	182	91.2	200	0.0636	
DRO >C10-C28	<10.0	10.0	08/13/2015	ND	194	97.2	200	0.823	

Surrogate: 1-Chlorooctane 72.0 % 47.2-157

Surrogate: 1-Chlorooctadecane 79.3 % 52.1-176

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:	08/12/2015	Sampling Date:	08/12/2015
Reported:	08/18/2015	Sampling Type:	Soil
Project Name:	CEDAR BREAK LATERAL 10"	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	CEDAR BREAK		

Sample ID: CBL #5 - SW WALL (H502098-05)

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	08/15/2015	ND	2.23	112	2.00	1.51	
Toluene*	<0.050	0.050	08/15/2015	ND	2.12	106	2.00	2.75	
Ethylbenzene*	<0.050	0.050	08/15/2015	ND	2.33	116	2.00	2.48	
Total Xylenes*	<0.150	0.150	08/15/2015	ND	6.49	108	6.00	2.28	
Total BTX	<0.300	0.300	08/15/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 85.6-137

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	08/13/2015	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/13/2015	ND	182	91.2	200	0.0636	
DRO >C10-C28	42.4	10.0	08/13/2015	ND	194	97.2	200	0.823	

Surrogate: 1-Chlorooctane 76.8 % 47.2-157

Surrogate: 1-Chlorooctadecane 85.7 % 52.1-176

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:	08/12/2015	Sampling Date:	08/12/2015
Reported:	08/18/2015	Sampling Type:	Soil
Project Name:	CEDAR BREAK LATERAL 10"	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	CEDAR BREAK		

Sample ID: CBL #6 - NW WALL (H502098-06)

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	08/15/2015	ND	2.23	112	2.00	1.51	
Toluene*	<0.050	0.050	08/15/2015	ND	2.12	106	2.00	2.75	
Ethylbenzene*	<0.050	0.050	08/15/2015	ND	2.33	116	2.00	2.48	
Total Xylenes*	<0.150	0.150	08/15/2015	ND	6.49	108	6.00	2.28	
Total BTX	<0.300	0.300	08/15/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 85.6-137

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	08/13/2015	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/13/2015	ND	182	91.2	200	0.0636	
DRO >C10-C28	159	10.0	08/13/2015	ND	194	97.2	200	0.823	

Surrogate: 1-Chlorooctane 78.8 % 47.2-157

Surrogate: 1-Chlorooctadecane 85.0 % 52.1-176

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

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

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



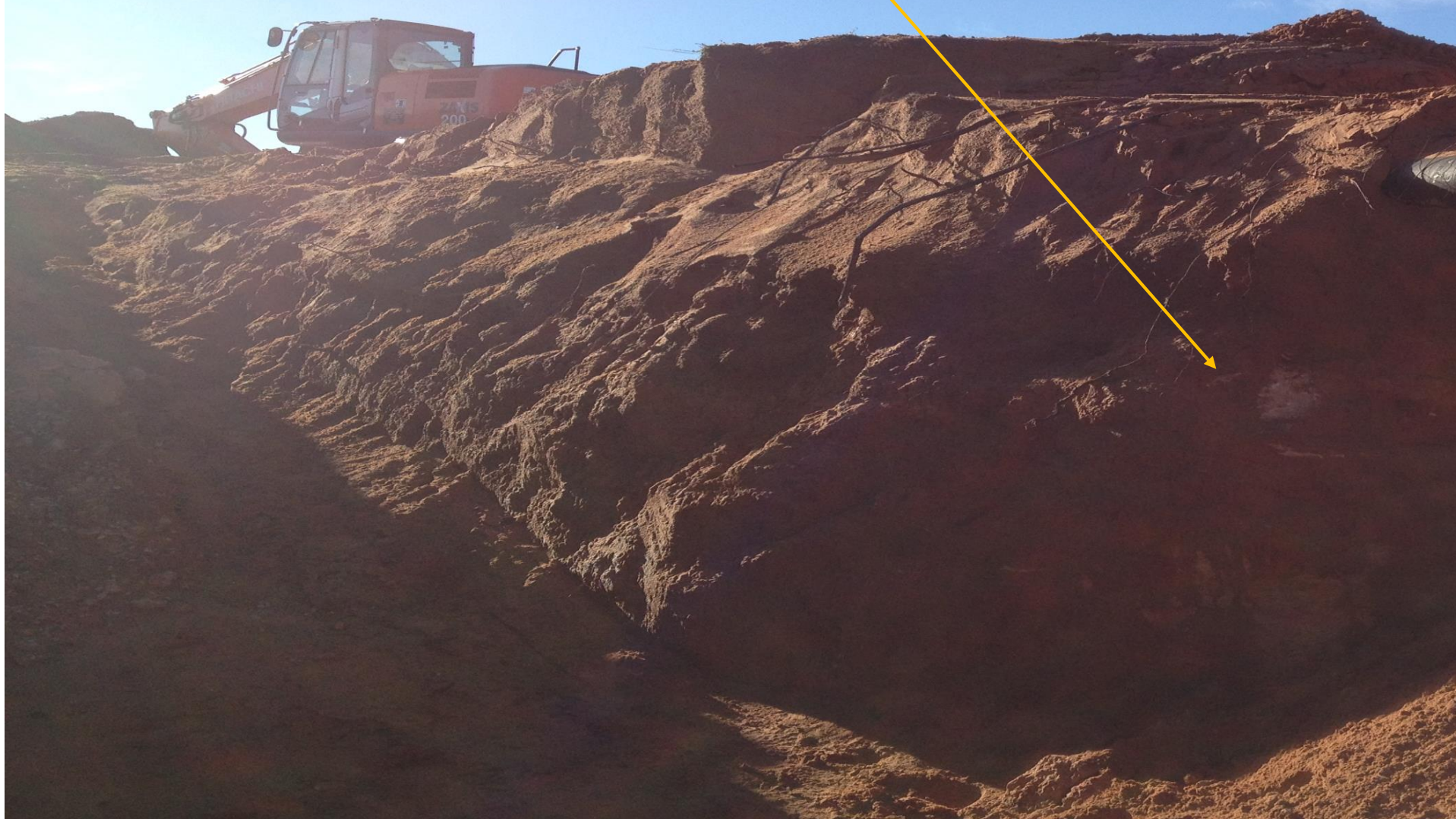
Page 9 of 9

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

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



Sample # 7



October 19, 2015

HARLEY EVERHART

FRONTIER FIELD SERVICES

4200 SKELLY DRIVE, SUITE 700

TULSA, OK 74135

RE: CEDAR BREAK 12" LATERAL

Enclosed are the results of analyses for samples received by the laboratory on 10/15/15 11:14.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at 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:	10/15/2015	Sampling Date:	10/15/2015
Reported:	10/19/2015	Sampling Type:	Soil
Project Name:	CEDAR BREAK 12" LATERAL	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Judy Garcia
Project Location:	CEDAR BREAK 12" LATERAL		

Sample ID: #7- CEDAR BREAK (SW WALL) (H502697-01)

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	10/15/2015	ND	1.81	90.3	2.00	0.905		
Toluene*	<0.050	0.050	10/15/2015	ND	1.93	96.5	2.00	1.98		
Ethylbenzene*	<0.050	0.050	10/15/2015	ND	1.72	86.1	2.00	0.174		
Total Xylenes*	<0.150	0.150	10/15/2015	ND	5.59	93.2	6.00	1.20		
Total BTX	<0.300	0.300	10/15/2015	ND						

Surrogate: 4-Bromofluorobenzene (PID) 115 % 85.6-137

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	10/16/2015	ND	416	104	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	10/16/2015	ND	193	96.4	200	5.03		
DRO >C10-C28	<10.0	10.0	10/16/2015	ND	205	102	200	4.87		

Surrogate: 1-Chlorooctane 93.6 % 47.2-157

Surrogate: 1-Chlorooctadecane 98.5 % 52.1-176

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

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

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



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Frontier Field Services (Hydro Energy)
Project Manager:

Address:

City: Malaga State: NM Zip:

Phone #: 505-513-4922 Fax #:

Project #:

Project Name: Cedar Break 12" lateral

Project Location: Cedar Break 12" lateral

Sampler Name: Mark Buckner

FOR LAB USE ONLY

Lab I.D. Sample I.D.

147 - Cedar Break
(5th well)

(G)RAB OR (C)OMP.

CONTAINERS

GROUNDWATER

WASTEWATER

SOIL

OIL

SLUDGE

OTHER :

ACID/BASE:

ICE / COOL

OTHER :

DATE

TIME

TPH

BTEX

chlorides

BILL TO

ANALYSIS REQUEST

P.O. #:

Company:

Attn:

Address:

City:

State:

Zip:

Phone #:

Fax #:

PRESERV

SAMPLING

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 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:

Date: 10-15-15

Received By:

Relinquished By:

Date: 10-15-15

Received By: Judy Garcia

Delivered By: (Circle One)

Time: 11:14

Sample Condition

Cool ☒ Intact ☒

CHECKED BY: AG

Sampler - UPS - Bus - Other:

#543.80

Yes ☒ No ☒

Yes ☒ No ☒

REMARKS:

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

Fax Result: ☐ Yes ☐ No ☐ Add'l Fax #:

REMARKS:

REMARKS:

REMARKS:

REMARKS:

REMARKS:

REMARKS:

REMARKS:

REMARKS:

REMARKS:

REMARKS:

REMARKS:

REMARKS:

REMARKS:

REMARKS:

REMARKS:

