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Soil Assessment and Remediation Work Plan

Arabian 30-19 Federal Com #2H
API # 30-025-43773 * **1RP-4854**
Talon Project No. 702072.002.01

APPROVED

By Olivia Yu at 9:07 am, Feb 15, 2018

Prepared For:

SwiftWater Energy
2401 North County Rd. 1287
Midland, TX 79707

Prepared By:

TALON/LPE
408 W. Texas Avenue
Artesia, New Mexico 88210

NMOCD approves of the proposed additional delineation for 1RP-4854. See email correspondence for clarifications about proposed remedial activities.

January 4, 2018

Ms. Olivia Yu
NMOCD District 1
1625 N. French Dr.
Hobbs, NM 88240

Subject: **Soil Assessment and Remediation Work Plan**
Arabian 30-19 Federal Com #2H
API # 30-025-43773 * **1RP-4854**

Dear Ms. Yu,

SwiftWater Energy has contracted Talon/LPE (Talon) to perform soil sampling and remediation services at the above referenced Devon Energy location. The results of our soil assessment and proposed remediation activities consist of the following.

Site Information

The Arabian 30-19 Federal Com #2H is located approximately sixty-two (62) miles east of Carlsbad, New Mexico. The legal location for this location is Unit Letter M, Section 2, Township 26S South and Range 31 East in Eddy County, New Mexico. More specifically the latitude and longitude of the release point are 32.067261 North and -103.757277 West. A site plan illustrating the work area is attached in [Appendix I](#).

According to the soil survey provided by the United States Department of Agriculture Natural Resources Conservation Service, the soil in this area is made up of the Pajarito loamy fine sand with 0 to 3 percent slopes, eroded. Per the New Mexico Bureau of Geology and Mineral Resources, the local surface and shallow geology is comprised of Holocene to middle Pleistocene Eolian deposits. Drainage courses in this area are normally dry.

Ground Water and Site Ranking

According to the New Mexico Office of the State Engineer database, the ground water in this area is approximately 365-feet below ground surface (BGS). The referenced ground water data is presented in [Appendix II](#). Therefore the ranking for this site is a **0** based on the following:

Depth to ground water	>100'
Wellhead Protection Area	>1000'
Distance to surface water body	>1000'

Based upon the site ranking of **0**, NMOCD Recommended Remedial Action Levels (RRAL's) are 50 mg/kg for BTEX, 10 mg/kg for Benzene and 5,000 mg/kg for TPH. The NMOCD recommended guideline for Total Chlorides is 600 mg/kg.

Incident Description and Initial Remedial Actions

While transferring treated water from the Terrapin Frac Pond to the Arabian 30-19 Federal Com #2H, the booster pump over pressured and the lay flat transfer line ruptured causing 281 barrels of treated water to be released. A vac truck was called to the location and recovered 145 barrels of fluids. A site plan is presented in [Appendix I](#) which illustrates the impacted area.

On November 7, 2017, Talon mobilized personnel to conduct initial site assessment and soil sampling activities for the construction of a work plan. Grab soil samples were collected utilizing a hand auger to depths at which refusal was encountered. The laboratory data from the above referenced sampling activities are presented in the table below and [Appendix III](#) contains the complete laboratory analytical results.

Laboratory Results

See [Appendix III](#) for complete report of laboratory results.

Sample ID		Depth (feet)	BTEX (mg/kg)	Chlorides (mg/kg)	TPH (mg/kg) GRO	TPH (mg/kg) DRO	TPH (mg/kg) EXT DRO	Total TPH (mg/kg)
S-1	Refusal	0.0	--	16	--	--	--	--
S-2		0.0	<0.300	32	<10	<10	<10	<10
	Refusal	1.0	<0.300	736	<10	<10	<10	<10
S-3	Refusal	0.0	--	80	--	--	--	--
S-4		0.0	--	22800	--	--	--	--
	Refusal	1.0	--	4000	--	--	--	--
S-5	Refusal	0.0	--	40400	--	--	--	--
S-6	Refusal	0.0	--	112	--	--	--	--
S-7		0.0	--	80	--	--	--	--
		1.0	--	32	--	--	--	--
		2.0	--	16	--	--	--	--
		3.0	--	32	--	--	--	--
		4.0	--	<16	--	--	--	--
S-8		0.0	--	29200	--	--	--	--
		1.0	--	3920	--	--	--	--
		2.0	--	208	--	--	--	--
		3.0	--	416	--	--	--	--
		4.0	--	160	--	--	--	--
S-9	Refusal	0.0	--	80	--	--	--	--
S-10		0.0	<0.300	96	<10	<10	<10	<10
		1.0	<0.300	16	<10	<10	<10	<10
		2.0	<0.300	32	<10	<10	<10	<10
		3.0	--	16	--	--	--	--
		4.0	--	32	--	--	--	--
S-11	Refusal	0.0	--	32	--	--	--	--

Sample ID	Depth (feet)	BTEX (mg/kg)	Chlorides (mg/kg)	TPH (mg/kg) GRO	TPH (mg/kg) DRO	TPH (mg/kg) EXT DRO	Total TPH (mg/kg)
S-12	0.0	<0.300	224	<10	<10	<10	<10
	1.0	<0.300	16	<10	<10	<10	<10
	Refusal	<0.300	48	<10	<10	<10	<10
S-13	0.0	--	32	--	--	--	--
S-14	0.0	<0.300	160	<10	<10	<10	<10
	1.0	--	48	--	--	--	--
	Refusal	--	192	--	--	--	--
S-15	0.0	--	14400	--	--	--	--

(--) Analyte Not Tested

Proposed Remedial Actions

- At the beginning of the project test pits will be excavated at sample locations S-4, S-5 and S-15 for further vertical delineation purposes. Field titration screening results for chlorides will be utilized to guide the excavation horizontally and vertically and will be followed up with laboratory confirmation sample analysis. The results will be immediately forwarded to NMOCD District II for approval of excavation depths in these areas.
- The impacted area in the vicinity of S-2 and S-8 will be excavated to a depth of 2.0' deep. A confirmation soil sample will also be collected from the bottom of the excavation at sample S-2.
- Sidewall soil samples will be collected from the excavated areas to verify that all the impacted soil has been removed.
- All contaminated soil will be transported to Lea Land, LLC, a NMOCD approved disposal facility.
- The excavated areas will be backfilled with new top soil obtained from a local borrow pit. Once the backfilling activities are complete the work area will be contoured to match the surrounding terrain and seeded using the recommended BLM seed mixture for the area.
- A final closure report documenting all remedial actions will be provided to the NMOCD Artesia Office along with a Final C-141 Form.

Should you have any questions or if further information is required, please do not hesitate to contact our office at (575)-746-8768

Respectfully submitted,

TALON/LPE



Kimberly M. Wilson
Project Manager



David J. Adkins
District Manager



Attachments

Appendix I Site Plan
Appendix II Groundwater Data & Initial C-141
Appendix III Laboratory Results

APPENDIX I
SITE MAP

Swift Water Energy

Eddy County, NM

- Legend**
-  Proposed Excavation Areas
 -  Sample Locations



Google Earth

© 2018 Google

M-2-26S-31E

281 BBLs PW

2

Lat: 32.067261° N
Lon: 103.757277° W

Swiftwater Spill 10/10/17

devon

This map is for illustrative purposes only and is not intended to be used as one. Devon makes no warranty, representation, or guarantee of any kind regarding this map.

WGS_1984_Web_Mercator_Auxiliary_Sphere
Prepared by: Menoud
Map is current as of: 13-Oct-2017



0 0.02 0.04 0.07 1:3,557

Central Valley Electric
Rock Electric

APPENDIX II
GROUNDWATER DATA
INITIAL C-141



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	Code	POD Sub-basin	County	Q 6	Q 4	Q 2	Q 1	Sec	Tws	Rng	X	Y	Distance	DepthWell	DepthWater	Water Column
C 03639 POD1		CUB	ED	3	4	2	01	26S	31E		620168	3549279	2917	700	365	335
C 02090			ED	4	4	01		26S	31E		620329	3548533*	2943	350	335	15

Average Depth to Water: **350 feet**

Minimum Depth: **335 feet**

Maximum Depth: **365 feet**

Record Count:2

UTMNAD83 Radius Search (in meters):

Easting (X): 617389

Northing (Y): 3548393

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.

11/20/17 12:37 PM

WATER COLUMN/ AVERAGE DEPTH TO WATER

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

Form C-141
Revised April 3, 2017

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

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	Devon Energy Production Co LP	Contact	Stephen Richards, Devon Completions Foreman
Address	PO BOX 250, Artesia, NM 88211	Telephone No.	(575) 252-3717
Facility Name:	Transfer line from Terrapin Frac Pond to Arabian 30-19 Fed Com 2H	Facility Type	Oil well

Surface Owner:	State / Federal	Mineral Owner:	State / Federal	API No.	30-025-43773
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LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
M	2	26S	31E	407	NORTH	46	WEST	LEA

Latitude 32.067261 N Longitude -103.757277 W NAD83

NATURE OF RELEASE

Type of Release:	Treated Produced Water	Volume of Release:	281 bbls	Volume Recovered:	145 bbls
Source of Release:	Lay Flat Transfer Line	Date and Hour of Occurrence:	10/10/2017, 9:45 AM	Date and Hour of Discovery:	10/10/2017, 9:45 AM
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	OCD: Olivia Yu, Dist. 1 BLM: Shelly Tucker		
By Whom?	Mike Shoemaker, EHS Professional	Date and Hour:	OCD: 10/11/17, 9:15 AM BLM: 10/11/17, 9:45 AM		
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse:	NA		
If a Watercourse was Impacted, Describe Fully.*	NA				

RECEIVED
By Olivia Yu at 3:45 pm, Oct 27, 2017

Describe Cause of Problem and Remedial Action Taken.*
While transferring treated produced water from the Terrapin Frac Pond to the Arabian 30-19 Fed Com #2H, the booster pump over pressured and the lay flat hose ruptured, releasing produced water on the ground. The pump was shut down and the hose was repaired.

Describe Area Affected and Cleanup Action Taken.*
The spill affected approximately 10,244 square feet (1711 cubic feet) running south then east of the rupture point located approximately at 32.067261 N, -103.757277 W and is approximately 3.3 miles southwest from the Arabian 30-19 Fed Com 2H well pad. An estimated 281 barrels of treated produced water was spilled and 145 barrels were recovered. A remediation contractor will be contacted to assist with the delineation and remediation efforts.

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>Denise Menoud</i>		OIL CONSERVATION DIVISION	
Printed Name: Denise Menoud		Approved by Environmental Specialist: <i>[Signature]</i>	
Title: Admin Field Support		Approval Date: 10/27/2017	Expiration Date:
E-mail Address: denise.menoud@dvn.com		Conditions of Approval: see attached directive	Attached <input checked="" type="checkbox"/>
Date: 10/13/2017 Phone: (575)746-5544			

* Attach Additional Sheets If Necessary

FOY1730056854

1RP-4854

nOY1730057049

pOY1730057379

APPENDIX III

LABORATORY RESULTS

November 17, 2017

DAVID ADKINS

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: ARABIAN 30-19 FED COM 2H

Enclosed are the results of analyses for samples received by the laboratory on 11/13/17 16:45.

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:

 TALON LPE
 DAVID ADKINS
 408 W. TEXAS AVE.
 ARTESIA NM, 88210
 Fax To: (575) 745-8905

Received:	11/13/2017	Sampling Date:	11/07/2017
Reported:	11/17/2017	Sampling Type:	Soil
Project Name:	ARABIAN 30-19 FED COM 2H	Sampling Condition:	Cool & Intact
Project Number:	702072.002.01	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

Sample ID: S-1 0' (H703161-01)

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AC							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	11/14/2017	ND	416	104	400	3.77		

Sample ID: S-2 0' (H703161-02)

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	11/15/2017	ND	1.88	94.0	2.00	0.846		
Toluene*	<0.050	0.050	11/15/2017	ND	1.89	94.3	2.00	0.528		
Ethylbenzene*	<0.050	0.050	11/15/2017	ND	1.85	92.4	2.00	0.735		
Total Xylenes*	<0.150	0.150	11/15/2017	ND	5.87	97.8	6.00	0.967		
Total BTEX	<0.300	0.300	11/15/2017	ND						

Surrogate: 4-Bromofluorobenzene (PIE) 105 % 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	11/14/2017	ND	416	104	400	3.77		

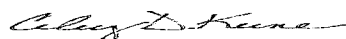
TPH 8015M		mg/kg	Analyzed By: MS							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	11/16/2017	ND	226	113	200	1.36		
DRO >C10-C28	<10.0	10.0	11/16/2017	ND	212	106	200	1.07		
EXT DRO >C28-C36	<10.0	10.0	11/16/2017	ND						

Surrogate: 1-Chlorooctane 76.4 % 28.3-164

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

TALON LPE
DAVID ADKINS
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	11/13/2017	Sampling Date:	11/07/2017
Reported:	11/17/2017	Sampling Type:	Soil
Project Name:	ARABIAN 30-19 FED COM 2H	Sampling Condition:	Cool & Intact
Project Number:	702072.002.01	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

Sample ID: S-2 0' (H703161-02)

TPH 8015M	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Surrogate: 1-Chlorooctadecane	75.8 %	34.7-157							

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* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 TALON LPE
 DAVID ADKINS
 408 W. TEXAS AVE.
 ARTESIA NM, 88210
 Fax To: (575) 745-8905

Received:	11/13/2017	Sampling Date:	11/07/2017
Reported:	11/17/2017	Sampling Type:	Soil
Project Name:	ARABIAN 30-19 FED COM 2H	Sampling Condition:	Cool & Intact
Project Number:	702072.002.01	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

Sample ID: S-2 1' REFUSAL (H703161-03)

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	11/15/2017	ND	1.88	94.0	2.00	0.846		
Toluene*	<0.050	0.050	11/15/2017	ND	1.89	94.3	2.00	0.528		
Ethylbenzene*	<0.050	0.050	11/15/2017	ND	1.85	92.4	2.00	0.735		
Total Xylenes*	<0.150	0.150	11/15/2017	ND	5.87	97.8	6.00	0.967		
Total BTEx	<0.300	0.300	11/15/2017	ND						

Surrogate: 4-Bromofluorobenzene (PIE) 108 % 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	736	16.0	11/14/2017	ND	416	104	400	3.77		

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	11/16/2017	ND	226	113	200	1.36	
DRO >C10-C28	<10.0	10.0	11/16/2017	ND	212	106	200	1.07	
EXT DRO >C28-C36	<10.0	10.0	11/16/2017	ND					

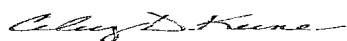
Surrogate: 1-Chlorooctane 84.4 % 28.3-164

Surrogate: 1-Chlorooctadecane 85.4 % 34.7-157

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* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 TALON LPE
 DAVID ADKINS
 408 W. TEXAS AVE.
 ARTESIA NM, 88210
 Fax To: (575) 745-8905

Received:	11/13/2017	Sampling Date:	11/07/2017
Reported:	11/17/2017	Sampling Type:	Soil
Project Name:	ARABIAN 30-19 FED COM 2H	Sampling Condition:	Cool & Intact
Project Number:	702072.002.01	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

Sample ID: S-3 0' (H703161-04)

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	11/14/2017	ND	416	104	400	3.77	

Sample ID: S-4 0' (H703161-05)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	22800	16.0	11/14/2017	ND	416	104	400	3.77	

Sample ID: S-4 1' REFUSAL (H703161-06)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4000	16.0	11/14/2017	ND	416	104	400	3.77	

Sample ID: S-5 0' (H703161-07)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	40400	16.0	11/14/2017	ND	416	104	400	3.77		

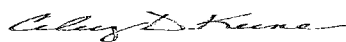
Sample ID: S-6 0' (H703161-08)

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	11/14/2017	ND	416	104	400	3.77		

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

TALON LPE
DAVID ADKINS
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	11/13/2017	Sampling Date:	11/07/2017
Reported:	11/17/2017	Sampling Type:	Soil
Project Name:	ARABIAN 30-19 FED COM 2H	Sampling Condition:	Cool & Intact
Project Number:	702072.002.01	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

Sample ID: S-7 0' (H703161-09)

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	11/14/2017	ND	416	104	400	3.77	

Sample ID: S-7 1' (H703161-10)

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	11/14/2017	ND	416	104	400	3.77	

Sample ID: S-7 2' (H703161-11)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	11/14/2017	ND	416	104	400	3.77	

Sample ID: S-7 3' (H703161-12)

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	11/14/2017	ND	416	104	400	3.77	

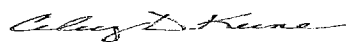
Sample ID: S-7 4' (H703161-13)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	11/14/2017	ND	416	104	400	0.00	

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

TALON LPE
DAVID ADKINS
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	11/13/2017	Sampling Date:	11/07/2017
Reported:	11/17/2017	Sampling Type:	Soil
Project Name:	ARABIAN 30-19 FED COM 2H	Sampling Condition:	Cool & Intact
Project Number:	702072.002.01	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

Sample ID: S-8 0' (H703161-14)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	29200	16.0	11/14/2017	ND	416	104	400	0.00	

Sample ID: S-8 1' (H703161-15)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3920	16.0	11/14/2017	ND	416	104	400	0.00	

Sample ID: S-8 2' (H703161-16)

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	11/14/2017	ND	416	104	400	0.00	

Sample ID: S-8 3' (H703161-17)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	416	16.0	11/14/2017	ND	416	104	400	0.00	

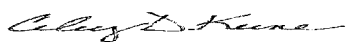
Sample ID: S-8 4' (H703161-18)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	11/14/2017	ND	416	104	400	0.00	

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Analytical Results For:

TALON LPE
DAVID ADKINS
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received: 11/13/2017
Reported: 11/17/2017
Project Name: ARABIAN 30-19 FED COM 2H
Project Number: 702072.002.01
Project Location: LEA COUNTY, NM

Sampling Date: 11/07/2017
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: S-9 0' (H703161-19)

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	11/14/2017	ND	416	104	400	0.00	

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Analytical Results For:

TALON LPE
DAVID ADKINS
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	11/13/2017	Sampling Date:	11/07/2017
Reported:	11/17/2017	Sampling Type:	Soil
Project Name:	ARABIAN 30-19 FED COM 2H	Sampling Condition:	Cool & Intact
Project Number:	702072.002.01	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

Sample ID: S-10 0' (H703161-20)

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	11/15/2017	ND	1.88	94.0	2.00	0.846	
Toluene*	<0.050	0.050	11/15/2017	ND	1.89	94.3	2.00	0.528	
Ethylbenzene*	<0.050	0.050	11/15/2017	ND	1.85	92.4	2.00	0.735	
Total Xylenes*	<0.150	0.150	11/15/2017	ND	5.87	97.8	6.00	0.967	
Total BTEX	<0.300	0.300	11/15/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 105 % 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	96.0	16.0	11/14/2017	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	11/16/2017	ND	226	113	200	1.36	
DRO >C10-C28	<10.0	10.0	11/16/2017	ND	212	106	200	1.07	
EXT DRO >C28-C36	<10.0	10.0	11/16/2017	ND					

Surrogate: 1-Chlorooctane 89.1 % 28.3-164

Surrogate: 1-Chlorooctadecane 85.0 % 34.7-157

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Analytical Results For:

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Received:	11/13/2017	Sampling Date:	11/07/2017
Reported:	11/17/2017	Sampling Type:	Soil
Project Name:	ARABIAN 30-19 FED COM 2H	Sampling Condition:	Cool & Intact
Project Number:	702072.002.01	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

Sample ID: S-10 1' (H703161-21)

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	11/15/2017	ND	1.88	94.0	2.00	0.846		
Toluene*	<0.050	0.050	11/15/2017	ND	1.89	94.3	2.00	0.528		
Ethylbenzene*	<0.050	0.050	11/15/2017	ND	1.85	92.4	2.00	0.735		
Total Xylenes*	<0.150	0.150	11/15/2017	ND	5.87	97.8	6.00	0.967		
Total BTEx	<0.300	0.300	11/15/2017	ND						

Surrogate: 4-Bromofluorobenzene (PIL) 108 % 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	16.0	16.0	11/14/2017	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	11/16/2017	ND	226	113	200	1.36		
DRO >C10-C28	<10.0	10.0	11/16/2017	ND	212	106	200	1.07		
EXT DRO >C28-C36	<10.0	10.0	11/16/2017	ND						

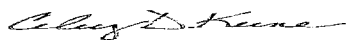
Surrogate: 1-Chlorooctane 86.4 % 28.3-164

Surrogate: 1-Chlorooctadecane 86.2 % 34.7-157

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Analytical Results For:

 TALON LPE
 DAVID ADKINS
 408 W. TEXAS AVE.
 ARTESIA NM, 88210
 Fax To: (575) 745-8905

Received:	11/13/2017	Sampling Date:	11/07/2017
Reported:	11/17/2017	Sampling Type:	Soil
Project Name:	ARABIAN 30-19 FED COM 2H	Sampling Condition:	Cool & Intact
Project Number:	702072.002.01	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

Sample ID: S-10 2' (H703161-22)

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	11/14/2017	ND	416	104	400	0.00		

Sample ID: S-10 3' (H703161-23)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	11/14/2017	ND	416	104	400	0.00		

Sample ID: S-10 4' (H703161-24)

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	11/14/2017	ND	416	104	400	0.00	

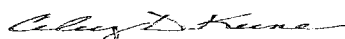
Sample ID: S-11 0' (H703161-25)

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	11/14/2017	ND	416	104	400	0.00	

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 DAVID ADKINS
 408 W. TEXAS AVE.
 ARTESIA NM, 88210
 Fax To: (575) 745-8905

Received:	11/13/2017	Sampling Date:	11/07/2017
Reported:	11/17/2017	Sampling Type:	Soil
Project Name:	ARABIAN 30-19 FED COM 2H	Sampling Condition:	Cool & Intact
Project Number:	702072.002.01	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

Sample ID: S-12 0' (H703161-26)

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	11/15/2017	ND	1.88	94.0	2.00	0.846		
Toluene*	<0.050	0.050	11/15/2017	ND	1.89	94.3	2.00	0.528		
Ethylbenzene*	<0.050	0.050	11/15/2017	ND	1.85	92.4	2.00	0.735		
Total Xylenes*	<0.150	0.150	11/15/2017	ND	5.87	97.8	6.00	0.967		
Total BTX	<0.300	0.300	11/15/2017	ND						

Surrogate: 4-Bromofluorobenzene (PIL) 108 % 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	224	16.0	11/14/2017	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	11/16/2017	ND	226	113	200	1.36	
DRO >C10-C28	<10.0	10.0	11/16/2017	ND	212	106	200	1.07	
EXT DRO >C28-C36	<10.0	10.0	11/16/2017	ND					

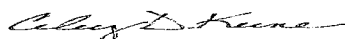
Surrogate: 1-Chlorooctane 74.2 % 28.3-164

Surrogate: 1-Chlorooctadecane 75.1 % 34.7-157

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Analytical Results For:

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DAVID ADKINS
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received:	11/13/2017	Sampling Date:	11/07/2017
Reported:	11/17/2017	Sampling Type:	Soil
Project Name:	ARABIAN 30-19 FED COM 2H	Sampling Condition:	Cool & Intact
Project Number:	702072.002.01	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

Sample ID: S-12 1' (H703161-27)

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	11/15/2017	ND	1.88	94.0	2.00	0.846	
Toluene*	<0.050	0.050	11/15/2017	ND	1.89	94.3	2.00	0.528	
Ethylbenzene*	<0.050	0.050	11/15/2017	ND	1.85	92.4	2.00	0.735	
Total Xylenes*	<0.150	0.150	11/15/2017	ND	5.87	97.8	6.00	0.967	
Total BTX	<0.300	0.300	11/15/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 107 % 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	16.0	16.0	11/14/2017	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	11/16/2017	ND	226	113	200	1.36	
DRO >C10-C28	<10.0	10.0	11/16/2017	ND	212	106	200	1.07	
EXT DRO >C28-C36	<10.0	10.0	11/16/2017	ND					

Surrogate: 1-Chlorooctane 72.5 % 28.3-164

Surrogate: 1-Chlorooctadecane 73.3 % 34.7-157

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 Fax To: (575) 745-8905

Received:	11/13/2017	Sampling Date:	11/07/2017
Reported:	11/17/2017	Sampling Type:	Soil
Project Name:	ARABIAN 30-19 FED COM 2H	Sampling Condition:	Cool & Intact
Project Number:	702072.002.01	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

Sample ID: S-12 2' REFUSAL (H703161-28)

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	11/15/2017	ND	1.88	94.0	2.00	0.846		
Toluene*	<0.050	0.050	11/15/2017	ND	1.89	94.3	2.00	0.528		
Ethylbenzene*	<0.050	0.050	11/15/2017	ND	1.85	92.4	2.00	0.735		
Total Xylenes*	<0.150	0.150	11/15/2017	ND	5.87	97.8	6.00	0.967		
Total BTX	<0.300	0.300	11/15/2017	ND						

Surrogate: 4-Bromofluorobenzene (PIE) 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	11/14/2017	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	11/16/2017	ND	226	113	200	1.36	
DRO >C10-C28	<10.0	10.0	11/16/2017	ND	212	106	200	1.07	
EXT DRO >C28-C36	<10.0	10.0	11/16/2017	ND					

Surrogate: 1-Chlorooctane 74.1 % 28.3-164

Surrogate: 1-Chlorooctadecane 76.0 % 34.7-157

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Received:	11/13/2017	Sampling Date:	11/07/2017
Reported:	11/17/2017	Sampling Type:	Soil
Project Name:	ARABIAN 30-19 FED COM 2H	Sampling Condition:	Cool & Intact
Project Number:	702072.002.01	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

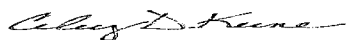
Sample ID: S-13 0' (H703161-29)

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	11/14/2017	ND	416	104	400	0.00		

Cardinal Laboratories

* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 TALON LPE
 DAVID ADKINS
 408 W. TEXAS AVE.
 ARTESIA NM, 88210
 Fax To: (575) 745-8905

Received:	11/13/2017	Sampling Date:	11/07/2017
Reported:	11/17/2017	Sampling Type:	Soil
Project Name:	ARABIAN 30-19 FED COM 2H	Sampling Condition:	Cool & Intact
Project Number:	702072.002.01	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

Sample ID: S-14 0' (H703161-30)

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	11/15/2017	ND	1.88	94.0	2.00	0.846	
Toluene*	<0.050	0.050	11/15/2017	ND	1.89	94.3	2.00	0.528	
Ethylbenzene*	<0.050	0.050	11/15/2017	ND	1.85	92.4	2.00	0.735	
Total Xylenes*	<0.150	0.150	11/15/2017	ND	5.87	97.8	6.00	0.967	
Total BTX	<0.300	0.300	11/15/2017	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 106 % 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	160	16.0	11/14/2017	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	11/16/2017	ND	226	113	200	1.36	
DRO >C10-C28	<10.0	10.0	11/16/2017	ND	212	106	200	1.07	
EXT DRO >C28-C36	<10.0	10.0	11/16/2017	ND					

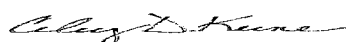
Surrogate: 1-Chlorooctane 92.0 % 28.3-164

Surrogate: 1-Chlorooctadecane 85.5 % 34.7-157

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 TALON LPE
 DAVID ADKINS
 408 W. TEXAS AVE.
 ARTESIA NM, 88210
 Fax To: (575) 745-8905

Received:	11/13/2017	Sampling Date:	11/07/2017
Reported:	11/17/2017	Sampling Type:	Soil
Project Name:	ARABIAN 30-19 FED COM 2H	Sampling Condition:	Cool & Intact
Project Number:	702072.002.01	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

Sample ID: S-14 1' (H703161-31)

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	11/14/2017	ND	416	104	400	0.00	

Sample ID: S-14 2' REFUSAL (H703161-32)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	192	16.0	11/14/2017	ND	416	104	400	0.00		

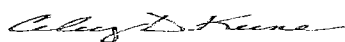
Sample ID: S-15 0' (H703161-33)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	14400	16.0	11/14/2017	ND	416	104	400	3.77		

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Celey D. Keene, Lab Director/Quality Manager

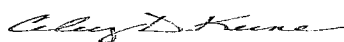
Notes and Definitions

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

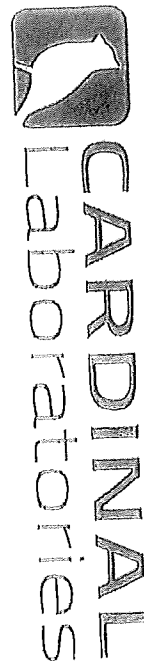
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Celey D. Keene, Lab Director/Quality Manager

[illegible]

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



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

ANALYSIS REQUEST

Company Name: Talon/LPE

Project Manager: D. ADAMS

Address: 408 W. Texas Ave.

City: Artesia

Phone #: 575-746-8768

Project #: 702072.002.01 Project Owner: Swiftwater

Project Name: Arabian 30-19 Fed on 2nd

Project Location: Leauda NM

Sample Name: J. LAIRD

FOR LAB USE ONLY

Lab I.D. Sample I.D.

4703161

5-7 2'

6 1

(G) GRAB OR (C) COMP.

CONTAINERS

GROUNDWATER

WASTEWATER

SOIL

OIL

SLUDGE

OTHER:

ACID/BASE:

ICE/COOL

OTHER:

DATE

TIME

11-7-17

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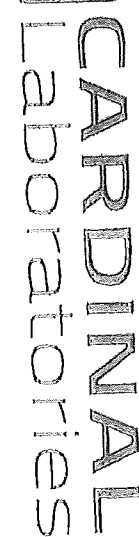
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101 East Maryland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

Company Name: Talon/LPE				P.O. #: 702072.002.01			
Project Manager: D. ADKINS				Company: Talon/LPE			
Address: 408 W. Texas Ave.				Attn:			
City: Artesia				Address:			
Phone #: 575-746-8768				City:			
Fax #: 575-746-8905				State: Zip:			
Project #: 702072.002.01				Project Owner: Swiftwater			
Project Name: Arabian 30-19 Fed Acre 24				Phone #:			
Project Location: Lea County NM				Fax #:			
Sampler Name: J. LATROD				PRESERV. SAMPLING			
FOR LAB USE ONLY							

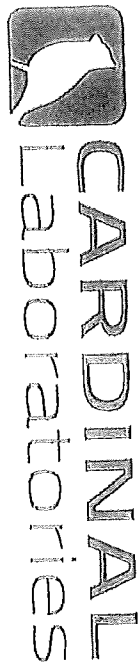
Lab I.D.	Sample I.D.	GRAB OR (C)OMP.		MATRIX						DATE	TIME								
		#	CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :									ACID/BASE:	ICE /COOL
H903141	5-10, 0'	6	1									11-4-17	1149	-	-	-	-	-	-
20	5-10, 1'												1151	-	-	-	-	-	-
21	5-10, 2'												1153	-	-	-	-	-	-
22	5-10, 3'												1154	-	-	-	-	-	-
23	5-10, 4'												1156	-	-	-	-	-	-
24	5-11, 0'												1158	-	-	-	-	-	-
25	5-12, 0'												1206	-	-	-	-	-	-
26	5-12, 1'												1208	-	-	-	-	-	-
27	5-12, 2'												1208	-	-	-	-	-	-
28	5-13, 0'												1213	-	-	-	-	-	-

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Relinquished By: <i>[Signature]</i>	Date: 11-3-17	Received By: <i>[Signature]</i>	Date: 11-3-17
Relinquished By: <i>[Signature]</i>	Date: 11-3-17	Received By: <i>[Signature]</i>	Date: 11-3-17

Delivered By: (Circle One) <u>4.96</u>	Sample Condition	CHECKED BY: <i>[Signature]</i>
Sampler - UPS - Bus - Other: <u>Corrected 5.15C</u>	<input type="checkbox"/> Cool <input type="checkbox"/> Intact <input type="checkbox"/> Yes <input type="checkbox"/> No	(Initials) <u>5275</u>

REMARKS: P. 3 of 4



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Mariand, Hobbs, NM 88246
(575) 393-2326 FAX (575) 393-2476

BI-10

ANALYSIS REQUEST

Company Name: Talon/LPE		P.O. #: 702072-002.01														
Project Manager: D. ADKINS		Company: Talon/LPE														
Address: 408 W. Texas Ave.		Attn:														
City: Artesia		Address:														
Phone #: 575-746-8768		City:														
Fax #: 575-746-8905		State:														
Project #: 702072-002.01		Zip:														
Project Name: Arabian 30-19 Fed Am 2H		Phone #:														
Project Location: Lea County NM		Fax #:														
Sample Name: J. LARAB		PRESERV. SAMPLING														
FOR LAB USE ONLY																
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX	DATE	TIME	ANALYSIS REQUEST									
4703161	S-14 0'		1	GROUNDWATER	11-17	1230	TOTAL CHLORIDES									
31	S-14 1'		1	WASTEWATER		1222	TPH EXT									
32	S-14 2' refusal		1	SOIL		1224	BTBX									
33	S-15 0'		1	OIL		1235										
				SLUDGE												
				OTHER:												
				ACID/BASE:												
				ICE / COOL												
				OTHER:												

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Relinquished By: *[Signature]* Date: 11-18-17 Received By: *[Signature]* Date: 11-18-17
Relinquished By: *[Signature]* Date: 11-18-17 Received By: *[Signature]* Date: 11-18-17

Delivered By: (Circle One) *Hand* Sample Condition: ☒ Cool ☐ Intact ☐ Yes ☐ No
Sampler - UPS - Bus - Other: *Contaminated 5.15C* ☐ Yes ☒ No

CHECKED BY: *[Signature]* (Initials) *YES*

REMARKS: *P. 4 of 4*