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Remediation and Closure Report

Allthorn Transfer Line
API # 30-015-43951, 2RP-4865
Talon Project No. 701307.111.01

Prepared For:

Lime Rock Resources II-A, L.P.
1111 Bagby St Suite 4600
Houston, TX 77002

Prepared By:

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

February 15, 2019

Mr. Mike Bratcher
NMOCD District 2
811 S. 1st Street
Artesia, NM 88210

Subject: **Remediation and Closure Report**
Althorn Transfer Line, 2RP-4865
API # 30-015-43951

Dear Mr. Bratcher,

Lime Rock Resources has contracted Talon/LPE (Talon) to perform soil assessment and remediation services at the above-referenced location. The results of our soil assessment and remediation activities consist of the following.

Site Information

The Althorn Transfer Line is located approximately 10 miles E of Artesia, New Mexico. The legal location for this release is Unit Letter J, Section 36, Township 17 South and Range 27 East in Eddy County, New Mexico. More specifically the latitude and longitude for the release are 32.7897722 North and -104.235581 West. A site plan is presented in [Appendix I](#).

According to the soil survey provided by the United States Department of Agriculture National Resources Conservation Services, the soil in this area is made up of Reeves Gypsum complex with 0 to 3 percent slopes. Per the New Mexico Bureau of Geology and Mineral Resources, the local surface and shallow geology is Guadalupian (Middle Permian) in age and comprised of clay loam and gypsiferous formations. These are made up of loamy soils underlain by hard, weathered gypsum rock and caliche. Drainage courses in this area are well drained.

Ground Water and Site Ranking

The New Mexico State Engineer web site indicates that the depth to groundwater is 92' below ground surface (BGS). See [Appendix II](#) for the referenced groundwater data.

Therefore the ranking for this site is a 10 based on the following:

Depth to groundwater	51-100'
Wellhead Protection Area	>1000'
Distance to surface water body	>1000'

Based upon a site ranking of 10, NMOCD Recommended Remedial Action Levels (RRAL) at the time of this incident were 50 mg/kg for BTEX, 10 mg/kg for Benzene and 1,000 mg/kg for TPH. The recommended guidelines for total chlorides were 600 mg/kg.

Incident Description and Initial Remedial Actions

On June 28, 2018, vandals stole the transfer line connections resulting in a release of approximately 25 bbls of fresh and produced water that was trapped in the line. The 12-inch transfer line from the All Thorn Facility to the Hawk 8K Federal #51 had previously been flushed with fresh water and was idle at the time of the release. The line was subsequently capped to stop the leak. A backhoe and a dump truck with clean fill were dispatched to berm the spill at Evans Road. The backhoe was also utilized to scrape up the impacted soil from accessible areas in the flow path. A vac truck was dispatched and was able to recover 8 bbls of standing water. A site plan is presented in [Appendix I](#) which illustrates the impacted area.

On July 3, 2018, Talon mobilized personnel to the location for the initial site assessment and soil sampling. Samples were taken with the assistance of the backhoe on-site and sample points were advanced until hard rock refusal was met. The analytical results are presented in the following data table.

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

July 3, 2018, Soil Sampling Analysis

Sample ID	Depth (feet)	BTEX (mg/kg)	Chlorides (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH EXT (mg/kg)
S-1	1	<0.300	27600	<10.0	185	72.7
	2	<0.300	24000	<10.0	<10.0	<10.0
	3	--	1720	--	--	--
	4	--	784	--	--	--
	5	--	304	--	--	--
	6	--	336	--	--	--
S-2	1	<0.300	5600	<10.0	<10.0	<10.0
	2	--	144	--	--	--
S-3	1	<0.300	8130	<10.0	<10.0	<10.0
	2	--	4040	--	--	--
	3	--	1720	--	--	--
	4	--	2120	--	--	--
	5	--	704	--	--	--
	6	--	32	--	--	--

	7	--	32	--	--	--
	8	--	96	--	--	--
	9	--	64	--	--	--
	10	--	32	--	--	--
	11	--	144	--	--	--

--Analyte Not Tested

On July 11, 2018, Talon personnel returned to the site to carry out additional soil sampling. Soil samples were collected utilizing a hand auger to depths at which refusal (rock) was encountered. The analytical results are presented in the following data table.

July 11, 2018, Soil Sampling Analysis Using EPA Method 300

Sample ID	Depth (feet)	BTEX (mg/kg)	Chlorides (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH EXT (mg/kg)
S-4	1	--	49	--	--	--
S-5	1	--	370	--	--	--
S-6	1	--	1800	--	--	--
S-7	1	--	ND	--	--	--
S-8	1	--	ND	--	--	--
	2	--	ND	--	--	--
S-9	1	--	ND	--	--	--

--Analyte Not Tested, ND- No Analyte Detected

July 25, 2018, Soil Sampling Analysis

Sample ID	Depth (feet)	BTEX (mg/kg)	Chlorides (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH EXT (mg/kg)
S-10	0	--	16	--	--	--
	1	--	64	--	--	--

--Analyte Not Tested

Remedial Actions Taken:

- The impacted area in the vicinity of S-1 was excavated to a depth of 4.0 feet deep with field titrations used to guide the excavation. See aerial photographs of the excavation in [Appendix III](#).
- The impacted soil in the vicinity of S-2 was excavated to a depth of 1.5 feet with field titrations used to guide the excavation.
- The impacted area in the vicinity of S-3 and S-6 was excavated to a depth of 4.0 feet deep with a 20 mil liner installed at the bottom of the excavation.
- The flow path along Evans Road was excavated to a depth of 1.5 feet, as close as practicable to Evans Road.
- All of the excavated material was transported to Lea Land, LLC, a NMOCD approved solid waste disposal facility.
- The excavated areas were backfilled with locally obtained topsoil, machine compacted and contoured to match the surrounding terrain.
- The work area was then seeded with BLM #4 seed mix which correlates with the published soil survey information ([Appendix II](#)).
- A Final C-141 Form is also attached ([Appendix V](#)).

Closure

On behalf of Lime Rock Resources, we respectfully request that no further actions be required and that closure with regard to this incident be granted.

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



Chris Jones
Project Manager



David J. Adkins
District Manager

Attachments:

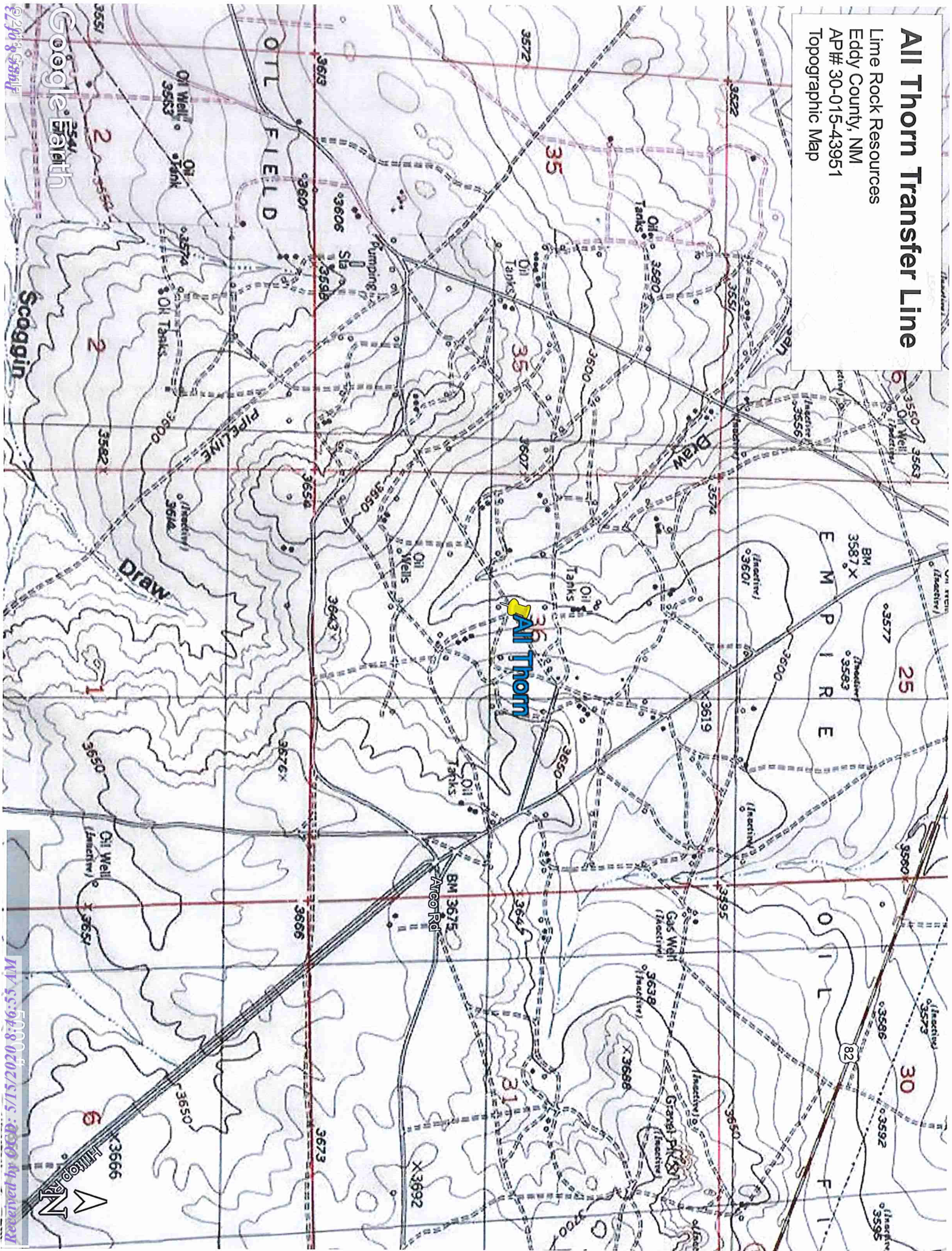
- Appendix I Site Plan
- Appendix II Groundwater Data & Soil Survey
- Appendix III Photographic Documentation
- Appendix IV FEMA FloodMap
- Appendix V Final C-141
- Appendix VI Laboratory Reports

APPENDIX I

SITE PLAN

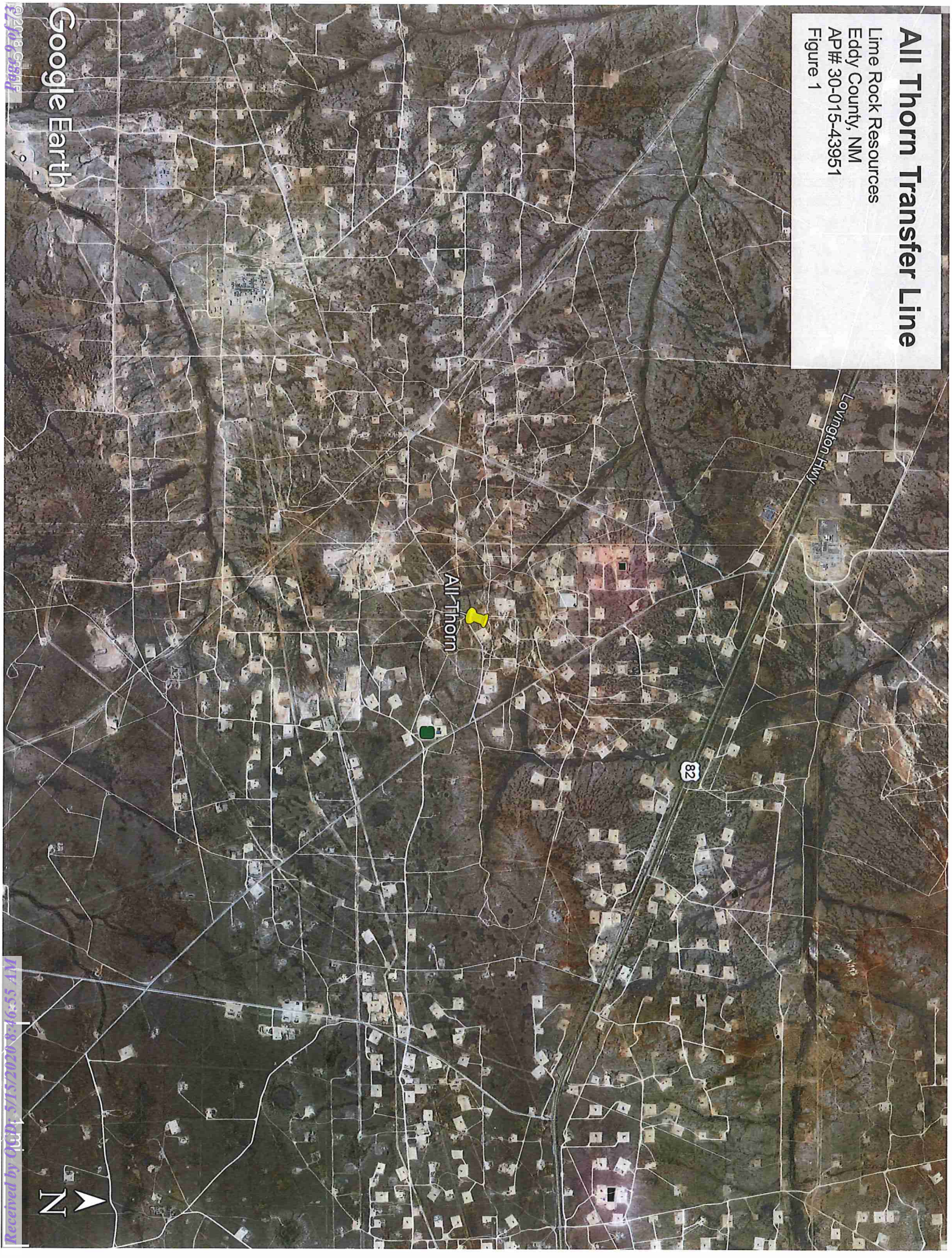
All Thorn Transfer Line

Lime Rock Resources
Eddy County, NM
AP# 30-015-43951
Topographic Map



All Thorn Transfer Line

Lime Rock Resources
Eddy County, NM
AP# 30-015-43951
Figure 1



Google Earth

© 2018 Google

Received by mail 11/26/2018 5:09 PM



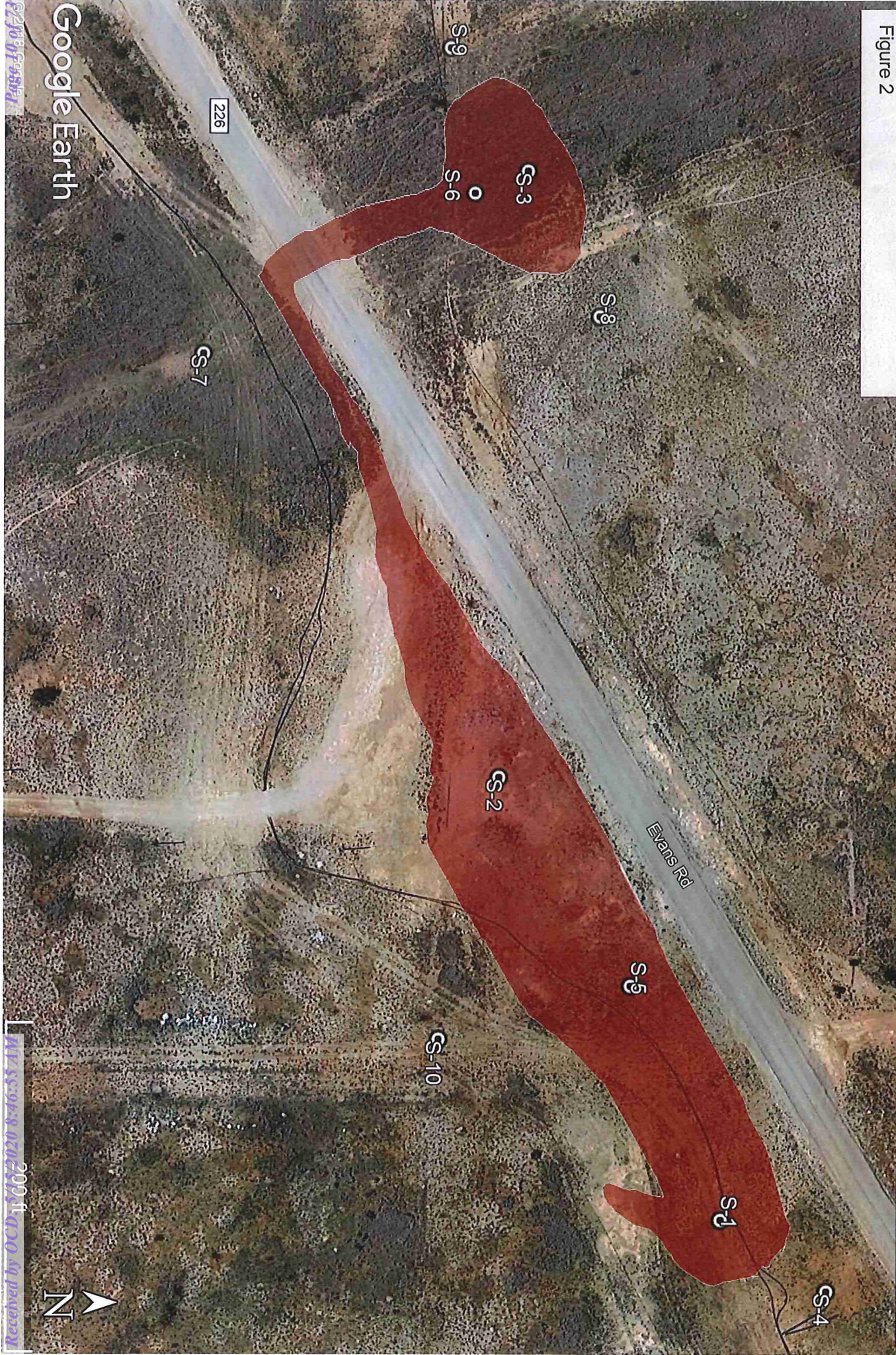
All Thorn Transfer Line

Lime Rock Resources
Eddy County, NM
AP# 30-015-43951
Figure 2

 Spill Path

 Soil Sample

Legend



Google Earth

APPENDIX II
GROUNDWATER DATA
SOIL SURVEY



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	Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	DepthWell	DepthWater	Water Column
RA 04561	RA	ED		4	2	26	17S	27E		570871	3630142*	2496	250		
RA 12456 POD1	RA	ED		1	4	4	24	17S	27E	572348	3630969	2944	220	92	128
Average Depth to Water:														92 feet	
Minimum Depth:														92 feet	
Maximum Depth:														92 feet	

Record Count: 2

UTMNAD83 Radius Search (in meters):

Eastings (X): 572200 Northing (Y): 3628029 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.

7/23/18 8:08 AM

WATER COLUMN/ AVERAGE DEPTH TO WATER

Eddy Area, New Mexico

RG—Reeves-Gypsum land complex, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 1w5f
Elevation: 1,250 to 5,000 feet
Mean annual precipitation: 10 to 25 inches
Mean annual air temperature: 57 to 70 degrees F
Frost-free period: 190 to 235 days
Farmland classification: Not prime farmland

Map Unit Composition

Reeves and similar soils: 55 percent
Gypsum land: 30 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Reeves

Setting

Landform: Ridges, hills, plains
Landform position (two-dimensional): Backslope, footslope, shoulder, toeslope
Landform position (three-dimensional): Side slope, crest, nose slope, head slope
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Residuum weathered from gypsum

Typical profile

H1 - 0 to 8 inches: loam
H2 - 8 to 32 inches: clay loam
H3 - 32 to 60 inches: gypsiferous material

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 25 percent
Gypsum, maximum in profile: 80 percent
Salinity, maximum in profile: Very slightly saline to moderately saline (2.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 4.0
Available water storage in profile: Low (about 4.3 inches)

Map Unit Description: Reeves-Gypsum land complex, 0 to 3 percent slopes---Eddy Area, New Mexico

Interpretive groups

Land capability classification (irrigated): 3s
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: B
Ecological site: Loamy (R042XC007NM)
Hydric soil rating: No

Description of Gypsum Land

Setting

Landform: Ridges, hills, plains
Landform position (two-dimensional): Backslope, footslope, shoulder, toeslope
Landform position (three-dimensional): Side slope, crest, nose slope, head slope
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Residuum weathered from gypsum

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8s
Hydric soil rating: No

Minor Components

Reagan

Percent of map unit:
Ecological site: Loamy (R042XC007NM)
Hydric soil rating: No

Largo

Percent of map unit:
Ecological site: Loamy (R042XC007NM)
Hydric soil rating: No

Cottonwood

Percent of map unit:
Ecological site: Salty Bottomland (R042XC033NM)
Hydric soil rating: No

Data Source Information

Soil Survey Area: Eddy Area, New Mexico
 Survey Area Data: Version 14, Sep 12, 2018

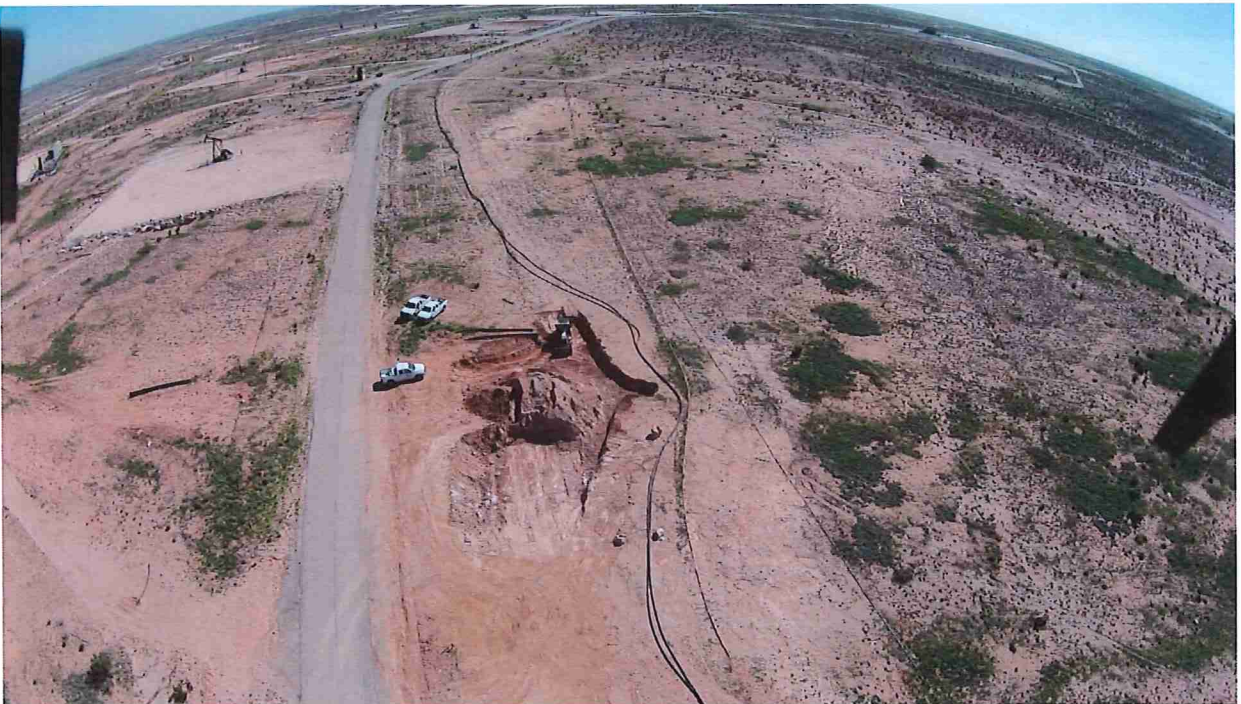
APPENDIX III

PHOTOGRAPHIC DOCUMENTATION

Before



Excavation





Backfill



Completed



Seed Mix

Curtis and Curtis Seed

4500 North Prince
Clovis, NM 88101
Phone: (575) 762-4759
www.curtisseed.com

Talon / LPE, LTD
1.25 Acre BLM \$4, Drilled Rate
1 - 1.25 Acre Bag @ 23.63 Bulk Pounds
Lime Rock- Allthorn Transfer Line Project
#701307.111.01

Lot: M-15383

Item	Origin	Purity	Germ	Dormant	Total Germination	Test Date	Total PLS Pounds
Allard Sacaton	New Mexico	9.14%	16.00%	71.00%	87.00%	05/18	1.88
Variety Not Stated							
Four-Wing Saltbush	New Mexico	72.96%	24.00%	34.00%	58.00%	04/18	10.00
Variety Not Stated							
Other Crop:	1.25%	There Are 1 Bags For This Mix					
Weed Seed:	0.03%	This Bag Weighs 23.63 Bulk Pounds					
Inert Matter:	16.57%	Use This Bag For 1.25 Acres					
						Total Bulk Pounds:	23.63

APPENDIX IV

FEMA FLOOD MAP

National Flood Hazard Layer FIRMette



32°47'38.50"N

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

Legend

SPECIAL FLOOD HAZARD AREAS	Without Base Flood Elevation (BFE) Zone A, V, AE, AH, VE, AR With BFE or Depth Zone AE, AO, AH, VE, AR Regulatory Floodway
----------------------------	---

OTHER AREAS OF FLOOD HAZARD	0.2% Annual Chance Flood Hazard, Area of 1% annual chance flood with average depth less than one foot or with draining areas of less than one square mile (Zone 2) Future Conditions 1% Annual Chance Flood Hazard Zone X Area with Reduced Flood Risk due to Levee. See Notes, Zone X Area with Flood Risk due to Levee Zone D
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OTHER AREAS GENERAL STRUCTURES	NO SCREEN Effective LOMRs Area of Undetermined Flood Hazard Zone Channel, Culvert, or Storm Sewer Levee, Dike, or Floodwall
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OTHER FEATURES	20.2 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation Coastal Transect Base Flood Elevation Line (BFE) Limit of Study Jurisdiction Boundary Coastal Transect Baseline Profile Baseline Hydrographic Feature
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MAP PANELS	Digital Data Available No Digital Data Available Unmapped
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The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **2/18/2019 at 10:48:15 AM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRW panel number, and FIRW effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.



APPENDIX V

FINAL C-141

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 April 3, 2017

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: Lime Rock Resources II-A, L.P.	Contact: Mike Barrett
Address: 1111 Bagby St. Ste. 4600, Houston, TX 77002	Telephone No. 575-365-9724
Facility Name: All Thorn P/W Transfer Line	Facility Type:

Surface Owner: Key Livestock, LLC	Mineral Owner: State	API No. 30-015-43951
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LOCATION OF RELEASE

Unit Letter J	Section 36	Township 17S	Range 27E	Feet from the 1650	North/South Line S	Feet from the 1650	East/West Line E	County Eddy
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Latitude 32.4724 Longitude -104.1404 NAD83

NATURE OF RELEASE

Type of Release: Fresh and Produced Water	Volume of Release: 25 bbls	Volume Recovered: 8 bbls
Source of Release: 12" PW transfer line	Date and Hour of Occurrence 6-28-18 @ Unknown AM	Date and Hour of Discovery 6-28-18 @ 12:15 PM
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Mike Bratcher/NMOCD voicemail	
By Whom? David Adkins	Date and Hour: 6-28-18 @ 3:15 pm	
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.*

The 12" transfer line going from the All Thorn Facility to the Hawk 8K Federal #51 (API above) had previously been flushed with fresh water and was at the time of the release idle. Vandals stole the connections resulting in a release of the water that was trapped in the line. The line subsequently was capped to stop the leak. Clean dirt was brought to berm the spill to prevent it from continuing to run across Evans Rd. A vac truck was also dispatched to pick up fluids and was able to recover 8 bbls of standing water. Talon mobilized personnel to the location for the initial site assessment.

Describe Area Affected and Cleanup Action Taken.*

The spill measures approximately 25 feet across at its greatest width and extends approximately 150 feet in total length. The spill did cross Evans road measuring approximately 15 feet wide by 30 feet long. Excavation activities are completed. A formal site characterization and closure report is attached. Lime Rock is respectfully requesting closure for this incident.

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: Mike Barrett	Approved by Environmental Specialist:	
Title: Production Superintendent	Approval Date:	Expiration Date:
E-mail Address: mbarrett@limerockresources.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 10-17-18	Phone: 575-365-9724	

* Attach Additional Sheets If Necessary

APPENDIX VI

LABORATORY REPORTS



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

February 14, 2019

DAVID ADKINS

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: ALTHORN TRANSFER LINE

Enclosed are the results of analyses for samples received by the laboratory on 07/09/18 11:35.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. 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	Total Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

Method SM 9223-B	Total Coliform and E. coli (Colilert MMO-MUG)
Method EPA 524.2	Regulated VOCs and Total Trihalomethanes (TTHM)
Method EPA 552.2	Total Haloacetic Acids (HAA-5)

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

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



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

Analytical Results For:

TALON LPE
408 W. TEXAS AVE.
ARTESIA NM, 88210

Project: ALTHORN TRANSFER LINE
Project Number: 701307.111.01
Project Manager: DAVID ADKINS
Fax To: (575) 745-8905

Reported:
14-Feb-19 08:55

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
S-1 1'	H801852-01	Soil	03-Jul-18 10:57	09-Jul-18 11:35
S-1 2'	H801852-02	Soil	03-Jul-18 11:01	09-Jul-18 11:35
S-1 3'	H801852-03	Soil	03-Jul-18 11:05	09-Jul-18 11:35
S-1 4'	H801852-04	Soil	03-Jul-18 11:07	09-Jul-18 11:35
S-1 5'	H801852-05	Soil	03-Jul-18 11:14	09-Jul-18 11:35
S-1 6' REFUSAL	H801852-06	Soil	03-Jul-18 11:25	09-Jul-18 11:35
S-2 1'	H801852-07	Soil	03-Jul-18 11:48	09-Jul-18 11:35
S-2 2'	H801852-08	Soil	03-Jul-18 11:55	09-Jul-18 11:35
S-3 1'	H801852-10	Soil	03-Jul-18 12:13	09-Jul-18 11:35
S-3 2'	H801852-11	Soil	03-Jul-18 12:14	09-Jul-18 11:35
S-3 3'	H801852-12	Soil	03-Jul-18 12:15	09-Jul-18 11:35
S-3 4'	H801852-13	Soil	03-Jul-18 12:16	09-Jul-18 11:35
S-3 5'	H801852-14	Soil	03-Jul-18 12:19	09-Jul-18 11:35
S-3 6'	H801852-15	Soil	03-Jul-18 12:23	09-Jul-18 11:35
S-3 7'	H801852-16	Soil	03-Jul-18 12:25	09-Jul-18 11:35
S-3 8'	H801852-17	Soil	03-Jul-18 12:29	09-Jul-18 11:35
S-3 9'	H801852-18	Soil	03-Jul-18 12:35	09-Jul-18 11:35
S-3 10'	H801852-19	Soil	03-Jul-18 12:38	09-Jul-18 11:35
S-3 11'	H801852-20	Soil	03-Jul-18 12:43	09-Jul-18 11:35
S-3 12'	H801852-21	Soil	03-Jul-18 12:52	09-Jul-18 11:35
S-3 13'	H801852-22	Soil	03-Jul-18 12:58	09-Jul-18 11:35

Client removed sample -09 from report. This is the revised report that will replace the one sent on 07/11/18.

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 or 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 damage 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



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

Analytical Results For:

TALON LPE
408 W. TEXAS AVE.
ARTESIA NM, 88210

Project: ALTHORN TRANSFER LINE
Project Number: 701307.111.01
Project Manager: DAVID ADKINS
Fax To: (575) 745-8905

Reported:
14-Feb-19 08:55

S-1 1'
H801852-01 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	27600		16.0	mg/kg	4	8070912	AC	09-Jul-18	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	8070910	MS	10-Jul-18	8021B	
Toluene*	<0.050		0.050	mg/kg	50	8070910	MS	10-Jul-18	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	8070910	MS	10-Jul-18	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	8070910	MS	10-Jul-18	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	8070910	MS	10-Jul-18	8021B	

Surrogate: 4-Bromofluorobenzene (PID) 113 % 69.8-142 8070910 MS 10-Jul-18 8021B

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	8070909	MS	10-Jul-18	8015B	
DRO >C10-C28*	185		10.0	mg/kg	1	8070909	MS	10-Jul-18	8015B	
EXT DRO >C28-C36	72.7		10.0	mg/kg	1	8070909	MS	10-Jul-18	8015B	

Surrogate: 1-Chlorooctane 102 % 41-142 8070909 MS 10-Jul-18 8015B

Surrogate: 1-Chlorooctadecane 105 % 37.6-147 8070909 MS 10-Jul-18 8015B

Cardinal Laboratories

* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

TALON LPE 408 W. TEXAS AVE. ARTESIA NM, 88210	Project: ALTHORN TRANSFER LINE Project Number: 701307.111.01 Project Manager: DAVID ADKINS Fax To: (575) 745-8905	Reported: 14-Feb-19 08:55
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**S-1 2'
H801852-02 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories

Inorganic Compounds

Chloride	24000		16.0	mg/kg	4	8070912	AC	09-Jul-18	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	8071005	MS	10-Jul-18	8021B	
Toluene*	<0.050		0.050	mg/kg	50	8071005	MS	10-Jul-18	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	8071005	MS	10-Jul-18	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	8071005	MS	10-Jul-18	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	8071005	MS	10-Jul-18	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			105 %	69.8-142		8071005	MS	10-Jul-18	8021B	

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	8071006	MS	10-Jul-18	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	8071006	MS	10-Jul-18	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	8071006	MS	10-Jul-18	8015B	
Surrogate: 1-Chlorooctane			94.8 %	41-142		8071006	MS	10-Jul-18	8015B	
Surrogate: 1-Chlorooctadecane			84.4 %	37.6-147		8071006	MS	10-Jul-18	8015B	

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Coley D. Keene

Coley D. Keene, Lab Director/Quality Manager



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Analytical Results For:

TALON LPE
408 W. TEXAS AVE.
ARTESIA NM, 88210

Project: ALTHORN TRANSFER LINE
Project Number: 701307.111.01
Project Manager: DAVID ADKINS
Fax To: (575) 745-8905

Reported:
14-Feb-19 08:55

S-1 3'
H801852-03 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories

Inorganic Compounds

Chloride	1720		16.0	mg/kg	4	8070912	AC	09-Jul-18	4500-Cl-B	
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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

TALON LPE	Project: ALTHORN TRANSFER LINE	Reported:
408 W. TEXAS AVE.	Project Number: 701307.111.01	14-Feb-19 08:55
ARTESIA NM, 88210	Project Manager: DAVID ADKINS	
	Fax To: (575) 745-8905	

S-1 4'
H801852-04 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories

Inorganic Compounds

Chloride	784		16.0	mg/kg	4	8070912	AC	09-Jul-18	4500-Cl-B	
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Analytical Results For:

TALON LPE
408 W. TEXAS AVE.
ARTESIA NM, 88210

Project: ALTHORN TRANSFER LINE
Project Number: 701307.111.01
Project Manager: DAVID ADKINS
Fax To: (575) 745-8905

Reported:
14-Feb-19 08:55

S-1 5'
H801852-05 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories

Inorganic Compounds

Chloride	304		16.0	mg/kg	4	8070912	AC	09-Jul-18	4500-Cl-B	
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Analytical Results For:

TALON LPE
408 W. TEXAS AVE.
ARTESIA NM, 88210

Project: ALTHORN TRANSFER LINE
Project Number: 701307.111.01
Project Manager: DAVID ADKINS
Fax To: (575) 745-8905

Reported:
14-Feb-19 08:55

S-1 6' REFUSAL

H801852-06 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories

Inorganic Compounds

Chloride	336		16.0	mg/kg	4	8070913	AC	09-Jul-18	4500-Cl-B	
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Analytical Results For:

TALON LPE 408 W. TEXAS AVE. ARTESIA NM, 88210	Project: ALTHORN TRANSFER LINE Project Number: 701307.111.01 Project Manager: DAVID ADKINS Fax To: (575) 745-8905	Reported: 14-Feb-19 08:55
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**S-2 1'
H801852-07 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories

Inorganic Compounds

Chloride	5600		16.0	mg/kg	4	8070913	AC	10-Jul-18	4500-CL-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	8070910	MS	10-Jul-18	8021B	
Toluene*	<0.050		0.050	mg/kg	50	8070910	MS	10-Jul-18	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	8070910	MS	10-Jul-18	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	8070910	MS	10-Jul-18	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	8070910	MS	10-Jul-18	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			115 %	69.8-142		8070910	MS	10-Jul-18	8021B	

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	8070909	MS	10-Jul-18	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	8070909	MS	10-Jul-18	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	8070909	MS	10-Jul-18	8015B	
Surrogate: 1-Chlorooctane			94.8 %	41-142		8070909	MS	10-Jul-18	8015B	
Surrogate: 1-Chlorooctadecane			90.4 %	37.6-147		8070909	MS	10-Jul-18	8015B	

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Coley D. Keene

Coley D. Keene, Lab Director/Quality Manager



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Analytical Results For:

TALON LPE 408 W. TEXAS AVE. ARTESIA NM, 88210	Project: ALTHORN TRANSFER LINE Project Number: 701307.111.01 Project Manager: DAVID ADKINS Fax To: (575) 745-8905	Reported: 14-Feb-19 08:55
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S-2 2'

H801852-08 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories

Inorganic Compounds

Chloride	144		16.0	mg/kg	4	8070913	AC	10-Jul-18	4500-Cl-B	
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Celestine D. Keene

Celestine D. Keene, Lab Director/Quality Manager



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Analytical Results For:

TALON LPE
408 W. TEXAS AVE.
ARTESIA NM, 88210

Project: ALTHORN TRANSFER LINE
Project Number: 701307.111.01
Project Manager: DAVID ADKINS
Fax To: (575) 745-8905

Reported:
14-Feb-19 08:55

S-3 1'
H801852-10 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	8130		16.0	mg/kg	4	8070913	AC	10-Jul-18	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	8070910	MS	10-Jul-18	8021B	
Toluene*	<0.050		0.050	mg/kg	50	8070910	MS	10-Jul-18	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	8070910	MS	10-Jul-18	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	8070910	MS	10-Jul-18	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	8070910	MS	10-Jul-18	8021B	

Surrogate: 4-Bromofluorobenzene (PID) 112 % 69.8-142 8070910 MS 10-Jul-18 8021B

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	8070909	MS	10-Jul-18	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	8070909	MS	10-Jul-18	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	8070909	MS	10-Jul-18	8015B	

Surrogate: 1-Chlorooctane 94.5 % 41-142 8070909 MS 10-Jul-18 8015B

Surrogate: 1-Chlorooctadecane 90.3 % 37.6-147 8070909 MS 10-Jul-18 8015B

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Analytical Results For:

TALON LPE	Project: ALTHORN TRANSFER LINE	Reported:
408 W. TEXAS AVE.	Project Number: 701307.111.01	14-Feb-19 08:55
ARTESIA NM, 88210	Project Manager: DAVID ADKINS	
	Fax To: (575) 745-8905	

S-3 2'
H801852-11 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories

Inorganic Compounds

Chloride	4040		16.0	mg/kg	4	8070913	AC	10-Jul-18	4500-Cl-B	
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Analytical Results For:

TALON LPE
408 W. TEXAS AVE.
ARTESIA NM, 88210

Project: ALTHORN TRANSFER LINE
Project Number: 701307.111.01
Project Manager: DAVID ADKINS
Fax To: (575) 745-8905

Reported:
14-Feb-19 08:55

S-3 3'

H801852-12 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories

Inorganic Compounds

Chloride	1720		16.0	mg/kg	4	8070913	AC	10-Jul-18	4500-Cl-B	
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Analytical Results For:

TALON LPE 408 W. TEXAS AVE. ARTESIA NM, 88210	Project: ALTHORN TRANSFER LINE Project Number: 701307.111.01 Project Manager: DAVID ADKINS Fax To: (575) 745-8905	Reported: 14-Feb-19 08:55
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S-3 4'

H801852-13 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories

Inorganic Compounds

Chloride	2120		16.0	mg/kg	4	8070913	AC	10-Jul-18	4500-Cl-B	
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Celestine D. Keene

Celestine D. Keene, Lab Director/Quality Manager



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Analytical Results For:

TALON LPE 408 W. TEXAS AVE. ARTESIA NM, 88210	Project: ALTHORN TRANSFER LINE Project Number: 701307.111.01 Project Manager: DAVID ADKINS Fax To: (575) 745-8905	Reported: 14-Feb-19 08:55
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S-3 5'

H801852-14 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories

Inorganic Compounds

Chloride	704		16.0	mg/kg	4	8070913	AC	10-Jul-18	4500-Cl-B	
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Analytical Results For:

TALON LPE
408 W. TEXAS AVE.
ARTESIA NM, 88210

Project: ALTHORN TRANSFER LINE
Project Number: 701307.111.01
Project Manager: DAVID ADKINS
Fax To: (575) 745-8905

Reported:
14-Feb-19 08:55

S-3 6'
H801852-15 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories

Inorganic Compounds

Chloride	32.0		16.0	mg/kg	4	8070913	AC	10-Jul-18	4500-Cl-B	
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Analytical Results For:

TALON LPE	Project: ALTHORN TRANSFER LINE	Reported:
408 W. TEXAS AVE.	Project Number: 701307.111.01	14-Feb-19 08:55
ARTESIA NM, 88210	Project Manager: DAVID ADKINS	
	Fax To: (575) 745-8905	

S-3 7'
H801852-16 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories

Inorganic Compounds

Chloride	32.0		16.0	mg/kg	4	8070913	AC	10-Jul-18	4500-Cl-B	
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Celestine D. Keene

Celestine D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

TALON LPE
408 W. TEXAS AVE.
ARTESIA NM, 88210

Project: ALTHORN TRANSFER LINE
Project Number: 701307.111.01
Project Manager: DAVID ADKINS
Fax To: (575) 745-8905

Reported:
14-Feb-19 08:55

S-3 8'
H801852-17 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories

Inorganic Compounds

Chloride	96.0		16.0	mg/kg	4	8070913	AC	10-Jul-18	4500-Cl-B	
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Analytical Results For:

TALON LPE
408 W. TEXAS AVE.
ARTESIA NM, 88210

Project: ALTHORN TRANSFER LINE
Project Number: 701307.111.01
Project Manager: DAVID ADKINS
Fax To: (575) 745-8905

Reported:
14-Feb-19 08:55

S-3 9'
H801852-18 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories

Inorganic Compounds

Chloride	64.0		16.0	mg/kg	4	8070913	AC	10-Jul-18	4500-Cl-B	
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Analytical Results For:

TALON LPE 408 W. TEXAS AVE. ARTESIA NM, 88210	Project: ALTHORN TRANSFER LINE Project Number: 701307.111.01 Project Manager: DAVID ADKINS Fax To: (575) 745-8905	Reported: 14-Feb-19 08:55
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**S-3 10'
H801852-19 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories

Inorganic Compounds

Chloride	32.0		16.0	mg/kg	4	8070913	AC	10-Jul-18	4500-Cl-B	
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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

TALON LPE
408 W. TEXAS AVE.
ARTESIA NM, 88210

Project: ALTHORN TRANSFER LINE
Project Number: 701307.111.01
Project Manager: DAVID ADKINS
Fax To: (575) 745-8905

Reported:
14-Feb-19 08:55

S-3 11'
H801852-20 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories

Inorganic Compounds

Chloride	144		16.0	mg/kg	4	8070913	AC	10-Jul-18	4500-Cl-B	
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Analytical Results For:

TALON LPE
408 W. TEXAS AVE.
ARTESIA NM, 88210

Project: ALTHORN TRANSFER LINE
Project Number: 701307.111.01
Project Manager: DAVID ADKINS
Fax To: (575) 745-8905

Reported:
14-Feb-19 08:55

S-3 12'
H801852-21 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories

Inorganic Compounds

Chloride	48.0		16.0	mg/kg	4	8070913	AC	10-Jul-18	4500-Cl-B	
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Analytical Results For:

TALON LPE 408 W. TEXAS AVE. ARTESIA NM, 88210	Project: ALTHORN TRANSFER LINE Project Number: 701307.111.01 Project Manager: DAVID ADKINS Fax To: (575) 745-8905	Reported: 14-Feb-19 08:55
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**S-3 13'
H801852-22 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories

Inorganic Compounds

Chloride	32.0		16.0	mg/kg	4	8070913	AC	10-Jul-18	4500-Cl-B	
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Analytical Results For:

TALON LPE 408 W. TEXAS AVE. ARTESIA NM, 88210	Project: ALTHORN TRANSFER LINE Project Number: 701307.111.01 Project Manager: DAVID ADKINS Fax To: (575) 745-8905	Reported: 14-Feb-19 08:55
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Inorganic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 8070912 - 1:4 DI Water

Blank (8070912-BLK1) Prepared & Analyzed: 09-Jul-18

Chloride	ND	16.0	mg/kg							
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LCS (8070912-BS1) Prepared & Analyzed: 09-Jul-18

Chloride	416	16.0	mg/kg	400		104	80-120			
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LCS Dup (8070912-BSD1) Prepared & Analyzed: 09-Jul-18

Chloride	416	16.0	mg/kg	400		104	80-120	0.00	20	
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Batch 8070913 - 1:4 DI Water

Blank (8070913-BLK1) Prepared & Analyzed: 09-Jul-18

Chloride	ND	16.0	mg/kg							
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LCS (8070913-BS1) Prepared & Analyzed: 09-Jul-18

Chloride	432	16.0	mg/kg	400		108	80-120			
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LCS Dup (8070913-BSD1) Prepared & Analyzed: 09-Jul-18

Chloride	416	16.0	mg/kg	400		104	80-120	3.77	20	
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Analytical Results For:

TALON LPE
408 W. TEXAS AVE.
ARTESIA NM, 88210

Project: ALTHORN TRANSFER LINE
Project Number: 701307.111.01
Project Manager: DAVID ADKINS
Fax To: (575) 745-8905

Reported:
14-Feb-19 08:55

Volatile Organic Compounds by EPA Method 8021 - Quality Control**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 8070910 - Volatiles**Blank (8070910-BLK1)**

Prepared & Analyzed: 09-Jul-18

Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	0.111		mg/kg	0.100		111	69.8-142			

LCS (8070910-BS1)

Prepared & Analyzed: 09-Jul-18

Benzene	2.04	0.050	mg/kg	2.00		102	74.5-124			
Toluene	2.02	0.050	mg/kg	2.00		101	78.8-122			
Ethylbenzene	1.99	0.050	mg/kg	2.00		99.4	78.6-122			
Total Xylenes	6.15	0.150	mg/kg	6.00		102	79.7-123			
Surrogate: 4-Bromofluorobenzene (PID)	0.109		mg/kg	0.100		109	69.8-142			

LCS Dup (8070910-BS1)

Prepared & Analyzed: 09-Jul-18

Benzene	1.99	0.050	mg/kg	2.00		99.6	74.5-124	2.42	15.2	
Toluene	1.97	0.050	mg/kg	2.00		98.4	78.8-122	2.40	15.1	
Ethylbenzene	1.94	0.050	mg/kg	2.00		97.1	78.6-122	2.31	15.4	
Total Xylenes	6.01	0.150	mg/kg	6.00		100	79.7-123	2.33	15.2	
Surrogate: 4-Bromofluorobenzene (PID)	0.108		mg/kg	0.100		108	69.8-142			

Batch 8071005 - Volatiles**Blank (8071005-BLK1)**

Prepared & Analyzed: 10-Jul-18

Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	0.106		mg/kg	0.100		106	69.8-142			

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Analytical Results For:

TALON LPE 408 W. TEXAS AVE. ARTESIA NM, 88210	Project: ALTHORN TRANSFER LINE Project Number: 701307.111.01 Project Manager: DAVID ADKINS Fax To: (575) 745-8905	Reported: 14-Feb-19 08:55
---	--	------------------------------

Volatile Organic Compounds by EPA Method 8021 - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 8071005 - Volatiles

LCS (8071005-BS1)				Prepared & Analyzed: 10-Jul-18						
Benzene	1.84	0.050	mg/kg	2.00		92.0	74.5-124			
Toluene	1.82	0.050	mg/kg	2.00		90.9	78.8-122			
Ethylbenzene	1.80	0.050	mg/kg	2.00		90.1	78.6-122			
Total Xylenes	5.55	0.150	mg/kg	6.00		92.4	79.7-123			
Surrogate: 4-Bromofluorobenzene (PID)	0.104		mg/kg	0.100		104	69.8-142			
LCS Dup (8071005-BSD1)				Prepared & Analyzed: 10-Jul-18						
Benzene	1.84	0.050	mg/kg	2.00		91.9	74.5-124	0.0378	15.2	
Toluene	1.81	0.050	mg/kg	2.00		90.6	78.8-122	0.254	15.1	
Ethylbenzene	1.78	0.050	mg/kg	2.00		88.9	78.6-122	1.37	15.4	
Total Xylenes	5.47	0.150	mg/kg	6.00		91.1	79.7-123	1.46	15.2	
Surrogate: 4-Bromofluorobenzene (PID)	0.106		mg/kg	0.100		106	69.8-142			

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Analytical Results For:

TALON LPE
408 W. TEXAS AVE.
ARTESIA NM, 88210

Project: ALTHORN TRANSFER LINE
Project Number: 701307.111.01
Project Manager: DAVID ADKINS
Fax To: (575) 745-8905

Reported:
14-Feb-19 08:55

Petroleum Hydrocarbons by GC FID - Quality Control**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 8070909 - General Prep - Organics**Blank (8070909-BLK1)**

Prepared: 09-Jul-18 Analyzed: 10-Jul-18

GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Total TPH C6-C28	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	54.1		mg/kg	50.0		108	41-142			
Surrogate: 1-Chlorooctadecane	49.5		mg/kg	50.0		98.9	37.6-147			

LCS (8070909-BS1)

Prepared & Analyzed: 09-Jul-18

GRO C6-C10	222	10.0	mg/kg	200		111	76.5-133			
DRO >C10-C28	226	10.0	mg/kg	200		113	72.9-138			
Total TPH C6-C28	448	10.0	mg/kg	400		112	78-132			
Surrogate: 1-Chlorooctane	58.5		mg/kg	50.0		117	41-142			
Surrogate: 1-Chlorooctadecane	55.4		mg/kg	50.0		111	37.6-147			

LCS Dup (8070909-BSD1)

Prepared & Analyzed: 09-Jul-18

GRO C6-C10	218	10.0	mg/kg	200		109	76.5-133	1.96	20.6	
DRO >C10-C28	221	10.0	mg/kg	200		111	72.9-138	2.03	20.6	
Total TPH C6-C28	439	10.0	mg/kg	400		110	78-132	2.00	18	
Surrogate: 1-Chlorooctane	57.1		mg/kg	50.0		114	41-142			
Surrogate: 1-Chlorooctadecane	55.8		mg/kg	50.0		112	37.6-147			

Batch 8071006 - General Prep - Organics**Blank (8071006-BLK1)**

Prepared & Analyzed: 10-Jul-18

GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Total TPH C6-C28	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	54.4		mg/kg	50.0		109	41-142			
Surrogate: 1-Chlorooctadecane	48.3		mg/kg	50.0		96.7	37.6-147			

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Analytical Results For:

TALON LPE 408 W. TEXAS AVE. ARTESIA NM, 88210	Project: ALTHORN TRANSFER LINE Project Number: 701307.111.01 Project Manager: DAVID ADKINS Fax To: (575) 745-8905	Reported: 14-Feb-19 08:55
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Petroleum Hydrocarbons by GC FID - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch 8071006 - General Prep - Organics

LCS (8071006-BS1)		Prepared & Analyzed: 10-Jul-18								
GRO C6-C10	216	10.0	mg/kg	200		108	76.5-133			
DRO >C10-C28	218	10.0	mg/kg	200		109	72.9-138			
Total TPH C6-C28	434	10.0	mg/kg	400		109	78-132			
Surrogate: 1-Chlorooctane	56.3		mg/kg	50.0		113	41-142			
Surrogate: 1-Chlorooctadecane	51.5		mg/kg	50.0		103	37.6-147			
LCS Dup (8071006-BS1)		Prepared & Analyzed: 10-Jul-18								
GRO C6-C10	212	10.0	mg/kg	200		106	76.5-133	1.86	20.6	
DRO >C10-C28	211	10.0	mg/kg	200		106	72.9-138	3.14	20.6	
Total TPH C6-C28	423	10.0	mg/kg	400		106	78-132	2.50	18	
Surrogate: 1-Chlorooctane	55.7		mg/kg	50.0		111	41-142			
Surrogate: 1-Chlorooctadecane	51.4		mg/kg	50.0		103	37.6-147			

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Coley D. Keene, Lab Director/Quality Manager

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Notes and Definitions

- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

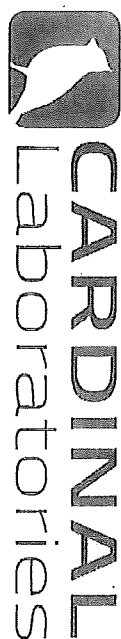
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A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

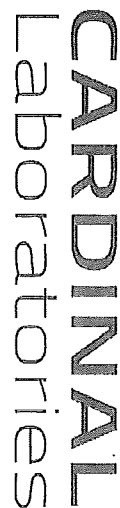
101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

Company Name: <u>Line Back - TRAVIS L&S</u>		P.O. #: <u>701-307-111-01</u>	
Project Manager: <u>David Addins</u>		Company: <u>Talon L&S</u>	
Address: <u>408 W. Texas Ave</u>		Attn: <u>DAVID ADDINS</u>	
City: <u>Acacia</u> State: <u>NM</u> Zip: <u>88210</u>		Address:	
Phone #: <u>575-746-9768</u> Fax #:		City:	
Project #: <u>701307.111.01</u> Project Owner: <u>Line Back</u>		State:	
Project Name: <u>Albion Transfer House</u>		Zip:	
Project Location: <u>Eden County, NM</u>		Phone #:	
Sampler Name: <u>Billy Stites</u>		Fax #:	

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						PRESERV.		SAMPLING		ANALYSIS REQUEST	
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE		TIME
#801852	1 5-1 1'	6										7-3-18	10:57	✓	BTEX pH TOTAL chlorides
	2 5-1 2'											11:01	11:01	✓	
	3 5-1 3'											11:05	11:05	✓	
	4 5-1 4'											11:07	11:07	✓	
	5 5-1 5'											11:14	11:14	✓	
	6 5-1 6' refused											11:25	11:25	✓	
	7 5-2 1'											11:48	11:48	✓	
	8 5-2 2'											11:55	11:55	✓	
	9 5-2 3' refused											11:58	11:58	✓	

Relinquished By: <u>Billy Stites</u>	Date: <u>7-3-18</u>	Time: <u>11:35</u>	Received By: <u>Shawna Black</u>
Delivered By: (Circle One) <u>2.62</u>	Sample Condition	CHECKED BY: (Initials)	
Sampler - UPS - Bus - Other: <u>Consolid 2.55C</u>	Cool <input type="checkbox"/> Intact <input type="checkbox"/>		
	Yes <input type="checkbox"/> No <input type="checkbox"/>		
	Yes <input type="checkbox"/> No <input type="checkbox"/>		
REMARKS: <u>P-167 260x</u> <u>Rust</u>			

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



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CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

BILL TO

ANALYSIS REQUEST

Company Name: <u>Line Red - TRANS/LOE</u>		P.O. #: <u>761 307.11.01</u>	
Project Manager: <u>David Allen</u>		Company: <u>Telen LBE</u>	
Address: <u>408 W. Texas</u>		City: <u>Albion</u>	
City: <u>Albion</u> State: <u>NM</u> Zip: <u></u>		Address: <u></u>	
Phone #: <u></u> Fax #: <u></u>		City: <u></u>	
Project #: <u>761307.11.01</u> Project Owner: <u>Line Red</u>		State: <u></u> Zip: <u></u>	
Project Name: <u>Albion Transfer Line</u>		Phone #: <u></u>	
Project Location: <u>Eddy Co, NM</u>		Fax #: <u></u>	
Sampler Name: <u>Billy Stites</u>			

Lab I.D.	Sample I.D.	FOR LAB USE ONLY	MATRIX						PRESERV	SAMPLING				
			(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE
<u>H801852</u>														
<u>20</u>	<u>5-3 11'</u>		<u>G</u>										<u>7-3-18</u>	<u>12:13</u>
<u>21</u>	<u>5-3 12'</u>		<u>G</u>										<u>12:52</u>	
<u>22</u>	<u>5-3 13'</u>		<u>G</u>										<u>12:58</u>	

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Relinquished By: <u>Billy Stites</u>	Date: <u>7-9-18</u>	Received By: <u>Carolina Martinez</u>	Date: <u>7-9-18</u>
Time: <u>11:35</u>			

Delivered By: (Circle One) <u>2.66</u>	Sample Condition	CHECKED BY: (Initials)
Sampler - UPS - Bus - Other: <u>Connected 2.558</u>	Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/>	<u>TD. #75</u>
	Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>	

REMARKS: P-3 of 3

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



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

July 19, 2018

Chris Jones
Talon Artesia
408 West Texas Ave
Artesia, NM 88210
TEL:
FAX

RE: All Thorne Transfer Line

OrderNo.: 1807707

Dear Chris Jones:

Hall Environmental Analysis Laboratory received 7 sample(s) on 7/13/2018 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order 1807707
Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT:	Talon Artesia	Client Sample ID:	S-4 1'
Project:	All Thorre Transfer Line	Collection Date:	7/11/2018 11:50:00 AM
Lab ID:	1807707-001	Matrix:	SOIL
		Received Date:	7/13/2018 8:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CJS
Chloride	49	30		mg/Kg	20	7/17/2018

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	
	D Sample Diluted Due to Matrix	E Value above quantitation range	
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits	Page 1 of 0
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range	
PQL	Practical Quantitative Limit	RL Reporting Detection Limit	
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified	

Analytical Report

Lab Order 1807707

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Client Sample ID: S-5 1' Refusal

Project: All Thorre Transfer Line

Collection Date: 7/11/2018 12:15:00 PM

Lab ID: 1807707-002

Matrix: SOIL

Received Date: 7/13/2018 8:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CJS
Chloride	370	30		mg/Kg	20	7/17/2018

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

Analytical Report
 Lab Order 1807707
 Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia	Client Sample ID: S-6 1' Refusal
Project: All Thorre Transfer Line	Collection Date: 7/11/2018 12:20:00 PM
Lab ID: 1807707-003	Matrix: SOIL Received Date: 7/13/2018 8:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CJS
Chloride	1800	75		mg/Kg	50	7/17/2018

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 3 of 0
	D	Sample Diluted Due to Matrix	E	Value above quantitation range	
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range	
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit	
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified	

Analytical Report
Lab Order 1807707
Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT:	Talon Artesia	Client Sample ID:	S-7 1'
Project:	All Thorre Transfer Line	Collection Date:	7/11/2018 12:30:00 PM
Lab ID:	1807707-004	Matrix:	SOIL
		Received Date:	7/13/2018 8:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CJS
Chloride	ND	30		mg/Kg	20	7/17/2018

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT:	Talon Artesia	Client Sample ID:	S-8 1'
Project:	All Thorre Transfer Line	Collection Date:	7/11/2018 12:35:00 PM
Lab ID:	1807707-005	Matrix:	SOIL
		Received Date:	7/13/2018 8:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CJS
Chloride	ND	30		mg/Kg	20	7/17/2018

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	
	D Sample Diluted Due to Matrix	E Value above quantitation range	
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits	Page 5 of 0
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range	
PQL	Practical Quantitative Limit	RL Reporting Detection Limit	
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified	

Hall Environmental Analysis Laboratory, Inc.

CLIENT:	Talon Artesia	Client Sample ID:	S-8 2' Refusal
Project:	All Thorre Transfer Line	Collection Date:	7/11/2018 12:40:00 PM
Lab ID:	1807707-006	Matrix:	SOIL
		Received Date:	7/13/2018 8:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CJS
Chloride	ND	30		mg/Kg	20	7/17/2018

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.			
Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

Analytical Report

Lab Order 1807707

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Client Sample ID: S-9 1' Refusal

Project: All Thorre Transfer Line

Collection Date: 7/11/2018 12:45:00 PM

Lab ID: 1807707-007

Matrix: SOIL

Received Date: 7/13/2018 8:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CJS
Chloride	ND	30		mg/Kg	20	7/17/2018

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 7 of 0
	D	Sample Diluted Due to Matrix	E	Value above quantitation range	
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range	
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit	
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified	

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1807707
19-Jul-18

Client: Talon Artesia
Project: All Thorne Transfer Line

Sample ID	MB-39246	SampType:	mblk	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	39246	RunNo:	52750					
Prep Date:	7/17/2018	Analysis Date:	7/17/2018	SeqNo:	1733779	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-39246	SampType:	lcs	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	39246	RunNo:	52750					
Prep Date:	7/17/2018	Analysis Date:	7/17/2018	SeqNo:	1733780	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.5	90	110			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: TALON ARTESIA

Work Order Number: 1807707

RcptNo: 1

Received By: Isaiah Ortiz 7/13/2018 8:50:00 AM

Completed By: Anne Thorne 7/13/2018 10:33:20 AM

Reviewed By: ID

Labeled by: JAB 07/13/18

IG

Anne Thorne

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐

2. How was the sample delivered? Client

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐

4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐

5. Sample(s) in proper container(s)? Yes ☒ No ☐

6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐

7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐

8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐

9. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒

10. Were any sample containers received broken? Yes ☐ No ☒

11. Does paperwork match bottle labels? Yes ☒ No ☐

(Note discrepancies on chain of custody)

12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐

13. Is it clear what analyses were requested? Yes ☒ No ☐

14. Were all holding times able to be met? Yes ☒ No ☐

(If no, notify customer for authorization.)

of preserved bottles checked for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by: JAB 07/13/18

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:	Date:
By Whom:	Via: <input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	
Client Instructions:	

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.3	Good	Yes			



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

July 31, 2018

CHRIS JONES

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: ALL THORNE

Enclosed are the results of analyses for samples received by the laboratory on 07/30/18 15:10.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. 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



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

Analytical Results For:

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

Received: 07/30/2018
 Reported: 07/31/2018
 Project Name: ALL THORNE
 Project Number: 701307.111.01
 Project Location: EDDY CO

Sampling Date: 07/25/2018
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: S- 10 0' (H802068-01)

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	07/31/2018	ND	400	100	400	7.69	

Sample ID: S- 10 1' (H802068-02)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	07/31/2018	ND	400	100	400	7.69		

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Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

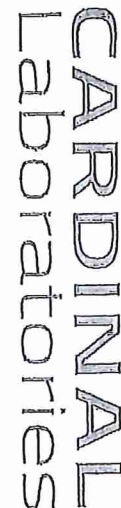
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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Received by *OCD*: 5/15/2020 8:46:55 AM