

Imagine the result

**Apache Corporation**

**EAU Pilot Project  
Remediation  
Proposal**

EAU M-141  
C-11-T18S-R27E  
225' FNL & 2280' FWL  
30-015-22834  
Eddy County, New Mexico

August 10, 2016

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Jennifer Van Curen  
Environmental Project Scientist

## **EAU Pilot Project**

Remediation  
Proposal  
EAU M-141  
C-11-T18S-R27E  
225' FNL & 2280' FWL  
30-015-22834

Prepared for:  
Apache  
Corporation  
Eddy County, New Mexico

Prepared by:  
ARCADIS U.S., Inc.  
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Texas 79701  
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Fax 432 687 5401

Our Ref.:  
MT001200.0000.0000

Date:  
August 10, 2016

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- Geology Map
- Hydrology Map
- Karst Potential Map
- Soils Map
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## **1. INTRODUCTION**

### **1.1 Site Information**

The subject site is a ROW and pasture area located approximately 10 miles southeast of Artesia, New Mexico at GPS coordinates of 32°46'5.01"N, 104°15'3.87"W. The fiberglass line is owned and operated by Apache Corporation.

The OCD 2RP # is 3572. The release area fingers through an area of a total 52,922 square feet with a linear distance of 1,050 feet. There is a west side that is 918 ft. long by 1-4' wide, an east side that is 763 ft. long by .5-2' ft. wide, and area at point of release that encompasses an area of 4,846 square feet with area for fiberglass line repair adding 143 square feet. The elevation at the point of release is 3,719 ft. with a 5.55% grade leading to northernmost point of release at 3535.9 ft. The release primarily headed in a northern direction, down slope, and fingered out in several places as fluid moved around vegetation.

## **2. SUMMARY OF SITE INVESTIGATION ACTIVITIES**

### **2.1 Initial Reporting and Incident Description**

New Mexico Oil Conservation Division (NMOCD) was notified of the release by Bruce Baker (Apache Corporation) via e-mail to Mike Bratcher (NMOCD) and Shelly Tucker (BLM) February 25, 2016 at 10:47 am. A form C-141 was submitted on February 26, 2016 by Bruce Baker.

The release was reported to have had failure in a repair clamp on a buried four inch fiberglass line resulting in a 50 bbl release containing 40 bbls water and 10 bbls oil with 5 bbls of fluid recovered. The line was isolated and a vacuum truck was dispatched to pick up standing fluid. The entire release was in the pasture. The area was mapped and a one call placed to permanently repair the line.

### **2.2 Sampling Activities**

Initial release site investigation activities were conducted on March 2, 2016 (0-2') and follow-up samples conducted on March 10, 2016 (SP-2 / 3-6'). Grab samples were collected utilizing a backhoe to a varied depth of down to 6-feet below ground surface (bgs). Laboratory results are presented below in Table 1, and the laboratory results is shown as Attachment 2 in Appendix A.

Table 1: Laboratory Sampling Results

Sample ID	BTEX	Chlorides	GRO	DRO
3/2/2016				
S-1				
0'	333	15600	7890	44500
1'	151	8600	823	1680
2'	26.2	6400	70.4	223
S-2				
0'	350	7200	7810	69100
1'	52.9	5730	276	870
2'	468	2320	2340	4200
3'	31.1	clay	289	947
4'	0.386	clay	<10	<10
5'	<0.300	clay	<10	<10
6'	<0.300	clay	<10	<10
S-3				
0'	599	6530	13200	66500
1'	202	8260	401	1240
2'	1.48	720	<10	47.2
S-4				
0'	115	14200	3100	61100
1'	6.13	416	153	1980
2'	<0.300	80	<10	47.2
S-5				
0'	98.4	2960	2620	48500
1'	9.33	3680	355	4210
2'	10.3	848	185	2590

### 3. ENVIRONMENTAL ASSESSMENT

#### 3.1 Surface and Mineral Ownership

The release site falls inside BLM and state managed lands and on an existing ROW and pasture. Apache will work with the BLM and OCD to complete the in-situ remediation of the release site. (Figure 2 in Appendix C)

### **3.2 Hydrology**

Water well depths were not located in the area. There is one intermittent storm water drainage area within a quarter mile to the north. There are no bodies of water, lakes, or streams near this release site. (Figure 5 in Appendix C)

The site 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'

### **3.3 Karst**

The area surrounding this release site has a high karst potential. A complete walk of the area showed there to be no known or visible signs of karst features in the area.

Mitigation measures will be to practice diligence with water movement through selected pilot area to collection tank. Records will be kept showing these volumes and differences.

### **3.4 Range**

The range allotment is in the Turkey Track, 65075 and cattle are sometimes in the area. All open trenches or excavations will be fenced to prevent injury to cattle if left unattended. All equipment left overnight will be positioned to prevent injury to cattle.

### **3.5 Soils, Geology, and Vegetation**

According to the soil survey data in the United States Department of Agriculture Natural Resources Conservation Service (NRCS), the soil description is RG – Reeves Gypsum land complex, 0-3 percent slopes. The natural drainage is well-drained. Water movement is very low. Shrink – swell potential is low. The soils in the area is loamy to gypsum soils. The soil has a sodic horizon within 30 inches of soil surface. According to United States Geological Survey, the underlying geology is in the Artesia Group (Pat). The Artesia is distinguishable from Moenkopi by its finer grain size, absence of conglomerate, predominance of brown, sandy siltstone. Contains: dolomite, sandstone, anhydrite, and siltstone. The vegetation in the area consist of mesquite, four-wing

saltbush, and grasses found in gypsum soils. All areas on the ROW and pasture will be seeded with the BLM 4 seed mix for gypsum soil types.

#### **4. REMEDIATION PLAN**

Apache has met with the BLM and OCD in order to review an in-situ remediation of the area. Apache has selected an area north of the point of release up to a surface steel pipeline as the initial in-situ remediation area. This area is a 6,023 square foot area.

##### **4.1 Soil Remediation Plan**

After many discussions with Apache, NMOCD and the Bureau of Land Management, our goal is not only to relieve the hydrocarbon and chloride contamination from the soil, but also to collect the effluent for off-site disposal. We will be able to achieve these goals by utilizing SuperAll for the hydrocarbons, BRINE-AID™ for the chlorides, and AWD collection system for the effluent removal. Effluent water will be utilized for the application of both remediation products.

1. Using a trench, we will excavate an area three and one-half feet deep and four inches wide throughout the contaminated area. We will then install ten separate collection lines running parallel on five-foot centers. All of the lines will be connected to a main header down grade. Coming out of the header will be a single four to six inch poly pipe to transport the effluent the rest of the way downhill to a holding tank. The treatment grid will be approximately 100 feet by 80 feet.
2. For the first application, we will use BRINE-AID™ at a dilution ratio of 20 parts effluent water to one part BRINE-AID™. This will be applied to the entire area. The application and subsequent flushes will require one 130-barrel and one 80-barrel vacuum truck.
3. One week after the first application, we will flush the entire site with just effluent water.
4. One week following the first flush, we will treat again with BRINE-AID™ using the same application process outlined in step 1.
5. One week following the second treatment, we will flush again as outlined in step 3.
6. One week following the second flush, we will apply SuperAll, using the quantity and dilution ratio recommended by them. The application will require two 130-barrel vacuum trucks.

7. One week following the application of SuperAll, we will flush with the balance of BRINE-AID™ and effluent water at a dilution ratio of approximately 30 to 1.

#### **4.2 Seeding Plan**

The ROW area will be seeded with the BLM seed mix #4 after the project has been completed. The seed bed will be prepared by raking area, broadcast seeding, and raking lightly to cover seed.

#### **5. REMEDIATION WORK SCHEDULE**

Initial section of the pilot project for in-situ remediation activities are expected to commence after receiving approval and funding of this proposed plan.

#### **6. FOLLOW-UP SCHEDULE**

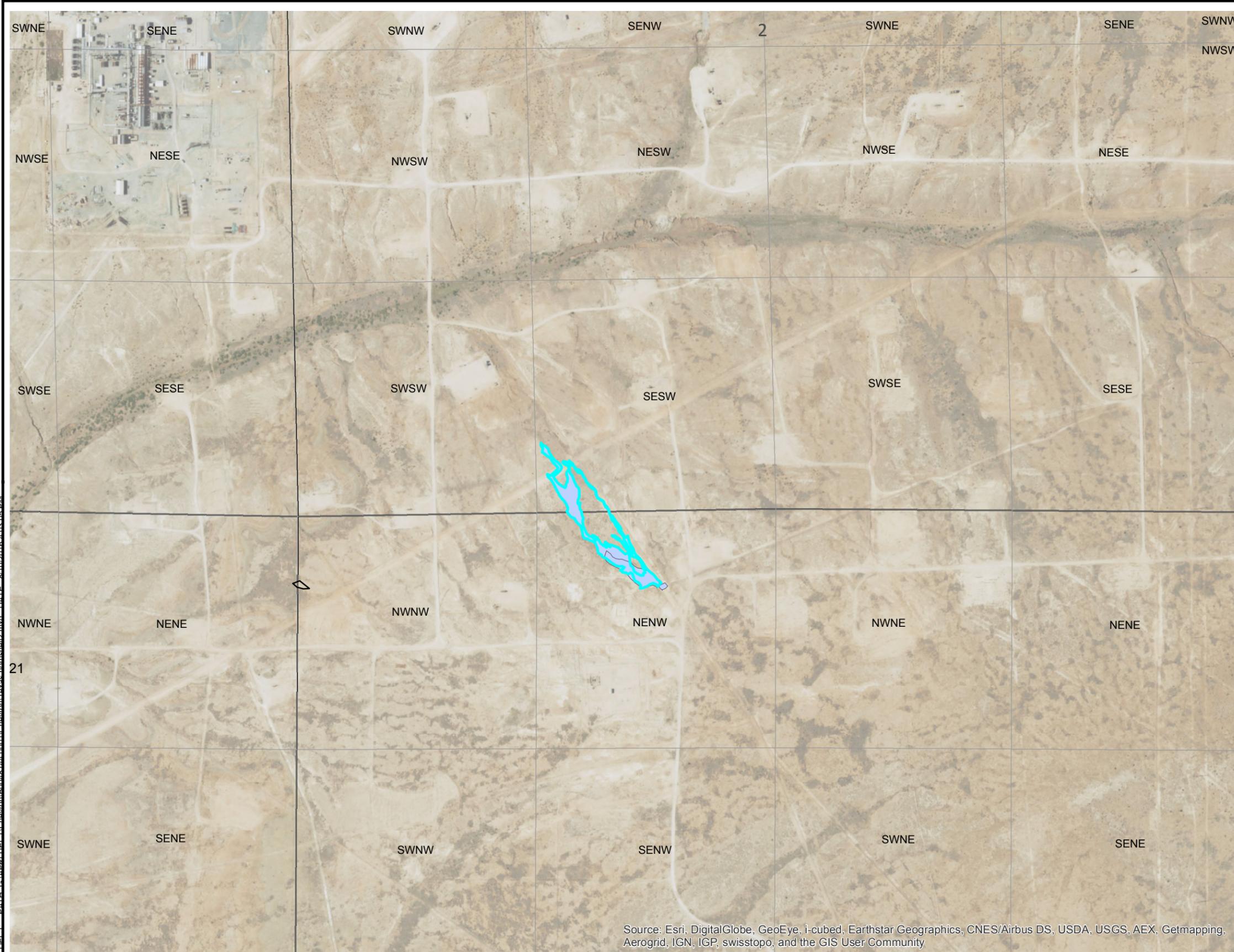
A remediation report for this section will be completed and mailed within 30 days of remediation work being completed to BLM and OCD. This report will have the map of actual remediation area, photos of remediation, and finished product of proposed section.



## **Appendix A**

Mapped Release  
Project 'A' Area

DIV\GROUP - ENV\IMDV\_DB\jvancuren.LD - PIC: PM: TM:  
PBO\ECT - PATH - C:\ARBO\ECT\Chemical\Trove\hatched\2.mxd DATE: 8/10/2016 4:03:05 PM

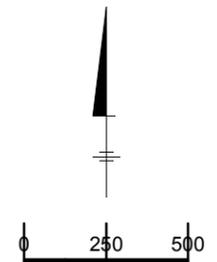


### LEGEND

#### Area



World Imagery



Feet

APACHE CORPORATION.  
ENVIRONMENTAL ASSESSMENT  
EDDY COUNTY, NEW MEXICO

## Mapped Release



Attachment

Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Project 'A' Area is in Pink outline

 EAU leak



## **Appendix B**

Photos





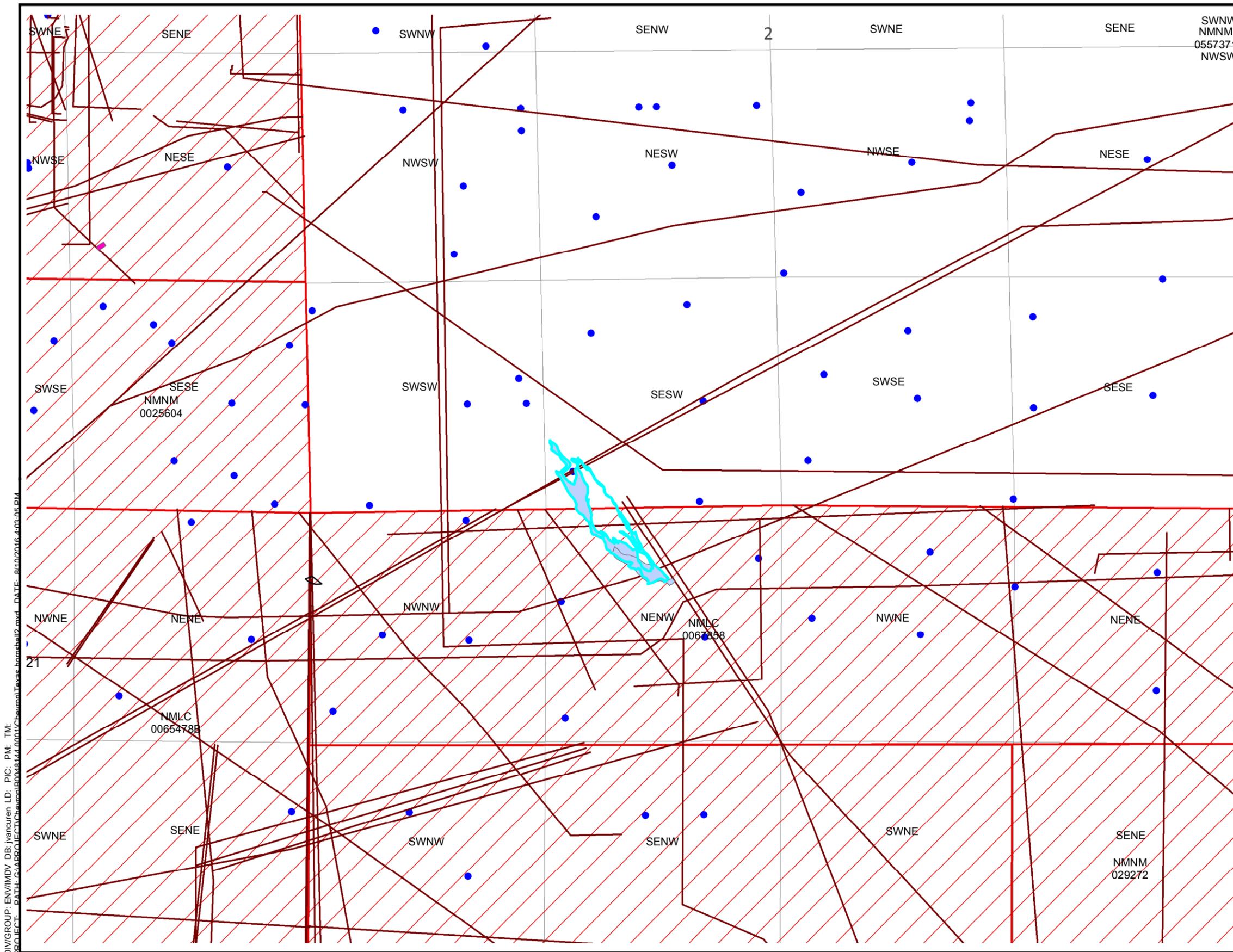






## **Appendix C**

Constraint Maps



**LEGEND**

**Area**

Area

ROW Pads

ROWs

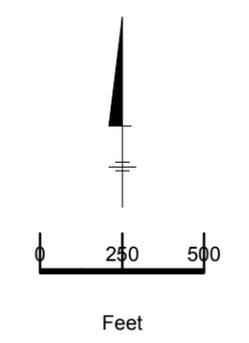
Completed Wells

Leases

Eddy

Sections

Townships

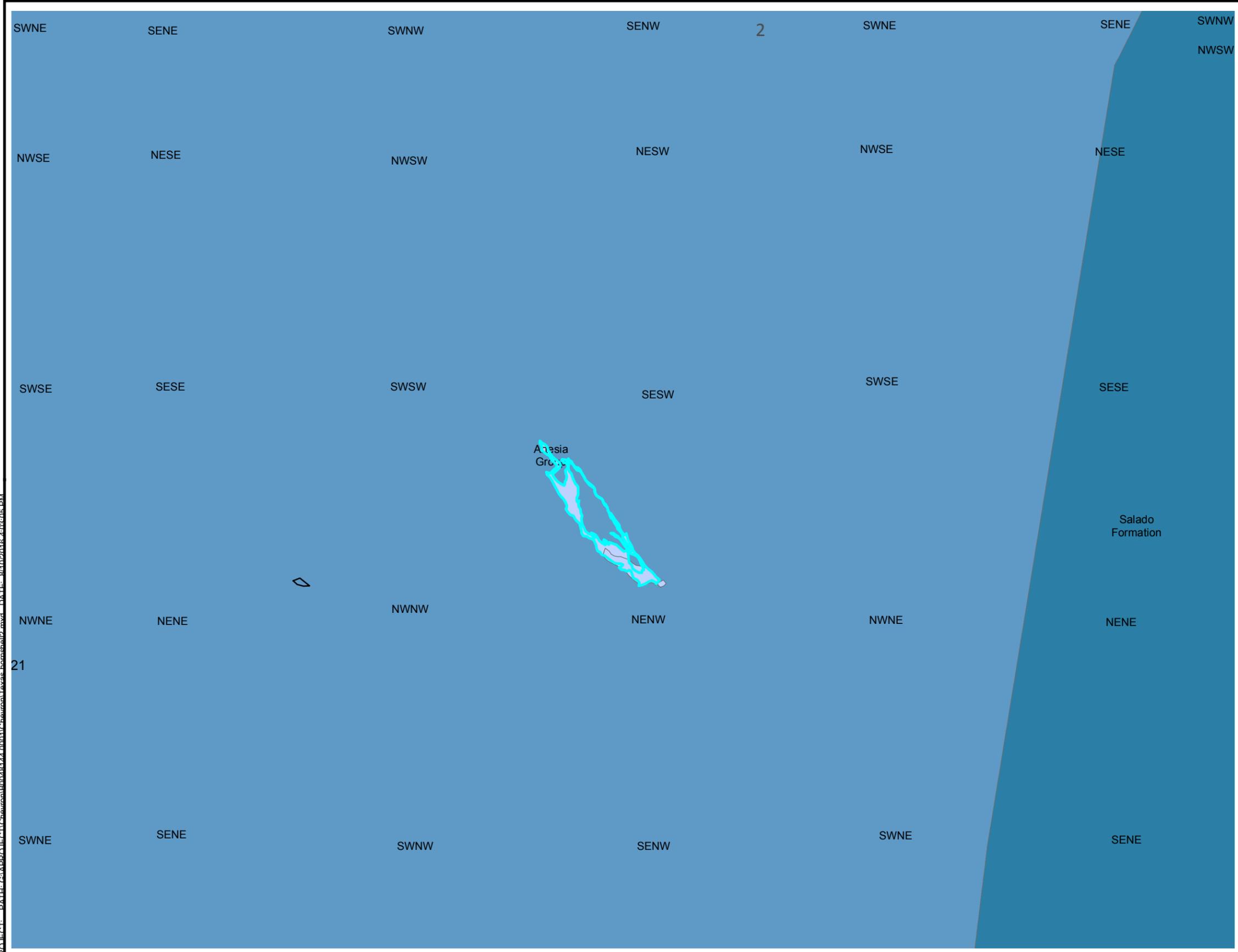


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ENVIRONMENTAL ASSESSMENT  
EDDY COUNTY, NEW MEXICO

**Existing Development**

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 PROJ: ECT: CHEM\004844\0041\Chemical\Tevca\hatched\2.mxd DATE: 8/10/2016 4:03:05 PM

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PROJECT - PATH - C:\ARBO\JECT\Chemical\B00444\0001\Chemical\Tevca\hatch\02.mxd



### LEGEND

#### Area

 Area

#### Aquifer

##### Aquifer Name



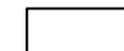
#### Geology

##### NAME

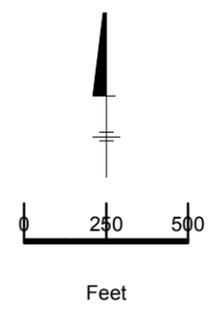
 Pat

 Psl

 Eddy

 Sections

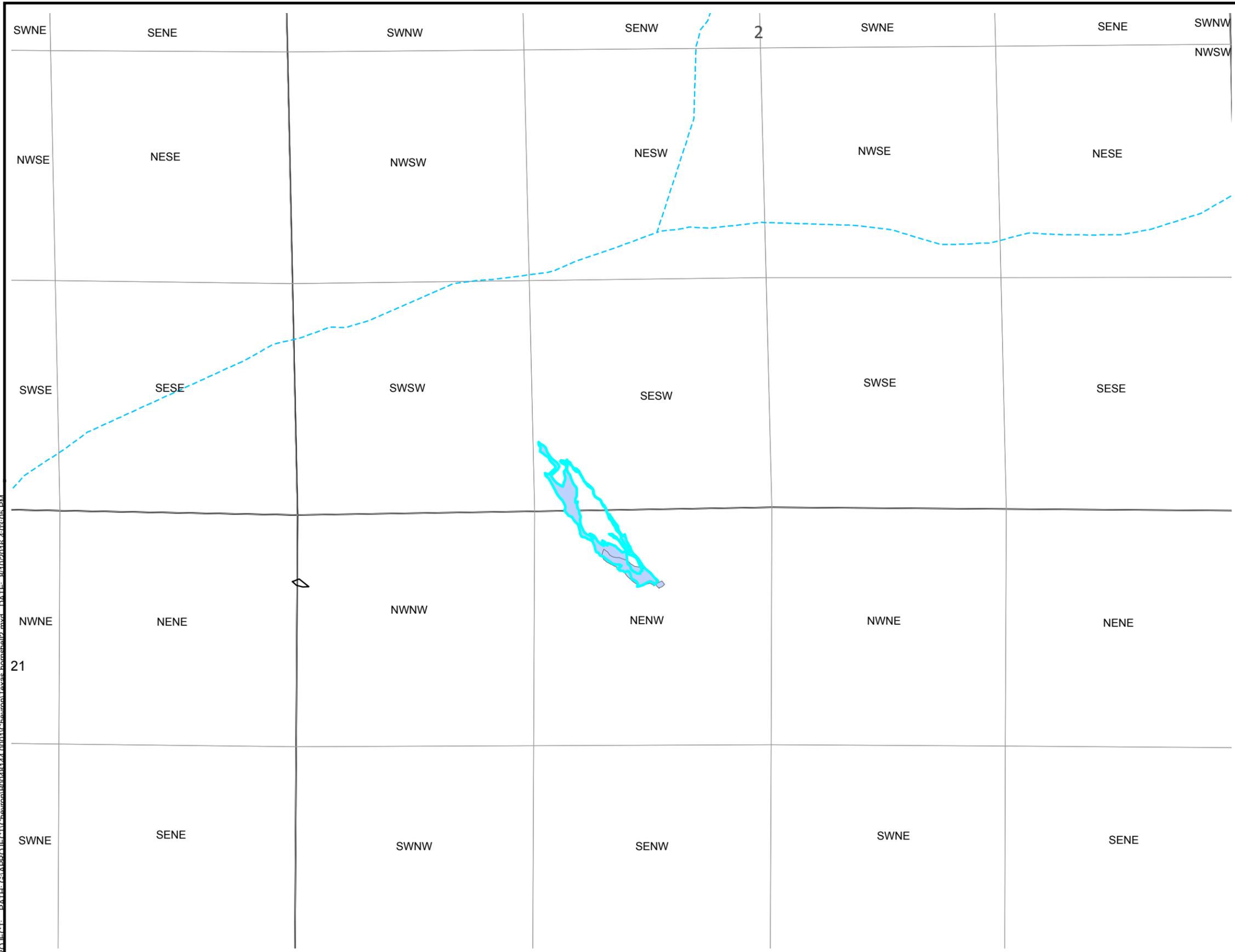
 Townships



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ENVIRONMENTAL ASSESSMENT  
EDDY COUNTY, NEW MEXICO

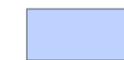
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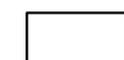
### LEGEND

#### Area

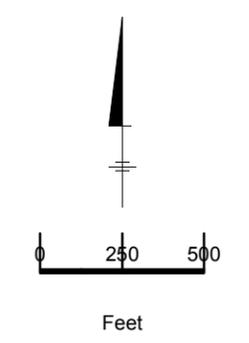
 Area

 Stream/River: Hydrographic Category = Intermittent

 Eddy

 Sections

 Townships

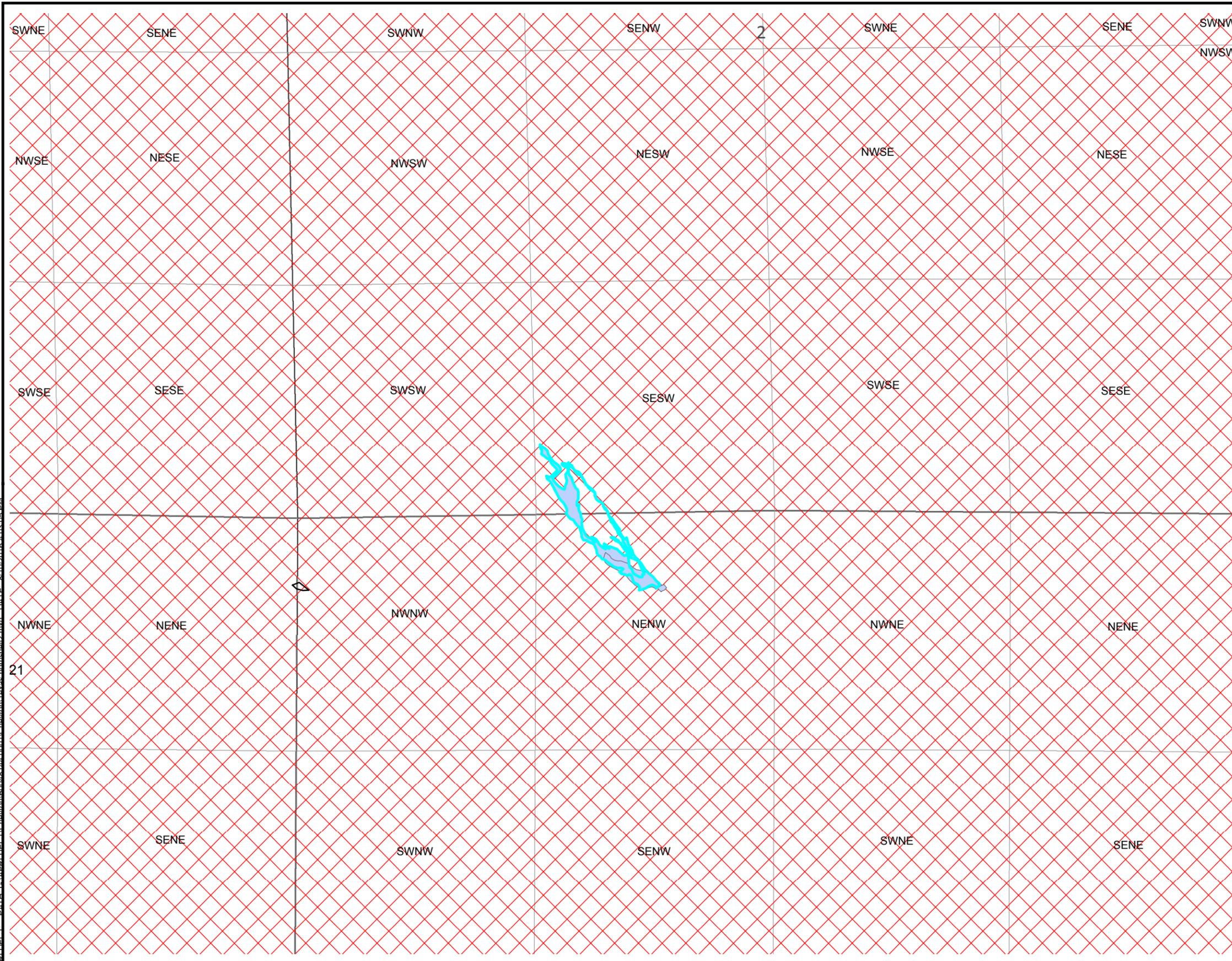


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EDDY COUNTY, NEW MEXICO

### Hydrology



DIV\GROUP - ENV\IMDV\_DB\javacuren LD - PIC - PM - TM:  
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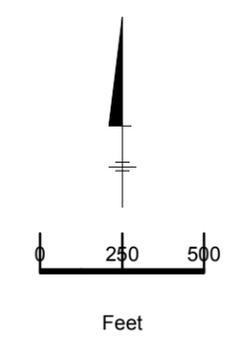
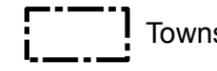
### LEGEND

#### Area



#### Karst Occuren... Potential

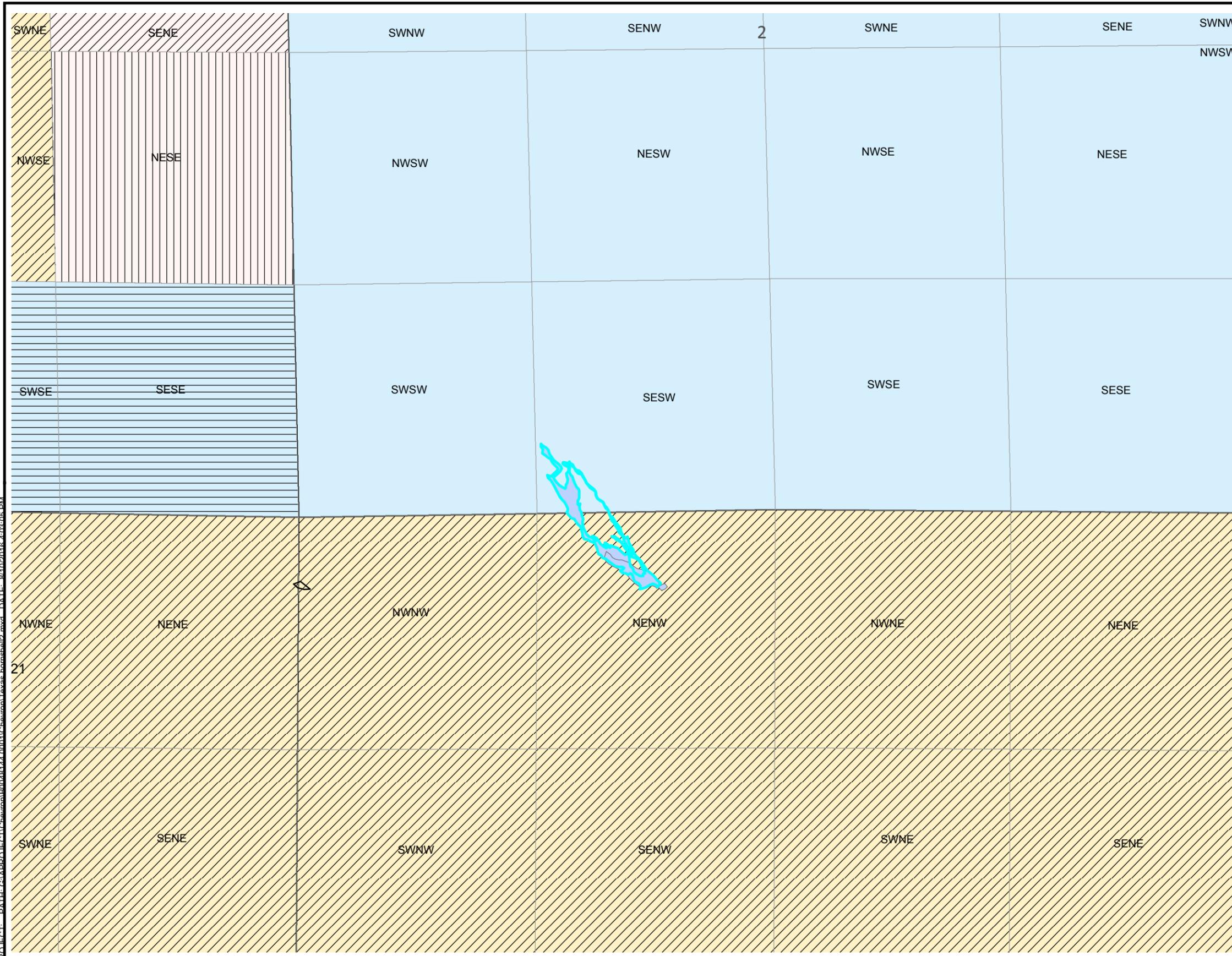
#### Potential



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EDDY COUNTY, NEW MEXICO

### Karst Potential

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PROJECT: PATH-C:\ARBO\LECT\Chemical\B004844\0001\Chemical\Tevaca\_herethal2.mxd DATE: 8/10/2016 4:03:05 PM



### LEGEND

#### Area

 Area

 Eddy

 Sections

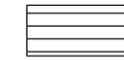
 Townships

#### Mineral Own...

#### minown

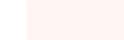
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 N

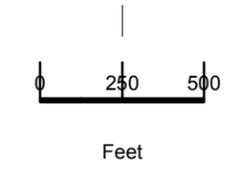
 O

 T

 Bureau of Land Management

 Private

 State

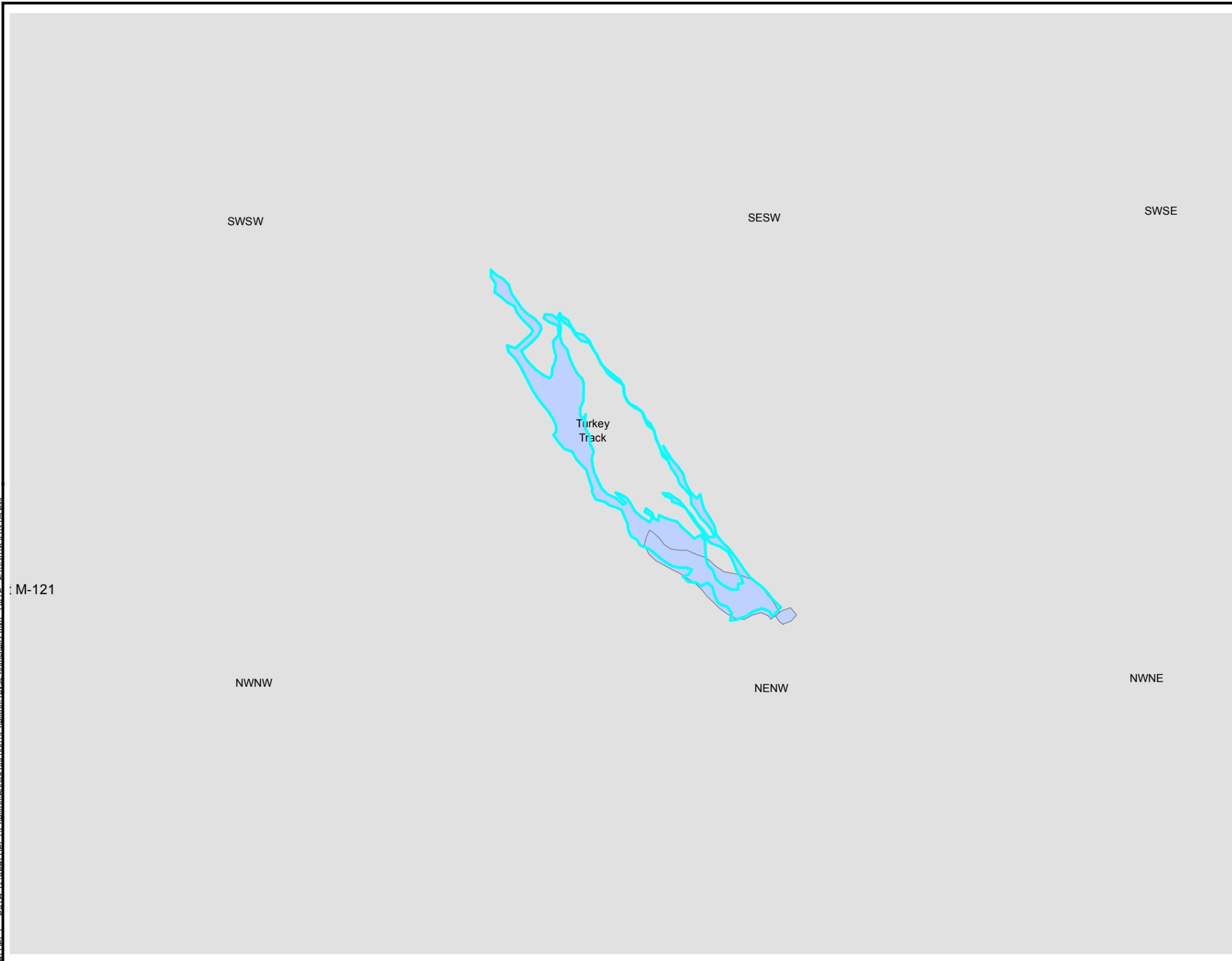


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EDDY COUNTY, NEW MEXICO

### Surface and Minerals Ownership

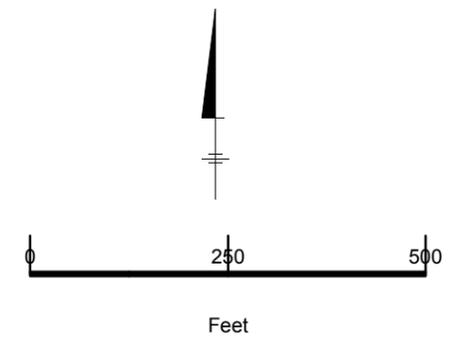


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### LEGEND

#### Area



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ENVIRONMENTAL ASSESSMENT  
EDDY COUNTY, NEW MEXICO

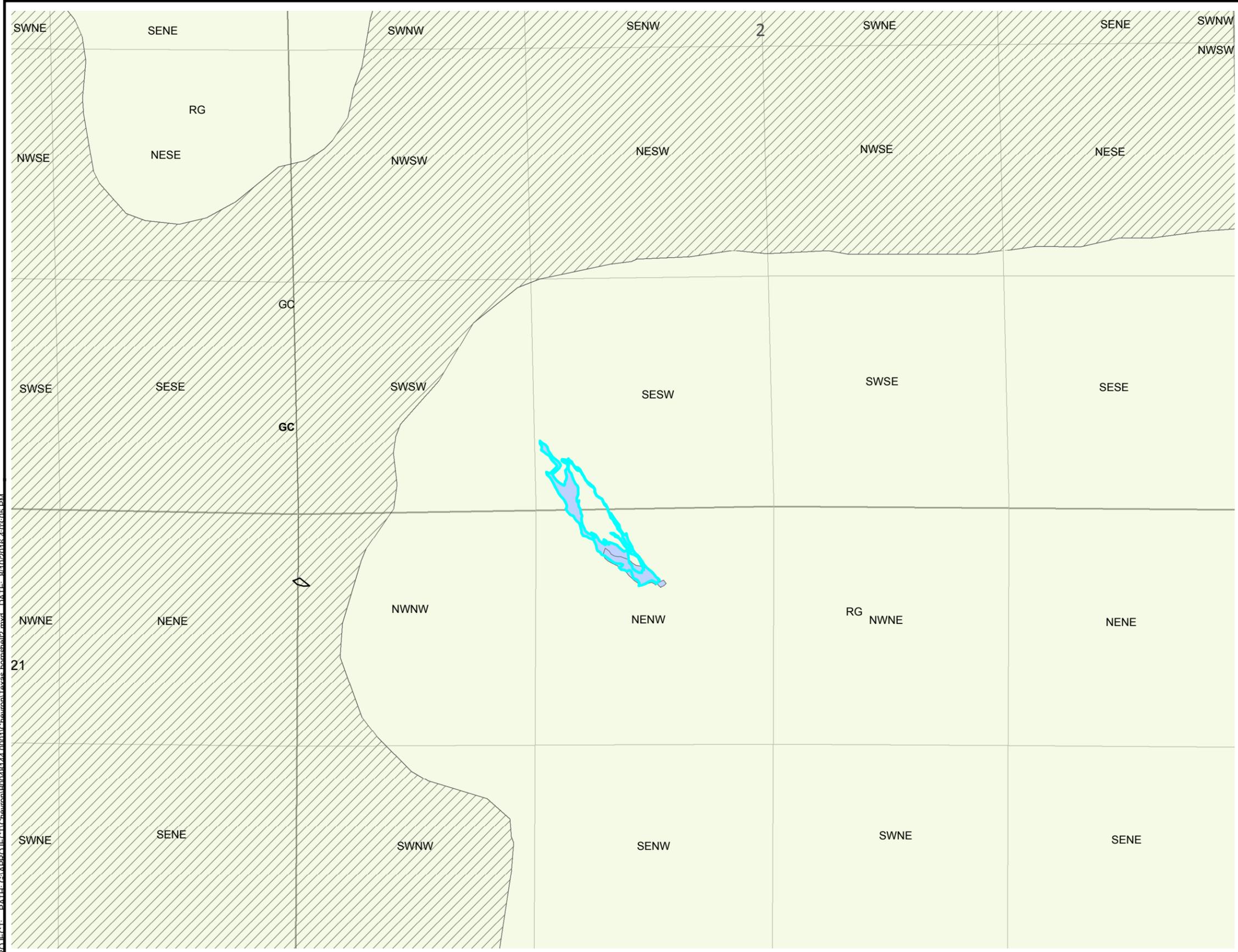
**Range**



FIGURE

**6**

DIV\GROUP - ENV\IMDV\_DB\jvanuren.LD - PIC: PM: TM:  
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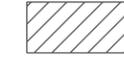


### LEGEND

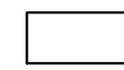
#### Area

 Area

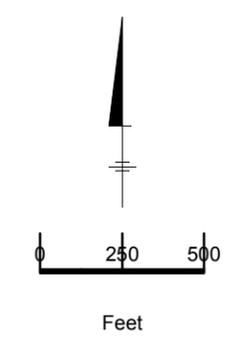
 Eddy County Soil Data

 Eddy County Gypsum

 Eddy

 Sections

 Townships



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ENVIRONMENTAL ASSESSMENT  
EDDY COUNTY, NEW MEXICO

### Soils



DIV\GROUP - ENV\IMDV\_DB\jvancuren.LD - PIC - PM - TM:  
PBO\ECT - PATH - CALABRO\ECT\Chavira\B004844.L0001\Chavira\Tevca\hatched\2.mxd DATE: 8/10/2016 4:03:05 PM



### LEGEND

#### Area



Area



Eddy

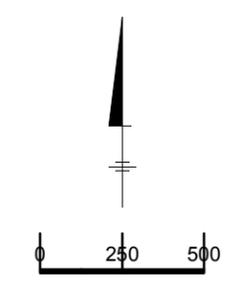


Sections



Townships

USA Topo Maps



Feet

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ENVIRONMENTAL ASSESSMENT  
EDDY COUNTY, NEW MEXICO

### Topos



FIGURE  
**8**



## **Appendix D**

Laboratory Results



March 10, 2016

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

RE: EMULSION LINE

Enclosed are the results of analyses for samples received by the laboratory on 03/04/16 13:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-15-7. 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](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

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

Celey D. Keene  
Lab Director/Quality Manager

**Analytical Results For:**

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

Received:	03/04/2016	Sampling Date:	03/02/2016
Reported:	03/10/2016	Sampling Type:	Soil
Project Name:	EMULSION LINE	Sampling Condition:	Cool & Intact
Project Number:	700745.058.01	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: S-1 0' (H600484-01)**

BTEX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>10.1</b>	5.00	03/08/2016	ND	2.07	103	2.00	3.33	
<b>Toluene*</b>	<b>82.5</b>	5.00	03/08/2016	ND	2.03	102	2.00	3.88	
<b>Ethylbenzene*</b>	<b>47.5</b>	5.00	03/08/2016	ND	1.82	91.2	2.00	4.85	
<b>Total Xylenes*</b>	<b>193</b>	15.0	03/08/2016	ND	5.66	94.4	6.00	4.50	
<b>Total BTEX</b>	<b>333</b>	30.0	03/08/2016	ND					

*Surrogate: 4-Bromofluorobenzene (PID) 101 % 73.6-140*

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>15600</b>	16.0	03/08/2016	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: CK						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>GRO C6-C10</b>	<b>7890</b>	200	03/07/2016	ND	206	103	200	10.6		
<b>DRO &gt;C10-C28</b>	<b>44500</b>	200	03/07/2016	ND	231	116	200	19.6		

*Surrogate: 1-Chlorooctane 363 % 35-147*
*Surrogate: 1-Chlorooctadecane 1040 % 28-171*

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: 03/04/2016  
 Reported: 03/10/2016  
 Project Name: EMULSION LINE  
 Project Number: 700745.058.01  
 Project Location: EDDY COUNTY, NM

 Sampling Date: 03/02/2016  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: S-1 1' (H600484-02)**

BTEX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>7.70</b>	0.500	03/08/2016	ND	2.07	103	2.00	3.33	
<b>Toluene*</b>	<b>42.8</b>	0.500	03/08/2016	ND	2.03	102	2.00	3.88	
<b>Ethylbenzene*</b>	<b>26.0</b>	0.500	03/08/2016	ND	1.82	91.2	2.00	4.85	
<b>Total Xylenes*</b>	<b>74.4</b>	1.50	03/08/2016	ND	5.66	94.4	6.00	4.50	
<b>Total BTEX</b>	<b>151</b>	3.00	03/08/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>8600</b>	16.0	03/08/2016	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10</b>	<b>823</b>	10.0	03/07/2016	ND	206	103	200	10.6	
<b>DRO &gt;C10-C28</b>	<b>1680</b>	10.0	03/07/2016	ND	231	116	200	19.6	

Surrogate: 1-Chlorooctane 143 % 35-147

Surrogate: 1-Chlorooctadecane 107 % 28-171

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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: 03/04/2016  
 Reported: 03/10/2016  
 Project Name: EMULSION LINE  
 Project Number: 700745.058.01  
 Project Location: EDDY COUNTY, NM

 Sampling Date: 03/02/2016  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: S-1 2' (H600484-03)**

BTEX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>1.10</b>	0.050	03/08/2016	ND	2.07	103	2.00	3.33	
<b>Toluene*</b>	<b>6.73</b>	0.050	03/08/2016	ND	2.03	102	2.00	3.88	
<b>Ethylbenzene*</b>	<b>4.66</b>	0.050	03/08/2016	ND	1.82	91.2	2.00	4.85	
<b>Total Xylenes*</b>	<b>13.8</b>	0.150	03/08/2016	ND	5.66	94.4	6.00	4.50	
<b>Total BTEX</b>	<b>26.2</b>	0.300	03/08/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 128 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>6400</b>	16.0	03/08/2016	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10</b>	<b>70.4</b>	10.0	03/07/2016	ND	206	103	200	10.6	
<b>DRO &gt;C10-C28</b>	<b>223</b>	10.0	03/07/2016	ND	231	116	200	19.6	

Surrogate: 1-Chlorooctane 112 % 35-147

Surrogate: 1-Chlorooctadecane 115 % 28-171

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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: 03/04/2016  
 Reported: 03/10/2016  
 Project Name: EMULSION LINE  
 Project Number: 700745.058.01  
 Project Location: EDDY COUNTY, NM

 Sampling Date: 03/02/2016  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: S-2 0' (H600484-04)**

BTEX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>5.56</b>	5.00	03/08/2016	ND	2.07	103	2.00	3.33	
<b>Toluene*</b>	<b>74.3</b>	5.00	03/08/2016	ND	2.03	102	2.00	3.88	
<b>Ethylbenzene*</b>	<b>54.8</b>	5.00	03/08/2016	ND	1.82	91.2	2.00	4.85	
<b>Total Xylenes*</b>	<b>216</b>	15.0	03/08/2016	ND	5.66	94.4	6.00	4.50	
<b>Total BTEX</b>	<b>350</b>	30.0	03/08/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 100 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>7200</b>	16.0	03/08/2016	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: CK						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>GRO C6-C10</b>	<b>7840</b>	200	03/07/2016	ND	206	103	200	10.6		
<b>DRO &gt;C10-C28</b>	<b>69100</b>	200	03/07/2016	ND	231	116	200	19.6		

Surrogate: 1-Chlorooctane 473 % 35-147

Surrogate: 1-Chlorooctadecane 1640 % 28-171

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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: 03/04/2016  
 Reported: 03/10/2016  
 Project Name: EMULSION LINE  
 Project Number: 700745.058.01  
 Project Location: EDDY COUNTY, NM

 Sampling Date: 03/02/2016  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: S-2 1' (H600484-05)**

BTEX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>1.89</b>	0.100	03/08/2016	ND	2.07	103	2.00	3.33	
<b>Toluene*</b>	<b>14.1</b>	0.100	03/08/2016	ND	2.03	102	2.00	3.88	
<b>Ethylbenzene*</b>	<b>9.66</b>	0.100	03/08/2016	ND	1.82	91.2	2.00	4.85	
<b>Total Xylenes*</b>	<b>27.3</b>	0.300	03/08/2016	ND	5.66	94.4	6.00	4.50	
<b>Total BTEX</b>	<b>52.9</b>	0.600	03/08/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 118 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>5730</b>	16.0	03/08/2016	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10</b>	<b>276</b>	10.0	03/07/2016	ND	206	103	200	10.6	
<b>DRO &gt;C10-C28</b>	<b>870</b>	10.0	03/07/2016	ND	231	116	200	19.6	

Surrogate: 1-Chlorooctane 136 % 35-147

Surrogate: 1-Chlorooctadecane 112 % 28-171

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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: 03/04/2016  
 Reported: 03/10/2016  
 Project Name: EMULSION LINE  
 Project Number: 700745.058.01  
 Project Location: EDDY COUNTY, NM

 Sampling Date: 03/02/2016  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: S-2 2' (H600484-06)**

BTEX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>29.5</b>	2.00	03/08/2016	ND	2.07	103	2.00	3.33	
<b>Toluene*</b>	<b>149</b>	2.00	03/08/2016	ND	2.03	102	2.00	3.88	
<b>Ethylbenzene*</b>	<b>77.8</b>	2.00	03/08/2016	ND	1.82	91.2	2.00	4.85	
<b>Total Xylenes*</b>	<b>211</b>	6.00	03/08/2016	ND	5.66	94.4	6.00	4.50	
<b>Total BTEX</b>	<b>468</b>	12.0	03/08/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>2320</b>	16.0	03/08/2016	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: CK						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>GRO C6-C10</b>	<b>2340</b>	50.0	03/07/2016	ND	206	103	200	10.6		
<b>DRO &gt;C10-C28</b>	<b>4200</b>	50.0	03/07/2016	ND	231	116	200	19.6		

Surrogate: 1-Chlorooctane 221 % 35-147

Surrogate: 1-Chlorooctadecane 139 % 28-171

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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: 03/04/2016  
 Reported: 03/10/2016  
 Project Name: EMULSION LINE  
 Project Number: 700745.058.01  
 Project Location: EDDY COUNTY, NM

 Sampling Date: 03/02/2016  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: S-3 0' (H600484-07)**

BTEX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>6.13</b>	5.00	03/08/2016	ND	2.07	103	2.00	3.33	
<b>Toluene*</b>	<b>114</b>	10.0	03/08/2016	ND	2.03	102	2.00	3.88	
<b>Ethylbenzene*</b>	<b>116</b>	10.0	03/08/2016	ND	1.82	91.2	2.00	4.85	
<b>Total Xylenes*</b>	<b>363</b>	30.0	03/08/2016	ND	5.66	94.4	6.00	4.50	
<b>Total BTEX</b>	<b>599</b>	55.0	03/08/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>6530</b>	16.0	03/08/2016	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: CK						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>GRO C6-C10</b>	<b>13200</b>	100	03/07/2016	ND	206	103	200	10.6		
<b>DRO &gt;C10-C28</b>	<b>66500</b>	100	03/07/2016	ND	231	116	200	19.6		

Surrogate: 1-Chlorooctane 616 % 35-147

Surrogate: 1-Chlorooctadecane 1390 % 28-171

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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: 03/04/2016  
 Reported: 03/10/2016  
 Project Name: EMULSION LINE  
 Project Number: 700745.058.01  
 Project Location: EDDY COUNTY, NM

 Sampling Date: 03/02/2016  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: S-3 1' (H600484-08)**

BTEX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>6.11</b>	0.200	03/08/2016	ND	2.07	103	2.00	3.33	
<b>Toluene*</b>	<b>48.4</b>	0.200	03/08/2016	ND	2.03	102	2.00	3.88	
<b>Ethylbenzene*</b>	<b>36.3</b>	0.200	03/08/2016	ND	1.82	91.2	2.00	4.85	
<b>Total Xylenes*</b>	<b>111</b>	0.600	03/08/2016	ND	5.66	94.4	6.00	4.50	
<b>Total BTEX</b>	<b>202</b>	1.20	03/08/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 135 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>8260</b>	16.0	03/08/2016	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10</b>	<b>401</b>	10.0	03/07/2016	ND	206	103	200	10.6	
<b>DRO &gt;C10-C28</b>	<b>1240</b>	10.0	03/07/2016	ND	231	116	200	19.6	

Surrogate: 1-Chlorooctane 123 % 35-147

Surrogate: 1-Chlorooctadecane 110 % 28-171

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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: 03/04/2016  
 Reported: 03/10/2016  
 Project Name: EMULSION LINE  
 Project Number: 700745.058.01  
 Project Location: EDDY COUNTY, NM

 Sampling Date: 03/02/2016  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: S-3 2' (H600484-09)**

BTEX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/08/2016	ND	2.07	103	2.00	3.33	
<b>Toluene*</b>	<b>0.177</b>	0.050	03/08/2016	ND	2.03	102	2.00	3.88	
<b>Ethylbenzene*</b>	<b>0.259</b>	0.050	03/08/2016	ND	1.82	91.2	2.00	4.85	
<b>Total Xylenes*</b>	<b>1.04</b>	0.150	03/08/2016	ND	5.66	94.4	6.00	4.50	
<b>Total BTEX</b>	<b>1.48</b>	0.300	03/08/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>720</b>	16.0	03/08/2016	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/07/2016	ND	206	103	200	10.6	
<b>DRO &gt;C10-C28</b>	<b>47.2</b>	10.0	03/07/2016	ND	231	116	200	19.6	

Surrogate: 1-Chlorooctane 107 % 35-147

Surrogate: 1-Chlorooctadecane 117 % 28-171

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

 Received: 03/04/2016  
 Reported: 03/10/2016  
 Project Name: EMULSION LINE  
 Project Number: 700745.058.01  
 Project Location: EDDY COUNTY, NM

 Sampling Date: 03/02/2016  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: S-4 0' (H600484-10)**

BTEX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<2.00	2.00	03/08/2016	ND	2.07	103	2.00	3.33	
<b>Toluene*</b>	<b>12.7</b>	2.00	03/08/2016	ND	2.03	102	2.00	3.88	
<b>Ethylbenzene*</b>	<b>22.6</b>	2.00	03/08/2016	ND	1.82	91.2	2.00	4.85	
<b>Total Xylenes*</b>	<b>79.9</b>	6.00	03/08/2016	ND	5.66	94.4	6.00	4.50	
<b>Total BTEX</b>	<b>115</b>	12.0	03/08/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>14200</b>	16.0	03/08/2016	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: CK						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>GRO C6-C10</b>	<b>3100</b>	100	03/07/2016	ND	206	103	200	10.6		
<b>DRO &gt;C10-C28</b>	<b>61100</b>	100	03/07/2016	ND	231	116	200	19.6		

Surrogate: 1-Chlorooctane 287 % 35-147

Surrogate: 1-Chlorooctadecane 1570 % 28-171

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: 03/04/2016  
 Reported: 03/10/2016  
 Project Name: EMULSION LINE  
 Project Number: 700745.058.01  
 Project Location: EDDY COUNTY, NM

 Sampling Date: 03/02/2016  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: S-4 1' (H600484-11)**

BTEX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.100	0.100	03/08/2016	ND	2.07	103	2.00	3.33	
<b>Toluene*</b>	<b>0.321</b>	0.100	03/08/2016	ND	2.03	102	2.00	3.88	
<b>Ethylbenzene*</b>	<b>1.08</b>	0.100	03/08/2016	ND	1.82	91.2	2.00	4.85	
<b>Total Xylenes*</b>	<b>4.73</b>	0.300	03/08/2016	ND	5.66	94.4	6.00	4.50	
<b>Total BTEX</b>	<b>6.13</b>	0.600	03/08/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 116 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>416</b>	16.0	03/08/2016	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10</b>	<b>153</b>	10.0	03/07/2016	ND	206	103	200	10.6	
<b>DRO &gt;C10-C28</b>	<b>1980</b>	10.0	03/07/2016	ND	231	116	200	19.6	

Surrogate: 1-Chlorooctane 124 % 35-147

Surrogate: 1-Chlorooctadecane 129 % 28-171

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: 03/04/2016  
 Reported: 03/10/2016  
 Project Name: EMULSION LINE  
 Project Number: 700745.058.01  
 Project Location: EDDY COUNTY, NM

 Sampling Date: 03/02/2016  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: S-4 2' (H600484-12)**

BTEX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/08/2016	ND	2.07	103	2.00	3.33	
Toluene*	<0.050	0.050	03/08/2016	ND	2.03	102	2.00	3.88	
Ethylbenzene*	<0.050	0.050	03/08/2016	ND	1.82	91.2	2.00	4.85	
Total Xylenes*	<0.150	0.150	03/08/2016	ND	5.66	94.4	6.00	4.50	
Total BTEX	<0.300	0.300	03/08/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.3 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>80.0</b>	16.0	03/08/2016	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/07/2016	ND	206	103	200	10.6	
<b>DRO &gt;C10-C28</b>	<b>150</b>	10.0	03/07/2016	ND	231	116	200	19.6	

Surrogate: 1-Chlorooctane 104 % 35-147

Surrogate: 1-Chlorooctadecane 111 % 28-171

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: 03/04/2016  
 Reported: 03/10/2016  
 Project Name: EMULSION LINE  
 Project Number: 700745.058.01  
 Project Location: EDDY COUNTY, NM

 Sampling Date: 03/02/2016  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: S-5 0' (H600484-13)**

BTEX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<2.00	2.00	03/08/2016	ND	2.07	103	2.00	3.33	
<b>Toluene*</b>	<b>12.0</b>	2.00	03/08/2016	ND	2.03	102	2.00	3.88	
<b>Ethylbenzene*</b>	<b>18.6</b>	2.00	03/08/2016	ND	1.82	91.2	2.00	4.85	
<b>Total Xylenes*</b>	<b>67.8</b>	6.00	03/08/2016	ND	5.66	94.4	6.00	4.50	
<b>Total BTEX</b>	<b>98.4</b>	12.0	03/08/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>2960</b>	16.0	03/08/2016	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: CK						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>GRO C6-C10</b>	<b>2620</b>	50.0	03/07/2016	ND	206	103	200	10.6		
<b>DRO &gt;C10-C28</b>	<b>48500</b>	50.0	03/07/2016	ND	231	116	200	19.6		

Surrogate: 1-Chlorooctane 271 % 35-147

Surrogate: 1-Chlorooctadecane 1150 % 28-171

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: 03/04/2016  
 Reported: 03/10/2016  
 Project Name: EMULSION LINE  
 Project Number: 700745.058.01  
 Project Location: EDDY COUNTY, NM

 Sampling Date: 03/02/2016  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: S-5 1' (H600484-14)**

BTEX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.200	0.200	03/08/2016	ND	2.07	103	2.00	3.33	
<b>Toluene*</b>	<b>0.578</b>	0.200	03/08/2016	ND	2.03	102	2.00	3.88	
<b>Ethylbenzene*</b>	<b>1.69</b>	0.200	03/08/2016	ND	1.82	91.2	2.00	4.85	
<b>Total Xylenes*</b>	<b>7.06</b>	0.600	03/08/2016	ND	5.66	94.4	6.00	4.50	
<b>Total BTEX</b>	<b>9.33</b>	1.20	03/08/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>3680</b>	16.0	03/08/2016	ND	432	108	400	7.69	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10</b>	<b>355</b>	10.0	03/07/2016	ND	206	103	200	10.6	
<b>DRO &gt;C10-C28</b>	<b>4210</b>	10.0	03/07/2016	ND	231	116	200	19.6	

Surrogate: 1-Chlorooctane 144 % 35-147

Surrogate: 1-Chlorooctadecane 140 % 28-171

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: 03/04/2016  
 Reported: 03/10/2016  
 Project Name: EMULSION LINE  
 Project Number: 700745.058.01  
 Project Location: EDDY COUNTY, NM

 Sampling Date: 03/02/2016  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: S-5 2' (H600484-15)**

BTEX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.100	0.100	03/08/2016	ND	2.07	103	2.00	3.33	
<b>Toluene*</b>	<b>0.628</b>	0.100	03/08/2016	ND	2.03	102	2.00	3.88	
<b>Ethylbenzene*</b>	<b>1.95</b>	0.100	03/08/2016	ND	1.82	91.2	2.00	4.85	
<b>Total Xylenes*</b>	<b>7.70</b>	0.300	03/08/2016	ND	5.66	94.4	6.00	4.50	
<b>Total BTEX</b>	<b>10.3</b>	0.600	03/08/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 121 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>848</b>	16.0	03/08/2016	ND	432	108	400	7.69	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10</b>	<b>185</b>	10.0	03/07/2016	ND	206	103	200	10.6	
<b>DRO &gt;C10-C28</b>	<b>2590</b>	10.0	03/07/2016	ND	231	116	200	19.6	

Surrogate: 1-Chlorooctane 131 % 35-147

Surrogate: 1-Chlorooctadecane 136 % 28-171

Cardinal Laboratories

\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Notes and Definitions**

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
QR-02	The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report



---

Celey D. Keene, Lab Director/Quality Manager





# CARDINAL Laboratories

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Page 2 of 2

### ANALYSIS REQUEST

**BILL TO**

Company Name: Talon/LPE		P.O. #:							
Project Manager: David Adkins		Company: Talon/LPE							
Address: 408 W. Texas Ave.		Attr.:							
City: Artesia	State: NM Zip: 88210	Address:							
Phone #: 575-746-8768	Fax #: 575-746-8905	City:							
Project #: 70074505801	Project Owner: <i>Apple</i>	State:							
Project Name: <i>Emulsion Line</i>	Phone #:	Zip:							
Project Location: <i>Eddy Hwy</i>	Fax #:								
Sampler Name: <i>Kim Wilson</i>									
FOR LAB USE ONLY									
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX	PRESERV.	SAMPLING	DATE	TIME	ANALYSIS
<i>HEAD 84</i>									<i>Chlorides</i>
	11	3-4	1'				<i>3/2/16</i>	<i>12:00</i>	<i>BTEX</i>
	12	8-4	2'					<i>2:00</i>	<i>TPH</i>
	13	5-5	0'					<i>2:10</i>	
	14	5-5	1'						
	15	5-5	2'					<i>2:15</i>	

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Relinquished By: *Kim Wilson* Date: \_\_\_\_\_ Received By: *Paula Medrano* Date: \_\_\_\_\_

Relinquished By: \_\_\_\_\_ Date: \_\_\_\_\_ Received By: \_\_\_\_\_ Date: \_\_\_\_\_

Delivered By: (Circle One) *Paula Medrano* Sample Condition:  Intact  Cool  Yes  No

Sampler - UPS - Bus - Other: *46c* CHECKED BY: *AW*

REMARKS: \_\_\_\_\_

Phone Result:  Yes  No Add'l Phone #: \_\_\_\_\_

Fax Result:  Yes  No Add'l Fax #: \_\_\_\_\_

† Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326 #54



March 15, 2016

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

RE: EMULSION LINE

Enclosed are the results of analyses for samples received by the laboratory on 03/10/16 15:45.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-15-7. 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](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

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

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: 03/10/2016  
 Reported: 03/15/2016  
 Project Name: EMULSION LINE  
 Project Number: 700745.058.01  
 Project Location: EDDY COUNTY, NM

 Sampling Date: 03/02/2016  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: S-2 3' (H600533-01)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>0.860</b>	0.050	03/14/2016	ND	2.15	107	2.00	4.48	
<b>Toluene*</b>	<b>6.99</b>	0.050	03/14/2016	ND	2.09	104	2.00	5.31	
<b>Ethylbenzene*</b>	<b>5.82</b>	0.050	03/14/2016	ND	1.87	93.6	2.00	4.18	
<b>Total Xylenes*</b>	<b>17.4</b>	0.150	03/14/2016	ND	5.70	95.1	6.00	3.38	
<b>Total BTEX</b>	<b>31.1</b>	0.300	03/14/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 133 % 73.6-140

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10</b>	<b>289</b>	10.0	03/12/2016	ND	200	100	200	2.14	
<b>DRO &gt;C10-C28</b>	<b>947</b>	10.0	03/12/2016	ND	220	110	200	2.22	

Surrogate: 1-Chlorooctane 103 % 35-147

Surrogate: 1-Chlorooctadecane 95.0 % 28-171

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: 03/10/2016  
 Reported: 03/15/2016  
 Project Name: EMULSION LINE  
 Project Number: 700745.058.01  
 Project Location: EDDY COUNTY, NM

 Sampling Date: 03/02/2016  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: S-2 4' (H600533-02)**

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	03/14/2016	ND	2.15	107	2.00	4.48	
<b>Toluene*</b>	<b>0.097</b>	0.050	03/14/2016	ND	2.09	104	2.00	5.31	
<b>Ethylbenzene*</b>	<b>0.054</b>	0.050	03/14/2016	ND	1.87	93.6	2.00	4.18	
<b>Total Xylenes*</b>	<b>0.234</b>	0.150	03/14/2016	ND	5.70	95.1	6.00	3.38	
<b>Total BTEX</b>	<b>0.386</b>	0.300	03/14/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 73.6-140

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/12/2016	ND	200	100	200	2.14	
DRO >C10-C28	<10.0	10.0	03/12/2016	ND	220	110	200	2.22	

Surrogate: 1-Chlorooctane 91.6 % 35-147

Surrogate: 1-Chlorooctadecane 102 % 28-171

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:	03/10/2016	Sampling Date:	03/02/2016
Reported:	03/15/2016	Sampling Type:	Soil
Project Name:	EMULSION LINE	Sampling Condition:	Cool & Intact
Project Number:	700745.058.01	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: S-2 5' (H600533-03)**

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	03/15/2016	ND	2.15	107	2.00	4.48		
Toluene*	<0.050	0.050	03/15/2016	ND	2.09	104	2.00	5.31		
Ethylbenzene*	<0.050	0.050	03/15/2016	ND	1.87	93.6	2.00	4.18		
Total Xylenes*	<0.150	0.150	03/15/2016	ND	5.70	95.1	6.00	3.38		
Total BTEX	<0.300	0.300	03/15/2016	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 73.6-140

TPH 8015M		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	03/12/2016	ND	200	100	200	2.14		
DRO >C10-C28	<10.0	10.0	03/12/2016	ND	220	110	200	2.22		

Surrogate: 1-Chlorooctane 81.1 % 35-147

Surrogate: 1-Chlorooctadecane 91.1 % 28-171

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: 03/10/2016  
 Reported: 03/15/2016  
 Project Name: EMULSION LINE  
 Project Number: 700745.058.01  
 Project Location: EDDY COUNTY, NM

 Sampling Date: 03/02/2016  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: S-2 6' (H600533-04)**

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	03/15/2016	ND	2.15	107	2.00	4.48		
Toluene*	<0.050	0.050	03/15/2016	ND	2.09	104	2.00	5.31		
Ethylbenzene*	<0.050	0.050	03/15/2016	ND	1.87	93.6	2.00	4.18		
Total Xylenes*	<0.150	0.150	03/15/2016	ND	5.70	95.1	6.00	3.38		
Total BTEX	<0.300	0.300	03/15/2016	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 73.6-140

TPH 8015M		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	03/12/2016	ND	200	100	200	2.14		
DRO >C10-C28	<10.0	10.0	03/12/2016	ND	220	110	200	2.22		

Surrogate: 1-Chlorooctane 84.2 % 35-147

Surrogate: 1-Chlorooctadecane 92.7 % 28-171

Cardinal Laboratories

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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

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

### ANALYSIS REQUEST

**BIETIO**  
P.O. #: 700745, OSB.01

Company: Talon/LPE

Attn:

Address:

City:

State:

Phone #:

Fax #:

Company Name: Talon/LPE

Project Manager: D. ADLUS

Address: 408 W. Texas Ave.

City: Artesia

State: NM zip: 88210

Phone #: 575-746-8768

Fax #: 575-746-8905

Project #: 700745, OSB.01

Project Owner: Apache

Project Name: EMULSION LINE

Project Location: Eddy Co.

Sampler Name: LW / DA

FOR LAB USE ONLY

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						PRESERV.	SAMPLING DATE	TIME	ANALYSIS REQUEST
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :				
H1000533	S-2 3'	G	1								4/2/16	11:00	BTX TPH
	S-2 4'	G	1										
	S-2 5'	G	1										
	S-2 6'	G	1										

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Relinquished By: *[Signature]* Date: 3/10/16 Time: 1:45pm Received By: *[Signature]* Date: 3/10/16 Time: 3:45pm

Delivered By: (Circle One) *[Signature]* Sample Condition: Cool  Intact  Yes  No

Sampler - UPS - Bus - Other: 4.66 CHECKED BY: *[Signature]*

+ Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326 #54

April 05, 2016

DAVID ADKINS

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: EMULSION LINE

Enclosed are the results of analyses for samples received by the laboratory on 03/04/16 13:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-15-7. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/ga/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/ga/lab_accred_certif.html).

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

Method EPA 552.2	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

**Analytical Results For:**TALON LPE  
408 W. TEXAS AVE.  
ARTESIA NM, 88210Project: EMULSION LINE  
Project Number: 700745.058.01  
Project Manager: DAVID ADKINS  
Fax To: (575) 745-8905Reported:  
05-Apr-16 11:40

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
S-2 1'	H600484-05	Soil	02-Mar-16 11:33	04-Mar-16 13:30

Cardinal Laboratories

\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

 Project: EMULSION LINE  
 Project Number: 700745.058.01  
 Project Manager: DAVID ADKINS  
 Fax To: (575) 745-8905

 Reported:  
 05-Apr-16 11:40

**S-2 1'**
**H600484-05 (Soil)**

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

Conductivity	14300		1.00	uS/cm	1	6032901	AP	29-Mar-16	120.1	
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**Green Analytical Laboratories**
**Sodium Saturation**

Cation Exchange Capacity	32.6		0.04	meq/100 g	1	B604028	JLM	05-Apr-16	USDA-60 19	
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**Exchangable Metals by ICP (Ammonium Acetate Extractable - Soluble)**

Exchangable Sodium Percentage	20.9		1.00	%	1	B604029	JLM	05-Apr-16	USDA-60	
Sodium	1570		2.00	mg/kg dry	1	B604029	JLM	05-Apr-16	EPA200.7	

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

 Project: EMULSION LINE  
 Project Number: 700745.058.01  
 Project Manager: DAVID ADKINS  
 Fax To: (575) 745-8905

 Reported:  
 05-Apr-16 11:40

**Inorganic Compounds - Quality Control**
**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 6032901 - General Prep - Wet Chem</b>										
<b>LCS (6032901-BS1)</b>					Prepared & Analyzed: 29-Mar-16					
Conductivity	489		uS/cm	500		97.8	80-120			
<b>Duplicate (6032901-DUP1)</b>					Source: <b>H600484-05</b> Prepared & Analyzed: 29-Mar-16					
Conductivity	14500	1.00	uS/cm		14300			1.18	20	

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

 Project: EMULSION LINE  
 Project Number: 700745.058.01  
 Project Manager: DAVID ADKINS  
 Fax To: (575) 745-8905

 Reported:  
 05-Apr-16 11:40

**Sodium Saturation - Quality Control**  
**Green Analytical Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B604028 - Sodium Acetate Saturation**
**Blank (B604028-BLK1)**

Prepared: 04-Apr-16 Analyzed: 05-Apr-16

Cation Exchange Capacity	ND	0.04	meq/100 g							
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**Duplicate (B604028-DUP1)**

Source: H600484-05

Prepared: 04-Apr-16 Analyzed: 05-Apr-16

Cation Exchange Capacity	32.0	0.04	meq/100 g		32.6			1.86	200	
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Cardinal Laboratories

\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

 Project: EMULSION LINE  
 Project Number: 700745.058.01  
 Project Manager: DAVID ADKINS  
 Fax To: (575) 745-8905

 Reported:  
 05-Apr-16 11:40

**Exchangable Metals by ICP (Ammonium Acetate Extractable - Soluble) - Quality Control**
**Green Analytical Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B604029 - Exchangable (Ammonium Acetate less Soluble)**
**Blank (B604029-BLK1)**

Prepared: 04-Apr-16 Analyzed: 05-Apr-16

Sodium	4.28	2.00	mg/kg dry							B1
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**Duplicate (B604029-DUP1)**

Source: H600484-05

Prepared: 04-Apr-16 Analyzed: 05-Apr-16

Sodium	1290	2.00	mg/kg dry		1570			20.0	20	
Exchangable Sodium Percentage	17.5	1.00	%		20.9			17.7	20	

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Celey D. Keene, Lab Director/Quality Manager

**Notes and Definitions**

- B1 Target analyte detected in method blank at or above method reporting limit. Sample concentration found to be 10 times above the concentration found in the method blank or less than the reporting limit.
- 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



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

**CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

*Page 1 of 2*

Company Name: Talon/LPE		P.O. #:	
Project Manager: David Adkins		Company: Talon/LPE	
Address: 408 W. Texas Ave.		Attn:	
City: Artesia	State: NM zip: 88210	Address:	
Phone #: 575-746-8768	Fax #: 575-746-8905	City:	
Project #: 700945-D98-D1	Project Owner: Apache	State:	
Project Name: Emulsion Line		Zip:	
Project Location: Eddy City		Phone #:	
Sampler Name: Kim Wilson		Fax #:	
FOR LAB USE ONLY			
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS
H00084			
1	5-1 0'		
2	5-1 1'		
3	5-1 2'		
4	5-2 0'		
5	5-2 1'		
6	5-2 2'		
7	5-3 0'		
8	5-3 1'		
9	5-3 2'		
10	5-4 0'		
		MATRIX	PRESERV.
		GROUNDWATER	
		WASTEWATER	
		SOIL	
		OIL	
		SLUDGE	
		OTHER :	
		ACID/BASE:	
		ICE / COOL	
		OTHER :	
		DATE	TIME
		3/2/16	11:17
			11:20
			11:22
			11:30
			11:33
			11:35
			11:45
			11:49
			11:55
		ANALYSIS REQUEST	
		Chlorides	
		BTEX	
		TPH	
		Conductivity added 3/24/16	X
		ESP / IEC added 3/29/16	X
		Rust	

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Relinquished By: *Kim Wilson* Date: *3/2/16* Time: *11:55*  
 Received By: *Paul Henderson* Date: *3/2/16* Time: *11:55*

Delivered By: (Circle One) *Bus* *UPS* *Other*: *4.60c*

Sample Condition:  Intact  Broken

CHECKED BY: *Paul Henderson*

REMARKS:

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

Page 2 of 2

ANALYSIS REQUEST

<b>Company Name:</b> Talon/LPE <b>Project Manager:</b> David Adkins <b>Address:</b> 408 W. Texas Ave. <b>City:</b> Artesia <b>Phone #:</b> 575-746-8768 <b>Project #:</b> 70274505801 <b>Project Name:</b> Emission Line <b>Project Location:</b> Eddy Cty <b>Sampler Name:</b> Kim Wilson		<b>State:</b> NM <b>Zip:</b> 88210 <b>City:</b> Artesia <b>Address:</b> <b>State:</b> <b>Zip:</b>		<b>P.O. #:</b> <b>Company:</b> Talon/LPE <b>Address:</b> <b>City:</b> <b>State:</b> <b>Zip:</b>											
<b>FOR LAB USE ONLY</b>		<b>MATRIX</b> <input type="checkbox"/> GROUNDWATER <input type="checkbox"/> WASTEWATER <input type="checkbox"/> SOIL <input type="checkbox"/> OIL <input type="checkbox"/> SLUDGE <input type="checkbox"/> OTHER:		<b>PRESERV:</b> <input type="checkbox"/> ACID/BASE: <input type="checkbox"/> ICE / COOL <input type="checkbox"/> OTHER:											
<b>Lab I.D.</b> HADY184		<b>Sample I.D.</b> (G)RAB OR (C)OMP. # CONTAINERS DATE TIME		<b>SAMPLING</b> Chlorides BTEX TPH											
11	3-4	1'	6	3/2/16	12:00	/	/	/							
12	8-4	2'	6		2:00	/	/	/							
13	5-5	0'	6		2:10	/	/	/							
14	5-5	1'	6		2:10	/	/	/							
15	5-5	2'	6		2:15	/	/	/							

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Relinquished By: Kim Wilson  
 Date: \_\_\_\_\_  
 Received By: Betty Medmans  
 Date: \_\_\_\_\_

Delivered By: (Circle One) Rudy Medmans  
 Sampler - UPS - Bus - Other: UOE  
 Sample Condition:  Cool  Ambient  
 Checked By: [Signature]  
 Phone Result:  Yes  No  
 Fax Result:  Yes  No  
 Add'l Phone #: \_\_\_\_\_  
 Add'l Fax #: \_\_\_\_\_

\* Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326 #154