

**RECEIVED**

**By JKeyes at 1:28 pm, Mar 28, 2016**

Requested modifications to be made to work plan.  
Comments can be seen through out work plan.

talonlpe.com • 866.742.0742



**Work Plan**

**Pyote Well Service, LLC: A N ETZ #001**

**[30-025-07713|1RP-3415|**

March 24, 2016

**Prepared By:**

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

**Prepared For:**

Pyote Well Service, LLC

Ms. Kellie Jones  
**NMOCD District 2**  
811 S. 1<sup>st</sup> Street  
Artesia, NM 88210

Subject: **Soil Assessment and Remediation Work Plan**  
Pyote Well Service  
A N ETZ #001 (30-025-07713) \*1RP-3415\*

Dear Ms. Jones,

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

### Site Information

The Pyote A N ETZ #001 is located approximately six (6) miles south of Hobbs, New Mexico. The legal location for this facility is Unit Letter P, Section 26, Township 19 South and Range 38 East in Lea County, New Mexico. More specifically the latitude and longitude are 32.6257858 North and -103.112793 West. A site plan is presented in [Appendix I](#).

According to the soil survey provided by the United States Department of Agriculture Natural Resources Conservation Service, the soil in this area is made up of Stegall loam with 0 to 1 percent slopes. Drainage courses in this area are normally dry.

### Ground Water and Site Ranking

According to the New Mexico Office of the State Engineer database, the ground water in this area is approximately 64-feet below ground surface (BGS). Therefore the ranking for this site is a **10** based on the following:

Depth to ground water	50-100'
Wellhead Protection Area	>1000'
Distance to surface water body	>1000'

Based upon the site ranking of **10**, NMOCD Recommended Remedial Action Levels (RRAL) are 50 mg/kg for BTEX, 10 mg/kg for Benzene, 1,000 mg/kg for TPH and ~~1,000~~ mg/kg for total chlorides.

RRAL for Chlorides with depth to groundwater at 64' bgs is 500 mg/kg.

## Incident Description and Initial Remedial Actions

On November 1, 2014 the tee and nipple on the injection well head failed resulting in the release of approximately 30bbls of produced water. The produced water flowed from the well head southeast across the well pad and into the low lying area south of the well pad. On January 7, 2014 Talon mobilized personnel to conduct an initial site assessment and soil sampling within the impacted area utilizing a hand auger. Refusal was encountered at a depth of 1-foot BGS with the hand auger.

On March 4, 2015 Talon mobilized personnel and equipment to vertically and horizontally delineate the impacted area utilizing an excavator. The laboratory results from the soil sampling events are summarized in the table below. See [Appendix IV](#) for complete report of laboratory results.

## Laboratory Results

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

January 7, 2014

Sample ID	Depth (feet)	BTEX (mg/kg)	Chlorides (mg/kg)	TPH(mg/kg) GRO	TPH(mg/kg) DRO
S-1	0	ND	8260	ND	4030
S-1 Refusal	1	ND	10500	11.5	222
S-2	0	ND	496	ND	ND
S-2 Refusal	1	ND	2160	ND	ND
S-3	0	ND	10700	ND	ND
S-3 Refusal	1	ND	6930	ND	ND

(ND) Analyte Not Detected

March 4, <sup>2016</sup>~~2015~~

Sample ID	Depth (feet)	BTEX (mg/kg)	Chlorides (mg/kg)	TPH (mg/kg) GRO	TPH (mg/kg) DRO
S-1	0	ND	6000	ND	ND
S-1	1	--	6530	--	--
S-1	2	--	8660	--	--
S-1	3	--	3760	--	--
S-1	4	--	608	--	--
S-1	5	--	80	--	--
S-2	0	ND	1280	ND	ND
S-2	1	--	1960	--	--
S-2	2	--	4160	--	--
S-2	3	--	4720	--	--
S-2	4	ND	4560	ND	ND
S-2	5	--	3760	--	--
S-2	7	ND	4400	--	--

2016

March 4, 2015 Continued

Sample ID	Depth (feet)	BTEX (mg/kg)	Chlorides (mg/kg)	TPH (mg/kg) GRO	TPH (mg/kg) DRO
S-2	9	ND	3920	--	--
S-2	11	--	1260	--	--
S-2	13	--	928	--	--
S-2	15	--	512	--	--
S-2	17	--	368	Delineation value is 250 mg/kg, S-2 Not fully delineated.	
S-3	0	ND	112	ND	ND
S-3	1	--	64	--	--
S-3	2	--	160	--	--
S-3	3	--	448	--	--
S-3	4	--	448	--	--
S-3	5	--	112	--	--
S-4	0	ND	ND	ND	ND
S-5	0	ND	ND	ND	ND
S-6	0	ND	ND	ND	ND

(-- ) Analyte Not Tested

(ND) Analyte Not Detected

S-3 is a low lying depression and the location where any spills or surface runoff from precipitation events would pool. It was observed to have standing water on several site visits over an extended period of time. Any contamination as a result from a spill/release will have been pushed downward. Since groundwater is at ~ 64bgs it is important that S-3 be delineated further in order to ensure that no impact to groundwater has occurred and exactly where, if any, chloride contamination occurs.



## Conclusions and Proposed Remedial Actions


- The impacted area in the vicinity of sample location S-1 will be excavated to a depth of ~~3.5-feet~~ <sup>4 feet</sup> BGS.
- The impacted area in the vicinity of sample location S-2 will be excavated to a depth of 4-feet BGS and a 20-mil reinforced liner will be installed at the bottom of the excavation to encapsulate the remaining chloride impacts. <sup>After being completely delineated.</sup>
- All of the excavated material will be hauled to an NMOCD approved solid waste disposal facility.
- The excavated area on the location will be backfilled with caliche. The excavation in the pasture will be backfilled with topsoil and contoured to match the surrounding area.

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

  
Sheldon L. Hitchcock  
Project Manager

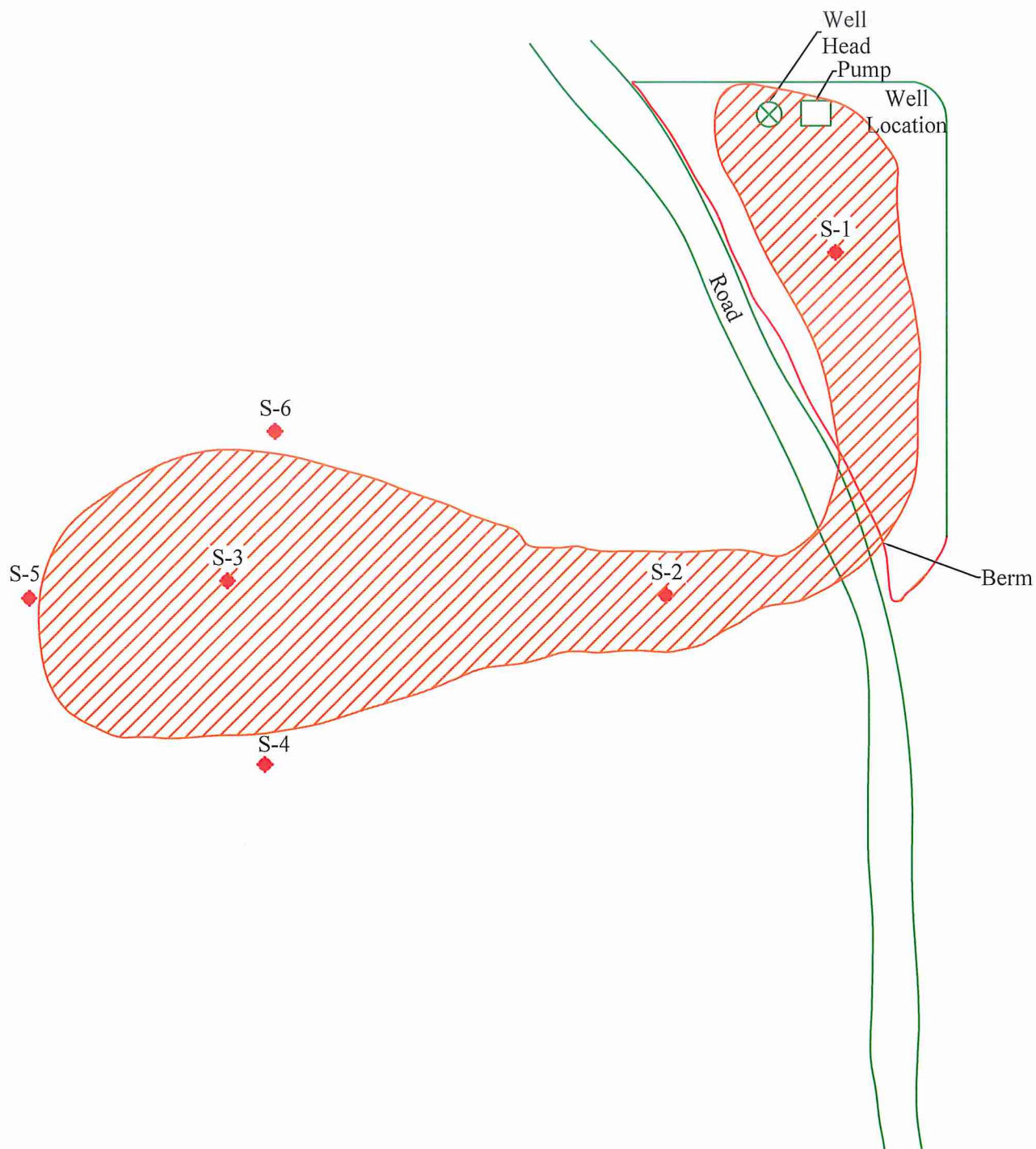
  
David J. Adkins  
District Manager

## Attachments

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

# APPENDIX I

## SITE PLAN



NTS



Scale in Feet

Legend

- ◆ - Sample Location
- Impacted Area



Date: 03/14/2016

Scale: NTS

Drawn By: TJS

ETZ SWD  
Pyote Water Solutions  
Lea County, New Mexico  
Figure 1 - Site Plan

# **APPENDIX II**

## **GROUNDWATER DATA**





# New Mexico Office of the State Engineer

## Water Column/Average Depth to Water

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

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

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
<a href="#">L 00298 POD5</a>	L	LE		3	3	3	25	19S	38E	677345	3611275*	315	112	64	48

Average Depth to Water: 64 feet

Minimum Depth: 64 feet

Maximum Depth: 64 feet

Record Count: 1

Basin/County Search:

County: Lea

UTMNAD83 Radius Search (in meters):

Easting (X): 677044

Northing (Y): 3611369

Radius: 320

\*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.

# **APPENDIX III**

## **INITIAL 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

Form C-141  
Revised August 8, 2011

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

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

**Release Notification and Corrective Action**

**OPERATOR**

\*\*\*\*\* ☐ \*\*\* Initial Report ☐ Final Report

Name of Company— <i>PYOTE WATER SOLUTIONS, LLC</i>	Contact --- <i>JERRY BURTON</i>
Address <i>400 W ILLINOIS, STE 950 MIDLAND TX, 79701</i>	Telephone No. <i>432-448-4917</i>
Facility Name <i>ETZ SWD</i> <i>IRP-3415</i>	Facility Type <i>PRODUCTION WATER DISPOSAL</i>

Surface Owner— <i>PYOTE WATER SOLUTIONS</i>	Mineral Owner <i>PYOTE WATER SOLUTIONS</i>	API No. <i>30-025-07713</i>
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**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line <i>SOUTH OF WELL</i>	Feet from the	East/West Line	County <i>LEA COUNTY</i>
-------------	---------	----------	-------	---------------	--	---------------	----------------	-----------------------------

Latitude *32.6275679.101018\_103.112804363809* Longitude \_\_\_\_\_

**NATURE OF RELEASE**

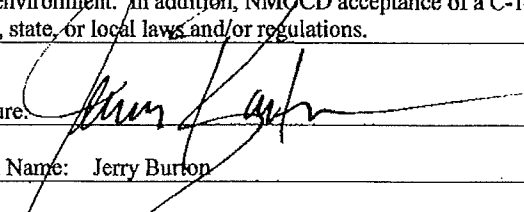
Type of Release: <i>wellhead busted T and nipple</i>	Volume of Release <i>300 bbls</i>	Volume Recovered
Source of Release: <i>production water</i>	Date and Hour of Occurrence <i>11-1-17 8:40 am</i>	Date and Hour of Discovery <i>11-1-17 8:40 am</i>
Was Immediate Notice Given?***** <input type="checkbox"/> Yes	If YES, To Whom? Left message on 11-1 at OCD office. Tomas called back on Monday. Audra Burton NM clerk for Pyote Water Systems	
By Whom? Tomas from Hobbs office	Date and Hour <i>11-1-17 8:40 am</i>	
Was a Watercourse Reached ***** <input type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\* *t and nipple on well head busted 8:40 am Jeff notified Jerry that morning*

Describe Area Affected and Cleanup Action Taken. *Southeast corner by well, and will need to call Talon for soil sampling –per Jerry Burton*

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:   
Printed Name: *Jerry Burton*

**OIL CONSERVATION DIVISION**

Approved by Environmental Specialist:

# **APPENDIX IV**

## **LABORATORY RESULTS**





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

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January 12, 2015

SHELDON HITCHCOCK

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: ETZ SWD

Enclosed are the results of analyses for samples received by the laboratory on 01/07/15 11:40.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/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	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 01/07/2015  
Reported: 01/12/2015  
Project Name: ETZ SWD  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 01/07/2015  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: S-1 0' (H500041-01)**

BTX 8021B			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/09/2015	ND	1.72	86.1	2.00	5.71	
Toluene*	<0.050	0.050	01/09/2015	ND	1.69	84.6	2.00	7.04	
Ethylbenzene*	<0.050	0.050	01/09/2015	ND	1.63	81.6	2.00	8.36	
Total Xylenes*	<0.150	0.150	01/09/2015	ND	4.91	81.8	6.00	8.55	
Total BTX	<0.300	0.300	01/09/2015	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 93.3 % 61-154

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AP				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	8260	16.0	01/08/2015	ND	416	104	400	0.00	

TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<50.0	50.0	01/07/2015	ND	190	94.9	200	1.64	
DRO >C10-C28	4030	50.0	01/07/2015	ND	177	88.5	200	0.912	

Surrogate: 1-Chlorooctane 89.2 % 47.2-157

Surrogate: 1-Chlorooctadecane 172 % 52.1-176

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

 Received: 01/07/2015  
 Reported: 01/12/2015  
 Project Name: ETZ SWD  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

 Sampling Date: 01/07/2015  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: S-1 1' REFUSAL (H500041-02)**

BTX 8021B			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/09/2015	ND	1.72	86.1	2.00	5.71	
Toluene*	<0.050	0.050	01/09/2015	ND	1.69	84.6	2.00	7.04	
Ethylbenzene*	<0.050	0.050	01/09/2015	ND	1.63	81.6	2.00	8.36	
Total Xylenes*	<0.150	0.150	01/09/2015	ND	4.91	81.8	6.00	8.55	
Total BTX	<0.300	0.300	01/09/2015	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 98.4 % 61-154

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AP				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	10500	16.0	01/08/2015	ND	416	104	400	0.00	

TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	11.5	10.0	01/07/2015	ND	190	94.9	200	1.64	
DRO >C10-C28	222	10.0	01/07/2015	ND	177	88.5	200	0.912	

Surrogate: 1-Chlorooctane 90.4 % 47.2-157

Surrogate: 1-Chlorooctadecane 94.8 % 52.1-176

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 01/07/2015  
Reported: 01/12/2015  
Project Name: ETZ SWD  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 01/07/2015  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: S-2 0' (H500041-03)**

BTX 8021B			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/09/2015	ND	1.72	86.1	2.00	5.71	
Toluene*	<0.050	0.050	01/09/2015	ND	1.69	84.6	2.00	7.04	
Ethylbenzene*	<0.050	0.050	01/09/2015	ND	1.63	81.6	2.00	8.36	
Total Xylenes*	<0.150	0.150	01/09/2015	ND	4.91	81.8	6.00	8.55	
Total BTX	<0.300	0.300	01/09/2015	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 94.8 % 61-154

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AP				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	496	16.0	01/08/2015	ND	416	104	400	0.00	

TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	01/07/2015	ND	190	94.9	200	1.64	
DRO >C10-C28	<10.0	10.0	01/07/2015	ND	177	88.5	200	0.912	

Surrogate: 1-Chlorooctane 87.1 % 47.2-157

Surrogate: 1-Chlorooctadecane 92.0 % 52.1-176

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

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

Received: 01/07/2015  
Reported: 01/12/2015  
Project Name: ETZ SWD  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 01/07/2015  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: S-2 1' REFUSAL (H500041-04)**

BTX 8021B			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/09/2015	ND	1.72	86.1	2.00	5.71	
Toluene*	<0.050	0.050	01/09/2015	ND	1.69	84.6	2.00	7.04	
Ethylbenzene*	<0.050	0.050	01/09/2015	ND	1.63	81.6	2.00	8.36	
Total Xylenes*	<0.150	0.150	01/09/2015	ND	4.91	81.8	6.00	8.55	
Total BTX	<0.300	0.300	01/09/2015	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 95.5 % 61-154

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AP				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2160	16.0	01/08/2015	ND	416	104	400	0.00	

TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	01/07/2015	ND	190	94.9	200	1.64	
DRO >C10-C28	<10.0	10.0	01/07/2015	ND	177	88.5	200	0.912	

Surrogate: 1-Chlorooctane 89.7 % 47.2-157

Surrogate: 1-Chlorooctadecane 98.8 % 52.1-176

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 01/07/2015  
Reported: 01/12/2015  
Project Name: ETZ SWD  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 01/07/2015  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: S-3 0' (H500041-05)**

BTEx 8021B			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/09/2015	ND	1.72	86.1	2.00	5.71	
Toluene*	<0.050	0.050	01/09/2015	ND	1.69	84.6	2.00	7.04	
Ethylbenzene*	<0.050	0.050	01/09/2015	ND	1.63	81.6	2.00	8.36	
Total Xylenes*	<0.150	0.150	01/09/2015	ND	4.91	81.8	6.00	8.55	
Total BTEX	<0.300	0.300	01/09/2015	ND					

Surrogate: 4-Bromofluorobenzene (PTE) 95.4 % 61-154

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AP				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	10700	16.0	01/08/2015	ND	416	104	400	0.00	

TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	01/07/2015	ND	190	94.9	200	1.64	
DRO >C10-C28	<10.0	10.0	01/07/2015	ND	177	88.5	200	0.912	

Surrogate: 1-Chlorooctane 85.7 % 47.2-157

Surrogate: 1-Chlorooctadecane 93.6 % 52.1-176

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 01/07/2015  
Reported: 01/12/2015  
Project Name: ETZ SWD  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 01/07/2015  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: S-3 1' REFUSAL (H500041-06)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/09/2015	ND	1.72	86.1	2.00	5.71	
Toluene*	<0.050	0.050	01/09/2015	ND	1.69	84.6	2.00	7.04	
Ethylbenzene*	<0.050	0.050	01/09/2015	ND	1.63	81.6	2.00	8.36	
Total Xylenes*	<0.150	0.150	01/09/2015	ND	4.91	81.8	6.00	8.55	
Total BTX	<0.300	0.300	01/09/2015	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 96.7 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6930	16.0	01/08/2015	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	01/08/2015	ND	190	94.9	200	1.64	
DRO >C10-C28	<10.0	10.0	01/08/2015	ND	177	88.5	200	0.912	

Surrogate: 1-Chlorooctane 90.6 % 47.2-157

Surrogate: 1-Chlorooctadecane 90.6 % 52.1-176

Cardinal Laboratories

\*=Accredited Analyte

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Celest 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

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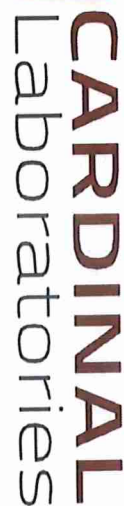
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Celey D. Keene, Lab Director/Quality Manager





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

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



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

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March 10, 2016

SHELDON HITCHCOCK

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: ETZ SWD

Enclosed are the results of analyses for samples received by the laboratory on 03/04/16 14:15.

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,

Celey D. Keene

Lab Director/Quality Manager

**Analytical Results For:**

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

 Received: 03/04/2016  
 Reported: 03/10/2016  
 Project Name: ETZ SWD  
 Project Number: 701712.004.01  
 Project Location: NOT GIVEN

 Sampling Date: 03/04/2016  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: S-1 0' (H600487-01)**

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) 99.0 % 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
Chloride	6000	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
GRO C6-C10	<10.0	10.0	03/07/2016	ND	206	103	200	10.6	
DRO >C10-C28	<10.0	10.0	03/07/2016	ND	231	116	200	19.6	

Surrogate: 1-Chlorooctane 92.4 % 35-147

Surrogate: 1-Chlorooctadecane 102 % 28-171

**Sample ID: S-1 1' (H600487-02)**

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AP				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6530	16.0	03/08/2016	ND	432	108	400	7.69	

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

 Received: 03/04/2016  
 Reported: 03/10/2016  
 Project Name: ETZ SWD  
 Project Number: 701712.004.01  
 Project Location: NOT GIVEN

 Sampling Date: 03/04/2016  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: S-1 2' (H600487-03)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	8660	16.0	03/08/2016	ND	432	108	400	7.69	

**Sample ID: S-1 3' (H600487-04)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3760	16.0	03/08/2016	ND	432	108	400	7.69	

**Sample ID: S-1 4' (H600487-05)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	608	16.0	03/08/2016	ND	432	108	400	7.69	

**Sample ID: S-1 5' (H600487-06)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	03/08/2016	ND	432	108	400	7.69	

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Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

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

Received: 03/04/2016  
Reported: 03/10/2016  
Project Name: ETZ SWD  
Project Number: 701712.004.01  
Project Location: NOT GIVEN

Sampling Date: 03/04/2016  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: S-2 0' (H600487-07)**

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 (PIE) 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
Chloride	1280	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
GRO C6-C10	<10.0	10.0	03/07/2016	ND	206	103	200	10.6	
DRO >C10-C28	<10.0	10.0	03/07/2016	ND	231	116	200	19.6	

Surrogate: 1-Chlorooctane 87.4 % 35-147

Surrogate: 1-Chlorooctadecane 99.0 % 28-171

**Sample ID: S-2 1' (H600487-08)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1960	16.0	03/08/2016	ND	432	108	400	7.69	

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 03/04/2016  
Reported: 03/10/2016  
Project Name: ETZ SWD  
Project Number: 701712.004.01  
Project Location: NOT GIVEN

Sampling Date: 03/04/2016  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: S-2 2' (H600487-09)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4160	16.0	03/08/2016	ND	432	108	400	7.69	

**Sample ID: S-2 3' (H600487-10)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4720	16.0	03/08/2016	ND	432	108	400	7.69	

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 03/04/2016  
Reported: 03/10/2016  
Project Name: ETZ SWD  
Project Number: 701712.004.01  
Project Location: NOT GIVEN

Sampling Date: 03/04/2016  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: S-2 4' (H600487-11)**

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	2.08	104	2.00	0.193	
Toluene*	<0.050	0.050	03/08/2016	ND	2.03	102	2.00	0.140	
Ethylbenzene*	<0.050	0.050	03/08/2016	ND	1.83	91.3	2.00	0.480	
Total Xylenes*	<0.150	0.150	03/08/2016	ND	5.63	93.8	6.00	0.275	
Total BTEX	<0.300	0.300	03/08/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.4 % 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
Chloride	4560	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
GRO C6-C10	<10.0	10.0	03/07/2016	ND	206	103	200	10.6	
DRO >C10-C28	<10.0	10.0	03/07/2016	ND	231	116	200	19.6	

Surrogate: 1-Chlorooctane 99.3 % 35-147

Surrogate: 1-Chlorooctadecane 111 % 28-171

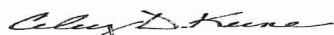
**Sample ID: S-2 5' (H600487-12)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3760	16.0	03/08/2016	ND	432	108	400	7.69	

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Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

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

 Received: 03/04/2016  
 Reported: 03/10/2016  
 Project Name: ETZ SWD  
 Project Number: 701712.004.01  
 Project Location: NOT GIVEN

 Sampling Date: 03/04/2016  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: S-2 7' (H600487-13)**

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4400	16.0	03/08/2016	ND	432	108	400	7.69	

**Sample ID: S-2 9' (H600487-14)**

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3920	16.0	03/08/2016	ND	432	108	400	7.69	

**Sample ID: S-2 11' (H600487-15)**

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1260	16.0	03/08/2016	ND	432	108	400	7.69	

**Sample ID: S-2 13' (H600487-16)**

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	928	16.0	03/08/2016	ND	432	108	400	7.69	

**Sample ID: S-2 15' (H600487-17)**

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	512	16.0	03/08/2016	ND	432	108	400	7.69	

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 03/04/2016  
Reported: 03/10/2016  
Project Name: ETZ SWD  
Project Number: 701712.004.01  
Project Location: NOT GIVEN

Sampling Date: 03/04/2016  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: S-2 17' (H600487-18)**

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	368	16.0	03/08/2016	ND	432	108	400	7.69	

**Sample ID: S-3 0' (H600487-19)**

BTX 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	2.08	104	2.00	0.193	
Toluene*	<0.050	0.050	03/08/2016	ND	2.03	102	2.00	0.140	
Ethylbenzene*	<0.050	0.050	03/08/2016	ND	1.83	91.3	2.00	0.480	
Total Xylenes*	<0.150	0.150	03/08/2016	ND	5.63	93.8	6.00	0.275	
Total BTX	<0.300	0.300	03/08/2016	ND					

Surrogate: 4-Bromofluorobenzene (PIB) 98.5 % 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
Chloride	112	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
GRO C6-C10	<10.0	10.0	03/07/2016	ND	227	114	200	7.80	
DRO >C10-C28	<10.0	10.0	03/07/2016	ND	259	130	200	13.5	

Surrogate: 1-Chlorooctane 97.6 % 35-147

Surrogate: 1-Chlorooctadecane 108 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

 Received: 03/04/2016  
 Reported: 03/10/2016  
 Project Name: ETZ SWD  
 Project Number: 701712.004.01  
 Project Location: NOT GIVEN

 Sampling Date: 03/04/2016  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: S-3 1' (H600487-20)**

Chloride, SM4500Cl-B	mg/kg	Analyzed By: AP							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	03/08/2016	ND	432	108	400	7.69	

**Sample ID: S-3 2' (H600487-21)**

Chloride, SM4500Cl-B	mg/kg	Analyzed By: AP							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	03/08/2016	ND	432	108	400	7.69	

**Sample ID: S-3 3' (H600487-22)**

Chloride, SM4500Cl-B	mg/kg	Analyzed By: AP							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	448	16.0	03/08/2016	ND	432	108	400	7.69	

**Sample ID: S-3 4' (H600487-23)**

Chloride, SM4500Cl-B	mg/kg	Analyzed By: AP							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	448	16.0	03/08/2016	ND	432	108	400	7.69	

**Sample ID: S-3 5' (H600487-24)**

Chloride, SM4500Cl-B	mg/kg	Analyzed By: AP							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	03/08/2016	ND	432	108	400	7.69	

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 03/04/2016  
Reported: 03/10/2016  
Project Name: ETZ SWD  
Project Number: 701712.004.01  
Project Location: NOT GIVEN

Sampling Date: 03/04/2016  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: S-4 0' (H600487-25)**

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	2.08	104	2.00	0.193	
Toluene*	<0.050	0.050	03/08/2016	ND	2.03	102	2.00	0.140	
Ethylbenzene*	<0.050	0.050	03/08/2016	ND	1.83	91.3	2.00	0.480	
Total Xylenes*	<0.150	0.150	03/08/2016	ND	5.63	93.8	6.00	0.275	
Total BTEX	<0.300	0.300	03/08/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.0 % 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
Chloride	<16.0	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
GRO C6-C10	<10.0	10.0	03/07/2016	ND	227	114	200	7.80	
DRO >C10-C28	<10.0	10.0	03/07/2016	ND	259	130	200	13.5	


Surrogate: 1-Chlorooctane 94.2 % 35-147

Surrogate: 1-Chlorooctadecane 107 % 28-171

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Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

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

Received: 03/04/2016  
Reported: 03/10/2016  
Project Name: ETZ SWD  
Project Number: 701712.004.01  
Project Location: NOT GIVEN

Sampling Date: 03/04/2016  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: S-5 0' (H600487-26)**

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	2.08	104	2.00	0.193	
Toluene*	<0.050	0.050	03/08/2016	ND	2.03	102	2.00	0.140	
Ethylbenzene*	<0.050	0.050	03/08/2016	ND	1.83	91.3	2.00	0.480	
Total Xylenes*	<0.150	0.150	03/08/2016	ND	5.63	93.8	6.00	0.275	
Total BTEX	<0.300	0.300	03/08/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.6 % 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
Chloride	<16.0	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
GRO C6-C10	<10.0	10.0	03/07/2016	ND	227	114	200	7.80	
DRO >C10-C28	<10.0	10.0	03/07/2016	ND	259	130	200	13.5	

Surrogate: 1-Chlorooctane 96.2 % 35-147

Surrogate: 1-Chlorooctadecane 103 % 28-171

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 03/04/2016  
Reported: 03/10/2016  
Project Name: ETZ SWD  
Project Number: 701712.004.01  
Project Location: NOT GIVEN

Sampling Date: 03/04/2016  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: S-6 0' (H600487-27)**

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	2.08	104	2.00	0.193	
Toluene*	<0.050	0.050	03/08/2016	ND	2.03	102	2.00	0.140	
Ethylbenzene*	<0.050	0.050	03/08/2016	ND	1.83	91.3	2.00	0.480	
Total Xylenes*	<0.150	0.150	03/08/2016	ND	5.63	93.8	6.00	0.275	
Total BTEX	<0.300	0.300	03/08/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.0 % 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	
Chloride	<16.0	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
GRO C6-C10	<10.0	10.0	03/08/2016	ND	227	114	200	7.80	
DRO >C10-C28	<10.0	10.0	03/08/2016	ND	259	130	200	13.5	

Surrogate: 1-Chlorooctane 95.5 % 35-147

Surrogate: 1-Chlorooctadecane 108 % 28-171

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



### Notes and Definitions


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.
BS1	Blank spike recovery above laboratory acceptance criteria. Results for analyte potentially biased high.
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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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

BILL TO

ANALYSIS REQUEST

Company Name: Talon/LPE  
Project Manager:  
Address: 408 W. Texas Ave.  
City: Artesia State: NM Zip: 88210  
Phone #: 575-746-8768 Fax #: 575-746-8905  
Project #:  
Project Name: ET2 SWD  
Project Location:  
Sample Name:

P.O. #: Company: Talon/LPE  
Attn:  
Address:  
City:  
State: Zip:  
Phone #:  
Fax #:

FOR LAB USE ONLY

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						DATE	TIME	ANALYSIS REQUEST									
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :												
11	5-2 4'	✓	1	✓						3/4/16	11:08	✓	TPH	✓							
12	5-2 5'	✓	1	✓						11:12		✓	BTEX	✓							
13	5-2 7'	✓	1	✓						11:14		✓	Chlorides	✓							
14	5-2 9'	✓	1	✓						11:15		✓									
15	5-2 11'	✓	1	✓						11:16		✓									
16	5-2 13'	✓	1	✓						11:18		✓									
17	5-2 15'	✓	1	✓						11:20		✓									
18	5-2 17'	✓	1	✓						11:50		✓									
19	5-3 0'	✓	1	✓						11:52		✓									
20	5-3 1'	✓	1	✓																	

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Relinquished By: Date: 3/4/16 Time: 12:15  
Received By: Speedi Benson

Relinquished By: Date: Time: Received By:

Delivered By: (Circle One) 5.80  
Sampler - UPS - Bus - Other: Sample Condition Cool ☒ Intact ☒  
☐ Yes ☐ No ☐ Yes ☐ No

CHECKED BY: (Initials)   
Phone Result: ☐ Yes ☐ No Add'l Phone #:   
Fax Result: ☐ Yes ☐ No Add'l Fax #:   
REMARKS:

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

462023



