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**Work Plan**

**Pyote Well Service, LLC: Kaiser SWD St. #9  
|30-025-02538|1RP-3512 & 1RP-3621|**

May 24, 2016

**Prepared By:**

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

**Prepared For:**

Pyote Well Service, LLC

Mr. Jamie Keyes  
**NMOCD District 1**  
1625 N. French Drive  
Hobbs, NM 88240

Subject: **Soil Assessment and Remediation Work Plan**  
Pyote Well Service  
Kaiser SWD St. #9 (30-025-02538) \*1RP-3512 & 1RP-3261\*

Dear Mr. Keyes,

Pyote Well Service, LLC (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 Kaiser SWD St. #9 is located approximately thirty-three (33) miles southwest of Hobbs, New Mexico. The legal location for this facility is Unit Letter F, Section 13, Township 21S South and Range 34 East in Lea County, New Mexico. More specifically the latitude and longitude are 32.480788 North and -103.425566 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 Ratliff-Wink fine sandy loams with 0 to 3 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 165-feet below ground surface (BGS). The referenced ground water data is presented in [Appendix II](#). Therefore the ranking for this site is a **0** based on the following:

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

Based upon the site ranking of **0**, NMOCD Recommended Remedial Action Levels (RRAL) are 50 mg/kg for BTEX, 10 mg/kg for Benzene, 5,000 mg/kg for TPH and 1,000 mg/kg for total chlorides.

## Incident Description and Initial Remedial Actions

On January 14, 2015 (IRP-3512) a sump overflowed because a driver did not pump the sump dry after unloading produced water. This event coincided with heavy precipitation events which complicated the repair process. On January 16, 2016 the impacted area surrounding the load out was scraped up with a backhoe.

On April 24, 2015 a driver struck load line 3 causing the release of approximately 100bbls of produced water. Vacuum trucks were utilized to recover the standing fluid on location and a backhoe was utilized to scrape up the heavily impacted soil.

On September 11, 2015 Talon mobilized personnel to collect soil samples in two areas of concern to NMOCD. These areas (shown on the attached site plan) were low areas on the location and on the lease road just off location that held the majority of rain water. Upon receipt of analytical data from the initial sampling results NMOCD requested that the areas in question be further vertically delineated, horizontal delineation samples be taken and that samples be taken at depths of 10-feet and 15-feet BGS. 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.

September 18, 2015

Sample ID	Depth (feet)	Chlorides (mg/kg)
S-1	0	608
S-2	0	350

May 16, 2016

Sample ID	Depth (feet)	Chlorides (mg/kg)
S-1	1	2080
S-1	2	320
S-1	3	160
S-1	4	128
S-1	10	144
S-1	15	128
S-1	N.WALL	208
S-1	E.WALL	208
S-1	S. WALL	160
S-1	W. WALL	240

Sample ID	Depth (feet)	Chlorides (mg/kg)
S-2	1	1010
S-2	2	928
S-2	3	864
S-2	4	880
S-2	6	1150
S-2	8	464
S-2	10	704
S-2 REFUSAL	15	432
S-2	N. WALL	1340
S-2	E. WALL	1420
S-2	S. WALL	1010
S-2	W. WALL	1180
S-3	0	23600

(--) Analyte Not Tested

(ND) Analyte Not Detected

## Conclusions and Proposed Remedial Actions


- The area on location in the vicinity of sample location S-1 will be excavated to a depth of 1-foot BGS. The excavation will be backfilled with caliche and contoured to match the surrounding location.
- Due to low chloride concentrations, the other potential causes of chloride impacts (pipelines, flowlines, trucks, and plugged wells in the area), safety and environmental hazards posed by excavating around the two pipeline right-of-ways on each side of the lease road and the depth to ground water (approximately 165'), Pyote respectfully requests that no further action be required on the lease road in the vicinity of sample location S-2.
- Due the number of flowlines, infrastructure and the liner in the vicinity of sample location S-3 mechanical delineation is not feasible. This area will be hand excavated to a depth of 1-foot BGS and backfilled with caliche to prevent the spread of chlorides at the surface.
- All of the excavated material will be hauled to an NMOCD approved solid waste disposal facility.

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



# Kaiser SWD St. #9

Pyote Well Service, LLC

## Legend

Pyote-Kaiser SWD

Sample Location

CS-1



Pyote-Kaiser SWD

CS-3

CS-2

Google earth

© 2016 Google

200 ft





# **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="#">CP 00089</a>	O		LE	2	1	13	21S	34E		647840	3594615	225	235		
<a href="#">CP 00939</a> <a href="#">POD1</a>			LE	4	1	2	07	21S	35E	649974	3596760*	2814	400	165	235
<a href="#">CP 00940</a> <a href="#">POD1</a>			LE	4	1	2	07	21S	35E	649974	3596760*	2814	400	165	235

Average Depth to Water: 165 feet

Minimum Depth: 165 feet

Maximum Depth: 165 feet

Record Count: 3

Basin/County Search:

County: Lea

UTM NAD83 Radius Search (in meters):

Easting (X): 647936

Northing (Y): 3594819

Radius: 3000

\*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

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

Form C-141  
Revised August 8, 2011

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 <b>Pyote Water Systems, LLC</b>	Contact <b>Jerry Burton Operations Manager for NM</b>
Address <b>400 W Illinois STE 950 Midland TX</b>	Telephone No. <b>432-448-4917</b>
Facility Name	Facility Type <b>Production Water</b>

Surface Owner <b>Pyote Water Systems, LLC</b>	Mineral Owner <b>Pyote</b>	API No. <b>30-025-02538</b>
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#### LOCATION OF RELEASE

Unit Letter <b>F</b>	Section <b>13</b>	Township <b>25</b>	Range <b>34</b>	Feet from the <b>10 ft</b>	North/South Line <b>N/S</b>	Feet from the	East/West Line	County <b>LEA COUNTY</b>
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Latitude **32.4808551534055** Longitude **-103.425630765566**

#### NATURE OF RELEASE

Type of Release <b>20 bbls production water</b>	Volume of Release <b>20 bbls</b>	Volume Recovered <b>20 bbls</b>
Source of Release <b>Vac truck</b>	Date and Hour of Occurrence <b>1/14/15</b>	Date and Hour of Discovery <b>1/14/15</b>
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? <b>Jerry Burton NM OM</b>	
By Whom? <b>Jerry Burton</b>	Date and Hour	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. <b>none</b>	

If a Watercourse was Impacted, Describe Fully.\*  
**none**

Describe Cause of Problem and Remedial Action Taken.\*

**Vac truck over filled the sumps~ / he failed to suck it out when they are instructed to do on each load. It is posted as well, at the sign in ticket area also**

Describe Area Affected and Cleanup Action Taken.\*

**The clean up area or remediation took place on 1/16/15, cleaned up the area with backhoe, brought in caliche and the remediation is done. Load lines 3&4 been shut down for about 4 months, the access water is from all the rain back n September and October, than the snow we have had since than. Has not been dry enough to work on those lines. DUE TO MOTHER NATURE we have had a company go out several times to do this for loads line 3 & 4**

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.

#### OIL CONSERVATION DIVISION

Signature:   
Printed Name: **Jerry Burton**

Approved by Environmental Specialist: 

Title: **Operations Manager for NM**

Approval Date: **1/29/15**

Expiration Date: **3/29/15**

E-mail Address: **audra@pyotewatersystems.com**

Conditions of Approval:

Attached ☐

Date: **1-23-15**

Phone: **432-448-4917**

Site samples required. Deliniate  
and remediate as per NMOCD  
guides.  
Submit final C-141 by 3

1RP-3512

\* Attach Additional Sheets If Necessary

294873

nTO1502927174

pTO1502927423



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 <b>PYOTE WATER SYSTEMS, LLC</b>	Contact <b>Jerry Burton NM Operations Manager</b>
Address <b>400 W. Illinois Ste 900</b>	Telephone No. <b>432.448.4917 or 432.448.5323(Audra)</b>
Facility Name <b>Kaiser SWD</b>	Facility Type <b>SWD- production water DIDPOSAL</b>

Surface Owner <b>Pyote Water Systems, LLC</b>	Mineral Owner <b>Pyote Water Systems, LLC</b>	API No. <b>30-025-02538</b>
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**LOCATION OF RELEASE**

Unit Letter <b>F</b>	Section <b>13</b>	Township <b>21</b>	Range <b>34</b>	Feet from the 125 ft	North/South Line	Feet from the	East/West Line E/W	County <b>Lea COUNTY</b>
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Latitude \_\_\_\_\_ Longitude \_\_\_\_\_

**NATURE OF RELEASE**

Type of Release; <b>production water</b>	Volume of Release <b>100BBLs</b>	Volume Recovered <b>100 BBLs</b>
Source of Release <b>Vac truck (unknown due to no camera's) hit load line 3</b>	Date and Hour of Occurrence <b>4/24/2015</b>	Date and Hour of Discovery <b>4/24/15 2:35 am</b>
Was Immediate Notice Given <input checked="" type="checkbox"/> <b>Yes</b> <input type="checkbox"/> <b>No</b> <input type="checkbox"/> <b>Not Required</b>	If YES, To Whom? <b>Jerry Burton</b>	
By Whom? <b>Unknown driver (575)-390-3836</b>	Date and HOUR; <b>4/24/2015 2:35 am</b>	
Was a Watercourse Reached? <input type="checkbox"/> <b>Yes</b> *** <b>No***</b>	If YES, Volume Impacting the Watercourse.	

**RECEIVED**

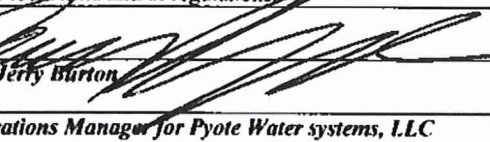

**By OCD District 1 at 11:10 am, Apr 30, 2015**

**Describe Cause of Problem and Remedial Action Taken.\*** *unknown truck driver hit load line 3 caused a spill. We had an anonymous driver call us at 2:35 am (575)390-3836 in the morning, upon his arrival he noticed a large amount of water on the pad at the location, than noticed line 3 was had been hit. He did not see this happen at the Kaiser*

**Describe Area Affected and Cleanup Action Taken.\***

*Area affected was the pad only at the location. Jerry and his pumper Kenny repaired damages themselves, remedial work done by L&J services (backhoe) 2 vac trucks one from Big Buck Services and one from BT Services*

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOC 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 NMOC 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, NMOC 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: 	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: <b>Jerry Burton</b>	Approved by Environmental Specialist: 	
Title: <b>NM Operations Manager for Pyote Water systems, LLC</b>	Approval Date: <b>04/30/2015</b>	Expiration Date: <b>07/30/2015</b>
E-mail Address: <b>jerry@pyotewatersystems.com or audra@pyotewatersystems.com</b>	Conditions of Approval: <b>Site samples required. Delineate and remediate as per MNOCD guides. Geotag photographs of remediation required.</b>	Attached <input type="checkbox"/> <b>294873</b> <b>1RP 3621</b>
Date: <b>4/26/15</b> Phone: <b>432.448.4917</b>		

\* Attach Additional Sheets If Necessary

pKJ1512042374  
nKJ1512041707

# **APPENDIX IV**

## **LABORATORY RESULTS**

September 18, 2015

SHELDON HITCHCOCK

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: KAISER SWD

Enclosed are the results of analyses for samples received by the laboratory on 09/11/15 10:36.

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: 09/11/2015  
Reported: 09/18/2015  
Project Name: KAISER SWD  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 09/11/2015  
Sampling Type: Soil  
Sampling Condition: \*\* (See Notes)  
Sample Received By: Judy Garcia

**Sample ID: S-1 0' (H502403-01)**

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	09/16/2015	ND	400	100	400	3.92	


**Sample ID: S-2 0' (H502403-02)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	320	16.0	09/16/2015	ND	400	100	400	3.92	

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Notes and Definitions**

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

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Cardinal Laboratories

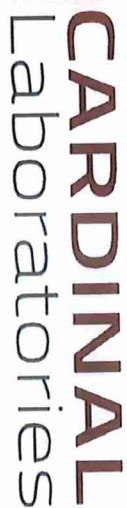
\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

+ Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2626



May 16, 2016

SHELDON HITCHCOCK

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: KAISER SWD ST. #9

Enclosed are the results of analyses for samples received by the laboratory on 05/12/16 13:10.

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: 05/12/2016  
 Reported: 05/16/2016  
 Project Name: KAISER SWD ST. #9  
 Project Number: 701712.005.01  
 Project Location: NONE GIVEN

 Sampling Date: 05/12/2016  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: S-1 1' (H601049-01)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2080	16.0	05/13/2016	ND	400	100	400	3.92	

**Sample ID: S-1 2' (H601049-02)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	320	16.0	05/13/2016	ND	400	100	400	3.92	

**Sample ID: S-1 3' (H601049-03)**

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	05/13/2016	ND	400	100	400	3.92	

**Sample ID: S-1 4' (H601049-04)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	05/13/2016	ND	400	100	400	3.92	

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: 05/12/2016  
 Reported: 05/16/2016  
 Project Name: KAISER SWD ST. #9  
 Project Number: 701712.005.01  
 Project Location: NONE GIVEN

 Sampling Date: 05/12/2016  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: S-1 10' (H601049-05)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	05/13/2016	ND	400	100	400	3.92	

**Sample ID: S-1 15' (H601049-06)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	05/13/2016	ND	400	100	400	3.92	

**Sample ID: S-1 N. WALL (H601049-07)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	05/13/2016	ND	400	100	400	3.92	

**Sample ID: S-1 E. WALL (H601049-08)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	192	16.0	05/13/2016	ND	400	100	400	3.92	

**Sample ID: S-1 S. WALL (H601049-09)**

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	05/13/2016	ND	400	100	400	3.92	

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: 05/12/2016  
 Reported: 05/16/2016  
 Project Name: KAISER SWD ST. #9  
 Project Number: 701712.005.01  
 Project Location: NONE GIVEN

 Sampling Date: 05/12/2016  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: S-1 W. WALL (H601049-10)**

Chloride, SM4500Cl-B			mg/kg Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	05/13/2016	ND	400	100	400	3.92	

**Sample ID: S-2 1' (H601049-11)**

Chloride, SM4500Cl-B			mg/kg Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1010	16.0	05/13/2016	ND	400	100	400	3.92	

**Sample ID: S-2 2' (H601049-12)**

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	05/13/2016	ND	400	100	400	3.92	

**Sample ID: S-2 3' (H601049-13)**

Chloride, SM4500Cl-B			mg/kg Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	864	16.0	05/13/2016	ND	400	100	400	3.92	

**Sample ID: S-2 4' (H601049-14)**

Chloride, SM4500Cl-B			mg/kg Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	880	16.0	05/13/2016	ND	400	100	400	3.92	

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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: 05/12/2016  
Reported: 05/16/2016  
Project Name: KAISER SWD ST. #9  
Project Number: 701712.005.01  
Project Location: NONE GIVEN

Sampling Date: 05/12/2016  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: S-2 6' (H601049-15)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1150	16.0	05/13/2016	ND	400	100	400	3.92	

**Sample ID: S-2 8' (H601049-16)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	464	16.0	05/13/2016	ND	400	100	400	3.92	

**Sample ID: S-2 10' (H601049-17)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	704	16.0	05/13/2016	ND	400	100	400	3.92	

**Sample ID: S-2 15' (H601049-18)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	432	16.0	05/13/2016	ND	400	100	400	3.92	

**Sample ID: S-2 N. WALL (H601049-19)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1340	16.0	05/13/2016	ND	400	100	400	3.92	

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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: 05/12/2016  
 Reported: 05/16/2016  
 Project Name: KAISER SWD ST. #9  
 Project Number: 701712.005.01  
 Project Location: NONE GIVEN

 Sampling Date: 05/12/2016  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: S-2 E. WALL (H601049-20)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1420	16.0	05/13/2016	ND	400	100	400	3.92	

**Sample ID: S-2 S. WALL (H601049-21)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1010	16.0	05/13/2016	ND	416	104	400	0.00	

**Sample ID: S-2 W. WALL (H601049-22)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1180	16.0	05/13/2016	ND	416	104	400	0.00	

**Sample ID: S-3 0' (H601049-23)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	23600	16.0	05/13/2016	ND	416	104	400	0.00	

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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

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Celey D. Keene, Lab Director/Quality Manager





# CARDINAL Laboratories

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

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Talon/LPE

Project Manager: S. Hinchuck

Address: 408 W. Texas Ave.

City: Artesia

Phone #: 575-746-8768

Project #: 701712, 005, 01

Project Name: Kaysa SWD St. #9

Project Location:

Sample Name: S. Hinchuck

FOR LAB USE ONLY

Lab I.D.

Sample I.D.

H601049

5-1 1'

2

5-1 2'

3

5-1 3'

4

5-1 4'

5

5-1 10'

6

5-1 15'

7

5-1 N. Wall

8

5-1 E. Wall

9

5-1 S. Wall

10

5-1 W. Wall

11

5-1 W. Wall

12

5-1 W. Wall

13

5-1 W. Wall

14

5-1 W. Wall

15

5-1 W. Wall

16

5-1 W. Wall

17

5-1 W. Wall

18

5-1 W. Wall

19

5-1 W. Wall

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5-1 W. Wall

21

5-1 W. Wall

22

5-1 W. Wall

23

5-1 W. Wall

24

5-1 W. Wall

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Relinquished By:

Shelly Hinchuck

Relinquished By:

Time:

Date:

Time:

Date:

Time:

Date:

Time:

### BILL TO

P.O. #:

Company: Talon/LPE

Attn:

Address:

City:

State:

Zip:

Phone #:

Fax #:

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Sampling

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### ANALYSIS REQUEST

Chlorides

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

Fax Result: ☐ Yes ☐ No Add'l Fax #:

REMARKS:

REMARKS:

REMARKS:

REMARKS:

REMARKS:

REMARKS:

REMARKS:

REMARKS:

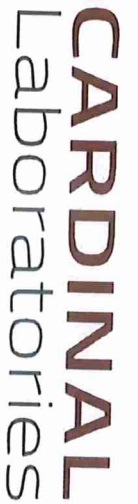
P6 10P3

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

29.602

corrected 29.702

29.702

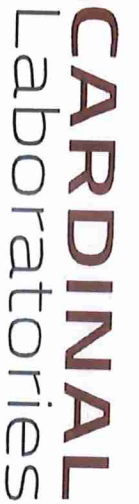


## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 9 of 10

PG 201





## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

PG 3 of 4

<b>Company Name:</b> Talon/LPE <b>Project Manager:</b> J. Hinchey <b>Address:</b> 408 W. Texas Ave. <b>City:</b> Artesia <b>State:</b> NM <b>Zip:</b> 88210 <b>Phone #:</b> 575-746-8768 <b>Fax #:</b> 575-746-8905 <b>Project #:</b> 201212.005.01 <b>Project Owner:</b> P y o r c <b>Project Name:</b> Kaysen SW 4th. #9 <b>Project Location:</b> <b>Sampler Name:</b> S. Hinchey <b>FOR LAB USE ONLY</b>				<b>P.O. #:</b> <b>Company:</b> Talon/LPE <b>Attn:</b> <b>Address:</b> <b>City:</b> <b>State:</b> <b>Zip:</b> <b>Phone #:</b> <b>Fax #:</b>			
<b>Lab I.D.</b> <b>Sample I.D.</b>				<b>BILL TO</b> <b>ANALYSIS REQUEST</b>			
<b>Lab I.D.</b> H001049 <b>Sample I.D.</b> 21 5-2 S. Way 22 5-2 W. Way 23 5-3 O. Way				<b>(G)RAB OR (C)OMP.</b> <b># CONTAINERS</b> <b>GROUNDWATER</b> <b>WASTEWATER</b> <b>SOIL</b> <b>OIL</b> <b>SLUDGE</b> <b>OTHER :</b> <b>ACID/BASE:</b> <b>ICE / COOL</b> <b>OTHER :</b>			
<b>DATE</b> <b>TIME</b> 5/12/16 11:12 5/12/16 11:14 5/12/16				<b>DATE</b> <b>TIME</b> 5/12/16 11:12 5/12/16 11:14 5/12/16			
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<b>Relinquished By:</b> <i>Sheila Perez</i> <b>Date:</b> 5/12/16 <b>Time:</b> 11:10 <b>Received By:</b> <i>Sheila Perez</i> <b>Date:</b> 5/12/16 <b>Time:</b> 11:10 <b>Relinquished By:</b> <i>Sheila Perez</i> <b>Date:</b> 5/12/16 <b>Time:</b> 11:10 <b>Received By:</b> <i>Sheila Perez</i>				<b>Phone Result:</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <b>Add'l Phone #:</b> <b>Fax Result:</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <b>Add'l Fax #:</b>			
<b>Delivered By: (Circle One)</b> <b>Sampler - UPS - Bus - Other:</b>				<b>Sample Condition</b> <b>Cool</b> <input checked="" type="checkbox"/> <b>Intact</b> <input checked="" type="checkbox"/> <b>Yes</b> <input checked="" type="checkbox"/> <b>No</b> <input type="checkbox"/> <b>Yes</b> <input checked="" type="checkbox"/> <b>No</b> <input type="checkbox"/> <b>Checked By:</b> <i>Sheila Perez</i>			