



**RECEIVED**

By OCD District 1 at 2:24 pm, Oct 07, 2015

September 29, 2015

**APPROVED**

By OCD District 1 at 2:24 pm, Oct 07, 2015

Ms. Kellie Jones  
NMOCD District I  
1625 N. French Dr.  
Hobbs, NM 88240

AMARILLO  
921 North Bivins  
Amarillo, Texas 79107  
Phone 806.467.0607  
Fax 806.467.0622

ARTESIA  
408 West Texas Ave.  
Artesia, New Mexico 88210  
Phone 575.746.8768  
Fax 575.746.8905

HOBBS  
318 East Taylor Street  
Hobbs, New Mexico 88240  
Phone 575.393.4261  
Fax 575.393.4658

MIDLAND  
2901 State Hwy 349  
Midland, Texas 79706  
Phone 432.522.2133  
Fax 432.522.2180

OKLAHOMA CITY  
7700 North Hudson Avenue  
Suite 10  
Oklahoma City, Oklahoma 73116  
Phone 405.486.7030  
Fax 806.467.0622

SAN ANTONIO  
11 Commercial Place  
Schertz, Texas 78154  
Phone 210.265.8025  
Fax 210.568.2191

Subject: **Soil Assessment and Remediation Work Plan**  
LRE Operating, LLC  
NOWATA AGR State #001 TB  
30-025-31244

Dear Ms. Jones:

LRE Operating, LLC has contracted Talon/LPE (Talon) to perform soil assessment and remediation services at the above referenced NOWATA AGR State #001 TB release. The results of our soil assessment and proposed remediation activities consist of the following:

#### **Incident Date**

May 24, 2014

#### **Background Information**

The NOWATA AGR State #001 TB is located approximately twenty-four (24) miles northwest of Hobbs in Lea County, New Mexico. The legal location for this site is Section 9, Township 18 South, and Range 35 East. More specifically the latitude and longitude for the release are 32.7573739 North and -103.4571457 West. A site plan is presented in [Appendix I](#).

According to the soil survey provided by the United States Department of Agriculture National Resources Conservation Services, the soil in this area is made up of Kimbrough-Lea land complex. Per the New Mexico Bureau of Geology and Mineral Resources, the local surface and shallow geology, Quaternary and Tertiary Age sedimentary deposits, is comprised of calcareous-loamy alluvium and calcareous-loamy eolian sands which includes silty soils underlain by sedimentary rock and hard caliche. Drainage courses in this area are normally dry. The New Mexico State Engineer web site indicates the nearest ground water data to be in S9-T18S-R35E. The ground water in Section 9 is reported to be at depth of 72' below ground surface (bgs). See [Appendix II](#) for the referenced groundwater data.

The ranking for this site is **10** based on the following:

ENVIRONMENTAL CONSULTING	Depth to ground water	50' - 100'
ENGINEERING	Wellhead Protection Area	>1000'
DRILLING	Distance to surface water body	>1000'
CONSTRUCTION		
SPILL MANAGEMENT		
GENERAL CONTRACTING		

## Incident Description

A flow line ruptured causing 45 barrels of produced water to be released. The facility was shut-in and the flow line was repaired. A vacuum truck was called to the location and recovered 20 barrels of produced water. The impacted area was scraped to remove approximately 72 yards of saturated soil from the surface. The impacted soil was transported to Lea Land, LLC. A site map is presented in [Appendix I](#).

## Actions Taken

On August 31, 2015 Talon mobilized personnel to begin the site assessment and soil sampling activities for the construction of a work plan. Grab soil samples were collected utilizing a hand auger to a depth of 1' below ground surface where refusal was encountered. The complete laboratory results are presented in [Table 1](#).

On September 16, 2015 Talon personnel returned to the site to obtain deeper vertical delineation samples utilizing a backhoe to a total depth of 2.5-feet below ground surface where hard rock refusal was encountered. The complete laboratory results are presented in [Table 2](#).

On September 25, 2015 Talon personnel returned to the site to obtain deeper vertical delineation samples with a drill rig to a total depth of 15-feet below ground surface. The complete laboratory results are presented in [Table 3](#).

All soil samples were collected by Talon personnel wearing clean nitrile gloves. The soil samples were placed in laboratory provided sample containers, iced and transported to Cardinal Laboratories in Hobbs, New Mexico for analysis. The samples were tested for TPH (Total Petroleum Hydrocarbons) using EPA Method 8015M, and volatile organics (BTEX) using EPA Method 8021B. The chloride samples were analyzed per Method SM4500Cl-B.

## Laboratory Results

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

September 4, 2015

Table 1

Sample ID	Depth (feet)	BTEX (mg/kg)	Chlorides (mg/kg)	TPH (mg/kg) GRO	TPH (mg/kg) DRO
S-1 Refusal	0'	<0.300	18800	<10	253
S-2	0'	<0.300	24000	<10	<10
Refusal	1'	<0.300	13200	<10	<10
S-3 Refusal	0'	142	11200	1200	14200

September 23, 2015

Table 2

Sample ID	Depth (feet)	BTEX (mg/kg)	Chlorides (mg/kg)	TPH (mg/kg) GRO	TPH (mg/kg) DRO
S-1	1'	<0.300	12100	<10	20.6
Refusal	1.5	0.323	8660	<10	90.8
S-2	2'	<0.300	12300	<10	<10
Refusal	2.5'	<0.300	10300	<10	29.3
S-3	1'	21.4	10500	621	9940
Refusal	1.5'	3.22	81300	74.4	3080

September 25, 2015

Table 3

Sample ID	Depth (feet)	BTEX (mg/kg)	Chlorides (mg/kg)	TPH (mg/kg) GRO	TPH (mg/kg) DRO
S-1	3'	--	2560	--	--
	5'	--	96	--	--
	7'	--	96	--	--
	10'	--	176	--	--
	15	--	48	--	--
S-2	3'	--	6720	--	--
	5'	--	7600	--	--
	7'	--	2680	--	--
	10'	--	208	--	--
	15'	--	240	--	--
S-3	3'	--	208	<10	<10
	5'	--	32	<10	<10
	7'	--	64	<10	<10
	10'	--	16	--	--
	15'	--	96	--	--

Based upon the site ranking of **10**, NMOCD Recommended Remedial Action Levels (RRAL's) are 50 mg/kg for BTEX, 10 mg for Benzene, and 1,000 mg/kg for TPH. The chloride remediation standard is considered to be 1,000 mg/kg based upon a water table depth less than 100-feet deep.

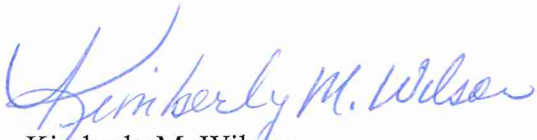


### Proposed Remedial Actions

- The impacted area in the vicinity of S-1 will be excavated to a depth of 4-feet below land surface. A confirmation sample for chlorides will be obtained.
- The impacted area in the vicinity of S-2 will be excavated to a depth of 4- feet deep and a 20-mil liner will be installed.
- The impacted area in the vicinity of S-3 will be excavated to a depth of 2.5-feet deep.
- All impacted soil will be transported to Lea Land, LLC for disposal.
- Upon approval of the confirmation sample from the NMOCD, the excavated areas will then be backfilled with new top soil and contoured to match the surrounding terrain.
- A final closure report documenting all remedial actions will be provided to the OCD along with Final Form C-141.

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,



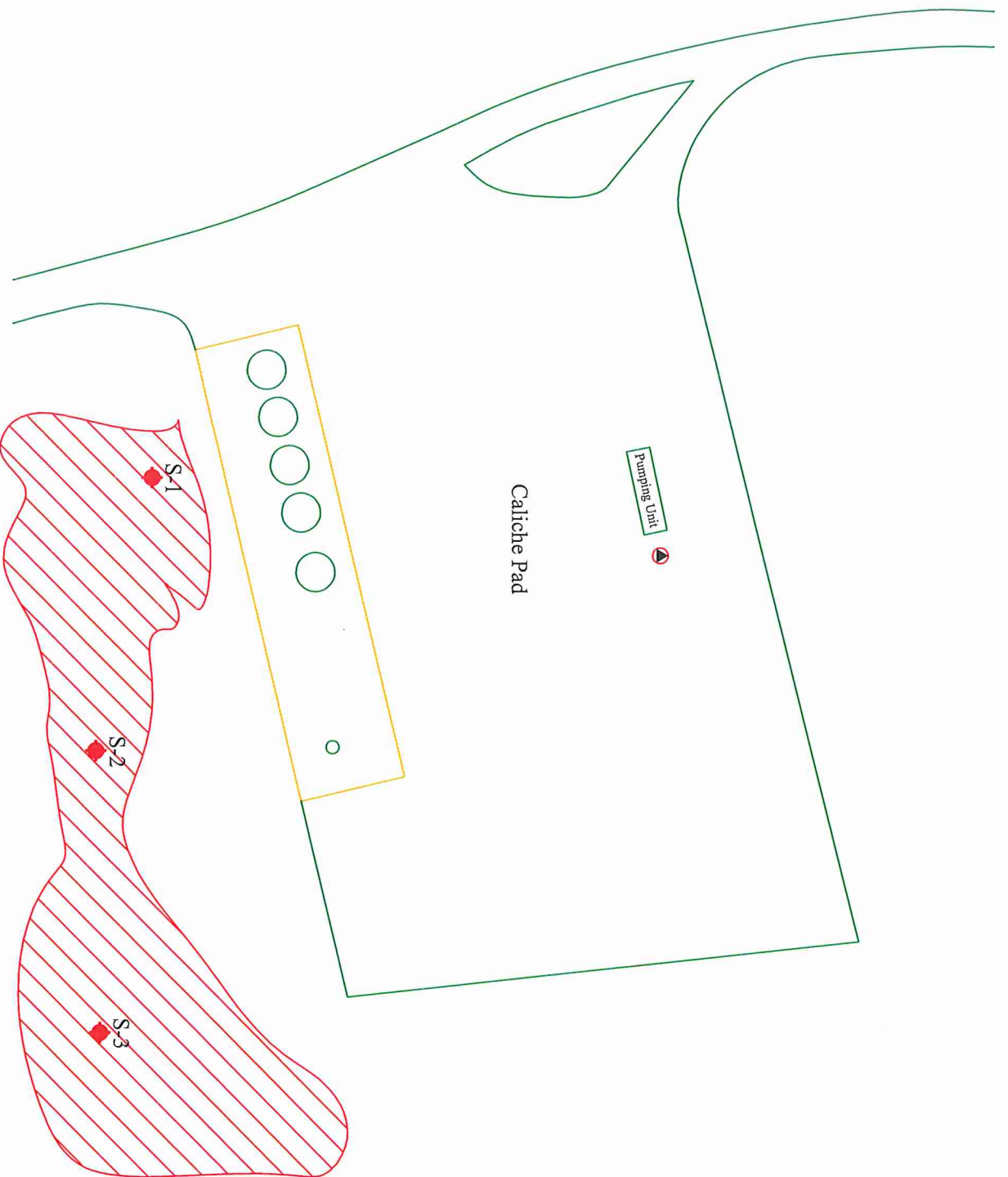
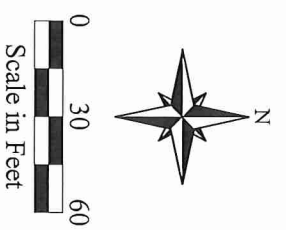
Kimberly M. Wilson  
Project Manager



David J. Adkins  
District Manager



**APPENDIX I**  
**SITE MAP**



Date: 09/21/2015  
Scale: 1" = 60'  
Drawn By: SMM

Nowata AGR State #1 Tank Battery  
Lime Rock Resources  
Lea County, NM  
Figure 1 - Site Plan

**APPENDIX II**  
**GROUNDWATER DATA**  
**INITIAL C-141**





# New Mexico Office of the State Engineer

## Water Column/Average Depth to Water












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

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

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

(quarters are smallest to largest) (NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-Code basin County		Q Q Q Q Q Q Q Q Q							X	Y	Distance	Depth Well	Depth Water	Water Column
			64	16	4	Sec	Tws	Rng							
<a href="#">L 10304</a>	L	LE	1	4	4	09	18S	35E	644526	3625479*		282	170	72	98
<a href="#">L 02676</a>	L	LE		1	2	16	18S	35E	644231	3624972*		582	175	60	115
<a href="#">L 06047</a>	L	LE	2	2	1	16	18S	35E	643927	3625066*		826	122	65	57
<a href="#">L 02675</a>	L	LE		3	2	15	18S	35E	645850	3624587*		1319	197	47	150
<a href="#">L 09588</a>	L	LE	4	3	4	16	18S	35E	644349	3623659*		1663	155	84	71
<a href="#">L 04206</a>	L	LE		3	4	04	18S	35E	644194	3626992*		1793	125	50	75
<a href="#">L 07872</a>	L	LE	1	3	3	03	18S	35E	644900	3627101*		1830	162	62	100
<a href="#">L 02677</a>	L	LE		3	4	15	18S	35E	645863	3623780*		1881	194	54	140
<a href="#">L 03772</a>	L	LE		2	2	21	18S	35E	644659	3623361*		1919	130	60	70
<a href="#">L 02680</a>	L	LE		1	2	21	18S	35E	644257	3623357*		1978	190	59	131
<a href="#">L 08309</a>	L	LE	1	2	2	10	18S	35E	646122	3626711*		1999	112	49	63

Average Depth to Water: **60 feet**

Minimum Depth: **47 feet**

Maximum Depth: **84 feet**

Record Count: 11

UTMNAD83 Radius Search (in meters):

**Easting (X):** 644726

**Northing (Y):** 3625279

**Radius:** 2000

\*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.

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: LRE Operating	Contact: Eddie Elliot	
Address: P.O. Box 250 Lovington, NM 88260	Telephone No. 432-413-0429	
Facility Name: NOWATA AGR State #001	Facility Type: Flowline	
Surface Owner: State	Mineral Owner: State	API No. 30-025-31244

**LOCATION OF RELEASE**

Unit Letter P	Section 09	Township 18S	Range 35E	Feet from the 860	North/South Line S	Feet from the 990	East/West Line E	County Lea
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Latitude 32.7573739 Longitude -103.4571457

**NATURE OF RELEASE**

Type of Release: Produced Water	Volume of Release: 45bbls	Volume Recovered: 20bbls
Source of Release: Flowline	Date and Hour of Occurrence: 8/28/2015	Date and Hour of Discovery: 8/28/2015
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? OCD-voicemail	
By Whom? Eddie Elliot	Date and Hour: 8/28/2015	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	
If a Watercourse was Impacted, Describe Fully.*		
Describe Cause of Problem and Remedial Action Taken.* A flowline ruptured causing a release of approximately 45bbls of produced water. A vacuum truck was utilized to recover approximately 20bbls of produced water. The impacted area was scraped to remove the saturated soil from the surface (approximately 72 yards). The impacted soil from the scrape was hauled to an NMOCD approved solid waste disposal facility.		
Describe Area Affected and Cleanup Action Taken.* The impacted area is in the pasture south of the tank battery. Talon/LPE mobilized personnel to conduct an initial site assessment and to perform soil sampling within the impacted area. A remediation work plan will be generated and submitted to NMOCD for review and approval. Upon approval of the work plan remediation activities will proceed.		
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: 		<b>OIL CONSERVATION DIVISION</b>
Printed Name: Eddie Elliot		Approved by Environmental Specialist:
Title: Production Supervisor	Approval Date:	Expiration Date:
E-mail Address: eelliott@limerockresources.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 9/24/2015	Phone: 432-413-0429	

\* Attach Additional Sheets If Necessary

## **APPENDIX III**

### **LABORATORY RESULTS**



September 04, 2015

KIMBERLY WILSON

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: NO WATA TB

Enclosed are the results of analyses for samples received by the laboratory on 09/01/15 12:25.

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/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  
 KIMBERLY WILSON  
 408 W. TEXAS AVE.  
 ARTESIA NM, 88210  
 Fax To: (575) 745-8905

 Received: 09/01/2015  
 Reported: 09/04/2015  
 Project Name: NO WATA TB  
 Project Number: 70130708001  
 Project Location: LEA COUNTY, NM

 Sampling Date: 08/31/2015  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Judy Garcia

**Sample ID: S-1 0' (H502324-01)**

BTX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>0.202</b>	0.050	09/03/2015	ND	1.90	95.1	2.00	0.227	
Toluene*	<0.050	0.050	09/03/2015	ND	1.74	86.8	2.00	0.647	
<b>Ethylbenzene*</b>	<b>0.065</b>	0.050	09/03/2015	ND	1.80	90.1	2.00	0.934	
Total Xylenes*	<0.150	0.150	09/03/2015	ND	5.43	90.5	6.00	1.45	
Total BTX	<0.300	0.300	09/03/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 85.6-137

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>18800</b>	16.0	09/03/2015	ND	416	104	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	09/02/2015	ND	187	93.4	200	0.402	
<b>DRO &gt;C10-C28</b>	<b>253</b>	10.0	09/02/2015	ND	201	101	200	1.77	

Surrogate: 1-Chlorooctane 83.1 % 47.2-157

Surrogate: 1-Chlorooctadecane 90.3 % 52.1-176

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

**Analytical Results For:**

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

Received: 09/01/2015  
Reported: 09/04/2015  
Project Name: NO WATA TB  
Project Number: 70130708001  
Project Location: LEA COUNTY, NM

Sampling Date: 08/31/2015  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Judy Garcia

**Sample ID: S-2 0' (H502324-02)**

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	09/03/2015	ND	1.90	95.1	2.00	0.227	
Toluene*	<0.050	0.050	09/03/2015	ND	1.74	86.8	2.00	0.647	
Ethylbenzene*	<0.050	0.050	09/03/2015	ND	1.80	90.1	2.00	0.934	
Total Xylenes*	<0.150	0.150	09/03/2015	ND	5.43	90.5	6.00	1.45	
Total BTX	<0.300	0.300	09/03/2015	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 99.6 % 85.6-137

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	24000	16.0	09/03/2015	ND	416	104	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	09/02/2015	ND	190	94.9	200	0.159	
DRO >C10-C28	<10.0	10.0	09/02/2015	ND	206	103	200	0.564	

Surrogate: 1-Chlorooctane 74.2 % 47.2-157

Surrogate: 1-Chlorooctadecane 78.8 % 52.1-176

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

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

Received: 09/01/2015  
Reported: 09/04/2015  
Project Name: NO WATA TB  
Project Number: 70130708001  
Project Location: LEA COUNTY, NM

Sampling Date: 08/31/2015  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Judy Garcia

**Sample ID: S-2 1' (H502324-03)**

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	09/03/2015	ND	1.90	95.1	2.00	0.227	
Toluene*	<0.050	0.050	09/03/2015	ND	1.74	86.8	2.00	0.647	
Ethylbenzene*	<0.050	0.050	09/03/2015	ND	1.80	90.1	2.00	0.934	
Total Xylenes*	<0.150	0.150	09/03/2015	ND	5.43	90.5	6.00	1.45	
Total BTX	<0.300	0.300	09/03/2015	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 101 % 85.6-137

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	13200	16.0	09/04/2015	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	09/02/2015	ND	190	94.9	200	0.159	
DRO >C10-C28	<10.0	10.0	09/02/2015	ND	206	103	200	0.564	

Surrogate: 1-Chlorooctane 72.1 % 47.2-157

Surrogate: 1-Chlorooctadecane 71.0 % 52.1-176

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

 Received: 09/01/2015  
 Reported: 09/04/2015  
 Project Name: NO WATA TB  
 Project Number: 70130708001  
 Project Location: LEA COUNTY, NM

 Sampling Date: 08/31/2015  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Judy Garcia

**Sample ID: S-3 0' (H502324-04)**

BTEx 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	2.66	1.00	09/03/2015	ND	1.90	95.1	2.00	0.227	
Toluene*	26.5	1.00	09/03/2015	ND	1.74	86.8	2.00	0.647	
Ethylbenzene*	48.0	1.00	09/03/2015	ND	1.80	90.1	2.00	0.934	
Total Xylenes*	65.2	3.00	09/03/2015	ND	5.43	90.5	6.00	1.45	
Total BTEX	142	6.00	09/03/2015	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 117 % 85.6-137

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	11200	16.0	09/04/2015	ND	432	108	400	7.69	

TPH 8015M		mg/kg		Analyzed By: CK						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	1200	100	09/02/2015	ND	190	94.9	200	0.159		
DRO >C10-C28	14200	100	09/02/2015	ND	206	103	200	0.564		

Surrogate: 1-Chlorooctane 195 % 47.2-157

Surrogate: 1-Chlorooctadecane 248 % 52.1-176

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

---

Cardinal Laboratories

\*=Accredited Analyte

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---

Celey D. Keene, Lab Director/Quality Manager





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

September 23, 2015

KIMBERLY WILSON

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: NOWATA AGR STATE #1

Enclosed are the results of analyses for samples received by the laboratory on 09/16/15 14:52.

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/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  
KIMBERLY WILSON  
408 W. TEXAS AVE.  
ARTESIA NM, 88210  
Fax To: (575) 745-8905

Received: 09/16/2015  
Reported: 09/23/2015  
Project Name: NOWATA AGR STATE #1  
Project Number: 70130708001  
Project Location: LEA COUNTY, NM

Sampling Date: 09/11/2015  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Judy Garcia

**Sample ID: S-1 1' (H502433-01)**

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	09/22/2015	ND	1.91	95.7	2.00	2.47	
Toluene*	<0.050	0.050	09/22/2015	ND	2.07	104	2.00	2.96	
Ethylbenzene*	<0.050	0.050	09/22/2015	ND	1.93	96.3	2.00	3.95	
Total Xylenes*	<0.150	0.150	09/22/2015	ND	6.06	101	6.00	3.70	
Total BTX	<0.300	0.300	09/22/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 85.6-137

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	12100	4.00	09/17/2015	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	09/21/2015	ND	197	98.7	200	3.80	
DRO >C10-C28	20.6	10.0	09/21/2015	ND	208	104	200	6.11	

Surrogate: 1-Chlorooctane 67.2 % 47.2-157

Surrogate: 1-Chlorooctadecane 73.6 % 52.1-176

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

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

 Received: 09/16/2015  
 Reported: 09/23/2015  
 Project Name: NOWATA AGR STATE #1  
 Project Number: 70130708001  
 Project Location: LEA COUNTY, NM

 Sampling Date: 09/11/2015  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Judy Garcia

**Sample ID: S-1 1.5' REFUSAL (H502433-02)**

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	09/22/2015	ND	1.91	95.7	2.00	2.47	
Toluene*	<b>0.054</b>	0.050	09/22/2015	ND	2.07	104	2.00	2.96	
Ethylbenzene*	<b>0.073</b>	0.050	09/22/2015	ND	1.93	96.3	2.00	3.95	
Total Xylenes*	<b>0.196</b>	0.150	09/22/2015	ND	6.06	101	6.00	3.70	
Total BTX	<b>0.323</b>	0.300	09/22/2015	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 109 % 85.6-137

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<b>8660</b>	4.00	09/17/2015	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	09/21/2015	ND	197	98.7	200	3.80	
DRO >C10-C28	<b>90.8</b>	10.0	09/21/2015	ND	208	104	200	6.11	

Surrogate: 1-Chlorooctane 69.4 % 47.2-157

Surrogate: 1-Chlorooctadecane 70.5 % 52.1-176

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received:	09/16/2015	Sampling Date:	09/11/2015
Reported:	09/23/2015	Sampling Type:	Soil
Project Name:	NOWATA AGR STATE #1	Sampling Condition:	Cool & Intact
Project Number:	70130708001	Sample Received By:	Judy Garcia
Project Location:	LEA COUNTY, NM		

**Sample ID: S-2 2' (H502433-03)**

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	09/22/2015	ND	1.91	95.7	2.00	2.47	
Toluene*	<0.050	0.050	09/22/2015	ND	2.07	104	2.00	2.96	
Ethylbenzene*	<0.050	0.050	09/22/2015	ND	1.93	96.3	2.00	3.95	
Total Xylenes*	<0.150	0.150	09/22/2015	ND	6.06	101	6.00	3.70	
Total BTX	<0.300	0.300	09/22/2015	ND					

Surrogate: 4-Bromofluorobenzene (PII) 107 % 85.6-137

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	12300	4.00	09/17/2015	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	09/21/2015	ND	197	98.7	200	3.80	
DRO >C10-C28	<10.0	10.0	09/21/2015	ND	208	104	200	6.11	


Surrogate: 1-Chlorooctane 65.0 % 47.2-157

Surrogate: 1-Chlorooctadecane 72.2 % 52.1-176

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 09/16/2015  
Reported: 09/23/2015  
Project Name: NOWATA AGR STATE #1  
Project Number: 70130708001  
Project Location: LEA COUNTY, NM

Sampling Date: 09/11/2015  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Judy Garcia

**Sample ID: S-2 2.5' REFUSAL (H502433-04)**

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	09/22/2015	ND	1.91	95.7	2.00	2.47	
Toluene*	<0.050	0.050	09/22/2015	ND	2.07	104	2.00	2.96	
Ethylbenzene*	<0.050	0.050	09/22/2015	ND	1.93	96.3	2.00	3.95	
Total Xylenes*	<0.150	0.150	09/22/2015	ND	6.06	101	6.00	3.70	
Total BTX	<0.300	0.300	09/22/2015	ND					

Surrogate: 4-Bromofluorobenzene (PII) 103 % 85.6-137

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AP				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	10300	4.00	09/17/2015	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	09/21/2015	ND	197	98.7	200	3.80	
DRO >C10-C28	29.3	10.0	09/21/2015	ND	208	104	200	6.11	

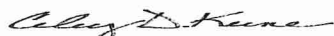
Surrogate: 1-Chlorooctane 72.0 % 47.2-157

Surrogate: 1-Chlorooctadecane 77.6 % 52.1-176

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

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

 Received: 09/16/2015  
 Reported: 09/23/2015  
 Project Name: NOWATA AGR STATE #1  
 Project Number: 70130708001  
 Project Location: LEA COUNTY, NM

 Sampling Date: 09/11/2015  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Judy Garcia

**Sample ID: S-3 1' (H502433-05)**

BTX 8021B		mg/kg	Analyzed By: MS				S-04		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.200	0.200	09/22/2015	ND	1.91	95.7	2.00	2.47	
Toluene*	<b>0.241</b>	0.200	09/22/2015	ND	2.07	104	2.00	2.96	
Ethylbenzene*	<b>4.15</b>	0.200	09/22/2015	ND	1.93	96.3	2.00	3.95	
Total Xylenes*	<b>17.0</b>	0.600	09/22/2015	ND	6.06	101	6.00	3.70	
Total BTX	<b>21.4</b>	1.20	09/22/2015	ND					

Surrogate: 4-Bromofluorobenzene (PII) 173 % 85.6-137

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<b>10500</b>	4.00	09/17/2015	ND	416	104	400	0.00	

TPH 8015M		mg/kg	Analyzed By: MS				S-06		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<b>621</b>	100	09/21/2015	ND	197	98.7	200	3.80	
DRO >C10-C28	<b>9940</b>	100	09/21/2015	ND	208	104	200	6.11	


Surrogate: 1-Chlorooctane 137 % 47.2-157

Surrogate: 1-Chlorooctadecane 184 % 52.1-176

Cardinal Laboratories

\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

 Received: 09/16/2015  
 Reported: 09/23/2015  
 Project Name: NOWATA AGR STATE #1  
 Project Number: 70130708001  
 Project Location: LEA COUNTY, NM

 Sampling Date: 09/11/2015  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Judy Garcia

**Sample ID: S-3 1.5' REFUSAL (H502433-06)**

BTEX 8021B		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/22/2015	ND	1.91	95.7	2.00	2.47	
Toluene*	0.056	0.050	09/22/2015	ND	2.07	104	2.00	2.96	
Ethylbenzene*	0.780	0.050	09/22/2015	ND	1.93	96.3	2.00	3.95	
Total Xylenes*	2.38	0.150	09/22/2015	ND	6.06	101	6.00	3.70	
Total BTEX	3.22	0.300	09/22/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 176 % 85.6-137

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	8130	4.00	09/17/2015	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	74.4	10.0	09/21/2015	ND	197	98.7	200	3.80	
DRO >C10-C28	3080	10.0	09/21/2015	ND	208	104	200	6.11	

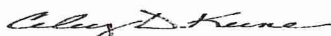
Surrogate: 1-Chlorooctane 95.0 % 47.2-157

Surrogate: 1-Chlorooctadecane 117 % 52.1-176

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.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
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

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

Company Name: <u>Golden LPE</u>		P.O. #:													
Project Manager: <u>Kimberly M. Wilson</u>		Company:													
Address: <u>408 W Texas</u>		Attn:													
City: <u>Artesia</u>		Address:													
State: <u>NM</u> Zip: <u>88218</u>		City:													
Phone #:		State:													
Fax #:		Zip:													
Project #: <u>701307.080.01</u>		Project Owner: <u>Linbeck</u>													
Project Name: <u>NEWHARPER #1 TB</u>		Phone #:													
Project Location: <u>Lea County</u>		Fax #:													
Sample Name: <u>Lea County</u>		PRESERV													
FOR LAB USE ONLY		SAMPLING													
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	ANALYSIS REQUEST
1502433	3-1 1'	1	1	1	1	1	1	1	1	1	1	1	9/11/15-9:48	1	Chlorides
	3-1 1.5' Refused	1	1	1	1	1	1	1	1	1	1	1	9:52	1	BTEX
	3-2 2'	1	1	1	1	1	1	1	1	1	1	1	10:15	1	TPH extended
	5-2 2.5' Refused	1	1	1	1	1	1	1	1	1	1	1	10:40	1	
	5-3 1'	1	1	1	1	1	1	1	1	1	1	1	10:35	1	
	6-5-3 1.5' Refused	1	1	1	1	1	1	1	1	1	1	1	10:40	1	
REMARKS: <u>Push!! 2 only!!</u>															

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Relinquished By: <u>Kimberly M. Wilson</u>	Date: <u>9/16/15</u>	Received By: <u>Andy Garcia</u>	Date: <u>9/16/15</u>
Relinquished By: <u>Kimberly M. Wilson</u>	Date: <u>9/16/15</u>	Received By: <u>Andy Garcia</u>	Date: <u>9/16/15</u>
Delivered By: (Circle One)	Time: <u>4:20</u>	Sample Condition	CHECKED BY: (Initials)
Sampler - UPS - Bus - Other:		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<u>AG</u>

\* Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

September 25, 2015

KIMBERLY WILSON

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: NOWATA AGR STATE #1

Enclosed are the results of analyses for samples received by the laboratory on 09/24/15 9:00.

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/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  
 KIMBERLY WILSON  
 408 W. TEXAS AVE.  
 ARTESIA NM, 88210  
 Fax To: (575) 745-8905

 Received: 09/24/2015  
 Reported: 09/25/2015  
 Project Name: NOWATA AGR STATE #1  
 Project Number: 70130708001  
 Project Location: LEA COUNTY, NM

 Sampling Date: 09/23/2015  
 Sampling Type: Soil  
 Sampling Condition: \*\* (See Notes)  
 Sample Received By: Judy Garcia

**Sample ID: S-1 3' (H502529-01)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2560	16.0	09/24/2015	ND	416	104	400	7.41	

**Sample ID: S-1 5' (H502529-02)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	09/24/2015	ND	416	104	400	7.41	

**Sample ID: S-1 7' (H502529-03)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	09/24/2015	ND	416	104	400	7.41	


**Sample ID: S-1 10' (H502529-04)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	09/24/2015	ND	416	104	400	7.41	

Cardinal Laboratories

\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

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

Received: 09/24/2015  
Reported: 09/25/2015  
Project Name: NOWATA AGR STATE #1  
Project Number: 70130708001  
Project Location: LEA COUNTY, NM

Sampling Date: 09/23/2015  
Sampling Type: Soil  
Sampling Condition: \*\* (See Notes)  
Sample Received By: Judy Garcia

**Sample ID: S-1 15' (H502529-05)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	09/24/2015	ND	416	104	400	7.41	

**Sample ID: S-2 3' (H502529-06)**

Chloride, SM4500Cl-B			mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	6720	16.0	09/24/2015	ND	416	104	400	7.41		

**Sample ID: S-2 5' (H502529-07)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	7600	16.0	09/24/2015	ND	416	104	400	7.41	

**Sample ID: S-2 7' (H502529-08)**

Chloride, SM4500Cl-B			mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	2680	16.0	09/24/2015	ND	416	104	400	7.41		

**Sample ID: S-2 10' (H502529-09)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	09/24/2015	ND	416	104	400	7.41	

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

 Received: 09/24/2015  
 Reported: 09/25/2015  
 Project Name: NOWATA AGR STATE #1  
 Project Number: 70130708001  
 Project Location: LEA COUNTY, NM

 Sampling Date: 09/23/2015  
 Sampling Type: Soil  
 Sampling Condition: \*\* (See Notes)  
 Sample Received By: Judy Garcia

**Sample ID: S-2 15' (H502529-10)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	09/24/2015	ND	416	104	400	7.41	

**Sample ID: S-3 3' (H502529-11)**

Chloride, SM4500Cl-B			mg/kg		Analyzed By: HM				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	09/24/2015	ND	432	108	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	09/25/2015	ND	162	80.9	200	1.42	
DRO >C10-C28	<10.0	10.0	09/25/2015	ND	173	86.3	200	0.855	

Surrogate: 1-Chlorooctane 66.1 % 47.2-157

Surrogate: 1-Chlorooctadecane 74.2 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received:	09/24/2015	Sampling Date:	09/23/2015
Reported:	09/25/2015	Sampling Type:	Soil
Project Name:	NOWATA AGR STATE #1	Sampling Condition:	** (See Notes)
Project Number:	70130708001	Sample Received By:	Judy Garcia
Project Location:	LEA COUNTY, NM		

**Sample ID: S-3 5' (H502529-12)**

Chloride, SM4500Cl-B			mg/kg							Analyzed By: HM
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>32.0</b>	16.0	09/24/2015	ND	432	108	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	09/25/2015	ND	162	80.9	200	1.42		
DRO >C10-C28	<10.0	10.0	09/25/2015	ND	173	86.3	200	0.855		
<i>Surrogate: 1-Chlorooctane</i>			61.1 %	47.2-157						
<i>Surrogate: 1-Chlorooctadecane</i>			68.5 %	52.1-176						

**Sample ID: S-3 7' (H502529-13)**

Chloride, SM4500Cl-B			mg/kg							Analyzed By: HM
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>64.0</b>	16.0	09/24/2015	ND	432	108	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	09/25/2015	ND	162	80.9	200	1.42		
DRO >C10-C28	<10.0	10.0	09/25/2015	ND	173	86.3	200	0.855		
<i>Surrogate: 1-Chlorooctane</i>			68.8 %	47.2-157						
<i>Surrogate: 1-Chlorooctadecane</i>			75.1 %	52.1-176						

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 09/24/2015  
Reported: 09/25/2015  
Project Name: NOWATA AGR STATE #1  
Project Number: 70130708001  
Project Location: LEA COUNTY, NM

Sampling Date: 09/23/2015  
Sampling Type: Soil  
Sampling Condition: \*\* (See Notes)  
Sample Received By: Judy Garcia

**Sample ID: S-3 10' (H502529-14)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	09/24/2015	ND	432	108	400	0.00	

**Sample ID: S-3 15' (H502529-15)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	09/24/2015	ND	432	108	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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\* = Accredited Analyte

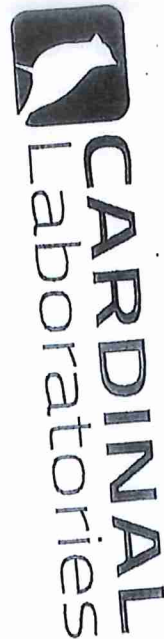
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Celey D. Keene, Lab Director/Quality Manager





CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

FILE #

ANALYSIS REQUEST

Company Name: Talon/LPE

Project Manager:

Address: 408 W. Texas Ave.

City: Artesia

Phone #: 575-746-8768

Project #: 701307.080.01

Project Name: Newada AGR

Project Location:

Sampler Name:

FOR LAB USE ONLY

Lab I.D.

Sample I.D.

1501525

S-1

3'

S-1

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S-1

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S-2





CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

BI-110

ANALYSIS REQUEST

Company Name: Talon/LPE		P.O. #: 701307.080.01														
Project Manager: DAVID ADKINS		Company: Talon/LPE														
Address: 408 W. Texas Ave.		Attn: D. ADKINS														
City: Artesia		Address:														
Phone #: 575-746-8768		City:														
Fax #: 575-746-8905		State:														
Project #: 701307.080.01		Project Owner: LRE														
Project Name: NO wafa AGR		Phone #:														
Project Location: Lea County		Fax #:														
Sampler Name: D. ADKINS		PRESERV														
FOR LAB USE ONLY		SAMPLING														
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	TOTAL CHLORIDES	TPH
1502519	S-3 3'	G 1	1										9/23/15		✓	
	S-3 5'	G 1	1										9/23		✓	
	S-3 7'	G 1	1										9/23		✓	
	S-3 10'	G 1	1										9/23		✓	
	S-3 15'	G 1	1										9/23		✓	
REMARKS:																
P. 2 of 2																
RUSTH!																

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