

# REPUBLIC BACKHOE SERVICE LLC

**INFORMATION ONLY**

Olivia Yu  
NMOCD District I  
1625 N. French Dr.  
Hobbs. NM 88240

July 16, 2017

Dear Olivia Yu,

**Subject:** Spill Summary and Remediation Work Plan

Location: Noble Permian LLC.  
Eilliams Battery  
1RP-4691

Noble Permian LLC has contracted Republic Backhoe Service LLC to perform site assessment and remediation services at the above referenced location. The results of our spill summary and proposed remediation activities consist of the following.

## **Incident Date**

May 5, 2017

## **Background Information**

The Eilliams Battery is located approximately nine (9) miles west of Buckeye, New Mexico. The legal location for the Battery is Unit A Section 34 Township 17 South and Range 33 East in Lea County, New Mexico. The spill site lies 550 feet west of the Eilliams Battery location with the GPS Coordinates as follows: Latitude: 32.795354 North Longitude: -103.646118 West. See Site Map attached in Appendix I.

Republic Backhoe Service LLC  
47 E. Dickens  
Lovington, NM 88260

Phone Number: (575) 631-0131

Email [Ericgarcia62@hotmail.com](mailto:Ericgarcia62@hotmail.com)

Watercourses in the area are dry except for infrequent flows in response to major precipitation events. The soil in this area is made up of Kimbrough-Lea loamy soil. As per the New Mexico Bureau of Geology and Minerals Resources, the local surface is comprised of 5" to 24" loamy soil with hard caliche below the soil. Groundwater in the area is estimated to be at a depth of 153 feet. See Appendix III for groundwater data.

The ranking score for this site is 0 based on the following:

Depth to ground water: 153' (50'-99')	0
Wellhead Protection Area: > 1000'	0
Distance to Surface Water Body: > 1000'	0

## **Incident Description**

On May 5, 2017 the pumper spotted a leak from the 3" poly P/W transfer line from the Eilliams Battery to the disposal well. The pump automatically turned off on low pressure which minimized the release. A crew was called out to repair the line. The produced water quickly soaked into the ground and there was not enough time to call a vacuum truck to recover any of the release. A total of 25 barrels of P/W was released. See Appendix II for the Spill Site Measurements. On May 5, 2017 immediate notice was given by phone to Olivia Yu at NMOCD Hobbs, NM and to Jim Amos Carlsbad, NM. On May 8, 2017 the C-141 was emailed to Olivia Yu. The spill occurred on deeded property belonging to Darr Angell (contacted 6/28/2017).

## **Actions Taken**

On 6/30/2017 began to delineate the sit the Eilliams Battery Spill Site. Collected a total of eight surface samples at the site. Backhoe was unable to penetrate the hard caliche thus proponed further work until a drill rig was contracted. The surface samples were preserved in ice and taken to Cardinal Labs in Hobbs, NM. On 07/06/2017, continued to delineate the site at the Eilliams Battery Spill Site. Big Dog Drill Inc was contracted to drill the bore holes. A total of four bore holes were drilled from inside of the spill area. Samples were taken at 5', 10', 15' and 20'. Also, drilled one bore hole outside the spill area for background samples at depths of 5' and 15'. All soil samples were collected by Republic Backhoe Service LLC personnel wearing clean nitrile groves. The soil samples

were placed in laboratory provided sample containers and transported to Cardinal Labs in Hobbs, NM for analysis. The chlorides samples were analyzed per Method SM4500C1-B.

## Laboratory Results

See Appendix IV for Site sample points.

Sample Date	Date Analyzed	Sample ID	Depth (feet)	Chlorides (mg/kg)
06/30/2017	07/03/2017	E15	0	20000
06/30/2017	07/03/2017	E25	0	19600
06/30/2017	07/03/2017	E35	0	23600
06/30/2017	07/03/2017	E45	0	30400
06/30/2017	07/03/2017	E55	0	26800
06/30/2017	07/03/2017	E65	0	18000
06/30/2017	07/03/2017	E75	0	18400
06/30/2017	07/03/2017	E85	0	16800
07/06/2017	07/07/2017	E2-5	5	464
07/06/2017	07/07/2017	E2-10	10	144
07/06/2017	07/07/2017	E2-15	15	208
07/06/2017	07/07/2017	E2-20	20	368
07/06/2017	07/07/2017	E3-5	5	400
07/06/2017	07/07/2017	E3-10	10	208
07/06/2017	07/07/2017	E3-15	15	144
07/06/2017	07/07/2017	E3-20	20	96
07/06/2017	07/07/2017	E5-5	5	896
07/06/2017	07/07/2017	E5-10	10	96
07/06/2017	07/07/2017	E5-15	15	128
07/06/2017	07/07/2017	E5-20	20	240
07/06/2017	07/07/2017	E8-5	5	128
07/06/2017	07/07/2017	E8-15	15	64
07/06/2017	07/07/2017	B 5	5	80
07/06/2017	07/07/2017	B 10	10	80

## **Proposal**

The release poses little threat to groundwater contamination in the area. The depth to ground water in the area is greater than 150'. Also, the quantity of the release limits the contamination to less than 5 feet. The goal of remediating the site is to establish vegetation growth. We respectfully ask for the following:

Excavate two feet. (This includes the topsoil, because after two feet the hard caliche makes excavation extremely difficult.)

Any Excavated material will be hauled to R360 an approved disposal facility.

Will then backfill the area with topsoil provided by the rancher Darr Angell.

Then will seed the area with Warm Season SSR Grass Seed Mix 350. Please see the Revegetation and weed management plan below.

## **Revegetation and Noxious Weed Management Plans**

Seed Mixture: Warm Season SSR Grass Seed Mix 350 (See Appendix V)

Seeding Rate/ acre: 20 lbs/acre

Timing of Dispersal: Mid to late August 2017

Method of Dispersal: First, the area will be disc. Second, the seed will be mechanically broadcasted. Third, will run the disc over the area to cover the seed. Finally, to best ensure seed germination success the area will be watered after seeding. Photos will be taken of the seed mixture bags, and of all seeding activities.

Follow up Monitoring Plan: We intend to monitor the area in late summer (before the fall season). We will evaluate the growth of the area to determine if reseeding will be necessary the following spring. We will also monitor for the area for noxious weeds. The area is small enough to rid the weeds mechanically.

### **Noxious Weeds Control**

Republic Backhoe Service LLC takes noxious weed control very serious. All equipment and trucks are inspected before entering the pasture area. For examples truck tires are inspected for seeds between the thread of the tires, and equipment (disc harrow and backhoe) is cleaned off before entering the site. The area will be monitored for the following noxious weeds (but not limited to):

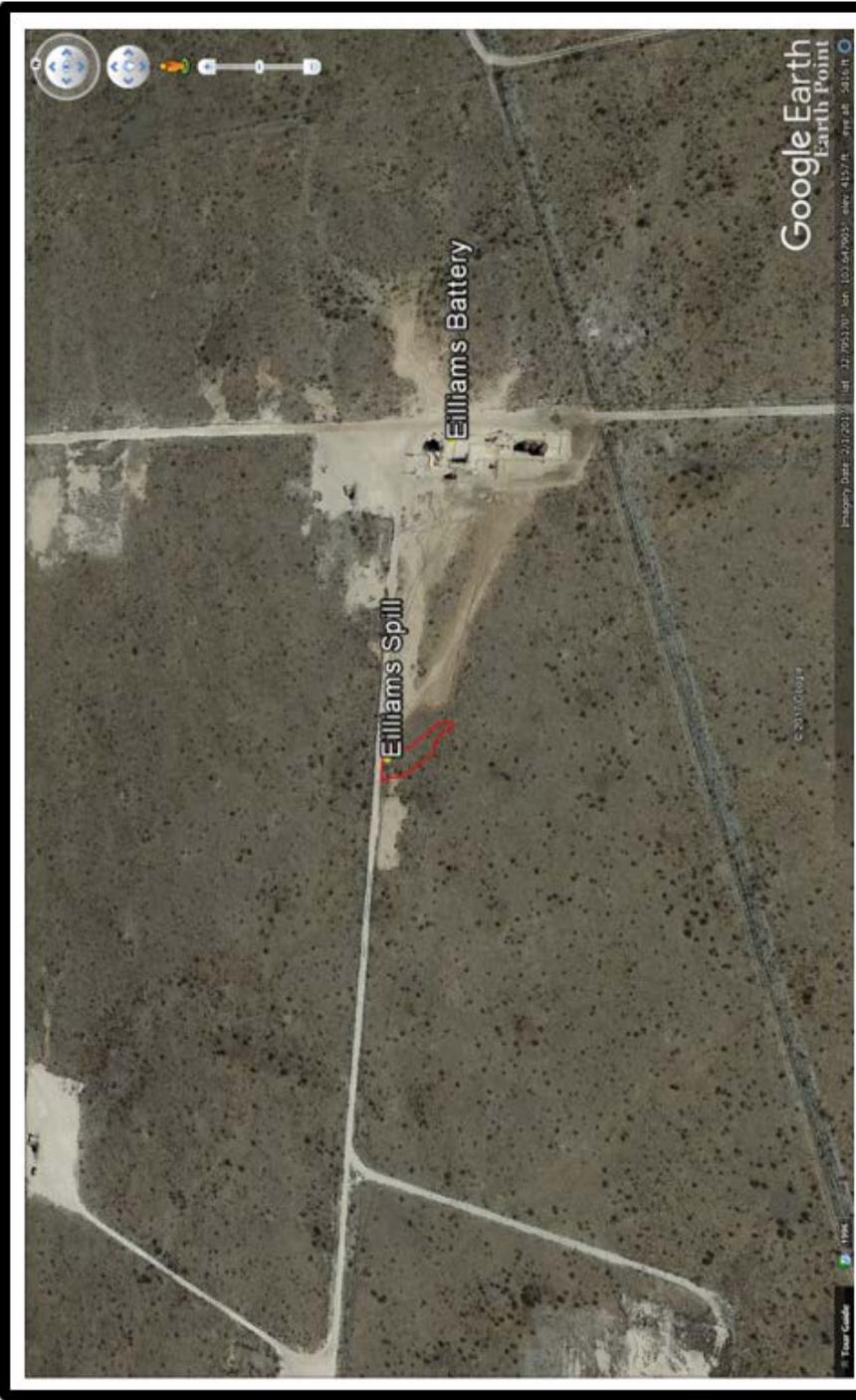
- Jointed Goatgrass
- Hoary Cress
- Cheat Grass
- African Rue
- Yellow Starthistle
- Malta Starthistle
- Purple Starthistle
- Common Teasel
- Camelthorn
- Russian Knapweed

IF you have any questions please call (575) 631-1031.

Eric Garcia  
Republic Backhoe Services LLC

Appendix I

Site Map



## Appendix I Site Map

Republic Backhoe  
Service LLC  
47 E. Dickens Rd  
Lovington, NM  
88260

Noble Permian LLC  
Eilliams Battery Transfer Line Spill  
Lea County, NM  
GPS 32.795354N, -103.646118W

Appendix II  
Site Measurements



**Noble Permian LLC**  
**Eilliams Battery Transfer Line Spill**  
**Lea County, NM**  
**GPS 32.795354N, -103.646118W**

Republic Backhoe  
Service LLC  
47 E. Dickens Rd  
Lovington, NM  
88260

## **Appendix II**

### **Sample Points**

Appendix III

Ground Water 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, O=orphaned, & no longer serves a water right file.) (R=POD has been replaced, 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	Sub-basin	Code	County	Q 6	Q 4	Q 3	Q 1	Sec	Tws	Rng	X	Y	Distance	WellDepth	Water Column
<a href="#">L_04363</a>	L	LE	LE	1	2	3	35	17S	33E	627634	3628855*	1003	226	160	66
<a href="#">L_05055</a>	L	LE	LE	3	3	4	35	17S	33E	628042	3628259*	1691	233	150	83
<a href="#">L_05096</a>	L	LE	LE	3	3	4	35	17S	33E	628042	3628259*	1691	233	150	83

Average Depth to Water: **153 feet**  
 Minimum Depth: **150 feet**  
 Maximum Depth: **160 feet**

Record Count: 3

UTM:NAD83 Radius Search (in meters):

Eastng (X): 626787.36 Northing (Y): 3629394.11 Radius: 2000

\*UTM location was derived from PLSS - see Help

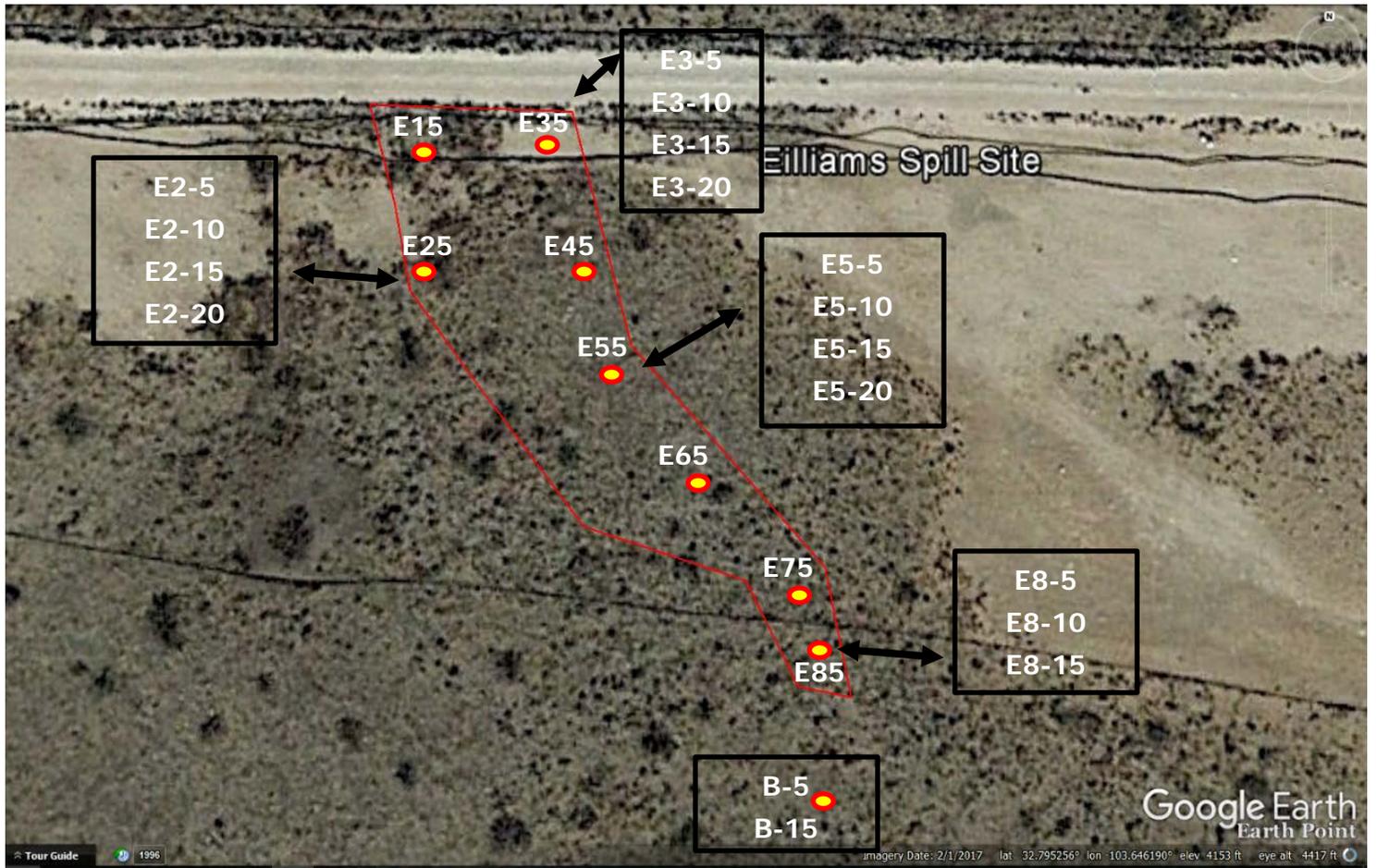
The data is furnished by the NMOSE/TSC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

7/17/17 5:40 PM

WATER COLUMN/ AVERAGE DEPTH TO WATER

## Appendix IV

### Sample Points



**Noble Permian LLC**  
**Williams Battery Transfer Line Spill**  
 Lea County, NM  
 GPS 32.795354N, -103.646118W

Republic Backhoe  
 Service LLC  
 47 E. Dickens Rd  
 Lovington, NM  
 88260

**Appendix IV**  
**Sample Points**

Appendix V  
Seed Mixture

## Bamert Seed Company Inc.

1897 CR 1818 Muleshoe, TX 79347 (800) 262-9892

Permit # TX00905

**Warm Season SSR Grass Seed Mix 350 Bulk in 25# bags**

Sales # SO-60263

Description	Pure Seed	Germ	Dormant	Hard Seed	Origin
Bluestem, Little "Cimarron" (Schizachyrium scoparium)	4.32%	82.00%	14.00%	0.00%	TX
Bluestem, Yellow "WW Spar" (Andropogon ischaemum)	7.22%	90.00%	5.00%	0.00%	
Buffalograss, "Texoka" Primed KNO3 (Bouteloua dactyloides)	5.86%	96.00%	0.00%	0.00%	TX
Dropseed, Sand (Sporobolus cryptandrus)	5.49%	31.00%	63.00%	0.00%	
Fescue, Tall "KY 31" (Festuca arundinacea Schreb.)	1.98%	85.00%	0.00%	0.00%	OR
Gramma, Blue (Bouteloua gracilis)	19.49%	94.00%	0.00%	0.00%	NM
Gramma, Sideoats (Bouteloua curtipendula)	22.06%	46.00%	39.00%	0.00%	KS
Kleingrass, "Selection 75" (Panicum coloratum)	7.82%	95.00%	0.00%	0.00%	TX
Switchgrass, "Blackwell" (Panicum virgatum)	7.82%	21.00%	72.00%	0.00%	TX
Purity: 82.07%	Inert Matter: 17.76%	Other Crop Seed: 0.09%	Weed Seed: 0.09%		

Appendix VIII  
C-141

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, 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 October 10, 2003

Submit 2 Copies to appropriate  
District Office in accordance  
with Rule 116 on back  
side of form

### Release Notification and Corrective Action

#### OPERATOR

Initial Report  Final Report

Name of Company	Noble Permian L.L.C	Contact	Dave Dunlap
Address	1001 Noble Energy Way Houston Tx 77070	Telephone No.	575-390-2062
Facility Name	Williams Fed Battery	Facility Type	Battery
Surface Owner	BLM	Mineral Owner	BLM
		Lease No.	

#### LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
A	34	17S	33E					Lea

Latitude 32.795393 Longitude -103.6460350

#### NATURE OF RELEASE

Type of Release	Produced Water	Volume of Release	25	Volume Recovered	0
Source of Release	3" Poly Transfer Line	Date and Hour of Occurrence	5/5/17	Date and Hour of Discovery	5/5/2017
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	Olivia Yu NMOCD Hobbs, NM Jim Amos BLM		
By Whom?	Eric Garcia, Noble Permian LLC Contractor	Date and Hour	5/5/2017 @ 2:00 PM		
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	N/A		
If a Watercourse was Impacted, Describe Fully.*	N/A				

**RECEIVED**  
By Olivia Yu at 8:40 am, May 10, 2017

#### Describe Cause of Problem and Remedial Action Taken.\*

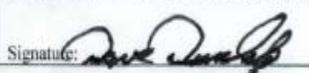
The pumper spotted a leak from the 3" poly P/W transfer line. The pump automatically turned off on low pressure which minimized the release. A crew was called out to repair the leak. The produced water quickly soaked into the ground and there wasn't enough time to call a vacuum truck to recover any of the release.

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

The release occurred approx. 500 feet west of the battery at GPS 32.795393 N -103.6460350 W.

The area is approx. 6,800 Square feet. Noble Permian will have the site evaluated and will present a remediation work plan to NMOCD and BLM for approval prior to any remediation work.

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: 	<u>OIL CONSERVATION DIVISION</u>	
Printed Name: DAVE DUNLAP	Approved by: 	
Title: Prod Foreman	Approval Date: 5/10/2017	Expiration Date:
E-mail Address: ddunlap@claytonwilliams.com	Conditions of Approval: see attached directive	Attached <input checked="" type="checkbox"/>
Date: 5-8-17	Phone: 575 390 2062	

Appendix IX  
Cardinal Lab Results



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

July 03, 2017

ERIC GARCIA

REPUBLIC BACKHOE SERVICES

47 E. DICKENS RD

LOVINGTON, NM 88260

RE: EILLIAMS BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 06/30/17 16:35.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-16-8. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

REPUBLIC BACKHOE SERVICES  
ERIC GARCIA  
47 E. DICKENS RD  
LOVINGTON NM, 88260  
Fax To: NONE

Received:	06/30/2017	Sampling Date:	06/30/2017
Reported:	07/03/2017	Sampling Type:	Soil
Project Name:	EILLIAMS BATTERY	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOBLE		

**Sample ID: E 15 (H701733-01)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	20000	16.0	07/03/2017	ND	448	112	400	0.00	QM-07	

**Sample ID: E 25 (H701733-02)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	19600	16.0	07/03/2017	ND	448	112	400	0.00		

**Sample ID: E 35 (H701733-03)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	23600	16.0	07/03/2017	ND	448	112	400	0.00		

**Sample ID: E 45 (H701733-04)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	30400	16.0	07/03/2017	ND	448	112	400	0.00		

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 analysis. 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



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

Analytical Results For:

REPUBLIC BACKHOE SERVICES
ERIC GARCIA
47 E. DICKENS RD
LOVINGTON NM, 88260
Fax To: NONE

Received: 06/30/2017 Sampling Date: 06/30/2017
Reported: 07/03/2017 Sampling Type: Soil
Project Name: EILLIAMS BATTERY Sampling Condition: \*\* (See Notes)
Project Number: NONE GIVEN Sample Received By: Tamara Oldaker
Project Location: NOBLE

Sample ID: E 55 (H701733-05)

Table with 10 columns: Analyte, Result, Reporting Limit, Analyzed, Method Blank, BS, % Recovery, True Value QC, RPD, Qualifier. Row 1: Chloride, 26800, 16.0, 07/03/2017, ND, 448, 112, 400, 0.00

Sample ID: E 65 (H701733-06)

Table with 10 columns: Analyte, Result, Reporting Limit, Analyzed, Method Blank, BS, % Recovery, True Value QC, RPD, Qualifier. Row 1: Chloride, 18000, 16.0, 07/03/2017, ND, 448, 112, 400, 0.00

Sample ID: E 75 (H701733-07)

Table with 10 columns: Analyte, Result, Reporting Limit, Analyzed, Method Blank, BS, % Recovery, True Value QC, RPD, Qualifier. Row 1: Chloride, 18400, 16.0, 07/03/2017, ND, 448, 112, 400, 0.00

Sample ID: E 85 (H701733-08)

Table with 10 columns: Analyte, Result, Reporting Limit, Analyzed, Method Blank, BS, % Recovery, True Value QC, RPD, Qualifier. Row 1: Chloride, 16800, 16.0, 07/03/2017, ND, 448, 112, 400, 0.00

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

Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

*Rush!!!*

Company Name: **Republic Bank & Service**  
 Project Manager: **Eric Garcia**  
 Address: **47 E Dekani Rd**  
 City: **Lovington** State: **NM** Zip: **88240**  
 Phone #: **575-231-0131** Fax #: **575-396-1782**  
 Project #: **C** Project Owner: **Noble**  
 Project Name: **Williams Battery**  
 Project Location: **Williams Battery**  
 Sampler Name: **Eric Garcia**

P.O. #: **Noble**  
 Company: **Noble**  
 Address: **Noble**  
 City: **Noble** State: **NM** Zip: **88240**  
 Phone #: **575-396-1782** Fax #: **575-396-1782**

Lab I.D. **H101733**  
 Sample I.D. **E15**  
 (G)RAB OR (C)OMP. **C**  
 # CONTAINERS **6**  
 MATRIX: **C**  
 GROUNDWATER **C**  
 WASTEWATER **C**  
 SOIL **C**  
 OIL **C**  
 SLUDGE **C**  
 OTHER **C**  
 ACID/BASE **C**  
 ICE / COOL **C**  
 OTHER **C**

DATE TIME  
 6/30 8:30  
 6/30 8:35  
 6/30 8:40  
 6/30 8:45  
 6/30 8:50  
 6/30 9:00  
 6/30 9:15

ANALYSIS REQUEST

Requested By: **Jamie Bar** Date: **6-30-17** Received By: **Jamie Bar**  
 Date: **4-35** Received By: **Jamie Bar**

Delivered By: (Circle One) **UPS**  
 Sampler - UPS - Bus - Other: **UPS**  
 Received By: **Jamie Bar**  
 Date: **6-30-17** Time: **4:35**  
 Sample Condition: **Yes**  
 Checked By: **Jamie Bar**

REMARKS: **Eric Garcia @ yahoo.com**  
**Jamie Bar @ yahoo.com**  
**engarcia @hotmail.com**

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

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



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

July 10, 2017

ERIC GARCIA

REPUBLIC BACKHOE SERVICES

47 E. DICKENS RD

LOVINGTON, NM 88260

RE: ELLIAMS

Enclosed are the results of analyses for samples received by the laboratory on 07/07/17 15:55.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-16-8. 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).

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Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

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Sincerely,

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Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

REPUBLIC BACKHOE SERVICES  
ERIC GARCIA  
47 E. DICKENS RD  
LOVINGTON NM, 88260  
Fax To: NONE

Received:	07/07/2017	Sampling Date:	07/06/2017
Reported:	07/10/2017	Sampling Type:	Soil
Project Name:	EILLIAMS	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOBLE		

**Sample ID: E3- 5 (H701762-01)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	400	16.0	07/10/2017	ND	384	96.0	400	18.9		

**Sample ID: E3- 10 (H701762-02)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	208	16.0	07/10/2017	ND	384	96.0	400	18.9		

**Sample ID: E3- 15 (H701762-03)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	144	16.0	07/10/2017	ND	384	96.0	400	18.9		

**Sample ID: E3- 20 (H701762-04)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	07/10/2017	ND	384	96.0	400	18.9		

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

REPUBLIC BACKHOE SERVICES  
ERIC GARCIA  
47 E. DICKENS RD  
LOVINGTON NM, 88260  
Fax To: NONE

Received:	07/07/2017	Sampling Date:	07/06/2017
Reported:	07/10/2017	Sampling Type:	Soil
Project Name:	EILLIAMS	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOBLE		

**Sample ID: E2- 5 (H701762-05)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	464	16.0	07/10/2017	ND	384	96.0	400	18.9		

**Sample ID: E2- 10 (H701762-06)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	144	16.0	07/10/2017	ND	448	112	400	3.64		

**Sample ID: E2- 15 (H701762-07)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	208	16.0	07/10/2017	ND	448	112	400	3.64		

**Sample ID: E2- 20 (H701762-08)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	368	16.0	07/10/2017	ND	448	112	400	3.64		

**Sample ID: E5- 5 (H701762-09)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	896	16.0	07/10/2017	ND	448	112	400	3.64		

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**Analytical Results For:**

REPUBLIC BACKHOE SERVICES  
ERIC GARCIA  
47 E. DICKENS RD  
LOVINGTON NM, 88260  
Fax To: NONE

Received:	07/07/2017	Sampling Date:	07/06/2017
Reported:	07/10/2017	Sampling Type:	Soil
Project Name:	EILLIAMS	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOBLE		

**Sample ID: E5- 10 (H701762-10)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	07/10/2017	ND	448	112	400	3.64		

**Sample ID: E5- 15 (H701762-11)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	07/10/2017	ND	448	112	400	3.64		

**Sample ID: E5- 20 (H701762-12)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	240	16.0	07/10/2017	ND	448	112	400	3.64		

**Sample ID: E8- 5 (H701762-13)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	07/10/2017	ND	448	112	400	3.64		

**Sample ID: E8- 15 (H701762-14)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	07/10/2017	ND	448	112	400	3.64		

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

REPUBLIC BACKHOE SERVICES  
ERIC GARCIA  
47 E. DICKENS RD  
LOVINGTON NM, 88260  
Fax To: NONE

Received:	07/07/2017	Sampling Date:	07/06/2017
Reported:	07/10/2017	Sampling Type:	Soil
Project Name:	EILLIAMS	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOBLE		

**Sample ID: B 5 (H701762-15)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	07/10/2017	ND	448	112	400	3.64		

**Sample ID: B 15 (H701762-16)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	07/10/2017	ND	448	112	400	3.64		

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: <u>Republic Backhoe</u> Project Manager: _____ Address: <u>47 E Dickens</u> City: <u>Livingston</u> State: <u>NM</u> Zip: <u>88260</u> Phone #: <u>575-639-0131</u> Fax #: _____ Project #: _____ Project Owner: <u>Woble Permian</u> Project Location: <u>Ellison's Battery</u> Sampler Name: <u>Eric Garrison</u>		P.O. #: _____ Company: <u>Woble Permian</u> Attn: _____ Address: <u>Box 1000</u> City: <u>Hurst</u> State: <u>TX</u> Zip: _____ Phone #: _____ Fax #: _____	
Lab I.D. <u>H701742</u> Sample I.D. _____ 11 <u>E5-15</u> 12 <u>E5-20</u> 13 <u>E8-5</u> 14 <u>E8-15</u> 15 <u>B5</u> 16 <u>R15</u>		(G)RAB OR (C)OMP. _____ # CONTAINERS _____ GROUNDWATER _____ WASTEWATER _____ SOIL _____ OIL _____ SLUDGE _____ OTHER: _____ ACID/BASE: _____ ICE / COOL _____ OTHER: _____	
Date: <u>11/17</u> Received By: _____ Type: <u>55</u> Delivered By: (Circle One) <u>30.32</u> <u>Jasmine Barr</u> Sampler - UPS - Bus - Other: <u>Personal 30.552</u> <u>Jasmine Barr</u> Delivered By: <u>30.552</u> <u>Jasmine Barr</u> Sampler - UPS - Bus - Other: <u>Personal 30.552</u> <u>Jasmine Barr</u>		MATRIX: _____ PRESERV: _____ SAMPLING: _____ DATE: <u>7-6 11:30</u> <u>7-6 11:45</u> <u>7-6 12:00</u> <u>7-6 12:04</u> <u>7-6 12:04</u> <u>7-6 1:15</u>	
Relinquished By: <u>Jasmine Barr</u> Date: <u>11/17</u> Received By: _____ Type: <u>55</u> Delivered By: (Circle One) <u>30.32</u> <u>Jasmine Barr</u> Sampler - UPS - Bus - Other: <u>Personal 30.552</u> <u>Jasmine Barr</u>		ANALYSIS REQUEST Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #: _____ Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Fax #: _____ REMARKS: <u>Jasmine Barr 30@yahoo.com</u> <u>Eric Garrison's@hotmail.com</u> <u>Rush 11</u>	

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