1001 Noble Energy Way Houston, TX 77070

> Tel: 281.872.3100 nblenergy.com



nbl permian llc a subsidiary of noble energy, inc.

March 7, 2018

NMOCD Olivia Yu, Environmental Specialist 1625 N. French Drive Hobbs, NM 88240

Dear Ms. Yu,

APPROVED

By Olivia Yu at 7:30 am, Apr 17, 2018

NMOCD approves of the vertical delineation completed for 1RP-4918. See email correspondence about completion of release characterization and request for deferral of remediation.

Sent via email to Olivia. Yu @state.nm.us

Effective January 31, 2018, Southwest Royalties, Inc. was transferred from NBL Permian LLC (a subsidiary of Noble Energy, Inc.) to Desert Permian LLC. As part of the transfer agreement, NBL Permian LLC agreed to continue performing site delineation and remediation activities related to release site 1RP-4918. Therefore, NBL Permian LLC respectfully submits the enclosed Release Characterization Report and Remediation Work Plan for release site 1RP-4918.

Should you have any questions or concerns, please contact me at 281-874-6072 or <u>jonathan.pennington@nblenergy.com</u>.

Sincerely,

Jonathan Pennington

Environmental Coordinator

Jonathan.Pennington@nblenergy.com

CC: Al Garcia, Noble Energy

:Enclosure

REPUBLIC BACKHOE SERVICE LLC

Olivia Yu NMOCD District I 1625 N. French Drive Hobbs, New Mexico 88240

March 7, 2018

Dear Ms. Yu,

Subject: Release Characterization Report and Remediation Work Plan

Location: Southwest Royalties, Inc.

Eilliams Battery

NMOCD Remediation Case #1RP-4918

NBL Permian LLC has contracted Republic Backhoe Service LLC ("Republic") to perform a 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

January 02, 2018

Incident Description

On January 02, 2018, a pumper did not turn off a transfer pump at the Wyatt Philips battery, which transfers the produced water to the Eilliams Battery for disposal. The pumper then observed the Produced Water Tank overflowing at the Eilliams Battery, after which he manually turned off the transfer pump at the Wyatt/Philips Battery. A total of approximately 8 barrels of produced water were released. A vacuum truck was called to the site and vacuumed a total of approximately 1.5 barrels. The release of 8 barrels stayed inside of the tank battery containment (Appendix III). The size of the impacted area is approximately 1,855 square feet. A C-141 form was filled out and emailed to NMOCD District I on January 8, 2018 (See Attachment I).

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 area was contained to the Produced Water tank area which is on the north side of the Eilliams Battery with the GPS Coordinates as follows: Latitude: 32.795246 North, Longitude: -103.644286 West. See Site Map attached in Appendix II.

The Eilliams Battery Spill Site is located less than ½ mile east from the Mescalero Ridge (Caprock Escarpment). 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.

According to the New Mexico Office of the State Engineer water well database there are no active water wells within a mile radius. Well #L 04363 (POD Number) is inside of ½ mile radius and is shown to be plugged. Well #L 05096 (POD Number) is outside of the 1 mile radius and is shown to be active (Appendix IV). According to the NMOSE Data the average depth to ground water is 153' (Appendix V).

There are no natural surface water bodies in the area. There are man-made dirt ponds within 3/4 mile from the location. There pond are mostly dry during the year, except for infrequent flows in response to major precipitation events.

Regulatory Requirements

New Mexico Oil Conservation Division evaluates each release of produced water or oil according to the Recommended Remediation Action Levels (RRAL). NMOCD uses RRALs as a ranking system when evaluating each spill in terms of Depth to Groundwater, Distance to Surface Water, and Distance to Wellhead Protection Area.

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

Depth to ground water: 153′ (50′-99′)

Wellhead Protection Area: > 1000′

Distance to Surface Water Body: > 1000′

0

Actions Taken

On January 3, 2018, a crew pressure washed the tanks and the stairway. Also, a vacuum truck removed approximately 1.5 barrels of produced water that were puddled inside of the tank battery berm.

On January 5, 2018, Southwest Royalties, Inc. submitted a completed C-141 to Ms. Olivia Yu, NMOCD District I office in Hobbs, NM.

On January 17 and 18, 2018, a crew with backhoe removed soil saturated with produced water from around the tanks. The area was excavated to remove saturated soil, and to provide a safe work environment for the operator. A total of 20 yards of impacted soil were hauled to NMOCD Approved Disposal Site R360. The excavated area was not backfilled.

On January 30 and 31, 2018, Atkins Engineering was contracted to drill a bore hole at the Eilliams Battery. One bore hole was drilled to satisfy the vertical delineation requirements. The bore hole was drilled in the area inside of the battery bermed area where the produced water had pooled at the following GPS Coordinates 32.795203N, -103.644331W (See Appendix VI). Soil samples were collected at depths of 5′, 10′, 15′, 20′, 25′, 30′, 35′, 40′, 45′, 50′, 55′, 60′, and 65′. The soil samples were placed in laboratory provided sample containers and transported to Cardinal Labs in Hobbs, NM for analysis (Appendix VII). The chlorides samples were analyzed per Method SM4500C1-B.

Laboratory Results

Sample	Date	Sampl	Depth	Chlorides	TPH	BTEX	Lithology
Date	Analyzed	e ID	(feet)	(mg/kg)	(mg/kg)	(mg/kg)	
01/31/2018	02/05/2018	EW-5	5	2440	<10.0	<0.300	Caliche
01/31/2018	02/05/2018	EW-10	10	1600	<10.0	<0.300	Sand/Caliche Mix
01/31/2018	02/05/2018	EW-15	15	2040	<10.0	<0.300	Sandy
01/31/2018	02/05/2018	EW-20	20	3080	<10.0	<0.300	Sandy
01/31/2018	02/05/2018	EW-25	25	3160	<10.0	<0.300	Light Brown Sand Mix
01/31/2018	02/05/2018	EW-30	30	4160	<10.0	<0.300	Light Brown Sand Mix
01/31/2018	02/05/2018	EW-35	35	4720	<10.0	<0.300	Light Brown Sand Mix
01/31/2018	02/05/2018	EW-40	40	3200	<10.0	<0.300	Light Brown Sand Mix
01/31/2018	02/05/2018	EW-45	45	1880	<10.0	<0.300	Hard Cobble
01/31/2018	02/05/2018	EW-50	50	912	<10.0	<0.300	Sandstone, Sand
01/31/2018	02/05/2018	EW-55	55	496	<10.0	<0.300	Sandy
01/31/2018	02/05/2018	EW-60	60	288	<10.0	<0.300	Sandy
01/31/2018	02/05/2018	EW-65	65	32	<10.0	<0.300	Sandy

See Appendix VI for Site sample points.

Proposal

The Eilliams Battery is a production facility for the Eilliams Lease, and is also a Salt Water Disposal facility for the Eilliams Lease, Wyatt Lease, and the Philips Lease. According to the groundwater data, the release poses little threat to groundwater contamination in the area. The depth to ground water in the area is greater than 150' bgs. The Site Delineation concluded that there are no issues with TPH or BTEX. Chloride contamination is the only issue at the site. Also, sample results indicate that chloride concentrations in soil are below NMOCD permissible levels at 60' bgs. NBL Permian LLC respectfully requests that NMOCD will consider delaying additional remediation activities at the site until the end of life of the battery.

Republic Backhoe Service LLC evaluated the potential to remediate the spill area while allowing operation of the battery to continue at the same time during remediation; however, this work plan was found to be unsafe and the remediation incomplete, as described below. As stated in the Background Information, the surface soil is comprised of Kimbrough-Lea Loamy Complex. The Kimbrough-Lea Loamy Complex is classified as being gravelly fine sandy loam, and gravelly loam. According to the Unified Soil Classification System (USCS), the Complex is classified as SP-Sand with Poor Gradation. This classification is useful in engineering and geology. The US Occupational Safety and Health Administration relies on the USCS to help protect workers from injury when working in excavations and trenches. OSHA uses 3 soil classifications based on strength and other factors which affect the stability of cut slopes. According to the guidelines set by OSHA, the Eilliams Battery sits on Type C Soil. According to OSHA, Type C Soil consists of granular soils or cohesive soils with unconfined compressive strength between .5 tsf and 1.5 tsf. Type C Soils are considered low strength resulting in unstable excavations usually resulting in cave-ins. The weight of the Produced Water Tank and that of the Heater Treater will only increase the probability of cave-ins if excavation takes place around the tanks. Type C Soils are susceptible to erosion from wind and rain thus making excavation around the tanks with shoring and shielding systems unsafe and a nonviable option. Excavations taking place in Type C Soils require a larger work site to account for elongated slopes of 34°. This would require disturbing vegetation outside of the leased well pad. The end result of this remediation would likely be only a partial remediation that will still need attention after the end of life of the battery. (See Appendix VII for List of Equipment at the Eilliams Battery)

In addition, temporarily shutting down the facility to remove all equipment and fully remediate the site would also likely require shutting down the Eilliams Production Battery (Eilliams Lease), Wyatt Lease, and Philips Lease. This would cause an undue burden to the company, as these are low oil volume wells that require operation to remain economically viable.

According to the groundwater data, the release poses little threat to groundwater in the area. The depth to ground water in the area is greater than 150′ bgs, whereas sample results indicate that chloride concentrations in soil are below NMOCD permissible levels at 60′ bgs. Sample results also indicated no detections of TPH or BTEX. Therefore, NBL Permian LLC respectfully requests that NMOCD will consider delaying additional remediation activities at the site until the end of life of the battery.



Appendix I C-141 District I 1525 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88240 District III 1000 Ria Emzov Road, Azzec, NM 87410 District IV 1230 S. Sc. Figuria Dr. Santo Es. NA 8750

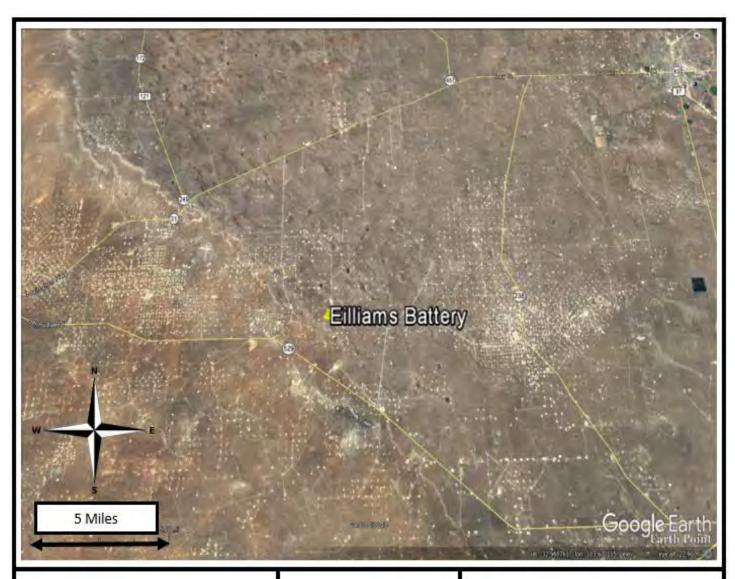
State of New Mexico Energy Minerals and Natural Resources

Form C-141 Revised April 3, 2017

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe. NM 87505 Suisoiti I Copy to appropriate District Office in accompance with (9.15.29 NMAC.

1330 S. Sr. Francis Dr., Santa Fe, NM 87505 Sant	ta Fe, NM 87505
Release Notifica	tion and Corrective Action
	OPERATOR Initial Report I final Report
Name of Company Southwest Royalties, Inc.	Contact Jonathan Pennington
Address 1001 Noble Energy Way, Houston, TX 77070. Facility Name Filliams Fed Battery	Telephone No. 281-874-6072 Facility Type Battery
Surface Owner Fee Mineral Own	rner BLM API No. 30-025-30778
LOCAT	TION OF RELEASE
Unit Letter Section Township Range Feet from the N	North South Line Feet from the East/West Line County
A. 34 178 35E 1150	North 590 bast Lee
Latitude 32.795246	Longitude -103.644286 NAD83
NATU	TRE OF RELEASE
Type of Release Produced Water	Volume of Release 8 bbts Volume Recovered 1,5 bbts
Source of Release Tunk Overflow	Date and Hour of Occurrence Date and Hour of Discovery
Vas Immediate Notice Given?	1/2/2018 12:00 1/2/2018 12:00 FYBS, To Whom?
Yes No Not Requ	
By Whom? N/A	Date and Hour N/A
Was a Watercourse Reached? ☐ Yes ☑ No	N/A.
Fu Watercourse was Impacted, Describe Fully, 3	
	RECEIVED
N/A	CALL COLUMN TO THE COLUMN TO T
	By Olivia Yu at 2:12 pm, Jan 08, 2018
NMOCD for approval prior to any remediation work. I hereby certify that the information given above is true and complete regulations all operators are required to report and/or file certain relaptions have failed to adequately investigate and remediate their operations have failed to adequately investigate and remediate to a complete their operations have failed to adequately investigate and remediately investigate an	twest Royalties, I.i.e. will evaluate the site and present a remediation workplan to te to the best of my knowledge and understand that pursuant to NMOCD rules and ease notifications and perform corrective actions for releases which may endanger by the NMOCD marked as "Final Report" does not relieve the operator of liability mediate contamination that pose a threat to ground water, surface water, human health part does not relieve the operator of responsibility for committance with any other
ederal, state, or local laws and/or regulations.	
1 11 D -A	OIL CONSERVATION DIVISION
Signature: Mall	_
Printed Name Jonathan Pennington	Approved by Environmental Specialist:
Fille: Unvironmental Coordinator	Approval Date: 1/8/2018 Expiration Date:
E-mail Address. Jenathan.Pennington@nblencegy.com	Conditions of Approval: Attached
Date: 01/08/2018 Page 281-874-6072	see attached directive
Attach Additional Sheets If Necessary	1RP-4918 nOY1800851743 pOY1800851995

Appendix II Site Map 1



Southwest Royalties Inc.

Eilliams Battery Spill

GPS: 32.795216N -103.644230W

Lea County, NM

Republic Backhoe Service LLC

47 E. Dickens

Lovington, NM 88260

Site Map

Appendix III Site Map 2



Southwest Royalties Inc.
Eilliams Battery Spill
GPS: 32.795216N -103.644230W

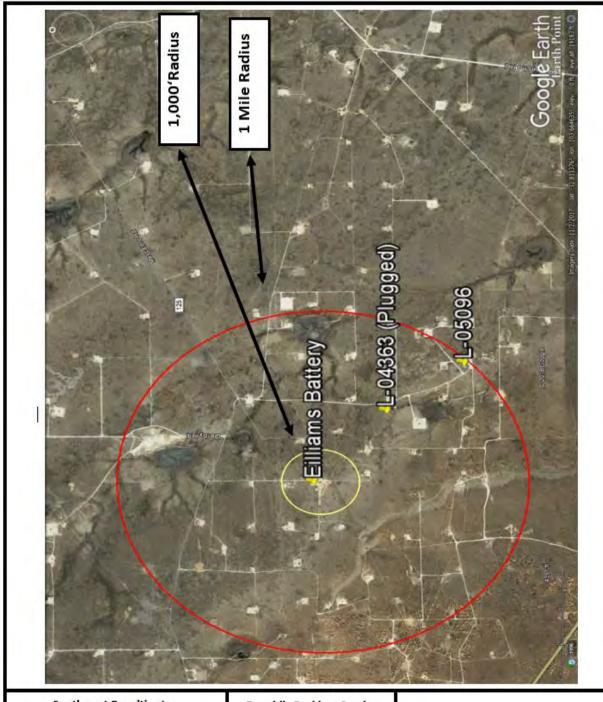
Lea County, NM

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

Site Map 2

Outlines the Spill Pool Area

Appendix IV Water Well Locations



Southwest Royalties Inc.

Eilliams Battery Spill

GPS: 32.795216N -103.644230W

Lea County, NM

Republic Backhoe Service LLC

47 E. Dickens

Lovington, NM 88260

Water Well Locations

1 Mile and 1,000' Radius Water Well Map

Appendix V Groundwater Data



Tinnwrrs.ose.state.nm.us/nmwrrs/ReportProxyTqueryData=Γreport*%3A*waterColumn*%2C%0A*BasinDiv*%3A*true*%2C%0A*Basin*%3A*



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	Code	POD Sub- basin	County	-		Q		Tws	Rng	x	Y	DistanceDe	pth Well Dep		Vater
L 04363		L	LE	1	2	3	35	178	33E	627634	3628855*	886	226	160	66
L 05055		L	LE	3	3	4	35	17S	33E	628042	3628259*	1589	233	150	83
L 05096		L	LE	3	3	4	35	17S	33E	628042	3628259*	1589	233	150	83

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

Record Count: 3

UTMNAD83 Radius Search (in meters):

Easting (X): 626937.36 Northing (Y): 3629402.5 Radius: 1609

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.

2/12/18 12:27 PM

WATER COLUMN/ AVERAGE DEPTH TO WATER

Southwest Royalties Inc.

Eilliams Battery Spill

GPS: 32.795216N -103.644230W

Lea County, NM

Republic Backhoe Service LLC

47 E. Dickens

Lovington, NM 88260

NMOSE

Water Column/Average Depth to Water

1 Mile Radius

^{*}UTM location was derived from PLSS - see Help

Appendix VI Sampling Map



Southwest Royalties Inc.

Eilliams Battery Spill

GPS: 32.795216N -103.644230W

Lea County, NM

Republic Backhoe Service LLC

47 E. Dickens Lovington, NM 88260

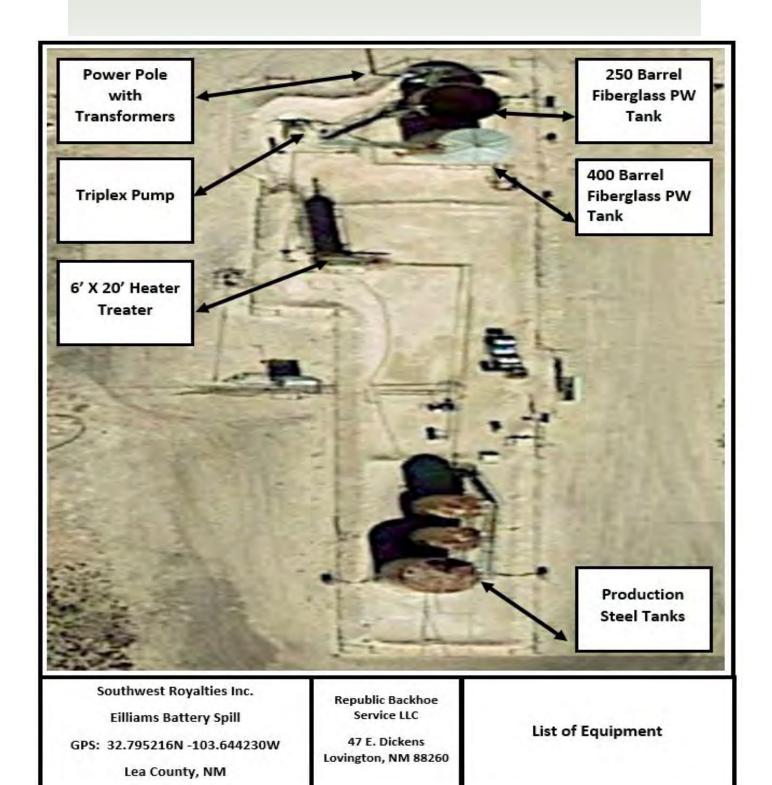
Sampling Map



- Bore Hole

GPS-32.795203N,-103.644331W

Appendix VII Battery Equipment



Appendix VIII Lab Analysis



February 05, 2018

ERIC GARCIA

REPUBLIC BACKHOE SERVICES

47 E. DICKENS RD

LOVINGTON, NM 88260

RE: EILLIAMS

Enclosed are the results of analyses for samples received by the laboratory on 02/02/18 9:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-17-10. 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 accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab accredited certif.html.

Cardinal Laboratories is accreditated 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.

Celeg D. Keine

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:

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

 Received:
 02/02/2018

 Reported:
 02/05/2018

 Project Name:
 ETILIAMS

 Project Number:
 BATTERY

 Project Location:
 NOBLE

 Sampling Date:
 01/31/2018

 Sampling Type:
 Soil

 Sampling Condition:
 Cool & Intact

 Sample Received By:
 Tamara Oldaker

Sample ID: EW - 5 (H800348-01)

BTEX 8021B	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifler
Benzene*	< 0.050	0.050	02/02/2018	ND	2.09	104	2.00	3.58	
Toluene*	< 0.050	0.050	02/02/2018	ND	2.07	104	2.00	3,29	
Ethylbenzene*	< 0.050	0.050	02/02/2018	ND	2.06	103	2.00	4.08	
Total Xylenes*	< 0.150	0.150	02/02/2018	ND	6.26	104	6.00	4.98	
Total BTEX	<0.300	0,300	02/02/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) Chloride, SM4500CI-B	111 mg	% 72-148 /kg		d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2440	16.0	02/02/2018	ND	432	108	400	3.77	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/02/2018	ND	214	107	200	0.652	
DRO >C10-C28*	<10.0	10.0	02/02/2018	ND	207	104	200	0.270	
EXT DRO >C28-C36	<10,0	10.0	02/02/2018	ND					
amenda 200 and an	7.22								

Surrogate: 1-Chlorooctane 87.0 % 41-142 Surrogate: 1-Chlorooctadecane 85.1 % 37.6-147

Cardinal Laboratories

REACE NOTE: Libbility and Energies. Confirm's facility and elects exclusive remarks for any dates arising, whether based to contend or both, shall be limited to the amount paid by client for analyses. All claims, including traces for negligation and any other cause electronese shall be deemed evaluable shallow in saids in writing and necessarily by Confirm's 15th; (3) days, other completion of the applicable services. To no write shall Candinal the failed for including, without including, without including, without including, including a services, because of the services between the following process of the services between the following including and the services between the following process of the services between the following impactable of whether puch claim is based upon any of the above caused measure or devalues. But makes only to the surpless interested above. This appoint but not be reproduced using a process of the services between the following process of Candinal Liberatories.

Celley & Keens

Celey D, Keene, Lab Director/Quality Manager

Page 2 of 17

*=Accredited Analyte

Analytical Results For:

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

 Received:
 02/02/2018

 Reported:
 02/05/2018

 Project Name:
 EILLIAMS

 Project Number:
 BATTERY

 Project Location:
 NOBLE

 Sampling Date:
 01/31/2018

 Sampling Type:
 Soil

 Sampling Condition:
 Cool & Intact

Sample Received By:

Cool & Intact Tamara Oldaker

Sample ID: EW - 10 (H800348-02)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Benzene*	<0.050	0.050	02/02/2018	ND	2.09	104	2.00	3.58	
Toluene*	<0.050	0.050	02/02/2018	ND	2.07	104	2.00	3,29	
Ethylbenzene*	< 0.050	0.050	02/02/2018	ND	2.06	103	2.00	4.08	
Total Xylenes*	<0.150	0.150	02/02/2018	ND	6.26	104	6,00	4.98	
Total BTEX	<0.300	0.300	02/02/2018	ND					
Surrogate: 4-Bromofluorobenzene (PID	115	% 72-148							
Chloride, SM4500CI-B	mg/	kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1600	16.0	02/02/2018	ND	432	108	400	3.77	
TPH 8015M	mg/	kg	Analyze	d By: MS			1.77		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/02/2018	ND	214	107	200	0.652	
DRO >C10-C28*	<10.0	10.0	02/02/2018	ND	207	104	200	0.270	
EXT DRO >C28-C36	<10.0	10.0	02/02/2018	ND					
Surrogate: 1-Chlorooctane	84.6	% 41-142							
Surrogate: 1-Chlorooctadecane	83.0	96 37.6-14	7						

Cardinal Laboratories

*=Accredited Analyte

REAGE NOTE: Usability and Demagne. Condrain's liability and clients enclusive monethy for any dains arising, whether based in contract or turt, that he limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause entatescene shall be deemed analysed unless made in wetting and mealest by Cardinal within thiny (2)) days after completion of the applicable services. To no west state Cardinal he labble for including, without inhabition, believes the temporary of the state of the participations of the services herearder by Cardinal, regardess of entative such claims to be the participations of the services herearder by Cardinal, regardess of entative such claims to be services believe the control of the services because or otherwises. Security of the state of the participations of the services herearder by Cardinal, regardess of entative such claims.

Celley & France

Celey D. Keene, Lab Director/Quality Manager

Page 3 of 17

Analytical Results For:

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

 Received:
 02/02/2018

 Reported:
 02/05/2018

 Project Name:
 EILLIAMS

 Project Number:
 BATTERY

 Project Location:
 NOBLE

 Sampling Date:
 01/31/2018

 Sampling Type:
 Soil

 Sampling Condition:
 Cool & Intact

 Sample Received By:
 Tamara Oldaker

Sample ID: EW - 15 (H800348-03)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Benzene*	< 0.050	0.050	02/02/2018	ND	2.09	104	2.00	3.58	
Toluene*	< 0.050	0.050	02/02/2018	ND	2.07	104	2.00	3.29	
Ethylbenzene*	< 0.050	0.050	02/02/2018	ND	2.06	103	2.00	4.08	
Total Xylenes*	< 0.150	0.150	02/02/2018	ND	6.26	104	6.00	4.98	
Total BTEX	<0.300	0.300	02/02/2018	ND					
Surrogate: 4-Bromofluorobenzene (PID)	1129	6 72-148							
Chloride, SM4500CI-B	mg/	kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Chloride	2040	16.0	02/02/2018	ND	432	108	400	3.77	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte.	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
GRO C6-C10*	<10.0	10,0	02/02/2018	ND	214	107	200	0.652	
DRO >C10-C28*	<10.0	10.0	02/02/2018	ND	207	104	200	0.270	
EXT DRO >C28-C36	<10.0	10.0	02/02/2018	ND					
Surrogate: 1-Chlorooctane	75.3	96 41-142							
Surrogate: 1-Chlorooctadecane	73.7	96 37.6-14	7						

Cardinal Laboratories

*=Accredited Analyte

REDICE NOTE: Usbilly and Demages. Condraft liability and clients exclusive remedy for any claim arising whether based in content or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause inhabitioner shall be deemed well-sed unless in writing and neclied by Cardinal within their, DSI, daily effect completion of the applicable services. In no west, shall Cardinal be liable for included to consequential damages, including, effects in liabilities, believes to introduce, and or invested to the performance of the services florested from the claim in the performance of the services florested from the claim in the content of the service florested from the claim in the content of the service florested from the claim in the content of the service florested from the claim in the content of the service florested from the claim in the content of the service florested from the claim in the content of the service florested from the claim in the content of the service florested from the claim in the content of the service florested from the claim in the content of the service florested from the service florested from the claim is the claim in the content of the service florested from the claim is the service florested from the claim to the claim is the service florested from the claim to the claim is the claim to the claim the claim to the c

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Celey D. Keene, Lab Director/Quality Manager

Page 4 of 17

Analytical Results For:

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

 Received:
 02/02/2018

 Reported:
 02/05/2018

 Project Name:
 EILLIAMS

 Project Number:
 BATTERY

 Project Location:
 NOBLE

 Sampling Date:
 01/31/2018

 Sampling Type:
 Soil

 Sampling Condition:
 Cool & Intact

 Sample Received By:
 Tamara Oldaker

Sample ID: EW - 20 (H800348-04)

BTEX 8021B	mg,	kg	Analyze	d By: MS					
Arialyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Benzene*	<0.050	0.050	02/02/2018	ND	2.09	104	2.00	3.58	
Toluene*	<0.050	0.050	02/02/2018	ND	2.07	104	2.00	3.29	
Ethylbenzene*	< 0.050	0.050	02/02/2018	ND	2.06	103	2.00	4.08	
Total Xylenes*	<0.150	0.150	02/02/2018	ND	6.26	104	6.00	4.98	
Total BTEX	<0.300	0.300	02/02/2018	ND					
Surrogate: 4-Bromofluorobenzene (PID)	114	% 72-148							
Chloride, SM4500CI-B	mg	mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3080	16.0	02/02/2018	ND	432	108	400	3.77	
TPH 8015M	mg	kg	Analyze	d By: MS		199			
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
GRO C6-C10*	<10.0	10.0	02/02/2018	ND	214	107	200	0.652	
DRO >C10-C28*	<10.0	10,0	02/02/2018	ND	207	104	200	0.270	
EXT DRO >C28-C36	<10.0	10.0	02/02/2018	ND					
Surrogate: 1-Chlorooctane	92.0	% 41-142							
Surrogate: 1-Chlorooctadecane	90.4	96 37.6-14	7						

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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:
 02/02/2018

 Reported:
 02/05/2018

 Project Name:
 EILLIAMS

 Project Number:
 BATTERY

 Project Location:
 NOBLE

 Sampling Date:
 01/31/2018

 Sampling Type:
 Soil

 Sampling Condition:
 Cool & Intact

 Sample Received By:
 Tamara Oldaker

Sample ID: EW - 25 (H800348-05)

BTEX 8021B	mg,	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Benzene*	<0.050	0.050	02/02/2018	ND	2.09	104	2.00	3.58	
Toluene*	<0.050	0.050	02/02/2018	ND	2.07	104	2.00	3.29	
Ethylbenzene*	<0.050	0.050	02/02/2018	ND	2.06	103	2.00	4.08	
Total Xylenes*	<0.150	0.150	02/02/2018	ND	6.26	104	6.00	4.98	
Total BTEX	<0.300	0.300	02/02/2018	ND					
Surrogate: 4-Bromofluorobenzene (PID)	112	26 72-148							
Chloride, SM4500CI-B	mg/	mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Chloride	3160	16.0	02/02/2018	ND	432	108	400	3.77	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
GRO C6-C10*	<10.0	10.0	02/02/2018	ND	214	107	200	0.652	
DRO >C10-C28*	<10.0	10.0	02/02/2018	ND	207	104	200	0.270	
EXT DRO >C28-C36	<10.0	10,0	02/02/2018	ND					
Surrogate: 1-Chlorooctane	82.2	96 41-142							
Surrogate: 1-Chlorooctadecane	80.4	96 37.6-14	-						

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Analytical Results For:

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

 Received:
 02/02/2018

 Reported:
 02/05/2018

 Project Name:
 EILLIAMS

 Project Number:
 BATTERY

NOBLE

 Sampling Date:
 01/31/2018

 Sampling Type:
 Soil

 Sampling Condition:
 Cool & Intact

Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: EW - 30 (H800348-06)

Project Location:

BTEX 8021B	mg	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/02/2018	ND	2.09	104	2.00	3.58	
Toluene*	<0.050	0.050	02/02/2018	ND	2.07	104	2.00	3,29	
Ethylbenzene*	<0.050	0.050	02/02/2018	ND	2.06	103	2.00	4.08	
Total Xylenes*	<0.150	0.150	02/02/2018	ND	6.26	104	6,00	4.98	
Total BTEX	<0.300	0.300	02/02/2018	ND					
Surrogate: 4-Bromofluorobenzene (PID	III	6 72-148	7						
Chloride, SM4500CI-B	mg	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4160	16.0	02/02/2018	ND	432	108	400	3.77	
TPH 8015M	mg	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/02/2018	ND	214	107	200	0.652	
DRO >C10-C28*	<10.0	10.0	02/02/2018	ND	207	104	200	0.270	
EXT DRO >C28-C36	<10.0	10.0	02/02/2018	ND					
Surrogate: 1-Chlorooctane	92.9	% 41-142							
Surrogate: 1-Chlorooctadecane	91.3	96 37.6-14	7						

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Analytical Results For:

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

 Received:
 02/02/2018

 Reported:
 02/05/2018

 Project Name:
 EILLIAMS

 Project Number:
 BATTERY

 Project Location:
 NOBLE

Sampling Date: 01/31/2018
Sampling Type: Soil
Sampling Condition: Cond & Tabel

Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: EW - 35 (H800348-07)

BTEX 8021B	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Benzene*	<0.050	0.050	02/02/2018	ND	2.09	104	2.00	3,58	
Toluene*	<0.050	0.050	02/02/2018	ND	2.07	104	2.00	3.29	
Ethylbenzene*	<0.050	0.050	02/02/2018	ND	2.06	103	2.00	4.08	
Total Xylenes*	<0.150	0.150	02/02/2018	ND	6.26	104	6.00	4.98	
Total BTEX	<0.300	0.300	02/02/2018	ND					
Surrogate: 4-Bromofluorobenzene (PID	114	96 72-148							
Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4720	16.0	02/02/2018	ND	432	108	400	3,77	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD.	Qualifier
GRO C6-C10*	<10.0	10.0	02/02/2018	ND	214	107	200	0.652	
DRO >C10-C28*	<10.0	10.0	02/02/2018	ND	207	104	200	0.270	
EXT DRO >C28-C36	<10.0	10.0	02/02/2018	ND					
Surrogate: 1-Chlorooctane	87.8	96 41-142							
Surrogate: 1-Chlorooctadecane	87.2	96 37.6-14	7						

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Celey D. Keene, Lab Director/Quality Manager

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Page 8 of 17

Analytical Results For:

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

 Received:
 02/02/2018

 Reported:
 02/05/2018

 Project Name:
 EILLIAMS

 Project Number:
 BATTERY

 Project Location:
 NOBLE

 Sampling Date:
 01/31/2018

 Sampling Type:
 Soil

 Sampling Condition:
 Cool & Intact

 Sample Received By:
 Tamara Oldaker

Sample ID: EW - 40 (H800348-08)

BTEX 8021B	mg	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/02/2018	ND	2.09	104	2.00	3.58	
Toluene*	< 0.050	0.050	02/02/2018	ND	2.07	104	2.00	3,29	
Ethylbenzene*	<0.050	0.050	02/02/2018	ND	2.06	103	2.00	4.08	
Total Xylenes*	<0.150	0.150	02/02/2018	ND	6.26	104	6.00	4.98	
Total BTEX	<0.300	0.300	02/02/2018	ND					
Surrogate: 4-Bromofluorobenzene (PID	108	6 72-148							
Chloride, SM4500CI-B	mg/	kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3200	16.0	02/02/2018	ND	432	108	400	3,77	
TPH 8015M	mg	kg	Analyze	d By: MS	11.11	1.74	1.1		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifler
GRO C6-C10*	<10.0	10.0	02/02/2018	ND	214	107	200	0.652	
DRO >C10-C28*	<10.0	10.0	02/02/2018	ND	207	104	200	0.270	
EXT DRO >C28-C36	<10.0	10.0	02/02/2018	ND					
Surrogate: 1-Chlorooctane	87.4	% 41-142							
Surrogate: 1-Chlorooctadecane	85.5	96 37.6-14	7						

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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:
 02/02/2018

 Reported:
 02/05/2018

 Project Name:
 EILLIAMS

 Project Number:
 BATTERY

 Project Location:
 NOBLE

Sampling Date: 01/31/2018
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: EW - 45 (H800348-09)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Benzene*	<0.050	0.050	02/05/2018	ND	2.50	125	2.00	11.7	
Toluene*	<0.050	0.050	02/05/2018	ND	2.55	128	2.00	12.8	
Ethylbenzene*	<0.050	0.050	02/05/2018	ND	2.57	129	2.00	13.3	
Total Xylenes*	<0.150	0.150	02/05/2018	ND	7.54	126	6.00	13.5	
Total BTEX	<0,300	0.300	02/05/2018	ND					
Surrogate: 4-Bromofluorobenzene (PID)	113	6 72-148							
Chloride, SM4500CI-B	mg	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1880	16.0	02/02/2018	ND	416	104	400	3.77	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/05/2018	ND	206	103	200	0.428	
DRO >C10-C28*	<10.0	10.0	02/05/2018	ND	198	98.8	200	0.684	
EXT DRO >C28-C36	<10.0	10.0	02/05/2018	ND					
Surrogate: 1-Chlorooctane	87.8	96 41-142							
Surrogate: 1-Chlorooctadecane	84.9	37.6-14	7						

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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:
 02/02/2018

 Reported:
 02/05/2018

 Project Name:
 ETILIAMS

 Project Number:
 BATTERY

NOBLE

 Sampling Date:
 01/31/2018

 Sampling Type:
 Soil

 Sampling Condition:
 Cool & Intact

 Sample Received By:
 Tamara Oldaker

Sample ID: EW - 50 (H800348-10)

Project Location:

BTEX 8021B	mg	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/05/2018	ND	2.50	125	2.00	11.7	
Toluene*	<0.050	0.050	02/05/2018	ND	2.55	128	2.00	12.8	
Ethylbenzene*	<0.050	0.050	02/05/2018	ND	2.57	129	2.00	13.3	
Total Xylenes*	<0.150	0.150	02/05/2018	ND	7.54	126	6.00	13.5	
Total BTEX	<0.300	0.300	02/05/2018	ND					
Surrogate: 4-Bromofluorobenzene (PID	112	26 72-148							
Chloride, SM4500CI-B	mg	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	912	16.0	02/02/2018	ND	416	104	400	3.77	
TPH 8015M	mg,	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/05/2018	ND	206	103	200	0.428	
DRO >C10-C28*	<10.0	10.0	02/05/2018	ND	198	98.8	200	0.684	
EXT DRO >C28-C36	<10.0	10.0	02/05/2018	ND					
Surrogate: 1-Chlorooctane	90.4	% 41-142							
Surrogate: 1-Chlorooctadecane	86.8	96 37.6-14	7						

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Analytical Results For:

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

 Received:
 02/02/2018

 Reported:
 02/05/2018

 Project Name:
 EILLIAMS

 Project Number:
 BATTERY

 Project Location:
 NOBLE

 Sampling Date:
 01/31/2018

 Sampling Type:
 Soil

 Sampling Condition:
 Cool & Intact

 Sample Received By:
 Tamara Oldaker

Sample ID: EW - 55 (H800348-11)

Sample ID: EW - 55 (H800348-									
BTEX 8021B	mg/	kg	Analyze	d By: MS					_
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	< 0.050	0.050	02/05/2018	ND	2.50	125	2.00	11,7	
Toluene*	<0.050	0.050	02/05/2018	ND	2.55	128	2.00	12,8	
Ethylbenzene*	<0.050	0.050	02/05/2018	ND	2.57	129	2.00	13,3	
Total Xylenes*	<0.150	0.150	02/05/2018	ND	7.54	126	6.00	13.5	
Total BTEX	<0.300	0.300	02/05/2018	ND					
Surrogate: 4-Bromofluorobenzene (PID	1169	6 72-148							
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	496	16.0	02/02/2018	ND	416	104	400	3.77	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10,0	02/05/2018	ND	206	103	200	0.428	
DRO >C10-C28*	<10.0	10.0	02/05/2018	ND	198	98.8	200	0.684	
EXT DRO >C28-C36	<10.0	10.0	02/05/2018	ND					
Surrogate: 1-Chlorooctane	89.4	% 41-142							
Surrogate: I-Chlorooctadecane	83.9	96 37.6-14	7						

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Analytical Results For:

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

 Received:
 02/02/2018

 Reported:
 02/05/2018

 Project Name:
 EILLIAMS

 Project Number:
 BATTERY

 Project Location:
 NOBLE

Sampling Date: 01/31/2018
Sampling Type: Soil
Sampling Condition: Cond & Interest

Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: EW - 60 (H800348-12)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte.	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/05/2018	ND	2.50	125	2.00	11.7	
Toluene*	< 0.050	0.050	02/05/2018	ND	2.55	128	2.00	12.8	
Ethylbenzene*	<0.050	0.050	02/05/2018	ND	2.57	129	2.00	13.3	
Total Xylenes*	< 0.150	0.150	02/05/2018	ND	7.54	126	6.00	13.5	
Total BTEX	<0.300	0.300	02/05/2018	ND					
Surrogate: 4-Bromofluorobenzene (PID	112	72-148							
Chloride, SM4500CI-B	mg	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	288	16.0	02/02/2018	ND	416	104	400	3.77	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/05/2018	ND	206	103	200	0.428	
DRO >C10-C28*	<10.0	10.0	02/05/2018	ND	198	98.8	200	0.684	
EXT DRO >C28-C36	<10.0	10.0	02/05/2018	ND					
Surrogate: 1-Chlorooctane	87.6	% 41-141							
Surrogate: 1-Chlorooctadecane	82.9	96 37.6-14	7						

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REACT NOTE: Likelity and Designe. Ordina's likelity and clients, including those for negligenous and any other bases in content or tors, shall be limited to the amount point by client for analyses. All claims, including those for negligenous and any other bases whitescene shall be deemed valued unsee made in vesting and necessed by Cardinal selfor thing. (SI) days after companion of the applicable annition. In ne west shall Cardinal the libels for including annition of the applicable annition. In ne west shall Cardinal the libels for including annition of the applicable intermigation, placed or loads of the benefit the performance of the sentine framework for including annition.

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Celey D. Keene, Lab Director/Quality Manager

Page 13 of 17

Analytical Results For:

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

 Received:
 02/02/2018

 Reported:
 02/05/2018

 Project Name:
 EILLIAMS

 Project Number:
 BATTERY

 Project Location:
 NOBLE

Sampling Date: 01/31/2018 Sampling Type: Soil Sampling Condition: Cool & Intact

Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: EW - 65 (H800348-13)

BTEX 8021B	mg	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/05/2018	ND	2.50	125	2.00	11.7	
Toluene*	< 0.050	0.050	02/05/2018	ND	2.55	128	2.00	12.8	
Ethylbenzene*	<0.050	0.050	02/05/2018	ND	2.57	129	2.00	13.3	
Total Xylenes*	< 0.150	0.150	02/05/2018	ND	7,54	126	6,00	13,5	
Total BTEX	<0.300	0.300	02/05/2018	ND					
Surrogate: 4-Bromofluorobenzene (PID	113	96 72-148							
Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	02/02/2018	ND	416	104	400	3.77	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/05/2018	ND	206	103	200	0.428	
DRO >C10-C28*	<10.0	10.0	02/05/2018	ND	198	98,8	200	0.684	
EXT DRO >C28-C36	<10.0	10.0	02/05/2018	ND					
Surrogate: 1-Chlorooctane	91,9	96 41-142	P						
Surrogate: 1-Chlorooctadecane	86.5	96 37.6-14	7						

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REPOST MOTT: Unbitly and Damages. Condrain's liability and client, including more for any claim arising, whether based in content or turn, chall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause evidationem chall be deemed valued unless made in writing and manifest by Cardinal within thing (20) days after completion of the applicable services. In no worst claim Cardinal be liable for including, without instance, business interruptions, loss of use, or loss of profits Increased by Cardinal, affiliation or associated and the particulations of the services between by Cardinal, regardess of whether such claim is based upon any of the above claim disastors or content and control profits increased and the particulation of the services between the claim of the control profits increased and the control profits increased

Celey D. Keene, Lab Director/Quality Manager

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Notes and Definitions

5-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QR-04	The RPD for the BS/BSD was outside of historical limits.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
BS1	Blank spike recovery above laboratory acceptance criteria. Results for analyte potentially biased high.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature,
	Onloride by SM4500CI-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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RASES NOTE. Liability and Demagne. Controlls liability and disent, enclaider money for any data arising, elebeth based in contract or tor, that is limited to the amount paid by deet for analyses. All failure, including doors for conquested and may elebether assets whether that is the demonst elebeth of their ordinated by Control elebeth of they CRIS days then completed of the supplicable arrives. In or level fail Certain is leaded to their foldered by class for conquested and the supplicable arrives. In ordinate, the supplicable arrives the supplicable

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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: Repub	1	backhoo Sminico CCC	GIL THIB		ANALYSIS REQUEST
Address: 47 E City Cov. 1, 10 C Phone # 575-681	E. Distri	State MM Zip 88260 Attn: Jon Al on Address 20/16	Company: Noble Company LI		
Project Name: Project Location Sampler Name:	E. Illiani	try.	State TX ZIP 71070 Phone # 830-497-7650		
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☐ Yes ☐ No Add Phone



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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