SITE CLOSURE REPORT

Shell State #3 1RP-4582 API #30-025-23014 Unit C, Sec.18, Township 11 South, Range 33 East

August 2017

Prepared By: Republic Backhoe Service, LLC. 47 East Dickens Lovington, NM 88260

Prepared For:

Read and Stevens Inc.

Republic Backhoe Service, LLC.

August 1, 2017

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

Dear Olivia Yu,

Re: Closure Report

Read and Stevens Inc. Shell State #3 Flowline Spill Unit C, Section 18, Township 11 South, Range 33 East Latitude: North 33.370575 Longitude: West 103.652344 API # 30-025-23014 1RP-4582

Republic Backhoe Service, LLC. Submits the attached Closure Report Letter describing remedial activities undertaken to remediate the above noted site. Remediation activities were undertaken by Republic Backhoe Service, LLC. Information and data contained herein were taken from notes, documents, photographs and e-mails directed to/from Republic Backhoe Service LLC.

Incident Date

January 22, 2017

Background Information

The Shell State #3 is located approximately twenty-one (21) miles west of Tatum, New Mexico. The legal location for the well is Unit C, Section 18, Township 11, South and Range 33 East in Lea County, New Mexico. The spill site lies 730 feet east of the Shell

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

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State #3 location with the GPS Coordinates as follows: Latitude: 33.370575 North Longitude: -103.652344 West.

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 and shallow geology is Quaternary formations and 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 56 feet.

The ranking score for this site is 20 based on the following:

Depth to ground water: 56' (50'-99')	20
Wellhead Protection Area: > 1000'	0
Distance to Surface Water Body: > 1000'	0

Incident Description

On January 22, 2017 the flow line between the well and the battery burst causing a release of 14 barrels (6 oil and 8 produced water) onto the pasture. The release was discovered on January 24, 2017.

Actions Taken

According to the C-141 form on January 22, 2017 the flowline from the Shell State #3 ruptured and released approx. 14 barrels (6 Oil and 8 PW) onto the ground. The released was discovered on January 24, 2017 and reported on February 1, 2017. On January 25, 2017 Republic Backhoe Service LLC began to excavate and haul the soil that was saturated with oil. From 1/25/2017 through 1/31/2017 a total of 360 yards of contaminated soil were hauled to Gandy Marly Inc. The dimensions of the Spill Site A are 55' (North Wall) X 135' (East Wall) X 90' (South Wall) X 130' (West Wall). The release that caused Spill Site A impacted an older release Spill Site B that will be attended to as well. The dimensions of the Spill Site B are 115' (West Wall and East Wall) 40' (North Wall) and 15' (South Wall).

Grab samples were collected utilizing a backhoe and a drilling rig. On March 29, 2017 surface samples were taken at the spill sites A and B. On March 23, 2017 and March

24, 2017 bore hole samples were taken at the Spill Site A at a depth of 20' and Spill Site B at a depth of 10'. Laboratory results from the soil sampling are summarized in the table below. 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, iced and transported to Cardinal Labs in Hobbs, NM for analysis. The samples were tested for TPH using EPA method 8015M, and volatile organics (BTEX) using EPA Method 8021B. The chlorides samples were analyzed per Method SM4500C1-B.

Remedial activities resumed on June 15, 2017. From 6/15/2017 through 7/08/2017 a total of 420 yards were hauled to Gandy Marly Inc (An approved NMOCD disposal) and 790 yards of top soil were hauled in from Mr. Pierce's top soil pit. The following table illustrates the spill area excavation depths that were agreed upon by the New Mexico Oil Conservation Division and by the State Land Office. On June 30, 2017 a twenty (20) mil polyethylene line was placed in the excavated area surrounding Center. The polyethylene liner consisting of an area of 76-feet X 61-feet was used to cover an excavated area of 60-feet X 45-feet extending up the sidewalls a minimum of 3-feet and overlapping the edges a minimum of –5 feet. Top soil was placed on the overlapped edges to prevent the polyethylene liner from sloughing into the excavation bottom. Then backfilled the area with top soil.

Sample ID	Depth (bgs)	20 mil liner
North	2′	No
Northeast	0′	No
East	3′	No
Southeast	2′	No
South	2′	No
Southwest	1'	No
West	2′	No
Northwest	2′	No
Central	4′	Yes
NS1	2′	No
NS2	0	No
NS3	1'	No
NS4	1'	No

As previously stated, a total of 790 yards of top soil were hauled in to backfill Spill Area A and Spill Area B. All top soil was hauled from Mr. Pierce's top soil pit located at 33.3879°N, -103.6219°W. The backfill material was 100% top soil no pond bottoms were used in backfilling Spill Area A or Spill Area B.

Revegetation and Noxious Weed Management Plan

Seed Mixture: Warm Season SSR Grass Seed Mix 350

Seeding Rate/ acre: 25 lbs/acre

Timing of Dispersal: July 10, 2017.

Method of Dispersal: The seed was mechanically broadcasted over Spill Area A and Spill Area B. The seed was then covered by running a disc over the area. The spill areas were not artificially watered as proposed. The area received more than 3" of rain in the month of July 2017, so artificially watering was not needed.

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

Remediation of the spill area was completed in compliance with New Mexico State Land Office and NMOCD Rules and Regulations as physically possible. While in situ chloride concentrations are above NMOCD Remedial Threshold goals, the polyethylene liner will abate vertical migration of chlorides and protect groundwater from contamination. On behalf of Read and Stevens Inc. Republic Backhoe Service, LLC, ask that the New Mexico State Land Office and NMOCD approve this site closure.

Thank you,

5. Camp

Eric Garcia Republic Backhoe Service, LLC.

Laboratory and Field Sample Results

Sample ID	Date	Depth	Chlorides (PPM)	BTEX	TPH (mg/kg) GRO	TPH (mg/kg) DRO	Sample Type
North							
N-1FS	2/10/17	0′	4800	-	-	-	Field Sample
N-Surface	3/29/17	Surface	5040	<.300	10	28.3	Lab
N-2FS	2/10/17	1'	1604	-	-	-	Field Sample
N-3FS	2/10/17	2′	360	-	-	-	Field Sample
N 2	2/15/17	2′	-	<.300	10	10	Lab Sample
N-4FS	2/10/17	3′	64	-	-	-	Field Sample
N 2-C	2/15/17	3′	32	-	-	-	Lab
N-5FS	2/10/17	5′	64	-	-	-	Field Sample
N-6FS	2/10/17	8′	64	-	-	-	Field Sample
N20	3/23/17	20′	16	<.300	10	10	Lab
Northeast							
NE-1FS	2/10/17	0′	64	-	-	-	Field Sample
NE Surface	3/29/17	Surface	32	<.300	10	10	Lab
NE 0	2/15/17	0′	-	<.300	10	10	Lab
NE 0-C	2/15/17	0′	32	-	-	-	Lab
NE-2FS	2/10/17	5′	64	-	-	-	Field Sample
NE-3FS	2/10/17	8′	64	-	-	-	Field Sample
NE20	3/23/17	20′	16	<.300	10	10	Lab

Sample ID	Date	Depth	Chlorides	BTEX	TPH(mg/kg) GRO	TPH(mg/kg) DRO	Sample Type
East							
E-1FS	2/10/17	0′	5816	-	-	-	Field Sample
E Surface	3/29/17	Surface	6000	.632	10	1020	Lab
E-2FS	2/10/17	1′	3204	-	-	-	Field Sample
E-3FS	2/10/17	2′	640	-	-	-	Field Sample
E-2	2/15/17	2′	-	<.300	10	10	Lab
E-4FS	2/10/17	3′	360	-	-	-	Field Sample
E-5FS	2/10/17	4′	220	-	-	-	Field Sample
E-6FS	2/10/17	5′	64	-	-	-	Field Sample
E2-C	2/15/17	5′	16	-	-	-	Lab
E-7FS	2/10/17	8′	64	-	-	-	Field Sample
E20	3/23/17	20′	16	<.300	10	10	Lab
Southeast							
SE-1FS	2/11/17	0′	320	-	-	-	Field Sample
SE Surface	3/29/2017	Surface	32	.605	225	23200	Lab
SE-2FS	2/11/17	1′	64	-	-	-	Field Sample
SE-3FS	2/11/17	2′	64	-	-	-	Field Sample
SE2	2/15/17	2′	-	<.300	10	10	Lab
SE 2-C	2/15/17	2′	16	-	-	-	Lab
SE-4FS	2/11/17	4′	64	-	-	-	Field Sample
SE-5FS	2/11/17	6′	64	-	-	-	Field Sample
SE-6FS	2/11/17	8′	64	-	-	-	Field Sample
SE20	3/23/17	20′	16	<.300	10	10	Lab

Sample ID	Date	Depth	Chlorides (PPM)	BTEX	TPH (mg/kg) GRO	TPH (mg/kg) DRO	Sample Type
South							
S-1FS	2/11/17	0′	2024	-	-	-	Field Sample
S-Surface	3/29/17	Surface	2240	<.300	10	127	Lab
S-2FS	2/11/17	1′	824	-	-	-	Field Sample
S2	2/15/17	2′	-	<.300	10	10	Lab
S-3FS	2/11/17	2′	484	-	-	-	Field Sample
S-4FS	2/11/17	3′	280	-	-	-	Field Sample
S-5FS	2/11/17	4′	128	-	-	-	Field Sample
S-6FS	2/11/17	5′	64	-	-	-	Field Sample
S2-C	2/15/17	5′	16	-	-	-	Lab
S-7FS	2/11/17	8′	64	-	-	-	Field Sample
S-20	3/23/17	20′	16	<.300	10	10	Lab
Southwest							
SW-1FS	2/11/17	0′	2088	-	-	-	Field Sample
SW-Surface	3/29/17	Surface	2240	<.300	10	127	Lab
SW0	2/15/17	0′	-	<.300	10	10	Lab
SW-2FS	2/11/17	1′	132	-	-	-	Field Sample
SW1-C	2/15/17	1'	64	-	-	-	Lab
SW-3FS	2/11/17	3′	64	-	-	-	Field Sample
SW-4FS	2/11/17	5′	64	-	-	-	Field Sample
SW20	3/23/17	20′	16	<.300	10	10	Lab

Sample ID	Date	Depth	Chlorides (PPM)	BTEX	TPH (mng/kg) GRO	TPH (mg/kg) DRO	Type of Sample
West							
W-1FS	2/12/17	0′	4424	-	-	-	Field Sample
W-Surface	3/29/17	Surface	5920	89.1	1520	10600	Lab
W-2FS	2/12/17	1′	720	-	-	-	Field Sample
W 2	2/15/17	2′	-	<.300	10	10	Lab
W 2-C	2/15/17	2′	16	-	-	-	Lab
W-3FS	2/12/17	2′	128	-	-	-	Field Sample
W-4FS	2/12/17	5′	64	-	-	-	Field Sample
W-20	3/23/17	20′	16	<.300	10	10	Lab
Northwest							
NW-1FS	2/12/17	0′	3644	-	-	-	Field Sample
NW-Surface	3/29/17	Surface	2480	.992	50.2	1570	Lab
NW-2FS	2/12/17	1′	2480	-	-	-	Field Sample
NW-3FS	2/12/17	2′	556	-	-	-	Field Sample
NW-4FS	2/12/17	3′	336	-	-	-	Field Sample
NW5-FS	2/12/17	5′	320	-	-	-	Field Sample
NW 6	2/15/17	6′	-	<.300	10	10	Lab
NW6-FS	2/12/17	8′	164	-	-	-	Field Sample
NW9-c	2/15/17	9′	16	-	-	-	Field Sample
NW7-FS	2/12/17	10′	64	-	-	-	Field Sample
	3/23/17	20′	16	<.300	10	10	Lab

Sample ID	Date	Depth	Chlorides (PPM)	BTEX	TPH (mg/kg) GRO	TPH (mg/kg) DRO	Type of Sample
Central							
C-1FS	2/12/17	0'	9600	-	-	-	Field Sample
C-Surface	3/29/17	Surface	700	10.5	197	9200	Lab
C-2FS	2/12/17	1′	4800	-	-	-	Field Sample
C-3FS	2/12/17	2′	1900	-	-	-	Field Sample
2	1/30/17	2′	2200	-	-	-	Lab
5	1/30/17	5′	2480	-	-	-	Lab
7′	1/30/17	7′	2080	-	-	-	Lab
Shell 5	2/1/17	5′	-	<.300	10	58.1	Lab
Shell 6	2/1/17	6′	-	<.300	10	49.3	Lab
Shell 7	2/1/17	7′	-	<.300	10	24.1	Lab
C10	2/16/17	10′	-	<.300	10	10	Lab
C-10FS	2/16/17	10′	212	-	-	-	Field Sample
C-11FS	2/16/17	15′	64	-	-	-	Field Sample
C-15	2/16/17	15′	32	-	-	-	Lab
C20	3/23/17	20′	16	<.300	10	10	Lab
NS-1							
NS1-0FS	2/15/17	0′	640	-	-	-	Field Sample
NS-1 Surface	3/29/17	Surface	512	<.300	10	24.5	Lab
NS1-1FS	2/15/17	1′	624	-	-	-	Lab
NS1-2	2/15/17	2′	240	-	-	-	Field Sample
NS1-3	2/15/17	5′	64	-	-	-	Field Sample
NS1-10	3/24/17	10′	16	<.300	10	10	Lab
NS-2							
NS2-0FS	2/15/17	0′	280	-	-	-	Field Sample
NS2-Surface	3/29/17	Surface	32	<.300	10	10	Lab
NS2-1FS	2/15/17	1′	64	-	-	-	Field Sample
NS2	2/15/17	1′	80	<.300	10	10	Lab
NS2-2FS	2/15/17	5′	64	-	-	-	Field Sample
NS2-10	3/24/17	10′	16	<.300	10	10	Lab

Sample ID	Date	Depth	Chlorides (PPM)	BTEX	TPH (mg/kg) GRO	TPH (mg/kg) DRO	Sample Type
NS-3							
NS3-0FS	2/15/17	0′	1224	-	-	-	Field Sample
NS-Surface	3/29/17	Surface	1960	<.300	10	10	Lab
NS3-1FS	2/15/17	1′	128	-	-	-	Field Sample
NS3	2/15/17	1′	46	<.300	10	10	Lab
NS-4							
NS4-0FS	2/15/17	0′	880	-	-	-	Field Sample
NS-4 Surface	3/29/17	Surface	1180	<.300	10	10	Lab
NS4-1FS	2/15/17	1′	64	-	-	-	Field Sample
NS 4	2/15/17	1′	32	<.300	10	10	Lab
NS4-2FS	2/15/17	5′	64	-	-	-	Field Sample
NS4-10	3/24/17	10'	16	<.300	10	10	Lab

Spill Site A-Delineation

Center

Surface contamination at the center is high (Sample ID C-S). TPH and BTEX reach vertical extent at depths of 5' and remain clean at depths of 10', and 20' (Sample ID Shell 5, C-10, and C20). Chloride contaminants reach vertical extent at depths of 10' (field sample ID C-10 212 PPM) and remain clean at depths of 15' (Sample ID C-15) and 20' (Sample ID C-20).

North

Surface TPH/BTEX contamination is below limits, but chloride contamination at the north is high (N-S). Chloride contaminants reach vertical extent at a depth of 3' (N2-C) and remain clean to a depth of 20' (N-20).

North East

Surface TPH/BTEX/Chloride contamination is below limits, and continue to be below limits to a depth of 20' (NE-20).

East

Surface contamination at the East is high (Sample ID E-S). TPH and BTEX reach vertical extent at depths of 2' (Sample ID E2) and remain clean at a depth of 20' (Sample ID E20). Chloride contaminants reach vertical extent at depths of 4' (Sample ID E2-C) and remain clean at a depth of 20' (Sample ID E-20).

South East

Surface TPH/BTEX contamination at the South East is high (Sample ID SE-S). TPH and BTEX reach vertical extent at depths of 2' (Sample ID SE2) and remain clean at a depth of 20' (Sample ID SE20). Chloride contaminants are below limits at the surface and continue to be clean at depths of 2' (Sample ID SE2-C) and remain clean at a depth of 20' (Sample ID SE-20).

South

Surface contamination at the South is high (Sample ID S-S). TPH and BTEX reach vertical extent at depths of 2' (Sample ID S2) and remain clean at a depth of 20' (Sample ID S20). Chloride contaminants reach vertical extent at depths of 5' (Sample ID S2-C) and remain clean at a depth of 20' (Sample ID E-20).

South West

Surface contamination at the South West is high (Sample ID SW-S). TPH and BTEX reach vertical extent at depths of 0' (Sample ID SW-0) and remain clean at a depth of 20' (Sample ID SW20). Chloride contaminants reach vertical extent at depths of 1' (Sample ID SW-1-C) and remain clean at a depth of 20' (Sample ID SW20).

West

Surface contamination at the West is high (Sample ID W-S). TPH and BTEX reach vertical extent at depths of 2' (Sample ID W2) and remain clean at a depth of 20'

(Sample ID W20). Chloride contaminants reach vertical extent at depths of 2' (Sample ID W2-C) and remain clean at a depth of 20' (Sample ID E-20).

North West

Surface contamination at the North West is high (Sample ID NW-S). TPH and BTEX reach vertical extent at depths of 6' (Sample ID NW6) and remain clean at a depth of 20' (Sample ID NW20). Chloride contaminants reach vertical extent at depths of 9' (Sample ID NW9-C) and remain clean at a depth of 20' (Sample ID NW9-C).

Spill Site B-Delineation

NS1

Surface TPH/BTEX contamination is below limits, but chloride contamination at the NS1 is high (NS1-S). Chloride contaminants reach 1' (Sample ID NS1) and reach vertical extent at a depth of 2' (Field Sample NS1-2) and remain clean to a depth of 10' (NS1-10).

NS2

Surface TPH/BTEX/Chloride contamination is below limits remain clean to a depth of 10' (NS2-10).

NS3

Surface TPH/BTEX contamination is below limits, but chloride contamination at the NS3 is high (NS3-S). Chloride contaminants reach vertical extent at a depth of 1' (Sample ID NS3) and remain clean to a depth of 10' (NS3-10).

NS4

Surface TPH/BTEX contamination is below limits, but chloride contamination at the NS4 is high (NS4-S). Chloride contaminants reach vertical extent at a depth of 1' (Sample ID NS4) and remain clean to a depth of 10' (NS4-10)

Appendix I Area Map



Read and Stevens Inc. Shell State #3 Flowline Leak Lea County, NM GPS: 33.370932N, 103.653313W

Republic Backhoe Service LLC 47 East Dickens Road Lovington, NM 88260

Figure I Area Map Appendix II Site Map



Appendix III

Ground Water Data

nmwrrs.ose.state.nm.us/nmwrrs/ReportDispatcher/type=PODGHTML&name=PodGroundSummaryHTMLjnzml&basin=L&nbr=10794&suffin= 🗊 nmwrtsosestatenmus/nmwrty/ReportProty//quenyData=['report'%3A'waterColumn'%2C%0A'BasinDV'%3A'true %2C%0A'Basin'%3A '%2C%0A'County'%3A''%2C%0A'Sub_basin'%3A''%2C%0A'UsageDIV'%3A'fase %2C%0A'tradusBox'%3A'tradius'%2C%0A'UtmDV'%3A'true %2C%0A'UtmB3e'%3A'6 🛃 Mozilla Firefox (A CLW memory in the POD suffix indicates the POD has been replaced & no longer serves a water night file.) L 10794 The data is furnished by the NAIOSE ISC and is accepted by the recipient with the expressed undertanding that the OSE ISC made no warranties, expressed or implied, concerning the accuracy, completenes, relabelity, unability, for any particular purpose of the data. L 06249 L 03762 POD2 L 03762 L 06362 L 03765 3/5/17 2:24 PM *UTM location was derived from PLSS - see Help Record Count: 17 L 10567 L 01640 POD L 03990 L 02043 L 05741 L 06273 L 03765 POD3 L 03765 S 09506 L 12006 POD2 POD Number 10817 ~ UTMNAD83 Radius Search (in meters): Easting (X): 625278.71 POD Sub-Code basin County 6416 4 See Trus Rug T LE 3 4 07 11S 33E replaced, O=orphaned, C=the file is closed) (R=POD has been 70 * Water Column/Average Depth to Water ---------------New Mexico Office of the State Engineer E F E E E E F E F F F F H E E E Northing (Y): 3693217.18 4 1 1 18 11S 33E 1 1 4 08 11S 3 3 2 12 1 2 2 19 11S 33E 3 3 3 18 118 33E 3 3 3 18 11S 1 1 2 19 3 2 4 18 11S 3 2 4 18 115 3 1 4 18 11S 33E 2 2 13 1 4 18 115 (quarters are smallest to largest) (NAD83 UTM in meters) 2 3 08 11S 3 1 17 11S (quarters are 1=NW 2=NE 3=SW 4=SE) 4 12 5 115 115 115 115 115 33E 33E 33E 32E 33E 33E 33E 32E 32E 33E 32E 33E 623711 3694356* 624024 625334 626919 3694188* 624546 3691950* 625346 626234 3692870* 625737 625737 625435 625386 625418 3693669* 623643 3692636* 626618 3694083* 625748 3691758* 624546 3691950* 624230 3693254* X Radius: 2000 3692360* 3692461* 3691755* 3693853* 3692537 3692363 3692363 Water Y DistanceDepthWellDepthWaterColumn 477 112 60 65 Average Depth to Water: Maximum Depth: WATER COLUMN/ AVERAGE DEPTH TO WATER Minimum Depth: 1937 1906 1735 1594 1532 1406 1049 1016 1463 1463 1463 969 969 858 772 688 130 120 105 136 122 120 140 152 150 160 120 120 120 155 8 95 (In feet) 57 feet 48 feet 83 feet 58 5 3 32 3 8 8 60 83 50 И 8 8 S 95 69 10 12 57 8 64 2 8 8 35 = 10 10

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Appendix IV Water Wells Map



Appendix V Surface Samples/Results





Appendix VI Bore Hole Samples/Results





Appendix VII Photos







Read and Stevens Inc. Shell State #3 Flowline Leak Lea County, NM 33.370932N, 103.653313

Republic Backhoe Service LLC 47. East Dickens Rd Lovington, NM 88260 Date 6/27/2017 Northwest Corner looking to the South.



Read and Stevens Inc. Shell State #3 Flowline Leak Lea County, NM 33.370932N, 103.653313

Republic Backhoe Service LLC 47. East Dickens Rd Lovington, NM 88260 Date 6/27/2017 Hard Caliche Shell made for slow digging in the center.



Read and Stevens Inc. Shell State #3 Flowline Leak Lea County, NM 33.370932N, 103.653313 Republic Backhoe Service LLC 47. East Dickens Rd Lovington, NM 88260

Date 6/27/2017 Backfilled South Side and Continued to dig out the Center.





Lea County, NM 33.370932N, 103.653313

47. East Dickens Rd Lovington, NM 88260

6/29/2017 **Prepared Center Area for Liner**










Appendix VIII C-141

District I 1625 N. French Dr., Hobbs, NM 88240 District II		f New Mexico s and Natural Resou	irces	Form C+14 Revised August 8, 201				
811 S. First St., Artesia, NM 88210 District III	Oil Com	ervation Division	Su	bmit 1 Com	y to appropri	ate District Office		
1000 Rio Brazos Road, Aztec, NM 87410		th St. Francis Dr.		a	coordance w	ith 19.15.29 NMA		
District IV 1220 S. St. Francis Dr., Sania Fe, NM 87505		a Fe, NM 87505						
	Release Notificati		ive Action	n				
		OPERATOR Initial Report Final Re						
Name of Company Read and Ste		Contact Joe Tova						
Address P.O Box 1518 Roswell, Nm Facility Name Shall State #3	88202	a wingerman a tur	(575) 390-3425 Il Well/Fitzwiine					
	146		a train to and	LADIN	201	0002-111		
Surface Owner State	Mineral Owne	Quality	2	APIN	0. 10000	7523014		
Unit Letter Section Township F	second	DN OF RELEASE th/South Line Feet fro		West Line	County			
Cint Letter Section Township P	sauge reernomme room	up doute Line. Fred its	ALL LARE	west line	county			
C 18 [15	33E 660	FNL 25	780	FWL.		LEA		
	Latitude 33.371284	Longitude -103.85	55681					
	NATUR	E OF RELEASE						
Type of Release Oil and Produced V	Nater	Volume of Release			Recovered			
Source of Release Flowline Leak Was Immediate Notice Given?		Date and Hour of O If YES, To Whom?		7 Date and	Hour of Dis	covery 1/24/17/8 4		
	Yes 🛛 No 🗌 Not Require	d No						
	Yes 🔯 No 🗋 Not Require	d No Date and Hour N	A.					
By Whom? N/A Was a Watercourse Reached?		140		lercourse.				
By Whom? N/A Was a Watercourse Reached?	Yes 🕅 No	Date and Hour N		tercourse.				
By Whom? N/A Was a Watercourse Reached?	Yes 🔯 No Fully.* af Action Taken.*	Date and Hour N If YES, Volume Im N/A	pacting the Wa		ew was calle	d out to the site and		
By Whom? N/A Was a Watercourse Reached? If a Watercourse was Impacted, Describe N/A. Describe Cause of Problem and Remedia The contract pumper noticed the flowline	Yes 🔯 No Fully.* af Action Taken.*	Date and Hour N If YES, Volume Im N/A	pacting the Wa		ew was called	d out to the site and		
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By Whom? N/A Was a Watercourse Reached? If a Watercourse Reached? If a Watercourse was Impacted, Describe N/A Describe Cause of Problem and Remedia The contract pumpler noticed the flowline repaired the ruptured flowline. Describe Area Affected and Cleanup Act The area that was affected measures approx. 10 Describe Area Affected and Cleanup Act The area that was affected measures approx. 10 Describe Area Affected and Cleanup Act The area that was affected measures approx. 10 Describe Area Affected and Cleanup Act The area that was affected measures approx. 10 Describe Area Affected and Cleanup Act The area that was affected measures approx. 10 Describe Area Affected and Cleanup Act The area that was affected measures to Gare were taken to Cardinal Lats on 1-31-2017 Thereby certify that the information give	Yes 🔯 No Fully.* If Action Taken.* leak approx 730' east of the pu tion Taken.* 10'X 100. Clean up began the day dy Marley. As of 2-1-17 a total of 38 on above is true and complete to report and/or file certain release complete and remed D seceptiance of a C-141 report parately investigate and remed D seceptiance of a C-141 report	Date and Hour N If YES, Volume Im N/A mp jack. He then turned o after the spil was discovered 0 yards had been hauled off o the best of my knowled motifications and perfor the NMOCD marked as after outminution that p does not relieve the ope	pacting the Wa aff and shut in th (1-25-17). A tead to Gandy Markey (1) ge and undersit m corrective ac "Final Report" ose a threat to g stater of response	e well. A cr show and bell inc. Also, beg ind third pur tions for rel does not rel ground wate stibility for c	ly dump began gan to delineat suum to NM leases which lieve the ope m, surface wa compliance v	to escavate and hau a the spill site, and sa OCD rules and may endanger rator of liability der, human health with any other		
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Appendix IX Seed Mixture

ood Co	mna	ny In	c	
		-		TX00905
			Sales # S	0-60263
Pure Seed	Germ	Dormant	Hard Seed	Origin
4.32%	82.00%	14.00%	0.00%	· TX
7.22%	90.00%	5.00%	0.00%	
5.86%	96.00%	0.00%	0.00%	тх
5.49%	31.00%	63.00%	0.00%	
1.98%	85.00%	0.00%	0.00%	OR
19.49%	94.00%	0.00%	0.00%	NM
22.06%	46.00%	39.00%	0.00%	KS
7.82%	95.00%	0.00%	0.00%	TX
	Image: 1800 Mix 350 Bit Pure Seed 4.32% 7.22% 5.86% 5.49% 1.98% 19.49% 22.06%	Image: Constraint of the section of the sec	Image: Non-State State St	Mix 350 Bulk in 25 Sales # S Pure Seed Germ Dormant Hard Seed 4.32% 82.00% 14.00% 0.00% 7.22% 90.00% 5.00% 0.00% 5.86% 96.00% 0.00% 0.00% 5.49% 31.00% 63.00% 0.00% 1.98% 85.00% 0.00% 0.00% 19.49% 94.00% 0.00% 0.00% 22.06% 46.00% 39.00% 0.00%

Appendix X Cardinal Lab Results



February 03, 2017

JOE TOVAR READ & STEVENS P.O. BOX 1719 LOVINGTON, NM 88260

RE: SHELL STATE

Enclosed are the results of analyses for samples received by the laboratory on 02/02/17 14:46.

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/ga/lab_accred_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.

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. Keine

Celey D. Keene Lab Director/Quality Manager

Page 1 of 6



Analytical Results For:

READ & STEVENS JOE TOVAR P.O. BOX 1719 LOVINGTON NM, 88260 Fax To: not given

Received:	02/02/2017	Sampling Date:	02/01/2017
Reported:	02/03/2017	Sampling Type:	Soil
Project Name:	SHELL STATE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	SHELL #3		

Sample ID: SHELL 6 (H700253-01)

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	02/03/2017	ND	2.19	109	2.00	0.644	
Toluene*	0.051	0.050	02/03/2017	ND	2.15	107	2.00	0.651	
Ethylbenzene*	<0.050	0.050	02/03/2017	ND	2.15	107	2.00	0.687	
Total Xylenes*	<0.150	0.150	02/03/2017	ND	6.07	101	6.00	0.556	
Total BTEX	<0.300	0.300	02/03/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID	103	% 73.6-14	10					
TPH 8015M	mg	/kg	Analyze	d By: MS			1.1	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	
GRO C6-C10	<10.0	10.0	02/02/2017	ND	192	96.0	200	

02/02/2017

204

ND

102

Surrogate: 1-Chlorooctane 96.5 % Surrogate: 1-Chlorooctadecane 107 %

49,3

10.0

35-147

28-171

DR0 >C10-C28

Cardinal Laboratories

*=Accredited Analyte

RPD

10.2

9.69

200

Qualifier

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Analytical Results For:

READ & STEVENS JOE TOVAR P.O. BOX 1719 LOVINGTON NM, 88260 Fax To: not given

Received:	02/02/2017	Sampling Date:	02/01/2017
Reported:	02/03/2017	Sampling Type:	Soil
Project Name:	SHELL STATE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	SHELL #3	10 July 10 10 10 10 10 10 10 10 10 10 10 10 10	

Sample ID: SHELL 7 (H700253-02)

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	02/03/2017	ND	2.19	109	2.00	0.644	
Toluene*	<0.050	0.050	02/03/2017	ND	2.15	107	2.00	0.651	
Ethylbenzene*	<0.050	0.050	02/03/2017	ND	2.15	107	2.00	0.687	
Total Xylenes*	<0.150	0.150	02/03/2017	ND	6.07	101	6.00	0.556	
Total BTEX	<0.300	0.300	02/03/2017	ND					

Surrogate: 4-Bromofluorobensene (PID	103	% 73.6-14	0						
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	02/02/2017	ND	192	96.0	200	10,2	
DR0 >C10-C28	24.1	10.0	02/02/2017	ND	204	102	200	9.69	

Surrogate: 1-Chlorooctadecane 81.2% 28-171

Cardinal Laboratories

*=Accredited Analyte

REACE WOTE Linkshy and Example. Controls beinty and electr actuative wavely for any name stated whether based to notice or bot, shall be instant to the ansunt pair by dent for manipus. All daims, including those for mappings and any other name websitewer whether website and in a website on restant by Cardinal web being 100 days that completes of the applicable averse. We not weak call instants to be based or included or consequential damapae, including website instantion, business memory of use or loss of under increasing by clear, the autobase, websites or successore strang out of or website to be performance of the service beamder by Cardinal, websites and their hand upon part of the above states or dawnes. Successore beamder by clear, the autobase, websites or successore strang out of or website to the performance of the service beamder by Cardinal, websites and their hand upon part of the above states or dawnes. Successore beamder by clear, the instant cardinal constrat.

Celling T. Freeze

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

READ & STEVENS JOE TOVAR P.O. BOX 1719 LOVINGTON NM, 88260 Fax To: not given

Received:	02/02/2017	Sampling Date:	02/01/2017
Reported:	02/03/2017	Sampling Type:	Soil
Project Name:	SHELL STATE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	SHELL #3		

Sample ID: SHELL 5 (H700253-03)

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	02/03/2017	ND	2.19	109	2.00	0.644	
Toluene*	<0.050	0.050	02/03/2017	ND	2.15	107	2.00	0.651	
Ethylbenzene*	<0.050	0.050	02/03/2017	ND	2.15	107	2.00	0.687	
Total Xylenes*	<0.150	0.150	02/03/2017	ND	6.07	101	6.00	0.556	
Total BTEX	<0.300	0.300	02/03/2017	ND					

Surrogate: 4-Bromofluorobenzene	PID	103 %	73.6-140
---------------------------------	-----	-------	----------

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	02/02/2017	ND	192	96.0	200	10,2	
DRO >C10-C28	58.1	10.0	02/02/2017	ND	204	102	200	9,69	

Surrogate: 1-Chlorooctane 81.3 % 35-147 Surrogate: 1-Chlorooctadecane 88.9 % 28-171

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Cardinal Laboratories

Celey D. Keene, Lab Director/Quality Manager

Page 4 of 6



Notes and Definitions

QR-02	The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
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.
- C	Chloride by SM4500G-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

RUSEI NOTE Looling and Damage. Contrarts lability and clients exclusion revealsy for any cases aroung, whether based in contract or bot, dual be limited to the annuant paid by direct for analyses. All claims, including those for magingers and any other, cause extensiver shall be derevel adults runks in writing and receased by Control writing. They are completed on the applicable periods. In or event paid Looking to be block for including whether based including, whether therein, here the analyzed on the analyzed on the analyzed on the annual shall be performed on the analyzed on the calified on the analyzed on the

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Celey D. Keene, Lab Director/Quality Manager

Page 5 of 6

Adde note: Linking or Charges, Capacity and you have a series and a series of the series of the series and a series of the series of	International Antipart Antipar
Received By: MUMABLE Pro	GROUNDWATER WASTEWATER WASTEWATER Soil OIL SULUGE OTHER ACIDIBASE KEZ (CODL OTHER ACIDIBASE KEZ (CODL OTHER ACIDIBASE
Jashuran Andre Addrightone E. Andre Addrightone E. Angele	CHAIN-OF-CUSTODY AND ANALYSIS REQUEST Hevens Plaza Plaza Bisep Bisep V V



February 06, 2017

ERIC GARCIA REPUBLIC BACKHOE SERVICES 47 E. DICKENS RD LOVINGTON, NM 88260

RE: READ & STEVENS #3

Enclosed are the results of analyses for samples received by the laboratory on 01/31/17 12:50.

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/ga/lab_accred_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.

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. Keine

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:	01/31/2017	Sampling Date:	01/30/2017
Reported:	02/06/2017	Sampling Type:	Soil
Project Name:	READ & STEVENS #3	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Celey D. Keene
Project Location:	LEA COUNTY, NM		

Sample ID: 2 (H700227-01)

Chloride, SM4500CI-B	mg,	/ Kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2200	16.0	02/03/2017	ND	416	104	400	3.77	

Sample ID: 5 (H700227-02) Chinaida Chiasonora n

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AC	_				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2480	16.0	02/03/2017	ND	416	104	400	3.77	

Sample ID: 7 (H700227-03)

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2080	16.0	02/03/2017	ND	416	104	400	3.77	

Cardinal Laboratories

*=Accredited Analyte

AUXEL NOTE: Liability and Damage. Controls builty and clearls endedy more any data study, whether based is contract or tort, shall be insted to the annual paid by deet for scalpes. Will deep the scale to any differ cause shatments that he deeped whether liability and research and by Cartonic whether binds (10) days after cause shatments that he deeped whether liability and research by Cartonic whether binds (10) days after cause shatments that he deeped whether liability and research by Cartonic whether binds (10) days after cause shatments after binds (10) days after an annual state of a state based of the performance of the same behavior by Cartonic whether such clinic based person of state shatments of state based of the same behavior by Cartonic whether such clinic based person of state shatments of states based whether based by Cartonic whether such clinic based person of datability clinic based persons of states and states of states based and the states and states after based by Cartonic whether such clinic based persons of states and states of states based and states after based by Cartonic whether such clinic based persons of datability clinic based persons of states and states after based by Cartonic whether such clinic based persons of states and states after based by Cartonic based by Cartonic

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Celey D. Keene, Lab Director/Quality Manager

Page 2 of 4



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 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

Cardinal Laboratories

*=Accredited Analyte

REACE NOTE: Unlikely and Europe. Control's boldly not check enclude menely for any caim study whethel based in contract or loss, shall be limited to the annual part by deet for scalpane. All daims, including toose for reapigence and any other cases whethere shall be deened whether made in writing and network by Controls whethel the completion of the anglebal annex. It is no week shall Control whether and the control damage, including whether howhere interpreting loss of any or loss of profile locarity by deet, by submitting without interpreting and or of a watch to be performance of the annious beauder by Control, regarding a state and control in the other approach and of the annious beauder by Control, regarding a state and control in the other approach and control interpreting locarity.

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Celey D. Keene, Lab Director/Quality Manager

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February 23, 2017

ERIC GARCIA REPUBLIC BACKHOE SERVICES 47 E. DICKENS RD LOVINGTON, NM 88260

RE: SHELL ST#3

Enclosed are the results of analyses for samples received by the laboratory on 02/16/17 9:30,

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/ga/lab_accred_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.

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. Keine





Analytical Results For:

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

Received:	02/16/2017	Sampling Date:	02/15/2017
Reported:	02/23/2017	Sampling Type:	Soil
Project Name:	SHELL ST#3	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	TATUM		

Sample ID: NS 1 (H700398-01)

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AC	_				_
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	624	16.0	02/20/2017	ND	448	112	400	0.00	

Sample ID: NS 2 (H700398-02)

Childride, SH4500CFB	119	/ NY	Analyze	u by Ac					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	02/20/2017	ND	448	112	400	0.00	

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Sample ID: NS 3 (H700398-03)

Chioride, SM4500CI-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	02/20/2017	ND	448	112	400	0.00	

Sample ID: NS 4 (H700398-04)

Chloride, SM4500CI-B	mg/kg	Analyzed By: AC	
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Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	02/20/2017	ND	448	112	400	0.00	

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Analytical Results For:

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

Received:	02/16/2017	Sampling Date:	02/15/2017	
Reported:	02/23/2017	Sampling Type:	Soil	
Project Name:	SHELL ST#3	Sampling Condition:	Cool & Intact	
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson	
Project Location:	TATUM			

Sample ID: N 2 (H700398-05)

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BIEX SUZIB	mg,	/Kg	Analyze	Analyzed Byt MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/19/2017	ND	2.02	101	2.00	7.72	
Toluene*	<0.050	0.050	02/19/2017	ND	1.88	94.2	2.00	9.17	
Ethylbenzene*	<0.050	0.050	02/19/2017	ND	1.84	92.0	2.00	12.1	
Total Xylenes*	<0.150	0.150	02/19/2017	ND	5.25	87.4	6.00	12.0	
Total BTEX	<0.300	0.300	02/19/2017	ND					

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Surrogate: 4-Bromofluorobenzene (PID	98.0	% 73.6-14	0						
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifi
GRO C6-C10	<10.0	10.0	02/17/2017	ND	187	93.3	200	0.843	
DRO >C10-C28	<10.0	10.0	02/17/2017	ND	201	100	200	0,331	

Sample ID: N2 C (H700398-06)

79.9%

89.8%

35-147

28-171

Surrogate: 1-Chlorooctane

Surrogate: 1-Chiorooctadecane

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	02/21/2017	ND	448	112	400	0.00	

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*=Accredited Analyte

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REACH NOTE: Likelity and Exercises. Conclusive balance of each actions manage for any data arising, whether based is contract or tord, shall be insted to the arroant and by dest for analyses. All chains, including those for supplement and any data arising whether based is contract or tord, shall be insted to the arroant and by dest for analyses. All chains, including those for supplement and any data arising whether based is contract are indicated to the arroant and by dest for analyses. All chains, including those for supplement and are shall be arroant and arising whether based is complement of the applicable and reads. In or west that includes the tordeal by Cantal weeks is a subdataway without branches, because the performance of the perfor

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Analytical Results For:

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

Received:	02/16/2017	Sampling Date:	02/15/2017
Reported:	02/23/2017	Sampling Type:	Soil
Project Name:	SHELL ST#3	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	TATUM		

Sample ID: NE 0 (H700398-07)

RTEY 80718

DIEX OUZID	ing.	NY	Analyze	Analyzed by his					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/19/2017	ND	2.02	101	2.00	7.72	
Toluene*	<0.050	0.050	02/19/2017	ND	1.88	94.2	2.00	9.17	
Ethylbenzene*	<0.050	0.050	02/19/2017	ND	1.84	92.0	2.00	12.1	
Total Xylenes*	<0.150	0.150	02/19/2017	ND	5.25	87.4	6.00	12.0	
Total BTEX	<0.300	0.300	02/19/2017	ND					

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Surrogate: 4-Bromofluorobenzene (PID 99.0 % 73.6-140

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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	02/17/2017	ND	187	93.3	200	0.843	
DRO >C10-C28	<10.0	10.0	02/17/2017	ND	201	100	200	0,331	
Surrogate: 1-Chlorooctane	85.9	% 35-147							

Surrogate: 1-Chiorooctadecane 93.3 % 28-171

Sample ID: NE O C (H700398-08)

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	02/21/2017	ND	448	112	400	0.00	

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REACH NOTE: Unabley and Damagas. Controls balliny and clearts excludes manely for any data arising, whether based is contract or tort, shall be instant to be service and by cleart for analyses. All claims, including those for suggestee and any differ class whethere that a whether class whethere that is completed or differ applicable and/es. To event shall be service and the service and product exceedence by Canthes, whethere and comits that service or phrase control service and the service and complete and whether and comits that service or phrase control service and the service and complete and the service and the

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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:	02/16/2017	Sampling Date:	02/15/2017
Reported:	02/23/2017	Sampling Type:	Soil
Project Name:	SHELL ST#3	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	TATUM		

Sample ID: NW 6 (H700398-09)

mg,	/kg	Analyzed By: MS						
Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<0.050	0.050	02/19/2017	ND	2.02	101	2.00	7.72	
<0.050	0.050	02/19/2017	ND	1.88	94.2	2.00	9.17	
<0.050	0.050	02/19/2017	ND	1.84	92.0	2.00	12.1	
<0.150	0.150	02/19/2017	ND	5.25	87.4	6.00	12.0	
<0.300	0.300	02/19/2017	ND					
	Result <0.050 <0.050 <0.050 <0.050	<0.050 0.050 <0.050 0.050 <0.050 0.050 <0.150 0.150	Result Reporting Limit Analyzed <0.050	Result Reporting Limit. Analyzed Method Blank <0.050	Result Reporting Limit Analyzed Method Blank B5 <0.050	Result Reporting Limit Analyzed Method Blank BS % Recovery <0.050	Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC <0.050	Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC RPD <0.050

Surrogate: 4-Bromofluorobenzene (PID TPH 8015M	98.8 mg			d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Quaifier
GRO 06-C10	<10.0	10.0	02/17/2017	ND	187	93.3	200	0.843	
DRO >C10-C28	<10.0	10.0	02/17/2017	ND	201	100	200	0.331	
Surrogate: 1-Chlorooctane	81.9	% 35-14	,			1.1			

Surrogate: 1-Chlorooctadecane 93.6 % 28-171

Sample ID: NW 9 C (H700398-10)

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit:	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Quaifier
Chloride	16.0	16.0	02/21/2017	ND	448	112	400	0.00	

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Analytical Results For:

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

Received:	02/16/2017	Sampling Date:	02/15/2017
Reported:	02/23/2017	Sampling Type:	Soil
Project Name:	SHELL ST#3	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	TATUM		

Sample ID: W 2 (H700398-11)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/19/2017	ND	2.02	101	2.00	7.72	
Toluene*	<0.050	0.050	02/19/2017	ND	1.88	94.2	2.00	9.17	
Ethylbenzene*	<0.050	0.050	02/19/2017	ND	1.84	92.0	2.00	12.1	
Total Xylenes*	<0.150	0.150	02/19/2017	ND	5.25	87.4	6.00	12.0	
Total BTEX	<0.300	0.300	02/19/2017	ND					

with the second s			and in such
Surrogate: 4-Bromofluorobenzene	(PIL)	98.5%	73.6-140

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	02/17/2017	ND	191	95.4	200	0.386	
DRO >C10-C28	<10.0	10.0	02/17/2017	ND	206	103	200	2.88	
Surrogate: 1-Chlorooctane	83.0	% 35-147							

Surrogate: 1-Chlorooctadecane 99.6% 28-171

Sample ID: W2 C (H700398-12)

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	02/21/2017	ND	448	112	400	0.00	

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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:	02/16/2017	Sampling Date:	02/15/2017
Reported:	02/23/2017	Sampling Type:	Soil
Project Na	me: SHELL ST#3	Sampling Condition:	Cool & Intact
Project Nu	mber: NONE GIVEN	Sample Received By:	Jodi Henson
Project Los	ation: TATUM	the contractes	

Sample ID: E 2 (H700398-13)

BTEX 80218	mg	/kg	Analyze	Analyzed By: MS					
Analyte	Resut	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/19/2017	ND	2.02	101	2.00	7.72	
Toluene*	<0.050	0.050	02/19/2017	ND	1.88	94.2	2.00	9.17	
Ethylbenzene*	< 0.050	0.050	02/19/2017	ND	1.84	92.0	2.00	12.1	
Total Xylenes*	<0.150	0.150	02/19/2017	ND	5.25	87.4	6.00	12.0	
Total BTEX	<0.300	0.300	02/19/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID TPH 8015M	98.0 % 73.6-140 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	02/17/2017	ND	191	95.4	200	0.386	
DRO >C10-C28	<10.0	10.0	02/17/2017	ND	206	103	200	2.88	
Surrogate: 1-Chlorooctane	\$2.5	% 35-147							

Surrogate: 1-Chlorooctadecane 90.3 % 28-171

Sample ID: E2 C (H700398-14)

Chloride, SM4500CI-B	ing,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit.	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	02/21/2017	ND	448	112	400	0.00	

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Analytical Results For:

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

Received:	02/16/2017	Sampling Date:	02/15/2017
Reported:	02/23/2017	Sampling Type:	Soil
Project Name:	SHELL ST#3	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	TATUM	March Constant Mar	

Sample ID: S 2 (H700398-15)

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	02/19/2017	ND	2.16	108	2,00	0.378	
Toluene*	<0.050	0.050	02/19/2017	ND	2.03	102	2.00	0.392	
Ethylbenzene*	<0,050	0.050	02/19/2017	ND	2.05	103	2.00	0.236	
Total Xylenes*	<0.150	0.150	02/19/2017	ND	5.85	97.5	6.00	0.262	
Total BTEX	<0.300	0.300	02/19/2017	ND					

a stand and a stand

Surrogate: 4-Bromo	fluorobenzene	(PID	98.5%	73.6-140

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	02/17/2017	ND	191	95.4	200	0.386	
DRO >C10-C28	<10.0	10.0	02/17/2017	ND	206	103	200	2.88	
Surrogate: 1-Chlorooctane	77.1	% 35-147	,						

Surrogate: 1-Chiorooctadecane 84.2% 28-171

Sample ID: 52 C (H700398-16)

Chloride, SM4500Cl-B	mg	mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	02/21/2017	ND	448	112	400	0.00	

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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:	02/16/2017	Sampling Date:	02/15/2017	
Reported:	02/23/2017	Sampling Type:	Soil	
Project Name:	SHELL ST#3	Sampling Condition:	Cool & Intact	
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson	
Project Location:	TATUM			

Sample ID: SW 0 (H700398-17)

BTEX 8021B	mg/kg		Analyze	Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/19/2017	ND	2.16	105	2.00	0.378	
Toluene*	<0.050	0.050	02/19/2017	ND	2.03	102	2.00	0.392	
Ethylbenzene*	<0.050	0.050	02/19/2017	ND	2.05	103	2.00	0.236	
Total Xylenes*	<0.150	0.150	02/19/2017	ND	5.85	97.5	6.00	0.262	
Total BTEX	<0.300	0.300	02/19/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID TPH 8015M	99.8 mg		7	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/17/2017	ND	191	95.4	200	0.386	
DRO >C10-C28	<10.0	10.0	02/17/2017	ND	206	103	200	2.88	
Surrogate: 1-Chlorooctane	84.9	% 35-14	7						

Surrogate: 1-Chiorooctadecane	95.1 %	28-171

Sample ID: SW 1 C (H700398-18)

Chloride, SM4500CI-B	mg	mg/kg		Analyzed By: AC				_	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	02/21/2017	ND	448	112	400	0.00	

Cardinal Laboratories

*=Accredited Analyte

RUAR NOTE: Liabley and Damagas. Controls bolley and clearly exclusive sensely for any clean straing whether based to contract or tort, shall be insted to the annual paid by clear for analyses. W clearly relating these to resplace and any discr cause whether state of the applicable advices. It is never that is denoted asked or terms and and a probe based by clearly within straing whether based to contract or tort, shall be insted to its annual paid by clear the relations of the applicable advice. This or went shall clearly based for incident in consequential damages, including whether based to probe based by clear the autochance, without on the advices and down whether such came based upon of down based to the applicable advices. The applicable advices are applied of down based to be adviced at the applicable advice at the advices of the annual to advice advice at the advices of the advices of the advices of advices advices. The applicable advices are approxed in advices of advices to advice the advices of advices the advices of advices advices at the advices of advices advices at the advices of advices to advice the advices of advices the advices of advices advices at the advices of advices to advice the advices of advices the advices of advices advices at the advices of advices advices at the advices of advices to advice the advices ad

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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:	02/16/2017	Sampling Date:	02/15/2017
Reported:	02/23/2017	Sampling Type:	Soil
Project Name:	SHELL ST#3	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	TATUM		

Sample ID: SE 2 (H700398-19)

BTEX 80218 Analyzed By: MS mg/kg Analyte Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC RPD Qualifier 108 < 0.050 0.050 02/19/2017 2.00 0.378 Benzene* ND 2.16 02/19/2017 Toluene* < 0.050 0.050 ND 2.03 102 2.00 0.392 Ethylbenzene* < 0.050 0.050 02/19/2017 ND 2.05 103 2.00 0.236 Total Xylenes* 0.150 02/19/2017 97.5 6.00 <0.150 ND 5.85 0,262 Total BTEX <0.300 0.300 02/19/2017 ND

Surrogate: 4-Bromofluorobenzene (PII)	99.5	% 73.6-14	0						
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	02/17/2017	ND	191	95.4	200	0.386	
DRO >C10-C28	<10.0	10.0	02/17/2017	ND	206	103	200	2.88	

Sample ID: SE 2 C (H700398-20)

83.7%

94.0%

35-147

28-171

Surrogate: 1-Chlorooctane

Surrogate: 1-Chlorooctadecane

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	02/21/2017	ND	448	112	400	0.00	

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RUGE NOTE: Loadily and tensory. Casteria loadily and clients exclusive remark for any carm many, whether based in contract or bot, data is instead to the annual paid by deet for analyses. All dams, including boos for sequences and any diver caree whethere that is deened used unkern made in writing and received by Castera well both, they (D) days play and provide a transport of the applicable ports. To never data Casteral is baile for incoment or consequential damage, including, which iterations, how of any of the provide to the advectory. Within a neuroscent and go of or which to the advectory, advector to be involved in any of the advectory advectory of the service inservice in the involved in any of the advectory and of the advectory advectory and the advectory advectory of the advectory advecto

Cellez Di Keine





Notes and Definitions

QR-02	The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
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.
4	Chloride 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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RUBEL MOTE: Labely and Decays. Control's holds and clears actives movedy for any claim states, whether tasks in control or tort, shall be limited to the amount paid by deet for analyses. All claims, including these for any other cause electrones that be deened whether makes in antipy and received by Carthal wheth tary (D) days and the completion of the applicable annies. In one west that Carthal be labels for including these for any other states, whether is and datases, and the completion of the applicable annies. In one west that Carthal be labels for including whether is additioned, whether is additioned, whether is additioned or accession at any other of the anniest beausion beausions by Carthal, regarding of whether each claim tabactopies and flat above. This pair data tables have additioned and that the datase and the applicable annies.

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

Page 11 of 13



and the state of t				Sampler Name: GAC (10	Project Name: Shell 8+#3	Phone # 575-90-2035	SE Y7 E Dic	Gora	101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476 Company Name: Kc Olthic KovKov	Laboratories
Time: Time: C, C, C		× 828 9	(G)RAB OR (C)OMP W CONTAINERS GROUNDWATER WASTEWATER SOIL OIL OIL SLUDGE OTHER ACID/BASE ICE / CCOL OTHER	HCLC FAX #: FAX #:	project Owner: Read to	State: N/172p: XX2(20 Attn: Fax #: S75-39(6-7782 Address:	Rd company:	P.O. 养	1065, NM 88240 (575) 393-2476 8/11 70	
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February 23, 2017

ERIC GARCIA REPUBLIC BACKHOE SERVICES 47 E. DICKENS RD LOVINGTON, NM 88260

RE: SHELL ST#3

Enclosed are the results of analyses for samples received by the laboratory on 02/17/17 9:17.

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 <u>www.tceq.texas.gov/field/ga/lab_accred_certif.html</u>.

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.

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. Keine

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

	and a state of the		100000000000000000000000000000000000000
Received:	02/17/2017	Sampling Date:	02/16/2017
Reported:	02/23/2017	Sampling Type:	Soil
Project Name:	SHELL ST#3	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	TATUM		

Sample ID: C 10' (H700413-01)

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	02/21/2017	ND	2.12	106	2.00	3.29	
Toluene*	<0.050	0.050	02/21/2017	ND	1.98	98.9	2.00	2.98	
Ethylbenzene*	<0.050	0.050	02/21/2017	ND	1.96	98.2	2.00	2.35	
Total Xylenes*	<0.150	0.150	02/21/2017	ND	5.65	94.1	6.00	2.87	
Total BTEX	<0.300	0.300	02/21/2017	ND					

TPH 8015M	mg	/kg	Analyze	d By: MS	_				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO 06-C10	<10.0	10.0	02/17/2017	ND	182	90.9	200	3.52	
DRO >C10-C28	<10.0	10.0	02/17/2017	ND	185	92.5	200	8.68	

73.6-140

35-147 28-171

Surrogate: 1-Chlorooctadecane 98.5 %

84.7%

Surrogate: 4-Bromofluorobenzene (PID 99.0 %

Sample ID: CENTER 15' (H700413-02)

Chloride, SM4500CI-B	ing	/kg	Analyze	d By: AC			_	_	-
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	02/17/2017	ND	416	104	400	0.00	

Cardinal Laboratories

Surrogate: 1-Chlorooctane

*=Accredited Analyte

RUSCE NOTE: Unlishing and Europea. Constraints builty, and clearts exclusive encodes for any categories and any other completes of stars, and and a second any other cases extractioner while the second encoded on the second encoded encoded on the second encoded encod

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Notes and Definitions

QM-07	The spike recovery was outside acceptance limits for the MS and/or MSO. The batch was accepted based on acceptable LCS recovery.
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 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

Cardinal Laboratories

*=Accredited Analyte

RUSCE NOTE: Underly and Decompose. Excedently holds not determined where we does stating whether based in contract or tort, shall be limited to the arrowst paid by devel for analyses. All datase, including those for analyses what here a between their limit of the arrowst by Cardinal whether based in contract or tort, shall be limited to the arrowst paid by devel for analyses. All datase, including those for analyses what here are all datases made in writing and measure the Cardinal Webs torty. (D) datase take completion of the applicable service. In so west the Cardinal her limits of the arrowst terminal to the particular state to the arrowst terminal terminal

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Celey D. Keene, Lab Director/Quality Manager

Page 3 of 4
Palada furiti: Linalin en Deregan. Contents hability and alority restances in andress. It is a contractive transformation of any other crume without andress of the sector state for extend or the product at a content of address of the sector and the for extended by: Relinquished By: Relinquished By: Delivered By: (Circle One) Sampler - UPS - Bus - Other: Three Date:	Initiand, Hobs, NM 88240 Initiand, Hobs, NM 88240 (875) 393-2326 FAX (675) 393-2476 Company Name: Republic Davines FAX (675) 393-2476 Project Manager: Fric, Gordia, Address: YT E Dickens Id Address: YT E Dickens Id State: NIM Zip: Broject Manager: Fric, Gordia, Address: YT E Dickens Id Project Manager: Fric, Gordia, Address: YT E Dickens Id Project Name: Fric, Gordia, State: NIM Zip: Broject Anne: State: NIM Zip: Broject Owner: Faad Project Name: State: NIM Zip: Broject Owner: Faad Project Courcia Sampler Name: Frict, Gordia, Sample I.D., Lab I.D., Lab I.D., Zip: Container 10041/3 CIO G 2 Center IS' G 3 CIO G
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The spectra the spectra stars stars Securit: U Yes U No Add? Phone #: Securit: U Yes U No Add? Phone #: Securit: U Yes U No Add? Fixer #: Securit: Securit: Se	CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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March 28, 2017

ERIC GARCIA REPUBLIC BACKHOE SERVICES 47 E. DICKENS RD LOVINGTON, NM 88260

RE: SHELL ST#3

Enclosed are the results of analyses for samples received by the laboratory on 03/24/17 13:00,

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/ga/lab_accred_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.

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. Keine

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:	03/24/2017	Sampling Date:	03/24/2017
Reported:	03/28/2017	Sampling Type:	Soil
Project Name:	SHELL ST#3	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	TATUM		

Sample ID: NS 1 - 10 (H700785-01)

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	03/27/2017	ND	1.98	98.8	2.00	5.25	
Toluene*	0.072	0.050	03/27/2017	ND	1.91	95.7	2.00	5.03	
Ethylbenzene*	<0.050	0.050	03/27/2017	ND	1.91	95.5	2.00	4.71	
Total Xylenes*	<0.150	0.150	03/27/2017	ND	5.44	90.7	6.00	4.67	
Total BTEX	<0.300	0.300	03/27/2017	ND					

Surrogate: 4-Bromofluorobensene (PID 98.2% 72-148

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/27/2017	ND	432	108	400	3.77	
TPH 8015M	mg	/kg	Analyze	d By: MS	1.2		-	1.1	
Analyte	Result	Reporting Limit:	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO 06-C10	<10.0	10.0	03/27/2017	ND	181	90.6	200	0.163	
DRO >C10-C28	<10.0	10.0	03/27/2017	ND	189	94.5	200	0.743	
Surrogate: 1-Chlorooctane	89.9	% 25.1-15	8						

Surrogate: 1-Chlorooctadecane 93.7% 26.8-170

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*=Accredited Analyte

RUALE NOTE: Labelty and Damages. Cardina's facility and clients encloses mersely for any client among whether based in contact or tort, dhall be limited to the annual part by client and any other among whether based in contact or tort, dhall be limited to the annual part by client and any other among whether based in contact or tort, dhall be limited to the annual part by client and any other among whether based in contact or tort, dhall be limited to the annual part by client and any other among whether based in contact or tort, dhall be limited to the annual part by client and any other among whether based in a contact or tort, dhall be limited to the annual part by client and any other among and manage, including whether the completion of the applicable and/es. To no event dhall clients be based for bollewest or company and any other among and managed and and any other and and any other and and any other among and and any other among and and any other and and any other any other among and and any other any other and and any other a

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Analytical Results For:

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

 Received:
 03/24/2017

 Reported:
 03/28/2017

 Project Name:
 SHELL ST#3

 Project Number:
 NONE GIVEN

 Project Location:
 TATUM

Sampling Date: Sampling Type: Sampling Condition: Sample Received By:

03/24/2017 Soil Cool & Intact Tamara Oldaker

Qualifier

Sample ID: NS 2 - 10 (H700785-02)

Total BTEX

BTEX 80218 Analyzed By: MS mg/kg Analyte Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC RPD Benzene* < 0.050 0.050 03/27/2017 ND 1.98 98.8 2.00 5.25 Toluene* <0.050 0.050 03/27/2017 ND 1.91 95.7 2.00 5.03 Ethylbenzene* < 0.050 0.050 03/27/2017 ND 1.91 95.5 2.00 4.71 0.150 5.44 Total Xylenes* <0.150 03/27/2017 ND 90.7 6.00 4.67

03/27/2017

Surrogate: 4-Bromofluorobenzene (PID 98.4 % 72-148

<0.300

0.300

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/27/2017	ND	432	108	400	3.77	
TPH 8015M	mg	/kg	Analyze	d By: MS				1.1	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/27/2017	ND	181	90.6	200	0.163	
DRO >C10-C28	<10.0	10.0	03/27/2017	ND	189	94.5	200	0.743	
Surrogate: 1-Chlorooctane	84.4	% 25.1-15	8						
Surrogate: 1-Chlorooctadecane	79.0	% 26.8-17	0						

ND

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03/24/2017

03/28/2017

SHELL ST#3

NONE GIVEN

TATUM

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: Reported: Project Name: Project Number: Project Location: Sampling Date: Sampling Type: Sampling Condition: Sample Received By: 03/24/2017 Soil Cool & Intact Tamara Oldaker

Sample ID: NS 3 - 10 (H700785-03)

BTEX 8021B mg/kg Analyzed By: MS Analyte True Value QC RPD Qualifier Result Reporting Limit Analyzed Method Blank BS % Recovery Benzene* < 0.050 0.050 03/27/2017 ND 1.98 98.8 2.00 5.25 Toluene* 0.050 03/27/2017 2.00 5.03 < 0.050 ND 1.91 95.7 Ethylbenzene* 03/27/2017 2.00 4.71 < 0.050 0.050 ND 1.91 95.5 Total Xylenes* <0.150 0.150 03/27/2017 ND 5.44 90.7 6.00 4,67 Total BTEX <0.300 0.300 03/27/2017 ND

Surrogate: 4-Bromofluorobenzene (PII) Chloride, SM4500Cl-B	97.6 mg			d By: HM					8
Analyte	Result	Reporting Limit:	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/27/2017	ND	432	108	400	3,77	
TPH 8015M	mg	/kg	Analyze	d By: MS		a de la deside			
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO 06-C10	<10.0	10.0	03/27/2017	ND	181	90.6	200	0.163	
DRO >C10-C28	<10.0	10.0	03/27/2017	ND	189	94.5	200	0.743	
Surrogate: 1-Chlorooctane	\$6.8	% 25.1-15	8		-				

Surrogate: 1-Chlorooctadecane 92.7% 26.8-170

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Analytical Results For:

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

Received:	03/24/2017	Sampling Date:	03/24/2017
Reported:	03/28/2017	Sampling Type:	Soil
Project Name:	SHELL ST#3	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	TATUM		
	Reported: Project Name: Project Number:	Reported: 03/28/2017 Project Name: SHELL ST#3 Project Number: NONE GIVEN	Reported: 03/28/2017 Sampling Type: Project Name: SHELL ST#3 Sampling Condition: Project Number: NONE GIVEN Sample Received By:

Sample ID: NS 4 - 10 (H700785-04)

BTEX 8021B		mg/	kg	Analyze	d By: MS			and the state of		
An	alyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*		<0.050	0.050	03/27/2017	ND	1.98	96.8	2.00	5.25	
Toluene*		<0.050	0.050	03/27/2017	ND	1.91	95.7	2.00	5.03	
Ethylbenzene*		<0.050	0.050	03/27/2017	ND	1.91	95.5	2.00	4.71	
Total Xylenes*		<0.150	0.150	03/27/2017	ND	5.44	90.7	6.00	4.67	
Total BTEX		<0.300	0.300	03/27/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID 98.8% 72-148

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/27/2017	ND	432	108	400	3.77	
TPH 8015M	mg	/kg	Analyze	d By: MS		1.10		11	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/27/2017	ND	181	90.6	200	0,163	
DRO >C10-C28	<10.0	10.0	03/27/2017	ND	189	94.5	200	0.743	
Surrogate: 1-Chlorooctane	85.5	% 25.1-15	8						

Surrogate: 1-Chlorooctadecane 86.5 % 26.8-170

Cardinal Laboratories

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Analytical Results For:

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

Received:	03/24/2017	Sampling Date:	03/23/2017
Reported:	03/28/2017	Sampling Type:	Soil
Project Name:	SHELL ST#3	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	TATUM		

Sample ID: N 20 (H700785-05)

alvie									
and the	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
	<0.050	0.050	03/27/2017	ND	1.98	98.8	2.00	5.25	
	<0.050	0.050	03/27/2017	ND	1.91	95.7	2.00	5.03	
	<0.050	0.050	03/27/2017	ND	1.91	95.5	2.00	4.71	
	<0.150	0.150	03/27/2017	ND	5.44	90.7	6.00	4.67	
	<0.300	0.300	03/27/2017	ND					
		<0.050 <0.050 <0.050 <0.150	<0.050 0.050 <0.050 0.050 <0.050 0.050 <0.150 0.150	<0.050	<0.050 0.050 03/27/2017 ND <0.050	<0.050 0.050 03/27/2017 ND 1.98 <0.050	<0.050 0.050 03/27/2017 ND 1.98 98.8 <0.050	<0.050 0.050 03/27/2017 ND 1.98 96.8 2.00 <0.050	<0.050 0.050 03/27/2017 ND 1.98 98.8 2.00 5.25 <0.050

Surrogate: 4-Bromofluorobenzene (PID 98.2% 72-148

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/27/2017	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	03/27/2017	ND	181	90.6	200	0.163	
DRO >C10-C28	<10.0	10.0	03/27/2017	ND	189	94.5	200	0.743	
Surrogate: 1-Chlorooctane	91.9	% 25.1-15	8						
Surrogate: 1-Chlorooctadecane	94.4	% 26.8-17	0						

Cardinal Laboratories

*=Accredited Analyte

RUSSE NOTE: Liability well barrages. Contrarts ballity and client's sociative servely for any client analog, whether based is contract or toric, deal just instead to be servent paid for the contract or ball clients whether based is contract or toric, deal just instead or the contract or toric and to be labeled to contract or toric, deal just instead or the contract or toric and clients. The or exect deal Cantol is labele for includes the servent and to deve to an executing three or exceeded or contract, while the servent and clients have the includes in the servent and the servent and to be served to an or to and or photo increase by clients whether to an executing three or exceeded or exact and the servent and to be served to an or to and or photo increase by direct, the and three, whether to an exact the served to be served by Cantol and the labele for exceeded or exc

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Analytical Results For:

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

Received:	03/24/2017	Sampling Date:	03/23/2017
Reported:	03/28/2017	Sampling Type:	Soil
Project Name:	SHELL ST#3	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	TATUM		

Sample ID: NE 20 (H700785-06)

BTEX 80218 mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/27/2017	ND	1.98	96.8	2.00	5.25	
Toluene*	<0.050	0.050	03/27/2017	ND	1.91	95.7	2.00	5.03	
Ethylbenzene*	<0.050	0.050	03/27/2017	ND	1.91	95.5	2.00	4.71	
Total Xylenes*	<0.150	0.150	03/27/2017	ND	5.44	90.7	6.00	4.67	
Total BTEX	<0.300	0.300	03/27/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID 98.4 % 72-148

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/27/2017	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	03/27/2017	ND	181	90.6	200	0.163	
DRO >C10-C28	<10.0	10.0	03/27/2017	ND	189	94.5	200	0.743	
Surrogate: 1-Chlorooctane	\$8.6	% 25.1-15	8						
Surrogate: 1-Chlorooctadecane	91.7	% 26.8-17	0						

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REACE NOTE: Liability and Damages. Cardinal's lability and client's endows merely for any calor strain, whether based is contract or bot, shall be limited to the summart pair by them for analyses. It clears, including show for rangingers and any other class whethere shall be limited to the summart pair by them for analyses. It clears, including show for rangingers and any other class whethere shall be limited to the summart pair by them for analyses. It clears is based for rangingers and any other class whethere shall be limited to the suplicities whethere shall be limited to the suplicities whethere shall be for indexed to the suplicities whethere shall be limited to the suplicities of the suplicities whethere is the superimentation of the suplicities whethere is the suplicities whethere is the superimentation of the suplicities whethere is the superimentation of the suplicities whethere is the superimentation of the superimentation of the superimentation of the superimentation of the superimentation is the superimentation of the superimport.

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Analytical Results For:

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

Received:	03/24/2017	Sampling Date:	03/23/2017
Reported:	03/28/2017	Sampling Type:	Soil
Project Name:	SHELL ST#3	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	TATUM		

Sample ID: E 20 (H700785-07)

BTEX S021B	mg	mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/27/2017	ND	1.98	98.8	2.00	5.25	
Toluene*	<0.050	0.050	03/27/2017	ND	1.91	95.7	2.00	5.03	
Ethylbenzene*	<0.050	0.050	03/27/2017	ND	1.91	95.5	2.00	4.71	
Total Xylenes*	<0.150	0.150	03/27/2017	ND	5.44	90.7	6.00	4.67	
Total BTEX	<0.300	0.300	03/27/2017	ND					

Surrogate.	4-Bromofluorobensene	(PID	98.4 %	72-148

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit:	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16,0	16.0	03/27/2017	ND	432	108	400	3.77	
TPH 8015M	mg	/kg	Analyze	d By: MS	14	1.11			
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/27/2017	ND	181	90.6	200	0.163	
DRO >C10-C28	<10.0	10.0	03/27/2017	ND	189	94.5	200	0.743	
Surrogate: 1-Chiorooctane	94.0	% 25.1-13	8						

26.8-170

Surrogate: 1-Chlorooctadecane 93.6%

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RUSCE NOTE: Underly not Damage. Confinite hashing and cherric studies wantedy for day calms bailing whether based in control or tort, shall be limited to the annuant pair by cherri for produces. All chains, including those for readjusces and any other cause whethere shall be deemed whether make its wetting and reasonable the state completion of the applicable werker. In this wante that the following it is well and the following whether produces and and the state completion of the applicable werker. In this wante that the following it is well and the following whether produces and the state completion of the applicable werker. In this wante the state of the sta

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Analytical Results For:

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

Received:	03/24/2017	Sampling Date:	03/23/2017
Reported:	03/28/2017	Sampling Type:	Soil
Project Name:	SHELL ST#3	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	TATUM		
Project cocoon	that get		

2.4

Sample ID: SE 20 (H700785-08)

RTEV 90218

BIEA 8021B	ang.	/ Kg	Analyze	o by: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/27/2017	ND	1.98	98.8	2.00	5.25	
Toluene*	<0.050	0.050	03/27/2017	ND	1.91	95.7	2.00	5.03	
Ethylbenzene*	<0.050	0.050	03/27/2017	ND	1.91	95.5	2.00	4.71	
Total Xylenes*	<0.150	0.150	03/27/2017	ND	5.44	90.7	6.00	4.67	
Total BTEX	<0.300	0.300	03/27/2017	ND					

H Bu- MC

Surrogate: 4-Bromofluorobenzene	(PID	98.9%	72-148
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min /km

Result	Reporting Limit							
	inquiring time	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<16.0	16.0	03/27/2017	ND	432	108	400	3.77	
mg,	/kg	Analyze	d By: MS		1.1.1			
Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<10.0	10.0	03/27/2017	ND	181	90,6	200	0.163	
<10.0	10.0	03/27/2017	ND	189	94.5	200	0.743	
85.0	% 25.1-15	8						
\$6.2	% 26.8-17	0						
	mg, Result <10.0 <10.0 <i>85.0</i>	mg/kg Result Reporting Limit <10.0 10.0 <10.0 10.0 85.0% 25.1-15	mg/kg Analyze Result Reporting Limit Analyzed <10.0	mg/kg Analyzed By: MS Result Reporting Limit Analyzed Method Blank <10.0	mg/kg Analyzed By: MS Result Reporting Limit Analyzed Method Blank BS <10.0	mg/kg Analyzed By: MS Result Reporting Limit Analyzed Method Blank BS % Recovery <10.0	mg/kg Analyzed By: MS Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC <10.0	mg/kg Analyzed By: MS Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC RPD <10.0

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Analytical Results For:

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

Received:	03/24/2017	Sampling Date:	03/23/2017
Reported:	03/28/2017	Sampling Type:	Soil
Project Name:	SHELL ST#3	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	TATUM		

Sample ID: 5 20 (H700785-09)

BTEX 8021B	mg/kg		Analyze	Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Benzene*	<0.050	0.050	03/27/2017	ND	1.98	98.8	2,00	5.25	
Toluene*	<0,050	0.050	03/27/2017	ND	1.91	95.7	2.00	5.03	
Ethylbenzene*	<0.050	0.050	03/27/2017	ND	1.91	95.5	2.00	4.71	
Total Xylenes*	<0,150	0.150	03/27/2017	ND	5.44	90.7	6.00	4.67	
Total BTEX	<0.300	0.300	03/27/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID 98.8% 72-148

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: HM				_	_
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/27/2017	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	03/27/2017	ND	181	90,6	200	0,163	
DRO >C10-C28	<10.0	10.0	03/27/2017	ND	189	94.5	200	0.743	
Surrogate: 1-Chlorooctane	90.6	% 25.1-15	8						
Surrogate: 1-Chiorooctadecane	92.5	% 26.8-17	0						

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REASE NOTE: Loadily and Damage. Contrast bolity and clerit actuate memory for any calor strain, whether based in contract or tort, and is limited to the answer paid by deet fix analyses. All dama, including trave for any given rate without we table in a strain whether based in contrast or tort, and the instead or tort, and the instead or the applicable server. In oriented the based is instead to the analysis with the server based in contrast or instead or tort, and the instead or the applicable server. In oriented all calories is likely for accesses of the applicable server. In oriented the lands is likely for accesses of orients instead or tort, and the server based in a server based or to expected advances in the based or tort, and the server b

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Analytical Results For:

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

Received:	03/24/2017	Sampling Date:	03/23/2017
Reported:	03/28/2017	Sampling Type:	Soil
Project Name:	SHELL ST#3	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	TATUM		

Sample ID: SW 20 (H700785-10)

BTEX 80218	mg,	/kg	Analyze	Analyzed By: MS					
Analyte	Result	Reporting Linvit.	Analyzed	Method Blank	BS	BS % Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/27/2017	ND	1.98	98.8	2.00	5,25	
Toluene*	<0.050	0.050	03/27/2017	ND	1.91	95.7	2,00	5.03	
Ethylbenzene*	<0.050	0.050	03/27/2017	ND	1,91	95,5	2.00	4.71	
Total Xylenes*	<0.150	0.150	03/27/2017	ND	5.44	90.7	6.00	4.67	
Total BTEX	<0.300	0.300	03/27/2017	ND					
TOTAL BLEX	<0.300	0.300	03/2//201/	ND					

Surrogate: 4-Bromofluorobenzene (PID 98.8% 72-148

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: HM	_				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Quaifier
Chloride	<16.0	16.0	03/27/2017	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 06-C10	<10.0	10.0	03/27/2017	ND	181	90,6	200	0.163	
DRO >C10-C28	<10.0	10.0	03/27/2017	ND	189	94.5	200	0.743	
Surrogate: 1-Chlorooctane	38.6	% 25.1-15	8		-				

Surrogate: 1-Chlorooctadecane 92.4 % 26.8-170

Cardinal Laboratories

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Analytical Results For:

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

Received:	03/24/2017	Sampling Date:	03/23/2017
Reported:	03/28/2017	Sampling Type:	Soil
Project Name:	SHELL ST#3	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	TATUM		

Sample ID: W 20 (H700785-11)

	mg/	Ny	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
	<0.050	0.050	03/27/2017	ND	1.98	98.8	2.00	5.25	
	<0.050	0.050	03/27/2017	ND	1.91	95.7	2.00	5.03	
e*	<0.050	0.050	03/27/2017	ND	1.91	95.5	2.00	4.71	
s*	<0.150	0.150	03/27/2017	ND	5.44	90.7	6.00	4.67	
	<0,300	0.300	03/27/2017	ND					
	e*	<0.050 <0.050 e ⁴ <0.050 s ⁸ <0.150	<0.050 0.050 <0.050 0.050 e* <0.050 0.050 s* <0.150 0.150	<0.050 0.050 03/27/2017 <0.050 0.050 03/27/2017 e ⁴ <0.050 0.050 03/27/2017 s ⁸ <0.150 0.150 03/27/2017	<0.050 0.050 03/27/2017 ND <0.050 0.050 03/27/2017 ND e* <0.050 0.050 03/27/2017 ND s* <0.150 0.150 03/27/2017 ND	<0.050 0.050 03/27/2017 ND 1.98 <0.050	<0.050 0.050 03/27/2017 ND 1.98 98.8 <0.050	<0.050 0.050 03/27/2017 ND 1.98 98.8 2.00 <0.050	<0.050 0.050 03/27/2017 ND 1.98 96.8 2.00 5.25 <0.050

Surrogate: 4-Bromofluorobenzene (PID 97.8 % 72-148

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/27/2017	ND	432	108	400	3.77	
TPH 8015M	mg	/kg	Analyze	d By: MS	1.1.1				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/27/2017	ND	181	90.6	200	0.163	
DRO >C10-C28	<10.0	10.0	03/27/2017	ND	189	94.5	200	0.743	

Surrogate: 1-Chlorooctane 92.6% 25.1-158 Surrogate: 1-Chlorooctadecane 88.5% 26.8-170

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RUSSE NOTE: Lastify and Gamagas. Contracts lability and clearly excluses remedy for any claim animal whether based in contract or tort, chall be instead to the ansate pair by cleart for analyses. All datas, including those for suggests and any other cause whethere that be deeped whether makes in writing and means with clearly pair days that comparison of the applicable serves. In the secret shall clearly be labeled as a secret based on the supervised dataspin. Including without instants, how and any other and and and by clearly the dataset within a strategy part of an which the performance of the performance of the service beaution by Clearly, or year of profile forms.

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Analytical Results For:

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

Received:	03/24/2017	Sampling Date:	03/23/2017
Reported:	03/28/2017	Sampling Type:	Soil
Project Name:	SHELL ST#3	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldake
Project Location:	TATUM		

Sample ID: NW 20 (H700785-12)

BTEX 8021B		/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
	<0.050	0.050	03/27/2017	ND	1.98	98.8	2.00	5.25	
	<0.050	0.050	03/27/2017	ND	1.91	95.7	2.00	5.03	
	<0.050	0.050	03/27/2017	ND	1.91	95.5	2.00	4.71	
	<0.150	0.150	03/27/2017	ND	5.44	90.7	6.00	4.67	
	<0.300	0.300	03/27/2017	ND					
	ilyte:	ityte: Result <0.050 <0.050 <0.050 <0.150	Nyte Result Reporting Limit <0.050 0.050 <0.050 0.050 <0.050 0.050 <0.050 0.050 <0.150 0.150	Plesult Reporting Limit Analyzed <0.050	Plesult Reporting Limit Analyzed Method Blank <0.050	Result Reporting Limit Analyzed Method Blank BS <0.050	Plesult Reporting Limit Analyzed Method Blank BS % Recovery <0.050	Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC <0.050	Presult Reporting Limit Analyzed Method Blank BS % Recovery True Value QC RPD <0.050

Surrogate: 4-Bromofluorobenzene (PID 98.6 % 72-148

Chloride, SM4500CI-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	03/27/2017	ND	432	108	400	0.00	
TPH 8015M	mg/kg		Analyzed By: MS			- C	10		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/27/2017	ND	181	90.6	200	0.163	
DRO >C10-C28	<10.0	10.0	03/27/2017	ND	189	94.5	200	0.743	

Surrogate: 1-Chiorooctane 92.9% 25.1-158 Surrogate: 1-Chiorooctadecane 96.6% 26.8-170

Cardinal Laboratories

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Analytical Results For:

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

Received:	03/24/2017	Sampling Date:	03/23/2017
Reported:	03/28/2017	Sampling Type:	Soil
Project Name:	SHELL ST#3	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	TATUM		

Sample ID: CENTER 20 (H700785-13)

BTEX 80218	mg/	/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/28/2017	ND	1.98	98.8	2.00	5.25	
Toluene*	<0.050	0.050	03/28/2017	ND	1.91	95.7	2.00	5.03	
Ethylbenzene*	<0.050	0.050	03/28/2017	ND	1.91	95.5	2.00	4.71	
Total Xylenes*	<0.150	0.150	03/28/2017	ND	5.44	90.7	6.00	4.67	
Total BTEX	<0.300	0.300	03/28/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID 98.1 % 72-148

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: HM	_		_		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/27/2017	ND	432	108	400	0.00	
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	03/27/2017	ND	181	90.6	200	0.163	
DRO >C10-C28	<10.0	10.0	03/27/2017	ND	189	94.5	200	0.743	
Surrogate: 1-Chiorooctane	82.9	% 25.1-15	8						

Surrogate: 1-Chiorooctadecane 84.3 % 26.8-170

Cardinal Laboratories

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Relinquished Relinquished Relinquished	1201-140-1405	Project Manager, Address: 47 City Could of Phone #: Project #: Project Location: Sempler Name:		
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Twice			ANALYSIS REQUEST	NALYSI



March 28, 2017

ERIC GARCIA REPUBLIC BACKHOE SERVICES 47 E. DICKENS RD LOVINGTON, NM 88260

RE: SHELL ST#3

Enclosed are the results of analyses for samples received by the laboratory on 03/24/17 13:00.

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.

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.

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.Kune

Celey D. Keene Lab Director/Quality Manager

Page 1 of 17

Labor	ac	Shies	,	PHON	IE (575) 3	93-2326 ° 101	E. MARLAND ° HO	885, NM 883	240
		Analy	tical Resul	ts For:					
			UBLIC BACKH C GARCIA	DE SERVICES					
			E. DICKENS RD)					
			To: NON						
Received:	03/24/20	17		San	npling Da	ite:	03/24/2	2017	
Reported: Project Name:	03/28/20 SHELL 5				npling Ty npling Co		Soil Cool &		
Project Number:	NONE GI					eived By:		Oldaker	
Project Location:	TATUM								
Sample ID: NS 1 - 10 (H7007) BTEX 8021B	85-01) 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	03/27/2017	ND	1.98	98.8	2.00	5.25	
Toluene*	0.072	0.050	03/27/2017	ND	1.91	95.7	2.00	5.03	
Ethylbenzene*	<0.050	0.050	03/27/2017	ND	1.91	95.5	2.00	4.71	
Total Xylenes*	<0.150	0.150	03/27/2017	ND	5.44	90.7	6.00	4.67	
Total BTEX	<0.300	0.300	03/27/2017	ND					
Surrogate: 4-Bromofluorobenzene (PIE Chloride, SM4500CI-B									
Analyte	mg/ Result	Reporting Limit	Analyzed	d By: HM Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/27/2017	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
GRD C6-C10	<10.0	10.0	03/27/2017	ND	181	90.6	200	0.163	
DRO >C10-C28	<10.0	10.0	03/27/2017	ND	189	94.5	200	0.743	
Surregate: I-Chlorooctane	89.9	% 25.1-15	5						
Surrogate: I-Chlorooctadecane	93.7	36 26.8-17	9						
Cardinal Laboratories								*=Accredit	ted Analyti
FORM 1076. Unliky and Damages. Contracts take any effort ensure stationeer shall be derived named	when wells in	arting and resoluted by Co	dival within they (32)	Any offer sampleful of	the applicable	and the second	Catal Cardinal Sections	ter institution of	anagarisi dan
initiality, without installary, itselena interruptions, into the initiality of the states dated means or effective							d De arches ferender i	by Cardinal, report	ins of shifts
College The	n.a								

Received;			tical Resul						
		RE		ts For:					
			UBLIC BACKH	DE SERVICES					
			C GARCIA						
			E. DICKENS RE						
			To: NON						
	03/24/20				npling Da		03/24/2 Soil	017	
Reported: Project Name:	03/28/20 SHELL ST				Sampling Type: Sampling Condition:			Intact	
Project Number:	NONE GI			Sampling Condition: Sample Received By:			Tamara		
Project Location:	TATUM								
ample ID: NS 2 - 10 (H7007	85-02)								
TEX 80218	mg/	kg	Analyze	d By: MS	_				
Analyte	Result	Reporting Limit.	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
enzene*	<0.050	0.050	03/27/2017	ND	1.98	96.8	2.00	5.25	
oluene*	<0.050	0.050	03/27/2017	ND	1.91	95.7	2.00	5.03	
thylbenzene*	<0.050	0.050	03/27/2017	ND	1.91	95.5	2.00	4.71	
otal Xylenes*	<0.150	0.150	03/27/2017	ND	5.44	90.7	6.00	4.67	
otal BTEX	<0.300	0.300	03/27/2017	ND					
urrogate: 4-Bromofluorobenzene (PID	98.4	72-145	ř						
hioride, SM4500CI-B	mg/	kg	Analyze	d By: HM	_				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
hloride	<16.0	16.0	03/27/2017	ND	432	108	400	3.77	
PH 8015M	mg/	kg	Analyze	d By: MS	-		-		-
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
R0 C6-C10	<10.0	10,0	03/27/2017	ND	181	90.6	200	0.163	
RO >C10-C28	<10.0	10.0	03/27/2017	ND	189	94.5	200	0.743	
urrogate: I-Chlorooctane	84.4	25.1-15	5						
urrogate: I-Chlorooctadecane	79.0	26.8-17	0						
Cardinal Laboratories								*=Accredit	ed Analyte
Kallat 1071 Lable and Designs Defines hel	D ed and a		e anne statie inst	a maked as but at		20 mm/ mi -			
ery offer state whether of a first second wood weaking sched withins, barrow with given a terr stand are synd its description are offer a		arthy and named by 2 of parts maread by star	alles whe had \$10 (12)	top offer services of		anna. It to and d is the parlamenta	t shat Gardinal Sa takin 1	te restantat an a	maturia Graps
detter The									

Labo	rate	ories	5	PHON	Æ (575) 3	93-2326 ° 101	E. MARLAND * HO	885, NM 882	40
		Analy	tical Resul	ts For:					
		ERI 47 LO	PUBLIC BACKH IC GARCIA E. DICKENS RE VINGTON NM, 1 (To: NON) 88260					
Received: Reported: Project Name: Project Number: Project Location:	03/24/20 03/28/20 SHELL S NONE GI TATUM)17 T#3		San San	npling Da npling Ty npling Co nple Reco	pe:	03/24/2 Soil Cool & Tamara		
Sample ID: NS 3 - 10 (H70 STEX 80218	0785-03) mg/	ka	Analyze	d By: M5					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RFD	Qualifier
Senzene*	<0.050	0.050	03/27/2017	ND	1.96	98.8	2.00	5.25	0.00
foluene*	<0.050	0.050	03/27/2017	ND	1.91	95.7	2.00	5.03	
thylbenzene*	<0.050	0.050	03/27/2017	ND	1.91	95.5	2.00	4.71	
fotal Xylenes*	<0.150	0.150	03/27/2017	ND	5.44	90.7	6.00	4.67	
fotal BTEX	<0.300	0.300	03/27/2017	ND					
Surrogaie: 4-Bromofluorobenzene ()	ME 97.6	36 72-145							
Chloride, SM4500CI-B	mg/	'kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	85	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/27/2017	ND	432	108	400	3.77	
PH 8015M	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	85	% Recovery	True Value QC	RPD	Qualifier
SR0 06-C10	<10.0	10.0	03/27/2017	ND	181	90.6	200	0.163	
0R0 >C10-C28	<10.0	10.0	03/27/2017	ND	189	94.5	200	0.743	
Surrogate: I-Chlorooctane	35.5	36 25.1- <u>1</u> 3	s					-	
iurrogaie: I-Chloroociadocane	92.7	36 26.8-17	0						
Cardinal Laboratories		-						*=Accredit	ed Analyte
MER NOT said and Sampa. Solver by the ana visitane shi is families making without induces barran devalues, a date stand are by difficulture date manage of	tal orient mate or tan of can ar tan	orden and maximal by 2 of parts maximal by star	andred within thelp (22) 6. The material article	Anys after monoration of	the applicable	antia. In sa man	and particular in take	for moderial or a	anaquerta denag
Calley 7 this									
Celey D. Keene, Lab Director,	la h u				-				

CAR	rate	pries		PHO	NE (575) 3	93-2326 ° 101	E. MARLAND * HO	885, NM 882	40
		Analy	tical Resul	ts For:					
		ERIC 47 E	JBLIC BACKH GARCIA DICKENS RD INGTON NM, 8 To: NON	38260					
Received: Reported: Project Name: Project Number: Project Location:	03/24/201 03/28/201 SHELL ST NONE GIV TATUM	.7 #3		San San	npling Da npling Ty npling Co nple Reco	pe:	03/24/2 Soil Cool & Tamara		
Sample ID: NS 4 - 10 (H70	· · · · · · · · · · · · · · · · · · ·			11. A					
BTEX 80218	mg/k			d By: M5			1002	- 440	10000
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/27/2017	ND	1.98	98.8	2.00	5.25	
Toluene* Ethylbergene*	<0.050	0.050	03/27/2017	ND	1.91	95.7	2.00	5.03	
Total Xvienes*	<0.150	0.150	03/27/2017	ND	5.44	90.7	6.00	4.67	
Total BTEX	<0.300	0.300	03/27/2017	ND	2.11	50.7	0.00	1.07	
Surrogaic: 4-Bromofluorobenzene (1	PIE 98.8 %	72-148							
Chloride, SM4500CI-B	mg/k		Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	The Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/27/2017	ND	432	108	400	3.77	
TPH 8015M	mg/k	a	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GR0 06-C10	<10.0	10.0	03/27/2017	ND	181	90.6	200	0.163	
DRO >C10-C28	<10.0	10.0	03/27/2017	ND	189	94.5	200	0.743	
Surrogate: I-Chlorooctane	85.5 %	25.1-138	1						
Surrogate: I-Chlorooctadecane	86.5 36	26.8-170							
Cardinal Laboratories		ure and to at the			- 1 -1-1-1	. So small get to	and the property of the	*=Accredit	-
ing aller anna stàitean dei in banad sa mining silled initite, banan simulan, dan stand ann ag illecter districtment di		parts moved by east,	in ministers, efficie			d is the partnerses	i alar Seden in lata A Da aleman tamandar (te madaeta e a la tanàna, mpani	anagundu banga an n' statur na

Labo	rate	ories	5	PHON	IE (575) 3	93-2326 ° 101 I	E. MARLAND * HO	385, NM 882	40
		Anal	vtical Resul	ts For:					
		RE ER 47 LO	PUBLIC BACKHO IC GARCIA E. DICKENS RD VINGTON NM, 8 K To: NONE	OE SERVICES 0 88260					
Received: Reported: Project Name: Project Number: Project Location:	03/24/20 03/28/20 SHELL ST NONE GI TATUM)17 T#3		San San	npling Da npling Ty npling Co nple Reco	pe:	03/23/2017 Soil Cool & Intact Tamara Oldaker		
Gample ID: N 20 (H700785	-05) mg/	ko	Analyze	d By: MS					
Anziyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
lenzene*	<0.050	0.050	03/27/2017	ND	1.98	98.8	2.00	5.25	
'aluene*	<0.050	0.050	03/27/2017	ND	1.91	95.7	2.00	5.03	
thylbenzene*	<0.050	0.050	03/27/2017	ND	1.91	95.5	2.00	4.71	
otal Xylenes*	<0.150	0.150	03/27/2017	ND	5.44	90.7	6.00	4.67	
otal BTEX	<0.300	0.300	03/27/2017	ND					
iurrogate: 4-Bromofluorobenzene (F	NE 98.2	36 72-14	7						
Chloride, SM4500CI-B	mg/			d By: HM					
Anziyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
hloride	<16.0	16.0	03/27/2017	ND	432	108	400	3.77	
PH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
RO C6-C10	<10.0	10.0	03/27/2017	ND	181	90.6	200	0.163	
0RO >C10-C28	<10.0	10,0	03/27/2017	ND	189	94.5	200	0.743	
iurrogate: I-Chloroostane	91.9	26 25,1-13	13						
iurrogate: I-Chlorooctadecane	54.4	36 26.8-17	0						
Cardinal Laboratories								*=Accredit	
Addition of the state of the second s	al trias and in	arting and maximal by 2 of particle maximal by size	Colora with the (10) C. D. adallaria, ittali	tays ofter surgistion of		d is the parlorments	and Desire in 1999	te instantat an a	anaquerta danag
dellay 5 this	s. us								



03/23/2017

Tamara Oldaker

Soil Cool & Intact

Analytical Results For:

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

Sampling Date:

Sampling Type:

Sampling Condition:

Sample Received By:

 Received:
 03/24/2017

 Reported:
 03/28/2017

 Project Name:
 SHELL ST#3

 Project Number:
 NONE GIVEN

 Project Location:
 TATUM

Sample ID: NE 20 (H700785-06)

BTEX 8021B	mg/	mg/kg		d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/27/2017	ND	1.98	98.8	2.00	5.25	
Toluene*	<0.050	0.050	03/27/2017	ND	1.91	95.7	2.00	5.03	
Ethylbenzene*	<0.050	0.050	03/27/2017	ND	1.91	95.5	2.00	4.71	
Total Xylenes*	<0.150	0.150	03/27/2017	ND	5.44	90.7	6.00	4.67	
Total BTEX	<0.300	0.300	03/27/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID 98.4 % 72-148

Chioride, SM4500CI-B	mg/	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/27/2017	ND	432	108	400	3.77	
TPH 8015M	mg/	lkg	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	03/27/2017	ND	181	90.6	200	0.163	

26.8-170

Surrogate: 1-Chlorooctadecane \$1.7.96

*=Accredited Analyte

Cardinal Laboratories

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Celey D. Keene, Lab Director/Quality Manager

Page 7 of 17

Labo	rate	ories	5	PHON	IE (575) 3	193-2326 ° 101 I	E. MARLAND * HOR	385, NM 883	240
		Anah	tical Resul	ts For					
		REI ERI 47 LO	PUBLIC BACKH IC GARCIA E. DICKENS RE VINGTON NM, 1 To: NON	OE SERVICES 0 88260					
Received: Reported: Project Name: Project Number: Project Location:	03/24/20 03/28/20 SHELL ST NONE GI TATUM	017 T#3		San San	npling Da npling Ty npling Co nple Reco	pe:	03/23/2 Soil Cool & : Tamara		
Sample ID: E 20 (H700785 STEX 80218	-07) mg/	/kg	Analyze	d By: MS					
Anzlyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/27/2017	ND	1.98	98.8	2.00	5.25	
foluene*	<0.050	0.050	03/27/2017	ND	1.91	95.7	2.00	5.03	
thylbenzene*	<0.050	0.050	03/27/2017	ND	1.91	95.5	2.00	4.71	
fotal Xylenes*	<0.150	0.150	03/27/2017	ND	5.44	90.7	6.00	4.67	
Total BTEX	<0.300	0.300	03/27/2017	ND					
Surregate: 4-Bromofluorobenzene () Chloride, SM4500Cl-B	PIE 98.4 mg/			d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	No Recovery	Thue Value QC	RPD	Qualifier
Diloride	<16.0	16.0	03/27/2017	ND	432	108	400	3.77	
TPH 8015M	mg/	/kg	Analyze	d By: MS		-			
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	The Value QC	RPD	Qualifier
SRD 06-010	<10.0	10.0	03/27/2017	ND	181	90.6	200	0,163	
0R0 >C10-C28	<10.0	10.0	03/27/2017	ND	189	94.5	200	0.743	
Surregate: 1-Chlorocetane	54.0	% 25.1-15	8						
Surrogate: 1-Chlorooetadecane	93.6	36 26.8-17	σ						
Cardinal Laboratories	the state and a set	andry and reasonal by C	andrea within their (22) 6 th maintinens afficia	les de anite d'	the applicable	a service. De rea mane al de die parlamenter	and to anyour of an total Calendaria to Juda 1	ina nautos tas in instanta ar i	amaganta tanap
ally the	in-								
Celey D. Keene, Lab Director,	Ouslin/ Mar	aner			-				

Labo	rate	ories	5	PHON	IE (575) 3	93-2326 ° 101 I	E. MARLAND * HO	885, NM 882	40
		Anah	tical Resul	ts For	-				
			PUBLIC BACKH						
		47 L01	IC GARCIA E. DICKENS RE VINGTON NM, 8 To: NONE	88260					
Received:	03/24/20	017		San	nolina Da	ite:	03/23/2	017	
Reported: Project Name: Project Number: Project Location:	03/28/20 SHELL S NONE GI TATUM	017 T#3		Sampling Date: Sampling Type: Sampling Condition: Sample Received By:			Soil Cool &		
Sample ID: SE 20 (H70078									
BTEX 8021B	mg			d By: MS			0.005.5	6.4	Constant of
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene* Toluene*	<0.050	0.050	03/27/2017	ND	1.98	98.8	2.00	5.25	
Chuene*	<0.050	0.050	03/27/2017	ND	1.91	95.5	2.00	4.71	
Total Xylenes*	<0.150	0.150	03/27/2017	ND	5.44	90.7	6.00	4.67	
Total BTEX	<0.300	0.300	03/27/2017	ND					
Surrogale: 4-Bromofluorobenzene (I	11 98.9	36 72-148	1						
Chioride, SM4500CI-8	mg	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/27/2017	ND	432	108	400	3.77	
TPH 8015M	mg	/kg	Analyze	d By: MS				100	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO 05-C10	<10.0	10.0	03/27/2017	ND	181	90.6	200	0.163	
DRO >C10-C28	<10.0	10.0	03/27/2017	ND	189	94.5	200	0.743	
Surrogate: I-Chlorooctane	85.0	36 25.1-13	8						
Surrogate: I-Chlorooctadecane	-86.2	96 26.8-17	0						
Cardinal Laboratories	-							*=Accredit	ed Analyte
Contract part of the second se	nd union made in an a' uni ar an	wing and reasonal by a of partic instead by size	andrei miller Belly (22) 6. is milailleren efficie	days after samplefun of	the second	al to the partnerspine	and the analysis. Joi w I shall Cardinal be laste	ing midny fra	the support of
aday to the	me-								
Celev D. Keene, Lab Director	Ouslity Man				_				

Labo	rate	ones	2	PHON	NE (575) 3	193-2326 ° 101	E. MARLAND * HO	885, NM 883	240
		Analy	tical Resul	ts For:					
		ERJ 47 LOV	PUBLIC BACKH IC GARCIA E. DICKENS RE VINGTON NM, 1 TO: NON) 88260					
Received: Reported: Project Name: Project Number: Project Location:	03/24/20 03/28/20 SHELL S NONE GI TATUM	017 T#3		San San	npling Da npling Ty npling Co nple Reo	ipe:	03/23/2 Soil Cool & Tamara		
Sample ID: S 20 (H700785 STEX 80218	-09) 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	03/27/2017	ND	1.98	98.8	2.00	5.25	
Toluene*	<0.050	0.050	03/27/2017	ND	1.91	95.7	2.00	5.03	
Ethylbenzene*	<0.050	0.050	03/27/2017	ND	1.91	95.5	2.00	4.71	
Total Xylenes*	<0.150	0.150	03/27/2017	ND	5.44	90.7	6.00	4.67	
Total BTEX	<0.300	0.300	03/27/2017	ND					
Surrogate: 4-Bromofluorobenzene () Chloride, SM4500Cl-B	720 98.8 mg			d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/27/2017	ND	432	108	400	3.77	
TPH 8015M	mg	/kg	Analyze	d By: MS		10-			
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO 05-C10	<10.0	10.0	03/27/2017	ND	181	90.6	200	0.163	
DRO >C10-C28	<10.0	10.0	03/27/2017	ND	189	94.5	200	0.743	
Surregaie: 1-Chloreoctane	90.6	36 25.1-15	8						
Surregaie: I-Chlorooctadecane	92.5								
Cardinal Laboratories	tal orian mala ye han si' ina, ar han	arting and maximal by C	adraf willin Didy (22) C. D. milliotan, affiala	tops after modules of	the sectories	a barine. In of one of is the party-size	alart for analysis. It as t also Gentral be leads	ing reading the	anaqueria Gener
ter staat as in die teden dete maar wete Collery School	rein. Saudi nieb er) in the company destified offers	. The report of all and taken of	ndani mud e Vi ell'ni	le area d'	ladari lalardara.			
	Quality Man				_				

CLabo	rate	pries		PHO	NE (575) 3	93-2326 ° 101	E. MARLAND * HO	885, NM 882	40
		Analyt	ical Resul	ts For:					
		ERIC 47 E	GARCIA DICKENS RD NGTON NM, 8	88260					
Received: Reported: Project Name: Project Number: Project Location:	03/24/201 03/28/201 SHELL ST# NONE GIVE TATUM	7 ‡3		San	npling Da npling Ty npling Co nple Reco	pe:	03/23/2 Soil Cool & I Tamara		
Sample ID: SW 20 (H7007: BTEX 80218	85-10) mg/kg		Analyze	d By: MS					
Analyte	1.1	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/27/2017	ND	1.98	98.8	2.00	5.25	
Toluene*	<0.050	0.050	03/27/2017	ND	1.91	95.7	2.00	5.03	
Ethylbenzene*	<0.050	0.050	03/27/2017	ND	1.91	95.5	2.00	4.71	
Total Xylenes*	<0.150	0.150	03/27/2017	ND	5.44	90.7	6.00	4.67	
Total BTEX	<0.300	0.300	03/27/2017	ND					
Surregate: 4-Bromofluorobenzene () Chloride, 5M4500Cl-B	P <i>LE 98.8</i> % mg/kg		Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/27/2017	ND	432	108	400	3.77	
TPH 8015M	mg/kg		Analyze	d By: MS	-				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	Thue Value QC	RPD	Qualifier
GR0 05-C10	<10.0	10.0	03/27/2017	ND	181	90.6	200	0.163	
DRO >C10-C28	<10.0	10.0	03/27/2017	ND	189	94.5	200	0.743	_
Surrogate: I-Chlorooctane	88.6 %	25.1-158							
Surregaie: I-Chloroociadocane	92.4 36	26.8-170							
Cardinal Laboratories Mill VCR, auto ed Serger, Solver et de sua video ser de la deste relativo et de series de la deste relativo et de series de la deste de series	and union water a suf-	ing and namend by God profile inscend by shart,	na with they (12) Is ministered affield	Legs after samples at	the explosion	d in the party-same	alari Ter anayan. Al ala Cahar Dadaar ke saba t	ina inadag Par	anaparta tenga
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Labo	rate	ories	5	PHON	E (575) 3	193-2326 ° 101	E. MARLAND * HOR	885, NM 882	40
		Anal	tical Resul	ts For					
		REI ERJ 47 LO	PUBLIC BACKHO IC GARCIA E. DICKENS RE VINGTON NM, 1 TO: NON	DE SERVICES) 88260					
Received: Reported: Project Name: Project Number: Project Location:	03/24/20 03/28/20 SHELL ST NONE GI TATUM)17 T#3		San San	npling Da npling Ty npling Co nple Reci	pe:	03/23/2 Soil Cool & Tamara		
Sample ID: W 20 (H700785 BTEX 80218	-11) mg/	ka	Analyze	d By: MS					
Anziyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/27/2017	ND	1.98	98.8	2.00	5.25	
Toluene*	<0.050	0.050	03/27/2017	ND	1.91	95.7	2.00	5.03	
Ethylbenzene*	<0.050	0.050	03/27/2017	ND	1.91	95.5	2.00	4.71	
Total Xylenes*	<0.150	0.150	03/27/2017	ND	5.44	90.7	6.00	4.67	
Total BTEX	<0.300	0.300	03/27/2017	ND					
Surrogate: 4-Bromofluorobenzene (P.	IE 97.8	36 72-248	0						
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: HM			_	_	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/27/2017	ND	432	108	400	3.77	
TPH 8015M	mg/	kg	Analyze	d By: MS	1				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GR0 06-010	<10.0	10.0	03/27/2017	ND	181	90.6	200	0.163	
DRO >C10-C28	<10.0	10.0	03/27/2017	ND	189	94.5	200	0.743	
Surrogate: I-Chlorooctane	92.5	36 25.1-15	3						
Surrogate: 1-Chlorooctadecane	88.5	36 25.3-17	σ						
Cardinal Laboratories	1	ording and maximal by 2 of posts records by alar	aday with the (2) 6 to schellarise attick	lays after perspectars of	the applicable d of an applicable	al la lla palamana	alart for analysis. It as Caller Gradnal to Justic 1	in insidelat or a	-
Calley 7 No.									
Celey D. Keene, Lab Director/					_				

Labo	rate	ories	5	PHON	IE (575) 3	93-2326 * 101	E. MARLAND ° HOR	385, NM 882	240
		Analy	tical Resul	ts For:					
		ERJ 47 LO	PUBLIC BACKH IC GARCIA E. DICKENS RE VINGTON NM, I < To: NON) 88260					
Received: Reported: Project Name: Project Number: Project Location:	03/24/20 03/28/20 SHELL ST NONE GE TATUM	17 T#3		San San			03/23/2 Soil Cool & Tamara		
Sample ID: NW 20 (H7007) STEX 80218	85-12) 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	03/27/2017	ND	1.98	98.8	2.00	5.25	
Foluene ^k	<0.050	0.050	03/27/2017	ND	1.91	95.7	2.00	5.03	
Ethylbenzene*	<0.050	0.050	03/27/2017	ND	1.91	95.5	2.00	4.71	
Fotal Xylenes*	<0.150	0.150	03/27/2017	ND	5.44	90.7	6.00	4.67	
Total BTEX	<0.300	0.300	03/27/2017	ND					
Surrogate: 4-Bromofluorobenzene (F	TE 98.6	36 72-142	5						
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Dilaride	<16.0	16.0	03/27/2017	ND	432	108	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: MS					_
Anziyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
SRO C6-C10	<10.0	10.0	03/27/2017	ND	181	90.6	200	0,163	
0R0 >C10-C28	<10.0	10.0	03/27/2017	ND	189	94.5	200	0,743	
Surrogate: I-Chlorooctane	92.9	36 25,1-13	18						
Surregate: I-Chlorooctadecane	55.6	36 26.8-17	0						
Cardinal Laboratories voter 1971 casts of Serger Solvey of the same obtained with the American making school within the American of making school within the American of Social Social Casts of the		ndeg and reasonal is it of pratia reasonal is also	andreal within they (20) 6. In maintening affield	tops ofter servicities of	the applicable	a service. In the same al In Die performance	uned he anisymm. If an Carlos Gendral in Judia 1	ina, nautoj Mar je instalaj ar i	amazarta tenap
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Celey D. Keene, Lab Director/	Ouslin/ Man	-			_				

Labo	rate	ories	5	PHON	IE (575) 3	93-2326 * 101	. MARLAND * HO	885, NM 882	40
		Anal	tical Resul	ts For:					
		RE ER 47 LO	PUBLIC BACKH IC GARCIA E. DICKENS RE VINGTON NM, 1 CTO: NONI	De Services) 88260					
Received: Reported: Project Name: Project Number: Project Location:	03/24/20 03/28/20 SHELL ST NONE GI TATUM	017 T#3		San San	npling Da npling Ty npling Co nple Reco	pe:	03/23/2 Soil Cool & Tamara		
Sample ID: CENTER 20 (H)	700785-13) mg/	ka	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/28/2017	ND	1.98	98.8	2.00	5.25	
Toluene*	<0.050	0.050	03/28/2017	ND	1.91	95.7	2.00	5.03	
Ethylbenzene*	<0.050	0.050	03/28/2017	ND	1.91	95.5	2.00	4.71	
Total Xylenes*	<0.150	0.150	03/28/2017	ND	5.44	90.7	6.00	4.67	
Total BTEX	<0.300	0.300	03/28/2017	ND					
Surrogate: 4-Bromofluorobenzone (i	PIE 95.1	36 72-14	5						
Chioride, SM4500CI-8	mg/	kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	Thué Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/27/2017	ND	432	108	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: MS	_	-		_	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	Thue Value QC	RPD.	Qualifier
GRO C6-C10	<10.0	10.0	03/27/2017	ND	181	90.6	200	0.163	
DRO >C10-C28	<10.0	10.0	03/27/2017	ND	189	94.5	200	0.743	
Surrogate: I-Chlorooctane	82.9	36 25.1-13	18						
Surrogate: I-Chlorooctadecane	54.3	36 26.8-11	ra						
Cardinal Laboratories								*=Accredit	
Addition (2014) work of an angen and an any other more exclusions which is desced on reacting, without instance, increase whereas one is finall oper any of the stand data manage of the	and prime made in . The of part of the	why as small in 2 at path moved in the	andres within their (\$2) C. & maladiarum, atticka	ten die menider d	the sectories	al la die performanie	t shel Gedral in latin	br insidefail at a	magazital dariega
Citing Forth									
Celey D. Keene, Lab Director	In the Here				_				

	CARDINAL Laboratories	PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240
	Notes and	Definitions
QR-03	The RPD value for the sample duplicate or MS/MSD was outside of Q accepted based on LCS and/or LCSD recovery and/or RPD values.	Cacceptance limits due to matrix interference. QC betch
QM-07	The spike recovery was outside acceptance limits for the MS and/or I	MSD. The batch was accepted based on acceptable LCS
ND	recovery. Analyte NOT DETECTED at or above the reporting limit.	
RFD	Relative Percent Difference	
**	Samples not received at proper temperature of 6°C or below.	
m	Insufficient time to reach temperature.	
•	Chloride by SM4S00CI-8 does not require samples be received at or be	
	Samples reported on an as received basis (wet) unless otherwise not	ed on report
Cardinal La	aboratories	*=Accredited Analyte
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