District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised April 3, 2017

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Co-103.508056

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company Legacy Reserves	Contact Clyde Wilhoit
Address 303 W Wall street, Suite 1800, Midland Tx, 79701	Telephone No. 432.425.4137
Facility Name Lea Unit South Battery	Facility Type Flowline

Surface Owner S & S Inc.	Mineral Owner Federal	API No. 30-025-43077

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
I	24	20-S	34-E					Lea

Latitude 32.557222 Longitude -103.30'.29" NAD83

NATURE OF RELEASE

Type of Release Crude oil	Volume of Release 72 BBL	Volume Recovered 60 BBL
Source of Release Flowline	Date and Hour of Occurrence 8/18/18 5:00 AM	Date and Hour of Discovery 8/18/18 5:00AM
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*
no

RECEIVED
By CHernandez at 3:03 pm, Aug 21, 2018

Describe Cause of Problem and Remedial Action Taken.*
Semi truck struck flow line. Well was shut in and line was repaired.

Describe Area Affected and Cleanup Action Taken.*
Flowline sprayed approximately 60'x150' area. Small pooling area under lines and road. Mico Blaze will be applied to vegetation and soil will be tested and remediated as soon as possible.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: Clyde Wilhoit
Printed Name: Clyde Wilhoit
Title: Maintenance Foreman
E-mail Address: cwilhoit@legacylp.com
Date: 8-20-18 Phone: 432-425-4137

OIL CONSERVATION DIVISION

Approved by Environmental Specialist: CH

Approval Date: 8/21/2018 Expiration Date:

Conditions of Approval:
NMAC 19.15.29 effective August 14, 2018. Complete release characterization before any significant remediation.

Attached ☐

* Attach Additional Sheets If Necessary

1RP-5167
pCH1823355621
nCH1823355359

State of New Mexico
Oil Conservation Division

Incident ID	NCH1823355359
District RP	1RP-5167
Facility ID	fCH1901642211
Application ID	pCH1823355621

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discover date.

What is the shallowest depth to groundwater beneath the area affected by the release?	50-100' (ft. bgs)
Did this release impact groundwater or surface water?	☐ Yes ☑ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☑ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☑ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☑ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☑ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☑ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☑ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☑ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☑ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☑ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☑ No
Did the release impact areas **not** on an exploration, development, production or storage site?	☑ Yes ☐ No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: ***Each of the following items must be included in the report.***

- ☑ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☑ Field data
- ☑ Data table of soil contaminant concentration data
- ☑ Determination of water sources and significant watercourses within 1/2-mile of the lateral extents of the release
- ☑ Boring or excavation logs
- ☑ Photographs including date and GIS information
- ☑ Topographic/Aerial maps
- ☑ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modifies by site- and release-specific parameters.

State of New Mexico
Oil Conservation Division

Incident ID	NCH1823355359
District RP	1RP-5167
Facility ID	fCH1901642211
Application ID	pCH1823355621

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Clyde Wilhoit
Title: Maintenance Foreman

Signature: Clyde Wilhoit
Date: 12-7-2018

email: cwilhoit@legacylp.com
Telephone: 432-425-4137

OCD Only

Received by:

REVIEWED
By CHernandez at 2:24 pm, Jan 16, 2019

State of New Mexico
Oil Conservation Division

Incident ID	NCH1823355359
District RP	1RP-5167
Facility ID	fCH1901642211
Application ID	pCH1823355621

Remediation Plan

Remediation Plan Checklist: ***Each of the following items must be included in the report.***

- ☑ Detailed description of proposed remediation technique
- ☐ Scaled sitemap with GPS coordinates showing delineation points (GPS N/A)
- ☑ Estimated volume of material to be remediated
- ☑ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☑ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: ***Each of the following items must be confirmed as part of any request for deferral of remediation.***

- ☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☐ Extents of contamination must be fully delineated.
- ☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Clyde Wilhoit Title: Maintenance Foreman

Signature: Clyde Wilhoit Date: 12-7-2018

email: cwilhoit@legacylp.com Telephone: 432-425-4137

OCD Only

Received by: _____ Date: _____

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: _____ Date: _____

APPROVED
By CHernandez at 2:24 pm, Jan 16, 2019

State of New Mexico
Oil Conservation Division

Incident ID	NCH1823355359
District RP	1RP-5167
Facility ID	30-025-43077
Application ID	pCH1823355621

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to

Closure Report Attachment Checklist: ***Each of the following items must be included in the closure report.***

☑ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☑ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☑ Laboratory analyses of final sampling (Note: appropriate OCD District office must be notified 2 days prior to final sampling)

☑ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Clyde Wilhoit Title: Maintenance Foreman

Signature: Clyde Wilhoit Date: 3/13/19

email: cwilhoit@legacylp.com Telephone: 432-425-4137

OCD Only

Received by: OCD Date: 3/13/19

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediation contamination that poses a threat to groundwater, surface water, human health, or the environmental nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: Date 4/1/19

Printed Name: Cory Smith Title Environmental Spec.

Incident ID	NCH1823355359
District RP	1RP-5167
Facility ID	30-025-43077
Application ID	pCH1823355621

February 27, 2019

New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division, District 1
1625 French Drive
Hobbs, NM 88240

Re: **Site Assessment and Closure Report**
Site Name: Lea Unit South Battery
GPS: Latitude: 32.55722 Longitude: -103.511284
Legals: UL "I", Sec. 24, T20S, R34E
Lea County, New Mexico
NMOCD Ref. No. 1RP-5167

Lowry Environmental & Associates, LLC (LEA), on behalf of Legacy Reserves Operating, LP, has prepared this Site Assessment and Closure Report for the Release Site known as the Lea Unit South Battery. Details of the release are summarized on the table below:

Nature and Volume of Release			
Date Release Discovered	8/18/2018	**Source of Release**	Flowline
Type of Release	Crude Oil	**Volume Released (bbls)**	72
		Volume Recovered (bbls)	60
Cause of Release The release was attributed to a 3rd Party Trucking Company striking above ground flowlines.			
Affected Area The release affected an area within the pasture measuring approximately 2,600 sq. ft. adjacent to, and west of, the caliche access road. Overspray from the release affected an additional area measuring approximately 60 ft. by 150 ft. southwest of the affected flowlines.			
Was this a major release?	**If YES, for what reasons (s) is this considered a major release?**		
Yes	Volume Greater than 25 bbls		
If Yes, was immediate notice given to the OCD? By whom? To whom? When and by what means? Not Available, Not Available, Not Available, Not Available			

A copy of the Release Notification (NMOCD Form C-141) is provided as Attachment #8.

Incident ID	NCH1823355359
District RP	1RP-5167
Facility ID	30-025-43077
Application ID	pCH1823355621

Site Assessment/Characterization	
What is the shallowest depth to groundwater beneath the area affected by the release?	50-100'
Did this release impact groundwater or surface water?	No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	No
Are the lateral extents of the release within 300 feet of a wetland?	No
Are the lateral extents of the release overlying a subsurface mine?	No
Are the lateral extents of the release overlying an unstable area such as karst geology?	No
Are the lateral extents of the release within a 100-year floodplain?	No
Did the release impact areas **not** on an exploration, development, production or storage site?	Yes

A search of groundwater databases maintained by the New Mexico Office of the State Engineer (NMOSE) and United States Geological Survey was conducted in an effort to determine the average depth to groundwater within a 1 Mile radius of the Site and identify any registered water wells within a 1/2 Mile radius of the Site. A search of the NMOSE database suggested the presence of 1 water well (CP00665) within 1,000 ft. of the site. A field survey indicated available geographic information for CP00665 was outdated and/or incorrect; there is no waterwell in that vicinity. A search of the USGS database did not identify any water wells within a 1/2 Mile radius.

Based on the volume and nature of the release, inferred depth to groundwater and NMOCD Siting Criteria, the NMOCD Closure Criteria for the Site is as follows:

Closure Criteria for Soil Impacted by a Release	
Benzene	**10 mg/kg**
Benzene, Toluene, Ethylbenzene and Total Xylenes (BTEX)	**50 mg/kg**
Total Petroleum Hydrocarbons	**2500 mg/kg**
Combined GRO and DRO	**1000 mg/kg**
Chloride	**10000 mg/kg**

NMOCD Siting Criteria data was gathered from available resources including Bureau of Land Management (BLM) shapefiles; topographic maps; NMOSE and USGS databases; and aerial imagery. The results are depicted on Figures 1 & 2. Depth to groundwater information is provided as Attachment #4. A Photographic Log is provided as Attachment #7.

Incident ID	NCH1823355359
District RP	1RP-5167
Facility ID	30-025-43077
Application ID	pCH1823355621

INITIAL SITE ASSESSMENT

On **September 26, 2018**, upon conducting limitied initial remediation activites, five (5) soil samples (SP#1 through SP#5) were collected from the base of the excavated area in an effort to determine if impacted soil affected above the NMOCD Closure Criteria remained in-situ. The collected soil samples were submitted to an NMOCD-approved laboratory for analysis of TPH and chloride. Laboratory analytical results indicated chloride and TPH concentrations were below the NMOCD Closure Criteria in each of the submitted soil samples with the exception of soil sample SP #4 and SP #5, which exhibited TPH concentrations of 8,341 mg/kg and 3,220 mg/kg, respectively.

On **November 7, 2018,** the site was revisted in an effort to further characterize the affected area. During the site visit, forteen (14) soil samples (SH @ Surface, SH @ 1', NH @ Surface, NH @ 1', WH1 @ Surface, WH1 @ 1', WH2 @ Surface, WH2 @ 1', EH1 @ Surface, EH1 @ 1', EH @ Surface, EH2 @ 1', SP4B @ 3' and SP5B @ 3') were collected and submitted to the laboratory for analysis of BTEX, TPH and chloride. Laboratory analytical results indicated BTEX, TPH and chloride concentrations were below the NMOCD Closure Criteria in each of the submitted soil samples. A table summarizing laboratory analytical results from soil samples collected during the initial site assessment is provided below:

Concentrations of BTEX, TPH and/or Chloride in Soil - Initial Assessment(s)

Sample ID	Date	Depth	Soil Status	SW 846 8021B		SW 846 8015M Ext.					E300/4500Cl
				Benzene (mg/kg)	BTEX (mg/kg)	GRO C_6-C_{10} (mg/kg)	DRO C_{10}-C_{28} (mg/kg)	GRO + DRO C_6-C_{28} (mg/kg)	ORO C_{28}-C_{36} (mg/kg)	TPH C_6-C_{36} (mg/kg)	Chloride (mg/kg)
SP #1	9/26/18	1'	In-Situ	-	-	<10.0	505	505	131	636	464
SP #2	9/26/18	1'	In-Situ	-	-	<10.0	270	270	38.4	308	64.0
SP #3	9/26/18	1'	In-Situ	-	-	<10.0	<10.0	<10.0	<10.0	<10.0	1,090
SP #4	9/26/18	1'	In-Situ	-	-	291	6,930	**7,221**	1,120	**8,341**	80.0
SP #5	9/26/18	1'	In-Situ	-	-	<10.0	2,710	**2,710**	510	**3,220**	192
SH @ Surf.	11/7/18	Surf.	In-Situ	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
SH @ 1'	11/7/18	1'	In-Situ	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
NH @ Surf.	11/7/18	Surf.	In-Situ	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
NH @ 1'	11/7/18	1'	In-Situ	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
WH1 @ Surf.	11/7/18	Surf.	In-Situ	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80.0
WH1 @ 1'	11/7/18	1'	In-Situ	<0.050	<0.300	<10.0	63.1	63.1	<10.0	63.1	240
WH2 @ Surf.	11/7/18	Surf.	In-Situ	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	240
WH2 @ 1'	11/7/18	1'	In-Situ	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
EH1 @ Surf.	11/7/18	Surf.	In-Situ	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
EH1 @ 1'	11/7/18	1'	In-Situ	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
EH2 @ Surf.	11/7/18	Surf.	In-Situ	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
EH2 @ 1'	11/7/18	1'	In-Situ	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
SP4B @ 3'	11/7/18	3'	In-Situ	<0.050	<0.300	<10.0	22.5	22.5	<10.0	22.5	<16.0
SP5B @ 3'	11/7/18	3'	In-Situ	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
Closure Criteria				**10**	**50**	**-**	**-**	**1,000**	**-**	**2,500**	**10,000**

A "Site & Sample Location Map" is provided as Attachment #3. Field Data, if applicable, is provided as Attachment #9. Soil profile observations are provided on Attachment #5. Laboratory analytical reports are provided as Attachment #6.

NMOCD APPROVALS/STIPULATIONS

The Site Assessment Report and Proposed Remediation Plan was subsequently approved. Please reference the associated Site Assessment Report and Proposed Remediation Plan that was submitted for 1RP-5167 for additional details.

REMEDIATION ACTIVITIES SUMMARY

On **November 16, 2018**, LEA collected five (5) soil samples (Past. 0-3", Past. 3-6", Road Comp., SW Floor Comp. and SE Floor Comp.) and submitted them to the laboratory in an effort to determine if soil was affected above the NMOCD Closure Criteria. The collected soil samples were submitted to an NMOCD-approved laboratory for analysis of BTEX, TPH and chloride. Laboratory analytical results indicated concentrations of TPH exceeded the NMOCD Closure Criteria in soil samples Past. 0-3", Past. 3-6", Road Comp., SW Floor Comp. and SE Floor Comp.

Upon receiving laboratory analytical results from the collected soil samples, remediation activities resumed at the release site. Impacted soil in the areas characterized by sample points SP#4, SP #5, Past., SW Floor Comp. and SE Floor Comp. was excavated, stockpiled on-site then tranported to an NMOCD-permitted disposal facility. The floor and sidewalls of the excavated area were advanced until field observations suggested chloride and hydrocarbon impacts had been mitigated.

On **December 11, 2018,** LEA collected nine (9) excavation confirmation composite soil samples (N. Floor Comp., S. Floor Comp., WP Comp. #1, WP Comp #2, Past. Comp., S. Wall Comp. E. Wall Comp., W. Wall Comp. and N. Wall Comp.) were collected from the floor and sidewalls of the excavated area and submitted them to the laboratory for analaysis of BTEX, TPH and chloride concentrations. Laboratory analytical results indicated BTEX, TPH and chloride concentrations were below the NMOCD Closure Criteria in each of the submitted soil samples with the exception of soil sample N. Wall Comp., which exhibited a combined GRO+DRO concentration of 1,070 mg/kg; the excavation sidewall was advanced.

On **January 8, 2019,** LEA revisited the release site. During the site visit, one (1) excavation confirmation composite soil (N. Wall Comp. B) sample was collected from the sidewall of the excavation in the area represented by soil sample N. Wall Comp. and submitted them to the laboratory for analaysis of TPH concentrations, which were determined to be below the NMOCD Closure Criteria.

On **February 4, 2019,** LEA revisited the release site. During the site visit, one (1) excavation confirmation soil sample (SE SW) was collected from the "grade change" in the central portion of the excavation in accordance with the NMOCD. The collected soil sample was submitted to the laboratory for analysis of BTEX, TPH and chloride concentrations, which were determined to be below the NMOCD Closure Criteria.

Upon receiving laboratory analytical results from confirmation soil samples, the excavated area was backfilled with locally-sourced, non-impact material. Areas affected by remediation and closure activities were contoured and/or compacted to achieve erosion control, stability and preservation of surface water flow wo the extent practicable. Affected areas not on production pads and/or lease roads will be reseeded with a landowner approved seed mixutre during the first favorable growing season follow closure of the Site.

A table summarizing laboratory analytical results from confirmation soil samples is provided on the following page:

Incident ID	NCH1823355359
District RP	1RP-5167
Facility ID	30-025-43077
Application ID	pCH1823355621

Concentrations of BTEX, TPH and/or Chloride in Soil - Confirmation Samples

Sample ID	Date	Depth	Soil Status	SW 846 8021B		SW 846 8015M Ext.					E300/4500Cl
				Benzene (mg/kg)	BTEX (mg/kg)	GRO C_6-C_{10} (mg/kg)	DRO C_{10}-C_{28} (mg/kg)	GRO + DRO C_6-C_{28} (mg/kg)	ORO C_{28}-C_{36} (mg/kg)	TPH C_6-C_{36} (mg/kg)	Chloride (mg/kg)
Past. 0-3"	11/16/18	0-3"	Excavated	<0.050	<0.300	27.4	7,210	**7,237**	1,320	**8,557**	4,960
Past. 3-6"	11/16/18	3-6"	Excavated	<0.050	<0.300	<10.0	3,150	**3,150**	908	**4,058**	704
Road Comp.	11/16/18	Surf.	In-Situ	<0.050	<0.300	<10.0	758	758	303	1,061	2,440
SW Floor Comp.	11/16/18	Surf.	Excavated	<0.050	<0.300	21.7	1,660	**1,682**	343	2,025	864
SE Floor Comp.	11/16/18	Surf.	Excavated	<0.050	0.455	<10.0	3,180	**3,180**	800	**3,980**	2,280
N. Floor Comp.	12/11/18	18"	In-Situ	<0.050	<0.300	<10.0	216	216	32.9	249	32.0
S. Floor Comp.	12/11/18	12"	In-Situ	<0.050	<0.300	<10.0	31.3	31.3	<10.0	31.3	16.0
WP Comp #1	12/11/18	4"	In-Situ	<0.050	<0.300	<10.0	205	205	22.00	227.0	256
WP Comp #2	12/11/18	4"	In-Situ	<0.050	<0.300	<10.0	246	246	23.5	269.5	448
Past. Comp.	12/11/18	8-10"	In-Situ	<0.050	<0.300	<10.0	42.3	42.3	10.6	52.9	16.0
S. Wall Comp.	12/11/18	0-12"	In-Situ	<0.050	<0.300	<10.0	127	127	22.6	150	16.0
E. Wall Comp.	12/11/18	0-18"	In-Situ	<0.050	<0.300	<10.0	119	119	24.6	143.6	16.0
W. Wall Comp.	12/11/18	0-18"	In-Situ	<0.050	<0.300	<10.0	193	193	45.1	238.1	256
N. Wall Comp.	12/11/18	0-18"	Excavated	<0.050	<0.300	<10.0	1,070	**1,070**	213	1,283	32.0
N. Wall Comp. B	1/8/19	0-18"	In-Situ	-	-	<10.0	<10.0	<10.0	<10.0	<10.0	-
SE SW	2/4/19	12-18"	In-Situ	<0.050	<0.300	<10.0	38.9	38.9	<10.0	38.9	160
Closure Criteria				**10**	**50**	**-**	**-**	**1,000**	**-**	**2,500**	**20,000**

A "Site & Sample Location Map" is provided as Attachment #3. Field Data, if applicable, is provided as Attachment #9. Soil profile observations are provided on Attachment #5. Laboratory analytical reports are provided as Attachment #6.

Incident ID	NCH1823355359
District RP	1RP-5167
Facility ID	30-025-43077
Application ID	pCH1823355621

CLOSURE REQUEST

Remediation activities were conducted in accordance with an approved Workplan. Impacted soil affected above the NMOCD Closure Criteria was excavated and transported to an NMOCD-permitted facility for disposal. Laboratory analytical results from confirmation soil sample indicate BTEX, TPH and chloride concentrations were below the NMOCD Closure Criteria in each of the submitted soil samples. Upon receiving laboratory analtyical results from confirmation soil samples, the excavated area was backfilled with locally-sourced, non-impacted material.

During the course of remediation activities, approximately 180 cubic yards of impacted soil were excavated and transported to an NMOCD-permitted facility for disposal.

Based on laboratory analytical results, field activities conducted to date and conditions at the site, LEA recommends Legacy Reserves Operating, LP provide a copy of this Remediation Summary and Closure Report to the NMOCD and request closure be granted to the Lea Unit South Battery Site.

Respectfully,

Joel W. Lowry
Environmental Professional
Lowry Environmental & Associates, LLC

Attachments:

Attachment #1- Figure 1 - Topographic Map
Attachment #2- Figure 2 - Aerial Map
Attachment #3- Figure 3 - Site & Sample Location Map
Attachment #4- Depth to Groundwater Information
Attachment #5- Soil Profile
Attachment #6- Laboratory Analytical Reports
Attachment #7- Photographic Log
Attachment #8- Release Notification (FORM C-141)
Attachment #9- Field Data

LIMITATIONS

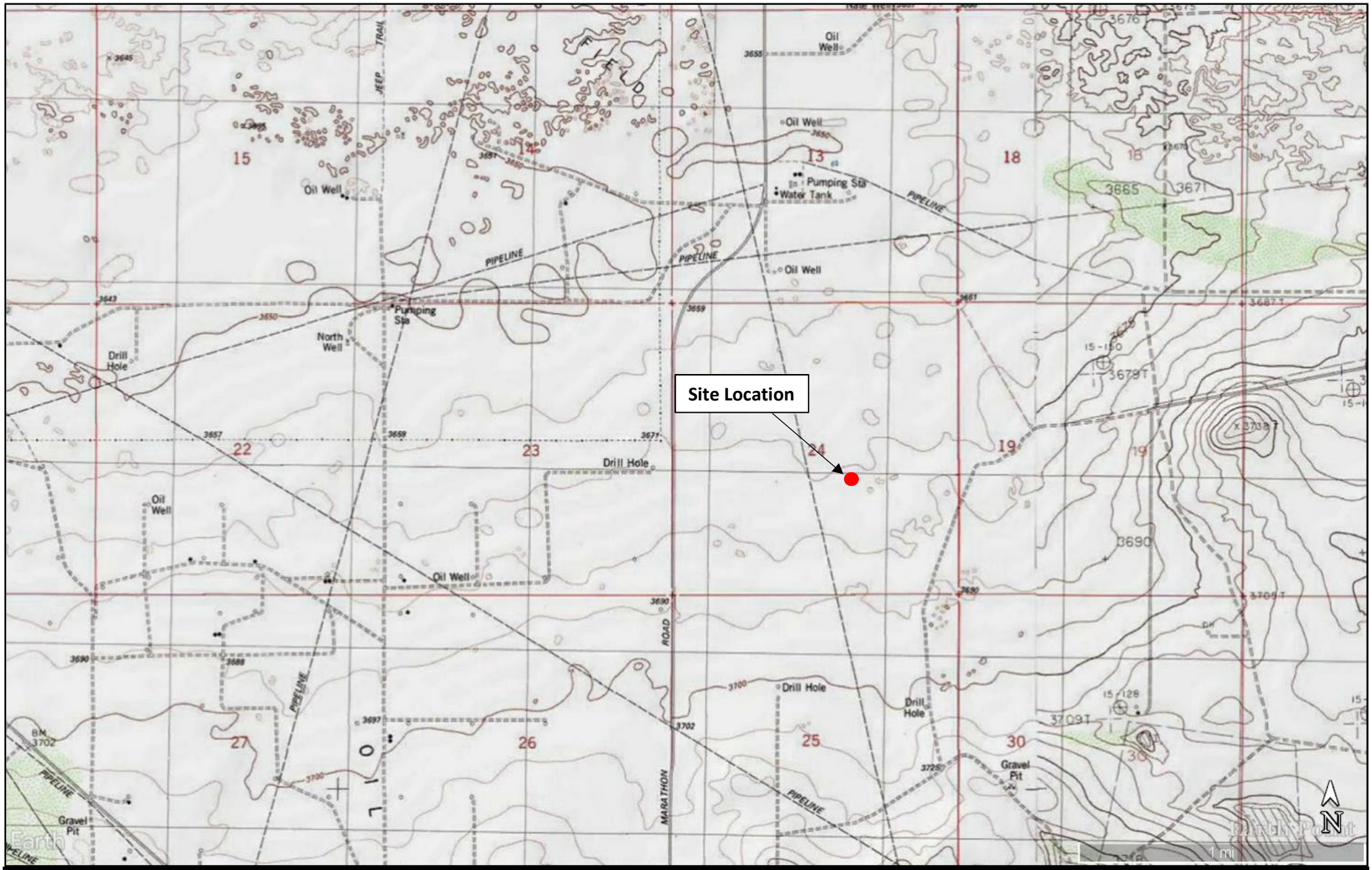
This document has been prepared on behalf of Legacy Reserves Operating, LP. Use of information contained in this report, including exhibits and attachments, by any other party without the consent of LEA and/or Legacy Reserves Operating, LP is prohibited.

This document has been prepared in a professional manner, using the degree of skill and care exercised by similar environmental professionals. LEA notes that the facts and conditions referenced in this document may change over time and that the conclusions and recommendations are only applicable to the facts and conditions as described at the time this document was prepared.

LEA has prepared this report to the best of its ability. No other warranty, expressed or implied, is made or intended.

ATTACHMENT #1

Figure 1 - Topographic Map



LEGEND:

- Site Location

Figure 1
Topographic Map
Legacy Reserves Operating, LP
Lea Unit South Battery
GPS: 32.55722, -103.50805
Lea County, New Mexico

LOWRY environmental

Drafted by: jwl Checked by: client Date: 11/6/2018

ATTACHMENT #2

Figure 2 - Aerial Map

LEGEND:

- Site Location
- Fresh Water Well
- 100-Year Floodplain
- High/Critical Karst
- Non-Industrial Building
- Subsurface Mine
- 1/2 Mile Radius

Figure 2

Aerial Map

Legacy Reserves Operating, LP

Lea Unit South Battery

GPS: 32.55722, -103.50805

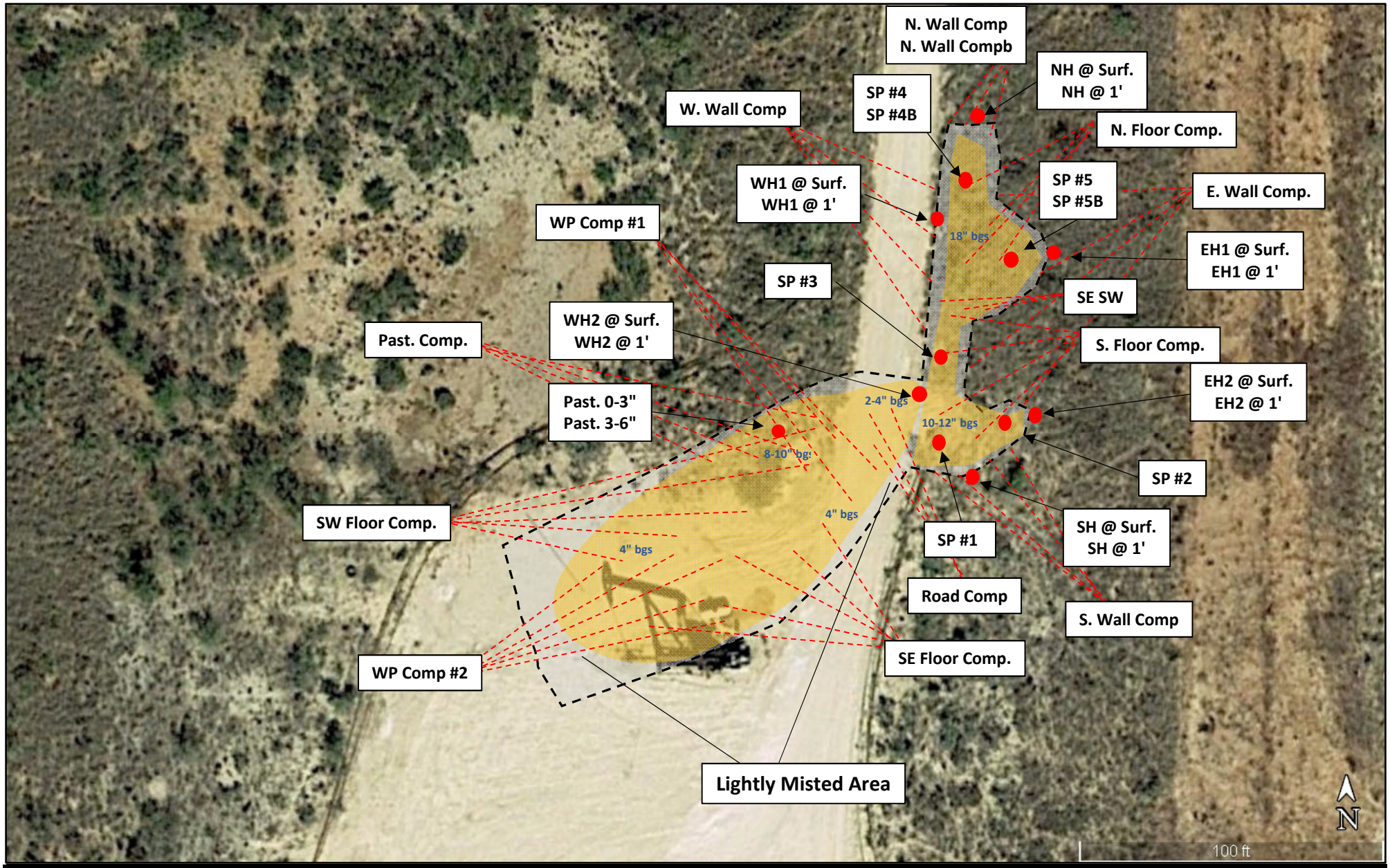
Lea County, New Mexico

LOWRY environmental

Drafted by: jwl Checked by: client Date: 12/6/2018

ATTACHMENT #3

Figure 3 - Site & Sample Location Map



LEGEND:

- Sample Location
- Confirmation Sample Location
- Affected Area
- Excavated Area

Figure 3

Site & Sample Location Map

Legacy Reserves Operating, LP

Lea Unit South Battery

GPS: 32.55722, -103.511284

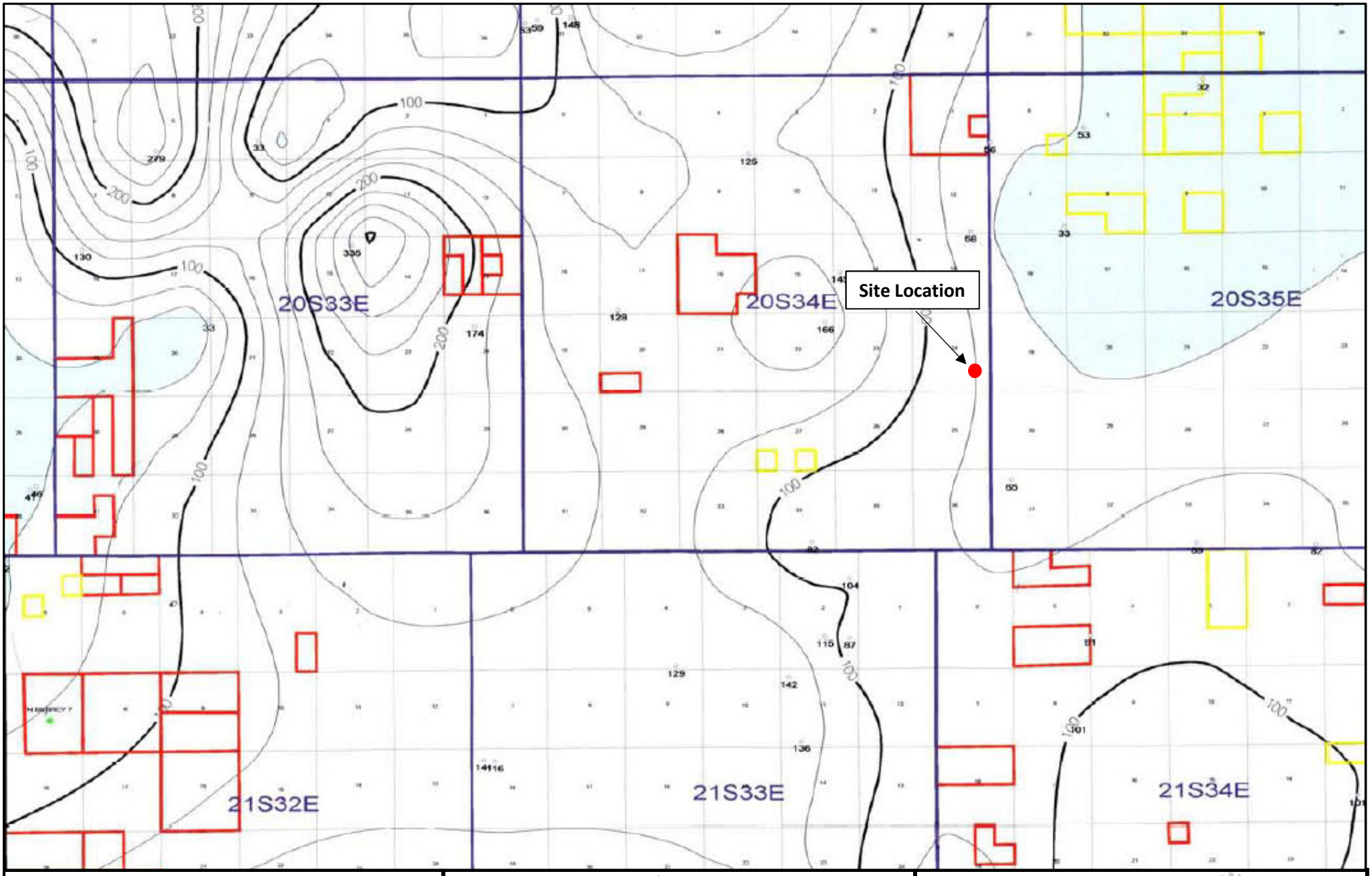
Lea County, New Mexico

LOWRY environmental

Drafted by: jwl Checked by: client Date: 2/27/2019

ATTACHMENT #4

Depth to Groundwater Information



LEGEND:

- Site Location

Figure 4

Inferred Depth to Groundwater Trend Map

Legacy Reserves Operating, LP

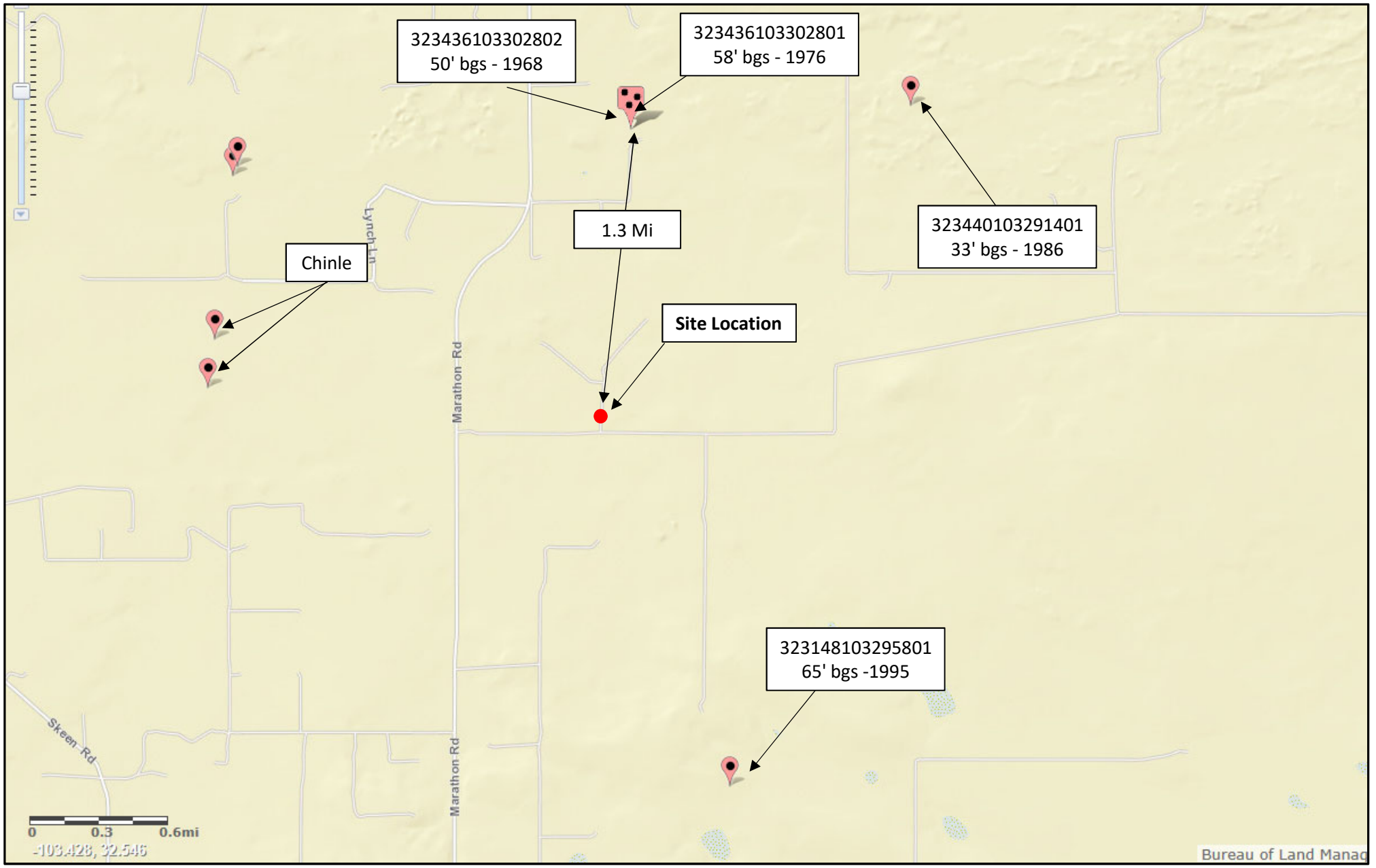
Lea Unit South Battery

GPS: 32.55722, -103.50805

Lea County, New Mexico

LOWRY environmental

Drafted by: jwl Checked by: client Date: 12/6/2018



LEGEND:

- Site Location

Figure 5

USGS Well Proximity Map

Legacy Reserves Operating, LP

Lea Unit South Battery

GPS: 32.55722, -103.50805

Lea County, New Mexico

LOWRY environmental

Drafted by: jwl Checked by: client Date: 12/6/2018

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

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

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

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Twn	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
CP 00665		CP	LE		1	4	24	20S	34E	639740	3603128*	37	698	270	428
CP 01204 POD1		CP	LE	3	1	1	25	20S	34E	638755	3602250	1355	370		

Average Depth to Water: **270 feet**

Minimum Depth: **270 feet**

Maximum Depth: **270 feet**

Record Count: 2

UTMNAD83 Radius Search (in meters):

Easting (X): 639761.1 **Northing (Y):** 3603158.9 **Radius:** 1610

***UTM location was derived from PLSS - see Help**

New Mexico Office of the State Engineer

Point of Diversion Summary

Well Tag	POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) Q64	Q16	Q4	Sec	Tws	Rng	(NAD83 UTM in meters) X	Y
	CP 00665		1	4	24	20S	34E	639740	3603128*

Driller License: 421 **Driller Company:** GLENN'S WATER WELL SERVICE

Driller Name: GLENN, CLARK A."CORKY" (LD)

Drill Start Date:	05/25/1984	**Drill Finish Date:**	05/28/1984	**Plug Date:**	
Log File Date:	06/11/1984	**PCW Rcv Date:**		**Source:**	Shallow
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	13 GPM
Casing Size:	6.63	**Depth Well:**	698 feet	**Depth Water:**	270 feet

Water Bearing Stratifications:	Top	Bottom	Description
	364	396	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	360	420

***UTM location was derived from PLSS - see Help**

National Water Information System: Web Interface

Click to hideNews Bulletins

- Please see news on new formats
- **UPDATE, 11/2: The USGS continues to make progress on restoring all of its gages. As of 3 p.m. Friday, November 2, less than 3 percent of USGS streamgages are still not transmitting due to an issue with the telemetry system that records and transmits streamgage data. The USGS will continue to work through the weekend to bring the streamgages back online. Read more**
- Full News

Groundwater levels for the Nation

Search Results -- 1 sites found

site_no list =

- 323440103291401

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

USGS 323440103291401 20S.35E.07.44420

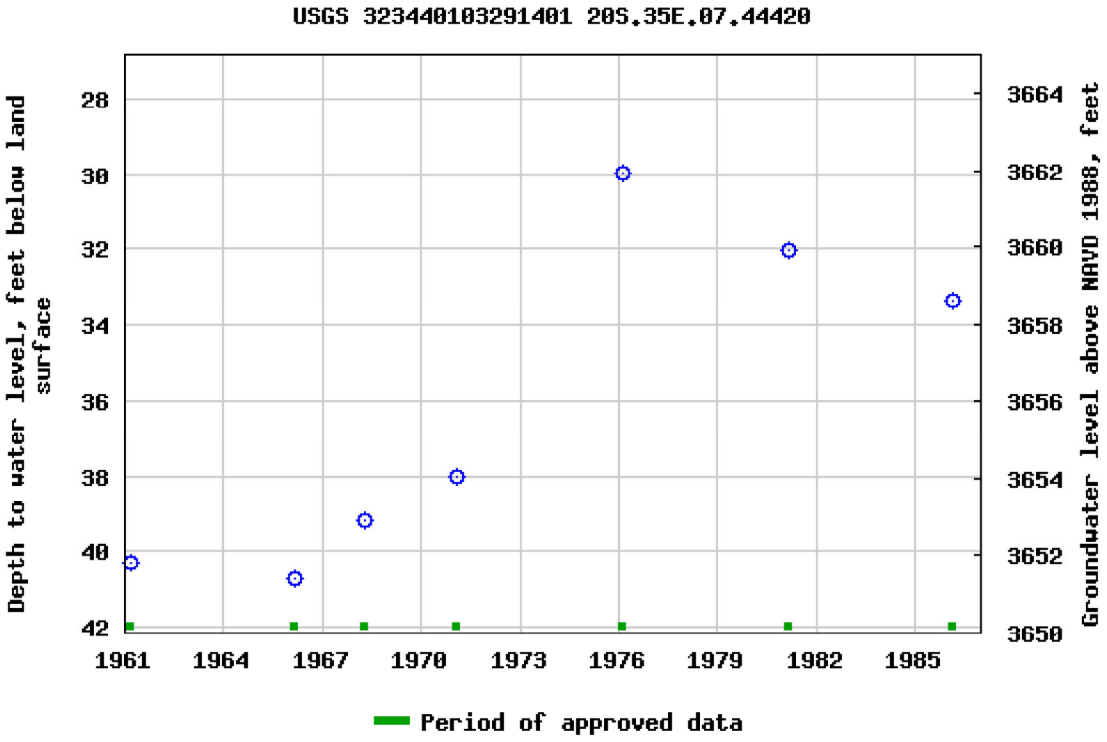
Available data for this site | Groundwater: Field measurements | GO

Lea County, New Mexico
Hydrologic Unit Code 13060011
Latitude 32°34'40", Longitude 103°29'14" NAD27
Land-surface elevation 3,692 feet above NAVD88
This well is completed in the Ogallala Formation (121OGLL) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data

Reselect period



Breaks in the plot represent a gap of at least one year between field measurements.
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Feedback on this web site
Automated retrievals
Help
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U.S. Department of the Interior | U.S. Geological Survey

Title: Groundwater for USA: Water Levels
URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: USGS Water Data Support Team
Page Last Modified: 2018-11-06 12:16:37 EST
1.12 1.01 nadww01

National Water Information System: Web Interface

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- **UPDATE, 11/2: The USGS continues to make progress on restoring all of its gages. As of 3 p.m. Friday, November 2, less than 3 percent of USGS streamgages are still not transmitting due to an issue with the telemetry system that records and transmits streamgage data. The USGS will continue to work through the weekend to bring the streamgages back online. Read more**
- Full News

Groundwater levels for the Nation

Search Results -- 1 sites found

site_no list =

- 323148103295801

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

USGS 323148103295801 20S.35E.31.12311

Available data for this site Groundwater: Field measurements | GO

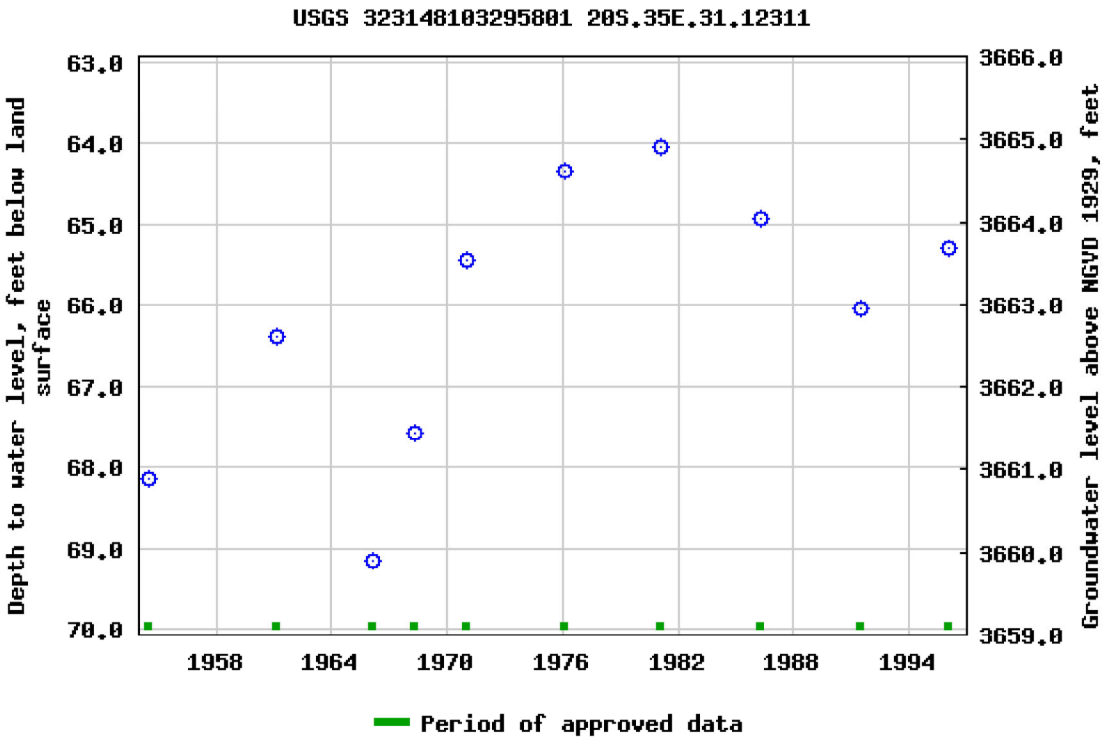
Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°32'06", Longitude 103°30'03" NAD27
Land-surface elevation 3,729.00 feet above NGVD29
The depth of the well is 85 feet below land surface.
This well is completed in the Ogallala Formation (121OGLL) local aquifer.

Output formats

Table of data
Tab-separated data

Graph of data

Reselect period



Breaks in the plot represent a gap of at least one year between field measurements.
Download a presentation-quality graph

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URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: USGS Water Data Support Team
Page Last Modified: 2018-11-06 12:17:42 EST
1.07 0.94 nadww01

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- **UPDATE, 11/2: The USGS continues to make progress on restoring all of its gages. As of 3 p.m. Friday, November 2, less than 3 percent of USGS streamgages are still not transmitting due to an issue with the telemetry system that records and transmits streamgage data. The USGS will continue to work through the weekend to bring the streamgages back online. Read more**
- Full News

Groundwater levels for the Nation

Search Results -- 1 sites found

site_no list =

- 323436103302801

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

USGS 323436103302801 20S.34E.12.44333

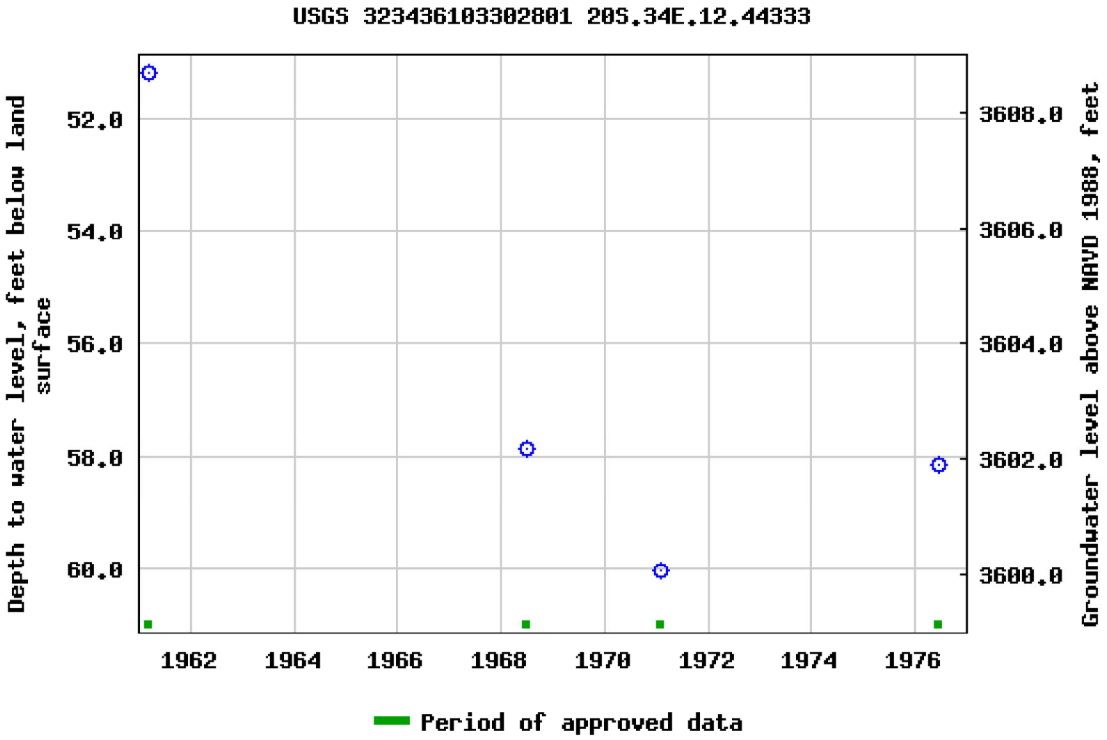
Available data for this site | Groundwater: Field measurements | GO

Lea County, New Mexico
Hydrologic Unit Code 13060011
Latitude 32°34'36", Longitude 103°30'28" NAD27
Land-surface elevation 3,660 feet above NAVD88
This well is completed in the Ogallala Formation (121OGLL) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data

Reselect period



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URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: USGS Water Data Support Team
Page Last Modified: 2018-11-06 12:18:56 EST
1.05 0.91 nadww01

National Water Information System: Web Interface

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- **UPDATE, 11/2: The USGS continues to make progress on restoring all of its gages. As of 3 p.m. Friday, November 2, less than 3 percent of USGS streamgages are still not transmitting due to an issue with the telemetry system that records and transmits streamgage data. The USGS will continue to work through the weekend to bring the streamgages back online. Read more**
- Full News

Groundwater levels for the Nation

Search Results -- 1 sites found

site_no list =

- 323436103302802

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

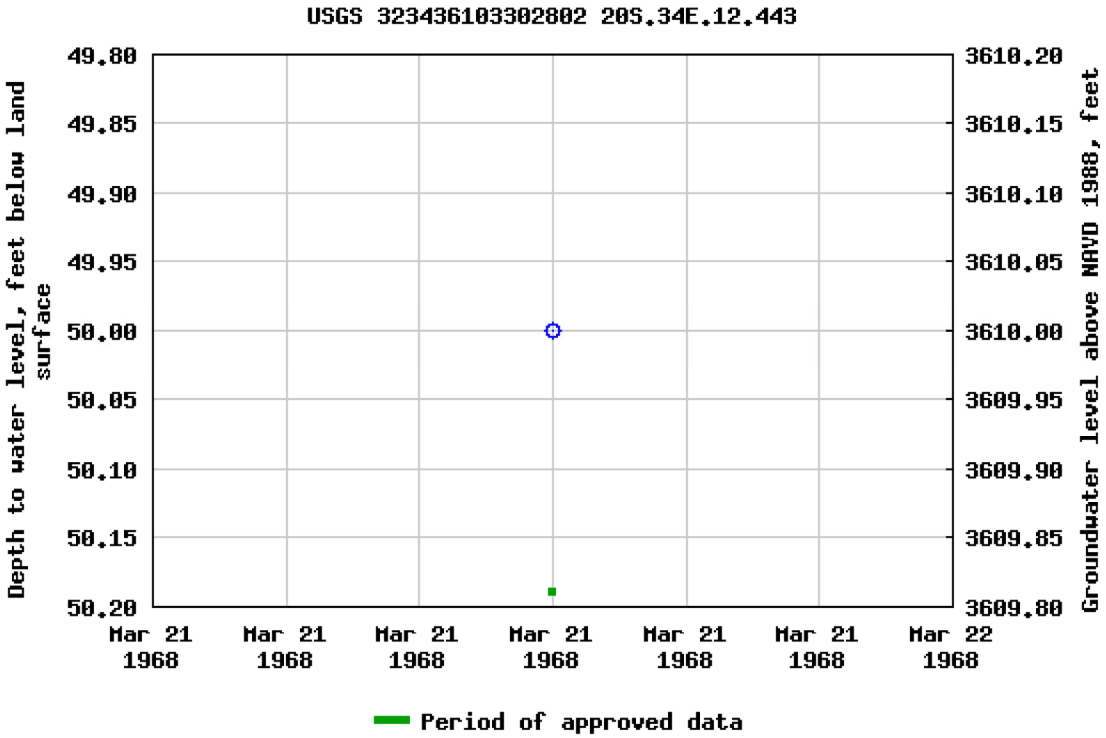
USGS 323436103302802 20S.34E.12.443

Available data for this site Groundwater: Field measurements | GO

Lea County, New Mexico
Hydrologic Unit Code 13060011
Latitude 32°34'36", Longitude 103°30'28" NAD27
Land-surface elevation 3,660 feet above NAVD88

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period



Breaks in the plot represent a gap of at least one year between field measurements.
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U.S. Department of the Interior | U.S. Geological Survey

Title: Groundwater for USA: Water Levels
URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: USGS Water Data Support Team
Page Last Modified: 2018-11-06 12:20:13 EST
0.99 0.89 nadww01

ATTACHMENT #5
Soil Profile

SOIL PROFILE

Site Name: Lea South Battery

Date: 11/7/2018

Description

Brown Soil w/ Rock

TD

Depth (ft. bgs)

1
2
3
4
5
6
7
8
9
0
1
2
3
4
5
6
7
8
9
0
1
2
3
4
5
6
7
8
9
0
1
2
3
4
5
6
7
8
9
0

ATTACHMENT #6
Laboratory Analytical Reports

CARDINAL Laboratories

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

September 28, 2018

STEVE TAYLOR

CAPROCK SERVICES

P.O. BOX 457

LOVINGTON, NM 88260

RE: LEA BATTERY SOUTH

Enclosed are the results of analyses for samples received by the laboratory on 09/26/18 10:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. 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. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

CAPROCK SERVICES
STEVE TAYLOR
P.O. BOX 457
LOVINGTON NM, 88260
Fax To:

Received:	09/26/2018	Sampling Date:	09/26/2018
Reported:	09/28/2018	Sampling Type:	Soil
Project Name:	LEA BATTERY SOUTH	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SP #1 (H802713-01)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**464**	16.0	09/26/2018	ND	416	104	400	3.77	

TPH 8015M **mg/kg** **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/27/2018	ND	195	97.6	200	0.158	
DRO >C10-C28*	**505**	10.0	09/27/2018	ND	182	90.8	200	1.35	
EXT DRO >C28-C36	**131**	10.0	09/27/2018	ND					

Surrogate: 1-Chlorooctane	*89.7 %*	*41-142*
Surrogate: 1-Chlorooctadecane	*111 %*	*37.6-147*

Sample ID: SP #2 (H802713-02)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**64.0**	16.0	09/26/2018	ND	416	104	400	3.77	

TPH 8015M **mg/kg** **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/27/2018	ND	195	97.6	200	0.158	
DRO >C10-C28*	**270**	10.0	09/27/2018	ND	182	90.8	200	1.35	
EXT DRO >C28-C36	**38.4**	10.0	09/27/2018	ND					

Surrogate: 1-Chlorooctane	*91.2 %*	*41-142*
Surrogate: 1-Chlorooctadecane	*100 %*	*37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

CAPROCK SERVICES
STEVE TAYLOR
P.O. BOX 457
LOVINGTON NM, 88260
Fax To:

Received:	09/26/2018	Sampling Date:	09/26/2018
Reported:	09/28/2018	Sampling Type:	Soil
Project Name:	LEA BATTERY SOUTH	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SP #3 (H802713-03)

Chloride, SM4500Cl-B mg/kg **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1090**	16.0	09/26/2018	ND	416	104	400	3.77	

TPH 8015M mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/27/2018	ND	195	97.6	200	0.158	
DRO >C10-C28*	<10.0	10.0	09/27/2018	ND	182	90.8	200	1.35	
EXT DRO >C28-C36	<10.0	10.0	09/27/2018	ND					

Surrogate: 1-Chlorooctane	*90.9 %*	*41-142*
Surrogate: 1-Chlorooctadecane	*89.7 %*	*37.6-147*

Sample ID: SP #4 (H802713-04)

Chloride, SM4500Cl-B mg/kg **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**80.0**	16.0	09/26/2018	ND	416	104	400	3.77	

TPH 8015M mg/kg **Analyzed By: MS** **S-04**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**291**	10.0	09/27/2018	ND	195	97.6	200	0.158	
DRO >C10-C28*	**6930**	10.0	09/27/2018	ND	182	90.8	200	1.35	
EXT DRO >C28-C36	**1120**	10.0	09/27/2018	ND					

Surrogate: 1-Chlorooctane	*144 %*	*41-142*
Surrogate: 1-Chlorooctadecane	*305 %*	*37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

CAPROCK SERVICES
STEVE TAYLOR
P.O. BOX 457
LOVINGTON NM, 88260
Fax To:

Received:	09/26/2018	Sampling Date:	09/26/2018
Reported:	09/28/2018	Sampling Type:	Soil
Project Name:	LEA BATTERY SOUTH	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SP #5 (H802713-05)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**192**	16.0	09/26/2018	ND	416	104	400	3.77	

TPH 8015M **mg/kg** **Analyzed By: MS** **S-04**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/27/2018	ND	195	97.6	200	0.158	
DRO >C10-C28*	**2710**	10.0	09/27/2018	ND	182	90.8	200	1.35	
EXT DRO >C28-C36	**510**	10.0	09/27/2018	ND					

Surrogate: 1-Chlorooctane	*95.2 %*	*41-142*
Surrogate: 1-Chlorooctadecane	*191 %*	*37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name:	Caprock Services
Project Manager:	Steve Taylor
Address:	P.O. Box 457
City:	Lovington State: NM Zip: 88260
Phone #:	(575) 704-2718 Fax #:
Project #:	Project Owner: Legacy
Project Name:	Lea Battery South
Project Location:	
Sampler Name:	Steve Taylor

BILL TO

P.O. #:	
Company:	Caprock Services
Attn:	Steve Taylor
Address:	P.O. Box 457
City:	Lovington
State:	NM Zip: 88260
Phone #:	(575) 704-2718
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING DATE	SAMPLING TIME	Chloride	TPH
H802713-1	SP#2	X				X					X		9/26/18	7:00 AM	X	X
2	SP#2	X				X					X			7:10 AM	X	X
3	SP#3	X				X					X			7:20 AM	X	X
4	SP#4	X				X					X			7:30 AM	X	X
5	SP#5	X				X					X			7:40 AM	X	X

Relinquished By:	Date: 9/26/18	Received By: Jodi Henson	
Relinquished By:	Time: 10:30	Received By:	
	Date:		
	Time:		

Delivered By: (Circle One)
Sampler - UPS - Bus - Other: 5.2°C / #97

Sample Condition		CHECKED BY: (Initials)
Cool: ☑ Yes ☐ No	Intact: ☑ Yes ☐ No	

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

REMARKS:

Caprockservices56@gmail.com

CARDINAL Laboratories

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

November 14, 2018

STEVE TAYLOR

CAPROCK SERVICES

P.O. BOX 457

LOVINGTON, NM 88260

RE: LEA UNIT SOUTH

Enclosed are the results of analyses for samples received by the laboratory on 11/08/18 11:18.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. 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. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

CAPROCK SERVICES
STEVE TAYLOR
P.O. BOX 457
LOVINGTON NM, 88260
Fax To:

Received:	11/08/2018	Sampling Date:	11/07/2018
Reported:	11/14/2018	Sampling Type:	Soil
Project Name:	LEA UNIT SOUTH	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY - MONUMENT NM		

Sample ID: SH @ SURFACE (H803230-01)

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	11/13/2018	ND	2.32	116	2.00	1.98	
Toluene*	<0.050	0.050	11/13/2018	ND	2.31	115	2.00	0.531	
Ethylbenzene*	<0.050	0.050	11/13/2018	ND	2.29	115	2.00	0.134	
Total Xylenes*	<0.150	0.150	11/13/2018	ND	6.71	112	6.00	0.146	
Total BTEX	<0.300	0.300	11/13/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *69.8-142*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48.0**	16.0	11/14/2018	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/09/2018	ND	208	104	200	7.06	
DRO >C10-C28*	<10.0	10.0	11/09/2018	ND	209	105	200	2.36	
EXT DRO >C28-C36	<10.0	10.0	11/09/2018	ND					

Surrogate: 1-Chlorooctane *86.9 %* *41-142*

Surrogate: 1-Chlorooctadecane *81.2 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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Analytical Results For:

CAPROCK SERVICES
STEVE TAYLOR
P.O. BOX 457
LOVINGTON NM, 88260
Fax To:

Received:	11/08/2018	Sampling Date:	11/07/2018
Reported:	11/14/2018	Sampling Type:	Soil
Project Name:	LEA UNIT SOUTH	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY - MONUMENT NM		

Sample ID: SH @ 1' (H803230-02)

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	11/13/2018	ND	2.32	116	2.00	1.98	
Toluene*	<0.050	0.050	11/13/2018	ND	2.31	115	2.00	0.531	
Ethylbenzene*	<0.050	0.050	11/13/2018	ND	2.29	115	2.00	0.134	
Total Xylenes*	<0.150	0.150	11/13/2018	ND	6.71	112	6.00	0.146	
Total BTEX	<0.300	0.300	11/13/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *100 %* *69.8-142*

Chloride, SM4500Cl-B mg/kg **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	11/14/2018	ND	416	104	400	0.00	

TPH 8015M mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/09/2018	ND	208	104	200	7.06	
DRO >C10-C28*	<10.0	10.0	11/09/2018	ND	209	105	200	2.36	
EXT DRO >C28-C36	<10.0	10.0	11/09/2018	ND					

Surrogate: 1-Chlorooctane *95.2 %* *41-142*

Surrogate: 1-Chlorooctadecane *87.2 %* *37.6-147*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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Analytical Results For:

CAPROCK SERVICES
STEVE TAYLOR
P.O. BOX 457
LOVINGTON NM, 88260
Fax To:

Received:	11/08/2018	Sampling Date:	11/07/2018
Reported:	11/14/2018	Sampling Type:	Soil
Project Name:	LEA UNIT SOUTH	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY - MONUMENT NM		

Sample ID: NH @ SURFACE (H803230-03)

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	11/13/2018	ND	2.32	116	2.00	1.98	
Toluene*	<0.050	0.050	11/13/2018	ND	2.31	115	2.00	0.531	
Ethylbenzene*	<0.050	0.050	11/13/2018	ND	2.29	115	2.00	0.134	
Total Xylenes*	<0.150	0.150	11/13/2018	ND	6.71	112	6.00	0.146	
Total BTEX	<0.300	0.300	11/13/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *100 %* *69.8-142*

Chloride, SM4500Cl-B mg/kg **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	11/14/2018	ND	416	104	400	0.00	

TPH 8015M mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/09/2018	ND	208	104	200	7.06	
DRO >C10-C28*	<10.0	10.0	11/09/2018	ND	209	105	200	2.36	
EXT DRO >C28-C36	<10.0	10.0	11/09/2018	ND					

Surrogate: 1-Chlorooctane *96.4 %* *41-142*

Surrogate: 1-Chlorooctadecane *86.3 %* *37.6-147*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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Analytical Results For:

CAPROCK SERVICES
STEVE TAYLOR
P.O. BOX 457
LOVINGTON NM, 88260
Fax To:

Received:	11/08/2018	Sampling Date:	11/07/2018
Reported:	11/14/2018	Sampling Type:	Soil
Project Name:	LEA UNIT SOUTH	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY - MONUMENT NM		

Sample ID: NH @ 1' (H803230-04)

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	11/13/2018	ND	2.32	116	2.00	1.98	
Toluene*	<0.050	0.050	11/13/2018	ND	2.31	115	2.00	0.531	
Ethylbenzene*	<0.050	0.050	11/13/2018	ND	2.29	115	2.00	0.134	
Total Xylenes*	<0.150	0.150	11/13/2018	ND	6.71	112	6.00	0.146	
Total BTEX	<0.300	0.300	11/13/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.2 %* *69.8-142*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48.0**	16.0	11/14/2018	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/09/2018	ND	208	104	200	7.06	
DRO >C10-C28*	<10.0	10.0	11/09/2018	ND	209	105	200	2.36	
EXT DRO >C28-C36	<10.0	10.0	11/09/2018	ND					

Surrogate: 1-Chlorooctane *103 %* *41-142*

Surrogate: 1-Chlorooctadecane *88.4 %* *37.6-147*

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Analytical Results For:

CAPROCK SERVICES
STEVE TAYLOR
P.O. BOX 457
LOVINGTON NM, 88260
Fax To:

Received:	11/08/2018	Sampling Date:	11/07/2018
Reported:	11/14/2018	Sampling Type:	Soil
Project Name:	LEA UNIT SOUTH	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY - MONUMENT NM		

Sample ID: WH 1 @ SURFACE (H803230-05)

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	11/13/2018	ND	2.32	116	2.00	1.98	
Toluene*	<0.050	0.050	11/13/2018	ND	2.31	115	2.00	0.531	
Ethylbenzene*	<0.050	0.050	11/13/2018	ND	2.29	115	2.00	0.134	
Total Xylenes*	<0.150	0.150	11/13/2018	ND	6.71	112	6.00	0.146	
Total BTEX	<0.300	0.300	11/13/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *100 %* *69.8-142*

Chloride, SM4500Cl-B mg/kg **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**80.0**	16.0	11/14/2018	ND	416	104	400	0.00	

TPH 8015M mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/09/2018	ND	208	104	200	7.06	
DRO >C10-C28*	<10.0	10.0	11/09/2018	ND	209	105	200	2.36	
EXT DRO >C28-C36	<10.0	10.0	11/09/2018	ND					

Surrogate: 1-Chlorooctane *99.6 %* *41-142*

Surrogate: 1-Chlorooctadecane *87.8 %* *37.6-147*

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CARDINAL Laboratories

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Analytical Results For:

CAPROCK SERVICES
STEVE TAYLOR
P.O. BOX 457
LOVINGTON NM, 88260
Fax To:

Received:	11/08/2018	Sampling Date:	11/07/2018
Reported:	11/14/2018	Sampling Type:	Soil
Project Name:	LEA UNIT SOUTH	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY - MONUMENT NM		

Sample ID: WH 1 @ 1' (H803230-06)

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	11/13/2018	ND	2.32	116	2.00	1.98	
Toluene*	<0.050	0.050	11/13/2018	ND	2.31	115	2.00	0.531	
Ethylbenzene*	<0.050	0.050	11/13/2018	ND	2.29	115	2.00	0.134	
Total Xylenes*	<0.150	0.150	11/13/2018	ND	6.71	112	6.00	0.146	
Total BTEX	<0.300	0.300	11/13/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *97.3 %* *69.8-142*

Chloride, SM4500Cl-B mg/kg **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**240**	16.0	11/14/2018	ND	416	104	400	0.00	

TPH 8015M mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/09/2018	ND	208	104	200	7.06	
DRO >C10-C28*	**63.1**	10.0	11/09/2018	ND	209	105	200	2.36	
EXT DRO >C28-C36	<10.0	10.0	11/09/2018	ND					

Surrogate: 1-Chlorooctane *112 %* *41-142*

Surrogate: 1-Chlorooctadecane *101 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

CAPROCK SERVICES
STEVE TAYLOR
P.O. BOX 457
LOVINGTON NM, 88260
Fax To:

Received:	11/08/2018	Sampling Date:	11/07/2018
Reported:	11/14/2018	Sampling Type:	Soil
Project Name:	LEA UNIT SOUTH	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY - MONUMENT NM		

Sample ID: WH 2 @ SURFACE (H803230-07)

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	11/14/2018	ND	2.48	124	2.00	1.94	
Toluene*	<0.050	0.050	11/14/2018	ND	2.41	120	2.00	1.28	
Ethylbenzene*	<0.050	0.050	11/14/2018	ND	2.35	118	2.00	2.21	
Total Xylenes*	<0.150	0.150	11/14/2018	ND	7.33	122	6.00	1.96	
Total BTEX	<0.300	0.300	11/14/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *103 %* *69.8-142*

Chloride, SM4500Cl-B mg/kg **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**240**	16.0	11/14/2018	ND	416	104	400	0.00	

TPH 8015M mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/09/2018	ND	208	104	200	7.06	
DRO >C10-C28*	<10.0	10.0	11/09/2018	ND	209	105	200	2.36	
EXT DRO >C28-C36	<10.0	10.0	11/09/2018	ND					

Surrogate: 1-Chlorooctane *103 %* *41-142*

Surrogate: 1-Chlorooctadecane *93.0 %* *37.6-147*

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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Analytical Results For:

CAPROCK SERVICES
STEVE TAYLOR
P.O. BOX 457
LOVINGTON NM, 88260
Fax To:

Received:	11/08/2018	Sampling Date:	11/07/2018
Reported:	11/14/2018	Sampling Type:	Soil
Project Name:	LEA UNIT SOUTH	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY - MONUMENT NM		

Sample ID: WH 2 @ 1' (H803230-08)

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	11/14/2018	ND	2.48	124	2.00	1.94	
Toluene*	<0.050	0.050	11/14/2018	ND	2.41	120	2.00	1.28	
Ethylbenzene*	<0.050	0.050	11/14/2018	ND	2.35	118	2.00	2.21	
Total Xylenes*	<0.150	0.150	11/14/2018	ND	7.33	122	6.00	1.96	
Total BTEX	<0.300	0.300	11/14/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *104 %* *69.8-142*

Chloride, SM4500Cl-B mg/kg **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	11/14/2018	ND	416	104	400	0.00	

TPH 8015M mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/09/2018	ND	208	104	200	7.06	
DRO >C10-C28*	<10.0	10.0	11/09/2018	ND	209	105	200	2.36	
EXT DRO >C28-C36	<10.0	10.0	11/09/2018	ND					

Surrogate: 1-Chlorooctane *109 %* *41-142*

Surrogate: 1-Chlorooctadecane *97.6 %* *37.6-147*

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Analytical Results For:

CAPROCK SERVICES
STEVE TAYLOR
P.O. BOX 457
LOVINGTON NM, 88260
Fax To:

Received:	11/08/2018	Sampling Date:	11/07/2018
Reported:	11/14/2018	Sampling Type:	Soil
Project Name:	LEA UNIT SOUTH	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY - MONUMENT NM		

Sample ID: EH 1 @ SURFACE (H803230-09)

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	11/13/2018	ND	2.24	112	2.00	5.73	
Toluene*	<0.050	0.050	11/13/2018	ND	2.28	114	2.00	5.98	
Ethylbenzene*	<0.050	0.050	11/13/2018	ND	2.23	112	2.00	5.81	
Total Xylenes*	<0.150	0.150	11/13/2018	ND	6.57	110	6.00	6.22	
Total BTEX	<0.300	0.300	11/13/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *100 %* *69.8-142*

Chloride, SM4500Cl-B mg/kg **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	11/14/2018	ND	416	104	400	0.00	

TPH 8015M mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/09/2018	ND	208	104	200	7.06	
DRO >C10-C28*	<10.0	10.0	11/09/2018	ND	209	105	200	2.36	
EXT DRO >C28-C36	<10.0	10.0	11/09/2018	ND					

Surrogate: 1-Chlorooctane *99.2 %* *41-142*

Surrogate: 1-Chlorooctadecane *85.6 %* *37.6-147*

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STEVE TAYLOR
P.O. BOX 457
LOVINGTON NM, 88260
Fax To:

Received:	11/08/2018	Sampling Date:	11/07/2018
Reported:	11/14/2018	Sampling Type:	Soil
Project Name:	LEA UNIT SOUTH	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY - MONUMENT NM		

Sample ID: EH 1 @ 1' (H803230-10)

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	11/13/2018	ND	2.24	112	2.00	5.73	
Toluene*	<0.050	0.050	11/13/2018	ND	2.28	114	2.00	5.98	
Ethylbenzene*	<0.050	0.050	11/13/2018	ND	2.23	112	2.00	5.81	
Total Xylenes*	<0.150	0.150	11/13/2018	ND	6.57	110	6.00	6.22	
Total BTEX	<0.300	0.300	11/13/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *97.1 %* *69.8-142*

Chloride, SM4500Cl-B mg/kg **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	11/14/2018	ND	416	104	400	0.00	

TPH 8015M mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/09/2018	ND	208	104	200	7.06	
DRO >C10-C28*	<10.0	10.0	11/09/2018	ND	209	105	200	2.36	
EXT DRO >C28-C36	<10.0	10.0	11/09/2018	ND					

Surrogate: 1-Chlorooctane *110 %* *41-142*

Surrogate: 1-Chlorooctadecane *96.2 %* *37.6-147*

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LOVINGTON NM, 88260
Fax To:

Received:	11/08/2018	Sampling Date:	11/07/2018
Reported:	11/14/2018	Sampling Type:	Soil
Project Name:	LEA UNIT SOUTH	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY - MONUMENT NM		

Sample ID: EH 2 @ SURFACE (H803230-11)

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	11/13/2018	ND	2.24	112	2.00	5.73	
Toluene*	<0.050	0.050	11/13/2018	ND	2.28	114	2.00	5.98	
Ethylbenzene*	<0.050	0.050	11/13/2018	ND	2.23	112	2.00	5.81	
Total Xylenes*	<0.150	0.150	11/13/2018	ND	6.57	110	6.00	6.22	
Total BTEX	<0.300	0.300	11/13/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *69.8-142*

Chloride, SM4500Cl-B mg/kg **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	11/14/2018	ND	416	104	400	0.00	

TPH 8015M mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/09/2018	ND	208	104	200	7.06	
DRO >C10-C28*	<10.0	10.0	11/09/2018	ND	209	105	200	2.36	
EXT DRO >C28-C36	<10.0	10.0	11/09/2018	ND					

Surrogate: 1-Chlorooctane *98.7 %* *41-142*

Surrogate: 1-Chlorooctadecane *86.2 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

CAPROCK SERVICES
STEVE TAYLOR
P.O. BOX 457
LOVINGTON NM, 88260
Fax To:

Received:	11/08/2018	Sampling Date:	11/07/2018
Reported:	11/14/2018	Sampling Type:	Soil
Project Name:	LEA UNIT SOUTH	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY - MONUMENT NM		

Sample ID: EH 2 @ 1' (H803230-12)

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	11/13/2018	ND	2.24	112	2.00	5.73	
Toluene*	<0.050	0.050	11/13/2018	ND	2.28	114	2.00	5.98	
Ethylbenzene*	<0.050	0.050	11/13/2018	ND	2.23	112	2.00	5.81	
Total Xylenes*	<0.150	0.150	11/13/2018	ND	6.57	110	6.00	6.22	
Total BTEX	<0.300	0.300	11/13/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *69.8-142*

Chloride, SM4500Cl-B mg/kg **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	11/14/2018	ND	416	104	400	0.00	

TPH 8015M mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/09/2018	ND	208	104	200	7.06	
DRO >C10-C28*	<10.0	10.0	11/09/2018	ND	209	105	200	2.36	
EXT DRO >C28-C36	<10.0	10.0	11/09/2018	ND					

Surrogate: 1-Chlorooctane *108 %* *41-142*

Surrogate: 1-Chlorooctadecane *92.4 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

CAPROCK SERVICES
STEVE TAYLOR
P.O. BOX 457
LOVINGTON NM, 88260
Fax To:

Received:	11/08/2018	Sampling Date:	11/07/2018
Reported:	11/14/2018	Sampling Type:	Soil
Project Name:	LEA UNIT SOUTH	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY - MONUMENT NM		

Sample ID: SP 4 B @ 3' (H803230-13)

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	11/13/2018	ND	2.24	112	2.00	5.73	
Toluene*	<0.050	0.050	11/13/2018	ND	2.28	114	2.00	5.98	
Ethylbenzene*	<0.050	0.050	11/13/2018	ND	2.23	112	2.00	5.81	
Total Xylenes*	<0.150	0.150	11/13/2018	ND	6.57	110	6.00	6.22	
Total BTEX	<0.300	0.300	11/13/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *69.8-142*

Chloride, SM4500Cl-B mg/kg **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	11/14/2018	ND	416	104	400	0.00	

TPH 8015M mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/09/2018	ND	208	104	200	7.06	
DRO >C10-C28*	**22.5**	10.0	11/09/2018	ND	209	105	200	2.36	
EXT DRO >C28-C36	<10.0	10.0	11/09/2018	ND					

Surrogate: 1-Chlorooctane *106 %* *41-142*

Surrogate: 1-Chlorooctadecane *94.8 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

CAPROCK SERVICES
STEVE TAYLOR
P.O. BOX 457
LOVINGTON NM, 88260
Fax To:

Received:	11/08/2018	Sampling Date:	11/07/2018
Reported:	11/14/2018	Sampling Type:	Soil
Project Name:	LEA UNIT SOUTH	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY - MONUMENT NM		

Sample ID: SP 5 B @ 3' (H803230-14)

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	11/13/2018	ND	2.24	112	2.00	5.73	
Toluene*	<0.050	0.050	11/13/2018	ND	2.28	114	2.00	5.98	
Ethylbenzene*	<0.050	0.050	11/13/2018	ND	2.23	112	2.00	5.81	
Total Xylenes*	<0.150	0.150	11/13/2018	ND	6.57	110	6.00	6.22	
Total BTEX	<0.300	0.300	11/13/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *69.8-142*

Chloride, SM4500Cl-B mg/kg **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	11/14/2018	ND	416	104	400	0.00	

TPH 8015M mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/09/2018	ND	208	104	200	7.06	
DRO >C10-C28*	<10.0	10.0	11/09/2018	ND	209	105	200	2.36	
EXT DRO >C28-C36	<10.0	10.0	11/09/2018	ND					

Surrogate: 1-Chlorooctane *105 %* *41-142*

Surrogate: 1-Chlorooctadecane *87.5 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

BS1	Blank spike recovery above laboratory acceptance criteria. Results for analyte potentially biased high.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	Caprock Services	**BILL TO**	
Project Manager:	Steve Taylor	**P.O. #:**	
Address:		**Company:**	Caprock Services
City:	Lovington **State:** NM **Zip:** 88260	**Attn:**	
Phone #:	(575) 704-2718 **Fax #:**	**Address:**	Steve Taylor PO Box 457
Project #:	**Project Owner:** Legacy	**City:**	Lovington
Project Name:	Lea Unit South	**State:**	NM **Zip:** 88260
Project Location:	Monument, NM	**Phone #:**	(575) 704-2718
Sampler Name:	Matt Taylor	**Fax #:**	

FOR LAB USE ONLY				MATRIX						PRESERV.			SAMPLING		ANALYSIS REQUEST		
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	BTEX	TPH	Cl-
H803230																	
1	SH@ Surface	G	1			X					X		11-7-18	8:00AM	X	X	X
2	SH@ 1'	G	1			X					X		11-7-18	8:05AM	X	X	X
3	NH@ Surface	G	1			X					X		11-7-18	8:10AM	X	X	X
4	NH@ 1'	G	1			X					X		11-7-18	8:15AM	X	X	X
5	WH1@ Surface	G	1			X					X		11-7-18	8:20AM	X	X	X
6	WH1@ 1'	G	1			X					X		11-7-18	8:25AM	X	X	X
7	WH2 @ Surface	G	1			X					X		11-7-18	8:30AM	X	X	X
8	WH2@ 1'	G	1			X					X		11-7-18	8:35AM	X	X	X
9	EH1@ Surface	G	1			X					X		11-7-18	8:40AM	X	X	X
10	EH1@ 1'	G	1			X					X		11-7-18	8:45AM	X	X	X

Relinquished By: Matt Taylor	**Date:** 11-8-18 **Time:** 11:58AM	**Received By:** Tamara Oldaker	
Relinquished By:	**Date:** **Time:**	**Received By:**	
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	8.2° #97	**Sample Condition** Cool: ☐ Yes ☑ No Intact: ☐ Yes ☐ No	**CHECKED BY: (Initials)** TO

Phone Result:	☐ Yes ☐ No	**Add'l Phone #:**	
Fax Result:	☐ Yes ☐ No	**Add'l Fax #:**	
REMARKS:			

joel@lowryenvironmental.com
matt.caprockservices@gmail.com
caprockservices56@gmail.com

FORM-006 R 2.0

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476

CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	Caprock Services	**BILL TO**	
Project Manager:	Steve Taylor	**P.O. #:**	
Address:		**Company:**	Caprock Services
City:	Lovington **State:** NM **Zip:** 88260	**Attn:**	
Phone #:	(575) 704-2718 **Fax #:**	**Address:**	Steve Taylor PO Box 457
Project #:	**Project Owner:** Legacy	**City:**	Lovington
Project Name:	Lea Unit South	**State:**	NM **Zip:** 88260
Project Location:	Monument, NM	**Phone #:**	(575) 704-2718
Sampler Name:	Matt Taylor	**Fax #:**	

FOR LAB USE ONLY				MATRIX						PRESERV.			SAMPLING		ANALYSIS REQUEST											
Lab I.D.	**Sample I.D.**	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	BTEX	TPH	Cl-									
H803230																										
11	EH 2 @ surface	G	1			X					X		11-7-18	8:50AM	X	X	X									
12	EH 2 @ 1'	G	1			X					X		11-7-18	8:55AM	X	X	X									
13	SP 4 B @ 3'	G	1			X					X		11-7-18	9:00 AM	X	X	X									
14	SP 5 B @ 3'	G	1			X					X		11-7-18	9:05AM	X	X	X									

Relinquished By:	**Date:** 11-8-18	**Received By:**	Phone Result: ☐ Yes ☐ No Add'l Phone #:
	Time: 11:15		Fax Result: ☐ Yes ☐ No Add'l Fax #:
Relinquished By:	**Date:**	**Received By:**	REMARKS:
	Time:		joel@lowrvenvironmental.com matt.caprockservices@gmail.com caprockservices56@gmail.com

Delivered By: (Circle One)
Sampler - UPS - Bus - Other: 8.2° #97

Sample Condition		CHECKED BY: (Initials)
Cool	Intact	
☐ Yes ☐ No	☑ Yes ☐ No	TO

FORM-006 R 2.0

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476

CARDINAL Laboratories

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

November 25, 2018

STEVE TAYLOR

CAPROCK SERVICES

P.O. BOX 457

LOVINGTON, NM 88260

RE: LEA BATTERY SOUTH

Enclosed are the results of analyses for samples received by the laboratory on 11/16/18 15:40.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. 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. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

CAPROCK SERVICES
STEVE TAYLOR
P.O. BOX 457
LOVINGTON NM, 88260
Fax To:

Received:	11/16/2018	Sampling Date:	11/16/2018
Reported:	11/25/2018	Sampling Type:	Soil
Project Name:	LEA BATTERY SOUTH	Sampling Condition:	Cool & Intact
Project Number:	TANK	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: PAST. 0-3" (H803354-01)

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	11/21/2018	ND	2.07	103	2.00	2.33	
Toluene*	<0.050	0.050	11/21/2018	ND	2.01	100	2.00	3.28	
Ethylbenzene*	<0.050	0.050	11/21/2018	ND	1.93	96.7	2.00	3.37	
Total Xylenes*	<0.150	0.150	11/21/2018	ND	6.03	101	6.00	3.13	
Total BTEX	<0.300	0.300	11/21/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *113 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**4960**	16.0	11/20/2018	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS **S-04**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**27.4**	10.0	11/20/2018	ND	173	86.5	200	8.40	
DRO >C10-C28*	**7210**	10.0	11/20/2018	ND	196	98.1	200	6.09	
EXT DRO >C28-C36	**1320**	10.0	11/20/2018	ND					

Surrogate: 1-Chlorooctane *87.4 %* *41-142*

Surrogate: 1-Chlorooctadecane *184 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

CAPROCK SERVICES
STEVE TAYLOR
P.O. BOX 457
LOVINGTON NM, 88260
Fax To:

Received:	11/16/2018	Sampling Date:	11/16/2018
Reported:	11/25/2018	Sampling Type:	Soil
Project Name:	LEA BATTERY SOUTH	Sampling Condition:	Cool & Intact
Project Number:	TANK	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: PAST. 3-6" (H803354-02)

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	11/21/2018	ND	2.07	103	2.00	2.33	
Toluene*	<0.050	0.050	11/21/2018	ND	2.01	100	2.00	3.28	
Ethylbenzene*	<0.050	0.050	11/21/2018	ND	1.93	96.7	2.00	3.37	
Total Xylenes*	<0.150	0.150	11/21/2018	ND	6.03	101	6.00	3.13	
Total BTEX	<0.300	0.300	11/21/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *98.8 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**704**	16.0	11/20/2018	ND	416	104	400	0.00	

TPH 8015M mg/kg **Analyzed By: MS** **S-04**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/20/2018	ND	173	86.5	200	8.40	
DRO >C10-C28*	**3150**	10.0	11/20/2018	ND	196	98.1	200	6.09	
EXT DRO >C28-C36	**908**	10.0	11/20/2018	ND					

Surrogate: 1-Chlorooctane *70.6 %* *41-142*

Surrogate: 1-Chlorooctadecane *217 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

CAPROCK SERVICES
STEVE TAYLOR
P.O. BOX 457
LOVINGTON NM, 88260
Fax To:

Received:	11/16/2018	Sampling Date:	11/16/2018
Reported:	11/25/2018	Sampling Type:	Soil
Project Name:	LEA BATTERY SOUTH	Sampling Condition:	Cool & Intact
Project Number:	TANK	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: ROAD COMP. (H803354-03)

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	11/21/2018	ND	2.07	103	2.00	2.33	
Toluene*	<0.050	0.050	11/21/2018	ND	2.01	100	2.00	3.28	
Ethylbenzene*	<0.050	0.050	11/21/2018	ND	1.93	96.7	2.00	3.37	
Total Xylenes*	<0.150	0.150	11/21/2018	ND	6.03	101	6.00	3.13	
Total BTEX	<0.300	0.300	11/21/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**2440**	16.0	11/20/2018	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/20/2018	ND	173	86.5	200	8.40	
DRO >C10-C28*	**758**	10.0	11/20/2018	ND	196	98.1	200	6.09	
EXT DRO >C28-C36	**303**	10.0	11/20/2018	ND					

Surrogate: 1-Chlorooctane *76.7 %* *41-142*

Surrogate: 1-Chlorooctadecane *116 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

CAPROCK SERVICES
STEVE TAYLOR
P.O. BOX 457
LOVINGTON NM, 88260
Fax To:

Received:	11/16/2018	Sampling Date:	11/16/2018
Reported:	11/25/2018	Sampling Type:	Soil
Project Name:	LEA BATTERY SOUTH	Sampling Condition:	Cool & Intact
Project Number:	TANK	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SW FLOOR COMP. (H803354-04)

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	11/21/2018	ND	2.07	103	2.00	2.33	
Toluene*	<0.050	0.050	11/21/2018	ND	2.01	100	2.00	3.28	
Ethylbenzene*	<0.050	0.050	11/21/2018	ND	1.93	96.7	2.00	3.37	
Total Xylenes*	<0.150	0.150	11/21/2018	ND	6.03	101	6.00	3.13	
Total BTEX	<0.300	0.300	11/21/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *111 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**864**	16.0	11/20/2018	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**21.7**	10.0	11/20/2018	ND	173	86.5	200	8.40	
DRO >C10-C28*	**1660**	10.0	11/20/2018	ND	196	98.1	200	6.09	
EXT DRO >C28-C36	**343**	10.0	11/20/2018	ND					

Surrogate: 1-Chlorooctane *93.8 %* *41-142*

Surrogate: 1-Chlorooctadecane *118 %* *37.6-147*

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

CAPROCK SERVICES
STEVE TAYLOR
P.O. BOX 457
LOVINGTON NM, 88260
Fax To:

Received:	11/16/2018	Sampling Date:	11/16/2018
Reported:	11/25/2018	Sampling Type:	Soil
Project Name:	LEA BATTERY SOUTH	Sampling Condition:	Cool & Intact
Project Number:	TANK	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SE FLOOR COMP. (H803354-05)

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	11/21/2018	ND	2.07	103	2.00	2.33	
Toluene*	**0.052**	0.050	11/21/2018	ND	2.01	100	2.00	3.28	
Ethylbenzene*	**0.087**	0.050	11/21/2018	ND	1.93	96.7	2.00	3.37	
Total Xylenes*	**0.316**	0.150	11/21/2018	ND	6.03	101	6.00	3.13	
Total BTEX	**0.455**	0.300	11/21/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID 99.9 % 73.3-129

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**2280**	16.0	11/20/2018	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/20/2018	ND	188	93.9	200	10.6	
DRO >C10-C28*	**3180**	10.0	11/20/2018	ND	168	84.0	200	7.69	QM-07
EXT DRO >C28-C36	**800**	10.0	11/20/2018	ND					

Surrogate: 1-Chlorooctane 68.9 % 41-142

Surrogate: 1-Chlorooctadecane 191 % 37.6-147

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
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.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Celey D. Keene, Lab Director/Quality Manager

1 of 1

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name:	Legacy	BILL TO	
Project Manager:	Joel Lowry	P.O. #:	
Address:		Company:	Eaprock Services
City:	State: Zip:	Attn:	Steve Taylor
Phone #:	Fax #:	Address:	
Project #:	Project Owner:	City:	Lovington
Project Name:	Lea South Tank Battery	State: NM	Zip: 88260
Project Location:	Lea Co, NM	Phone #:	
Sampler Name:	Joel Lowry	Fax #:	

FOR LAB USE ONLY				MATRIX						PRESERV.			SAMPLING		ANALYSIS REQUEST										
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	TPH	BTEX	Cl-								
H803354																									
1	Past. 0-3"	G	1			X					X		11/16	12:36	X	X	V								
2	Past. 3-6"	G											11/16	12:40	X	X	V								
3	Road Comp.	C											11/16	12:45	X	X	V								
4	SW Floor Comp.	C											11/16	12:50	X	X	V								
5	SE Floor Comp.	C											11/16	12:55	X	X	X								

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: Joel Lowry	Date: 11/16/18 Time: 15:40	Received By: Jodi Henson	Phone Result: ☐ Yes ☐ No Add'l Phone #:
Relinquished By:	Date: Time:	Received By:	Fax Result: ☐ Yes ☐ No Add'l Fax #:
Delivered By: (Circle One) Sampler - UPS - Bus - Other: 5.2°C / #97	Sample Condition Cool: ☐ Yes ☐ No Intact: ☑ Yes ☐ No	CHECKED BY: (Initials)	REMARKS:

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

CARDINAL Laboratories

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

December 18, 2018

STEVE TAYLOR

CAPROCK SERVICES

P.O. BOX 457

LOVINGTON, NM 88260

RE: LEA UNIT SOUTH

Enclosed are the results of analyses for samples received by the laboratory on 12/12/18 15:35.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. 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. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

CAPROCK SERVICES
STEVE TAYLOR
P.O. BOX 457
LOVINGTON NM, 88260
Fax To:

Received:	12/12/2018	Sampling Date:	12/11/2018
Reported:	12/18/2018	Sampling Type:	Soil
Project Name:	LEA UNIT SOUTH	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY - MONUMENT NM		

Sample ID: N. FLOOR COMP (H803644-01)

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	12/13/2018	ND	1.86	93.1	2.00	0.550	
Toluene*	<0.050	0.050	12/13/2018	ND	1.79	89.5	2.00	1.12	
Ethylbenzene*	<0.050	0.050	12/13/2018	ND	1.72	86.2	2.00	1.48	
Total Xylenes*	<0.150	0.150	12/13/2018	ND	5.13	85.5	6.00	0.835	
Total BTEX	<0.300	0.300	12/13/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *96.9 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	12/13/2018	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/13/2018	ND	198	99.0	200	2.55	
DRO >C10-C28*	**216**	10.0	12/13/2018	ND	236	118	200	3.76	
EXT DRO >C28-C36	**32.9**	10.0	12/13/2018	ND					

Surrogate: 1-Chlorooctane *76.2 %* *41-142*

Surrogate: 1-Chlorooctadecane *87.9 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

CAPROCK SERVICES
STEVE TAYLOR
P.O. BOX 457
LOVINGTON NM, 88260
Fax To:

Received:	12/12/2018	Sampling Date:	12/11/2018
Reported:	12/18/2018	Sampling Type:	Soil
Project Name:	LEA UNIT SOUTH	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY - MONUMENT NM		

Sample ID: S. FLOOR COMP (H803644-02)

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	12/13/2018	ND	1.86	93.1	2.00	0.550	
Toluene*	<0.050	0.050	12/13/2018	ND	1.79	89.5	2.00	1.12	
Ethylbenzene*	<0.050	0.050	12/13/2018	ND	1.72	86.2	2.00	1.48	
Total Xylenes*	<0.150	0.150	12/13/2018	ND	5.13	85.5	6.00	0.835	
Total BTEX	<0.300	0.300	12/13/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *97.3 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	12/13/2018	ND	416	104	400	0.00	

TPH 8015M mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/13/2018	ND	198	99.0	200	2.55	
DRO >C10-C28*	**31.3**	10.0	12/13/2018	ND	236	118	200	3.76	
EXT DRO >C28-C36	<10.0	10.0	12/13/2018	ND					

Surrogate: 1-Chlorooctane *84.8 %* *41-142*

Surrogate: 1-Chlorooctadecane *82.3 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

CAPROCK SERVICES
STEVE TAYLOR
P.O. BOX 457
LOVINGTON NM, 88260
Fax To:

Received:	12/12/2018	Sampling Date:	12/11/2018
Reported:	12/18/2018	Sampling Type:	Soil
Project Name:	LEA UNIT SOUTH	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY - MONUMENT NM		

Sample ID: WP COMP #1 (H803644-03)

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	12/13/2018	ND	1.86	93.1	2.00	0.550	
Toluene*	<0.050	0.050	12/13/2018	ND	1.79	89.5	2.00	1.12	
Ethylbenzene*	<0.050	0.050	12/13/2018	ND	1.72	86.2	2.00	1.48	
Total Xylenes*	<0.150	0.150	12/13/2018	ND	5.13	85.5	6.00	0.835	
Total BTEX	<0.300	0.300	12/13/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *97.1 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**256**	16.0	12/13/2018	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/13/2018	ND	198	99.0	200	2.55	
DRO >C10-C28*	**205**	10.0	12/13/2018	ND	236	118	200	3.76	
EXT DRO >C28-C36	**22.0**	10.0	12/13/2018	ND					

Surrogate: 1-Chlorooctane *81.6 %* *41-142*

Surrogate: 1-Chlorooctadecane *87.1 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

CAPROCK SERVICES
STEVE TAYLOR
P.O. BOX 457
LOVINGTON NM, 88260
Fax To:

Received:	12/12/2018	Sampling Date:	12/11/2018
Reported:	12/18/2018	Sampling Type:	Soil
Project Name:	LEA UNIT SOUTH	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY - MONUMENT NM		

Sample ID: WP COMP #2 (H803644-04)

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	12/13/2018	ND	1.86	93.1	2.00	0.550	
Toluene*	<0.050	0.050	12/13/2018	ND	1.79	89.5	2.00	1.12	
Ethylbenzene*	<0.050	0.050	12/13/2018	ND	1.72	86.2	2.00	1.48	
Total Xylenes*	<0.150	0.150	12/13/2018	ND	5.13	85.5	6.00	0.835	
Total BTEX	<0.300	0.300	12/13/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *95.3 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**448**	16.0	12/13/2018	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/13/2018	ND	198	99.0	200	2.55	
DRO >C10-C28*	**246**	10.0	12/13/2018	ND	236	118	200	3.76	
EXT DRO >C28-C36	**23.5**	10.0	12/13/2018	ND					

Surrogate: 1-Chlorooctane *82.2 %* *41-142*

Surrogate: 1-Chlorooctadecane *92.1 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

CAPROCK SERVICES
STEVE TAYLOR
P.O. BOX 457
LOVINGTON NM, 88260
Fax To:

Received:	12/12/2018	Sampling Date:	12/11/2018
Reported:	12/18/2018	Sampling Type:	Soil
Project Name:	LEA UNIT SOUTH	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY - MONUMENT NM		

Sample ID: PAST. COMP (H803644-05)

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	12/13/2018	ND	1.86	93.1	2.00	0.550	
Toluene*	<0.050	0.050	12/13/2018	ND	1.79	89.5	2.00	1.12	
Ethylbenzene*	<0.050	0.050	12/13/2018	ND	1.72	86.2	2.00	1.48	
Total Xylenes*	<0.150	0.150	12/13/2018	ND	5.13	85.5	6.00	0.835	
Total BTEX	<0.300	0.300	12/13/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *96.5 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	12/13/2018	ND	416	104	400	0.00	

TPH 8015M mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/13/2018	ND	204	102	200	2.73	
DRO >C10-C28*	**42.3**	10.0	12/13/2018	ND	218	109	200	3.98	
EXT DRO >C28-C36	**10.6**	10.0	12/13/2018	ND					

Surrogate: 1-Chlorooctane *92.1 %* *41-142*

Surrogate: 1-Chlorooctadecane *103 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

CAPROCK SERVICES
STEVE TAYLOR
P.O. BOX 457
LOVINGTON NM, 88260
Fax To:

Received:	12/12/2018	Sampling Date:	12/11/2018
Reported:	12/18/2018	Sampling Type:	Soil
Project Name:	LEA UNIT SOUTH	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY - MONUMENT NM		

Sample ID: S. WALL COMP (H803644-06)

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	12/14/2018	ND	2.05	102	2.00	0.493	
Toluene*	<0.050	0.050	12/14/2018	ND	1.99	99.3	2.00	0.174	
Ethylbenzene*	<0.050	0.050	12/14/2018	ND	1.97	98.6	2.00	0.216	
Total Xylenes*	<0.150	0.150	12/14/2018	ND	6.03	100	6.00	0.210	
Total BTEX	<0.300	0.300	12/14/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *96.0 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	12/13/2018	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/13/2018	ND	204	102	200	2.73	
DRO >C10-C28*	**127**	10.0	12/13/2018	ND	218	109	200	3.98	
EXT DRO >C28-C36	**22.6**	10.0	12/13/2018	ND					

Surrogate: 1-Chlorooctane *96.8 %* *41-142*

Surrogate: 1-Chlorooctadecane *114 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

CAPROCK SERVICES
STEVE TAYLOR
P.O. BOX 457
LOVINGTON NM, 88260
Fax To:

Received:	12/12/2018	Sampling Date:	12/11/2018
Reported:	12/18/2018	Sampling Type:	Soil
Project Name:	LEA UNIT SOUTH	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY - MONUMENT NM		

Sample ID: E. WALL COMP (H803644-07)

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	12/14/2018	ND	2.05	102	2.00	0.493	
Toluene*	<0.050	0.050	12/14/2018	ND	1.99	99.3	2.00	0.174	
Ethylbenzene*	<0.050	0.050	12/14/2018	ND	1.97	98.6	2.00	0.216	
Total Xylenes*	<0.150	0.150	12/14/2018	ND	6.03	100	6.00	0.210	
Total BTEX	<0.300	0.300	12/14/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.2 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	12/13/2018	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/13/2018	ND	204	102	200	2.73	
DRO >C10-C28*	**119**	10.0	12/13/2018	ND	218	109	200	3.98	
EXT DRO >C28-C36	**24.6**	10.0	12/13/2018	ND					

Surrogate: 1-Chlorooctane *97.4 %* *41-142*

Surrogate: 1-Chlorooctadecane *117 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

CAPROCK SERVICES
STEVE TAYLOR
P.O. BOX 457
LOVINGTON NM, 88260
Fax To:

Received:	12/12/2018	Sampling Date:	12/11/2018
Reported:	12/18/2018	Sampling Type:	Soil
Project Name:	LEA UNIT SOUTH	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY - MONUMENT NM		

Sample ID: W. WALL COMP (H803644-08)

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	12/14/2018	ND	2.05	102	2.00	0.493	
Toluene*	<0.050	0.050	12/14/2018	ND	1.99	99.3	2.00	0.174	
Ethylbenzene*	<0.050	0.050	12/14/2018	ND	1.97	98.6	2.00	0.216	
Total Xylenes*	<0.150	0.150	12/14/2018	ND	6.03	100	6.00	0.210	
Total BTEX	<0.300	0.300	12/14/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *98.9 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**256**	16.0	12/13/2018	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/13/2018	ND	204	102	200	2.73	
DRO >C10-C28*	**193**	10.0	12/13/2018	ND	218	109	200	3.98	
EXT DRO >C28-C36	**45.1**	10.0	12/13/2018	ND					

Surrogate: 1-Chlorooctane *96.7 %* *41-142*

Surrogate: 1-Chlorooctadecane *117 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

CAPROCK SERVICES
STEVE TAYLOR
P.O. BOX 457
LOVINGTON NM, 88260
Fax To:

Received:	12/12/2018	Sampling Date:	12/11/2018
Reported:	12/18/2018	Sampling Type:	Soil
Project Name:	LEA UNIT SOUTH	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY - MONUMENT NM		

Sample ID: N. WALL COMP (H803644-09)

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	12/14/2018	ND	2.05	102	2.00	0.493	
Toluene*	<0.050	0.050	12/14/2018	ND	1.99	99.3	2.00	0.174	
Ethylbenzene*	<0.050	0.050	12/14/2018	ND	1.97	98.6	2.00	0.216	
Total Xylenes*	<0.150	0.150	12/14/2018	ND	6.03	100	6.00	0.210	
Total BTEX	<0.300	0.300	12/14/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *98.4 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	12/13/2018	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS **S-04**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/13/2018	ND	204	102	200	2.73	
DRO >C10-C28*	**1070**	10.0	12/13/2018	ND	218	109	200	3.98	
EXT DRO >C28-C36	**213**	10.0	12/13/2018	ND					

Surrogate: 1-Chlorooctane *94.0 %* *41-142*

Surrogate: 1-Chlorooctadecane *149 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name:	Legacy Resources	**BILL TO**	
Project Manager:	Joel Lowry	**P.O. #:**	
Address:		**Company:**	Caprock Serv
City:	**State:** **Zip:**	**Attn:**	Steve Taylor
Phone #:	**Fax #:**	**Address:**	
Project #:	**Project Owner:**	**City:**	
Project Name:	Lea Unit South	**State:** **Zip:**	
Project Location:	Lea, NM	**Phone #:**	
Sampler Name:	Joel Lowry	**Fax #:**	

FOR LAB USE ONLY				MATRIX						PRESERV.			SAMPLING		ANALYSIS REQUEST		
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	BTEX	TPH	Cl-
H803644																	
1	N. Floor Comp	C	1			X					X		12/11	1:40	X	X	X
2	S. Floor Comp.													1:42			
3	WP Comp #1													1:46			
4	WP Comp #2													1:48			
5	Past. Comp													1:51			
6	S. Wall Comp													1:52			
7	E. Wall Comp													1:53			
8	W. Wall Comp													1:54			
9	N. Wall Comp.	↓	↓			↓					↓		↓	1:55	↓	↓	↓

Relinquished By:	**Date:** 12/12	**Received By:**	
	Time: 3:38		
Relinquished By:	**Date:**	**Received By:**	
	Time:		

Delivered By: (Circle One) Sampler - UPS - Bus - Other: 5.4°C #97

Sample Condition		CHECKED BY: (Initials)
Cool	Intact	
☑ Yes ☐ No	☑ Yes ☐ No	TO.

Phone Result:	☐ Yes ☐ No	**Add'l Phone #:**	
Fax Result:	☐ Yes ☐ No	**Add'l Fax #:**	
REMARKS:			

joel@lowryenvironmental.com
Steve Taylor

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

CARDINAL Laboratories

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

January 10, 2019

JOEL LOWRY

CAPROCK SERVICES

P.O. BOX 457

LOVINGTON, NM 88260

RE: LEA BATTERY SOUTH

Enclosed are the results of analyses for samples received by the laboratory on 01/09/19 11:50.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. 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. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

CAPROCK SERVICES
JOEL LOWRY
P.O. BOX 457
LOVINGTON NM, 88260
Fax To:

Received:	01/09/2019	Sampling Date:	01/08/2019
Reported:	01/10/2019	Sampling Type:	Soil
Project Name:	LEA BATTERY SOUTH	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: NORTH WALL COMP. B (H900050-01)

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	01/09/2019	ND	186	93.1	200	5.47	
DRO >C10-C28*	<10.0	10.0	01/09/2019	ND	203	102	200	3.92	
EXT DRO >C28-C36	<10.0	10.0	01/09/2019	ND					

Surrogate: 1-Chlorooctane	*87.3 %*	*41-142*
Surrogate: 1-Chlorooctadecane	*85.0 %*	*37.6-147*

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

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

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

		BILL TO	
Company Name:	Legacy Reserves Operating, LP	P.O. #:	
Project Manager:	Joel Lowry	Company:	Caprock Services
Address:	303 W. Wall St. Midland, TX 79701	Attn:	CO Steve Taylor
City:	State: Zip:	Address:	
Phone #:	432-466-4450 Fax #:	City:	
Project #:	Project Owner:	State:	Zip:
Project Name:	Lea South Unit Batter	Phone #:	
Project Location:	Lea County, New Mexico	Fax #:	
Sampler Name:	Joel Lowry		

FOR LAB USE ONLY				MATRIX						PRESERV.			SAMPLING		ANALYSIS REQUEST											
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	Chloride	TPH 8015	BTEX 8021									
H900050																									
1	N. Wall Comp. B	G	a			x					x		1/8/19	2:30		x									

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: Joel Lowry	Date: 1/9/19 Time: 11:50	Received By: Jodi Henson	
Relinquished By:	Date: Time:	Received By:	
Delivered By: (Circle One) Sampler - UPS - Bus - Other: 1.1°c / #97	Sample Condition Cool: ☑ Yes ☐ No Intact: ☑ Yes ☐ No	CHECKED BY: (Initials) GA	

Phone Result: ☐ Yes ☐ No Add'l Phone #:
Fax Result: ☐ Yes ☐ No Add'l Fax #:
REMARKS:
joel@lowryenvironmental.com
steve taylor

FORM-006 R 2.0

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476

CARDINAL Laboratories

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

February 11, 2019

JOEL LOWRY

LOWRY ENVIROMENTAL & ASSOCIATES

PO BOX 296

LOVINGTON, NM 88260

RE: LEA SOUTH UNIT BATTER

Enclosed are the results of analyses for samples received by the laboratory on 02/05/19 11:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. 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. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

LOWRY ENVIROMENTAL & ASSOCIATES
JOEL LOWRY
PO BOX 296
LOVINGTON NM, 88260
Fax To:

Received:	02/05/2019	Sampling Date:	02/04/2019
Reported:	02/11/2019	Sampling Type:	Soil
Project Name:	LEA SOUTH UNIT BATTER	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY CO NM		

Sample ID: SE SW (H900419-01)

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	02/09/2019	ND	1.88	93.9	2.00	0.925	
Toluene*	<0.050	0.050	02/09/2019	ND	1.77	88.3	2.00	0.381	
Ethylbenzene*	<0.050	0.050	02/09/2019	ND	1.71	85.4	2.00	2.49	
Total Xylenes*	<0.150	0.150	02/09/2019	ND	5.16	86.0	6.00	2.09	
Total BTEX	<0.300	0.300	02/09/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.8 %* *73.3-129*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**160**	16.0	02/11/2019	ND	400	100	400	3.92	

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	02/10/2019	ND	189	94.4	200	5.88	
DRO >C10-C28*	**38.9**	10.0	02/10/2019	ND	193	96.4	200	5.87	
EXT DRO >C28-C36	<10.0	10.0	02/10/2019	ND					

Surrogate: 1-Chlorooctane *76.5 %* *41-142*

Surrogate: 1-Chlorooctadecane *79.7 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

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 QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
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.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

1 of 1

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name:	Lowry	**BILL TO**	
Project Manager:	Joel Lowry	**P.O. #:**	
Address:	PO 896	**Company:**	Lowry Environmental
City:	Lovington **State:** NM **Zip #**	**Attn:**	CO Joel Lowry
Phone #:	432-466-4450 **Fax #:**	**Address:**	
Project #:	**Project Owner:**	**City:**	
Project Name:	Lea South Unit Batter	**State:**	**Zip:**
Project Location:	Eddy Co NM	**Phone #:**	
Sampler Name:	Joel Lowry	**Fax #:**	

FOR LAB USE ONLY				MATRIX						PRESERV.			SAMPLING		ANALYSIS REQUEST										
Lab I.D.	**Sample I.D.**	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	**DATE**	**TIME**	**Chloride**	**TPH 8015**	**BTEX 8021**									
H900419 1	SE SW	C	1			x					x		2/4/18	13:20	x	x	x								

Relinquished By: Joel Lowry	**Date:**	**Received By:** Alexis Lowry	**Phone Result:** ☐ Yes ☐ No	**Add'l Phone #:**	
	Time:		**Fax Result:** ☐ Yes ☐ No	**Add'l Fax #:**	
Relinquished By: Alexis Lowry	**Date:** 2/5/19	**Received By:** Jodi Henson	**REMARKS:** joel@lowrvenvironmental.com		
	Time: 11:00				
Delivered By: (Circle One) Sampler - UPS - Bus - Other: -4.6°c/#97		**Sample Condition** Cool ☑ Yes ☐ No Intact ☑ Yes ☐ No	**CHECKED BY:** (Initials)		

FORM-006 R 2.0

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476

ATTACHMENT #7

Photographic Log

PHOTOGRAPHIC LOG

Figure 1 View of portion of the excavated area, facing East.

Figure 2 View of portion of the excavated area, facing East.

PHOTOGRAPHIC LOG

Figure 3 View of portion of the excavated area, facing North.

Figure 4 View of soil excavated during initial remediation activities.

PHOTOGRAPHIC LOG

Figure 5 View of portion of the excavated area, facing Northeast.

Figure 6 View of portion of the excavated area, facing East.

PHOTOGRAPHIC LOG

Figure 7 View of surface staining from the initial release, facing North.

Figure 8 View of portion of the excavated area, facing South.

Figure 9 View of excavated pasture area, facing Northeast.

Figure 10 View of scrapped well pad, facing West.

Figure 11 View of the affected area after remediation activities, facing Southeast.

Figure 12 View of the affected area after remediation activities, facing Southeast.

ATTACHMENT #8
Release Notification (FORM C-141)

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised April 3, 2017

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company Legacy Reserves	Contact Clyde Wilhoit
Address 303 W Wall street, Suite 1800, Midland Tx, 79701	Telephone No. 432.425.4137
Facility Name Lea Unit South Battery	Facility Type Flowline

Surface Owner S & S Inc.	Mineral Owner Federal	API No. 30-025-43077

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
I	24	20-S	34-E					Lea

Latitude 32.557222 Longitude -103.508056 NAD83

NATURE OF RELEASE

Type of Release Crude oil	Volume of Release 72 BBL	Volume Recovered 60 BBL
Source of Release Flowline	Date and Hour of Occurrence 8/18/18 5:00 AM	Date and Hour of Discovery 8/18/18 5:00AM
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*
no

RECEIVED
By CHernandez at 3:03 pm, Aug 21, 2018

Describe Cause of Problem and Remedial Action Taken.*
Semi truck struck flow line. Well was shut in and line was repaired.

Describe Area Affected and Cleanup Action Taken.*
Flowline sprayed approximately 60'x150' area. Small pooling area under lines and road. Mico Blaze will be applied to vegetation and soil will be tested and remediated as soon as possible.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: Clyde Wilhoit
Printed Name: Clyde Wilhoit
Title: Maintenance Foreman
E-mail Address: cwilhoit@legacylp.com
Date: 8-20-18 Phone: 432-425-4137

OIL CONSERVATION DIVISION

Approved by Environmental Specialist: CH

Approval Date: 8/21/2018 Expiration Date:

Conditions of Approval:
NMAC 19.15.29 effective August 14, 2018. Complete release characterization before any significant remediation.

Attached ☐

* Attach Additional Sheets If Necessary

1RP-5167
pCH1823355621
nCH1823355359

State of New Mexico
Oil Conservation Division

Incident ID	NCH1823355359
District RP	1RP-5167
Facility ID	fCH1901642211
Application ID	pCH1823355621

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discover date.

What is the shallowest depth to groundwater beneath the area affected by the release?	50-100' (ft. bgs)
Did this release impact groundwater or surface water?	☐ Yes ☑ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☑ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☑ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☑ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☑ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☑ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☑ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☑ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☑ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☑ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☑ No
Did the release impact areas **not** on an exploration, development, production or storage site?	☑ Yes ☐ No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: ***Each of the following items must be included in the report.***

- ☑ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☑ Field data
- ☑ Data table of soil contaminant concentration data
- ☑ Determination of water sources and significant watercourses within 1/2-mile of the lateral extents of the release
- ☑ Boring or excavation logs
- ☑ Photographs including date and GIS information
- ☑ Topographic/Aerial maps
- ☑ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modifies by site- and release-specific parameters.

State of New Mexico
Oil Conservation Division

Incident ID	NCH1823355359
District RP	1RP-5167
Facility ID	fCH1901642211
Application ID	pCH1823355621

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Clyde Wilhoit
Title: Maintenance Foreman

Signature: Clyde Wilhoit
Date: 12-7-2018

email: cwilhoit@legacylp.com
Telephone: 432-425-4137

OCD Only

Received by:

REVIEWED
By CHernandez at 2:24 pm, Jan 16, 2019

State of New Mexico
Oil Conservation Division

Incident ID	NCH1823355359
District RP	1RP-5167
Facility ID	fCH1901642211
Application ID	pCH1823355621

Remediation Plan

Remediation Plan Checklist: ***Each of the following items must be included in the report.***

- ☑ Detailed description of proposed remediation technique
- ☐ Scaled sitemap with GPS coordinates showing delineation points (GPS N/A)
- ☑ Estimated volume of material to be remediated
- ☑ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☑ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: ***Each of the following items must be confirmed as part of any request for deferral of remediation.***

- ☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☐ Extents of contamination must be fully delineated.
- ☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Clyde Wilhoit Title: Maintenance Foreman

Signature: Clyde Wilhoit Date: 12-7-2018

email: cwilhoit@legacylp.com Telephone: 432-425-4137

OCD Only

Received by: _____ Date: _____

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: _____ Date: _____

APPROVED
By CHernandez at 2:24 pm, Jan 16, 2019

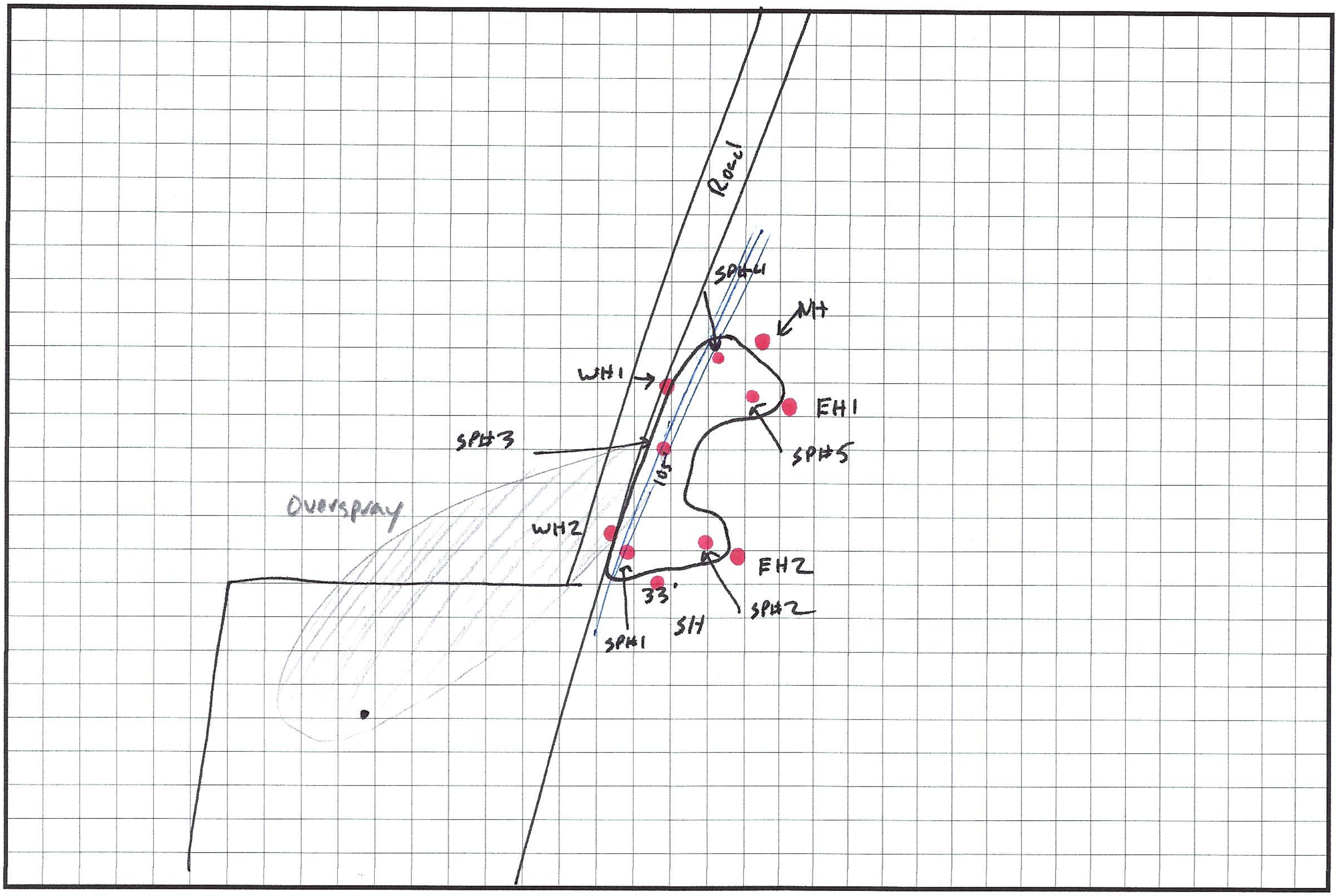
ATTACHMENT #9

Field Data

FIELD NOTES

Site Name: Lea South Battery

Date: 11/7/2018



Collect samples necessary for Workplan

Check Microblaze treatment of Overspray, will require additional scraping

Field ID	Odor/PID	Chloride

Field ID	Odor/PID	Chloride

Field ID	Odor/PID	Chloride

Field ID	Odor/PID	Chloride

Field ID	Odor/PID	Chloride

Field ID	Odor/PID	Chloride