APPROVED
By Olivia Yu at 10:21 am, Jan 19, 2018

NMOCD approves of the proposed delineation for 1RP-4646, 1RP-4655, and 1RP-4718 with clarifications:
1) Annotate the 3 releases on a scaled map.
2) Laboratory analyses must demonstrate permissible BTEX, TPH extended, and chlorides for at least 2 depths for each sample location.

1RP-4646, 1RP-4655 & 1RP-4718
DELINEATION PLAN
Lea Unit West Battery
Lea County, New Mexico

Latitude: N32° 35' 20.77
Longitude: W103° 31' 17.43"

LAI Project No. 17-0175-35

December 12, 2017

Prepared for:
Legacy Reserves Operating, LP
303 West Wall Street, Suite 1300
Midland, Texas 79701

Prepared by:
Larson & Associates, Inc.
507 North Marienfeld Street, Suite 205
Midland, Texas 79701

Mark J. Larson, P.G.
Certified Professional Geologist #10490

Sarah R. Johnson
Staff Geologist

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1.0 INTRODUCTION

Larson & Associates, Inc. (LAI) has prepared this delineation plan on behalf of Legacy Reserves Operating, LP (Legacy) for submittal to the New Mexico Oil Conservation Division (OCD) District I for a crude oil and two (2) produced water spills at the Lea Unit West Battery (Site) located in Unit E (SW/4, NW/4), Section 12, Township 20 South and Range 34 East in Lea County, New Mexico. The geodetic position is North 32° 35' 20.77 and West -103° 31' 17.43". Figure 1 presents a topographic map. Figure 2 presents an aerial map.

1.1 Background

The first spill occurred on March 16, 2017, due to a ruptured flow line, allowing for approximately 10 barrels (bbl) of crude oil to be released. Approximately 6 bbl were recovered. The majority of the released fluids were contained within the firewall surrounding the battery with an overspray that extended approximately 50 feet into the nearby pasture to the northeast. The initial C-141 was submitted to the OCD on March 16, 2017, and assigned remediation permit number 1RP-4646. Appendix A presents the initial C-141.

The second spill occurred on March 23, 2017, due to a closed valve, causing the water tank to overflow, releasing approximately 90 bbl of produced water. Approximately 80 bbl were recovered. The majority of the fluids were contained within the firewall, with an overspray outside of the containment in a nearby pasture to the northeast. The initial C-141 was submitted on March 23, 2017 and assigned remediation permit number 1RP-4655. Appendix A presents the initial C-141.

The third spill occurred on June 7, 2017, due to a gasket failure on a separator and transfer pump, causing the tanks to overflow and release 450 bb of produced water. Approximately 420 bbl were recovered. The release was contained within the containment, measuring approximately 30 x 50, with an overspray in the northeast corner of the battery pad. The initial C-141 was submitted and assigned remediation permit number 1RP-4718. Appendix A presents the initial C-141.

T*1.2 Physical Setting*

The physical setting is as follows:

- The surface elevation is approximately 3,660 feet above mean sea level (msl);
- The topography slopes gradually to the south and southwest;
- There are no surface water features within 1,000 feet of the Site;
- The soils are designated as "Kermit soils and dune land, 0 to 12 percent slopes" consisting of 0 to 8 inches of fine sand underlain by 8 to 60 inches of fine sand;
- The surface geology is Eolian Piedmont deposits from the Holocene to middle Pleistocene, the deposits consisting of interlayed eolian sands and piedmont-slope deposits underlain by the Teriary-age Blackwater Draw and Ogallala formations in descending order;
- The nearest freshwater well is located in Unit P (SE/4, SE/4), Section 24, Township 20 South, Range 34 East about 0.9 miles southeast of the Site;
- Depth to groundwater was reported at about 58 feet bgs (1968).

1.3 Remediation Action Levels

Remediation action levels (RRAL) were calculated for benzene, BTEX and TPH based on the following criteria established by OCD in *"Guidelines for Remediation of Leaks, Spills and Releases, pp. 6-7, August 13, 1993".*

Criteria	***Result***	***Score***
Depth-to-Groundwater	50 – 99 Feet	10
Wellhead Protection Area	No	0
Distance to Surface Water Body	>1,000 Horizontal Feet	0

The following RRAL apply to the release for ranking score: 10

- Benzene 10 mg/Kg
- BTEX 50 mg/Kg
- TPH 1,000 mg/Kg

Depth to groundwater between 50 and 99 feet bgs requires vertical delineation for chloride to 600 milligrams per kilogram (mg/Kg).

2.0 PRELIMINARY DELINEATION

On June 20, 2017, Superior Oilfield Service (SOS) personnel collected soil samples at six (6) locations (Sp-1 through Sp-6) within the tank battery firewall at depths of approximately 6 to 8 inches bgs and about 5 feet bgs. The soil samples were delivered under chain of custody and preservation to Cardinal Laboratories in Hobbs, New Mexico. The laboratory analyzed the samples for BTEX (the sum of benzene, toluene, ethylbenzene and xylenes), total petroleum hydrocarbons (TPH) including gasoline range organics (GRO) and diesel range organics (DRO) by EPA SW-846 Methods 8021B and 8015M, respectively. Chloride was analyzed by titration method (SM 4500 cl B).
Benzene exceeded the RRAL (10 mg/Kg) in the following samples:

- Sp – 3, 6 to 8 inches (56.1 mg/Kg)
- Sp – 4, 6 to 8 inches (35.8 mg/Kg)

BTEX exceeded the RRAL (50 mg/Kg) in the following samples:

- Sp – 3, 6 to 8 inches (708 mg/Kg)
- Sp – 4, 6 to 8 inches (568 mg/Kg)

TPH exceeded the RRAL (1,000 mg/Kg) in the following soil samples:

- Sp - 1, 6 to 8 inches (6,104 mg/Kg)
- Sp - 2, 6 to 8 inches (8,149 mg/Kg)
- Sp – 3, 6 to 8 inches (15,430 mg/Kg)
- Sp – 4, 6 to 8 inches (20,300 mg/Kg)
- Sp - 5, 6 to 8 inches (2,920 mg/Kg)
- Sp – 6, 6 to 8 inches (3,990 mg/Kg)

Chloride exceeded 600 mg/Kg in the following soil samples:

- Sp – 1, 6 to 8 inches (2,960 mg/Kg)
- Sp – 2, 6 to 8 inches (3,280 mg/Kg)
- Sp – 3, 6 to 8 inches (5,280 mg/Kg)
- Sp – 4, 6 to 8 inches (7,330 mg/Kg)
- Sp – 5, 6 to 8 inches (11,200 mg/Kg)
- Sp – 6 , 6 to 8 inches (22,400 mg/Kg)

All soil samples at a depth of 5 feet bgs reported below the RRAL for benzene, BTEX and TPH. Chloride reported below 600 mg/Kg for all soil samples at 5 feet bgs.

On June 29, 2017, SOS personnel collected soil samples at four (4) locations outside the tank battery firewall at a depth of 1 foot bgs. The samples were collected at the overspray area, east of the site, as a 3 part composite sample, and in between the tank battery and production equipment as 4 part and 2 part composite samples. The soil samples were delivered under chain of custody and preservation to Cardinal Laboratories in Hobbs, New Mexico. The laboratory analyzed the samples for chloride titration method (SM 4500 cl B). All soil samples reported below the RRAL. Appendix B presents preliminary laboratory reports and maps showing soil sample locations.

3.0 DELINEATION PLAN

LAI proposes to delineate 1RP-4646, 1RP-4655 and 1Rp-4718 simultaneously. LAI proposes to collect soil samples at six (6) locations within the tank battery firewall and six (6) locations outside the firewall to delineate the release. The discrete soil samples will be collected at 1 foot intervals to approximately 4 feet bgs and 2 foot intervals to approximately 12 feet bgs using direct push technology (DPT) depending on subsurface conditions. LAI proposes to collect discrete soil samples to 1 foot bgs at three (3) locations within the overspray area and in each cardinal direction (north, south, east and west) of the overspray area for lateral delineation. The samples will be delivered to Permian Basin Environmental Lab (PBEL) under chain of custody and preservation. The samples will be analyzed for BTEX, TPH, including gasoline range organics (GRO), diesel range organics (DRO) and oil range organics (ORO) and chloride by EPA SW-846 Methods 8021B, 8015M and 300 respectively. Pending laboratory results, further delineation will be performed to achieve the RRALs. Figure 2 presents a site map showing proposed soil sample locations. Appendix C presents photographs.

4.0 DELINEATION REPORT

Legacy will submit a delineation report to the OCD that will include a remediation plan upon receipt of the laboratory report.

Figures

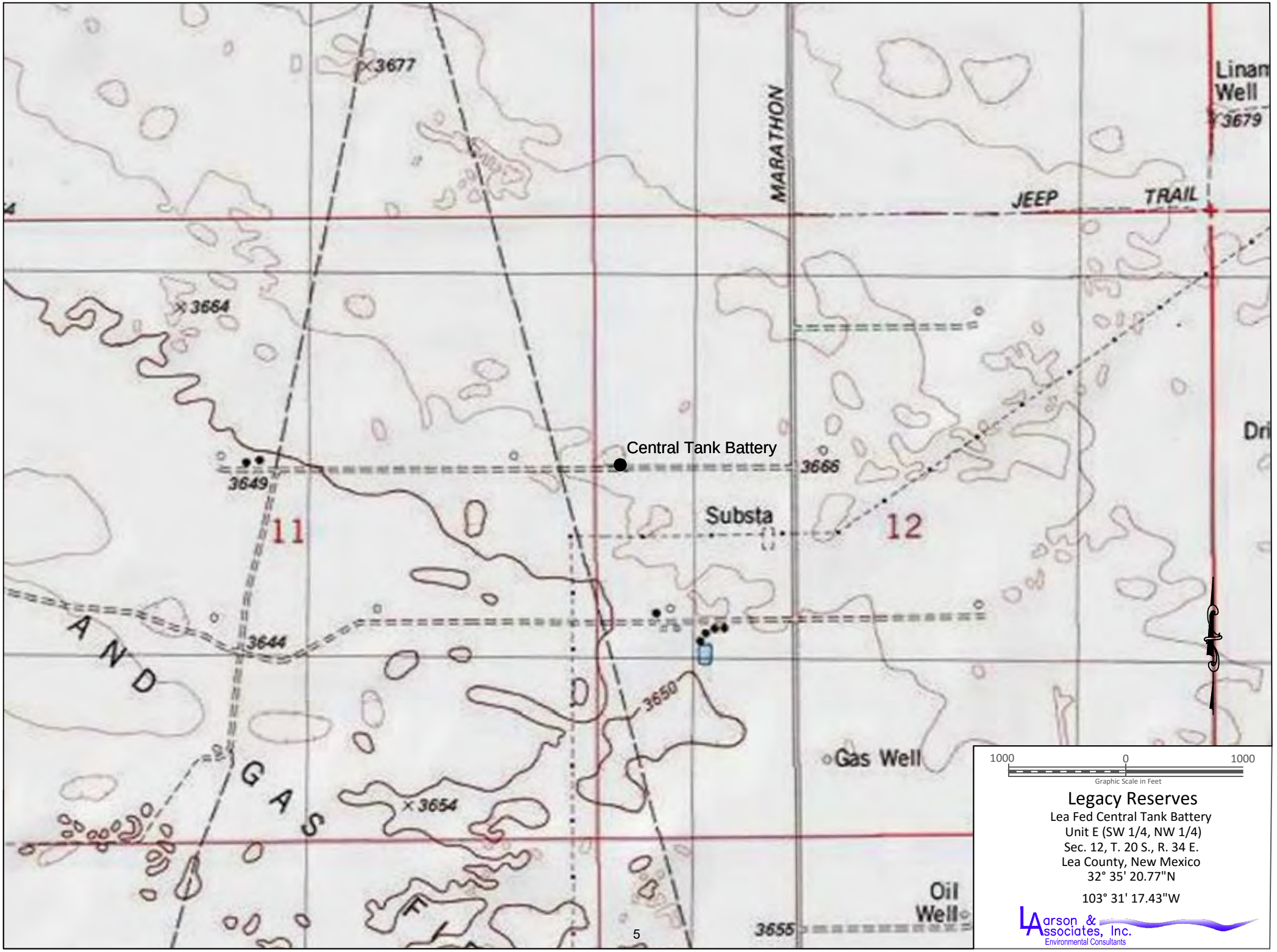

Figure 1 - Topographic Map

Figure 2 - Aerial Map Showing Proposed Sample Points

Appendix A

Initial 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 August 8, 2011

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

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company – Legacy Reserves, LP	Contact – Brian Cunningham
Address – PO Box 104848	Telephone No. 432-234-9450
Facility Name – Lea Unit West Battery	Facility Type – Tank Battery

Surface Owner - Federal	Mineral Owner	API No. 30-025-42885

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
E	12	20S	34E	630	South	660	West	Lea

Latitude 32.5967 **Longitude** -103.5201
32.589443 -103.521101

NATURE OF RELEASE

Type of Release - Hydrocarbon	Volume of Release – 10bbl	Volume Recovered – 6bbl
Source of Release – Ruptured Flow Line	Date and Hour of Occurrence	Date and Hour of Discovery
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Olivia Yu	
By Whom? Todd Roberson	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

RECEIVED
By Olivia Yu at 8:31 am, Mar 20, 2017

Describe Cause of Problem and Remedial Action Taken.*
Man way gasket failed causing a leak and over spray in the pasture

Describe Area Affected and Cleanup Action Taken.*

Most of the fluid stayed inside the containment for the battery with an overspray outside of the battery in the pasture.

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: Brian Cunningham	OIL CONSERVATION DIVISION
Printed Name: Brian Cunningham	Approved by Environmental Specialist:
Title: Production Foreman	Approval Date: 3/20/2017 Expiration Date:
E-mail Address: bcunningham@legacylp.com	Conditions of Approval: see attached directive Attached ☑
Date: 3/16/17 Phone: 432-234-9450	

* Attach Additional Sheets If Necessary

1RP-4646 fOY1707931278 nOY1707931963

pOY1707932196

Operator/Responsible Party,

The OCD has received the form C-141 you provided on _3/17/2017_ regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number __1R-_4646_ has been assigned. **Please refer to this case number in all future correspondence.**

It is the Division's obligation under both the Oil & Gas Act and Water Quality Act to provide for the protection of public health and the environment. Our regulations (19.15.29.11 NMAC) state the following,

> *The responsible person shall complete division-approved corrective action for releases that endanger public health or the environment. The responsible person shall address releases in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with 19.15.30 NMAC.* [emphasis added]

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. **As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District _1_ office in __Hobbs____ on or before _4/20/2017__. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.**

The goals of a characterization effort are: 1) determination of the lateral and vertical extents along with the magnitude of soil contamination. 2) determine if groundwater or surface waters have been impacted. 3) If groundwater or surface waters have been impacted, what are the extents and magnitude of that impact. 4) The characterization of any other adverse impacts that may have occurred (examples: impacts on vegetation, impacts on wildlife, air quality, loss of use of property, etc.). To meet these goals as quickly as possible, the following items must, at a minimum, be addressed in the release characterization workplan and subsequent reporting:

● Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C_6 thru C_{36}), and for chloride by Method 300. This is not an exclusive list of potential contaminants. Analyzed parameters should be modified based on the nature of the released substance(s). Soil sampling must be both within the impacted area and beyond.

● Vertical delineation of soil impacts. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C_6 thru C_{36}), and for chloride by Method 300. As above, this is not an exclusive list of potential contaminants and can be modified. Vertical characterization samples should be taken at depth intervals no greater than five feet apart. Lithologic description of encountered soils must also be provided. At least ten vertical feet of soils with contaminant concentrations at or below these values must be demonstrated as existing above the water table.

● Nominal detection limits for field and laboratory analyses must be provided.

● Composite sampling is not generally allowed.

● Field screening and assessment techniques are acceptable (headspace, titration, EC [include algorithm for validation purposes], EM, etc.), but the sampling and assay procedures must be clearly defined. Copies of field notes are highly desirable. A statistically significant set of split samples must be submitted for confirmatory laboratory analysis, including the laterally farthest and vertically deepest sets of soil samples. Make sure there are at least two soil samples submitted

for laboratory analysis from each borehole or test pit (highest observed contamination and deepest depth investigated). Copies of the actual laboratory results must be provided including chain of custody documentation.

●Probable depth to shallowest protectable groundwater and lateral distance to nearest surface water. If there is an estimate of groundwater depth, the information used to arrive at that estimate must be provided. If there is a reasonable assumption that the depth to protectable water is 50 feet or less, the responsible party should anticipate the need for at least one groundwater monitoring well to be installed in the area of likely maximum contamination.

● If groundwater contamination is encountered, an additional investigation workplan may be required to determine the extents of that contamination. Groundwater and/or surface water samples, if any, must be analyzed by a competent laboratory for volatile organic hydrocarbons (typically Method 8260 full list), total dissolved solids, pH, major anions and cations including chloride and sulfate, dissolved iron, and dissolved manganese. The investigation workplan must provide the groundwater sampling method(s) and sample handling protocols. To the fullest extent possible, aqueous analyses must be undertaken using nominal method detection limits. As with the soil analyses, copies of the actual laboratory results must be provided including chain of custody documentation.

● Accurately scaled and well-drafted site maps must be provided providing the location of borings, test pits, monitoring wells, potentially impacted areas, and significant surface features including roads and site infrastructure that might limit either the release characterization or remedial efforts. Field sketches may be included in subsequent reporting, but should not be considered stand-alone documentation of the site's layout. Digital photographic documentation of the location and fieldwork is recommended, especially if unusual circumstances are encountered.

Nothing herein should be interpreted to preclude emergency response actions or to imply immediate remediation by removal cannot proceed as warranted. Nonetheless, characterization of impacts and confirmation of the effectiveness of remedial efforts must still be provided to the OCD before any release incident will be closed.

Jim Griswold
OCD Environmental Bureau Chief
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
505-476-3465
jim.griswold@state.nm.us

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
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State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised August 8, 2011

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

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company – Legacy Reserves, LP	Contact – Brian Cunningham
Address – PO Box 104848	Telephone No. 432-234-9450
Facility Name – Lea Unit West Battery	Facility Type – Tank Battery

Surface Owner - Federal	Mineral Owner	API No. 30-025-42885

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
E	12	20S	34E	630	South	660	West	Lea

Latitude 32.589305, -103.521692

NATURE OF RELEASE

Type of Release – Produced Water	Volume of Release – 90 bbl	Volume Recovered – 80 bbl
Source of Release – Ruptured Flow Line	Date and Hour of Occurrence 3/23/17 after 5:00PM	Date and Hour of Discovery 3/24/17 6:30 AM
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Olivia Yu	
By Whom? Todd Roberson	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

RECEIVED
By Olivia Yu at 10:23 am, Apr 10, 2017

Describe Cause of Problem and Remedial Action Taken.*

A valve was accidentaly closed causing the water tank to overflow Vacuum truck picked up standing fluid in the containment.

Describe Area Affected and Cleanup Action Taken.*

Most of the fluid stayed inside the containment. A slight overspray outside of the containment.

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: Brian Cunningham

Printed Name: Brian Cunningham

Title: Foreman

E-mail Address: bcunningham@legacylp.com

Date: 3/23/17 Phone: 432-234-9450

Attach Additional Sheets If Necessary

OIL CONSERVATION DIVISION

Approved by Environmental Specialist:

Approval Date: 4/7/2017 Expiration Date:

Conditions of Approval: see attached directive

Attached ☑

1RP-4655 nOY1710038346 pOY1710038562

Operator/Responsible Party,

The OCD has received the form C-141 you provided on _3/23/2017_ regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number __1R-_4655_ has been assigned. **Please refer to this case number in all future correspondence.**

It is the Division's obligation under both the Oil & Gas Act and Water Quality Act to provide for the protection of public health and the environment. Our regulations (19.15.29.11 NMAC) state the following,

> *The responsible person shall complete division-approved corrective action for releases that endanger public health or the environment. The responsible person shall address releases in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with 19.15.30 NMAC.* [emphasis added]

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. **As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District _1_ office in __Hobbs____ on or before _4/27/2017_. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.**

The goals of a characterization effort are: 1) determination of the lateral and vertical extents along with the magnitude of soil contamination. 2) determine if groundwater or surface waters have been impacted. 3) If groundwater or surface waters have been impacted, what are the extents and magnitude of that impact. 4) The characterization of any other adverse impacts that may have occurred (examples: impacts on vegetation, impacts on wildlife, air quality, loss of use of property, etc.). To meet these goals as quickly as possible, the following items must, at a minimum, be addressed in the release characterization workplan and subsequent reporting:

● Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C_6 thru C_{36}), and for chloride by Method 300. This is not an exclusive list of potential contaminants. Analyzed parameters should be modified based on the nature of the released substance(s). Soil sampling must be both within the impacted area and beyond.

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for laboratory analysis from each borehole or test pit (highest observed contamination and deepest depth investigated). Copies of the actual laboratory results must be provided including chain of custody documentation.

●Probable depth to shallowest protectable groundwater and lateral distance to nearest surface water. If there is an estimate of groundwater depth, the information used to arrive at that estimate must be provided. If there is a reasonable assumption that the depth to protectable water is 50 feet or less, the responsible party should anticipate the need for at least one groundwater monitoring well to be installed in the area of likely maximum contamination.

● If groundwater contamination is encountered, an additional investigation workplan may be required to determine the extents of that contamination. Groundwater and/or surface water samples, if any, must be analyzed by a competent laboratory for volatile organic hydrocarbons (typically Method 8260 full list), total dissolved solids, pH, major anions and cations including chloride and sulfate, dissolved iron, and dissolved manganese. The investigation workplan must provide the groundwater sampling method(s) and sample handling protocols. To the fullest extent possible, aqueous analyses must be undertaken using nominal method detection limits. As with the soil analyses, copies of the actual laboratory results must be provided including chain of custody documentation.

● Accurately scaled and well-drafted site maps must be provided providing the location of borings, test pits, monitoring wells, potentially impacted areas, and significant surface features including roads and site infrastructure that might limit either the release characterization or remedial efforts. Field sketches may be included in subsequent reporting, but should not be considered stand-alone documentation of the site's layout. Digital photographic documentation of the location and fieldwork is recommended, especially if unusual circumstances are encountered.

Nothing herein should be interpreted to preclude emergency response actions or to imply immediate remediation by removal cannot proceed as warranted. Nonetheless, characterization of impacts and confirmation of the effectiveness of remedial efforts must still be provided to the OCD before any release incident will be closed.

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OCD Environmental Bureau Chief
1220 South St. Francis Drive
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505-476-3465
jim.griswold@state.nm.us

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Form C-141
Revised August 8, 2011

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

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company Legacy Reserves	Contact Brian Cunningham
Address	Telephone No.(432) 234-9450
Facility Name Lea Federal Unit West Battery	Facility Type Central Tank Battery

Surface Owner BLM	Mineral Owner Federal	API No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
E	12	20S	34 E					Lea

Latitude 32.589305 Longitude -103.52155

NATURE OF RELEASE

Type of Release Produce water	Volume of Release 450 BBLS	Volume Recovered 420 BBLS
Source of Release Tank Battery	Date and Hour of Occurrence 06/07/17 11:30 p.m.	Date and Hour of Discovery 06/08/17 4:00 a.m.
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.*

RECEIVED
By Olivia Yu at 11:09 am, Jun 09, 2017

Describe Cause of Problem and Remedial Action Taken.*
Gasket went out on separator and transfer pump went out causing tanks to overfill. Had vacuum truck pick up 420 BBLS of produce water and haul to disposal.

Describe Area Affected and Cleanup Action Taken.*

Everything stayed inside dyke 130x50. Had little visible overspray on NE corner from separator.

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: Brian Cunningham

Printed Name: Brian Cunningham

Title: Production Foreman

E-mail Address: bcunningham@legacylp.com

Date: 6/8/17 Phone: 432-234-9450

OIL CONSERVATION DIVISION

Approved by Environmental Specialist: gvf

Approval Date: 6/9/2017 Expiration Date:

Conditions of Approval: see attached directive

Attached ☑

* Attach Additional Sheets If Necessary

1RP-4718 nOY1716040816 fOY1707931278 pOY1716041104

Operator/Responsible Party,

The OCD has received the form C-141 you provided on _6/9/2017_ regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number __1R-_4718_ has been assigned. **Please refer to this case number in all future correspondence.**

It is the Division's obligation under both the Oil & Gas Act and Water Quality Act to provide for the protection of public health and the environment. Our regulations (19.15.29.11 NMAC) state the following,

> *The responsible person shall complete division-approved corrective action for releases that endanger public health or the environment. The responsible person shall address releases in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with 19.15.30 NMAC.* [emphasis added]

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. **As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District _1_ office in __Hobbs____ on or before _7/9/2017_. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.**

The goals of a characterization effort are: 1) determination of the lateral and vertical extents along with the magnitude of soil contamination. 2) determine if groundwater or surface waters have been impacted. 3) If groundwater or surface waters have been impacted, what are the extents and magnitude of that impact. 4) The characterization of any other adverse impacts that may have occurred (examples: impacts on vegetation, impacts on wildlife, air quality, loss of use of property, etc.). To meet these goals as quickly as possible, the following items must, at a minimum, be addressed in the release characterization workplan and subsequent reporting:

● Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C_6 thru C_{36}), and for chloride by Method 300. This is not an exclusive list of potential contaminants. Analyzed parameters should be modified based on the nature of the released substance(s). Soil sampling must be both within the impacted area and beyond.

● Vertical delineation of soil impacts. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C_6 thru C_{36}), and for chloride by Method 300. As above, this is not an exclusive list of potential contaminants and can be modified. Vertical characterization samples should be taken at depth intervals no greater than five feet apart. Lithologic description of encountered soils must also be provided. At least ten vertical feet of soils with contaminant concentrations at or below these values must be demonstrated as existing above the water table.

● Nominal detection limits for field and laboratory analyses must be provided.

● Composite sampling is not generally allowed.

● Field screening and assessment techniques are acceptable (headspace, titration, EC [include algorithm for validation purposes], EM, etc.), but the sampling and assay procedures must be clearly defined. Copies of field notes are highly desirable. A statistically significant set of split samples must be submitted for confirmatory laboratory analysis, including the laterally farthest and vertically deepest sets of soil samples. Make sure there are at least two soil samples submitted

for laboratory analysis from each borehole or test pit (highest observed contamination and deepest depth investigated). Copies of the actual laboratory results must be provided including chain of custody documentation.

●Probable depth to shallowest protectable groundwater and lateral distance to nearest surface water. If there is an estimate of groundwater depth, the information used to arrive at that estimate must be provided. If there is a reasonable assumption that the depth to protectable water is 50 feet or less, the responsible party should anticipate the need for at least one groundwater monitoring well to be installed in the area of likely maximum contamination.

● If groundwater contamination is encountered, an additional investigation workplan may be required to determine the extents of that contamination. Groundwater and/or surface water samples, if any, must be analyzed by a competent laboratory for volatile organic hydrocarbons (typically Method 8260 full list), total dissolved solids, pH, major anions and cations including chloride and sulfate, dissolved iron, and dissolved manganese. The investigation workplan must provide the groundwater sampling method(s) and sample handling protocols. To the fullest extent possible, aqueous analyses must be undertaken using nominal method detection limits. As with the soil analyses, copies of the actual laboratory results must be provided including chain of custody documentation.

● Accurately scaled and well-drafted site maps must be provided providing the location of borings, test pits, monitoring wells, potentially impacted areas, and significant surface features including roads and site infrastructure that might limit either the release characterization or remedial efforts. Field sketches may be included in subsequent reporting, but should not be considered stand-alone documentation of the site's layout. Digital photographic documentation of the location and fieldwork is recommended, especially if unusual circumstances are encountered.

Nothing herein should be interpreted to preclude emergency response actions or to imply immediate remediation by removal cannot proceed as warranted. Nonetheless, characterization of impacts and confirmation of the effectiveness of remedial efforts must still be provided to the OCD before any release incident will be closed.

Jim Griswold
OCD Environmental Bureau Chief
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
505-476-3465
jim.griswold@state.nm.us

From: superior21j@aol.com
To: Yu, Olivia, EMNRD
Subject: Re: Lea Federal Unit West Battery release
Date: Friday, June 9, 2017 10:13:29 AM

Olivia

Here's some more information on the Lea Unit West Central Tank
From 62/180 and Marathon road go south on marathon 3.1 miles turn west 0.2 to tank battery
32. 34' 21"N. 103. 31' 21"W
Section 12 Township 20S R34E
Lea County
Closest well connected to battery is Lea Unit 44
API #30-025-42885
Also please see attached pictures
Thanks
Melecio

Sent from my iPhone

Good morning Mr. Orozco:

Pleased to meet you this morning. Please send me the PLSS and GPS coordinates for the release site ASAP even if you don't have an associated API well #.

Thanks,

Olivia Yu
Environmental Specialist
NMOCD, District I
Olivia.yu@state.nm.us
575-393-6161 x113

OCD approval does not relieve the operator of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve the operator of responsibility for compliance with any other federal, state, local laws and/or regulations.

Appendix B

Preliminary Laboratory Reports and Maps Showing Soil Sample Locations

CARDINAL Laboratories

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

June 26, 2017

MELECIO OROZCO

SUPERIOR OILFIELD SERVICE

P. O. BOX 73

EUNICE, NM 88231

RE: WEST CENTRAL

Enclosed are the results of analyses for samples received by the laboratory on 06/20/17 14:40.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

SUPERIOR OILFIELD SERVICE
MELECIO OROZCO
P. O. BOX 73
EUNICE NM, 88231
Fax To:

Received:	06/20/2017	Sampling Date:	06/20/2017
Reported:	06/26/2017	Sampling Type:	Soil
Project Name:	WEST CENTRAL	Sampling Condition:	** (See Notes)
Project Number:	TANK BATTERY	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: SP1 @ 6-8" (H701596-01)

BTEX 8021B mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	**1.05**	0.200	06/22/2017	ND	2.17	109	2.00	1.21	
Toluene*	**6.00**	0.200	06/22/2017	ND	2.00	99.8	2.00	1.55	
Ethylbenzene*	**2.71**	0.200	06/22/2017	ND	2.03	101	2.00	3.17	
Total Xylenes*	**17.0**	0.600	06/22/2017	ND	5.87	97.9	6.00	3.22	
Total BTEX	**26.8**	1.20	06/22/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID *111 %* *72-148*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**2960**	16.0	06/21/2017	ND	448	112	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	**334**	50.0	06/21/2017	ND	167	83.5	200	11.3	
DRO >C10-C28	**5770**	50.0	06/21/2017	ND	168	84.0	200	13.8	

Surrogate: 1-Chlorooctane *120 %* *28.3-164*

Surrogate: 1-Chlorooctadecane *151 %* *34.7-157*

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Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

SUPERIOR OILFIELD SERVICE
MELECIO OROZCO
P. O. BOX 73
EUNICE NM, 88231
Fax To:

Received:	06/20/2017	Sampling Date:	06/20/2017
Reported:	06/26/2017	Sampling Type:	Soil
Project Name:	WEST CENTRAL	Sampling Condition:	** (See Notes)
Project Number:	TANK BATTERY	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: SP1 @ 5' (H701596-02)

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	06/22/2017	ND	2.17	109	2.00	1.21	
Toluene*	<0.050	0.050	06/22/2017	ND	2.00	99.8	2.00	1.55	
Ethylbenzene*	<0.050	0.050	06/22/2017	ND	2.03	101	2.00	3.17	
Total Xylenes*	<0.150	0.150	06/22/2017	ND	5.87	97.9	6.00	3.22	
Total BTEX	<0.300	0.300	06/22/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID *119 %* *72-148*

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	06/21/2017	ND	448	112	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	06/21/2017	ND	167	83.5	200	11.3	
DRO >C10-C28	<10.0	10.0	06/21/2017	ND	168	84.0	200	13.8	

Surrogate: 1-Chlorooctane *85.1 %* *28.3-164*

Surrogate: 1-Chlorooctadecane *75.5 %* *34.7-157*

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Analytical Results For:

SUPERIOR OILFIELD SERVICE
MELECIO OROZCO
P. O. BOX 73
EUNICE NM, 88231
Fax To:

Received:	06/20/2017	Sampling Date:	06/20/2017
Reported:	06/26/2017	Sampling Type:	Soil
Project Name:	WEST CENTRAL	Sampling Condition:	** (See Notes)
Project Number:	TANK BATTERY	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: SP2 @ 6-8" (H701596-03)

BTEX 8021B mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	**1.09**	0.200	06/22/2017	ND	2.17	109	2.00	1.21	
Toluene*	**7.35**	0.200	06/22/2017	ND	2.00	99.8	2.00	1.55	
Ethylbenzene*	**3.70**	0.200	06/22/2017	ND	2.03	101	2.00	3.17	
Total Xylenes*	**19.9**	0.600	06/22/2017	ND	5.87	97.9	6.00	3.22	
Total BTEX	**32.0**	1.20	06/22/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID *124 %* *72-148*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**3280**	16.0	06/21/2017	ND	448	112	400	0.00	

TPH 8015M mg/kg **Analyzed By: MS** **S-06**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	**469**	50.0	06/21/2017	ND	167	83.5	200	11.3	
DRO >C10-C28	**7680**	50.0	06/21/2017	ND	168	84.0	200	13.8	

Surrogate: 1-Chlorooctane *128 %* *28.3-164*

Surrogate: 1-Chlorooctadecane *192 %* *34.7-157*

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Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

SUPERIOR OILFIELD SERVICE
MELECIO OROZCO
P. O. BOX 73
EUNICE NM, 88231
Fax To:

Received:	06/20/2017	Sampling Date:	06/20/2017
Reported:	06/26/2017	Sampling Type:	Soil
Project Name:	WEST CENTRAL	Sampling Condition:	** (See Notes)
Project Number:	TANK BATTERY	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: SP2 @ 5' (H701596-04)

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	06/22/2017	ND	2.17	109	2.00	1.21	
Toluene*	<0.050	0.050	06/22/2017	ND	2.00	99.8	2.00	1.55	
Ethylbenzene*	<0.050	0.050	06/22/2017	ND	2.03	101	2.00	3.17	
Total Xylenes*	<0.150	0.150	06/22/2017	ND	5.87	97.9	6.00	3.22	
Total BTEX	<0.300	0.300	06/22/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID *116 %* *72-148*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**304**	16.0	06/21/2017	ND	448	112	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	06/21/2017	ND	167	83.5	200	11.3	
DRO >C10-C28	**10.2**	10.0	06/21/2017	ND	168	84.0	200	13.8	

Surrogate: 1-Chlorooctane *96.9 %* *28.3-164*

Surrogate: 1-Chlorooctadecane *84.1 %* *34.7-157*

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Analytical Results For:

SUPERIOR OILFIELD SERVICE
MELECIO OROZCO
P. O. BOX 73
EUNICE NM, 88231
Fax To:

Received:	06/20/2017	Sampling Date:	06/20/2017
Reported:	06/26/2017	Sampling Type:	Soil
Project Name:	WEST CENTRAL	Sampling Condition:	** (See Notes)
Project Number:	TANK BATTERY	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: SP3 @ 6-8" (H701596-05)

BTEX 8021B mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	**56.1**	5.00	06/22/2017	ND	2.17	109	2.00	1.21	
Toluene*	**237**	5.00	06/22/2017	ND	2.00	99.8	2.00	1.55	
Ethylbenzene*	**121**	5.00	06/22/2017	ND	2.03	101	2.00	3.17	
Total Xylenes*	**295**	15.0	06/22/2017	ND	5.87	97.9	6.00	3.22	
Total BTEX	**708**	30.0	06/22/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID *107 %* *72-148*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**5280**	16.0	06/21/2017	ND	448	112	400	0.00	

TPH 8015M mg/kg **Analyzed By: MS** **S-06**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	**5660**	50.0	06/21/2017	ND	167	83.5	200	11.3	
DRO >C10-C28	**9770**	50.0	06/21/2017	ND	168	84.0	200	13.8	

Surrogate: 1-Chlorooctane *179 %* *28.3-164*

Surrogate: 1-Chlorooctadecane *211 %* *34.7-157*

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Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

SUPERIOR OILFIELD SERVICE
MELECIO OROZCO
P. O. BOX 73
EUNICE NM, 88231
Fax To:

Received:	06/20/2017	Sampling Date:	06/20/2017
Reported:	06/26/2017	Sampling Type:	Soil
Project Name:	WEST CENTRAL	Sampling Condition:	** (See Notes)
Project Number:	TANK BATTERY	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: SP3 @ 5' (H701596-06)

BTEX 8021B mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	**0.058**	0.050	06/22/2017	ND	2.17	109	2.00	1.21	
Toluene*	**0.109**	0.050	06/22/2017	ND	2.00	99.8	2.00	1.55	
Ethylbenzene*	**0.050**	0.050	06/22/2017	ND	2.03	101	2.00	3.17	
Total Xylenes*	<0.150	0.150	06/22/2017	ND	5.87	97.9	6.00	3.22	
Total BTEX	<0.300	0.300	06/22/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *72-148*

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	06/21/2017	ND	448	112	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	06/21/2017	ND	167	83.5	200	11.3	
DRO >C10-C28	**10.7**	10.0	06/21/2017	ND	168	84.0	200	13.8	

Surrogate: 1-Chlorooctane *96.0 %* *28.3-164*

Surrogate: 1-Chlorooctadecane *82.8 %* *34.7-157*

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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:

SUPERIOR OILFIELD SERVICE
MELECIO OROZCO
P. O. BOX 73
EUNICE NM, 88231
Fax To:

Received:	06/20/2017	Sampling Date:	06/20/2017
Reported:	06/26/2017	Sampling Type:	Soil
Project Name:	WEST CENTRAL	Sampling Condition:	** (See Notes)
Project Number:	TANK BATTERY	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: SP4 @ 6-8" (H701596-07)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	**35.8**	5.00	06/22/2017	ND	2.17	109	2.00	1.21	
Toluene*	**171**	5.00	06/22/2017	ND	2.00	99.8	2.00	1.55	
Ethylbenzene*	**100**	5.00	06/22/2017	ND	2.03	101	2.00	3.17	
Total Xylenes*	**262**	15.0	06/22/2017	ND	5.87	97.9	6.00	3.22	
Total BTEX	**568**	30.0	06/22/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID *105 %* *72-148*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**7330**	16.0	06/21/2017	ND	448	112	400	0.00	

TPH 8015M mg/kg Analyzed By: MS S-06

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	**5200**	50.0	06/21/2017	ND	167	83.5	200	11.3	
DRO >C10-C28	**15100**	50.0	06/21/2017	ND	168	84.0	200	13.8	

Surrogate: 1-Chlorooctane *203 %* *28.3-164*

Surrogate: 1-Chlorooctadecane *341 %* *34.7-157*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

SUPERIOR OILFIELD SERVICE
MELECIO OROZCO
P. O. BOX 73
EUNICE NM, 88231
Fax To:

Received:	06/20/2017	Sampling Date:	06/20/2017
Reported:	06/26/2017	Sampling Type:	Soil
Project Name:	WEST CENTRAL	Sampling Condition:	** (See Notes)
Project Number:	TANK BATTERY	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: SP4 @ 4' (H701596-08)

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	06/22/2017	ND	2.17	109	2.00	1.21	
Toluene*	<0.050	0.050	06/22/2017	ND	2.00	99.8	2.00	1.55	
Ethylbenzene*	<0.050	0.050	06/22/2017	ND	2.03	101	2.00	3.17	
Total Xylenes*	<0.150	0.150	06/22/2017	ND	5.87	97.9	6.00	3.22	
Total BTEX	<0.300	0.300	06/22/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID *103 %* *72-148*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**400**	16.0	06/21/2017	ND	432	108	400	3.64	

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	06/21/2017	ND	167	83.5	200	11.3	
DRO >C10-C28	**10.3**	10.0	06/21/2017	ND	168	84.0	200	13.8	

Surrogate: 1-Chlorooctane *95.3 %* *28.3-164*

Surrogate: 1-Chlorooctadecane *82.8 %* *34.7-157*

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Analytical Results For:

SUPERIOR OILFIELD SERVICE
MELECIO OROZCO
P. O. BOX 73
EUNICE NM, 88231
Fax To:

Received:	06/20/2017	Sampling Date:	06/20/2017
Reported:	06/26/2017	Sampling Type:	Soil
Project Name:	WEST CENTRAL	Sampling Condition:	** (See Notes)
Project Number:	TANK BATTERY	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: SP5 @ 6-8" (H701596-09)

BTEX 8021B mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	**0.101**	0.050	06/22/2017	ND	2.17	109	2.00	1.21	
Toluene*	**0.187**	0.050	06/22/2017	ND	2.00	99.8	2.00	1.55	
Ethylbenzene*	**0.061**	0.050	06/22/2017	ND	2.03	101	2.00	3.17	
Total Xylenes*	<0.150	0.150	06/22/2017	ND	5.87	97.9	6.00	3.22	
Total BTEX	**0.349**	0.300	06/22/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID *100 %* *72-148*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**11200**	16.0	06/21/2017	ND	432	108	400	3.64	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<50.0	50.0	06/21/2017	ND	167	83.5	200	11.3	
DRO >C10-C28	**2920**	50.0	06/21/2017	ND	168	84.0	200	13.8	

Surrogate: 1-Chlorooctane *84.0 %* *28.3-164*

Surrogate: 1-Chlorooctadecane *129 %* *34.7-157*

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Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

SUPERIOR OILFIELD SERVICE
MELECIO OROZCO
P. O. BOX 73
EUNICE NM, 88231
Fax To:

Received:	06/20/2017	Sampling Date:	06/20/2017
Reported:	06/26/2017	Sampling Type:	Soil
Project Name:	WEST CENTRAL	Sampling Condition:	** (See Notes)
Project Number:	TANK BATTERY	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: SP5 @ 5' (H701596-10)

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	06/22/2017	ND	2.17	109	2.00	1.21	
Toluene*	<0.050	0.050	06/22/2017	ND	2.00	99.8	2.00	1.55	
Ethylbenzene*	<0.050	0.050	06/22/2017	ND	2.03	101	2.00	3.17	
Total Xylenes*	<0.150	0.150	06/22/2017	ND	5.87	97.9	6.00	3.22	
Total BTEX	<0.300	0.300	06/22/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID *142 %* *72-148*

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	06/21/2017	ND	432	108	400	3.64	

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	06/21/2017	ND	167	83.5	200	11.3	
DRO >C10-C28	<10.0	10.0	06/21/2017	ND	168	84.0	200	13.8	

Surrogate: 1-Chlorooctane *89.2 %* *28.3-164*

Surrogate: 1-Chlorooctadecane *75.2 %* *34.7-157*

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Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

SUPERIOR OILFIELD SERVICE
MELECIO OROZCO
P. O. BOX 73
EUNICE NM, 88231
Fax To:

Received:	06/20/2017	Sampling Date:	06/20/2017
Reported:	06/26/2017	Sampling Type:	Soil
Project Name:	WEST CENTRAL	Sampling Condition:	** (See Notes)
Project Number:	TANK BATTERY	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: SP6 @ 6-8" (H701596-11)

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	06/22/2017	ND	2.17	109	2.00	1.21	
Toluene*	<0.050	0.050	06/22/2017	ND	2.00	99.8	2.00	1.55	
Ethylbenzene*	<0.050	0.050	06/22/2017	ND	2.03	101	2.00	3.17	
Total Xylenes*	<0.150	0.150	06/22/2017	ND	5.87	97.9	6.00	3.22	
Total BTEX	<0.300	0.300	06/22/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID *103 %* *72-148*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**22400**	16.0	06/21/2017	ND	432	108	400	3.64	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<50.0	50.0	06/21/2017	ND	177	88.6	200	3.03	
DRO >C10-C28	**3990**	50.0	06/21/2017	ND	182	90.9	200	2.24	QM-07

Surrogate: 1-Chlorooctane *82.3 %* *28.3-164*

Surrogate: 1-Chlorooctadecane *145 %* *34.7-157*

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Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

SUPERIOR OILFIELD SERVICE
MELECIO OROZCO
P. O. BOX 73
EUNICE NM, 88231
Fax To:

Received:	06/20/2017	Sampling Date:	06/20/2017
Reported:	06/26/2017	Sampling Type:	Soil
Project Name:	WEST CENTRAL	Sampling Condition:	** (See Notes)
Project Number:	TANK BATTERY	Sample Received By:	Tamara Oldaker
Project Location:	NONE GIVEN		

Sample ID: SP6 @ 4' (H701596-12)

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	06/22/2017	ND	2.17	109	2.00	1.21	
Toluene*	<0.050	0.050	06/22/2017	ND	2.00	99.8	2.00	1.55	
Ethylbenzene*	<0.050	0.050	06/22/2017	ND	2.03	101	2.00	3.17	
Total Xylenes*	<0.150	0.150	06/22/2017	ND	5.87	97.9	6.00	3.22	
Total BTEX	<0.300	0.300	06/22/2017	ND					

Surrogate: 4-Bromofluorobenzene (PID *137 %* *72-148*

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	06/21/2017	ND	432	108	400	3.64	

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	06/21/2017	ND	177	88.6	200	3.03	
DRO >C10-C28	<10.0	10.0	06/21/2017	ND	182	90.9	200	2.24	

Surrogate: 1-Chlorooctane *85.5 %* *28.3-164*

Surrogate: 1-Chlorooctadecane *75.0 %* *34.7-157*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
QR-02	The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

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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: Lesley
Project Manager: Brian Cunningham
Address:
City: Hobbs State: NM Zip: 88240
Phone #: Fax #:
Project #: Project Owner:
Project Name: West Central Tank Battery
Project Location:
Sampler Name: Oscar Frayre

BILL TO
P.O. #:
Company: SOS
Attn:
Address:
City:
State: Zip:
Phone #:
Fax #:

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	TIME	ANALYSIS REQUEST: Cl	TPH 8015 mod	BTEX
H701596- 1	Sp1 @ 6-5"	G	1			X					X		6-20-17	9:30	X	X	X
2	@ 5'													9:40	X	X	X
3	Sp2 @ 6-8"													9:50	X	X	X
4	@ 5'													10:00	X	X	X
5	Sp3 @ 6-5"													10:30	X	X	X
6	@ 5'													10:40	X	X	X
7	Sp4 @ 6-5"													11:20	X	X	X
8	@ 4'													11:45	X	X	X
9	Sp5 @ 6-8"													12:20	X	X	X
10	@ 5'													12:30	X	X	X

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"NO" "Rush"

Relinquished By: Date: 6/20/17 Time: 2:40 Received By: Valerie Munoz
Relinquished By: Date: Time: Received By:
Delivered By: (Circle One) Sampler - UPS - Bus - Other: #75 6.1°C
Sample Condition: Cool Yes / No; Intact Yes / No
CHECKED BY: (Initials) V.N.

Phone Result: ☐ Yes ☐ No Add'l Phone #:
Fax Result: ☐ Yes ☐ No Add'l Fax #:
REMARKS:
O Frayre20@gmail.com
Supervisor215@AOL.com

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

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name:	**BILL TO**
Project Manager:	P.O. #:
Address:	Company:
City: State: Zip:	Attn:
Phone #: Fax #:	Address:
Project #: Project Owner:	City:
Project Name:	State: Zip:
Project Location:	Phone #:
Sampler Name:	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	CL	TPH 8015	BTEX										
H701596-																											
11	S#4-6-8 @4	1	1			X					X		6/20/17	1:45	X	X	X										
12															X	X	X										

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Relinquished By:	Date: 6/20/17	Received By:	Phone Result: ☐ Yes ☐ No Add'l Phone #:
	Time: 2:40		Fax Result: ☐ Yes ☐ No Add'l Fax #:
Relinquished By:	Date:	Received By:	REMARKS:
	Time:		
Delivered By: (Circle One) Sampler - UPS - Bus - Other: #75	Sample Condition Cool: ☒ Yes ☐ No Intact: ☒ Yes ☐ No	CHECKED BY: (Initials) V.N.	

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

CARDINAL Laboratories

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July 05, 2017

MELECIO OROZCO

SUPERIOR OILFIELD SERVICE

P. O. BOX 73

EUNICE, NM 88231

RE: LEA FED WEST BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 06/29/17 13:50.

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

SUPERIOR OILFIELD SERVICE
MELECIO OROZCO
P. O. BOX 73
EUNICE NM, 88231
Fax To:

Received:	06/29/2017	Sampling Date:	06/29/2017
Reported:	07/05/2017	Sampling Type:	Soil
Project Name:	LEA FED WEST BATTERY	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: OVERSPRAY AREA @ 1' 3 PT (H701715-01)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**144**	16.0	06/30/2017	ND	448	112	400	3.51	

Sample ID: 4PT COMP AREA #2 @ 1' (H701715-02)

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	06/30/2017	ND	448	112	400	3.51	

Sample ID: 2PT COMP AREA #3 @ 1' (H701715-03)

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	06/30/2017	ND	448	112	400	3.51	

Sample ID: 4PT COMP AREA 3 @ 1' (H701715-04)

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	06/30/2017	ND	448	112	400	3.51	

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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

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Legacy
Project Manager: Ben Cazalen
Address:
City: Hobbs State: N.M. Zip: 88240
Phone #: Fax #:
Project #: Project Owner:
Project Name:
Project Location: Lea Fed West Batt
Sampler Name:

BILL TO
P.O. #:
Company: SOS
Attn:
Address:
City:
State: Zip:
Phone #:
Fax #:

ANALYSIS REQUEST

Lab I.D. (FOR LAB USE ONLY)	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING: DATE	TIME	Cl
H701715 1	Overspray Area @ 1' 3PT	C				X					X		6-29-17	12:11	X
2	4pt Comp area #2 @ 1'	C				X					X		6-29-17	12:20	X
3	2pt Comp @ area 3 @ 1'	C				X					X		6-29-17	12:40	X
4	4pt Comp @ 1' 3 @ 1'	C				X					X		6-29-17	1:00	X

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Relinquished By: [signature] Date: 6-29-17 Time: Received By:

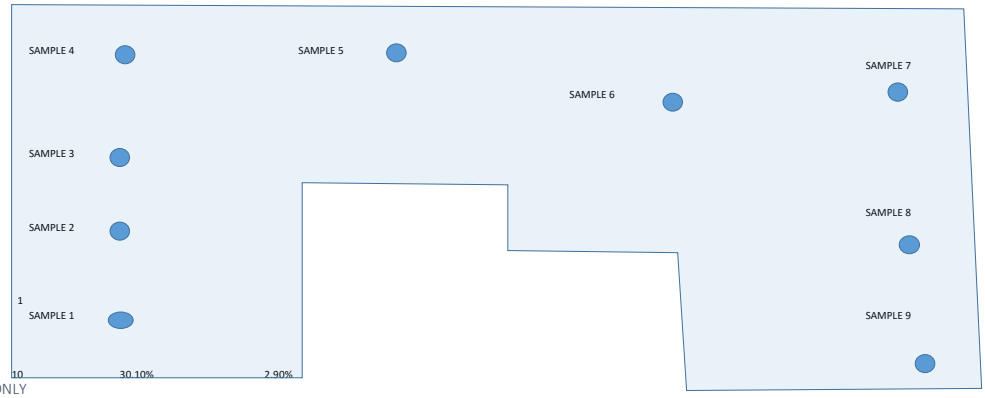
Relinquished By: Date: 6-29-17 Time: 1:50 Received By: Tamara Oldaker

Delivered By: (Circle One)
Sampler - UPS - Bus - Other:
14.1°C
Sample Condition: Cool ☐ Yes ☑ No; Intact ☑ Yes ☐ No
CHECKED BY: (Initials) T° #75

Phone Result: ☐ Yes ☐ No Add'l Phone #:
Fax Result: ☐ Yes ☐ No Add'l Fax #:
REMARKS: OFrape20@gmail.com
Superno21J.@abf.com
Brought directly to lab from field

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

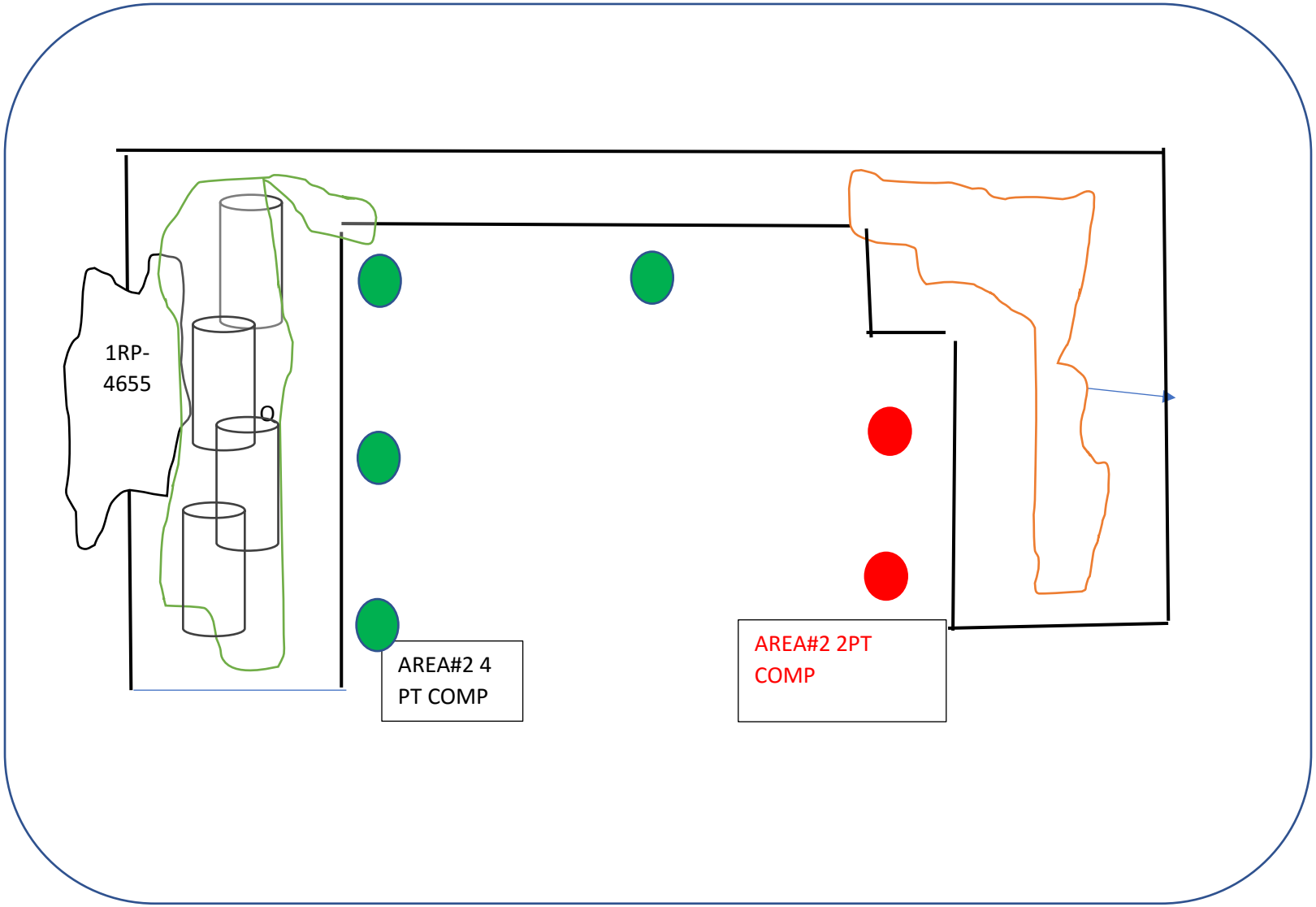
LEGACY INSIDE WEST BATTERY 1RP4646/4718/4655-1 *Field TEST <CL ONLY*



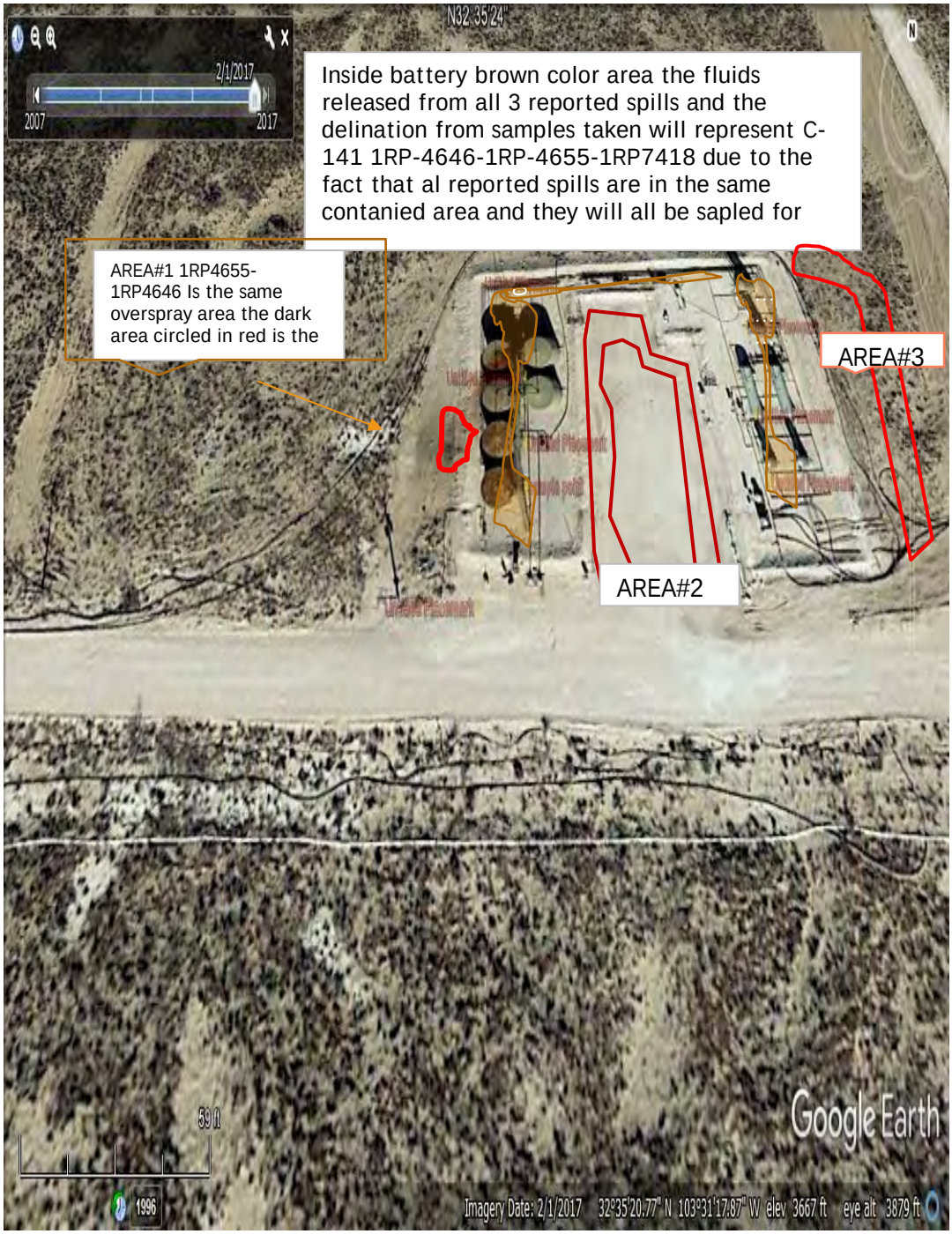
Field Tiration <CL ONLY

SAMPLE POINT	SOIL	H2O	CF	Agno3	Cl PPM	
1@1'		10.3	30.30%	30.00%	3.42	937
2'		10.5	2.83%	2.83%	1.78	404
4'		10.4	30.20%	2.91%	1.76	175
2@1'		10.1	30.40%	3.00%	1.76	3786
2"		11.1	2.87%	2.85%	1.76	1663
4'		10	30.10%	2.90%	0.9	449
3@1		10.4	30.20%	3.01%	0.9	743
2		10.3	30.30%	30.00%	1.11	309
3		10.5	2.83%	2.83%	0.33	98
4@1		10.4	30.20%	2.91%	5.81	1540
2		10.1	30.40%	3.00%	1.6	492
4		11.1	2.87%	2.85%		209
5@1		10.4	30.20%	2.91%	0.05	149
3		10.1	30.40%	3.00%	0.05	149
5@1		11.1	2.87%	2.85%	0.05	149
3		10	30.10%	2.90%	0.05	149
6@1		10	30.00%	3.00%	0.05	149
3		10	30.00%	3.00%	0.05	149
7@1		10	30.00%	3.00%	0.05	149
3		10	30.00%	3.00%	0.05	149
8@1		10	30.00%	3.00%	0.05	149
3		10	30.00%		0.05	149

LEGACY WEST BATTERY SAMPLE POINT AREA #2



25’ SPREAD


N32 35'24"
2/1/2017
2007
2017
Inside battery brown color area the fluids released from all 3 reported spills and the delination from samples taken will represent C-141 1RP-4646-1RP-4655-1RP7418 due to the fact that al reported spills are in the same contanied area and they will all be sapled for
AREA#1 1RP4655-1RP4646 Is the same overspray area the dark area circled in red is the
AREA#3
AREA#2
59 ft
1996
Google Earth
Imagery Date: 2/1/2017 32°35'20.77" N 103°31'17.87" W elev 3667 ft eye alt 3879 ft

Appendix C

Photographs

Site Location, September 28, 2017

Site Prior to Remediation Viewing South, September 28, 2017

Site Prior to Remediation Viewing North, September 28, 2017

Site Prior to Remediation Viewing North, September 28, 2017

Site Prior to Remediation Viewing West, September 28, 2017

West Side of Tank Battery Prior to Remediation Viewing South, September 28, 2017

Site Prior to Remediation Viewing West, September 28, 2017

Site Prior to Remediation Viewing East, September 28, 2017

Site Prior to Remediation Viewing North, September 28, 2017