

APPROVED

By Olivia Yu at 7:39 am, Mar 01, 2018

NMOCD approves of the
proposed confirmatory
delineation plan for 1RP-4536.

**1RP-4536
DELINEATION PLAN
Jal Cooper Unit #239
Produced Water Spill
Lea County, New Mexico**

Latitude: N32.190606
Longitude: W-103.210428

LAI Project No. 17-0175-38

February 9, 2018

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 1 for a produced water spill at the Jal Cooper Unit #239 (Site) located in Unit H (SE/4, NE/4) Section 25, Township 24 South, Range 36 East in Lea County, New Mexico. The geodetic position is North 32° 11' 26.18" and West -103° 12' 37.54". Figure 1 presents a topographic map. Figure 2 presents an aerial map.

1.1 Background

The spill occurred on December 15, 2016, due to a leak in an injection line, releasing 130 barrels (bbl) of produced water. Approximately 90 bbl were recovered. The fluids migrated south along the lease road from the failure point, terminating in the pasture. The spill area measures approximately 44,450 square feet. Woolworth Trust reported the spill to the OCD (verbal communication with Mike Whitaker) on the day of the release. The initial C-141 was submitted on December 20, 2016 and assigned remediation permit number 1RP-4536. Appendix A presents the initial C-141.

On December 16, 21, and 27, 2016 and January 9, 2017, Environmental Plus, Inc. (EPI) personnel collected soil samples at four (4) locations along the lease road (SP1 through SP-4) and two (2) locations in the pasture (SP5 and SP6). The samples were collected at depths of 4 feet below ground surface (bgs) at SP1, SP3, SP5 and SP6, 8 feet bgs at SP4 and 10 feet bgs at SP2. The soil samples were delivered to Cardinal Laboratories (Cardinal), in Hobbs, New Mexico under preservation and chain of custody. The soil samples were analyzed for chloride by titration method (SM 4500 CL-B). The following samples reported chloride above the delineation limit of 600 milligrams per kilogram (mg/Kg):

- SP1, 4' (1,150 mg/Kg)
- SP2, 10' (864 mg/Kg)
- SP3, 4' (736 mg/Kg)

On February 27-28, 2017 EPI personnel collected soil samples east and west of each previous sample on the lease road (SP1 through SP-4) and north and south of the samples in the pasture (SP5 and SP6). The samples were collected at the surface and to a depth of 2 feet bgs. The samples were delivered to Cardinal under preservation and chain of custody and analyzed for chloride by titration method (SM 4500 CL-B). All samples reported below the delineation standard (600 mg/Kg).

On an unknown date, under EPI supervision, the lease road was excavated to a depth of one foot bgs. The area in the vicinity of SP5 and SP6 was excavated to a depth of approximately 3 feet bgs. The excavation measured approximately 135 x 365 or about 22,300 square feet. Appendix B presents the EPI data.

1.2 Physical Setting

The physical setting is as follows:

- The surface elevation is approximately 3,280 feet above mean sea level (msl);
- The surface topography slopes gently towards the southeast;
- There are no surface water features within 1,000 feet of the Site;
- The soil is designated as "Berino-Cacique loamy fine sands association, 0 to 3 percent slope" consisting of 0 to 6 inches of loamy fine sand underlain by 6 to 60 inches of sandy clay loam;

- The geology is of Eolian and Piedmont deposits (Holocene to middle Pleistocene)- interlayered eolian sands and piedmont-slope deposits;
- Groundwater occurs in the Ogallala formation at approximately 100 feet bgs;
- According to the New Mexico Office of the State Engineer (NMOSE), the nearest fresh water well is located in Unit I (NE/4, SE/4), Section 25, Township 24 South, Range 36 East, approximately 0.22 miles southwest of the Site.

1.3 Recommended Remediation Action Levels

Recommended Remediation Action Levels (RRAL) were calculated for benzene, BTEX and TPH based on the following criteria established by the OCD in “Guidelines for Remediation of Leaks, Spills and Releases, pp. 6-7, August 13, 1993”:

Criteria	Result	Score
Depth-to-Groundwater	>100 Feet	0
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: 0

- Benzene 10 mg/Kg
- BTEX 50 mg/Kg
- TPH 5,000 mg/Kg

Depth to groundwater greater than 100 feet bgs required vertical delineation for chloride to 600 milligrams per kilogram (mg/Kg) and maintained 5 feet farther in depth.

2.0 DELINEATION PLAN

LAI proposes to collect soil samples from five (5) locations on the lease road. The 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. Soil samples will be collected at four (4) locations in the bottom of the excavation at SP5 and SP6 as well as each side wall (north, south east and west). Additional samples will be collected in each cardinal direction (north, south, east and west) of the spill area at the same depth intervals for horizontal delineation. The soil samples will be delivered under preservation and chain of custody to Permian Basin Environmental Lab (PBEL) in Midland, Texas. the upper samples (0 to 1 foot) will be analyzed for BTEX (the sum of benzene, toluene, ethylbenzene and xylenes) and TPH (total petroleum hydrocarbons), including gasoline range organics (GRO), diesel range organics (DRO) and oil range organics (ORO) by EPA SW-846 Methods 8021B and 8015M, respectively. Additional samples will be analyzed for BTEX and TPH for vertical delineation should the initial samples report concentrations above the RRAL. All samples will be analyzed for chloride by Method 300 respectively. Pending laboratory results, further delineation will be determined to reach clean up level standards. Figure 2 presents the proposed sample locations. Appendix C presents photographs.

3.0 REMEDIATION

Legacy will include a remediation plan in the delineation report to be submitted to the OCD upon receipt of the laboratory report.

Figures

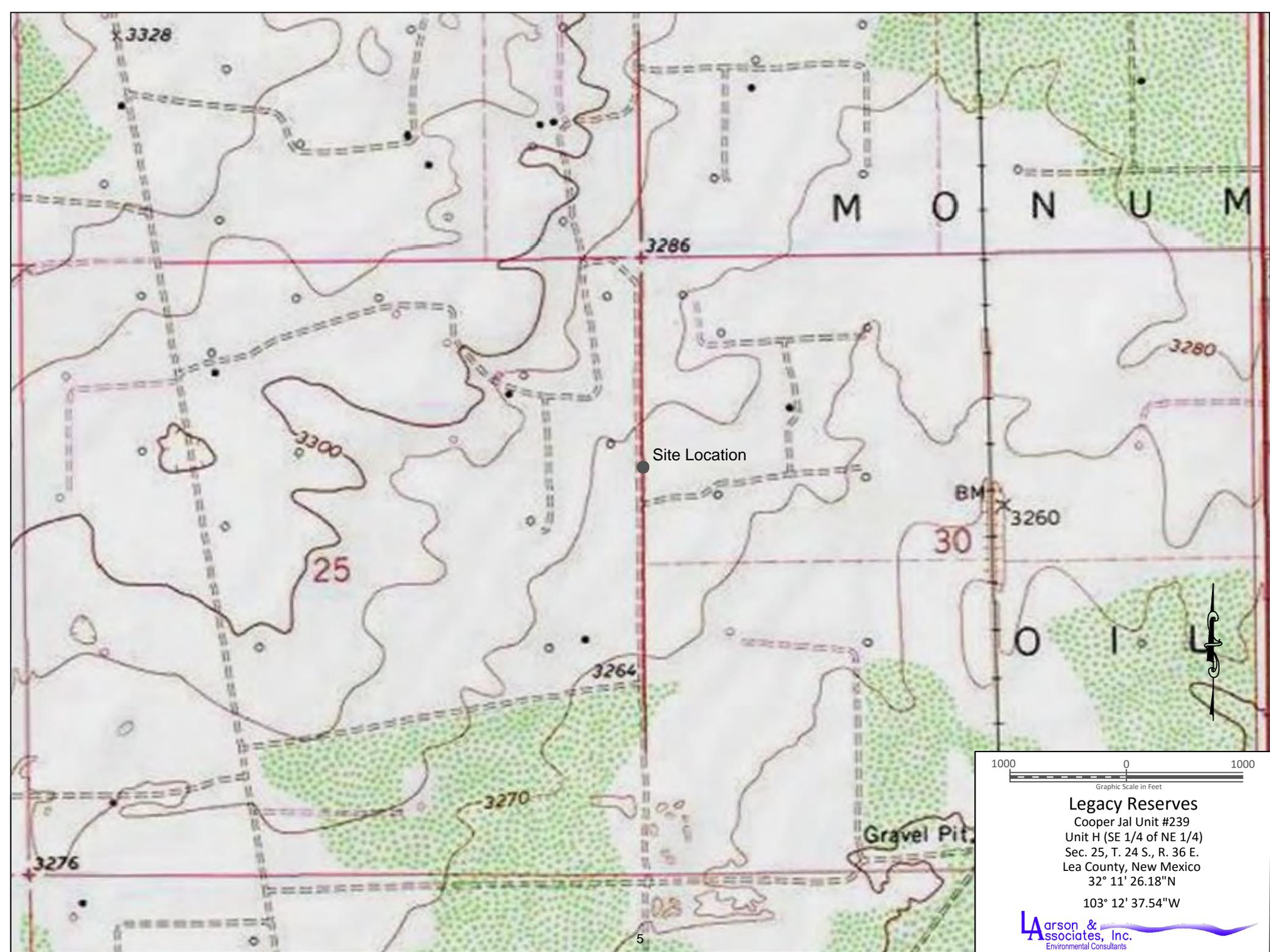


Figure 1 - Topographic Map



Figure 2 - Aerial Map

Appendix A

Initial C-141

NM OIL CONSERVATION
ARTESIA DISTRICT

DEC 22 2016

Form C-141
Revised August 8, 2011

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

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

240974 240974 Release Notification and Corrective Action

240974 OPERATOR Initial Report Final Report

Name of Company: Legacy, L.P. 240974	Contact: Ernest Barrientez
Address: P.O. Box 10848 Midland, TX 79702	Telephone No. 432-853-0633
Facility Name: Jal Cooper Unit #239	Facility Type: Injection Line
Surface Owner: Woolworth Trust	Mineral Owner:
API No.	

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
H	25	24S	36E					Lea

Latitude: N 32.190606° Longitude: W 103.210428°

NATURE OF RELEASE

Type of Release: produced water	Volume of Release: 130 barrels	Volume Recovered: 90 barrels
Source of Release: injection line failed	Date and Hour of Occurrence: 12/15/16 @ unknown	Date and Hour of Discovery: 12/15/16 @ unknown
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Mike Whitaker, OCD	
By Whom? Woolworth Trust	Date and Hour: 12/15/16	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse: Not Applicable	

If a Watercourse was Impacted, Describe Fully.* Not Applicable

Describe Cause of Problem and Remedial Action Taken.*

An injection line developed a leak releasing fluid to lease road and pasture. A vacuum truck was dispatched to collect standing fluid.

Describe Area Affected and Cleanup Action Taken.*

A vacuum truck was called to the location and was able to recover 90 barrels of the fluid from lease road and pasture. Surface contamination will be scraped up and samples will be collected from release area.

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:	OIL CONSERVATION DIVISION	
Printed Name: Ernest Barrientez	Approved by Environmental Specialist:	
Title: Production Foreman	Approval Date: 12/29/16	Expiration Date: N/A
E-mail Address: ebarrientez@legacylp.com	Conditions of Approval: see attached	Attached <input checked="" type="checkbox"/>
Date: 12-20-2016	Phone: 432-853-0633	

* Attach Additional Sheets If Necessary

IRP-4536

Operator/Responsible Party,

The OCD has received the form C-141 you provided on **12/22/16** regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number IRP-4536 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 II office in Artesia on or before 2/1/17 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; C₆ thru C₃₆), 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; C₆ thru C₃₆), 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

Weaver, Crystal, EMNRD

From: Lynch, Kristen, EMNRD
Sent: Wednesday, December 21, 2016 4:10 PM
To: Patterson, Heather, EMNRD; Weaver, Crystal, EMNRD; Bratcher, Mike, EMNRD
Subject: Fw: C - 141 - TARGA MIDSTREAM
Attachments: Untitled.PDF

From: Casillas, Bertha, EMNRD
Sent: Wednesday, December 21, 2016 10:36 AM
To: Lynch, Kristen, EMNRD
Subject: C - 141 - TARGA MIDSTREAM

BERTHA CASILLAS
EMNRD – OCD DISTRICT I
1625 N. FRENCH DRIVE
HOBBS, NM 88240
OFFICE: (575) 393-6161
FAX: (575) 393-0720
BERTHA.CASILLAS@STATE.NM.US

Appendix B
EPI Work Plan

ENVIRONMENTAL PLUS, INC.

2100 AVE 'O'
P.O. BOX 1558
EUNICE, NM 88231
ddominguezepi@gmail.com
Office: (575) 394-3481
Fax: (575) 394-2601



Site Characterization and Work Plan

**Legacy, L.P.
Jal Cooper #239
Lea County, New Mexico
Unit Letter "H", Section 25, Township 24 South, Range 36 East
Latitude 32.190606 North, Longitude 103.210428 West
NMOCD Reference #1RP-4536**

Prepared For:

APPROVED

By Olivia Yu at 9:04 am, May 04, 2017

Legacy, L.P.
P.O. Box 10848
Midland, Texas 79702

Prepared By:

Environmental Plus, Inc.
2100 Ave 'O'
Eunice, NM 88231

February 2017

A handwritten signature in black ink, appearing to read 'Daniel Dominguez', written over a horizontal line.

Daniel Dominguez
Project Manager

NMOCD approves the delineation workplan for 1RP-4536.
-Bottom confirmation samples are requested for SP5 and SP6 at 3 ft. bgs.



The following *Site Characterization and Work Plan* serves as a condensed update on field activities undertaken and proposed actions for the afore referenced Site.

Background:

The site is located in Unit Letter H (SE ¼ NE ¼), Section 25, Township 24 South, Range 36 East, approximately five miles north-west of Jal, in Lea County, New Mexico. The property is owned by the Woolworth Trust.

The release site is located on an active lease road; latitude 32.190606 North, longitude 103.210428 West. Area Map, Site Location Map, and Sample/Site Map are included as Figure 1, Figure 2, and Figure 3, respectively. The Initial NMOCD Form C-141 indicated that on December 15, 2016 approximately 130 barrels of produced water was released when an injection line developed a leak releasing the fluid to lease road and pasture. A vacuum truck was dispatched to the site and recovered approximately 90 barrels, resulting in a net loss of 40 barrels of produced water. The visually stained area covers approximately 37,500 square feet of lease road and 56,500 square feet of pasture area totaling 94,000 square feet. The Initial NMOCD Form C-141 in included as Attachment IV.

NMOCD Site Classification:

A search for water wells was completed utilizing the New Mexico Office of the State Engineer’s (NMOSE) website. There are two wells located in the area surrounding the release site (reference *Table I*). Also, no wells (domestic, agriculture or public) and no bodies of surface water exist within a 1,000-foot radius of the release site (reference *Figure 2*). The NMOSE database indicates average water depth is approximately 135 feet below ground surface (bgs) within a 2,000-meter radius of the release site (reference *Attachment II*).

Utilizing this information, the NMOCD guidelines indicate the Jal Cooper #239 release site to have a ranking score of zero. Based on this score, the NMOCD Recommended Remedial Action Levels (RRALs) for this Site were determined as follows: Benzene – 10 mg/Kg, BTEX – 50 mg/Kg, TPH – 5,000 mg/Kg, and Chloride – 1,000 mg/Kg.

The produced water traveled down the lease road approximately 2,000'. This area is sandy topsoil over compacted caliche. Approximately 1,800' down the road, the produced water entered the pasture covering an area approximately 230' x 320'. This area is sandy topsoil over caliche.

Delineation Progress:

On December 16, 21, and 27, 2016 and January 9, 2017 EPI personnel mobilized on site to collect soil samples to determine the vertical extent of contamination. A total of thirty-three soil samples were collected from six sample locations; SP1 – SP6. Six representative samples, one from TD at each sample location, were sent to Cardinal Labs in Hobbs, New Mexico, for chloride testing. Laboratory analytical results indicate that, apart from SP1 at four feet bgs, the release area is void of Chloride concentrations more than NMOCD RRALs of 1,000 mg/Kg (reference *Figure 3* and *Table 2*).

On February 27-28, 2017 EPI personnel mobilized on site to collect soil samples to determine the vertical and horizontal extent of contamination. A total of thirteen vertical soil samples were collected from six sample locations; SP1 – SP6. Six representative samples, one from TD at each sample location, were sent to Cardinal Labs in Hobbs, New Mexico, for chloride testing. Laboratory analytical results indicate that Chloride concentrations more than NMOCD RRALs of 1,000 mg/Kg are not present at eighteen to twenty-two feet bgs.

A total of twenty-two horizontal soil samples were collected from six sample locations surrounding the release area; SP1 E – SP6 S. All twenty-two soil samples were sent to Cardinal Labs in Hobbs, New Mexico, for chloride testing. Laboratory analytical results indicate that the area adjacent to the release area, horizontally, is void of Chloride concentrations more than NMOCD RRALs of 1,000 mg/Kg (reference *Figure 3* and *Table 2*).

Proposed Actions:

Taking into consideration the release occurred on an active lease road, and field chloride testing indicating chloride levels above NMOCD RRALs between three and six feet bgs (reference *Table 2*), EPI proposes to excavate the lease road area to one foot bgs and then backfill with one foot of caliche to impede the further vertical migration of chloride impacts.

Field chloride testing in the area off the road in the pasture indicate chloride levels above NMOCD RRALs to two feet bgs (reference *Table 2*). EPI proposes to excavate this area to three feet bgs to ensure removal of chloride impacts. The pasture excavation will first be backfilled with two feet of caliche and then one foot of select top soil to finish grade. Top soil and caliche will be free of deleterious material or rocks or large clumps.

Backfilling will continue until the entire excavation is closed. Upon completion of backfill activities, the entire disturbed area will be contoured to blend with existing lease road and pasture area and protected against wind/water erosion. The disturbed pasture area will be seeded with a mixture approved by the property owner. However, it is recommended completing this activity in late spring 2017 when ground conditions are more conducive to vegetative growth.

Following completion of NMOCD approved Proposed Actions, EPI will provide a detailed *Final Closure Report* to Legacy, L.P. and NMOCD personnel. Legacy, L.P. and EPI personnel would welcome an opportunity to briefly discuss the *Work Plan* at your earliest convenience.

Should you have any questions or concerns please feel free to contact me at (575) 394-3481 or via e-mail at ddominguezepi@gmail.com or Mr. Steven Dittman at (432) 312-4757 or via e-mail at sdittman@legacylp.com. All official communication should be addressed to:

Mr. Steven Dittman
Legacy, L.P.
P.O. Box 10848
Midland, TX 79702

Sincerely,

ENVIRONMENTAL PLUS, INC.

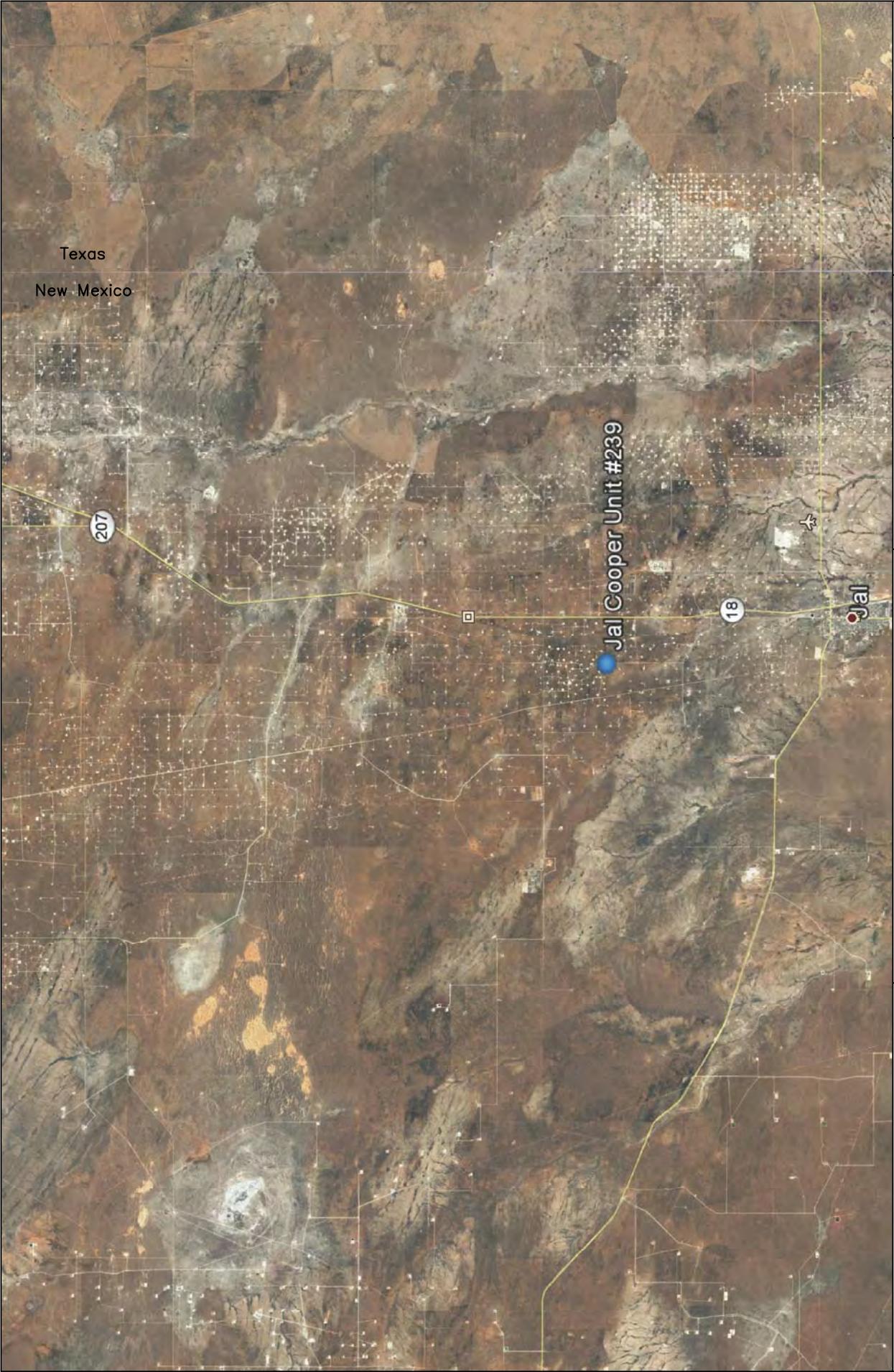


Daniel Dominguez
Environmental Consultant

cc: Olivia Yu, Environmental Specialist – NMOCD District 1, Hobbs
Steven Dittman, Production Tech – Legacy, L.P.
File

Encl.: Figure 1 – Area Map
Figure 2 – Site Location Map
Figure 3 – Sample/Site Map
Table 1 – Well Data
Table 2 – Summary of Soil Sample Field Testing and Laboratory Analytical Results
Attachment I – Photographs
Attachment II – NMOSE Average Depth to Groundwater
Attachment III – Laboratory Analytical Results
Attachment IV – Copy of Initial NMOCD Form C-141

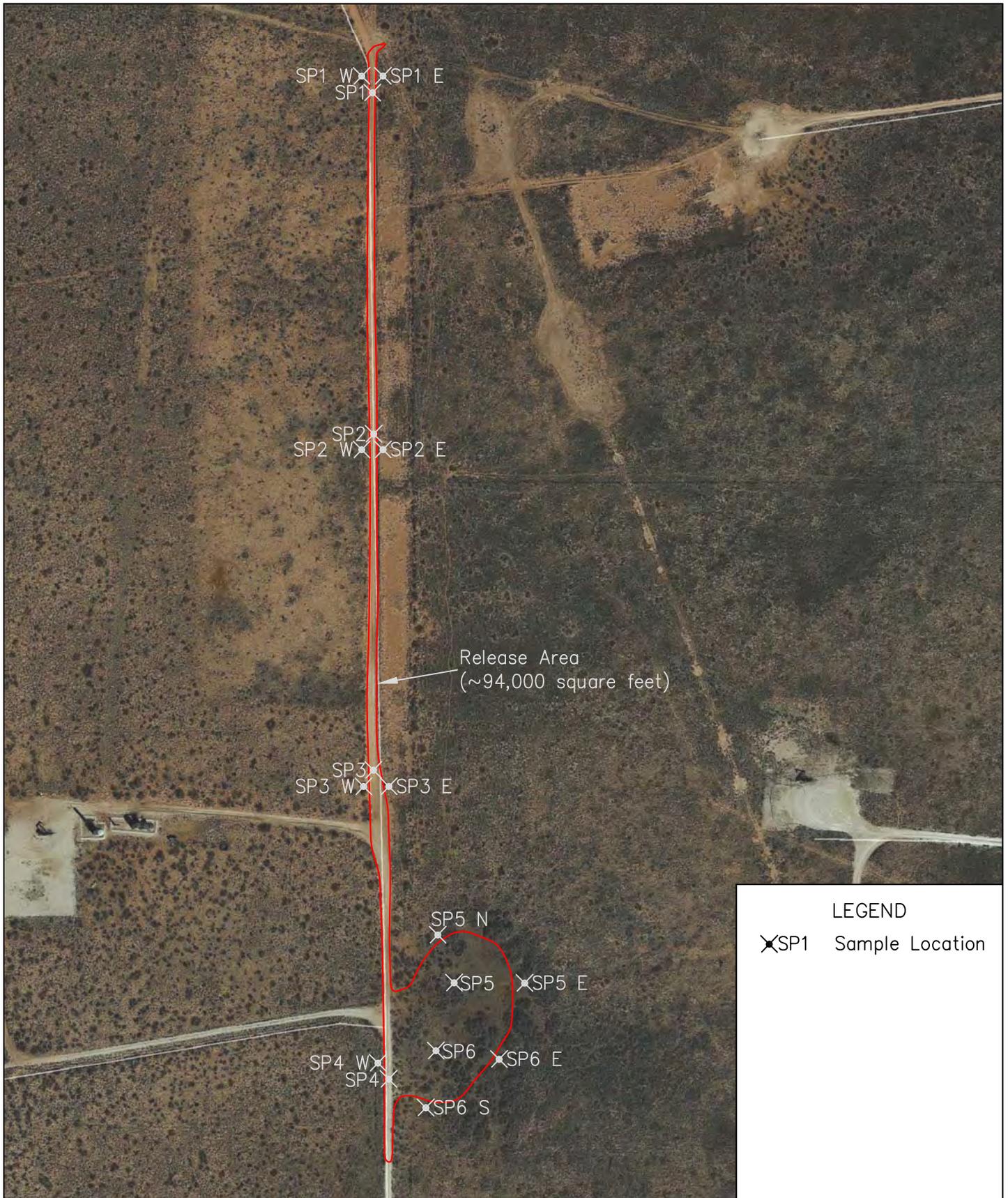
FIGURES



<p>Figure 1 Area Map Legacy, L.P. Jalisco Cooper Unit #239</p>	<p>Lea County, New Mexico SE 1/4 of NE 1/4, Sec. 25, T24S, R36E N 32° 11' 26.18" W 103° 12' 37.54" Elevation: 3,280 feet amsl</p>		<p>DWG By: D Dominguez December 2016</p>	<p>REVISED:</p>	
	<p>Scale: 0 to 6 Miles</p>				



<p>Figure 2 Site Location Map Legacy, L.P. Jal Cooper Unit #239</p>	<p>Lea County, New Mexico SE 1/4 of NE 1/4, Sec. 25, T24S, R36E N 32° 11' 26.18" W 103° 12' 37.54" Elevation: 3,280 feet amsl</p>		<p>DWG By: D Dominguez December 2016</p>	<p>REVISED:</p>	
	<p>0 2,000 4,000 Feet</p>				



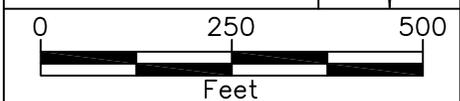
LEGEND

X SP1 Sample Location

Figure 3
 Sample/Site Map
 Legacy, L.P.
 Jal Cooper Unit #239

Lea County, New Mexico
 SE 1/4 of NE 1/4, Sec. 25, T24S, R36E
 N 32° 11' 26.18" W 103° 12' 37.54"
 Elevation: 3,280 feet amsl

DWG By: D Dominguez
 December 2016



TABLES

TABLE 1
Well Data

Legacy, L.P. - Jal Cooper Unit #239

Ref #	Well Number	Use	Diversion ^A	Owner	q64	q16	q4	Sec	Twsp	Rng	Easting	Northing	Distance ^B	Date Measured	Surface Elevation ^C	Depth to Water (ft bgs)
1	CP 01188	MON	0	CHEVRON ENVIRONMENTAL MGMT	2	1	4	24	24S	36E	668131	3564233	1,151	30-Sep-13	3,327	136
2	CP 01174	MON	0	ENVIRONMENTAL COMPLIANCE	2	4	2	24	24S	36E	668516	3564680	1,722	--	3,306	--

* = Data obtained from the New Mexico Office of the State Engineer Website (http://iwaters.ose.state.nm.us:7001/iWATERS/wr_RegisServlet)

^A = In acre feet per annum

^B = In meters

^C = Elevation interpolated from USGS topographical map based on referenced location.

-- = Data not provided

MON = Monitoring Well

quarters are 1=NW, 2=NE, 3=SW, 4=SE; quarters are smallest to biggest

TABLE 2
Summary of Soil Sample Field Testing and Laboratory Analytical Results
Legacy, L.P.
Jal Cooper Unit #239

Lab Sample ID	Depth (feet)	Soil Status	Sample Date	PID Reading (ppm)	Field Chloride (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Total Xylenes (mg/Kg)	Total BTEX (mg/Kg)	GRO C6-C10 (mg/Kg)	DRO C10-C28 (mg/Kg)	Total TPH (mg/Kg)	Chloride (mg/Kg)
SP1	Surface	Excavated	16-Dec-16	--	2,800	--	--	--	--	--	--	--	--	--
	1	In Situ	16-Dec-16	--	2,400	--	--	--	--	--	--	--	--	--
	2	In Situ	16-Dec-16	--	1,600	--	--	--	--	--	--	--	--	--
	3	In Situ	16-Dec-16	--	3,040	--	--	--	--	--	--	--	--	--
	4	In Situ	09-Jan-17	--	720	--	--	--	--	--	--	--	--	1,150
	14	In Situ	27-Feb-17	--	160	--	--	--	--	--	--	--	--	--
	18	In Situ	27-Feb-17	--	160	--	--	--	--	--	--	--	--	128
	SP2	Surface	Excavated	16-Dec-16	--	4,000	--	--	--	--	--	--	--	--
1		In Situ	16-Dec-16	--	1,200	--	--	--	--	--	--	--	--	--
2		In Situ	16-Dec-16	--	1,400	--	--	--	--	--	--	--	--	--
3		In Situ	16-Dec-16	--	2,320	--	--	--	--	--	--	--	--	--
4		In Situ	09-Jan-17	--	1,600	--	--	--	--	--	--	--	--	--
6		In Situ	09-Jan-17	--	1,880	--	--	--	--	--	--	--	--	--
10		In Situ	09-Jan-17	--	960	--	--	--	--	--	--	--	--	864
14		In Situ	27-Feb-17	--	160	--	--	--	--	--	--	--	--	--
18		In Situ	27-Feb-17	--	160	--	--	--	--	--	--	--	--	192

TABLE 2
Summary of Soil Sample Field Testing and Laboratory Analytical Results
Legacy, L.P.
Jal Cooper Unit #239

Lab Sample ID	Depth (feet)	Soil Status	Sample Date	PID Reading (ppm)	Field Chloride (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Total Xylenes (mg/Kg)	Total BTEX (mg/Kg)	GRO C6-C10 (mg/Kg)	DRO C10-C28 (mg/Kg)	Total TPH (mg/Kg)	Chloride (mg/Kg)
SP3	Surface	In Situ	16-Dec-16	--	2,560	--	--	--	--	--	--	--	--	--
	1	In Situ	16-Dec-16	--	2,000	--	--	--	--	--	--	--	--	--
	2	In Situ	16-Dec-16	--	1,840	--	--	--	--	--	--	--	--	--
	3	In Situ	16-Dec-16	--	1,920	--	--	--	--	--	--	--	--	--
	4	In Situ	09-Jan-17	--	880	--	--	--	--	--	--	--	--	736
	14	In Situ	27-Feb-17	--	160	--	--	--	--	--	--	--	--	--
	18	In Situ	27-Feb-17	--	160	--	--	--	--	--	--	--	--	176
	Surface	In Situ	16-Dec-16	--	2,400	--	--	--	--	--	--	--	--	--
SP4	1	In Situ	21-Dec-16	--	1,280	--	--	--	--	--	--	--	--	--
	2	In Situ	21-Dec-16	--	1,200	--	--	--	--	--	--	--	--	--
	3	In Situ	21-Dec-16	--	1,440	--	--	--	--	--	--	--	--	--
	4	In Situ	21-Dec-16	--	1,200	--	--	--	--	--	--	--	--	--
	5	In Situ	21-Dec-16	--	1,880	--	--	--	--	--	--	--	--	--
	6	In Situ	21-Dec-16	--	1,600	--	--	--	--	--	--	--	--	--
	8	In Situ	09-Jan-17	--	240	--	--	--	--	--	--	--	--	160
	14	In Situ	27-Feb-17	--	240	--	--	--	--	--	--	--	--	--
	18	In Situ	27-Feb-17	--	240	--	--	--	--	--	--	--	--	208

TABLE 2
Summary of Soil Sample Field Testing and Laboratory Analytical Results
Legacy, L.P.
Jal Cooper Unit #239

Lab Sample ID	Depth (feet)	Soil Status	Sample Date	PID Reading (ppm)	Field Chloride (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Total Xylenes (mg/Kg)	Total BTEX (mg/Kg)	GRO C6-C10 (mg/Kg)	DRO C10-C28 (mg/Kg)	Total TPH (mg/Kg)	Chloride (mg/Kg)
SP5	1	In Situ	27-Dec-16	--	2,400	--	--	--	--	--	--	--	--	--
	2	In Situ	27-Dec-16	--	1,600	--	--	--	--	--	--	--	--	--
	3	In Situ	27-Dec-16	--	480	--	--	--	--	--	--	--	--	--
	4	In Situ	27-Dec-16	--	400	--	--	--	--	--	--	--	--	576
	14	In Situ	27-Feb-17	--	240	--	--	--	--	--	--	--	--	--
	18	In Situ	27-Feb-17	--	240	--	--	--	--	--	--	--	--	224
SP6	1	In Situ	27-Dec-16	--	1,200	--	--	--	--	--	--	--	--	--
	2	In Situ	27-Dec-16	--	1,200	--	--	--	--	--	--	--	--	--
	3	In Situ	27-Dec-16	--	80	--	--	--	--	--	--	--	--	--
	4	In Situ	27-Dec-16	--	80	--	--	--	--	--	--	--	--	32
	14	In Situ	27-Feb-17	--	400	--	--	--	--	--	--	--	--	--
	18	In Situ	27-Feb-17	--	240	--	--	--	--	--	--	--	--	--
	22	In Situ	27-Feb-17	--	240	--	--	--	--	--	--	--	--	208
SP1 E	Surface	In Situ	28-Feb-17	--	80	--	--	--	--	--	--	--	--	16
	2	In Situ	28-Feb-17	--	80	--	--	--	--	--	--	--	--	32

TABLE 2
Summary of Soil Sample Field Testing and Laboratory Analytical Results
Legacy, L.P.
Jal Cooper Unit #239

Lab Sample ID	Depth (feet)	Soil Status	Sample Date	PID Reading (ppm)	Field Chloride (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Total Xylenes (mg/Kg)	Total BTEX (mg/Kg)	GRO C6-C10 (mg/Kg)	DRO C10-C28 (mg/Kg)	Total TPH (mg/Kg)	Chloride (mg/Kg)
SP1 W	Surface	In Situ	28-Feb-17	--	80	--	--	--	--	--	--	--	--	32
	2	In Situ	28-Feb-17	--	80	--	--	--	--	--	--	--	--	16
SP2 E	Surface	In Situ	28-Feb-17	--	80	--	--	--	--	--	--	--	--	32
	2	In Situ	28-Feb-17	--	80	--	--	--	--	--	--	--	--	16
SP2 W	Surface	In Situ	28-Feb-17	--	80	--	--	--	--	--	--	--	--	32
	2	In Situ	28-Feb-17	--	80	--	--	--	--	--	--	--	--	<16.0
SP3 E	Surface	In Situ	28-Feb-17	--	80	--	--	--	--	--	--	--	--	16
	2	In Situ	28-Feb-17	--	80	--	--	--	--	--	--	--	--	16
SP3 W	Surface	In Situ	28-Feb-17	--	80	--	--	--	--	--	--	--	--	32
	2	In Situ	28-Feb-17	--	80	--	--	--	--	--	--	--	--	16
SP4 W	Surface	In Situ	28-Feb-17	--	80	--	--	--	--	--	--	--	--	32
	2	In Situ	28-Feb-17	--	80	--	--	--	--	--	--	--	--	32
SP5 N	Surface	In Situ	28-Feb-17	--	80	--	--	--	--	--	--	--	--	16
	2	In Situ	28-Feb-17	--	80	--	--	--	--	--	--	--	--	16

TABLE 2
Summary of Soil Sample Field Testing and Laboratory Analytical Results
Legacy, L.P.
Jal Cooper Unit #239

Lab Sample ID	Depth (feet)	Soil Status	Sample Date	PID Reading (ppm)	Field Chloride (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Total Xylenes (mg/Kg)	Total BTEX (mg/Kg)	GRO C6-C10 (mg/Kg)	DRO C10-C28 (mg/Kg)	Total TPH (mg/Kg)	Chloride (mg/Kg)
SP5 E	Surface	In Situ	28-Feb-17	--	80	--	--	--	--	--	--	--	--	<16.0
	2	In Situ	28-Feb-17	--	80	--	--	--	--	--	--	--	--	32
SP6 E	Surface	In Situ	28-Feb-17	--	80	--	--	--	--	--	--	--	--	16
	2	In Situ	28-Feb-17	--	80	--	--	--	--	--	--	--	--	16
SP6 S	Surface	In Situ	28-Feb-17	--	80	--	--	--	--	--	--	--	--	16
	2	In Situ	28-Feb-17	--	80	--	--	--	--	--	--	--	--	16
NMOC D Recommended Remedial Action Levels														
				100	10					50			5,000	1,000

-- = Not Analyzed
Red values are in excess of NMOC D Recommended Remedial Action Levels

ATTACHMENTS

ATTACHMENT I
Photographs



Photograph #1- Point of release



Photograph #2- Looking across release area.



Photograph #3- Looking across release area.



Photograph #4- Looking across release area.



Photograph #5- Looking across release area.



Photograph #6- Looking across release area.



Photograph #7 – Looking across pasture release area



Photograph #8 – Looking across pasture release area

ATTACHMENT II
NMOSE Average Depth to Groundwater



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	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
CP 01188 POD2			LE	3	2	4	24	24S	36E	668359	3564067	1151	171	135	36
CP 01188 POD1			LE	2	1	4	24	24S	36E	668131	3564233	1386	176	136	40

Average Depth to Water: **135 feet**

Minimum Depth: **135 feet**

Maximum Depth: **136 feet**

Record Count: 2

UTMNAD83 Radius Search (in meters):

Easting (X): 668696

Northing (Y): 3562967

Radius: 2000

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

ATTACHMENT III
Laboratory Analytical Results



January 05, 2017

Daniel Dominguez
Environmental Plus, Inc.
P.O. Box 1558
Eunice, NM 88231

RE: JAL COOPER UNIT #239

Enclosed are the results of analyses for samples received by the laboratory on 01/03/17 15:36.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene
Lab Director/Quality Manager

Analytical Results For:

 Environmental Plus, Inc.
 Daniel Dominguez
 P.O. Box 1558
 Eunice NM, 88231
 Fax To: (505) 394-2601

Received:	01/03/2017	Sampling Date:	12/27/2016
Reported:	01/05/2017	Sampling Type:	Soil
Project Name:	JAL COOPER UNIT #239	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	UL-H SEC. 25, T24S, R36E		

Sample ID: SP 5 (4') (H700007-01)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	576	16.0	01/04/2017	ND	416	104	400	0.00	

Sample ID: SP 6 (4') (H700007-02)

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	01/04/2017	ND	432	108	400	3.77	

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

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



Celey D. Keene, Lab Director/Quality Manager



January 16, 2017

Daniel Dominguez
Environmental Plus, Inc.
P.O. Box 1558
Eunice, NM 88231

RE: JAL COOPER UNIT #239

Enclosed are the results of analyses for samples received by the laboratory on 01/12/17 15:37.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene".

Celey D. Keene
Lab Director/Quality Manager

Analytical Results For:

 Environmental Plus, Inc.
 Daniel Dominguez
 P.O. Box 1558
 Eunice NM, 88231
 Fax To: (505) 394-2601

Received:	01/12/2017	Sampling Date:	01/09/2017
Reported:	01/16/2017	Sampling Type:	Soil
Project Name:	JAL COOPER UNIT #239	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	UL-H SEC. 25, T24S, R36E		

Sample ID: SP 1 (4') (H700088-01)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1150	16.0	01/13/2017	ND	432	108	400	0.00	

Sample ID: SP 2 (10') (H700088-02)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	864	16.0	01/13/2017	ND	432	108	400	0.00	

Sample ID: SP 3 (4') (H700088-03)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	736	16.0	01/13/2017	ND	432	108	400	0.00	

Sample ID: SP 4 (8') (H700088-04)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	01/13/2017	ND	432	108	400	0.00	

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

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



Celey D. Keene, Lab Director/Quality Manager



March 03, 2017

Daniel Dominguez
Environmental Plus, Inc.
P.O. Box 1558
Eunice, NM 88231

RE: JAL COOPER UNIT #239

Enclosed are the results of analyses for samples received by the laboratory on 02/28/17 15:50.

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.

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

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Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene".

Celey D. Keene
Lab Director/Quality Manager

Analytical Results For:

 Environmental Plus, Inc.
 Daniel Dominguez
 P.O. Box 1558
 Eunice NM, 88231
 Fax To: (505) 394-2601

Received:	02/28/2017	Sampling Date:	02/27/2017
Reported:	03/03/2017	Sampling Type:	Soil
Project Name:	JAL COOPER UNIT #239	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	UL-H SEC. 25, T24S, R36E		

Sample ID: SP 1 (18') (H700508-01)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	03/01/2017	ND	448	112	400	0.00	

Sample ID: SP 2 (18') (H700508-02)

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	03/01/2017	ND	448	112	400	0.00	

Sample ID: SP 3 (18') (H700508-03)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	03/01/2017	ND	448	112	400	0.00	

Sample ID: SP 4 (18') (H700508-04)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	03/01/2017	ND	448	112	400	0.00	

Cardinal Laboratories

* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 Environmental Plus, Inc.
 Daniel Dominguez
 P.O. Box 1558
 Eunice NM, 88231
 Fax To: (505) 394-2601

 Received: 02/28/2017
 Reported: 03/03/2017
 Project Name: JAL COOPER UNIT #239
 Project Number: NONE GIVEN
 Project Location: UL-H SEC. 25, T24S, R36E

 Sampling Date: 02/27/2017
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: SP 5 (18') (H700508-05)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	224	16.0	03/01/2017	ND	448	112	400	0.00	

Sample ID: SP 6 (22') (H700508-06)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	03/01/2017	ND	448	112	400	0.00	

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

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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



March 03, 2017

Daniel Dominguez
Environmental Plus, Inc.
P.O. Box 1558
Eunice, NM 88231

RE: JAL COOPER UNIT #239

Enclosed are the results of analyses for samples received by the laboratory on 02/28/17 15:50.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style.

Celey D. Keene
Lab Director/Quality Manager

Analytical Results For:

 Environmental Plus, Inc.
 Daniel Dominguez
 P.O. Box 1558
 Eunice NM, 88231
 Fax To: (505) 394-2601

Received:	02/28/2017	Sampling Date:	02/28/2017
Reported:	03/03/2017	Sampling Type:	Soil
Project Name:	JAL COOPER UNIT #239	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	UL-H SEC. 25, T24S, R36E		

Sample ID: SP 1 EAST (SURFACE) (H700509-01)

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	03/02/2017	ND	448	112	400	0.00	

Sample ID: SP 1 EAST (2') (H700509-02)

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	03/02/2017	ND	448	112	400	0.00	

Sample ID: SP 1 WEST (SURFACE) (H700509-03)

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	03/02/2017	ND	448	112	400	0.00	

Sample ID: SP 1 WEST (2') (H700509-04)

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	03/02/2017	ND	448	112	400	0.00	

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 Environmental Plus, Inc.
 Daniel Dominguez
 P.O. Box 1558
 Eunice NM, 88231
 Fax To: (505) 394-2601

 Received: 02/28/2017
 Reported: 03/03/2017
 Project Name: JAL COOPER UNIT #239
 Project Number: NONE GIVEN
 Project Location: UL-H SEC. 25, T24S, R36E

 Sampling Date: 02/28/2017
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: SP 2 EAST (SURFACE) (H700509-05)

Chloride, SM4500CI-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	03/02/2017	ND	448	112	400	0.00	

Sample ID: SP 2 EAST (2') (H700509-06)

Chloride, SM4500CI-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	03/02/2017	ND	448	112	400	0.00	

Sample ID: SP 2 WEST (SURFACE) (H700509-07)

Chloride, SM4500CI-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	03/02/2017	ND	448	112	400	0.00	

Sample ID: SP 2 WEST (2') (H700509-08)

Chloride, SM4500CI-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	03/02/2017	ND	448	112	400	0.00	

Sample ID: SP 3 EAST (SURFACE) (H700509-09)

Chloride, SM4500CI-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	03/02/2017	ND	448	112	400	0.00	

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 Daniel Dominguez
 P.O. Box 1558
 Eunice NM, 88231
 Fax To: (505) 394-2601

 Received: 02/28/2017
 Reported: 03/03/2017
 Project Name: JAL COOPER UNIT #239
 Project Number: NONE GIVEN
 Project Location: UL-H SEC. 25, T24S, R36E

 Sampling Date: 02/28/2017
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: SP 3 EAST (2') (H700509-10)

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	03/02/2017	ND	448	112	400	0.00	

Sample ID: SP 3 WEST (SURFACE) (H700509-11)

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	03/02/2017	ND	448	112	400	0.00	

Sample ID: SP 3 WEST (2') (H700509-12)

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	03/02/2017	ND	448	112	400	0.00	

Sample ID: SP 4 WEST (SURFACE) (H700509-13)

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	03/02/2017	ND	448	112	400	0.00	

Sample ID: SP 4 WEST (2') (H700509-14)

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	03/02/2017	ND	448	112	400	0.00	

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 Daniel Dominguez
 P.O. Box 1558
 Eunice NM, 88231
 Fax To: (505) 394-2601

Received: 02/28/2017
 Reported: 03/03/2017
 Project Name: JAL COOPER UNIT #239
 Project Number: NONE GIVEN
 Project Location: UL-H SEC. 25, T24S, R36E

Sampling Date: 02/28/2017
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: SP 5 NORTH (SURFACE) (H700509-15)

Chloride, SM4500CI-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	03/02/2017	ND	448	112	400	0.00	

Sample ID: SP 5 NORTH (2') (H700509-16)

Chloride, SM4500CI-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	03/02/2017	ND	448	112	400	0.00	

Sample ID: SP 5 EAST (SURFACE) (H700509-17)

Chloride, SM4500CI-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	03/02/2017	ND	448	112	400	0.00	

Sample ID: SP 5 EAST (2') (H700509-18)

Chloride, SM4500CI-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	03/02/2017	ND	448	112	400	0.00	

Sample ID: SP 6 EAST (SURFACE) (H700509-19)

Chloride, SM4500CI-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	03/02/2017	ND	448	112	400	0.00	

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 Fax To: (505) 394-2601

 Received: 02/28/2017
 Reported: 03/03/2017
 Project Name: JAL COOPER UNIT #239
 Project Number: NONE GIVEN
 Project Location: UL-H SEC. 25, T24S, R36E

 Sampling Date: 02/28/2017
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: SP 6 EAST (2') (H700509-20)

Chloride, SM4500CI-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	03/02/2017	ND	448	112	400	0.00	

Sample ID: SP 6 SOUTH (SURFACE) (H700509-21)

Chloride, SM4500CI-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	03/02/2017	ND	448	112	400	0.00	

Sample ID: SP 6 SOUTH (2') (H700509-22)

Chloride, SM4500CI-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	03/02/2017	ND	448	112	400	0.00	

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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

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Celey D. Keene, Lab Director/Quality Manager

ATTACHMENT IV
Copy of Initial NMOCD Form C-141

NM OIL CONSERVATION
ARTESIA DISTRICT

DEC 22 2016

Form C-141
Revised August 8, 2011

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

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

240974 240974 Release Notification and Corrective Action

240974 OPERATOR Initial Report Final Report

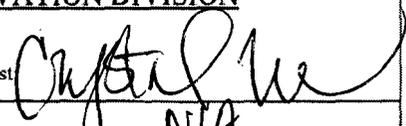
Name of Company: Legacy, L.P. 240974	Contact: Ernest Barrientez
Address: P.O. Box 10848 Midland, TX 79702	Telephone No. 432-853-0633
Facility Name: Jal Cooper Unit #239	Facility Type: Injection Line
Surface Owner: Woolworth Trust	Mineral Owner:
API No.	

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
H	25	24S	36E					Lea

Latitude: N 32.190606° Longitude: W 103.210428°

NATURE OF RELEASE

Type of Release: produced water	Volume of Release: 130 barrels	Volume Recovered: 90 barrels
Source of Release: injection line failed	Date and Hour of Occurrence: 12/15/16 @ unknown	Date and Hour of Discovery: 12/15/16 @ unknown
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Mike Whitaker, OCD	
By Whom? Woolworth Trust	Date and Hour: 12/15/16	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse: Not Applicable	
If a Watercourse was Impacted, Describe Fully.* Not Applicable		
Describe Cause of Problem and Remedial Action Taken.* An injection line developed a leak releasing fluid to lease road and pasture. A vacuum truck was dispatched to collect standing fluid.		
Describe Area Affected and Cleanup Action Taken.* A vacuum truck was called to the location and was able to recover 90 barrels of the fluid from lease road and pasture. Surface contamination will be scraped up and samples will be collected from release area.		
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: 	OIL CONSERVATION DIVISION	
Printed Name: Ernest Barrientez	Approved by Environmental Specialist 	
Title: Production Foreman	Approval Date: 12/29/16	Expiration Date: N/A
E-mail Address: ebarrientez@legacylp.com	Conditions of Approval: see attached	
Date: 12-20-2016 Phone: 432-853-0633	Attached <input checked="" type="checkbox"/>	

* Attach Additional Sheets If Necessary

IRP-4536

Appendix C
Photographs



Site Location



Site Prior to Remediation Viewing South, November 8, 2017



Site Prior to Remediation Viewing South, November 8, 2017



Site Prior to Remediation Viewing North, November 8, 2017



Site Prior to Remediation Viewing East, November 8, 2017



Site Prior to Remediation Viewing Northeast, November 8, 2017



Site Prior to Remediation Viewing West, November 8, 2017