APPROVED
By Olivia Yu at 9:19 am, Mar 05, 2018

NMOCD approves of the proposed confirmatory delineation plan for 1RP-4538.

1RP-4538
DELINEATION PLAN
LMPSU 1 CTB
Produced Water Spill
Lea County, New Mexico

Latitude: N 32.356572°
Longitude: W -103.14906°

LAI Project No. 17-0175-39

February 15, 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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Figures

Appendices

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 LMPSU 1 CTB (Site) located in Unit O (SE/4, SE/4), Section 27, Township 22 South, Range 37 East in Lea County, New Mexico. The geodetic position is North 32.356572° and West -103.149062°. Figure 1 presents a topographic map. Figure 2 presents an aerial map.

1.1 Background

The spill occurred on December 18, 2016 due to failure of an injection line. The failure allowed for approximately 730 barrels (bbl) of produced water to be released onto the lease road. Approximately 660 bbl were recovered. The area measures approximately 44, 500 square feet. The spill was reported to the OCD the day of the release (verbal communication with Kristen Lynch). The initial C-141 was submitted on December 22, 2016 and assigned remediation permit number 1RP-4538. Appendix presents the initial C-141.

On December 21, 2016 and January 4- 5, 2017, Environment Plus, Inc. (EPI) collected soil samples at seven (7) locations (SP1 through SP7). The samples were collected every 2 feet below ground surface (bgs) until refusal between approximately 2 and 22 feet bgs . The deepest sample from each location was delivered Cardinal Laboratories (Cardinal) in Hobbs, New Mexico and analyzed for chloride by titration method SM4500 CL-B.

Chloride tested above the delineation limit of 250 mg/Kg in the following samples:

- SP1, 4’ (368 mg/Kg)
- SP2, 22’ (304 mg/Kg)
- SP3, 4’ (496 mg/Kg)

On March 6, 2017 EPI collected soil samples at ten (10) locations (SPH1 through SPH10). The samples were collected at surface, 1 and 2 feet bgs. The top and deepest samples from each location were delivered Cardinal and analyzed for chloride by titration method SM4500 CL-B. Chloride tested below the delineation limit in all samples.

On an unknown date, EPI excavated the release area to a depth of 2 feet bgs. Appendix B presents the EPI work plan.

1.2 Physical Setting

The physical setting is as follows:

- The surface elevation is approximately 3,330 feet above mean sea level (msl);
- The topography slopes gently to the southeast;
- There are no surface water features within 1,000 feet of the Site;
- The soils are designated as “Ratliff-Wink fine sandy loams, 0 to 3 percent slopes”, consisting of 0 to 4 inches of fine sandy loam underlain by 4 to 22 inches of clay loam;
- The geology is the Eolian and piedmont deposits (Holocene to middle Pleistocene) – interlayed eolian sands and piedmont-slope deposits;

- Groundwater occurs in the Ogallala formation at approximately 44 feet below ground surface (bgs)(2013);
- According to the New Mexico Office of the State Engineer (OSE) website the nearest groundwater well is located in Unit O (SW/4, SE/4), Section 27, Township 22 South, Range 37 East, approximately 0.04 miles west of the Site.

1.3 Recommended Remediation Action Levels

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

Criteria	***Result***	***Score***
Depth-to-Groundwater	<50 Feet	20
Wellhead Protection Area	Yes	20
Distance to Surface Water Body	>1,000 Horizontal Feet	0

The following RRAL apply to the release for ranking score: 40

- Benzene 10 mg/Kg
- BTEX 50 mg/Kg
- TPH 100 mg/Kg

Depth to groundwater less than 50 feet bgs requires vertical delineation for chloride to 250 milligrams per kilogram (mg/Kg) and maintained for 10 feet farther in depth.

2.0 DELINEATION PLAN

LAI proposes to collect soil samples at eight (8) locations within the spill area. 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. 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 Xenco Laboratories (Xenco) 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 (OR) 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 cleanup level standards. 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

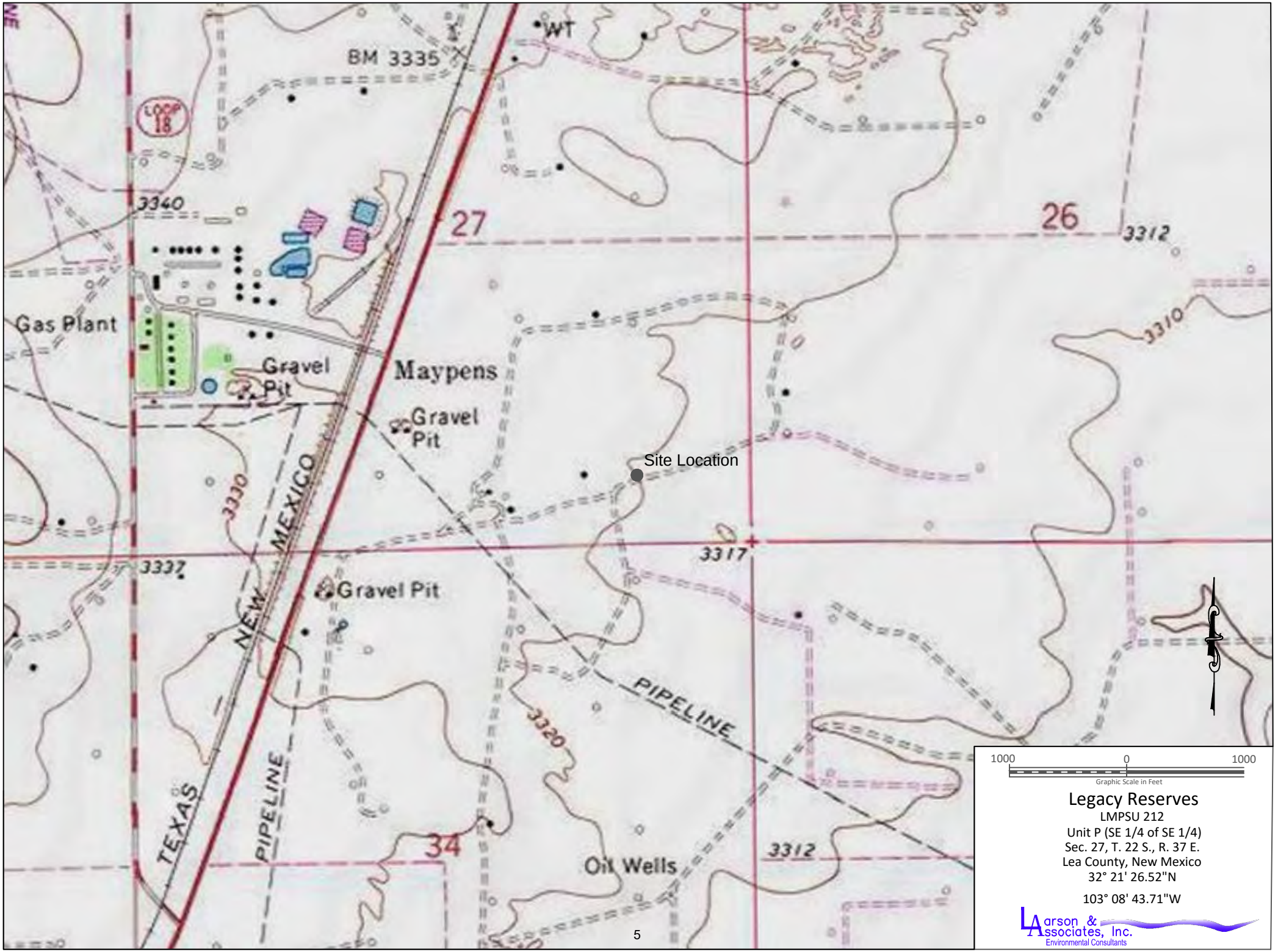

Figure 1 - Topographic Map

Figure 2 - Aerial Map with Proposed Sample Points

Appendix A

Initial C-141

NM OIL CONSERVATION
ARTESIA DISTRICT
DEC 27 2016
RECEIVED

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.

fAB1636536260
nAB1636536488

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: Legacy, L.P. 294281	Contact: Ernest Barrientez
Address: P.O. Box 10848 Midland, TX 79702	Telephone No. 432-853-0633
Facility Name: LMPSU 1 CTB	Facility Type: Injection Line

Surface Owner: Legacy	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
O	27	22S	37E					Lea

Latitude: N 32.356572° **Longitude:** W 103.149062°

NATURE OF RELEASE

Type of Release: produced water	Volume of Release: 730 barrels	Volume Recovered: 660 barrels
Source of Release: injection line failed	Date and Hour of Occurrence: 12/18/16 @ unknown	Date and Hour of Discovery: 12/18/16 @ ~~unknown~~ 9:15 Am
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Kristen Lynch, Tomas Oberding, OCD	
By Whom? Legacy	Date and Hour: 12/18/16	
Was a Watercourse Reached? ☐ Yes ☒ 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. A vacuum truck was dispatched to collect standing fluid.

Describe Area Affected and Cleanup Action Taken.*
Vacuum trucks were called to the location and was able to recover 660 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: Ernest Barrientez

Printed Name: Ernest Barrientez

Title: Production Foreman

E-mail Address: cbarrientez@legacylp.com

Date: Dec. 22, 2016 Phone: 432-853-0633

OIL CONSERVATION DIVISION

Approved by Environmental Specialist: Chris Weaver

Approval Date: 12/30/16 Expiration Date: N/A

Conditions of Approval:
delineation is needed before site ranking can be assessed

Attached ☒ COA's attached

IRP-4538

* Attach Additional Sheets If Necessary

Operator/Responsible Party,

The OCD has received the form C-141 you provided on **12/27/16** regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number 1RP-4538 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 2/3/17. 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

Weaver, Crystal, EMNRD

From: Lynch, Kristen, EMNRD
Sent: Tuesday, December 27, 2016 1:20 PM
To: Weaver, Crystal, EMNRD; Bratcher, Mike, EMNRD; Billings, Bradford, EMNRD
Subject: Fw: LMPSU 1 CTB Initial C-141
Attachments: LMPSU 1 CTB Initial C-141.pdf

From: Daniel Dominguez <ddominguezepi@gmail.com>
Sent: Tuesday, December 27, 2016 9:50 AM
To: Lynch, Kristen, EMNRD; ebarrientez@legacylp.com; bboone.epi@gmail.com
Subject: LMPSU 1 CTB Initial C-141

Ms. Lynch,

Attached for your review is the Initial C-141 for the LMPSU 1 CTB, operated by Legacy.

--
Sincerely,
ENVIRONMENTAL PLUS, INC.

Daniel Dominguez
Environmental Consultant/Safety Director

Environmental Plus, Inc.
P.O. Box 1558
2100 Avenue 'O'
Eunice, NM 88231
(575) 631-0401 (Cell)
(575) 394-3481 (Office)
(575) 394-2601 (fax)

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.
LMPSU 1 CTB
Lea County, New Mexico
Unit Letter "O", Section 27, Township 22 South, Range 37 East
Latitude 32.356572 North, Longitude 103.149062 West
NMOCD Reference #1RP-4538

Prepared For:

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

Prepared By:

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

March 2017

Daniel Dominguez
Project Manager

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 O (SW ¼ SE ¼), Section 27, Township 22 South, Range 37 East, approximately five miles south-east of Eunice, in Lea County, New Mexico. The property is owned by Legacy.

The release site is located on an active lease road; latitude 32.356572 North, longitude 103.149062 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 18, 2016 approximately 730 barrels of produced water was released when an injection line developed a leak releasing the fluid to lease road. A vacuum truck was dispatched to the site and recovered approximately 660 barrels, resulting in a net loss of 70 barrels of produced water. The visually stained area covers approximately 61,000 square feet of lease road. 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 twelve wells located in the area surrounding the release site (reference *Table 1*). Also, no wells (domestic, agriculture or public) and no bodies of surface water exist within a 1,000-foot radius of the release site. There is a monitor well, CP 01177, within the 1,000-foot radius of the release site with an indicated depth to water of 41 feet below ground surface (bgs) (reference *Table 1* and *Figure 2*). The NMOSE database indicates average water depth is approximately 59 feet bgs within a 2,000-meter radius (reference *Attachment II*).

Utilizing this information, the NMOCD guidelines indicate the LMPSU 1 CTB release site to have a ranking score of twenty. Based on this score, the NMOCD Recommended Remedial Action Levels (RRALs) for vertical delineation at this Site were determined as follows: Benzene – 10 mg/Kg, BTEX – 50 mg/Kg, TPH – 100 mg/Kg, and Chloride – 250 mg/Kg. The NMOCD RRALs for horizontal delineation at this Site were determined as follows: Benzene – 10 mg/Kg, BTEX – 50 mg/Kg, TPH – 100 mg/Kg, and Chloride – 600 mg/Kg.

The produced water flowed south off the tank battery pad and east down the lease road approximately 1,500 feet and approximately 600 feet down another lease road. This area is caliche.

Delineation Progress:
On December 21, 2016 and January 4-5, 2017 EPI personnel mobilized on site to collect soil samples to determine the vertical extent of contamination. A total of twenty-seven soil samples were collected from seven sample locations; SP1 – SP7. Seven 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 Chloride concentrations more than NMOCD RRALs of 250 mg/Kg at depth of sample locations SP1, SP2, and SP3 (reference *Figure 3* and *Table 2*).

ENVIRONMENTAL PLUS, INC.

On March 6, 2017 EPI personnel mobilized on site to collect soil samples to determine the horizontal extent of contamination. A total of thirty soil samples were collected from ten sample locations; SPH1 – SPH10. Twenty representative samples, surface and TD samples from each sample location, 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 600 mg/Kg at surface and depth of samples (reference *Figure 3* and *Table 2*).

Proposed Actions:
Taking into consideration the release occurred on an active lease road and tank battery, and laboratory tests indicating chloride levels above NMOCD RRALs at SP1 – SP3 (reference *Table 2*), EPI proposes to excavate the entire release area to one foot bgs and then backfill with one foot of caliche to impede the further vertical migration of chloride impacts. Backfill soil 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/tank battery and protected against wind/water erosion.

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
Midalnd, 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

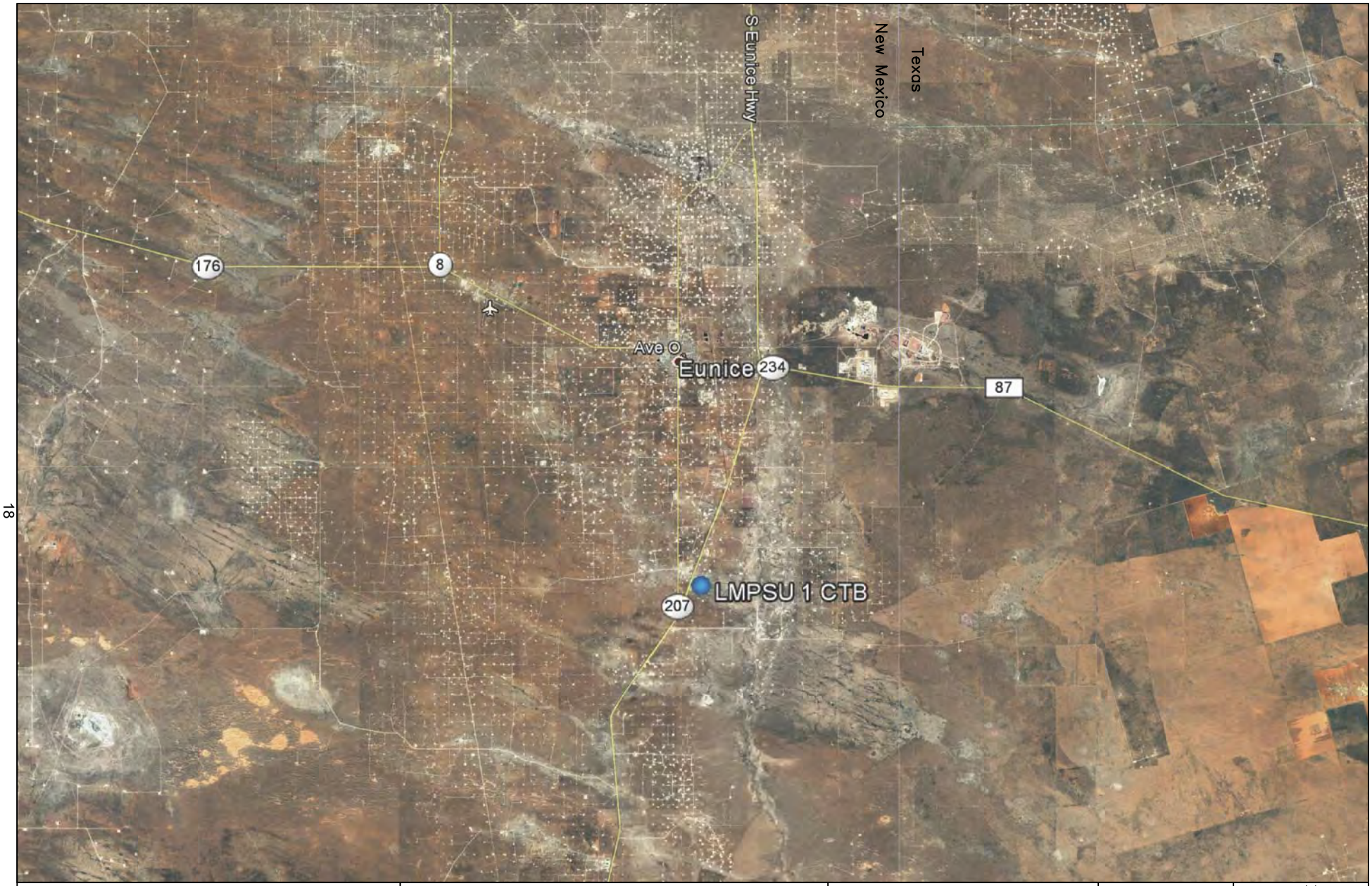

Figure 1 Area Map Legacy, L.P. LMPSU 1 CTB	Lea County, New Mexico SW 1/4 of SE 1/4, Sec. 27, T22S, R37E N 32° 21' 23.67" W 103° 08' 56.61" Elevation: 3,330 feet amsl	DWG By: D Dominguez December 2016	REVISED:	N
		0 3 6 Miles	SHEET 1 of 1	

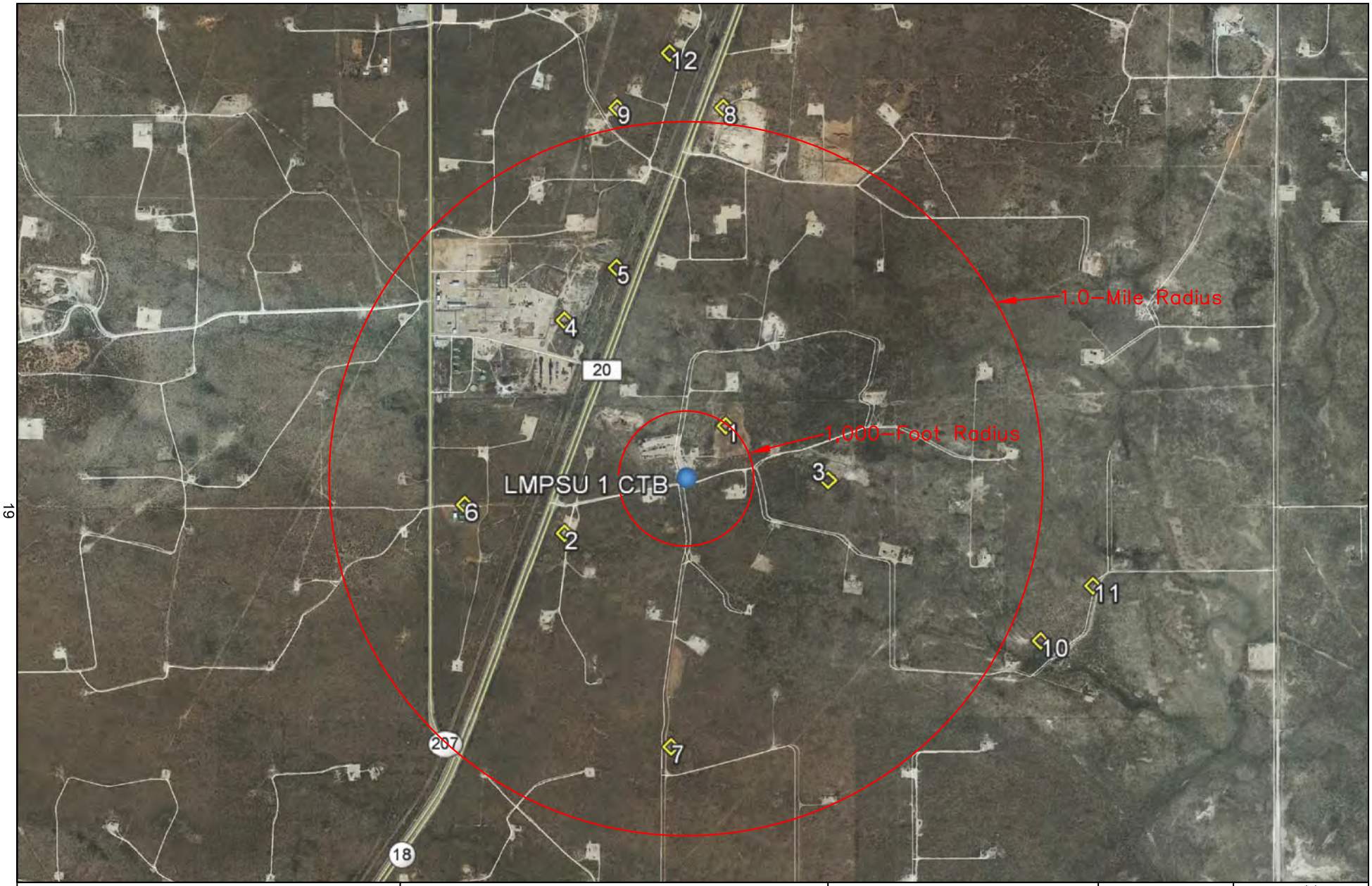

Figure 2 Site Location Map Legacy, L.P. LMPSU 1 CTB	Lea County, New Mexico SW 1/4 of SE 1/4, Sec. 27, T22S, R37E N 32° 21' 23.67" W 103° 08' 56.61" Elevation: 3,330 feet amsl	DWG By: D Dominguez December 2016 0 2,000 4,000 Feet	REVISED: SHEET 1 of 1

Figure 3 Sample/Site Map Legacy, L.P. LMPSU 1 CTB	Lea County, New Mexico SW 1/4 of SE 1/4, Sec. 27, T22S, R37E N 32° 21' 23.67" W 103° 08' 56.61" Elevation: 3,330 feet amsl	DWG By: D Dominguez December 2016	REVISED: March 2017	N
		0 250 500 Feet	SHEET 1 of 1	

TABLES

TABLE 1

Well Data

Legacy, L.P. - LMPSU 1 CTB

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 01177	MON	0	LEGACY RESERVES	2	2	4	4	23S	37E	674307	3581663	244	08-Jul-13	3,326	41
2	CP 00142	PLS	15	R.D. SIMS	1	2	1	34	22S	37E	673704	3581247	509	31-Dec-38	3,333	--
3	CP 00141	PDM	3	R.D. SIMS	4	4	4	27	22S	37E	674701	3581464	536	31-Dec-09	3,322	--
4	CP 00243	IND	32	VERSADO GAS PROCESSORS LLC	1	2	3	27	22S	37E	673690	3582051	752	17-Jan-02	3,335	54
5	CP 00009	IND	32	SKELLY OIL COMPANY	4	4	1	27	22S	37E	673883	3582253	835	17-Jan-02	3,340	52
6	CP 01157	DOM	1	BETHANY SKILES	1	1	1	34	22S	37E	673324	3581348	847	02-Apr-13	3,339	--
7	CP 00143	PLS	1	R.D. SIMS	1	1	4	34	22S	37E	674121	3580450	1,017	31-Dec-36	3,329	--
8	CP 00445	PRO	6.5	HAROLD E. JOHNSON	2	1	2	27	22S	37E	674277	3582863	1,401	--	3,340	--
9	CP 00384	PLS	5	WILLIAM E. JOHNSTON	2	2	1	27	22S	37E	673875	3582855	1,418	--	3,348	--
10	CP 00144	IRR	18	R.D. SIMS	2	4	1	35	22S	37E	675520	3580874	1,479	31-Dec-22	3,313	57
11	CP 00146	COM	5	R.D. SIMS	3	1	2	35	22S	37E	675715	3581083	1,597	31-Dec-48	3,318	67
12	CP 00382	PDL	5	WILLIAM E. JOHNSTON	3	3	4	22	22S	37E	674070	3583065	1,601	--	3,345	--

* = Data obtained from the New Mexico Office of the State Engineer Website (http://iwaters.ose.state.nm.us:7001/iWATERS/wr_RegisServlet1)

[A] = In acre feet per annum [B] = In meters [C] = Elevation interpolated from Google Earth based on referenced location.

-- = Data not provided

MON = Monitoring Well DOM = 72-12-1 Domestic one household PDL = Non 72-12-1 Domestic & livestock

PLS = Non 72-12-1 Livestock watering PRO = 72-12-1 Prospecticing or development of a natural resource

PDM = Non 72-12-1 Domestic IRR = Irrigation

IND = Industrial COM = Commercial

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.

LMPSU 1 CTB

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	In Situ	21-Dec-16	--	4,000	--	--	--	--	--	--	--	--	--
	2	In Situ	04-Jan-17	--	320	--	--	--	--	--	--	--	--	--
	4	In Situ	04-Jan-17	--	480	--	--	--	--	--	--	--	--	**368**
SP2	Surface	In Situ	21-Dec-16	--	3,480	--	--	--	--	--	--	--	--	--
	2	In Situ	04-Jan-17	--	1,280	--	--	--	--	--	--	--	--	--
	4	In Situ	04-Jan-17	--	1,200	--	--	--	--	--	--	--	--	--
	6	In Situ	04-Jan-17	--	880	--	--	--	--	--	--	--	--	--
	8	In Situ	04-Jan-17	--	1,200	--	--	--	--	--	--	--	--	--
	10	In Situ	04-Jan-17	--	1,360	--	--	--	--	--	--	--	--	--
	12	In Situ	05-Jan-17	3.1	2,080	--	--	--	--	--	--	--	--	--
	18	In Situ	05-Jan-17	5.6	800	--	--	--	--	--	--	--	--	--
	22	In Situ	05-Jan-17	4.2	400	--	--	--	--	--	--	--	--	**304**
SP3	Surface	In Situ	21-Dec-16	--	2,400	--	--	--	--	--	--	--	--	--
	2	In Situ	04-Jan-17	--	400	--	--	--	--	--	--	--	--	--
	4	In Situ	04-Jan-17	--	400	--	--	--	--	--	--	--	--	**496**
SP4	Surface	In Situ	21-Dec-16	--	4,000	--	--	--	--	--	--	--	--	--
	2	In Situ	04-Jan-17	--	80	--	--	--	--	--	--	--	--	32

TABLE 2

Summary of Soil Sample Field Testing and Laboratory Analytical Results

Legacy, L.P.

LMPSU 1 CTB

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	Surface	In Situ	21-Dec-16	--	3,120	--	--	--	--	--	--	--	--	--
	2	In Situ	04-Jan-17	--	80	--	--	--	--	--	--	--	--	32
SP6	2	In Situ	04-Jan-17	--	80	--	--	--	--	--	--	--	--	--
	4	In Situ	04-Jan-17	--	320	--	--	--	--	--	--	--	--	224
SP7	2	In Situ	04-Jan-17	--	640	--	--	--	--	--	--	--	--	--
	4	In Situ	04-Jan-17	--	640	--	--	--	--	--	--	--	--	--
	6	In Situ	04-Jan-17	--	1,040	--	--	--	--	--	--	--	--	--
	8	In Situ	04-Jan-17	--	800	--	--	--	--	--	--	--	--	--
	10	In Situ	04-Jan-17	--	800	--	--	--	--	--	--	--	--	--
	14	In Situ	05-Jan-17	--	160	--	--	--	--	--	--	--	--	128
SPH1	Surface	In Situ	06-Mar-17	0.0	80	--	--	--	--	--	--	--	--	64
	1	In Situ	06-Mar-17	0.0	80	--	--	--	--	--	--	--	--	--
	2	In Situ	06-Mar-17	0.0	80	--	--	--	--	--	--	--	--	32
SPH2	Surface	In Situ	06-Mar-17	0.1	80	--	--	--	--	--	--	--	--	16
	1	In Situ	06-Mar-17	0.0	80	--	--	--	--	--	--	--	--	--
	2	In Situ	06-Mar-17	0.0	80	--	--	--	--	--	--	--	--	32

TABLE 2

Summary of Soil Sample Field Testing and Laboratory Analytical Results

Legacy, L.P.

LMPSU 1 CTB

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)
SPH3	Surface	In Situ	06-Mar-17	0.0	80	--	--	--	--	--	--	--	--	16
	1	In Situ	06-Mar-17	0.0	80	--	--	--	--	--	--	--	--	--
	2	In Situ	06-Mar-17	0.2	80	--	--	--	--	--	--	--	--	16
SPH4	Surface	In Situ	06-Mar-17	0.0	80	--	--	--	--	--	--	--	--	16
	1	In Situ	06-Mar-17	0.0	80	--	--	--	--	--	--	--	--	--
	2	In Situ	06-Mar-17	0.0	80	--	--	--	--	--	--	--	--	32
SPH5	Surface	In Situ	06-Mar-17	0.1	80	--	--	--	--	--	--	--	--	16
	1	In Situ	06-Mar-17	0.0	80	--	--	--	--	--	--	--	--	--
	2	In Situ	06-Mar-17	0.0	80	--	--	--	--	--	--	--	--	16
SPH6	Surface	In Situ	06-Mar-17	0.0	80	--	--	--	--	--	--	--	--	32
	1	In Situ	06-Mar-17	0.0	80	--	--	--	--	--	--	--	--	--
	2	In Situ	06-Mar-17	0.0	80	--	--	--	--	--	--	--	--	32
SPH7	Surface	In Situ	06-Mar-17	0.0	160	--	--	--	--	--	--	--	--	80
	1	In Situ	06-Mar-17	0.0	80	--	--	--	--	--	--	--	--	--
	2	In Situ	06-Mar-17	0.0	80	--	--	--	--	--	--	--	--	32
SPH8	Surface	In Situ	06-Mar-17	0.1	80	--	--	--	--	--	--	--	--	16
	1	In Situ	06-Mar-17	0.0	80	--	--	--	--	--	--	--	--	--
	2	In Situ	06-Mar-17	0.0	80	--	--	--	--	--	--	--	--	<16.0

TABLE 2

Summary of Soil Sample Field Testing and Laboratory Analytical Results

Legacy, L.P.

LMPSU 1 CTB

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)
SPH9	Surface	In Situ	06-Mar-17	0.0	80	--	--	--	--	--	--	--	--	32
	1	In Situ	06-Mar-17	0.1	80	--	--	--	--	--	--	--	--	--
	2	In Situ	06-Mar-17	0.0	80	--	--	--	--	--	--	--	--	32
SPH10	Surface	In Situ	06-Mar-17	0.0	80	--	--	--	--	--	--	--	--	16
	1	In Situ	06-Mar-17	0.0	80	--	--	--	--	--	--	--	--	--
	2	In Situ	06-Mar-17	0.0	80	--	--	--	--	--	--	--	--	16
NMOCD Recommended Remedial Action Levels				100		10				50			100	250

- - = Not Analyzed

Bold *values are in excess of NMOCD 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 release area.

Photograph #8- Looking across 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-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
CP 01177 POD1		LE	2	2	4	04	23S	37E	674308	3581663	244	60	41	19
CP 00142 POD1		LE	1	2	1	34	22S	37E	673704	3581247*	509	350		
CP 00141 POD1		LE	4	4	4	27	22S	37E	674701	3581464*	536	41		
CP 00244 POD1	CP	LE	4	3	3	27	22S	37E	673495	3581442*	669	150		
CP 00007 POD1	CP	LE				27	22S	37E	673999	3582146*	699	182		
CP 00009 POD1	CP	LE				27	22S	37E	673999	3582146*	699	150		
CP 00010 POD1	CP	LE				27	22S	37E	673999	3582146*	699	135		
CP 00011 POD1	CP	LE				27	22S	37E	673999	3582146*	699	148		
CP 00233 POD2	CP	LE	1	2	3	27	22S	37E	673690	3582051*	752	90		
CP 00243 POD2	CP	LE	1	2	3	27	22S	37E	673690	3582051*	752	90	54	36
CP 00232 POD1	CP	LE	4	1	3	27	22S	37E	673488	3581844*	774	150		
CP 00233 POD1	CP	LE	4	1	3	27	22S	37E	673488	3581844*	774	182		
CP 00009 POD2	CP	LE	4	4	1	27	22S	37E	673883	3582253*	835	90	52	38
CP 00231 POD2	CP	LE	4	4	1	27	22S	37E	673883	3582253*	835	97		
CP 01157 POD1		LE	1	1	1	34	22S	37E	673325	3581348	847	143		
CP 00247 POD1	CP	LE	1	3	3	27	22S	37E	673295	3581642*	886	100		
CP 00244 POD2	CP	LE	3	4	1	27	22S	37E	673683	3582253*	922	87		
CP 00231 POD1	CP	LE	3	1	3	27	22S	37E	673288	3581844*	954	145		
CP 00234 POD1	CP	LE	3	1	3	27	22S	37E	673288	3581844*	954	135		
CP 00143 POD1		LE	1	1	4	34	22S	37E	674121	3580450*	1017	140		
CP 00243 POD1	CP	LE	3	3	1	27	22S	37E	673281	3582246*	1178	106		
CP 00747 POD1	CP	LE			1	27	22S	37E	673583	3582548*	1227	410		
CP 00144 POD1	CP	LE	2	4	1	35	22S	37E	675520	3580874*	1479	73	57	16
CP 00146 POD1	CP	LE	3	1	2	35	22S	37E	675715	3581083*	1597	75	67	8
CP 00257 POD1	CP	LE	3	3	3	22	22S	37E	673266	3583050*	1820	136		
CP 00561		LE	3	3	3	34	22S	37E	673324	3579834*	1835	137	60	77

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

(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-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
CP 00003 POD1		CP	LE			4	22	22S	37E	674372	3583367*	1911	142	110	32
CP 00395 POD1		CP	LE	4	2	3	28	22S	37E	672282	3581822*	1915	90		
CP 00911			LE	4	4	4	21	22S	37E	673064	3583043*	1922	153		
CP 00545			LE	3	2	2	35	22S	37E	676117	3581091*	1988	70	35	35
CP 00256 POD1	R	CP	LE	1	3	3	22	22S	37E	673266	3583250*	1997	146		

Average Depth to Water: **59 feet**

Minimum Depth: **35 feet**

Maximum Depth: **110 feet**

Record Count: 31

UTMNAD83 Radius Search (in meters):

Easting (X): 674164.28 **Northing (Y):** 3581466.38 **Radius:** 2000

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

ATTACHMENT III
Laboratory Analytical Results

CARDINAL Laboratories

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

January 12, 2017

Daniel Dominguez

Environmental Plus, Inc.

P.O. Box 1558

Eunice, NM 88231

RE: LMPSU 1 CTB

Enclosed are the results of analyses for samples received by the laboratory on 01/06/17 15:44.

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:

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

Received:	01/06/2017	Sampling Date:	01/04/2017
Reported:	01/12/2017	Sampling Type:	Soil
Project Name:	LMPSU 1 CTB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	UL-O SEC. 27, T22S, R37E		

Sample ID: SP 1 (4') (H700051-01)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**368**	16.0	01/09/2017	ND	416	104	400	0.00	

Sample ID: SP 2 (22') (H700051-02)

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	01/09/2017	ND	416	104	400	0.00	

Sample ID: SP 3 (4') (H700051-03)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**496**	16.0	01/09/2017	ND	416	104	400	0.00	

Sample ID: SP 4 (2') (H700051-04)

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	01/09/2017	ND	416	104	400	0.00	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	01/06/2017	Sampling Date:	01/04/2017
Reported:	01/12/2017	Sampling Type:	Soil
Project Name:	LMPSU 1 CTB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	UL-O SEC. 27, T22S, R37E		

Sample ID: SP 5 (2') (H700051-05)

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	01/09/2017	ND	416	104	400	0.00	

Sample ID: SP 6 (4') (H700051-06)

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	01/09/2017	ND	416	104	400	0.00	

Sample ID: SP 7 (14') (H700051-07)

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	01/09/2017	ND	400	100	400	3.92	QR-03

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

Environmental Plus, Inc.

2100 Avenue O, Eunice, NM 88231 P.O. Box 1558, Eunice, NM 88231
(575) 394-3481 FAX: (575) 394-2601

Chain of Custody Form

LAB Cardinal

Company Name	Environmental Plus, Inc.
EPI Project Manager	Daniel Dominguez
Mailing Address	P.O. BOX 1558
City, State, Zip	Eunice New Mexico 88231
EPI Phone#/Fax#	575-394-3481 / 575-394-2601
Client Company	Legacy LP
Facility Name	LMPSU 1 CTB
Location	UL-O Sec. 27, T22S, R37E
Project Reference	
EPI Sampler Name	David Robinson

Bill To

Attn: Daniel Dominguez
P.O. Box 1558
Eunice, NM 88231

ANALYSIS REQUEST

LAB I.D.	SAMPLE I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUND WATER	WASTEWATER	SOIL	CRUDE OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE	ICE/COOL	OTHER	SAMPLING: DATE	TIME	BTEX 8021B	TPH 8015M	CHLORIDES (Cl^-)	SULFATES ($SO_4^{=}$)	pH	TCLP	OTHER >>>	PAH			
H700051																									
1	SP1 (4')	G	1			X					X		04-Jan-17	7:40			X								
2	SP2 (22')	G	1			X					X		05-Jan-17	13:15			X								
3	SP3 (4')	G	1			X					X		04-Jan-17	9:30			X								
4	SP4 (2')	G	1			X					X		04-Jan-17	9:45			X								
5	SP5 (2')	G	1			X					X		04-Jan-17	9:50			X								
6	SP6 (4')	G	1			X					X		04-Jan-17	11:15			X								
7	SP7 (14')	G	1			X					X		05-Jan-17	15:20			X								
8																									
9																									
10																									

Sampler Relinquished: David Robinson Date 1/6/17 Time 6:00 am Received By:

Relinquished by: Date 1/6/17 Time 3:44 pm Received By: (lab staff) Jodi Henson

Delivered by: #75 -2.3°C Sample Cool & Intact Yes No Checked By:

E-mail results to: ddominguezepi@gmail.com & ebarrientez@legacylp.com

NOTES:

CARDINAL Laboratories

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

March 09, 2017

Daniel Dominguez

Environmental Plus, Inc.

P.O. Box 1558

Eunice, NM 88231

RE: LMPSU 1 CTB

Enclosed are the results of analyses for samples received by the laboratory on 03/07/17 15:31.

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:

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

Received:	03/07/2017	Sampling Date:	03/06/2017
Reported:	03/09/2017	Sampling Type:	Soil
Project Name:	LMPSU 1 CTB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	UL-O SEC. 27, T22S, R37E		

Sample ID: SPH1 (SURFACE) (H700584-01)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**64.0**	16.0	03/08/2017	ND	448	112	400	0.00	

Sample ID: SPH1 (2') (H700584-02)

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	03/08/2017	ND	448	112	400	0.00	

Sample ID: SPH2 (SURFACE) (H700584-03)

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	03/08/2017	ND	448	112	400	0.00	

Sample ID: SPH2 (2') (H700584-04)

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	03/08/2017	ND	448	112	400	0.00	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	03/07/2017	Sampling Date:	03/06/2017
Reported:	03/09/2017	Sampling Type:	Soil
Project Name:	LMPSU 1 CTB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	UL-O SEC. 27, T22S, R37E		

Sample ID: SPH3 (SURFACE) (H700584-05)

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	03/08/2017	ND	448	112	400	0.00	

Sample ID: SPH3 (2') (H700584-06)

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	03/09/2017	ND	480	120	400	3.39	

Sample ID: SPH4 (SURFACE) (H700584-07)

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	03/09/2017	ND	480	120	400	3.39	

Sample ID: SPH4 (2') (H700584-08)

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	03/09/2017	ND	480	120	400	3.39	

Sample ID: SPH5 (SURFACE) (H700584-09)

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	03/09/2017	ND	480	120	400	3.39	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	03/07/2017	Sampling Date:	03/06/2017
Reported:	03/09/2017	Sampling Type:	Soil
Project Name:	LMPSU 1 CTB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	UL-O SEC. 27, T22S, R37E		

Sample ID: SPH5 (2') (H700584-10)

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	03/09/2017	ND	480	120	400	3.39	

Sample ID: SPH6 (SURFACE) (H700584-11)

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	03/09/2017	ND	480	120	400	3.39	

Sample ID: SPH6 (2') (H700584-12)

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	03/09/2017	ND	480	120	400	3.39	

Sample ID: SPH7 (SURFACE) (H700584-13)

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	03/09/2017	ND	480	120	400	3.39	

Sample ID: SPH7 (2') (H700584-14)

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	03/09/2017	ND	480	120	400	3.39	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	03/07/2017	Sampling Date:	03/06/2017
Reported:	03/09/2017	Sampling Type:	Soil
Project Name:	LMPSU 1 CTB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	UL-O SEC. 27, T22S, R37E		

Sample ID: SPH8 (SURFACE) (H700584-15)

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	03/09/2017	ND	480	120	400	3.39	

Sample ID: SPH8 (2') (H700584-16)

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	03/09/2017	ND	480	120	400	3.39	

Sample ID: SPH9 (SURFACE) (H700584-17)

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	03/09/2017	ND	480	120	400	3.39	

Sample ID: SPH9 (2') (H700584-18)

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	03/09/2017	ND	480	120	400	3.39	

Sample ID: SPH10 (SURFACE) (H700584-19)

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	03/09/2017	ND	480	120	400	3.39	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	03/07/2017	Sampling Date:	03/06/2017
Reported:	03/09/2017	Sampling Type:	Soil
Project Name:	LMPSU 1 CTB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	UL-O SEC. 27, T22S, R37E		

Sample ID: SPH10 (2') (H700584-20)

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	03/09/2017	ND	480	120	400	3.39	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

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

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

Environmental Plus, Inc.

2100 Avenue O, Eunice, NM 88231 P.O. Box 1558, Eunice, NM 88231
(575) 394-3481 FAX: (575) 394-2601

Chain of Custody Form

LAB Cardinal

Company Name	Environmental Plus, Inc.
EPI Project Manager	Daniel Dominguez
Mailing Address	P.O. BOX 1558
City, State, Zip	Eunice New Mexico 88231
EPI Phone#/Fax#	575-394-3481 / 575-394-2601
Client Company	Legacy LP
Facility Name	LMPSU 1 CTB
Location	UL-O Sec. 27, T22S, R37E
Project Reference	
EPI Sampler Name	David Robinson

Bill To

Attn: Daniel Dominguez
P.O. Box 1558
Eunice, NM 88231

ANALYSIS REQUEST

LAB I.D.	SAMPLE I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUND WATER	WASTEWATER	SOIL	CRUDE OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE	ICE/COOL	OTHER	SAMPLING: DATE	TIME	BTEX 8021B	TPH 8015M	CHLORIDES (Cl^-)	SULFATES ($SO_4^{=}$)	pH	TCLP	OTHER >>>	PAH
H200584																						
1	SPH1 (Surface)	G	1			X					X		06-Mar-17	7:41			X					
2	SPH1 (2')	G	1			X					X		06-Mar-17	7:43			X					
3	SPH2 (Surface)	G	1			X					X		06-Mar-17	8:10			X					
4	SPH2 (2')	G	1			X					X		06-Mar-17	8:12			X					
5	SPH3 (Surface)	G	1			X					X		06-Mar-17	8:37			X					
6	SPH3 (2')	G	1			X					X		06-Mar-17	8:39			X					
7	SPH4 (Surface)	G	1			X					X		06-Mar-17	9:00			X					
8	SPH4 (2')	G	1			X					X		06-Mar-17	9:02			X					
9	SPH5 (Surface)	G	1			X					X		06-Mar-17	9:24			X					
10	SPH5 (2')	G	1			X					X		06-Mar-17	9:26			X					

Sampler Relinquished: Daniel Robinson — Date 3/7/17 Time 6:00 am — Received By: Daniel Dominguez

Relinquished by: Daniel Dominguez — Date 3/7/17 Time 3:31 pm — Received By: (lab staff) Tamara Oldaker

Delivered by: -4°C — Sample Cool & Intact: Yes / No — Checked By: TO. HTS

E-mail results to: ddominguezepi@gmail.com & bboone.epi@gmail.com

NOTES:

Environmental Plus, Inc.

2100 Avenue O, Eunice, NM 88231 P.O. Box 1558, Eunice, NM 88231
(575) 394-3481 FAX: (575) 394-2601

Chain of Custody Form

LAB Cardinal

Company Name	Environmental Plus, Inc.
EPI Project Manager	Daniel Dominguez
Mailing Address	P.O. BOX 1558
City, State, Zip	Eunice New Mexico 88231
EPI Phone#/Fax#	575-394-3481 / 575-394-2601
Client Company	Legacy LP
Facility Name	LMPSU 1 CTB
Location	UL-O Sec. 27, T22S, R37E
Project Reference	
EPI Sampler Name	David Robinson

Bill To

Attn: Daniel Dominguez
P.O. Box 1558
Eunice, NM 88231

ANALYSIS REQUEST

LAB I.D.	SAMPLE I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUND WATER	WASTEWATER	SOIL	CRUDE OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE	ICE/COOL	OTHER	SAMPLING: DATE	TIME	BTEX 8021B	TPH 8015M	CHLORIDES (Cl^-)	SULFATES ($SO_4^{=}$)	pH	TCLP	OTHER >>>	PAH			
H700584																									
11	SPH6 (Surface)	G	1			X					X		06-Mar-17	9:51			X								
12	SPH6 (2')	G	1			X					X		06-Mar-17	9:53			X								
13	SPH7 (Surface)	G	1			X					X		06-Mar-17	10:14			X								
14	SPH7 (2')	G	1			X					X		06-Mar-17	10:16			X								
15	SPH8 (Surface)	G	1			X					X		06-Mar-17	10:45			X								
16	SPH8 (2')	G	1			X					X		06-Mar-17	10:47			X								
17	SPH9 (Surface)	G	1			X					X		06-Mar-17	11:10			X								
18	SPH9 (2')	G	1			X					X		06-Mar-17	11:12			X								
19	SPH10 (Surface)	G	1			X					X		06-Mar-17	11:35			X								
20	SPH10 (2')	G	1			X					X		06-Mar-17	11:37			X								

Sampler Relinquished: David Robinson — Date 3/7/17 — Time 6:00 am — Received By: David Dominguez

Relinquished by: David Dominguez — Date 3/7/17 — Time 3:37 pm — Received By: (lab staff) Tamara Oldaker

Delivered by: 4.4°C — Sample Cool & Intact: Yes / No — Checked By: T.O. #75

E-mail results to: ddominguezepi@gmail.com & bboone.epi@gmail.com

NOTES:

ATTACHMENT IV
Copy of Initial NMOCD Form C-141

NM OIL CONSERVATION
ARTESIA DISTRICT
DEC 27 2016
RECEIVED

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.

fAB1636536260
nAB1636536488

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: Legacy, L.P. 294281	Contact: Ernest Barrientez
Address: P.O. Box 10848 Midland, TX 79702	Telephone No. 432-853-0633
Facility Name: LMPSU 1 CTB	Facility Type: Injection Line

Surface Owner: Legacy	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
O	27	22S	37E					Lea

Latitude: N 32.356572° **Longitude:** W 103.149062°

NATURE OF RELEASE

Type of Release: produced water	Volume of Release: 730 barrels	Volume Recovered: 660 barrels
Source of Release: injection line failed	Date and Hour of Occurrence: 12/18/16 @ unknown	Date and Hour of Discovery: 12/18/16 @ ~~unknown~~ 9:15 Am
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Kristen Lynch, Tomas Oberding, OCD	
By Whom? Legacy	Date and Hour: 12/18/16	
Was a Watercourse Reached? ☐ Yes ☒ 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. A vacuum truck was dispatched to collect standing fluid.

Describe Area Affected and Cleanup Action Taken.*
Vacuum trucks were called to the location and was able to recover 660 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: Ernest Barrientez

Printed Name: Ernest Barrientez

Title: Production Foreman

E-mail Address: cbarrientez@legacylp.com

Date: Dec. 22, 2016 Phone: 432-853-0633

OIL CONSERVATION DIVISION

Approved by Environmental Specialist: Chris Weaver

Approval Date: 12/30/16 Expiration Date: N/A

Conditions of Approval:
delineation is needed before site ranking can be assessed

Attached ☒ COA's attached

IRP-4538

* Attach Additional Sheets If Necessary

Appendix C
Photographs

Site Location

Site Prior to Remediation Viewing West, November 8, 2017

Site Prior to Remediation Viewing Northeast, November 8, 2017

Site Prior to Remediation Viewing West, November 8, 2017

Site Prior to Remediation Viewing North, September 8, 2017

EPI Photograph Viewing South, October 6, 2017