



27 October 2016

Ms. Kristen Lynch  
Environmental Specialist  
NMOCD  
1625 N. French Drive  
Hobbs, New Mexico 88240

**Re: Initial C-141  
Legacy, L.P.  
High Plains 22 State Com #1 Battery  
UL-E, Section 22, Township 14 South, Range 34 East  
Lea County, New Mexico**

Ms. Lynch:

Environmental Plus, Inc. (EPI), on behalf of Mr. Manuel Soriano, Legacy, L.P., submits the attached form C-141 for the above-referenced leak site, located on land owned by the State of New Mexico.

The site is located approximately 14 miles northwest of Lovington, New Mexico (reference *Figure 1*). A search for water wells was completed utilizing the New Mexico Office of the State Engineer's website and a United States Geological Survey (USGS) database. There are no wells (domestic, agriculture or public) and no bodies of surface water that exist within a 1,000-foot radius of the release site (reference *Figure 2*). Groundwater data indicated the average water depth is approximately 60 feet below ground surface (bgs). The attached site information and ranking form ranks the site in accordance with the New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Leaks, Spills and Releases (August 13, 1993).

The release occurred when an oil tank ran over. Approximately 190 bbls of oil were released with no fluid recovered (reference *Figure 3* and attached photographs). The liner was found to have several punctures that will be repaired. Based on available information, it was projected distance between impacted soil and groundwater is approximately 75 vertical feet. Utilizing this information, NMOCD Recommended Remedial Action Levels (RRALs) for this Site were determined as follows:

Parameter	Recommended Remedial Action Level
Benzene	10 parts per million
BTEX	50 parts per million
TPH	1,000 parts per million
Chloride	500 parts per million

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](mailto:ddominguezepi@gmail.com) or Mr. Manuel Soriano at (432) 269-8806 or via e-mail at [jsoriano@legacyp.com](mailto:jsoriano@legacyp.com). All official communication should be addressed to:

Mr. Manuel Soriano  
Legacy, L.P.  
P.O. Box 10848  
Midland, Texas 79702

Sincerely,

ENVIRONMENTAL PLUS, INC.

Daniel Dominguez  
Environmental Consultant

cc: Manuel Soriano, Production Foreman – Legacy, L.P.  
Amber Groves, Remediation Specialist – NMSLO  
File

## FIGURES

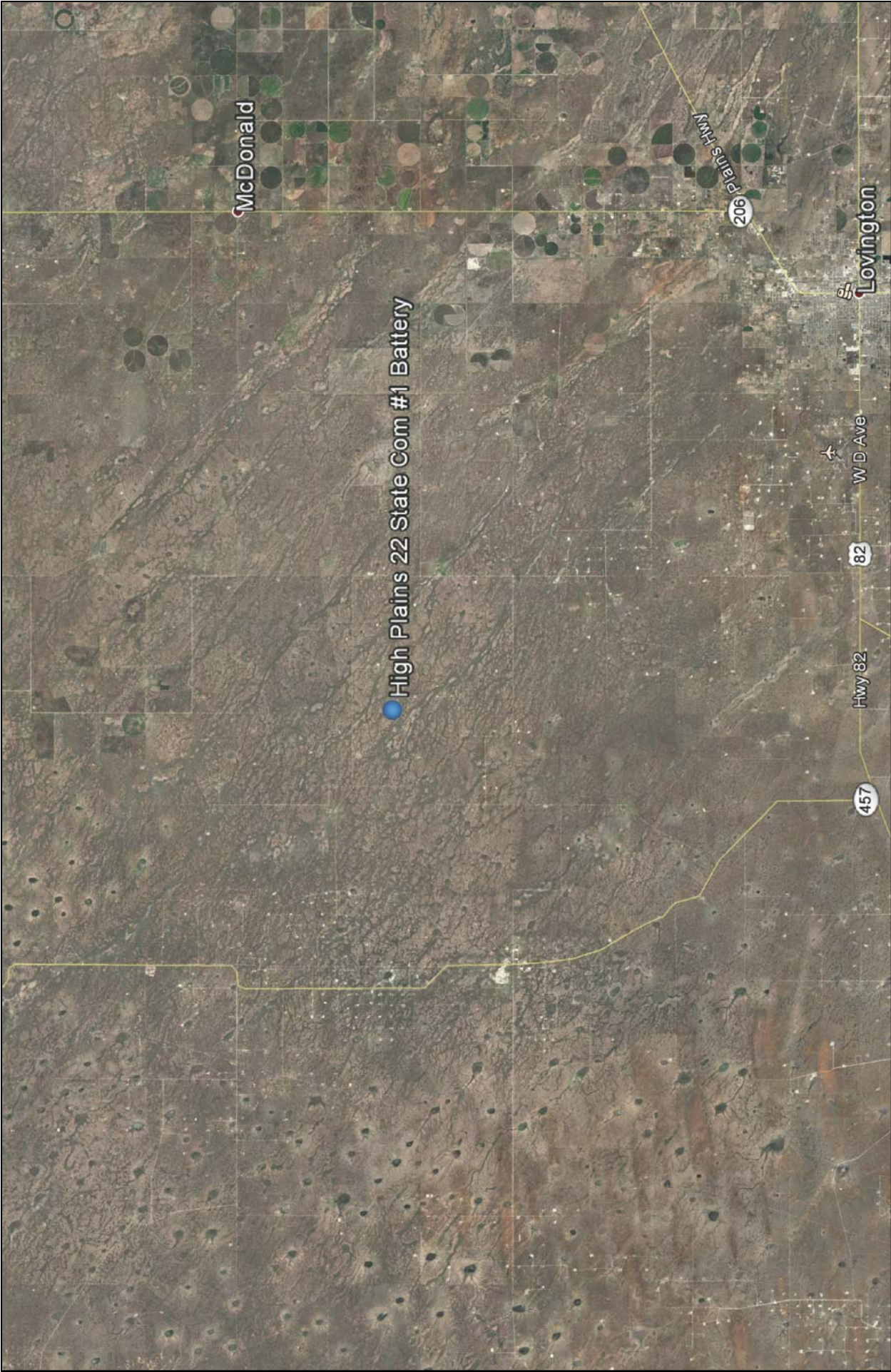


Figure 1 Area Map Legacy, L.P. High Plains 22 State Com #1 Battery	Lea County, New Mexico SW 1/4 of NW 1/4, Sec. 22, T14S, R34E N 33° 05' 30.89" W 103° 30' 21.46" Elevation: 4,133 feet amsl	DWG By: D Dominguez October 2016	REVISED:		
		0 3 6 Miles	SHEET 1 of 1		



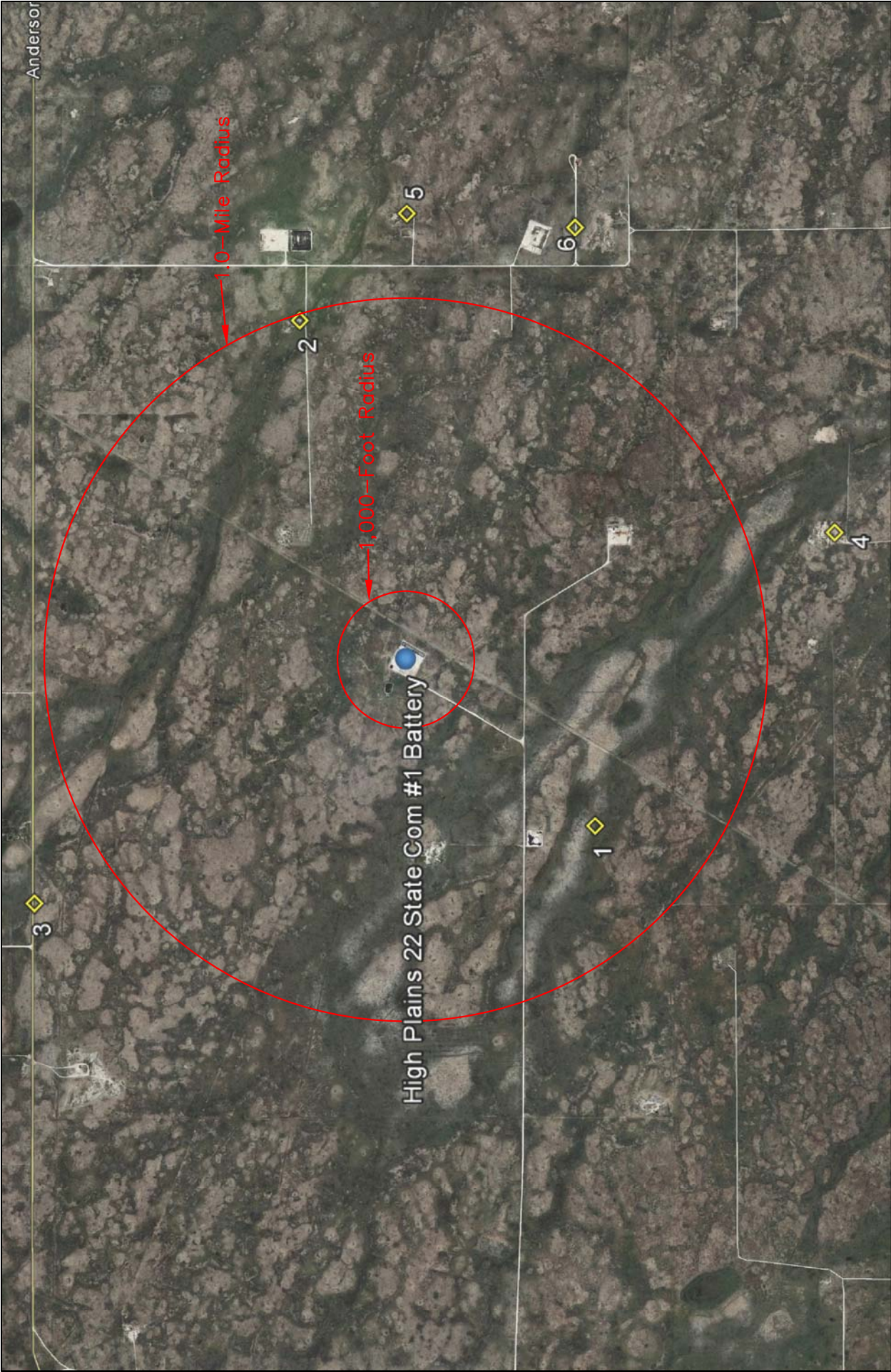
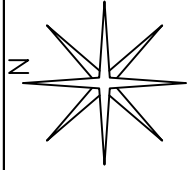


Figure 2 Site Location Map Legacy, L.P. High Plains 22 State Com #1 Battery	Lea County, New Mexico SW 1/4 of NW 1/4, Sec. 22, T14S, R34E N 33° 05' 30.89" W 103° 30' 21.46" Elevation: 4,133 feet amsl	DWG By: D Dominguez October 2016	REVISED:		
		0	4,000		SHEET
			2,000		1 of 1



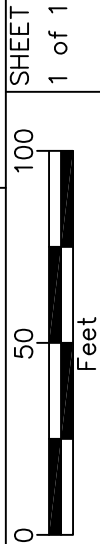


LEGEND



REVISED:

DWG By: D Dominguez  
October 2016



Lea County, New Mexico  
SW 1/4 of NW 1/4, Sec. 22, T14S, R34E  
N 33° 05' 30.89" W 103° 30' 21.46"  
Elevation: 4,133 feet amsl

Figure 3  
Site Map  
Legacy, L.P.  
High Plains 22 State Com #1 Battery

## **TABLES**

TABLE 1

## Well Data

## Legacy, L.P. - High Plains 22 State Com #1 Battery

Ref #	Well Number	Use	Diversion <sup>A</sup>	Owner	q64	q16	q4	Sec	Twsp	Rng	Easting	Northing	Distance <sup>B</sup>	Date Measured	Surface Elevation <sup>C</sup>	Depth to Water (ft bgs)
1	L 06879	PRO	0	TRI-STATE DRILLING COMPANY	2	3	4	21	14S	34E	638806	3661748	952	06-Dec-71	4,128	63
2	L 05508	PRO	0	CLEMENT ENERGY		2	2	22	14S	34E	640702	3662885	1,339	07-Dec-64	4,112	65
3	L 10915	PRO	0	TIMBERSHARP DRILLING				16	14S	34E	638483	3663849	1,672	08-Dec-98	4,135	54
4	L 10792	PRO	0	DELMAR DRILLING		4	1	27	14S	34E	639925	3660863	1,681	07-Apr-97	4,112	61
5	L 12899	PRO	0	GLENN'S WATER WELL SVC, INC.	4	3	1	23	14S	34E	641111	3662487	1,683	13-Oct-83	4,107	60
6	L 12747	STK	0	ANGELL #2 FAMILY LTD PRTNRSHIP	1	3	3	23	14S	34E	641067	3661855	1,749		4,101	

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

<sup>A</sup> = In acre feet per annum

<sup>B</sup> = In meters

<sup>C</sup> = Elevation interpolated from satellite map based on referenced location

PRO = 72-12-1 Prospecting or development of Natural Resource

STK = 72-12-1 Livestock watering

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

-- = Data not provided on the NM iwaters website

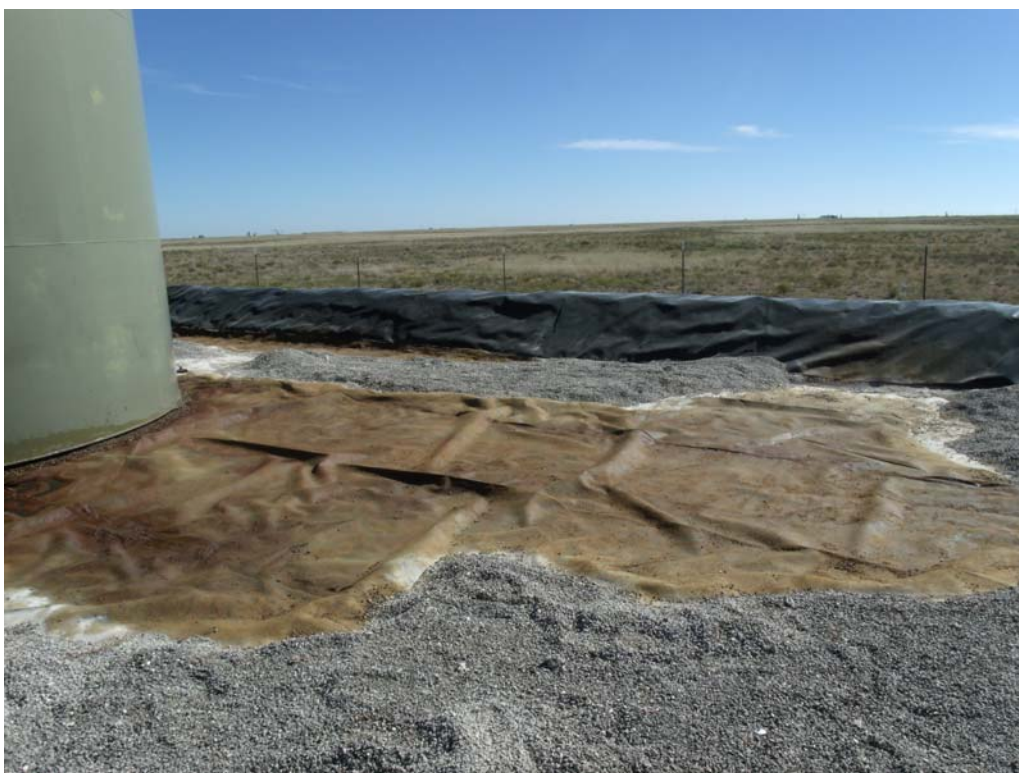


## **ATTACHMENTS**

**ATTACHMENT I  
PHOTOGRAPHS**



Photograph #1- Release with in containment berm.



Photograph #2- Release with in containment berm.





Photograph #3- Release with in containment berm.



Photograph #4- Release with in containment berm.

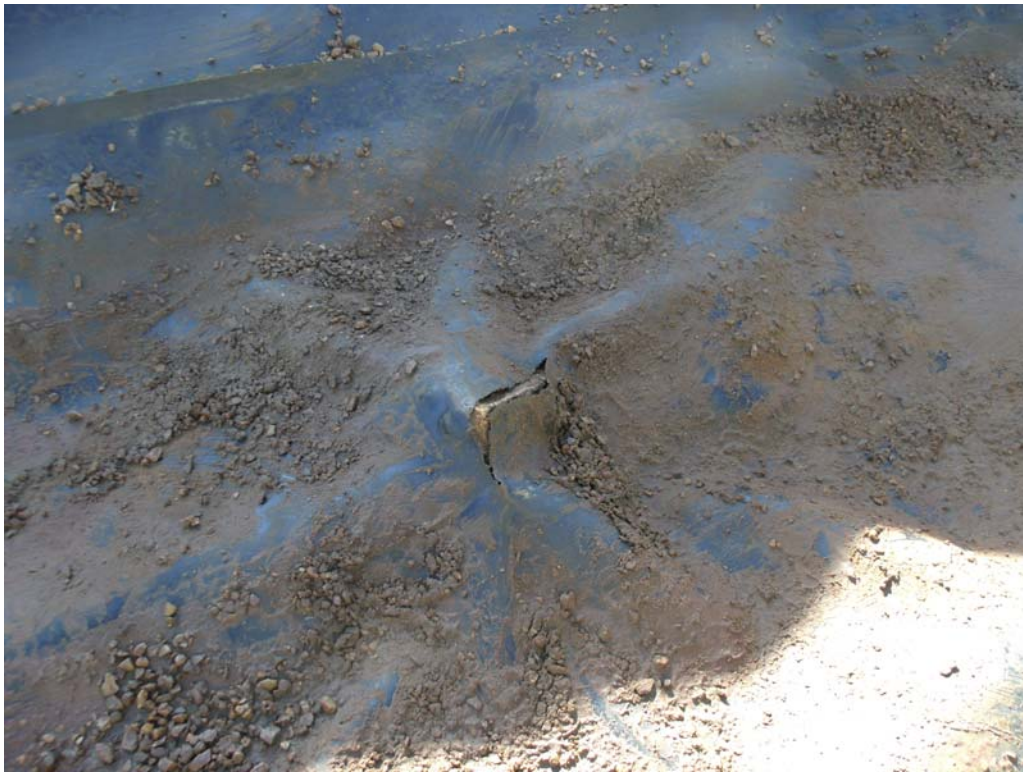


Photograph #5- Release with in containment berm.



Photograph #6- Release with in containment berm.



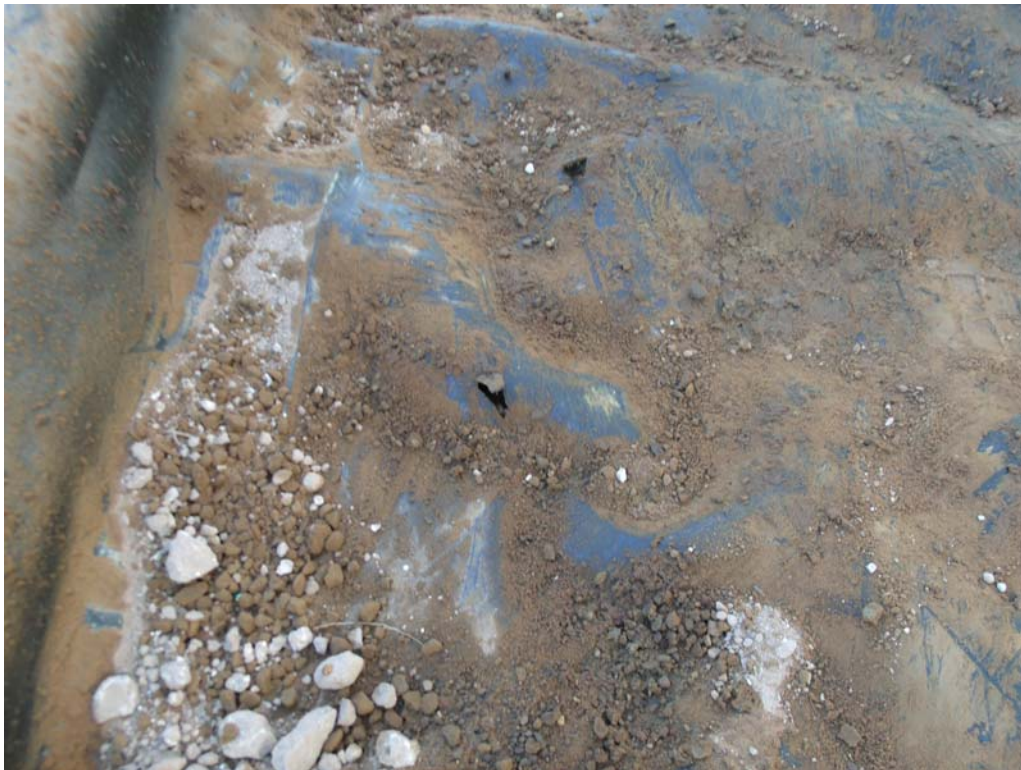


Photograph #7- Liner puncture.

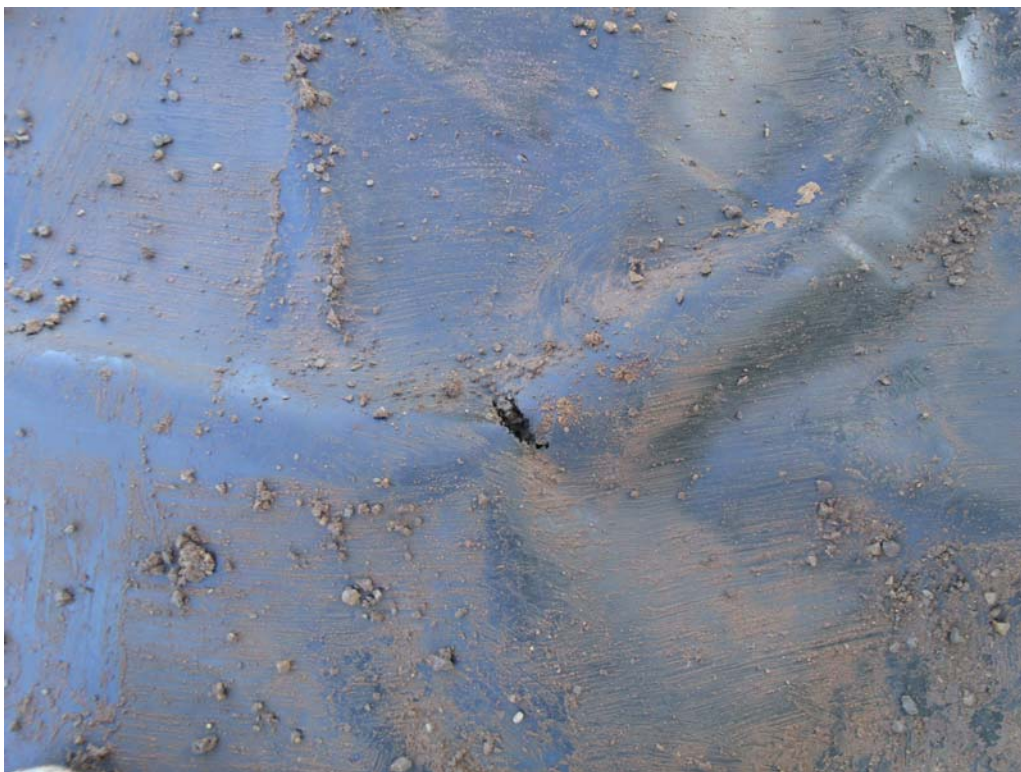


Photograph #8- Liner puncture.





Photograph #9- Liner puncture.



Photograph #10- Liner puncture.



Photograph #11- Liner puncture.

**ATTACHMENT II  
INFORMATION AND RANKING  
INITIAL C-141**



		<b>Incident Date:</b> 10-19-16	<b>NMOCD Notified:</b> 10-19-16
Information and Ranking			
<b>Site:</b> High Plains 22 State Com #1 Battery		<b>Assigned Site Reference #:</b>	
<b>Company:</b> Legacy, L.P.			
<b>Street Address:</b>			
<b>Mailing Address:</b> P.O. Box 10848			
<b>City, State, Zip:</b> Midland, Texas, 79702			
<b>Representative:</b> Manuel Soriano			
<b>Representative Telephone:</b> (432) 269 – 8809			
<b>Telephone:</b>			
<b>Fluid volume released (bbls):</b> 190 bbls		<b>Recovered (bbls):</b> 0 bbls	
<p align="center"><b>&gt;25 bbls: Notify NMOCD verbally within 24 hrs and submit form C-141 within 15 days.</b>  <b>(Also applies to unauthorized releases &gt;500 mcf Natural Gas)</b></p>			
<p align="center"><b>5-25 bbls: Submit form C-141 within 15 days (Also applies to unauthorized releases of 50-500 mcf Natural Gas)</b></p>			
<b>Leak, Spill, or Pit (LSP) Name:</b> High Plains 22 State Com #1 Battery			
<b>Source of contamination:</b> Tank Battery			
<b>Land Owner, i.e., BLM, ST, Fee, Other:</b> State			
<b>LSP Dimensions:</b>			
<b>LSP Area:</b> ~ 6,000 sq. ft.			
<b>Location of Reference Point (RP):</b>			
<b>Location distance and direction from RP:</b>			
<b>Latitude:</b> N 33° 5' 30.89"			
<b>Longitude:</b> W 103° 30' 21.46"			
<b>Elevation above mean sea level:</b> 4,133 feet			
<b>Feet from Section Line:</b>			
<b>Feet from Section Line:</b>			
<b>Location- Unit or ¼:</b> SW¼ of the NW¼		<b>Unit Letter:</b> E	
<b>Location- Section:</b> 22			
<b>Location- Township:</b> T14S			
<b>Location- Range:</b> R34E			
<b>Surface water body within 1000' radius of site:</b> none			
<b>Domestic water wells within 1000' radius of site:</b> none			
<b>Agricultural water wells within 1000' radius of site:</b> none			
<b>Public water supply wells within 1000' radius of site:</b> none			
<b>Depth from land surface to ground water (DG):</b> ~ 60'			
<b>Depth of contamination (DC):</b> unknown			
<b>Depth to ground water (DG – DC = DtGW):</b> ~ 60'			
<b>1. Ground Water</b>		<b>2. Wellhead Protection Area</b>	<b>3. Distance to Surface Water Body</b>
If Depth to GW <50 feet: <i>20 points</i>		If <1000' from water source, or; <200' from private domestic water source: <i>20 points</i>	<200 horizontal feet: <i>20 points</i>
If Depth to GW 50 to 99 feet: <i>10 points</i>			200-100 horizontal feet: <i>10 points</i>
If Depth to GW >100 feet: <i>0 points</i>		If >1000' from water source, or; >200' from private domestic water source: <i>0 points</i>	>1000 horizontal feet: <i>0 points</i>
<i>Site Rank (1+2+3) = 10 + 0 + 0 = 10</i>			
<b>Total Site Ranking Score and Acceptable Concentrations</b>			
Parameter	>19	<b>10-19</b>	0-9
Benzene <sup>1</sup>	10 ppm	<b>10 ppm</b>	10 ppm
BTEX <sup>1</sup>	50 ppm	<b>50 ppm</b>	50 ppm
TPH	100 ppm	<b>1,000 ppm</b>	5,000 ppm
Chloride	250 ppm	<b>500 ppm</b>	1,000 ppm
<sup>1</sup> 100 ppm field VOC headspace measurement may be substituted for lab analysis			

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

State of New Mexico  
Energy Minerals and Natural Resources

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

Form C-141  
Revised August 8, 2011

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

### Release Notification and Corrective Action

#### OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: Legacy, L.P.	Contact: Manuel Soriano	
Address: P.O. Box 10848, Midland, Texas 79702	Telephone No. 432-269-8806	
Facility Name: High Plains 22 State Com #1 Battery	Facility Type: Battery	
Surface Owner: State	Mineral Owner:	API No. 30-025-39540

#### LOCATION OF RELEASE

Unit Letter E	Section 22	Township 14S	Range 34E	Feet from the	North/South Line	Feet from the	East/West Line	County Lea
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Latitude: N 33.091912° Longitude: W 103.505966°

#### NATURE OF RELEASE

Type of Release: oil	Volume of Release: ~190 bbls	Volume Recovered: 0 bbls
Source of Release: oil tank ran over	Date and Hour of Occurrence: 10-19-16 @ am	Date and Hour of Discovery: 10-19-16 @ am
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Kristen Lynch	
By Whom? Manuel Soriano	Date and Hour: 10-19-16	
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.* Release occurred when an oil tank ran over. No fluid was recovered.		
Describe Area Affected and Cleanup Action Taken.* The spill impacted approximately 6,000 sq. ft. of caliche tank battery pad. The entire release of oil was contained within the lined berms. All fluid was lost; the liner has several punctures that will be repaired. The stained soil will be removed and hauled to a state approved disposal facility. Samples will be collected.		
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: 	<u>OIL CONSERVATION DIVISION</u>	
Printed Name: Manuel Soriano	Approved by Environmental Specialist:	
Title: Production Foreman	Approval Date: 11/8/2016	Expiration Date: 1/8/2017
E-mail Address: jsoriano@legacyp.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 12/31/2016 Phone: 432-269-8806	See attached Directive	1RP 4501

\* Attach Additional Sheets If Necessary

NMOCD accepts discrete samples only  
Notify OCD prior to sampling

nKL1631347882  
pKL1631348136

Operator/Responsible Party,

The OCD has received the form C-141 you provided on 11/7/2016 regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number 1RP 4501 has been assigned. **Please refer to this case number in all future correspondence.**

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

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

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. **As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District 1 office in Hobbs on or before 12/7/2016. 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<sub>6</sub> thru C<sub>36</sub>), 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<sub>6</sub> thru C<sub>36</sub>), 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