



20 January 2017

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

**Re: Initial C-141  
Legacy, L.P.  
Rainer State #1  
UL-B, Section 28, Township 10 South, Range 37 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 northeast of Tatum, 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 115 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 a heater failed. Approximately 287 bbls of oil and water were released with approximately 260 bbls fluid recovered (reference *Figure 3* and attached photographs). Based on available information, it was projected distance between impacted soil and groundwater is approximately 115 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	5,000 parts per million
Chloride	1,000 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

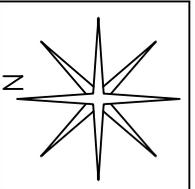
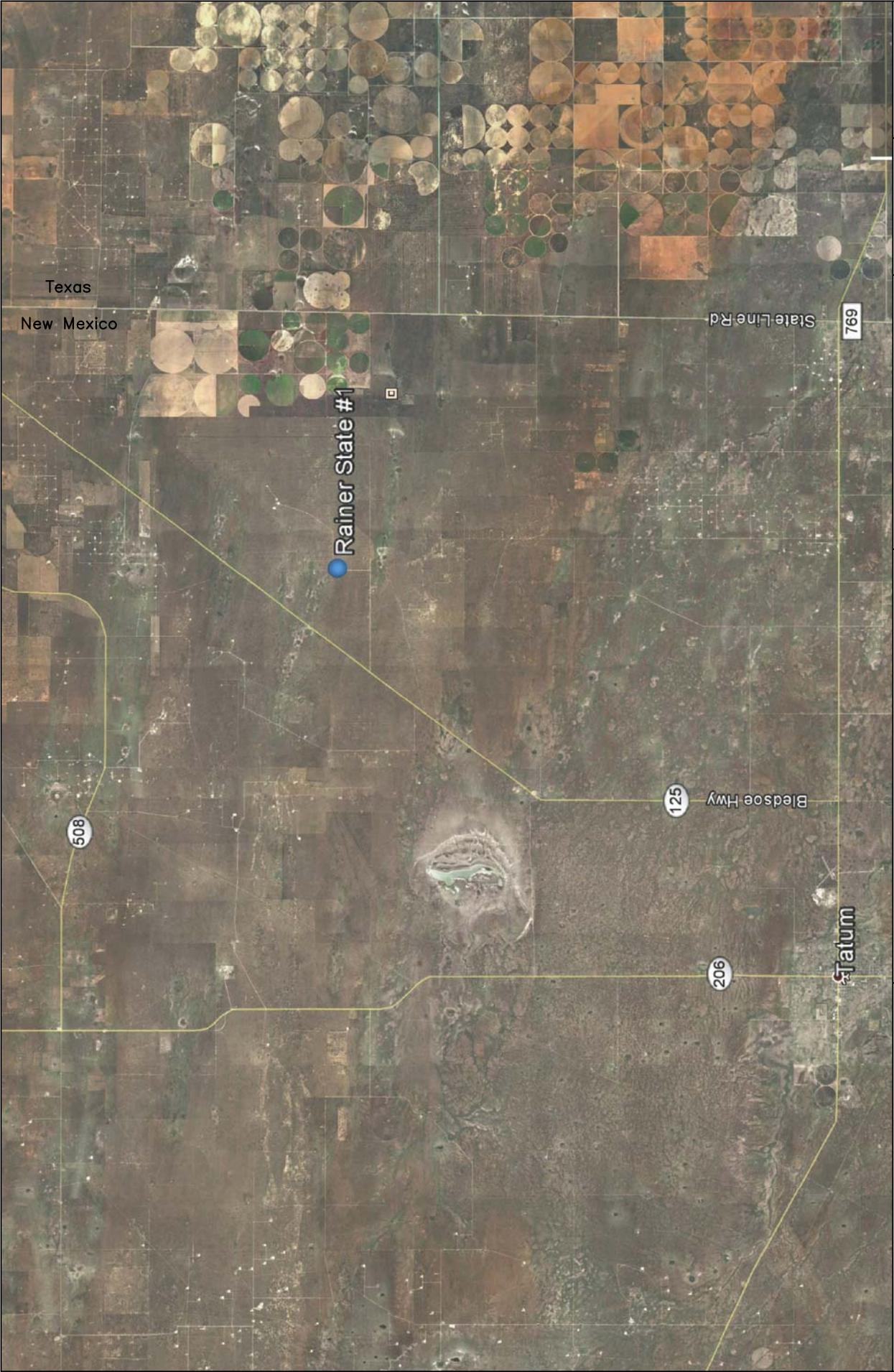
Sincerely,

ENVIRONMENTAL PLUS, INC.

Daniel Dominguez  
Environmental Consultant

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

## **FIGURES**



REVISED:  
 6 SHEET  
 1 of 1

DWG By: D Dominguez  
 January 2017

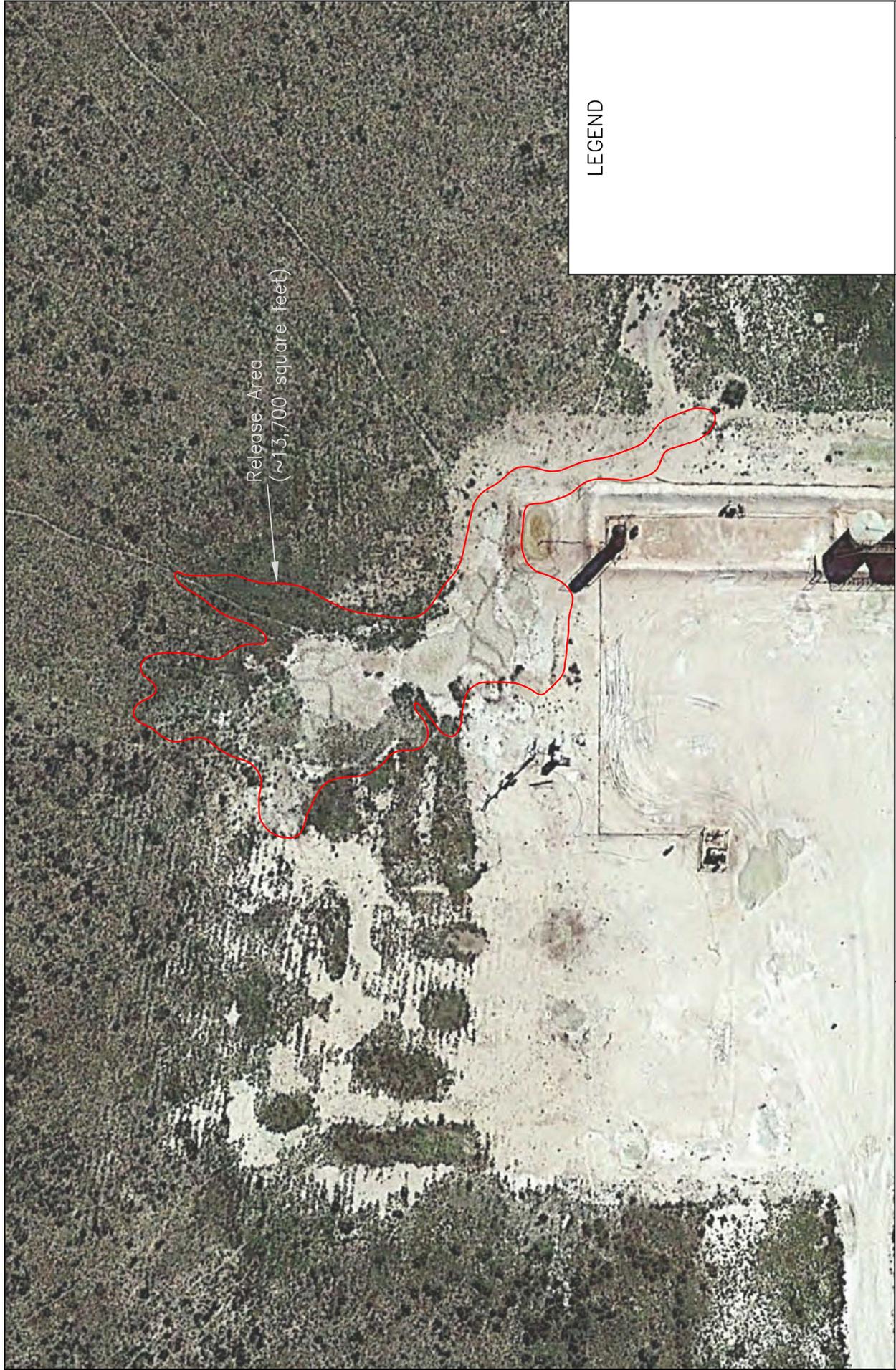
0 3 6  
 Miles

Lea County, New Mexico  
 NW 1/4 of NE 1/4, Sec. 28, T10S, R37E  
 N 32° 25' 18.55" W 103° 09' 24.55"  
 Elevation: 3,951 feet amsl

Figure 1  
 Area Map  
 Legacy, L.P.  
 Rainer State #1

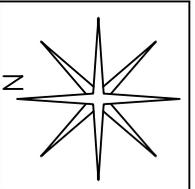


<p>DWG By: D Dominguez January 2017</p>	<p>REVISID:</p> <p>4,000 SHEET 1 of 1</p>	
<p>0 2,000 4,000 Feet</p>	<p>Lea County, New Mexico NW 1/4 of NE 1/4, Sec. 28, T10S, R37E N 32° 25' 18.55" W 103° 09' 24.55" Elevation: 3,951 feet amsl</p>	<p>Figure 2 Site Location Map Legacy, L.P. Rainer State #1</p>



Release Area  
 (~13,700 square feet)

LEGEND



REVISED:  
 DWG By: D Dominguez  
 January 2017

0 60 120  
 Feet

SHEET  
 1 of 1

Lea County, New Mexico  
 NW 1/4 of NE 1/4, Sec. 28, T10S, R37E  
 N 32° 25' 18.55" W 103° 09' 24.55"  
 Elevation: 3,951 feet amsl

Figure 3  
 Site Map  
 Legacy, L.P.  
 Rainer State #1

## **TABLES**

**TABLE 1**  
**Well Data**

**Legacy, L.P. - Rainer State #1**

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)
				No POD's Found												

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

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

<sup>B</sup> = In meters

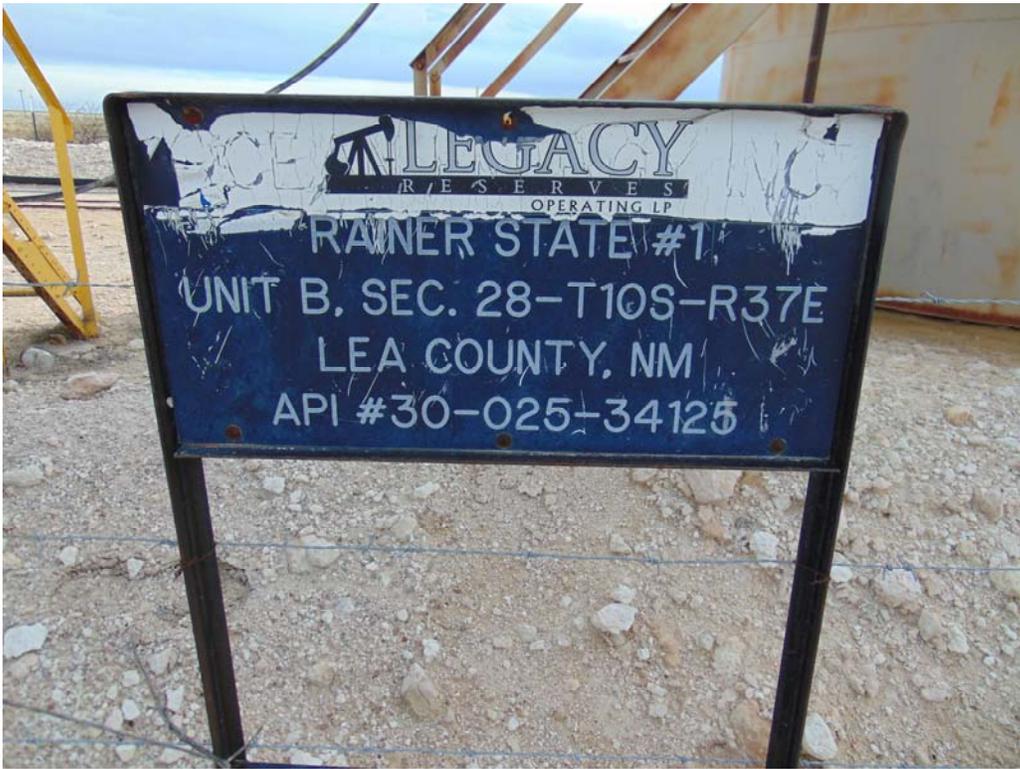
<sup>C</sup> = Elevation interpolated from satellite map based on referenced location.

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- Lease sign



Photograph #2- Release area



Photograph #3- Release area



Photograph #4- Release area



Photograph #5- Release area



Photograph #6- Release area

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

Information and Ranking		<b>Incident Date:</b> 1-20-17	<b>NMOCD Notified:</b> 1-20-17
		<b>Assigned Site Reference #:</b>	
<b>Site:</b> Rainer State #1			
<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> 287 bbls		<b>Recovered (bbls):</b> 260 bbls	
>25 bbls: Notify NMOCD verbally within 24 hrs and submit form C-141 within 15 days. (Also applies to unauthorized releases >500 mcf Natural Gas)			
5-25 bbls: Submit form C-141 within 15 days (Also applies to unauthorized releases of 50-500 mcf Natural Gas)			
<b>Leak, Spill, or Pit (LSP) Name:</b> Rainer State #1			
<b>Source of contamination:</b> Heater			
<b>Land Owner, i.e., BLM, ST, Fee, Other:</b> State			
<b>LSP Dimensions:</b>			
<b>LSP Area:</b> ~ 13,700 sq. ft.			
<b>Location of Reference Point (RP):</b>			
<b>Location distance and direction from RP:</b>			
<b>Latitude:</b> N 33° 25' 15.55"			
<b>Longitude:</b> W 103° 09' 24.55"			
<b>Elevation above mean sea level:</b> 3,951 feet			
<b>Feet from Section Line:</b>			
<b>Feet from Section Line:</b>			
<b>Location- Unit or ¼/¼:</b> NW¼ of the NE¼		<b>Unit Letter:</b> B	
<b>Location- Section:</b> 28			
<b>Location- Township:</b> T10S			
<b>Location- Range:</b> R37E			
<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> ~ 115'			
<b>Depth of contamination (DC):</b> unknown			
<b>Depth to ground water (DG – DC = DtGW):</b> ~ 115'			
<b>1. Ground Water</b>		<b>2. Wellhead Protection Area</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>	
If Depth to GW 50 to 99 feet: <i>10 points</i>		If >1000' from water source, or; >200' from private domestic water source: <i>0 points</i>	
If Depth to GW >100 feet: <i>0 points</i>			
		<b>3. Distance to Surface Water Body</b>	
		<200 horizontal feet: <i>20 points</i>	
		200-100 horizontal feet: <i>10 points</i>	
		>1000 horizontal feet: <i>0 points</i>	
<i>Site Rank (1+2+3) = 0 + 0 + 0 = 0</i>			
<b>Total Site Ranking Score and Acceptable Concentrations</b>			
Parameter	>19	10-19	<b>0-9</b>
Benzene <sup>1</sup>	10 ppm	10 ppm	<b>10 ppm</b>
BTEX <sup>1</sup>	50 ppm	50 ppm	<b>50 ppm</b>
TPH	100 ppm	1,000 ppm	<b>5,000 ppm</b>
Chloride	250 ppm	500 ppm	<b>1,000 ppm</b>
<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: Rainer State #1	Facility Type: Battery
Surface Owner: State	Mineral Owner:
API No. 30-025-34125	

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
B	28	10S	37E					Lea

Latitude: N 33.421819° Longitude: W 103.156819°

**NATURE OF RELEASE**

Type of Release: oil and water	Volume of Release: ~287 bbls	Volume Recovered: 260 bbls
Source of Release: heater failed	Date and Hour of Occurrence: 1-20-17 @ pm	Date and Hour of Discovery: 1-20-17 @ pm
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Mark Whitaker	
By Whom? EPI	Date and Hour: 1-20-17	
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		

**RECEIVED**  
By Olivia Yu at 7:41 am, Feb 06, 2017

Describe Cause of Problem and Remedial Action Taken.\*  
Release occurred when a heater failed. Approximately 287 bbls of oil and water were released and approximately 260 bbls were recovered.

Describe Area Affected and Cleanup Action Taken.\*  
The spill impacted approximately 13,700 sq. ft. of caliche tank battery pad and pasture. 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: <i>Manuel Soriano</i>	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Manuel Soriano	Approved by Environmental Specialist: <i>[Signature]</i>	
Title: Production Foreman	Approval Date:	Expiration Date:
E-mail Address: jsoriano@legacyp.com	Conditions of Approval: <b>see attached directive</b>	Attached <input checked="" type="checkbox"/>
Date: 1-24-2017	Phone: 432-269-8806	

\* Attach Additional Sheets If Necessary

1RP-4575

nOY1703727487

pOY1703727861

Operator/Responsible Party,

The OCD has received the form C-141 you provided on 01/20/2017 regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number 1R-4575 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 03/06/2017. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.**

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

- Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C<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