27 May 2015

Mr. Mike Bratcher Environmental Specialist NMOCD 811 S. First St. Artesia, New Mexico 88210

Re: Initial C-141
Vanguard
Water Disposal Line
UL-P, Section 12, Township 20 South, Range 29 East
Eddy County, New Mexico

Mr. Bratcher:

Environmental Plus, Inc. (EPI), on behalf of Mr. JT Terry, Vanguard, submits the attached form C-141 for the above-referenced leak site, located on land owned by the State of New Mexico and administered by the BLM.

The site is located approximately 16 miles northeast of Carlsbad, 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. A total of seven (7) wells are located in the area surrounding the release site (reference *Table 1*). No wells (domestic, agriculture or public) and no bodies of surface water exist within a 1,000-foot radius of the release site (reference *Figure 2*). Groundwater data indicated the average water depth is approximately 40 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 polyline failed due to traffic on the lease road. Approximately 10 bbls of water were released with 5 bbls picked up by vacuum truck (reference *Figure 3* and attached photographs). Based on available information, it was projected distance between impacted soil and groundwater is approximately 40 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	
ТРН	100 parts per million	
Chloride	250 parts per million	



Should you have any questions or concerns please feel free to contact me at (575) 394-3481 or via email at ddominguezepi@gmail.com or Mr. JT Terry at (432) 362-2209 or via e-mail at jterry@vnrllc.com. All official communication should be addressed to:

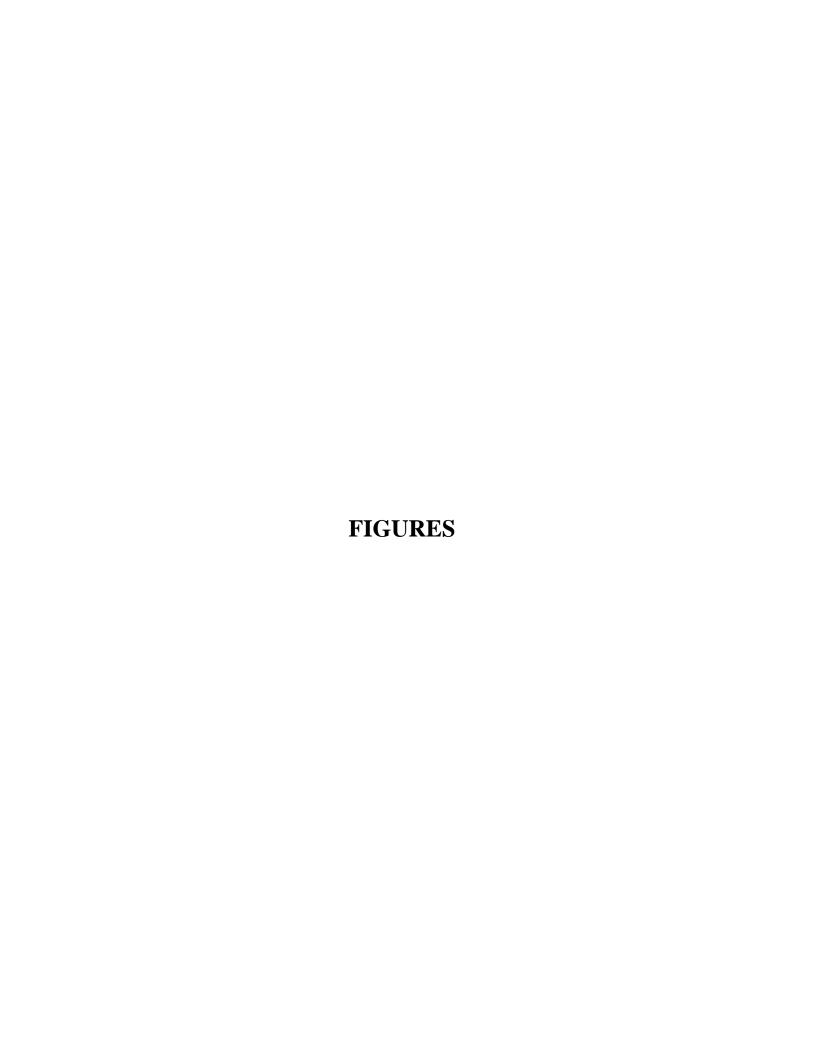
Mr. JT Terry Vanguard 4001 Penbrook, Suite 201 Odessa, Texas 79762

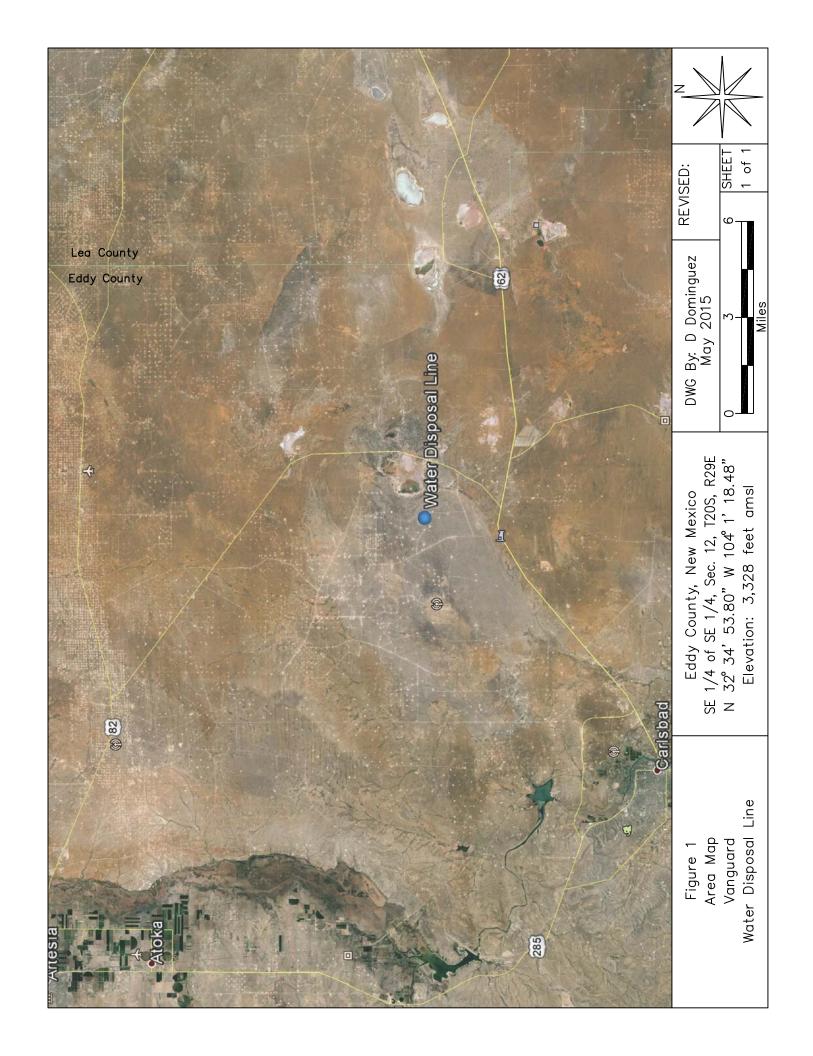
Sincerely,

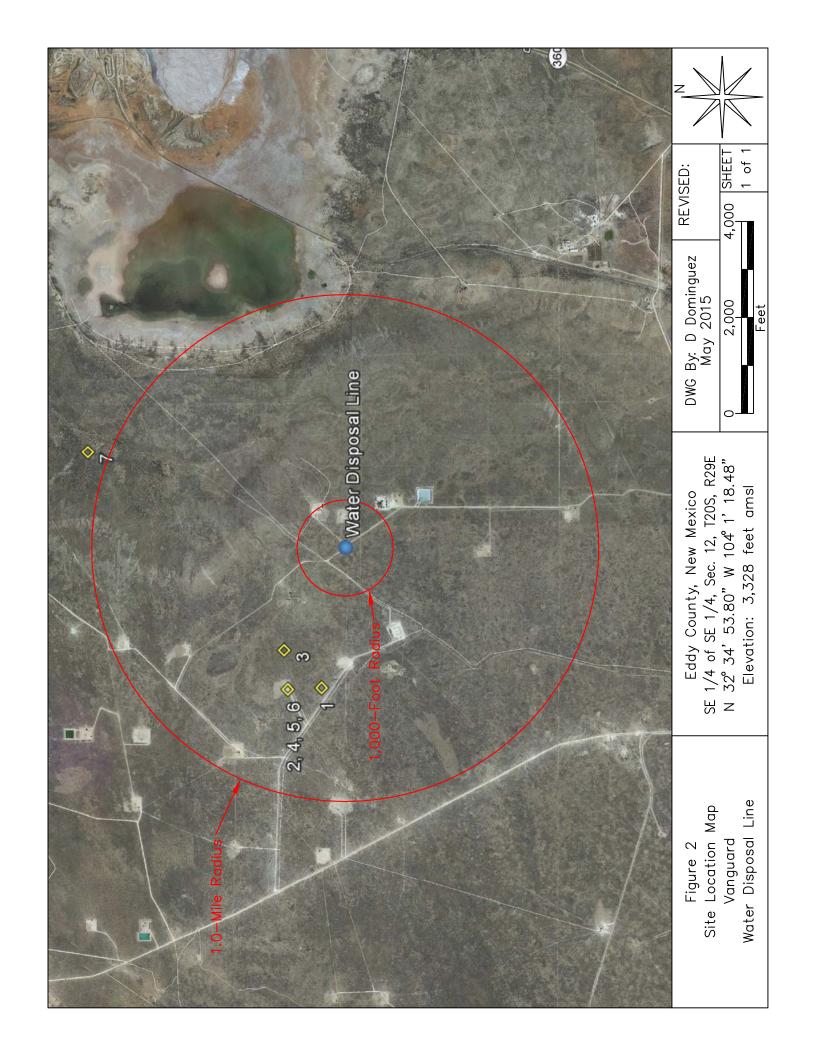
ENVIRONMENTAL PLUS, INC.

Daniel Dominguez Environmental Consultant

cc: JT Terry, Production Foreman - Vanguard Jim Amos, Environmental Protection Specialist - BLM File







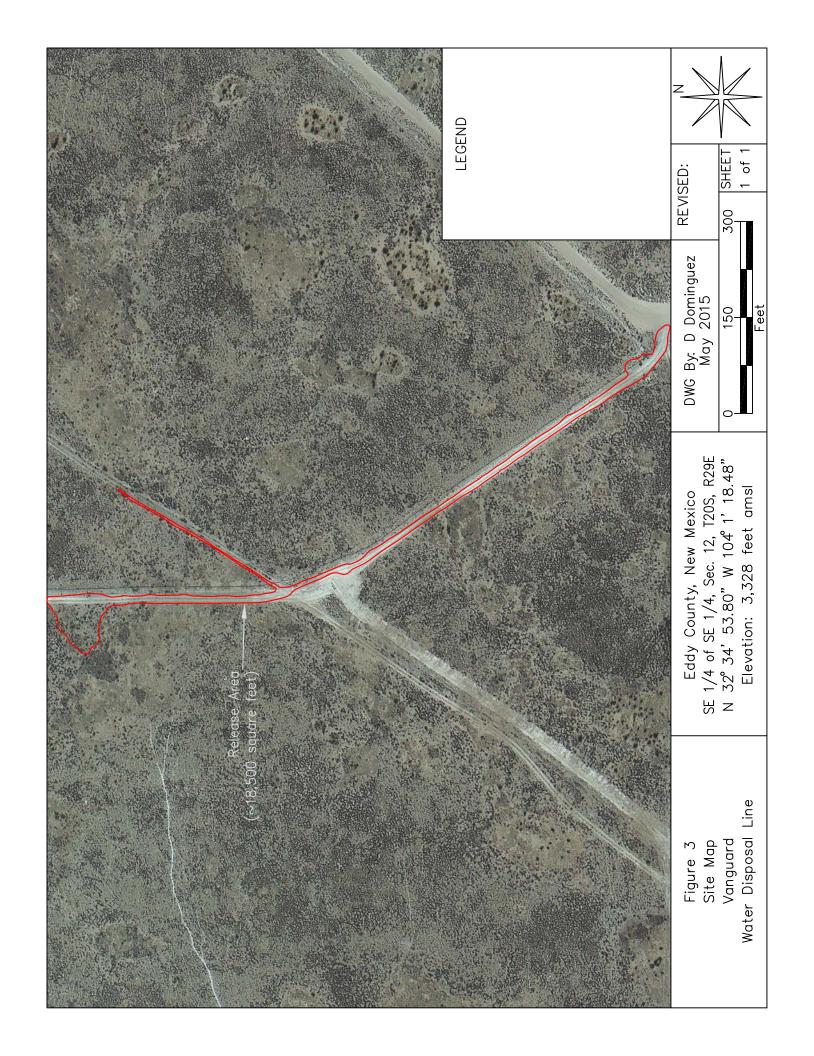




TABLE 1

Well Data

Vanguard - Water Disposal Line

Ref#	Well Number	Use	Use Diversion ^A	Owner	q64	q16	d4	Sec	Twsp	Rng	Easting	q64 q16 q4 Sec Twsp Rng Easting Northing	Date Measured	Date Surface Measured Elevation ^B	Depth to Water
															(ft bgs)
1	CP 00740	PRO	3	YATES PETROLEUM CORP.	7	3	3	12	3 12 20S 29E	29E	699065	3605509	590669 3605509 19-Feb-89	3,329	1
2	CP 00745	PRO	0	YATES PETROLEUM	4	1	3 12		20S	29E	590653	3605782	68-ce-86	3,329	ł
3	CP 00832	STd	3	SNYDER RANCHES		2	3	12	3 12 20S 29E	29E	590971	3605815	1	3,328	1
4	CP 01111	PRO	0	CONCHO OIL AND GAS	4	1	3	12	20S	29E	590653	3605782	68-pec-86	3,329	-
5	CP 01112	PRO	0	CONCHO OIL & GAS	4	1	3 12	12	20S 29E	29E	590653	3605782	68-29Q-60	3,329	-
9	CP 01113	PRO	0	BUREAU OF LAND MANAGEMENT	4	1	3	12	3 12 20S 29E	29E	590653	3605782	590653 3605782 09-Dec-89	3,329	1
7	CP 00834	PLS	3	SNYDER RANCHES		2		9	3 6 20S 30E	30E	592566	3607436		3,225	:

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

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

 $^{^{\}mathrm{B}}=\mathrm{Elevation}$ interpolated from USGS topographical map based on referenced location. A = In acre feet per annum



ATTACHMENT I PHOTOGRAPHS



Photograph #1- Northwest view over release area.



Photograph #2- Northerly view over release area.



Photograph #3- Looking north across release area.



Photograph #4- Looking north across release area.

ATTACHMENT II INFORMATION AND RANKING INITIAL C-141

Incident Date: Unknown

NMOCD Notified:

Information and Ranking

Site: Water Disposal Line **Assigned Site Reference #:**

Company: Vanguard

Street Address:

Mailing Address: 4001 Penbrook Suite 201 City, State, Zip: Odessa, Texas 79762

Representative: JT Terry

Representative Telephone: (432) 362 – 2209

Telephone:

Fluid volume released (bbls): 10 bbls **Recovered (bbls):** 5 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)

Leak, Spill, or Pit (LSP) Name: Water Disposal Line

Source of contamination: Polyline

Land Owner, i.e., BLM, ST, Fee, Other: BLM

LSP Dimensions:

LSP Area: ~ 18,500 sq. ft.

Location of Reference Point (RP):

Location distance and direction from RP:

Latitude: N 32° 34′ 53.80″ **Longitude:** W 104° 1' 18.48"

Elevation above mean sea level: 3,328 feet

Feet from Section Line: Feet from Section Line:

Location- Unit or 1/41/4: SE1/4 of the SE1/4 **Unit Letter:** P

Location- Section: 12 Location- Township: T20S Location- Range: R29E

Surface water body within 1000 ' radius of site: none

Domestic water wells within 1000' radius of site: none

Agricultural water wells within 1000' radius of site: none

Public water supply wells within 1000' radius of site: none

Depth from land surface to ground water (DG): $\sim 40^{\circ}$

Depth of contamination (DC): unknown

Depth to ground water (DG – DC = DtGW): $\sim 40^{\circ}$

1. Ground Water	2. Wellhead Protection Area	3. Distance to Surface Water Body
If Depth to GW <50 feet: 20 points	If <1000' from water source, or;<200' from	<200 horizontal feet: 20 points
If Depth to GW 50 to 99 feet: 10 points	private domestic water source: 20 points	200-100 horizontal feet: 10 points
If Depth to GW >100 feet: 0 points	If >1000' from water source, or; >200' from private domestic water source: 0 points	>1000 horizontal feet: 0 points

Site Rank (1+2+3) = 20 + 0 + 0 = 20

	Total Site Ranking Score and Acceptable Concentrations					
Parameter	>19	10-19	0-9			
Benzene ¹	10 ppm	10 ppm	10 ppm			
BTEX ¹	50 ppm	50 ppm	50 ppm			
TPH	100 ppm	1,000 ppm	5,000 ppm			
Chloride	250 ppm	500 ppm	1,000 ppm			

¹100 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

Form C-141 Revised August 8, 2011

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit I Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Attached

Release Notification and Corrective Action OPERATOR Initial Report Final Report Contact: JT Terry

Name of Company: Vanguard Address: 4001 Penbrook, Suite 201, Odessa, Texas 79762 Telephone No. 432-362-2209 Facility Name: Water Disposal Line Facility Type: polyline Surface Owner: Federal Mineral Owner: Federal API No. LOCATION OF RELEASE Unit Letter Section Township Range Feet from the North/South Line Feet from the East/West Line County P 12 **20S** 29E Eddy Latitude: N 32.581612° Longitude: W 104.021801° NATURE OF RELEASE Type of Release: produced water Volume of Release: 10 bbls Volume Recovered: 5 bbls Source of Release: disposal line Date and Hour of Occurrence: Date and Hour of Discovery: unknown unknown Was Immediate Notice Given? If YES, To Whom? ☐ Yes ☐ Not Required By Whom? Date and Hour: Was a Watercourse Reached? If YES, Volume Impacting the Watercourse: ☐ Yes ☒ No Not Applicable If a Watercourse was Impacted, Describe Fully.* Not Applicable Describe Cause of Problem and Remedial Action Taken.* The poly disposal line failed due to vehicle traffic. The line was repaired and moved. Describe Area Affected and Cleanup Action Taken.* The spill impacted approximately 18,500 sq. ft. of lease road. A vacuum truck was brought in and picked up approximately 5 bbls of water. The area will be remediated in accordance to the NMOCD and BLM guidelines for spill remediation. 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. OIL CONSERVATION DIVISION Signature: Approved by Environmental Specialist: Printed Name: JT Terry Title: Production Foreman Approval Date: **Expiration Date:** E-mail Address: jterry@vnrllc.com Conditions of Approval:

Phone: 432-362-2209

Date:

^{*} Attach Additional Sheets If Necessary