Rice Environmental Consulting & Safety

P.O. Box 2948, Hobbs, NM 88241 Phone 575.393.2967

February 4th, 2014

Ms. Jennifer E. Van Curen
Environmental Protection Specialist
BLM
320 E. Greene St.
Carlsbad, New Mexico 88220

RE: Updated Corrective Action Plan GP II Littlefield BO Federal #2 Battery (2RP-1738) UL/A sec. 34 T26S R29E API No. 30-015-24529

Ms. Van Curen:

GPII Energy (GPII) has retained Rice Environmental Consulting and Safety (RECS) to address potential environmental concerns at the above-referenced site.

Background and Previous Work

The site is located approximately 32.6 miles southeast of Carlsbad, New Mexico at UL/A sec. 34 T26S R29E. BLM records indicate that groundwater will likely be encountered at a depth of approximately 58 +/- feet.

On July 15th, 2013, GP II received a Letter of Violation from EMNRD for the Littlefield BO Federal #2 Battery (Appendix A). During a routine inspection, hydrocarbon staining was discovered at the well head, which extended out onto the well pad. In addition, the southwest corner of the bermed battery area had standing oil. GP II filed an initial C-141 for the site, which was approved by NMOCD on July 23rd, 2013 (Appendix B). The initial C-141 stated that the power switched off on the transfer pump and caused the water storage tank to overflow. A total of approximately 12 – 15 barrels of produced water and oil were released at the site and 8 – 10 barrels of this fluid was recovered.

RECS personnel were on site beginning on September 6th, 2013 to assess the site. The stained area on the pad was scraped down to a depth of 1 foot and a 5 point composite of the bottom of the scrape was taken to a commercial laboratory for analysis (Figure 1 and Appendix C). The 5 point composite returned a laboratory chloride reading of 848 mg/kg and Gasoline Range Organics (GRO), Diesel Range Organics (DRO) and BTEX readings of non-detect. Vertical installation was attempted within the bermed battery area but had to be abandoned once an unmarked PVC pipe was discovered. Two samples were taken prior to the vertical being abandoned. The 4 ft sample returned a field chloride result of 12,497 mg/kg and the 5 ft sample returned a field chloride result of 2,100 mg/kg.

A Corrective Action Plan was submitted to NMOCD and BLM on December 4th, 2013. As requested by BLM, an Addendum was submitted to NMOCD and BLM on the same

day. The Addendum stated that the southwest corner of the bermed battery still needed to be delineated. Another vertical would be installed in the southwest corner of the battery to a depth where laboratory chloride readings indicated a significant decline. Once this had been achieved, the highest impacted soil, to a depth of 2-3 ft bgs, would be excavated and sent to a NMOCD approved facility. The excavation would be backfilled with clean, imported soil and a 40 mil reinforced poly liner would be installed over the surface of the area. BLM approved the Addendum on December 4th, 2013.

On December 26th, 2013, the previous vertical was extended to the north and with some effort, RECS was able to break through the rock and get samples at a depth of 5.5 ft and 6 ft (Figure 1). Both these samples were taken to a commercial laboratory and returned chloride values below 1,000 mg/kg (Appendix D). Another vertical was installed to the northeast and determined that rock was located there as well. This data was sent to BLM and NMOCD on January 15th, 2014. BLM replied to this data by requesting a site visit with RECS and NMOCD on January 22nd, 2014.

Update Corrective Action Plan

Based on the meeting with BLM and NMOCD on January 22nd, 2014, BLM and NMOCD requested that following items be addressed by GPII (Figure 2):

- 1. The pump jack is leaking and needs to be repaired.
- 2. The area around the pump jack needs to be scraped down to 1 ft bgs and replaced with clean, imported soil.
- 3. The scrape south of the pump jack needs to be extended south to the edge of the vegetation and erosion controls needs to be installed at the edge of the vegetation.
- 4. The east side of the pad needs to be reclaimed. The large rocks should be removed and the site seeded with a 3:4 mix.
- 5. There is a large hole to the northeast of the site. If the hole has been sampled, that data needs to go to BLM and NMOCD to prove the hole is clean. If not, the hole needs to be sampled and the laboratory data sent to BLM and NMOCD. The trash and debris need to be removed from the hole. If the hole is proved clean, the large rocks from the east side of the pad can be used to help backfill the hole. The hole needs to be backfilled then seeded with a 3:4 mix.
- 6. The old pit north of the site is beginning to be uncovered. Clean soil needs to be placed over the former pit so that the liner is not visible. A ravine needs to be cut into the imported soil to allow water to drain off the pit area and around the battery (not through the battery).
- 7. The short, tan tank seems to be leaking. BLM requests a tank integrity test and then the tank needs to be repaired or replaced. If it is replaced, the soil under the tank needs to be remediated per BLM/NMOCD guidelines.
- 8. The stock tank in the battery must be eliminated.
- 9. The area west and south of the tanks must be reclaimed.

- a. All leaking pipes and the pump must be repaired to eliminate the leaks. All unnecessary equipment needs to be removed.
- b. The area west of the tanks will be excavated to the depth of the rock.
- c. The excavated area will be padded with 6 inches of clean, imported soil to prevent liner punctures.
- d. A 40-mil reinforced poly liner will be installed over the padding, under the new berms and south of the tanks.
- e. The west excavation will be backfilled with caliche to 1 ft bgs, then 1 ft of topsoil over the caliche. The area south of the tanks needs to be backfilled with caliche to the surface.
- f. The reclaimed areas need to be seeded with a 3:4 seed mix.
- 10. There is a wooden junction box on the southwest corner of the site that is leaking. If the box belongs to GP II, it needs to be fixed and soil around it remediated.

Once these activities have been completed, a Termination Request will be sent to BLM and NMOCD requesting site closure.

RECS appreciates the opportunity to work with you on this project. Please call Hack Conder at (575) 393-2967 or me if you have any questions or wish to discuss the site.

Sincerely,

Lara Weinheimer Project Scientist

RECS

(575) 441-0431

Attachments:

Figure 1 – Excavation Map

Figure 2 – Corrective Actions

Appendix A – Letter of Violation

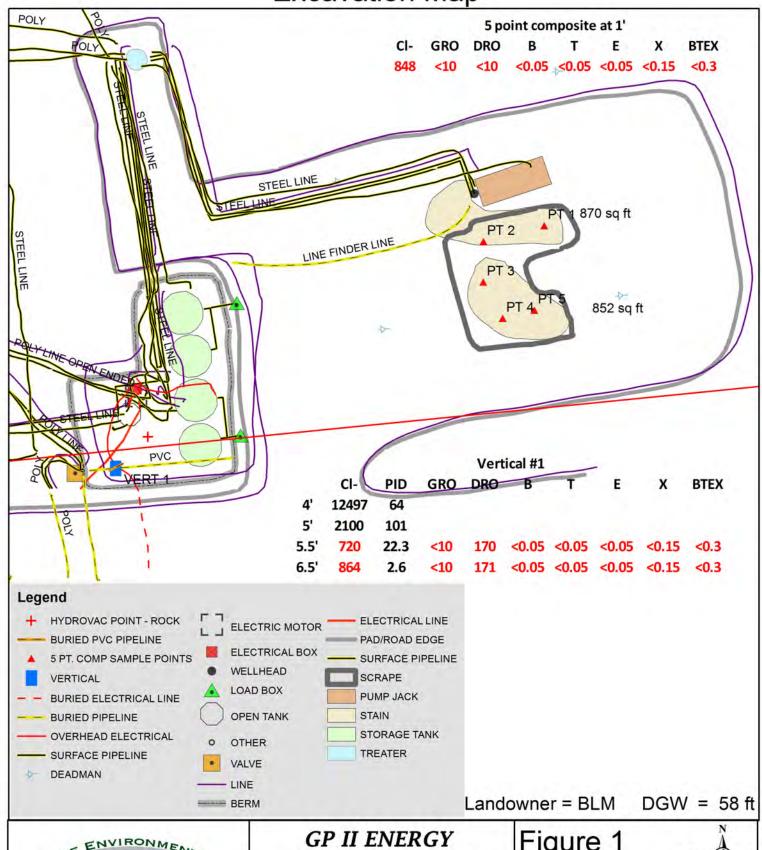
Appendix B – Initial C-141

Appendix C – 5 Point Composite Lab

Appendix D – Vertical Sampling Lab

Figures

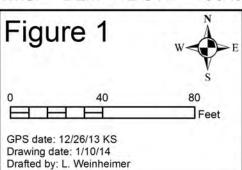
Excavation Map



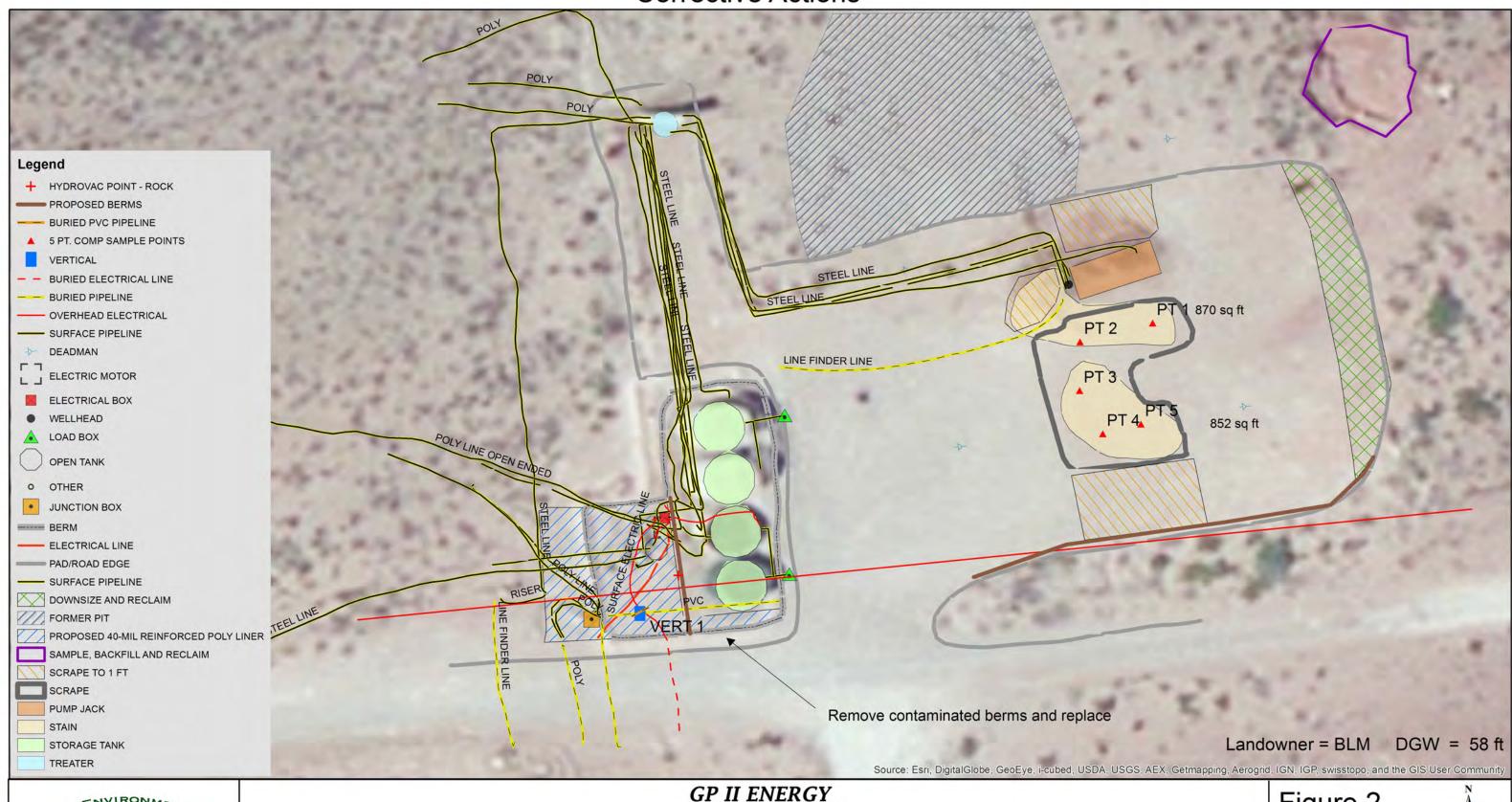


GP II ENERGY LITTLEFIELD BO FEDERAL #2 BATTERY (2RP-1738)

LEGALS: UL/A Sec. 34 T26S - R29E EDDY COUNTY, NM



Corrective Actions

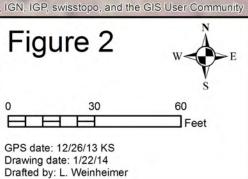




GP II ENERGY LITTLEFIELD BO FEDERAL #2 BATTERY

(2RP-1738)

LEGALS: UL/A Sec. 34 T26S - R29E EDDY COUNTY, NM



Appendix A Letter of Violation

State of New Mexico Energy, Minerals and Natural Resources Department

Susana Martinez

Governor

David Martin

Cabinet Secretary-Designate

Brett F. Woods, Ph.D. **Deputy Cabinet Secretary** Jami Bailey, Division Director Oil Conservation Division



Response Required - Deadline Enclosed

Field Inspection Program "Preserving the Integrity of Our Environment"

15-Jul-13

GP II ENERGY INC 113 CORPORATE DRIVE MIDLAND TX 79705

LETTER OF VIOLATION - Inspection

Dear Operator:

The following inspection(s) indicate that the well, equipment, location or operational status of the well(s) failed to meet standards of the New Mexico Oil Conservation Division as described in the detail section below. To comply with standards imposed by Rules and Regulations of the Division, corrective action must be taken immediately and the situation brought into compliance. The detail section indicates preliminary findings and/or probable nature of the violation. This determination is based on an inspection of your well or facility by an inspector employed by the Oil Conservation Division on the date(s) indicated.

Please notify the proper district office of the Division, in writing, of the date corrective actions are scheduled to be made so that arrangements can be made to reinspect the well and/or facility.

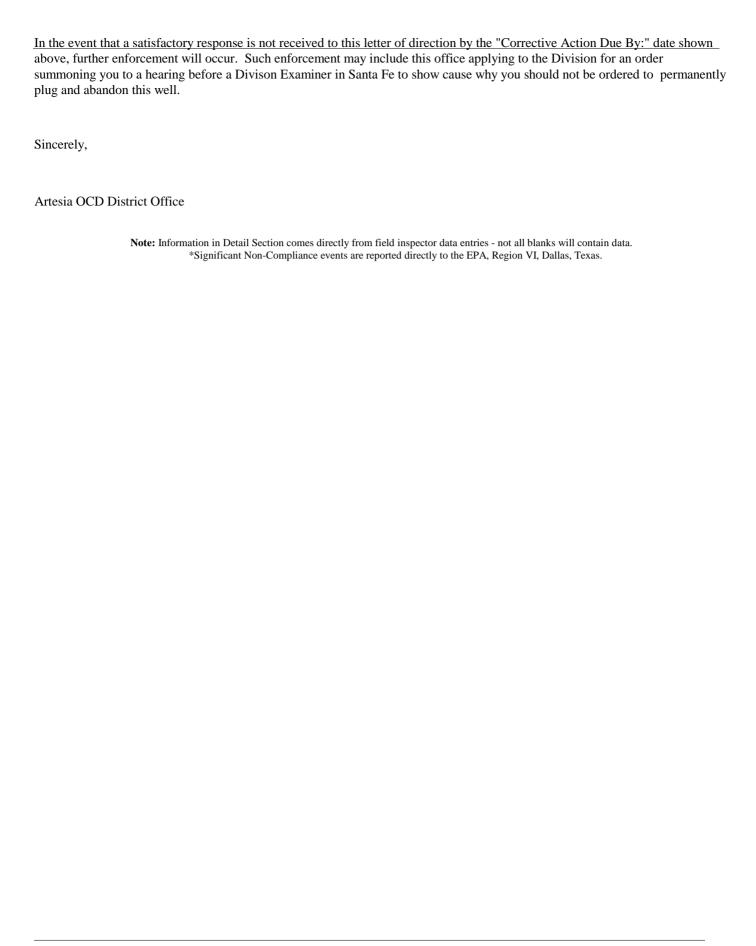
INSPECTION DETAIL SECTION

LITTLEFIE	ELD BO FEDERAL No.002			A-34-26S-29E	30-015-24529-00-0	00
Inspection Date	Type Inspection	Inspector	Violation?	*Significant Non-Compliance?	Corrective Action Due By:	Inspection No.
07/11/2013	Routine/Periodic	Mike Bratcher	Yes	No	8/11/2013	iMLB1319244223

Comments on Inspection:

During a routine inspection of this site, the following was observed: Hydrocarbon staining at well head, extending out on to well pad. Areas in the tank battery are heavily impacted with oil and produced water. There are two open top fiberglass storage tanks on the south end of battery. The north (tan) fiberglass tank appears to have been allowed to overflow on what appears to be more than one occasion. Bermed area on west side of these vessels has oil standing in sw corner. Impacted soils are present inside and outside the battery area on west side. OCD is requesting that GPII submit a Form C-141 to report the release/releases that have occurred at this facility. Well is in violation of NMAC 19.15.29. Standing oil and/or produced fluid is to be removed immediately. Highly conatminated soils are to be excavated and hauled to disposal or temporarily stored in a lined, bermed portion of the facility. All areas of contamination are to be delineated and a remediation proposal submitted to NMOCD and BLM for review. Delineation samples are to be tested for (at a minimum) GRO/DRO, BTEX, and chloride content. Additional sampling and testing will be required as project progresses. Standing fluid removal is to commence immediately. Highly contaminated/saturated soil excavation is to commence after notification and approval from NMOCD and BLM. NMOCD contact is Mike Bratcher (575-748-1283 Ext 108) Contact for BLM is Jim Amos (575-234-5909)

Oil Conservation Division * 811 S. First St. * Artesia, New Mexico 88210



Appendix B Initial C-141

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 <u>District IV</u> 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy Minerals and Natural Resources

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

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

Release Notification and Corrective Action

Form C-141

Revised August 8, 2011

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	ompany GP I		Inc.	8359			ris Richardson			
Address 113 Corporate Dr.						Telephone No. 432-967-8950				
Facility Name Littlefield Federal BO #2						Facility Type Tank Battery				
Surface Owner Federal Mineral Owner					Owner	r Federal API No. 30-015-24529				
				LOCA	ATIO	OF RE	LEASE	4		
Unit Letter B	Section To	ownship 26S	Range 29E	Feet from the 724	North/ Nor	South Line	Feet from the 660	East/West Lin East	County Eddy	
			Lat	itude 32 . O	033	_ Longitud	le-103.96	554		
				NAT	FURE	OF REL				
Type of Release Water/Oil						Volume of Release ~12-15 Bbls. Volume Recovered 8-10 Bbls.				
Source of Release Water Tank					Date and Hour of Occurrence Date and Hour of Discovery					
Was Immediate Notice Given?				6July2013 9:00 am 6July2013 9:30 am If YES, To Whom?						
			Yes 🔽	No Not R	equired	2 22.63	5.20.0			
By Whom?						Date and I-	lour			
	course Reached	1?				If YES, Volume Impacting the Watercourse.				
2			Yes 🛭	No						
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		A			as contac	eted Basin En	vironmental to ev	aluate and reme	diate contamination.	
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