1R - 427-04

REPORTS

DATE:

6-5-12

Rice Environmental Consulting & Safety
P.O. Box 5630 Hobbs, NM 88241
Phone 575.393.4411 Fax 575.393.0293

CERTIFIED MAIL
RETURN RECEIPT NO. 7007 2560 0000 4569 8173

June 5th, 2012

Mr. Edward Hansen
New Mexico Energy, Minerals, & Natural Resources
Oil Conservation Division, Environmental Bureau
1220 S. St. Francis Drive
Santa Fe, New Mexico 87505

RE: **Corrective Action Plan Report and Termination Request**
Rice Operating Company – EME SWD System
EME L-34 (1R427-04): UL/L sec. 34 T20S R36E

Mr. Hansen:

RICE Operating Company (ROC) has retained Rice Environmental Consulting and Safety (RECS) to address potential environmental concerns at the above-referenced site in the EME Salt Water Disposal (SWD) system. ROC is the service provider (agent) for the EME SWD System and has no ownership of any portion of the pipeline, well, or facility. The system is owned by a consortium of oil producers, System Parties, who provide all operating capital on a percentage ownership/usage basis.

Background and Previous Work

The site is located approximately 8 miles southwest of Monument, New Mexico at UL/L sec. 34 T20S R36E as shown on the Site Location Map (Figure 1). NM OSE records indicated that groundwater would likely be encountered at a depth of approximately +/- 122 feet. However, soil bore installation activities performed at the site showed that there was no groundwater located beneath the site.

In 2003, ROC initiated work on the former EME L-34 junction box. The site was delineated using a backhoe to form a 20 ft x 20 ft x 12 ft deep excavation and soil samples were screened at regular intervals for both hydrocarbons and chlorides. From the excavation, the four-wall composite, the bottom composite and the remediated backfill were taken to a commercial laboratory for analysis. Laboratory tests of the four wall composite showed a chloride reading of 1,770 mg/kg and non-detect for gasoline range organics (GRO), diesel range organics (DRO) and BTEX. The bottom composite showed a chloride laboratory reading of 1,860 mg/kg and non-detect for GRO, DRO and BTEX. The soil was blended on site and backfilled into the excavation to 4 ft bgs. At 4 ft bgs, a 20-mil poly liner was installed throughout the excavation and then the site was backfilled with the remaining remediated soil. Laboratory analysis of the remediated backfill showed a chloride reading of 744 mg/kg and non-detect for GRO, DRO and BTEX.

The area was contoured to the surrounding landscape, seeded and an identification plate was placed on the surface of the site to mark its location for future environmental considerations. NMOCD was notified of potential groundwater impact on August 14th, 2003 and a junction box disclosure report was submitted to NMOCD with all the 2003 junction box closures and disclosures.

ICP Investigative Results

As part of the Investigation and Characterization Plan (ICP) approved by NMOCD on November 17th, 2011, one soil bore was advanced through the former junction box site to a depth of 120 ft bgs on December 13th, 2011. RECS personnel field tested the soil at regular intervals to a depth of 70 ft bgs for chlorides and screened in the field with a photo-ionization detector for hydrocarbons. Representative samples from the bore were taken to a commercial laboratory for confirmation of chloride and hydrocarbon field numbers. Laboratory chloride numbers peaked at 15 ft bgs with a reading of 1,800 mg/kg and declined to 96 mg/kg at 70 ft bgs. GRO and DRO laboratory readings were non-detect throughout the bore. Even though the bore attained appropriate chloride levels at 70 ft bgs, the bore was advanced to 120 ft to determine depth to groundwater. Red bed clay was encountered at approximately 100 ft bgs which indicated the bottom of the aquifer. Since no groundwater was encountered, the bore was advanced to approximately 120 ft bgs and packed open for 48 hours to allow any possible groundwater to accumulate. On December 15th, 2011, Harrison & Cooper Drilling, Inc. were on site to gauge the bore for groundwater accumulation. They found no water in the bore.

An ICP Report and Corrective Action Plan (CAP) was submitted to NMOCD on January 13th, 2012 and approved on February 1st, 2012. In the report, RECS recommended that ROC re-seed the site to help bring it back to normal vegetative capacity. Vegetation would act as an evapo-transpiration barrier which will inhibit the downward movement of chlorides and hydrocarbons. Plants capture water through their roots and reduce the amount of water infiltrating below the root zone.

Corrective Action Plan Report

On April 20th, 2012, REC personnel were on site to seed the location. The site was seeded with a blend of native vegetation and the site was then watered to promote vegetative growth. A silt net fence was placed along the northeast end of the site to help maintain seed integrity. Documentation for these activities can be found in Appendix A. The site has an existing 20 ft x 20 ft poly liner installed at 4 ft bgs, which will impede migration of residual chlorides and hydrocarbons.

ROC has completed the corrective actions as approved by NMOCD in the CAP by seeding the site. Therefore, ROC requests 'remediation termination' status of the regulatory file.

RECS appreciates the opportunity to work with you on this project. Please call Hack Conder at (575) 393-9174 or me if you have any questions or wish to discuss the site.

Sincerely,

Lara Weinheimer
Project Scientist
RECS
(575) 441-0431

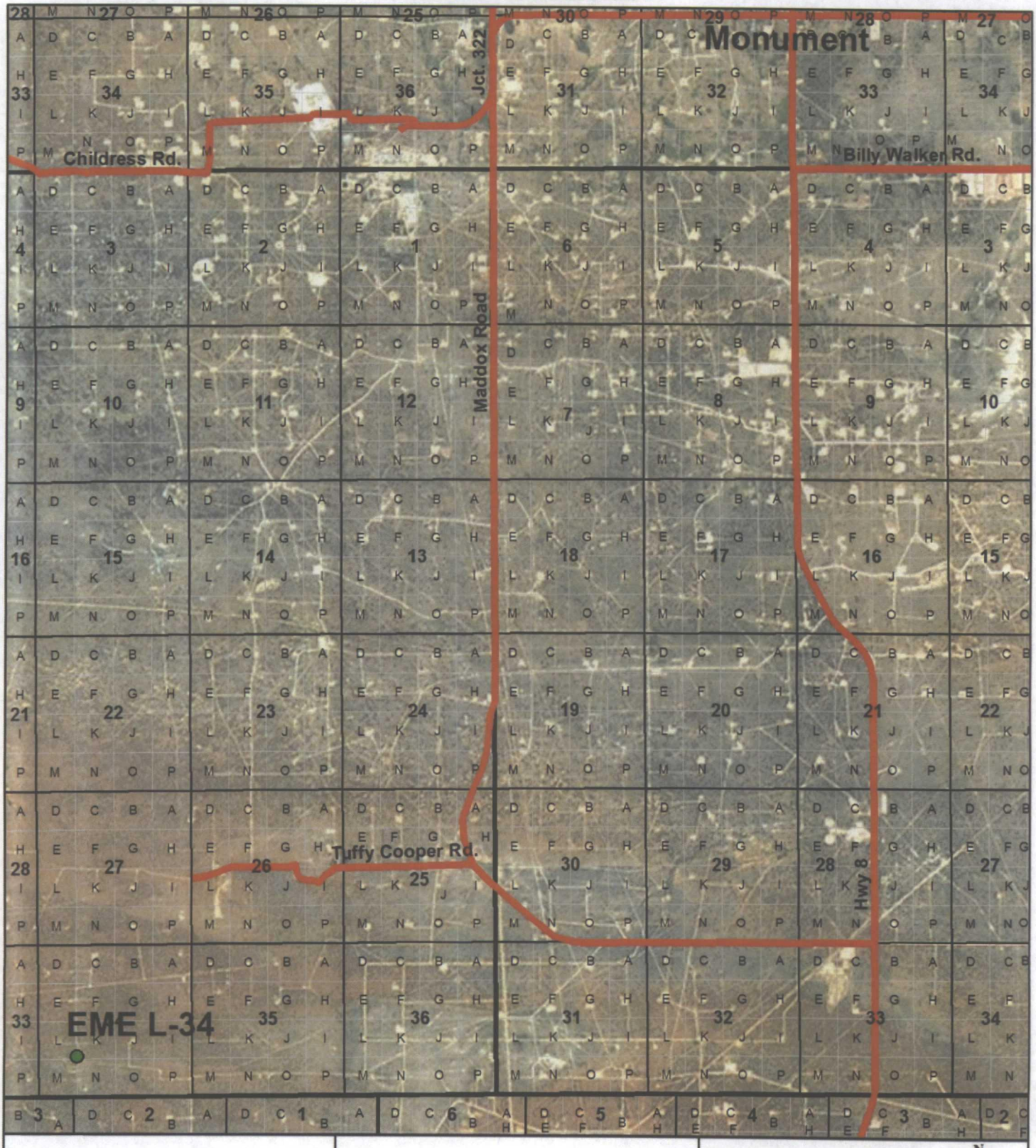
Attachments:

Figure 1 – Site Location Map
Appendix A – CAP Activities Documentation

Figures

RICE Environmental Consulting and Safety (RECS)
P.O. Box 5630 Hobbs, NM 88241
Phone 575.393.4411 Fax 575.393.0293

Site Location



RICE ENVIRONMENTAL RECS CONSULTING & SAFETY, LLC

EME L-34

LEGALS: UL/L sec. 34
T-20-S R-36-E

NMOCD Case #: 1R427-04

Figure 1

N W E S

0 0.25 0.5 1
Miles

Drawing date: 11/1/11
Drafted by: L. Weinheimer

Appendix A

CAP Activities Documentation

RICE Environmental Consulting and Safety (RECS)
P.O. Box 5630 Hobbs, NM 88241
Phone 575.393.4411 Fax 575.393.0293

112 West Taylor
Hobbs, NM 88240
Phone: (575) 393-9174
Fax: (575) 393-0293

REVEGETATION FORM

1. General Information

Site name: **EME L-34**						
U/L **L**	Section **34**	Township **20S**	Range **36E**	County **LEA**	Latitude **32° 31.569' N**	Longitude **103° 20.771' W**
Contact Name: **Zack Conder**						
Email: **zconder@rice-ecs.com**						
Site size: square feet			Map detail of site attached ☐			
Additional information:						

2. Soils **Do not rip caliche subsoils; caliche rocks brought to the surface by ripping shall be removed.*

Salvaged from site ☒	Bioremediated ☐	Imported ☐	Blended ☒	Depth (in)
Texture: **Sandy**	Describe soil & subsoil: **Blow sand and subsoil caliche**			
Soil prep methods:	Rip ☐ Depth(in):	Disc ☐ Depth (in):		Rollerpack ☐
Date completed: **6-3-2003**				

3. Bioremediation

Fertilizer ☐	Hay ☐	Other ☐
Type:		Describe:
Lbs/acre:		

4. Seeding **Attach seed bag tags to this form. Seed bag tags shall contain the site name and S-T-R.*

Custom seed mix ☒	Prescribed mix ☐	Seed mix name: **Lea County mix, Blue Grama, Race Horse Oats**	Seeding date: **4-20-2012**
Broadcast ☒ Method: **Broadcast by mechanical seeder**			
Soil conditions during seeding: Dry ☒	Damp ☐	Wet ☐	
Photos attached ☐ Number of photos:	Observations: **1 lb. Lea County mix, 1 lb. Blue Grama, 1 lb. Race Horse Oats**		

5. Certification I hereby certify that the information in this form and attachments is true and complete to the best of my knowledge and belief.

Name: **Edward Garcia**	Title: **Environmental Tech**	Date: **4-20-2012**
Signature: Edward Garcia		

EME L-34

Unit Letter L, Section 34, T20S, R36E

Seeding and tilling site, facing southwest 4/20/2012

Watering seeded site, facing northeast 4/20/2012

Installing silt net fence, facing west 4/20/2012

Site complete, facing north 4/20/2012