

# STAGE 2 REPORT

# Date 9-20-/0

RECEIVED OCD



2010 SEP 23 P 1: 34

CERTIFIED MAIL RETURN RECEIPT NO. 7010 0290 0003 1264 8997

September 20, 2010

Mr. Edward Hansen New Mexico Energy, Minerals, & Natural Resources Oil Conservation Division, Environmental Bureau 1220 S. St. Francis Drive Santa Fe, New Mexico 87504

## RE: Stage 2 Abatement Completion Report and Termination Request EME P-6 Line Leak (AP-45) T20S-R37E-Section 6, Unit Letter P Lea County, New Mexico

Mr. Hansen:

As agent for Rice Operating Company (ROC), Trident Environmental submits this report of the completed corrective actions which have been performed at the above-referenced site with a request for termination. This termination request includes documentation of the native vegetation which has been restored to full capacity (photographs in Attachment A), and the completion of chloride removal program. The activities described herein were performed in accordance with the *Amended Stage 2 Abatement Plan* which was approved by the NMOCD on January 7, 2009.

A recovery well (RW-1) was installed on March 2, 2009, and groundwater recovery activities were initiated at RW-1 on October 1, 2009. As of August 13, 2010, a total of 132,522 gallons (3,155 barrels) of groundwater has been recovered from the site. The most recent laboratory analytical results for the groundwater recovered from recovery well RW-1, with a chloride concentration of 5,500 mg/L, is attached (Attachment B). The groundwater recovered has resulted in the removal of at least 2,759 kg of chlorides. As stated in the NMOCD-approved *Amended Stage 2 Abatement Plan*, the goal of groundwater recovery was to remove 2,460 kg of chloride mass (2,200 bbls). Dismantling of the groundwater recovery system was completed on August 30, 2010. Since the system was located on the existing caliche pad, reseeding is not required. Photographic documentation of the recovery well completion activities and groundwater recovery system (installed and dismantled), and the most recent laboratory analytical report are included in Attachment B.

The following graph depicts the cumulative chloride mass removed at the site since recovery operations began in October 2009.



ROC has met all abatement requirements in accordance with 19.15.30 NMAC, and respectfully requests termination of the regulatory file for this site. Upon OCD approval, ROC will use a cement grout with 1% to 3% bentonite and a 3 foot cap of cement at the surface to plug the onsite groundwater monitoring wells (MW-1, MW-3, and MW-4) and one recovery well (RW-1). Up-gradient monitoring well (MW-2) will continue to be periodically sampled to monitor regional groundwater impacts. ROC is the service provider (agent) for the EME SWD System and has no ownership of any portion of pipeline, well, or facility. The EME SWD System is owned by a consortium of oil producers, System Parties, who provide all operating capital on a percentage ownership/usage basis.

Thank you for your consideration concerning this request for site termination. If you have any questions, please contact Hack Conder at (575) 393-9174.

Sincerely

Gilbert J. Van Deventer, PG, REM Trident Environmental



cc: Hack Conder (ROC)

## ATTACHMENT A

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Photographic Documentation of Restored Vegetation



## ATTACHMENT B

GROUNDWATER RECOVERY SYSTEM (RW-1)

- > RW-1: Well Construction Diagram
- Photographic documentation
- > Laboratory Analytical Report (August 2, 2010)





Removing the bermed area (facing east.)

Groundwater recovery system removed (facing north)

## CARDINAL

August 05, 2010

Hack Conder Rice Operating Company 112 W. Taylor Hobbs, NM 88240

RE: EME P-6

Enclosed are the results of analyses for samples received by the laboratory on 08/03/10 8:10.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method SW-846 8260	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method TX 1005	Total Petroleum Hydorcarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Kune

Celey D. Keene Lab Director/Quality Manager





## Analytical Results For:

Rice Operating Company Hack Conder 112 W. Taylor Hobbs NM, 88240 Fax To: (575) 397-1471

Received:	08/03/2010	Sampling Date:	08/02/2010
Reported:	08/05/2010	Sampling Type:	Water
Project Name:	EME P-6	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	EME P-6		

## Sample ID: WATER FROM RW-1 (H020524-01)

Chloride, SM4500CI-B	mg	/L	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5500	4.00	08/03/2010	ND	108	108	100	0.00	

## **Cardinal Laboratories**

## \*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any daim arising, whether based in contract or tort, shall be limited to the amount paid by dient for analyses. All claims, including those for negligence and any other cause whitsoever shall be deemed walved unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential demages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subcliaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such whether successions are otherwise. Results relate only to the sample's identified above. This reproduced except in full with written approval of Cardinal Laboratives.

Celux D.H Sune

Celey D. Keene, Lab Director/Quality Manager



## **Notes and Definitions**

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500CI-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

## **Cardinal Laboratories**

\*=Accredited Analyte

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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