

1R - 425-26

**GENERAL
CORRESPONDENCE**

YEAR(S):

2007



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Date: Fri, 4 May 2007 08:12:45 -0700 (PDT)

2007 MAY 7 PM 12:03

From: "L. Peter Galusky, Jr. P.E." <lpg@texerra.com>

Subject: Rice Operating Co - Vacuum State P EOL (name change from Vacuum Mobil P EOL)

To: "Edward J. Hansen" <edwardj.hansen@state.nm.us>

CC: "Kristin Pope" <kpope@riceswd.com>, "Carolyn Haynes" <chaynes@riceswd.com>

1R 425 - 26

Edward,

Per my recent e-mail, please find attached the revised Investigation and Characterization Plan for the above referenced project, where we wish to change the project name from "Mobil P EOL" to "State P EOL". (Please note that there were no other changes made to the Plan from the previous version).

I will follow this with a hard copy in the mail.

Thank you greatly.

Sincerely,

Pete G.

Attachments

Files:

Vac_State1_P_EOL_ICP_05_04_07_lpg.pdf (3.1MB)

L. Peter Galusky, Jr. Ph.D., P.G.

Texerra

May 4th, 2007

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: Investigation and Characterization Plan
Rice Operating Company – Vacuum SWD
State P EOL T 17S R 35E Section 26 Unit A**

Sent via E-mail and U.S. Certified Mail w/ Return Receipt 7006 0100 0001 2438 3838

Dear Mr. Hansen:

RICE Operating Company (ROC) has retained L. Peter Galusky, Jr. Ph.D. to address potential environmental concerns at the above-referenced site. ROC is the service provider (agent) for the Vacuum 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 Partners, who provide all operating capital on a percentage ownership/usage basis. Environmental projects of this magnitude require System Partner AFE approval, and work begins as funds are received. In general, project funding is not forthcoming until NMOCD approves the work plan. Therefore, your timely review of this submission would be greatly appreciated.

For all such environmental projects, ROC will choose a path forward that:

- protects public health,
- provides the greatest net environmental benefit,
- complies with NMOCD Rules, and
- is supported by good science.

Each site shall generally have three submissions, as described below:

1. An Investigation and Characterization Plan (ICP) is proposed for data gathering and site characterization and assessment.
2. Upon evaluating the data and results from the ICP, a recommended remedy will be submitted in a Corrective Action Plan (CAP) if this is warranted.
3. Finally, after implementing the remedy, a Closure Report with final documentation will be submitted.

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Background and Previous Work

The site is located approximately one mile north/northeast of the intersection of Lea County Roads 50 and 53, approximately 4 miles east of Buckeye (Figure 1). The topography is gently sloping toward the southeast. Soils on the site are mapped (as KO) in the Lea County Soil Survey as belonging to the Kimbrough gravelly loam soil series. These are characterized by gravelly loam to a depth of approximately 6 inches, and this is underlain by several feet of calcium indurated caliche. Groundwater is estimated to occur at a depth of approximately 55+/- feet, occurring in unconsolidated Tertiary alluvium of the Ogallala Formation .

As part of the abandonment and closure of the Vacuum SWD system, Rice Operating Company (ROC) investigated soils beneath the former wood junction box at the Mobil P EOL location; (See Appendix A: Rice Junction Box Disclosure Report). Beginning on August 2nd, 2005, the wood junction box was removed and soils were sampled using a trackhoe, creating a 30 by 20 by 12 ft deep excavation. Potential organic contaminants were ruled out, based upon low (< 10 ppm) PID readings throughout the sampled area and depth. However, chloride concentrations increased with depth from 290 ppm at the surface to 2189 ppm at 12 ft. The excavated soil was blended on site and then returned to the hole up to 6 ft below ground surface, where a one foot thick clay barrier was installed. The remaining fill was then placed on top of the clay. Some additional, clean fill was imported to provide enough material to fill the excavation to the ground surface (allowing some overage for settling). The disturbed surface was seeded with a native vegetation mix on April 24th, 2006. A photographic chronology of these activities is provided in Appendix B. OCD was notified that this site has potential for groundwater impacts.

The surface (ecological) impact of this release was relatively small. However, as the potential for groundwater contamination exists, further evaluation is warranted for chlorides, the constituent of concern. Therefore, ROC proposes additional investigative work, as outlined in the Investigation and Characterization Plan (ICP) below, to more definitively evaluate the extent of contamination caused by the release, and to then evaluate the potential for groundwater degradation. Yet, it should be noted that the source of this impact is historical. There is no longer a threat of continued, compounded impact at this site as the former junction box has been removed and the Vacuum SWD system closed.

Proposed Work Elements

1. Summarize information and data collected by ROC to date.
2. Summarize additional, publicly available regional and local hydrological information.
3. Complete vertical and lateral delineation of soil chloride concentrations, and prepare graphics to illustrate the horizontal and vertical extent of contamination.

Texerra

4. If warranted, install monitor wells sufficient to determine up-gradient, zone-of-release and down-gradient groundwater chloride concentrations. [All monitoring wells will be constructed (with the annular space sealed with a cement/bentonite mix) per NM Dept. Environment standards].
5. Evaluate the risk of groundwater impact in light of the information obtained.

If the evaluation demonstrates that residual constituents pose no threat to ground water quality, then only a surface restoration plan will be proposed to OCD. If, as a result of this work, it is believed that this produced water leak does pose a present or future risk of impacting groundwater quality, then a corrective action plan (CAP) will be developed and proposed to OCD.

I appreciate the opportunity to work with you and your staff on this project. Please call either myself, at the number below, or Kristin Farris Pope (ROC) at 505-393-9174, if you have any questions or wish to discuss these matters.

Thank you for your consideration.

Sincerely,



L. Peter (**Pete**) Galusky, Jr. Ph.D., P.G.
Principal

Texerra

505 N. Big Spring, Suite 404
Midland, Texas 70701
Tel: 432-634-9257
E-mail: lpg@texerra.com
Web site: www.texerra.com

cc: CDH, KFP, file
Attachments: site location map

Texerra

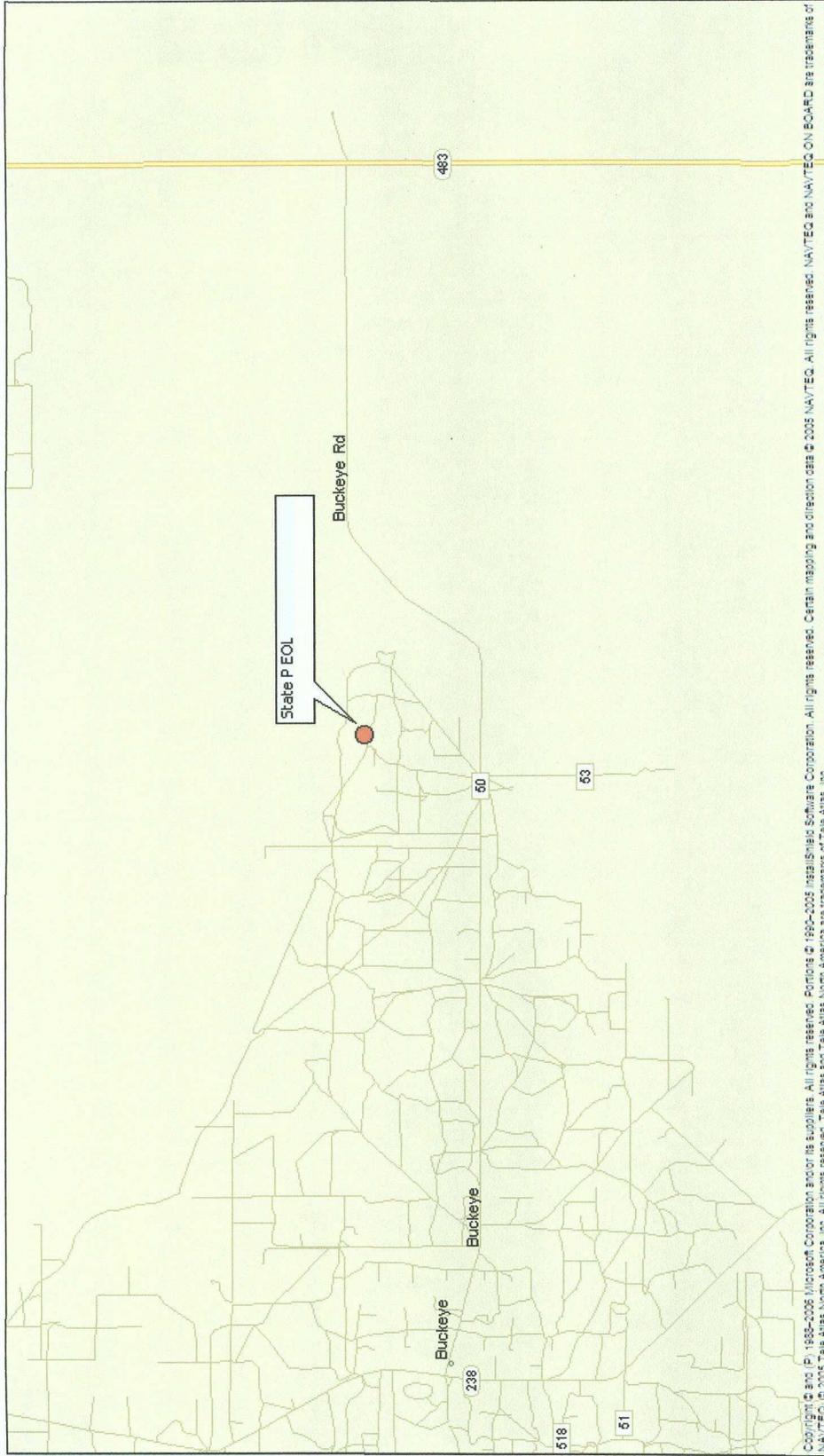


Figure 1 – Site Location Map. Scale: 1 inch = approx. 1 mile. North is “up”.

Mobil P EOL

Appendix A – Junction Box Disclosure Report

**RICE OPERATING COMPANY
JUNCTION BOX DISCLOSURE* REPORT**

BOX LOCATION

SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE	COUNTY	BOX DIMENSIONS - FEET		
							Length	Width	Depth
Vacuum	Mobil 'P' EOL	A	26	17S	35E	Lea	System Abandoned--no box		

LAND TYPE: BLM _____ STATE X FEE LANDOWNER _____ OTHER _____

Depth to Groundwater 50 feet NMOCD SITE ASSESSMENT RANKING SCORE: 20

Date Started 8/2/2005 Date Completed 4/20/2006 NMOCD Witness no

Soil Excavated 267 cubic yards Excavation Length 30 Width 20 Depth 12 feet

Soil Disposed 0 cubic yards Offsite Facility n/a Location n/a

FINAL ANALYTICAL RESULTS: Sample Date 3/27/2006 Sample Depth 12 ft

5-point composite sample of bottom and 4-point composite sample of excavation sidewalls. TPH and chloride laboratory test results completed by using an approved lab and testing procedures pursuant to NMOCD guidelines.

CHLORIDE FIELD TESTS

LOCATION	DEPTH (ft)	ppm	
delineation trench at junction	3	290	
	4	299	
	5	686	
	6	709	
	7	872	
	8	1286	
	9	1601	
	10	1733	
	11	1999	
	12	2189	
	4-wall comp.	n/a	1050
	bottom comp.	12	1554
backfill comp.	n/a	1404	

Sample Location	PID ppm	GRO mg/kg	DRO mg/kg	Chloride mg/kg
4-WALL COMP.	0.1	<10.0	<10.0	1480
BOTTOM COMP.	0.1	<10.0	<10.0	1750
REMED. BACKFILL	0.1	<10.0	<10.0	1950

General Description of Remedial Action: This junction box was addressed as part of the abandonment of the Vacuum SWD system. After the box lumber was removed, the site was delineated using a trackhoe to collect soil samples at regular intervals, producing a 30 x 20 x 12-ft-deep excavation. Chloride and organic vapors were measured in the field for each sample. All PID readings yielded very low concentrations (<10 ppm), however, chloride concentrations increased with depth. The excavated soil was blended on site and then returned to the hole up to 6 ft BGS where a 1-ft-thick clay barrier was installed. The remaining fill was placed on top of the clay. Additional fill was needed so clean, imported fill was used to backfill the remainder of the excavation. An identification plate was placed on the surface of the site to mark the location of the former junction for future environmental consideration and the presence of the clay below. The disturbed surface was seeded with a blend of native vegetation on 4/24/2006 and is expected to return to productive capacity at a normal rate. On 4/3/2006, OCD was notified of potential groundwater impact at this site. ROC has retained the consultant, L. Peter Galusky Jr., Ph.D. to address environmental concerns at this site.

enclosures: photos, lab results, PID field screenings, c/ graph, excavation cross-section

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

SITE SUPERVISOR Jorge Hernandez SIGNATURE not available COMPANY RICE Operating Company

REPORT ASSEMBLED BY Kristin Farris Pope SIGNATURE _____

Texerra

Appendix B – Photo chronology.



Junction box prior to excavation: 7/11/2005

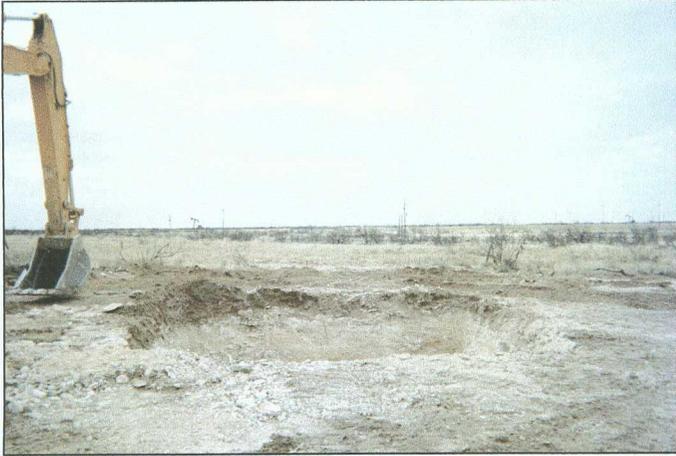


Beginning delineation with trackhoe: 8/2/2005



Collecting soil samples from excavation: 3/23/2006

Texerra



Final 30 x 20 x 12 ft deep excavation



Installing clay barrier at 6 ft: 4/13/2006



Identification plate to mark former junction site and clay barrier below.

Texerra



Seeding disturbed area at backfilled site: 4/24/2006



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Date: Fri, 20 Apr 2007 12:49:26 -0700 (PDT)
From: "L. Peter Galusky, Jr. P.E." <lpg@texerra.com>
Subject: Mobil P EOL T 17S R 35E Section 26 Unit A
To: "Edward J. Hansen" <edwardj.hansen@state.nm.us>
CC: "Carolyn Haynes" <chaynes@riceswd.com>, "Kristin Pope" <kpope@riceswd.com>

Dear Mr. Hansen:

Please find enclosed an Investigation and Characterization Plan for the Mobil P EOL site in the Vacuum SWD in Lea County. As Rice is anxious to proceed with this work, I would be most grateful for your review of this Plan at your earliest convenience.

Please do not hesitate to contact me if you have any questions or need additional information.

Sincerely,

Pete G.

Attachments

Files:

 Vac_Mobil_P_EOL_ICP_04_20_07_lpg.pdf (3.2MB)

RECEIVED

APR 27 2007

Environmental Bureau
Oil Conservation Division

2 HARD COPY ENCLOSED.

L. Peter Galusky, Jr. Ph.D., P.G.

Texerra

April 20th, 2007

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: Investigation and Characterization Plan
Rice Operating Company – Vacuum SWD
Mobil P EOL T 17S R 35E Section 26 Unit A**

Sent via E-mail and U.S. Certified Mail: Return Receipt No. 7005 0390 0002 9898 2723

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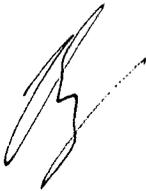
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L. Peter (**Pete**) Galusky, Jr. Ph.D., P.G.
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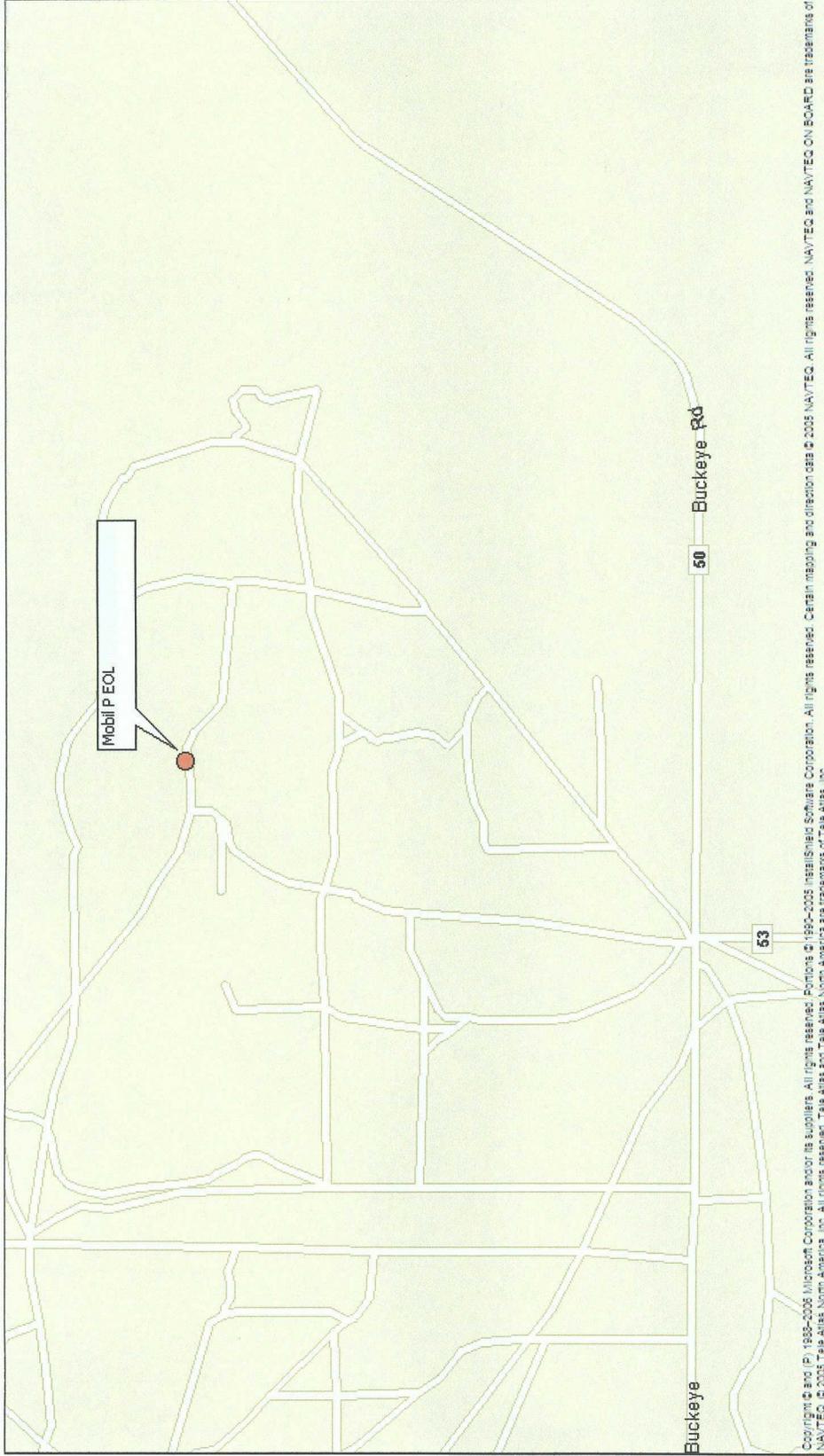


Figure 1 – Site Location Map. Scale: 1 inch = 1,000 ft. North is “up”.

Mobil P EOL

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Texerra

Appendix B – Photo chronology.



Junction box prior to excavation: 7/11/2005



Beginning delineation with trackhoe: 8/2/2005



Collecting soil samples from excavation: 3/23/2006

Texerra



Final 30 x 20 x 12 ft deep excavation



Installing clay barrier at 6 ft: 4/13/2006



Identification plate to mark former junction site and clay barrier below.

Texerra



Seeding disturbed area at backfilled site: 4/24/2006