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**GENERAL  
CORRESPONDENCE**

**YEAR(S):**

**2007**

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# RICE Operating Company

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March 27, 2007

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APR - 3 2007

Environmental Bureau  
Oil Conservation Division

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

RE: JUNCTION BOX UPGRADE REPORT for 2006  
VACUUM SWD SYSTEM  
Lea County, New Mexico

Mr. Price:

Rice Operating Company (ROC) takes this opportunity to submit the Junction Box Upgrade results for the year 2006. Enclosed is a list of the completed junction boxes and their respective closure/disclosure dates. These boxes are located in the Vacuum Salt Water Disposal (SWD) System.

ROC completed 9 junction box sites in 2006. Vacuum System Partners have decided to abandon the Vacuum SWD System. In 2007, junction boxes will continue to be evaluated with the objective of abandonment of the System.

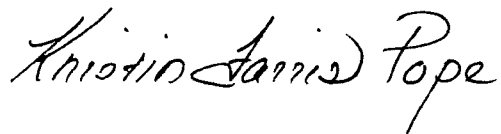
Enclosed are the 2006 results from the PID/BTEX study described in the NMOCD-approved Revised Junction Box Upgrade Work Plan (July 16, 2003). This comparison study is ongoing and data will continue to be collected in 2007. From the data collected thus far, no definitive conclusions can be drawn from the composite methods analyzed. A third-party analysis of ROC's 2006 chloride field tests compared to chloride laboratory analyses is also enclosed. The study of this data continues to validate the accuracy of the chloride field tests employed by ROC.

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. Upgrade/closure projects of this magnitude require System Partner AFE approval and work begins as funds are received.

Thank you for your consideration of this Junction Box Upgrade Report for 2006.

RICE OPERATING COMPANY

A handwritten signature in black ink that reads "Kristin Farris Pope". The signature is written in a cursive, flowing style.

Kristin Farris Pope  
Project Scientist

enclosures as stated

cc: SC, CDH, file,

Mr. Chris Williams  
NMOCD, District I Office  
1625 N. French Drive  
Hobbs, NM 88240

**RICE** *Operating Company*

## Vacuum SWD SYSTEM Junction Box Upgrade Project

## 2006 Completed Boxes

	Junction Box	Legal Description				Completion Date	OCD Assessment Score	Report Status
		Unit	Sec	T	R			
1	ject. F-31-1	F	31	17S	35E	2/17/2006	0	Disclosure
2	ject. M-33	M	33	17S	35E	4/24/2006	10	Closure
3	ject. F-30-1	F	30	17S	35E	2/17/2006	0	Closure
4	BP American Production St. 'A' EOL	M	22	17S	35E	3/3/2006	10	Closure
5	ject. K-6	K	6	18S	35E	5/23/2006	10	Closure
6	K-35 vent	K	35	17S	35E	2/17/2006	10	Closure
7	M-26 vent	M	26	17S	35E	12/17/2005	10	Disclosure
8	ject. C-31-3	C	31	17S	35E	2/16/2006	0	Closure
9	Mobil 'P' EOL	A	26	17S	35E	4/20/2006	20	Disclosure
10	ject. I-29	I	29	17S	35E	8/24/2005	0	Closure

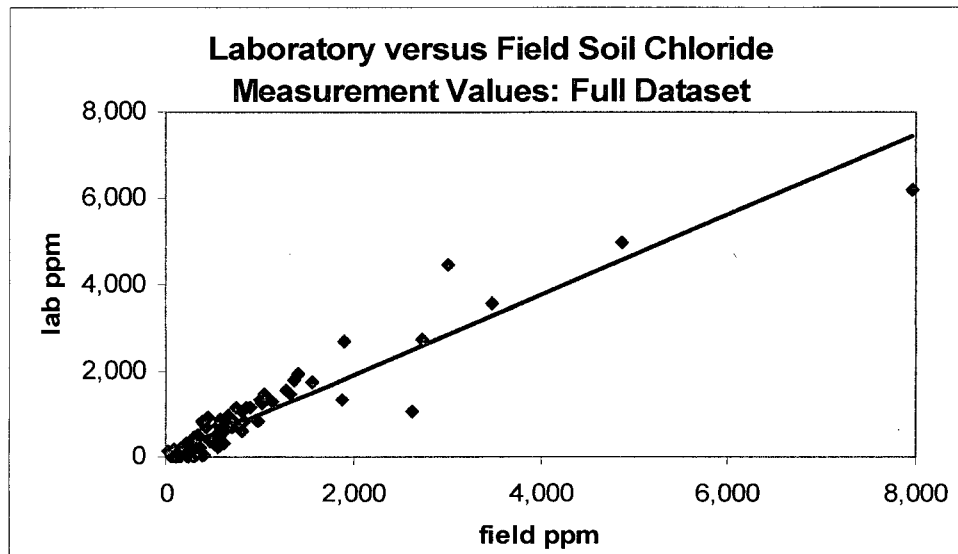
## **Soil Chloride Measurement QA/QC: Comparison of Laboratory and Field Measurements<sup>1</sup>**

### **Objective and Scope**

Rice Operating Company (ROC) evaluated soil chloride data from its junction box replacement program to determine how field measurements compared with laboratory measurements. A total of 112 measurements were taken from 45 sites over the period December, 2004 through December, 2006. Most (91) of the laboratory measurements were made by the Environmental Laboratories of Texas, with the remainder (21) being made by Cardinal Laboratories.

### **Results**

Evaluation of the dataset reveals a good relationship between laboratory and field measurements of soil chloride concentrations (see graph, below).



Field soil chloride measurement thus provides a reasonable surrogate for laboratory measurement (which may be presumed to be closer to the true values), and the ability to distinguish between low and high levels of chloride contamination.

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<sup>1</sup> Prepared by L. Peter Galusky, Jr. of Texerra.

# 2006 BTEX Study

# Revised Junction Box Upgrade Plan (2003)

System: BD Date: 10/27/2005 Laboratory: Environmental  
 Site: Hendrix Elliott EOL Sampler: Kevin Collins Lab of Texas

Location	PID reading (ppm)	FIELD COMPOSITE (mg/kg)			
		Benzene	Toluene	Ethyl Benzene	Total Xylenes
bottom composite at 12 ft BGS	599	0.00796	0.0980	0.257	1.18
LAB COMPOSITE (mg/kg)					
		0.0142	0.515	1.83	4.893

Field PID tests <100 ppm are considered final for BTEX. If PID is >100 ppm, the components of the BTEX composite sample will be collected individually and will be composited under laboratory conditions to prevent excessive volatilization. A 15-box, 30-sample study will be made to compare field-compositing with lab-compositing BTEX samples. Composite components are collected in a skewed 'W' pattern.

Work Plan (July 16, 2003)

Revised Junction Box Upgrade

# 2006 BTEX Study

# Revised Junction Box Upgrade Plan (2003)

System: EME Date: 10/20/2006 Laboratory: Cardinal  
 Site: Hartman Britt 'A' EOL Sampler: Darnell Mitchell Laboratories

Location	Component	PID reading (ppm)	FIELD COMPOSITE (mg/kg)			
			Benzene	Toluene	Ethyl Benzene	Total Xylenes
4-WALL COMPOSITE from 30 x 25 x 12 ft	NORTH wall	4.1	<0.005	<0.005	0.043	0.052
	SOUTH wall	597				
	EAST wall	415				
	WEST wall	273				
			LAB COMPOSITE (mg/kg)			
			<0.005	<0.005	0.024	0.025

Field PID tests <100 ppm are considered final for BTEX. If PID is >100 ppm, the components of the BTEX composite sample will be collected individually and will be composited under laboratory conditions to prevent excessive volatilization. A 15-box, 30-sample study will be made to compare field-compositing with lab-compositing BTEX samples. Composite components are collected in a skewed 'W' pattern.

Revised Junction Box Upgrade Work Plan (July 16, 2003)

# 2006 BTEX Study

# Revised Junction Box Upgrade Plan (2003)

System:

EME

Date:

8/3/2006

Laboratory:

Cardinal

Site:

Amerada Hartman 'J' EOL

Sampler:

Darnell Mitchell

Laboratories

Location	Component	PID reading (ppm)	FIELD COMPOSITE (mg/kg)			
			Benzene	Toluene	Ethyl Benzene	Total Xylenes
4-WALL COMPOSITE from 30 x 30 x 12 ft	NORTH wall	265	<0.005	<0.005	<0.005	<0.015
	SOUTH wall	715				
	EAST wall	133				
	WEST wall	71.6				
			LAB COMPOSITE (mg/kg)			
			<0.005	<0.005	<0.005	<0.015

Field PID tests <100 ppm are considered final for BTEX. If PID is >100 ppm, the components of the BTEX composite sample will be collected individually and will be composited under laboratory conditions to prevent excessive volatilization. A 15-box, 30-sample study will be made to compare field-compositing with lab-compositing BTEX samples. Composite components are collected in a skewed 'W' pattern.

Revised Junction Box Upgrade Work Plan (July 16, 2003)

# 2006 BTEX Study

## Revised Junction Box Upgrade Plan (2003)

System: EME  
Site: C-8 vent

Date: 9/26/2006  
Sampler: Noel Carmona

Laboratory: Cardinal  
Laboratories

Location	Component	PID reading (ppm)	FIELD COMPOSITE (mg/kg)			
			Benzene	Toluene	Ethyl Benzene	Total Xylenes
bottom composite at 12 ft BGS	1	0.1	<0.005	<0.005	<0.005	<0.015
	2	3.2				
	3	235				
	4	33.5				
	5	18.2				
			LAB COMPOSITE (mg/kg)			
			<0.005	<0.005	<0.005	<0.015

Field PID tests <100 ppm are considered final for BTEX. If PID is >100 ppm, the components of the BTEX composite sample will be collected individually and will be composited under laboratory conditions to prevent excessive volatilization. A 15-box, 30-sample study will be made to compare field-compositing with lab-compositing BTEX samples. Composite components are collected in a skewed 'W' pattern.

Revised Junction Box Upgrade Work Plan (July 16, 2003)

# 2006 BTEX Study

## Revised Junction Box Upgrade Plan (2003)

System: BD  
Site: jct. P-30

Date: 6/22/2006  
Sampler: Darnell Mitchell

Laboratory: Cardinal  
Laboratories

Location	Component	PID reading (ppm)	FIELD COMPOSITE (mg/kg)			
			Benzene	Toluene	Ethyl Benzene	Total Xylenes
bottom composite at 12 ft BGS	1	4000	<0.005	<0.005	<0.005	0.021
	2	3500				
	3	3940				
	4	0.1				
	5	0.0				
			LAB COMPOSITE (mg/kg)			
			<0.005	<0.005	<0.005	0.035

Field PID tests <100 ppm are considered final for BTEX. If PID is >100 ppm, the components of the BTEX composite sample will be collected individually and will be composited under laboratory conditions to prevent excessive volatilization. A 15-box, 30-sample study will be made to compare field-compositing with lab-compositing BTEX samples. Composite components are collected in a skewed 'W' pattern.

Revised Junction Box Upgrade Work Plan (July 16, 2003)