

**AP - 048**

**ANNUAL GW  
REPORT**

**DATE:  
2006**



# Highlander Environmental Corp.

Midland, Texas

AP-48  
Annual GW Mon.  
Report  
2006

CERTIFIED MAIL

RETURN RECEIPT NO. 7004 2510 0001 1869 0934

March 7, 2007

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

**Re: 2006 Annual Groundwater Summary Report & Project Status Report, Rice Operating Company, Justis Saltwater Disposal System (SWD) Jct. L-1, Unit L, Section 1, T-25-S, R-37-E, Lea County, New Mexico, NMOCD CASE #1R0423-0 (AP-48)**

Dear Mr. Price:

Highlander Environmental Corp. (Highlander) submits the following 2006 Annual Groundwater Summary Report for the Rice Operating Company (ROC), Jct. L-1 site (AP-48), located in the Justis Salt Water Disposal System.

## Background

As part of the RICE Operating Company (ROC) Junction Box Upgrade Workplan, the original Justis L-1 junction box was removed and replaced with a new water tight junction box, located 50 feet south of the old box. Once the junction box was removed, evaluation of the surrounding and subsurface soils was initiated. Delineation was conducted with a backhoe. Chloride testing and PID field screening were performed at regular intervals. The final excavation measured 20 feet x 22 feet x 12 feet deep. PID concentrations were minimal and laboratory confirmed TPH concentrations were well below NMOCD regulatory guidelines. Chloride concentrations, however, did not appear to decline with depth.

On 12/29/2003, a soil boring was placed into the center of the excavation and advanced to a depth of 80' below ground surface, apparently encountering a saturated zone at 75' below ground surface. The borehole was plugged and a 1.5 foot thick clay barrier was placed into the excavation at 6 feet below ground surface. The remainder of the excavation was backfilled with excavated soils. No TPH impact to groundwater was indicated. On February 24, 2004,

ROC submitted a Junction Box Disclosure Form to the NMOCD.

On June 15, 2004, Highlander submitted a work plan for a confirmation borehole and possible monitor well placement at the site. The NMOCD responded with requested revisions to the workplan and on November 3, 2004, Highlander submitted a revised workplan to address NMOCD concerns. The workplan was approved by the NMOCD on November 4, 2004. Highlander supervised the installation of Monitor Well (MW-1) on December 19, 2004. The well was purged and sampled on December 21, 2004. On January 14, 2005, Rice submitted a Notification of Groundwater Impact to the NMOCD. Groundwater has been sampled and analyzed on a quarterly basis. Traces of benzene and ethylbenzene found in the original sampling have not been evident in subsequent sampling events.

On May 5, 2005, Daniel Sanchez with the NMOCD requested a Rule 19, Stage I Abatement Plan for this site. On July 12, 2005 a Stage I Abatement Plan was submitted to the NMOCD. The Stage I Abatement Plan approval was received, dated February 23, 2006.

### **Stage 1 Abatement Plan**

As part of the Stage 1 Abatement Plan two additional monitor wells were proposed for the site. These two monitor wells (MW-2 and MW-3) were installed on March 21, 2006. MW-2 was placed down-gradient of MW-1 and MW-3 was placed up-gradient. An oil well location and open reserve pit, were located up-gradient of MW-1, necessitating the placement of MW-3 up-gradient of the open reserve pit. The wells were developed and sampled on March 28, 2006. MW-3 exhibited apparent background chloride concentrations of 96 mg/L. The down-gradient monitor well, (MW-2) displayed similar qualities to the monitor well placed at the removed junction box site (MW-1), with a chloride concentration of 564 mg/L and total dissolved solids of 1,730 mg/L.

Also as part of the Stage I Abatement Plan, a water well database search was performed to encompass a ½ mile radius around the site. The database search revealed one well in Section 1 and 3 wells in adjoining sections to this site. The field inspection revealed processing plant wells up-gradient of the site, one inaccessible well at the "Targa" booster or compressor station (4/10 mile south) and one inactive domestic well with no access (1/2 mile south). An open reserve pit located 135' up-gradient was sampled and had a chloride concentration of 42,286 mg/L.

ROC submitted a report titled "Results of Stage 1 Implementation and Request for Suspension from Rule 19 Requirements", Dated August 10, 2006 to the NMOCD. On September 27, 2006, ROC received a response from the NMOCD. In a telephone conference with the NMOCD, it was discussed that the plan should be re-issued as a Stage 1/Stage 2 Abatement Plan for continued monitoring. Additionally, the NMOCD verbally approved the placement of one additional down-gradient monitoring well. As approved, on October 9, 2006, one additional monitor well (MW-4) was installed down-gradient and constructed according to EPA and industry standards.



## **Stage1/Stage2 Abatement Plan**

On December 12, 2006, a Stage1/Stage2 Abatement Plan was submitted to the NMOCD. Based upon the results of the Stage I Abatement Plan implementation, it appears that the water quality at the original junction box site is improving over time. The Stage 1/Stage2 Plan proposed to continue to monitor all four wells on a quarterly basis to ensure continued improvement of groundwater quality.

As part of the Stage 1/Stage 2 Abatement Plan, a Corrective Action Plan (CAP) for final soil remediation was presented. In order to complete horizontal delineation of the soil impact, soil borings will be placed beyond the edges of the existing clay barrier and soil samples will be collected for field chloride testing. Once the results of the delineation are completed, the data will be evaluated to determine if further excavation and extension of clay barrier is warranted. If warranted, the site will be excavated down to a depth of approximately 6' and the existing clay barrier will be extended, prior to backfilling with excavated material. NMOCD approval of this Stage1/Stage2 Abatement Plan is pending.

## **Monitor Well Sampling**

The monitor wells were sampled on a quarterly basis. Prior to sampling, the monitor wells were gauged and approximately three casing volumes of water were purged from the wells prior to sampling. The pump and associated tubing were decontaminated with a laboratory grade detergent and rinsed with deionized water. Cumulative water level measurements and purge volumes for the monitor wells are included in the Tables Section of this report.

The well was also inspected for the presence of phase-separated hydrocarbons (PSH). Groundwater samples were collected as soon as possible after the groundwater returned to its static level. Groundwater samples were collected using clean disposable polyethylene bailers and disposable line. The samples were transferred into labeled and preserved containers provided by the laboratory. The samples were delivered under proper chain-of-custody control to Environmental Labs of Texas, Inc., Odessa, Texas. The groundwater samples were analyzed for major anions, by methods 310.1, 9253 and 375.4, cations by method 6010B, Total Dissolved Solids (TDS) by method 160.1 and Benzene, Toluene, Ethylbenzene, and Xylene (BTEX) by method EPA 8021B. Copies of the laboratory reports are enclosed in Appendix A.

## **Monitor Well Sample Results**

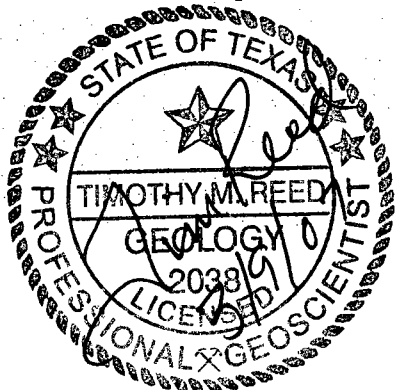
The analysis of up-gradient monitor well, MW-3, has showed background chloride concentrations ranging from 91.4 mg/L to 125 mg/L. The down-gradient monitor well, (MW-2) has displayed similar qualities to the monitor well placed at the removed junction box site (MW-1). The original monitor well (MW-1) has been sampled on a quarterly basis since December 2004 and all monitor wells are sampled on a quarterly basis. The most recent sampling was performed on all four monitor wells on October 30, 2006. Traces of



benzene and ethylbenzene were found in the original two sampling events. In the past seven quarters, BTEX parameters have not been detected at or above reporting limits. Chloride and total dissolved solid concentrations have been declining in MW-1 since the original sampling where chloride was 1,060 mg/L and TDS was 2,660 mg/L, however the most recent sample concentrations in MW-1 are showing some increase in chloride and TDS. Cumulative analytical data is summarized in the Table Section of this report.

## Conclusions

1. In 2006, there were no BTEX constituents at or above the New Mexico Water Quality Control Commission (WQCC) standards. In the past seven quarters, BTEX parameters have not been detected at or above reporting limits.
2. Chloride and total dissolved solid (TDS) concentrations from monitor well MW-1 have been declining since the original sampling, however, the most recent sample concentrations in MW-1 are showing some increase in chloride and TDS.
3. As per an NMOCD request, one additional well will be installed between MW-1 and MW-3, during the 2<sup>nd</sup> quarter of 2007.
4. Quarterly monitoring at this site will continue and an annual report will be prepared and submitted to the NMOCD in the first quarter of 2008. As discussed in the Stage 1/Stage 2 Abatement Plan, if conditions do not improve or if they deteriorate, a workplan for additional investigation will be prepared and submitted to the NMOCD.
5. In order to complete horizontal delineation of the soil impact, soil borings will be placed beyond the edges of the existing clay barrier and soil samples will be collected for field chloride testing. Once the results of the delineation are completed, the data will be evaluated to determine if further excavation and extension of clay barrier is warranted. If warranted, the site will be excavated down to a depth of approximately 6' and the existing clay barrier will be extended, prior to backfilling with excavated material



Respectfully Submitted,  
HIGHLANDER ENVIRONMENTAL CORP.

A handwritten signature of Timothy M. Reed in black ink.

Timothy M. Reed, P.G.  
Vice President

cc: ROC, Edward Hansen – NMOCD  
Enclosures: Figures, Tables, Laboratory Analysis



## FIGURES





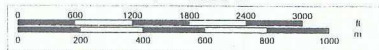


**FIGURE NO. 2**  
**LEA COUNTY, NEW MEXICO**  
**RICE OPERATING COMPANY**  
**TOPOGRAPHIC MAP**



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[www.delorme.com](http://www.delorme.com)

Scale 1 : 24,000  
 1" = 2000 ft





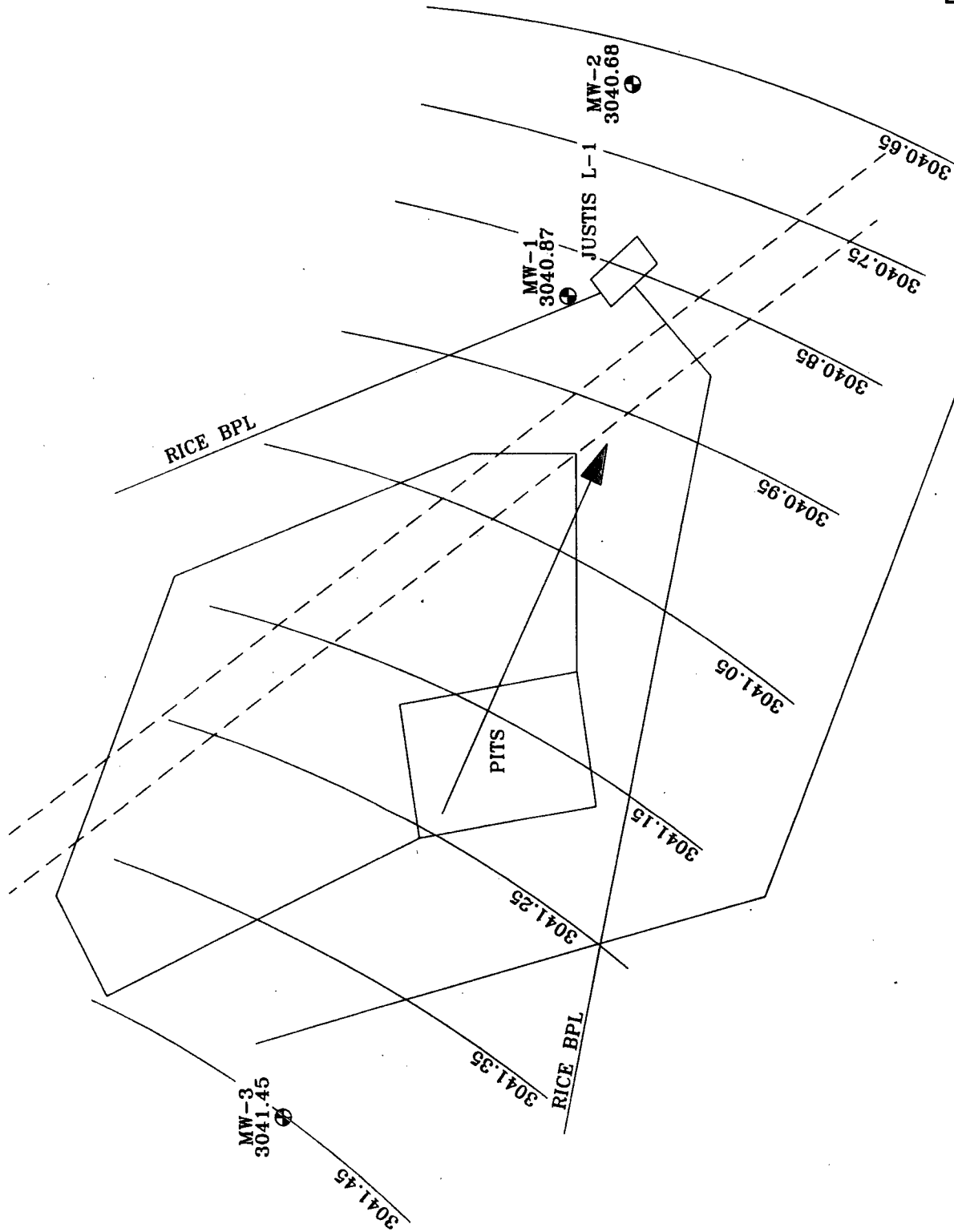
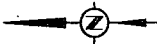


FIGURE NO. 3

LEA COUNTY, NEW MEXICO
RICE OPERATING COMPANY
JUSTIS L-1 GROUNDWATER MAP
5/24/06
HIGHLANDER ENVIRONMENTAL CORP.
MIDLAND, TEXAS

DATE:	8/14/06
DWN. BY:	JJ
FILE:	100003142
SR:	000

● MONITOR WELL LOCATIONS

NOT TO SCALE

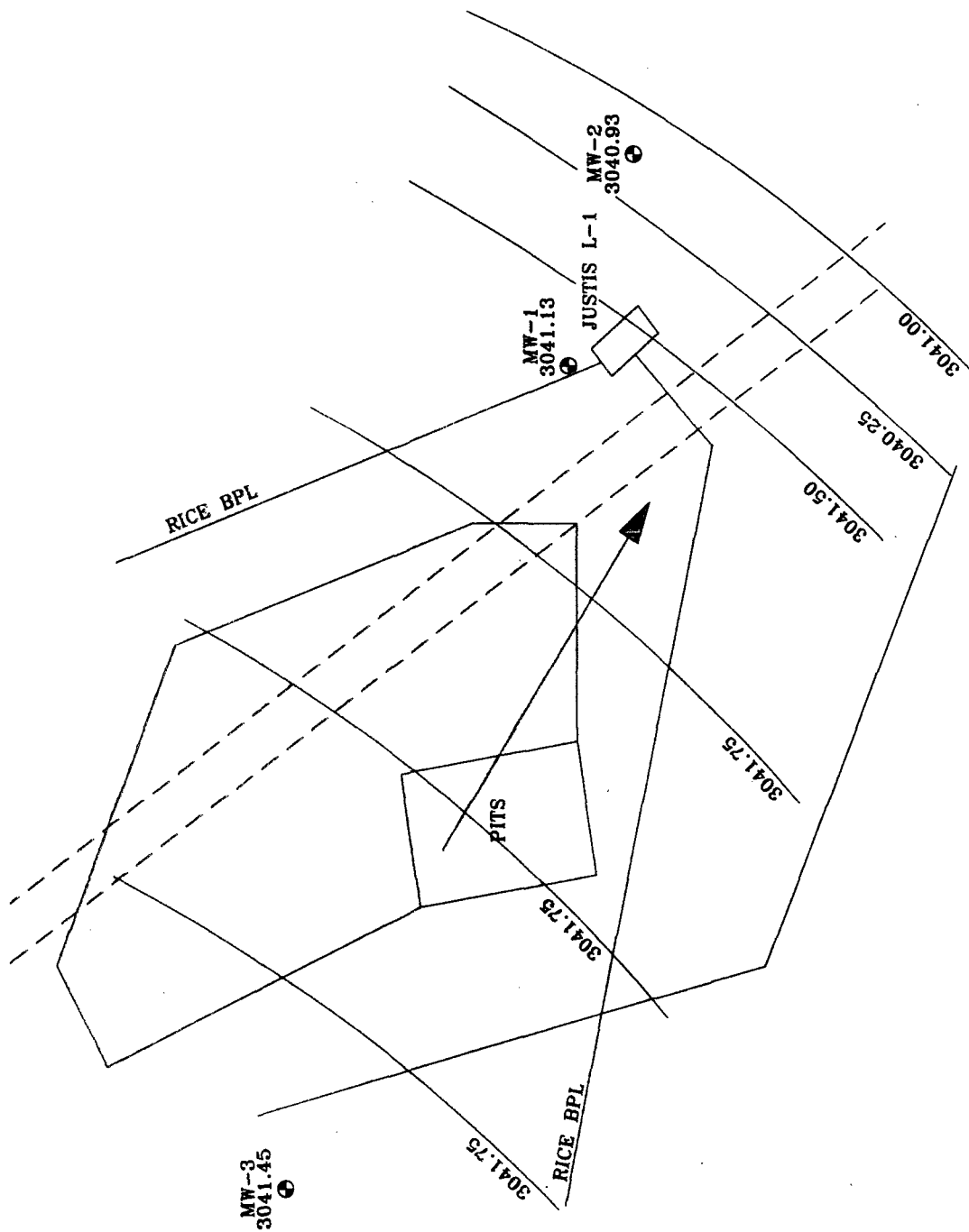
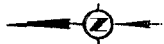


FIGURE NO. 4

LEA COUNTY, NEW MEXICO

RICE OPERATING COMPANY  
JUSTIS L-1 GROUNDWATER MAP  
9/14/08

HIGHLANDER ENVIRONMENTAL CORP.  
MIDLAND, TEXAS

DATE:	1/8/07
DWN. BY:	JJ
FILE:	C:\RICE\3142
SITE MAP	

⊙ MONITOR WELL LOCATIONS

NOT TO SCALE

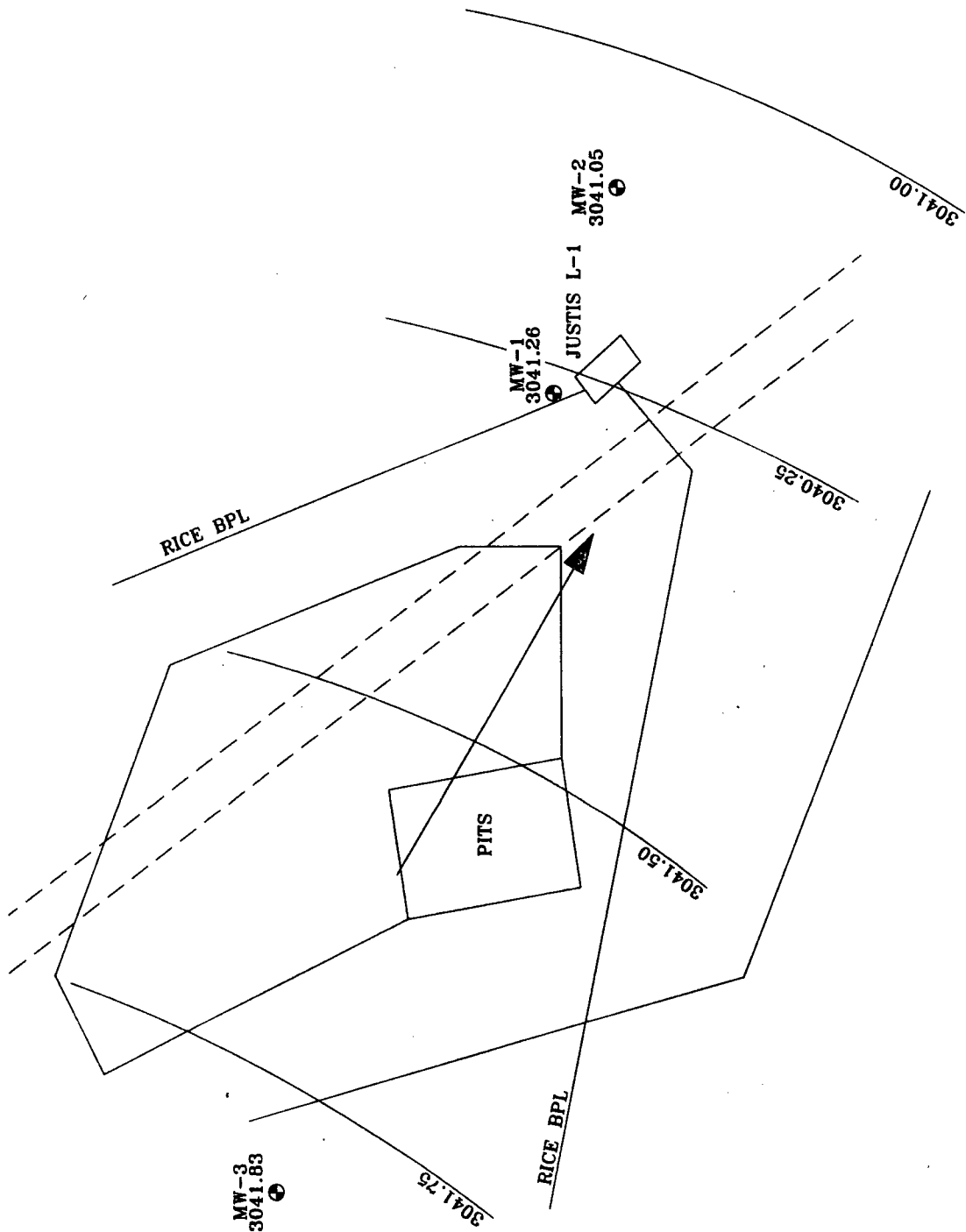


FIGURE NO. 5

LEA COUNTY, NEW MEXICO

RICE OPERATING COMPANY  
JUSTIS L-1 GROUNDWATER MAP  
10/30/06

HIGHLANDER ENVIRONMENTAL CORP.  
MIDLAND, TEXAS

DATE:	1/8/07
DRAWN BY:	JJ
FILE:	ENV060112
SHEET NO.	

NOT TO SCALE

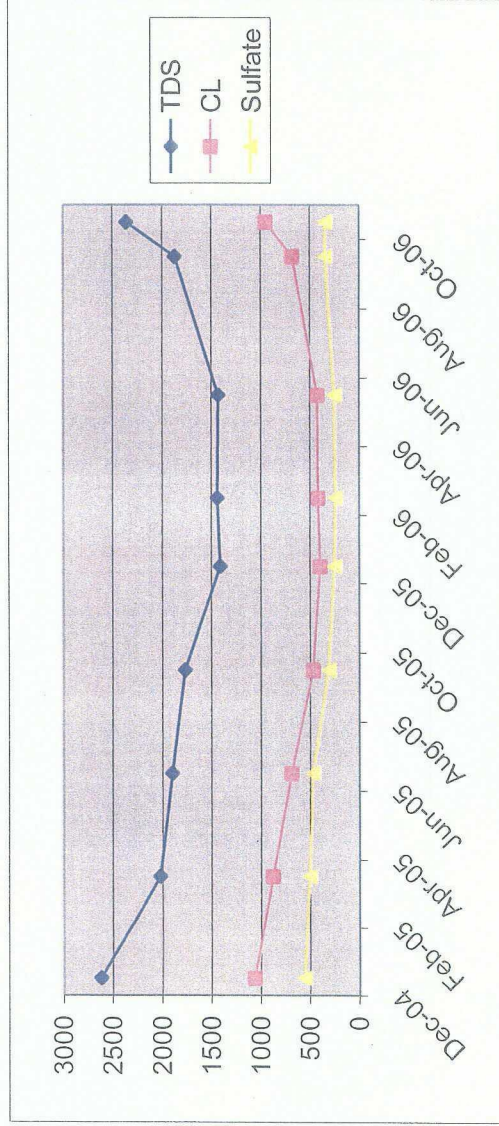
● MONITOR WELL LOCATIONS

## TABLES



Rice Engineering Operating  
Justice L-1  
Lea County, New Mexico

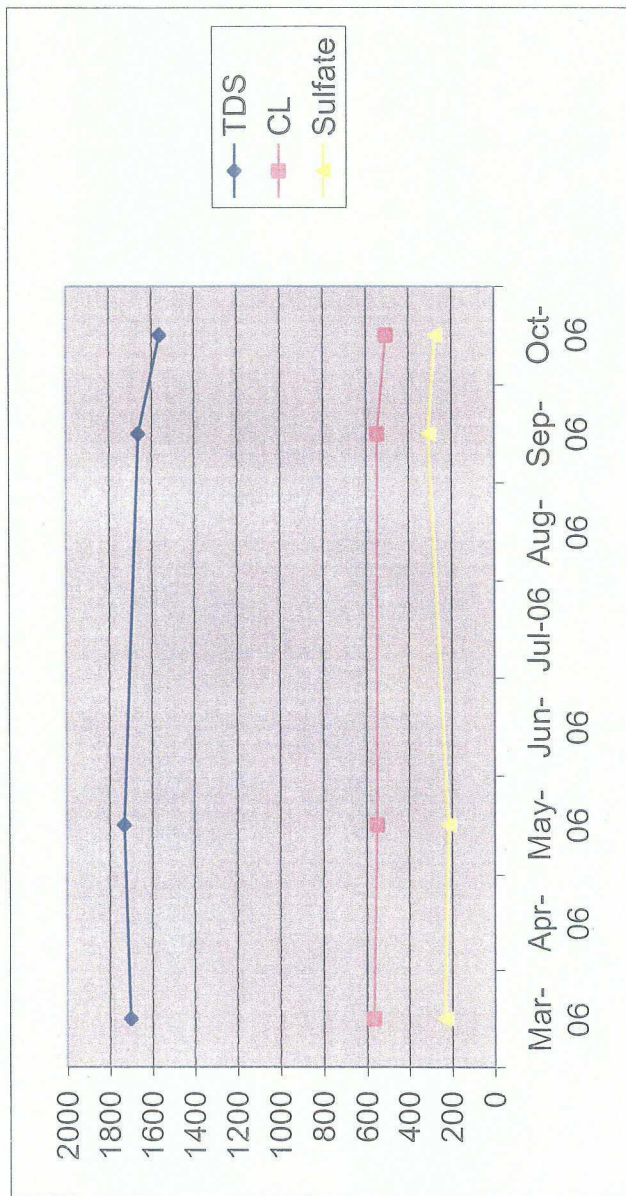
MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	CI	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
1	78.43	92.00	XXX	20	12/21/04	1060	2620	0.0158	<0.001	0.00209	<0.001	550	
1	78.19	92.00	XXX	20	03/29/05	873	2020	0.000904	<0.001	<0.001	<0.001	502	
1	78.11	92.00	XXX	20	06/16/05	684	1900	<0.001	<0.001	<0.001	<0.001	468	
1	77.95	92.00	XXX	2.5	09/15/05	464	1770	<0.001	<0.001	<0.001	<0.001	307	
1	77.80	92.00	2.30	8	12/05/05	390	1410	<0.001	<0.001	<0.001	0.000666	245	
1	77.56	92.00	2.30	8	02/27/06	413	1440	<0.001	<0.001	<0.001	<0.001	236	
1	77.51	92.00	2.30	10	05/24/06	420	1430	<0.001	<0.001	<0.001	<0.001	246	
1	77.25	92.00	2.40	10	09/14/06	672	1870	<0.001	<0.001	<0.001	<0.001	339	
1	77.12	92.00	2.40	10	10/30/06	943	2360	<0.001	<0.001	<0.001	<0.001	339	Clear no odor



Rice Engineering Operating  
Justice L-1

Lea County, New Mexico

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
2	77.72	93.05	2.50	12	03/28/06	564	1700	<0.001	<0.001	<0.001	<0.001	233	
2	77.48	93.05	2.50	15	05/24/06	549	1730	<0.001	<0.001	<0.001	<0.001	215	
2	77.23	93.05	2.50	10	09/14/06	546	1660	<0.001	<0.001	<0.001	<0.001	306	
2	77.11	93.05	2.60	10	10/30/06	505	1560	<0.001	<0.001	<0.001	<0.001	275	Clear no odor



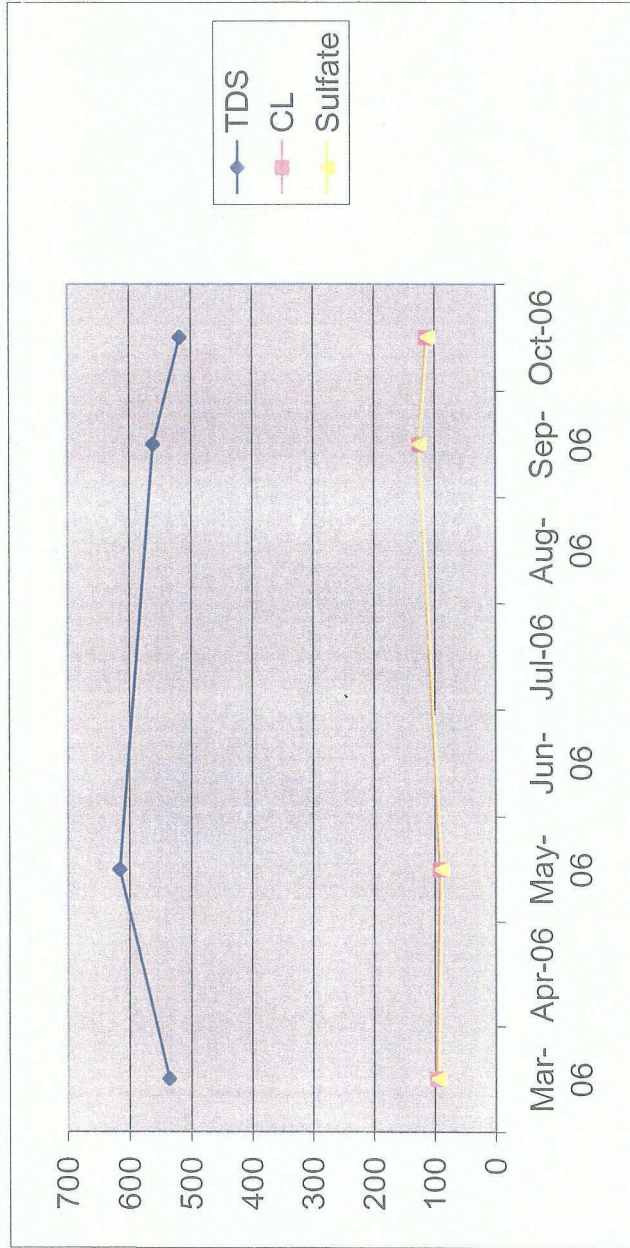


# Rice Engineering Operating

Justice L-1

Lea County, New Mexico

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
3	78.21	93.00	2.40	12	03/28/06	96.3	536	<0.001	<0.001	<0.001	<0.001	93.4	
3	77.99	93.00	2.40	10	05/24/06	91.4	616	<0.001	<0.001	<0.001	<0.001	88.3	
3	77.99	93.00	2.40	10	09/14/06	125	562	<0.001	<0.001	<0.001	<0.001	125	
3	77.61	93.00	2.50	10	10/30/06	114	518	<0.001	<0.001	<0.001	<0.001	111	Clear no odor

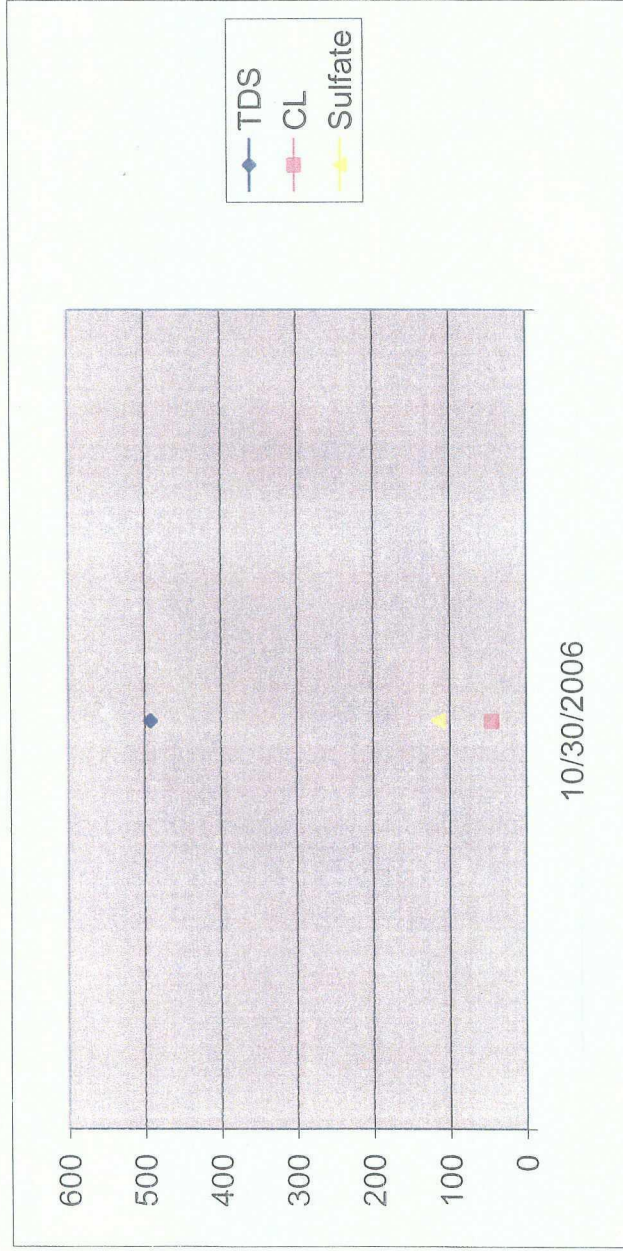


Rice Engineering Operating

Justice L-1

Lea County, New Mexico

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	CI	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
4	78.44	91.24	2.00	10	10/30/06	44.2	492	<0.001	<0.001	<0.001	<0.001	115	Clear no odor

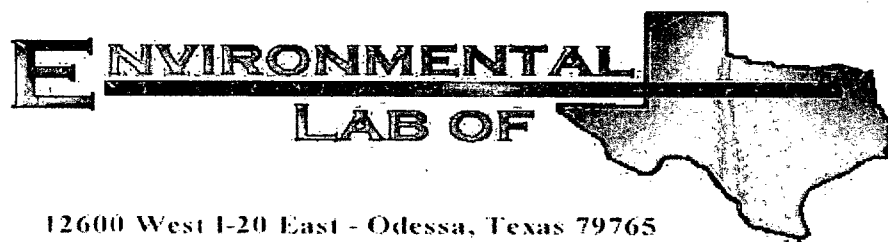




## APPENDIX A

### Lab Analysis

2/27/06



12600 West I-20 East - Odessa, Texas 79765

## Analytical Report

**Prepared for:**

Kristin Farris-Pope

Rice Operating Co.

122 W. Taylor

Hobbs, NM 88240

Project: Justis L-I Vent

Project Number: None Given

Location: Lea County

Lab Order Number: 6C02022

Report Date: 03/15/06

Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: Justis L-1 Vent  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471  
Reported:  
03/15/06 14:00

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Monitor Well #1	6C02022-01	Water	02/27/06 16:30	03/02/06 16:05



Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: Justis L-1 Vent  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

Reported:  
03/15/06 14:00

**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Monitor Well #1 (6C02022-01) Water</b>									
Benzene	ND	0.00100	mg/L	1	EC60704	03/07/06	03/08/06	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		87.8 %	80-120	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		90.8 %	80-120	"	"	"	"	"	

Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: Justis L-1 Vent  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

Reported:  
03/15/06 14:00

**General Chemistry Parameters by EPA / Standard Methods**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Monitor Well #1 (6C02022-01) Water</b>									
Total Alkalinity	202	2.00	mg/L	1	EC60905	03/09/06	03/09/06	EPA 310.1M	
Chloride	413	10.0	"	20	EC60320	03/03/06	03/07/06	EPA 300.0	
Total Dissolved Solids	1440	5.00	"	1	EC60607	03/03/06	03/06/06	EPA 160.1	
Sulfate	236	10.0	"	20	EC60320	03/03/06	03/07/06	EPA 300.0	

Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: Justis L-1 Vent  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

Reported:  
03/15/06 14:00

**Total Metals by EPA / Standard Methods**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Monitor Well #1 (6C02022-01) Water</b>									
Calcium	151	0.500	mg/L	50	EC60711	03/07/06	03/07/06	EPA 6010B	
Magnesium	37.9	0.0100	"	10	"	"	"	"	
Potassium	9.05	0.500	"	"	"	"	"	"	
Sodium	340	2.00	"	200	"	"	"	"	

Environmental Lab of Texas

*The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.*

Page 4 of 10

Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: Justis L-I Vent  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

Reported:  
03/15/06 14:00

**Organics by GC - Quality Control**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

**Batch EC60704 - EPA 5030C (GC)**

**Blank (EC60704-BLK1)**

Prepared: 03/07/06 Analyzed: 03/08/06

Benzene	ND	0.00100	mg/L							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00100	"							
Xylene (o)	ND	0.00100	"							
Surrogate: a,a,a-Trifluorotoluene	37.1		ug/l	40.0		92.8	80-120			
Surrogate: 4-Bromofluorobenzene	39.5		"	40.0		98.8	80-120			

**LCS (EC60704-BS1)**

Prepared: 03/07/06 Analyzed: 03/08/06

Benzene	0.0440	0.00100	mg/L	0.0500		88.0	80-120			
Toluene	0.0489	0.00100	"	0.0500		97.8	80-120			
Ethylbenzene	0.0569	0.00100	"	0.0500		114	80-120			
Xylene (p/m)	0.117	0.00100	"	0.100		117	80-120			
Xylene (o)	0.0590	0.00100	"	0.0500		118	80-120			
Surrogate: a,a,a-Trifluorotoluene	38.7		ug/l	40.0		96.8	80-120			
Surrogate: 4-Bromofluorobenzene	42.3		"	40.0		106	80-120			

**Calibration Check (EC60704-CCV1)**

Prepared: 03/07/06 Analyzed: 03/09/06

Benzene	40.1		ug/l	50.0		80.2	80-120			
Toluene	40.8		"	50.0		81.6	80-120			
Ethylbenzene	42.9		"	50.0		85.8	80-120			
Xylene (p/m)	88.4		"	100		88.4	80-120			
Xylene (o)	44.3		"	50.0		88.6	80-120			
Surrogate: a,a,a-Trifluorotoluene	34.1		"	40.0		85.2	80-120			
Surrogate: 4-Bromofluorobenzene	32.7		"	40.0		81.8	80-120			

**Matrix Spike (EC60704-MS1)**

Source: 6C03007-06

Prepared: 03/07/06 Analyzed: 03/09/06

Benzene	0.0403	0.00100	mg/L	0.0500	ND	80.6	80-120			
Toluene	0.0432	0.00100	"	0.0500	ND	86.4	80-120			
Ethylbenzene	0.0464	0.00100	"	0.0500	ND	92.8	80-120			
Xylene (p/m)	0.0971	0.00100	"	0.100	ND	97.1	80-120			
Xylene (o)	0.0476	0.00100	"	0.0500	ND	95.2	80-120			
Surrogate: a,a,a-Trifluorotoluene	36.4		ug/l	40.0		91.0	80-120			
Surrogate: 4-Bromofluorobenzene	43.8		"	40.0		110	80-120			

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Page 5 of 10

Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: Justis L-1 Vent  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

Reported:  
03/15/06 14:00

**Organics by GC - Quality Control**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch EC60704 - EPA 5030C (GC)</b>										
<b>Matrix Spike Dup (EC60704-MSD1)</b>		<b>Source: 6C03007-06</b>			<b>Prepared: 03/07/06 Analyzed: 03/09/06</b>					
Benzene	0.0433	0.00100	mg/L	0.0500	ND	86.6	80-120	7.18	20	
Toluene	0.0472	0.00100	"	0.0500	ND	94.4	80-120	8.85	20	
Ethylbenzene	0.0539	0.00100	"	0.0500	ND	108	80-120	15.1	20	
Xylene (p/m)	0.112	0.00100	"	0.100	ND	112	80-120	14.3	20	
Xylene (o)	0.0541	0.00100	"	0.0500	ND	108	80-120	12.6	20	
Surrogate: a,a,a-Trifluorotoluene	36.5		ug/l	40.0		91.2	80-120			
Surrogate: 4-Bromofluorobenzene	38.0		"	40.0		95.0	80-120			

Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: Justis L-I Vent  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

Reported:  
03/15/06 14:00

**General Chemistry Parameters by EPA / Standard Methods - Quality Control**

**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch EC60320 - General Preparation (WetChem)**

**Blank (EC60320-BLK1)**

Prepared: 03/03/06 Analyzed: 03/07/06

Chloride	ND	0.500	mg/L							
Sulfate	ND	0.500	"							

**LCS (EC60320-BS1)**

Prepared: 03/03/06 Analyzed: 03/07/06

Sulfate	8.49		mg/L	10.0		84.9	80-120			
Chloride	8.77		"	10.0		87.7	80-120			

**Calibration Check (EC60320-CCV1)**

Prepared: 03/03/06 Analyzed: 03/07/06

Chloride	9.37		mg/L	10.0		93.7	80-120			
Sulfate	9.44		"	10.0		94.4	80-120			

**Duplicate (EC60320-DUP1)**

Source: 6C02021-03

Prepared: 03/03/06 Analyzed: 03/07/06

Chloride	27.1	5.00	mg/L		26.8			1.11	20	
Sulfate	124	5.00	"		123			0.810	20	

**Batch EC60607 - General Preparation (WetChem).**

**Blank (EC60607-BLK1)**

Prepared: 03/03/06 Analyzed: 03/06/06

Total Dissolved Solids	ND	5.00	mg/L							
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**Duplicate (EC60607-DUP1)**

Source: 6C02020-01

Prepared: 03/03/06 Analyzed: 03/06/06

Total Dissolved Solids	524	5.00	mg/L		538			2.64	5	
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**Duplicate (EC60607-DUP2)**

Source: 6C02021-03

Prepared: 03/03/06 Analyzed: 03/06/06

Total Dissolved Solids	570	5.00	mg/L		562			1.41	5	
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Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: Justis L-I Vent  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

Reported:  
03/15/06 14:00

### General Chemistry Parameters by EPA / Standard Methods - Quality Control

#### Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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#### Batch EC60905 - General Preparation (WetChem)

##### Blank (EC60905-BLK1)

Prepared & Analyzed: 03/09/06

Total Alkalinity ND 2.00 mg/L

##### LCS (EC60905-BS1)

Prepared & Analyzed: 03/09/06

Bicarbonate Alkalinity 216 2.00 mg/L 200 108 85-115

##### Duplicate (EC60905-DUP1)

Source: 6C02020-01

Prepared & Analyzed: 03/09/06

Total Alkalinity 195 2.00 mg/L 194 0.514 20

##### Reference (EC60905-SRM1)

Prepared & Analyzed: 03/09/06

Total Alkalinity 97.0 mg/L 100 97.0 90-110

Environmental Lab of Texas

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Page 8 of 10

Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: Justis L-1 Vent  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

Reported:  
03/15/06 14:00

**Total Metals by EPA / Standard Methods - Quality Control**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch EC60711 - 6010B/No Digestion**

**Blank (EC60711-BLK1)**

Prepared & Analyzed: 03/07/06

Calcium	ND	0.0100	mg/L							
Magnesium	ND	0.00100	"							
Potassium	ND	0.0500	"							
Sodium	ND	0.0100	"							

**Calibration Check (EC60711-CCV1)**

Prepared & Analyzed: 03/07/06

Calcium	2.04		mg/L	2.00		102	85-115			
Magnesium	2.09		"	2.00		104	85-115			
Potassium	1.90		"	2.00		95.0	85-115			
Sodium	1.85		"	2.00		92.5	85-115			

**Duplicate (EC60711-DUP1)**

Source: 6C02020-01

Prepared & Analyzed: 03/07/06

Calcium	73.7	0.100	mg/L		72.7			1.37	20	
Magnesium	15.8	0.0100	"		15.2			3.87	20	
Potassium	3.61	0.0500	"		3.71			2.73	20	
Sodium	37.6	0.100	"		37.2			1.07	20	



Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: Justis L-I Vent  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

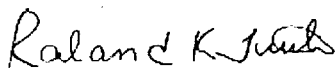
Fax: (505) 397-1471

Reported:  
03/15/06 14:00

### Notes and Definitions

DET Analyte DETECTED  
ND Analyte NOT DETECTED at or above the reporting limit  
NR Not Reported  
dry Sample results reported on a dry weight basis  
RPD Relative Percent Difference  
LCS Laboratory Control Spike  
MS Matrix Spike  
Dup Duplicate

Report Approved By:



Date:

3/15/2006

Raland K. Tuttle, Lab Manager  
Celey D. Keene, Lab Director, Org. Tech Director  
Peggy Allen, QA Officer

Jeanne Mc Murrey, Inorg. Tech Director  
LaTasha Cornish, Chemist  
Sandra Sanchez, Lab Tech.

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If you have received this material in error, please notify us immediately at 432-563-1800.

12600 West I-20 East  
Odessa, Texas 79765  
Phone: 432-563-1800  
Fax: 432-563-1713

### CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

**Project Name: Justis L-1 Vent**

**Project #:**

Project Loc: Lea County

City/State/Zip: Hobbs, New Mexico 88240

PO#:

Telephone No: (505) 393-9174

Fax No: (505) 397-1471

**Sampler Signature:** Rozanne Johnson (505) 631-9310

Email: [rozanne@valornet.com](mailto:rozanne@valornet.com)

SAMPLER SIGNATURE: ROZANNE JOHNSON (003) 631-5510		Email: rozanne@valornet.com	
LAB # (lab use only)	FIELD CODE	Date Sampled	Time Sampled
01	Monitor Well #1	2/27/2006	16:30
No. of Containers		Matrix	
Ice		Preservative	
HNO <sub>3</sub>		H <sub>2</sub> SO <sub>4</sub>	
HCl (2) 40 ml glass vials		NaOH	
Other (Specify)		None (1) 1 Liter HDPE	
Water		Other (Specify)	
Sludge		Soil	
Other (Specify):		TPH: 418.1 8015M 1005 1006	
Cations (Ca, Mg, Na, K)		Anions (Cl, SO <sub>4</sub> , CO <sub>3</sub> , HCO <sub>3</sub> )	
SAR / ESP / CEC		Metals: As Ag Ba Cd Cr Pb Hg Se	
Volatiles		Semi-volatiles	
BTEX 8021B/5030		RCI	
NORM		Total Dissolved Solids	
Standard TAT		RUSH TAT (pre-schedule)	

Sample Containers Intact?	Labels on container?	Custody Seals/Containers/Cooler	Temperature Upon Receipt
Y	Y	Y	-10°C not frozen

Laboratory Comments:

Special Instructions: PLEASE Email RESULTS TO: kpriceswd@valornet.com & mfranks@riceswd.com

Relinquished by:	Date	Time	Received by:	Date	Time
Rozanne Johnson	3/2/06	1605		03-02-06	1605

Environmental Lab of Texas  
Variance / Corrective Action Report – Sample Log-In

Client: Rice Op.

Date/Time: 3/2/06 11:05

Order #: LC02022

Initials: CK

Sample Receipt Checklist

Temperature of container/cooler?	Yes	No	— 1.0 C
Shipping container/cooler in good condition?	<input checked="" type="checkbox"/> Yes	No	
Custody Seals intact on shipping container/cooler?	<input checked="" type="checkbox"/> Yes	No	Not present
Custody Seals intact on sample bottles?	<input checked="" type="checkbox"/> Yes	No	Not present
Chain of custody present?	<input checked="" type="checkbox"/> Yes	No	
Sample Instructions complete on Chain of Custody?	<input checked="" type="checkbox"/> Yes	No	
Chain of Custody signed when relinquished and received?	<input checked="" type="checkbox"/> Yes	No	
Chain of custody agrees with sample label(s)	<input checked="" type="checkbox"/> Yes	No	
Container labels legible and intact?	<input checked="" type="checkbox"/> Yes	No	
Sample Matrix and properties same as on chain of custody?	<input checked="" type="checkbox"/> Yes	No	
Samples in proper container/bottle?	<input checked="" type="checkbox"/> Yes	No	
Samples properly preserved?	<input checked="" type="checkbox"/> Yes	No	
Sample bottles intact?	<input checked="" type="checkbox"/> Yes	No	
Preservations documented on Chain of Custody?	<input checked="" type="checkbox"/> Yes	No	
Containers documented on Chain of Custody?	<input checked="" type="checkbox"/> Yes	No	
Sufficient sample amount for indicated test?	<input checked="" type="checkbox"/> Yes	No	
All samples received within sufficient hold time?	<input checked="" type="checkbox"/> Yes	No	
VOC samples have zero headspace?	<input checked="" type="checkbox"/> Yes	No	Not Applicable

Other observations:

Samples not frozen.

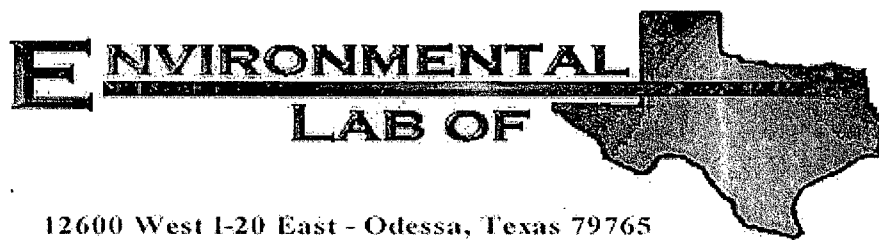
Variance Documentation:

Contact Person: - \_\_\_\_\_ Date/Time: \_\_\_\_\_ Contacted by: \_\_\_\_\_

Regarding: \_\_\_\_\_

Corrective Action Taken: \_\_\_\_\_

3/28/06



12600 West I-20 East - Odessa, Texas 79765

## Analytical Report

**Prepared for:**

Kristin Farris-Pope

Rice Operating Co.

122 W. Taylor

Hobbs, NM 88240

Project: Justis Jct. L-1 Vent

Project Number: None Given

Location: Lea County

Lab Order Number: 6C29006

Report Date: 04/06/06

Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: Justis Jct. L-I Vent  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

Reported:  
04/06/06 14:01

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Monitor Well #2	6C29006-01	Water	03/28/06 09:20	03/29/06 13:40
Monitor Well #3	6C29006-02	Water	03/28/06 10:55	03/29/06 13:40

Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: Justis Jct. L-1 Vent  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

Reported:  
04/06/06 14:01

Organics by GC  
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Monitor Well #2 (6C29006-01) Water</b>									
Benzene	ND	0.00100	mg/L	1	EC63016	03/30/06	03/31/06	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: <i>a,a,a</i> -Trifluorotoluene		80.8 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		89.8 %	80-120		"	"	"	"	

**Monitor Well #3 (6C29006-02) Water**

Benzene	ND	0.00100	mg/L	1	EC63016	03/30/06	03/31/06	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: <i>a,a,a</i> -Trifluorotoluene		80.2 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		87.5 %	80-120		"	"	"	"	

Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: Justis Jct. L-1 Vent  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

Reported:  
04/06/06 14:01

**General Chemistry Parameters by EPA / Standard Methods**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Monitor Well #2 (6C29006-01) Water</b>									
Total Alkalinity	177	2.00	mg/L	1	ED60315	04/03/06	04/03/06	EPA 310.1M	
Chloride	564	10.0	"	20	ED60306	03/31/06	04/03/06	EPA 300.0	
Total Dissolved Solids	1700	5.00	"	1	EC63019	03/29/06	03/30/06	EPA 160.1	
Sulfate	233	10.0	"	20	ED60306	03/31/06	04/03/06	EPA 300.0	
<b>Monitor Well #3 (6C29006-02) Water</b>									
Total Alkalinity	156	2.00	mg/L	1	ED60315	04/03/06	04/03/06	EPA 310.1M	
Chloride	96.3	5.00	"	10	ED60306	03/31/06	04/03/06	EPA 300.0	
Total Dissolved Solids	536	5.00	"	1	EC63019	03/29/06	03/30/06	EPA 160.1	
Sulfate	93.4	5.00	"	10	ED60306	03/31/06	04/03/06	EPA 300.0	

Environmental Lab of Texas

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Page 3 of 10



Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: Justis Jct. L-1 Vent  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

Reported:  
04/06/06 14:01

**Total Metals by EPA / Standard Methods**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Monitor Well #2 (6C29006-01) Water</b>									
Calcium	194	0.500	mg/L	50	EC63112	03/31/06	03/31/06	EPA 200.7	
Magnesium	48.1	0.0100	"	10	"	"	"	"	
Potassium	10.2	0.500	"	"	"	"	"	"	
Sodium	274	2.00	"	200	"	"	"	"	
<b>Monitor Well #3 (6C29006-02) Water</b>									
Calcium	70.2	0.100	mg/L	10	EC63112	03/31/06	03/31/06	EPA 200.7	
Magnesium	23.1	0.0100	"	"	"	"	"	"	
Potassium	3.93	0.500	"	"	"	"	"	"	
Sodium	62.9	0.500	"	50	"	"	"	"	

Environmental Lab of Texas

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Page 4 of 10

Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: Justis Jct. L-1 Vent  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

Reported:  
04/06/06 14:01

**Organics by GC - Quality Control**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch EC63016 - EPA 5030C (GC)**

**Blank (EC63016-BLK1)**

Prepared & Analyzed: 03/30/06

Benzene	ND	0.00100	mg/L							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00100	"							
Xylene (o)	ND	0.00100	"							
Surrogate: <i>a,a,a</i> -Trifluorotoluene	33.8		ug/l	40.0		84.5	80-120			
Surrogate: 4-Bromofluorobenzene	38.6		"	40.0		96.5	80-120			

**LCS (EC63016-BS1)**

Prepared & Analyzed: 03/30/06

Benzene	0.0405	0.00100	mg/L	0.0500		81.0	80-120			
Toluene	0.0441	0.00100	"	0.0500		88.2	80-120			
Ethylbenzene	0.0593	0.00100	"	0.0500		119	80-120			
Xylene (p/m)	0.102	0.00100	"	0.100		102	80-120			
Xylene (o)	0.0499	0.00100	"	0.0500		99.8	80-120			
Surrogate: <i>a,a,a</i> -Trifluorotoluene	34.4		ug/l	40.0		86.0	80-120			
Surrogate: 4-Bromofluorobenzene	39.8		"	40.0		99.5	80-120			

**Calibration Check (EC63016-CCV1)**

Prepared: 03/30/06 Analyzed: 03/31/06

Benzene	45.1		ug/l	50.0		90.2	80-120			
Toluene	41.8		"	50.0		83.6	80-120			
Ethylbenzene	46.8		"	50.0		93.6	80-120			
Xylene (p/m)	95.9		"	100		95.9	80-120			
Xylene (o)	47.5		"	50.0		95.0	80-120			
Surrogate: <i>a,a,a</i> -Trifluorotoluene	39.7		"	40.0		99.2	80-120			
Surrogate: 4-Bromofluorobenzene	35.1		"	40.0		87.8	80-120			

**Matrix Spike (EC63016-MS1)**

Source: 6C24010-02

Prepared: 03/30/06 Analyzed: 03/31/06

Benzene	0.0450	0.00100	mg/L	0.0500	ND	90.0	80-120			
Toluene	0.0429	0.00100	"	0.0500	ND	85.8	80-120			
Ethylbenzene	0.0491	0.00100	"	0.0500	ND	98.2	80-120			
Xylene (p/m)	0.0999	0.00100	"	0.100	ND	99.9	80-120			
Xylene (o)	0.0492	0.00100	"	0.0500	ND	98.4	80-120			
Surrogate: <i>a,a,a</i> -Trifluorotoluene	35.1		ug/l	40.0		87.8	80-120			
Surrogate: 4-Bromofluorobenzene	36.9		"	40.0		92.2	80-120			

Environmental Lab of Texas

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Page 5 of 10

Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: Justis Jct. L-1 Vent  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

Reported:  
04/06/06 14:01

### Organics by GC - Quality Control

#### Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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#### Batch EC63016 - EPA 5030C (GC)

##### Matrix Spike Dup (EC63016-MSD1)

Source: 6C24010-02

Prepared: 03/30/06 Analyzed: 03/31/06

Benzene	0.0433	0.00100	mg/L	0.0500	ND	86.6	80-120	3.85	20	
Toluene	0.0415	0.00100	"	0.0500	ND	83.0	80-120	3.32	20	
Ethylbenzene	0.0475	0.00100	"	0.0500	ND	95.0	80-120	3.31	20	
Xylene (p/m)	0.0971	0.00100	"	0.100	ND	97.1	80-120	2.84	20	
Xylene (o)	0.0475	0.00100	"	0.0500	ND	95.0	80-120	3.52	20	
Surrogate: a,a,a-Trifluorotoluene	43.1		ug/l	40.0		108	80-120			
Surrogate: 4-Bromofluorobenzene	34.5		"	40.0		86.2	80-120			

Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: Justis Jct. L-I Vent  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

Reported:  
04/06/06 14:01

**General Chemistry Parameters by EPA / Standard Methods - Quality Control**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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**Batch EC63019 - General Preparation (WetChem)**

**Blank (EC63019-BLK1)**

Prepared: 03/29/06 Analyzed: 03/30/06

Total Dissolved Solids ND 5.00 mg/L

**Duplicate (EC63019-DUP1)**

Source: 6C29006-01

Prepared: 03/29/06 Analyzed: 03/30/06

Total Dissolved Solids 1660 5.00 mg/L 1700 2.38 5

**Batch ED60306 - General Preparation (WetChem)**

**Blank (ED60306-BLK1)**

Prepared & Analyzed: 04/03/06

Sulfate ND 0.500 mg/L

Chloride ND 0.500 "

**LCS (ED60306-BS1)**

Prepared & Analyzed: 04/03/06

Chloride 8.69 mg/L 10.0 86.9 80-120

Sulfate 9.44 " 10.0 94.4 80-120

**Calibration Check (ED60306-CCV1)**

Prepared & Analyzed: 04/03/06

Sulfate 9.95 mg/L 10.0 99.5 80-120

Chloride 9.04 " 10.0 90.4 80-120

**Duplicate (ED60306-DUP1)**

Source: 6C29006-01

Prepared & Analyzed: 04/03/06

Sulfate 211 10.0 mg/L 233 9.91 20

Chloride 570 10.0 " 564 1.06 20

**Batch ED60315 - General Preparation (WetChem)**

**Blank (ED60315-BLK1)**

Prepared & Analyzed: 04/03/06

Total Alkalinity ND 2.00 mg/L

Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: Justis Jct. L-1 Vent  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

Reported:  
04/06/06 14:01

**General Chemistry Parameters by EPA / Standard Methods - Quality Control**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch ED60315 - General Preparation (WetChem)**

**Duplicate (ED60315-DUP1)**

Source: 6C29006-01

Prepared & Analyzed: 04/03/06

Total Alkalinity	176	2.00	mg/L		177			0.567	20	
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**Reference (ED60315-SRM1)**

Prepared & Analyzed: 04/03/06

Total Alkalinity	98.0		mg/L	100		98.0	90-110			
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Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: Justis Jct. L-1 Vent  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

Reported:  
04/06/06 14:01

**Total Metals by EPA / Standard Methods - Quality Control**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch EC63112 - 6010B/No Digestion**

**Blank (EC63112-BLK1)**

Prepared & Analyzed: 03/31/06

Calcium	ND	0.0100	mg/L							
Magnesium	ND	0.00100	"							
Potassium	ND	0.0500	"							
Sodium	ND	0.0100	"							

**Calibration Check (EC63112-CCV1)**

Prepared & Analyzed: 03/31/06

Calcium	1.85		mg/L	2.00		92.5	85-115			
Magnesium	1.84		"	2.00		92.0	85-115			
Potassium	1.76		"	2.00		88.0	85-115			
Sodium	1.74		"	2.00		87.0	85-115			

**Duplicate (EC63112-DUP1)**

Source: 6C23007-01

Prepared & Analyzed: 03/31/06

Calcium	145	0.500	mg/L		147			1.37	20	
Magnesium	94.1	0.0500	"		93.9			0.213	20	
Potassium	30.2	0.500	"		29.7			1.67	20	
Sodium	483	2.00	"		490			1.44	20	

Environmental Lab of Texas

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Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: Justis Jct. L-1 Vent  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471  
Reported:  
04/06/06 14:01

### Notes and Definitions

DET Analyte DETECTED  
ND Analyte NOT DETECTED at or above the reporting limit  
NR Not Reported  
dry Sample results reported on a dry weight basis  
RPD Relative Percent Difference  
LCS Laboratory Control Spike  
MS Matrix Spike  
Dup Duplicate

Report Approved By:

*Raland K. Tuttle*

Date: 4/6/2006

Raland K. Tuttle, Lab Manager  
Celey D. Keene, Lab Director, Org. Tech Director  
Peggy Allen, QA Officer

Jeanne Mc Murrey, Inorg. Tech Director  
LaTasha Cornish, Chemist  
Sandra Sanchez, Lab Tech.

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-563-1800.

Environmental Lab of Texas

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Page 10 of 10

12600 West I-20 East  
Odessa, Texas 79765  
Phone: 432-563-1800  
Fax: 432-563-1713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Name: Justis Jct. L-1 Vent

Company Name RICE Operating Company

Project #:

Company Address: 122 W. Taylor Street

Project Loc: Lea County

City/State/Zip: Hobbs, New Mexico 88240

PO#:

Telephone No: (505) 393-9174

Fax No: (505) 397-1471

**Sampler Signature:** Rozanne Johnson (505) 631-9310

Email: [rozanne@valornet.com](mailto:rozanne@valornet.com)

[illegible]



# Environmental Lab of Texas Variance / Corrective Action Report – Sample Log-In

Client live Op.

Date/Time 3/29/06 1:40

Order #: 6029006

Initials CK

## Sample Receipt Checklist

Temperature of container/cooler?	Yes	No	60	C
Shipping container/cooler in good condition?	<input checked="" type="checkbox"/>	No		
Custody Seals intact on shipping container/cooler?	<input checked="" type="checkbox"/>	No	Not present	
Custody Seals intact on sample bottles?	<input checked="" type="checkbox"/>	No	Not present	
Chain of custody present?	<input checked="" type="checkbox"/>	No		
Sample Instructions complete on Chain of Custody?	<input checked="" type="checkbox"/>	No		
Chain of Custody signed when relinquished and received?	<input checked="" type="checkbox"/>	No		
Chain of custody agrees with sample label(s)	<input checked="" type="checkbox"/>	No		
Container labels legible and intact?	<input checked="" type="checkbox"/>	No		
Sample Matrix and properties same as on chain of custody?	<input checked="" type="checkbox"/>	No		
Samples in proper container/bottle?	<input checked="" type="checkbox"/>	No		
Samples properly preserved?	<input checked="" type="checkbox"/>	No		
Sample bottles intact?	<input checked="" type="checkbox"/>	No		
Preservations documented on Chain of Custody?	<input checked="" type="checkbox"/>	No		
Containers documented on Chain of Custody?	<input checked="" type="checkbox"/>	No		
Sufficient sample amount for indicated test?	<input checked="" type="checkbox"/>	No		
All samples received within sufficient hold time?	<input checked="" type="checkbox"/>	No		
VOC samples have zero headspace?	<input checked="" type="checkbox"/>	No	Not Applicable	

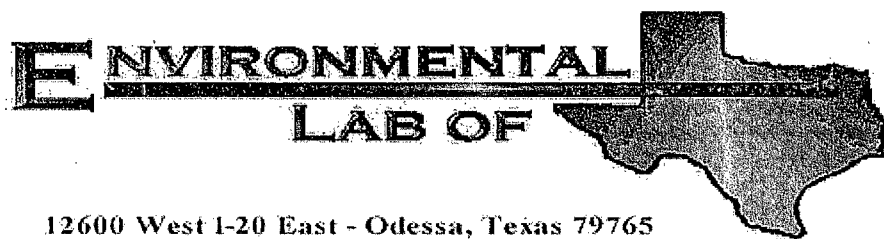
Other observations:

## Variance Documentation:

Contact Person: \_\_\_\_\_ Date/Time: \_\_\_\_\_ Contacted by: \_\_\_\_\_  
Regarding: \_\_\_\_\_

Corrective Action Taken:

5/24/06



12600 West 1-20 East - Odessa, Texas 79765

## Analytical Report

**Prepared for:**

Kristin Farris-Pope

Rice Operating Co.

122 W. Taylor

Hobbs, NM 88240

Project: Justis Jct. L-1 Vent

Project Number: None Given

Location: Lea County

Lab Order Number: 6E25009

Report Date: 06/05/06

Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: Justis Jct. L-1 Vent  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

Reported:  
06/05/06 14:46

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Monitor Well #1	6E25009-01	Water	05/24/06 07:45	05/25/06 10:50
Monitor Well #2	6E25009-02	Water	05/24/06 08:35	05/25/06 10:50
Monitor Well #3	6E25009-03	Water	05/24/06 09:40	05/25/06 10:50

Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: Justis Jct. L-1 Vent  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

Reported:  
06/05/06 14:46

**General Chemistry Parameters by EPA / Standard Methods**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Monitor Well #1 (6E25009-01) Water</b>									
Total Alkalinity	214	2.00	mg/L	1	EE63019	06/01/06	06/01/06	EPA 310.1M	
Carbonate Alkalinity	ND	0.100	"	"	"	"	"	"	
Bicarbonate Alkalinity	ND	2.00	"	"	"	"	"	"	
Hydroxide Alkalinity	ND	0.100	"	"	"	"	"	"	
Chloride	420	12.5	"	25	EE63012	05/30/06	05/30/06	EPA 300.0	
Total Dissolved Solids	1430	5.00	"	1	EE63017	05/25/06	05/26/06	EPA 160.1	
Sulfate	246	12.5	"	25	EE63012	05/30/06	05/30/06	EPA 300.0	
<b>Monitor Well #2 (6E25009-02) Water</b>									
Total Alkalinity	200	2.00	mg/L	1	EE63019	06/01/06	06/01/06	EPA 310.1M	
Carbonate Alkalinity	ND	0.100	"	"	"	"	"	"	
Bicarbonate Alkalinity	ND	2.00	"	"	"	"	"	"	
Hydroxide Alkalinity	ND	0.100	"	"	"	"	"	"	
Chloride	549	12.5	"	25	EE63012	05/30/06	05/30/06	EPA 300.0	
Total Dissolved Solids	1730	5.00	"	1	EE63017	05/25/06	05/26/06	EPA 160.1	
Sulfate	215	12.5	"	25	EE63012	05/30/06	05/30/06	EPA 300.0	
<b>Monitor Well #3 (6E25009-03) Water</b>									
Total Alkalinity	150	2.00	mg/L	1	EE63019	06/01/06	06/01/06	EPA 310.1M	
Carbonate Alkalinity	ND	0.100	"	"	"	"	"	"	
Bicarbonate Alkalinity	ND	2.00	"	"	"	"	"	"	
Hydroxide Alkalinity	ND	0.100	"	"	"	"	"	"	
Chloride	91.4	5.00	"	10	EE63012	05/30/06	05/30/06	EPA 300.0	
Total Dissolved Solids	616	5.00	"	1	EE63017	05/25/06	05/26/06	EPA 160.1	
Sulfate	88.3	5.00	"	10	EE63012	05/30/06	05/30/06	EPA 300.0	

Environmental Lab of Texas

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Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: Justis Jct. L-1 Vent  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

Reported:  
06/05/06 14:46

**Total Metals by EPA / Standard Methods**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Monitor Well #1 (6E25009-01) Water**

Calcium	139	0.500	mg/L	50	EE63023	05/30/06	05/30/06	EPA 6010B	
Magnesium	47.3	0.0100	"	10	"	"	"	"	
Potassium	6.52	0.500	"	"	"	"	"	"	
Sodium	269	0.500	"	50	"	"	"	"	

**Monitor Well #2 (6E25009-02) Water**

Calcium	173	0.500	mg/L	50	EE63023	05/30/06	05/30/06	EPA 6010B	
Magnesium	54.7	0.0100	"	10	"	"	"	"	
Potassium	8.04	0.500	"	"	"	"	"	"	
Sodium	302	0.500	"	50	"	"	"	"	

**Monitor Well #3 (6E25009-03) Water**

Calcium	70.8	0.100	mg/L	10	EE63023	05/30/06	05/30/06	EPA 6010B	
Magnesium	24.2	0.0100	"	"	"	"	"	"	
Potassium	3.87	0.500	"	"	"	"	"	"	
Sodium	64.3	0.100	"	"	"	"	"	"	

Environmental Lab of Texas

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Page 3 of 10

Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: Justis Jct. L-1 Vent  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

Reported:  
06/05/06 14:46

**Volatile Organic Compounds by EPA Method 8260B**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Monitor Well #1 (6E25009-01) Water</b>									
Benzene	ND	1.00	ug/l	1	EF60104	05/31/06	06/01/06	EPA 8260B	
Toluene	ND	1.00	"	"	"	"	"	"	
Ethylbenzene	ND	1.00	"	"	"	"	"	"	
Xylene (p/m)	ND	1.00	"	"	"	"	"	"	
Xylene (o)	ND	1.00	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		98.0 %	68-129		"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		83.0 %	72-132		"	"	"	"	
Surrogate: Toluene-d8		91.6 %	74-118		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		81.2 %	65-140		"	"	"	"	
<b>Monitor Well #2 (6E25009-02) Water</b>									
Benzene	ND	1.00	ug/l	1	EF60104	05/31/06	06/01/06	EPA 8260B	
Toluene	ND	1.00	"	"	"	"	"	"	
Ethylbenzene	ND	1.00	"	"	"	"	"	"	
Xylene (p/m)	ND	1.00	"	"	"	"	"	"	
Xylene (o)	ND	1.00	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		109 %	68-129		"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		89.8 %	72-132		"	"	"	"	
Surrogate: Toluene-d8		96.8 %	74-118		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		86.4 %	65-140		"	"	"	"	
<b>Monitor Well #3 (6E25009-03) Water</b>									
Benzene	ND	1.00	ug/l	1	EF60104	05/31/06	06/01/06	EPA 8260B	
Toluene	ND	1.00	"	"	"	"	"	"	
Ethylbenzene	ND	1.00	"	"	"	"	"	"	
Xylene (p/m)	ND	1.00	"	"	"	"	"	"	
Xylene (o)	ND	1.00	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		104 %	68-129		"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		87.0 %	72-132		"	"	"	"	
Surrogate: Toluene-d8		94.0 %	74-118		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		85.0 %	65-140		"	"	"	"	

Environmental Lab of Texas

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Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: Justis Jct. L-1 Vent  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

Reported:  
06/05/06 14:46

**General Chemistry Parameters by EPA / Standard Methods - Quality Control**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch EE63012 - General Preparation (WetChem)**

**Blank (EE63012-BLK1)**

Prepared & Analyzed: 05/30/06

Sulfate	ND	0.500	mg/L							
Chloride	ND	0.500	"							

**LCS (EE63012-BS1)**

Prepared & Analyzed: 05/30/06

Chloride	9.89	0.500	mg/L	10.0		98.9	80-120			
Sulfate	8.10	0.500	"	10.0		81.0	80-120			

**Calibration Check (EE63012-CCV1)**

Prepared & Analyzed: 05/30/06

Chloride	9.82		mg/L	10.0		98.2	80-120			
Sulfate	8.15		"	10.0		81.5	80-120			

**Duplicate (EE63012-DUP1)**

Source: 6E25009-01

Prepared & Analyzed: 05/30/06

Sulfate	248	12.5	mg/L		246			0.810	20	
Chloride	425	12.5	"		420			1.18	20	

**Matrix Spike (EE63012-MS1)**

Source: 6E25009-01

Prepared & Analyzed: 05/30/06

Chloride	736	12.5	mg/L	250	420	126	80-120			S-07
Sulfate	439	12.5	"	250	246	77.2	80-120			S-07

**Batch EE63017 - Filtration Preparation**

**Blank (EE63017-BLK1)**

Prepared: 05/25/06 Analyzed: 05/26/06

Total Dissolved Solids	ND	5.00	mg/L							
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**Duplicate (EE63017-DUP1)**

Source: 6E25009-01

Prepared: 05/25/06 Analyzed: 05/26/06

Total Dissolved Solids	1410	5.00	mg/L		1430			1.41	5	
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Environmental Lab of Texas

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Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: Justis Jct. L-1 Vent  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

Reported:  
06/05/06 14:46

**General Chemistry Parameters by EPA / Standard Methods - Quality Control**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch EE63019 - General Preparation (WetChem)**

**Blank (EE63019-BLK1)**

Prepared & Analyzed: 06/01/06

Total Alkalinity	ND	2.00	mg/L							
Carbonate Alkalinity	ND	0.100	"							
Bicarbonate Alkalinity	ND	2.00	"							

**LCS (EE63019-BS1)**

Prepared & Analyzed: 06/01/06

Bicarbonate Alkalinity	216	2.00	mg/L	200		108	85-115			
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**Duplicate (EE63019-DUP1)**

Source: 6E25009-01

Prepared & Analyzed: 06/01/06

Total Alkalinity	213	2.00	mg/L		214			0.468	20	
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**Reference (EE63019-SRM1)**

Prepared & Analyzed: 06/01/06

Total Alkalinity	96.0		mg/L	100		96.0	90-110			
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Environmental Lab of Texas

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Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: Justis Jct. L-1 Vent  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

Reported:  
06/05/06 14:46

### Total Metals by EPA / Standard Methods - Quality Control

#### Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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#### Batch EE63023 - 6010B/No Digestion

##### Blank (EE63023-BLK1)

Prepared & Analyzed: 05/30/06

Calcium	ND	0.0100	mg/L							
Magnesium	ND	0.00100	"							
Potassium	ND	0.0500	"							
Sodium	ND	0.0100	"							

##### Calibration Check (EE63023-CCV1)

Prepared & Analyzed: 05/30/06

Calcium	2.15		mg/L	2.00		108	85-115			
Magnesium	2.25		"	2.00		112	85-115			
Potassium	1.90		"	2.00		95.0	85-115			
Sodium	1.93		"	2.00		96.5	85-115			

##### Duplicate (EE63023-DUP1)

Source: 6E24005-01

Prepared & Analyzed: 05/30/06

Calcium	105	0.500	mg/L		108			2.82	20	
Magnesium	44.8	0.0100	"		43.7			2.49	20	
Potassium	10.3	0.500	"		11.1			7.48	20	
Sodium	266	0.500	"		260			2.28	20	

Environmental Lab of Texas

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Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: Justis Jct. L-1 Vent  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

Reported:  
06/05/06 14:46

## Volatile Organic Compounds by EPA Method 8260B - Quality Control

### Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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#### Batch EF60104 - EPA 5030C (GCMS)

##### Blank (EF60104-BLK1)

Prepared & Analyzed: 05/31/06

Benzene	ND	1.00	ug/l							
Toluene	ND	1.00	"							
Ethylbenzene	ND	1.00	"							
Xylene (p/m)	ND	1.00	"							
Xylene (o)	ND	1.00	"							
Surrogate: Dibromofluoromethane	53.2		"	50.0		106	68-129			
Surrogate: 1,2-Dichloroethane-d4	47.3		"	50.0		94.6	72-132			
Surrogate: Toluene-d8	45.4		"	50.0		90.8	74-118			
Surrogate: 4-Bromofluorobenzene	40.7		"	50.0		81.4	65-140			

##### LCS (EF60104-BS1)

Prepared: 05/31/06 Analyzed: 06/01/06

Benzene	25.0	1.00	ug/l	25.0		100	70-130			
Toluene	25.5	1.00	"	25.0		102	70-130			
Ethylbenzene	25.8	1.00	"	25.0		103	70-130			
Xylene (p/m)	47.4	1.00	"	50.0		94.8	70-130			
Xylene (o)	25.2	1.00	"	25.0		101	70-130			
Surrogate: Dibromofluoromethane	49.6		"	50.0		99.2	68-129			
Surrogate: 1,2-Dichloroethane-d4	46.0		"	50.0		92.0	72-132			
Surrogate: Toluene-d8	45.9		"	50.0		91.8	74-118			
Surrogate: 4-Bromofluorobenzene	41.6		"	50.0		83.2	65-140			

##### Calibration Check (EF60104-CCV1)

Prepared: 05/31/06 Analyzed: 06/01/06

Toluene	46.1		ug/l	50.0		92.2	70-130			
Ethylbenzene	39.0		"	50.0		78.0	70-130			
Surrogate: Dibromofluoromethane	48.2		"	50.0		96.4	68-129			
Surrogate: 1,2-Dichloroethane-d4	43.1		"	50.0		86.2	72-132			
Surrogate: Toluene-d8	45.2		"	50.0		90.4	74-118			
Surrogate: 4-Bromofluorobenzene	39.4		"	50.0		78.8	65-140			

Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: Justis Jct. L-1 Vent  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

Reported:  
06/05/06 14:46

**Volatile Organic Compounds by EPA Method 8260B - Quality Control**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch EF60104 - EPA 5030C (GCMS)**

**Matrix Spike (EF60104-MS1)**

Source: 6E25011-01

Prepared: 05/31/06 Analyzed: 06/01/06

Benzene	23.8	1.00	ug/l	25.0	ND	95.2	80-120			
Toluene	24.1	1.00	"	25.0	ND	96.4	80-120			
Ethylbenzene	24.8	1.00	"	25.0	ND	99.2	80-120			
Xylene (p/m)	45.3	1.00	"	50.0	ND	90.6	80-120			
Xylene (o)	24.2	1.00	"	25.0	ND	96.8	80-120			
Surrogate: Dibromofluoromethane	48.0		"	50.0		96.0	68-129			
Surrogate: 1,2-Dichloroethane-d4	44.5		"	50.0		89.0	72-132			
Surrogate: Toluene-d8	45.4		"	50.0		90.8	74-118			
Surrogate: 4-Bromofluorobenzene	40.5		"	50.0		81.0	65-140			

**Matrix Spike Dup (EF60104-MSD1)**

Source: 6E25011-01

Prepared: 05/31/06 Analyzed: 06/01/06

Benzene	25.2	1.00	ug/l	25.0	ND	101	80-120	5.71	20	
Toluene	25.7	1.00	"	25.0	ND	103	80-120	6.43	20	
Ethylbenzene	26.1	1.00	"	25.0	ND	104	80-120	5.11	20	
Xylene (p/m)	47.2	1.00	"	50.0	ND	94.4	80-120	4.11	20	
Xylene (o)	25.4	1.00	"	25.0	ND	102	80-120	4.84	20	
Surrogate: Dibromofluoromethane	46.4		"	50.0		92.8	68-129			
Surrogate: 1,2-Dichloroethane-d4	42.9		"	50.0		85.8	72-132			
Surrogate: Toluene-d8	43.4		"	50.0		86.8	74-118			
Surrogate: 4-Bromofluorobenzene	38.6		"	50.0		77.2	65-140			

Environmental Lab of Texas

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Page 9 of 10

Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: Justis Jct. L-1 Vent  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

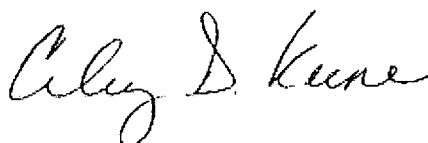
Fax: (505) 397-1471

Reported:  
06/05/06 14:46

### Notes and Definitions

S-07 Recovery outside Laboratory historical or method prescribed limits.  
DET Analyte DETECTED  
ND Analyte NOT DETECTED at or above the reporting limit  
NR Not Reported  
dry Sample results reported on a dry weight basis  
RPD Relative Percent Difference  
LCS Laboratory Control Spike  
MS Matrix Spike  
Dup Duplicate

Report Approved By: \_\_\_\_\_



Date: 6/5/2006

Raland K. Tuttle, Lab Manager  
Caley D. Keene, Lab Director, Org. Tech Director  
Peggy Allen, QA Officer

Jeanne Mc Murrey, Inorg. Tech Director  
La Tasha Cornish, Chemist  
Sandra Sanchez, Lab Tech.

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12600 West I-20 East  
Odessa, Texas 79755  
Phone: 432-563-1800  
Fax: 432-563-1713

## CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Name: Justis Jct. L-1 Vent

**Project #:**

Project Loc: Lea County

送

Fax No: (505) 397-1471

**Sampler Signature:** Rozanne Johnson (505) 631-9310

Email: [rozanne@valornei.com](mailto:rozanne@valornei.com)

[illegible]

Environmental Lab of Texas  
Variance / Corrective Action Report – Sample Log-In

Client: Rice Op.  
Date/Time: 8/25/06 10:50  
Order #: 16E25009  
Initials: UK

Sample Receipt Checklist

Temperature of container/cooler?	Yes	No	215	C
Shipping container/cooler in good condition?	<input checked="" type="checkbox"/>	No		
Custody Seals intact on shipping container/cooler?	<input checked="" type="checkbox"/>	No	Not present	
Custody Seals intact on sample bottles?	<input checked="" type="checkbox"/>	No	Not present	
Chain of custody present?	<input checked="" type="checkbox"/>	No		
Sample Instructions complete on Chain of Custody?	<input checked="" type="checkbox"/>	No		
Chain of Custody signed when relinquished and received?	<input checked="" type="checkbox"/>	No		
Chain of custody agrees with sample label(s)	<input checked="" type="checkbox"/>	No		
Container labels legible and intact?	<input checked="" type="checkbox"/>	No		
Sample Matrix and properties same as on chain of custody?	<input checked="" type="checkbox"/>	No		
Samples in proper container/bottle?	<input checked="" type="checkbox"/>	No		
Samples properly preserved?	<input checked="" type="checkbox"/>	No		
Sample bottles intact?	<input checked="" type="checkbox"/>	No		
Preservations documented on Chain of Custody?	<input checked="" type="checkbox"/>	No		
Containers documented on Chain of Custody?	<input checked="" type="checkbox"/>	No		
Sufficient sample amount for indicated test?	<input checked="" type="checkbox"/>	No		
All samples received within sufficient hold time?	<input checked="" type="checkbox"/>	No		
VOC samples have zero headspace?	<input checked="" type="checkbox"/>	No	Not Applicable	

Other observations:

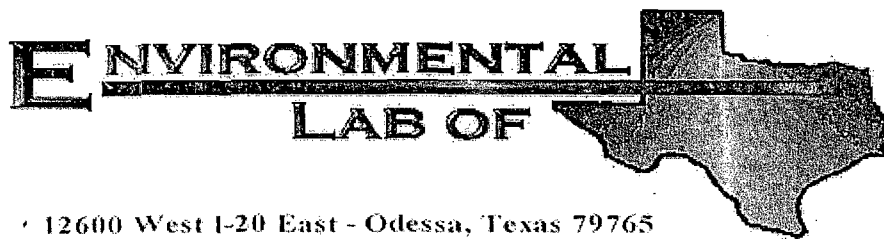
Variance Documentation:

Contact Person: - \_\_\_\_\_ Date/Time: \_\_\_\_\_ Contacted by: \_\_\_\_\_  
Regarding: \_\_\_\_\_

Corrective Action Taken:



9/14/06



12600 West I-20 East - Odessa, Texas 79765

## Analytical Report

**Prepared for:**

Kristin Farris-Pope

Rice Operating Co.

122 W. Taylor

Hobbs, NM 88240

Project: Justis Junction L-1 Vent

Project Number: None Given

Location: T25S-R37E-Sec1L- Lea County, NM

Lab Order Number: 6114014

Report Date: 09/22/06

Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: Justis Junction L-I Vent  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Monitor Well #1	6I14014-01	Water	09/14/06 13:45	09-14-2006 16:00
Monitor Well #2	6I14014-02	Water	09/14/06 12:20	09-14-2006 16:00
Monitor Well #3	6I14014-03	Water	09/14/06 11:25	09-14-2006 16:00

Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: Justis Junction L-1 Vent  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Monitor Well #1 (6I14014-01) Water</b>									
Benzene	ND	0.00100	mg/L	1	EI61906	09/19/06	09/20/06	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: <i>a,a,a</i> -Trifluorotoluene		93.0 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		80.2 %	80-120		"	"	"	"	
<b>Monitor Well #2 (6I14014-02) Water</b>									
Benzene	ND	0.00100	mg/L	1	EI61906	09/19/06	09/20/06	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: <i>a,a,a</i> -Trifluorotoluene		89.8 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		83.8 %	80-120		"	"	"	"	
<b>Monitor Well #3 (6I14014-03) Water</b>									
Benzene	ND	0.00100	mg/L	1	EI61906	09/19/06	09/20/06	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: <i>a,a,a</i> -Trifluorotoluene		95.5 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		95.0 %	80-120		"	"	"	"	

Environmental Lab of Texas

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Page 2 of 10

Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: Justis Junction L-1 Vent  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

**General Chemistry Parameters by EPA / Standard Methods**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Monitor Well #1 (6I14014-01) Water</b>									
Total Alkalinity	226	2.00	mg/L	1	EI62015	09/20/06	09/20/06	EPA 310.1M	
Chloride	672	12.5	"	25	EI61815	09/15/06	09/19/06	EPA 300.0	
Total Dissolved Solids	1870	10.0	"	1	EI61818	09/15/06	09/18/06	EPA 160.1	
Sulfate	339	12.5	"	25	EI61815	09/15/06	09/19/06	EPA 300.0	
<b>Monitor Well #2 (6I14014-02) Water</b>									
Total Alkalinity	256	2.00	mg/L	1	EI62015	09/20/06	09/20/06	EPA 310.1M	
Chloride	546	12.5	"	25	EI61815	09/15/06	09/19/06	EPA 300.0	
Total Dissolved Solids	1660	10.0	"	1	EI61818	09/15/06	09/18/06	EPA 160.1	
Sulfate	306	12.5	"	25	EI61815	09/15/06	09/19/06	EPA 300.0	
<b>Monitor Well #3 (6I14014-03) Water</b>									
Total Alkalinity	160	2.00	mg/L	1	EI62015	09/20/06	09/20/06	EPA 310.1M	
Chloride	125	5.00	"	10	EI61815	09/15/06	09/19/06	EPA 300.0	
Total Dissolved Solids	562	10.0	"	1	EI61818	09/15/06	09/18/06	EPA 160.1	
Sulfate	125	5.00	"	10	EI61815	09/15/06	09/19/06	EPA 300.0	

Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: Justis Junction L-1 Vent  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

**Total Metals by EPA / Standard Methods**

**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Monitor Well #1 (6114014-01) Water**

Calcium	205	4.05	mg/L	50	EI61801	09/18/06	09/18/06	EPA 6010B	
Magnesium	83.3	1.80	"	"	"	"	"	"	
Potassium	8.08	0.600	"	10	"	"	"	"	
Sodium	275	2.15	"	50	"	"	"	"	

**Monitor Well #2 (6114014-02) Water**

Calcium	157	4.05	mg/L	50	EI61801	09/18/06	09/18/06	EPA 6010B	
Magnesium	49.1	0.360	"	10	"	"	"	"	
Potassium	7.86	0.600	"	"	"	"	"	"	
Sodium	293	2.15	"	50	"	"	"	"	

**Monitor Well #3 (6114014-03) Water**

Calcium	80.9	0.810	mg/L	10	EI61801	09/18/06	09/18/06	EPA 6010B	
Magnesium	25.0	0.360	"	"	"	"	"	"	
Potassium	3.73	0.600	"	"	"	"	"	"	
Sodium	59.4	0.430	"	"	"	"	"	"	

Environmental Lab of Texas

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Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: Justis Junction L-I Vent  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

**Organics by GC - Quality Control**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch EI61906 - EPA 5030C (GC)**

**Blank (EI61906-BLK1)**

Prepared: 09/19/06 Analyzed: 09/20/06

Benzene	ND	0.00100	mg/L							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00100	"							
Xylene (o)	ND	0.00100	"							
Surrogate: a,a,a-Trifluorotoluene	41.7		ug/l	40.0		104	80-120			
Surrogate: 4-Bromofluorobenzene	42.7		"	40.0		107	80-120			

**LCS (EI61906-BS1)**

Prepared & Analyzed: 09/19/06

Benzene	0.0553	0.00100	mg/L	0.0500		111	80-120			
Toluene	0.0473	0.00100	"	0.0500		94.6	80-120			
Ethylbenzene	0.0437	0.00100	"	0.0500		87.4	80-120			
Xylene (p/m)	0.105	0.00100	"	0.100		105	80-120			
Xylene (o)	0.0506	0.00100	"	0.0500		101	80-120			
Surrogate: a,a,a-Trifluorotoluene	39.9		ug/l	40.0		99.8	80-120			
Surrogate: 4-Bromofluorobenzene	36.7		"	40.0		91.8	80-120			

**Calibration Check (EI61906-CCV1)**

Prepared: 09/19/06 Analyzed: 09/20/06

Benzene	0.0540		mg/L	0.0500		108	80-120			
Toluene	0.0482		"	0.0500		96.4	80-120			
Ethylbenzene	0.0489		"	0.0500		97.8	80-120			
Xylene (p/m)	0.0966		"	0.100		96.6	80-120			
Xylene (o)	0.0480		"	0.0500		96.0	80-120			
Surrogate: a,a,a-Trifluorotoluene	40.1		ug/l	40.0		100	80-120			
Surrogate: 4-Bromofluorobenzene	43.3		"	40.0		108	80-120			

**Matrix Spike (EI61906-MS1)**

Source: 6114005-01

Prepared: 09/19/06 Analyzed: 09/20/06

Benzene	0.0597	0.00100	mg/L	0.0500	ND	119	80-120			
Toluene	0.0503	0.00100	"	0.0500	ND	101	80-120			
Ethylbenzene	0.0502	0.00100	"	0.0500	ND	100	80-120			
Xylene (p/m)	0.106	0.00100	"	0.100	ND	106	80-120			
Xylene (o)	0.0511	0.00100	"	0.0500	ND	102	80-120			
Surrogate: a,a,a-Trifluorotoluene	39.8		ug/l	40.0		99.5	80-120			
Surrogate: 4-Bromofluorobenzene	46.6		"	40.0		116	80-120			

Environmental Lab of Texas

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Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: Justis Junction L-1 Vent  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

**Organics by GC - Quality Control**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch EI61906 - EPA 5030C (GC)**

**Matrix Spike Dup (EI61906-MSD1)**

**Source: 6114005-01**

Prepared: 09/19/06 Analyzed: 09/20/06

Benzene	0.0580	0.00100	mg/L	0.0500	ND	116	80-120	2.55	20	
Toluene	0.0510	0.00100	"	0.0500	ND	102	80-120	0.985	20	
Ethylbenzene	0.0506	0.00100	"	0.0500	ND	101	80-120	0.995	20	
Xylene (p/m)	0.106	0.00100	"	0.100	ND	106	80-120	0.00	20	
Xylene (o)	0.0534	0.00100	"	0.0500	ND	107	80-120	4.78	20	
Surrogate: a,a,a-Trifluorotoluene	40.0		ug/l	40.0		100	80-120			
Surrogate: 4-Bromofluorobenzene	46.0		"	40.0		115	80-120			

Environmental Lab of Texas

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Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: Justis Junction L-1 Vent  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

**General Chemistry Parameters by EPA / Standard Methods - Quality Control**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch EI61815 - General Preparation (WetChem)</b>										
<b>Blank (EI61815-BLK1)</b>										
Prepared: 09/15/06 Analyzed: 09/19/06										
Sulfate	ND	0.500	mg/L							
Chloride	ND	0.500	"							
<b>LCS (EI61815-BS1)</b>										
Prepared: 09/15/06 Analyzed: 09/19/06										
Chloride	9.83	0.500	mg/L	10.0		98.3	80-120			
Sulfate	10.1	0.500	"	10.0		101	80-120			
<b>Calibration Check (EI61815-CCV1)</b>										
Prepared: 09/15/06 Analyzed: 09/19/06										
Chloride	9.86		mg/L	10.0		98.6	80-120			
Sulfate	10.2		"	10.0		102	80-120			
<b>Duplicate (EI61815-DUP1)</b>										
Source: 6113001-01 Prepared: 09/15/06 Analyzed: 09/19/06										
Chloride	223	5.00	mg/L		221			0.901	20	
Sulfate	80.6	5.00	"		80.7			0.124	20	
<b>Duplicate (EI61815-DUP2)</b>										
Source: 6114014-02 Prepared: 09/15/06 Analyzed: 09/19/06										
Chloride	547	12.5	mg/L		546			0.183	20	
Sulfate	306	12.5	"		306			0.00	20	
<b>Matrix Spike (EI61815-MS1)</b>										
Source: 6113001-01 Prepared: 09/15/06 Analyzed: 09/19/06										
Chloride	331	5.00	mg/L	100	221	110	80-120			
Sulfate	185	5.00	"	100	80.7	104	80-120			
<b>Matrix Spike (EI61815-MS2)</b>										
Source: 6114014-02 Prepared: 09/15/06 Analyzed: 09/19/06										
Chloride	829	12.5	mg/L	250	546	113	80-120			
Sulfate	579	12.5	"	250	306	109	80-120			

Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: Justis Junction L-1 Vent  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

**General Chemistry Parameters by EPA / Standard Methods - Quality Control**

**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch EI61818 - Filtration Preparation**

**Blank (EI61818-BLK1)**

Prepared: 09/15/06 Analyzed: 09/18/06

Total Dissolved Solids ND 10.0 mg/L

**Duplicate (EI61818-DUP1)**

Source: 6I14012-01

Prepared: 09/15/06 Analyzed: 09/18/06

Total Dissolved Solids 1250 10.0 mg/L 1260 0.797 5

**Duplicate (EI61818-DUP2)**

Source: 6I14014-03

Prepared: 09/15/06 Analyzed: 09/18/06

Total Dissolved Solids 564 10.0 mg/L 562 0.355 5

**Batch EI62015 - General Preparation (WetChem)**

**Blank (EI62015-BLK1)**

Prepared & Analyzed: 09/20/06

Total Alkalinity ND 2.00 mg/L

**LCS (EI62015-BS1)**

Prepared & Analyzed: 09/20/06

Total Alkalinity 170 2.00 mg/L 200 85.0 85-115

**Duplicate (EI62015-DUP1)**

Source: 6I14012-01

Prepared & Analyzed: 09/20/06

Total Alkalinity 170 2.00 mg/L 164 3.59 20

**Reference (EI62015-SRM1)**

Prepared & Analyzed: 09/20/06

Total Alkalinity 240 mg/L 250 96.0 90-110

Environmental Lab of Texas

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Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: Justis Junction L-1 Vent  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

**Total Metals by EPA / Standard Methods - Quality Control**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

**Batch EI61801 - 6010B/No Digestion**

**Blank (EI61801-BLK1)**

Prepared & Analyzed: 09/18/06

Calcium	ND	0.0810	mg/L							
Magnesium	ND	0.0360	"							
Potassium	ND	0.0600	"							
Sodium	ND	0.0430	"							

**Calibration Check (EI61801-CCV1)**

Prepared & Analyzed: 09/18/06

Calcium	1.89		mg/L	2.00		94.5	85-115			
Magnesium	2.15		"	2.00		108	85-115			
Potassium	1.74		"	2.00		87.0	85-115			
Sodium	1.73		"	2.00		86.5	85-115			

**Duplicate (EI61801-DUP1)**

Source: 6I14005-01

Prepared & Analyzed: 09/18/06

Calcium	40.2	0.810	mg/L		39.4			2.01	20	
Magnesium	18.0	0.360	"		17.6			2.25	20	
Potassium	8.88	0.600	"		8.96			0.897	20	
Sodium	48.5	0.430	"		49.1			1.23	20	

Environmental Lab of Texas

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Page 9 of 10

Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: Justis Junction L-1 Vent  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

### Notes and Definitions

DET Analyte DETECTED  
ND Analyte NOT DETECTED at or above the reporting limit  
NR Not Reported  
dry Sample results reported on a dry weight basis  
RPD Relative Percent Difference  
LCS Laboratory Control Spike  
MS Matrix Spike  
Dup Duplicate

Report Approved By:

*Raland K. Tuttle*

Date:

9/22/2006

Raland K. Tuttle, Lab Manager  
Celey D. Keene, Lab Director, Org. Tech Director  
Peggy Allen, QA Officer

Jeanne Mc Murrey, Inorg. Tech Director  
LaTasha Cornish, Chemist  
Sandra Sanchez, Lab Tech.

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# Environmental Lab of Texas

## Variance/ Corrective Action Report- Sample Log-In

Client: Rice Dr.  
 Date/ Time: 9/14/06 16:00  
 Lab ID #: 6H4014  
 Initials: OK

### Sample Receipt Checklist

Client Initials

Temperature of container/ cooler?	Yes	No	21.5 °C	
Shipping container in good condition?	Yes	No		
Custody Seals intact on shipping container/ cooler?	Yes	No	Not Present	
Custody Seals intact on sample bottles/ container?	Yes	No	Not Present	
Chain of Custody present?	Yes	No		
Sample instructions complete of Chain of Custody?	Yes	No		
Chain of Custody signed when relinquished/ received?	Yes	No		
Chain of Custody agrees with sample label(s)?	Yes	No	ID written on Cont./ Lid	
Container label(s) legible and intact?	Yes	No	Not Applicable	
0 Sample matrix/ properties agree with Chain of Custody?	Yes	No		
1 Containers supplied by ELOT?	Yes	No		
2 Samples in proper container/ bottle?	Yes	No	See Below	
3 Samples properly preserved?	Yes	No	See Below	
4 Sample bottles intact?	Yes	No		
5 Preservations documented on Chain of Custody?	Yes	No		
6 Containers documented on Chain of Custody?	Yes	No		
7 Sufficient sample amount for indicated test(s)?	Yes	No	See Below	
8 All samples received within sufficient hold time?	Yes	No	See Below	
9 VOC samples have zero headspace?	Yes	No	Not Applicable	

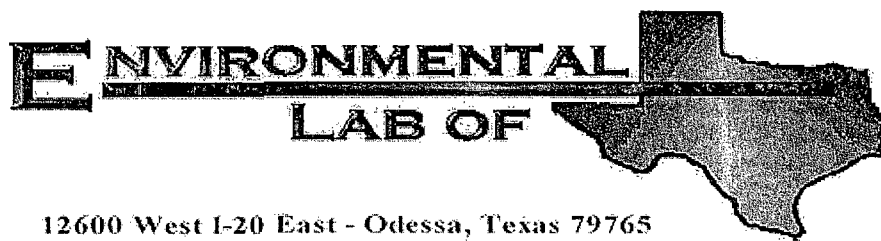
### Variance Documentation

Contact: \_\_\_\_\_ Contacted by: \_\_\_\_\_ Date/ Time: \_\_\_\_\_  
 Regarding: \_\_\_\_\_

Corrective Action Taken:

- Check all that Apply:
- ☐ See attached e-mail/ fax
  - ☐ Client understands and would like to proceed with analysis
  - ☐ Cooling process had begun shortly after sampling event

10/30/06



12600 West I-20 East - Odessa, Texas 79765

## Analytical Report

**Prepared for:**

Kristin Farris-Pope

Rice Operating Co.

122 W. Taylor

Hobbs, NM 88240

Project: Justis Jct. L-1 Vent

Project Number: None Given

Location: T25S, R37E, Sec.11L- Lea County, NM

Lab Order Number: 6K03008

Report Date: 11/10/06



Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: Justis Jct. L-1 Vent  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Monitor Well #1	6K03008-01	Water	10/30/06 13:30	11-03-2006 11:45
Monitor Well #2	6K03008-02	Water	10/30/06 12:35	11-03-2006 11:45
Monitor Well #3	6K03008-03	Water	10/30/06 10:25	11-03-2006 11:45
Monitor Well #4	6K03008-04	Water	10/30/06 11:40	11-03-2006 11:45

Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: Justis Jct. L-1 Vent  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Monitor Well #1 (6K03008-01) Water</b>									
Benzene	ND	0.00100	mg/L	1	EK60807	11/08/06	11/08/06	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		80.8 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		80.0 %	80-120		"	"	"	"	
<b>Monitor Well #2 (6K03008-02) Water</b>									
Benzene	ND	0.00100	mg/L	1	EK60807	11/08/06	11/08/06	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		92.8 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		80.5 %	80-120		"	"	"	"	
<b>Monitor Well #3 (6K03008-03) Water</b>									
Benzene	ND	0.00100	mg/L	1	EK60807	11/08/06	11/08/06	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		98.2 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		80.5 %	80-120		"	"	"	"	
<b>Monitor Well #4 (6K03008-04) Water</b>									
Benzene	ND	0.00100	mg/L	1	EK60807	11/08/06	11/08/06	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		94.8 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		84.2 %	80-120		"	"	"	"	

Environmental Lab of Texas

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Page 2 of 10

Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: Justis Jct. L-1 Vent  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

**General Chemistry Parameters by EPA / Standard Methods**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Monitor Well #1 (6K03008-01) Water</b>									
Total Alkalinity	240	2.00	mg/L	1	EK60711	11/07/06	11/07/06	EPA 310.1M	
Chloride	943	12.5	"	25	EK60602	11/06/06	11/06/06	EPA 300.0	
Total Dissolved Solids	2360	10.0	"	1	EK60209	11/03/06	11/06/06	EPA 160.1	
Sulfate	339	12.5	"	25	EK60602	11/06/06	11/06/06	EPA 300.0	
<b>Monitor Well #2 (6K03008-02) Water</b>									
Total Alkalinity	246	2.00	mg/L	1	EK60711	11/07/06	11/07/06	EPA 310.1M	
Chloride	505	10.0	"	20	EK60602	11/06/06	11/06/06	EPA 300.0	
Total Dissolved Solids	1560	10.0	"	1	EK60209	11/03/06	11/06/06	EPA 160.1	
Sulfate	275	10.0	"	20	EK60602	11/06/06	11/06/06	EPA 300.0	
<b>Monitor Well #3 (6K03008-03) Water</b>									
Total Alkalinity	194	2.00	mg/L	1	EK60711	11/07/06	11/07/06	EPA 310.1M	
Chloride	114	5.00	"	10	EK60602	11/06/06	11/06/06	EPA 300.0	
Total Dissolved Solids	518	10.0	"	1	EK60209	11/03/06	11/06/06	EPA 160.1	
Sulfate	111	5.00	"	10	EK60602	11/06/06	11/06/06	EPA 300.0	
<b>Monitor Well #4 (6K03008-04) Water</b>									
Total Alkalinity	260	2.00	mg/L	1	EK60711	11/07/06	11/07/06	EPA 310.1M	
Chloride	44.2	5.00	"	10	EK60602	11/06/06	11/06/06	EPA 300.0	
Total Dissolved Solids	492	10.0	"	1	EK60209	11/03/06	11/06/06	EPA 160.1	
Sulfate	115	5.00	"	10	EK60602	11/06/06	11/06/06	EPA 300.0	

Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: Justis Jct. L-1 Vent  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

**Total Metals by EPA / Standard Methods**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Monitor Well #1 (6K03008-01) Water</b>									
Calcium	354	4.05	mg/L	50	EK60712	11/07/06	11/07/06	EPA 6010B	
Magnesium	127	1.80	"	"	"	"	"	"	
Potassium	9.05	0.600	"	10	"	"	"	"	
Sodium	323	2.15	"	50	"	"	"	"	
<b>Monitor Well #2 (6K03008-02) Water</b>									
Calcium	173	4.05	mg/L	50	EK60712	11/07/06	11/07/06	EPA 6010B	
Magnesium	60.4	1.80	"	"	"	"	"	"	
Potassium	7.65	0.600	"	10	"	"	"	"	
Sodium	304	2.15	"	50	"	"	"	"	
<b>Monitor Well #3 (6K03008-03) Water</b>									
Calcium	74.5	0.810	mg/L	10	EK60712	11/07/06	11/07/06	EPA 6010B	
Magnesium	24.2	0.360	"	"	"	"	"	"	
Potassium	3.91	0.600	"	"	"	"	"	"	
Sodium	61.4	0.430	"	"	"	"	"	"	
<b>Monitor Well #4 (6K03008-04) Water</b>									
Calcium	70.0	0.810	mg/L	10	EK60712	11/07/06	11/07/06	EPA 6010B	
Magnesium	22.7	0.360	"	"	"	"	"	"	
Potassium	3.76	0.600	"	"	"	"	"	"	
Sodium	57.7	0.430	"	"	"	"	"	"	

Environmental Lab of Texas

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Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: Justis Jct. L-1 Vent  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

**Organics by GC - Quality Control**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch EK60807 - EPA 5030C (GC)**

**Blank (EK60807-BLK1)**

Prepared & Analyzed: 11/08/06

Benzene	ND	0.00100	mg/L							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00100	"							
Xylene (o)	ND	0.00100	"							
Surrogate: a,a,a-Trifluorotoluene	39.7		ug/l	40.0		99.2	80-120			
Surrogate: 4-Bromofluorobenzene	36.0		"	40.0		90.0	80-120			

**LCS (EK60807-BS1)**

Prepared & Analyzed: 11/08/06

Benzene	0.0505	0.00100	mg/L	0.0500		101	80-120			
Toluene	0.0455	0.00100	"	0.0500		91.0	80-120			
Ethylbenzene	0.0450	0.00100	"	0.0500		90.0	80-120			
Xylene (p/m)	0.0963	0.00100	"	0.100		96.3	80-120			
Xylene (o)	0.0469	0.00100	"	0.0500		93.8	80-120			
Surrogate: a,a,a-Trifluorotoluene	36.7		ug/l	40.0		91.8	80-120			
Surrogate: 4-Bromofluorobenzene	42.3		"	40.0		106	80-120			

**Calibration Check (EK60807-CCV1)**

Prepared: 11/08/06 Analyzed: 11/09/06

Benzene	53.7		ug/l	50.0		107	80-120			
Toluene	46.9		"	50.0		93.8	80-120			
Ethylbenzene	48.0		"	50.0		96.0	80-120			
Xylene (p/m)	93.1		"	100		93.1	80-120			
Xylene (o)	45.8		"	50.0		91.6	80-120			
Surrogate: a,a,a-Trifluorotoluene	41.4		"	40.0		104	80-120			
Surrogate: 4-Bromofluorobenzene	35.5		"	40.0		88.8	80-120			

**Matrix Spike (EK60807-MS1)**

Source: 6K03002-01

Prepared: 11/08/06 Analyzed: 11/09/06

Benzene	0.0549	0.00100	mg/L	0.0500	ND	110	80-120			
Toluene	0.0474	0.00100	"	0.0500	ND	94.8	80-120			
Ethylbenzene	0.0462	0.00100	"	0.0500	ND	92.4	80-120			
Xylene (p/m)	0.0939	0.00100	"	0.100	ND	93.9	80-120			
Xylene (o)	0.0451	0.00100	"	0.0500	ND	90.2	80-120			
Surrogate: a,a,a-Trifluorotoluene	39.5		ug/l	40.0		98.8	80-120			
Surrogate: 4-Bromofluorobenzene	37.4		"	40.0		93.5	80-120			

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Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: Justis Jct. L-1 Vent  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

**Organics by GC - Quality Control**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch EK60807 - EPA 5030C (GC)**

**Matrix Spike Dup (EK60807-MSD1)**

Source: 6K03002-01

Prepared: 11/08/06 Analyzed: 11/09/06

Benzene	0.0554	0.00100	mg/L	0.0500	ND	111	80-120	0.905	20	
Toluene	0.0504	0.00100	"	0.0500	ND	101	80-120	6.33	20	
Ethylbenzene	0.0472	0.00100	"	0.0500	ND	94.4	80-120	2.14	20	
Xylene (p/m)	0.105	0.00100	"	0.100	ND	105	80-120	11.2	20	
Xylene (o)	0.0521	0.00100	"	0.0500	ND	104	80-120	14.2	20	
Surrogate: <i>a,a,a</i> -Trifluorotoluene	39.4		ug/l	40.0		98.5	80-120			
Surrogate: <i>4</i> -Bromofluorobenzene	42.5		"	40.0		106	80-120			

Environmental Lab of Texas

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Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: Justis Jct. L-1 Vent  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

**General Chemistry Parameters by EPA / Standard Methods - Quality Control**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch EK60209 - Filtration Preparation</b>										
<b>Blank (EK60209-BLK1)</b>					Prepared: 11/02/06 Analyzed: 11/03/06					
Total Dissolved Solids	ND	10.0	mg/L							
<b>Duplicate (EK60209-DUP1)</b>					Source: 6K01015-01 Prepared: 11/02/06 Analyzed: 11/03/06					
Total Dissolved Solids	696	10.0	mg/L		702			0.858	5	
<b>Duplicate (EK60209-DUP2)</b>					Source: 6K03008-04 Prepared: 11/03/06 Analyzed: 11/06/06					
Total Dissolved Solids	500	10.0	mg/L		492			1.61	5	
<b>Batch EK60602 - General Preparation (WetChem)</b>										
<b>Blank (EK60602-BLK1)</b>					Prepared & Analyzed: 11/06/06					
Chloride	ND	0.500	mg/L							
Sulfate	ND	0.500	"							
<b>LCS (EK60602-BS1)</b>					Prepared & Analyzed: 11/06/06					
Chloride	10.2	0.500	mg/L	10.0		102	80-120			
Sulfate	9.30	0.500	"	10.0		93.0	80-120			
<b>Calibration Check (EK60602-CCV1)</b>					Prepared & Analyzed: 11/06/06					
Sulfate	10.9		mg/L	10.0		109	80-120			
Chloride	10.0		"	10.0		100	80-120			
<b>Duplicate (EK60602-DUP1)</b>					Source: 6K03002-01 Prepared & Analyzed: 11/06/06					
Chloride	45.8	5.00	mg/L		45.4			0.877	20	
Sulfate	508	5.00	"		511			0.589	20	
<b>Duplicate (EK60602-DUP2)</b>					Source: 6K03008-04 Prepared & Analyzed: 11/06/06					
Sulfate	116	5.00	mg/L		115			0.866	20	
Chloride	44.5	5.00	"		44.2			0.676	20	

Environmental Lab of Texas

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Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: Justis Jct. L-1 Vent  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

**General Chemistry Parameters by EPA / Standard Methods - Quality Control**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch EK60602 - General Preparation (WetChem)**

**Matrix Spike (EK60602-MS1)**

Source: 6K03002-01

Prepared & Analyzed: 11/06/06

Sulfate	613	5.00	mg/L	100	511	102	80-120			
Chloride	148	5.00	"	100	45.4	103	80-120			

**Matrix Spike (EK60602-MS2)**

Source: 6K03008-04

Prepared & Analyzed: 11/06/06

Sulfate	214	5.00	mg/L	100	115	99.0	80-120			
Chloride	150	5.00	"	100	44.2	106	80-120			

**Batch EK60711 - General Preparation (WetChem)**

**Blank (EK60711-BLK1)**

Prepared & Analyzed: 11/07/06

Total Alkalinity	ND	2.00	mg/L							
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**LCS (EK60711-BS1)**

Prepared & Analyzed: 11/07/06

Total Alkalinity	202	2.00	mg/L	200		101	85-115			
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**Duplicate (EK60711-DUP1)**

Source: 6K03008-01

Prepared & Analyzed: 11/07/06

Total Alkalinity	236	2.00	mg/L		240			1.68	20	
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**Reference (EK60711-SRM1)**

Prepared & Analyzed: 11/07/06

Total Alkalinity	254		mg/L	250		102	90-110			
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Environmental Lab of Texas

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Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: Justis Jct. L-1 Vent  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

**Total Metals by EPA / Standard Methods - Quality Control**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch EK60712 - 6010B/No Digestion**

**Blank (EK60712-BLK1)**

Prepared & Analyzed: 11/07/06

Calcium	ND	0.0810	mg/L							
Magnesium	ND	0.0360	"							
Potassium	ND	0.0600	"							
Sodium	ND	0.0430	"							

**Calibration Check (EK60712-CCV1)**

Prepared & Analyzed: 11/07/06

Calcium	2.26		mg/L	2.00		113	85-115			
Magnesium	2.12		"	2.00		106	85-115			
Potassium	1.73		"	2.00		86.5	85-115			
Sodium	2.13		"	2.00		106	85-115			

**Duplicate (EK60712-DUP1)**

Source: 6K03002-01

Prepared & Analyzed: 11/07/06

Calcium	84.4	0.810	mg/L		83.8			0.713	20	
Magnesium	40.5	0.360	"		38.9			4.03	20	
Potassium	7.74	0.600	"		8.13			4.91	20	
Sodium	110	2.15	"		117			6.17	20	

Environmental Lab of Texas

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Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: Justis Jct. L-1 Vent  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

#### Notes and Definitions

DET Analyte DETECTED  
ND Analyte NOT DETECTED at or above the reporting limit  
NR Not Reported  
dry Sample results reported on a dry weight basis  
RPD Relative Percent Difference  
LCS Laboratory Control Spike  
MS Matrix Spike  
Dup Duplicate

Report Approved By:

*Raland K. Tuttle*

Date: 11/10/2006

Raland K. Tuttle, Lab Manager  
Celey D. Keene, Lab Director, Org. Tech Director  
Peggy Allen, QA Officer

Jeanne Mc Murrey, Inorg. Tech Director  
LaTasha Cornish, Chemist  
Sandra Sanchez, Lab Tech.

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If you have received this material in error, please notify us immediately at 432-563-1800.



Environmental Lab of Texas  
Variance/ Corrective Action Report- Sample Log-In

Client: Rice Op.  
Date/ Time: 11/3/06 11:45  
Lab ID #: 6K0300F  
Initials: UK

Sample Receipt Checklist

Client Initials

#1	Temperature of container/ cooler?	Yes	No	0.5 °C	
#2	Shipping container in good condition?	Yes	No		
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	Not Present	
#4	Custody Seals intact on sample bottles/ container?	Yes	No	Not Present	
#5	Chain of Custody present?	Yes	No		
#6	Sample instructions complete of Chain of Custody?	Yes	No		
#7	Chain of Custody signed when relinquished/ received?	Yes	No		
#8	Chain of Custody agrees with sample label(s)?	Yes	No	ID written on Cont./ Lid	
#9	Container label(s) legible and intact?	Yes	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	Yes	No		
#11	Containers supplied by ELDT?	Yes	No		
#12	Samples in proper container/ bottle?	Yes	No	See Below	
#13	Samples properly preserved?	Yes	No	See Below	
#14	Sample bottles intact?	Yes	No		
#15	Preservations documented on Chain of Custody?	Yes	No		
#16	Containers documented on Chain of Custody?	Yes	No		
#17	Sufficient sample amount for indicated test(s)?	Yes	No	See Below	
#18	All samples received within sufficient hold time?	Yes	No	See Below	
#19	VOC samples have zero headspace?	Yes	No	Not Applicable	

Variance Documentation

Contact: \_\_\_\_\_ Contacted by: \_\_\_\_\_ Date/ Time: \_\_\_\_\_

Regarding: \_\_\_\_\_

Corrective Action Taken: \_\_\_\_\_

Check all that Apply:

- ☐ See attached e-mail/ fax  
☐ Client understands and would like to proceed with analysis  
☐ Cooling process had begun shortly after sampling event