

**1R - 428-06**

**GENERAL  
CORRESPONDENCE**

**DATE:**

**2007 - 2010**

**RICE Operating Company**

122 West Taylor • Hobbs, NM 88240

Phone: (505) 393-9174 • Fax: (505) 397-1471

1R-423-06

Gen. Cor.

2007 - 2010

**CERTIFIED MAIL**

**RETURN RECEIPT NO. 7005 1820 0001 6802 1975**

October 15, 2007

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

RECEIVED  
2007 OCT 19 / PM 1 31

**RE: NOTIFICATION OF GROUNDWATER IMPACT  
JUSTIS E-1 vent #1R0423-06  
UNIT 'E', SEC. 1, T25S, R37E**

Mr. Price:

Rice Operating Company (ROC) takes this opportunity to notify the Director of the NMOCD Environmental Bureau of groundwater impact in accordance with NM Rule 116. The remediation of this site may fall under NM Rule 19 procedures.

The following work at this junction box site was performed in accordance with the NMOCD-approved Investigation & Characterization Plan (ICP) submitted by Highlander Environmental Corp. (Highlander) of Midland, Texas. Delineation soil borings and monitoring well installations were initiated on 8/6/2007. Groundwater was encountered at 85 feet and a 2-inch monitoring well was installed near the source (former junction box site) to a depth of 104 feet as chloride impact was indicated by field tests. Two more 2-inch wells (up-gradient and down-gradient) were also installed during this event. After proper development, the wells were sampled pursuant to NMOCD guidelines by Arc Environmental on 9/10/2007. Cardinal Laboratories performed the analysis. Groundwater from these wells will continue to be sampled on a quarterly basis. NMOCD will receive regular updates from Highlander regarding this site.

ROC is the service provider (agent) for the Justis Salt Water Disposal System and has no ownership of any portion of the pipelines, wells, or facilities. The Justis System is owned by a consortium of oil producers, System Partners, who provide all operating capital on a percentage ownership/usage basis. Environmental remediation projects of this magnitude require System Partner AFE approval and work begins as funds are received.





PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR  
RICE OPERATING COMPANY  
ATTN: KRISTIN FARRIS-POPE  
122 W. TAYLOR  
HOBBS, NM 88240  
FAX TO: (505) 397-1471

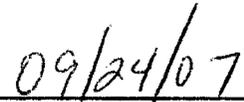
Receiving Date: 09/13/07  
Reporting Date: 09/14/07  
Project Number: NOT GIVEN  
Project Name: JUSTIS E-1  
Project Location: T25S-R37E-SEC1 E ~ LEA COUNTY, NM

Sampling Date: 09/10/07  
Sample Type: GROUNDWATER  
Sample Condition: COOL & INTACT  
Sample Received By: NF  
Analyzed By: BC

LAB NO.	SAMPLE ID	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	TOTAL XYLENES (mg/L)
	ANALYSIS DATE	09/13/07	09/13/07	09/13/07	09/13/07
H13291-1	MONITOR WELL #1	<0.002	<0.002	<0.002	<0.006
H13291-2	MONITOR WELL #2	<0.002	<0.002	<0.002	<0.006
H13291-3	MONITOR WELL #3	<0.002	<0.002	<0.002	<0.006
	Quality Control	0.103	0.098	0.100	0.277
	True Value QC	0.100	0.100	0.100	0.300
	% Recovery	103	98.3	100	92.2
	Relative Percent Difference	5.0	1.7	4.9	2.7

METHOD: EPA SW-846 8260

  
\_\_\_\_\_  
Chemist

  
\_\_\_\_\_  
Date

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. Cardinal shall not be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.



PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR  
 RICE OPERATING COMPANY  
 ATTN: KRISTIN FARRIS-POPE  
 122 W. TAYLOR STREET  
 HOBBS, NM 88240  
 FAX TO: (505) 397-1471

Receiving Date: 09/13/07  
 Reporting Date: 09/21/07  
 Project Owner: NOT GIVEN  
 Project Name: JUSTIS E-1  
 Project Location: T25S-R37E-SEC1 E-LEA COUNTY, NM

Sampling Date: 09/10/07  
 Sample Type: WATER  
 Sample Condition: COOL & INTACT  
 Sample Received By: NF  
 Analyzed By: HM/KS

LAB NUMBER	SAMPLE ID	Na (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Conductivity ( $\mu$ S/cm)	T-Alkalinity (mgCaCO <sub>3</sub> /L)
ANALYSIS DATE:		09/17/07	09/15/07	09/15/07	09/15/07	09/15/07	09/17/07
H13291-1	MONITOR WELL #1	2,136	592	169	46	14,090	172
H13291-2	MONITOR WELL #2	578	434	161	11.8	6,190	140
H13291-3	MONITOR WELL #3	1,151	898	290	15.6	11,550	124
Quality Control		NR	50.6	50.0	1.91	9,800	NR
True Value QC		NR	50.0	50.0	2.00	10,000	NR
% Recovery		NR	101	100	95.7	98.0	NR
Relative Percent Difference		NR	< 0.1	6.2	1.6	2.0	NR

METHODS:	SM3500-Ca-D	3500-Mg E	8049	120.1	310.1
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	Cl <sup>-</sup> (mg/L)	SO <sub>4</sub> (mg/L)	CO <sub>3</sub> (mg/L)	HCO <sub>3</sub> (mg/L)	pH (s.u.)	TDS (mg/L)	
ANALYSIS DATE:		09/17/07	09/17/07	09/17/07	09/15/07	09/17/07	
H13291-1	MONITOR WELL #1	4,349	558	0	210	6.95	8,734
H13291-2	MONITOR WELL #2	1,819	304	0	171	6.87	4,268
H13291-3	MONITOR WELL #3	3,919	305	0	151	6.93	7,966
Quality Control		500	27.2	NR	1000	6.98	NR
True Value QC		500	25.0	NR	1000	7.00	NR
% Recovery		100	109	NR	100	99.7	NR
Relative Percent Difference		< 0.1	6.3	NR	3.7	0.1	NR

METHODS:	SM4500-Cl-B	375.4	310.1	310.1	150.1	160.1
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*Kristin Farris-Pope*  
 Chemist

9/21/07  
 Date

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. Cardinal shall not be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.

101 East Marland - Hobbs, New Mexico 88240  
 Tel (505) 393-2326  
 Fax (505) 393-2476

# Cardinal Laboratories, Inc.

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # \_\_\_\_\_

### ANALYSIS REQUEST

(Circle or Specify Method No.)

Company Name: RICE Operating Company  
 Project Manager: Kristin Farris-Pope, Project Scientist  
 Address: (Street, City, Zip) 122 W Taylor Street - Hobbs, New Mexico 88240  
 Phone #: (505) 393-9174  
 Fax #: (505) 397-1471

Project #: Justis E-1  
 Project Name: Justis E-1  
 Project Location: T25S-R37E-Sec1 E ~ Lea County - New Mexico

Sampler/Signature: Rozanne Johnson (505) 931-9310  
 Email: rozanne@valornet.com

LAB # (LAB USE ONLY)	FIELD CODE	(G)rab or (C)omp	# CONTAINERS	MATRIX				PRESERVATIVE METHOD				DATE (2007)	TIME
				WATER	SOIL	AIR	SLUDGE	HCL (2.40ml VOA)	HNO <sub>3</sub>	NaHSO <sub>4</sub>	H <sub>2</sub> SO <sub>4</sub>		
A13291-1	Monitor Well #1	G	3	X				2				9-10	14:25
-2	Monitor Well #2	G	3	X				2				9-10	12:35
-3	Monitor Well #3	G	3	X				2			1	9-10	13:40

Relinquished by: Rozanne Johnson  
 Date: 9-13-07  
 Time: 2:50 PM  
 Received by: [Signature]  
 Date: 9-13-07  
 Time: 2:50 PM

Delivered By: (Circle One)  
 UPS  
 Bus  
 Other  
 Sample Condition:  
 Cool  Yes  No  
 Intact  Yes  No  
 CHECKED BY: [Signature]

Phone Results	Fax Results	Yes	No	Additional Fax Number:
		Yes	No	
		Yes	No	

REMARKS:  
 Email Results to: kpope@riceswd.com  
 lweinheimer@riceswd.com  
 rozanne@valornet.com

<b>Logger:</b>	Jeff Kindley (Highlander Env.)	<b>Client:</b>	RICE Operating Company	<b>Well ID:</b>  MW - 1
<b>Driller:</b>	Harrison Cooper Drilling	<b>Project Name:</b>	Justis E-1 vent	
<b>Drilling Method:</b>	Split spoon and air rotary	<b>Location:</b>	Justis SWD System unit 'E' Sec.1 T25S, R37E Lea County, NM	
<b>Start Date:</b>	8-6-07			
<b>End Date:</b>	8-6-07			
<b>Comments:</b> Split-spoon discrete until 20 ft, and air rotary thereafter. Located 60ft SE of former jct. site.				
TD = 104 ft      GW = 85 ft				

Depth (feet)	chloride field tests	PID	Description	Lithology	Well Construction
5	286	0	0 - 10 ft FINE TO MEDIUM GRAIN SAND tan to buff, dry		2 x 2 ft concrete pad on surface
10	624	0			
15	1096	0	10 - 20 ft FINE TO MEDIUM GRAIN SAND tannish-red, sandstone intermixed, slightly damp		grout
20	952	0			
25	1208	0			
30	1000	0			
35	1003	0			
40	828	0			
45	692	0	20 - 104 ft FINE TO MEDIUM GRAIN SAND tannish-red, increasing dampness		
50	742	0			
55	894	0			
60	861	0			
65	1367	0			
70	1328	0			bentonite seal
75	1395	0			
80	1219	0			sand pack
85	900	0			
90	745	0			
95	582	0			screen slot diameter = 0.01"
100	630	0			

<b>Logger:</b>	Jeff Kindley (Highlander Env.)	<b>Client:</b>	RICE Operating Company	<b>Well ID:</b>  MW - 2
<b>Driller:</b>	Harrison Cooper Drilling	<b>Project Name:</b>	Justis E-1 vent	
<b>Drilling Method:</b>	Air rotary	<b>Location:</b>	Justis SWD System	
<b>Start Date:</b>	8-6-07		unit 'E' Sec.1 T25S, R37E	
<b>End Date:</b>	8-6-07		Lea County, NM	
<b>Comments:</b> Located 87 ft NNW of former jct. site.  TD = 95 ft      GW = 85 ft				

Depth (feet)	chloride field tests	PID	Description	Lithology	Well Construction
5	119	0	0 - 10 ft FINE TO MEDIUM GRAIN SAND calcareous, tan to buff, dry		2 x 2 ft concrete pad on surface
10	334	1			
15	239	0	10 - 20 ft FINE TO MEDIUM GRAIN SAND tannish-red, dry		grout
20	352	0			
25	1061	0	20 - 25 ft FINE TO MEDIUM GRAIN SAND tannish-red, sandstne intermixed, dry		
30	297	0			
35	151	0			
40	118	1			
45	119	0	25 - 95 ft FINE TO MEDIUM GRAIN SAND tannish-red, increasing dampness from 30 ft		
50	122	0			
55	88	0			
60	113	0			
65	233	0			bentonite seal
70	213	0			sand pack
75	144	0			
80	159	0			
85	190	0			
90	214	0			
95	582	0			screen slot diameter = 0.01"

<b>Logger:</b>	Jeff Kindley (Highlander Env.)	<b>Client:</b>	MW - 3
<b>Driller:</b>	Harrison Cooper Drilling	RICE Operating Company	
<b>Drilling Method:</b>	Air rotary	<b>Project Name:</b>	
<b>Start Date:</b>	8-6-07	Justis E-1 vent	
<b>End Date:</b>	8-6-07	<b>Location:</b>	
<b>Comments:</b> Located 150 ft ESE of MW 1; 150 ft. ESE of former junction site. TD = 95 ft      GW = 85 ft		Justis SWD System unit 'E' Sec.1 T25S, R37E Lea County, NM	

Depth (feet)	chloride field tests	PID	Description	Lithology	Well Construction
5	359	0	0 - 10 ft		2 x 2 ft concrete pad on surface
10	428	1	FINE TO MEDIUM GRAIN SAND calcareous, tan to buff, dry		
15	574	0	10 - 15 ft FINE TO MEDIUM GRAIN tan, calcereous, dry		grout
20	740	0	15 - 20 ft FINE TO MEDIUM GRAIN tannish-red, sandstone, dry		
25	401	1	20 - 25 ft FINE TO MEDIUM GRAIN w/ sandstone intermixed, tannish-red		
30	304	0	25 - 95 ft FINE TO MEDIUM GRAIN SAND tannish-red, increasing dampness from 55 ft on		
35	337	0			
40	651	0			
45	290	0			
50	229	0			
55	201	0			
60	144	0			
65	119	0			
70	120	0			
75	90	0			
80	92	0		bentonite seal	
85	148	1			
90	**	**		sand pack	
95	**	**			

