

AP -

99

ANNUAL MONITORING REPORT

YEAR(S):

2010



TETRA TECH

RECEIVED OCD
2011 APR -1 A 12:48

CERTIFIED MAIL
RETURN RECEIPT NO. 7008 3230 0001 9310 9130

March 29, 2011

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

Re: 2010 Annual Groundwater Summary Report & Project Status Report, Rice Operating Company, Justis Saltwater Disposal System (SWD), E-1 Vent, Unit E, Section 1, T-25-S, R-37-E, Lea County, New Mexico, NMOCD CASE #1R0423-06, AP-99

Mr. Hansen:

Tetra Tech Inc. (Tetra Tech) submits the following 2010 Annual Groundwater Summary Report for the Rice Operating Company (ROC), E-1 Vent, located in the Justis Salt Water Disposal System. This report consists of the following sections:

1. A figure presenting the location of the monitoring wells and most recent groundwater sampling results.
2. Tables summarizing all laboratory results and depths to groundwater at the site, including the current year (2010).
3. Graphs depicting the concentration of chlorides, total dissolved solids (TDS), and sulfates over time.
4. Laboratory results for the most recent groundwater sampling event.

In October 2008, ROC submitted a Stage 1/Stage 2 Abatement Plan to the NMOCD. The plan included detailed information on the possible impact to the site from an upgradient source. ROC proposed removal of 2,121.6 kg chloride mass or approximately 136,000 gallons of impacted water based on mass calculation from the data presented. In an email dated April 13, 2010, the NMOCD deemed the Stage 1/Stage 2 Abatement Plan to be administratively complete. On July 2, 2010, an amendment to the abatement plan was submitted to the NMOCD addressing the potential contribution from 50 to 90 feet below ground surface (bgs) in the area around SB-1. The conclusion of the amendment was to remove an additional 212.05 kg

Tetra Tech

1910 North Big Spring, Midland, TX 79705

Tel 432.682.4559

Fax 432.682.3946 www.tetrattech.com



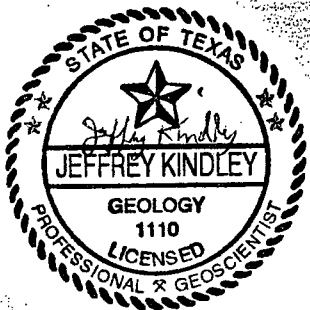
TETRA TECH

chloride mass or 10,471 gallons of impacted water for a total mass of 2,333.65 kg. The NMOCD approved the amendment in an email dated July 21, 2010.

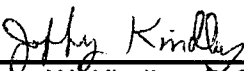
On June 9, 2010, ROC was onsite to oversee the installation of recovery well RW-1 adjacent to MW-1 for purposes of recovery of the 2,333.65 kg of chloride from impacted groundwater. From September 13 to November 26, 2010, ROC removed a total of 802.37708 kg or 57,288 gallons of chloride impacted water from RW-1 with the removed water being utilized for line maintenance. For 2011, ROC will continue to remove the remaining 1,531.27 kg of chloride from RW-1. In addition, quarterly sampling will be continued until the remaining impacted water has been removed.

ROC is the service provider (agent) for the Justis Salt Water Disposal System and has no ownership of any portion of the pipeline, well or facility. The Justis SWD system is owned by a consortium of oil producers, System Parties, who provide all operating capital on a percentage ownership/usage basis.

Thank you for your consideration of this annual summary information. If you have any questions, please contact me at (432) 682-4559, or Hack Conder of ROC at (575) 393-9174.



Respectfully Submitted,
Tetra Tech, Inc.

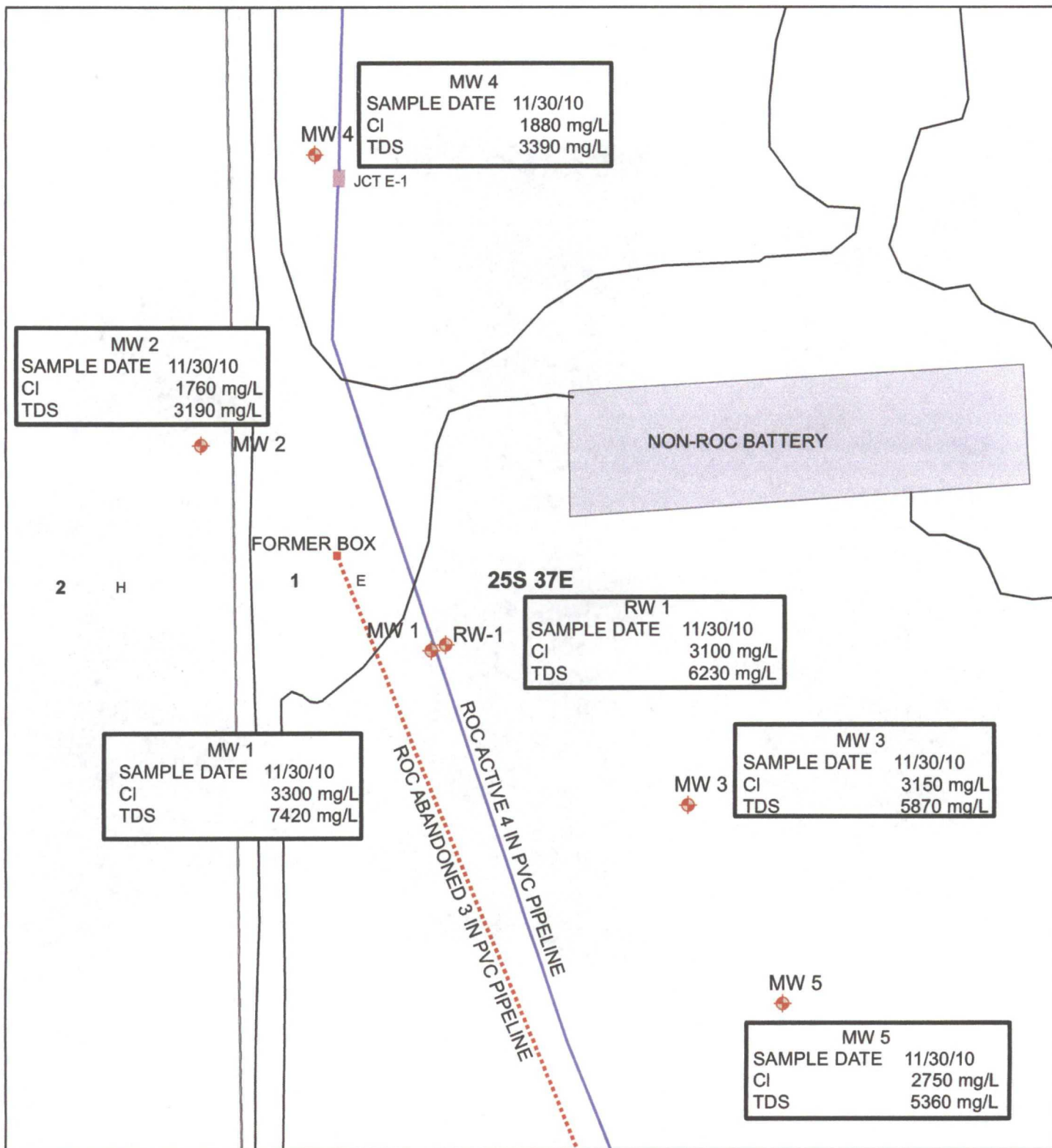


Jeffrey W. Kindley, P.G.
Senior Project Manager

cc: Hack Conder -ROC
Enclosures: Figure, Tables, Graphs, Lab Results

FIGURES

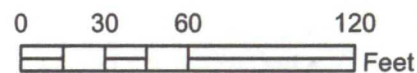
MONITOR WELL SAMPLING DATA



JUSTIS E-1 VENT

Legals: UL/E SEC 1
 T-25-S R-37-E
 NMOCD Case #: AP 99

FIGURE 1



Drawing date: 3/24/11
 Revision date:
 Drafted by: TONY GRIECO

TABLES

Table 1

Rice Operating Company

Justis Jct. E-1

Lea County, New Mexico

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl mg/L	TDS mg/L	Benzene mg/L	Toluene mg/L	Ethyl Benzene mg/L	Total Xylenes mg/L	Sulfate mg/L	Comments
1	88.25	106.41	2.90	10	09/10/07	4,349	8,734	<0.002	<0.002	<0.002	<0.006	558	Clear no odor
1	88.10	106.41	2.90	10	11/15/07	4,050	7,397	<0.001	<0.001	<0.001	<0.003	424	Clear no odor
1	87.85	106.38	3.00	10	02/26/08	3,750	7,410	<0.001	<0.001	<0.001	<0.003	430	Clear no odor
1	87.42	106.38	3.00	10	05/22/08	4,000	7,770	<0.002	<0.002	<0.002	<0.006	310	Clear no odor
1	87.38	106.38	3.00	10	08/26/08	4,100	8,030	<0.001	<0.001	<0.001	<0.003	435	Clear no odor
1	87.30	106.38	3.10	10	11/25/08	3,500	8,180	<0.001	<0.001	<0.001	<0.003	337	Clear no odor
1	87.03	106.37	3.10	10	02/24/09	4,150	7,420	<0.001	<0.001	<0.001	<0.003	356	Clear no odor
1	86.89	106.37	3.10	10	05/27/09	5,300	10,300	<0.001	<0.001	<0.001	<0.003	364	Clear no odor
1	86.63	106.37	3.20	10	09/08/09	4,550	9,130	<0.001	<0.001	<0.001	<0.003	346	Clear no odor
1	86.56	106.37	3.20	10	11/17/09	5,050	9,160	<0.001	<0.001	<0.001	<0.003	267	Clear no odor
1	86.16	106.60	3.30	10	03/08/10	5,350	10,900	<0.001	<0.001	<0.001	<0.003	390	Clear no odor
1	86.03	106.60	3.30	10	06/02/10	5,500	9,850	<0.001	<0.001	<0.001	<0.003	379	Clear no odor
1	86.05	106.60	3.30	10	08/25/10	5,800	10,100	<0.001	<0.001	<0.001	<0.003	397	Clear no odor
1	86.12	106.60	3.30	10	11/30/10	3,300	7,420	<0.001	<0.001	<0.001	<0.003	400	Clear no odor

Graph 1
 Rice Operating Company
 MW-1
 Justis Jct. E-1
 Lea County, New Mexico

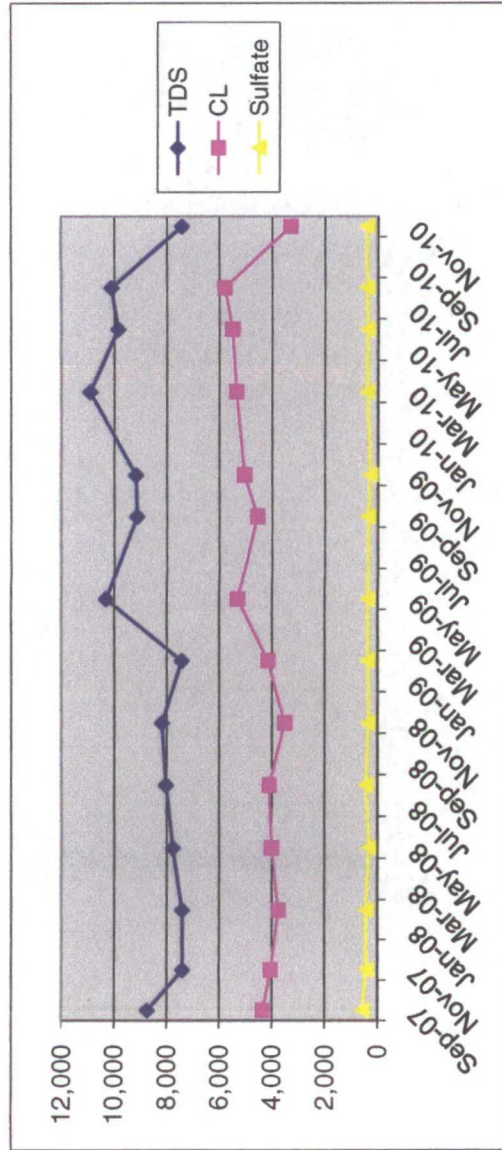


Table 2
Rice Operating Company
Justis Jct. E-1
Lea County, New Mexico

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl mg/L	TDS mg/L	Benzene mg/L	Toluene mg/L	Ethyl Benzene mg/L	Total Xylenes mg/L	Sulfate mg/L	Comments
2	91.71	100.60	1.40	5	09/10/07	1,819	4,268	<0.002	<0.002	<0.002	<0.006	304	Clear no odor
2	91.51	100.60	1.50	5	11/15/07	1,920	3,756	<0.001	<0.001	<0.001	<0.003	223	Clear no odor
2	91.31	100.78	1.50	5	02/26/08	1,760	3,430	<0.001	<0.001	<0.001	<0.003	233	Clear no odor
2	91.89	100.78	1.60	5	05/22/08	1,900	4,360	<0.002	<0.002	<0.002	<0.006	217	Clear no odor
2	90.84	100.78	1.60	5	08/26/08	1,960	4,080	<0.001	<0.001	<0.001	<0.003	232	Clear no odor
2	90.75	100.78	1.60	5	11/25/08	1,760	4,290	<0.001	<0.001	<0.001	<0.003	194	Clear no odor
2	90.48	100.57	1.60	5	02/24/09	1,360	2,540	<0.001	<0.001	<0.001	<0.003	142	Clear no odor
2	90.47	100.57	1.60	5	05/27/09	1,350	3,370	<0.001	<0.001	<0.001	<0.003	134	Clear no odor
2	90.09	100.57	1.70	5	09/08/09	1,460	3,390	<0.001	<0.001	<0.001	<0.003	143	Clear no odor
2	89.97	100.57	1.70	5	11/17/09	1,500	3,450	<0.001	<0.001	<0.001	<0.003	125	Clear no odor
2	89.56	100.55	1.80	6	03/08/10	1,600	4,260	<0.001	<0.001	<0.001	<0.003	209	Clear no odor
2	89.45	100.55	1.80	6	06/02/10	1,650	3,400	<0.001	<0.001	<0.001	<0.003	219	Clear no odor
2	89.49	100.55	1.80	6	08/25/10	1,660	3,250	<0.001	<0.001	<0.001	<0.003	187	Clear no odor
2	89.51	100.55	1.80	6	11/30/10	1,760	3,190	<0.001	<0.001	<0.001	<0.003	219	Clear no odor

Graph 2
Rice Operating Company
MW-2
Justis Jct. E-1
Lea County, New Mexico

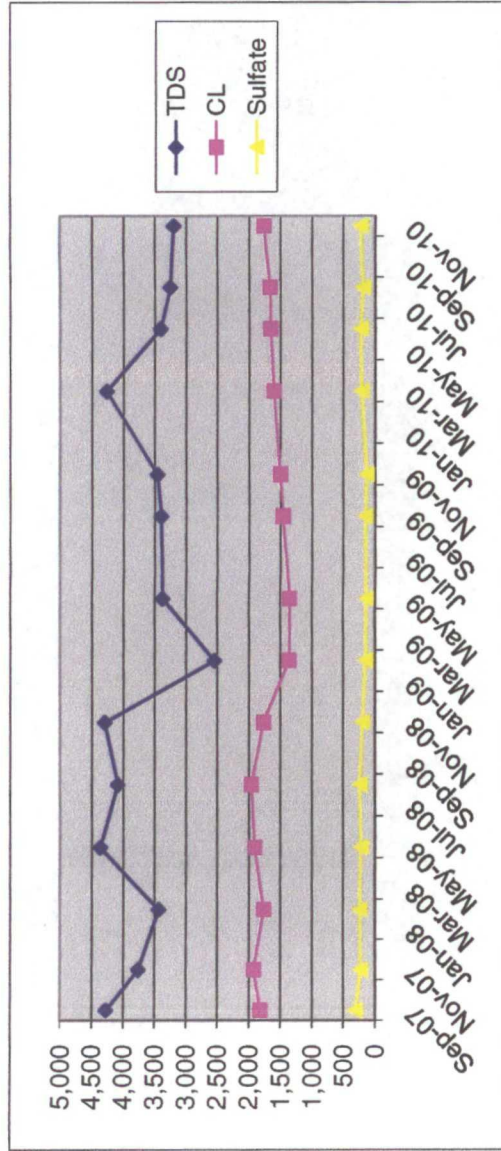


Table 3

Rice Operating Company

Justis Jct. E-1

Lea County, New Mexico

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl mg/L	TDS mg/L	Benzene mg/L	Toluene mg/L	Ethyl Benzene mg/L	Total Xylenes mg/L	Sulfate mg/L	Comments
3	86.95	98.90	1.90	7	09/10/07	3,919	7,966	<0.002	<0.002	<0.002	<0.006	305	Clear no odor
3	86.82	98.90	1.90	7	11/15/07	3,150	5,454	<0.001	<0.001	<0.001	<0.003	150	Clear no odor
3	86.58	98.89	2.00	7	02/26/08	3,400	5,960	<0.001	<0.001	<0.001	<0.003	224	Clear no odor
3	86.03	98.89	2.10	7	05/22/08	4,100	8,200	<0.002	<0.002	<0.002	<0.006	225	Clear no odor
3	86.07	98.89	2.10	7	08/26/08	3,900	7,240	<0.001	<0.001	<0.001	<0.003	228	Clear no odor
3	85.89	98.89	2.10	7	11/25/08	3,350	8,320	<0.001	<0.001	<0.001	<0.003	189	Clear no odor
3	85.71	98.92	2.10	7	02/24/09	3,850	7,090	<0.001	<0.001	<0.001	<0.003	337	Clear no odor
3	85.61	98.92	2.10	7	05/27/09	3,950	8,940	<0.001	<0.001	<0.001	<0.003	190	Clear no odor
3	85.31	98.92	2.20	7	09/08/09	3,850	7,970	<0.001	<0.001	<0.001	<0.003	199	Clear no odor
3	85.20	98.92	2.20	7	11/17/09	3,700	7,080	<0.001	<0.001	<0.001	<0.003	161	Clear no odor
3	84.79	98.91	2.30	8	03/08/10	4,150	10,200	<0.001	<0.001	<0.001	<0.003	246	Clear no odor
3	84.65	98.91	2.30	8	06/02/10	3,950	7,040	<0.001	<0.001	<0.001	<0.003	269	Clear no odor
3	84.74	98.91	2.30	8	08/25/10	3,900	7,430	<0.001	<0.001	<0.001	<0.003	211	Clear no odor
3	84.80	98.91	2.30	8	11/30/10	3,150	5,870	<0.001	<0.001	<0.001	<0.003	242	Clear no odor

Graph 3
Rice Operating Company
MW-3
Justis Jct. E-1
Lea County, New Mexico

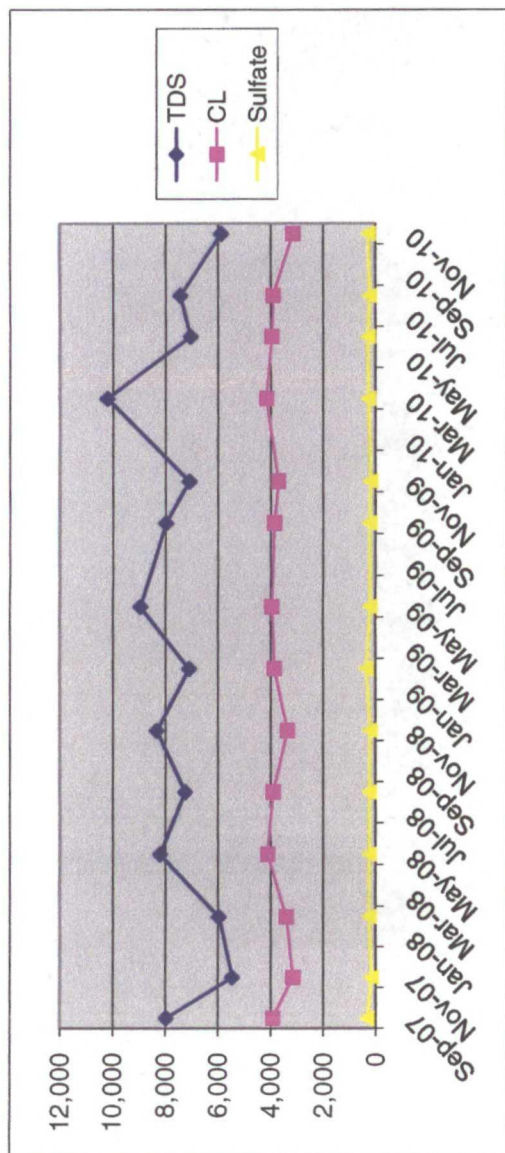


Table 4

Rice Operating Company

Justis Jct. E-1

Lea County, New Mexico

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl mg/L	TDS mg/L	Benzene mg/L	Toluene mg/L	Ethyl Benzene mg/L	Total Xylenes mg/L	Sulfate mg/L	Comments
4	91.35	99.98	1.40	50	05/22/08	2,100	4,640	<0.002	<0.002	<0.002	<0.006	240	Clear
4	91.22	99.98	1.40	40	08/26/08	2,020	4,330	<0.001	<0.001	<0.001	<0.003	234	Clear
4	91.09	99.98	1.40	40	11/25/08	1,680	4,560	<0.001	<0.001	<0.001	<0.003	162	Clear
4	90.84	100.09	1.50	10	02/24/09	1,780	3,610	<0.001	<0.001	<0.001	<0.003	177	Clear/slight odor
4	90.71	100.09	1.50	10	05/27/09	2,000	4,410	<0.001	<0.001	<0.001	<0.003	200	Clear/slight odor
4	90.46	100.09	1.50	10	09/08/09	1,900	3,690	<0.001	<0.001	<0.001	<0.003	202	Clear/slight odor
4	90.35	100.09	1.60	10	11/17/09	1,840	4,140	<0.001	<0.001	<0.001	<0.003	176	Clear/slight odor
4	89.93	100.08	1.60	6	03/08/10	1,770	4,630	<0.001	<0.001	<0.001	<0.003	220	Clear/slight odor
4	89.81	100.08	1.60	6	06/02/10	1,900	3,920	<0.001	<0.001	<0.001	<0.003	236	Clear/slight odor
4	89.95	100.08	1.60	6	08/25/10	2,250	3,920	<0.001	<0.001	<0.001	<0.003	236	Clear/slight odor
4	89.83	100.08	1.60	6	11/30/10	1,880	3,390	<0.001	<0.001	<0.001	<0.003	242	Clear/slight odor

Graph 4
Rice Operating Company
MW-4
Justis Jct. E-1
Lea County, New Mexico

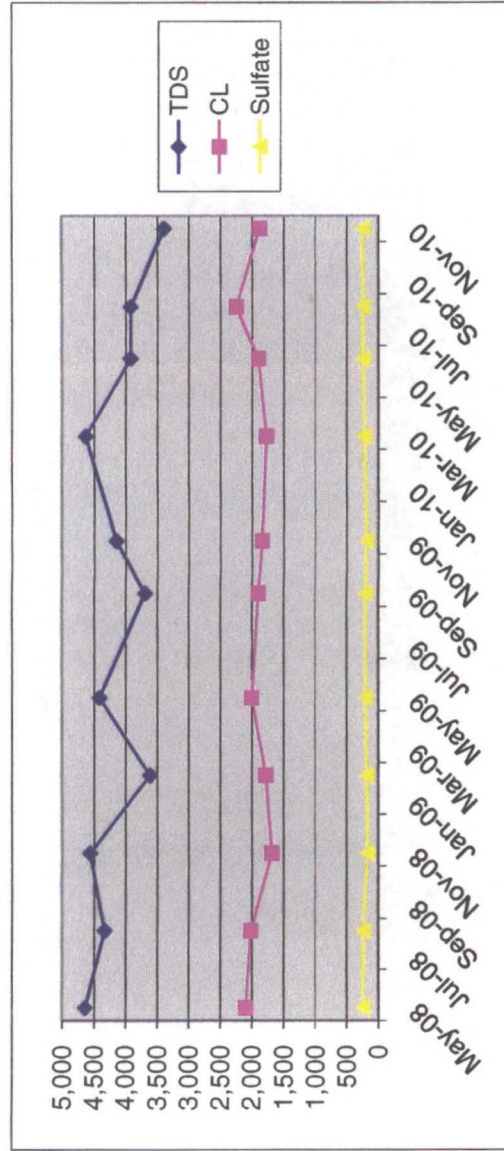


Table 5

Rice Operating Company

Justis Jct. E-1

Lea County, New Mexico

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl mg/L	TDS mg/L	Benzene mg/L	Toluene mg/L	Ethyl Benzene mg/L	Total Xylenes mg/L	Sulfate mg/L	Comments
5	84.66	102.70	2.90	50	05/22/08	2,300	6,220	<0.002	<0.002	<0.002	<0.006	251	Clear
5	84.65	102.70	2.90	40	08/26/08	3,050	5,990	<0.001	<0.001	<0.001	<0.003	106	Clear
5	85.23	102.70	2.80	40	11/25/08	2,750	4,900	<0.001	<0.001	<0.001	<0.003	46.4	Clear
5	84.39	102.72	2.90	12	02/24/09	2,360	4,360	<0.001	<0.001	<0.001	<0.003	225	Clear
5	84.25	102.72	3.00	12	05/27/09	3,070	7,380	<0.001	<0.001	<0.001	<0.003	91.6	Clear
5	83.96	102.72	3.00	12	09/08/09	3,250	5,670	<0.001	<0.001	<0.001	<0.003	121.0	Clear
5	83.80	102.72	3.00	12	11/17/09	3,150	6,950	<0.001	<0.001	<0.001	<0.003	104.0	Clear
5	83.38	102.72	3.10	10	03/08/10	3,350	8,560	<0.001	<0.001	<0.001	<0.003	167.0	Clear/slight odor
5	83.23	102.72	3.10	10	06/02/10	3,050	6,870	<0.001	<0.001	<0.001	<0.003	166.0	Clear/slight odor
5	83.34	102.72	3.10	10	08/25/10	3,300	6,610	<0.001	<0.001	<0.001	<0.003	162.0	Clear/slight odor
5	83.44	102.72	3.10	10	11/30/10	2,750	5,360	<0.001	<0.001	<0.001	<0.003	222.0	Clear/slight odor

Graph 5
Rice Operating Company
MW-5
Jusis Jct. E-1
Lea County, New Mexico

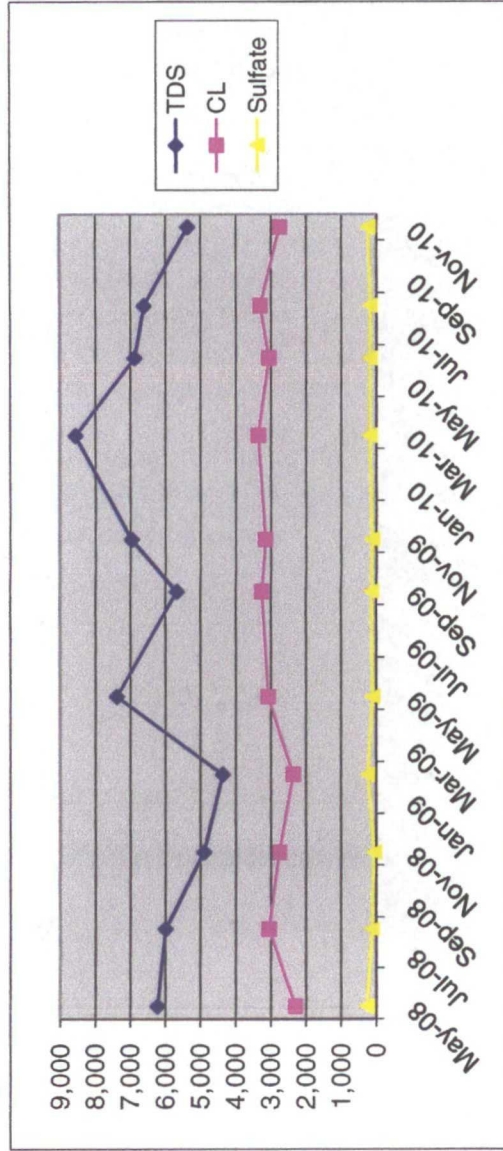
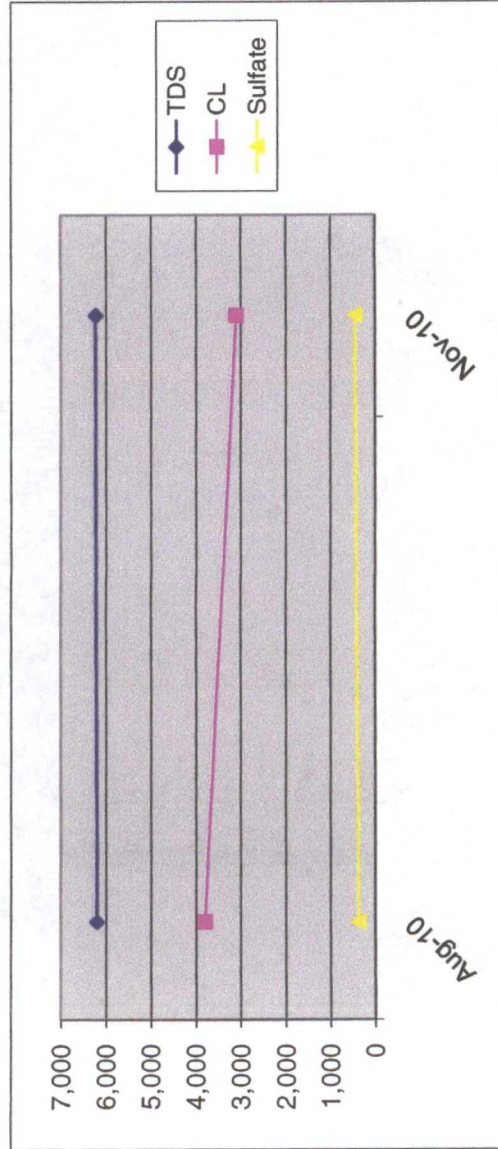


Table 6 Rice Operating Company Justis Jct. E-1 Lea County, New Mexico													
RW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl mg/L	TDS mg/L	Benzene mg/L	Toluene mg/L	Ethyl Benzene mg/L	Total Xylenes mg/L	Sulfate mg/L	Comments
1	85.87	136.00	32.60	100	08/25/10	3,800	6,200	<0.001	<0.001	<0.001	<0.003	364	Clear/slight odor
1	NA	136.00	NA	100	11/30/10	3,100	6,230	<0.001	<0.001	<0.001	<0.003	440	Clear/slight odor

NA Not available

Graph 6
Rice Operating Company
RW-1
Justis Jct. E-1
Lea County, New Mexico



APPENDIX A



December 07, 2010

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

RE: JUSTIS E-1 VENT

Enclosed are the results of analyses for samples received by the laboratory on 12/01/10 14:35.

Cardinal Laboratories is accredited through Texas NELAP for:

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

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene
Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

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

Received: 12/01/2010
Reported: 12/07/2010
Project Name: JUSTIS E-1 VENT
Project Number: NOT GIVEN
Project Location: T25S-R37E-SEC1 E-LEA CTY., NM

Sampling Date: 11/30/2010
Sampling Type: Water
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: MONITOR WELL #1 (H021422-01)**BTEX 8021B**

mg/L

Analyzed By: cms

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.001	0.001	12/03/2010	ND	0.049	97.8	0.0500	2.25	
Toluene*	<0.001	0.001	12/03/2010	ND	0.048	95.8	0.0500	2.95	
Ethylbenzene*	<0.001	0.001	12/03/2010	ND	0.047	94.7	0.0500	4.31	
Total Xylenes*	<0.003	0.003	12/03/2010	ND	0.140	93.5	0.150	4.64	

*Surrogate: 4-Bromofluorobenzene (PIL 101 % 80-120)***Chloride, SM4500Cl-B**

mg/L

Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3300	4.00	12/07/2010	ND	104	104	100	3.77	

Sulfate 375.4

mg/L

Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate	400	10.0	12/07/2010	ND	43.2	108	40.0	0.995	

TDS 160.1

mg/L

Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS	7420	5.00	12/02/2010	ND				9.79	

Cardinal Laboratories

*=Accredited Analyte

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. In no event shall Cardinal 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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Caley D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

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

Received: 12/01/2010
Reported: 12/07/2010
Project Name: JUSTIS E-1 VENT
Project Number: NOT GIVEN
Project Location: T25S-R37E-SEC1 E-LEA CTY., NM

Sampling Date: 11/30/2010
Sampling Type: Water
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: MONITOR WELL #2 (H021422-02)

BTX 8021B		mg/L		Analyzed By: cms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.001	0.001	12/03/2010	ND	0.049	97.8	0.0500	2.25		
Toluene*	<0.001	0.001	12/03/2010	ND	0.048	95.8	0.0500	2.95		
Ethylbenzene*	<0.001	0.001	12/03/2010	ND	0.047	94.7	0.0500	4.31		
Total Xylenes*	<0.003	0.003	12/03/2010	ND	0.140	93.5	0.150	4.64		

Surrogate: 4-Bromofluorobenzene (PIL) 99.8 % 80-120

Chloride, SM4500Cl-B		mg/L		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1760	4.00	12/07/2010	ND	104	104	100	3.77		

Sulfate 375.4		mg/L		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate	219	10.0	12/07/2010	ND	43.2	108	40.0	0.995	

TDS 160.1		mg/L		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS	3190	5.00	12/02/2010	ND				9.79	

Cardinal Laboratories

* = Accredited Analyte

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. In no event shall Cardinal 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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

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

Received: 12/01/2010
Reported: 12/07/2010
Project Name: JUSTIS E-1 VENT
Project Number: NOT GIVEN
Project Location: T25S-R37E-SEC1 E-LEA CTY., NM

Sampling Date: 11/30/2010
Sampling Type: Water
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: MONITOR WELL #3 (H021422-03)

BTX 8021B		mg/L		Analyzed By: cms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.001	0.001	12/03/2010	ND	0.049	97.8	0.0500	2.25	
Toluene*	<0.001	0.001	12/03/2010	ND	0.048	95.8	0.0500	2.95	
Ethylbenzene*	<0.001	0.001	12/03/2010	ND	0.047	94.7	0.0500	4.31	
Total Xylenes*	<0.003	0.003	12/03/2010	ND	0.140	93.5	0.150	4.64	

Surrogate: 4-Bromofluorobenzene (PIL) 105 % 80-120

Chloride, SM4500Cl-B		mg/L		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3150	4.00	12/07/2010	ND	104	104	100	3.77	

Sulfate 375.4		mg/L		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate	242	10.0	12/07/2010	ND	43.2	108	40.0	0.995	

TDS 160.1		mg/L		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS	5870	5.00	12/02/2010	ND				9.79	

Cardinal Laboratories

* = Accredited Analyte

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. In no event shall Cardinal 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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Caley D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

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

Received: 12/01/2010
Reported: 12/07/2010
Project Name: JUSTIS E-1 VENT
Project Number: NOT GIVEN
Project Location: T25S-R37E-SEC1 E-LEA CTY., NM

Sampling Date: 11/30/2010
Sampling Type: Water
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: MONITOR WELL #4 (H021422-04)**BTEX 8021B****mg/L****Analyzed By: cms**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.001	0.001	12/03/2010	ND	0.049	97.8	0.0500	2.25	
Toluene*	<0.001	0.001	12/03/2010	ND	0.048	95.8	0.0500	2.95	
Ethylbenzene*	<0.001	0.001	12/03/2010	ND	0.047	94.7	0.0500	4.31	
Total Xylenes*	<0.003	0.003	12/03/2010	ND	0.140	93.5	0.150	4.64	

*Surrogate: 4-Bromofluorobenzene (PIL) 105 % 80-120***Chloride, SM4500Cl-B****mg/L****Analyzed By: HM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1880	4.00	12/07/2010	ND	104	104	100	3.77	

Sulfate 375.4**mg/L****Analyzed By: HM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate	242	10.0	12/07/2010	ND	43.2	108	40.0	0.995	

TDS 160.1**mg/L****Analyzed By: HM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS	3390	5.00	12/02/2010	ND				9.79	

Cardinal Laboratories

*=Accredited Analyte

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. In no event shall Cardinal 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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

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

Received: 12/01/2010
Reported: 12/07/2010
Project Name: JUSTIS E-1 VENT
Project Number: NOT GIVEN
Project Location: T25S-R37E-SEC1 E-LEA CTY., NM

Sampling Date: 11/30/2010
Sampling Type: Water
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: MONITOR WELL #5 (H021422-05)

BTX 8021B		mg/L		Analyzed By: cms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.001	0.001	12/03/2010	ND	0.049	97.8	0.0500	2.25		
Toluene*	<0.001	0.001	12/03/2010	ND	0.048	95.8	0.0500	2.95		
Ethylbenzene*	<0.001	0.001	12/03/2010	ND	0.047	94.7	0.0500	4.31		
Total Xylenes*	<0.003	0.003	12/03/2010	ND	0.140	93.5	0.150	4.64		

Surrogate: 4-Bromofluorobenzene (PII) 104 % 80-120

Chloride, SM4500Cl-B		mg/L		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	2750	4.00	12/07/2010	ND	104	104	100	3.77		

Sulfate 375.4		mg/L		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate	222	10.0	12/07/2010	ND	43.2	108	40.0	0.995	

TDS 160.1		mg/L		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
TDS	5360	5.00	12/02/2010	ND				9.79		

Cardinal Laboratories

* = Accredited Analyte

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. In no event shall Cardinal 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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

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

Received: 12/01/2010
Reported: 12/07/2010
Project Name: JUSTIS E-1 VENT
Project Number: NOT GIVEN
Project Location: T25S-R37E-SEC1 E-LEA CTY., NM

Sampling Date: 11/30/2010
Sampling Type: Water
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: RECOVERY WELL #1 (H021422-06)**BTEX 8021B**

mg/L

Analyzed By: cms

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.001	0.001	12/03/2010	ND	0.049	97.8	0.0500	2.25	
Toluene*	<0.001	0.001	12/03/2010	ND	0.048	95.8	0.0500	2.95	
Ethylbenzene*	<0.001	0.001	12/03/2010	ND	0.047	94.7	0.0500	4.31	
Total Xylenes*	<0.003	0.003	12/03/2010	ND	0.140	93.5	0.150	4.64	

*Surrogate: 4-Bromofluorobenzene (PIL 105 % 80-120)***Chloride, SM4500Cl-B**

mg/L

Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3100	4.00	12/07/2010	ND	104	104	100	3.77	

Sulfate 375.4

mg/L

Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate	440	10.0	12/07/2010	ND	43.2	108	40.0	0.995	

TDS 160.1

mg/L

Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS	6230	5.00	12/02/2010	ND				9.79	

Cardinal Laboratories

*=Accredited Analyte

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. In no event shall Cardinal 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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
- Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

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 analytes. 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. In no event shall Cardinal 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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

