1R - 426-02

Annual GW Mon. REPORTS

DATE:

2007

ARCADIS
Infrastructure, environment, buildings

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Midland
Texas 79701
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Sent Certified Mail
Return Receipt No. 7002 2410 0001 5812 9916

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

Environmental

Subject: **2007 MONITOR WELL REPORT/SAMPLING SUMMARY**
Jcts. K-27, BD SWD SYSTEM
Unit K, SEC. 27, T21S, R37E
NMOCD CASE #s 1R0426-02 and 1R0426-03

K-27 K-27-1

Date:
21 March 2008

Contact:
Sharon E. Hall

Phone:
432 687-5400

Email:
shall@arcadis-us.com

Our ref:
MT000834.0001

Dear Mr. Hansen:

On behalf of Rice Operating Company (ROC), ARCADIS G&M, Inc. (ARCADIS) respectfully submits the 2007 Monitor Well Report for the BD K-27 site located in the Blinebry-Drinkard (BD) Salt Water Disposal (SWD) System.

One monitoring well was installed at each of two junction box locations (K-27-1 and K-27 North) on May 9 and 10, 2005 during delineation as part of the NMOCD approved ICP.

A letter informing NMOCD that due to their proximity to each other the sites would be combined as one site referred to as the K-27 site was submitted on June 12, 2006. The letter also informed NMOCD of our intent to drill 4 additional monitoring wells at the K-27 site. Approval to drill the monitor wells was received on July 18, 2007.

Monitor wells MW-2 through MW-5 were installed on July 24 and 25, 2006. All wells are sampled quarterly per NMOCD guidelines. The attached tables summarize the analytical results from groundwater samples collected from the monitor wells at the site. 2007 groundwater laboratory reports are also attached.

Based on data collected for published reports, groundwater in this area has been impacted by brine as far back as 1953. This site is adjacent to the City of Eunice. Impacted groundwater conditions are documented in this area since the 1950s. (Ground- Water Report 6; Geology and Ground-Water Conditions in Southern Lea

County, New Mexico; Alexander Nicholson, Jr. and Alfred Clebsch, Jr.; U.S. Geological Survey in cooperation with State Bureau of Mines and Mineral Resources Division of the New Mexico Institute of Mining and Technology and with the New Mexico State Engineer.)

Based on the widespread chloride impacts documented since the 1950s and the fact that the potential sources of additional impacts to groundwater (the junction boxes and impacted soil) at this site have been removed ROC requests closure of this site.

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

Thank you for your consideration concerning this annual summary of groundwater monitoring information and request for closure. If you have any questions, do not hesitate to contact me.

Sincerely,
ARCADIS G&M, Inc.

Sharon E. Hall
Site Evaluation Department Manager

Copies:
Kristin Farris Pope- ROC (3 copies)

Attachments:
MW Summary Tables
Monitor Well Location Figure
Laboratory Analytical Results

BD Jct. K-27-N MW-1
Groundwater Results

Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Laboratory and Field Results (mg/kg)						
					Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate
43.5	52.5	XXX	17.5	6/27/2005	1060	2760	<0.001	<0.001	<0.001	<0.001	422
43.31	52.5	XXX	18	9/6/2005	810	2270	<0.001	<0.001	<0.001	<0.001	290
43.21	52.5	6	18	10/17/2005	978	2240	<0.001	<0.001	<0.001	J{0.000886}	357
43.13	52.5	6.1	20	1/16/2006	621	1980	<0.001	<0.001	<0.001	<0.001	280
43.45	52.5	5.9	20	4/10/2006	740	1980	<0.001	<0.001	<0.001	<0.001	345
43.94	52.5	5.6	20	7/10/2006	704	2070	<0.001	<0.001	<0.001	<0.001	462
43.52	52.5	5.8	20	10/4/2006	494	1980	<0.001	<0.001	<0.001	<0.001	315
43.28	52.45	6	20	2/7/2007	518	1550	<0.001	<0.001	<0.001	<0.001	334
43.42	52.45	5.9	20	4/17/2007	511	1720	<0.001	<0.001	<0.001	<0.001	383
42.98	52.45	6.2	20	7/25/2007	549	1670	<0.001	<0.001	<0.001	<0.002	
43.15	52.45	6	20	10/3/2007	470	1679	<0.001	<0.001	<0.001	<0.003	341

BD Jct. K-27-1 MW-1
Groundwater Results

Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Laboratory and Field Results (mg/kg)						
					Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate
35.45	44	XXX	17	7/15/2005	975	2800	<0.001	<0.001	<0.001	<0.001	624
35.28	44	XXX	17.08	9/6/2005	885	2850	<0.001	<0.001	<0.001	<0.001	460
35.14	44	5.8	17.5	10/17/2005	1280	3390	<0.001	<0.001	<0.001	<0.001	619
35.03	44	5.8	20	1/19/2006	679	2610	<0.001	<0.001	<0.001	<0.001	465
35.63	44	5.4	20	4/10/2006	442	1970	<0.001	<0.001	<0.001	<0.001	527
36.25	44	5	20	7/10/2006	430	1830	<0.001	<0.001	<0.001	<0.001	604
35.43	44	5.6	20	10/4/2006	314	1760	<0.001	<0.001	<0.001	<0.001	460
35.23	44.05	5.7	20	2/7/2007	378	1750	<0.001	<0.001	<0.001	<0.001	512
35.09	44.05	5.8	20	4/17/2007	367	1820	<0.001	<0.001	<0.001	<0.001	490
34.38	44.05	6.3	20	7/25/2007	1040	2980	<0.001	<0.001	<0.001	ND	<0.002
34.89	44.05	6	20	10/3/2007	420	1964	<0.001	<0.001	<0.001	<0.003	516

ROC BD Jct. K-27 MW-2
Groundwater Results

					Laboratory and Field Results (mg/kg)						
Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate
41.44	51.15	1.6	10	10/4/2006	543	1850	<0.001	<0.001	<0.001	<0.001	275
41.16	50.91	1.6	8	2/7/2007	576	1420	<0.001	<0.001	<0.001	<0.001	268
41.29	50.91	1.5	6	4/17/2007	604	1670	<0.001	<0.001	<0.001	<0.001	270
40.9	50.91	1.6	6	7/25/2007	581	2140	<0.001	<0.001	<0.001	<0.002	ND
41.05	50.91	1.6	6	10/3/2007	600	1879	<0.001	<0.001	<0.001	<0.003	270

BD Jct. K-27 MW-3
Groundwater Results

Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Laboratory and Field Results (mg/kg)						
					Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate
43.71	52.5	1.4	6	10/4/2006	227	1480	<0.001	<0.001	<0.001	<0.001	324
43.38	52.36	1.4	6	2/7/2007	256	1300	<0.001	<0.001	<0.001	<0.001	327
43.51	52.36	1.4	6	4/17/2007	264	1340	<0.001	<0.001	<0.001	<0.001	314
43.02	53.36	1.5	6	7/25/2007	274	1420	<0.001	<0.001	<0.001	<0.002	
43.24	52.36	1.5	6	10/3/2007	308	1500	<0.001	<0.001	<0.001	<0.003	352

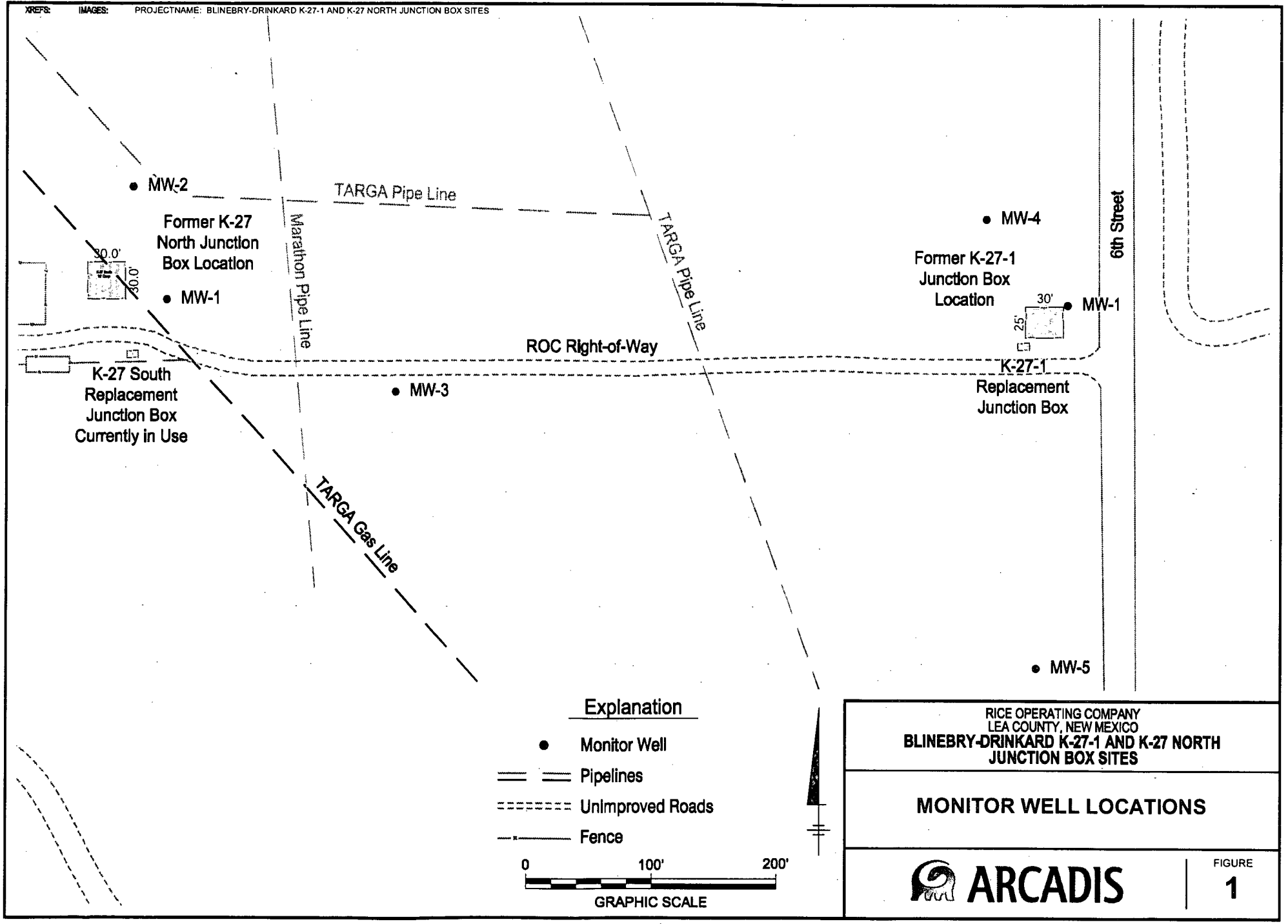
BD Jct. K-27 MW-4
Groundwater Results

Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Laboratory and Field Results (mg/kg)						
					Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate
37.42	45.3	1.3	6	10/4/2006	516	2020	<0.001	<0.001	<0.001	<0.001	540
36.94	45.15	1.3	6	2/7/2007	525	1860	<0.001	<0.001	<0.001	<0.001	577
36.92	45.15	1.3	6	4/17/2007	526	1940	<0.001	<0.001	<0.001	<0.001	556
36.33	45.15	1.4	6	7/25/2007	349	1930	<0.001	<0.001	<0.001	<0.002	
36.7	45.15	1.4	6	10/3/2007	390	1938	<0.001	<0.001	<0.001	<0.003	579

BD Jct. K-27 MW-5
Groundwater Results

Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Laboratory and Field Results (mg/kg)						
					Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate
31.84	39	1.1	5	10/4/2006	282	1950	<0.001	<0.001	<0.001	<0.001	551
32.55	38.94	1	4	2/7/2007	317	1730	<0.001	<0.001	<0.001	<0.001	677
35.09	44.05	5.8	20	4/17/2007	272	1890	<0.001	<0.001	<0.001	<0.001	591
31.97	38.94	1.1	5	7/25/2007	208	1700	<0.001	<0.001	<0.001	<0.002	
32.35	38.94	1.1	5	10/3/2007	260	1799	<0.001	<0.001	<0.001	<0.003	632

CITY: MID-TX DIV 85/GROUP: ENV DB: HC LD: PIC: PM: SH TM: SH LYR: ON=*;OFF=*REF* UN: 31-014-00913
G:\CAD\ACTIVITY\00834\0001\00001\DWG\00834804.dwg LAYOUT: 2 SAVED: 3/13/2008 11:12 AM ACADVER: 17.0S (LMS TECH) PAGESETUP: PDF PLOTSTYLETABLE: AGANDM.CTB PLOTTED: 3/13/2008 11:14 AM BY: CLARDY, HERB
XREFS: IMAGES: PROJECTNAME: BLINEBRY-DRINKARD K-27-1 AND K-27 NORTH JUNCTION BOX SITES



RICE OPERATING COMPANY
LEA COUNTY, NEW MEXICO
BLINEBRY-DRINKARD K-27-1 AND K-27 NORTH JUNCTION BOX SITES

MONITOR WELL LOCATIONS

ARCADIS

FIGURE
1

ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

A Xenco Laboratories Company

Analytical Report

Prepared for:

Kristin Farris-Pope

Rice Operating Co.

122 W. Taylor

Hobbs, NM 88240

Project: BD Jct. K-27 & K-27-1

Project Number: None Given

Location: T21S R37E Sec27 K ~ Lea County New Mexico

Lab Order Number: 7B09006

Report Date: 02/19/07

Rice Operating Co.	Project: BD Jct. K-27 & K-27-1	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
K-27 Monitor Well #1	7B09006-01	Water	02/07/07 12:10	02-08-2007 16:50
K-27 Monitor Well #2	7B09006-02	Water	02/07/07 09:15	02-08-2007 16:50
K-27 Monitor Well #3	7B09006-03	Water	02/07/07 11:40	02-08-2007 16:50
K-27 Monitor Well #4	7B09006-04	Water	02/07/07 11:00	02-08-2007 16:50
K-27 Monitor Well #5	7B09006-05	Water	02/07/07 13:05	02-08-2007 16:50
K-27-1 Monitor Well #1	7B09006-06	Water	02/07/07 10:20	02-08-2007 16:50

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

Project: BD Jct. K-27 & K-27-1
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
K-27 Monitor Well #1 (7B09006-01) Water									
Benzene	ND	0.00100	mg/L	1	EB71210	02/12/07	02/13/07	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		*80.6 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*81.8 %*	*80-120*		"	"	"	"	
K-27 Monitor Well #2 (7B09006-02) Water									
Benzene	ND	0.00100	mg/L	1	EB71210	02/12/07	02/13/07	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		*73.6 %*	*80-120*		"	"	"	"	*S-04*
Surrogate: 4-Bromofluorobenzene		*80.6 %*	*80-120*		"	"	"	"	
K-27 Monitor Well #3 (7B09006-03) Water									
Benzene	ND	0.00100	mg/L	1	EB71210	02/12/07	02/13/07	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		*80.4 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*81.0 %*	*80-120*		"	"	"	"	
K-27 Monitor Well #4 (7B09006-04) Water									
Benzene	ND	0.00100	mg/L	1	EB71210	02/12/07	02/14/07	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		*85.2 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*86.6 %*	*80-120*		"	"	"	"	

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

Project: BD Jct. K-27 & K-27-1
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
K-27 Monitor Well #5 (7B09006-05) Water									
Benzene	ND	0.00100	mg/L	1	EB71210	02/12/07	02/14/07	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		*81.6 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*83.8 %*	*80-120*		"	"	"	"	
K-27-1 Monitor Well #1 (7B09006-06) Water									
Benzene	ND	0.00100	mg/L	1	EB71210	02/12/07	02/14/07	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		*87.8 %*	*80-120*		"	"	"	"	

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Rice Operating Co.	Project: BD Jct. K-27 & K-27-1	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
K-27 Monitor Well #1 (7B09006-01) Water									
Total Alkalinity	**270**	2.00	mg/L	1	EB71213	02/10/07	02/10/07	EPA 310.1M	
Chloride	**518**	10.0	"	20	EB71202	02/12/07	02/13/07	EPA 300.0	
Total Dissolved Solids	**1550**	10.0	"	1	EB71003	02/09/07	02/10/07	EPA 160.1	
Sulfate	**334**	10.0	"	20	EB71202	02/12/07	02/13/07	EPA 300.0	
K-27 Monitor Well #2 (7B09006-02) Water									
Total Alkalinity	**336**	2.00	mg/L	1	EB71213	02/10/07	02/10/07	EPA 310.1M	
Chloride	**576**	12.5	"	25	EB71202	02/12/07	02/13/07	EPA 300.0	
Total Dissolved Solids	**1420**	10.0	"	1	EB71003	02/09/07	02/10/07	EPA 160.1	
Sulfate	**268**	12.5	"	25	EB71202	02/12/07	02/13/07	EPA 300.0	
K-27 Monitor Well #3 (7B09006-03) Water									
Total Alkalinity	**380**	2.00	mg/L	1	EB71213	02/10/07	02/10/07	EPA 310.1M	
Chloride	**256**	10.0	"	20	EB71202	02/12/07	02/13/07	EPA 300.0	
Total Dissolved Solids	**1300**	10.0	"	1	EB71003	02/09/07	02/10/07	EPA 160.1	
Sulfate	**327**	10.0	"	20	EB71202	02/12/07	02/13/07	EPA 300.0	
K-27 Monitor Well #4 (7B09006-04) Water									
Total Alkalinity	**364**	2.00	mg/L	1	EB71213	02/10/07	02/10/07	EPA 310.1M	
Chloride	**525**	12.5	"	25	EB71202	02/12/07	02/13/07	EPA 300.0	
Total Dissolved Solids	**1860**	10.0	"	1	EB71003	02/09/07	02/10/07	EPA 160.1	
Sulfate	**577**	12.5	"	25	EB71202	02/12/07	02/13/07	EPA 300.0	
K-27 Monitor Well #5 (7B09006-05) Water									
Total Alkalinity	**428**	2.00	mg/L	1	EB71213	02/10/07	02/10/07	EPA 310.1M	
Chloride	**317**	12.5	"	25	EB71202	02/12/07	02/13/07	EPA 300.0	
Total Dissolved Solids	**1730**	10.0	"	1	EB71003	02/09/07	02/10/07	EPA 160.1	
Sulfate	**677**	12.5	"	25	EB71202	02/12/07	02/13/07	EPA 300.0	
K-27-1 Monitor Well #1 (7B09006-06) Water									
Total Alkalinity	**346**	2.00	mg/L	1	EB71213	02/10/07	02/10/07	EPA 310.1M	
Chloride	**378**	5.00	"	10	EB71202	02/12/07	02/13/07	EPA 300.0	
Total Dissolved Solids	**1750**	10.0	"	1	EB71003	02/09/07	02/10/07	EPA 160.1	
Sulfate	**512**	5.00	"	10	EB71202	02/12/07	02/13/07	EPA 300.0	

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Rice Operating Co.	Project: BD Jct. K-27 & K-27-1	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

Total Metals by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
K-27 Monitor Well #1 (7B09006-01) Water									
Calcium	**175**	4.05	mg/L	50	EB70903	02/09/07	02/09/07	EPA 6010B	
Magnesium	**88.6**	1.80	"	"	"	"	"	"	
Potassium	**9.78**	0.600	"	10	"	"	"	"	
Sodium	**256**	2.15	"	50	"	"	"	"	
K-27 Monitor Well #2 (7B09006-02) Water									
Calcium	**184**	4.05	mg/L	50	EB70903	02/09/07	02/09/07	EPA 6010B	
Magnesium	**82.0**	1.80	"	"	"	"	"	"	
Potassium	**9.22**	0.600	"	10	"	"	"	"	
Sodium	**253**	2.15	"	50	"	"	"	"	
K-27 Monitor Well #3 (7B09006-03) Water									
Calcium	**120**	4.05	mg/L	50	EB70903	02/09/07	02/09/07	EPA 6010B	
Magnesium	**46.2**	0.360	"	10	"	"	"	"	
Potassium	**7.53**	0.600	"	"	"	"	"	"	
Sodium	**206**	2.15	"	50	"	"	"	"	
K-27 Monitor Well #4 (7B09006-04) Water									
Calcium	**191**	4.05	mg/L	50	EB70903	02/09/07	02/09/07	EPA 6010B	
Magnesium	**80.1**	1.80	"	"	"	"	"	"	
Potassium	**9.98**	0.600	"	10	"	"	"	"	
Sodium	**364**	2.15	"	50	"	"	"	"	
K-27 Monitor Well #5 (7B09006-05) Water									
Calcium	**106**	4.05	mg/L	50	EB70903	02/09/07	02/09/07	EPA 6010B	
Magnesium	**50.8**	0.360	"	10	"	"	"	"	
Potassium	**8.22**	0.600	"	"	"	"	"	"	
Sodium	**402**	10.8	"	250	"	"	"	"	
K-27-1 Monitor Well #1 (7B09006-06) Water									
Calcium	**153**	4.05	mg/L	50	EB70903	02/09/07	02/09/07	EPA 6010B	
Magnesium	**65.5**	1.80	"	"	"	"	"	"	
Potassium	**8.50**	0.600	"	10	"	"	"	"	
Sodium	**265**	10.8	"	250	"	"	"	"	

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

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

Project: BD Jct. K-27 & K-27-1
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
Batch EB71210 - EPA 5030C (GC)										
Blank (EB71210-BLK1)				Prepared: 02/12/07 Analyzed: 02/13/07						
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	*42.1*		*ug/l*	*50.0*		*84.2*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*44.1*		*"*	*50.0*		*88.2*	*80-120*			
LCS (EB71210-BS1)				Prepared: 02/12/07 Analyzed: 02/13/07						
Benzene	0.0473	0.00100	mg/L	0.0500		94.6	80-120			
Toluene	0.0462	0.00100	"	0.0500		92.4	80-120			
Ethylbenzene	0.0424	0.00100	"	0.0500		84.8	80-120			
Xylene (p/m)	0.0971	0.00100	"	0.100		97.1	80-120			
Xylene (o)	0.0411	0.00100	"	0.0500		82.2	80-120			
Surrogate: a,a,a-Trifluorotoluene	*42.9*		*ug/l*	*50.0*		*85.8*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*45.4*		*"*	*50.0*		*90.8*	*80-120*			
Calibration Check (EB71210-CCV1)				Prepared: 02/12/07 Analyzed: 02/14/07						
Benzene	54.3		ug/l	50.0		109	80-120			
Toluene	51.1		"	50.0		102	80-120			
Ethylbenzene	48.1		"	50.0		96.2	80-120			
Xylene (p/m)	93.3		"	100		93.3	80-120			
Xylene (o)	40.3		"	50.0		80.6	80-120			
Surrogate: a,a,a-Trifluorotoluene	*50.2*		*"*	*50.0*		*100*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*44.3*		*"*	*50.0*		*88.6*	*80-120*			
Matrix Spike (EB71210-MS1)	**Source: 7B09003-01**			Prepared: 02/12/07 Analyzed: 02/14/07						
Benzene	0.0448	0.00100	mg/L	0.0500	ND	89.6	80-120			
Toluene	0.0427	0.00100	"	0.0500	ND	85.4	80-120			
Ethylbenzene	0.0409	0.00100	"	0.0500	ND	81.8	80-120			
Xylene (p/m)	0.0831	0.00100	"	0.100	ND	83.1	80-120			
Xylene (o)	0.0406	0.00100	"	0.0500	ND	81.2	80-120			
Surrogate: a,a,a-Trifluorotoluene	*42.5*		*ug/l*	*50.0*		*85.0*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*41.2*		*"*	*50.0*		*82.4*	*80-120*			

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

Project: BD Jct. K-27 & K-27-1
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
Batch EB71210 - EPA 5030C (GC)										
Matrix Spike Dup (EB71210-MSD1)	**Source: 7B09003-01**			Prepared: 02/12/07 Analyzed: 02/14/07						
Benzene	0.0439	0.00100	mg/L	0.0500	ND	87.8	80-120	2.03	20	
Toluene	0.0420	0.00100	"	0.0500	ND	84.0	80-120	1.65	20	
Ethylbenzene	0.0417	0.00100	"	0.0500	ND	83.4	80-120	1.94	20	
Xylene (p/m)	0.0817	0.00100	"	0.100	ND	81.7	80-120	1.70	20	
Xylene (o)	0.0400	0.00100	"	0.0500	ND	80.0	80-120	1.49	20	
Surrogate: a,a,a-Trifluorotoluene	*41.0*		*ug/l*	*50.0*		*82.0*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*40.3*		*"*	*50.0*		*80.6*	*80-120*			

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

Project: BD Jct. K-27 & K-27-1
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
Batch EB71003 - Filtration Preparation										
Blank (EB71003-BLK1)				Prepared: 02/09/07 Analyzed: 02/10/07						
Total Dissolved Solids	ND	10.0	mg/L							
Duplicate (EB71003-DUP1)	Source: 7B09002-01			Prepared: 02/09/07 Analyzed: 02/10/07						
Total Dissolved Solids	852	10.0	mg/L		908			6.36	20	
Duplicate (EB71003-DUP2)	Source: 7B09006-02			Prepared: 02/09/07 Analyzed: 02/10/07						
Total Dissolved Solids	1550	10.0	mg/L		1420			8.75	20	
Batch EB71202 - General Preparation (WetChem)										
Blank (EB71202-BLK2)				Prepared: 02/12/07 Analyzed: 02/13/07						
Chloride	ND	0.500	mg/L							
Sulfate	ND	0.500	"							
LCS (EB71202-BS1)				Prepared: 02/12/07 Analyzed: 02/13/07						
Sulfate	11.1	0.500	mg/L	10.0		111	80-120			
Chloride	10.5	0.500	"	10.0		105	80-120			
Calibration Check (EB71202-CCV1)				Prepared: 02/12/07 Analyzed: 02/13/07						
Chloride	10.3		mg/L	10.0		103	80-120			
Sulfate	10.1		"	10.0		101	80-120			
Duplicate (EB71202-DUP1)	Source: 7B09002-01RE1			Prepared: 02/12/07 Analyzed: 02/13/07						
Sulfate	20.3	10.0	mg/L		21.0			3.39	20	
Chloride	33.3	10.0	"		36.8			9.99	20	
Duplicate (EB71202-DUP2)	Source: 7B09006-02			Prepared: 02/12/07 Analyzed: 02/13/07						
Chloride	566	12.5	mg/L		576			1.75	20	
Sulfate	265	12.5	"		268			1.13	20	

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

Project: BD Jct. K-27 & K-27-1
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
Batch EB71202 - General Preparation (WetChem)										
Matrix Spike (EB71202-MS1)	**Source: 7B09002-01RE1**			Prepared: 02/12/07 Analyzed: 02/13/07						
Sulfate	256	10.0	mg/L	200	21.0	118	80-120			
Chloride	255	10.0	"	200	36.8	109	80-120			
Matrix Spike (EB71202-MS2)	**Source: 7B09006-02**			Prepared: 02/12/07 Analyzed: 02/13/07						
Chloride	845	12.5	mg/L	250	576	108	80-120			
Sulfate	533	12.5	"	250	268	106	80-120			
Batch EB71213 - General Preparation (WetChem)										
Blank (EB71213-BLK1)				Prepared & Analyzed: 02/10/07						
Total Alkalinity	ND	2.00	mg/L							
LCS (EB71213-BS1)				Prepared & Analyzed: 02/10/07						
Bicarbonate Alkalinity	194	2.00	mg/L	200		97.0	85-115			
Duplicate (EB71213-DUP1)	**Source: 7B09002-01**			Prepared & Analyzed: 02/10/07						
Total Alkalinity	226	2.00	mg/L		228			0.881	20	
Reference (EB71213-SRM1)				Prepared & Analyzed: 02/10/07						
Total Alkalinity	250		mg/L	250		100	90-110			

Rice Operating Co.	Project: BD Jct. K-27 & K-27-1	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

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 EB70903 - 6010B/No Digestion										
Blank (EB70903-BLK1)				Prepared & Analyzed: 02/09/07						
Calcium	ND	0.0810	mg/L							
Magnesium	ND	0.0360	"							
Potassium	ND	0.0600	"							
Sodium	ND	0.0430	"							
Calibration Check (EB70903-CCV1)				Prepared & Analyzed: 02/09/07						
Calcium	2.10		mg/L	2.00		105	85-115			
Magnesium	2.17		"	2.00		108	85-115			
Potassium	1.73		"	2.00		86.5	85-115			
Sodium	1.78		"	2.00		89.0	85-115			
Duplicate (EB70903-DUP1)	**Source: 7B09002-01**			Prepared & Analyzed: 02/09/07						
Calcium	139	4.05	mg/L		137			1.45	20	
Magnesium	25.4	0.360	"		26.3			3.48	20	
Potassium	2.51	0.600	"		2.58			2.75	20	
Sodium	108	2.15	"		110			1.83	20	

Rice Operating Co.	Project: BD Jct. K-27 & K-27-1	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
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: Brent Barron Date: 2/19/2007

Brent Barron, Laboratory Director/Corp. Technical Director
Celey D. Keene, Org. Tech Director
Raland K. Tuttle, Laboratory Consultant

James Mathis, QA/QC Officer
Jeanne Mc Murrey, Inorg. Tech Director

Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Kristin Farris Pope kpope@riceswd.com

Company Name: RICE Operating Company

Company Address: 122 W. Taylor Street

City/State/Zip: Hobbs, New Mexico 88240

Telephone No: (505) 393-9174 Fax No: (505) 397-1471

Sampler Signature: Rozanne Johnson (505)631-9310 e-mail: rozanne@valornet.com

Project Name: BD Junction K-27 and K-27-1

Project #:

Project Loc: T21S R37E Sec27 K ~ Lea County New Mexico

PO #:

Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only)
ORDER #: 7B090006

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl (2) 40 ml glass vials	H_2SO_4	NaOH	$Na_2S_2O_3$	None (1) 1 Liter HDPE	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles (BTEX-N 8260)	Semivolatiles	BTEX 8021B/5030	RCI	N.O.R.M.	Total Dissolved Solids			RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
-01	K-27 Monitor Well #1			2/7/2007	12:10		3	X		2				1		GW			X	X					X			X				X
-02	K-27 Monitor Well #2			2/7/2007	9:15		3	X		2				1		GW			X	X					X			X				X
-03	K-27 Monitor Well #3			2/7/2007	11:40		3	X		2				1		GW			X	X					X			X				X
-04	K-27 Monitor Well #4			2/7/2007	11:00		3	X		2				1		GW			X	X					X			X				X
-05	K-27 Monitor Well #5			2/7/2007	13:05		3	X		2				1		GW			X	X					X			X				X
-06	K-27-1 Monitor Well #1			2/7/2007	10:20		3	X		2				1		GW			X	X					X			X				X

Special Instructions:
Please email to : kpope@riceswd.com mfranks@riceswd.com rozanne@valornet.com RG

Relinquished by:	Date	Time	Received by:	Date	Time
Rozanne Johnson	2-8-07	4:50			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT: Corrin Lees	2/8/07	4:50

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered by Sampler/Client Rep.?	Y	N
by Courier? UPS DHL FedEx Lone Star		

Temperature Upon Receipt: 2.5 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Rice Op.

Date/ Time: 2/8/07 4:50

Lab ID # : 7B69006

Initials: CF

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	Yes	No	2.5 °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 ELOT?	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	Subcontract of sample(s)?	Yes	No	Not Applicable	
#20	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

ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

A Xenco Laboratories Company

Analytical Report

Prepared for:

Kristin Farris-Pope

Rice Operating Co.

122 W. Taylor

Hobbs, NM 88240

Project: BD Jct. K-27 & K-27-1

Project Number: None Given

Location: T21S R37E Sec27 K ~ Lea County New Mexico

Lab Order Number: 7D18018

Report Date: 05/07/07

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

Project: BD Jct. K-27 & K-27-1
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
K-27 Monitor Well # 1	7D18018-01	Water	04/17/07 11:00	04-18-2007 14:55
K-27 Monitor Well # 2	7D18018-02	Water	04/17/07 10:00	04-18-2007 14:55
K-27 Monitor Well # 3	7D18018-03	Water	04/17/07 13:35	04-18-2007 14:55
K-27 Monitor Well # 4	7D18018-04	Water	04/17/07 11:45	04-18-2007 14:55
K-27 Monitor Well # 5	7D18018-05	Water	04/17/07 14:20	04-18-2007 14:55
K-27-1 Monitor Well # 1	7D18018-06	Water	04/17/07 12:45	04-18-2007 14:55

Rice Operating Co.	Project: BD Jct. K-27 & K-27-1	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
K-27 Monitor Well # 1 (7D18018-01) Water									
Benzene	ND	0.00100	mg/L	1	ED71904	04/19/07	04/20/07	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		*116 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*102 %*	*80-120*		"	"	"	"	
K-27 Monitor Well # 2 (7D18018-02) Water									
Benzene	ND	0.00100	mg/L	1	ED71904	04/19/07	04/20/07	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		*116 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*102 %*	*80-120*		"	"	"	"	
K-27 Monitor Well # 3 (7D18018-03) Water									
Benzene	ND	0.00100	mg/L	1	ED72007	04/20/07	04/24/07	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		*125 %*	*80-120*		"	"	"	"	*S-04*
Surrogate: 4-Bromofluorobenzene		*116 %*	*80-120*		"	"	"	"	
K-27 Monitor Well # 4 (7D18018-04) Water									
Benzene	ND	0.00100	mg/L	1	ED72007	04/20/07	04/24/07	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		*123 %*	*80-120*		"	"	"	"	*S-04*
Surrogate: 4-Bromofluorobenzene		*112 %*	*80-120*		"	"	"	"	

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

Project: BD Jct. K-27 & K-27-1
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
K-27 Monitor Well # 5 (7D18018-05) Water									
Benzene	ND	0.00100	mg/L	1	ED72007	04/20/07	04/24/07	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		*113 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*113 %*	*80-120*		"	"	"	"	
K-27-1 Monitor Well # 1 (7D18018-06) Water									
Benzene	ND	0.00100	mg/L	1	ED72007	04/20/07	04/24/07	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		*122 %*	*80-120*		"	"	"	"	*S-04*
Surrogate: 4-Bromofluorobenzene		*113 %*	*80-120*		"	"	"	"	

Rice Operating Co. 122 W. Taylor Hobbs NM, 88240	Project: BD Jct. K-27 & K-27-1 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
K-27 Monitor Well # 1 (7D18018-01) Water									
Total Alkalinity	**296**	2.00	mg/L	1	ED71913	04/19/07	04/19/07	EPA 310.1M	
Chloride	**511**	5.00	"	10	ED72411	04/24/07	04/27/07	EPA 300.0	
Total Dissolved Solids	**1720**	10.0	"	1	ED71911	04/19/07	04/20/07	EPA 160.1	
Sulfate	**383**	5.00	"	10	ED72411	04/24/07	04/27/07	EPA 300.0	
K-27 Monitor Well # 2 (7D18018-02) Water									
Total Alkalinity	**304**	2.00	mg/L	1	ED71913	04/19/07	04/19/07	EPA 310.1M	
Chloride	**604**	12.5	"	25	ED72411	04/24/07	04/27/07	EPA 300.0	
Total Dissolved Solids	**1670**	10.0	"	1	ED71911	04/19/07	04/20/07	EPA 160.1	
Sulfate	**270**	12.5	"	25	ED72411	04/24/07	04/27/07	EPA 300.0	
K-27 Monitor Well # 3 (7D18018-03) Water									
Total Alkalinity	**364**	2.00	mg/L	1	ED71913	04/19/07	04/19/07	EPA 310.1M	
Chloride	**264**	10.0	"	20	ED72411	04/24/07	04/27/07	EPA 300.0	
Total Dissolved Solids	**1340**	10.0	"	1	ED71911	04/19/07	04/20/07	EPA 160.1	
Sulfate	**314**	10.0	"	20	ED72411	04/24/07	04/27/07	EPA 300.0	
K-27 Monitor Well # 4 (7D18018-04) Water									
Total Alkalinity	**370**	2.00	mg/L	1	ED71913	04/19/07	04/19/07	EPA 310.1M	
Chloride	**526**	12.5	"	25	ED72411	04/24/07	04/27/07	EPA 300.0	
Total Dissolved Solids	**1940**	10.0	"	1	ED71911	04/19/07	04/20/07	EPA 160.1	
Sulfate	**556**	12.5	"	25	ED72411	04/24/07	04/27/07	EPA 300.0	
K-27 Monitor Well # 5 (7D18018-05) Water									
Total Alkalinity	**488**	2.00	mg/L	1	ED71913	04/19/07	04/19/07	EPA 310.1M	
Chloride	**272**	12.5	"	25	ED72411	04/24/07	04/27/07	EPA 300.0	
Total Dissolved Solids	**1890**	10.0	"	1	ED71911	04/19/07	04/20/07	EPA 160.1	
Sulfate	**591**	12.5	"	25	ED72411	04/24/07	04/27/07	EPA 300.0	
K-27-1 Monitor Well # 1 (7D18018-06) Water									
Total Alkalinity	**384**	2.00	mg/L	1	ED71913	04/19/07	04/19/07	EPA 310.1M	
Chloride	**367**	12.5	"	25	ED72411	04/24/07	04/27/07	EPA 300.0	
Total Dissolved Solids	**1820**	10.0	"	1	ED71911	04/19/07	04/20/07	EPA 160.1	
Sulfate	**490**	12.5	"	25	ED72411	04/24/07	04/27/07	EPA 300.0	

Rice Operating Co.	Project: BD Jct. K-27 & K-27-1	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

Total Metals by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
K-27 Monitor Well # 1 (7D18018-01) Water									
Calcium	**155**	4.05	mg/L	50	ED72703	04/27/07	04/27/07	EPA 6010B	
Magnesium	**106**	1.80	"	"	"	"	"	"	
Potassium	**10.6**	0.600	"	10	"	"	"	"	
Sodium	**373**	4.30	"	100	"	"	"	"	
K-27 Monitor Well # 2 (7D18018-02) Water									
Calcium	**157**	4.05	mg/L	50	ED72703	04/27/07	04/27/07	EPA 6010B	
Magnesium	**107**	1.80	"	"	"	"	"	"	
Potassium	**10.6**	0.600	"	10	"	"	"	"	
Sodium	**347**	4.30	"	100	"	"	"	"	
K-27 Monitor Well # 3 (7D18018-03) Water									
Calcium	**132**	4.05	mg/L	50	ED72703	04/27/07	04/27/07	EPA 6010B	
Magnesium	**70.0**	1.80	"	"	"	"	"	"	
Potassium	**8.65**	0.600	"	10	"	"	"	"	
Sodium	**257**	4.30	"	100	"	"	"	"	
K-27 Monitor Well # 4 (7D18018-04) Water									
Calcium	**204**	4.05	mg/L	50	ED72703	04/27/07	04/27/07	EPA 6010B	
Magnesium	**75.9**	1.80	"	"	"	"	"	"	
Potassium	**11.6**	0.600	"	10	"	"	"	"	
Sodium	**465**	4.30	"	100	"	"	"	"	
K-27 Monitor Well # 5 (7D18018-05) Water									
Calcium	**108**	4.05	mg/L	50	ED72703	04/27/07	04/27/07	EPA 6010B	
Magnesium	**56.7**	1.80	"	"	"	"	"	"	
Potassium	**8.60**	0.600	"	10	"	"	"	"	
Sodium	**505**	4.30	"	100	"	"	"	"	
K-27-1 Monitor Well # 1 (7D18018-06) Water									
Calcium	**163**	4.05	mg/L	50	ED72703	04/27/07	04/27/07	EPA 6010B	
Magnesium	**67.6**	1.80	"	"	"	"	"	"	
Potassium	**9.94**	0.600	"	10	"	"	"	"	
Sodium	**332**	4.30	"	100	"	"	"	"	

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

Project: BD Jct. K-27 & K-27-1
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
Batch ED71904 - EPA 5030C (GC)										
Blank (ED71904-BLK1)				Prepared: 04/19/07 Analyzed: 04/20/07						
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	*53.3*		*ug/l*	*50.0*		*107*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*46.6*		*"*	*50.0*		*93.2*	*80-120*			
LCS (ED71904-BS1)				Prepared: 04/19/07 Analyzed: 04/20/07						
Benzene	0.0535	0.00100	mg/L	0.0500		107	80-120			
Toluene	0.0536	0.00100	"	0.0500		107	80-120			
Ethylbenzene	0.0564	0.00100	"	0.0500		113	80-120			
Xylene (p/m)	0.104	0.00100	"	0.100		104	80-120			
Xylene (o)	0.0575	0.00100	"	0.0500		115	80-120			
Surrogate: a,a,a-Trifluorotoluene	*55.0*		*ug/l*	*50.0*		*110*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*52.2*		*"*	*50.0*		*104*	*80-120*			
Calibration Check (ED71904-CCV1)				Prepared: 04/19/07 Analyzed: 04/20/07						
Benzene	59.7		ug/l	50.0		119	80-120			
Toluene	58.1		"	50.0		116	80-120			
Ethylbenzene	59.8		"	50.0		120	80-120			
Xylene (p/m)	109		"	100		109	80-120			
Xylene (o)	58.6		"	50.0		117	80-120			
Surrogate: a,a,a-Trifluorotoluene	*56.8*		*"*	*50.0*		*114*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*54.3*		*"*	*50.0*		*109*	*80-120*			
Matrix Spike (ED71904-MS1)	**Source: 7D17009-07**			Prepared: 04/19/07 Analyzed: 04/23/07						
Benzene	0.0540	0.00100	mg/L	0.0500	ND	108	80-120			
Toluene	0.0546	0.00100	"	0.0500	ND	109	80-120			
Ethylbenzene	0.0597	0.00100	"	0.0500	ND	119	80-120			
Xylene (p/m)	0.108	0.00100	"	0.100	ND	108	80-120			
Xylene (o)	0.0594	0.00100	"	0.0500	ND	119	80-120			
Surrogate: a,a,a-Trifluorotoluene	*53.4*		*ug/l*	*50.0*		*107*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*54.4*		*"*	*50.0*		*109*	*80-120*			

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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 ED71904 - EPA 5030C (GC)										
Matrix Spike Dup (ED71904-MSD1)	**Source: 7D17009-07**			Prepared: 04/19/07 Analyzed: 04/23/07						
Benzene	0.0531	0.00100	mg/L	0.0500	ND	106	80-120	1.87	20	
Toluene	0.0540	0.00100	"	0.0500	ND	108	80-120	0.922	20	
Ethylbenzene	0.0576	0.00100	"	0.0500	ND	115	80-120	3.42	20	
Xylene (p/m)	0.107	0.00100	"	0.100	ND	107	80-120	0.930	20	
Xylene (o)	0.0584	0.00100	"	0.0500	ND	117	80-120	1.69	20	
Surrogate: a,a,a-Trifluorotoluene	*52.9*		*ug/l*	*50.0*		*106*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*53.8*		*"*	*50.0*		*108*	*80-120*			
Batch ED72007 - EPA 5030C (GC)										
Blank (ED72007-BLK1)				Prepared: 04/20/07 Analyzed: 04/24/07						
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	*57.6*		*ug/l*	*50.0*		*115*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*57.5*		*"*	*50.0*		*115*	*80-120*			
LCS (ED72007-BS1)				Prepared: 04/20/07 Analyzed: 04/24/07						
Benzene	0.0528	0.00100	mg/L	0.0500		106	80-120			
Toluene	0.0551	0.00100	"	0.0500		110	80-120			
Ethylbenzene	0.0567	0.00100	"	0.0500		113	80-120			
Xylene (p/m)	0.107	0.00100	"	0.100		107	80-120			
Xylene (o)	0.0574	0.00100	"	0.0500		115	80-120			
Surrogate: a,a,a-Trifluorotoluene	*56.7*		*ug/l*	*50.0*		*113*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*55.1*		*"*	*50.0*		*110*	*80-120*			

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

Project: BD Jct. K-27 & K-27-1
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
Batch ED72007 - EPA 5030C (GC)										
Calibration Check (ED72007-CCV1)				Prepared: 04/20/07 Analyzed: 04/24/07						
Benzene	54.8		ug/l	50.0		110	80-120			
Toluene	55.1		"	50.0		110	80-120			
Ethylbenzene	56.5		"	50.0		113	80-120			
Xylene (p/m)	106		"	100		106	80-120			
Xylene (o)	57.1		"	50.0		114	80-120			
Surrogate: a,a,a-Trifluorotoluene	*56.9*		"	*50.0*		*114*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*53.1*		"	*50.0*		*106*	*80-120*			
Matrix Spike (ED72007-MS1)		**Source: 7D18018-03**		Prepared: 04/20/07 Analyzed: 04/24/07						
Benzene	0.0552	0.00100	mg/L	0.0500	ND	110	80-120			
Toluene	0.0573	0.00100	"	0.0500	ND	115	80-120			
Ethylbenzene	0.0565	0.00100	"	0.0500	ND	113	80-120			
Xylene (p/m)	0.109	0.00100	"	0.100	ND	109	80-120			
Xylene (o)	0.0598	0.00100	"	0.0500	ND	120	80-120			
Surrogate: a,a,a-Trifluorotoluene	*58.3*		*ug/l*	*50.0*		*117*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*57.6*		"	*50.0*		*115*	*80-120*			
Matrix Spike Dup (ED72007-MSD1)		**Source: 7D18018-03**		Prepared: 04/20/07 Analyzed: 04/24/07						
Benzene	0.0549	0.00100	mg/L	0.0500	ND	110	80-120	0.00	20	
Toluene	0.0575	0.00100	"	0.0500	ND	115	80-120	0.00	20	
Ethylbenzene	0.0593	0.00100	"	0.0500	ND	119	80-120	5.17	20	
Xylene (p/m)	0.111	0.00100	"	0.100	ND	111	80-120	1.82	20	
Xylene (o)	0.0611	0.00100	"	0.0500	ND	122	80-120	1.65	20	QM-07
Surrogate: a,a,a-Trifluorotoluene	*60.0*		*ug/l*	*50.0*		*120*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*58.8*		"	*50.0*		*118*	*80-120*			

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Rice Operating Co. 122 W. Taylor Hobbs NM, 88240	Project: BD Jct. K-27 & K-27-1 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
Batch ED71911 - Filtration Preparation										
Blank (ED71911-BLK1)				Prepared: 04/19/07 Analyzed: 04/20/07						
Total Dissolved Solids	ND	10.0	mg/L							
Duplicate (ED71911-DUP1)		**Source: 7D18006-01**		Prepared: 04/19/07 Analyzed: 04/20/07						
Total Dissolved Solids	614	10.0	mg/L		674			9.32	20	
Duplicate (ED71911-DUP2)		**Source: 7D18015-03**		Prepared: 04/19/07 Analyzed: 04/20/07						
Total Dissolved Solids	1660	10.0	mg/L		1820			9.20	20	
Batch ED71913 - General Preparation (WetChem)										
Blank (ED71913-BLK1)				Prepared & Analyzed: 04/19/07						
Total Alkalinity	ND	2.00	mg/L							
LCS (ED71913-BS1)				Prepared & Analyzed: 04/19/07						
Bicarbonate Alkalinity	176	2.00	mg/L	200		88.0	85-115			
Duplicate (ED71913-DUP1)		**Source: 7D18017-01**		Prepared & Analyzed: 04/19/07						
Total Alkalinity	226	2.00	mg/L		232			2.62	20	
Reference (ED71913-SRM1)				Prepared & Analyzed: 04/19/07						
Total Alkalinity	246		mg/L	250		98.4	90-110			
Batch ED72411 - General Preparation (WetChem)										
Blank (ED72411-BLK1)				Prepared: 04/24/07 Analyzed: 04/27/07						
Sulfate	ND	0.500	mg/L							
Chloride	ND	0.500	"							

Rice Operating Co.	Project: BD Jct. K-27 & K-27-1	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

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
Batch ED72411 - General Preparation (WetChem)										
Blank (ED72411-BLK2)				Prepared: 04/24/07 Analyzed: 04/27/07						
Chloride	ND	0.500	mg/L							
Sulfate	ND	0.500	"							
LCS (ED72411-BS1)				Prepared & Analyzed: 04/24/07						
Chloride	9.02	0.500	mg/L	10.0		90.2	80-120			
Sulfate	9.66	0.500	"	10.0		96.6	80-120			
Calibration Check (ED72411-CCV1)				Prepared: 04/24/07 Analyzed: 04/27/07						
Sulfate	11.0		mg/L	10.0		110	80-120			
Chloride	8.05		"	10.0		80.5	80-120			
Duplicate (ED72411-DUP1)	**Source: 7D23008-01**			Prepared & Analyzed: 04/24/07						
Chloride	187	5.00	mg/L		187			0.00	20	
Sulfate	74.3	5.00	"		74.0			0.405	20	
Duplicate (ED72411-DUP2)	**Source: 7D18018-06**			Prepared: 04/24/07 Analyzed: 04/27/07						
Sulfate	492	12.5	mg/L		490			0.407	20	
Chloride	361	12.5	"		367			1.65	20	
Matrix Spike (ED72411-MS1)	**Source: 7D23008-01**			Prepared: 04/24/07 Analyzed: 04/27/07						
Sulfate	166	5.00	mg/L	100	74.0	92.0	80-120			
Chloride	291	5.00	"	100	187	104	80-120			
Matrix Spike (ED72411-MS2)	**Source: 7D18018-06**			Prepared: 04/24/07 Analyzed: 04/27/07						
Chloride	631	12.5	mg/L	250	367	106	80-120			
Sulfate	774	12.5	"	250	490	114	80-120			

Rice Operating Co. 122 W. Taylor Hobbs NM, 88240	Project: BD Jct. K-27 & K-27-1 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 ED72703 - 6010B/No Digestion										
Blank (ED72703-BLK1)				Prepared & Analyzed: 04/27/07						
Calcium	ND	0.0810	mg/L							
Magnesium	ND	0.0360	"							
Potassium	ND	0.0600	"							
Sodium	ND	0.0430	"							
Calibration Check (ED72703-CCV1)				Prepared & Analyzed: 04/27/07						
Calcium	1.90		mg/L	2.00		95.0	85-115			
Magnesium	2.07		"	2.00		104	85-115			
Potassium	1.98		"	2.00		99.0	85-115			
Sodium	2.29		"	2.00		114	85-115			
Duplicate (ED72703-DUP1)	**Source: 7D18014-01**			Prepared & Analyzed: 04/27/07						
Calcium	140	4.05	mg/L		133			5.13	20	
Magnesium	76.4	1.80	"		76.8			0.522	20	
Potassium	15.7	0.600	"		15.6			0.639	20	
Sodium	350	4.30	"		358			2.26	20	

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Rice Operating Co.	Project: BD Jct. K-27 & K-27-1	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
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: Brent Barron Date: 5/7/2007

Brent Barron, Laboratory Director/Corp. Technical Director
Celey D. Keene, Org. Tech Director
Raland K. Tuttle, Laboratory Consultant

James Mathis, QA/QC Officer
Jeanne Mc Murrey, Inorg. Tech Director

Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Kristin Farris Pope kpope@riceswd.com

Project Name: BD Junction K-27 and K-27-1

Company Name: RICE Operating Company

Project #:

Company Address: 122 W. Taylor Street

Project Loc: T21S R37E Sec27 K ~ Lea County New Mexico

City/State/Zip: Hobbs, New Mexico 88240

PO #:

Telephone No: (505) 393-9174 Fax No: (505) 397-1471

Report Format: [X] Standard [ ] TRRP [ ] NPDES

Sampler Signature: Rozanne Johnson (505)631-9310 e-mail: rozanne@valornet.com

(lab use only)
ORDER #: 7D18018

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LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO3	HCl (2) 40 ml glass vials	H2SO4	NaOH	Na2S2O3	None (1) 1 Liter HDPE	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge	GW=Groundwater S=Soil/Solid	NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	TOTAL: Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles (BTEX-N 8260)	Semivolatiles	BTEX 8021B/5030 X	RCI	N.O.R.M.	Total Dissolved Solids			RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	K-27 Monitor Well #1			4/17/2007	11:00		3	X		2				1		GW					X	X					X			X				X
02	K-27 Monitor Well #2			4/17/2007	10:00		3	X		2				1		GW					X	X					X			X				X
03	K-27 Monitor Well #3			4/17/2007	13:35		3	X		2				1		GW					X	X					X			X				X
04	K-27 Monitor Well #4			4/17/2007	11:45		3	X		2				1		GW					X	X					X			X				X
05	K-27 Monitor Well #5			4/17/2007	14:20		3	X		2				1		GW					X	X					X			X				X
06	K-27-1 Monitor Well #1			4/17/2007	12:45		3	X		2				1		GW					X	X					X			X				X

Special Instructions:
Please email to : kpope@riceswd.com matt@riceswd.com rozanne@valornet.com
jpurvis@riceswd.com

Relinquished by:	Date	Time	Received by:	Date	Time
Rozanne Johnson	4-18-07	12:10	Mary Morton	4-18-07	12:11
Relinquished by: Mary Morton	4-18-07	1:55	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT: Andrea	4-18-07	1:55

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered	Y	N
by Sampler/Client Rep. ?	Y	N
by Courier? UPS DHL FedEx Lone Star		
Temperature Upon Receipt:	-1.0	°C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

lient: Rice

ate/ Time: 4-18-07 2:55

ab ID #: 7018018

itials: AL

Sample Receipt Checklist

				Client Initials
Temperature of container/ cooler?	(Yes)	No	-1.0 °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 Subcontract of sample(s)?	Yes	No	(Not Applicable)	
0 VOC samples have zero headspace?	(Yes)	No	Not Applicable	

Variance Documentation

ntact: _____ Contacted by: _____ Date/ Time: _____

garding: _____

rective Action Taken:

_____

_____

_____

ck 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

CARDINAL LABORATORIES

PHONE (325) 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: (575) 397-1471

Receiving Date: 10/05/07
Reporting Date: 10/12/07
Project Number: NOT GIVEN
Project Name: BD JUNCTION K-27 and K-27-1
Project Location: T21S R37E SEC27 K~LEA COUNTY, NM

Sampling Date: 10/03/07
Sample Type: WATER
Sample Condition: COOL & INTACT
Sample Received By: SB
Analyzed By: HM/KS

LAB NUMBER	SAMPLE ID	Na (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Conductivity (uS/cm)	T-Alkalinity ($mgCaCO_3$/L)
ANALYSIS DATE:		10/12/07	10/11/07	10/11/07	10/12/07	10/10/07	10/10/07
H13453-1	K-27 MONITOR WELL 1	264	166	77.4	7.15	2,590	300
H13453-2	K-27 MONITOR WELL 2	324	181	67.8	7.40	2,840	320
H13453-3	K-27 MONITOR WELL 3	302	136	35.5	7.70	2,190	352
H13453-4	K-27 MONITOR WELL 4	371	165	62.9	7.58	2,760	336
H13453-5	K-27 MONITOR WELL 5	441	106	56.5	6.53	2,650	440
H13453-6	K-27-1 MONITOR WELL 1	366	170	62.9	7.70	2,830	360
Quality Control		NR	50.6	51.6	1.87	9,760	NR
True Value QC		NR	50.0	50.0	2.00	10,000	NR
% Recovery		NR	101	103	93.6	97.6	NR
Relative Percent Difference		NR	< 0.1	1.6	5.7	0.1	NR
METHODS:			SM3500-Ca-D	3500-Mg E	8049	120.1	310.1

LAB NUMBER	SAMPLE ID	Cl^- (mg/L)	SO_4 (mg/L)	CO_3 (mg/L)	HCO_3 (mg/L)	pH (s.u.)	TDS (mg/L)
ANALYSIS DATE:		10/11/07	10/11/07	10/10/07	10/10/07	10/10/07	10/09/07
H13453-1	K-27 MONITOR WELL 1	470	341	0	366	7.29	1,679
H13453-2	K-27 MONITOR WELL 2	600	270	0	390	7.20	1,879
H13453-3	K-27 MONITOR WELL 3	308	352	0	429	7.28	1,500
H13453-4	K-27 MONITOR WELL 4	390	579	0	410	7.25	1,938
H13453-5	K-27 MONITOR WELL 5	260	632	0	537	7.36	1,799
H13453-6	K-27-1 MONITOR WELL 1	420	516	0	439	7.25	1,964
Quality Control		500	54.0	NR	1000	7.00	NR
True Value QC		500	50.0	NR	1000	7.00	NR
% Recovery		100	108	NR	100	100	NR
Relative Percent Difference		< 0.1	16.8	NR	< 0.1	0.1	NR
METHODS:		SM4500-Cl-B	375.4	310.1	310.1	150.1	160.1

Kristin Farris-Pope
Chemist

10/12/07
Date

H13453.PICF

CARDINAL LABORATORIES

PHONE (325) 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 WEST TAYLOR
HOBBS, NM 88240
FAX TO: (505) 397-1471

Receiving Date: 10/05/07
Reporting Date: 10/10/07
Project Number: NOT GIVEN
Project Name: BD JUNCTION K-27 AND K-27-1
Project Location: T21S R37E SEC27 K - LEA COUNTY, NM

Sampling Date: 10/03/07
Sample Type: WATER
Sample Condition: COOL & INTACT
Sample Received By: SB
Analyzed By: CK

LAB NUMBER	SAMPLE ID	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	TOTAL XYLENES (mg/L)
ANALYSIS DATE		10/06/07	10/06/07	10/06/07	10/06/07
H13453-1	K-27 MONITOR WELL #1	<0.001	<0.001	<0.001	<0.003
H13453-2	K-27 MONITOR WELL #2	<0.001	<0.001	<0.001	<0.003
H13453-3	K-27 MONITOR WELL #3	<0.001	<0.001	<0.001	<0.003
H13453-4	K-27 MONITOR WELL #4	<0.001	<0.001	<0.001	<0.003
H13453-5	K-27 MONITOR WELL #5	<0.001	<0.001	<0.001	<0.003
H13453-6	K-27-1 MONITOR WELL #1	<0.001	<0.001	<0.001	<0.003
Quality Control		0.114	0.106	0.106	0.108
True Value QC		0.100	0.100	0.100	0.300
% Recovery		114	106.0	106.0	108.0
Relative Percent Difference		9.3	11.6	12.1	12.7

METHOD: EPA SW-846 8021B

Chemist

10/12/07
Date

H13453b Rice

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 # _____

Company Name: RICE Operating Company	BILL TO Company: RICE Operating Company PO#
Project Manager: Kristin Farris-Pope, Project Scientist	Address: (Street, City, Zip) 122 W Taylor Street ~ Hobbs, New Mexico 88240
Address: (Street, City, Zip) 122 W Taylor Street ~ Hobbs, New Mexico 88240	Phone#: (505) 393-9174 Fax#: (505)397-1471
Phone #: (505) 393-9174	Fax #: (505) 397-1471
Project #:	Project Name: BD Junction K-27 and K-27-1
Project Location: T21S R37E Sec27 K ~ Lea County New Mexico	Sampler Signature: Rozanne Johnson (505)631-9310 rozanne@valornet.com

LAB # (LAB USE ONLY)	FIELD CODE	(G)rab or (C)omp	# CONTAINERS	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL (2 40ml VOA)	HNO_3	$NaHSO_4$	H_2SO_4	ICE (1-1Liter HDPE)	NONE	SAMPLING: DATE (2007)	TIME
H13453-1	K-27 Monitor Well 1	G	3	X				2				1		10-3	9:35
2	K-27 Monitor Well 2	G	3	X				2				1		10-3	8:40
3	K-27 Monitor Well 3	G	3	X				2				1		10-3	12:30
4	K-27 Monitor Well 4	G	3	X				2				1		10-3	10:20
5	K-27 Monitor Well 5	G	3	X				2				1		10-3	13:45
6	K-27-1 Monitor Well 1	G	3	X				2				1		10-3	11:40

ANALYSIS REQUEST
(Circle or Specify Method No.)

MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005 / TX1005 Extended (C35)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	Moisture Content		Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	Total Dissolved Solids	Chlorides	Turn Around Time ~ 24 Hours
	X																X	X	X		
	X																X	X	X		
	X																X	X	X		
	X																X	X	X		
	X																X	X	X		
	X																X	X	X		

Relinquished by: Rozanne Johnson	Date: 10-5-07	Time: 2:28 pm	Received by: Lisa Barnes	Date: 10/5/07	Time: 2:28 pm
Relinquished by:	Date:	Time:	Received By: (Laboratory Staff)	Date:	Time:

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

Delivered By: (Circle One) Sampler - UPS - Bus - Other:

Sample Condition: Cool: Yes ✓ / No; Intact: Yes ✓ / No

CHECKED BY: (Initials) SB

REMARKS:

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

Analytical Report 286633

for

Rice Operating Co.

Project Manager: Kristin Pope

BD Junction K-27 and K-27-1

13-AUG-07

12600 West I-20 East Odessa, Texas 79765

A Xenco Laboratories Company

NELAC certification numbers:
Houston, TX E871002 - Miami, FL E86678 - Tampa, FL E86675

Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America

13-AUG-07

Project Manager: **Kristin Pope**
Rice Operating Co.
122 West Taylor
Hobbs, NM 88240

Reference: XENCO Report No: **286633**
BD Junction K-27 and K-27-1
Project Address: T21S R37E Sec27 K ~ Lea County New Mexico

Kristin Pope:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 286633. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 286633 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Brent Barron
Odessa Laboratory Director

Certificate of Analysis Summary 286633
Rice Operating Co., Hobbs, NM

Project Name: BD Junction K-27 and K-27-1

Project Id:
Contact: Kristin Pope
Project Location: T21S R37E Sec27 K ~ Lea County New M

Date Received in Lab Jul-26-07 02:15 pm
Report Date: 13-AUG-07
Project Manager: Brent Barron, II

Analysis Requested	*Lab Id:*	286633-001		286633-002		286633-003		286633-004	
	Field Id:	K-27 Monitor Well # 1		K-27 Monitor Well # 2		K-27 Monitor Well # 3		K-27 Monitor Well # 4	
	Depth:								
	Matrix:	WATER		WATER		WATER		WATER	
	Sampled:	Jul-25-07 09:20		Jul-25-07 08:15		Jul-25-07 12:25		Jul-25-07 10:10	
Alkalinity by EPA 310.1	*Extracted:*								
	Analyzed:	Jul-27-07 14:45		Jul-27-07 14:45		Jul-27-07 14:45		Jul-27-07 14:45	
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL
Alkalinity, Total (as CaCO3)		1230	4.00	1330	4.00	1420	4.00	1390	4.00
BTEX by EPA 8021B	*Extracted:*	Jul-27-07 13:38		Jul-27-07 13:38		Jul-27-07 13:38		Jul-27-07 13:38	
	Analyzed:	Jul-30-07 21:52		Jul-30-07 22:13		Jul-30-07 22:33		Jul-30-07 22:54	
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL
Benzene		ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010
Toluene		ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010
Ethylbenzene		ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010
m,p-Xylene		ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020
o-Xylene		ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010
Total Xylenes		ND		ND		ND		ND	
Total BTEX		ND		ND		ND		ND	
Inorganic Anions by EPA 300	*Extracted:*								
	Analyzed:	Jul-27-07 14:53		Jul-27-07 14:53		Jul-27-07 14:53		Jul-27-07 14:53	
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL
Chloride		549	12.5	581	12.5	274	10.0	349	12.5
Metals per ICP by SW846 6010B	*Extracted:*	Jul-31-07 09:16		Jul-31-07 09:16		Jul-31-07 09:16		Jul-31-07 09:16	
	Analyzed:	Jul-31-07 14:58		Jul-31-07 14:59		Jul-31-07 15:03		Jul-31-07 15:04	
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL
Calcium		184	1.00	230	1.00	144	1.00	184	1.00
Magnesium		89.4	0.100	96.3	0.100	74.4	0.100	72.5	0.100
Potassium		8.43	2.00	8.64	2.00	7.65	2.00	8.55	2.00
Sodium		276	5.00	299	5.00	23.5	5.00	352	5.00
Residue, Filterable (TDS) by EPA 160.1	*Extracted:*								
	Analyzed:	Jul-26-07 16:30		Jul-26-07 16:30		Jul-26-07 16:30		Jul-26-07 16:30	
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL
Total dissolved solids		1670	5.00	2140	5.00	1420	5.00	1930	5.00

Brent Barron
Odessa Laboratory Director

Certificate of Analysis Summary 286633
Rice Operating Co., Hobbs, NM

Project Name: BD Junction K-27 and K-27-1

Project Id:
Contact: Kristin Pope
Project Location: T21S R37E Sec27 K ~ Lea County New M

Date Received in Lab Jul-26-07 02:15 pm
Report Date: 13-AUG-07
Project Manager: Brent Barron, II

Analysis Requested		*Lab Id:*	286633-005		286633-006			
		Field Id:	K-27 Monitor Well # 5		K-27-1 Monitor Well # 1			
		Depth:						
		Matrix:	WATER		WATER			
		Sampled:	Jul-25-07 13:15		Jul-25-07 11:15			
Alkalinity by EPA 310.1	*Extracted:*							
	Analyzed:		Jul-27-07 14:45		Jul-27-07 14:45			
	Units/RL:		mg/L	RL	mg/L	RL		
Alkalinity, Total (as CaCO3)			1870	4.00	8600	4.00		
BTEX by EPA 8021B	*Extracted:*		Jul-27-07 13:38		Jul-27-07 13:38			
	Analyzed:		Jul-30-07 23:15		Jul-30-07 23:35			
	Units/RL:		mg/L	RL	mg/L	RL		
Benzene			ND	0.0010	ND	0.0010		
Toluene			ND	0.0010	ND	0.0010		
Ethylbenzene			ND	0.0010	ND	0.0010		
m,p-Xylene			ND	0.0020	ND	0.0020		
o-Xylene			ND	0.0010	ND	0.0010		
Total Xylenes			ND		ND			
Total BTEX			ND		ND			
Inorganic Anions by EPA 300	*Extracted:*							
	Analyzed:		Jul-27-07 14:53		Jul-27-07 14:53			
	Units/RL:		mg/L	RL	mg/L	RL		
Chloride			208	10.0	1040	25.0		
Metals per ICP by SW846 6010B	*Extracted:*		Jul-31-07 09:16		Jul-31-07 09:16			
	Analyzed:		Jul-31-07 15:05		Jul-31-07 15:06			
	Units/RL:		mg/L	RL	mg/L	RL		
Calcium			111	1.00	322	1.00		
Magnesium			53.4	0.100	110	0.100		
Potassium			7.40	2.00	12.7	2.00		
Sodium			408	5.00	615	5.00		
Residue, Filterable (TDS) by EPA 160.1	*Extracted:*							
	Analyzed:		Jul-26-07 16:30		Jul-26-07 16:30			
	Units/RL:		mg/L	RL	mg/L	RL		
Total dissolved solids			1700	5.00	2980	5.00		

Brent Barron
Odessa Laboratory Director

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the MQL and above the SQL.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

	Phone	Fax
11381 Meadowglen Lane Suite L Houston, Tx 77082-2647	(281) 589-0692	(281) 589-0695
9701 Harry Hines Blvd , Dallas, TX 75220	(214) 902 0300	(214) 351-9139
5332 Blackberry Drive, Suite 104, San Antonio, TX 78238	(210) 509-3334	(201) 509-3335
2505 N. Falkenburg Rd., Tampa, FL 33619	(813) 620-2000	(813) 620-2033
5757 NW 158th St, Miami Lakes, FL 33014	(305) 823-8500	(305) 823-8555

Form 2 - Surrogate Recoveries

Project Name: BD Junction K-27 and K-27-1

Work Order #: 286633 **Project ID:**

Lab Batch #: 701442 **Sample:** 286633-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0490	0.0500	98	80-120	

Lab Batch #: 701442 **Sample:** 286633-002 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0461	0.0500	92	80-120	

Lab Batch #: 701442 **Sample:** 286633-003 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0475	0.0500	95	80-120	

Lab Batch #: 701442 **Sample:** 286633-004 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0497	0.0500	99	80-120	

Lab Batch #: 701442 **Sample:** 286633-005 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0484	0.0500	97	80-120	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: BD Junction K-27 and K-27-1

Work Order #: 286633 **Project ID:**

Lab Batch #: 701442 **Sample:** 286633-006 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0501	0.0500	100	80-120	

Lab Batch #: 701442 **Sample:** 286638-004 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0524	0.0500	105	80-120	

Lab Batch #: 701442 **Sample:** 286638-004 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0532	0.0500	106	80-120	

Lab Batch #: 701442 **Sample:** 497682-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0410	0.0500	82	80-120	

Lab Batch #: 701442 **Sample:** 497682-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0451	0.0500	90	80-120	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Blank Spike Recovery

Project Name: BD Junction K-27 and K-27-1

Work Order #: 286633 **Project ID:**

Lab Batch #: 701211 **Sample:** 701211-1-BKS **Matrix:** Water
Date Analyzed: 07/27/2007 **Date Prepared:** 07/27/2007 **Analyst:** WRU
Reporting Units: mg/L **Batch #:** 1

Alkalinity by EPA 310.1 Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
	BLANK /BLANK SPIKE RECOVERY STUDY					
Alkalinity, Total (as CaCO3)	ND	400	340	85	80-120	

Lab Batch #: 701442 **Sample:** 497682-1-BKS **Matrix:** Water
Date Analyzed: 07/30/2007 **Date Prepared:** 07/27/2007 **Analyst:** CELKEE
Reporting Units: mg/L **Batch #:** 1

BTEX by EPA 8021B Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
	BLANK /BLANK SPIKE RECOVERY STUDY					
Benzene	ND	0.0500	0.0457	91	70-125	
Toluene	ND	0.0500	0.0468	94	70-125	
Ethylbenzene	ND	0.0500	0.0501	100	71-129	
m,p-Xylene	ND	0.1000	0.0898	90	70-131	
o-Xylene	ND	0.0500	0.0475	95	71-133	

Lab Batch #: 701264 **Sample:** 701264-1-BKS **Matrix:** Water
Date Analyzed: 07/27/2007 **Date Prepared:** 07/27/2007 **Analyst:** IRO
Reporting Units: mg/L **Batch #:** 1

Inorganic Anions by EPA 300 Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
	BLANK /BLANK SPIKE RECOVERY STUDY					
Chloride	ND	10.0	9.94	99	90-110	

Blank Spike Recovery [D] = 100*[C]/[B]
All results are based on MDL and validated for QC purposes.

BS / BSD Recoveries

Project Name: BD Junction K-27 and K-27-1

Work Order #: 286633
Analyst: DAT
Lab Batch ID: 701350 **Sample:** 497762-1-BKS
Units: mg/L

Date Prepared: 07/31/2007 **Batch #:** 1

Project ID:
Date Analyzed: 07/31/2007
Matrix: Water

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Metals per ICP by SW846 6010B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Calcium	ND	1.00	1.02	102	1.0	1.05	105	3	75-125	25	
Magnesium	ND	1.00	1.13	113	1.0	1.12	112	1	75-125	25	
Potassium	ND	10.0	9.95	100	10.0	9.89	99	1	75-125	25	
Sodium	ND	11.0	10.8	98	11.0	10.7	97	1	75-125	25	

Relative Percent Difference RPD = 200*|(D-F)/(D+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Form 3 - MS Recoveries

Project Name: BD Junction K-27 and K-27-1

Work Order #: 286633
Lab Batch #: 701264
Project ID:
Date Analyzed: 07/27/2007
Date Prepared: 07/27/2007
Analyst: IRO
QC- Sample ID: 286626-003 S
Batch #: 1
Matrix: Water
Reporting Units: mg/L

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	1040	500	1630	118	90-110	X

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference [E] = 200*(C-A)/(C+B)
All Results are based on MDL and Validated for QC Purposes

Form 3 - MS / MSD Recoveries

Project Name: BD Junction K-27 and K-27-1

Work Order # 286633 **Project ID:**

Lab Batch ID: 701442 **QC- Sample ID:** 286638-004 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 07/31/2007 **Date Prepared:** 07/27/2007 **Analyst:** CELKEE

Reporting Units: mg/L

BTEX by EPA 8021B Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	0.0309	0.0500	0.0808	100	0.0500	0.0774	93	7	70-125	25	
Toluene	0.0010	0.0500	0.0603	119	0.0500	0.0581	114	4	70-125	25	
Ethylbenzene	ND	0.0500	0.0633	127	0.0500	0.0613	123	3	71-129	25	
m,p-Xylene	0.0042	0.1000	0.1137	110	0.1000	0.1103	106	4	70-131	25	
o-Xylene	ND	0.0500	0.0609	122	0.0500	0.0591	118	3	71-133	25	

Lab Batch ID: 701350 **QC- Sample ID:** 286807-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 07/31/2007 **Date Prepared:** 07/31/2007 **Analyst:** DAT

Reporting Units: mg/L

Metals per ICP by SW846 6010B Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Calcium	300	2.00	307	350	2.00	303	150	80	75-125	20	XF
Magnesium	9.93	2.00	12.1	109	2.00	12.0	104	5	75-125	20	
Potassium	15.1	20.0	39.1	120	20.0	38.9	119	1	75-125	20	
Sodium	4.39	22.0	28.3	109	22.0	27.5	105	4	75-125	20	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*(D-G)/(D+G)

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not ApplicableN = See Narrative, EQL = Estimated Quantitation Limit

Sample Duplicate Recovery

Project Name: BD Junction K-27 and K-27-1

Work Order #: 286633

Lab Batch #: 701211 **Project ID:**
Date Analyzed: 07/27/2007 **Date Prepared:** 07/27/2007 **Analyst:** WRU
QC- Sample ID: 286139-012 D **Batch #:** 1 **Matrix:** Water
Reporting Units: mg/L

Alkalinity by EPA 310.1	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Alkalinity, Total (as CaCO3)	2200	2200	0	20	

Lab Batch #: 701264
Date Analyzed: 07/27/2007 **Date Prepared:** 07/27/2007 **Analyst:** IRO
QC- Sample ID: 286626-003 D **Batch #:** 1 **Matrix:** Water
Reporting Units: mg/L

Inorganic Anions by EPA 300	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	1040	1060	2	20	

Lab Batch #: 701255
Date Analyzed: 07/26/2007 **Date Prepared:** 07/26/2007 **Analyst:** IRO
QC- Sample ID: 286139-012 D **Batch #:** 1 **Matrix:** Water
Reporting Units: mg/L

Residue, Filterable (TDS) by EPA 160.1	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Total dissolved solids	5020	5370	7	30	

Lab Batch #: 701255
Date Analyzed: 07/26/2007 **Date Prepared:** 07/26/2007 **Analyst:** IRO
QC- Sample ID: 286633-006 D **Batch #:** 1 **Matrix:** Water
Reporting Units: mg/L

Residue, Filterable (TDS) by EPA 160.1	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Total dissolved solids	2980	3090	4	30	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |
All Results are based on MDL and validated for QC purposes.

Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765
Phone: 432-563-1800
Fax: 432-561-1713

Project Manager: Kristin Farris Pope kpope@riceswd.com
Company Name: RICE Operating Company
Company Address: 122 W. Taylor Street
City/State/Zip: Hobbs, New Mexico 88240
Telephone No: (505) 393-9174 Fax No: (505) 397-1471
Sampler Signature: Rozanne Johnson (505)631-9310 e-mail: rozanne@valornet.com

Project Name: BD Junction K-27 and K-27-1
Project #:
Project Loc: T21S R37E Sec27 K - Lea County New Mexico
PO #:
Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only)
ORDER #: 286633

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl (2) 40 ml glass vials	H_2SO_4	NaOH	$Na_2S_2O_3$	None (1) 1 Liter HDPE	Other (Specify)	Matrix: Drinking Water SL=Sludge	GW = Groundwater S=Soil/Solid	NP=Non-Potable Specify Other	Analyze For: TCLP:	TOTAL:	8015B: TPH: 418.1	8015M TPH: TX 1005	TX 1005	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles (BTEX-N 8260)	Semivolatiles	BTEX 8021B/5030	RCI	N.O.R.M.	Total Dissolved Solids			RUSH TAT (Pre Schedule) 24, 48, 72 hrs	Standard TAT
01	K-27 Monitor Well #1			7/25/2007	9:20		3	X		2				1			GW						X	X					X			X				X
02	K-27 Monitor Well #2			7/25/2007	8:15		3	X		2				1			GW						X	X					X			X				X
03	K-27 Monitor Well #3			7/25/2007	12:25		3	X		2				1			GW						X	X					X			X				X
04	K-27 Monitor Well #4			7/25/2007	10:10		3	X		2				1			GW						X	X					X			X				X
05	K-27 Monitor Well #5			7/25/2007	13:15		3	X		2				1			GW						X	X					X			X				X
06	K-27-1 Monitor Well #1			7/25/2007	11:15		3	X		2				1			GW						X	X					X			X				X

Special Instructions:
Please email to : kpope@riceswd.com rozanne@valornet.com

Relinquished by: Rozanne Johnson	Date 7-26-07	Time 11:35	Received by: Raelyn Gardner	Date 7-26-07	Time 11:36
Relinquished by: Raelyn Gardner	Date 7-26	Time 2:16	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date 7/26/07	Time 2:16

Laboratory Comments:

Sample Containers Intact?		N
VOCs Free of Headspace?		N
Labels on container(s)		N
Custody seals on container(s)		N
Custody seals on cooler(s)		N
Sample Hand Delivered by Sampler/Client Rep. ?		N
by Courier?	UPS DHL FedEx Lone Star	

Temperature Upon Receipt: 1.5 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Rice

Date/ Time: 7.26.07 7:15

Lab ID #: 28663

Initials: AL

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	(Yes)	No	1.5 °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 ELOT?	(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	Subcontract of sample(s)?	Yes	No	Not Applicable	
#20	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