# AP- 66

# ANNUAL MONITORING REPORT

YEAR(S): 2007



### CERTIFIED MAIL RETURN RECIEPT NO. 7099 3400 0017 1737 2534

March 20, 2008

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

RE:

2007 ANNUAL GROUNDWATER MONITORING REPORT

EME JCT. N-5 SITE (AP-66)

T20S, R37E, SECTION 5, UNIT LETTER N

LEA COUNTY, NEW MEXICO

Mr. Hansen:

On behalf of Rice Operating Company (ROC), Trident Environmental takes this opportunity to submit the 2007 Annual Groundwater Monitoring Report for the EME Jct. N-5 Site located in the Eunice-Monument-Eumont (EME) Salt Water Disposal (SWD) System.

ROC is the service provider (agent) for the EME SWD System and has no ownership of any portion of pipeline, well, or facility. The EME 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. If you have any questions, do not hesitate to contact me at (432) 638-8740 or Kristin Pope at (505) 393-9174.

Sincerely,

Gilbert J. Van Deventer, PG, REM

cc: KFP, JSC, file

enclosures: table, graphs, maps, well sampling data forms, and laboratory analytical reports.

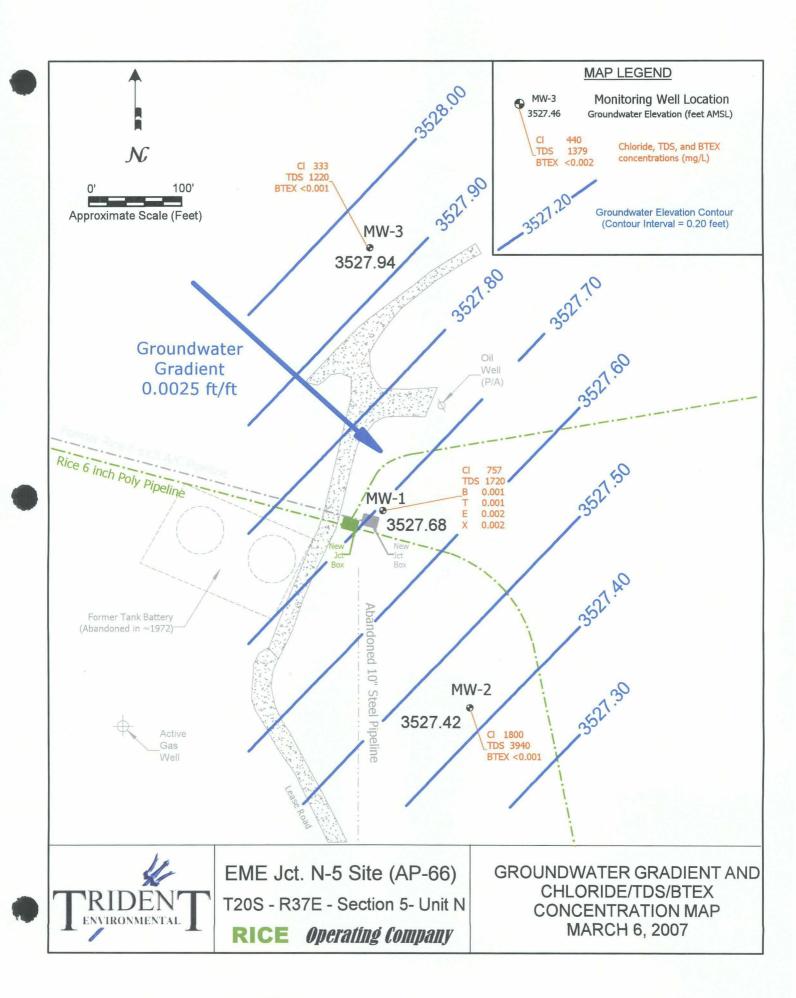


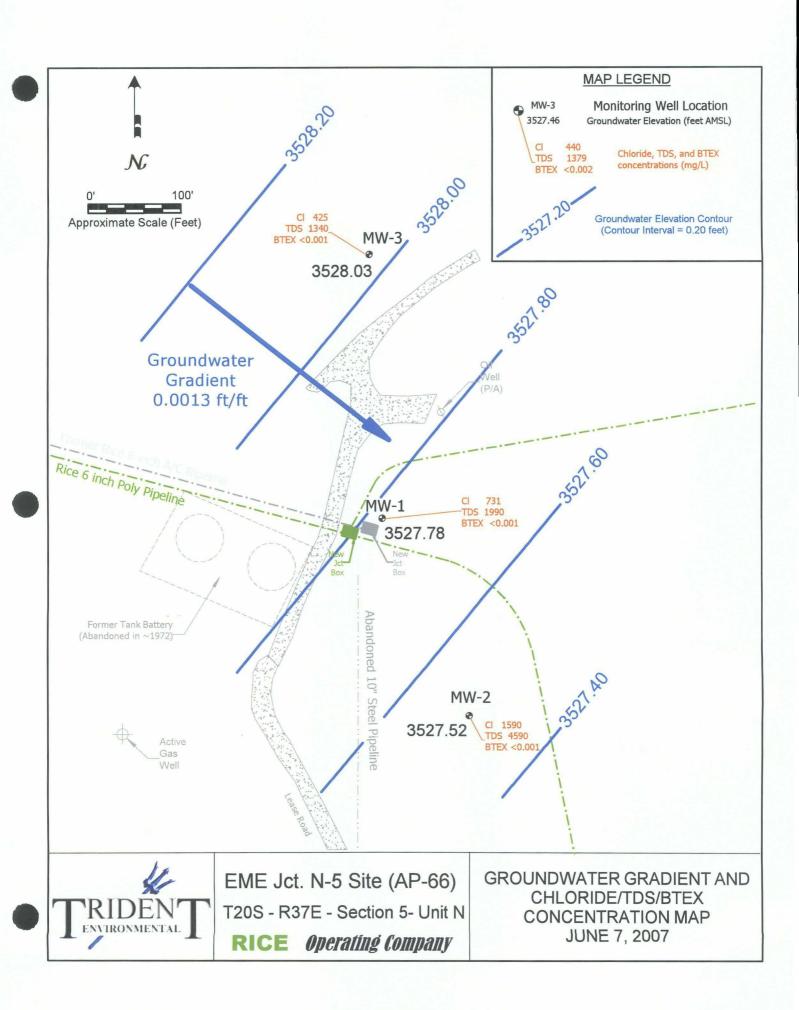
# ATTACHMENT A

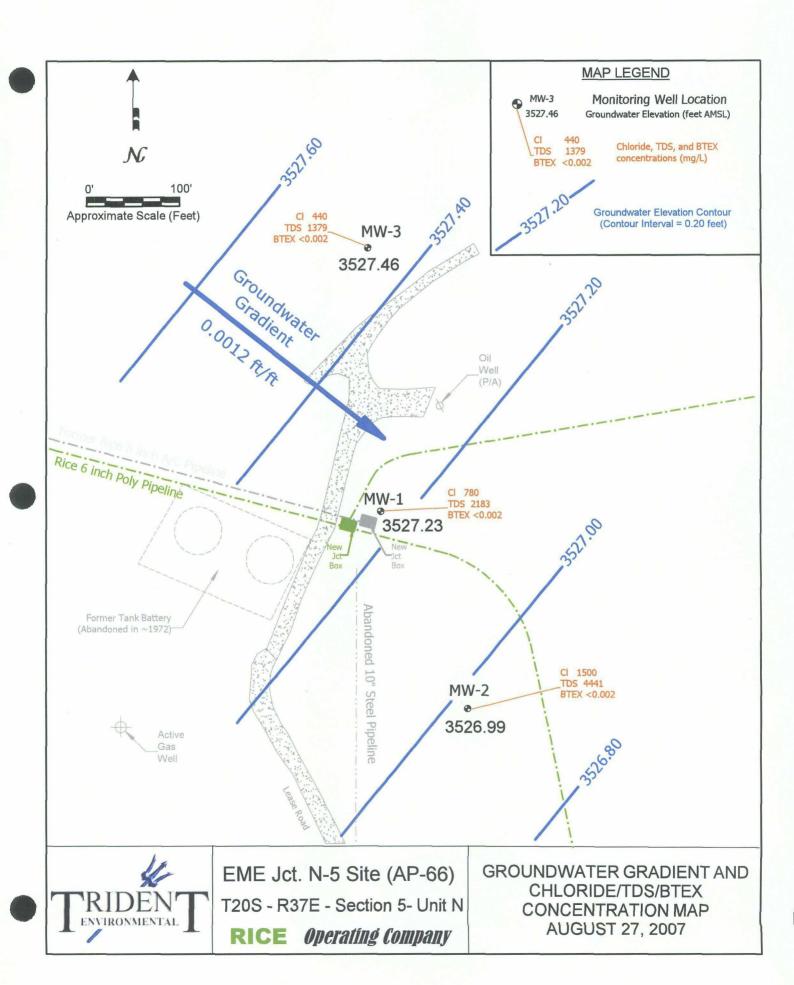
Site Maps

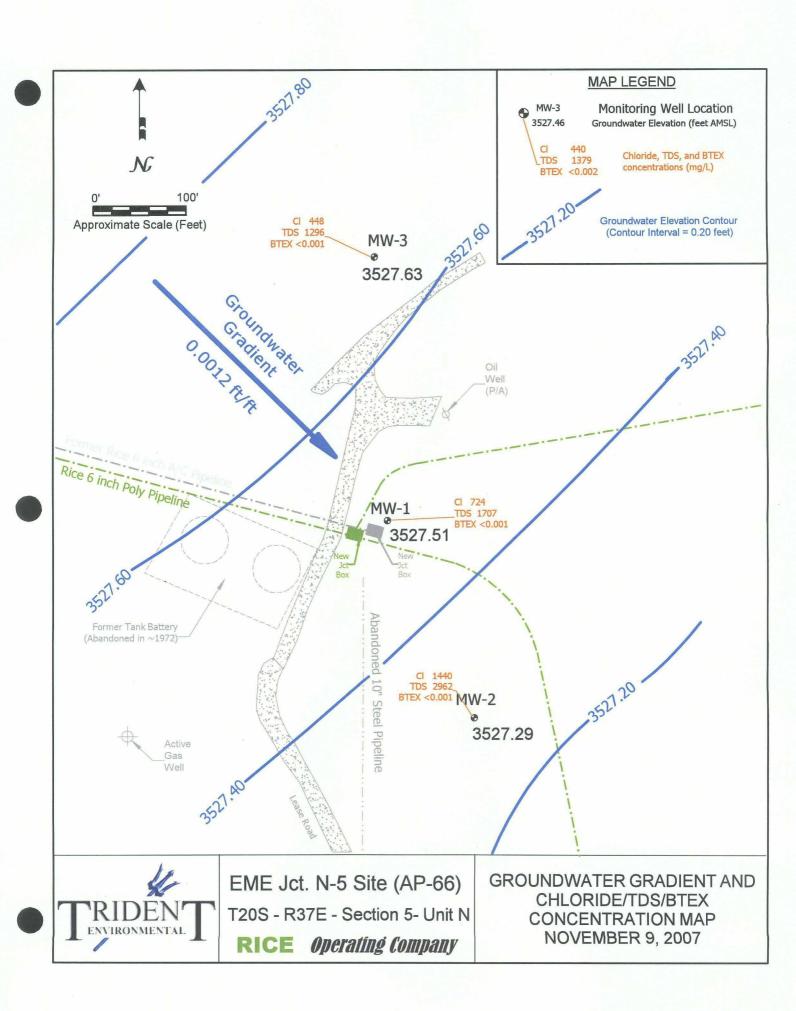
Graphs

Table

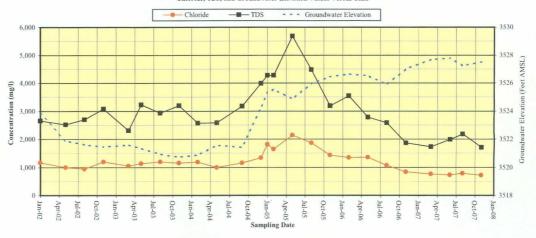




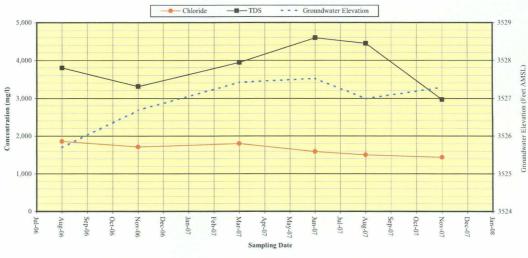




MW-1 Chloride, TDS, and Groundwater Elevation Values Versus Time



MW-2 Chloride, TDS, and Groundwater Elevation Values Versus Time



MW-3 Chloride, TDS, and Groundwater Elevation Values Versus Time

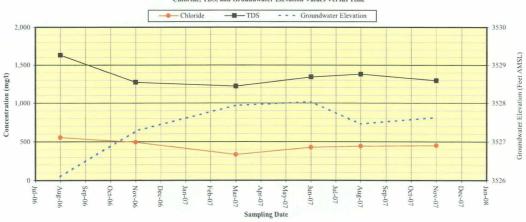
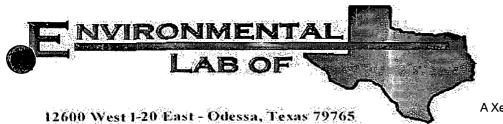


Table I Summary of Groundwater Sampling Results

		D. d. e.		nary of Ground	rater Sampini	g results			
Monitoring	Sample Date	Depth to Groundwater	Water Table Elevation	Chloride	TDS	Benzene	Toluene	Ethylbenzene	Xylene
Well	Sample Date	(feet BTOC)	(feet AMSL)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
	01/10/02	35.50	3523.85	1,160	2,652	< 0.002	< 0.002	< 0.006	< 0.006
	05/13/02	37.47	3521.88	993	2,520	< 0.001	0.002	0.003	0.009
	08/12/02	37.75	3521.60	939	2,700	< 0.001	< 0.001	< 0.001	0.001
	11/04/02	37.90	3521.45	1,200	3,083	< 0.002	< 0.002	< 0.002	< 0.006
	03/14/03	37.78	3521.57	1,050	2,310	< 0.001	0.002	0.004	0.011
	05/29/03	38.00	3521.35	1,130	3,230	<0.001	0.001	0.004	0.01
	08/22/03	38.42	3520.93	1,200	2,930				
	11/20/03	38.63	3520.72	1,150	3,200	< 0.001	0.002	0.003	0.012
	02/20/04	38.50	3520.85	1,180	2,575	<0.002	< 0.002	<0.002	<0.006
	05/26/04	37.80	3521.55	1,000	2,583	< 0.002	0.005	0.005	0.010
	09/02/04	37.94	3521.41	1,150	3,170	< 0.001	0.001	0.002	0.003
	12/21/04	35.12	3524.23	1,330	3,990	< 0.001	<0.001	< 0.001	<0.001
MW-I	01/26/05	34.03	3525.32	1,810	4,280	< 0.001	<0.001	0.001	0.001
	02/08/05	33.79	3525.56	1,640	4,280	< 0.001	<0.001	0.002	0.001
	05/02/05	34.50	3524.85	2,140	5,680	< 0.001	<0.001	0.003	0.002
	08/11/05	33.39	3525.96	1,860	4,480	< 0.001	< 0.001	< 0.001	< 0.001
	11/28/05	32.90	3526,45	1,430	3,180	<0.001	< 0.001	<0.001	< 0.001
	02/21/06	32.72	3526.63	1,340	3,550	< 0.001	< 0.001	< 0.001	< 0.001
	05/17/06	32.83	3526.52	1,350	2,780	< 0.001	< 0.001	< 0.001	< 0.001
	08/21/06	33.45	3525.90	1,070	2,580	< 0.001	0.001	0.001	0.004
	11/07/06	32.35	3527.00	841	1,860	0.002	< 0.001	0.001	100.0
	03/06/07	31.67	3527.68	757	1,720	<0.001	0.001	0.001	< 0.001
	06/07/07	31.57	3527.78	731	1,990	< 0.001	0.001	0.001	< 0.001
	08/27/07	32.12	3527.23	780	2,183	<0.002	<0.002	<0.002	< 0.006
	11/09/07	31.84	3527.51	724	1,707	< 0.001	< 0.001	< 0.001	< 0.003
	08/21/06	33.04	3525.70	1,860	3,800	< 0.001	< 0.001	<0.001	<0.001
	11/07/06	32.06	3526.68	1,710	3,310	< 0.001	< 0.001	<0.001	< 0.001
	03/06/07	31.32	3527.42	1,800	3,940	< 0.001	< 0.001	< 0.001	< 0.001
MW-2	06/07/07	31.22	3527.52	1,590	4,590	<0.001	<0.001	< 0.001	< 0.001
	08/27/07	31.75	3526.99	1,500	4,441	<0.002	< 0.002	< 0.002	< 0.006
	11/09/07	31.45	3527.29	1,440	2,962	< 0.001	< 0.001	< 0.001	< 0.003
	08/21/06	31.86	3526.10	553	1,630	< 0.001	< 0.001	< 0.001	< 0.001
	11/07/06	30.68	3527.28	491	1,270	< 0.001	< 0.001	< 0.001	<0.001
	03/06/07	30.02	3527.94	333	1,220	< 0.001	< 0.001	<0.001	< 0.001
MW-3	06/07/07	29.93	3528.03	425	1,340	< 0.001	< 0.001	< 0.001	< 0.001
	08/27/07	30.50	3527.46	440	1,379	< 0.002	<0.002	< 0.002	< 0.006
	11/09/07	30.33	3527.63	448	1,296	< 0.001	< 0.001	< 0.001	< 0.003
			CC Standards	250	1000	0.01	0.75	0.75	0.62

Total Dissolved Soulds (DS), chloride, sulfate, and BTEX concentrations listed in milligrams per lifer (mg/L). Analyses performed by Environmental Lab of Feast (Messar IX) or Cardinal Laboratories (Hobbs NM). Values in boldface type indicate concentrations acused New Mexico Water Quality Commission (WQCC) standards. AMML - Above Mean Neal Level; BTMC. Below Top of Casing Elevations and state plane coordinates surveyed by Rasin Surveys, Hobbs, NM.





A Xenco Laboratories Company

# Analytical Report

# Prepared for:

Kristin Farris-Pope Rice Operating Co. 122 W. Taylor Hobbs, NM 88240

Project: EME Jct. N-5

Project Number: None Given

Location: T20S-R37E-Sec 5N- Lea County, NM

Lab Order Number: 7C09025

Report Date: 03/29/07

Project: EME Jct. N-5

Project Number: None Given

Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Monitor Well #1	7C09025-01	Water	03/06/07 11:30	03-09-2007 13:15
Monitor Well #2	7C09025-02	Water	03/06/07 10:45	03-09-2007 13:15
Monitor Well #3	7C09025-03	Water	03/06/07 09:40	03-09-2007 13:15

Project: EME Jct. N-5

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	Note
Monitor Well #1 (7C09025-01) Water	•								
Benzene	ND	0.00100	mg/L	1	EC71307	03/13/07	03/13/07	EPA 8021B	
Toluene	J [0.000893]	0.00100	*	,	n	н		n	
Ethylbenzene	J [0.000986]	0.00100	W	,	n	<b>n</b>		n	
Xylene (p/m)	0.00178	0.00100	Ħ	7		н	"	u	
Xylene (o)	0.00199	0.00100	•	,		"	*	n	
Surrogate: a,a,a-Trifluorotoluene		89.8 %	80-12	20	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.2 %	80-12	20	"	"	"	n	
Monitor Well #2 (7C09025-02) Water	•								
Benzene	ND	0.00100	mg/L	1	EC71307	03/13/07	03/13/07	EPA 8021B	
Toluene	ND	0.00100	٠.,	n	"	II.	,	п	
Ethylbenzene	ND	0.00100		"	n	n	н	п	
Xylene (p/m)	ND	0.00100	,		n	n	Й.,	n	
Xylene (o)	ND	0.00100	10	"	n	п	n	п	
Surrogate: a,a,a-Trifluorotoluene		87.6%	80-12	20	"	"	n	"	
urrogate: 4-Bromofluorobenzene		86.0 %	80-12	20	"	"	"	"	
<b>V</b> Monitor Well #3 (7C09025-03) Water	•								
Benzene	ND	0.00100	mg/L	1	EC71307	03/13/07	03/13/07	EPA 8021B	
Toluene	ND	0.00100	*	"	н	и	н	n	
Ethylbenzene	ND	0.00100	*	n	п	n	н		
Xylene (p/m)	ND	0.00100	*	n	п	rt	н		
Xylene (o)	ND	0.00100	H	u	и	u	п	n	
Surrogate: a,a,a-Trifluorotoluene		93.0 %	80-12	20	"	"	"	"	•
Surrogate: 4-Bromofluorobenzene		95.2 %	80-12	20	"	"	"	"	

122 W. Taylor Hobbs NM, 88240 Project: EME Jct. N-5

Project Number: None Given
Project Manager: Kristin Farris-Pope

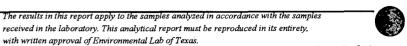
Fax: (505) 397-1471



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

Analyte Result Limit Units Dilution Batch Prepared Analyzed Method Notes  Monitor Well #1 (7C09025-01) Water  Total Alkalinity 336 2.00 mg/L 1 EC71304 03/13/07 03/13/07 EPA 310.1M  Chloride 757 12.5 25 EC71615 03/14/07 03/14/07 EPA 300.0  Total Dissolved Solids 1720 10.0 1 EC71610 03/12/07 03/13/07 EPA 160.1  Sulfate 97.3 12.5 25 EC71615 03/14/07 03/14/07 EPA 300.0  Monitor Well #2 (7C09025-02) Water  Total Alkalinity 312 2.00 mg/L 1 EC71304 03/13/07 03/13/07 EPA 310.1M  Chloride 1800 25.0 50 EC71615 03/14/07 03/14/07 EPA 300.0  Total Dissolved Solids 3940 10.0 1 EC71610 03/12/07 03/13/07 EPA 160.1  Sulfate 169 25.0 50 EC71615 03/14/07 03/14/07 EPA 300.0  Monitor Well #3 (7C09025-03) Water  Total Alkalinity 336 2.00 mg/L 1 EC71304 03/13/07 03/14/07 EPA 300.0  Monitor Well #3 (7C09025-03) Water  Total Alkalinity 336 2.00 mg/L 1 EC71304 03/13/07 03/14/07 EPA 300.0  Monitor Well #3 (7C09025-03) Water  Total Alkalinity 336 2.00 mg/L 1 EC71304 03/13/07 03/14/07 EPA 300.0  Monitor Well #3 (7C09025-03) Water  Total Dissolved Solids 120 10.0 1 EC71610 03/12/07 03/13/07 EPA 310.1M  Chloride 333 10.0 20 EC71615 03/14/07 03/14/07 EPA 300.0  Total Dissolved Solids 120 10.0 1 EC71610 03/12/07 03/13/07 EPA 300.0			Reporting		*			٠.٠		*
Total Alkalinity  336  2.00 mg/L  1 EC71304 03/13/07 03/13/07 EPA 310.1M  Chloride  757  12.5 25 EC71615 03/14/07 03/14/07 EPA 300.0  Total Dissolved Solids  1720  10.0 1 EC71610 03/12/07 03/13/07 EPA 160.1  Sulfate  97.3  12.5 25 EC71615 03/14/07 03/14/07 EPA 300.0  Monitor Well #2 (7C09025-02) Water  Total Alkalinity  312  2.00 mg/L  1 EC71304 03/13/07 03/13/07 EPA 300.0  Chloride  1800  25.0 50 EC71615 03/14/07 03/14/07 EPA 300.0  Total Dissolved Solids  3940  10.0 1 EC71610 03/12/07 03/13/07 EPA 160.1  Sulfate  169  25.0 50 EC71615 03/14/07 03/14/07 EPA 300.0  Monitor Well #3 (7C09025-03) Water  Total Alkalinity  336  2.00 mg/L  1 EC71304 03/13/07 03/13/07 EPA 100.1  Chloride  333  10.0 20 EC71615 03/14/07 03/14/07 EPA 300.0  Total Dissolved Solids  120  10.0 1 EC71610 03/12/07 03/13/07 EPA 300.0  Total Dissolved Solids  120  10.0 1 EC71610 03/12/07 03/13/07 EPA 300.0  Total Dissolved Solids  120  10.0 1 EC71610 03/12/07 03/13/07 EPA 300.0	Analyte	Result		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chloride         757         12.5         25         EC71615         03/14/07         03/14/07         EPA 300.0           Total Dissolved Solids         1720         10.0         1         EC71610         03/12/07         03/13/07         EPA 160.1           Sulfate         97.3         12.5         25         EC71615         03/14/07         03/14/07         EPA 300.0           Monitor Well #2 (7C09025-02) Water         Total Alkalinity         312         2.00         mg/L         1         EC71304         03/13/07         03/13/07         EPA 310.1M           Chloride         1800         25.0         50         EC71615         03/14/07         03/14/07         EPA 300.0           Total Dissolved Solids         3940         10.0         1         EC71610         03/12/07         03/13/07         EPA 160.1           Sulfate         169         25.0         50         EC71615         03/14/07         03/14/07         EPA 300.0           Monitor Well #3 (7C09025-03) Water         EPA 300.0         EPA 300.0	Monitor Well #1 (7C09025-01) Water									
Total Dissolved Solids 1720 10.0 1 EC71610 03/12/07 03/13/07 EPA 160.1 Sulfate 97.3 12.5 25 EC71615 03/14/07 03/14/07 EPA 300.0  Monitor Well #2 (7C09025-02) Water  Total Alkalinity 312 2.00 mg/L 1 EC71304 03/13/07 03/13/07 EPA 310.1M  Chloride 1800 25.0 50 EC71615 03/14/07 03/14/07 EPA 300.0  Total Dissolved Solids 3940 10.0 1 EC71610 03/12/07 03/13/07 EPA 160.1  Sulfate 169 25.0 50 EC71615 03/14/07 03/14/07 EPA 300.0  Monitor Well #3 (7C09025-03) Water  Total Alkalinity 336 2.00 mg/L 1 EC71304 03/13/07 03/13/07 EPA 300.0  Monitor Well #3 (7C09025-03) Water  Total Alkalinity 336 2.00 mg/L 1 EC71304 03/13/07 03/13/07 EPA 310.1M  Chloride 333 10.0 20 EC71615 03/14/07 03/14/07 EPA 300.0  Total Dissolved Solids 1220 10.0 1 EC71610 03/12/07 03/13/07 EPA 300.0	Total Alkalinity	336	2.00	mg/L	1	EC71304	03/13/07	03/13/07	EPA 310.1M	
Sulfate         97.3         12.5         25         EC71615         03/14/07         03/14/07         EPA 300.0           Monitor Well #2 (7C09025-02) Water         Total Alkalinity         312         2.00         mg/L         1         EC71304         03/13/07         03/13/07         EPA 310.1M           Chloride         1800         25.0         50         EC71615         03/14/07         03/13/07         EPA 300.0           Total Dissolved Solids         3940         10.0         1         EC71610         03/12/07         03/13/07         EPA 160.1           Sulfate         169         25.0         50         EC71615         03/14/07         03/14/07         EPA 300.0           Monitor Well #3 (7C09025-03) Water           Total Alkalinity         336         2.00         mg/L         1         EC71304         03/13/07         03/13/07         EPA 310.1M           Chloride         333         10.0         20         EC71615         03/14/07         03/14/07         EPA 300.0           Total Dissolved Solids         1220         10.0         1         EC71610         03/12/07         03/13/07         EPA 160.1	Chloride	757	12.5	*	25	EC71615	03/14/07	03/14/07	EPA 300.0	
Monitor Well #2 (7C09025-02) Water  Total Alkalinity 312 2.00 mg/L 1 EC71304 03/13/07 03/13/07 EPA 310.1M  Chloride 1800 25.0 " 50 EC71615 03/14/07 03/14/07 EPA 300.0  Total Dissolved Solids 3940 10.0 " 1 EC71610 03/12/07 03/13/07 EPA 160.1  Sulfate 169 25.0 " 50 EC71615 03/14/07 03/14/07 EPA 300.0  Monitor Well #3 (7C09025-03) Water  Total Alkalinity 336 2.00 mg/L 1 EC71304 03/13/07 03/13/07 EPA 310.1M  Chloride 333 10.0 " 20 EC71615 03/14/07 03/14/07 EPA 300.0  Total Dissolved Solids 1220 10.0 " 1 EC71610 03/12/07 03/13/07 EPA 300.0	<b>Total Dissolved Solids</b>	1720	10.0	,	1	EC71610	03/12/07	03/13/07	EPA 160.1	
Total Alkalinity  312  2.00 mg/L  1 EC71304 03/13/07 03/13/07 EPA 310.1M  Chloride  1800  25.0 " 50 EC71615 03/14/07 03/14/07 EPA 300.0  Total Dissolved Solids  3940  10.0 " 1 EC71610 03/12/07 03/13/07 EPA 160.1  Sulfate  169  25.0 " 50 EC71615 03/14/07 03/14/07 03/14/07 EPA 300.0  Monitor Well #3 (7C09025-03) Water  Total Alkalinity  336  2.00 mg/L  1 EC71304 03/13/07 03/13/07 EPA 310.1M  Chloride  333  10.0 " 20 EC71615 03/14/07 03/14/07 EPA 300.0  Total Dissolved Solids  120  10.0 " 1 EC71610 03/12/07 03/13/07 EPA 300.0	Sulfate	97.3	12.5		25	EC71615	03/14/07	03/14/07	EPA 300.0	
Chloride         1800         25.0         " 50 EC71615         03/14/07         03/14/07         EPA 300.0           Total Dissolved Solids         3940         10.0         " 1 EC71610         03/12/07         03/13/07         EPA 160.1           Sulfate         169         25.0         " 50 EC71615         03/14/07         03/14/07         EPA 300.0           Monitor Well #3 (7C09025-03) Water           Total Alkalinity         336         2.00 mg/L         1 EC71304         03/13/07         03/13/07         EPA 310.1M           Chloride         333         10.0         20 EC71615         03/14/07         03/14/07         EPA 300.0           Total Dissolved Solids         1220         10.0         1 EC71610         03/12/07         03/13/07         EPA 160.1	Monitor Well #2 (7C09025-02) Water									
Total Dissolved Solids 3940 10.0 " 1 EC71610 03/12/07 03/13/07 EPA 160.1  Sulfate 169 25.0 " 50 EC71615 03/14/07 03/14/07 EPA 300.0  Monitor Well #3 (7C09025-03) Water  Total Alkalinity 336 2.00 mg/L 1 EC71304 03/13/07 03/13/07 EPA 310.1M  Chloride 333 10.0 " 20 EC71615 03/14/07 03/14/07 EPA 300.0  Total Dissolved Solids 1220 10.0 " 1 EC71610 03/12/07 03/13/07 EPA 160.1	Total Alkalinity	312	2.00	mg/L	1	EC71304	03/13/07	03/13/07	EPA 310.1M	
Sulfate         169         25.0         50         EC71615         03/14/07         03/14/07         EPA 300.0           Monitor Well #3 (7C09025-03) Water         Total Alkalinity         336         2.00         mg/L         1         EC71304         03/13/07         03/13/07         EPA 310.1M           Chloride         333         10.0         20         EC71615         03/14/07         03/14/07         EPA 300.0           Total Dissolved Solids         1220         10.0         1         EC71610         03/12/07         03/13/07         EPA 160.1	Chloride	1800	25.0	H	50	EC71615	03/14/07	03/14/07	EPA 300.0	
Monitor Well #3 (7C09025-03) Water         Total Alkalinity       336       2.00 mg/L       1 EC71304 03/13/07 03/13/07 EPA 310.1M         Chloride       333       10.0 " 20 EC71615 03/14/07 03/14/07 03/14/07 EPA 300.0         Total Dissolved Solids       1220       10.0 " 1 EC71610 03/12/07 03/13/07 EPA 160.1	<b>Total Dissolved Solids</b>	3940	10.0	".	1	EC71610	03/12/07	03/13/07	EPA 160.1	
Total Alkalinity         336         2.00 mg/L         1 EC71304 03/13/07 03/13/07 EPA 310.1M           Chloride         333         10.0 " 20 EC71615 03/14/07 03/14/07 03/14/07 EPA 300.0           Total Dissolved Solids         1220         10.0 " 1 EC71610 03/12/07 03/13/07 EPA 160.1	Sulfate	169	25.0	n	50	EC71615	03/14/07	03/14/07	EPA 300.0	
Chloride 333 10.0 ' 20 EC71615 03/14/07 03/14/07 EPA 300.0  Total Dissolved Solids 1220 10.0 ' 1 EC71610 03/12/07 03/13/07 EPA 160.1	Monitor Well #3 (7C09025-03) Water									
Total Dissolved Solids 1220 10.0 " 1 EC71610 03/12/07 03/13/07 EPA 160.1	Total Alkalinity	336	2.00	mg/L	I	EC71304	03/13/07	03/13/07	EPA 310.1M	
10.0 1 EC/1610 03/12/07 05/13/07 EFA 100.1	Chloride	333	10.0	п	20	EC71615	03/14/07	03/14/07	EPA 300.0	
Sulfate         91.1         10.0         20         EC71615         03/14/07         03/14/07         EPA 300.0	Total Dissolved Solids	1220	10.0		1	EC71610	03/12/07	03/13/07	EPA 160.1	
	Sulfate	91.1	10.0		20	EC71615	03/14/07	03/14/07	EPA 300.0	





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Project: EME Jct. N-5

Project Number: None Given
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
Monitor Well #1 (7C09025-01) Water						-			: <u></u>
Calcium	229	0.200	mg/L	1	EC72614	03/23/07	03/23/07	EPA 6020A	
Magnesium	65.3	0.500			. н	,		•	
Potassium	4.03	0.500	,	*	н	и			
Sodium	388	0.500	11	н	н	н	H	М	
Monitor Well #2 (7C09025-02) Water		•							
Calcium	505	0.200	mg/L	1	EC72614	03/23/07	03/23/07	EPA 6020A	
Magnesium	127	0.500	W	n	н	,	n	n	
Potassium	5.64	0.500	n	n	н	ıı	и	и	
Sodium	588	0.500	н	ø	п	а	*	н	
Monitor Well #3 (7C09025-03) Water									
Calcium	167	0.200	mg/L	1	EC72614	03/23/07	03/23/07	EPA 6020A	
Magnesium	50.0	0.500		n		n		*	
Potassium	3.27	0.500		*	n	н	*	W	
Sodium	216	0.500	,,		n	ri-	u	W	

Project: EME Jct. N-5

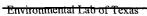
Project Number: None Given
Project Manager: Kristin Farris-Pope

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 EC71307 - EPA 5030C (GC)										
Blank (EC71307-BLK1)				Prepared &	Analyzed	03/13/07			•	
Benzene	ND	0.00100	mg/L			***************************************				
Toluene	ND	0.00100	н							
Ethylben <i>ze</i> ne	ND	0.00100	"							
Xylene (p/m)	ND	0.00100	n							
Xylene (o)	ND	0.00100	н				9			
Surrogate: a,a,a-Trifluorotoluene	40.0		ug/l	50.0		80.0	80-120			
Surrogate: 4-Bromofluorobenzene	<b>43</b> .8		"	50.0		87.6	80-120			
LCS (EC71307-BS1)				Prepared &	Analyzed:	03/13/07				
Benzene	0.0438	0.00100	mg/L	0.0500		87.6	80-120			
Toluene	0.0413	0.00100	и	0.0500		82.6	80-120			
Ethylbenzene /	0.0422	0.00100		0.0500		84.4	80-120			
Xylene (p/m)	0.0843	0.00100	*	0.100		84.3	80-120			
Xylene (o)	0.0406	0.00100	8	0.0500		81.2	80-120			
Surrogate: a,a,a-Trifluorotoluene	42.5		ug/l	50.0		85.0	80-120			
Surrogate: 4-Bromofluorobenzene	47.6		"	50.0	•	95.2	80-120			
Calibration Check (EC71307-CCV1)				Prepared: (	03/13/07 A	nalyzed: 03	3/14/07			
Benzene	0.0450		mg/L	0.0500		90.0	80-120			
Toluene	0.0414		п	0.0500		82.8	80-120			
Ethylbenzene	0.0401		н	0.0500		80.2	80-120			
Xylene (p/m)	0.0802		*	0.100		80.2	80-120			
Xylene (o)	0.0401		п	0.0500		80.2	80-120			
Surrogate: a,a,a-Trifluorotoluene	41.5		ug/l	50.0		83.0	80-120			
Surrogate: 4-Bromofluorobenzene	42.2		"	50.0		84.4	80-120			
Matrix Spike (EC71307-MS1)	Sou	arce: 7C09031-	-03	Prepared:	03/13/07 A	nalyzed: 03	3/14/07			
Benzene	0.0423	0.00100	mg/L	0.0500	ND	84.6	80-120			
Toluene .	0.0408	0.00100		0.0500	ND	81.6	80-120			
Ethylbenzene	0.0402	0.00100	н	0.0500	ND	80.4	80-120			
Xylene (p/m)	0.0809	0.00100	н	0.100	ND	80.9	80-120			
Xylene (o)	0.0401	0.00100	н	0.0500	ND	80.2	80-120			
Surrogate: a,a,a-Trifluorotoluene	44.0		ug/l	50.0		88.0	80-120			
Surrogate: 4-Bromofluorobenzene	47.5		"	50.0		95.0	80-120			





Project: EME Jct. N-5

Project Number: None Given
Project Manager: Kristin Farris-Pope

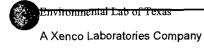
Fax: (505) 397-1471

# Organics by GC - Quality Control Environmental Lab of Texas

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

Matrix Spike Dup (EC71307-MSD1)	Sour	rce: 7C09031-	03	Prepared: 0	3/13/07 A	nalyzed: 03	3/14/07		
Benzene	0.0421	0.00100	mg/L	0.0500	ND	84.2	80-120	0.474	20
Toluene	0.0411	0.00100		0.0500	ND	82.2	80-120	0.733	20
Ethylbenzene	0.0411	0.00100	и	0.0500	ND	82.2	80-120	2.21	20
Xylene (p/m)	0.0815	0.00100		0.100	ND	81.5	80-120	0.739	20
Xylene (o)	0.0403	0.00100	n	0.0500	ND	80.6	80-120	0.498	20
Surrogate: a,a,a-Trifluorotoluene	42.9		ug/l	50.0	,	85.8	80-120		
Surrogate: 4-Bromofluorobenzene	43.0		"	50.0		86.0	80-120		





Project: EME Jct. N-5

Fax: (505) 397-1471

122 W. Taylor Hobbs NM, 88240

Project Number: None Given Project Manager: Kristin Farris-Pope



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

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EC71304 - General Preparatio	on (WetChem)									
Blank (EC71304-BLK1)				Prepared &	: Analyzed:	03/13/07				
otal Alkalinity	2.00	2.00	mg/L							
LCS (EC71304-BS1)				Prepared &	: Analyzed:	03/13/07				
Bicarbonate Alkalinity	174	2.00	mg/L	200		87.0	85-115			
Duplicate (EC71304-DUP1)	Sour	ce: 7C09025-	01	Prepared &	Analyzed:	03/13/07				
Total Alkalinity	328	2.00	mg/L		336			2.41	20	
Reference (EC71304-SRM1)				Prepared &	: Analyzed:	03/13/07				
Total Alkalinity	246		mg/L	250		98.4	90-110			
Batch EC71610 - General Preparatio	on (WetChem)									
Blank (EC71610-BLK1)	_			Prepared: 0	03/12/07 Ai	nalyzed: 03	/13/07			
Total Dissolved Solids	ND	10.0	mg/L							
Duplicate (EC71610-DUP1)	Sour	ce: 7C09022-	01	Prepared: 0	03/12/07 A	nalyzed: 03	3/13/07			
	1690	10.0	mg/L		1550			8.64	20	
Total Dissolved Solids										
Totał Dissolved Solids <b>Duplicate (EC71610-DUP2)</b>	Sour	ce: 7C09026-	02	Prepared: (	03/12/07 A	nalyzed: 03	/13/07			



Blank (EC71615-BLK1)				Prepared & Analyzed: 03/14/07	
Chloride	ND	0.500	mg/L		
Sulfate	ND	0.500			



Project: EME Jct. N-5

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**

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EC71615 - General Preparation (	WetChem)									
LCS (EC71615-BS1)				Prepared &	Analyzed:	03/14/07				
Chloride	9.19	0.500	mg/L	10.0		91.9	80-120			
Sulfate	9.74	0.500	H	10.0		97.4	80-120			
Calibration Check (EC71615-CCV1)				Prepared 8	k Analyzed:	03/14/07				
Chloride	8.13		mg/L	10.0		81.3	80-120			
Sulfate	11.6		H	10.0		116	80-120			
Duplicate (EC71615-DUP1)	Source	e: 7C09022-	01	Prepared 8	Analyzed:	03/14/07				
Chloride	326	10.0	mg/L		328			0.612	20	
Sulfate	393	10.0	n		397			1.01	20	
Duplicate (EC71615-DUP2)	Source	e: 7C09027-	01	Prepared 8	Analyzed:	03/14/07				
Chloride	700	12.5	mg/L		704			0.570	20	
Sulfate	89.6	12.5	*		90.8			1.33	20	
Matrix Spike (EC71615-MS1)	Source	e: 7C09022-	-01	Prepared 8	k Analyzed:	03/14/07				
Sulfate	621	10.0	mg/L	200	397	112	80-120			
Chloride	553	10.0	hr	200	328	112	80-120			
latrix Spike (EC71615-MS2)	Source	e: 7C09027-	-01	Prepared &	k Analyzed:	03/14/07				
Chloride	961	12.5	mg/L	250	704	103	80-120			
Sulfate	313	12.5	M	250	90.8	88.9	80-120			

Rice Operating Co.

122 W. Taylor Hobbs NM, 88240 Project: EME Jct. N-5

Project Number: None Given

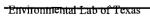
Project Manager: Kristin Farris-Pope





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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	ŔPD	RPD Limit	Notes
Batch EC72614 - General Preparation (M		-								7,000
Blank (EC72614-BLK1)		- <del>-</del>		Prepared &	: Analyzed:	03/23/07				
Calcium	ND	0.200	mg/L							
Magnesium	ND .	0.500								
Potassium	ND	0.500	н							
Sodium	ND	0.500	n							
LCS (EC72614-BS1)				Prepared &	Analyzed:	03/23/07				
Calcium	2.46	0.200	mg/L	2.50		98.4	75-125			
Magnesium	2.22	0.500	*	2.50		88.8	75-125			
Potassium	. 1.98	0.500		2.50		79.2	75-125			
Sodium	2.58	0.500	н	2.50		103	75-125			
Duplicate (EC72614-DUP1)	Sou	rce: 7C09022	-01	Prepared 8	k Analyzed	: 03/23/07				
Calcium	123	0.200	mg/L		125			1.61	25	
Magnesium	73.5	0.500	*		71.3			3.04	25	
Potassium	9.49	0.500	*		8.45			11.6	25	
Sodium	221	0.500	*		247			11.1	25	
Matrix Spike (EC72614-MS1)	Sou	rce: 7C09022	-01	Prepared &	t Analyzed	: 03/23/07				
Calcium	132	0.200	mg/L	2.50	125	280	75-125			MS-1
Magnesium	73.1	0.500	n	2.50	71.3	72.0	75-125			MS-1
Potassium	11.3	0.500	"	2.50	8.45	114	75-125			
Sodium	237	0.500		2.50	247	NR.	75-125			MS-1
Matrix Spike Dup (EC72614-MSD1)	Sou	rce: 7C09022	-01	Prepared &	k Analyzed	: 03/23/07				
Calcium	132	0.200	mg/L	2.50	125	280	75-125	0.00	25	MS-1
Magnesium	74.2	0.500	n	2.50	71.3	116	75-125	1.49	25	
Potassium	. 11.1	0.500	*	2.50	8.45	106	75-125	1.79	25	
Sodium	243	0.500	и	2.50	247	NR	75-125	2.50	25	MS-1



Matrix Spike

Duplicate

MS Dup Project: EME Jct. N-5

Project Number: None Given
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

### **Notes and Definitions**

MS-1 Recovery of sample outside of historical limits due to matrix interference.

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

Report Approved By:

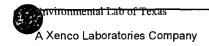
ate: 3/29/2007

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

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



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

# **Environmental Lab of Texas**

# Variance/ Corrective Action Report- Sample Log-In

Client:	Rice				
Date/	Time: 3/4/07 1315				
Lab IC	D#: 709025		•		
Initials					
	Sample Recei	nt Checklist			
		pr 0110011101		Client Initia	als
#1 T	Temperature of container/ cooler?	Yes,	No	(.0 °c	
#2 \$	Shipping container in good condition?	Yes	No.		1
~ <del>~~~~~~~</del> ,	Custody Seals intact on shipping container/ cooler?	χes :	No	Not Present	ヿ
#4, C	Custody Seals intact on sample bottles/ container?	Ύes	No.	Not Present	7
#5 (	Chain of Custody present?	Yes:	No		7
#6 8	Sample instructions complete of Chain of Custody?	Yes	No		
#7 (	Chain of Custody signed when relinquished/ received?	Yes)	No		1
************************************	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	1
#10	Sample matrix/ properties agree with Chain of Custody?	(Yes)	No		7
#11	Containers supplied by ELOT?	Yes	. No		1
#12	Samples in proper container/ bottle?	Yes	No	See Below	7
#13	Samples properly preserved?	Yes)	No	See Below	7
	Sample bottles intact?	Yes	No		7
	Preservations documented on Chain of Custody?	(Yes)	No		_
#10	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	7
#19	Subcontract of sample(s)?	Yes	No	Not Applicable	7
#20	VOC samples have zero headspace?	(Yes)	No	Not Applicable	
	Variance Doc	cumentation			
Conta	ract: Contacted by:			Date/ Time:	
Rega	arding:		***************************************		
Corre	ective Action Taken:			·	
					######################################
					***************************************
Chec	ck all that Apply:  See attached e-mail/ fax Client understands and w	auld like to occ	and with	- On other in	

Cooling process had begun shortly after sampling event



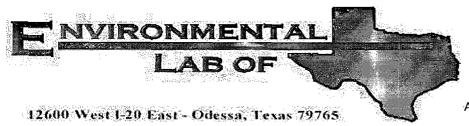
# Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East Odessa, Texas 79765

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

ZZZZZZ TAT brabnat2 × × O NPDES RUSH TAT (Pre-Schedde) 24, 48, 12 hrs Project Loc: T20S R37E Sec5 N - Lea County New Mexico Ç Total Dissolved Solids × TRRP MAON Ħ EME Junction N-5 OF Labels on container(s) Custody seals on container(s) Custody seals on cooler(s) Laboratory Comments: Sample Containers Intac? BTEX 8021B/5030 × × × - Femperature Upon Receipt: /OCs Free of Headspace? Sample Hand Delivered by Sampler/Cleaf Rep by Courler? semisolatiles azyleny Volatiles (BTEX-N 6260) X Standard Metals: As Ag Ba Cd Cr Pb Hg Se TOTAL 400 SAR / ESP / OEC Anions (Cl. SOA, Alkalinity) × Project Name: PO#: Project #: Cations (Ca, Mg, Na, K) Report Format 5001 XT HdJ 78:3 au. me a Be 85108 M2108 1,814 Hdl 2 80 30 SS SS 19/07 3/11/67 addresats area durano-ac Date Other (Specify) rozanne@valornet.com Anone (1) 1 Littler HDPE OSSEN rozanne@valornet.com HOSN (505) 397-1471 \*05°H alpiv sesig im 04 (S) iOH N Ň HMO 90( × m (C) ന otal #. of Containers leld Fillered e-mail. Fax No. 11:30 10:45 9:40 balqma2 amiT matt@riceswd.com kpope@riceswd.com N. Zenesze Received by ELOT James Johnson 3/6/2007 3/6/2007 3/6/2007 Received by Received by Date Sampled Ending Depth 6:36 Hobbs, New Mexico 88240 RICE Operating Company me Rozanne Johnson (505)631-9310 Beginning Depth kpope@riceswd.com purvis@riceswd.com 122 W. Taylor Street Kristin Farris Pope 3/6/67 3/4/07 (505) 393-9174 FIELD CODE Please email to: Company Address: Sampler Signature. Project Manager: Company Name Monitor Well #2 Monitor Well #3 Monitor Well #1 Telephone No: City/State/Zip: Special Instructions: Relifquehed by Rozanne Jehnson Relinquished by (lab use only ORDER #: (yino seu dei) # 8A



A Xenco Laboratories Company

# Analytical Report

# Prepared for:

Kristin Farris-Pope Rice Operating Co. 122 W. Taylor Hobbs, NM 88240

Project: EME Jct. N-5

Project Number: None Given

Location: T20S R37E Sec5 N ~ Lea County New Mexico

Lab Order Number: 7F11014

Report Date: 06/27/07

Project: EME Jct. N-5

Project Number: None Given
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Monitor Well #1	7F11014-01	Water	06/07/07 11:35	06-11-2007 16:30
Monitor Well #2	7F11014-02	Water	06/07/07 10:50	06-11-2007 16:30
Monitor Well #3	7F11014-03	Water	06/07/07 09:45	06-11-2007 16:30

Project: EME Jct. N-5

Project Number: None Given

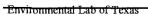
Project Manager: Kristin Farris-Pope

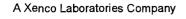


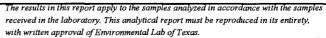
Fax: (505) 397-1471

# Organics by GC Environmental Lab of Texas

						<u> </u>			
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
Monitor Well #1 (7F11014-01) Water	<u>-</u> :	<del>_</del>							
Benzene	ND	0.00100	mg/L	1	EF71312	06/13/07	06/15/07	EPA 8021B	
Toluene	ND	0.00100	и		"	n	"		
Ethylbenzene	ND	0.00100	r	п	п	ıı	n	n	
Xylene (p/m)	ND	0.00100	"	n		n	Ħ	я	
Xylene (o)	ND	0.00100	u	"	,,	*	"	n	
Surrogate: a,a,a-Trifluorotoluene		101 %	80-12	0	"	и .	"	"	
Surrogate: 4-Bromofluorobenzene		89.4 %	80-12	0	n	"	"	"	
Monitor Well #2 (7F11014-02) Water									
Benzene	ND	0.00100	mg/L	1	EF71312	06/13/07	06/15/07	EPA 8021B	
Toluene	ND	0.00100	n	н	H			и .	
Ethylbenzene	ND	0.00100	N	н	n	n	n	n	
Xylene (p/m)	ND	0.00100	n	n	n	n	"	и	
Xylene (o)	ND	0.00100	"		н	"	"	n .	
Surrogate: a,a,a-Trifluorotoluene		96.8 %	80-12	20	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		86.6 %	80-12	20	"	"	"	"	
Monitor Well #3 (7F11014-03) Water									
Benzene	ND	0.00100	mg/L	1	EF71312	06/13/07	06/15/07	EPA 8021B	
Toluene	ND	0.00100		"	н		n	u	
Ethylbenzene	ND	0.00100	н	*	"	n	,	n	
Xylene (p/m)	ND	0.00100	,,	*	н	н	n	n .	
Xylene (o)	ND	0.00100	н	n	n n	#	H		
Surrogate: a,a,a-Trifluorotoluene		103 %	80-12	20	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		87.8 %	80-12	20	"	"	"	"	







Project: EME Jct. N-5

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	Not
Monitor Well #1 (7F11014-01) Water									
Total Alkalinity	344	2.00	mg/L	1	EF71403	06/14/07	06/14/07	EPA 310.1M	•
Chloride	731	12.5	н	25	EF71504	06/15/07	06/15/07	EPA 300.0	
Total Dissolved Solids	1990	10.0	11	1	EF71519	06/12/07	06/15/07	EPA 160.1	
Sulfate	104	12.5	Ħ	25	EF71504	06/15/07	06/15/07	EPA 300.0	
Monitor Well #2 (7F11014-02) Water									
Total Alkalinity	350	2.00	mg/L	1	EF71403	06/14/07	06/14/07	EPA 310.1M	
Chloride	1590	25.0	"	50	EF71504	06/15/07	06/15/07	EPA 300.0	
Total Dissolved Solids	4590	10.0	n	1	EF71519	06/12/07	06/15/07	EPA 160.1	
Sulfate	204	25.0	U	50	EF71504	06/15/07	06/15/07	EPA 300.0	
Monitor Well #3 (7F11014-03) Water									
Total Alkalinity	384	2.00	mg/L	1	EF71403	06/14/07	06/14/07	EPA 310.1M	
Chloride	425	10.0	"	20	EF71504	06/15/07	06/15/07	EPA 300.0	
Total Dissolved Solids	1340	10.0	*	1	EF71519	06/12/07	06/15/07	EPA 160.1	
Nulfate	110	10.0	n	20	EF71504	06/15/07	06/15/07	EPA 300.0	

Rice Operating Co. 122 W. Taylor

Hobbs NM, 88240

Project: EME Jct. N-5

Project Number: None Given
Project Manager: Kristin Farris-Pope

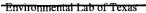
Fax: (505) 397-1471



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

a the time was the contract of the contract	,								
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
Monitor Well #1 (7F11014-01) Water									
Calcium	203	4.05	mg/L	50	EF71902	06/19/07	06/19/07	EPA 6010B	
Magnesium	56.8	1.80			и	**		n	
Potassium	6.37	0.600	м	10	n	,		n	
Sodium	311	10.8	n	250	n	n	я	ı	
Monitor Well #2 (7F11014-02) Water								_	
Calcium	353	20.2	mg/L	250	EF71902	06/19/07	06/19/07	EPA 6010B	
Magnesium	95.8	1.80	*	50	n	n	н	"	
Potassium	11.9	0.600	W	10	"		n	11	
Sodium	550	10.8	u	250	н	н	,	u	
Monitor Well #3 (7F11014-03) Water		_							-
Calcium	130	4.05	mg/L	50	EF71902	06/19/07	06/19/07	EPA 6010B	
Magnesium	39.2	0.360		10	,	Ħ	*	н	
Potassium	6.33	0.600	n	n	n	н	*	n	
Sodium	234	2.15	п	50	п	#	и	•	





Project: EME Jct. N-5

Project Number: None Given
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

# Organics by GC - Quality Control Environmental Lab of Texas

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EF71312 - EPA 5030C (GC)										
Blank (EF71312-BLK1)				Prepared: 0	6/13/07 A	nalyzed: 06	/15/07			
Benzene	ND	0.00100	mg/L		5.					_
Toluene	ND	0.00100	h							
Ethylbenzene	ND	0.00100	,							
Xylene (p/m)	ND	0.00100	71							
Xylene (o)	ND	0.00100	*							
Surrogate: a,a,a-Trifluorotoluene	46.1		ug/l	50.0		92.2	80-120			_
Surrogate: 4-Bromofluorobenzene	41.1		"	50.0		82.2	80-120			
LCS (EF71312-BS1)				Prepared: 0	6/13/07 A	nalyzed: 06	/15/07			
Benzene	0.0508	0.00100	mg/L	0.0500	~	102	80-120			
Toluene	0.0522	0.00100	n	0.0500		104	80-120			
Ethylbenzene	0.0541	0.00100	n	0.0500		108	80-120			
Xylene (p/m)	0.0945	0.00100	n	0.100		94.5	80-120			
Xylene (o)	0.0527	0.00100		0.0500		105	80-120			
Surrogate: a,a,a-Trifluorotoluene	49.2		ug/l	50.0		98.4	80-120			
Surrogate: 4-Bromofluorobenzene	47.4		"	50.0		94.8	80-120			
'alibration Check (EF71312-CCV1)				Prepared: 0	6/13/07 A	nalyzed: 06	/15/07			
Benzene	0.0493		mg/L	0.0500		98.6	80-120			
Toluene	0.0501			0.0500		100	80-120			
Ethylbenzene	0.0485			0.0500		97.0	80-120			
Xylene (p/m)	0.0906		la .	0.100		90.6	80-120			
Xylene (o)	0.0506		н	0.0500		101	80-120			
Surrogate: a, a, a-Trifluorotoluene	48.6		ug/l	50.0		97.2	80-120			
Surrogate: 4-Bromofluorobenzene	46.8		"	50.0		93.6	80-120			
Matrix Spike (EF71312-MS1)	Sou	ırce: 7F12005-	03	Prepared: 0	06/13/07 A	nalyzed: 06	/15/07			
Benzene	0.0494	0.00100	mg/L	0.0500	ND	98.8	80-120			_
l'oluene	0.0505	0.00100	н	0.0500	ND	101	80-120			

0.0534

0.0936

0.0523

50.4

47.1

0.00100

0.00100

0.00100

ug/l

0.0500

0.100

0.0500

50.0

50.0

ND

ND

ND

107

93.6

105

101

94.2

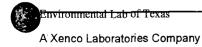
80-120

80-120

80-120

80-120

80-120



Surrogate: a,a,a-Trifluorotoluene

Surrogate: 4-Bromofluorobenzene

Ethylbenzene

Xylene (p/m)

Xylene (o)

Project: EME Jct. N-5

Project Number: None Given Project Manager: Kristin Farris-Pope Fax: (505) 397-1471



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

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

### Batch EF71312 - EPA 5030C (GC)

Source: 7F12005-03			Prepared: 06/13/07 Analyzed: 06/15/07					
0.0478	0.00100	mg/L	0.0500	ND	95.6	80-120	3.29	20
0.0495	0.00100	N	0.0500	ND	99.0	80-120	2.00	20
0.0523	0.00100		0.0500	ND	105	80-120	1.89	20
0.0913	0.00100	н	0.100	ND	91.3	80-120	2.49	20
0.0506	0.00100	'n	0.0500	ND	101	80-120	3.88	20
49.5		ug/l	50.0		99.0	80-120		
47.1		"	50.0		94.2	80-120		
	0.0478 0.0495 0.0523 0.0913 0.0506	0.0478 0.00100 0.0495 0.00100 0.0523 0.00100 0.0913 0.00100 0.0506 0.00100	0.0478 0.00100 mg/L 0.0495 0.00100 " 0.0523 0.00100 " 0.0913 0.00100 " 0.0506 0.00100 " 49.5 ug/l	0.0478 0.00100 mg/L 0.0500 0.0495 0.00100 " 0.0500 0.0523 0.00100 " 0.0500 0.0913 0.00100 " 0.100 0.0506 0.00100 " 0.0500 49.5 ug/l 50.0	0.0478 0.00100 mg/L 0.0500 ND 0.0495 0.00100 " 0.0500 ND 0.0523 0.00100 " 0.0500 ND 0.0913 0.00100 " 0.100 ND 0.0506 0.00100 " 0.0500 ND	0.0478         0.00100         mg/L         0.0500         ND         95.6           0.0495         0.00100         "         0.0500         ND         99.0           0.0523         0.00100         "         0.0500         ND         105           0.0913         0.00100         "         0.100         ND         91.3           0.0506         0.00100         "         0.0500         ND         101           49.5         ug/l         50.0         99.0	0.0478         0.00100         mg/L         0.0500         ND         95.6         80-120           0.0495         0.00100         "         0.0500         ND         99.0         80-120           0.0523         0.00100         "         0.0500         ND         105         80-120           0.0913         0.00100         "         0.100         ND         91.3         80-120           0.0506         0.00100         "         0.0500         ND         101         80-120           49.5         ug/l         50.0         99.0         80-120	0.0478         0.00100         mg/L         0.0500         ND         95.6         80-120         3.29           0.0495         0.00100         "         0.0500         ND         99.0         80-120         2.00           0.0523         0.00100         "         0.0500         ND         105         80-120         1.89           0.0913         0.00100         "         0.100         ND         91.3         80-120         2.49           0.0506         0.00100         "         0.0500         ND         101         80-120         3.88           49.5         ug/l         50.0         99.0         80-120





Project: EME Jct. N-5

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 EF71403 - General Preparation (					TOSUR	741450			24	
Blank (EF71403-BLK1)	Wetchenij			Dranged &	: Analyzed:	06/14/07		·		
Total Alkalinity	ND	2.00	mg/L	T Tepareu &	Analyzed.	00/14/07				
•			-							
LCS (EF71403-BS1)				<u>-</u>	z Analyzed:					
Bicarbonate Alkalinity	170	2.00	mg/L	200		85.0	85-115			
Duplicate (EF71403-DUP1)	Sour	ce: 7F11010-	01	Prepared &	Analyzed:	06/14/07				
Total Alkalinity	320	2.00	mg/L		320			0.00	20	
Reference (EF71403-SRM1)				Prepared &	Analyzed:	06/14/07				
Total Alkalinity	250		mg/L	250		100	90-110			
Batch EF71504 - General Preparation (V Blank (EF71504-BLK1)				Prepared &	z Analyzed:	06/15/07		<del></del>		<u> </u>
Batch EF71504 - General Preparation (\ Blank (EF71504-BLK1)		0.500	mg/L	Prepared &	Analyzed:	06/15/07				••••••
Batch EF71504 - General Preparation (V Blank (EF71504-BLK1) Sulfate	WetChem)	0.500 0.500		Prepared &	Analyzed:	06/15/07				
Batch EF71504 - General Preparation ( Blank (EF71504-BLK1) Sulfate Chloride	WetChem)				z Analyzed:					
Batch EF71504 - General Preparation ( Blank (EF71504-BLK1) Sulfate Chloride LCS (EF71504-BS1)	WetChem)						80-120			
Batch EF71504 - General Preparation ( Blank (EF71504-BLK1) Sulfate Chloride LCS (EF71504-BS1)	WetChem)  ND  ND	0.500	mg/L "	Prepared &		06/15/07	80-120 80-120			
Batch EF71504 - General Preparation (1) Blank (EF71504-BLK1) Sulfate Chloride LCS (EF71504-BS1) Sulfate hloride	ND ND 10.1	0.500	mg/L " mg/L	Prepared &		06/15/07 101 98.3				
Batch EF71504 - General Preparation (Value of the Blank (EF71504-BLK1) Sulfate Chloride LCS (EF71504-BS1) Sulfate Chloride Calibration Check (EF71504-CCV1)	ND ND 10.1	0.500	mg/L " mg/L	Prepared &	z Analyzed:	06/15/07 101 98.3				
Batch EF71504 - General Preparation (V Blank (EF71504-BLK1) Sulfate Chloride LCS (EF71504-BS1) Sulfate Phloride Calibration Check (EF71504-CCV1)	ND ND 10.1 9.83	0.500	mg/L " mg/L	Prepared &	z Analyzed:	06/15/07 101 98.3 06/15/07	80-120			
Batch EF71504 - General Preparation (Value of the Blank (EF71504-BLK1) Sulfate Chloride LCS (EF71504-BS1) Sulfate Chloride Calibration Check (EF71504-CCV1) Chloride Sulfate	ND ND 10.1 9.83	0.500	mg/L " mg/L	Prepared & 10.0 10.0 Prepared & 10.0 10.0	z Analyzed:	06/15/07 101 98.3 06/15/07 90.7 120	80-120			
Batch EF71504 - General Preparation (V Blank (EF71504-BLK1) Sulfate Chloride LCS (EF71504-BS1) Sulfate	ND ND 10.1 9.83	0.500 0.500 0.500	mg/L " mg/L	Prepared & 10.0 10.0 Prepared & 10.0 10.0	z Analyzed: z Analyzed:	06/15/07 101 98.3 06/15/07 90.7 120	80-120	0.00	20	

Rice Operating Co.

122 W. Taylor Hobbs NM, 88240 Project: EME Jct. N-5

Project Number: None Given Project Manager: Kristin Farris-Pope

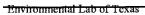


Fax: (505) 397-1471

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

•		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EF71504 - General Preparation	n (WetChem)									
Duplicate (EF71504-DUP2)	Source	e: 7F11017-	01	Prepared &	z Analyzed:	06/15/07				
Sulfate	76.7	5.00	mg/L		77.6			1.17	20	
Chloride	67.9	5.00	н		69.9			2.90	20	
Matrix Spike (EF71504-MS1)	Source	e: 7F11014-	01	Prepared &	Analyzed:	06/15/07				
Chloride	992	12.5	mg/L	250	731	104	80-120			
Sulfate	354	12.5	*	250	104	100	80-120			
Matrix Spike (EF71504-MS2)	Source	e: 7F11017-	01	Prepared &	k Analyzed	06/15/07				
Sulfate	174	5.00	mg/L	100	77.6	96.4	80-120			
Chloride	168	5.00		· 100	69.9	98.1	80-120			
Batch EF71519 - General Preparatio	n (WetChem)									
Blank (EF71519-BLK1)				Prepared:	06/12/07 A	nalyzed: 06	5/15/07			
Total Dissolved Solids	ND	10.0	mg/L				***			
Duplicate (EF71519-DUP1)	Source	ce: 7F11009-	01	Prepared:	06/12/07 A	nalyzed: 06	5/15/07			
Total Dissolved Solids	24600	10.0	mg/L		23000			6.72	20	
Duplicate (EF71519-DUP2)	Source	ce: 7F11014	03	Prepared:	06/12/07 A	nalyzed: 06	5/15/07			
Total Dissolved Solids	1380	10.0	mg/L		1340			2.94	20	





Project: EME Jct. N-5

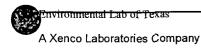
Project Number: None Given
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

# Total Metals by EPA / Standard Methods - Quality Control

### **Environmental Lab of Texas**

		D		g., 1	g		e/DEG		ממת	
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EF71902 - 6010B/No Digestion										
Blank (EF71902-BLK1)				Prepared &	Analyzed:	06/19/07				
Calcium	ND	0.0810	mg/L	•						
Magnesium	ND	0.0360								
Potassium	ND	0.0600								
Sodium	ND	0.0430	n							
Calibration Check (EF71902-CCV1)				Prepared &	Analyzed:	06/19/07				
Calcium	2.04		mg/L	2.00		102	85-115			
Magnesium	2.00			2.00		100	85-115			
Potassium	2.13			2.00		106	85-115			
Sodium	2.04			2.00		102	85-115			
Duplicate (EF71902-DUP1)	Sou	ırce: 7F11010-	01	Prepared &	Analyzed:	06/19/07				
Calcium	956	40.5	mg/L		940			1.69	20	
Magnesium	337	3.60			346			2.64	20	
Potassium	29.9	0.600			30.9			3.29	20	
Sodium	2970	21.5			2940			1.02	20	



# Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Odessa, Texas 79765 12600 West I-20 East

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

TAT bisbrist × × × □ NPDES eurst ,84 ,45 (4)ubsdo8-arr) TAT HRUF Project Loc: T20S R37E Sec5 N → Lea County New Mexico z z z z z z z **60363600**# Total Dissolved Solids × × TRRP M.A.O.P EME Junction N-5 SCI Labels on container(s)
Custody seals on container(s)
Custody seals on cooler(s) 0009/81Z09 X31E × Sample Containers Intact? VOCs Free of Headspace? Laboratory Comments: Semivolatiles Volatiles (BTEX-N 6250) Report Format: X Standard Metals: As Ag Ba Cd Cr Pb Hg Se TOTAL 101 SARIESPICEC Anions (Cl. SO4: Alkalininy) Project Name: Project #: # 0d × × Cations (Ca. Mg. Na. K) × 8001 XT 15,0 89108 M2108 1.814 Specify Other <u>გ</u> Se ≥ Oner (Specify) rozanne@valomet.com None (1) 1 Liter HDPE EO<sup>Z</sup>S<sup>Z</sup>BN ozanne@valornet.com HOPN (505) 397-1471 'OSZH N N HCI (2) 10 ml glass vials  $\sim$ FONH × × 90 5 က 3 otal # of Containers benefit Plei Fax No: e-mail 11:35 10:50 9:45 Time Sampled matt@riceswd.com kpope@riceswd.com 6/7/2007 6/7/2007 6/7/2007 Date Sampled գրգություն ընկա Hobbs, New Mexico 88240 RICE Operating Company Rozanne Johnson (505)631-9310 ridad gninniga8 kpope@riceswd.com purvis@riceswd.com 122 W. Taylor Street Kristin Farris Pope (0/11/0) (505) 393-9174 FIELD CODE Please email to: Company Address: Sampler Signature: -1F11014 Project Manager: Company Name Monitor Well #2 Monitor Well #3 Monitor Well #1 Telephone No: City/State/Zip: Special Instructions: (lab use only) ORDER #: 9 9 (Vino esu del) # 8A

Lone Sta

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Sample Hand Delivered by Sampler/Olent by Courier? U O

Temperature Upon Receipt:

4.30

6-11-67

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

Dup

Duplicate

Project: EME Jct. N-5

Project Number: None Given
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

# This-rope

### **Notes and Definitions**

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

LCS Laboratory Control Spike

MS Matrix Spike

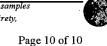
Report Approved By: \_\_\_\_\_\_ Date: \_\_\_\_\_\_ 6/27/2007

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

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

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



Delivered By: Relinquished by company Name: ONLY ONLY 122 W Taylor Street ~ Hobbs, New Mexico 88240 Kristin Farris-Pope, Project Scientist RICE Operating Company (505) 393-9174 101 East Martand - Hobbs, New T20S-R37E-Sec5 N ~ Lea County - New Mexico 131951 LAB# Tel (505) 393-2326 Fax (505) 393-2476 Jieffied by Mexico 88240 (Street, City, Zip) Monitor Well #3 Monitor Well #2 Monitor Well #1 (Circle One) Bus -5-26-6 Date: EME Junction N-5 FIELD CODE Other: Time: Time Cardinal Laboratories, 4:05 Fax# Received by: Sample Condition (505)397-1471 Received By: 6 ଉ ິດ (G)rab or (C)omp 8 Yes RICE Operating Company BILL TO Company: 122 W Taylor Street ~ Hobbs, New Mexico 88240 (505) 393-9174 # CONTAINERS دن بن. Ü orano la WATER (Laboratory Staff) × × × S Yes SOIL MATRIX AIR SLUDGE N N HCL (2 40ml VOA) PRESERVATIVE HNO<sub>3</sub> Rozanne Johnson (505)631-9310 08/29/07 rozanne@valornet.com Date: Date: CHECKED BY: METHOD NaHSO<sub>4</sub> (Initials) (Street, City, Zip) H<sub>2</sub>SO<sub>4</sub> Time: ICE (1-1 Liter HDPE) (505)397-1471 lime: まく NONE 8-27 8-27 SAMPLING 8-27 **DATE (2007)** 9.30 11:20 TIME REMARKS: Fax Results Phone Results MTBE 8021B/602 Email Results to: BTEX 8021B/602 × × × TPH 418.1/TX1005 / TX1005 Extended (C35) CHAIN-OF-CUSTODY AND ANALYSIS REQUEST Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7 LAB Order ID # TCLP Metals Ag As Ba Cd Cr Pb Se Hg Yes Yes **TCLP Volatiles** (Circle or Specify Method No. **ANALYSIS REQUEST** kpope@riceswd.com TCLP Semi Volatiles rozanne@valornet.com **TCLP Pesticides** 8 Z<sub>o</sub> **RCI** GC/MS Vol. 8260B/624 Additional Fax Number 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

Page 1 of 1

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

variance/ Corrective Action Rep	on- Sample	a rog-ii	1	
lient: Bice				
ate/ Time: 6 11:07 4:30				
ate/ Time: 6:11:07 4:30				
etials.				
Sample Receipt (	Checklist		au	- 4.e
1 Temperature of container/ cooler?	(es)	No	Client I	nitials
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?	(es)	No	3,33.7.43.50.63	
6 Sample instructions complete of Chain of Custody?	Ves	No		
7 Chain of Custody signed when relinquished/ received?	Yes	No		<del></del>
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?	Xes	No	(токт. трриодоја	
†11 Containers supplied by ELOT?	X-8-3	No		
112 Samples in proper container/ bottle?	XES	No	See Below	
#13 Samples properly preserved?	Mes	No	See Below	[
#14 Sample bottles intact?	Yes	No	OCC BEIOW	
#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)?	(es)	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	<del></del>
Variance Docum	nentation		Date/ Time:	
Regarding:				
Corrective Action Taken:				
				· 
Theck all that Apply:   See attached e-mail/ fax			· · · · · · · · · · · · · · · · · · ·	
Client understands and would Cooling process had begun				



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

ANALYTICAL RESULTS FOR RICE OPERATING COMPANY ATTN: KRISTIN FARRIS-POPE 122 W. TAYLOR **HOBBS, NM 88240** 

FAX TO: (505) 397-1471

Receiving Date: 08/29/07 Reporting Date: 09/04/07

Sampling Date: 08/27/07

Project Number: NOT GIVEN Project Name: EME JUNCTION N-5

Project Location: T20S-R37E-SEC5 N ~ LEA CO., NM Analyzed By: CK

Sample Type: GROUNDWATER Sample Condition: COOL & INTACT

Sample Received By: HM

				ETHYL	TOTAL
		BENZENE	TOLUENE	BENZENE	XYLENES
LAB NUMBER	SAMPLE ID	(mg/L)	(mg/L)	(mg/L)	(mg/L)

ANALYSIS DA	VIE .	08/30/07	08/30/07	08/30/07	08/30/07
H13195-1	MONITOR WELL #1	<0.002	<0.002	<0.002	<0.006
H13195-2	MONITOR WELL #2	<0.002	<0.002	<0.002	<0.006
H13195-3	MONITOR WELL #3	<0.002	<0.002	<0.002	<0.006
Quality Contro	ol .	0.086	0.082	0.082	0.252
True Value Q	3	0.100	0.100	0.100	0.300
% Recovery		86.0	82.3	82.4	84.0
Relative Perce	ent Difference	6.0	2.6	1.8	0.7

METHOD: EPA SW-846 8021 B





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



ANALYTICAL RESULTS FOR RICE OPERATING COMPANY ATTN: KRISTIN FARRIS-POPE 122 W. TAYLOR STREET HOBBS, NM 88240

FAX TO: (505) 397-1471

Receiving Date: 08/29/07 Reporting Date: 09/05/07 Project Owner: NOT GIVEN

Project Name: EME JUNCTION N-5

Project Location: T20S-R37E-SEC5 N~LEA COUNTY, NM

Sampling Date: 08/27/07 Sample Type: WATER

Sample Condition: COOL & INTACT

Sample Received By: HM Analyzed By: HM/KS

		Na	Ca	Mg	K	Conductivity	T-Alkalinity
LAB NUMBER	SAMPLE ID	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(u S/cm)	(mgCaCO <sub>3</sub> /L)
ANALYSIS DA	ΓE:	09/05/07	09/04/07	09/04/07	09/05/07	08/30/07	09/04/07
H13195-1	MONITOR WELL #1	327	203	60.5	4.80	3,040	260
H13195-2	MONITOR WELL #2	517	366	125	7.30	5,280	220
H13195-3	MONITOR WELL #3	213	129	47.6	4.60	2,200	232
Quality Control		NR	50.6	53.2	1.87	1423	NR
True Value QC		NR.	50.0	50.0	2.00	1413	NR
% Recovery		NR.	101	106	93.6	1913	NR.
Relative Percer	nt Difference	NR NR	< 0.1	3.1	2.1	< 0.1	NR
		*					
METHODS:	***************************************	SM	3500-Ca-D	3500-Mg E	8049	120.1	310.1
		ēi <sup>-</sup>	8Ô₄	ĒŌ₃	HČÖ₃	рH	TDS
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(s.u.)	(mg/L)
ANALYSIS DAT	TE:	09/04/07	09/05/07	09/04/07	09/04/07	08/30/07	09/04/07
H13195-1	MONITOR WELL #1	780	110	0	317	6:97	2,183
H13195-2	MONITOR WELL #2	1,500	222	0	268	6.88	4,441
H13195-3	MONITOR WELL #3	440	131	0	283	7.11	1,379
			· · · · · · · · · · · · · · · · · · ·				
Quality Control		500	24.0	NR	1025	6.97	NR
True Value QC		500	25.0	NR	1000	7.00	NR
% Recovery		100	96.1	NR	102	99.6	NR
Relative Percer	nt Difference	< 0.1	8.2	NR	6.1	0.1	NR.

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METHODS:

09-07-07

310.1

150.1

Date

310.1



160.1

375.4

SM4500-CI-B



ANALYTICAL RESULTS FOR RICE OPERATING COMPANY ATTN: KRISTIN FARRIS-POPE 122 W. TAYLOR STREET

HOBBS, NM 88240 FAX TO: (575) 397-1471

Receiving Date: 11/13/07 Reporting Date: 11/19/07 Project Number: NOT GIVEN

Project Name: EME JUNCTION N-5

Project Location: T20S-R37E-SEC5 N~LEA COUNTY, NM

Sampling Date: 11/09/07 Sample Type: WATER

Sample Condition: COOL & INTACT

Sample Received By: CK Analyzed By: HM/KS

		Na	Ça	Mg	K	Conductivity	T-Alkalinity	
LAB NUMBE	LAB NUMBER SAMPLE ID		(mg/L)	(mg/L)	(mg/L)	(uS/cm)	(mgCaCO <sub>3</sub> /L)	
ANALYSIS D	ATE:	11/19/07	11/19/07	11/19/07	11/15/07	11/14/07	11/14/07	
H13697-1	MONITOR WELL #1	405	136	64.5	8.15	3,060	364	
H13697-2	MONITOR WELL #2	628	326	107	4.38	5,280	356	
H13697-3	MONITOR WELL #3	327	89.2	50.8	4.35	2,264	396	
Quality Contr	rol	NR	49.2	51.6	2.95	1,415	NR	
True Value Q	nC	NR	50.0	50.0	3.00	1,413	NR	
% Recovery		NR	98.5	103	98.3	100	NR	
Pelative Perc	cent Difference	NR	< 0.1	1.5	5.0	0.1	NR	
METHODS:		SM	3500-Ca-D	3500-Mg E	8049	120.1	310.1	

		CI	SO <sub>4</sub>	CO <sub>3</sub>	HCO <sub>3</sub>	рН	TDS
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(s.u.)	(mg/L)
ANALYSIS D	ATE:	11/15/07	11/19/07	11/14/07	11/14/07	11/14/07	11/14/07
H13697-1	MONITOR WELL #1	724	108	0	444	6.98	1,707
H13697-2	MONITOR WELL #2	1,440	233	0	434	6.81	2,962
H13697-3	MONITOR WELL #3	448	117	0	483	7.06	1,296
Quality Contr	roi	500	22.8	NR	988	6.95	NR
True Value C	(C	500	25.0	NR	1000	7.00	NR
% Recovery		100	91.1	NR	98.8	99.3	NR
Relative Perc	cent Difference	< 0.1	6.3	NR	1.2	0.7	NR
METHODS:		SM4500-CI-B	375.4	310.1	310.1	150,1	160.1

Busta Suploto

\_\_/// Date





ANALYTICAL RESULTS FOR RICE OPERATING COMPANY ATTN: KRISTIN FARRIS-POPE 122 WEST TAYLOR HOBBS, NM 88240

FAX TO: (575) 397-1471

Receiving Date: 11/13/07

Reporting Date: 11/20/07

Project Number: NOT GIVEN

Project Name: EME JUNCTION N-5

Project Location: T20S R37E SEC5 N - LEA COUNTY, NM

Sampling Date: 11/09/07

Sample Type: WATER

Sample Condition: COOL & INTACT

Sample Received By: CK

Analyzed By: AB

BENZENE TOLUENE BENZENE XYLENES
LAB NUMBER SAMPLEID (mg/L) (mg/L) (mg/L)

ANALYSIS D	ATE	11/14/07	11/14/07	11/14/07	11/14/07
H13697-1	MONITOR WELL # 1	< 0.001	<0.001	< 0.001	< 0.003
H13697-2	MONITOR WELL # 2	<0.001	<0.001	<0.001	<0.003
H13697-3	MONITOR WELL#3	<0.001	<0.001	<0.001	<0.003
<u></u>					
Quality Contr	rol	0.102	0.092	0.095	0.293
True Value C	OC	0.100	0.100	0.100	0.300
% Recovery		102	92	95	98
Relative Pero	cent Difference	2.4	0.4	1.0	1.5

METHOD: EPA SW-846 8021B

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ATTACHMENT C

Field Data Forms

CLIENT: RICE Operating Company				WELL ID: MOINOI WEN #1
SYSTEM: EME				DATE: June 7, 2007
SITE LOCATION:	Junction	N-5		SAMPLER: Rozanne Johnson
PURGING METHOD	):	☑ Hand Ba	ailed 🔲	Pump, Type:
SAMPLING METHO	D:	☑ Disposa	able Bailer	☐ Direct from Discharge Hose ☐ Other:
DISPOSAL METHO	O OF PURG	SE WATER:	☐ On-si	te Drum 🔲 Drums 🗹 SWD Disposal Facility
TOTAL DEPTH OF V	WELL:	40.10	Feet	
DEPTH TO WATER HEIGHT OF WATER		31.57 8.53	Feet Feet	2 In. Well Diameter
WELL VOLUME:		Gal.	. i eet	Gallons purged prior to sampling
TIME	TEMP. °C	COND. mS/cm	рН	PHYSICAL APPEARANCE AND REMARKS
44.25	20.5	2.47	6.01	Septic Odor / Gray in Color / Heavy Sheen
11:35	20.5	3.17	6.91	Samples Collected
1				BTEX (2-40ml VOA)
				Major lons/TDS (1-1000ml Plastic)
				Major Iono/150 (1 1000mi 1 lastic)
L	L	l		
COMMENTS:				
	ument used	to obtain of	ł. conducti	vity, and temperature measurements.
				essa, Texas for BTEX, Major lons, and TDS analysis.

CLIENT: RICE Operating Company				WELL ID: Monitor Well #1		
SYSTEM:	EME			DATE: March 6, 2007		
SITE LOCATION: Junction N-5				SAMPLER: Rozanne Johnson		
PURGING METHOD SAMPLING METHOI		☑ Hand Ba ☑ Disposa		Pump, Type:  Direct from Discharge Hose		
DISPOSAL METHOD TOTAL DEPTH OF V DEPTH TO WATER: HEIGHT OF WATER WELL VOLUME:	VELL: : R COLUMN:	40.10 31.67	On-sit	E Drum ☐ Drums ☑ SWD Disposal Facility  2 In. Well Diameter		
TIME	TEMP. °C	COND. mS/cm	pН	PHYSICAL APPEARANCE AND REMARKS		
11:30	20.1	3.42	6.91	Septic Odor / Gray in Color / Heavy Sheen		
	· ·			Samples Collected BTEX (2-40ml VOA)		
				Major lons/TDS (1-1000ml Plastic)		
				Wajor Ions/103 (1-1000m Flastic)		
				vity, and temperature measurements.		

CLIENT: RICE Operating Company				WELL ID: Monitor Well #1		
SYSTEM: EME				DATE: November 9, 2007		
SITE LOCATION: Junction N-5				SAMPLER: Rozanne Johnson		
	_					
PURGING METHOD	);	☐ Hand B	ailed 🗹	Pump, Type: Purge Pump		
SAMPLING METHO	D:	☑ Disposa	able Bailer <b>I</b>	☐ Direct from Discharge Hose ☐ Other:		
DISPOSAL METHOL		SE WATED:	□ On-si	te Drum 🔲 Drums 💟 SWD Disposal Facility		
				The Drums Swb Disposal Facility		
TOTAL DEPTH OF \ DEPTH TO WATER		<u>40.10</u> 31.84	- Feet Feet			
HEIGHT OF WATER			Feet	2 In. Well Diameter		
WELL VOLUME:		Gal.	-	5 Gallons purged prior to sampling		
	TEMP.	COND.				
TIME	°C	mS/cm	pН	PHYSICAL APPEARANCE AND REMARKS		
20	_					
11:00	19.5	2.98	6.98	Septic Odor / Gray in Color / Heavy Sheen		
				Samples Collected		
				BTEX (2-40ml VOA)		
				Major lons/TDS (1-1000ml Plastic)		
COMMENTS:						
Myron Model 6P instr	ument used	I to obtain pl	H, conductiv	vity, and temperature measurements.		
Delivered samples to	Cardinal La	b in Hobbs,	New Mexic	o for BTEX, Major Ions, and TDS analysis.		
				·		
·						

CLIENT: RICE Operating Company				WELL ID: Monitor Well #1		
SYSTEM:	EME			DATE: August 27, 2007		
SITE LOCATION: Junction N-5				SAMPLER: Rozanne Johnson		
•						
PURGING METHOD	:	☐ Hand Ba	ailed 🗹 F	Pump, Type: Purge Pump		
SAMPLING METHOD:   Disposable Bailer   Direct from Discharge Hose   Other:  Other:						
DISPOSAL METHOD	OF PURG	SE WATER:	☐ On-sit	e Drum 🔲 Drums 🔃 SWD Disposal Facility		
TOTAL DEPTH OF V	WELL:	40.10	Feet			
DEPTH TO WATER:			Feet Feet	2 In, Well Diameter		
WELL VOLUME:		Gal.	reel	<ul><li>In. Well Diameter</li><li>Gallons purged prior to sampling</li></ul>		
		·				
. TIME	TEMP.	COND. mS/cm	pН	PHYSICAL APPEARANCE AND REMARKS		
	C	1115/0111				
11:20	21.1	.3.01	6.94	Septic Odor / Gray in Color / Heavy Sheen		
				Samples Collected		
				BTEX (2-40ml VOA)		
				Major lons/TDS (1-1000ml Plastic)		
COMMENTS:						
Myron Model 6P instr	ument used	to obtain p⊦	f, conductiv	rity, and temperature measurements.		
Delivered samples to	Cardinal La	b in Hobbs,	New Mexic	o for BTEX, Major Ions, and TDS analysis.		
			······································			

CLIENT: RICE Operating Company				WELL ID: Monitor Well #2
SYSTEM	и: ЕМЕ			DATE: June 7, 2007
SITE LOCATION	N: Junction	N-5		SAMPLER: Rozanne Johnson
PURGING METHO	DD:	☐ Hand B	ailed 🗹	Pump, Type: Purge Pump
SAMPLING METH	OD:	☑ Disposa	able Bailer I	☐ Direct from Discharge Hose ☐ Other:
DISPOSAL METH	OD OF PUR	SE WATER:	☐ On-si	te Drum   Drums
TOTAL DEPTH O	WELL:	44.10	Feet	
DEPTH TO WATE		31.22 : 12.88	Feet Feet	2 In. Well Diameter
WELL VOLUME:		Gal.	_1 661	8 Gallons purged prior to sampling
	T ====	T	r -	
TIME	TEMP.	COND. mS/cm	pН	PHYSICAL APPEARANCE AND REMARKS
		<del> </del>		
10:50	20.4	5.52	6.73	Sand to Clear with Slight Odor
				Samples Collected
				BTEX (2-40ml VOA)
				Major lons/TDS (1-1000ml Plastic)
COMMENTS:	· · · ·			
Myron Model 6P ins	strument used	d to obtain ph	H, conductiv	vity, and temperature measurements.
Delivered samples	to Environme	ntal Lab of T	exas in Ode	essa, Texas for BTEX, Major Ions, and TDS analysis.
		···		<del></del>
		******		
				•

CLIENT: RICE Operating Company				WELL ID: Monitor Well #2
SYSTEM:	EME			DATE: March 6, 2007
SITE LOCATION: Junction N-5				SAMPLER: Rozanne Johnson
PURGING METHOD	:	☐ Hand Ba	ailed 🗹 🛭	Pump, Type: Purge Pump
SAMPLING METHO	D:	☑ Disposa	ble Bailer [	☐ Direct from Discharge Hose ☐ Other:
		•		
DISPOSAL METHOR	OF PURG	SE WATER:	☐ On-sit	te Drum 🔲 Drums 🗹 SWD Disposal Facility
				_ ens superau, asmi,
TOTAL DEPTH OF V DEPTH TO WATER:		<u>44.10</u> 31.32	Feet	
HEIGHT OF WATER	COLUMN	12.78	Feet	2 In. Well Diameter
WELL VOLUME:	2.0	Gal.		8 Gallons purged prior to sampling
TIME	TEMP.	COND.	На	PHYSICAL APPEARANCE AND REMARKS
Time	°C	mS/cm	pri	THIS IS TO SHOEL THE REMAINING
10:45	22.0	5.87	6.76	Sand to Clear with Slight Odor
				Samples Collected
				BTEX (2-40ml VOA)
				Major lons/TDS (1-1000ml Plastic)
COMMENTS:				
Myron Model 6P instr	ument used	to obtain ph	ł, conductiv	vity, and temperature measurements.
Delivered samples to	Environme	ntal Lab of T	exas in Ode	essa, Texas for BTEX, Major lons, and TDS analysis.
				The state of the s

CLIENT:	RICE Op	erating Co	mpany	WELL ID: Monitor Well #2	
SYSTEM: EME				DATE: November 9, 2007	
SITE LOCATION: Junction N-5				SAMPLER: Rozanne Johnson	
PURGING METHOD	):			Pump, Type: Purge Pump  Direct from Discharge Hose	
DISPOSAL METHOD TOTAL DEPTH OF V DEPTH TO WATER HEIGHT OF WATER WELL VOLUME:	WELL: : R COLUMN:	44.10 31.45	On-sit	le Drum Drums SWD Disposal Facility  2 In. Well Diameter 3 Gallons purged prior to sampling	
TIME	TEMP. °C	COND. mS/cm	pН	PHYSICAL APPEARANCE AND REMARKS	
	40.0	- 10		Condition Of a supplier Office of the Condition of the Co	
10:00	19.8	5.10	6.83	Sand to Clear with Slight Odor	
				Samples Collected BTEX (2-40ml VOA)	
		. ,,,,,		Major lons/TDS (1-1000ml Plastic)	
				Widgo 1018/103 (1-1000Hil Flastic)	
				rity, and temperature measurements.	
Delivered samples to	Cardinal La	b in Hobbs,	New Mexic	o for BTEX, Major lons, and TDS analysis.	
	<del>-</del>				
4.00				· · · · · · · · · · · · · · · · · · ·	
			. "		

SYSTEM: EME				DATE: August 27, 2007
-				
PURGING METHOD:		☐ Hand Ba	ailed 🗹 🛚	Pump, Type: Purge Pump
SAMPLING METHOD:			ble Bailer [	Direct from Discharge Hose  Other:
				,
DISPOSAL METHOD	OF PURG	SE WATER:	☐ On-sit	te Drum 🔲 Drums 🗹 SWD Disposal Facility
TOTAL DEPTH OF V	VFII:	44.10	Feet	
DEPTH TO WATER: 44.10 Feet				
HEIGHT OF WATER	COLUMN	12.35	Feet	2 In. Well Diameter
WELL VOLUME:	2.0	Gal.		Gallons purged prior to sampling
TIME	TEMP.	COND.		PHYSICAL APPEARANCE AND REMARKS
TIME	°C	mS/cm	pН	- FITTOICAL APPEARANCE AND REMARKS
10:25	20.8	5.12	6.81	Sand to Clear with Slight Odor
				Samples Collected
				BTEX (2-40ml VOA)
,				Major lons/TDS (1-1000ml Plastic)
			<u> </u>	
COMMENTS:				
Myron Model 6P instr	ument used	to obtain ph	l, conductiv	vity, and temperature measurements.
Delivered samples to	Cardinal La	ab in Hobbs,	New Mexic	o for BTEX, Major lons, and TDS analysis.

CLIENT:	RICE O	perating Co	mpany	WELL ID: Monitor Well #3	
SYSTEM: EME				DATE: June 7, 2007	
SITE LOCATION: Junction N-5				SAMPLER: Rozanne Johnson	
PURGING METHOD	<b>)</b> ;	☐ Hand B	ailed 🗹	Pump, Type: Purge Pump	
SAMPLING METHOD:				☐ Direct from Discharge Hose ☐ Other:	
DISPOSAL METHO	O OF PUR	GE WATER:	☐ On-si	te Drum 🔲 Drums 💟 SWD Disposal Facility	
TOTAL DEPTH OF	WELL:	43.15	Feet		
DEPTH TO WATER		29.93	Feet	2 In. Well Diameter	
HEIGHT OF WATER COLUMN: 13.22 Feet 2 In. Well Diameter  WELL VOLUME: 2.1 Gal. Gallons purged prior to sampling					
	7540	2011	T		
TIME	TEMP.	COND. mS/cm	рΗ	PHYSICAL APPEARANCE AND REMARKS	
9:45	20.5	2.23	6.94	Sand to Clear with No Odor	
				Samples Collected	
				BTEX (2-40ml VOA)	
				Major lons/TDS (1-1000ml Plastic)	
			<u> </u>		
	•				
COMMENTS:					
Myron Model 6P insti	ument used	d to obtain ph	H, conducti	vity, and temperature measurements.	
Delivered samples to	Environme	ntal Lab of T	exas in Od	essa, Texas for BTEX, Major lons, and TDS analysis.	
		<del></del>			
	_				

SYSTEM: EME DATE: March 6, 2007  SITE LOCATION: Junction N-5 SAMPLER: Rozanne Johnson  PURGING METHOD:						
PURGING METHOD:						
SAMPLING METHOD: ☑ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other:  DISPOSAL METHOD OF PURGE WATER: ☐ On-site Drum ☐ Drums ☑ SWD Disposal Facility  TOTAL DEPTH OF WELL: 43.15 Feet DEPTH TO WATER: ☐ 30.02 Feet HEIGHT OF WATER COLUMN: 13.13 Feet						
SAMPLING METHOD: ☑ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other:  DISPOSAL METHOD OF PURGE WATER: ☐ On-site Drum ☐ Drums ☑ SWD Disposal Facility  TOTAL DEPTH OF WELL: 43.15 Feet DEPTH TO WATER: ☐ 30.02 Feet HEIGHT OF WATER COLUMN: 13.13 Feet						
DISPOSAL METHOD OF PURGE WATER: On-site Drum Drums SWD Disposal Facility  TOTAL DEPTH OF WELL: 43.15 Feet DEPTH TO WATER: 30.02 Feet HEIGHT OF WATER COLUMN: 13.13 Feet WELL VOLUME: 2.1 Gal. B Gallons purged prior to sampling  TIME TEMP. COND. DH PHYSICAL APPEARANCE AND REMARKS						
TOTAL DEPTH OF WELL:         43.15         Feet           DEPTH TO WATER:         30.02         Feet           HEIGHT OF WATER COLUMN:         13.13         Feet         2         In. Well Diameter           WELL VOLUME:         2.1         Gal.         8         Gallons purged prior to sampling						
TOTAL DEPTH OF WELL:         43.15         Feet           DEPTH TO WATER:         30.02         Feet           HEIGHT OF WATER COLUMN:         13.13         Feet         2         In. Well Diameter           WELL VOLUME:         2.1         Gal.         8         Gallons purged prior to sampling						
TOTAL DEPTH OF WELL:         43.15         Feet           DEPTH TO WATER:         30.02         Feet           HEIGHT OF WATER COLUMN:         13.13         Feet         2         In. Well Diameter           WELL VOLUME:         2.1         Gal.         8         Gallons purged prior to sampling						
TOTAL DEPTH OF WELL:         43.15         Feet           DEPTH TO WATER:         30.02         Feet           HEIGHT OF WATER COLUMN:         13.13         Feet         2         In. Well Diameter           WELL VOLUME:         2.1         Gal.         8         Gallons purged prior to sampling						
DEPTH TO WATER:         30.02         Feet           HEIGHT OF WATER COLUMN:         13.13         Feet         2         In. Well Diameter           WELL VOLUME:         2.1         Gall.         8         Gallons purged prior to sampling						
WELL VOLUME: 2.1 Gal. 8 Gallons purged prior to sampling  TIME TEMP. COND. pH PHYSICAL APPEARANCE AND REMARKS						
TIME TEMP. COND. DH PHYSICAL APPEARANCE AND REMARKS						
I TIME I I TOU PHYSICAL APPEARANCE AND REMARKS						
°C mS/cm						
1 · · · · · · · · · · · · · · · · · · ·						
9:40 20.0 2.28 6.96 Sand to Clear with No Odor						
Samples Collected						
BTEX (2-40ml VOA)						
Major lons/TDS (1-1000ml Plastic)						
COMMENTS:						
Myron Model 6P instrument used to obtain pH, conductivity, and temperature measurements.						
Delivered samples to Environmental Lab of Texas in Odessa, Texas for BTEX, Major Ions, and TDS analysis.						
·						

CLIENT:	RICE OF	erating Co	mpany_	WELL ID: Monitor Well #3
SYSTEM: EME				DATE: November 9, 2007
SITE LOCATION: Junction N-5				SAMPLER: Rozanne Johnson
PURGING METHOD	:	☐ Hand Ba	ailed 🗹 🛭	Pump, Type: Purge Pump
SAMPLING METHOD:				Direct from Discharge Hose  Other:
DISPOSAL METHO	OF PURG	SE WATER:	☐ On-sit	e Drum 🔲 Drums 🗹 SWD Disposal Facility
TOTAL DEPTH OF V	WELL:	43.15	Feet	
DEPTH TO WATER	:	30.33	Feet	
HEIGHT OF WATER WELL VOLUME:		12.82 Gal.	Feet	In. Well Diameter8 Gallons purged prior to sampling
		· 		
TIME	TEMP.	COND. mS/cm	pН	PHYSICAL APPEARANCE AND REMARKS
9:05	19.8	2.19	7.05	Sand to Clear with No Odor
3.00	19.0	2.10	7.00	Samples Collected
				BTEX (2-40ml VOA)
				Major lons/TDS (1-1000ml Plastic)
COMMENTS:				
Myron Model 6P instr	ument used	I to obtain pH	I, conductiv	rity, and temperature measurements.
Delivered samples to	Cardinal La	b in Hobbs,	New Mexic	o for BTEX, Major lons, and TDS analysis.
			, <u></u>	
				·

CLIENT:	RICE Op	verating Co	mpany	WELL ID: Monitor Well #3
SYSTEM: EME				DATE: August 27, 2007
SITE LOCATION: Junction N-5				SAMPLER: Rozanne Johnson
PURGING METHOD	):	☐ Hand Ba	ailed 🗹 🛭 F	Pump, Type: Purge Pump
SAMPLING METHOD:   Disposable Bailer				☐ Direct from Discharge Hose ☐ Other:
DISPOSAL METHO	OF PURG	SE WATER:	☐ On-sit	e Drum 🔲 Drums 🖳 SWD Disposal Facility
TOTAL DEPTH OF V	WELL:	43.15	Feet	
DEPTH TO WATER		30.50	Feet	2 to Well Diameter
HEIGHT OF WATEF WELL VOLUME:		Gal.	Feet	fn. Well Diameter Gallons purged prior to sampling
	1	- 	ı	
TIME	TEMP.	COND. mS/cm	pН	PHYSICAL APPEARANCE AND REMARKS
9:30	20.5	2.18	7.03	Sand to Clear with No Odor
0.00	20.0	20	7.00	Samples Collected
PR				BTEX (2-40ml VOA)
				Major lons/TDS (1-1000ml Plastic)
COMMENTS:	-			
Myron Model 6P instr	rument used	to obtain pł	H, conductiv	ity, and temperature measurements.
Delivered samples to	Cardinal La	ab in Hobbs,	New Mexic	o for BTEX, Major lons, and TDS analysis.
	_			
		_		
		_		

