AP. 66

# ANNUAL MONITORING REPORT

YEAR(S): 2,006





February 6, 2007

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

FEB - 9 2007

Environmental Bureau
Oil Conservation Division

RE:

2006 ANNUAL GROUNDWATER MONITORING REPORT

**EME N-5 JUNCTION BOX SITE** 

T20S, R37E, SECTION 5, UNIT LETTER N STAGE 1 ABATEMENT PLAN NO.: AP-66

Mr. Hansen:

On behalf of Rice Operating Company (ROC), Trident Environmental takes this opportunity to submit the 2006 Annual Monitoring Well Report for the EME N-5 Junction Box Site located in the Eunice-Monument-Eumont (EME) Salt Water Disposal (SWD) System.

Identification of soil and ground water impacts occurred during junction box upgrade operations as part of the approved Junction Box Upgrade Program in August 2001. Groundwater monitoring activities have been conducted quarterly since January 10, 2002. The Stage 1 Abatement Plan (AP-66) for this site was verbally approved by the NMOCD on March 30, 2006. After obtaining access and archaeological clearance from the BLM, one downgradient (MW-2) and upgradient (MW-3) monitoring well were installed in July. A Stage 1 Final Investigation Report is in progress and will be forthcoming to incorporate the findings described above.

ROC is the service provider (agent) for the EME Salt Water Disposal 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 Farris Pope at (505) 393-9174.

Sincerely,

Gilbert J. Van Deventer, PG, REM

cc: CDH, KFP, file

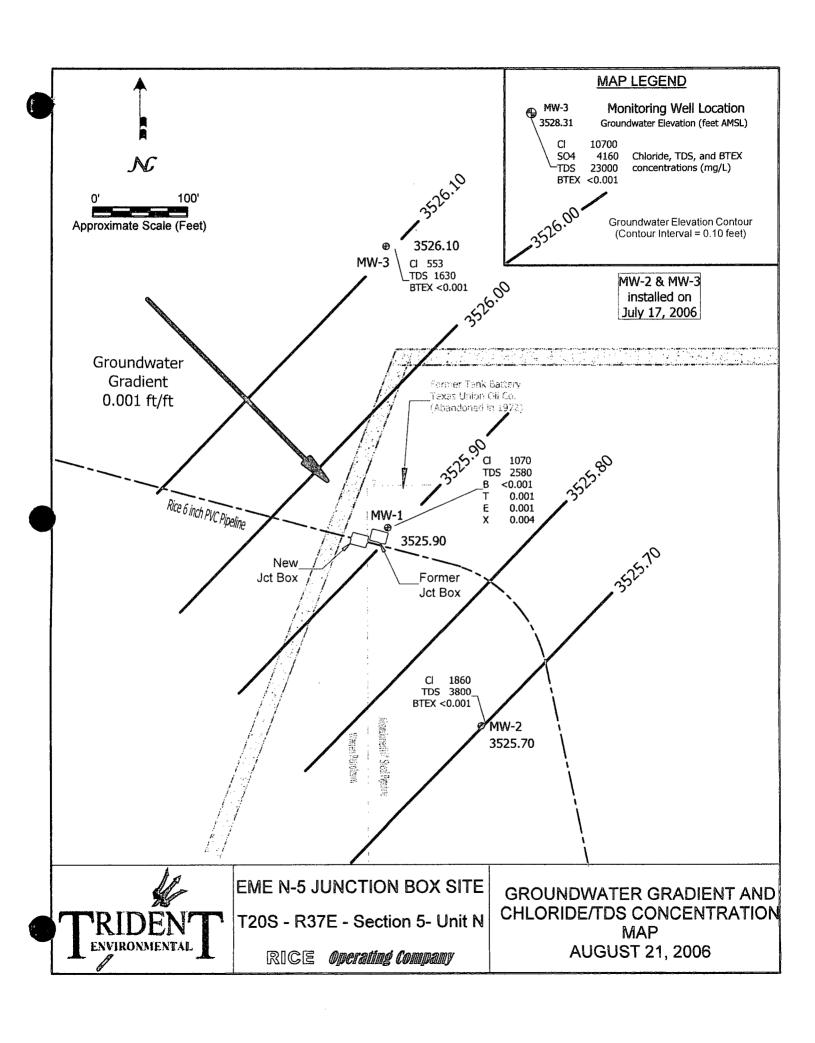
enclosures: tables, graphs, maps, and laboratory analytical reports.

### ATTACHMENT A

Site Maps

Table

Graphs



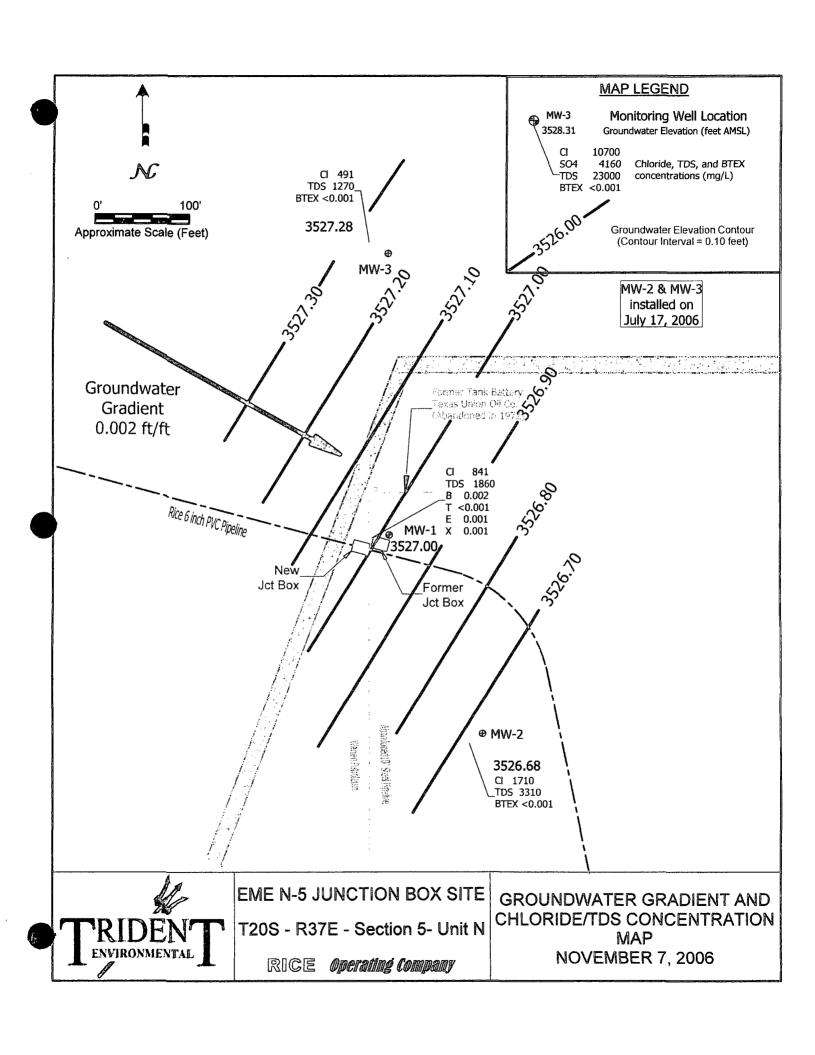


Table 1 Summary of Groundwater Sampling Results EME N-5 Junction Box Site

			,		netion Dox Site				
Monitoring Well	Sample Date	Depth to Groundwater (feet BTOC)	Water Table Elevation (feet AMSL)	Chloride (mg/L)	TDS (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylene (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
MW-1	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
	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	< 0.00
	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	0.001
MW-2	08/21/06	33.04	3525.70	1,860	3,800	<0.001	< 0.001	< 0.001	< 0.001
171 77 -2	11/07/06	32.06	3526.68	1,710	3,310	< 0.001	<0.001	<0.001	<0.001
MW-3	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	< 0.00
		W	QCC Standards	250	1000	0.01	0.75	0.75	0.62

Total Dissolved Soilds (TDS), chloride, sulfate, and BTEX concentrations listed in milligrams per liter (mg/L)

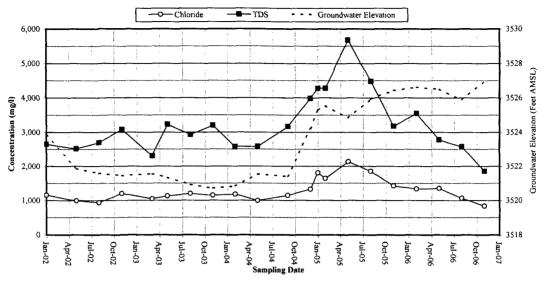
Analyses performed by Environmental Lab of Texas (Odessa TX) or Cardinal Laboratories (Hobbs NM).

Values in bidiface type indicate concentrations exceed New Mexico Water Quality Commission (WQCC) standards

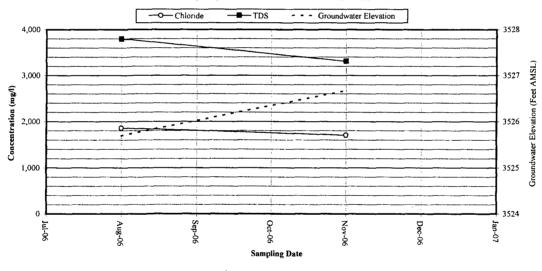
AMSL. - Above Mean Sea LevE, BTCC - Below Top of Classing

Elevations and state plane coordinates surveyed by Basin Surveys, Hobbs, NM.

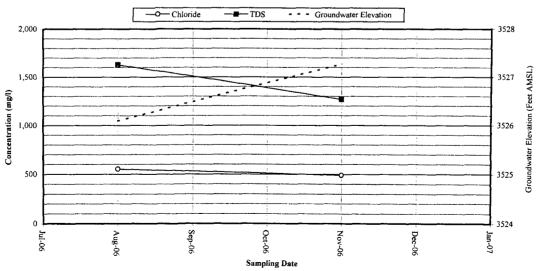
MW-1 Chloride, TDS, and Groundwater Elevation Values Versus Time



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



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

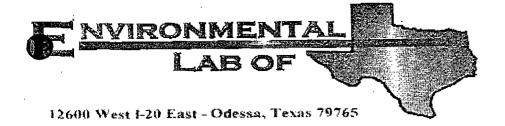


#### ATTACHMENT B

Laboratory Analytical Reports

And

Chain of Custody Documentation



## **Analytical Report**

#### Prepared for:

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

Project: EMF. Jct. N-5
Project Number: None Given
Location: Lea County

Lab Order Number: 6B23004

Report Date: 03/02/06

Project: EME Jct. N-5

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

Reported: 03/02/06 17:06

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Monitor Well #1	61323004-01	Water	02/21/06 09:40	02/23/06 09:45

Project: EME Jct. N-5
Project Number: None Given
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

Reported:
03/02/06 17:06

## Organics by GC Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Monitor Well #1 (6B23004-01) Wate	er								
Benzene	מא	0.00100	mg/L	1	EB62306	02/23/06	02/24/06	EPA 8021B	
Toluene	0.00402	0.00100	н	**	11	u	n	ţi .	
Ethylbenzene	0.00808	0.00100	11	Ħ	n	п		а	
Xylene (p/m)	0.0150	0.00100	Ú		n	15	(I	н	
Xylene (o)	0.00977	0.00100	•	u	n	H	IJ	H	
Surrogate: a,a,a-Trifluorotoluene		86.0 %	80-12	20	"	11	"		
Surrogate: 4-Bromofluorobenzene		134 %	80-12	20	"	"	H	10	S-04

Project: EME Jct. N-5

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

Fax: (505) 397-1471

Reported: 03/02/06 17:06

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Monitor Well #1 (6B23004-01) Water	•					······································			
Total Alkalinity	278	2.00	mg/L	1	EB62205	02/23/06	02/23/06	EPA 310.1M	
Chloride	1340	25.0	U	50	EB62811	02/28/06	02/28/06	EPA 300.0	
Total Dissolved Solids	3550	5.00	11	1	EB62405	02/23/06	02/24/06	EPA 160.1	
Sulfate	136	25.0		50	EB62811	02/28/06	02/28/06	EPA 300.0	

Project: EME Jct. N-5

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

Reported: 03/02/06 17:06

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Monitor Well #1 (6B23004-01) Water									
Calcium	319	0.500	mg/L	. 50	EC60207	03/02/06	03/02/06	EPA 6010B	
Magnesium	126	0.0500	0	н .	III	n	u	tı	
Potassium	9.49	0.500	п	10	10	*1	n	ļ4	
Sodium	560	2.00	u	200	u	*	n	W	

Project: EME Jet. N-5

Project Number: Nonc Given Project Manager: Kristin Farris-Pope Fax: (505) 397-1471

Reported: 03/02/06 17:06

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

Angluro	Result	Reporting Limit	Units .	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Analyte	21-0						. , , ,			
Batch EB62306 - EPA 5030C (GC)										\ P
Blank (EB62306-BLK1)		<del></del> ;		Prepared &	& Analyze	ed: 02/23/	<u>u6</u>			
Benzene	ND	0.00100	mg/L							
Toluene	МD	0.00100	H.							
Ethylbenzene	טא	0.00100	11							
Xylene (p/m)	ND	0.00100								
Xylene (o)	ND	0.00100	(1			//				
Surrogate: a.a,a-Trifluorotoluene	33.3		ug/l	40.0		83.2	80-120			
Surrogate: 4-Bromofluorobenzene	35.5		n	40.0		88.8	80-120			
LCS (EB62306-BS1)				Prepared:	02/23/06	Analyzed	1: 02/27/06			
Benzene	0.0480	0.00100	mg/L	0.0500		96.0	80-120			
Toluene	0.0524	0.00100	н	0.0500		105	80-120			
Ethylbenzene	0.0564	0.00100	ır	0.0500		113	80-120			
Xylene (p/m)	0,118	0.00100	11	0.100		118	80-120			
Xylene (o)	0.0577	0.00100	n	0.0500		115	80-120			
Surrogate: a,a,a-Trifluorotoluene	40.5	-	ug/l	40.0		101	80-120			
Surrogate: 4-Bromofluorobenzene	38.4		11	40.0		96.0	80-120			
ibration Check (EB62306-CCV1)				Prepared:	02/23/06	Analyze	d: 02/27/06	;		
Benzene	47.3		ug/l	50.0		94.6	80-120			, , <del></del> , , ,
Toluene	52.9		"	50.0		106	80-120			
Ethylbenzene	59.9		U	50.0		120	80-120		•	
Xylene (p/m)	120		u	100		120	80-120			
Xylone (o)	59.7		ıı	50.0		119	80-120			
Surrogate: a,a,a-Trifluorotoluene	41.5		"	40.0		104	80-120		1	
Surrogate: 4-Bromofluorobenzene	47.5		μ	40.0		119	80-120			
Matrix Spike (EB62306-M\$1)	· Sc	ource: 6B230	01-01	Prepared	: 02/23/06	Analyze	d: 02/27/06	5		
Benzene	0.0418	00100	mg/L	0.0500	ND	83.6	80-120			
Toluene	0.0464	0.00100		0.0500	ÜИ	92.8	80-120			
Ethylbenzene	0.0521	0.00100	. 11	0.0500	ND	104	80-120			
Xylene (p/m)	0.109	0,00100	**	0.100	ΝĎ	109	80-120			
Xylene (o)	0.0537	0,00100	n	0.0500	NID	107	80-120			
Surrogate: a.a.a-Trifluorotoluene	38.4		บรู/เ	40.0	•	96.0	80-120			
Surrogate: 4-Bromofluorobenzene	41.3		n	. 40,0		103	80-120			

Project: EME Jct. N-5
Project Number: Nonc Given

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

Reported: 03/02/06 17:06

#### 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 EB62306 - EPA 5030C (GC)										
Matrix Spike Dup (EB62306-MSD1)	Sou	rce: 6B2300	1-01	Prepared:	02/23/06	Analyzed	: 02/27/06			
Benzene	0.0475	0.00100	mg/L	0.0500	ND	95.0	80-120	12.8	20	
Foluene	0.0524	0.00100	tı	0.0500	ND	105	80-120	12.3	20	
Ethylbenzene	0.0577	0.00100	u	0.0500	ИD	115	80-120	10.0	20	
Xylene (p/m)	0.120	0.00100	н	0.100	ND	120	80-120	9.61	20	
Xylene (o)	0,0591	0.00100	*1	0.0500	ND	118	80-120	9.78	20	
Surragate: a.a.a-Trifluorotoluene	40.3		ug/l	40.0		101	80-120			<del></del> ·
Surrogate: 4-Bromofluorobenzene	41.3		"	40.0		103	80-120			

Project: EME Jet. N-5

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

Fax: (505) 397-1471

Reported: 03/02/06 17:06

#### 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 EB62205 - General Prepara	ation (WetChem)		· · ·							<del></del>
Blank (EB62205-BLK1)				Prepared	& Analyzo	d: 02/23/	06			
Cotal Alkalinity	ND	2.00	mg/L				•	:		
LCS (EB62205-BS1)				Prepared	& Analyzo	:d: 02/23/	06			
Bicarbonate Alkalinity	207	2.00	mg/L	200		104	85-115			
Duplicate (EB62205-DUP1)	Sour	ce: 6B1600	4-01	Prepared	& Analyze	ed: 02/23/	06		<u></u>	
Total Alkalinity	273	2.00	mg/L		278			1.81	20	
Reference (EB62205-SRM1)				Prepared	& Analyzo	ed; 02/23/	06			
Total Alkalinity	97.0		mg/L	100		97.0	90-110			
Batch EB62405 - General Prepar	ation (WetChem)									
Blank (ER62405-BLK1)			-	Prepared:	02/23/06	Analyzed	1: 02/24/06			
Total Dissolved Solids	ND	5.00	mg/L							
Duplicate (EB62405-DUP1)	Sour	ce: 6B1700	14-01	Prepared:	02/23/06	Analyzed	1: 02/24/06			
Total Dissolved Solids	178	5.00	mg/L	(1988)	178			0.00	5	
tch EB62811 - General Prepar	ation (WetChem)									
Blank (EB6281 I-BLK1)				Prepared	& Analyz	ed: 02/28/	06			
Sulfate	ND	0.500	mg/l.							
Chloride	ND	0.500	n							
LCS (EB62811-BSI)	····	,		Prepared	& Analyz	ed: 02/28/	06			_
('hloride	8.76	0.500	mg/L	10.0		87.6	80-120			
Sulfate	8.40	0,500	•	10.0		84.0	80-120			

Project: EME Jct. N-5

Project Number: Nonc Given Project Manager: Kristin Farris-Pope Fax: (505) 397-1471

Reported: 03/02/06 17:06

#### 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 EB62811 - General Preparatio	n (WetChen	1)								
Calibration Check (EB62811-CCV1)				Prepared	& Дпајула	ed: 02/28/	06			
Sulfate	9.25		ing/L	10.0		92.5	80-120			
Chloride	9,36		11	0.01		93.6	80-120			
Duplicate (EB62811-DUPI)	So	urce: 6B2300	1-01	Prepared	د Analyze	cd: 02/28/	06			
Chloride	774()	100	mg/i.		7510			3.02	20	
Sulfate	956	100	н		889			7.26	20	

Project: EME Jet. N-5
Project Number: None Given

Fax: (505) 397-1471

Reported: 03/02/06 17:06

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 EC60207 - 6010B/No Digestion		· · · · · · · · · · · · · · · · · · ·		<b></b>						
Blank (EC60207-BLK1)				Prepared	& Analyze	d: 03/02/	06			
Calcium	ND	0.0100	mg/L						,	
Magnesium	ND	0.00100	II.							
Potassium	N̈́D	0.0500	Ħ							
Sodium	ND	0.0100								
Calibration Check (EC60207-CCV1)				Prepared	& Analyze	d: 03/02/	06			
Calcium	2.15		nıg/l.	2.00	•••	108	85-115		• :	
Magnesium	2.20		ы	2.00		110	85-115			·
Potassium	1,72		π	2.00		86.0	85-115			
Sodium	1.87		u	2.00		93.5	85-115			
Duplicate (EC60207-DUP1)	So	urce: 6B1700	4-01	Prepared	& Analyze	d: 03/02/	06			
Calcium	106	0.500	mg/L		102			3.85	20	
Magnesium	20.6	0.0100	u		22.2			7.48	20	
Potassium	15.4	0.500	U		15.8			2.56	20	
Sodium	91.5	0.500	v		88.3			3,56	20	

Project: EME Jct. N-5 Project Number: None Given Project Manager: Kristin Farris-Pope Fax: (505) 397-1471 Reported:

03/02/06 17:06

#### Notes and Definitions

The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect. S-04

Analyte DETECTED DET

Analyte NOT DETECTED at or above the reporting limit ND

Not Reported NR

Sample results reported on a dry weight basis dry

Relative Percent Difference RPD

Laboratory Control Spike LCS

Matrix Spike MS

Dup Duplicate

Report Approved By:

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

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

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

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

Lea County

Project Loc: Project #:

Relinquished by:

Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Name: EME Jct. N-5

Phone: 432-563-1880 Fax: 432-563-1713

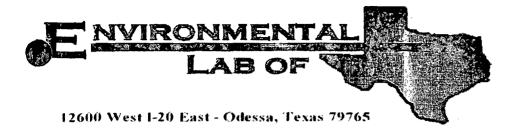
12600 West I-20 East Odessa, Texas 79765

kpriceswd@valornet.com Company Name RICE Operating Company Company Address: 122 W. Taylor Street Project Manager: Kristin Farris Pope

члејуzе For 집 TOTAL: Fax No: (505) 397-1471 Sampler Signature: Rozanne Johnson (505) 631-9310 city/state/Zip: Hobbs, New Mexico 88240 Email: rozanne@valomet.com Telephone No: (505) 393-9174

TAT brebnate (Pre-Schedule) TAT HEUR Total Dissolved Sosta M.A.O. Custody Seals: Containers Temperature Upon Receipt )Dž Sample Containers Intact Laboratory Comments BTEX 8021B/5030 Labels on container? 2 Metals: As Ag Ba Cd Cr Pb Hg Se Anions (Ct. 5O4, CO3, HCO3) Cations (Ca. Mg. Na. N) TIMB 4:07 8001 2001 M2108 1,814;H97 Other (specify): PLEASE Email RESULTS TO: kpriceswd@valornet.com & mfranks@riceswd.com 2/23/06 обриу with. Other (Specify) 크역CIH setiu f (t) empN 'OS'H HOTN HCI (2) 40 mi glass vials <sup>c</sup>ONH 921 ŝ No. of Containers 9:40 DakimeS amiT 2/21/2008 Received by: Date Sampled 00:7 Time 2/25/06 FIELD CODE Monitor Well #1 Special Instructions: ₹

Environmental	Labofi	exas			
Variance / Corrective Action	i Report	-58	imple Lo	j-lir	
0.04.00	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·		~	
Client: <u>MCD DY</u>	•				•
Date/Time: 2/23/01/9:45					
Order #: 6823004					
Initials:					•
Sample Recei	nt Chackli	ict ·	_		
Temperature of container/cooler?	Pt Checkii Yes	No 1	-2.5	C	
Shipping container/cooler in good condition?	इद्ये	No	2,3		
Custody Seals intact on shipping container/cooler?	Yeş	No	Not preser	<u>!</u>	
Custody Seals intact on sample bottles?	(E)	No	Not preser		
Chain of custody present?	1 1/25	No	1100 610321		
Sample Instructions complete on Chain of Custody?	YES	No I			
Chain of Custody signed when relinquished and received?	YES	No		<del></del>	
Chain of custody agrees with sample label(s)	¥es	No			
Container labels legible and intact?	Yes	No			
Sample Matrix and properties same as on chain of custody?	Yes	No		·	•
Samples in procer container/bottle?	\(\int_{\inttitetant\int_{\inttileftinteta}\int_{\int_{\inttileftinteta\int_{\inttileftinteta\int_{\inttileftinteta\int_{\inttileftinteta\int_{\inttileftinteta\int_{\inttileftinteta\inttileftinteta\inttileftinteta\inttileftinteta\inttileftinteta\inttileftinteta\inttileftinteta\inttileftinteta\inttileftinteta\inttileftinteta\inttileftinteta\inttileftinteta\inttileftinteta\inttileftinteta\inttileftinteta\inttileftinteta\inttileftinteta\intileftinteta\intileftinteta\inttileftinteta\intileftileftileftileftileftileftileftilef	No			
Samples properly preserved?	1 (3)	No			
Sample bottles intact?	\ \(\mathrea{\circ}{\text{3}}\)is	No		_ <del>i</del>	
servations documented on Chain of Custody?	YEE	No		<del></del>	
Centainers documented on Chain of Custody?		No		!	
Sufficient sample amount for indicated test?		No	<del>-</del>		
All samples received within sufficient hold time?	<b>163</b>	No			
VOC samples have zero headspace?	<u> </u>	No	Not Applicat	<del></del>	
ACO SEMERE HERE THE HOSPINGS	2.83	140	I NOT ABOIICA	JIE	
Other observations:				· · · · · · · · · · · · · · · · · · ·	
	1				:
Variance Doc					
Contact Person: - Date/Time:			Contacted I	ov:	
Regarding:					
					•
	****				
A 17		<del> </del>			
Corrective Action Taken:					
	· · ·		·		
			<del></del>		
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				<u> </u>	



## **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: Lea County

Lab Order Number: 6E18017

Report Date: 05/25/06

Project: EME Jct. N-5
Project Number: None Given

Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

Reported: 05/25/06 16:12

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Monitor Well #1	6E18017-01	Water	05/17/06 12:00	05/18/06 12:00

Project: EME Jct. N-5

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

Fax: (505) 397-1471

**Reported:** 05/25/06 16:12

#### Organics by GC

#### **Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Monitor Well #1 (6E18017-01) Water									
Benzene	ND	0.00100	mg/L	1	EE62101	05/21/06	05/22/06	EPA 8021B	
Toluene	J [0.000659]	0.00100	**	"	n	"	**	•	
Ethylbenzene	0.00126	0.00100	**	**	"	"	**	11	
Xylene (p/m)	0.00215	0.00100	**	11	•	"	**	11	
Xylene (0)	0.00116	0.00100	H	n	15	**	u	55	
Surrogate: a.a.a-Trifluorotoluene		112 %	80-12	0	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		89.0 %	80-12	0	,,	"	"	"	

Project: EME Jct. N-5

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

Fax: (505) 397-1471

Reported: 05/25/06 16:12

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Monitor Well #1 (6E18017-01) Water									
Total Alkalinity	281	2.00	mg/L	1	EE62220	05/22/06	05/22/06	EPA 310.1M	
Chloride	1350	25.0	**	50	EE62205	05/22/06	05/22/06	EPA 300.0	
Total Dissolved Solids	2780	5.00	н	l	EE61919	05/18/06	05/18/06	EPA 160.1	
Sulfate	165	25.0	н	50	EE62205	05/22/06	05/22/06	EPA 300.0	

Project: EME Jct. N-5

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

Fax: (505) 397-1471

**Reported:** 05/25/06 16:12

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

Analyte  Monitor Well #1 (6E18017-01) Water	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	320	0.500	mg/L	50	EE61926	05/19/06	05/19/06	EPA 6010B	
Magnesium	100	0.0500		**	"	IT	,,	16	
Potassium	7.00	0.500	**	10		n	"	11	
Sodium	416	1.00	**	100	"	w	,,	•	

Project: EME Jct. N-5

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

Fax: (505) 397-1471

**Reported:** 05/25/06 16:12

#### 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 EE62101 - EPA 5030C (GC)										
Blank (EE62101-BLK1)				Prepared &	: Analyzed:	05/21/06				
Benzene	ND	0.00100	mg/L							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00100	Ħ							
Xylene (o)	ND	0.00100	"							
Surrogate: a,a,a-Trifluorotoluene	42.9		ug/l	40.0		107	80-120			
Surrogate: 4-Bromofluorobenzene	32.2		13	40.0		80.5	80-120			
LCS (EE62101-BS1)				Prepared &	: Analyzed:	05/21/06				
Benzene	0.0415	0.00100	mg/L	0.0500		83.0	80-120			
Toluene	0.0421	0.00100	11	0.0500		84.2	80-120			
Ethylbenzene	0.0463	0.00100	н	0.0500		92.6	80-120			
Xylene (p/m)	0.102	0.00100	'n	0.100		102	80-120			
Xylene (o)	0.0504	0.00100	••	0.0500		101	80-120			
Surrogate: a,a,a-Trifluorotoluene	42.7		ug/l	40.0		107	80-120			
Surrogate: 4-Bromofluorobenzene	36.2		n	40.0		90.5	80-120			
ibration Check (EE62101-CCVI)				Prepared &	: Analyzed:	05/21/06				
Benzene	44.3		ug/l	50.0		88.6	80-120			
Toluene	44.3		"	50.0		88.6	80-120			
Ethylbenzene	55.3		**	50.0		111	80-120			
Xylene (p/m)	99.1		**	100		99.1	80-120			
Xylene (o)	49.1		"	50.0		98.2	80-120			
Surrogate: a,a,a-Trifluorotoluene	44.6		"	40.0		112	80-120			
Surrogate: 4-Bromofluorobenzene	34.8		"	40.0		87.0	80-120			
Matrix Spike (EE62101-MS1)	Sou	rce: 6E17005-	01	Prepared: 0	05/21/06 A	nalyzed: 05	/22/06			
Benzene	0.0444	0.00100	mg/L	0.0500	ND	88.8	80-120			
Toluene	0.0454	0.00100	**	0.0500	ND	90.8	80-120			
Ethylbenzene	0.0488	0.00100	"	0.0500	ND	97.6	80-120			
Xylene (p/m)	0.108	0.00100	**	0.100	ND	108	80-120			
Xylene (o)	0.0531	0.00100	"	0.0500	ND	106	80-120			
Surrogate: a,a,a-Trifluorotoluene	45.5		ug/l	40.0		114	80-120			
Surrogate: 4-Bromofluorohenzene	36.9		"	40.0		92.2	80-120			

Surrogate: 4-Bromofluorobenzene

Project: EME Jct. N-5

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

Fax: (505) 397-1471

**Reported:** 05/25/06 16:12

#### 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 EE62101 - EPA 5030C (GC)										
Matrix Spike Dup (EE62101-MSD1)	Sour	ce: 6E17005-	01	Prepared: 0	5/21/06 Ai	nalyzed: 05	5/22/06			
Benzene	0.0439	0.00100	mg/L	0.0500	ND	87.8	80-120	1.13	20	
Toluene	0.0447	0.00100	"	0.0500	ND	89.4	80-120	1.55	20	
Ethylbenzene	0.0481	0.00100	"	0.0500	ND	96.2	80-120	1.44	20	
Xylene (p/m)	0.107	0.00100	**	0.100	ND	107	80-120	0.930	20	
Xylene (o)	0.0521	0.00100	**	0.0500	ND	104	80-120	1.90	20	
Surrogate: a,a,a-Trifluorotoluene	46.4		ug/l	40.0		116	80-120			

40.0

83.5

80-120

33.4

Project: EME Jet. N-5

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

Fax: (505) 397-1471

Reported: 05/25/06 16:12

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

#### **Environmental Lab of Texas**

	p. 1	Reporting	11.5	Spike	Source	Nanc	%REC	222	RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EE61919 - Filtration Preparation			<u></u>							
Blank (EE61919-BLK1)		·		Prepared &	2 Analyzed	05/18/06				
Total Dissolved Solids	ND	5.00	mg/L							
Duplicate (EE61919-DUP1)	Sou	rce: 6E18012-	-01	Prepared &	k Analyzed:	05/18/06				
Total Dissolved Solids	1420	5.00	mg/L		1470			3.46	5	
Batch EE62205 - General Preparation (V	VetChem)									
Blank (EE62205-BLK1)				Prepared &	ż Analyzed:	05/22/06				
Sulfate	ND	0.500	mg/L	1						
Chloride	ND	0.500	"							
LCS (EE62205-BS1)				Prepared &	k Analyzed:	05/22/06				
Sulfate	8.20		mg/L	10.0		82.0	80-120			
Chloride	10.1		11	10.0		101	80-120			
Calibration Check (EE62205-CCV1)				Prepared &	ż Analyzed:	05/22/06				
Chloride	10.1		mg/L	10.0		101	80-120			
Sulfate	9.63		n	10.0		96.3	80-120			
plicate (EE62205-DUP1)	Sou	rce: 6E18012-	-01	Prepared &	k Analyzed:	05/22/06				
Sulfate	307	10.0	mg/L		304			0.982	20	
Chloride	343	10.0	11		344			0.291	20	
Duplicate (EE62205-DUP2)	Sou	rce: 6E18015-	-01	Prepared &	h Analyzed:	05/22/06				
Chloride	415	10.0	mg/L		412		,	0.726	20	
Sulfate	50.3	10.0	"		50.6			0.595	20	

Project: EME Jct. N-5

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

Fax: (505) 397-1471

**Reported:** 05/25/06 16:12

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

Environmental Lab of Texas
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		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EE62205 - General Preparation	ı (WetChem)									
Matrix Spike (EE62205-MS1)	Source	ce: 6E18012-	01	Prepared &	k Analyzed:	05/22/06				
Chloride	565	10.0	mg/L	200	344	110	80-120			
Sulfate	465	10.0	"	200	304	80.5	80-120			
Matrix Spike (EE62205-MS2)	Source	ce: 6E18015-	01	Prepared &	& Analyzed:	05/22/06				
Chloride	654	10.0	mg/L	200	412	121	80-120	,		S-0
Sulfate	200	10.0	**	200	50.6	74.7	80-120			S-0
Batch EE62220 - General Preparation										
Blank (EE62220-RLK1)				Prepared 6	Analyzed	05/22/06				<del></del>
Blank (EE62220-BLK1) Total Alkalinity	ND	2.00	mg/L	Prepared &	& Analyzed:	05/22/06				
·	ND	2.00	mg/L	· · · · · · · · · · · · · · · · · · ·	è Analyzed:					
Total Alkalinity	ND 214	2.00	mg/L mg/L	· · · · · · · · · · · · · · · · · · ·	- · · · · · · · · · · · · · · · · · · ·		85-115			
otal Alkalinity  CS (EE62220-BS1)	214		mg/L	Prepared &	- · · · · · · · · · · · · · · · · · · ·	05/22/06	85-115			
Cotal Alkalinity  CCS (EE62220-BS1)  Discarbonate Alkalinity	214	2.00	mg/L	Prepared &	k Analyzed:	05/22/06	85-115	0.358	20	
otal Alkalinity  CS (EE62220-BS1)  licarbonate Alkalinity  Duplicate (EE62220-DUP1)	214 Source	2.00 ce: 6E18012-	mg/L -01	Prepared & 200 Prepared &	ጀ Analyzed: ጀ Analyzed:	05/22/06 107 05/22/06	85-115	0.358	20	

Project: EME Jct. N-5

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

Fax: (505) 397-1471

**Reported:** 05/25/06 16:12

#### 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 EE61926 - 6010B/No Digestion										
Blank (EE61926-BLK1)			· · · · ·	Prepared &	. Analyzed:	05/19/06				
Calcium	ND	0.0100	mg/L							
Magnesium	ND	0.00100	"							
Potassium	ND	0.0500	**							
Sodium	ND	0.0100	"							
Calibration Check (EE61926-CCV1)				Prepared &	z Analyzed:	05/19/06				
Calcium	2.30		mg/L	2.00		115	85-115		· · · · · · · · · · · · · · · · · · ·	
Magnesium	2.21		H	2.00		110	85-115			
Potassium	1.80		u	2.00		90.0	85-115			
Sodium	1.81		u	2.00		90.5	85-115			
Duplicate (EE61926-DUP1)	Sou	rce: 6E18012-	01	Prepared &	z Analyzed:	05/19/06				
Calcium	111	0.500	mg/L		111			0.00	20	
Magnesium	58.3	0.0100	н		56.5			3.14	20	
Potassium	12.2	0.500	"		12.9			5.58	20	
Sodium	266	0.500	n		271			1.86	20	

Project EME Jct. N-5
Project Number: None Given
Project Manager: Kristin Farris-Pope

Reported: 05/25/06 16:12

Fax: (505) 397-1471

#### **Notes and Definitions**

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

	Kaland KJulis		
Report Approved By:	Karan Ciro	Date:	5/25/2006

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

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

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

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

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

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

Lea County Project Name: EME Jct. N-5 Project Lac: Project #: # 0 Fax No: (505) 397-1471 kpope@riceswd.com Sampler Signature: Rozanne Johnson (505) 631-9310 city/State/Zip: Hobbs, New Mexico 88240 company Name RICE Operating Company Company Address: 122 W. Taylor Street Project Manager: Kristin Farris Pope Telephone No: (505) 393-9174

TOTAL:

Email: rozanne@valornet.com

		//			_	reser	Preservative		• •	Matrix	폱	9	_	_	9		_	_	_		_		_		ı
LAB # (ato use only):		balqms2 eteQ	Time Sampled	No. of Confainers	HMÓ³	HOsh	H <sub>2</sub> SO <sub>4</sub>	Mone (1) 1 Liter HDPE	Other ( Specify) Water	egbui2	Other (enecity):	1.b.H: 418'1 8012W 1002 100	Caffors (Ca, Mg. Na, K)	Anions (CL SOA, CO3, HCO3)	Metals: As Ag Ba Cd Cr Pb Hg S	satiletoV	Semivolatiles	BTEX 8021B/5030	RCI N.O.RJM.	ebilo2 bevloasiO latoT			John Parks and Tat 11311G	elubədə Sene TAT HZUR TAT busbrist?	
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Special Instructions: PLEASE Email RESULTS TO: kpope@riceswd.com & mfranks@riceswd.com	RESULTS	TO: kpope@	jriceswd.cc	Ε. 20	Ę	ank	<b>®</b>	ices	.wd	200	_			Samp Label Custo	Sample Containers Intact?  Labels on container?  Custody Seals: Containers / Cooler Temperature Upon Receipt:	ontair conta eals:	on Solar	Intact staine	or Sign	[ 이렇]~		ZC	z _ 2	1000	1 1 1 1 1 1 1 1 1 1 1
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Relinquished by: Date  Mind A My 2217 STIDE	Date Time (17.00)	Regulad by ELOT.	100 Je							Date - 18-4		Time													

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

IET Rice Operating Co.	
ate/Time: 05-18-04 @ 1200	
rder#: 6F18017	
itials: JMM	
	ceipt Checklist
Imperature of container/cooler?	(Yes) No 1 1.0 C
hipping container/cooler in good condition?	(res) No
istody Seals intact on shipping container/cooler?	Yes No Not present
islody Seals intact on sample bottles?	(es) No Not present
nain of custody present?	(FES) NO
imple Instructions complete on Chain of Custody?	(YES) NO
rain of Custody signed when relinquished and received?	
rain of custody agrees with sample label(s)	(Yes) No
ontainer labels legible and intact?	(Tes) No
ample Matrix and properties same as on chain of custody	y? (Yes) No
smales in proper container/bottle?	Mess No
amples properly preserved?	YES No
ample bottles intact?	Yes) No
reservations documented on Chain of Custody?	(Yes) No
ontainers documented on Chain of Custody?	(₹ê\$) No
unicient sample amount for indicated test?	(Yes) No
I samples received within sufficient hold time?	(Yes) No
OC spoles have zero headspace?	Yes No Not Applicable
ther observations:	
ontact Person: Date/Time: egarding:	Documentation:Contacted by:
orrective Action Taken:	



## **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-Sec5N, Lea Co., NM

Lab Order Number: 6H25010

Report Date: 09/05/06

Project: EME Jct. N-5

Project Number: None Given

Project Manager: Kristin Farris-Pope

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Monitor Well #1	6H25010-01	Water	08/21/06 14:55	08-25-2006 15:22
Monitor Well #2	6H25010-02	Water	08/21/06 13:20	08-25-2006 15:22
Monitor Well #3	6H25010-03	Water	08/21/06 11:40	08-25-2006 15:22

Fax: (505) 397-1471

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	Notes
Monitor Well #1 (6H25010-01) Water				·					
Benzene	ND	0.00100	mg/L	i	EH62520	08/25/06	08/28/06	EPA 8021B	
Toluene	J [0.000678]	0.00100	n .	n		n	**	"	
Ethylbenzene	0.00149	0.00100	11	"	*	H	Ħ	"	
Xylene (p/m)	0.00234	0.00100	**	41	rr ·	"	11	•	
Xylene (0)	0.00174	0.00100	н	"	"	"	н		
Surrogate: a,a,a-Trifluorotoluene		106 %	80-12	20	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		96.0 %	80-12	20	"	n	n	n	
Monitor Well #2 (6H25010-02) Water									
Benzene	ND	0.00100	mg/L	1	EH62520	08/25/06	08/28/06	EPA 8021B	
Toluene	ND	0.00100	n	•	н	u	**	и	
Ethylbenzene	ND	0.00100	**	n	51	"	"	11	
Xylene (p/m)	ND	0.00100	"	**	tt	n	n	**	
Xylene (o)	ND	0.00100	n	"	н	•	"	n	
Surrogate: a,a,a-Trifluorotoluene		104 %	80-12	20	n	"	"	"	
rogate: 4-Bromofluorobenzene		87.0 %	80-12	20	n	"	n	"	
Monitor Well #3 (6H25010-03) Water									
Benzene	ND	0.00100	mg/L	1	EH62520	08/25/06	08/28/06	EPA 8021B	
Toluene	ND	0.00100	"	"	*	"	"	н	
Ethylbenzene	ND	0.00100	н	"	"	**	11	"	
Xylene (p/m)	ND	0.00100	11	"	"	н .	н	н	
Xylene (0)	ND	0.00100	"	"	н	n	n	н	
Surrogate: a,a,a-Trifluorotoluene		98.5 %	80-12	20	"	"	,,	"	
Surrogate: 4-Bromofluorobenzene		81.0 %	80-12	20	"	n	"	n	

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

								<del></del>	
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Not
Monitor Well #1 (6H25010-01) Water									
Total Alkalinity	302	2.00	mg/L	l	EH63106	08/31/06	08/31/06	EPA 310.1M	
Chloride	1070	25.0	**	50	EH63019	08/28/06	08/28/06	EPA 300.0	
Total Dissolved Solids	2580	10.0	"	1	EH62916	08/25/06	08/29/06	EPA 160.1	
Sulfate	122	25.0	"	50	EH63019	08/28/06	08/28/06	EPA 300.0	
Monitor Well #2 (6H25010-02) Water									
Total Alkalinity	284	2.00	mg/L	1	EH63106	08/31/06	08/31/06	EPA 310.1M	
Chloride	1860	25.0	•	50	EH63019	08/28/06	08/28/06	EPA 300.0	
Total Dissolved Solids	3800	10.0	#	1	EH62916	08/25/06	08/29/06	EPA 160.1	
Sulfate	132	25.0	"	50	EH63019	08/28/06	08/28/06	EPA 300.0	
Monitor Well #3 (6H25010-03) Water									
Total Alkalinity	320	2.00	mg/L	1	EH63106	08/31/06	08/31/06	EPA 310.1M	
Chloride	553	10.0	n	20	EH63019	08/28/06	08/28/06	EPA 300.0	
Total Dissolved Solids	1630	10.0	n	1	ЕН62916	08/25/06	08/29/06	EPA 160.1	
fate	128	10.0	"	20	EH63019	08/28/06	08/28/06	EPA 300.0	

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

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
Monitor Well #1 (6H25010-01) Water				·····					
Calcium	251	4.05	mg/L	50	EH62802	08/28/06	08/28/06	EPA 6010B	
Magnesium	77.6	1.80	**		rt	**	**	"	
Potassium	7.76	0.600	"	10	15	11	"	**	
Sodium	409	2.15	n	50	н	**	"	"	
Monitor Well #2 (6H25010-02) Water									
Calcium	510	4.05	mg/L	50	EH62802	08/28/06	08/28/06	EPA 6010B	
Magnesium	132	1.80	"	"	n	It	"		
Potassium	9.56	0.600		10		n	rt	и	
Sodium	530	2.15	11	50	11	11	**	"	
Monitor Well #3 (6H25010-03) Water									
Calcium	182	4.05	mg/L	50	EH62802	08/28/06	08/28/06	EPA 6010B	
Magnesium	49.1	0.360	и	10	**	11	Ħ	"	
Potassium	5.56	0.600		**	"	н	,,	**	
tium	233	2.15	"	50	**	"	11	Ħ	

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 EH62520 - EPA 5030C (GC)										
Blank (EH62520-BLK1)				Prepared: 0	8/25/06 A	nalyzed: 08	3/28/06			
Benzene	ND	0.00100	mg/L							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	n							
Xylene (p/m)	ND	0.00100	"							
Xylene (o)	ND	0.00100	"							
Surrogate: a,a,a-Trifluorotoluene	42.0		ug/l	40.0		105	80-120			
Surrogate: 4-Bromofluorobenzene	43.1		"	40.0		108	80-120			
LCS (EH62520-BS1)				Prepared: 0	8/25/06 A	nalyzed: 08	3/28/06			
Benzene	0.0508	0.00100	mg/L	0.0500		102	80-120			
Toluene	0.0533	0.00100		0.0500		107	80-120			
Ethylbenzene	0.0539	0.00100	"	0.0500		108	80-120			
Xylene (p/m)	0.120	0.00100	"	0.100		120	80-120			
Xylene (o)	0.0559	0.00100	"	0.0500		112	80-120			
Surrogate: a,a,a-Trifluorotoluene	43.0		ug/l	40.0		108	80-120			
Surrogate: 4-Bromofluorobenzene	46.7		"	40.0		117	80-120			
libration Check (EH62520-CCV1)				Prepared &	Analyzed:	08/25/06				
Benzene	45.2		ug/l	50.0		90.4	80-120			
Toluene	48.4		**	50.0		96.8	80-120			
Ethylbenzene	52.4		"	50.0		105	80-120			
Xylene (p/m)	109		"	100		109	80-120			
Xylene (o)	54.1		н	50.0		108	80-120			
Surrogate: a,a,a-Trifluorotoluene	41.9		"	40.0		105	80-120			
Surrogate: 4-Bromofluorobenzene	38.5		"	40.0		96.2	80-120			
Matrix Spike (EH62520-MS1)	Sou	rce: 6H23008-	01	Prepared &	Analyzed:	08/25/06				
Benzene	0.0517	0.00100	mg/L	0.0500	ND	103	80-120			
Toluene	0.0561	0.00100	"	0.0500	ND	112	80-120			
Ethylbenzene	0.0509	0.00100	**	0.0500	ND	102	80-120			
Xylene (p/m)	0.118	0.00100	**	0.100	ND	118	80-120			
Xylene (o)	0.0546	0.00100	"	0.0500	ND	109	80-120			
Surrogate: a,a,a-Trifluorotoluene	47.5		ug/l	40.0		119	80-120			
Surrogate: 4-Bromofluorobenzene	47.0		"	40.0		118	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

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EH62520 - EPA 5030C (GC)										·
Matrix Spike Dup (EH62520-MSD1)	Sour	rce: 6H23008-	-01	Prepared &	Analyzed:	08/25/06				
Benzene	0.0542	0.00100	mg/L	0.0500	ND	108	80-120	4.74	20	
Toluene	0.0563	0.00100	"	0.0500	ND	113	80-120	0.889	20	
Ethylbenzene	0.0539	0.00100	**	0.0500	ND	108	80-120	5.71	20	
Xylene (p/m)	0.106	0.00100	n	0.100	ND	106	80-120	10.7	20	
Xylene (o)	0.0525	0.00100	**	0.0500	ND	105	80-120	3.74	20	
Surrogate: a,a,a-Trifluorotoluene	45.9		ug/l	40.0		115	80-120			
Surrogate: 4-Bromofluorobenzene	45.3		<i>n</i> .	40.0		113	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
	1000ii			Dover	resuit	70REC	Limits	IG D	- Emili	110103
Batch EH62916 - Filtration Preparation		-								
Blank (EH62916-BLK1)				Prepared: 0	08/28/06 Ai	nalyzed: 08	/29/06			
Total Dissolved Solids	ND	10.0	mg/L							
Duplicate (EH62916-DUP1)	Sour	ce: 6H25010-	-01	Prepared: 0	08/28/06 Ai	nalyzed: 08	/29/06			
Total Dissolved Solids	2480	10.0	mg/L		2580			3.95	5	
Duplicate (EH62916-DUP2)	Sour	ce: 6H25013	-01	Prepared: 0	)8/28/06 Ar	nalyzed: 08	/29/06			
Total Dissolved Solids	1350	10.0	mg/L		1400			3.64	5	
Batch EH63019 - General Preparation (W	etChem)									
Blank (EH63019-BLK1)				Prepared &	: Analyzed:	08/28/06				
Sulfate	ND	0.500	mg/L							
Chloride	ND	0.500	"							
LCS (EH63019-BS1)				Prepared &	: Analyzed:	08/28/06				
Chloride	10.2	0,500	mg/L	10.0		102	80-120			
Sulfate	10.1	0.500	**	10.0		101	80-120			
Calibration Check (EH63019-CCV1)				Prepared &	: Analyzed:	08/28/06				
oride	9.87		mg/L	10.0		98.7	80-120			
Sulfate	12.0			10.0		120	80-120			
Duplicate (EH63019-DUP1)	Sour	ce: 6H24003-	-01	Prepared &	: Analyzed:	08/28/06				
Chloride	94.7	5.00	mg/L		102			7.42	20	
Sulfate	225	5.00	**		227			0.885	20	
Duplicate (EH63019-DUP2)	Sour	ce: 6H25013-	01	Prepared &	: Analyzed:	08/28/06				
Chloride	420	10.0	mg/L		418			0.477	20	
Sulfate	40.5	10.0	"		40.9			0.983	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 - Quality Control Environmental Lab of Texas

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EH63019 - General Preparatio	n (WetChem)									
Matrix Spike (EH63019-MS1)	Sour	ce: 6H24003-	01	Prepared &	: Analyzed:	08/28/06				
Sulfate	338	5.00	mg/L	100	227	111	75-125			
Chloride	204	5.00	**	100	102	102	80-120			
Matrix Spike (EH63019-MS2)	Sour	ce: 6H25013-	01	Prepared &	: Analyzed:	08/28/06				
Sulfate	239	10.0	mg/L	200	40.9	99.0	75-125			
Chloride	645	10.0	n	200	418	114	80-120			
Ratch FU63106 - Canaral Pronanctic	n (WatCham)									
Batch EH63106 - General Preparatio Blank (EH63106-BLK1)	n (WetChem)		<del></del> ,,	Prepared &	: Analyzed:	08/31/06				
<del></del>	n (WetChem)	2.00	mg/L	Prepared &	Analyzed:	08/31/06				
Blank (EH63106-BLK1)		2.00	mg/L		Analyzed:					
Blank (EH63106-BLK1) Total Alkalinity LCS (EH63106-BS1)		2.00	mg/L		<del></del>		85-115			
Blank (EH63106-BLK1) Total Alkalinity	ND 190		mg/L	Prepared &	Analyzed:	08/31/06 95.0	85-115			
Blank (EH63106-BLK1) Fotal Alkalinity LCS (EH63106-BS1) Bicarbonate Alkalinity Duplicate (EH63106-DUP1)	ND 190	2.00	mg/L	Prepared &	Analyzed:	08/31/06 95.0	85-115	3.92	20	
Blank (EH63106-BLK1) Fotal Alkalinity LCS (EH63106-BS1) Bicarbonate Alkalinity	ND 190 Sour	2.00 ce: 6H24003-	mg/L 01	Prepared &	Analyzed: Analyzed: 156	08/31/06 95.0 08/31/06	85-115	3.92	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**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EH62802 - 6010B/No Digestion										
Blank (EH62802-BLK1)				Prepared &	Analyzed:	08/28/06				
Calcium	ND	0.0810	mg/L							
Magnesium	ND	0.0360	**							
Potassium	ND	0.0600	"							
Sodium	ND	0.0430	"							
Calibration Check (EH62802-CCV1)				Prepared &	Analyzed:	08/28/06				
Calcium	1.97		mg/L	2.00		98.5	85-115			
Magnesium	2.13		**	2.00		106	85-115			
Potassium	1.74		"	2.00		87.0	85-115			
Sodium	1.84		"	2.00		92.0	85-115			
Duplicate (EH62802-DUP1)	Sou	rce: 6H25010-	01	Prepared &	Analyzed:	08/28/06				
Calcium	267	4.05	mg/L		251			6.18	20	
Magnesium	81.9	1.80	H		77.6			5.39	20	
Potassium	7.20	0.600	"		7.76			7.49	20	
Sodium	396	2.15	"		409			3.23	20	

Dup

Duplicate

Project Number: EME Jct. N-5
Project Number: None Given
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

### **Notes and Definitions**

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

LCS Laboratory Control Spike

MS Matrix Spike

	Kaland K Julias		
Report Approved By:	Raware	Date:	9/5/2006

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

0

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

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

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

# Environmental Lab of Texas 12600 (17) 1-20 East Odessa, Texas 79765

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

kpope@riceswd.com

Project Manager: Kristin Farris Pope

company Name RICE Operating Company

city/state/Zip: Hobbs, New Mexico 88240 Company Address: 122 W. Taylor Street

Telephone No: (505) 393-9174

Fax No: (505) 397-1471

PO Number: Project Loc:

T20S-R37E-Sec5N, Lea County NM

EME Junction N-5

Project Number:

Project Name:

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Sampler Signature: Rozanne Johnson (505) 631-9310

× × sbilos baylossiQ lato BTEX 8021B/5030 × Analyze letals: As Ag Ba Cd Cr Pb Hg Se TCLP rujous (Ci' 204' CO3' HCO3) (N. su .gM .so) enoise. PH 418.1 8015M 1005 1006 Office (specify): Sindge × TOTELY Other (Specify) HOUSE (1) I FIRST HOPE 2054 HOPN HCI (S) 40 ml Blass vials 2 2 HMO ო (1) No. of Containers 13:20 11:40 14:55 Dalqme2 amiT 8/21/2006 8/21/2006 8/21/2006 Date Sampled Email: rozanne@valornet.com FIELD CODE 03 | Monitor Well #3 -O Monitor Well #1 C2 | Monitor Well #2 LAB # (lab use only)

TAT brebnet2

alubado2-ang) TAT HSU9

Custody Seals: Containers / Coole Sample Containers Intact? remperature Upon Receipt Labels on container?

PLEASE Email RESULTS TO: kpope@riceswd.com; mfranks@riceswd.com

rozanne@valornet.com

Special Instructions:

Laboratory Comments

Time

Time 2-25-04

1522

82.00

James Johnson lecenhed by ELO

8-22-06

Refinguished by

Received by:

Time 13:10

Date

8-35-06

13:11

Date

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### Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

ent:	Rice Operating				
Date/ Time:	08-25-06 @ 1522				
Lab ID#:	6H25010				
Initials:	JMM				
	Sample Receipt	Chacklist		·	
	Sample Receipt	CHECKHSE		Client Init	iala
#1 Tempera	ture of container/ cooler?	(Yes)	No	1.0 °C	1015
<del></del>	container in good condition?	Yes	No	<del>                                     </del>	
	Seals intact on shipping container/ cooler?	Tres	No	Not Present	
<del></del>	Seals intact on sample bottles/ container?	Tes	No	Not Present	-
	Custody present?	Tres	No	Hotiresen	
	nstructions complete of Chain of Custody?	Yes	No		$\dashv$
<del></del>	Custody signed when relinquished/ received?	Tres	No		
	Custody agrees with sample label(s)?	(Yes)	No	ID written on Cont / Lid	
	r label(s) legible and intact?	(Yes)	No	Not Applicable	
	matrix/ properties agree with Chain of Custody?	(Yes)	No	1401 Applicable	
<del></del>	ers supplied by ELOT?	(Yes)	No		$\dashv$
	s in proper container/ bottle?	Yes	No	See Below	
<del></del>	s properly preserved?	Yes	No	See Below	
	bottles intact?	(Yes	No	330 55.01	_
	ations documented on Chain of Custody?	(Yes)	No		
	ers documented on Chain of Custody?	(Yes)	No		
#17 Sufficien	nt sample amount for indicated test(s)?	(Yes)	No	See Below	
	ples received within sufficient hold time?	(Yes)	No	See Below	
<del></del>	mples have zero headspace?	Yes	No	Not Applicable	-
				, total paradition	
	Variance Docu	mentation			
Contact:	Contacted by:			Date/ Time:	
Regarding:					
Corrective Ac	tion Taken:				
		<del></del>			
		<u> </u>			
		<del></del>		·	
Ø6 = =1. =11 14 − 1	Alaba Caratashada masii fara				
Check all that		مسمد حد سیم	-الدائدين استست		
	Client understands and would			·	
	Cooling process had begun	sn <b>oniy ane</b> r si	ampling	event	



## 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 5 N- Lea County, NM

Lab Order Number: 6K08009

Report Date: 11/29/06

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	6K08009-01	Water	11/07/06 11:55	11-08-2006 14:50
Monitor Well #2	6K08009-02	Water	11/07/06 10:50	11-08-2006 14:50
Monitor Well #3	6K08009-03	Water	11/07/06 09:55	11-08-2006 14:50

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

Al.	Result	Reporting Limit	Units						
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Monitor Well #1 (6K08009-01) Water									
Benzene	0.00155	0.00100	mg/L	1	EK60808	11/10/06	11/11/06	EPA 8021B	
Toluene	J [0.000447]	0.00100	"	"	Ħ	н	n	n	
Ethylbenzene	0.00137	0.00100	n	н	"	"	u u	n	
Xylene (p/m)	J [0.000834]	0.00100	"	"	u .	H	н	и	
Xylene (o)	J [0.000235]	0.00100	"	**	11	n	"	n	
Surrogate: a,a,a-Trifluorotoluene		101 %	80-1	20	"	"	n	"	
Surrogate: 4-Bromofluorobenzene		83.5 %	80-1	20	"	"	"	n	
Monitor Well #2 (6K08009-02) Water									
Benzene	ND	0.00100	mg/L	1	EK60808	11/10/06	11/10/06	EPA 8021B	
Toluene	ND	0.00100	"	n	**	*	**	11	
Ethylbenzene	ND	0.00100	ıı	"	**	"	n	**	
Xylene (p/m)	ND	0.00100	**	**		"	**	**	
Xylene (o)	ND	0.00100	"		**	#	n	"	
Surrogate: a,a,a-Trifluorotoluene		97.5 %	80-1	20	"	"	,,	"	
ogate: 4-Bromofluorobenzene		82.8 %	80-1	20	"	"	"	n	
Monitor Well #3 (6K08009-03) Water									
Benzene	ND	0.00100	mg/L	1	EK60808	11/10/06	11/10/06	EPA 8021B	
Toluene	ND	0.00100	H	н	n	,,	и	**	
Ethylbenzene	ND	0.00100	11		"	n	"	**	
Xylene (p/m)	ND	0.00100	"	11	n	"	"	#	
Xylene (o)	ND	0.00100	"	**	"	n	ıı	n	
Surrogate: a,a,a-Trifluorotoluene		96.5 %	80-1	20	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		83.5 %	80-1	20	"	11	"	"	

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**

									<del></del>
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Monitor Well #1 (6K08009-01) Water									
Total Alkalinity	348	4.00	mg/L	2	EK61307	11/14/06	11/14/06	EPA 310.1M	
Chloride	841	20.0	**	40	EK60911	11/09/06	11/09/06	EPA 300.0	
Total Dissolved Solids	1860	10.0	"	1	EK61306	11/09/06	11/10/06	EPA 160.1	
Sulfate	101	20.0	"	40	EK60911	11/09/06	11/09/06	EPA 300.0	
Monitor Well #2 (6K08009-02) Water			_						
Total Alkalinity	328	4.00	mg/L	2	EK61307	11/14/06	11/14/06	EPA 310.1M	
Chloride	1710	25.0	"	50	EK60911	11/09/06	11/09/06	EPA 300.0	
Total Dissolved Solids	3310	10.0	n	1	EK61306	11/09/06	11/10/06	EPA 160.1	
Sulfate	123	25.0	"	50	EK60911	11/09/06	11/09/06	EPA 300.0	
Monitor Well #3 (6K08009-03) Water									
Total Alkalinity	316	2.00	mg/L	1	EK61307	11/14/06	11/14/06	EPA 310.1M	
Chloride	491	12.5	"	25	EK60911	11/09/06	11/09/06	EPA 300.0	
Total Dissolved Solids	1270	10.0	u	1	EK61306	11/09/06	11/10/06	EPA 160.1	
ate	125	12.5	n	25	EK60911	11/09/06	11/09/06	EPA 300.0	

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	Dibution	Datah	December	Amahura	Mashod	N
Monitor Well #1 (6K08009-01) Water	Result	Luill	Omis	Dilution	Batch	Prepared	Analyzed	Method	Note
Calcium	301	4.05	mg/L	50	EK60919	11/09/06	11/09/06	EPA 6010B	
Magnesium	81.6	1.80	mg/L	30	EK60919	11/09/06	11/09/06	# "	
Potassium	6.64	0.600		10	**		**	n	
Sodium	399	2.15	"	50	If	**	Ħ	11	
Mouitor Well #2 (6K08009-02) Water									
Calcium	625	20.2	mg/L	250	EK60919	11/09/06	11/09/06	EPA 6010B	
Magnesium	139	1.80	"	50	11	и	<b>11</b>	11	
Potassium	9.43	0.600	и	10	"	**	**	**	
Sodium	597	10.8	ų	250	н	Ħ	"	n	
Monitor Well #3 (6K08009-03) Water									
Calcium	186	4.05	mg/L	50	EK60919	11/09/06	11/09/06	EPA 6010B	
Magnesium	44.6	0.360	**	10		"	"	It.	
Potassium	4.81	0.600	**	n		"	*		
ium	241	2.15	"	50	19		"	"	

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

A-1	n .	Reporting	TT. *-	Spike	Source	0/25-	%REC	222	RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EK60808 - EPA 5030C (GC)										
Blank (EK60808-BLK1)				Prepared: 1	1/08/06 A	nalyzed: 11	/10/06			
Benzene	ND	0.00100	mg/L		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ИD	0.00100	11							
Xylene (o)	ND	0.00100	· ·							
Surrogate: a,a,a-Trifluorotoluene	40.3		ug/l	40.0		101	80-120			
Surrogate: 4-Bromofluorobenzene	33.5		n	40.0		83.8	80-120			
LCS (EK60808-BS1)				Prepared: 1	1/08/06 A	nalyzed: 11	/10/06			
Benzene	0.0525	0.00100	mg/L	0.0500		105	80-120	······································		
Toluene	0.0458	0.00100	h	0.0500		91.6	80-120			
Ethylbenzene	0.0457	0.00100	"	0.0500		91.4	80-120			
Xylene (p/m)	0.0919	0.00100	"	0.100		91.9	80-120			
Xylene (o)	0.0448	0.00100	H	0.0500		89.6	80-120			
Surrogate: a,a,a-Trifluorotoluene	41.2		ug/l	40.0		103	80-120			
Surrogate: 4-Bromofluorobenzene	41.5		"	40.0		104	80-120			
bration Check (EK60808-CCV1)				Prepared: 1	1/08/06 A	nalyzed: 11	/11/06			
Benzene	50.9		ug/l	50.0		102	80-120			
Toluene	45.0		"	50.0		90.0	80-120			
Ethylbenzene	46.8		11	50.0		93.6	80-120			
Xylene (p/m)	90.9		**	100		90.9	80-120			
Xylene (o)	45.4		"	50.0		90.8	80-120			
Surrogate: a,a,a-Trifluorotoluene	39.9		"	40.0		99.8	80-120			
Surrogate: 4-Bromofluorobenzene	39.0		n	40.0		97.5	80-120			
Matrix Spike (EK60808-MS1)	Sou	rce: 6K06005-	01	Prepared: 1	1/08/06 A	nalyzed: 11	/10/06			
Benzene	0.0503	0.00100	mg/L	0.0500	ND	101	80-120	-		
Toluene	0.0458	0.00100	"	0.0500	ND	91.6	80-120			
Ethylbenzene	0.0473	0.00100	11	0.0500	ND	94.6	80-120			
Xylene (p/m)	0.0939	0.00100	**	0.100	ND	93.9	80-120			
Xylene (o)	0.0465	0.00100	"	0.0500	ND	93.0	80-120			
Surrogate: a,a,a-Trifluorotoluene	38.9		ug/l	40.0		97.2	80-120			
Surrogate: 4-Bromofluorohenzene	43.4		"	40.0		108	80-120			

Project: EME Jct. N-5

Project Number: None Given
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### 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

Datah	EK60808 -	E'DA	5020C	CC	
Datch	L NOUGUO -	CFA	SUSUL	いしい	

Matrix Spike Dup (EK60808-MSD1)	Sour	Source: 6K06005-01			1/08/06 A	nalyzed: 1				
Benzene	0.0518	0.00100	mg/L	0.0500	ND	104	80-120	2.93	20	
Toluene	0.0465	0.00100	"	0.0500	ND	93.0	80-120	1.52	20	
Ethylbenzene	0.0478	0.00100	"	0.0500	ND	95.6	80-120	1.05	20	
Xylene (p/m)	0.0983	0.00100		0.100	ND	98.3	80-120	4.58	20	
Xylene (o)	0.0494	0.00100	"	0.0500	ND	98.8	80-120	6.05	20	
Surrogate: a,a,a-Trifluorotoluene	41.8		ug/l	40.0		104	80-120			
Surrogate: 4-Bromofluorobenzene	43.7		"	40.0		109	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 EK60911 - General Preparation (V	VetChem)									
Blank (EK60911-BLK1)				Prepared &	: Analyzed:	11/09/06				
Chloride	ND	0.500	mg/L							
Sulfate	ND	0.500	"							
LCS (EK60911-BS1)				Prepared &	: Analyzed:	11/09/06				
Chloride	10,9	0.500	mg/L	10.0		109	80-120			
Sulfate	10.1	0.500	11	10.0		101	80-120			
Calibration Check (EK60911-CCV1)				Prepared &	: Analyzed:	11/09/06				
Chloride	10.8		mg/L	10.0		108	80-120			
Sulfate	10.1		"	10.0		101	80-120			
Duplicate (EK60911-DUP1)	Sour	ce: 6K08007-	01	Prepared &	: Analyzed:	11/09/06				
Sulfate	86.2	5.00	mg/L		86.1			0.116	20	
Chloride	283	5.00	"		285			0.704	20	
Duplicate (EK60911-DUP2)	Sour	ce: 6K09002-	01	Prepared &	: Analyzed:	11/09/06				
Sulfate	1650	20.0	mg/L		1590			3.70	20	
Chloride	248	20.0	**		239			3.70	20	
trix Spike (EK60911-MS1)	Sour	ce: 6K08007-	01	Prepared &	: Analyzed:	11/09/06				
Sulfate	184	5.00	mg/L	100	86.1	97.9	80-120			
Chloride	404	5.00	**	100	285	119	80-120			
Matrix Spike (EK60911-MS2)	Sour	ce: 6K09002-	01	Prepared &	: Analyzed:	11/09/06				
Chloride	655	20.0	mg/L	400	239	104	80-120			
Sulfate	1960	20.0	**	400	1590	92.5	80-120			

al Alkalinity

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 EK61306 - Filtration Preparati	on		· · · · · · · · · · · · · · · · · · ·							
Blank (EK61306-BLK1)				Prepared: 1	1/09/06 A	nalyzed: 11	/10/06			
Total Dissolved Solids	ND	10.0	mg/L							
Ouplicate (EK61306-DUP1)	Sou	rce: 6K07002-	01	Prepared: 1	1/09/06 A	nałyzed: 11	/10/06			
Total Dissolved Solids	10400	10.0	mg/L		9240			11.8	5	S-08
Ouplicate (EK61306-DUP2)	Sou	rce: 6K08010-	02	Prepared: 1	1/09/06 A	nalyzed: 11	/10/06			
Total Dissolved Solids	24600	10.0	mg/L		23600			4.15	5	
Batch EK61307 - General Preparatio	n (WetChem)									
Blank (EK61307-BLK1)				Prepared &	Analyzed:	11/14/06				
otal Alkalinity	ND	2.00	mg/L							
LCS (EK61307-BS1)				Prepared &	: Analyzed:	11/14/06				
Bicarbonate Alkalinity	192	2.00	mg/L	200		96.0	85-115			
Duplicate (EK61307-DUP1)	Sou	Source: 6K08007-01		Prepared & Analyzed: 11/14/06						
Total Alkalinity	150	2.00	mg/L		152			1.32	20	

mg/L .

250

248

99.2

90-110

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**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EK60919 - 6010B/No Digestion										
Blank (EK60919-BLK1)				Prepared &	Analyzed:	11/09/06				
Calcium	ND	0.0810	mg/L							
Magnesium	ND	0.0360	n							
Potassium	ND	0.0600	"							
Sodium	ND	0.0430	**							
Calibration Check (EK60919-CCV1)				Prepared &	: Analyzed:	11/09/06				
Calcium	2.28		mg/L	2.00		114	85-115			
Magnesium	2.14		n	2.00		107	85-115			
Potassium	1.87		#	2.00		93.5	85-115			
Sodium	2.04		n	2.00		102	85-115			
Duplicate (EK60919-DUP1)	Sou	rce: 6K08007-	01	Prepared &	: Analyzed:	11/09/06				
Calcium	164	4.05	mg/L		166			1.21	20	
Magnesium	23.5	0.360			23.5			0.00	20	
Potassium	3.34	0.600	n		3.30			1.20	20	
Sodium	77.5	0.430	"		77.6			0.129	20	

Project: EME Jct. N-5

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

Fax: (505) 397-1471

### Notes and Definitions

S-08 Value outside Laboratory historical or method prescribed QC limits.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

LCS Laboratory Control Spike

MS Matrix Spike

Dup Duplicate

	Kaland KJulis			
Report Approved By:	Racari C 110	Date:	11/29/2006	

Raland K. Tuttle, Lab Manager Celey D. Keene, Lab Director, Org. Tech Director Peggy Allen, QA Officer Jeanne Mc Murrey, Inorg. Tech Director LaTasha Cornish, Chemist Sandra Sanchez, Lab Tech.

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# Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST Odessa, Texas 19765 12600 West I-20 East

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

TAT brebnets × □ NPDES RUSH TAT (PRe-Schedate) 24, 48, 72 hrs Project Loc: T20S R37E Sec5 N ~ Lea County New Mexico Total Dissolved Solids × × M.A.O.N TRRP (D) EME Junction N-5 Labels on container(s) Custody seals on container(s) Sample Containers Intect? × × Custody seals on cooler(s) BTEX 80218/5030 of BTEX 8260 VOCs Free of Headspace? Laboratory Comments: Volatiles (BTEX-N 8260) X Standard Metals: As Ag Ba Cd Cr Pb Hg Se TOTAL SAR / ESP / CEC × Anions (Cl. SO4, Alkalinity) PO #: Project Name: Project #: × Cations (Ca, Mg, Na, K) Report Format: 9001 XT 9001 X1 Hall 96108 Metos 1.814 Hdl Matrix <u>≷</u> გ 30 Date Other (Specify) rozanne@valornet.com Yone (1) 1 Liter HOPE Preservation & 8 of Containers OzSz6N rozanne@valornet.com HOEN (505) 397-147 **\***05\*H HCI (2) 40 ml glass vials N N N EONIace × (1) Š n otal #, of Containers eld Filtered e-mail: Fax No: 10:50 mfranks@riceswd.com 11:55 9.55 Deliquies SmiT kpope@riceswd.com 11/7/2006 11/7/2006 11/7/2006 Received by Date Sampled Ending Depth Hobbs, New Mexico 88240 2.50 in the RICE Operating Company Rozanne Johnson (505)631-9310 dqəQ gninnigə**B** Please email to: kpope@riceswd.com 122 W. Taylor Street Kristin Farris Pope D-8-11 Pale (505) 393-9174 FIELD CODE Sampler Signature: Company Address: Project Manager: Company Name Monitor Well #3 Monitor Well #2 Monitor Well #1 Telephone No: City/State/Zip: Special Instructions: (lab use only) ORDER #: (Nuo asn qel) # 84

one Star

FedEx

H

Sample Hand Delivered by Sampler/Client Rep. ? by Courter? UPS

Time

Date

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Temperature Upon Receipt:

Time

Received by ELDI

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Date

Refinquished by

Received by:

ime

Date

Rozanne John Sa Relinquished by

### Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

ETT UP.				
nte/ Time: 11/8/00 2:50				
ыD#: 6 tox009				
itials: CK				
IIIdi7.				
Sample Receipt	Checklist			
	<del></del>		Client I	nitials
Temperature of container/ cooler?	Yes	No	05 °C	
Shipping container in good condition?	(Fes	No		
B 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?	Ves .	No		
Chain of Custody signed when relinquished/ received?	Yes	No		
Chain of Custody agrees with sample label(s)?	₹ <b>€</b> 8	No	ID written on Cont./ Lid	
Container label(s) legible and intact?	Xes	No	Not Applicable	
10. Sample matrix/ properties agree with Chain of Custody?	Y,95>	No		
11 Containers supplied by ELOT?	Yes	No		
12 Samples in proper container/ bottle?	y∕e <sub>s</sub> s	No	See Below	
13 Samples properly preserved?	Yes	No	See Below	
14 Sample bottles intact?	Yes	No		
15 Preservations documented on Chaîn of Custody?	Y96,	No		
16 Containers documented on Chain of Custody?	Yes	No		
1 figuration of the first sample amount for indicated test(s)?	Yes	No	See Below	
18 All samples received within sufficient hold time?	Yes	No	See Below	
19 VOC samples have zero headspace?	Yes	No	Not Applicable	
ontact: Contacted by:	mentation	-	Date/ Time;	
Corrective Action Taken:				
Check all that Apply:  See attached e-mail/ fax  Client understands and woul  Cooling process had begun			-	