AP – 043

ANNUAL GW REPORT

DATE: 2006

AP-43
Annual GW Mon. Report
2006

ARCADIS
Infrastructure, environment, buildings

ARCADIS G&M, Inc.
1004 North Big Spring Street
Suite 300
Midland
Texas 79701
Tel 432 687 5400
Fax 432 687 5401
www.arcadis-us.com

2007 MAR 2 PM 12 40

Sent Certified mail
Return Receipt No. 7002 2410 0001 5812 9848

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

Environmental

Subject: **2006 MONITOR WELL REPORT/SAMPLING SUMMARY**
JCT. A-20, EME SWD SYSTEM
UNIT 'A', SEC. 20, T20S, R37E
NMOCD CASE # AP-43 (formerly 1R0427-89)

Date:
26 February 2007

Contact:
Sharon E. Hall

Phone:
432 687-5400

Email:
shall@arcadis-us.com

Our ref:
MT000857.0001

Dear Mr. Hansen:

On behalf of Rice Operating Company (ROC), ARCADIS G&M, Inc. (ARCADIS) respectfully submits the 2006 Monitor Well Report for the EME Jct. A-20 site located in the Eunice Monument Eumont (EME) Salt Water Disposal (SWD) System.

One monitoring well was installed in 2002 during delineation as part of the Junction Box Upgrade Program.

Soon after the well was installed, phase-separated hydrocarbon (PSH) was found on the water. ROC has actively worked at recovering the PSH in the well by hand bailing or by using an absorbent sock. In September of 2004 Basin Environmental Service Technologies (Basin) assumed the maintenance and weekly replacement of the socks; PSH thickness and volume are measured weekly. Basin will continue weekly recovery in 2007 unless an alternate remedial method is proposed and approved by NMOCD. Product thickness and recovery information is shown in the attached table.

A Stage 1 Abatement Plan was submitted to NMOCD on June 23, 2005 NMOCD approved the Abatement Plan Proposal on February 21, 2006.

On February 28, 2006 monitor wells MW-2 and MW-3 were installed southeast and southwest of the Jct. A-20 and soil and groundwater samples were collected. On May

31, 2006, monitor wells MW-4 and MW-5 were installed southeast and northwest of the Jct. A-20 and soil and groundwater samples were collected. A Stage 1 Abatement Plan Report and Stage 2 Abatement Plan proposal was submitted to NMOCD on January 30, 2007. The report details the investigation and investigation results.

All monitor wells are sampled quarterly per NMOCD guidelines. The attached table summarizes the groundwater conditions at the site. 2006 groundwater laboratory reports are also attached.

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.

Sincerely,
ARCADIS G&M, Inc.

Sharon E. Hall

Sharon E. Hall
Site Evaluation Department Manager

Copies:
Kristin Farris Pope- ROC (3 copies)

BD H-35 Monitor Well Sampling Results

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate
1	43.64	57.2	8.8	30	1/4/2006	1880	4290	<0.001	<0.001	<0.001	<0.001	383
1	43.79	57.2	8.7	30	4/24/2006	2360	5380	<0.001	<0.001	<0.001	<0.001	405
1	43.92	57.2	8.6	35	7/19/2006							
1	43.83	57.2	8.7	30	10/11/2006	2880	7460	<0.001	<0.001	<0.001	<0.001	561

ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

Analytical Report

Prepared for:

Kristin Farris-Pope

Rice Operating Co.

122 W. Taylor

Hobbs, NM 88240

Project: BD H-35 SWD

Project Number: None Given

Location: Lea County

Lab Order Number: 6A05002

Report Date: 01/13/06

Rice Operating Co.	Project: BD H-35 SWD	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	**Reported:**
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	01/13/06 12:33

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Monitor Well #1	6A05002-01	Water	01/04/06 09:45	01/04/06 17:00

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

Rice Operating Co.	Project: BD H-35 SWD	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	**Reported:**
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	01/13/06 12:33

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Monitor Well #1 (6A05002-01) Water									
Benzene	ND	0.00100	mg/L	1	EA60408	01/05/06	01/09/06	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*92.0 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*95.2 %*	*80-120*		"	"	"	"	

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

Rice Operating Co.	Project: BD H-35 SWD	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	**Reported:**
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	01/13/06 12:33

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 (6A05002-01) Water									
Total Alkalinity	**110**	2.00	mg/L	1	EA61216	01/12/06	01/12/06	EPA 310.1M	
Chloride	**1880**	25.0	"	50	EA61009	01/10/06	01/10/06	EPA 300.0	
Total Dissolved Solids	**4290**	5.00	"	1	EA60605	01/05/06	01/06/06	EPA 160.1	
Sulfate	**383**	25.0	"	50	EA61009	01/10/06	01/10/06	EPA 300.0	

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

Rice Operating Co.	Project: BD H-35 SWD	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	**Reported:**
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	01/13/06 12:33

Total Metals by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Monitor Well #1 (6A05002-01) Water									
Calcium	**444**	1.00	mg/L	100	EA60609	01/06/06	01/06/06	EPA 6010B	
Magnesium	**247**	0.100	"	"	"	"	"	"	
Potassium	**28.7**	0.500	"	10	"	"	"	"	
Sodium	**584**	1.00	"	100	"	"	"	"	

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

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 EA60408 - EPA 5030C (GC)										
Blank (EA60408-BLK1)				Prepared: 01/04/06 Analyzed: 01/09/06						
Benzene	ND	0.00100	mg/L							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00100	"							
Xylene (o)	ND	0.00100	"							
Surrogate: a,a,a-Trifluorotoluene	*34.9*		*ug/l*	*40.0*		*87.2*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*36.2*		"	*40.0*		*90.5*	*80-120*			
LCS (EA60408-BS1)				Prepared: 01/04/06 Analyzed: 01/09/06						
Benzene	0.0528	0.00100	mg/L	0.0500		106	80-120			
Toluene	0.0586	0.00100	"	0.0500		117	80-120			
Ethylbenzene	0.0586	0.00100	"	0.0500		117	80-120			
Xylene (p/m)	0.119	0.00100	"	0.100		119	80-120			
Xylene (o)	0.0591	0.00100	"	0.0500		118	80-120			
Surrogate: a,a,a-Trifluorotoluene	*41.3*		*ug/l*	*40.0*		*103*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*38.0*		"	*40.0*		*95.0*	*80-120*			
Calibration Check (EA60408-CCV1)				Prepared: 01/04/06 Analyzed: 01/09/06						
Benzene	54.1		ug/l	50.0		108	80-120			
Toluene	59.8		"	50.0		120	80-120			
Ethylbenzene	59.5		"	50.0		119	80-120			
Xylene (p/m)	120		"	100		120	80-120			
Xylene (o)	57.0		"	50.0		114	80-120			
Surrogate: a,a,a-Trifluorotoluene	*40.2*		"	*40.0*		*100*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*36.6*		"	*40.0*		*91.5*	*80-120*			
Matrix Spike (EA60408-MS1)	**Source: 6A05002-01**			Prepared: 01/04/06 Analyzed: 01/09/06						
Benzene	0.0516	0.00100	mg/L	0.0500	ND	103	80-120			
Toluene	0.0572	0.00100	"	0.0500	ND	114	80-120			
Ethylbenzene	0.0587	0.00100	"	0.0500	ND	117	80-120			
Xylene (p/m)	0.119	0.00100	"	0.100	ND	119	80-120			
Xylene (o)	0.0588	0.00100	"	0.0500	ND	118	80-120			
Surrogate: a,a,a-Trifluorotoluene	*39.9*		*ug/l*	*40.0*		*99.8*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*41.4*		"	*40.0*		*104*	*80-120*			

Rice Operating Co.	Project: BD H-35 SWD	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	**Reported:**
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	01/13/06 12:33

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 EA60408 - EPA 5030C (GC)										
Matrix Spike Dup (EA60408-MSD1)	**Source: 6A05002-01**			Prepared: 01/04/06 Analyzed: 01/09/06						
Benzene	0.0525	0.00100	mg/L	0.0500	ND	105	80-120	1.92	20	
Toluene	0.0575	0.00100	"	0.0500	ND	115	80-120	0.873	20	
Ethylbenzene	0.0573	0.00100	"	0.0500	ND	115	80-120	1.72	20	
Xylene (p/m)	0.119	0.00100	"	0.100	ND	119	80-120	0.00	20	
Xylene (o)	0.0590	0.00100	"	0.0500	ND	118	80-120	0.00	20	
Surrogate: a,a,a-Trifluorotoluene	*39.6*		*ug/l*	*40.0*		*99.0*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*36.8*		*"*	*40.0*		*92.0*	*80-120*			

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

Rice Operating Co.	Project: BD H-35 SWD	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	**Reported:**
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	01/13/06 12:33

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 EA60605 - General Preparation (WetChem)										
Blank (EA60605-BLK1)				Prepared: 01/05/06 Analyzed: 01/06/06						
Total Dissolved Solids	ND	5.00	mg/L							
Duplicate (EA60605-DUP1)	**Source: 6A05002-01**			Prepared: 01/05/06 Analyzed: 01/06/06						
Total Dissolved Solids	4130	5.00	mg/L		4290			3.80	5	
Batch EA61009 - General Preparation (WetChem)										
Blank (EA61009-BLK1)				Prepared & Analyzed: 01/10/06						
Sulfate	ND	0.500	mg/L							
Chloride	ND	0.500	"							
LCS (EA61009-BS1)				Prepared & Analyzed: 01/10/06						
Sulfate	9.33		mg/L	10.0		93.3	80-120			
Chloride	11.3		"	10.0		113	80-120			
Calibration Check (EA61009-CCV1)				Prepared & Analyzed: 01/10/06						
Sulfate	9.50		mg/L	10.0		95.0	80-120			
Chloride	8.61		"	10.0		86.1	80-120			
Duplicate (EA61009-DUP1)	**Source: 6A06009-06**			Prepared & Analyzed: 01/10/06						
Sulfate	552	10.0	mg/L		511			7.71	20	
Chloride	398	10.0	"		394			1.01	20	
Batch EA61216 - General Preparation (WetChem)										
Blank (EA61216-BLK1)				Prepared & Analyzed: 01/12/06						
Total Alkalinity	ND	2.00	mg/L							

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

Rice Operating Co.	Project: BD H-35 SWD	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	**Reported:**
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	01/13/06 12:33

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 EA61216 - General Preparation (WetChem)										
LCS (EA61216-BS1)				Prepared & Analyzed: 01/12/06						
Bicarbonate Alkalinity	198	2.00	mg/L	200		99.0	85-115			
Duplicate (EA61216-DUP1)		**Source: 6A05002-01**		Prepared & Analyzed: 01/12/06						
Total Alkalinity	109	2.00	mg/L		110			0.913	20	
Reference (EA61216-SRM1)				Prepared & Analyzed: 01/12/06						
Total Alkalinity	96.0		mg/L	100		96.0	90-110			

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

Rice Operating Co.	Project: BD H-35 SWD	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	**Reported:**
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	01/13/06 12:33

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 EA60609 - 6010B/No Digestion										
Blank (EA60609-BLK1)				Prepared & Analyzed: 01/06/06						
Calcium	ND	0.0100	mg/L							
Magnesium	ND	0.00100	"							
Potassium	ND	0.0500	"							
Sodium	ND	0.0100	"							
Calibration Check (EA60609-CCV1)				Prepared & Analyzed: 01/06/06						
Calcium	2.06		mg/L	2.00		103	85-115			
Magnesium	2.05		"	2.00		102	85-115			
Potassium	1.87		"	2.00		93.5	85-115			
Sodium	1.84		"	2.00		92.0	85-115			
Duplicate (EA60609-DUP1)	**Source: 5L30002-01**			Prepared & Analyzed: 01/06/06						
Calcium	32.6	0.100	mg/L		33.8			3.61	20	
Magnesium	18.0	0.0100	"		18.6			3.28	20	
Potassium	4.45	0.500	"		4.58			2.88	20	
Sodium	34.8	0.100	"		34.1			2.03	20	

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

Rice Operating Co.	Project: BD H-35 SWD	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	**Reported:**
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	01/13/06 12:33

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
Dup	Duplicate

Report Approved By: Raland K Tuttle Date: 1/13/2006

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.

Environmental Lab of Texas

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

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

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

Project Name: BD H-35 SWD
Project #:
Project Loc: Lea County
PO #:

LAB # (lab use only)	FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Preservative: Ice	Preservative: HNO_3	Preservative: HCl (2) 40 ml glass vials	Preservative: NaOH	Preservative: H_2SO_4	Preservative: None (1) 1 Liter HDPE	Preservative: Other (Specify)	Matrix: Water	Matrix: Sludge	Matrix: Soil	Matrix: Other (specify)	Analyze For: TCLP: TPH: 418.1 8015M 1005 1006	TOTAL: TPH: 418.1 8015M 1005 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030	RCI	N.O.R.M.	Total Dissolved Solids			RUSH TAT (Pre-Schedule)	Standard TAT
605002																	X							X			X				
-01	Monitor Well #1	1/4/2006	9:45	3	X		2			1		X						X	X					X			X				X

Special Instructions:

PLEASE Email RESULTS TO: kpriceswd@valornet.com & mfranks@riceswd.com

Sample Containers Intact? Y N
Labels on container? Y N
Custody Seals: Containers / Cooler
Temperature Upon Receipt: -2.0

Relinquished by:	Date	Time	Received by:	Date	Time
Rozanne Johnson	1/4/06	12:15	James Johnson	1/4/06	12:16
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
James Johnson	1/4/06	17:00		1/4/06	17:00

Laboratory Comments: not frozen

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

Client: Rice Operating

Date/Time: 01-04-06 @ 1700

Order #: 6A05002

Initials: JMM

Sample Receipt Checklist

Temperature of container/cooler?	(Yes)	No	-2.0 C	not frozen
Shipping container/cooler in good condition?	(Yes)	No		
Custody Seals intact on shipping container/cooler?	(Yes)	No	Not present	
Custody Seals intact on sample bottles?	(Yes)	No	Not present	
Chain of custody present?	(Yes)	No		
Sample Instructions complete on Chain of Custody?	(Yes)	No		
Chain of Custody signed when relinquished and received?	(Yes)	No		
Chain of custody agrees with sample label(s)	(Yes)	No		
Container labels legible and intact?	(Yes)	No		
Sample Matrix and properties same as on chain of custody?	(Yes)	No		
Samples in proper container/bottle?	(Yes)	No		
Samples properly preserved?	(Yes)	No		
Sample bottles intact?	(Yes)	No		
Preservations documented on Chain of Custody?	(Yes)	No		
Containers documented on Chain of Custody?	(Yes)	No		
Sufficient sample amount for indicated test?	(Yes)	No		
All samples received within sufficient hold time?	(Yes)	No		
VOC samples have zero headspace?	(Yes)	No	Not Applicable	

Other observations:

Variance Documentation:

Contact Person: - Date/Time: Contacted by:

Regarding:

Corrective Action Taken:

ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

Analytical Report

Prepared for:

Kristin Farris-Pope

Rice Operating Co.

122 W. Taylor

Hobbs, NM 88240

Project: BD H-35 SWD

Project Number: None Given

Location: Lea County

Lab Order Number: 6D27009

Report Date: 05/04/06

Rice Operating Co.	Project: BD H-35 SWD	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	**Reported:**
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	05/04/06 14:10

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Monitor Well #1	6D27009-01	Water	04/24/06 13:00	04/27/06 10:30

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

Rice Operating Co.	Project: BD H-35 SWD	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	**Reported:**
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	05/04/06 14:10

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Monitor Well #1 (6D27009-01) Water									
Benzene	ND	0.00100	mg/L	1	ED62807	04/28/06	04/30/06	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*100 %*		*80-120*		"	"	"	
Surrogate: 4-Bromofluorobenzene		*98.8 %*		*80-120*		"	"	"	

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

Rice Operating Co.	Project: BD H-35 SWD	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	**Reported:**
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	05/04/06 14:10

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 (6D27009-01) Water									
Total Alkalinity	**110**	2.00	mg/L	1	EE60301	05/03/06	05/03/06	EPA 310.1M	
Chloride	**2360**	25.0	"	50	EE60116	05/01/06	05/01/06	EPA 300.0	
Total Dissolved Solids	**5380**	5.00	"	1	EE60115	04/27/06	04/28/06	EPA 160.1	
Sulfate	**405**	25.0	"	50	EE60116	05/01/06	05/01/06	EPA 300.0	

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

Rice Operating Co.	Project: BD H-35 SWD	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	**Reported:**
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	05/04/06 14:10

Total Metals by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Monitor Well #1 (6D27009-01) Water									
Calcium	**628**	2.00	mg/L	200	ED62719	04/27/06	04/27/06	EPA 6010B	
Magnesium	**268**	0.0500	"	50	"	"	"	"	
Potassium	**29.0**	0.500	"	10	"	"	"	"	
Sodium	**806**	2.00	"	200	"	"	"	"	

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

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 ED62807 - EPA 5030C (GC)										
Blank (ED62807-BLK1)				Prepared: 04/28/06 Analyzed: 04/30/06						
Benzene	ND	0.00100	mg/L							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00100	"							
Xylene (o)	ND	0.00100	"							
Surrogate: a,a,a-Trifluorotoluene	*42.7*		*ug/l*	*40.0*		*107*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*42.2*		"	*40.0*		*106*	*80-120*			
LCS (ED62807-BS1)				Prepared: 04/28/06 Analyzed: 04/30/06						
Benzene	0.0599	0.00100	mg/L	0.0500		120	80-120			
Toluene	0.0580	0.00100	"	0.0500		116	80-120			
Ethylbenzene	0.0551	0.00100	"	0.0500		110	80-120			
Xylene (p/m)	0.120	0.00100	"	0.100		120	80-120			
Xylene (o)	0.0596	0.00100	"	0.0500		119	80-120			
Surrogate: a,a,a-Trifluorotoluene	*43.0*		*ug/l*	*40.0*		*108*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*42.2*		"	*40.0*		*106*	*80-120*			
Calibration Check (ED62807-CCV1)				Prepared: 04/28/06 Analyzed: 05/01/06						
Benzene	55.0		ug/l	50.0		110	80-120			
Toluene	53.0		"	50.0		106	80-120			
Ethylbenzene	55.9		"	50.0		112	80-120			
Xylene (p/m)	110		"	100		110	80-120			
Xylene (o)	55.9		"	50.0		112	80-120			
Surrogate: a,a,a-Trifluorotoluene	*39.0*		"	*40.0*		*97.5*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*39.1*		"	*40.0*		*97.8*	*80-120*			
Matrix Spike (ED62807-MS1)	**Source: 6D27008-01**			Prepared: 04/28/06 Analyzed: 05/01/06						
Benzene	0.0576	0.00100	mg/L	0.0500	ND	115	80-120			
Toluene	0.0568	0.00100	"	0.0500	ND	114	80-120			
Ethylbenzene	0.0587	0.00100	"	0.0500	ND	117	80-120			
Xylene (p/m)	0.120	0.00100	"	0.100	ND	120	80-120			
Xylene (o)	0.0600	0.00100	"	0.0500	ND	120	80-120			
Surrogate: a,a,a-Trifluorotoluene	*41.7*		*ug/l*	*40.0*		*104*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*47.5*		"	*40.0*		*119*	*80-120*			

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 ED62807 - EPA 5030C (GC)										
Matrix Spike Dup (ED62807-MSD1)	**Source: 6D27008-01**			Prepared: 04/28/06 Analyzed: 05/01/06						
Benzene	0.0597	0.00100	mg/L	0.0500	ND	119	80-120	3.42	20	
Toluene	0.0579	0.00100	"	0.0500	ND	116	80-120	1.74	20	
Ethylbenzene	0.0585	0.00100	"	0.0500	ND	117	80-120	0.00	20	
Xylene (p/m)	0.120	0.00100	"	0.100	ND	120	80-120	0.00	20	
Xylene (o)	0.0598	0.00100	"	0.0500	ND	120	80-120	0.00	20	
Surrogate: a,a,a-Trifluorotoluene	*43.5*		*ug/l*	*40.0*		*109*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*46.4*		"	*40.0*		*116*	*80-120*			

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 EE60115 - General Preparation (WetChem)										
Blank (EE60115-BLK1)				Prepared: 04/27/06 Analyzed: 04/28/06						
Total Dissolved Solids	ND	5.00	mg/L							
Duplicate (EE60115-DUP1)	**Source: 6D27015-01**			Prepared: 04/27/06 Analyzed: 04/28/06						
Total Dissolved Solids	3020	5.00	mg/L		3040			0.660	5	
Batch EE60116 - General Preparation (WetChem)										
Blank (EE60116-BLK1)				Prepared & Analyzed: 05/01/06						
Chloride	ND	0.500	mg/L							
Sulfate	ND	0.500	"							
LCS (EE60116-BS1)				Prepared & Analyzed: 05/01/06						
Sulfate	9.47	0.500	mg/L	10.0		94.7	80-120			
Chloride	9.71	0.500	"	10.0		97.1	80-120			
Calibration Check (EE60116-CCV1)				Prepared & Analyzed: 05/01/06						
Chloride	9.86		mg/L	10.0		98.6	80-120			
Sulfate	8.11		"	10.0		81.1	80-120			
Duplicate (EE60116-DUP1)	**Source: 6D27008-01**			Prepared & Analyzed: 05/01/06						
Sulfate	80.0	2.50	mg/L		79.2			1.01	20	
Chloride	49.3	2.50	"		49.0			0.610	20	
Batch EE60301 - General Preparation (WetChem)										
Blank (EE60301-BLK1)				Prepared & Analyzed: 05/03/06						
Total Alkalinity	ND	2.00	mg/L							

Rice Operating Co.	Project: BD H-35 SWD	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	**Reported:**
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	05/04/06 14:10

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 EE60301 - General Preparation (WetChem)										
LCS (EE60301-BS1)				Prepared & Analyzed: 05/03/06						
Bicarbonate Alkalinity	214		mg/L	200		107	85-115			
Duplicate (EE60301-DUP1)		**Source: 6D26006-01**		Prepared & Analyzed: 05/03/06						
Total Alkalinity	29.0	2.00	mg/L		28.0			3.51	20	
Reference (EE60301-SRM1)				Prepared & Analyzed: 05/03/06						
Total Alkalinity	96.0		mg/L	100		96.0	90-110			

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

Rice Operating Co.	Project: BD H-35 SWD	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	**Reported:**
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	05/04/06 14:10

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 ED62719 - 6010B/No Digestion										
Blank (ED62719-BLK1)				Prepared & Analyzed: 04/27/06						
Calcium	ND	0.0100	mg/L							
Magnesium	ND	0.00100	"							
Potassium	ND	0.0500	"							
Sodium	ND	0.0100	"							
***Calibration* Check (ED62719-CCV1)**				Prepared & Analyzed: 04/27/06						
Calcium	2.08		mg/L				85-115			
Magnesium	2.16		"				85-115			
Potassium	1.94		"				85-115			
Sodium	1.96		"				85-115			
Duplicate (ED62719-DUP1)	**Source: 6D26006-01**			Prepared & Analyzed: 04/27/06						
Calcium	0.0366	0.0100	mg/L		0.0367			0.273	20	
Magnesium	ND	0.00100	"		ND				20	
Potassium	0.275	0.0500	"		0.275			0.00	20	
Sodium	13.0	0.100	"		12.1			7.17	20	

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

Rice Operating Co.	Project: BD H-35 SWD	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	**Reported:**
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	05/04/06 14:10

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
Dup	Duplicate

Report Approved By: Raland K Tuttle Date: 5/4/2006

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.

Environmental Lab of Texas

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

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

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

Project Name: BD H-35 SWD
Project #:
Project Loc: Lea County
PO #:

LAB # (lab use only)	FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Preservative: Ice	Preservative: HNO_3	Preservative: HCl (2) 40 ml glass vials	Preservative: NaOH	Preservative: H_2SO_4	Preservative: None (1) 1 Liter HDPE	Preservative: Other (Specify)	Matrix: Water	Matrix: Sludge	Matrix: Soil	Matrix: Other (specify):	Analyze For: TPH: 418.1 8015M 1005 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030	RCI	N.O.R.M.	Total Dissolved Solids			RUSH TAT (Pre-Schedule)	Standard TAT
	Monitor Well #1	4/24/2006	13:00	3	X		2			1		X					X	X					X			X				X

Special Instructions:
PLEASE Email RESULTS TO: kpope@riceswd.com & mfranks@riceswd.com

Sample Containers Intact? Y N
Labels on container? Y N
Custody Seals: Containers / Cooler
Temperature Upon Receipt: 2.0

Laboratory Comments:

Relinquished by:	Date	Time	Received by:	Date	Time
Rozanne Johnson	4/27/06	6:00	James Johnson	4/27/06	6:01
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
	4/27/06	10:30		4/27/06	10:30

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

nt: Rice Op.

e/Time: 4/27/08 10:30

ler #: 6082700 9

ials: CK

Sample Receipt Checklist

	Yes	No	
perature of container/cooler?			2.0 C
ping container/cooler in good condition?	Yes	No	
tody Seals intact on shipping container/cooler?	Yes	No	Not present
tody Seals intact on sample bottles?	Yes	No	Not present
in of custody present?	Yes	No	
mple Instructions complete on Chain of Custody?	Yes	No	
in of Custody signed when relinquished and received?	Yes	No	
in of custody agrees with sample label(s)	Yes	No	
tainer labels legible and intact?	Yes	No	
mple Matrix and properties same as on chain of custody?	Yes	No	
mples in proper container/bottle?	Yes	No	
mples properly preserved?	Yes	No	
mple bottles intact?	Yes	No	
servations documented on Chain of Custody?	Yes	No	
ntainers documented on Chain of Custody?	Yes	No	
fficient sample amount for indicated test?	Yes	No	
samples received within sufficient hold time?	Yes	No	
C samples have zero headspace?	Yes	No	Not Applicable

her observations:

_____

_____

_____

Variance Documentation:

ontact Person: _____ Date/Time: _____ Contacted by: _____

egarding:

_____

_____

_____

orrective Action Taken:

_____

_____

_____

_____

_____

_____

_____

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
155 McCutcheon, Suite H El Paso, Texas 79932 888•588•3443 915•585•3443 FAX 915•585•4944
E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Kristen Farris-Pope
Rice Operating Company
122 W Taylor Street
Hobbs, NM, 88240

Report Date: August 17, 2006

Work Order: 6072146

Project Location: Lea County, New Mexico
Project Name: BD H-35 SWD
Project Number: BD H-35 SWD

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
96143	Monitor Well #1	water	2006-07-19	14:20	2006-07-21

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 11 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 96143 - Monitor Well #1

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	28340	Date Analyzed:	2006-07-26	Analyzed By:	LJ
Prep Batch:	24777	Sample Preparation:	2006-07-25	Prepared By:	LJ

Parameter	Flag	Result	RL	Units	Dilution	RL
Hydroxide Alkalinity		<1.00		mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00		mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		**108**		mg/L as CaCo3	1	4.00
Total Alkalinity		**108**		mg/L as CaCo3	1	4.00

Sample: 96143 - Monitor Well #1

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	28277	Date Analyzed:	2006-07-24	Analyzed By:	MT
Prep Batch:	24759	Sample Preparation:	2006-07-24	Prepared By:	MT

Parameter	Flag	Result	RL	Units	Dilution	RL
Benzene		<0.00100		mg/L	1	0.00100
Toluene		<0.00100		mg/L	1	0.00100
Ethylbenzene		<0.00100		mg/L	1	0.00100
Xylene		*<0.00100*		*mg/L*	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0951	mg/L	1	0.100	95	66.2 - 127.7
4-Bromofluorobenzene (4-BFB)	[1]	0.0546	mg/L	1	0.100	55	70.6 - 129.2

Sample: 96143 - Monitor Well #1

Analysis:	Cations	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	28357	Date Analyzed:	2006-07-26	Analyzed By:	TP
Prep Batch:	24749	Sample Preparation:	2006-07-24	Prepared By:	TS

Parameter	Flag	Result	RL	Units	Dilution	RL
Dissolved Calcium		**698**		mg/L	10	0.500
Dissolved Potassium		**45.3**		mg/L	1	1.00
Dissolved Magnesium		**371**		mg/L	10	1.00
Dissolved Sodium		**719**		mg/L	10	1.00

Sample: 96143 - Monitor Well #1

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	28783	Date Analyzed:	2006-08-02	Analyzed By:	WB
Prep Batch:	25169	Sample Preparation:	2006-08-02	Prepared By:	WB

[1] BFB surrogate recovery outside normal limits. ICV/CCV and TFT surrogate recovery show the method to be in control.

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**3040**	mg/L	100	0.500
Sulfate		**580**	mg/L	100	0.500

Sample: 96143 - Monitor Well #1

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	28620	Date Analyzed:	2006-08-03	Analyzed By:	SM
Prep Batch:	24979	Sample Preparation:	2009-08-01	Prepared By:	SM

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		**8170**	mg/L	10	10.00

Method Blank (1) QC Batch: 28277

QC Batch:	28277	Date Analyzed:	2006-07-24	Analyzed By:	MT
Prep Batch:	24759	QC Preparation:	2006-07-24	Prepared By:	MT

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.000255	mg/L	0.001
Toluene		<0.000210	mg/L	0.001
Ethylbenzene		<0.000317	mg/L	0.001
Xylene		<0.000603	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0949	mg/L	1	0.100	95	76.1 - 117
4-Bromofluorobenzene (4-BFB)		0.0633	mg/L	1	0.100	63	58.5 - 118

Method Blank (1) QC Batch: 28340

QC Batch:	28340	Date Analyzed:	2006-07-26	Analyzed By:	LJ
Prep Batch:	24777	QC Preparation:	2006-07-25	Prepared By:	LJ

Parameter	Flag	MDL Result	Units	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1
Bicarbonate Alkalinity		<4.00	mg/L as CaCo3	4
Total Alkalinity		<4.00	mg/L as CaCo3	4

Method Blank (1) QC Batch: 28357

QC Batch:	28357	Date Analyzed:	2006-07-26	Analyzed By:	TP
Prep Batch:	24749	QC Preparation:	2006-07-24	Prepared By:	TS

Parameter	Flag	MDL Result	Units	RL
Dissolved Calcium		0.132	mg/L	0.5
Dissolved Potassium		1.08	mg/L	1
Dissolved Magnesium		<0.704	mg/L	1
Dissolved Sodium		0.836	mg/L	1

Method Blank (1) QC Batch: 28620

QC Batch: 28620 Date Analyzed: 2006-08-03 Analyzed By: SM
Prep Batch: 24979 QC Preparation: 2006-08-01 Prepared By: SM

Parameter	Flag	MDL Result	Units	RL
Total Dissolved Solids		<5.000	mg/L	10

Method Blank (1) QC Batch: 28783

QC Batch: 28783 Date Analyzed: 2006-08-02 Analyzed By: WB
Prep Batch: 25169 QC Preparation: 2006-08-02 Prepared By: WB

Parameter	Flag	MDL Result	Units	RL
Chloride	[2]	<0.0181	mg/L	0.5
Sulfate		<0.0485	mg/L	0.5

Duplicates (1)

QC Batch: 28340 Date Analyzed: 2006-07-26 Analyzed By: LJ
Prep Batch: 24777 QC Preparation: 2006-07-25 Prepared By: LJ

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Hydroxide Alkalinity	<1.00	<1.00	mg/L as CaCo3	1	0	20
Carbonate Alkalinity	<1.00	<1.00	mg/L as CaCo3	1	0	20
Bicarbonate Alkalinity	110	108	mg/L as CaCo3	1	2	12.6
Total Alkalinity	110	108	mg/L as CaCo3	1	2	11.5

Duplicates (1)

QC Batch: 28620 Date Analyzed: 2006-08-03 Analyzed By: SM
Prep Batch: 24979 QC Preparation: 2006-08-01 Prepared By: SM

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids	160.0	180.0	mg/L	10	12	17.2

[2]Not entered

Laboratory Control Spike (LCS-1)

QC Batch: 28277 | Date Analyzed: 2006-07-24 | Analyzed By: MT
Prep Batch: 24759 | QC Preparation: 2006-07-24 | Prepared By: MT

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.109	mg/L	1	0.100	<0.000255	109	82.2 - 119
Toluene	0.108	mg/L	1	0.100	<0.000210	108	81.2 - 119
Ethylbenzene	0.109	mg/L	1	0.100	<0.000317	109	80 - 122
Xylene	0.322	mg/L	1	0.300	<0.000603	107	81.3 - 122

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	0.104	mg/L	1	0.100	<0.000255	109	82.2 - 119	5	20
Toluene	0.103	mg/L	1	0.100	<0.000210	108	81.2 - 119	5	20
Ethylbenzene	0.101	mg/L	1	0.100	<0.000317	109	80 - 122	8	20
Xylene	0.306	mg/L	1	0.300	<0.000603	107	81.3 - 122	5	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.101	0.101	mg/L	1	0.100	101	101	81.8 - 114
4-Bromofluorobenzene (4-BFB)	0.112	0.111	mg/L	1	0.100	112	111	72.7 - 116

Laboratory Control Spike (LCS-1)

QC Batch: 28357 | Date Analyzed: 2006-07-26 | Analyzed By: TP
Prep Batch: 24749 | QC Preparation: 2006-07-24 | Prepared By: TS

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Dissolved Calcium	51.7	mg/L	1	50.0	<0.0950	103	85 - 115
Dissolved Potassium	50.8	mg/L	1	50.0	<0.377	102	85 - 113
Dissolved Magnesium	51.5	mg/L	1	50.0	<0.704	103	85 - 113
Dissolved Sodium	50.5	mg/L	1	50.0	<0.261	101	85 - 111

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Dissolved Calcium	51.7	mg/L	1	50.0	<0.0950	103	85 - 115	0	20
Dissolved Potassium	49.3	mg/L	1	50.0	<0.377	102	85 - 113	3	20
Dissolved Magnesium	49.8	mg/L	1	50.0	<0.704	103	85 - 113	3	20
Dissolved Sodium	48.6	mg/L	1	50.0	<0.261	101	85 - 111	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 28783 | Date Analyzed: 2006-08-02 | Analyzed By: WB
Prep Batch: 25169 | QC Preparation: 2006-08-02 | Prepared By: WB

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	<0.0181	mg/L	1	12.5	<0.0181		90 - 110
Sulfate	13.0	mg/L	1	12.5	<0.0485	104	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	0.00	mg/L	1	12.5	<0.0181		90 - 110		20
Sulfate	13.2	mg/L	1	12.5	<0.0485	104	90 - 110	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 96149

QC Batch: 28277
Prep Batch: 24759

Date Analyzed: 2006-07-24
QC Preparation: 2006-07-24

Analyzed By: MT
Prepared By: MT

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	0.107	mg/L	1	0.100	<0.000255	107	70.9 - 126
Toluene	0.105	mg/L	1	0.100	<0.000210	105	70.8 - 125
Ethylbenzene	0.106	mg/L	1	0.100	<0.000317	106	74.8 - 125
Xylene	0.311	mg/L	1	0.300	<0.000603	104	75.7 - 126

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param		MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	[3]	NA	mg/L	1	0.100	<0.000255	0	70.9 - 126	200	20
Toluene	[4]	NA	mg/L	1	0.100	<0.000210	0	70.8 - 125	200	20
Ethylbenzene	[5]	NA	mg/L	1	0.100	<0.000317	0	74.8 - 125	200	20
Xylene	[6]	NA	mg/L	1	0.300	<0.000603	0	75.7 - 126	200	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate		MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	[7]	0.101	NA	mg/L	1	0.1	101	0	73.6 - 121
4-Bromofluorobenzene (4-BFB)	[8]	0.110	NA	mg/L	1	0.1	110	0	81.8 - 114

Matrix Spike (MS-1) Spiked Sample: 96142

QC Batch: 28357
Prep Batch: 24749

Date Analyzed: 2006-07-26
QC Preparation: 2006-07-24

Analyzed By: TP
Prepared By: TS

[3]RPD is out of range because a matrix spike duplicate was not prepared.
[4]RPD is out of range because a matrix spike duplicate was not prepared.
[5]RPD is out of range because a matrix spike duplicate was not prepared.
[6]RPD is out of range because a matrix spike duplicate was not prepared.
[7]RPD is out of range because a matrix spike duplicate was not prepared.
[8]RPD is out of range because a matrix spike duplicate was not prepared.

Param		MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Dissolved Calcium	[9]	884	mg/L	1	50.0	863	42	68.4 - 138
Dissolved Potassium		110	mg/L	1	50.0	67.3	85	82 - 129
Dissolved Magnesium		496	mg/L	1	50.0	438	116	61.2 - 135
Dissolved Sodium	[10]	2200	mg/L	1	50.0	2180	40	81.8 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param		MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Dissolved Calcium	[11]	884	mg/L	1	50.0	863	42	68.4 - 138	0	20
Dissolved Potassium		111	mg/L	1	50.0	67.3	87	82 - 129	1	20
Dissolved Magnesium		491	mg/L	1	50.0	438	106	61.2 - 135	1	20
Dissolved Sodium	[12]	2200	mg/L	1	50.0	2180	40	81.8 - 125	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 97690

QC Batch: 28783
Prep Batch: 25169

Date Analyzed: 2006-08-02
QC Preparation: 2006-08-02

Analyzed By: WB
Prepared By: WB

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	<0.0181	mg/L	1	12.5	<0.0181		25.4 - 171
Sulfate	420	mg/L	10	12.5	307	90	0 - 677

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	0.00	mg/L	1	12.5	<0.0181		25.4 - 171		20
Sulfate	421	mg/L	10	12.5	307	91	0 - 677	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1)

QC Batch: 28277

Date Analyzed: 2006-07-24

Analyzed By: MT

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.104	104	85 - 115	2006-07-24
Toluene		mg/L	0.100	0.104	104	85 - 115	2006-07-24
Ethylbenzene		mg/L	0.100	0.104	104	85 - 115	2006-07-24
Xylene		mg/L	0.300	0.314	105	85 - 115	2006-07-24

[9]Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
[10]Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
[11]Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
[12]Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.

Standard (CCV-1)

QC Batch: 28277 Date Analyzed: 2006-07-24 Analyzed By: MT

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.107	107	85 - 115	2006-07-24
Toluene		mg/L	0.100	0.105	105	85 - 115	2006-07-24
Ethylbenzene		mg/L	0.100	0.106	106	85 - 115	2006-07-24
Xylene		mg/L	0.300	0.311	104	85 - 115	2006-07-24

Standard (ICV-1)

QC Batch: 28340 Date Analyzed: 2006-07-26 Analyzed By: LJ

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Alkalinity		mg/L as CaCo3	250	240	96	90 - 110	2006-07-26

Standard (CCV-1)

QC Batch: 28340 Date Analyzed: 2006-07-26 Analyzed By: LJ

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Alkalinity		mg/L as CaCo3	250	240	96	90 - 110	2006-07-26

Standard (ICV-1)

QC Batch: 28357 Date Analyzed: 2006-07-26 Analyzed By: TP

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	50.0	50.7	101	90 - 110	2006-07-26
Dissolved Potassium		mg/L	50.0	52.0	104	90 - 110	2006-07-26
Dissolved Magnesium		mg/L	50.0	49.6	99	90 - 110	2006-07-26
Dissolved Sodium		mg/L	50.0	50.9	102	90 - 110	2006-07-26

Standard (CCV-1)

QC Batch: 28357 Date Analyzed: 2006-07-26 Analyzed By: TP

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	50.0	48.7	97	90 - 110	2006-07-26
Dissolved Potassium		mg/L	50.0	47.4	95	90 - 110	2006-07-26
Dissolved Magnesium		mg/L	50.0	47.2	94	90 - 110	2006-07-26

continued ...

standard continued . . .

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Sodium		mg/L	50.0	47.3	95	90 - 110	2006-07-26

Standard (ICV-1)

QC Batch: 28620 Date Analyzed: 2006-08-03 Analyzed By: SM

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	1001	100	90 - 110	2006-08-03

Standard (CCV-1)

QC Batch: 28620 Date Analyzed: 2006-08-03 Analyzed By: SM

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	1022	102	90 - 110	2006-08-03

Standard (ICV-1)

QC Batch: 28783 Date Analyzed: 2006-08-02 Analyzed By: WB

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.5	<0.0181		90 - 110	2006-08-02
Sulfate		mg/L	12.5	12.4	99	90 - 110	2006-08-02

Standard (CCV-1)

QC Batch: 28783 Date Analyzed: 2006-08-02 Analyzed By: WB

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.5	<0.0181		90 - 110	2006-08-02
Sulfate		mg/L	12.5	12.7	102	90 - 110	2006-08-02

Page 1 of 1

6701 Aberdeen Ave, Ste 9
Lubbock,Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

TraceAnalysis, Inc.

155 McCutcheon Way, Suite H
El Paso,Texas 79932
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # 6072146

Company Name: RICE Operating Company
Phone #: (505)393-9174
Address: (Street, City, Zip) 122 W Taylor Street - Hobbs, New Mexico 88240
Fax #: (505) 397-1471
Contact Person: Kristin Farris - Pope, Project Scientist
kpope@riceswd.com
Invoice to: (If different from above)
Project #: None Given
Project Name: BD H-35 SWD
Project Location: Lea County - New Mexico
Sampler Signature: Rozanne Johnson (505)631-9310
rozanne@valornet.com

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL	HNO_3	$NaHSO_4$	H_2SO_4	ICE	NONE	SAMPLING: DATE 2006	TIME
46143	Monitor Well #1	2	40 ml	X				X				X		7-19	14:20
	Monitor Well #1	1	1L	X								X		7-19	14:20

ANALYSIS REQUEST (Circle or Specify Method No.)

FIELD CODE	MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005 / TX1005 Extended (C35)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	Moisture Content	Cations (Ca, Mg, Na, K)	Anions (Cl, SSSSO4, CO3, HCO3)	Total Dissolved Solids	Turn Around Time if different from standard	Hold
Monitor Well #1		X																			
Monitor Well #1																	X	X	X		

Relinquished by: Rozanne Johnson Date: 7-20-06 Time: 8:00
Received by: Date: Time:
Relinquished by: Date: Time:
Received by: Date: Time:
Relinquished by: Date: Time:
Received at Laboratory by: Megan McLeod Date: 7-21-06 Time: 1105

LAB USE ONLY
Intact (Y) / N
Headspace Y / (N)
Temp 4.0°
Log-in Review MA

REMARKS:

☐ check if special reporting limits needed

Carrier # BUS 611690177159

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of COC

Cation-Anion Balance Sheet

DATE: 8/16/2006

Sample #	Calcium ppm	Magnesium ppm	Sodium ppm	Potassium ppm	Alkalinity ppm	Sulfate ppm	Chloride ppm	Nitrate ppm	Fluoride ppm	TDS ppm	EC µMHOs/cm
96143	698	371	719	45.3	108	580	3040			8170	

Sample #	Calcium in meq/L	Magnesium in meq/L	Sodium in meq/L	Potassium in meq/L	Alkalinity in meq/L	Sulfate in meq/L	Chloride in meq/L	Nitrate in meq/L	Fluoride in meq/L	**Total Cations in meq/L**	**Total Anions in meq/L**	**Percentage Error**
96143	34.83	30.53	31.28	1.16	2.16	12.08	85.76			97.80	99.99	2.22

	EC/Cation	EC/Anion					TDS/EC	TDS/Cat	TDS/Anion	
96143			range	0	to	0		0.84	0.82	needs to be 0.55-0.77

ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

Analytical Report

Prepared for:

Kristin Farris-Pope

Rice Operating Co.

122 W. Taylor

Hobbs, NM 88240

Project: BD SWD H-35

Project Number: None Given

Location: T22S-R37E-Sec35K, Lea Co., NM

Lab Order Number: 6J12015

Report Date: 10/24/06

Rice Operating Co.	Project: BD SWD H-35	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Monitor Well #1	6J12015-01	Water	10/11/06 11:45	10-12-2006 16:00

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

Rice Operating Co.	Project: BD SWD H-35	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Monitor Well #1 (6J12015-01) Water									
Benzene	ND	0.00100	mg/L	1	EJ61407	10/14/06	10/16/06	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*87.0 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*91.5 %*	*80-120*		"	"	"	"	

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

Rice Operating Co.	Project: BD SWD H-35	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Monitor Well #1 (6J12015-01) Water									
Total Alkalinity	**138**	2.00	mg/L	1	EJ61311	10/13/06	10/13/06	EPA 310.1M	
Chloride	**2880**	100	"	200	EJ61403	10/19/06	10/19/06	EPA 300.0	
Total Dissolved Solids	**7460**	10.0	"	1	EJ61404	10/14/06	10/15/06	EPA 160.1	
Sulfate	**561**	100	"	200	EJ61403	10/19/06	10/19/06	EPA 300.0	

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

Rice Operating Co.	Project: BD SWD H-35	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

Total Metals by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Monitor Well #1 (6J12015-01) Water									
Calcium	**619**	20.2	mg/L	250	EJ61604	10/13/06	10/16/06	EPA 6010B	
Magnesium	**384**	9.00	"	"	"	"	"	"	
Potassium	**25.4**	3.00	"	50	"	"	"	"	
Sodium	**711**	10.8	"	250	"	"	"	"	

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

Rice Operating Co.	Project: BD SWD H-35	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

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 EJ61407 - EPA 5030C (GC)										
Blank (EJ61407-BLK1)				Prepared: 10/14/06 Analyzed: 10/15/06						
Benzene	ND	0.00100	mg/L							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00100	"							
Xylene (o)	ND	0.00100	"							
Surrogate: a,a,a-Trifluorotoluene	*33.5*		*ug/l*	*40.0*		*83.8*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*35.0*		"	*40.0*		*87.5*	*80-120*			
LCS (EJ61407-BS1)				Prepared: 10/14/06 Analyzed: 10/15/06						
Benzene	0.0451	0.00100	mg/L	0.0500		90.2	80-120			
Toluene	0.0430	0.00100	"	0.0500		86.0	80-120			
Ethylbenzene	0.0513	0.00100	"	0.0500		103	80-120			
Xylene (p/m)	0.0929	0.00100	"	0.100		92.9	80-120			
Xylene (o)	0.0423	0.00100	"	0.0500		84.6	80-120			
Surrogate: a,a,a-Trifluorotoluene	*34.4*		*ug/l*	*40.0*		*86.0*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*43.8*		"	*40.0*		*110*	*80-120*			
Calibration Check (EJ61407-CCV1)				Prepared: 10/14/06 Analyzed: 10/17/06						
Benzene	49.9		ug/l	50.0		99.8	80-120			
Toluene	43.1		"	50.0		86.2	80-120			
Ethylbenzene	42.0		"	50.0		84.0	80-120			
Xylene (p/m)	83.7		"	100		83.7	80-120			
Xylene (o)	41.2		"	50.0		82.4	80-120			
Surrogate: a,a,a-Trifluorotoluene	*36.1*		"	*40.0*		*90.2*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*34.3*		"	*40.0*		*85.8*	*80-120*			
Matrix Spike (EJ61407-MS1)	**Source: 6J12015-01**			Prepared: 10/14/06 Analyzed: 10/17/06						
Benzene	0.0501	0.00100	mg/L	0.0500	ND	100	80-120			
Toluene	0.0440	0.00100	"	0.0500	ND	88.0	80-120			
Ethylbenzene	0.0416	0.00100	"	0.0500	ND	83.2	80-120			
Xylene (p/m)	0.0914	0.00100	"	0.100	ND	91.4	80-120			
Xylene (o)	0.0427	0.00100	"	0.0500	ND	85.4	80-120			
Surrogate: a,a,a-Trifluorotoluene	*35.5*		*ug/l*	*40.0*		*88.8*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*40.2*		"	*40.0*		*100*	*80-120*			

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

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

Project: BD SWD H-35
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 EJ61407 - EPA 5030C (GC)										
Matrix Spike Dup (EJ61407-MSD1)	**Source: 6J12015-01**			Prepared: 10/14/06 Analyzed: 10/17/06						
Benzene	0.0502	0.00100	mg/L	0.0500	ND	100	80-120	0.00	20	
Toluene	0.0442	0.00100	"	0.0500	ND	88.4	80-120	0.454	20	
Ethylbenzene	0.0412	0.00100	"	0.0500	ND	82.4	80-120	0.966	20	
Xylene (p/m)	0.0913	0.00100	"	0.100	ND	91.3	80-120	0.109	20	
Xylene (o)	0.0437	0.00100	"	0.0500	ND	87.4	80-120	2.31	20	
Surrogate: a,a,a-Trifluorotoluene	*35.4*		*ug/l*	*40.0*		*88.5*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*41.0*		*"*	*40.0*		*102*	*80-120*			

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

Project: BD SWD H-35
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 EJ61311 - General Preparation (WetChem)										
Blank (EJ61311-BLK1)				Prepared & Analyzed: 10/13/06						
Total Alkalinity	ND	2.00	mg/L							
Carbonate Alkalinity	ND	0.100	"							
Bicarbonate Alkalinity	ND	2.00	"							
Hydroxide Alkalinity	ND	0.100	"							
LCS (EJ61311-BS1)				Prepared: 10/13/06 Analyzed: 10/20/06						
Bicarbonate Alkalinity	196	2.00	mg/L	200		98.0	85-115			
Duplicate (EJ61311-DUP1)		**Source: 6J12011-01**		Prepared & Analyzed: 10/13/06						
Total Alkalinity	238	2.00	mg/L		242			1.67	20	
Reference (EJ61311-SRM1)				Prepared & Analyzed: 10/13/06						
Total Alkalinity	250		mg/L	250		100	90-110			
Batch EJ61403 - General Preparation (WetChem)										
Blank (EJ61403-BLK1)				Prepared & Analyzed: 10/19/06						
Chloride	ND	0.500	mg/L							
Sulfate	ND	0.500	"							
LCS (EJ61403-BS1)				Prepared & Analyzed: 10/19/06						
Sulfate	9.55	0.500	mg/L	10.0		95.5	80-120			
Chloride	9.62	0.500	"	10.0		96.2	80-120			
Calibration Check (EJ61403-CCV1)				Prepared & Analyzed: 10/19/06						
Sulfate	10.1		mg/L	10.0		101	80-120			
Chloride	10.5		"	10.0		105	80-120			

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 EJ61403 - General Preparation (WetChem)										
Duplicate (EJ61403-DUP1)	**Source: 6J12011-01**			Prepared & Analyzed: 10/19/06						
Sulfate	291	25.0	mg/L		308			5.68	20	
Chloride	1430	25.0	"		1430			0.00	20	
Duplicate (EJ61403-DUP2)	**Source: 6J12016-02**			Prepared & Analyzed: 10/19/06						
Sulfate	236	12.5	mg/L		237			0.423	20	
Chloride	690	12.5	"		692			0.289	20	
Matrix Spike (EJ61403-MS1)	***Source: 6J12011-01***			Prepared & Analyzed: 10/19/06						
Chloride	2040	25.0	mg/L	500	1430	122	80-120			S-07
Sulfate	781	25.0	"	500	308	94.6	80-120			
Matrix Spike (EJ61403-MS2)	**Source: 6J12016-02**			Prepared & Analyzed: 10/19/06						
Sulfate	476	12.5	mg/L	250	237	95.6	80-120			
Chloride	979	12.5	"	250	692	115	80-120			
Batch EJ61404 - Filtration Preparation										
Blank (EJ61404-BLK1)				Prepared: 10/14/06 Analyzed: 10/15/06						
Total Dissolved Solids	ND	10.0	mg/L							
Duplicate (EJ61404-DUP1)	**Source: 6J12011-01**			Prepared: 10/14/06 Analyzed: 10/15/06						
Total Dissolved Solids	3380	10.0	mg/L		3260			3.61	5	
Duplicate (EJ61404-DUP2)	**Source: 6J12016-02**			Prepared: 10/14/06 Analyzed: 10/15/06						
Total Dissolved Solids	1850	10.0	mg/L		1900			2.67	5	

Rice Operating Co.	Project: BD SWD H-35	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

Total Metals by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EJ61604 - 6010B/No Digestion										
Blank (EJ61604-BLK1)				Prepared: 10/13/06 Analyzed: 10/16/06						
Calcium	ND	0.0810	mg/L							
Magnesium	ND	0.0360	"							
Potassium	ND	0.0600	"							
Sodium	ND	0.0430	"							
Calibration Check (EJ61604-CCV1)				Prepared: 10/13/06 Analyzed: 10/16/06						
Calcium	1.99		mg/L	2.00		99.5	85-115			
Magnesium	2.20		"	2.00		110	85-115			
Potassium	1.94		"	2.00		97.0	85-115			
Sodium	1.79		"	2.00		89.5	85-115			
Duplicate (EJ61604-DUP1)	**Source: 6J12001-04**			Prepared: 10/13/06 Analyzed: 10/16/06						
Calcium	0.426	0.0810	mg/L		0.427			0.234	20	
Magnesium	0.432	0.0360	"		0.422			2.34	20	
Potassium	0.596	0.0600	"		0.582			2.38	20	
Sodium	0.890	0.0430	"		0.866			2.73	20	

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

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
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By: Raland K Tuttle Date: 10/24/2006

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.

Environmental Lab of Texas

12600 West I-20 East
Odessa, Texas 79766
Phone: 432-563-1800
Fax: 432-563-1713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

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

Project Name: BD SWD System H-35
Project Number:
Project Loc: T22S-R37E-Sec35K, Lea County NM
PO Number:

LAB # (lab use only)	FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Preservative: Ice	HNO_3	HCl (Z) 40 ml glass vials	NaOH	H_2SO_4	None (1) 1 Liter HDPE	Other (Specify)	Matrix: Water	Sludge	Soil	Other (specify)	Analyze For: TPH: 418.1 / 8015M / 1005	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030	RCI	N.O.R.M.	Total Dissolved Solids	RUSH TAT (Pre-Schedule)	Standard TAT
-01	Monitor Well #1	10/11/2006	11:45	3	X		2			1		X					X	X					X			X		X

Analyze For: TCLP: / TOTAL: X

Special Instructions:

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

Sample Containers Intact? Y N
Labels on container? Y N
Custody Seals: Containers / Cooler
Temperature Upon Receipt:
Laboratory Comments: 2.0

Relinquished by:	Date	Time	Received by:	Date	Time
Rozanne Johnson	10/12/06	4:00			
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
			Celeste Rios	10/12/06	4:00

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Rice OP.

Date/ Time: 10/12/06 4:00

Lab ID # : 6512015

Initials: CH

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	Yes	No	2.0 °C	
#2	Shipping container in good condition?	~~Yes~~	No		
#3	Custody Seals intact on shipping container/ cooler?	~~Yes~~	No	Not Present	
#4	Custody Seals intact on sample bottles/ container?	~~Yes~~	No	Not Present	
#5	Chain of Custody present?	~~Yes~~	No		
#6	Sample instructions complete of Chain of Custody?	~~Yes~~	No		
#7	Chain of Custody signed when relinquished/ received?	~~Yes~~	No		
#8	Chain of Custody agrees with sample label(s)?	~~Yes~~	No	ID written on Cont./ Lid	
#9	Container label(s) legible and intact?	~~Yes~~	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	~~Yes~~	No		
#11	Containers supplied by ELOT?	~~Yes~~	No		
#12	Samples in proper container/ bottle?	~~Yes~~	No	See Below	
#13	Samples properly preserved?	~~Yes~~	No	See Below	
#14	Sample bottles intact?	~~Yes~~	No		
#15	Preservations documented on Chain of Custody?	~~Yes~~	No		
#16	Containers documented on Chain of Custody?	~~Yes~~	No		
#17	Sufficient sample amount for indicated test(s)?	~~Yes~~	No	See Below	
#18	All samples received within sufficient hold time?	~~Yes~~	No	See Below	
#19	VOC samples have zero headspace?	~~Yes~~	No	Not Applicable	

Variance Documentation

Contact: _____ Contacted by: _____ Date/ Time: _____

Regarding: _____

Corrective Action Taken: _____

Check all that Apply:

- ☐ See attached e-mail/ fax
- ☐ Client understands and would like to proceed with analysis
- ☐ Cooling process had begun shortly after sampling event