AP - 59

F-35
ANNUAL GW MONITORING REPORT

DATE:
2007

AP-59
F-35 Annual GW Mon. Report 2007

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R. T. HICKS CONSULTANTS, LTD.

901 Rio Grande Blvd NW ▲ Suite F-142 ▲ Albuquerque, NM 87104 ▲ 505.266.5004 ▲ Fax: 505.266-0745

January 24, 2008

Wayne Price
Oil Conservation Division
1220 S. St. Francis Drive
Santa Fe, NM 87505

RE: 2007 Annual Ground Water Monitoring Report
F-35 SWD, Sec 35, T17S, R35E, Unit "F"
NMOCD Case #: AP-59

Dear Mr. Wayne Price:

R.T. Hicks Consultants, Ltd is pleased to submit the 2007 Annual Ground Water Monitoring Report for the F-35 SWD site located in the Vacuum Salt Water Disposal System (SWD). This report consists of the following sections:

1. A table summarizing all laboratory results, depth to ground water and other pertinent data associated with ground water sampling at the site, including this past year.
2. Graphs showing chemical concentration over time for chloride, TDS, and sulfate.
3. Laboratory data sheets associated with the routine sampling for 2007.
4. Potentiometric surface map.
5. Site Survey

A status report was submitted to NMOCD on September 24, 2007. The vadose zone remedy was installed and the excavation was backfilled according to the approved plan in August of 2007. Revegetation efforts are ongoing. The point source treatment system has been operating without issue since August. The system produced approximately 6,500 gallons of potable water for stock and wildlife in 2007. We plan to continue quartely ground water monitoring in 2008.

Thank you for your consideration of this annual summary information. The attached CD contains an electronic copy of this report. If you have any questions, please contact us at 505-266-5004, or Kristin Farris Pope at ROC, 505-393-9174.

Sincerely,
R.T. Hicks Consultants, Ltd.

Randall T. Hicks
Principal

Copy: Hobbs NMOCD office; Rice Operating Company

F-35 SWD

Table 1: chemistry over time

Well Name	*Date*	*DTW (ft)*	*Chloride (mg/L)*	*Sulfate (mg/L)*	*TDS (mg/L)*	*Benzene (mg/L)*	*Toluene (mg/L)*	*EthylBenzene (mg/L)*	*Total Xylenes (mg/L)*	*Comments*
MW-1	1/10/2002	58.00	5200	5	9425	0.050	0.053	0.050	0.0900	
MW-1	5/15/2002	XXX	3720	3.2	7050	0.744	0.207	0.510	0.3090	
MW-1	8/19/2002	XXX	3630	10.7	6040	0.705	0.172	0.112	0.0760	
MW-1	11/11/2002	XXX	3720	2.8	6020	1.210	0.343	0.835	0.4310	
MW-1	2/28/2003	XXX	2200	26.2	4040	0.909	0.840	0.321	0.1240	
MW-1	6/5/2003	XXX	2300	20.3	4180	0.632	0.134	0.061	0.0670	
MW-1	8/21/2003	XXX	2060	4.9	4000	0.617	0.360	0.202	0.1920	
MW-1	11/19/2003	XXX	2000	5.1	3760	0.797	0.301	0.264	0.2480	
MW-1	2/18/2004	58.20	1819	0.19	3932	0.349	0.038	0.121	0.0270	
MW-1	5/27/2004	58.50	1759	8.7	4008	0.726	0.176	0.268	0.2150	
MW-1	9/7/2004	58.20	1040	19.9	3000	0.429	0.221	0.143	0.2247	mod. odor; gray
MW-1	11/24/2004	57.81	1260	51	2740	0.0489	0.313	0.209	0.2507	mod. odor; gray
MW-1	3/21/2005	57.18	1220	110	2210	2.200	1.610	0.848	1.2830	mod. odor; gray
MW-1	5/11/2005		1490	24.6	2970	686	451	374	176.2000	
MW-1	8/15/2005	58.40	1340	69.5	2890	0.819	0.393	0.666	0.5840	
MW-1	10/25/2005	57.45	1080	72.7	2540	0.779	0.243	0.394	0.3062	
MW-1	1/23/2006	57.38	886	88.2	2080	0.447	0.222	0.28	0.3006	Heavy skim of Oil: Septic Odor
MW-1	4/25/2006	57.58	1420	62.5	3040	0.227	0.0956	0.174	0.1614	
MW-1	10/24/2006	XXX	1460	45.2	3190	0.462	0.489	0.230	0.745	Clear with a strong septic odor
MW-1	1/9/2007	XXX	1510	67.2	2980	0.486	0.577	0.185	0.333	Clear Strong Septic Odor
MW-1	5/23/2007	XXX	1500	44.4	2850	0.557	0.387	0.323	0.681	Clear Strong Septic Odor
MW-1	9/19/2007	XXX	1380	23.2	2902	0.902	0.706	0.582	1.140	Clear Strong Septic Odor
MW-1	11/19/2007	XXX	1260	44.2	2642	0.719	0.203	0.429	0.665	Clear Strong septic odor

F-35 SWD

Table 1: chemistry over time

Well Name	*Date*	*DTW (ft)*	*Chloride (mg/L)*	*Sulfate (mg/L)*	*TDS (mg/L)*	*Benzene (mg/L)*	*Toluene (mg/L)*	*EthylBenzene (mg/L)*	*Total Xylenes (mg/L)*	*Comments*
MW-2	6/6/2006	52.57	97.6	63.3	724	<0.001	<0.001	<0.001	<0.001	Clear no odor
MW-2	10/24/2006	52.77	89.1	67.2	598	<0.001	<0.001	<0.001	<0.001	
MW-2	1/9/2007	52.91	101	69.4	590	<0.001	<0.001	<0.001	<0.001	Clear No Odor
MW-2	5/23/2007	53.12	88.3	61	512	<0.001	<0.001	<0.001	<0.001	Clear No Odor
MW-2	9/19/2007	53.33	100	71.7	587	<0.002	<0.002	<0.002	<0.006	Clear No Odor
MW-2	11/18/2007	53.41	96	85.7	571	<0.002	<0.002	<0.002	<0.006	Clear No odor
MW-3 Deep	1/9/2007	52.35	133	86.9	500	<0.001	0.0103	<0.001	<0.001	Clear Slight Odor
MW-3 Deep	5/23/2007	52.50	91.9	47.5	452	<0.001	0.00241	<0.001	<0.001	Clear Slight Odor
MW-3 Deep	9/19/2007	52.82	204	72.8	772	<0.002	<0.002	<0.002	<0.006	Clear Slight Odor
MW-3 Deep	11/19/2007	52.82	216	64.6	735	<0.002	<0.002	<0.002	<0.006	Clear Slight odor
MW-3 Shallow	1/9/2007	52.35	144	99	512	<0.001	0.0150	<0.001	<0.001	Clear Slight Odor
MW-3 Shallow	5/23/2007	52.50	117	56.9	494	<0.001	0.00130	<0.001	<0.001	Clear Slight Odor
MW-3 Shallow	9/19/2007	52.82	192	73.5	789	<0.002	<0.002	<0.002	<0.006	Clear Slight Odor
MW-3 Shallow	11/19/2007	52.82	104	66.3	467	<0.002	<0.002	<0.002	<0.006	Clear Slight odor

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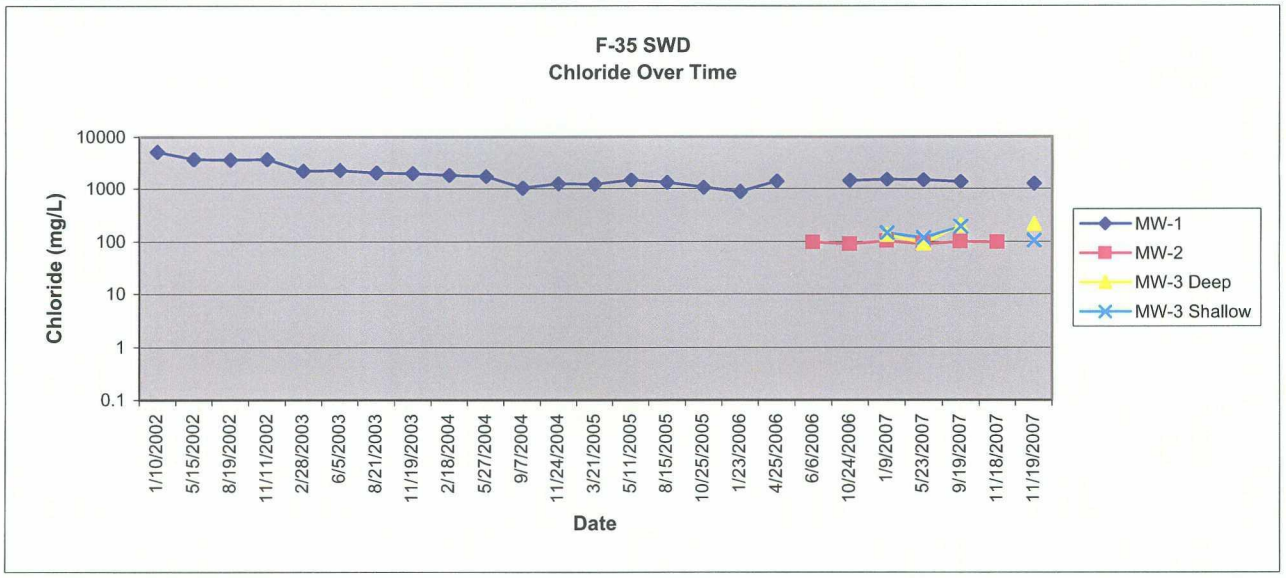

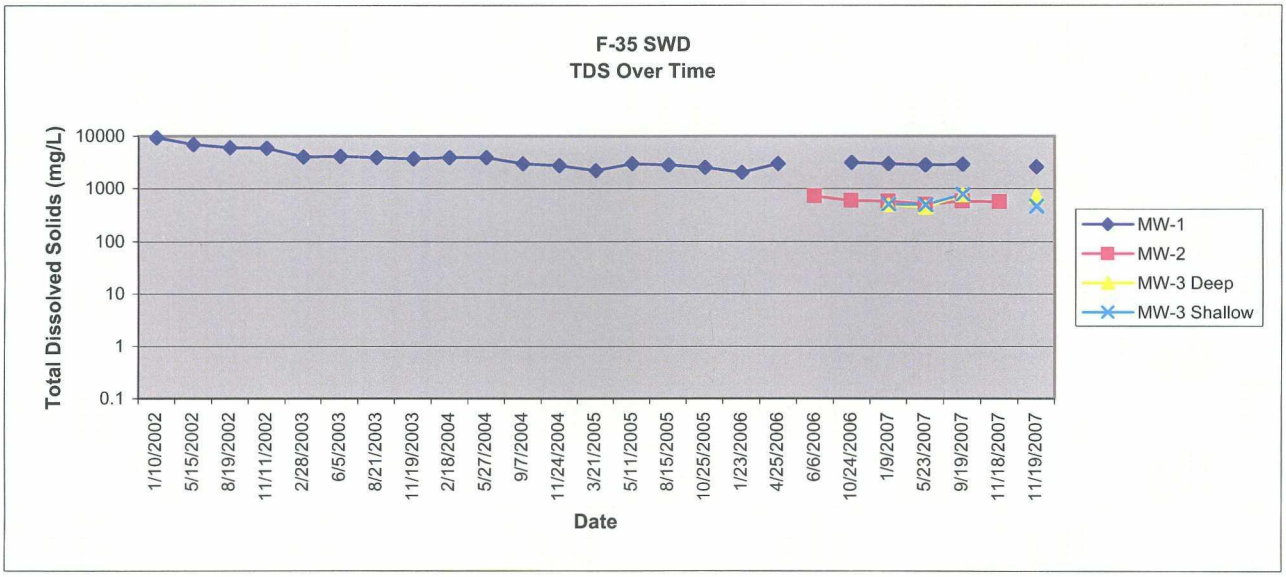

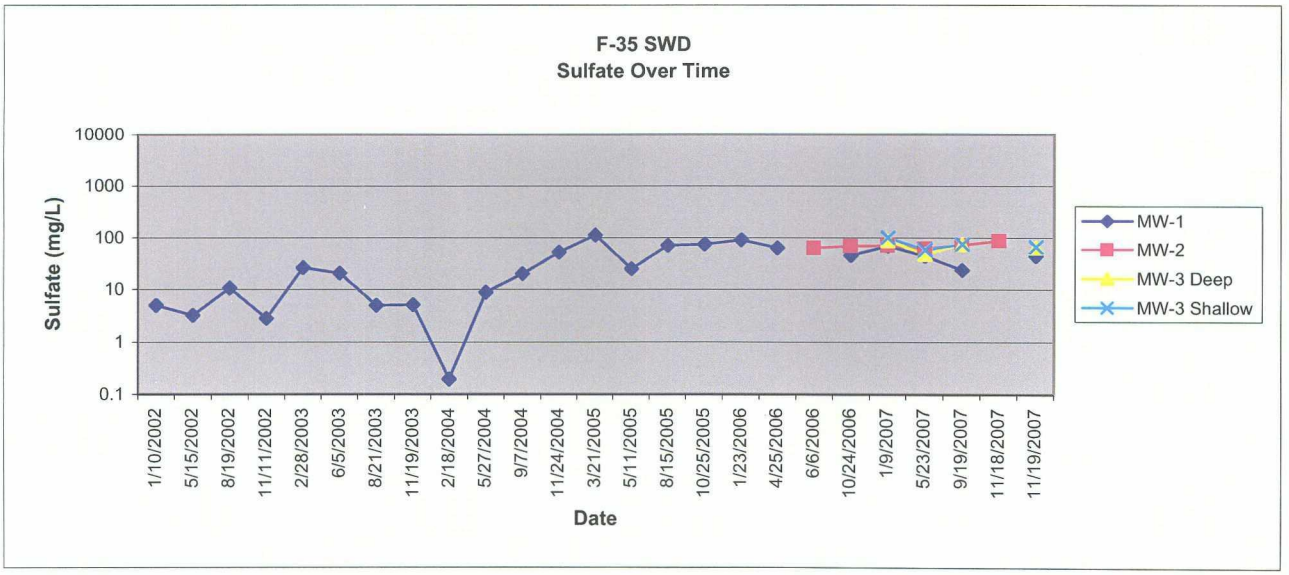

R.T. Hicks Consultants, Ltd 901 Rio Grande Blvd NW, Suite F-142 Albuquerque, NM 87104 505-266-5004	Ground Water Chemistry	F-35 SWD
	Rice Operating Company 2007 Annual Report	1/24/2008

ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

A Xenco Laboratories, Inc. Company

Analytical Report

Prepared for:

Kristin Farris-Pope

Rice Operating Co.

122 W. Taylor

Hobbs, NM 88240

Project: Vacuum F-35 SWD & G-35 SWD

Project Number: None Given

Location: T17S-R35E-Sec35 F&G- Lea County, New Mexico

Lab Order Number: 7A12003

Report Date: 01/25/07

Rice Operating Co.	Project: Vacuum F-35 SWD & G-35 SWD	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
F-35 SWD Monitor Well #1	7A12003-01	Water	01/09/07 11:10	01-12-2007 09:30
F-35 SWD Monitor Well #2	7A12003-02	Water	01/09/07 10:30	01-12-2007 09:30
F-35 SWD Monitor Well #3- Shallow	7A12003-03	Water	01/09/07 13:40	01-12-2007 09:30
F-35 SWD Monitor Well #3- Deep	7A12003-04	Water	01/09/07 14:05	01-12-2007 09:30
G-35 SWD Monitor Well #1	7A12003-05	Water	01/09/07 11:40	01-12-2007 09:30
G-35 SWD Monitor Well #2	7A12003-06	Water	01/09/07 09:25	01-12-2007 09:30
G-35 SWD Monitor Well #3- Shallow	7A12003-07	Water	01/09/07 14:55	01-12-2007 09:30
G-35 SWD Monitor Well #3- Deep	7A12003-08	Water	01/09/07 15:30	01-12-2007 09:30

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

Rice Operating Co.	Project: Vacuum F-35 SWD & G-35 SWD	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
F-35 SWD Monitor Well #1 (7A12003-01) Water									
Total Alkalinity	**362**	2.00	mg/L	1	EA71603	01/18/07	01/18/07	EPA 310.1M	
Chloride	**1510**	50.0	"	100	EA71507	01/15/07	01/15/07	EPA 300.0	
Total Dissolved Solids	**2980**	10.0	"	1	EA71508	01/15/07	01/16/07	EPA 160.1	
Sulfate	**67.2**	50.0	"	100	EA71507	01/15/07	01/15/07	EPA 300.0	
F-35 SWD Monitor Well #2 (7A12003-02) Water									
Total Alkalinity	**288**	2.00	mg/L	1	EA71603	01/18/07	01/18/07	EPA 310.1M	
Chloride	**101**	5.00	"	10	EA71507	01/15/07	01/15/07	EPA 300.0	
Total Dissolved Solids	**590**	10.0	"	1	EA71508	01/15/07	01/16/07	EPA 160.1	
Sulfate	**69.4**	5.00	"	10	EA71507	01/15/07	01/15/07	EPA 300.0	
F-35 SWD Monitor Well #3- Shallow (7A12003-03) Water									
Total Alkalinity	**174**	2.00	mg/L	1	EA71603	01/18/07	01/18/07	EPA 310.1M	
Chloride	**144**	5.00	"	10	EA71507	01/15/07	01/15/07	EPA 300.0	
Total Dissolved Solids	**512**	10.0	"	1	EA71508	01/15/07	01/16/07	EPA 160.1	
Sulfate	**99.0**	5.00	"	10	EA71507	01/15/07	01/15/07	EPA 300.0	
F-35 SWD Monitor Well #3- Deep (7A12003-04) Water									
Total Alkalinity	**160**	2.00	mg/L	1	EA71603	01/18/07	01/18/07	EPA 310.1M	
Chloride	**133**	5.00	"	10	EA71507	01/15/07	01/15/07	EPA 300.0	
Total Dissolved Solids	**500**	10.0	"	1	EA71508	01/15/07	01/16/07	EPA 160.1	
Sulfate	**86.9**	5.00	"	10	EA71507	01/15/07	01/15/07	EPA 300.0	
G-35 SWD Monitor Well #1 (7A12003-05) Water									
Total Alkalinity	**426**	2.00	mg/L	1	EA71603	01/18/07	01/18/07	EPA 310.1M	
Chloride	**873**	25.0	"	50	EA71507	01/15/07	01/15/07	EPA 300.0	
Total Dissolved Solids	**1950**	10.0	"	1	EA71508	01/15/07	01/16/07	EPA 160.1	
Sulfate	**34.6**	25.0	"	50	EA71507	01/15/07	01/15/07	EPA 300.0	
G-35 SWD Monitor Well #2 (7A12003-06) Water									
Total Alkalinity	**180**	2.00	mg/L	1	EA71603	01/18/07	01/18/07	EPA 310.1M	
Chloride	**13.7**	2.50	"	5	EA71507	01/15/07	01/15/07	EPA 300.0	
Total Dissolved Solids	**322**	10.0	"	1	EA71508	01/15/07	01/16/07	EPA 160.1	
Sulfate	**21.7**	2.50	"	5	EA71507	01/15/07	01/15/07	EPA 300.0	

Rice Operating Co.	Project: Vacuum F-35 SWD & G-35 SWD	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
G-35 SWD Monitor Well #3- Shallow (7A12003-07) Water									
Total Alkalinity	**166**	2.00	mg/L	1	EA71603	01/18/07	01/18/07	EPA 310.1M	
Chloride	**311**	5.00	"	10	EA71507	01/15/07	01/15/07	EPA 300.0	
Total Dissolved Solids	**804**	10.0	"	1	EA71508	01/15/07	01/16/07	EPA 160.1	
Sulfate	**48.9**	5.00	"	10	EA71507	01/15/07	01/15/07	EPA 300.0	
G-35 SWD Monitor Well #3- Deep (7A12003-08) Water									
Total Alkalinity	**140**	2.00	mg/L	1	EA71603	01/18/07	01/18/07	EPA 310.1M	
Chloride	**313**	12.5	"	25	EA71507	01/15/07	01/15/07	EPA 300.0	
Total Dissolved Solids	**830**	10.0	"	1	EA71508	01/15/07	01/16/07	EPA 160.1	
Sulfate	**46.5**	12.5	"	25	EA71507	01/15/07	01/15/07	EPA 300.0	

Rice Operating Co.	Project: Vacuum F-35 SWD & G-35 SWD	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
F-35 SWD Monitor Well #1 (7A12003-01) Water									
Calcium	**192**	4.05	mg/L	50	EA71815	01/18/07	01/18/07	EPA 6010B	
Magnesium	**73.0**	1.80	"	"	"	"	"	"	
Potassium	**8.47**	0.600	"	10	"	"	"	"	
Sodium	**773**	10.8	"	250	"	"	"	"	
F-35 SWD Monitor Well #2 (7A12003-02) Water									
Calcium	**104**	4.05	mg/L	50	EA71815	01/18/07	01/18/07	EPA 6010B	
Magnesium	**19.6**	0.360	"	10	"	"	"	"	
Potassium	**3.72**	0.600	"	"	"	"	"	"	
Sodium	**45.9**	0.430	"	"	"	"	"	"	
F-35 SWD Monitor Well #3- Shallow (7A12003-03) Water									
Calcium	**83.4**	4.05	mg/L	50	EA71815	01/18/07	01/18/07	EPA 6010B	
Magnesium	**17.0**	0.360	"	10	"	"	"	"	
Potassium	**3.59**	0.600	"	"	"	"	"	"	
Sodium	**72.0**	2.15	"	50	"	"	"	"	
F-35 SWD Monitor Well #3- Deep (7A12003-04) Water									
Calcium	**93.7**	4.05	mg/L	50	EA71815	01/18/07	01/18/07	EPA 6010B	
Magnesium	**17.2**	0.360	"	10	"	"	"	"	
Potassium	**3.18**	0.600	"	"	"	"	"	"	
Sodium	**50.1**	2.15	"	50	"	"	"	"	
G-35 SWD Monitor Well #1 (7A12003-05) Water									
Calcium	**21.8**	0.810	mg/L	10	EA71815	01/18/07	01/18/07	EPA 6010B	
Magnesium	**15.0**	0.360	"	"	"	"	"	"	
Potassium	**9.32**	0.600	"	"	"	"	"	"	
Sodium	**684**	10.8	"	250	"	"	"	"	
G-35 SWD Monitor Well #2 (7A12003-06) Water									
Calcium	**52.0**	0.810	mg/L	10	EA71815	01/18/07	01/18/07	EPA 6010B	
Magnesium	**11.1**	0.360	"	"	"	"	"	"	
Potassium	**2.44**	0.600	"	"	"	"	"	"	
Sodium	**19.2**	0.430	"	"	"	"	"	"	

Rice Operating Co.	Project: Vacuum F-35 SWD & G-35 SWD	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
G-35 SWD Monitor Well #3- Shallow (7A12003-07) Water									
Calcium	**124**	4.05	mg/L	50	EA71815	01/18/07	01/18/07	EPA 6010B	
Magnesium	**16.9**	0.360	"	10	"	"	"	"	
Potassium	**5.71**	0.600	"	"	"	"	"	"	
Sodium	**115**	2.15	"	50	"	"	"	"	
G-35 SWD Monitor Well #3- Deep (7A12003-08) Water									
Calcium	**127**	4.05	mg/L	50	EA71815	01/18/07	01/18/07	EPA 6010B	
Magnesium	**18.8**	0.360	"	10	"	"	"	"	
Potassium	**4.09**	0.600	"	"	"	"	"	"	
Sodium	**105**	2.15	"	50	"	"	"	"	

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

Volatile Organic Compounds by EPA Method 8260B

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
F-35 SWD Monitor Well #1 (7A12003-01) Water									
Benzene	**0.486**	0.00500	mg/L	5	EA71517	01/15/07	01/15/07	EPA 8260B	
Toluene	**0.577**	0.00500	"	"	"	"	"	"	
Ethylbenzene	**0.185**	0.00500	"	"	"	"	"	"	
Xylene (p/m)	**0.217**	0.00500	"	"	"	"	"	"	
Xylene (o)	**0.116**	0.00500	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*97.6 %*	*68-129*		"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*90.0 %*	*72-132*		"	"	"	"	
Surrogate: Toluene-d8		*97.2 %*	*74-118*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*95.6 %*	*65-140*		"	"	"	"	
F-35 SWD Monitor Well #2 (7A12003-02) Water									
Benzene	ND	0.00100	mg/L	1	EA71517	01/15/07	01/15/07	EPA 8260B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*97.2 %*	*68-129*		"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*88.0 %*	*72-132*		"	"	"	"	
Surrogate: Toluene-d8		*90.6 %*	*74-118*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*95.8 %*	*65-140*		"	"	"	"	
F-35 SWD Monitor Well #3- Shallow (7A12003-03) Water									
Benzene	ND	0.00100	mg/L	1	EA71517	01/15/07	01/15/07	EPA 8260B	
Toluene	**0.0150**	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*97.8 %*	*68-129*		"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*86.0 %*	*72-132*		"	"	"	"	
Surrogate: Toluene-d8		*92.0 %*	*74-118*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*97.6 %*	*65-140*		"	"	"	"	

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

Volatile Organic Compounds by EPA Method 8260B

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
F-35 SWD Monitor Well #3- Deep (7A12003-04) Water									
Benzene	ND	0.00100	mg/L	1	EA71517	01/15/07	01/15/07	EPA 8260B	
Toluene	**0.0103**	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*98.4 %*	*68-129*		"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*86.6 %*	*72-132*		"	"	"	"	
Surrogate: Toluene-d8		*91.8 %*	*74-118*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*96.4 %*	*65-140*		"	"	"	"	
G-35 SWD Monitor Well #1 (7A12003-05) Water									
Benzene	**0.188**	0.0100	mg/L	10	EA71517	01/15/07	01/15/07	EPA 8260B	
Toluene	ND	0.0100	"	"	"	"	"	"	
Ethylbenzene	**0.0883**	0.0100	"	"	"	"	"	"	
Xylene (p/m)	**ND**	0.0100	"	"	"	"	"	"	
Xylene (o)	**J [0.00764]**	0.0100	"	"	"	"	"	"	J
Surrogate: Dibromofluoromethane		*101 %*	*68-129*		"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*90.8 %*	*72-132*		"	"	"	"	
Surrogate: Toluene-d8		*94.0 %*	*74-118*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*102 %*	*65-140*		"	"	"	"	
G-35 SWD Monitor Well #2 (7A12003-06) Water									
Benzene	ND	0.00100	mg/L	1	EA71517	01/15/07	01/15/07	EPA 8260B	
Toluene	**J [0.000540]**	0.00100	"	"	"	"	"	"	J
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*94.0 %*	*68-129*		"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*76.0 %*	*72-132*		"	"	"	"	
Surrogate: Toluene-d8		*90.0 %*	*74-118*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*103 %*	*65-140*		"	"	"	"	

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

Volatile Organic Compounds by EPA Method 8260B

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
G-35 SWD Monitor Well #3- Shallow (7A12003-07) Water									
Benzene	ND	0.00100	mg/L	1	EA71517	01/15/07	01/15/07	EPA 8260B	
Toluene	**0.0191**	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*91.4 %*		*68-129*		"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*75.6 %*		*72-132*		"	"	"	
Surrogate: Toluene-d8		*89.2 %*		*74-118*		"	"	"	
Surrogate: 4-Bromofluorobenzene		*106 %*		*65-140*		"	"	"	
G-35 SWD Monitor Well #3- Deep (7A12003-08) Water									
Benzene	ND	0.00100	mg/L	1	EA71517	01/15/07	01/15/07	EPA 8260B	
Toluene	**0.0136**	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*104 %*		*68-129*		"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*90.4 %*		*72-132*		"	"	"	
Surrogate: Toluene-d8		*92.0 %*		*74-118*		"	"	"	
Surrogate: 4-Bromofluorobenzene		*98.4 %*		*65-140*		"	"	"	

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

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EA71507 - General Preparation (WetChem)										
Blank (EA71507-BLK1)				Prepared & Analyzed: 01/15/07						
Sulfate	ND	0.500	mg/L							
Chloride	ND	0.500	"							
LCS (EA71507-BS1)				Prepared & Analyzed: 01/15/07						
Chloride	10.4	0.500	mg/L	10.0		104	80-120			
Sulfate	9.84	0.500	"	10.0		98.4	80-120			
Calibration Check (EA71507-CCV1)				Prepared & Analyzed: 01/15/07						
Chloride	9.78		mg/L	10.0		97.8	80-120			
Sulfate	12.0		"	10.0		120	80-120			
Duplicate (EA71507-DUP1)	**Source: 7A12003-02**			Prepared & Analyzed: 01/15/07						
Chloride	103	5.00	mg/L		101			1.96	20	
Sulfate	70.8	5.00	"		69.4			2.00	20	
Duplicate (EA71507-DUP2)	**Source: 7A12006-03**			Prepared & Analyzed: 01/15/07						
Chloride	146	5.00	mg/L		148			1.36	20	
Sulfate	51.3	5.00	"		52.3			1.93	20	
Matrix Spike (EA71507-MS1)	**Source: 7A12003-02**			Prepared & Analyzed: 01/15/07						
Chloride	206	5.00	mg/L	100	101	105	80-120			
Sulfate	228	5.00	"	100	69.4	159	80-120			
Matrix Spike (EA71507-MS2)	**Source: 7A12006-03**			Prepared & Analyzed: 01/15/07						
Sulfate	155	5.00	mg/L	100	52.3	103	80-120			
Chloride	257	5.00	"	100	148	109	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 EA71508 - Filtration Preparation										
Duplicate (EA71508-DUP1)	**Source: 7A12003-02**			Prepared: 01/15/07 Analyzed: 01/16/07						
Total Dissolved Solids	586	10.0	mg/L		590			0.680	20	
Duplicate (EA71508-DUP2)	**Source: 7A12006-03**			Prepared: 01/15/07 Analyzed: 01/16/07						
Total Dissolved Solids	582	10.0	mg/L		590			1.37	20	
Batch EA71603 - General Preparation (WetChem)										
Blank (EA71603-BLK1)				Prepared & Analyzed: 01/18/07						
Total Alkalinity	ND	2.00	mg/L							
LCS (EA71603-BS1)				Prepared & Analyzed: 01/18/07						
Bicarbonate Alkalinity	186	2.00	mg/L	200		93.0	85-115			
Duplicate (EA71603-DUP1)	**Source: 7A12003-01**			Prepared & Analyzed: 01/18/07						
Total Alkalinity	360	2.00	mg/L		362			0.554	20	
Reference (EA71603-SRM1)				Prepared & Analyzed: 01/18/07						
Total Alkalinity	246		mg/L	250		98.4	90-110			

Rice Operating Co.	Project: Vacuum F-35 SWD & G-35 SWD	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 EA71815 - 6010B/No Digestion										
Blank (EA71815-BLK1)				Prepared & Analyzed: 01/18/07						
Calcium	ND	0.0810	mg/L							
Magnesium	ND	0.0360	"							
Potassium	ND	0.0600	"							
Sodium	ND	0.0430	"							
Calibration Check (EA71815-CCV1)				Prepared & Analyzed: 01/18/07						
Calcium	1.98		mg/L	2.00		99.0	85-115			
Magnesium	2.05		"	2.00		102	85-115			
Potassium	1.74		"	2.00		87.0	85-115			
Sodium	1.86		"	2.00		93.0	85-115			
Duplicate (EA71815-DUP1)	**Source: 7A12003-01**			Prepared & Analyzed: 01/18/07						
Calcium	192	4.05	mg/L		192			0.00	20	
Magnesium	75.6	1.80	"		73.0			3.50	20	
Potassium	8.54	0.600	"		8.47			0.823	20	
Sodium	739	10.8	"		773			4.50	20	

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

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EA71517 - EPA 5030C (GCMS)										
Blank (EA71517-BLK1)				Prepared & Analyzed: 01/15/07						
Benzene	ND	0.00100	mg/L							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00100	"							
Xylene (o)	ND	0.00100	"							
Surrogate: Dibromofluoromethane	*49.3*		*ug/l*	*50.0*		*98.6*	*68-129*			
Surrogate: 1,2-Dichloroethane-d4	*39.0*		"	*50.0*		*78.0*	*72-132*			
Surrogate: Toluene-d8	*40.2*		"	*50.0*		*80.4*	*74-118*			
Surrogate: 4-Bromofluorobenzene	*49.4*		"	*50.0*		*98.8*	*65-140*			
LCS (EA71517-BS1)				Prepared & Analyzed: 01/15/07						
Benzene	0.0198	0.00100	mg/L	0.0250		79.2	70-130			
Toluene	0.0193	0.00100	"	0.0250		77.2	70-130			
Ethylbenzene	0.0241	0.00100	"	0.0250		96.4	70-130			
Xylene (p/m)	0.0486	0.00100	"	0.0500		97.2	70-130			
Xylene (o)	0.0248	0.00100	"	0.0250		99.2	70-130			
Surrogate: Dibromofluoromethane	*50.7*		*ug/l*	*50.0*		*101*	*68-129*			
Surrogate: 1,2-Dichloroethane-d4	*46.0*		"	*50.0*		*92.0*	*72-132*			
Surrogate: Toluene-d8	*38.0*		"	*50.0*		*76.0*	*74-118*			
Surrogate: 4-Bromofluorobenzene	*35.6*		"	*50.0*		*71.2*	*65-140*			
Calibration Check (EA71517-CCV1)				Prepared & Analyzed: 01/15/07						
Toluene	51.3		ug/l	50.0		103	70-130			
Ethylbenzene	40.6		"	50.0		81.2	70-130			
Surrogate: Dibromofluoromethane	*48.2*		"	*50.0*		*96.4*	*68-129*			
Surrogate: 1,2-Dichloroethane-d4	*51.7*		"	*50.0*		*103*	*72-132*			
Surrogate: Toluene-d8	*52.9*		"	*50.0*		*106*	*74-118*			
Surrogate: 4-Bromofluorobenzene	*37.4*		"	*50.0*		*74.8*	*65-140*			

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

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EA71517 - EPA 5030C (GCMS)										
Matrix Spike (EA71517-MS1)	**Source: 7A12013-05**			Prepared: 01/15/07 Analyzed: 01/16/07						
Benzene	0.0245	0.00100	mg/L	0.0250	0.00381	82.8	80-120			
Toluene	0.0224	0.00100	"	0.0250	ND	89.6	80-120			
Ethylbenzene	0.0250	0.00100	"	0.0250	ND	100	80-120			
Xylene (p/m)	0.0508	0.00100	"	0.0500	ND	102	80-120			
Xylene (o)	0.0260	0.00100	"	0.0250	ND	104	80-120			
Surrogate: Dibromofluoromethane	*51.2*		*ug/l*	*50.0*		*102*	*68-129*			
Surrogate: 1,2-Dichloroethane-d4	*44.2*		"	*50.0*		*88.4*	*72-132*			
Surrogate: Toluene-d8	*41.8*		"	*50.0*		*83.6*	*74-118*			
Surrogate: 4-Bromofluorobenzene	*49.0*		"	*50.0*		*98.0*	*65-140*			
Matrix Spike Dup (EA71517-MSD1)	**Source: 7A12013-05**			Prepared: 01/15/07 Analyzed: 01/18/07						
Benzene	0.0258	0.00100	mg/L	0.0250	0.00381	88.0	80-120	5.17	20	
Toluene	0.0224	0.00100	"	0.0250	ND	89.6	80-120	0.00	20	
Ethylbenzene	0.0246	0.00100	"	0.0250	ND	98.4	80-120	1.61	20	
Xylene (p/m)	0.0503	0.00100	"	0.0500	ND	101	80-120	0.989	20	
Xylene (o)	0.0267	0.00100	"	0.0250	ND	107	80-120	2.66	20	
Surrogate: Dibromofluoromethane	*57.0*		*ug/l*	*50.0*		*114*	*68-129*			
Surrogate: 1,2-Dichloroethane-d4	*49.9*		"	*50.0*		*99.8*	*72-132*			
Surrogate: Toluene-d8	*42.2*		"	*50.0*		*84.4*	*74-118*			
Surrogate: 4-Bromofluorobenzene	*48.3*		"	*50.0*		*96.6*	*65-140*			

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

Notes and Definitions

S-08	Value outside Laboratory historical or method prescribed QC limits.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By: Brent Barron Date: 1/25/2007

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

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

Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

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

Project Manager: Kristin Farris Pope kpope@riceswd.com

Company Name: RICE Operating Company

Company Address: 122 W. Taylor Street

City/State/Zip: Hobbs, New Mexico 88240

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

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

Project Name: Vacuum F-35 SWD & G-35 SWD

Project #:

Project Loc: T17S-R35E-Sec35 F&G ~ Lea County New Mexico

PO #:

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

(lab use only)

ORDER #: 7AN2003

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl (2) 40 ml glass vials	H_2SO_4	NaOH	$Na_2S_2O_3$	None (1) 1 Liter HDPE	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW= Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TPH: 418.1 8015M TX 1005	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se (TCLP: / TOTAL:)	Volatiles	Semivolatiles	BTEX 8021B/5030	RCI	N.O.R.M.	Total Dissolved Solids			RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
-01	F-35 SWD Monitor Well #1			1/9/2007	11:10		3	X		2				1		GW			X	X					X			X				X
-02	F-35 SWD Monitor Well #2			1/9/2007	10:30		3	X		2				1		GW			X	X					X			X				X
-03	F-35 SWD Monitor Well #3-Shallow			1/9/2007	13:40		3	X		2				1		GW			X	X					X			X				X
-04	F-35 SWD Monitor Well #3-Deep			1/9/2007	14:05		3	X		2				1		GW			X	X					X			X				X
-05	G-35 SWD Monitor Well #1			1/9/2007	11:40		3	X		2				1		GW			X	X					X			X				X
-06	G-35 SWD Monitor Well #2			1/9/2007	9:25		3	X		2				1		GW			X	X					X			X				X
-07	G-35 SWD Monitor Well #3-Shallow			1/9/2007	14:55		3	X		2				1		GW			X	X					X			X				X
-08	G-35 SWD Monitor Well #3-Deep			1/9/2007	15:30		3	X		2				1		GW			X	X					X			X				X

Special Instructions:

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

Relinquished by:	Date	Time	Received by:	Date	Time
Rozanne Johnson	1-12-07	5:00	James Johnson	1-12-07	5:01
Relinquished by: James Johnson	1-12-07		Received by:		
Relinquished by:			Received by ELOT:	1/12/07	9:30

Laboratory Comments:

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

Temperature Upon Receipt: 1.5 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: RICE OP

Date/ Time: 11/2/07 9:30

Lab ID # : 711202003

Initials: CK

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	Yes	No	1.5 °C	
#2	Shipping container in good condition?	Yes	No		
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	Not Present	
#4	Custody Seals intact on sample bottles/ container?	Yes	No	Not Present	
#5	Chain of Custody present?	Yes	No		
#6	Sample instructions complete of Chain of Custody?	Yes	No		
#7	Chain of Custody signed when relinquished/ received?	Yes	No		
#8	Chain of Custody agrees with sample label(s)?	Yes	No	ID written on Cont./ Lid	
#9	Container label(s) legible and intact?	Yes	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	Yes	No		
#11	Containers supplied by ELOT?	Yes	No		
#12	Samples in proper container/ bottle?	Yes	No	See Below	
#13	Samples properly preserved?	Yes	No	See Below	
#14	Sample bottles intact?	Yes	No		
#15	Preservations documented on Chain of Custody?	Yes	No		
#16	Containers documented on Chain of Custody?	Yes	No		
#17	Sufficient sample amount for indicated test(s)?	Yes	No	See Below	
#18	All samples received within sufficient hold time?	Yes	No	See Below	
#19	Subcontract of sample(s)?	Yes	No	Not Applicable	
#20	VOC samples have zero headspace?	Yes	No	Not Applicable	

Variance Documentation

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

Regarding: _____

Corrective Action Taken: _____

Check all that Apply:

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

ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

A Xenco Laboratories Company

Analytical Report

Prepared for:

Kristin Farris-Pope

Rice Operating Co.

122 W. Taylor

Hobbs, NM 88240

Project: Vacuum F-35 SWD & G-35 SWD

Project Number: None Given

Location: T17S-R35E-Sec35 F&G ~ Lea County New Mexico

Lab Order Number: 7E25009

Report Date: 06/13/07

Rice Operating Co.	Project: Vacuum F-35 SWD & G-35 SWD	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
F-35 SWD Monitor Well #1	7E25009-01	Water	05/23/07 10:50	05-25-2007 11:25
F-35 SWD Monitor Well #2	7E25009-02	Water	05/23/07 11:35	05-25-2007 11:25
F-35 SWD Monitor Well #3-Shallow	7E25009-03	Water	05/23/07 14:10	05-25-2007 11:25
F-35 SWD Monitor Well #3-Deep	7E25009-04	Water	05/23/07 14:45	05-25-2007 11:25
G-35 SWD Monitor Well #1	7E25009-05	Water	05/24/07 14:40	05-25-2007 11:25
G-35 SWD Monitor Well #2	7E25009-06	Water	05/24/07 09:30	05-25-2007 11:25
G-35 SWD Monitor Well #3-Shallow	7E25009-07	Water	05/24/07 12:45	05-25-2007 11:25
G-35 SWD Monitor Well #3-Deep	7E25009-08	Water	05/24/07 13:25	05-25-2007 11:25
G-35 SWD Monitor Well #4	7E25009-09	Water	05/24/07 16:15	05-25-2007 11:25

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Rice Operating Co.	Project: Vacuum F-35 SWD & G-35 SWD	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
F-35 SWD Monitor Well #1 (7E25009-01) Water									
Benzene	**0.557**	0.00500	mg/L	5	EE73017	05/30/07	05/31/07	EPA 8021B	
Toluene	**0.387**	0.00500	"	"	"	"	"	"	
Ethylbenzene	**0.323**	0.00500	"	"	"	"	"	"	
Xylene (p/m)	**0.444**	0.00500	"	"	"	"	"	"	
Xylene (o)	**0.237**	0.00500	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*88.4 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*94.4 %*	*80-120*		"	"	"	"	
F-35 SWD Monitor Well #2 (7E25009-02) Water									
Benzene	ND	0.00100	mg/L	1	EE73017	05/30/07	05/31/07	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	**ND**	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*101 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*98.2 %*	*80-120*		"	"	"	"	
F-35 SWD Monitor Well #3-Shallow (7E25009-03) Water									
Benzene	ND	0.00100	mg/L	1	EE73017	05/30/07	05/31/07	EPA 8021B	
Toluene	**0.00130**	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*104 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*97.6 %*	*80-120*		"	"	"	"	
F-35 SWD Monitor Well #3-Deep (7E25009-04) Water									
Benzene	ND	0.00100	mg/L	1	EE73017	05/30/07	05/31/07	EPA 8021B	
Toluene	**0.00241**	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*101 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*99.2 %*	*80-120*		"	"	"	"	

Rice Operating Co.	Project: Vacuum F-35 SWD & G-35 SWD	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
G-35 SWD Monitor Well #1 (7E25009-05) Water									
Benzene	**0.143**	0.00100	mg/L	1	EE73017	05/30/07	05/31/07	EPA 8021B	
Toluene	**0.00735**	0.00100	"	"	"	"	"	"	
Ethylbenzene	**0.0664**	0.00100	"	"	"	"	"	"	
Xylene (p/m)	**0.0109**	0.00100	"	"	"	"	"	"	
Xylene (o)	**0.0118**	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*102 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*97.6 %*	*80-120*		"	"	"	"	
G-35 SWD Monitor Well #2 (7E25009-06) Water									
Benzene	ND	0.00100	mg/L	1	EE73017	05/30/07	05/31/07	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*99.8 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*96.6 %*	*80-120*		"	"	"	"	
G-35 SWD Monitor Well #3-Shallow (7E25009-07) Water									
Benzene	ND	0.00100	mg/L	1	EE73017	05/30/07	05/31/07	EPA 8021B	
Toluene	**J [0.000380]**	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*101 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*93.6 %*	*80-120*		"	"	"	"	
G-35 SWD Monitor Well #3-Deep (7E25009-08) Water									
Benzene	ND	0.00100	mg/L	1	EE73017	05/30/07	05/31/07	EPA 8021B	
Toluene	**J [0.000320]**	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*104 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*96.8 %*	*80-120*		"	"	"	"	

Rice Operating Co.	Project: Vacuum F-35 SWD & G-35 SWD	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
G-35 SWD Monitor Well #4 (7E25009-09) Water									
Benzene	**0.0521**	0.00100	mg/L	1	EE73017	05/30/07	05/31/07	EPA 8021B	
Toluene	**0.0582**	0.00100	"	"	"	"	"	"	
Ethylbenzene	**0.0170**	0.00100	"	"	"	"	"	"	
Xylene (p/m)	**0.0199**	0.00100	"	"	"	"	"	"	
Xylene (o)	**0.00829**	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*103 %*		*80-120*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*96.4 %*		*80-120*	"	"	"	"	

Rice Operating Co.	Project: Vacuum F-35 SWD & G-35 SWD	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
F-35 SWD Monitor Well #1 (7E25009-01) Water									
Total Alkalinity	**510**	2.00	mg/L	1	EE72910	05/29/07	05/30/07	EPA 310.1M	
Chloride	**1500**	25.0	"	50	EE73019	05/30/07	05/30/07	EPA 300.0	
Total Dissolved Solids	**2850**	10.0	"	1	EE73008	05/25/07	05/30/07	EPA 160.1	
Sulfate	**44.4**	25.0	"	50	EE73019	05/30/07	05/30/07	EPA 300.0	
F-35 SWD Monitor Well #2 (7E25009-02) Water									
Total Alkalinity	**312**	2.00	mg/L	1	EE72910	05/29/07	05/30/07	EPA 310.1M	
Chloride	**88.3**	5.00	"	10	EE73019	05/30/07	05/30/07	EPA 300.0	
Total Dissolved Solids	**512**	10.0	"	1	EE73008	05/25/07	05/30/07	EPA 160.1	
Sulfate	**61.0**	5.00	"	10	EE73019	05/30/07	05/30/07	EPA 300.0	
F-35 SWD Monitor Well #3-Shallow (7E25009-03) Water									
Total Alkalinity	**176**	2.00	mg/L	1	EE72910	05/29/07	05/30/07	EPA 310.1M	
Chloride	**117**	5.00	"	10	EE73019	05/30/07	05/30/07	EPA 300.0	
Total Dissolved Solids	**494**	10.0	"	1	EE73008	05/25/07	05/30/07	EPA 160.1	
Sulfate	**56.9**	5.00	"	10	EE73019	05/30/07	05/30/07	EPA 300.0	
F-35 SWD Monitor Well #3-Deep (7E25009-04) Water									
Total Alkalinity	**170**	2.00	mg/L	1	EE72910	05/29/07	05/30/07	EPA 310.1M	
Chloride	**91.9**	5.00	"	10	EE73019	05/30/07	05/30/07	EPA 300.0	
Total Dissolved Solids	**452**	10.0	"	1	EE73008	05/25/07	05/30/07	EPA 160.1	
Sulfate	**47.5**	5.00	"	10	EE73019	05/30/07	05/30/07	EPA 300.0	
G-35 SWD Monitor Well #1 (7E25009-05) Water									
Total Alkalinity	**510**	2.00	mg/L	1	EE72910	05/29/07	05/30/07	EPA 310.1M	
Chloride	**873**	25.0	"	50	EE73019	05/30/07	05/30/07	EPA 300.0	
Total Dissolved Solids	**1820**	10.0	"	1	EE73008	05/25/07	05/30/07	EPA 160.1	
Sulfate	**41.2**	25.0	"	50	EE73019	05/30/07	05/30/07	EPA 300.0	
G-35 SWD Monitor Well #2 (7E25009-06) Water									
Total Alkalinity	**196**	2.00	mg/L	1	EE72910	05/29/07	05/30/07	EPA 310.1M	
Chloride	**17.2**	5.00	"	10	EE73019	05/30/07	05/30/07	EPA 300.0	
Total Dissolved Solids	**254**	10.0	"	1	EE73008	05/25/07	05/30/07	EPA 160.1	
Sulfate	**20.1**	5.00	"	10	EE73019	05/30/07	05/30/07	EPA 300.0	

Rice Operating Co.	Project: Vacuum F-35 SWD & G-35 SWD	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
G-35 SWD Monitor Well #3-Shallow (7E25009-07) Water									
Total Alkalinity	**200**	2.00	mg/L	1	EE72910	05/29/07	05/30/07	EPA 310.1M	
Chloride	**599**	12.5	"	25	EE73019	05/30/07	05/30/07	EPA 300.0	
Total Dissolved Solids	**1070**	10.0	"	1	EE73008	05/25/07	05/30/07	EPA 160.1	
Sulfate	**34.5**	12.5	"	25	EE73019	05/30/07	05/30/07	EPA 300.0	
G-35 SWD Monitor Well #3-Deep (7E25009-08) Water									
Total Alkalinity	**230**	2.00	mg/L	1	EE72910	05/29/07	05/30/07	EPA 310.1M	
Chloride	**648**	12.5	"	25	EE73019	05/30/07	05/30/07	EPA 300.0	
Total Dissolved Solids	**1090**	10.0	"	1	EE73008	05/25/07	05/30/07	EPA 160.1	
Sulfate	**34.7**	12.5	"	25	EE73019	05/30/07	05/30/07	EPA 300.0	
G-35 SWD Monitor Well #4 (7E25009-09) Water									
Total Alkalinity	**320**	2.00	mg/L	1	EE72910	05/29/07	05/30/07	EPA 310.1M	
Chloride	**1200**	25.0	"	50	EE73019	05/30/07	05/30/07	EPA 300.0	
Total Dissolved Solids	**2050**	10.0	"	1	EE73008	05/25/07	05/30/07	EPA 160.1	
Sulfate	**43.2**	25.0	"	50	EE73019	05/30/07	05/30/07	EPA 300.0	

Rice Operating Co.	Project: Vacuum F-35 SWD & G-35 SWD	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
F-35 SWD Monitor Well #1 (7E25009-01) Water									
Calcium	**209**	4.05	mg/L	50	EE73022	05/30/07	05/30/07	EPA 6010B	
Magnesium	**53.3**	0.360	"	10	"	"	"	"	
Potassium	**6.57**	0.600	"	"	"	"	"	"	
Sodium	**718**	10.8	"	250	"	"	"	"	
F-35 SWD Monitor Well #2 (7E25009-02) Water									
Calcium	**136**	4.05	mg/L	50	EE73022	05/30/07	05/30/07	EPA 6010B	
Magnesium	**18.3**	0.360	"	10	"	"	"	"	
Potassium	**3.81**	0.600	"	"	"	"	"	"	
Sodium	**38.2**	0.430	"	"	"	"	"	"	
F-35 SWD Monitor Well #3-Shallow (7E25009-03) Water									
Calcium	**97.4**	4.05	mg/L	50	EE73022	05/30/07	05/30/07	EPA 6010B	
Magnesium	**15.3**	0.360	"	10	"	"	"	"	
Potassium	**3.75**	0.600	"	"	"	"	"	"	
Sodium	**51.9**	0.430	"	"	"	"	"	"	
F-35 SWD Monitor Well #3-Deep (7E25009-04) Water									
Calcium	**86.5**	0.810	mg/L	10	EE73022	05/30/07	05/30/07	EPA 6010B	
Magnesium	**13.3**	0.360	"	"	"	"	"	"	
Potassium	**3.04**	0.600	"	"	"	"	"	"	
Sodium	**30.4**	0.430	"	"	"	"	"	"	
G-35 SWD Monitor Well #1 (7E25009-05) Water									
Calcium	**57.3**	0.810	mg/L	10	EE73022	05/30/07	05/30/07	EPA 6010B	
Magnesium	**17.6**	0.360	"	"	"	"	"	"	
Potassium	**7.47**	0.600	"	"	"	"	"	"	
Sodium	**611**	10.8	"	250	"	"	"	"	
G-35 SWD Monitor Well #2 (7E25009-06) Water									
Calcium	**60.6**	0.810	mg/L	10	EE73022	05/30/07	05/30/07	EPA 6010B	
Magnesium	**8.87**	0.360	"	"	"	"	"	"	
Potassium	**2.15**	0.600	"	"	"	"	"	"	
Sodium	**8.51**	0.430	"	"	"	"	"	"	

Rice Operating Co.	Project: Vacuum F-35 SWD & G-35 SWD	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
G-35 SWD Monitor Well #3-Shallow (7E25009-07) Water									
Calcium	**276**	4.05	mg/L	50	EE73022	05/30/07	05/30/07	EPA 6010B	
Magnesium	**32.8**	0.360	"	10	"	"	"	"	
Potassium	**4.97**	0.600	"	"	"	"	"	"	
Sodium	**135**	2.15	"	50	"	"	"	"	
G-35 SWD Monitor Well #3-Deep (7E25009-08) Water									
Calcium	**279**	4.05	mg/L	50	EE73022	05/30/07	05/30/07	EPA 6010B	
Magnesium	**33.2**	0.360	"	10	"	"	"	"	
Potassium	**4.72**	0.600	"	"	"	"	"	"	
Sodium	**139**	2.15	"	50	"	"	"	"	
G-35 SWD Monitor Well #4 (7E25009-09) Water									
Calcium	**241**	4.05	mg/L	50	EE73022	05/30/07	05/30/07	EPA 6010B	
Magnesium	**38.4**	0.360	"	10	"	"	"	"	
Potassium	**5.91**	0.600	"	"	"	"	"	"	
Sodium	**505**	10.8	"	250	"	"	"	"	

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

Rice Operating Co.	Project: Vacuum F-35 SWD & G-35 SWD	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 EE73017 - EPA 5030C (GC)										
Blank (EE73017-BLK1)				Prepared: 05/30/07 Analyzed: 05/31/07						
Benzene	ND	0.00100	mg/L							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00100	"							
Xylene (o)	ND	0.00100	"							
Surrogate: a,a,a-Trifluorotoluene	*46.3*		*ug/l*	*50.0*		*92.6*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*46.1*		*"*	*50.0*		*92.2*	*80-120*			
LCS (EE73017-BS1)				Prepared: 05/30/07 Analyzed: 05/31/07						
Benzene	0.0481	0.00100	mg/L	0.0500		96.2	80-120			
Toluene	0.0517	0.00100	"	0.0500		103	80-120			
Ethylbenzene	0.0530	0.00100	"	0.0500		106	80-120			
Xylene (p/m)	0.102	0.00100	"	0.100		102	80-120			
Xylene (o)	0.0555	0.00100	"	0.0500		111	80-120			
Surrogate: a,a,a-Trifluorotoluene	*50.1*		*ug/l*	*50.0*		*100*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*53.5*		*"*	*50.0*		*107*	*80-120*			
Calibration Check (EE73017-CCV1)				Prepared: 05/30/07 Analyzed: 06/01/07						
Benzene	0.0532		mg/L	0.0500		106	80-120			
Toluene	0.0547		"	0.0500		109	80-120			
Ethylbenzene	0.0547		"	0.0500		109	80-120			
Xylene (p/m)	0.103		"	0.100		103	80-120			
Xylene (o)	0.0569		"	0.0500		114	80-120			
Surrogate: a,a,a-Trifluorotoluene	*50.1*		*ug/l*	*50.0*		*100*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*51.4*		*"*	*50.0*		*103*	*80-120*			
Matrix Spike (EE73017-MS1)	**Source: 7E24011-02**			Prepared: 05/30/07 Analyzed: 06/01/07						
Benzene	0.0512	0.00100	mg/L	0.0500	ND	102	80-120			
Toluene	0.0540	0.00100	"	0.0500	ND	108	80-120			
Ethylbenzene	0.0512	0.00100	"	0.0500	ND	102	80-120			
Xylene (p/m)	0.103	0.00100	"	0.100	ND	103	80-120			
Xylene (o)	0.0562	0.00100	"	0.0500	ND	112	80-120			
Surrogate: a,a,a-Trifluorotoluene	*50.0*		*ug/l*	*50.0*		*100*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*51.7*		*"*	*50.0*		*103*	*80-120*			

Rice Operating Co.	Project: Vacuum F-35 SWD & G-35 SWD	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 EE73017 - EPA 5030C (GC)										
Matrix Spike Dup (EE73017-MSD1)	**Source: 7E24011-02**			Prepared: 05/30/07 Analyzed: 06/01/07						
Benzene	0.0500	0.00100	mg/L	0.0500	ND	100	80-120	1.98	20	
Toluene	0.0529	0.00100	"	0.0500	ND	106	80-120	1.87	20	
Ethylbenzene	0.0525	0.00100	"	0.0500	ND	105	80-120	2.90	20	
Xylene (p/m)	0.100	0.00100	"	0.100	ND	100	80-120	2.96	20	
Xylene (o)	0.0548	0.00100	"	0.0500	ND	110	80-120	1.80	20	
Surrogate: a,a,a-Trifluorotoluene	*53.0*		*ug/l*	*50.0*		*106*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*50.2*		*"*	*50.0*		*100*	*80-120*			

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

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EE72910 - General Preparation (WetChem)										
Blank (EE72910-BLK1)				Prepared: 05/29/07 Analyzed: 05/30/07						
Total Alkalinity	ND	2.00	mg/L							
Carbonate Alkalinity	ND	0.100	"							
Bicarbonate Alkalinity	ND	2.00	"							
Hydroxide Alkalinity	ND	0.100	"							
LCS (EE72910-BS1)				Prepared: 05/29/07 Analyzed: 05/30/07						
Bicarbonate Alkalinity	180	2.00	mg/L	200		90.0	85-115			
Duplicate (EE72910-DUP1)	**Source: 7E22010-01**			Prepared: 05/29/07 Analyzed: 05/30/07						
Total Alkalinity	790	2.00	mg/L		780			1.27	20	
Carbonate Alkalinity	0.00	0.100	"		0.00				20	
Bicarbonate Alkalinity	790	2.00	"		790			0.00	20	
Hydroxide Alkalinity	0.00	0.100	"		0.00				20	
Reference (EE72910-SRM1)				Prepared: 05/29/07 Analyzed: 05/30/07						
Total Alkalinity	252		mg/L	250		101	90-110			
Batch EE73008 - Filtration Preparation										
Blank (EE73008-BLK1)				Prepared: 05/25/07 Analyzed: 05/30/07						
Total Dissolved Solids	ND	10.0	mg/L							
Duplicate (EE73008-DUP1)	**Source: 7E25007-01**			Prepared: 05/25/07 Analyzed: 05/30/07						
Total Dissolved Solids	968	10.0	mg/L		948			2.09	20	
Duplicate (EE73008-DUP2)	**Source: 7E25009-05**			Prepared: 05/25/07 Analyzed: 05/30/07						
Total Dissolved Solids	1780	10.0	mg/L		1820			2.22	20	

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

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EE73019 - General Preparation (WetChem)										
Blank (EE73019-BLK1)				Prepared & Analyzed: 05/30/07						
Sulfate	ND	0.500	mg/L							
Chloride	ND	0.500	"							
LCS (EE73019-BS1)				Prepared & Analyzed: 05/30/07						
Sulfate	9.42	0.500	mg/L	10.0		94.2	80-120			
Chloride	8.23	0.500	"	10.0		82.3	80-120			
Calibration Check (EE73019-CCV1)				Prepared & Analyzed: 05/30/07						
Sulfate	9.96		mg/L	10.0		99.6	80-120			
Chloride	8.37		"	10.0		83.7	80-120			
Duplicate (EE73019-DUP1)	**Source: 7E25007-01**			Prepared & Analyzed: 05/30/07						
Sulfate	54.8	10.0	mg/L		53.8			1.84	20	
Chloride	335	10.0	"		329			1.81	20	
Duplicate (EE73019-DUP2)	**Source: 7E25009-05**			Prepared & Analyzed: 05/30/07						
Chloride	879	25.0	mg/L		873			0.685	20	
Sulfate	38.6	25.0	"		41.2			6.52	20	
Matrix Spike (EE73019-MS1)	**Source: 7E25007-01**			Prepared & Analyzed: 05/30/07						
Chloride	524	10.0	mg/L	200	329	97.5	80-120			
Sulfate	233	10.0	"	200	53.8	89.6	80-120			
Matrix Spike (EE73019-MS2)	**Source: 7E25009-05**			Prepared & Analyzed: 05/30/07						
Chloride	1390	25.0	mg/L	500	873	103	80-120			
Sulfate	453	25.0	"	500	41.2	82.4	80-120			

Rice Operating Co.	Project: Vacuum F-35 SWD & G-35 SWD	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 EE73022 - 6010B/No Digestion										
Blank (EE73022-BLK1)				Prepared & Analyzed: 05/30/07						
Calcium	ND	0.0810	mg/L							
Magnesium	ND	0.0360	"							
Potassium	ND	0.0600	"							
Sodium	ND	0.0430	"							
Calibration Check (EE73022-CCV1)				Prepared & Analyzed: 05/30/07						
Calcium	2.26		mg/L	2.00		113	85-115			
Magnesium	2.08		"	2.00		104	85-115			
Potassium	1.81		"	2.00		90.5	85-115			
Sodium	1.99		"	2.00		99.5	85-115			
Duplicate (EE73022-DUP1)	**Source: 7E25007-01**			Prepared & Analyzed: 05/30/07						
Calcium	96.2	4.05	mg/L		94.8			1.47	20	
Magnesium	11.8	0.360	"		11.6			1.71	20	
Potassium	2.44	0.600	"		2.79			13.4	20	
Sodium	206	2.15	"		203			1.47	20	

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

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

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: Brent Barron Date: 6/13/2007

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

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

Items for Project Manager Review

LabNumber	Analysis	Analyte	Exception
7E25009-02	Alkalinity 310.1M		Sampled->Prepared > 2.00 days
			Default Report (not modified)
7E25009-08	Alkalinity 310.1M		Sampled->Prepared > 2.00 days
7E25009-08	Alkalinity 310.1M		Sampled->Analyzed > 2.00 days
7E25009-07	Alkalinity 310.1M		Sampled->Prepared > 2.00 days
7E25009-07	Alkalinity 310.1M		Sampled->Analyzed > 2.00 days
7E25009-06	Alkalinity 310.1M		Sampled->Prepared > 2.00 days
7E25009-06	Alkalinity 310.1M		Sampled->Analyzed > 2.00 days
7E25009-05	Alkalinity 310.1M		Sampled->Prepared > 2.00 days
7E25009-05	Alkalinity 310.1M		Sampled->Analyzed > 2.00 days
7E25009-04	Alkalinity 310.1M		Sampled->Prepared > 2.00 days
7E25009-04	Alkalinity 310.1M		Sampled->Analyzed > 2.00 days
7E25009-09	Alkalinity 310.1M		Sampled->Prepared > 2.00 days
7E25009-03	Alkalinity 310.1M		Sampled->Analyzed > 2.00 days
7E25009-01	Alkalinity 310.1M		Missing Bicarbonate Alkalinity
7E25009-02	Alkalinity 310.1M		Sampled->Analyzed > 2.00 days
7E25009-01	Alkalinity 310.1M		Sampled->Prepared > 2.00 days
7E25009-01	Alkalinity 310.1M		Sampled->Analyzed > 2.00 days
	Sulfate-300.0	(Water)	J-Flags used
	Chloride-300.0	(Water)	J-Flags used
	Cations 6010B	(Water)	J-Flags used
	8021B BTEX	(Water)	RPD calculations based on %Recovery
	Sulfate-300.0	(Water)	Result calculations based on MDL
	Chloride-300.0	(Water)	Result calculations based on MDL
	Cations 6010B	(Water)	Result calculations based on MDL
	8021B BTEX	(Water)	Result calculations based on MDL
7E25009-03	Alkalinity 310.1M		Sampled->Prepared > 2.00 days
7E25009-04	Alkalinity 310.1M		Missing Carbonate Alkalinity
7E25009-08	Alkalinity 310.1M		Missing Hydroxide Alkalinity
7E25009-07	Alkalinity 310.1M		Missing Hydroxide Alkalinity
7E25009-06	Alkalinity 310.1M		Missing Hydroxide Alkalinity
7E25009-05	Alkalinity 310.1M		Missing Hydroxide Alkalinity
7E25009-04	Alkalinity 310.1M		Missing Hydroxide Alkalinity
7E25009-03	Alkalinity 310.1M		Missing Hydroxide Alkalinity
7E25009-02	Alkalinity 310.1M		Missing Hydroxide Alkalinity
7E25009-01	Alkalinity 310.1M		Missing Hydroxide Alkalinity
7E25009-09	Alkalinity 310.1M		Missing Carbonate Alkalinity
7E25009-08	Alkalinity 310.1M		Missing Carbonate Alkalinity
7E25009-07	Alkalinity 310.1M		Missing Carbonate Alkalinity
7E25009-09	Alkalinity 310.1M		Sampled->Analyzed > 2.00 days
7E25009-05	Alkalinity 310.1M		Missing Carbonate Alkalinity
7E25009-09	Alkalinity 310.1M		Missing Hydroxide Alkalinity
7E25009-03	Alkalinity 310.1M		Missing Carbonate Alkalinity
7E25009-02	Alkalinity 310.1M		Missing Carbonate Alkalinity
7E25009-01	Alkalinity 310.1M		Missing Carbonate Alkalinity
7E25009-09	Alkalinity 310.1M		Missing Bicarbonate Alkalinity
7E25009-08	Alkalinity 310.1M		Missing Bicarbonate Alkalinity
7E25009-07	Alkalinity 310.1M		Missing Bicarbonate Alkalinity
7E25009-06	Alkalinity 310.1M		Missing Bicarbonate Alkalinity
7E25009-05	Alkalinity 310.1M		Missing Bicarbonate Alkalinity

Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

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

Project Manager: Kristin Farris Pope kpope@riceswd.com

Company Name: RICE Operating Company

Company Address: 122 W. Taylor Street

City/State/Zip: Hobbs, New Mexico 88240

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

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

Project Name: Vacuum F-35 SWD & G-35 SWD

Project #:

Project Loc: T17S-R35E-Sec35 F&G ~ Lea County New Mexico

PO #:

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

(lab use only)

ORDER #: 7E25009

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl (2) 40 ml glass vials	H_2SO_4	NaOH	$Na_2S_2O_3$	None (1) 1 Liter HDPE	Other (Specify)	Matrix: Dw-Drinking Water SL-Sludge	GW-Groundwater S-Soil/Solid	NP-Non-Potable Specify Other	Analyze For: TCLP / TOTAL: TPH 418.1 8015M 8015B	TPH TX1005 TX1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/8030	RCI	N.O.R.M.	Total Dissolved Solids		RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	F-35 SWD Monitor Well #1			5/23/2007	10:50		3	X		2				1		GW					X	X					X			X			X
02	F-35 SWD Monitor Well #2			5/23/2007	11:35		3	X		2				1		GW					X	X					X			X			X
03	F-35 SWD Monitor Well #3-Shallow			5/23/2007	14:10		3	X		2				1		GW					X	X					X			X			X
04	F-35 SWD Monitor Well #3-Deep			5/23/2007	14:45		3	X		2				1		GW					X	X					X			X			X
05	G-35 SWD Monitor Well #1			5/24/2007	14:40		3	X		2				1		GW					X	X					X			X			X
06	G-35 SWD Monitor Well #2			5/24/2007	9:30		3	X		2				1		GW					X	X					X			X			X
07	G-35 SWD Monitor Well #3-Shallow			5/24/2007	12:45		3	X		2				1		GW					X	X					X			X			X
08	G-35 SWD Monitor Well #3-Deep			5/24/2007	13:25		3	X		2				1		GW					X	X					X			X			X
09	G-35 SWD Monitor Well #4			5/24/2007	16:15		3	X		2				1		GW					X	X					X			X			X

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

Relinquished by:	Date	Time	Received by:	Date	Time
Rozanne Johnson	5/25/07	7:30	Mary Morton	5/25/07	7:31
Relinquished by:	Date	Time	Received by:	Date	Time
Mary Morton	5/25/07	11:25			
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
			Andrea Lann	5-25-07	11:25

Laboratory Comments:

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

by Courier? UPS OHL FedEx Lone Star

Temperature Upon Receipt: -0.5 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Rice

Date/ Time: 5-25-07 11 25

Lab ID #: 7625009

Initials: CL

Sample Receipt Checklist

				Client Initials
#1 Temperature of container/ cooler?	(Yes)	No	-0.5 °C	
#2 Shipping container in good condition?	(Yes)	No		
#3 Custody Seals intact on shipping container/ cooler?	(Yes)	No	Not Present	
#4 Custody Seals intact on sample bottles/ container?	(Yes)	No	Not Present	
#5 Chain of Custody present?	(Yes)	No		
#6 Sample instructions complete of Chain of Custody?	(Yes)	No		
#7 Chain of Custody signed when relinquished/ received?	(Yes)	No		
#8 Chain of Custody agrees with sample label(s)?	(Yes)	No	ID written on Cont./ Lid	
#9 Container label(s) legible and intact?	(Yes)	No	Not Applicable	
#10 Sample matrix/ properties agree with Chain of Custody?	(Yes)	No		
#11 Containers supplied by ELOT?	(Yes)	No		
#12 Samples in proper container/ bottle?	(Yes)	No	See Below	
#13 Samples properly preserved?	(Yes)	No	See Below	
#14 Sample bottles intact?	(Yes)	No		
#15 Preservations documented on Chain of Custody?	(Yes)	No		
#16 Containers documented on Chain of Custody?	(Yes)	No		
#17 Sufficient sample amount for indicated test(s)?	(Yes)	No	See Below	
#18 All samples received within sufficient hold time?	(Yes)	No	See Below	
#19 Subcontract of sample(s)?	Yes	No	(Not Applicable)	
#20 VOC samples have zero headspace?	(Yes)	No	Not Applicable	

Variance Documentation

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

Regarding: _____

Corrective Action Taken: _____

Check all that Apply:

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

101 East Marland - Hobbs, New Mexico 88240
Tel (505) 393-2326
Fax (505) 393-2476

Cardinal Laboratories, Inc.

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # _____

Company Name: RICE Operating Company	BILL TO Company: RICE Operating Company — PO#
Project Manager: Kristin Farris-Pope, Project Scientist	Address: (Street, City, Zip) 122 W Taylor Street ~ Hobbs, New Mexico 88240
Address: (Street, City, Zip) 122 W Taylor Street ~ Hobbs, New Mexico 88240	Phone#: (505) 393-9174 — Fax#: (505)397-1471
Phone #: (505) 393-9174	Fax #: (505) 397-1471
Project #:	Project Name: Vacuum F-35 SWD and G-35 SWD
Project Location: T17S-R35E-Sec35 F and G ~ Lea County - New Mexico	Sampler Signature: Rozanne Johnson (505)631-9310 rozanne@valornet.com

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	(G)rab or (C)omp	# CONTAINERS	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL (2 40ml VOA)	HNO_3	$NaHSO_4$	H_2SO_4	ICE (1-1Liter HDPE)	NONE	SAMPLING: DATE (2007)	TIME	MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005 / TX1005 Extended (C35)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	Moisture Content		Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	Total Dissolved Solids	Chlorides	Turn Around Time ~ 24 Hours
H13351-1	F-35 SWD Monitor Well #1	G	3	X				2				1		9-19	9:30		X																X	X	X		
-2	F-35 SWD Monitor Well #2	G	3	X				2				1		9-19	10:15		X																X	X	X		
-3	F-35 SWD Monitor Well #3-Shallow	G	3	X				2				1		9-19	12:25		X																X	X	X		
-4	F-35 SWD Monitor Well #3-Deep	G	3	X				2				1		9-19	12:10		X																X	X	X		
-5	G-35 SWD Monitor Well #1	G	3	X				2				1		9-20	14:05		X																X	X	X		
-6	G-35 SWD Monitor Well #2	G	3	X				2				1		9-20	9:10		X																X	X	X		
-7	G-35 SWD Monitor Well #3-Shallow	G	3	X				2				1		9-20	11:15		X																X	X	X		
-8	G-35 SWD Monitor Well #3-Deep	G	3	X				2				1		9-20	12:00		X																X	X	X		
-9	G-35 SWD Monitor Well #4	G	3	X				2				1		9-20	13:10		X																X	X	X		

Relinquished by: Rozanne Johnson	Date: 9-21-07	Time: 2:14	Received by: Sue Barnes — Date: 9/21/07 — Time: 2:15pm
Relinquished by:	Date:	Time:	Received By: (Laboratory Staff) — Date: — Time:

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

REMARKS:

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

Delivered By: (Circle One)	Sample Condition	CHECKED BY:
Sampler - UPS - Bus - Other:	Cool: Yes [X] No [ ] — Intact: Yes [X] No [ ]	(Initials)

CARDINAL LABORATORIES

PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603
PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
RICE OPERATING COMPANY
ATTN: KRISTIN FARRIS-POPE
122 W. TAYLOR
HOBBS, NM 88240
FAX TO: (505) 397-1471

Receiving Date: 09/21/07
Reporting Date: 09/24/07
Project Number: NOT GIVEN
Project Name: VACUUM F-35 SWD AND G-35 SWD
Project Location: T17S-R35E-SEC35 F & G ~ LEA COUNTY, NM

Sampling Date: 09/19/07 & 09/20/07
Sample Type: GROUNDWATER
Sample Condition: COOL & INTACT
Sample Received By: SB
Analyzed By: BC

LAB NO.	SAMPLE ID	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	TOTAL XYLENES (mg/L)
ANALYSIS DATE		09/22/07	09/22/07	09/22/07	09/22/07
H13351-1	F-35 SWD MONITOR WELL #1	0.902	0.706	0.582	1.140
H13351-2	F-35 SWD MONITOR WELL #2	<0.002	<0.002	<0.002	<0.006
H13351-3	F-35 SWD MW #3-SHALLOW	<0.002	<0.002	<0.002	<0.006
H13351-4	F-35 SWD MW #3-DEEP	<0.002	<0.002	<0.002	<0.006
H13351-5	G-35 SWD MONITOR WELL #1	0.189	0.004	0.082	0.029
H13351-6	G-35 SWD MONITOR WELL #2	<0.002	<0.002	<0.002	<0.006
H13351-7	G-35 SWD MW #3-SHALLOW	<0.002	<0.002	<0.002	<0.006
H13351-8	G-35 SWD MW #3-DEEP	<0.002	<0.002	<0.002	<0.006
H13351-9	G-35 SWD MONITOR WELL #4	0.146	0.058	0.023	0.042
Quality Control		0.106	0.098	0.096	0.273
True Value QC		0.100	0.100	0.100	0.300
% Recovery		106	98.3	96.2	90.9
Relative Percent Difference		3.1	<0.1	0.8	1.9

METHOD: EPA SW-846 8260

Chemist

9/24/07
Date

H13351B-RICE

CARDINAL LABORATORIES

PHONE (325) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603
PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
RICE OPERATING COMPANY
ATTN: KRISTIN FARRIS-POPE
122 W. TAYLOR STREET
HOBBS, NM 88240
FAX TO: (505) 397-1471

Receiving Date: 09/21/07
Reporting Date: 09/28/07
Project Owner: NOT GIVEN
Project Name: VACUUM F-35 SWD and G-35 SWD
Project Location: T17S-R35E-SEC35 F and G ~ LEA COUNTY, NM

Sampling Date: 09/19/07 & 09/20/07
Sample Type: WATER
Sample Condition: COOL & INTACT
Sample Received By: SB
Analyzed By: HM/KS/AB

LAB NUMBER	SAMPLE ID	Na (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Conductivity (u S/cm)	T-Alkalinity ($mgCaCO_3$/L)
ANALYSIS DATE:		09/28/07	09/28/07	09/28/07	09/27/07	09/24/07	09/25/07
H13351-1	F-35 SWD Monitor Well #1	797	168	49.2	10.3	4,950	400
H13351-2	F-35 SWD Monitor Well #2	103	70.5	18.6	2.92	931	264
H13351-3	F-35 SWD M. W. #3-Shallow	83	99.8	18.6	2.91	1,035	164
H13351-4	F-35 SWD M. W. #3-Deep	78	108	20.2	3.00	1,104	164
Quality Control		NR	50.6	50.8	1.94	9,690	NR
True Value QC		NR	50.0	50.0	2.00	10,000	NR
% Recovery		NR	101	102	97.0	96.9	NR
Relative Percent Difference		NR	< 0.1	3.1	2.1	0.5	NR
METHODS:			SM3500-Ca-D	3500-Mg E	8049	120.1	310.1

LAB NUMBER	SAMPLE ID	Cl^- (mg/L)	SO_4 (mg/L)	CO_3 (mg/L)	HCO_3 (mg/L)	pH (s.u.)	TDS (mg/L)
ANALYSIS DATE:		09/25/07	09/27/07	09/25/07	09/25/07	09/24/07	09/26/07
H13351-1	F-35 SWD Monitor Well #1	1,380	23.2	0	488	7.84	2,902
H13351-2	F-35 SWD Monitor Well #2	100	71.7	0	322	7.59	587
H13351-3	F-35 SWD M. W. #3-Shallow	192	73.5	0	200	7.94	789
H13351-4	F-35 SWD M. W. #3-Deep	204	72.8	0	200	7.88	772
Quality Control		500	28.5	NR	1000	6.97	NR
True Value QC		500	25.0	NR	1000	7.00	NR
% Recovery		570	114	NR	100	99.6	NR
Relative Percent Difference		< 0.1	7.2	NR	< 0.1	0.1	NR
METHODS:		SM4500-Cl-B	375.4	310.1	310.1	150.1	160.1

Kristen Sypniboo
Chemist

9/28/07
Date

H13351 R35E

CARDINAL LABORATORIES

PHONE (325) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603
PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
RICE OPERATING COMPANY
ATTN: KRISTIN FARRIS-POPE
122 W. TAYLOR STREET
HOBBS, NM 88240
FAX TO: (505) 397-1471

Receiving Date: 09/21/07
Reporting Date: 09/28/07
Project Owner: NOT GIVEN
Project Name: HOBBS N-6
Project Location: T19S-R38E-SEC5&6 E/H ~ LEA COUNTY, NM

Sampling Date: 09/19/07 & 09/20/07
Sample Type: WATER
Sample Condition: COOL & INTACT
Sample Received By: SB
Analyzed By: HM/KS/AB

LAB NUMBER	SAMPLE ID	Na (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Conductivity (u S/cm)	T-Alkalinity ($mgCaCO_3/L$)
ANALYSIS DATE:		09/28/07	09/28/07	09/28/07	09/27/07	09/24/07	09/25/07
H13351-5	G-35 SWD Monitor Well #1	657	16.0	15.3	5.37	3,220	448
H13351-6	G-35 SWD Monitor Well #2	38	38.6	9.68	2.35	420	172
H13351-7	G-35 SWD M.W. #3-Shallow	217	154	24.2	4.20	2,010	216
H13351-8	G-35 SWD M.W. #3-Deep	135	230	32.3	4.59	2,120	168
H13351-9	G-35 SWD Monitor Well #4	869	204	50.8	5.57	5,300	344
Quality Control		NR	50.6	50.8	1.94	9,690	NR
True Value QC		NR	50.0	50.0	2.00	10,000	NR
% Recovery		NR	101	102	97.0	96.9	NR
Relative Percent Difference		NR	< 0.1	3.1	2.1	0.5	NR
METHODS:			SM3500-Ca-D	3500-Mg E	8049	120.1	310.1

LAB NUMBER	SAMPLE ID	Cl^- (mg/L)	SO_4 (mg/L)	CO_3 (mg/L)	HCO_3 (mg/L)	pH (s.u.)	TDS (mg/L)
ANALYSIS DATE:		09/25/07	09/27/07	09/25/07	09/25/07	09/24/07	09/26/07
H13351-5	G-35 SWD Monitor Well #1	800	22.2	24	424	8.24	1,738
H13351-6	G-35 SWD Monitor Well #2	16	25.6	0	210	7.80	262
H13351-7	G-35 SWD M.W. #3-Shallow	500	39.1	0	264	7.89	1,373
H13351-8	G-35 SWD M.W. #3-Deep	570	34.0	0	205	7.93	1,442
H13351-9	G-35 SWD Monitor Well #4	1,600	17.8	0	420	7.78	3,262
Quality Control		500	28.5	NR	1000	6.97	NR
True Value QC		500	25.0	NR	1000	7.00	NR
% Recovery		100	114	NR	100	99.6	NR
Relative Percent Difference		< 0.1	7.2	NR	< 0.1	0.1	NR
METHODS:		SM4500-Cl-B	375.4	310.1	310.1	150.1	160.1

Kristen Sapirstein
Chemist

9/28/07
Date

H13351 BCE

CARDINAL LABORATORIES

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

ANALYTICAL RESULTS FOR
RICE OPERATING COMPANY
ATTN: KRISTIN FARRIS-POPE
122 W. TAYLOR STREET
HOBBS, NM 88240
FAX TO: (575) 397-1471

Receiving Date: 11/20/07
Reporting Date: 11/21/07
Project Number: NOT GIVEN
Project Name: VACUUM F-35 SWD AND G-35 SWD
Project Location: T17S-R35E-SEC35 F AND G ~ LEA CO., NM

Sampling Date: 11/19/07 & 11/20/07
Sample Type: WATER
Sample Condition: COOL & INTACT
Sample Received By: SB
Analyzed By: BC

LAB NO.	SAMPLE ID	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	TOTAL XYLENES (mg/L)
ANALYSIS DATE		11/21/07	11/21/07	11/21/07	11/21/07
H13758-1	F-35-SWD MW #1	0.719	0.203	0.429	0.665
H13758-2	F-35 SWD MW #2	<0.002	<0.002	<0.002	<0.006
H13758-3	F-35 SWD MW #3-SHALLOW	<0.002	<0.002	<0.002	<0.006
H13758-4	F-35 SWD MW #3-DEEP	<0.002	<0.002	<0.002	<0.006
H13758-5	G-35 SWD MW #1	0.003	<0.002	<0.002	<0.006
H13758-6	G-35 SWD MW #2	<0.002	<0.002	<0.002	<0.006
H13758-7	G-35 SWD MW #3-SHALLOW	<0.002	<0.002	<0.002	<0.006
H13758-8	G-35 SWD MW #3-DEEP	<0.002	<0.002	<0.002	<0.006
H13758-9	G-35 SWD MW #4	0.036	0.034	0.010	0.017
Quality Control		0.090	0.086	0.086	0.250
True Value QC		0.100	0.100	0.100	0.300
% Recovery		90.4	86.4	85.7	83.2
Relative Percent Difference		7.1	0.9	3.5	2.2

METHOD: EPA SW-846 8260

Chemist

11/21/07
Date

CARDINAL LABORATORIES

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

ANALYTICAL RESULTS FOR
RICE OPERATING COMPANY
ATTN: KRISTIN FARRIS-POPE
122 W. TAYLOR STREET
HOBBS, NM 88240
FAX TO: (575) 397-1471

Receiving Date: 11/20/07
Reporting Date: 11/28/07
Project Number: NOT GIVEN
Project Name: VACUUM F-35 SWD and G-35 SWD
Project Location: T17S-R35E-SEC35 F and G~LEA COUNTY, NM

Sampling Date: 11/19/07
Sample Type: WATER
Sample Condition: COOL & INTACT
Sample Received By: SB
Analyzed By: HM/KS

LAB NUMBER	SAMPLE ID	Na (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Conductivity (u S/cm)	T-Alkalinity ($mgCaCO_3/L$)
ANALYSIS DATE:		11/27/07	11/27/07	11/27/07	11/27/07	11/27/07	11/27/07
H13758-1	F-35 SWD M.W. #1	764	153	42.0	3.88	4,770	400
H13758-2	F-35 SWD M.W. #2	56	140	16.1	3.97	992	320
H13758-3	F-35 SWD M.W. #3-Shallow	84	55.9	12.9	2.93	777	164
H13758-4	F-35 SWD M.W. #3-Deep	86	129	3.23	3.49	1,119	156
Quality Control		NR	49.2	51.6	3.26	1,416	NR
True Value QC		NR	50.0	50.0	3.00	1,413	NR
% Recovery		NR	98.5	103	109	101	NR
Relative Percent Difference		NR	4.6	1.6	12.0	0.5	NR
METHODS:			SM3500-Ca-D	3500-Mg E	8049	120.1	310.1

LAB NUMBER	SAMPLE ID	Cl^- (mg/L)	SO_4 (mg/L)	CO_3 (mg/L)	HCO_3 (mg/L)	pH (s.u.)	TDS (mg/L)
ANALYSIS DATE:		11/27/07	11/27/07	11/27/07	11/27/07	11/27/07	11/20/07
H13758-1	F-35 SWD M.W. #1	1,260	44.2	0	488	7.21	2,642
H13758-2	F-35 SWD M.W. #2	96	85.7	0	390	7.26	571
H13758-3	F-35 SWD M.W. #3-Shallow	104	66.3	0	200	7.68	467
H13758-4	F-35 SWD M.W. #3-Deep	216	64.6	0	190	7.64	735
Quality Control		500	26.4	NR	1000	7.08	NR
True Value QC		500	25.0	NR	1000	7.00	NR
% Recovery		100	106	NR	100	101	NR
Relative Percent Difference		< 0.1	14.9	NR	1.2	0.3	NR
METHODS:		SM4500-Cl-B	375.4	310.1	310.1	150.1	160.1

Kristen Sproles
Chemist

11/28/07
Date

ARDINAL LABORATORIES

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

ANALYTICAL RESULTS FOR
RICE OPERATING COMPANY
ATTN: KRISTIN FARRIS-POPE
122 W. TAYLOR STREET
HOBBS, NM 88240
FAX TO: (575) 397-1471

Receiving Date: 11/20/07
Reporting Date: 11/28/07
Project Number: NOT GIVEN
Project Name: VACUUM F-35 SWD and G-35 SWD
Project Location: T17S-R35E-SEC35 F and G~LEA COUNTY, NM

Sampling Date: 11/20/07
Sample Type: WATER
Sample Condition: COOL & INTACT
Sample Received By: SB
Analyzed By: HM/KS

LAB NUMBER	SAMPLE ID	Na (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Conductivity (uS/cm)	T-Alkalinity ($mgCaCO_3/L$)
ANALYSIS DATE:		11/27/07	11/27/07	11/27/07	11/27/07	11/27/07	11/27/07
H13758-5	G-35 SWD M.W. #1	353	25.3	6.45	5.71	1,736	376
H13758-6	G-35 SWD M.W. #2	6	66.5	11.3	2.17	449	180
H13758-7	G-35 SWD M.W. #3-Shallow	296	220	34.3	4.00	2,839	204
H13758-8	G-35 SWD M.W. #3-Deep	149	213	36.3	3.33	2,155	164
H13758-9	G-35 SWD M.W. #4	621	366	80.7	5.13	5,540	324
Quality Control		NR	49.2	51.6	3.26	1,416	NR
True Value QC		NR	50.0	50.0	3.00	1,413	NR
% Recovery		NR	98.5	103	109	101	NR
Relative Percent Difference		NR	4.6	1.6	12.0	0.5	NR
METHODS:			SM3500-Ca-D	3500-Mg E	8049	120.1	310.1

LAB NUMBER	SAMPLE ID	Cl^- (mg/L)	SO_4 (mg/L)	CO_3 (mg/L)	HCO_3 (mg/L)	pH (s.u.)	TDS (mg/L)
ANALYSIS DATE:		11/27/07	11/27/07	11/27/07	11/27/07	11/27/07	11/26/07
H13758-5	G-35 SWD M.W. #1	320	35.3	0	459	7.88	969
H13758-6	G-35 SWD M.W. #2	16	25.0	0	220	7.72	283
H13758-7	G-35 SWD M.W. #3-Shallow	776	40.4	0	249	7.37	1,670
H13758-8	G-35 SWD M.W. #3-Deep	570	42.5	0	200	7.46	1,312
H13758-9	G-35 SWD M.W. #4	1,600	26.0	0	395	7.14	3,256
Quality Control		500	26.4	NR	1000	7.08	NR
True Value QC		500	25.0	NR	1000	7.00	NR
% Recovery		100	106	NR	100	101	NR
Relative Percent Difference		< 0.1	14.9	NR	1.2	0.3	NR
METHODS:		SM4500-Cl-B	375.4	310.1	310.1	150.1	160.1

Kristin Dyrobo
Chemist

11/28/07
Date

H13758 RICE

101 East Marland - Hobbs, New Mexico 88240
Tel (505) 393-2326
Fax (505) 393-2476

Cardinal Laboratories, Inc.

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # _____

Company Name: RICE Operating Company	BILL TO Company: RICE Operating Company PO#
Project Manager: Kristin Farris-Pope, Project Scientist	Address: (Street, City, Zip) 122 W Taylor Street ~ Hobbs, New Mexico 88240
Address: (Street, City, Zip) 122 W Taylor Street ~ Hobbs, New Mexico 88240	Phone#: (505) 393-9174 Fax#: (505)397-1471
Phone #: (505) 393-9174	Fax #: (505) 397-1471
Project #:	Project Name: Vacuum F-35 SWD and G-35 SWD
Project Location: T17S-R35E-Sec35 F and G ~ Lea County - New Mexico	Sampler Signature: Rozanne Johnson (505)631-9310 rozanne@valornet.com

LAB # (LAB USE ONLY)	FIELD CODE	(G)rab or (C)omp	# CONTAINERS	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL (2 40ml VOA)	HNO_3	$NaHSO_4$	H_2SO_4	ICE (1-1Liter HDPE)	NONE	SAMPLING: DATE (2007)	TIME
H13758-1	F-35 SWD Monitor Well #1	G	3	X				2				1		11-19	11:20
2	F-35 SWD Monitor Well #2	G	3	X				2				1		11-19	12:00
3	F-35 SWD Monitor Well #3-Shallow	G	3	X				2				1		11-19	13:05
4	F-35 SWD Monitor Well #3-Deep	G	3	X				2				1		11-19	14:00
5	G-35 SWD Monitor Well #1	G	3	X				2				1		11-20	8:50
6	G-35 SWD Monitor Well #2	G	3	X				2				1		11-20	13:00
7	G-35 SWD Monitor Well #3-Shallow	G	3	X				2				1		11-20	12:05
8	G-35 SWD Monitor Well #3-Deep	G	3	X				2				1		11-20	11:10
9	G-35 SWD Monitor Well #4	G	3	X				2				1		11-20	10:00

ANALYSIS REQUEST
(Circle or Specify Method No.)

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

Relinquished by: Rozanne Johnson	Date: 11-20-2007	Time: 15:15	Received by:
Relinquished by:	Date:	Time:	Received By: (Laboratory Staff) Sue Barnes 11/20/07 15:15 pm

Phone Results ☐ Yes ☐ No

Fax Results ☐ Yes ☐ No Additional Fax Number:

REMARKS:

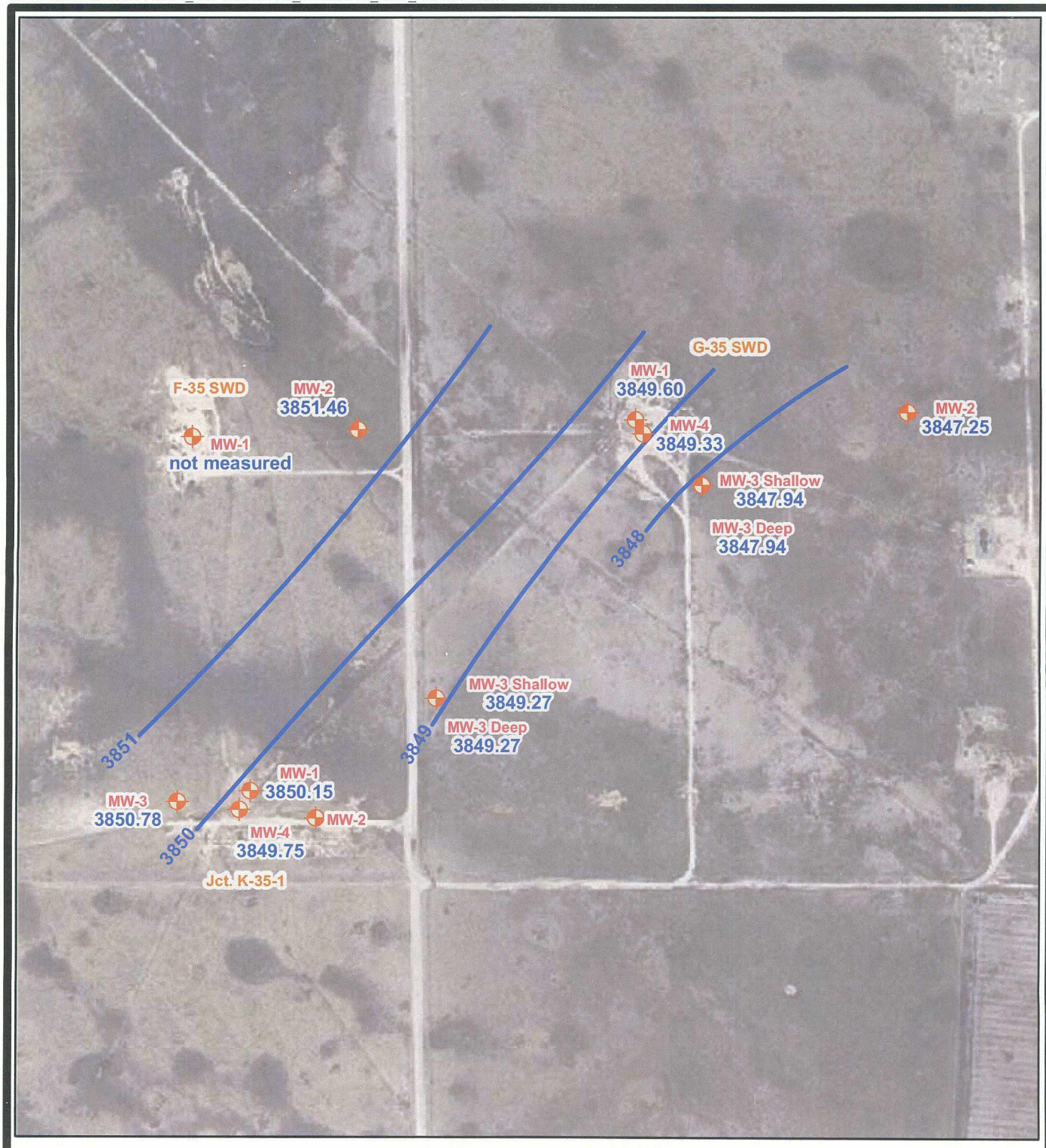
Email Results to: kpope@riceswd.com
lweinheimer@riceswd.com
rozanne@valornet.com

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

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

CHECKED BY: (Initials) SB

X:/PROJECTS/ROC/FANDG_35/PLATES/F35_POTENTIO_2007_ANNUAL.MXD



Explanation

- Monitoring well
  Ground water elevation (feet)
- Potentiometric surface (feet)

N
W E
S

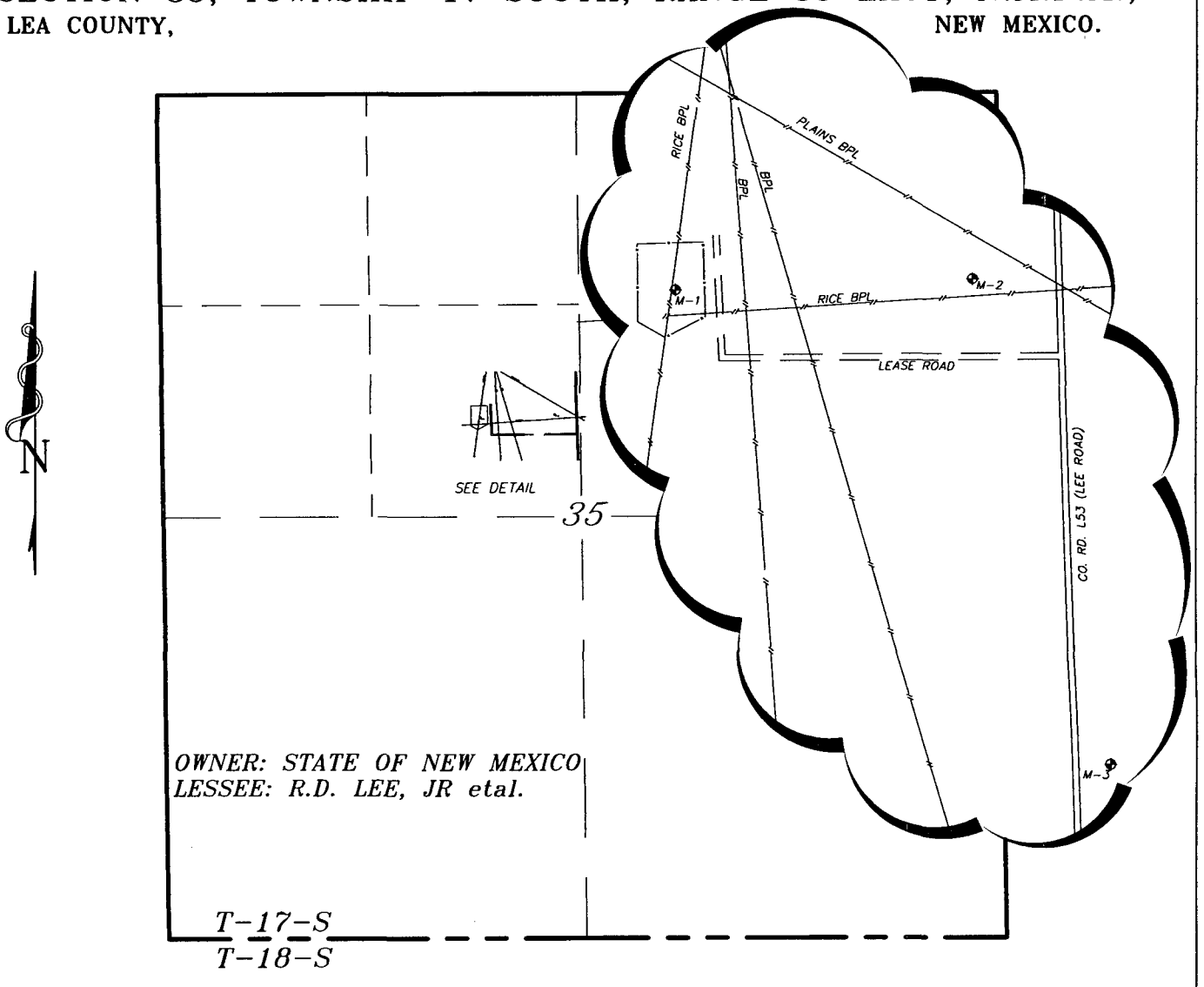
0 200 400
Feet

R.T. Hicks Consultants, Ltd 901 Rio Grande Blvd NW Suite F-142 Albuquerque, NM 87104 Ph: 505.266.5004	Potentiometric Surface (4th Qtr 2007) Rice Operating Company: F-35 SWD 2007 Annual Report	 January 2008

1/24/2008

SECTION 35, TOWNSHIP 17 SOUTH, RANGE 35 EAST, N.M.P.M.,

LEA COUNTY, **NEW MEXICO.**



NOTE:
ELEVATIONS ARE ON BLACK MARK
ON NORTH SIDE OF PVC CASING.

NEW MEXICO STATE PLANE COORDINATES (NAD83)

WELL	NORTHING	EASTING	LATITUDE	LONGITUDE	ELEV. PVC	ELEV. GRND
MW-1	653404.425	818842.039	N 32°47'34.7"	W 103°25'49.0"	3911.41'	3908.25'
MW-2	653422.055	819313.959	N 32°47'34.9"	W 103°25'43.5"	3904.97'	3902.45'
MW-3	652653.200	819534.031	N 32°47'27.3"	W 103°25'41.0"	3902.09"	3900.10'

1000 0 1000 2000 FEET

SCALE: 1" = 1000'

I HEREBY CERTIFY THAT THIS PLAT WAS PREPARED FROM FIELD NOTES OF AN ACTUAL SURVEY AND MEETS OR EXCEEDS ALL REQUIREMENTS FOR LAND SURVEYS AS SPECIFIED BY THIS STATE.

GARY L. JONES, N.M. P.S. No. 7977
TEXAS R.P.L.S. No. 5074

BASIN SURVEYS P.O. BOX 1786 – HOBBS, NEW MEXICO

RICE OPERATING COMPANY

REF: VAC. F-35

MONITOR WELLS LOCATED IN

SECTION 35, TOWNSHIP 17 SOUTH, RANGE 35 EAST,

N.M.P.M., LEA COUNTY, NEW MEXICO.

W.O. Number: 17419	Drawn By: J. M. SMALL		
Date: 11-14-2006	Disk: JMS 17419MW	Survey Date: 11-15-2006	Sheet 1 of 1 Sheets