

AP - 64

ANNUAL MONITORING REPORT

YEAR(S):

2011

Rice Environmental Consulting & Safety

P.O. Box 5630 Hobbs, NM 88241
Phone 575.393.4411 Fax 575.393.0293

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CERTIFIED MAIL

RETURN RECEIPT NO. 7008 1140 0001 3070 6136

January 20th, 2011

Mr. Edward Hansen

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

**RE: 2011 Annual Groundwater Monitoring Report and Additional
Groundwater Remediation
Rice Operating Company – Hobbs SWD System
Hobbs F-29 SWD (AP-64): UL/F sec. 29 T18S R38E**

Mr. Hansen:

RICE Operating Company (ROC) has retained Rice Environmental Consulting and Safety (RECS) to address potential environmental concerns at the above-referenced site in the abandoned Hobbs Salt Water Disposal (SWD) system. ROC is the service provider (agent) for the Hobbs SWD System and has no ownership of any portion of the pipeline, well, or facility. The system is owned by a consortium of oil producers, System Parties, who provide all operating capital on a percentage ownership/usage basis. The Hobbs SWD System has been abandoned.

This 2011 Annual Groundwater Monitoring Report contains:

1. A table presenting all laboratory results and depths to groundwater for each well at the site.
2. Graphs showing the concentrations of chloride and TDS in groundwater over time.
3. A map showing the well locations and the approximate location of the proposed 4 inch well (RW-1).
4. The laboratory analytical results for the most recent sampling event.

Quarterly groundwater sampling will continue in 2012.

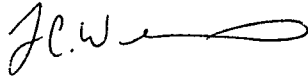
Additional Groundwater Remediation

The Hobbs F-29 SWD site has chloride readings above WQCC standards in both MW-2 and MW-4. During the most recent sampling event on December 16th, 2011, MW-2 had a laboratory chloride reading of 480 mg/L and MW-4 had a laboratory chloride reading of 580 mg/L. MW-3 and MW-5 both had chloride values below WQCC standards with MW-3 having a laboratory chloride reading of 168 mg/L and MW-5 having a laboratory chloride reading of 220 mg/L. Due to the higher chloride readings in MW-2 and MW-4,

ROC will install a 4 inch monitor well (RW-1) at the site and conduct a groundwater source removal and test pumping program. The purpose of this pumping program is to determine if groundwater may be restored within a short period of time and assist in the evaluation of groundwater restoration methods. Water removed from RW-1 will be utilized for makeup water for 10 lb brine water. Once the groundwater pumping program has been evaluated, ROC will submit a report with recommendations.

RECS appreciates the opportunity to work with you on this project. Please call Hack Conder at (575) 393-9174 or me if you have any questions or wish to discuss the site.

Sincerely,

A handwritten signature in black ink, appearing to read 'J.L.W.' followed by a long, horizontal, wavy line.

Lara Weinheimer
Project Scientist
RECS
(575) 441-0431

Hobbs F-29 SWD (AP-64)

MW	Depth to Water	Sample Date	Cl	TDS	Benzene	(mg/L)						Ethyl Benzene	Total Xylenes	Sulfate
2	XXX	3/21/2000	2564	6660	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
2	49	7/10/2000	1829	3470	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.006	<0.006	XXX	XXX
2	49.26	9/27/2000	1748	3032	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.006	<0.006	XXX	XXX
2	49.61	12/12/2000	1027	2586	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.006	<0.006	XXX	XXX
2	XXX	1/4/2001	308	1114	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
2	XXX	3/16/2001	396	1373	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
2	XXX	3/23/2001	368	1312	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
2	XXX	5/7/2001	365	1272	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
2	XXX	6/8/2001	513	1796	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
2	XXX	8/14/2001	340	1385	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
2	51.13	12/29/2001	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
2	51.16	1/4/2002	308	1114	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
2	XXX	6/6/2002	221	XXX	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	135	135
2	52.07	8/14/2002	186	806	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	144	144
2	52.58	12/11/2002	172	738	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.006	<0.006	106	106
2	52.94	3/21/2003	230	XXX	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	140	140
2	53.15	5/28/2003	257	804	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	138	138
2	53.71	9/22/2003	151	700	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	173	173
2	54.1	12/18/2003	208	815	<0.002	<0.002	0.003	0.003	<0.002	<0.002	0.014	0.014	71	71
2	54.33	3/15/2004	186	607	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	103	103
2	XXX	5/27/2004	213	830	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	138	138
2	54.6	9/8/2004	248	946	0.00464	0.000412	0.000412	0.000412	0.000979	0.000979	0.001199	0.001199	129	129
2	54.2	11/23/2004	139	888	0.00448	<0.001	<0.001	<0.001	<0.001	<0.001	0.000714	0.000714	125	125
2	53.39	3/22/2005	214	914	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	196	196
2	53.35	5/18/2005	223	930	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	131	131
2	53.55	8/8/2005	210	799	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	130	130
2	53.81	10/31/2005	185	762	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	100	100
2	53.89	1/30/2006	198	904	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	89.4	89.4
2	53.91	5/1/2006	212	904	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	91.3	91.3
2	54.13	10/16/2006	258	1040	<0.001	j[0.000790]	j[0.000790]	j[0.000356]	j[0.000356]	j[0.000940]	j[0.000940]	j[0.000940]	116	116

XXX: Not Recorded or Not Analyzed
j: Result Below Detection Limit

MW	Depth to Water	Sample Date	Cl	TDS	Benzene	Toluene	Benzene	Xylenes	Sulfate
(mg/L)									
2	54.08	2/5/2007	299	908	<0.001	<0.001	<0.001	<0.001	112
2	54.17	5/16/2007	236	898	<0.001	<0.001	<0.001	<0.001	102
2	54.37	7/31/2007	272	1040	<0.001	<0.001	0.0033	41.9	
2	54.43	10/18/2007	292	1047	<0.001	<0.001	<0.001	<0.003	113
2	54.19	2/18/2008	300	1040	<0.002	<0.002	<0.002	<0.006	132
2	54.53	4/25/2008	320	1070	<0.002	<0.002	<0.002	<0.006	185
2	54.69	7/24/2008	172	773	<0.001	<0.001	<0.001	<0.003	104
2	54.89	11/12/2008	296	1130	<0.001	<0.001	<0.001	<0.003	131
2	54.97	2/3/2009	248	1100	XXX	XXX	XXX	XXX	109
2	55.05	5/4/2009	344	1330	XXX	XXX	XXX	XXX	120
2	55.21	8/28/2009	280	1220	XXX	XXX	XXX	XXX	102
2	55.33	10/27/2009	240	1000	XXX	XXX	XXX	XXX	105
2	55.53	3/12/2010	312	1290	XXX	XXX	XXX	XXX	132
2	55.52	6/10/2010	260	1100	XXX	XXX	XXX	XXX	111
2	55.55	8/31/2010	288	1080	XXX	XXX	XXX	XXX	115
2	55.68	12/6/2010	240	1010	XXX	XXX	XXX	XXX	104
2	55.76	3/11/2011	256	1080	XXX	XXX	XXX	XXX	109
2	55.89	6/17/2011	404	1350	XXX	XXX	XXX	XXX	121
2	55.89	9/19/2011	560	1720	XXX	XXX	XXX	XXX	143
2	56.26	12/16/2011	480	1350	XXX	XXX	XXX	XXX	226

MW	Depth to Water	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate
(mg/L)									
3	XXX	1/4/2001	136	1013	XXX	XXX	XXX	XXX	XXX
3	51.2	12/29/2001	XXX	XXX	XXX	XXX	XXX	XXX	XXX
3	51.24	1/4/2002	136	1013	XXX	XXX	XXX	XXX	XXX
3	XXX	5/24/2002	137	917	<0.001	<0.001	<0.001	<0.001	158
3	52.12	8/14/2002	151	998	<0.001	<0.001	<0.001	<0.001	284
3	52.64	12/11/2002	136	1069	0.005	<0.002	<0.002	<0.006	201
3	52.98	3/21/2003	133	XXX	<0.001	<0.001	<0.001	<0.001	266
3	53.7	5/28/2003	301	1120	<0.001	<0.001	<0.001	<0.001	240

XXX: Not Recorded or Not Analyzed
j: Result Below Detection Limit

MW	Depth to Water	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate
						(mg/L)			
3	53.74	9/22/2003	120	881	<0.001	<0.001	<0.001	<0.001	238
3	54.35	3/15/2004	115	1140	<0.001	<0.001	<0.001	<0.001	248
3	XXX	5/27/2004	111	810	<0.001	<0.001	<0.001	<0.001	171
3	54.6	9/8/2004	230	937	<0.001	<0.001	<0.001	<0.001	186
3	54.4	11/23/2004	115	925	<0.001	<0.001	<0.001	<0.001	183
3	54.59	12/18/2004	124	852	<0.002	<0.002	<0.002	<0.006	73
3	53.4	3/22/2005	162	796	<0.001	<0.001	<0.001	<0.001	126
3	53.38	5/18/2005	272	1050	<0.001	<0.001	<0.001	<0.001	92
3	53.9	8/8/2005	203	945	<0.001	<0.001	<0.001	<0.001	122
3	53.57	10/31/2005	113	732	<0.001	<0.001	<0.001	<0.001	116
3	53.92	1/30/2006	97.3	650	<0.001	<0.001	<0.001	j[0.000562]	120
3	53.98	5/1/2006	85.3	704	<0.001	<0.001	<0.001	<0.001	111
3	54.18	10/16/2006	88.9	616	<0.001	j[0.000950]	j[0.000404]	0.00105	135
3	54.1	2/5/2007	98.3	572	<0.001	<0.001	<0.001	<0.001	128
3	54.2	5/16/2007	90.6	542	<0.001	<0.001	<0.001	<0.001	111
3	54.23	7/31/2007	105	590	<0.001	<0.001	<0.001	<0.002	76.5
3	54.48	10/18/2007	100	611	<0.001	<0.001	<0.001	<0.003	120
3	54.23	2/18/2008	104	607	<0.002	<0.002	<0.002	<0.006	144
3	54.55	4/25/2008	244	918	<0.002	<0.002	<0.002	<0.006	172
3	54.86	7/24/2008	80	584	<0.001	<0.001	<0.001	<0.003	104
3	54.93	11/12/2008	104	708	<0.001	<0.001	<0.001	<0.003	143
3	54.99	2/3/2009	104	744	XXX	XXX	XXX	XXX	127
3	55.08	5/4/2009	108	705	XXX	XXX	XXX	XXX	135
3	55.24	8/28/2009	108	703	XXX	XXX	XXX	XXX	120
3	55.3	10/27/2009	108	623	XXX	XXX	XXX	XXX	118
3	55.57	3/12/2010	112	653	XXX	XXX	XXX	XXX	140
3	55.54	6/10/2010	112	718	XXX	XXX	XXX	XXX	133
3	55.58	8/31/2010	112	657	XXX	XXX	XXX	XXX	115
3	55.69	12/6/2010	116	687	XXX	XXX	XXX	XXX	130
3	55.77	3/21/2011	116	582	XXX	XXX	XXX	XXX	114
3	55.85	6/17/2011	124	609	XXX	XXX	XXX	XXX	125

XXX: Not Recorded or Not Analyzed
j: Result Below Detection Limit

MW	Depth to Water	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate
3	55.87	9/19/2011	116	622	XXX	XXX	XXX	XXX	146
3	56.05	12/16/2011	168	647	XXX	XXX	XXX	XXX	89.1

MW	Depth to Water	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate
4	XXX	1/4/2001	464	1781	XXX	XXX	XXX	XXX	XXX
4	51.51	12/29/2001	XXX	XXX	XXX	XXX	XXX	XXX	XXX
4	51.56	1/4/2002	464	1781	XXX	XXX	XXX	XXX	XXX
4	XXX	5/24/2002	461	1520	<0.001	<0.001	<0.001	<0.001	286
4	52.5	8/14/2002	416	1660	<0.001	<0.001	<0.001	<0.001	303
4	53	12/11/2002	336	1302	0.003	<0.002	<0.002	<0.006	170
4	53.41	3/21/2003	346	XXX	<0.001	<0.001	<0.001	<0.001	289
4	53.25	5/28/2003	124	742	<0.001	<0.001	<0.001	<0.001	269
4	54.21	9/22/2003	425	1640	<0.001	<0.001	<0.001	<0.001	271
4	54.12	12/18/2003	660	1902	<0.002	<0.002	<0.002	<0.006	123
4	54.84	3/15/2004	452	1510	<0.001	<0.001	<0.001	<0.001	290
4	XXX	5/27/2004	461	1600	<0.001	<0.001	<0.001	<0.001	174
4	54.8	9/8/2004	372	1300	<0.001	<0.001	<0.001	<0.001	260
4	54.4	11/23/2004	401	1550	<0.001	<0.001	<0.001	<0.001	217
4	53.76	3/22/2005	392	1220	<0.001	<0.001	<0.001	<0.001	196
4	53.78	5/18/2005	336	1230	<0.001	<0.001	<0.001	<0.001	169
4	53.98	8/8/2005	370	1230	<0.001	<0.001	<0.001	<0.001	171
4	53.82	10/31/2005	411	1560	<0.001	J[0.000774]	J[0.000385	J[0.000842]	156
4	54.31	1/30/2006	523	1780	<0.001	<0.001	J[0.000332]	J[0.001064]	182
4	54.36	5/1/2006	501	1800	<0.001	<0.001	<0.001	<0.001	144
4	54.53	10/16/2006	683	2570	<0.001	<0.001	<0.001	<0.001	284
4	54.52	2/5/2007	653	1750	<0.001	<0.001	<0.001	<0.001	289
4	54.68	6/1/2007	668	2060	<0.001	<0.001	<0.001	<0.001	254
4	54.83	7/31/2007	548	2380	<0.001	<0.001	<0.001	<0.002	248

XXX: Not Recorded or Not Analyzed
j: Result Below Detection Limit

MW	Depth to Water	Sample Date	CI	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate
						(mg/L)			
4	54.9	10/18/2007	440	1394	<0.001	<0.001	<0.001	<0.003	211
4	54.71	2/18/2008	508	1680	<0.002	<0.002	<0.002	<0.002	186
4R	57.57	4/25/2008	670	1960	<0.002	<0.002	<0.002	<0.006	304
4R	57.88	7/24/2008	590	1950	<0.001	<0.001	<0.001	<0.003	350
4R	58.11	11/12/2008	476	1570	<0.001	<0.001	<0.001	<0.003	289
4R	58.25	2/3/2009	610	2110	XXX	XXX	XXX	XXX	283
4R	58.31	5/4/2009	640	2060	XXX	XXX	XXX	XXX	280
4R	58.46	8/28/2009	780	2500	XXX	XXX	XXX	XXX	276
4R	58.56	10/27/2009	800	2530	XXX	XXX	XXX	XXX	318
4R	58.76	3/12/2010	580	1680	XXX	XXX	XXX	XXX	240
4R	58.77	6/10/2010	470	1440	XXX	XXX	XXX	XXX	160
4R	58.78	8/31/2010	840	2350	XXX	XXX	XXX	XXX	310
4R	58.91	12/6/2010	730	2280	XXX	XXX	XXX	XXX	317
4R	58.98	3/11/2011	700	2310	XXX	XXX	XXX	XXX	281
4R	59.14	6/17/2011	700	2350	XXX	XXX	XXX	XXX	303
4R	59.35	9/19/2011	540	1960	XXX	XXX	XXX	XXX	252
4R	59.52	12/16/2011	580	1960	XXX	XXX	XXX	XXX	260

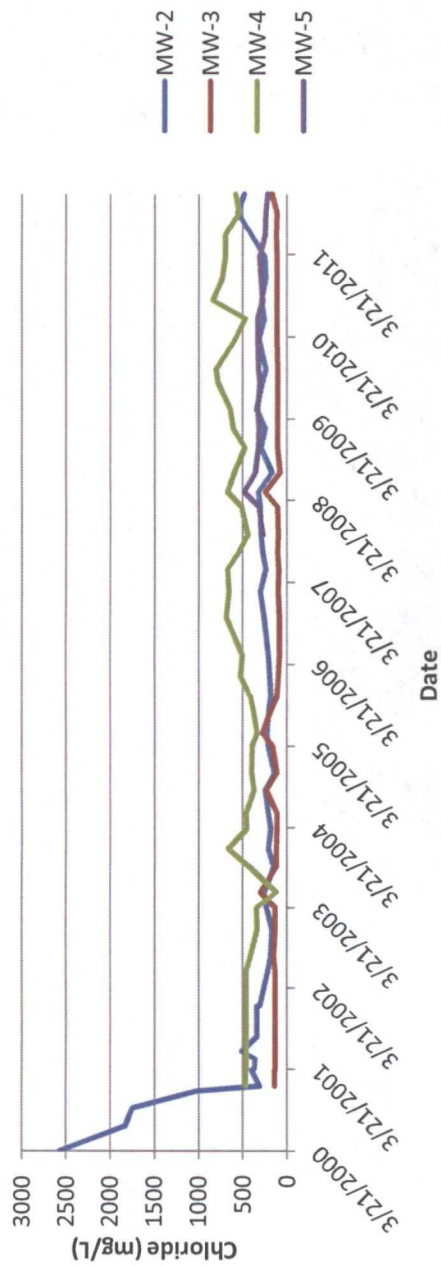
MW	Depth to Water	Sample Date	CI	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate
						(mg/L)			
5	57.02	10/18/2007	268	983	<0.001	<0.001	<0.001	<0.003	138
5	56.54	2/18/2008	316	1110	<0.002	<0.002	<0.002	<0.006	168
5	56.9	4/25/2008	484	1530	<0.002	<0.002	<0.002	<0.006	262
5	57.28	7/24/2008	356	1250	<0.001	<0.001	<0.001	<0.003	172
5	57.46	11/12/2008	324	1190	<0.001	<0.001	<0.001	<0.003	186
5	57.53	2/3/2009	312	1080	XXX	XXX	XXX	XXX	164
5	57.61	5/4/2009	328	1180	XXX	XXX	XXX	XXX	172
5	57.79	8/28/2009	308	1080	XXX	XXX	XXX	XXX	138
5	57.91	10/27/2009	320	1040	XXX	XXX	XXX	XXX	160
5	58.06	3/12/2010	328	1040	XXX	XXX	XXX	XXX	180
5	58.09	6/10/2010	332	1090	XXX	XXX	XXX	XXX	168

XXX: Not Recorded or Not Analyzed
j: Result Below Detection Limit

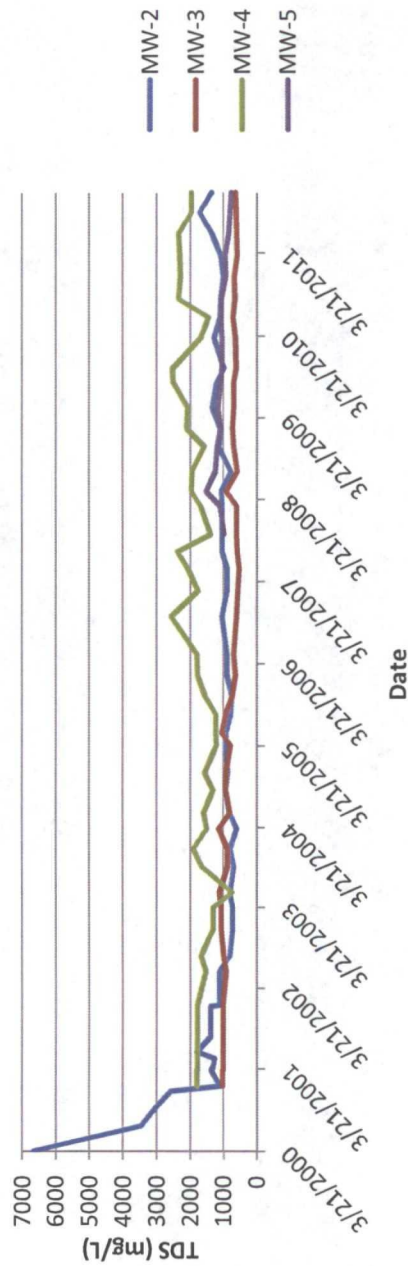
MW	Depth to Water	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate
5	58.11	8/31/2010	272	1070	XXX	XXX	XXX	XXX	172
5	58.21	12/6/2010	296	944	XXX	XXX	XXX	XXX	179
5	58.28	3/11/2011	308	952	XXX	XXX	XXX	XXX	156
5	58.42	6/17/2011	244	843	XXX	XXX	XXX	XXX	154
5	58.64	9/19/2011	240	802	XXX	XXX	XXX	XXX	159
5	58.8	12/16/2011	220	771	XXX	XXX	XXX	XXX	166

XXX: Not Recorded or Not Analyzed
j: Result Below Detection Limit

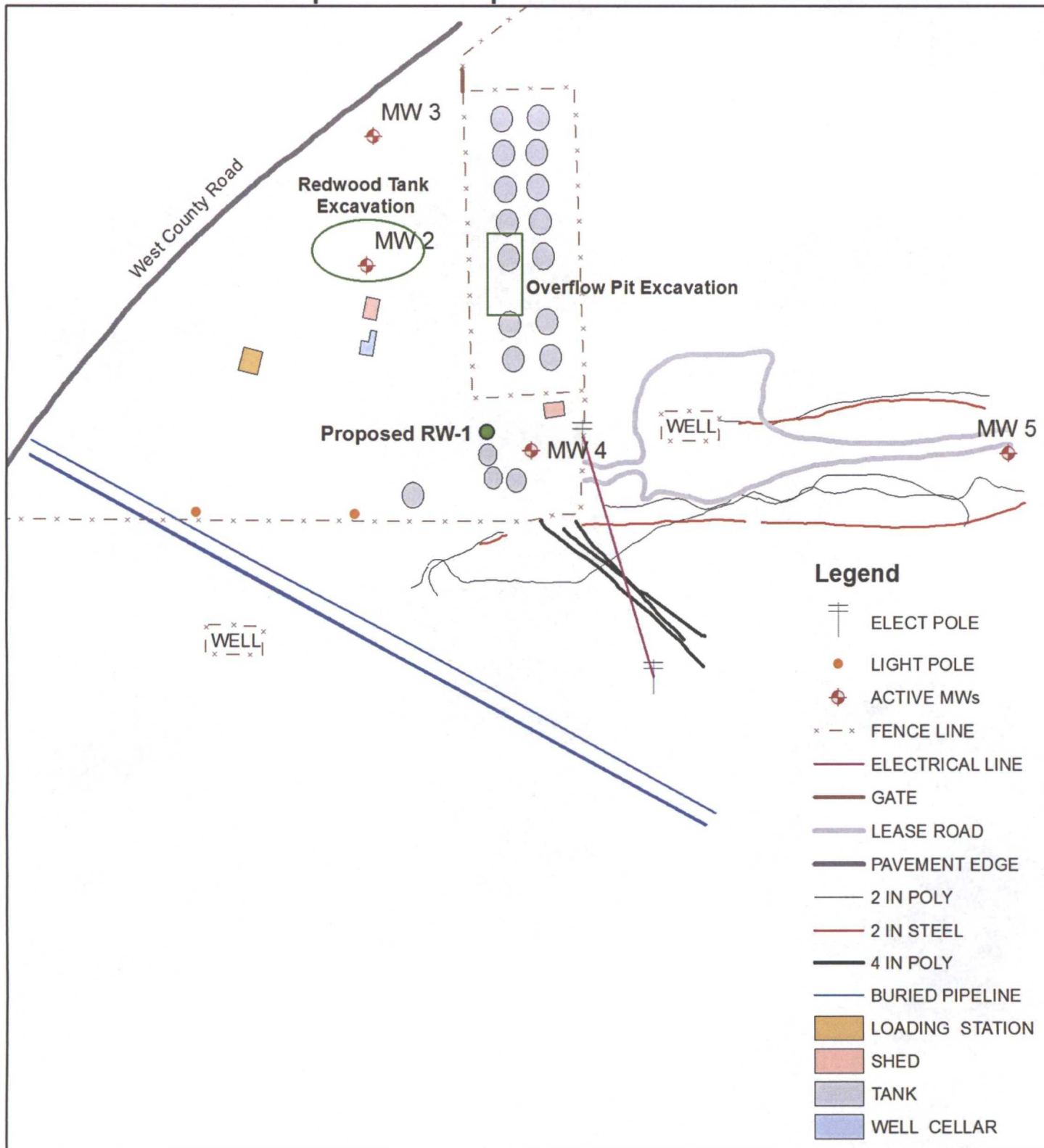
Hobbs F-29 SWD Chloride in Groundwater



Hobbs F-29 SWD TDS in Groundwater



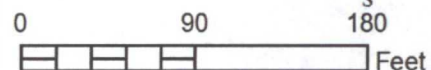
Site Map and Proposed RW-1 Location



HOBBS F-29 SWD

NMOCD Case #: AP-64

UL/F SECTION 29
T-18-S R-38-E
LEA COUNTY, NM



GPS date: 1/3/12 by TG
Drawing date: 1/3/12
Drafted by: TONY GRIECO

December 27, 2011

Hack Conder
Rice Operating Company
112 W. Taylor
Hobbs, NM 88240

RE: HOBBS F-29 SWD

Enclosed are the results of analyses for samples received by the laboratory on 12/19/11 15:46.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

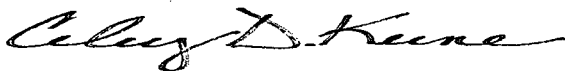
Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Celey D. Keene
Lab Director/Quality Manager

Analytical Results For:

 Rice Operating Company
 Hack Conder
 112 W. Taylor
 Hobbs NM, 88240
 Fax To: (575) 397-1471

Received:	12/19/2011	Sampling Date:	12/16/2011
Reported:	12/27/2011	Sampling Type:	Water
Project Name:	HOBBS F-29 SWD	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	T18S-R38E-SEC29 F-LEA CTY., NM		

Sample ID: MONITOR WELL #2 (H102736-01)

Chloride, SM4500Cl-B		mg/L		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride*	480	4.00	12/27/2011	ND	108	108	100	0.00		
Sulfate 375.4		mg/L		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Sulfate*	226	10.0	12/27/2011	ND	18.6	93.0	20.0	0.539		
TDS 160.1		mg/L		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
TDS*	1350	5.00	12/21/2011	ND	232	96.7	240	4.31		

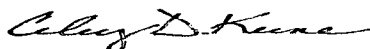
Sample ID: MONITOR WELL #3 (H102736-02)

Chloride, SM4500Cl-B		mg/L		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride*	168	4.00	12/27/2011	ND	108	108	100	0.00		
Sulfate 375.4		mg/L		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Sulfate*	89.1	10.0	12/27/2011	ND	18.6	93.0	20.0	0.539		
TDS 160.1		mg/L		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
TDS*	647	5.00	12/21/2011	ND	232	96.7	240	4.31		

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 Rice Operating Company
 Hack Conder
 112 W. Taylor
 Hobbs NM, 88240
 Fax To: (575) 397-1471

Received:	12/19/2011	Sampling Date:	12/16/2011
Reported:	12/27/2011	Sampling Type:	Water
Project Name:	HOBBS F-29 SWD	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	T18S-R38E-SEC29 F-LEA CTY., NM		

Sample ID: MONITOR WELL #4R (H102736-03)

Chloride, SM4500Cl-B		mg/L		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride*	580	4.00	12/27/2011	ND	108	108	100	0.00		
Sulfate 375.4		mg/L		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Sulfate*	260	10.0	12/27/2011	ND	18.6	93.0	20.0	0.539		
TDS 160.1		mg/L		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
TDS*	1960	5.00	12/21/2011	ND	232	96.7	240	4.31		

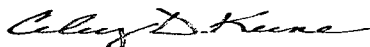
Sample ID: MONITOR WELL #5 (H102736-04)

Chloride, SM4500Cl-B		mg/L		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride*	220	4.00	12/27/2011	ND	108	108	100	0.00		
Sulfate 375.4		mg/L		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Sulfate*	166	10.0	12/27/2011	ND	18.6	93.0	20.0	0.539		
TDS 160.1		mg/L		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
TDS*	771	5.00	12/21/2011	ND	232	96.7	240	4.31		

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Celely D. Keene, Lab Director/Quality Manager

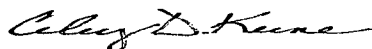
Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keene, Lab Director/Quality Manager

Cardinal Laboratories, Inc. 101 East Midland - Hobbs, New Mexico 88240 Tel (575) 393-2326 Fax (575) 393-2476		CHAIN-OF-CUSTODY AND ANALYSIS REQUEST LAB Order ID # _____	
Company Name: RICE Operating Company Project Manager: Hack Corder Address: (Street, City, Zip) 122 W Taylor Street ~ Hobbs, New Mexico 88240 Phone #: (575) 393-9174 Fax #: (575) 393-9174		ANALYSIS REQUEST (Circle or Specify Method No.)	
Project Name: Hobbs F-29 SWD Project Location: T18S-R38E-Sec29 F ~ Lea County - New Mexico Sample Signature: <i>Rozanne Johnson</i> (575) 631-9310 rozanne@valornet.com		Pesticides 8081A/608 _____ PCB's 8082/608 _____ GC/MS Semi. Vol. 8270C/625 _____ GC/MS Vol. 8260B/524 _____ RCI _____ TCLP Pesticides _____ TCLP Semi Volatiles _____ TCLP Volatiles _____ TCLP Metals Ag As Ba Cd Cr Pb Se Hg _____ Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7 _____ PAH 8270C _____ TPH 418.1/TX1005 / TX1005 Extended (C35) _____ BTEX 8021B/602 _____ MTBE 8021B/602 _____	
FIELD CODE Monitor Well #2 Monitor Well #3 Monitor Well #4r Monitor Well #5		DATE (2011) 12-16 10:15 12-16 9:10 12-16 11:15 12-16 13:40	
MATRIX WATER SOIL AIR SLUDGE		PRESERVATIVE METHOD HCL (2.40ml VOA) HNO ₃ NaHSO ₄ H ₂ SO ₄ ICE (1-Liter HDPE) NONE	
# CONTAINERS G 1 X G 1 X G 1 X G 1 X		TIME 12-16 10:15 12-16 9:10 12-16 11:15 12-16 13:40	
Relinquished by: <i>Rozanne Johnson</i> Date: 12-14-2011 Time: 13:45 Relinquished by: _____ Date: _____ Time: _____		Phone Results Yes No Fax Results Yes No Additional Fax Number: _____	
Delivered By: (Circle One) Sampler - UPS - Bus - Other: _____		REMARKS: Email Results to: horder@riceswd.com weinheimer@rice-ecs.com monies@riceswd.com rozanne@valornet.com	