AP - 48

STAGE 2 REPORT

Date 9-5-12

TETRA TECH

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September 5, 2012

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

Re: Stage 2 Abatement Plan Completion and Termination Request, Rice Operating Company, Justis Saltwater Disposal System (SWD) L-1 Boot, Unit L, Section 1, T-25-S, R-37-E, Lea County, New Mexico, NMOCD CASE #1R0423-0 (AP-48)

Mr. Hansen:

On behalf of Rice Operating Company (ROC), Tetra Tech, Inc. (Tetra Tech) submits the following completed implementation of the Stage 2 Abatement Plan and Request for Termination of the Justis Salt Water Disposal System (SWD) L-1 boot. ROC is the service provider (agent) for the Justis SWD System and has no ownership of any portion of the pipeline, well or facility. The Justis SWD system is owned by a consortium of oil producers, Systems Parties, who provide all operating capital on a percentage ownership/usage basis. See Figures 1 and 2 for site location.

BACKGROUND AND PREVIOUS WORK

As part of the ROC Junction Box Upgrade Workplan, the original Justis L-1 junction box was removed and replaced with a new water tight junction box, located 50 feet south of the old box. Once the junction box was removed, evaluation of the surrounding and subsurface soils was initiated with a backhoe. Chloride testing and PID field screening were performed at regular intervals with the final excavation measuring 20 feet by 22 feet by 12 feet deep with chlorides being the only constituent which did not decrease with depth.

On December 29, 2003, a soil boring was installed in the center of the excavation and advanced to a depth of 80 feet below ground surface (bgs) with groundwater encountered at a depth of 75 feet bgs. The borehole was found to be impacted to depth

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with chlorides. As such, the borehole was plugged utilizing bentonite and the excavation brought up to 6 feet bgs with excavated soils. A 1.5 foot thick clay liner was installed with the dimensions of that of the excavation. The remainder of the excavated soils was utilized to bring the excavation up to surface grade.

On December 9, 2004, a monitor well (MW-1) was installed at the site. A Stage I Abatement Plan was submitted to the NMOCD on July 12, 2005, and approved on February 23, 2006. As part of the abatement plan, additional monitor wells were proposed for the site in order to complete delineation of the chlorides within the groundwater. In addition, a water well search was performed on the site. As part of the implementation of the abatement plan, ROC was onsite March 21, 2006 to oversee the installation of three (3) monitor wells (MW-2, MW-3, and MW-4) at the site. An additional monitoring well (MW-5) was installed on April 17, 2007 up-gradient of this site, but down-gradient of a reserve pit. Monitor wells MW-1, MW-2, and MW-5 were found to be impacted with chlorides greater than the New Mexico Water Quality Control Commission standard of 250 milligrams per liter (mg/L). Monitor well MW-4 located down gradient of the site had a chloride concentration average of 53.3 mg/L, while MW-3 located most up-gradient of the site had a chloride concentration of 168.41 mg/L. The groundwater was presumed to be regionally impacted due to the up-gradient reserve pit, which was confirmed through sampling MW-5 (located up-gradient of the L-1 boot site but down-gradient of the reserve pit). See Figure 3 for monitor well locations. The results of the groundwater gauging/sampling are presented in Appendix A.

On June 9 and 10, 2010, Tetra Tech personnel were onsite to oversee the installation of six (6) additional soil borings (SB-2 through SB-7) in order to delineate the impact of chlorides adjacent to the former junction box. Based on the results of the drilling, it was determined that a liner would need to be installed in order to impede further vertical migration of the remaining chlorides within the soils.

On October 4, 2010, ROC submitted a Stage 2 Abatement Plan Addendum to the NMOCD. The addendum proposed installing a 20-mil polyethylene liner in order to impede vertical migration of chlorides in the soil near the initial junction box. In addition, the addendum included the installation of a recovery well with plans to remove 434 kilograms (kg) of chloride mass or approximately 60,385 gallons of chloride impacted groundwater from the well. Removed groundwater would be utilized for pipeline and well maintenance. A subsequent Addendum proposing a 45 foot by 60 foot, 20-mil polyethylene liner be installed at 4 feet bgs was submitted to the NMOCD on December 22, 2010. See Figure 4 for liner dimensions. The NMOCD approved the Stage 2 Abatement Plan Addendum and subsequent Addendum in an email dated December 27, 2010.

Between August 1 and August 27, 2011, the site was excavated to dimensions of 45 feet by 60 feet by 5 feet deep. See attached photographs. Clean, imported soil was used as a 6 inch pad in the bottom of the excavation. Laboratory analysis of the imported soil resulted in a chloride concentration below detectable limits (<16 mg/kg) and a field PID measurement of 0.2 ppm. The 20-mil polyethylene liner was properly seated in the bottom of the excavation and a 6 inch pad was placed above the liner. Laboratory analysis of the imported soil resulted in a chloride concentration below

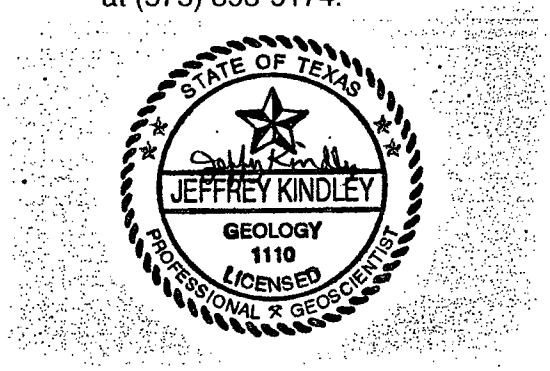
detectable limits (<16 mg/kg) and a field PID measurement of 0.1 ppm. Approximately 72 yds^3 of excavated soil were properly disposed of at an NMOCD approved facility. The remaining excavated soil was blended with clean, imported soil and was used to backfill the excavation to ground surface. See Appendix B for laboratory analysis of soils. Laboratory analysis of the blended backfill resulted in a chloride concentration of 192 mg/kg and a field PID measurement of 3.2 ppm. See Appendix C for field sheets. Once the excavation was backfilled silt net fencing was installed and the site was seeded with a blend of native vegetation. See Appendix D for revegetation form. On September 1, 2011, a recovery well (RW-1) was installed at the site in order to implement the groundwater remediation at the site.

GROUNDWATER CHLORIDE REMEDIATION AND COMPLETION

Groundwater recovery began at RW-1 on March 19, 2012 and were completed on August 3, 2012. During that time, approximately 2,924 barrels (122,808 gallons) were removed. With a chloride concentration of 1,140 mg/L in RW-1, this equates to approximately 529.96 kilograms of chloride. Removed groundwater was utilized for pipeline and well maintenance. See Appendix B for analytical results from recovery well and groundwater withdrawal log sheet.

Based on the completion activities performed at the site, ROC acknowledges they have met the requirements of 19.15.30 NMAC and respectfully request termination of this regulatory file. Upon NMOCD approval of this Termination Request, all monitor wells MW-1 through MW-5 will be plugged using a cement grout with 1 to 3% bentonite and a 3-foot cap of cement to the surface. RW-1 will remain open to monitor up-gradient groundwater quality and possibly to be utilized for regional groundwater recovery. Upon completion of these activities, a Monitor Well Plugging Report will be submitted to the NMOCD.

If you have any questions or comments regarding the above Termination Request, please do not hesitate to contact us at (432) 682-4559 or Hack Conder of ROC at (575) 393-9174.



Respectfully Submitted,
Tetra Tech, Inc.

Jeffrey Kindley, P.G.
Senior Project Manager

cc: Hack Conder – ROC
Enclosures: Figures, Appendices

FIGURES

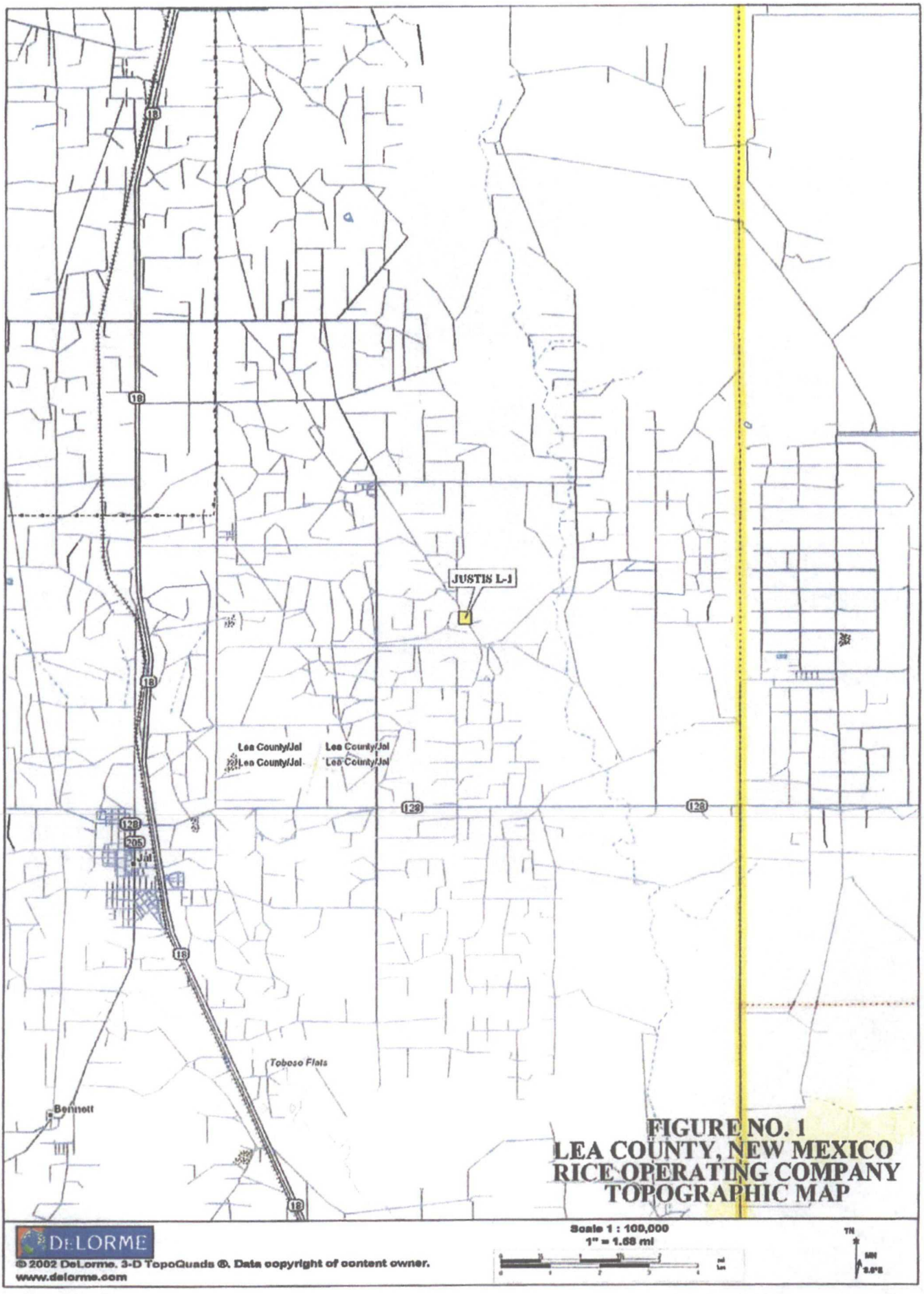


FIGURE NO. 1
LEA COUNTY, NEW MEXICO
RICE OPERATING COMPANY
TOPOGRAPHIC MAP

Scale 1 : 100,000
1" = 1.58 mi

TN
MN

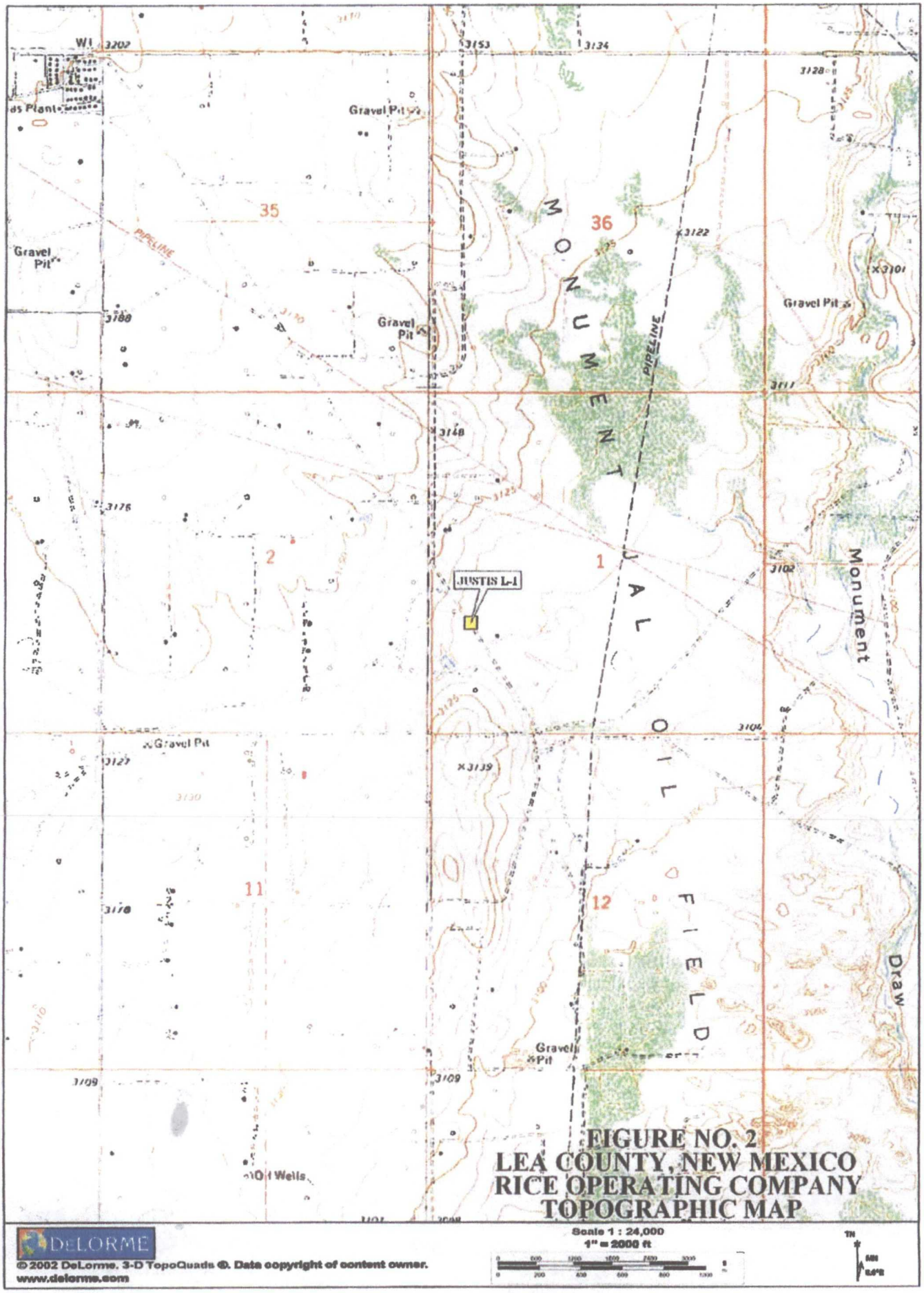
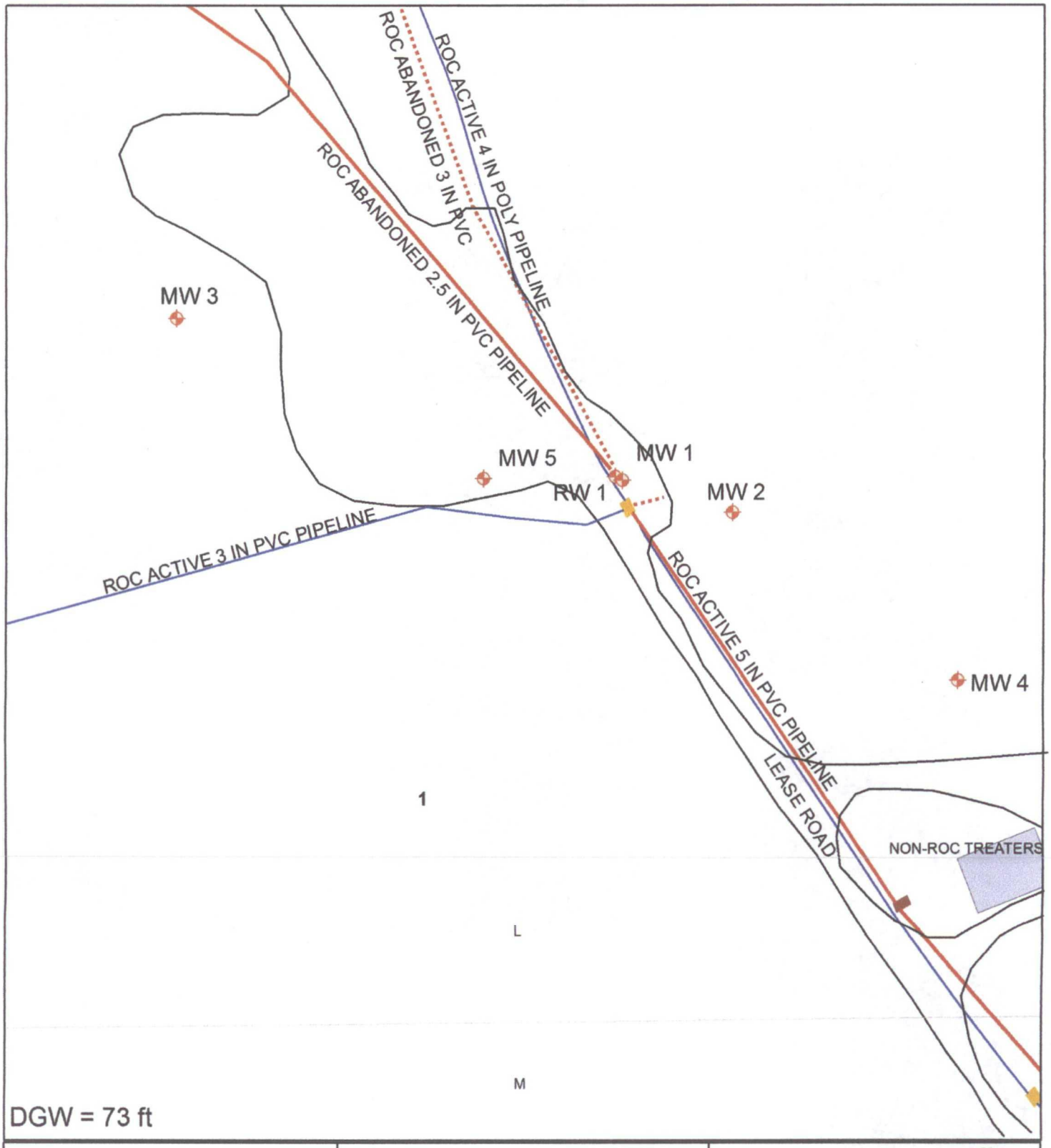


FIGURE NO. 2
LEA COUNTY, NEW MEXICO
RICE OPERATING COMPANY
TOPOGRAPHIC MAP

Monitor Well Locations



RICE ENVIRONMENTAL CONSULTING & SAFETY, LLC

RECS

JUSTIS L-1 BOOT

Legals: UL/L SEC 1
T-25-S R-37-E

NMOCD Case #: AP 48

Figure 3

N
W E
S

0 50 100 200
Feet

Drawing date: 8/23/12
Drafted by: L. Weinheimer

Installed Liner

RICE ENVIRONMENTAL RECS CONSULTING & SAFETY, LLC

Justis L-1 boot

Legals: UL/L sec. 1
T25S R37E
NMOCD Case #: AP-48

Figure 4

N W E S

0 15 30 60 Feet

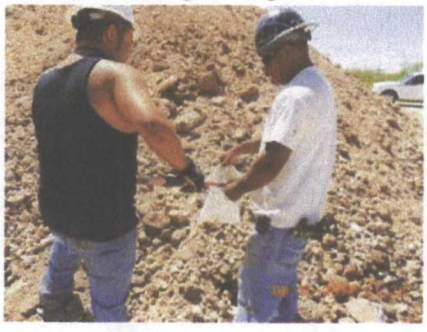
Drawing date: 8/23/12
Drafted by: L. Weinheimer

PHOTOGRAPHS

Justis L-1 boot (AP-48)
Unit L, Section 1, T25S, R37E

site prior to excavating, facing south 8.5.11

excavating the site, facing southeast 8.9.11



collecting a soil sample 8.15.11

importing sand for 6" pad above liner, facing west 8.17.11

20-mil reinforced liner installed, facing southeast 8.15.11

importing sand for 6" pad below liner, facing northwest 8.10.11

backfilling site with blended backfill, facing north 8.18.11

seeding site, facing east 11.18.11

APPENDIX A
GAUGING/SAMPLING RESULTS

Table 1
Rice Operating Company
Justis L-1
Lea County, New Mexico

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl mg/L	TDS mg/L	Benzene mg/L	Toluene mg/L	Ethyl Benzene mg/L	Total Xylenes mg/L	Sulfate mg/L	Comments
1	78.43	92.00	xxx	20	12/21/04	1060	2620	0.0158	<0.001	0.00209	<0.001	550	xxx
1	78.19	92.00	xxx	20	03/29/05	873	2020	0.000904	<0.001	<0.001	<0.001	502	xxx
1	78.11	92.00	xxx	20	06/16/05	684	1900	<0.001	<0.001	<0.001	<0.001	468	xxx
1	77.95	92.00	xxx	2.5	09/15/05	464	1770	<0.001	<0.001	<0.001	<0.001	307	xxx
1	77.80	92.00	2.30	8	12/05/05	390	1410	<0.001	<0.001	<0.001	0.000666	245	xxx
1	77.56	92.00	2.30	8	02/27/06	413	1440	<0.001	<0.001	<0.001	<0.001	236	xxx
1	77.51	92.00	2.30	10	05/24/06	420	1430	<0.001	<0.001	<0.001	<0.001	246	xxx
1	77.25	92.00	2.40	10	09/14/06	672	1870	<0.001	<0.001	<0.001	<0.001	339	xxx
1	77.12	92.00	2.40	10	10/30/06	943	2360	<0.001	<0.001	<0.001	<0.001	339	Clear no odor
1	76.95	91.85	2.40	10	03/16/07	519	3630	<0.001	<0.001	<0.001	<0.001	112	Clear no odor
1	76.80	91.85	2.40	10	05/15/07	2160	4530	<0.001	<0.001	<0.001	<0.001	397	Clear no odor
1	76.48	91.85	2.50	10	08/29/07	2179	7305	<0.002	<0.002	<0.002	<0.006	500	Clear no odor
1	76.30	91.85	2.50	10	11/14/07	2250	4679	<0.002	<0.002	<0.002	<0.006	477	Clear no odor
1	76.10	91.83	2.50	10	02/27/08	2360	5420	<0.002	<0.002	<0.002	<0.006	455	Clear no odor
1	75.88	91.83	2.80	10	05/23/08	3000	6560	<0.002	<0.002	<0.002	<0.006	439	Clear no odor
1	75.77	91.83	2.60	10	08/28/08	2150	5110	<0.001	<0.001	<0.001	<0.003	550	Clear no odor
1	75.59	91.83	2.60	10	12/17/08	2500	5100	<0.001	<0.001	<0.001	<0.003	538	Clear no odor
1	75.37	91.35	2.60	10	02/23/09	2240	4630	xxx	xxx	xxx	xxx	486	Clear no odor
1	75.22	91.35	2.60	10	05/28/09	2150	4620	xxx	xxx	xxx	xxx	636	Clear no odor
1	74.98	91.35	2.60	10	09/09/09	1940	5030	xxx	xxx	xxx	xxx	546	Clear no odor
1	74.84	91.35	2.60	10	11/18/09	1980	4640	xxx	xxx	xxx	xxx	418	Clear no odor
1	74.63	91.34	2.70	10	03/09/10	1880	5330	xxx	xxx	xxx	xxx	814	Clear no odor
1	74.42	91.34	2.70	10	06/03/10	1860	5530	xxx	xxx	xxx	xxx	510	Clear no odor
1	73.38	91.34	2.90	10	08/24/10	1740	3900	xxx	xxx	xxx	xxx	538	Clear no odor
1	74.15	91.34	2.80	10	11/29/10	1640	3530	xxx	xxx	xxx	xxx	621	Clear no odor
1	74.00	91.35	2.80	10	03/08/11	1950	4060	xxx	xxx	xxx	xxx	510	Clear no odor
1	73.72	91.35	2.80	10	06/15/11	2140	4490	xxx	xxx	xxx	xxx	553	Clear no odor
1	73.46	91.35	2.90	10	12/09/11	1580	3440	xxx	xxx	xxx	xxx	600	Clear no odor
1	73.23	91.35	2.90	10	03/14/12	1650	3680	xxx	xxx	xxx	xxx	529	Clear no odor
1	73.29	91.35	2.90	10	06/06/12	1280	3100	xxx	xxx	xxx	xxx	677	Clear no odor
													Clear no odor

Graph 1
Rice Operating Company
MW-1
Justis L-1
Lea County, New Mexico

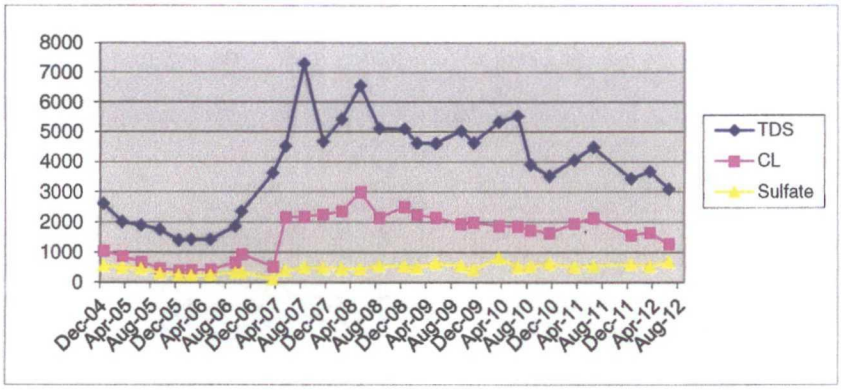


Table 2
Rice Operating Company
Justis L-1
Lea County, New Mexico

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl mg/L	TDS mg/L	Benzene mg/L	Toluene mg/L	Ethyl Benzene mg/L	Total Xylenes mg/L	Sulfate mg/L	Comments
2	77.72	93.05	2.50	12	03/28/06	564	1700	<0.001	<0.001	<0.001	<0.001	233	xxx
2	77.48	93.05	2.50	15	05/24/06	549	1730	<0.001	<0.001	<0.001	<0.001	215	xxx
2	77.23	93.05	2.50	10	09/14/06	546	1660	<0.001	<0.001	<0.001	<0.001	306	xxx
2	77.11	93.05	2.60	10	10/30/06	505	1560	<0.001	<0.001	<0.001	<0.001	275	Clear no odor
2	76.93	92.88	2.60	10	03/16/07	584	1392	<0.001	<0.001	<0.001	<0.001	362	Clear no odor
2	76.78	92.88	2.60	10	05/15/07	437	1490	<0.001	<0.001	<0.001	<0.001	262	Clear no odor
2	76.47	92.88	2.60	10	08/29/07	424	1438	<0.002	<0.002	<0.002	<0.006	295	Clear no odor
2	76.3	92.88	2.70	10	11/14/07	396	1353	<0.002	<0.002	<0.002	<0.006	283	Clear no odor
2	76.07	92.65	2.70	10	02/27/08	412	1360	<0.002	<0.002	<0.002	<0.006	269	Clear no odor
2	75.82	92.65	2.70	10	05/23/08	428	1380	<0.002	<0.002	<0.002	<0.006	267	Clear no odor
2	75.74	92.65	2.70	10	08/28/08	430	1400	<0.001	<0.001	<0.001	<0.003	240	Clear no odor
2	75.57	92.65	2.70	10	12/17/08	500	1660	<0.001	<0.001	<0.001	<0.003	351	Clear no odor
2	75.32	92.58	2.80	10	02/23/09	500	1700	xxx	xxx	xxx	xxx	346	Clear no odor
2	75.19	92.58	2.80	10	05/28/09	490	1710	xxx	xxx	xxx	xxx	438	Clear no odor
2	74.96	92.58	2.80	10	09/09/09	460	1730	xxx	xxx	xxx	xxx	438	Clear no odor
2	74.80	92.58	2.80	10	11/18/09	480	1660	xxx	xxx	xxx	xxx	349	Clear no odor
2	74.59	92.58	2.90	10	03/09/10	428	1680	xxx	xxx	xxx	xxx	511	Clear no odor
2	74.41	92.58	2.90	10	06/03/10	460	1720	xxx	xxx	xxx	xxx	475	Clear no odor
2	74.34	92.58	2.90	10	08/24/10	420	1600	xxx	xxx	xxx	xxx	438	Clear no odor
2	74.10	92.58	3.00	10	11/29/10	390	1420	xxx	xxx	xxx	xxx	385	Clear no odor
2	73.96	92.57	3.00	10	03/08/11	410	1420	xxx	xxx	xxx	xxx	316	Clear no odor
2	73.67	92.57	3.00	10	06/15/11	540	1530	xxx	xxx	xxx	xxx	332	Clear no odor
2	73.52	92.57	3.00	10	09/15/11	550	1630	xxx	xxx	xxx	xxx	385	Clear no odor
2	73.41	92.57	3.10	10	12/09/11	500	1640	xxx	xxx	xxx	xxx	429	Clear no odor
2	73.18	92.57	3.10	10	03/13/12	570	1710	xxx	xxx	xxx	xxx	484	Clear no odor
2	73.03	92.57	3.10	10	06/06/12	530	1710	xxx	xxx	xxx	xxx	362	Clear no odor

Graph 2
Rice Operating Company
MW-2
Justis L-1
Lea County, New Mexico

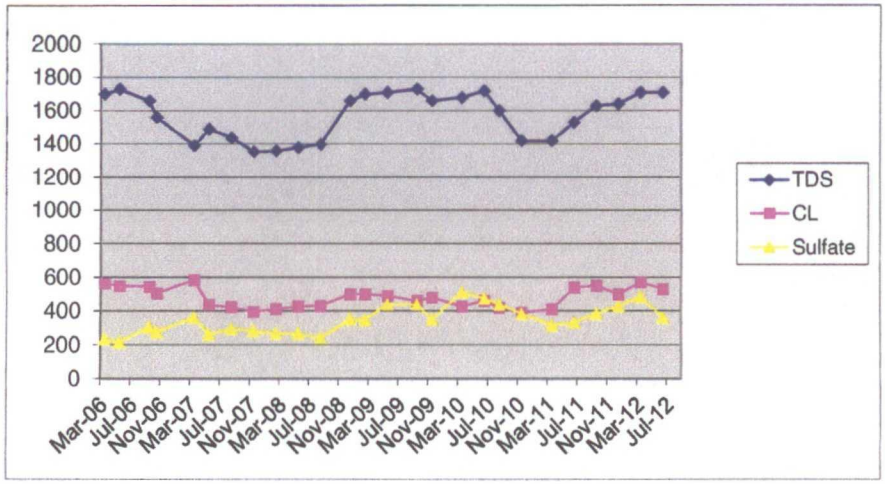


Table 3
Rice Operating Company
Justis L-1
Lea County, New Mexico

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl mg/L	TDS mg/L	Benzene mg/L	Toluene mg/L	Ethyl Benzene mg/L	Total Xylenes mg/L	Sulfate mg/L	Comments
3	78.21	93.00	2.40	12	03/28/06	96.3	536	<0.001	<0.001	<0.001	<0.001	93.4	xxx
3	77.99	93.00	2.40	10	05/24/06	91.4	616	<0.001	<0.001	<0.001	<0.001	88.3	xxx
3	77.99	93.00	2.40	10	09/14/06	125	562	<0.001	<0.001	<0.001	<0.001	125	xxx
3	77.61	93.00	2.50	10	10/30/06	114	518	<0.001	<0.001	<0.001	<0.001	111	Clear no odor
3	77.47	92.84	2.50	10	03/16/07	146	574	<0.001	<0.001	<0.001	<0.001	146	Clear no odor
3	77.30	92.84	2.50	10	05/15/07	128	538	<0.001	<0.001	<0.001	<0.001	108	Clear no odor
3	76.98	92.84	2.50	10	08/29/07	156	702	<0.002	<0.002	<0.002	<0.006	134	Clear no odor
3	76.84	92.84	2.60	10	11/14/07	132	621	<0.002	0.002	0.003	0.007	131	Clear no odor
3	76.58	92.48	2.50	10	02/27/08	124	613	<0.002	<0.002	<0.002	<0.006	131	Clear no odor
3	76.36	92.48	2.60	10	05/23/08	164	696	<0.002	<0.002	<0.002	<0.006	126	Clear no odor
3	76.30	92.48	2.60	10	08/28/08	88	558	<0.001	<0.001	<0.001	<0.003	128	Clear no odor
3	76.23	92.48	2.60	10	12/17/08	140	661	<0.001	<0.001	<0.001	<0.003	128	Clear no odor
3	75.84	92.35	2.60	10	02/23/09	184	642	xxx	xxx	xxx	xxx	113	Clear no odor
3	75.76	92.35	2.70	10	05/28/09	188	751	xxx	xxx	xxx	xxx	115	Clear no odor
3	75.52	92.35	2.70	10	09/09/09	184	647	xxx	xxx	xxx	xxx	117	Clear no odor
3	75.32	92.35	2.70	10	11/18/09	196	660	xxx	xxx	xxx	xxx	85.9	Clear no odor
3	75.11	92.29	2.70	10	03/09/10	224	793	xxx	xxx	xxx	xxx	147	Clear no odor
3	74.96	92.29	2.80	10	06/03/10	240	903	xxx	xxx	xxx	xxx	99	Clear no odor
3	74.87	92.29	2.80	10	08/24/10	244	734	xxx	xxx	xxx	xxx	108	Clear no odor
3	74.66	92.29	2.80	10	11/29/10	268	818	xxx	xxx	xxx	xxx	120	Clear no odor
3	74.52	92.62	2.90	10	03/08/11	204	714	xxx	xxx	xxx	xxx	108	Clear no odor
3	74.38	92.62	2.90	10	06/15/11	268	815	xxx	xxx	xxx	xxx	122	Clear no odor
3	74.09	92.62	3.00	10	09/15/11	276	841	xxx	xxx	xxx	xxx	130	Clear no odor
3	74.03	92.62	3.00	10	12/09/11	204	706	xxx	xxx	xxx	xxx	119	Clear no odor
3	73.79	92.62	3.00	10	03/14/12	276	824	xxx	xxx	xxx	xxx	116	Clear no odor
3	73.59	92.62	3.00	10	06/06/12	390	951	xxx	xxx	xxx	xxx	99.7	Clear no odor

Graph 3
Rice Operating Company
MW-3
Justis L-1
Lea County, New Mexico

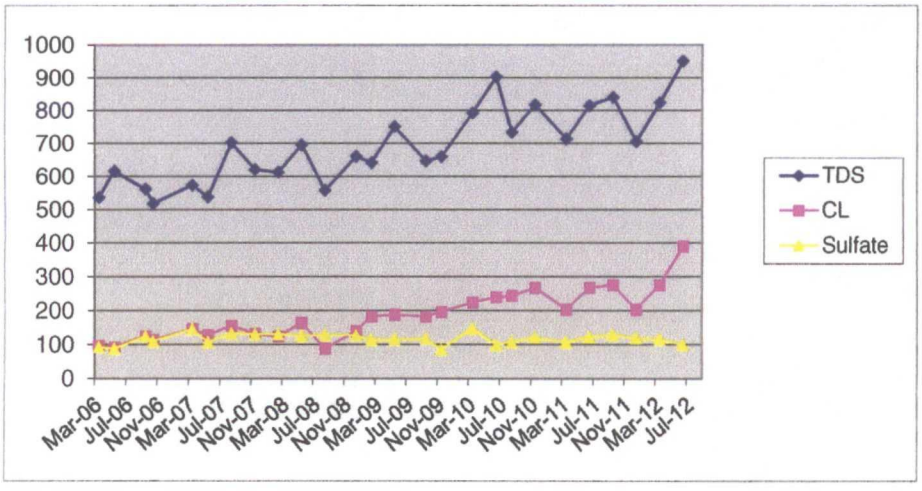


Table 4
Rice Operating Company
Justis L-1
Lea County, New Mexico

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl mg/L	TDS mg/L	Benzene mg/L	Toluene mg/L	Ethyl Benzene mg/L	Total Xylenes mg/L	Sulfate mg/L	Comments
4	78.44	91.24	2.00	10	10/30/06	44.2	492	<0.001	<0.001	<0.001	<0.001	115	Clear no odor
4	78.32	90.62	2.00	10	03/16/07	45.8	512	<0.001	<0.001	<0.001	<0.001	109	Clear no odor
4	78.11	90.62	2.00	8	05/15/07	48.0	518	<0.001	<0.001	<0.001	<0.001	109	Clear no odor
4	77.84	90.62	2.00	8	08/29/07	52.0	578	<0.002	<0.002	<0.002	<0.006	151	Clear no odor
4	77.67	90.62	2.10	8	11/14/07	52.0	562	<0.002	<0.002	<0.002	<0.006	135	Clear no odor
4	77.44	90.51	2.10	8	02/27/08	52.0	554	<0.002	<0.002	<0.002	<0.006	126	Clear no odor
4	77.18	90.51	2.10	8	05/23/08	56.0	538	<0.002	<0.002	<0.002	<0.006	139	Clear no odor
4	77.11	90.51	2.10	8	08/28/08	52.0	580	<0.001	<0.001	<0.001	<0.003	114	Clear no odor
4	76.91	90.51	2.20	8	12/17/08	76.0	565	<0.001	<0.001	<0.001	<0.003	136	Clear no odor
4	76.65	90.37	2.20	8	02/23/09	52.0	567	xxx	xxx	xxx	xxx	120	Clear no odor
4	76.33	90.37	2.20	8	05/28/09	52.0	566	xxx	xxx	xxx	xxx	124	Clear no odor
4	76.27	90.37	2.30	8	09/09/09	56.0	565	xxx	xxx	xxx	xxx	121	Clear no odor
4	76.11	90.37	2.30	8	11/18/09	48.0	481	xxx	xxx	xxx	xxx	87.2	Clear no odor
4	75.89	90.36	2.30	8	03/09/10	48.0	536	xxx	xxx	xxx	xxx	162	Sand to clear
4	75.71	90.36	2.30	8	06/03/10	52.0	525	xxx	xxx	xxx	xxx	106	Sand to clear
4	75.63	90.36	2.40	8	08/24/10	60.0	538	xxx	xxx	xxx	xxx	128	Sand to clear
4	75.40	90.36	2.40	8	11/29/10	56.0	502	xxx	xxx	xxx	xxx	135	Sand to clear
4	75.25	90.54	2.40	8	03/08/11	52.0	514	xxx	xxx	xxx	xxx	119	Sand to clear
4	75.95	90.54	2.30	10	06/15/11	60.0	530	xxx	xxx	xxx	xxx	123	Sand to clear
4	74.79	90.54	2.50	10	09/15/11	56.0	492	xxx	xxx	xxx	xxx	272	Sand to clear
4	74.73	90.54	2.50	10	12/09/11	52.0	526	xxx	xxx	xxx	xxx	121	Sand to clear
4	74.47	90.54	2.60	10	03/14/12	52.0	543	xxx	xxx	xxx	xxx	143	Sand to clear
4	74.26	90.54	2.60	10	06/06/12	52.0	520	xxx	xxx	xxx	xxx	135	Sand to clear

Graph 4
Rice Operating Company
MW-4
Justis L-1
Lea County, New Mexico

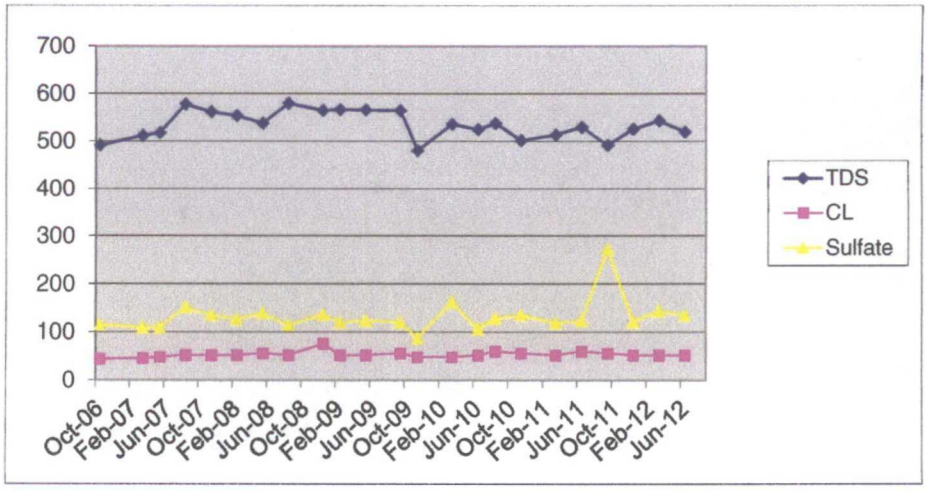


Table 5
Rice Operating Company
Justis L-1
Lea County, New Mexico

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl mg/L	TDS mg/L	Benzene mg/L	Toluene mg/L	Ethyl Benzene mg/L	Total Xylenes mg/L	Sulfate mg/L	Comments
5	75.94	87.20	1.80	8	05/15/07	1870	3950	<0.001	<0.001	<0.001	<0.001	655	Clear no odor
5	75.61	87.20	1.90	8	08/29/07	1619	4386	<0.002	<0.002	<0.002	<0.006	894	Clear no odor
5	75.44	87.20	1.90	8	11/14/07	1940	4306	<0.002	<0.002	<0.002	<0.006	490	Clear no odor
5	75.24	87.70	2.00	8	02/27/08	700	1950	<0.002	<0.002	<0.002	<0.006	333	Clear no odor
5	75.00	87.70	2.00	8	05/23/08	850	2450	<0.002	<0.002	<0.002	<0.006	560	Clear no odor
5	74.94	87.70	2.00	8	08/28/08	1180	3780	<0.001	<0.001	<0.001	<0.003	842	Clear no odor
5	74.76	87.70	2.10	8	12/17/08	416	1480	<0.001	<0.001	<0.001	<0.003	307	Clear no odor
5	74.52	88.19	2.20	8	02/23/09	790	2230	<0.001	<0.001	<0.001	<0.003	466	Clear no odor
5	74.38	88.19	2.20	8	05/28/09	940	2700	<0.001	<0.001	<0.001	<0.003	600	Clear no odor
5	74.14	88.19	2.20	8	09/09/09	1000	2960	<0.001	<0.001	<0.001	<0.003	635	Sand to clear
5	74.00	88.19	2.30	8	11/18/09	188	718	<0.001	<0.001	<0.001	<0.003	134	Sand to clear
5	73.79	88.20	2.30	8	03/09/10	980	2940	<0.001	<0.001	<0.001	<0.003	801	Sand to clear
5	73.60	88.20	2.30	8	06/03/10	920	2570	<0.001	<0.001	<0.001	<0.003	530	Sand to clear
5	73.53	88.20	2.30	8	08/24/10	920	2750	<0.001	<0.001	<0.001	<0.003	572	Sand to clear
5	73.33	88.20	2.40	8	11/29/10	710	2440	<0.001	<0.001	<0.001	<0.003	636	Sand to clear
5	73.18	89.04	2.50	8	03/08/11	650	2000	<0.001	<0.001	<0.001	<0.003	419	Sand to clear
5	72.90	89.04	2.60	10	06/15/11	730	2250	<0.001	<0.001	<0.001	<0.003	528	Sand to clear
5	72.74	89.04	2.60	10	09/15/11	820	2340	<0.001	<0.001	<0.001	<0.003	526	Sand to clear
5	72.64	89.04	2.60	10	12/09/11	820	2380	<0.001	<0.001	<0.001	<0.003	556	Sand to clear
5	72.40	89.04	2.70	10	03/14/12	930	2450	xxx	xxx	xxx	xxx	537	Sand to clear
5	72.22	89.04	2.70	10	06/06/12	840	2600	xxx	xxx	xxx	xxx	309	Sand to clear

Graph 5
Rice Operating Company
MW-5
Justis L-1
Lea County, New Mexico

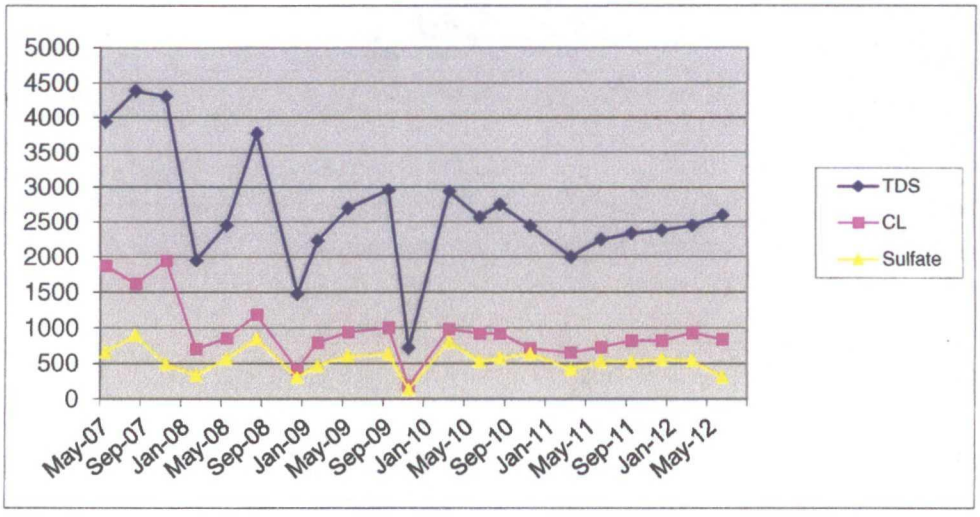
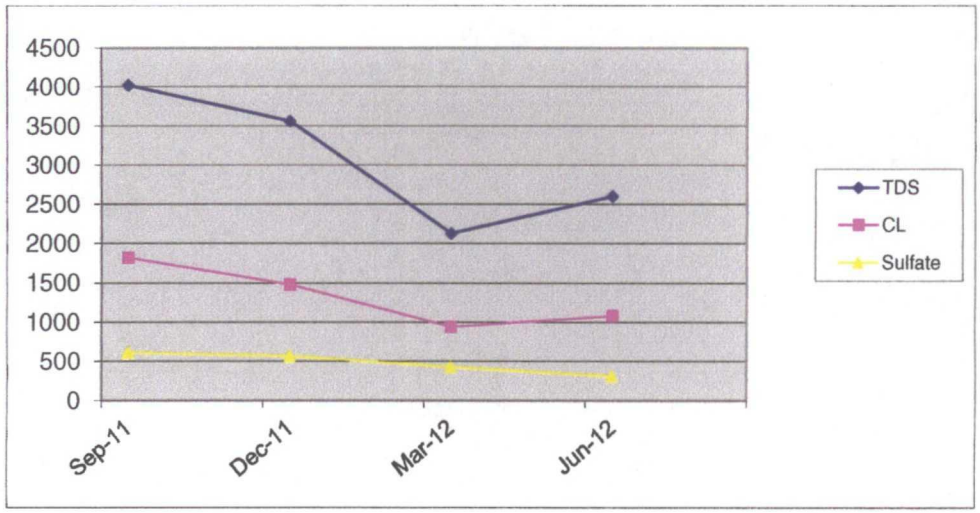


Table 6
Rice Operating Company
Justis L-1
Lea County, New Mexico

RW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl mg/L	TDS mg/L	Benzene mg/L	Toluene mg/L	Ethyl Benzene mg/L	Total Xylenes mg/L	Sulfate mg/L	Comments
1	73.11	122.90	32.40	100	09/15/11	1820	4020	xxx	xxx	xxx	xxx	615	Clear/slight odor
1	73.03	122.90	32.40	100	12/09/11	1480	3560	xxx	xxx	xxx	xxx	569	Clear/slight odor
1	xxx	122.90	xxx	100	03/14/12	940	2130	xxx	xxx	xxx	xxx	429	Clear/slight odor
1	xxx	122.90	xxx	Pumping	06/06/12	1080	2600	xxx	xxx	xxx	xxx	309	Clear/slight odor

Graph 6
Rice Operating Company
RW-1
Justis L-1
Lea County, New Mexico



APPENDIX B
ANALYTICAL RESULTS AND GROUNDWATER WITHDRAWAL LOG SHEET

CARDINAL Laboratories

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

July 23, 2012

Hack Conder

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: JUSTIS L-1

Enclosed are the results of analyses for samples received by the laboratory on 07/19/12 15:30.

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 accreditated 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

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	07/19/2012	Sampling Date:	07/19/2012
Reported:	07/23/2012	Sampling Type:	Water
Project Name:	JUSTIS L-1	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: RW-1 (H201663-01)

Chloride, SM4500Cl-B **mg/L** **Analyzed By: HM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	**1140**	4.00	07/23/2012	ND	100	100	100	0.00	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

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

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL LABORATORIES

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603
(505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325)673-7020

Company Name: Rice		BILL TO	
Project Manager:		P.O. #:	
Address:		Company:	
City:	State: NM Zip:	Attn:	
Phone #:	Fax #:	Address:	
Project #:	Project Owner:	City:	
Project Name:		State:	Zip:
Project Location: Jones L-1		Phone #:	
Sampler Name: Kyle Norman		Fax #:	

FOR LAB USE ONLY				MATRIX						PRESERV.			SAMPLING		ANALYSIS REQUEST										
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	Chlorides	TPH 8015 M	BTEX	Texas TPH	Complete Cations/Anions	TDS					
H201663																									
1	RW-1	G	1	✓									7-19-12	1145	✓										

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: Kyle N	Date: 7-19-12 Time: 3:30	Received By: Addi Henson	Phone Result: ☐ Yes ☑ No Add'l Phone #:
Relinquished By:	Date: Time:	Received By:	Fax Result: ☐ Yes ☑ No Add'l Fax #:
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Sample Condition Cool: ☐ Yes ☑ No Intact: ☑ Yes ☐ No	CHECKED BY: (Initials)	REMARKS: email results kjones@riceswd.com; knorman@rice-ecs.com; Zconder@rice-ecs.com; Bbaker@rice-ecs.com; hconder@rice-ecs.com; Lweinheimer@rice-ecs.com L-Pena @ riceswd.com

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

#26

CARDINAL Laboratories

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

August 17, 2011

KATY JONES

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: JUSTIS L-1

Enclosed are the results of analyses for samples received by the laboratory on 08/16/11 16:20.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method SW-846 8260	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method TX 1005	Total Petroleum Hydorcarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

Cardinal Laboratories is accreditated 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 (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,

Hope S. Moreno

Hope Moreno

Inorganic Technical Director

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	08/16/2011	Sampling Date:	08/16/2011
Reported:	08/17/2011	Sampling Type:	Soil
Project Name:	JUSTIS L-1	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: 8 PT. BLENDED BACKFILL COMP (H101723-01)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**192**	16.0	08/17/2011	ND	416	104	400	3.77	

Sample ID: IMPORTED BLOW SAND (H101723-02)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	08/17/2011	ND	416	104	400	3.77	

Cardinal Laboratories *=Accredited Analyte

Hope S. Moreno

Hope Moreno, Inorganic Technical Director

CARDINAL Laboratories

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

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

Cardinal Laboratories

*=Accredited Analyte

Hope S. Moreno

Hope Moreno, Inorganic Technical Director

CARDINAL LABORATORIES

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603
(505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325)673-7020

		BILL TO	
Company Name:	Rice Operating Company	P.O. #:	
Project Manager:	Katie Jones	Company:	
Address:	122 W. Taylor	Attn:	
City:	Hobbs State: NM Zip: 88240	Address:	
Phone #:	575-393-9174 Fax #: 575-397-1471	City:	
Project #:	Project Owner:	State: Zip:	
Project Name:		Phone #:	
Project Location:	Justis L-1	Fax #:	
Sampler Name:	Zach Conder		

FOR LAB USE ONLY				MATRIX						PRESERV.			SAMPLING		ANALYSIS REQUEST									
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	Chlorides	TPH 8015 M	BTEX	Texas TPH	Complete Cations/Anions	TDS				
H10173																								
-1	8-pt. Blended Backfill Composite		1			✓							8/16/11		✓									
2	Imported Blow Sand		1			✓							8/10/11		✓									

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:	Date: 8-16-11 Time: 4:20	Received By:	
Relinquished By:	Date: Time:	Received By:	
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Sample Condition Cool: ☐ Yes ☑ No Intact: ☑ Yes ☐ No	CHECKED BY: (Initials)	

Phone Result: ☐ Yes ☑ No Add'l Phone #:
Fax Result: ☐ Yes ☑ No Add'l Fax #:
REMARKS:

email results RUSH
Kjones@riceswd.com
Zconder@rice-ecs.com; Bbaker@rice-ecs.com;
hconder@rice-ecs.com; Lweinheimer@rice-ecs.com

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

#26

CARDINAL Laboratories

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

August 23, 2011

Hack Conder

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: JUSTICE / JCT L-1

Enclosed are the results of analyses for samples received by the laboratory on 08/22/11 16:10.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method SW-846 8260	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method TX 1005	Total Petroleum Hydorcarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

Cardinal Laboratories is accreditated 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 (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

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

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

Received:	08/22/2011	Sampling Date:	08/22/2011
Reported:	08/23/2011	Sampling Type:	Soil
Project Name:	JUSTICE / JCT L-1	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NONE GIVEN		

Sample ID: IMPORTED SOIL (H101776-01)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	08/23/2011	ND	432	108	400	3.77	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

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

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

Company Name: Rice		**BILL TO**
Project Manager: Hack Conder		P.O. #:
Address: 1522 W Taylor		Company:
City: Hobbs N M	State: NM Zip: 88240	Attn:
Phone #:	Fax #:	Address:
Project #:	Project Owner:	City:
Project Name:		State: Zip:
Project Location: Justice / SCT L-1		Phone #:
Sampler Name: Oscar Fraire		Fax #:

ANALYSIS REQUEST

Lab I.D. (FOR LAB USE ONLY)	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING: DATE	TIME	Cl
H101776															
-1	Imported Soil	G	1			✓					✓		8-22-11	9:00	X

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: [signature]	Date: 8-22-11 Time: 4:10	Received By: Jodi Henson	Phone Result: ☐ Yes ☐ No Add'l Phone #:
Relinquished By:	Date: Time:	Received By:	Fax Result: ☐ Yes ☐ No Add'l Fax #:

REMARKS: H-Conder@rice-ecs.com; B-Baker@rice-ecs.com; K-Jones@rice-swd.com; Z-Conder@rice.ecs.com; O. Fraire@rice-ecs.com;

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

Sample Condition: Cool ☐ Yes ☑ No; Intact ☑ Yes ☐ No

CHECKED BY: (Initials) JH

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476 #26

Record of Groundwater Withdrawal
Site Name: Justis L-1 boot (AP-48)

Date	Fluid Hauled (bbls)		Lab	Comments
3/16/2012			940	RW-1
3/26/2012	130			
3/30/2012	100			
Total For March	230 bbls		Total kg of Cl-	34.37305316
	9660 gallons		Removed	
Total for Project	230 bbls			
	9660 gallons			
4/6/2012	130			
4/10/2012	86			
4/16/2012			1,040	RW-1
4/16/2012	129			
4/19/2012	91			
4/23/2012	79			
4/26/2012	77			
Total For April	592 bbls		Total kg of Cl-	135.9150587
	24864 gallons		Removed	
Total for Project	822 bbls			
	34524 gallons			
5/1/2012	115			
5/4/2012	81			
5/8/2012	90			
5/10/2012	28			
5/15/2012	72			
5/17/2012	50			
5/21/2012			1,000	RW-1
5/22/2012	130			
5/24/2012	84			
5/30/2012	130			
Total For May	780 bbls		Total kg of Cl-	254.6976465
	32760 gallons		Removed	
Total for Project	1602 bbls			
	67284 gallons			
6/5/2012	130			
6/8/2012	73			
6/13/2012	110			
6/20/2012	62			

6/21/2012			980	RW-1
6/27/2012	125			
Total For June	500 bbls	Total kg of Cl-		327.5074681
	21000 gallons	Removed		
Total for Project	2102 bbls			
	88284 gallons			
7/2/2012	123			
7/9/2012	130			
7/12/2012	57			
7/16/2012	85			
7/19/2012			1140	RW-1
7/20/2012	119			
7/25/2012	95			
7/27/2012	33			
7/31/2012	85			
8/3/2012	95			
Total For July/Aug	822 bbls	Total kg of Cl-		529.9618894
	34524 gallons	Removed		
Total for Project	2924 bbls			
	122808 gallons			

APPENDIX C
FIELD SHEETS

RICE ENVIRONMENTAL CONSULTING & SAFETY

122 West Taylor Hobbs, NM 88240
PHONE: (505) 393-9174 FAX: (505) 397-1471

PID METER CALIBRATION & FIELD REPORT FORM

CK. MODEL NO.			
		MODEL: PGM 7300	SERIAL NO: 590-000508
		MODEL: PGM 7300	SERIAL NO: 590-000504
		MODEL: PGM 7320	SERIAL NO: 592-903318
	X	MODEL: PGM 7300	SERIAL NO: 590-000183

GAS COMPOSITION: ISOBUTYLENE 100PPM / AIR: BALANCE

LOT NO : 930132	EXPIRATION DATE: 4-28-2013
METER READING ACCURACY: 100 ppm	

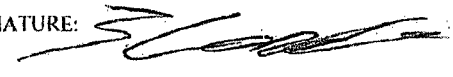
ACCURACY : +/- 2%

COMPANY
Rice Operating

SYSTEM	JUNCTION	UNIT	SECTION	TOWN SHIP	RANGE
Justis	L-1 Boot	L	1	25S	37E

SAMPLE ID	PID	SAMPLE ID	PID
8-pt. Blended Backfill	3.2		

I verify that I have calibrated the above instrument in accordance to the manufacture operation manual.

SIGNATURE: 

DATE: 8/16/2011

RICE ENVIRONMENTAL CONSULTING & SAFETY

122 West Taylor Hobbs, NM 88240
PHONE: (505) 393-9174 FAX: (505) 397-1471

PID METER CALIBRATION & FIELD REPORT FORM

CK. MODEL NO.			
		MODEL: PGM 7300	SERIAL NO: 590-000508
		MODEL: PGM 7300	SERIAL NO: 590-000504
		MODEL: PGM 7320	SERIAL NO: 592-903318
	X	MODEL: PGM 7300	SERIAL NO: 590-000183

GAS COMPOSITION: ISOBUTYLENE 100PPM / AIR: BALANCE

LOT NO : 930132	EXPIRATION DATE: 4-28-2013
METER READING ACCURACY: 100 ppm	

ACCURACY : +/- 2%

COMPANY
Rice Operating

SYSTEM	JUNCTION	UNIT	SECTION	TOWN SHIP	RANGE
Justis	L-1 Boot	L	1	25S	37E

SAMPLE ID	PID	SAMPLE ID	PID
imported blow sand	0.1		

I verify that I have calibrated the above instrument in accordance to the manufacture operation manual.

SIGNATURE:

DATE: 8/10/2011

APPENDIX D
REVEGETATION FORM

PO Box 5630
Hobbs, NM 88241
Phone: (575) 393-4411
Fax: (575) 393-0293

REVEGETATION FORM

1. General Information

Site name:	Justis L-1 boot					
U/L L	Section 1	Township T25S	Range R37E	County Lea	Latitude 32° 9'24.865" N	Longitude 103°7'23.7" W
Contact Name:	Bruce Baker					
Email:	bbaker@rice-ecs.com					
Site size: 6,528	square feet			Map detail of site attached ☐		
Additional information:						

2. Soils **Do not rip caliche subsoils; caliche rocks brought to the surface by ripping shall be removed.*

Salvaged from site ☐	Bioremediated ☐	Imported ☒	Blended ☐	Depth (in):
Texture: Sandy	Describe soil & subsoil:	Blow sand and subsoil caliche		
Soil prep methods:	Rip ☐ Depth(in):	Disc ☐ Depth (in):		Rollerpack ☐
Date completed: 8/22/2011				

3. Bioremediation

Fertilizer ☐	Hay ☐	Other ☐
Type:		Describe:
Lbs/acre:		

4. Seeding **Attach seed bag tags to this form. Seed bag tags shall contain the site name and S-T-R.*

Custom seed mix ☒	Prescribed mix ☐	Seed mix name: 3.5 lbs. Blue grama, 3.5 lbs. Winter wheat	Seeding date: 11/18/2011
Broadcast ☒ Method: Portable seeder			
Soil conditions during seeding: Dry ☒ Damp ☐ Wet ☐			
Photos attached ☐ Number of photos:	Observations:		

5. Certification I hereby certify that the information in this form and attachments is true and complete to the best of my knowledge and belief.

Name: Oscar Frayre	Title: Environmental Tech	Date: 11/18/2011
Signature: *not available*		