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Annual GW Mon. REPORTS

DATE: 2008



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March 13, 2009

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

Re: 2008 Annual Groundwater Summary Report & Project Status Report, Rice Operating Company, K-4 Release, BD SWD System, Unit K, Section 4, T-22-S, R-37-E, Lea County, New Mexico, NMOCD CASE #1R0459

Dear Mr. Jones:

Tetra Tech Inc. (Tetra Tech) submits the following 2008 Annual Groundwater Summary Report for the Rice Operating Company (ROC), K-4 Release, located in the BD Salt Water Disposal System. ROC is the service provider (agent) for the BD Salt Water Disposal System and has no ownership of any portion of the pipeline, well or facility. The BD SWD system is owned by a consortium of oil producers, system partners, who provide all operating capital on a percentage ownership/usage basis.

Background

On February 25, 2004, a leak was discovered 34 feet east of the K-4 junction box. According to the form C-141 (Initial) filed with the NMOCD, the spill was due to the rupture of a 4-inch PVC line. An estimated 1,040 barrels of produced water was discharged with 1,000 barrels of fluid recovered. Regional groundwater information indicates that the depth to groundwater is approximately 90 to 100 feet below ground surface (bgs).

Initial soil sampling performed in April 2004 indicated a residual subsurface chloride impact. On July 14, 2004, a hollow-stem auger unit was utilized to install one soil boring at the release source area at the site. The soil boring was advanced to a depth of 80 feet bgs. Field chloride analysis was performed on soil samples at five foot



increments. Results of field chloride testing and laboratory analysis indicated that chloride impacts extend to a depth of greater than 80 feet bgs. The soil boring was backfilled with bentonite and drill cuttings. Between October 12 and October 19, 2006, Highlander personnel were onsite to oversee the installation of three monitor wells (MW-1 through MW-3) within, up and down gradient of the release source area. The wells were drilled to a maximum depth ranging from 92 to 95 feet bgs. The wells were completed with 0.020 slotted 2 inch PVC screen placed 15 feet below and 5 feet above the water table to EPA and industry standards. The wells were completed with monument style risers.

During drilling activities, soil samples were collected every 10 feet for monitor well MW-1 and 5 feet for monitor wells MW-2 and MW-3. Soil samples were field screened for chlorides with a field sampling kit. Specific samples were collected and submitted for laboratory analysis of chlorides utilizing EPA Method 300.0. Laboratory analytical results indicated the entire soil column for MW-1 was impacted with chlorides greater than 250 mg/Kg. Monitor well MW-2 and MW-3 had soil concentrations of less than 250 mg/kg at the vadose zone located at approximately 80 feet bgs. Groundwater was found to be impacted with chlorides only in monitor well MW-1.

On April 23, 2007, Highlander submitted a Corrective Action Plan (CAP) for the site. The CAP addressed elevated levels of chlorides within the soils and included placement of a barrier approximately 68 feet by 120 feet wide at three feet below ground surface (bgs). Upon completion of the barrier, the excavation will be backfilled with soils that will support vegetation. The disturbed area will be reseeded with a blend of native vegetation and monitored for growth. As of this report, the CAP has not been approved by the NMOCD.

During a meeting between Rice, Highlander, and the NMOCD on July 18, 2007, it was decided to replace the 2 inch monitor well at MW-1 with a 4 inch monitor well in order to increase volume of recovery of chlorides within that well. Also, it was discussed that the soils barrier would be placed at four feet bgs instead of three feet bgs. On August 7, 2007, monitor well MW-1was redrilled and reinstalled as a 4 inch well.

A pump test was performed on monitor well MW-1 on November 29, 2007. Results indicate the well was able to pump 3 gallons per minute (gpm) for 40 minutes without pumping dry. Groundwater analytical results show the concentrations of chlorides dropped by approximately 300 mg/L (from 1,040 mg/L on November 13, 2006 to 736 mg/L on October 31, 2007). With the decrease in chlorides, it was decided that instead of installing a pump and running it for 24 hours, 7 days a week, that periodically, the well will be pumped off for several hours to enhance recovery.



Monitor Well Sampling

The site monitor wells were sampled on February 15, May 5, August 11, and November 13, 2008. Prior to sampling, the monitor wells were gauged and approximately three casing volumes of water were purged from the wells. The pump and associated tubing were decontaminated with a laboratory grade detergent and rinsed with deionized water. Cumulative water level measurements and purge volumes for the monitor wells are included in the Tables Section of this report.

The wells were also inspected for the presence of phase-separated hydrocarbons (PSH). Groundwater samples were collected as soon as possible after the groundwater returned to its static level. Groundwater samples were collected using clean disposable polyethylene bailers and disposable line. The samples were transferred into labeled and preserved containers provided by the laboratory. The samples were delivered under proper chain-of-custody control to Cardinal Lab of Hobbs, New Mexico. The groundwater samples were analyzed for major anions by methods 310.1, 9253 and 375.4, cations by method 6010B, Total Dissolved Solids (TDS) by method 160.1 and Benzene, Toluene, Ethylbenzene, and Xylene (BTEX) by method EPA 8021B. Copies of the laboratory reports are enclosed in Appendix A.

Monitor Well Sample Results

The analysis of monitor well, MW-1, has shown a decrease in chloride concentration from 1,040 mg/L in the fourth quarter of 2006 to 570 mg/L in the fourth quarter of 2008. TDS concentrations have declined from 2,120 mg/L in the fourth quarter of 2006 to 1,470 mg/L in the fourth quarter of 2008. The chloride and TDS concentrations in monitor wells MW-2 and MW-3 were relatively stable throughout the year and chloride concentrations remained below the 250 mg/L WQCC standard. All monitor wells were sampled on a quarterly basis. The most recent sampling was performed on all three monitor wells on November 13, 2008. No traces of BTEX have ever been found in any of the monitor wells since they were initially drilled in 2006. Cumulative analytical data is summarized in the Table Section of this report.

Conclusions

- 1. In 2008, there were no BTEX constituents at or above the New Mexico Water Quality Control Commission (WQCC) standards.
- 2. Chloride and total dissolved solid (TDS) concentrations have decreased throughout the year in monitor well MW-1.
- 3. Chloride and TDS concentrations have remained stable in monitor wells MW-2 and MW-3 throughout the year and chloride concentrations remained below the 250 mg/L WQCC standard. This also indicates that the limited plume of impact is relatively stable.





Respectfully Submitted, Tetra Tech, Inc.

Jeffrey Kindley, P.G. Senior Project Manager

cc: Hack Conder - ROC, Edward Hansen - NMOCD Enclosures: Figures, Tables, Laboratory Analysis

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TABLES

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		Comments		Clear no odor								
		Sulfate		152	148	339	159	124	157	195	106	148
		Total Xylenes		<0.001	<0.001	<0.001	<0.003	<0.006	<0.006	<0.006	<0.003	<0.003
-		Ethyl Benzene		<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.001	<0.001
		Toluene		<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.001	<0.001
Company	v Mexico	Senzene		<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.001	<0.001
ating C 3D K-4	ty, Nev	TDS E		2120	2100	1950	2028	1770	1880	1880	1590	1470
e Oper E	a Coun	Ū		1040	916	917	760	736	760	720	620	570
Ric	Lea	Sample	Date	11/13/06	03/08/07	04/23/07	09/14/07	10/31/07	02/15/08	05/05/08	08/11/08	11/13/08
		Volume	Purged	5	9	9	9	20	30	30	30	30
		Well	Volume	1.40	1.40	1.40	7.60	7.60	8.20	8.40	8.30	8.40
		Total	Depth	93.63	93.62	93.62	97.70	97.70	98.60	98.60	98.60	98.60
		Depth to	Water	85.02	84.99	84.96	86.06	86.06	85.93	85.73	85.81	85.65
		MM		4	1	-	1	1	-	1	1	1



		Comments		Clear no odor								
		Sulfate		85	80.8	83	130 (82.7	86.6	117 (94 (93.7 (
		Total Xylenes		<0.001	<0.001	<0.001	<0.003	<0.006	<0.006	<0.006	<0.003	<0.003
		Ethyl Benzene		<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.001	<0.001
		Toluene		<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.001	<0.001
company	v Mexico	Benzene		<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.001	<0.001
ating C	ty, Nev	TDS E		542	574	564	588	596	574	570	596	578
e Oper B	Count	0		77	75.3	83.5	110	84	92	100	108	144
Rio	Lea	Sample	Date	11/13/06	03/08/07	04/23/07	09/14/07	10/31/07	02/15/08	05/05/08	08/11/08	11/13/08
		Volume	Purged	7	7	7	7	9	9	9	9	9
		Well	Volume	1.70	1.70	1.70	1.80	1.80	1.80	1.80	1.80	1.80
		Total	Depth	94.10	94.08	94.08	94.08	94.08	94.05	94.05	94.05	94.05
		Depth to	Water	83.35	83.28	83.25	83.12	83.11	82.97	82.81	82.86	82 75
		MM		2	2	2	2	2	2	2	2	0



		Comments		Clear no odor								
		Sulfate		97.6	103	92.1	151	106	110	166	117	124
		Total Xylenes		<0.001	<0.001	<0.001	<0.003	<0.006	<0.006	<0.006	<0.003	<0.003
		Ethyl Benzene		<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.001	<0.001
		Toluene		<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.001	<0.001
Company	v Mexico	Benzene		<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.001	<0.001
3D K-4	ty, Nev	TDS 1		622	678	674	710	689	668	710	691	711
e Oper	Coun	Ū		148	199	145	170	156	160	160	172	168
Ric	Lea	Sample	Date	11/13/06	03/08/07	04/23/07	09/14/07	10/31/07	02/15/08	05/05/08	08/11/08	11/13/08
		Volume	Purged	5	5	9	9	9	9	9	9	9
		Well	Volume	1.30	1.30	1.30	1.30	1.30	1.30	1.40	1.30	1.40
		Total	Depth	94.60	94.50	94.50	94.50	94.50	94.35	94.35	94.35	94.35
		Depth to	Water	86.45	86.41	86.35	86.23	86.19	86.09	85.89	85.94	85.84
		MM		3	3	3	3	3	3	3	3	0



APPENDIX A LABORATORY ANALYTICAL

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Receiving Date: 02/19/08 Reporting Date: 02/21/08 Project Number: NOT GIVEN Project Name: BD K-4 RELEASE Project Location: T22S R37E SEC4 K ~ LEA COUNTY, NM Sampling Date: 02/15/08 Sample Type: WATER Sample Condition: COOL & INTACT Sample Received By: KS Analyzed By: BC

LAB NUMBER	SAMPLE ID	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	TOTAL XYLENES (mg/L)
ANALYSIS DA	ΓΕ	02/20/08	02/20/08	02/20/08	02/20/08
H14279-1	MONITOR WELL #1	<0.002	< 0.002	<0.002	< 0.006
H14279-2	MONITOR WELL #2	<0.002	<0.002	<0.002	< 0.006
H14279-3	MONITOR WELL #3	<0.002	<0.002	<0.002	<0.006
	······································				
Quality Control		0.089	0.096	0.093	0.256
True Value QC	· · · · · · · · · · · · · · · · · · ·	0.100	0.100	0.100	0.300
% Recovery		89.4	95.9	93.1	85.3
Relative Perce	nt Difference	3.2	3.6	4.6	1.9

METHOD: EPA SW-846 8260

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Receiving Date: 02/19/08 Reporting Date: 02/22/08 Project Number: NOT GIVEN Project Name: BD K-4 RELEASE Project Location: T22S R37E SEC4 K~LEA COUNTY, NM

Sampling Date: 02/15/08 Sample Type: WATER Sample Condition: COOL & INTACT Sample Received By: KS Analyzed By: HM/KS

		Na	Ca	Mg	К	Conductivity	T-Alkalinity
LAB NUMBE	R SAMPLE ID	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(u S/cm)	(mgCaCO ₃ /L)
ANALYSIS D	DATE:	02/21/08	02/21/08	02/21/08	02/21/08	02/20/08	02/20/08
H14279-1	MONITOR WELL #1	368	174	50.0	4.98	2,910	212
H14279-2	MONITOR WELL #2	101	55.9	27.4	5.32	902	260
H14279-3	MONITOR WELL #3	121	65.2	28.2	5.42	1,070	208
Quality Conti	rol	NR	50.6	51.6	3.11	1,417	NR
True Value C	QC	NR	50.0	50.0	3.00	1,413	NR
% Recovery		NR	101	103	104	100	NR
Relative Per	cent Difference	NR	2.8	< 0.1	4.6	0.1	NR
METHODS:		SM	3500-Ca-D	3500-Mg E	8049	120.1	310.1

	CI	SO4	CO3	HCO ₃	pН	TDS
	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(s.u.)	(mg/L)
ANALYSIS DATE:	02/21/08	02/21/08	02/20/08	02/20/08	02/20/08	02/20/08
H14279-1 MONITOR WELL #1	760	157	0	259	7.25	1,880
H14279-2 MONITOR WELL #2	92.0	86.6	0	317	7.56	574
H14279-3 MONITOR WELL #3	160	110	0	254	7.56	668
Quality Control	490	27.0	NR	1000	7.06	NR
True Value QC	500	25.0	NR	1000	7.00	NR
% Recovery	98.0	108	NR	100	101	NR
Relative Percent Difference	2.0	3.0	NR	1.2	0.1	NR
METHODS	SM4500-CI-B	375.4	310.1	310 1	150 1	160.1

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Receiving Date: 05/08/08 Reporting Date: 05/13/08 Project Number: NOT GIVEN Project Name: BD K-4 RELEASE Project Location: T22S R37E SEC4 K ~ LEA COUNTY, NM Sampling Date: 05/05/08 Sample Type: WATER Sample Condition: COOL & INTACT Sample Received By: ML Analyzed By: BC

LAB NUMBER	SAMPLE ID	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	TOTAL XYLENES (mg/L)
ANALYSIS DA	ГЕ	05/12/08	05/12/08	05/12/08	05/12/08
H14775-1	MONITOR WELL #1	<0.002	<0.002	< 0.002	<0.006
H14775-2	MONITOR WELL #2	<0.002	<0.002	< 0.002	<0.006
H14775-3	MONITOR WELL #3	<0.002	<0.002	<0.002	<0.006
Quality Control		0.088	0.097	0.100	0.277
True Value QC	· ····································	0.100	0.100	0.100	0.300
% Recovery		87.8	97.4	99.6	92.4
Relative Perce	nt Difference	1.0	1.3	2.5	1.4

METHOD: EPA SW-846 8260

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Receiving Date: 05/08/08 Reporting Date: 05/13/08 Project Number: NOT GIVEN Project Name: BD K-4 RELEASE Project Location: T22S R37E SEC4 K~LEA COUNTY, NM Sampling Date: 05/05/08 Sample Type: WATER Sample Condition: COOL & INTACT Sample Received By: ML Analyzed By: HM/KS

		Na	Ca	Mg	к	Conductivity	T-Alkalinity
LAB NUMBE	ER SAMPLE ID	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(<i>u SI</i> cm)	(mgCaCO ₃ /L)
ANALYSIS C	DATE:	05/13/08	05/09/08	05/09/08	05/12/08	05/09/08	05/09/08
H14775-1	MONITOR WELL #1	359	176	46	8.55	2,820	204
H14775-2	MONITOR WELL #2	117	58	25	8.97	894	252
H14775-3	MONITOR WELL #3	141	67	31	9.86	1,060	216
Quality Cont	rol	NR	51.3	50.5	3.10	1,412	NR
True Value (20	NR	50.0	50.0	3.00	1,413	NR
% Recovery	· · · · · · · · · · · · · · · · · · ·	NR	103	101	103	99.9	NR
Relative Per	cent Difference	NR	3.1	3.8	18.7	0.1	NR
METHODS:		SM	3500-Ca-D	3500-Mg E	8049	120.1	310.1

		CI	SO4	CO₃	HCO ₃	pН	TDS
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(s.u.)	(mg/L)
ANALYSIS D	DATE:	05/09/08	05/13/08	05/09/08	05/09/08	05/09/08	05/09/08
H14775-1	MONITOR WELL #1	720	195	0	249	7.33	1,880
H14775-2	MONITOR WELL #2	100	117	0	307	7.54	570
H14775-3	MONITOR WELL #3	160	166	0	264	7.53	710
Quality Contr	rol	500	42.6	NR	988	7.04	NR
True Value C	DC	500	40.0	NR	1000	7.00	NR
% Recovery	-	100	106	NR	98.8	100	NR
Relative Per	cent Difference	< 0.1	5.2	NR	1.2	0.1	NR
METHODS:		SM4500-CI-B	375.4	310.1	310.1	150.1	160.1

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

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

Receiving Date: 08/14/08 Reporting Date: 08/19/08 Project Number: NOT GIVEN Project Name: BD K-4 RELEASE Project Location: T22S-R37E-SEC4 K ~ LEA COUNTY, NM Sampling Date: 08/11/08 Sample Type: WATER Sample Condition: COOL & INTACT Sample Received By: ML Analyzed By: HM/TR

		Na	Ca	Mg	K	Conductivity	T-Alkalinity
LAB NUMBER S	AMPLE ID	(mg/L)	(mg/L_)	(mg/L)	(mg/L)	(<i>u</i> S/cm)	(mgCaCO ₃ /L)
ANALYSIS DATE		08/18/08	08/18/08	08/18/08	08/18/08	08/15/08	08/15/08
H15738-1 M	MONITOR WELL #1	317	131	41.8	6.4	2,250	212
H15738-2 N	AONITOR WELL #2	129	38.5	26.2	4.5	846	240
H15738-3 N	IONITOR WELL #3	145	49.7	31.1	6.2	996	212
Quality Control		NR	52.1	51.0	2.80	1,410	NR
True Value QC		NR	50.0	50.0	3.00	1,413	NR
% Recovery		NR	104	102	92.8	99.8	NR
Relative Percent	Difference	NR	< 0.1	4.8	13.0	0.7	NR
METHODS:		SM	3500-Ca-D	3500-Mg E	8049	120.1	310.1

	CI	SO₄	CO3	HCO3	pН	TDS
	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(s.u.)	(mg/L)
ANALYSIS DATE:	08/15/08	08/15/08	08/15/08	08/15/08	08/15/08	08/17/08
H15738-1 MONITOR WELL #1	620	106	0	259	7.18	1,590
H15738-2 MONITOR WELL #2	108	94	0	293	7.31	596
H15738-3 MONITOR WELL #3	172	117	0	259	7.43	691
Quality Control	500	45.1	NR	1000	7.00	NR
True Value QC	500	40.0	NR	1000	7.00	NR
% Recovery	100	113	NR	100	100	NR
Relative Percent Difference	2.0	2.4	NR	1.2	0.1	NR
METHODS:	SM4500-CI-B	375.4	310.1	310.1	150.1	160.1

Chemist

38-21-6 Date

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

Receiving Date: 08/14/08 Reporting Date: 08/19/08 Project Number: NOT GIVEN Project Name: BD K-4 RELEASE Project Location: T22S R37E SEC4 K ~ LEA CO., NM Sampling Date: 08/11/08 Sample Type: WATER Sample Condition: COOL & INTACT Sample Received By: ML Analyzed By: ZL

LAB NUMBER	SAMPLE ID	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	TOTAL XYLENES (mg/L)
ANALYSIS DA	TE	08/15/08	08/15/08	08/15/08	08/15/08
H15738-1	MONITOR WELL #1	< 0.001	< 0.001	< 0.001	< 0.003
H15738-2	MONITOR WELL #2	<0.001	<0.001	< 0.001	< 0.003
H15738-3	MONITOR WELL #3	<0.001	<0.001	<0.001	< 0.003
Quality Control		0.055	0.047	0.049	0.161
True Value QC		0.050	0.050	0.050	0.150
% Recovery		109	94.7	98.1	107
Relative Perce	nt Difference	3.8	2.2	2.2	<0.1

METHOD: EPA SW-846 8021

TEXAS NELAP CERTIFICATION T104704398-08-TX FOR BENZENE, TOLUENE, ETHYL BENZENE, AND TOTAL XYLENES.

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PLEASE NOTE: Lability 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 client for analyses. All claims in a kinet in the second
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ANALYTICAL RESULTS FOR RICE OPERATING COMPANY ATTN: HACK CONDER 122 W. TAYLOR HOBBS, NM 88240 FAX TO: (575) 397-1471

Receiving Date: 11/17/08 Reporting Date: 11/21/08 Project Number: NOT GIVEN Project Name: BD K-4 RELEASE Project Location: T22S-R37E-SEC4 K~ LEA CO., NM Sampling Date: 11/13/08 Sample Type: WATER Sample Condition: COOL & INTACT Sample Received By: ML Analyzed By: ZL

				ETHYL	TOTAL
		BENZENE	TOLUENE	BENZENE	XYLENES
LAB NUMBER	SAMPLE ID	(mg/L)	(mg/L)	(mg/L)	(mg/L)
ANALYSIS DA	TE	11/20/08	11/20/08	11/20/08	11/20/08
H16347-1	MONITOR WELL #1	<0.001	<0.001	<0.001	< 0.003
H16347-2	MONITOR WELL #2	<0.001	<0.001	<0.001	< 0.003
H16347-3	MONITOR WELL #3	<0.001	<0.001	<0.001	<0.003
Quality Contro	1	0.060	0.051	0.055	0.154
True Value QC	<u>)</u>	0.050	0.050	0.050	0.150
% Recovery		120	102	110	103
Relative Perce	ent Difference	1.7	10.1	5.2	3.3

METHOD: EPA SW-846 8260B

TEXAS NELAP CERTIFICATION T104704398-08-TX FOR BENZENE, TOLUENE, ETHYL BENZENE, AND TOTAL XYLENES.

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11/21/08

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Receiving Date: 11/17/08 Reporting Date: 11/20/08 Project Number: NOT GIVEN Project Name: BD K-4 RELEASE Project Location: T22S-R37E-SEC4 K ~ LEA CO., NM Sampling Date: 11/13/08 Sample Type: WATER Sample Condition: COOL & INTACT Sample Received By: ML Analyzed By: TR

	Na	Ca	Mg	К	Conductivity	T-Alkalinity
LAB NUMBE SAMPLE ID	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(uS/cm)	(mgCaCO ₃ /L)
ANALYSIS DATE:	11/19/08	11/19/08	11/19/08	11/19/08	11/18/08	11/18/08
H16347-1 MONITOR WELL #1	302	128	41.3	8.1	2,190	200
H16347-2 MONITOR WELL #2	100	56.1	26.2	6.0	883	172
H16347-3 MONITOR WELL #3	125	67.3	29.2	8.4	1,030	204
				·		
Quality Control	NR	48.1	48.6	3.07	1,429	NR
True Value QC	NR	50.0	50.0	3.00	1,413	NR
% Recovery	NR	96.2	97.2	102	101	NR
Relative Percent Difference	NR	8.0	<0.1	5.7	0.4	NR

METHODS:

SM3500-Ca-D 3500-Mg E

310.1

120.1

		Cl (ma/L)	SO₄ (ma/L)	CO ₃ (ma/L)	HCO ₃ (ma/L)	рН (s.u.)	TDS (mg/L)
ANALYSIS	DATE:	11/18/08	11/19/08	11/18/08	11/18/08	11/18/08	11/19/08
H16347-1	MONITOR WELL #1	570	148	0	244	7.32	1,470
H16347-2	MONITOR WELL #2	144	93.7	Ō	210	7.50	578
H16347-3	MONITOR WELL #3	168	124	0	249	7.56	711
Quality Cor		500	44.8	ND	1000	7.02	
True Value		500	40.0	NR	1000	7.02	
% Recover	<u>y</u>	100	112	NR	1000	1.00	NR
Relative Pe	ercent Difference	<0.1	0.7	NR	<0.1	0.1	NR
METHODS	:	SM4500-CI-B	375.4	310.1	310.1	150.1	160.1

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11-20-08 Date

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