IR-255

Larson & Associates, Inc.
Environmental Consultants

August 18, 2005

Mr. Wayne Price
Environmental Bureau
Oil Conservation Division
New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Re: Annual Groundwater Monitoring Report, Chevron North America Exploration and Production Inc., J. R. Phillips Tank Battery No. 2, NW/4, SE/4, Section 30, Township 18 South, Range 38 East, Lea County, New Mexico

Dear Mr. Price:

Please find enclosed a copy of the above-referenced report. The report is submitted on behalf of Chevron North America Exploration and Production Company, and presents the results of annual groundwater monitoring conducted by Larson and Associates, Inc. Please call Scott Toner at (281) 561-3653 or myself at (432) 687-0901 if you have questions.

Sincerely,
Larson and Associates, Inc.

Cindy K. Crain

Cindy K. Crain, P.G.
Project Manager

cc: Scott Toner - Chevron
Chris Williams – NMOCD District I
Luke Markham - CRA

ANNUAL GROUNDWATER MONITORING REPORT
J. R. PHILLIPS TANK BATTERY NO. 2
LEA COUNTY, NEW MEXICO

Prepared for:

Chevron North America Exploration & Production Company
11111 S. Wilcrest
Houston, Texas

Prepared by:

Larson and Associates, Inc.
507 North Marienfeld St., Ste. 202
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August 15, 2005

Cindy K. Crain

Cindy K. Crain, CPG
Project Manager

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Annual Groundwater Monitoring Report

J. R. Phillips Tank Battery No. 2

Lea County, New Mexico

1.0 INTRODUCTION

Chevron North America Exploration and Production Company (Chevron), as successor to Texaco Exploration and Production Inc. (Texaco), has retained Larson and Associates, Inc. (LA) to conduct groundwater monitoring activities at the J. R. Phillips Tank Battery No. 2 (Site). The Site is located in Unit Letter F (SE/4, NW/4), Section 6, Township 20 South, Range 37 East, Lea County, New Mexico. Figure 1 presents a Site location and topographic map.

2.0 BACKGROUND

In March 2000, Environmental Plus, Inc. (EPI) of Eunice, New Mexico, installed two monitoring wells (MW-1 and MW-2), to determine background chloride levels in groundwater at the Site. On April 10 and 11, 2001, LA supervised installation of four (4) monitoring wells (MW-3 through MW-6), and two additional wells (MW-7 and MW-8) were installed on April 16, 2001, to assess groundwater quality upgradient, downgradient and cross gradient to the Site. Details of that investigation were submitted to the New Mexico Oil Conservation Division (NMOCD) in a Groundwater Assessment Report dated May 24, 2001. In that report, Texaco proposed to monitor groundwater on a semi-annual schedule for a period of two (2) years, with groundwater samples to be analyzed for anions, cations and TDS, using EPA approved methods.

The proposed activities were approved by the NMOCD in a letter dated December 27, 2001, with the condition that groundwater also be analyzed for concentrations of benzene, toluene, ethylbenzene and xylenes. A copy of the letter is included in Appendix A. The NMOCD agreed to allow Texaco to monitor groundwater at the Site due to a regional groundwater impact from chloride that has affected groundwater at the Site, as well as upgradient, cross gradient and downgradient to the Site.

An Annual Groundwater Monitoring Report was submitted to the NMOCD on May 10, 2004, summarizing the results of activities conducted in 2003, which fulfilled the two-year monitoring

schedule approved by the NMOCD. Chevron proposed an adjustment to the groundwater monitoring schedule from semi-annual (twice-yearly) to annual (yearly), analyzing groundwater samples only for anions, cations and TDS. The groundwater monitoring modifications were approved by the NMOCD in a letter dated October 1, 2004. A copy of the letter is included in Appendix A.

3.0 GROUNDWATER MONITORING

LA conducted monitoring at the Site in May, 2004 and May, 2005. On May 3, 2004, depth to groundwater measurements were collected from all monitoring wells (MW-1 through MW-8) and the water well (WW-1) located southeast of the Site. On May 10, 2005, depth to groundwater measurements were collected from all monitoring wells (MW-1 through MW-8), and the water well (WW-1). Depth to groundwater ranged from 35.49 feet (WW-1) to 44.07 feet (MW-8) below top of casing (TOC) on the May, 2004 event, and from 30.58 feet (WW-1) to 38.86 feet (MW-1) below TOC on the May, 2005 event. The groundwater gradient was approximately 0.002 feet per foot during each monitoring event. Groundwater flow at the Site has remained consistent, and is from northwest to southeast. Table 1 provides a summary of depth to groundwater measurements. Figure 3 shows the groundwater gradient on May 3, 2004. Figure 4 shows the groundwater gradient on May 10, 2005.

Groundwater samples were collected on May 4, 2004, from all monitoring wells (MW-1 through MW-8) and the water well (WW-1). A duplicate sample was collected from monitoring well MW-8. The groundwater samples were submitted under chain-of-custody control to TraceAnalysis, Inc. (Trace), located in Lubbock, Texas, and were analyzed for benzene, toluene, ethylbenzene, and xylenes (collectively referred to as BTEX), anions, cations and total dissolved solids (TDS). Prior to sample collection, the wells were purged of a minimum of three (3) casing volumes of groundwater. The groundwater samples were collected using dedicated disposable PVC bailers. Table 2 presents a

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summary of the BTEX analysis. Table 3 presents a summary of the inorganic analysis. Appendix B presents the laboratory report.

Referring to Table 2, BTEX was not reported above test method detection limits in any groundwater samples. Referring to Table 3, chloride concentrations exceeded the NMWQCC standard (250 mg/L) in all monitoring wells and the water well, as follows:

- MW-1 (5,280 mg/L)
- MW-2 (6,040 mg/L)
- MW-3 (11,400 mg/L)
- MW-4 (8,740 mg/L)
- MW-5 (6,630 mg/L)
- MW-6 (11,400 mg/L)
- MW-7 (6,610 mg/L)
- MW-8 (7,960 mg/L)
- WW-1 (12,500 mg/L).

Sulfate concentrations exceeded the NMWQCC standard (600 mg/L) in all monitoring wells and the water well, as follows:

- MW-1 (1,620 mg/L)
- MW-2 (1,950 mg/L)
- MW-3 (4,750 mg/L)
- MW-4 (3,170 mg/L)
- MW-5 (2,310 mg/L)
- MW-6 (4,310 mg/L)
- MW-7 (1,930 mg/L)

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- MW-8 (1,370 mg/L)
- WW-1 (1,880 mg/L).

Total dissolved solids concentrations exceeded the NMWQCC standard (1,000 mg/L) in all monitoring wells and the water well, as follows:

- MW-1 (11,260 mg/L)
- MW-2 (12,520 mg/L)
- MW-3 (22,500 mg/L)
- MW-4 (15,800 mg/L)
- MW-5 (16,800 mg/L)
- MW-6 (23,850 mg/L)
- MW-7 (16,600 mg/L)
- MW-8 (12,750 mg/L)
- WW-1 (23,400 mg/L).

Figure 5 shows the chloride concentrations in groundwater, Figure 7 shows the sulfate concentrations in groundwater, and Figure 9 shows the TDS concentrations in groundwater on May 4, 2005.

On May 10, 2005, groundwater samples were collected from all monitoring wells (MW-1 through MW-8), and water well WW-1. A duplicate sample was collected from MW-7. The groundwater samples were submitted under chain-of-custody control to Trace, and analyzed for anions, cations and TDS. Prior to sample collection, the wells were purged of a minimum of three (3) casing volumes of groundwater. The groundwater samples were collected using dedicated disposable PVC bailers. Table 3 presents a summary of the inorganic analysis. Appendix B presents the laboratory report.

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Referring to Table 3, chloride concentrations exceeded the NMWQCC standard (250 mg/L) in all monitoring wells, as follows:

- MW-1 (7,000 mg/L)
- MW-2 (8,080 mg/L)
- MW-3 (11,900 mg/L)
- MW-4 (7,750 mg/L)
- MW-5 (23,300 mg/L)
- MW-6 (11,000 mg/L)
- MW-7 (8,210 mg/L)
- MW-8 (2,590 mg/L).

The chloride concentration in groundwater collected from water well WW-1 (121 mg/L) was less than the NMWQCC standard.

Sulfate concentrations exceeded the NMWQCC standard (600 mg/L) in all monitoring wells, as follows:

- MW-1 (2,360 mg/L)
- MW-2 (2,090 mg/L)
- MW-3 (4,190 mg/L)
- MW-4 (2,010 mg/L)
- MW-5 (2,380 mg/L)
- MW-6 (4,050 mg/L)
- MW-7 (1,810 mg/L)
- MW-8 (936 mg/L).

The sulfate concentration in groundwater collected from water well WW-1 (63.4 mg/L) was less than the NMWQCC standard.

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Total dissolved solids concentrations exceeded the NMWQCC standard (1,000 mg/L) in all monitoring wells, as follows:

- MW-1 (16,250 mg/L)
- MW-2 (17,050 mg/L)
- MW-3 (26,750 mg/L)
- MW-4 (26,700 mg/L)
- MW-5 (17,400 mg/L)
- MW-6 (24,200 mg/L)
- MW-7 (14,600 mg/L)
- MW-8 (5,635 mg/L).

The TDS concentration in groundwater collected from water well WW-1 (336 mg/L) was less than the NMWQCC standard.

Figure 6 shows the chloride concentrations in groundwater. The chloride concentration reported in groundwater from monitoring well MW-5 (23,300 mg/L) is higher than the reported TDS concentration (17,400 mg/L) and is noted as being questionable data. Figure 8 shows the sulfate concentrations in groundwater and Figure 10 shows the TDS concentrations in groundwater on May 10, 2005.

Groundwater levels were considerably higher in all monitoring wells and the water well (WW-1) during the 2005 monitoring period, possibly resulting in the decreased concentrations of inorganic constituents reported in monitoring well MW-8. The drastic decrease of inorganic constituents reported in water well WW-1 during the 2005 monitoring event is questionable, and the reported values of chloride, sulfate and TDS in groundwater collected from WW-1 have not been used in the compilation of the isopleth maps (Figures 6, 8 and 10, respectively). Groundwater samples will be

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collected again in May 2006, and closely analyzed for changes in inorganic constituent concentrations.

During the May 10, 2005 monitoring event, a hydrocarbon odor was detected in monitoring wells MW-4 and MW-8. On May 12, 2005, groundwater samples were collected from wells MW-4 and MW-8. The groundwater samples were submitted under chain-of-custody control to Trace, and analyzed for benzene and BTEX. The groundwater samples were collected using dedicated disposable PVC bailers. Table 2 presents a summary of the BTEX analysis. Appendix B presents the laboratory report.

Referring to Table 2, groundwater from monitoring wells MW-4 and MW-8 reported concentrations of BTEX below the test method detection limits.

4.0 WASTE MANAGEMENT AND DISPOSITION

Purged groundwater from the sampling activities was disposed at an NMOCD permitted salt water disposal (SWD) facility operated by Chapparel Services, Inc., located in Eunice, New Mexico. Approximately 86 gallons of purged groundwater was disposed following each sampling event, for a total of approximately 172 gallons.

5.0 CONCLUSIONS

1. Depth to groundwater ranged from 35.49 feet (WW-1) to 44.07 feet (MW-8) below top of casing (TOC) on the May, 2004 event, and from 30.58 feet (WW-1) to 38.86 feet (MW-1) below TOC on the May, 2005 event.
2. The groundwater gradient was approximately 0.002 feet per foot during each monitoring event.
3. Groundwater flow at the Site has remained consistent, and is from northwest to southeast.

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4. From the May 4, 2004 sampling event, BTEX was not reported above test method detection limits in any groundwater samples. Chloride, sulfate and TDS concentrations exceeded the New Mexico Water Quality Conservation Commission (NMWQCC) standard in all monitoring wells and the water well.
5. From the May 10, 2005 sampling event, chloride, sulfate and TDS concentrations exceeded the NMWQCC standards in all monitoring wells. Concentrations of chloride, sulfate and TDS were below the NMWQCC standards in water well WW-1.
6. Depths to groundwater decreased significantly in all monitoring wells and the water well (WW-1) during the 2005 monitoring period.

6.0 RECOMMENDATIONS

Chevron proposes to continue annual groundwater monitoring at the Site, with submission of an annual report to the NMOCD, detailing results of activities.

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TABLES

Table 1: Summary of Depth-to-Groundwater Measurements from Monitoring and Water Wells
Texaco Exploration and Production Inc., J. R. Phillips Tank Battery # 2
SE/4, NW/4, Section 6, Township 20 South, Range 37 East
Lea County, New Mexico

Date	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	WW-1
5/2/01	39.33	39.15	39.30	40.24	38.37	39.40	39.76	40.35	33.93
05/21/02	40.37	40.14	40.57	41.09	39.53	40.22	40.85	49.27*	34.60
11/12/02	40.92	40.69	41.09	41.59	40.02	40.72	41.47	43.15	35.03
05/15/03	41.11	40.89	41.26	41.77	40.21	40.88	41.65	43.30	---
09/03/03	41.54	41.33	41.61	42.19	42.21	41.92	42.13	43.52	35.51
11/20/03	41.65	41.42	41.73	42.27	40.71	41.33	42.25	43.87	35.56
05/03/04	41.40	41.11	41.60	42.03	40.39	41.12	41.92	44.07	35.49
05/10/05	38.86	35.78	36.89	37.15	35.48	36.56	36.43	32.30	30.58

Notes: All measurements in feet from top-of-casing
*: Questionable Data
"---" no data

Table 2: Summary of BTEX Analyses of Groundwater Samples from Monitoring and Water Wells
Texaco Exploration and Production Inc., J. R. Phillips Tank Battery # 2
SE/4, NW/4, Section 6, Township 20 South, Range 37 East
Lea County, New Mexico

Well Number	Sample Date	Benzene mg/L	Toluene mg/L	Ethylbenzene mg/L	Xylene mg/L	Total BTEX mg/L
MW-1	04/10/00*	<0.002	<0.002	<0.002	<0.006	<0.012
	05/03/01	<0.001	<0.001	<0.001	<0.001	<0.004
	05/23/02	<0.001	<0.001	<0.001	<0.001	<0.004
	11/12/02	<0.001	<0.001	<0.001	<0.001	<0.004
	05/15/03	<0.001	<0.001	<0.001	<0.001	<0.004
	11/21/03	<0.001	<0.001	<0.001	<0.001	<0.004
	05/04/04	<0.001	<0.001	<0.001	<0.001	<0.004
MW-2	04/10/00*	<0.002	<0.002	<0.002	<0.006	<0.012
	05/03/01	<0.001	<0.001	<0.001	<0.001	<0.004
	05/22/02	<0.001	<0.001	<0.001	<0.001	<0.004
	11/12/02	<0.001	<0.001	<0.001	<0.001	<0.004
	05/15/03	<0.005	<0.005	<0.005	<0.005	<0.02
	11/21/03	<0.001	<0.001	<0.001	<0.001	<0.004
	05/04/04	<0.001	<0.001	<0.001	<0.001	<0.004
MW-3	05/03/01	<0.001	<0.001	<0.001	<0.001	<0.004
	05/23/02	<0.001	<0.001	<0.001	<0.001	<0.004
	11/13/02	<0.001	<0.001	<0.001	<0.001	<0.004
	05/15/03	<0.001	<0.001	<0.001	<0.001	<0.004
	11/21/03	<0.001	<0.001	0.0029	0.0079	0.0108
	05/04/04	<0.001	<0.001	<0.001	<0.001	<0.004
MW-4	05/03/01	0.005	<0.001	<0.001	<0.001	0.005
	05/22/02	0.003	0.003	<0.001	<0.001	0.006
	11/13/02	<0.001	<0.001	<0.001	<0.001	<0.004
	05/15/03	0.001	<0.001	<0.001	<0.001	0.001
	11/21/03	<0.005	<0.005	<0.005	<0.005	<0.020
	05/04/04	<0.001	<0.001	<0.001	<0.001	<0.004
	05/12/05	<0.005	<0.005	<0.005	<0.005	<0.020
MW-5	05/03/01	<0.001	<0.001	<0.001	<0.001	<0.004
	05/23/02	<0.001	<0.001	<0.001	<0.001	<0.004
	11/13/02	<0.001	<0.001	<0.001	<0.001	<0.004
	05/15/03	<0.001	<0.001	<0.001	<0.001	<0.004
	11/21/03	<0.001	<0.001	<0.001	<0.001	<0.004
	05/04/04	<0.001	<0.001	<0.001	<0.001	<0.004
MW-6	05/03/01	<0.001	<0.001	<0.001	<0.001	<0.004
	05/23/02	<0.005	<0.005	<0.005	<0.005	<0.005
	11/13/02	<0.001	<0.001	<0.001	<0.001	<0.004
	05/15/03	<0.001	<0.001	<0.001	<0.001	<0.004
	11/20/03	<0.001	<0.001	<0.001	<0.001	<0.004
	05/04/04	<0.001	<0.001	<0.001	<0.001	<0.004
MW-7	05/02/01	<0.001	<0.001	<0.001	<0.001	<0.004
	05/22/02	<0.0022	0.002	<0.001	0.001	0.005
	11/12/02	<0.001	<0.001	<0.001	<0.001	<0.004
	05/15/03	<0.001	<0.001	<0.001	<0.001	<0.004
	11/20/03	<0.001	<0.001	<0.001	<0.001	<0.004
	05/04/04	<0.001	<0.001	<0.001	<0.001	<0.004
MW-8	05/02/01	<0.001	0.002	<0.001	<0.001	0.002
	05/23/02	<0.005	<0.005	<0.005	<0.005	<0.02
	11/12/02	0.020	0.005	<0.001	0.004	<0.030
	05/15/03	0.0138	<0.005	<0.005	<0.005	0.0138
	11/20/03	<0.001	<0.001	<0.001	<0.001	<0.004
	05/04/04	<0.005	<0.005	<0.005	<0.005	<0.020
	05/12/05	<0.005	<0.005	<0.005	<0.005	<0.020

Table 2: Summary of BTEX Analyses of Groundwater Samples from Monitoring and Water Wells
Texaco Exploration and Production Inc., J. R. Phillips Tank Battery # 2
SE/4, NW/4, Section 6, Township 20 South, Range 37 East
Lea County, New Mexico

Well Number	Sample Date	Benzene mg/L	Toluene mg/L	Ethylbenzene mg/L	Xylene mg/L	Total BTEX mg/L
WW-1	03/15/00*	<0.002	<0.002	<0.002	<0.006	<0.012
	05/03/01	<0.001	<0.001	<0.001	<0.001	<0.004
	05/23/02	<0.001	<0.001	<0.001	<0.001	<0.004
	11/12/02	<0.001	<0.001	<0.001	<0.001	<0.004
	05/15/03	<0.005	<0.005	<0.005	<0.005	<0.02
	11/21/03	<0.005	<0.005	<0.005	<0.005	<0.020
	05/04/04	<0.001	<0.001	<0.001	<0.001	<0.004
Duplicate	05/03/01	<0.002	<0.002	<0.002	<0.006	<0.012
(WW-1)						
Duplicate	11/13/02	<0.001	<0.001	<0.001	<0.001	<0.004
(MW-1)						
Duplicate	05/15/03	0.0155	<0.0100	<0.0100	<0.0100	0.0155
(MW-8)						
Duplicate	11/20/03	<0.001	<0.001	<0.001	<0.001	<0.004
(MW-6)						
Duplicate	11/21/03	<0.001	<0.001	<0.001	<0.001	<0.004
(MW-3)						
Duplicate	05/04/04	<0.005	<0.005	<0.005	<0.005	<0.020
(MW-8)						

Notes: Analyses performed by TraceAnalysis, Inc., Lubbock, Texas

1. mg/L: Milligrams per liter (equivalent to parts per million)
2. <: Analyte not detected above test method detection limit
3. *: Analysis performed by Cardinal Laboratories, Inc., Hobbs, New Mexico

Table 3: Summary of Inorganic Analyses of Groundwater Samples from Monitoring Wells and Water Wells
Texaco Exploration and Production Inc., J. R. Phillips Tank Battery # 2
SE/4, NW/4, Section 6, Township 20 South, Range 37 East
Lea County, New Mexico

Monitor Well	Sample Date	pH (s.u.)	Carbonate (mg/L)	Bicarbonate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Sulfate (mg/L)	Nitrate-N (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	TDS (mg/L)
	NMWQCC Standard				**250**		**600**						**1,000**
MW-1	10-Apr-01	7.01	0.00	556	7,300	--	2,061	--	445	175	44.00	5,058	15,816
	03-May-01	6.77	<2.00	500	6,913	--	2,020	--	323.4	172.5	52.11	3,756	14,501
	23-May-02	--	<1.00	494	6,060	--	1,850	--	361	154	66.40	3,750	13,300
	12-Nov-02	---	<0.10	456	6,030	--	1,400	--	235	143	67.40	3,060	12,800
	15-May-03	---	<1.00	430	5,150	--	1,710	--	312	121	42.80	3,970	5,990
	9-Sep-03	---	---	---	5,320	--	---	--	---	---	---	---	---
	21-Nov-03	---	<1.00	460	4,910	--	1,730	--	302	121	54.6	3,360	11,540
	04-May-04	---	<1.00	438	5,280	<4.00	1,620	<4.00	272	115	49.10	3,030	11,260
	10-May-05	---	<1.00	412	7,000	<2.00	2,360	<2.00	453	211	94.50	3,780	16,250
MW-2	10-Apr-01	6.91	0.00	566	8,704	--	2,611	--	569	296	31.00	5,871	19,312
	03-May-01	6.77	<2.00	516	7,799	--	2,670	--	412.4	221.7	30.31	4,424	16,857
	22-May-02	--	<1.00	530	7,320	--	2,150	--	471	204	42.20	4,200	15,700
	12-Nov-02	---	<0.10	482	6,740	--	1,780	--	352	187	48.70	3,640	14,300
	15-May-03	---	<1.00	498	5,850	--	1,990	--	312	150	31.30	4,670	14,000
	9-Sep-03	---	---	---	6,470	--	---	--	---	---	---	---	---
	21-Nov-03	---	<1.00	510	5,790	--	2,100	--	378	158	52.1	3,770	14,080
	04-May-04	---	<1.00	530	6,040	<4.00	1,950	<4.00	326	136	43.80	3,300	12,520
	10-May-05	---	<1.00	502	8,080	5.57	2,090	<2.00	385	171	52.90	4,310	17,050
MW-3	03-May-01	6.50	<2.00	458	11,078	---	3,525	---	984	431.9	38.89	6,114	24,135
	23-May-02	--	<1.00	512	10,800	---	3,920	---	999	350	56.50	6,210	24,200
	13-Nov-02	---	<0.10	456	11,400	---	3,670	---	863	371	59.30	5,680	23,600
	15-May-03	---	<1.00	462	10,700	---	4,220	---	921	315	34.10	5,870	24,200
	9-Sep-03	---	---	---	10,300	---	---	---	---	---	---	---	---
	21-Nov-03	---	<1.00	464	10,500	---	4,480	---	972	333	47.50	7,540	23,100
	04-May-04	---	<1.00	478	11,400	<8.00	4,750	<8.00	808	291	54.10	5,290	22,500
	10-May-05	---	<1.00	472	11,900	<2.00	4,190	<2.00	965	356	86.70	7,320	26,750
MW-4	03-May-01	6.51	<2.00	618	9,572	---	2,755	---	467.7	299.8	49.25	5,435	20,118
	22-May-02	--	<1.00	814	8,170	---	1,940	---	389	220	45.30	5,100	18,200
	13-Nov-02	---	<0.10	1020	7,890	---	1,020	---	47.1	202	21.60	3,980	14,800
	15-May-03	---	<1.00	1050	7,140	---	1,210	---	185	179	14.80	5,250	15,200
	9-Sep-03	---	---	---	7,800	---	---	---	---	---	---	---	---
	21-Nov-03	---	<1.00	770	7,500	---	2,720	---	334	198	39.70	4,760	17,350
	04-May-04	---	<1.00	900	8,740	<6.00	3,170	<6.00	240	191	25.80	3,660	15,800
	10-May-05	---	<1.00	708	7,750	2.73	2,010	<2.00	330	186	50.40	4,400	26,700

Table 3: Summary of Inorganic Analyses of Groundwater Samples from Monitoring Wells and Water Wells
Texaco Exploration and Production Inc., J. R. Phillips Tank Battery # 2
SE/4, NW/4, Section 6, Township 20 South, Range 37 East
Lea County, New Mexico

Monitor Well	Sample Date	pH (s.u.)	Carbonate (mg/L)	Bicarbonate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Sulfate (mg/L)	Nitrate-N (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	TDS (mg/L)
	NMWQCC Standard				**250**		**600**						**1,000**
MW-5	03-May-01	6.60	<2.00	416	8,685	---	3,045	---	430.9	237.1	44.36	4,651	18,846
	23-May-02	--	<1.00	496	6,970	---	2,510	---	394	200	44.00	4,680	16,900
	13-Nov-02	---	<0.10	640	7,270	---	1,790	---	266	172	43.80	3,880	14,900
	15-May-03	---	<1.00	562	6,800	---	2,320	---	383	167	30.90	5,300	16,000
	9-Sep-03	---	---	---	7,090	---	---	---	---	---	---	---	---
	21-Nov-03	---	<1.00	522	7,010	---	3,170	---	434	178	54.90	4,300	16,850
	04-May-04	---	<1.00	534	6,630	<4.00	2,310	<4.00	365	152	47.80	3,850	16,800
	10-May-05	---	<1.00	536	23,300	<2.00	2,380	<2.00	362	151	68.30	4,400	17,400
MW-6	03-May-01	6.41	<2.00	460	11,876	--	4,380	--	1,004	429.9	52.27	6,281	25,288
	23-May-02	--	<1.00	474	11,000	--	4,300	--	1,130	483	53.00	6,060	25,500
	13-Nov-02	---	<0.10	416	10,800	--	3,660	--	936	486	57.60	5,470	23,400
	15-May-03	---	<1.00	470	10,700	--	4,310	--	1,000	388	34.10	5,760	23,800
	9-Sep-03	---	---	---	10,300	--	---	--	---	---	---	---	---
	20-Nov-03	---	<1.00	480	10,000	--	4,410	--	904	399	42.50	5,610	23,500
	04-May-04	---	<1.00	466	11,400	<8.00	4,310	<8.00	869	350	49.00	5,590	23,850
	10-May-05	---	<1.00	476	11,000	3.48	4,050	<2.00	801	331	52.20	6,090	24,200
MW-7	02-May-01	6.70	<2.00	436	8,154	--	2,430	--	599.5	289.8	34.57	4,578	18,578
	22-May-02	--	<1.00	440	7,420	--	2,280	--	630	264	48.50	4,390	16,900
	12-Nov-02	---	<0.10	412	7,530	--	1,800	--	512	244	55.00	3,950	15,700
	15-May-03	---	<1.00	438	7,180	--	2,350	--	583	220	33.30	4,970	16,800
	9-Sep-03	---	---	---	6,910	--	---	--	---	---	---	---	---
	20-Nov-03	---	<1.00	434	6,360	--	2,110	--	532	204	52.70	3,770	14,500
	04-May-04	---	<1.00	418	6,610	<4.00	1,930	<4.00	527	188	47.10	3,460	16,600
	10-May-05	---	<1.00	450	8,210	2.14	1,810	<2.00	506	188	62.80	3,860	14,600
MW-8	02-May-01	6.67	<2.00	426	7,445	--	1,213	--	766.7	295.7	52.68	2,999	16,325
	23-May-02	--	<1.00	430	6,680	--	1,260	--	701	237	75.90	3,420	13,300
	12-Nov-02	---	<0.10	444	7,270	--	1,220	--	591	254	88.00	3,150	14,000
	15-May-03	---	<1.00	468	7,300	--	1,690	--	777	265	55.10	4,580	15,700
	9-Sep-03	--	--	--	7,270	--	--	--	--	--	--	--	--
	20-Nov-03	---	<1.00	438	8,190	--	2,570	--	881	280	64.5	3,560	14,040
	04-May-04	---	<1.00	380	7,960	<6.00	1,370	<6.00	912	321	60.10	2,970	12,750
	10-May-05	---	<1.00	446	2,590	4.12	936	<1.00	228	84.40	46.30	1,740	5,635
WW-1	--	--	--	--	13,152	--	--	--	--	--	--	--	--
	03-May-01	4.38	<2.00	<2.00	12,053	--	629	--	1,419	387.3	38.95	1,486	22,571
	12-Nov-02	---	<0.10	<2.0	<5.0	--	998	--	1,120	361	38.30	2,260	15,800
	15-May-03	--	<1.00	<4.00	11,800	--	1,780	--	1,490	403	28.90	3,360	21,400
	9-Sep-03	--	--	--	<5.00	--	--	--	--	--	--	--	--
	21-Nov-03	--	<1.00	<4.00	10,000	--	2,180	--	1,650	461	52.7	3,630	18,900
	04-May-04	---	<1.00	<4.00	12,500	<8.00	1,880	<8.00	1,540	450	47.00	3,470	23,400
	10-May-05	---	<1.00	<4.00	121	<1.00	63.40	<1.00	39.8	12.2	3.05	10.20	336

Table 3: Summary of Inorganic Analyses of Groundwater Samples from Monitoring Wells and Water Wells
Texaco Exploration and Production Inc., J. R. Phillips Tank Battery # 2
SE/4, NW/4, Section 6, Township 20 South, Range 37 East
Lea County, New Mexico

Monitor Well	Sample Date	pH (s.u.)	Carbonate (mg/L)	Bicarbonate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Sulfate (mg/L)	Nitrate-N (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	TDS (mg/L)
NMWQCC Standard					**250**		**600**						**1,000**
Duplicate (WW-1)	03-May-01	4.24	<2.00	<2.00	12,053	--	688	--	1,337	323.9	42.68	1,376	21,192
Duplicate (MW-1)	13-Nov-02	---	<0.10	457	5,940	--	1,480	--	290	148	67.90	2,930	12,300
Duplicate (MW-8)	15-May-03	---	<1.00	482	7,170	--	1,660	--	770	272	53.60	4,610	15,600
Duplicate (MW-3)	9-Sep-03	---	---	---	10,300	--	---	--	---	---	---	---	---
Duplicate (MW-6)	20-Nov-03	---	<1.00	492	9,960	--	4,220	--	980	389	45.90	6,330	24,500
Duplicate (MW-1)	21-Nov-03	---	<1.00	488	9,080	--	3,860	--	985	331	48.20	6,280	23,200
Duplicate (MW-8)	04-May-04	---	<1.00	408	8,980	<6.00	1,430	<6.00	957	310	57.70	3,090	12,700
Duplicate (MW-7)	10-May-05	---	<1.00	442	8,200	2.08	1,870	<2.00	584	222	72.10	4,640	16,500

Notes: Analyses performed by Environmental Lab of Texas, Inc., Odessa, Texas

1. mg/L: Milligrams per liter (equivalent to parts per million)
2. <: Analyte not detected above test method detection limit
3. --: No data available

FIGURES

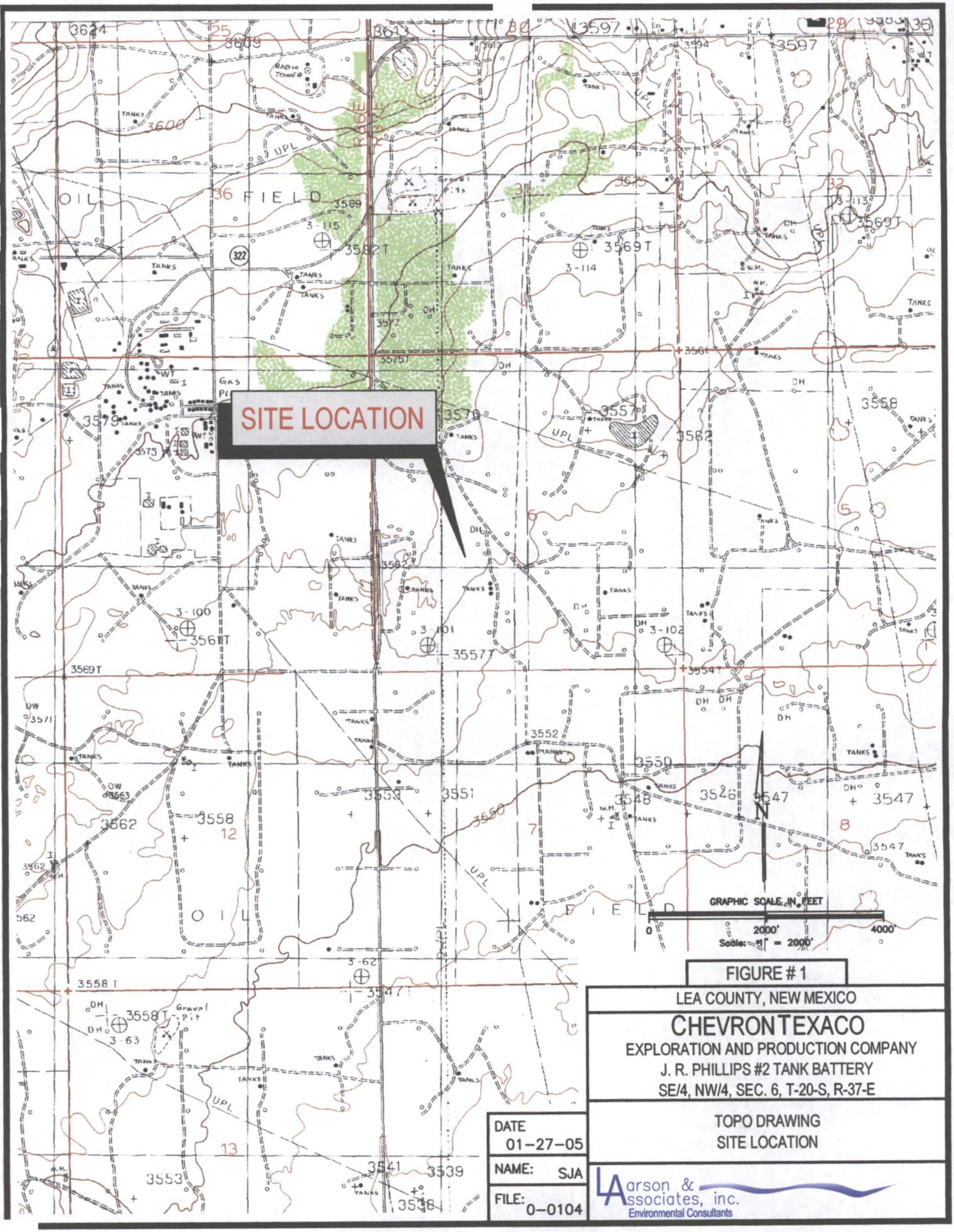


FIGURE # 1

LEA COUNTY, NEW MEXICO

CHEVRONTEXACO

EXPLORATION AND PRODUCTION COMPANY

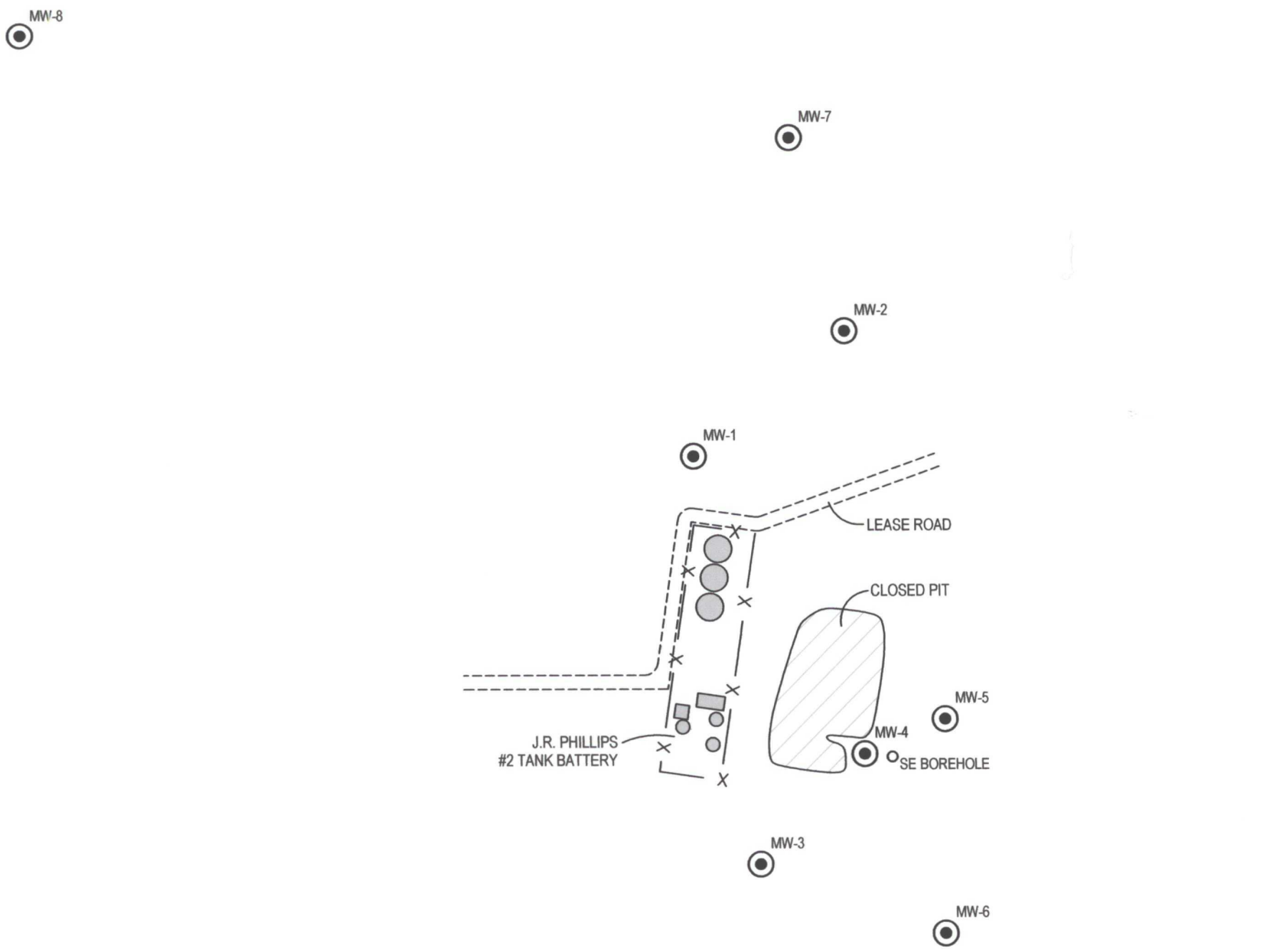
J. R. PHILLIPS #2 TANK BATTERY

SE/4, NW/4, SEC. 6, T-20-S, R-37-E

TOPO DRAWING
SITE LOCATION

DATE	01-27-05
NAME:	SJA
FILE:	0-0104

Larson & Associates, inc.
Environmental Consultants



MONITORING WELL DATA

WELL NUMBER	TOP OF CASING ELEVATION (FEET) AMSL	GROUND ELEVATION (FEET AMSL)
MW-1	3571.61	3568.16
MW-2	3571.12	3568.44
MW-3	3570.70	3568.08
MW-4	3571.07	3568.50
MW-5	3569.31	3566.80
MW-6	3569.53	3567.00
MW-7	3572.46	3569.95
MW-8	3577.66	3575.02
WW-1	3562.54	3562.54

LEGEND

MW-1 ◉ MONITORING WELL LOCATION

WW-1 ◭ WATER WELL LOCATION

GRAPHIC SCALE IN FEET

0 100' 200'

Scale: 1" = 100'

FIGURE # 2

LEA COUNTY, NEW MEXICO

Chevron

NORTH AMERICA EXPLORATION AND PRODUCTION COMPANY

J. R. PHILLIPS #2 TANK BATTERY

SE/4, NW/4, SEC. 6, T-20-S, R-37-E

SITE DRAWING

DATE 08-15-05

NAME: SJA

FILE: 0-0104

Larson & Associates, inc.

Environmental Consultants

MW-8
3533.59

MW-7
3530.54

MW-2
3530.01

MW-1
3530.21

LEASE ROAD

CLOSED PIT

MW-5
3528.92

MW-4
SE BOREHOLE
3529.04

J.R. PHILLIPS
#2 TANK BATTERY

MW-3
3529.10

MW-6
3528.41

3533
3532
3531
3530
3529
3528
3527

3527.05
WW-1

MONITORING WELL DATA

WELL NUMBER	TOP OF CASING ELEVATION (FEET) AMSL	GROUND ELEVATION (FEET AMSL)
MW-1	3571.61	3568.16
MW-2	3571.12	3568.44
MW-3	3570.70	3568.08
MW-4	3571.07	3568.50
MW-5	3569.31	3566.80
MW-6	3569.53	3567.00
MW-7	3572.46	3569.95
MW-8	3577.66	3575.02
WW-1	3562.54	3562.54

LEGEND

MW-1
3530.21
MONITORING WELL LOCATION, AND GROUNDWATER POTENTIOMETRIC SURFACE ELEVATION, FEET AMSL, 5/3/04

WW-1
3527.05
WATER WELL LOCATION, AND GROUNDWATER POTENTIOMETRIC SURFACE ELEVATION, FEET AMSL, 5/3/04

3530
CONTOUR OF GROUNDWATER POTENTIOMETRIC SURFACE ELEVATION, FEET AMSL, 5/3/04

DIRECTION OF GROUNDWATER FLOW

GRAPHIC SCALE IN FEET
0 100' 200'
Scale: 1" = 100'

FIGURE # 3

LEA COUNTY, NEW MEXICO

Chevron
NORTH AMERICA EXPLORATION AND PRODUCTION COMPANY
J. R. PHILLIPS #2 TANK BATTERY
SE/4, NW/4, SEC. 6, T-20-S, R-37-E

GROUNDWATER POTENTIOMETRIC SURFACE MAP
MAY 3, 2004

DATE 08-14-05
NAME: SJA
FILE: 0-0104

Larson & Associates, inc.
Environmental Consultants

MW-8
3545.36

MW-7
3536.03

MW-2
3535.34

MW-1
3532.75 *

LEASE ROAD

CLOSED PIT

MW-5
3533.83

MW-4
SE BOREHOLE
3533.92

J.R. PHILLIPS
#2 TANK BATTERY

MW-3
3533.81

MW-6
3532.97

3531.96
WW-1

3545
3544
3543
3542
3541
3540
3539
3538
3537
3536
3535
3534
3533
3532
3531
3530

MONITORING WELL DATA

WELL NUMBER	TOP OF CASING ELEVATION (FEET) AMSL	GROUND ELEVATION (FEET AMSL)
MW-1	3571.61	3568.16
MW-2	3571.12	3568.44
MW-3	3570.70	3568.08
MW-4	3571.07	3568.50
MW-5	3569.31	3566.80
MW-6	3569.53	3567.00
MW-7	3572.46	3569.95
MW-8	3577.66	3575.02
WW-1	3562.54	3562.54

LEGEND

MW-1 / 3532.75 — MONITORING WELL LOCATION, AND GROUNDWATER POTENTIOMETRIC SURFACE ELEVATION, FEET AMSL, 5/10/05

WW-1 / 3531.96 — WATER WELL LOCATION, AND GROUNDWATER POTENTIOMETRIC SURFACE ELEVATION, FEET AMSL, 5/10/05

3530 — CONTOUR OF GROUNDWATER POTENTIOMETRIC SURFACE ELEVATION, FEET AMSL, 5/10/05

DIRECTION OF GROUNDWATER FLOW

* QUESTIONABLE DATA

GRAPHIC SCALE IN FEET

0 100' 200'

Scale: 1" = 100'

FIGURE # 4

LEA COUNTY, NEW MEXICO

Chevron

NORTH AMERICA EXPLORATION AND PRODUCTION COMPANY

J. R. PHILLIPS #2 TANK BATTERY

SE/4, NW/4, SEC. 6, T-20-S, R-37-E

GROUNDWATER POTENTIOMETRIC SURFACE MAP

MAY 10, 2005

DATE 08-14-05

NAME: SJA

FILE: 0-0104

Larson & Associates, inc.

Environmental Consultants

MW-8
7,960

7000

6000

MW-7
6,610

MW-2
6,040

4,000

MW-1
5,280

LEASE ROAD

CLOSED PIT

5,000

6,000

MW-5
6,630

J.R. PHILLIPS
#2 TANK BATTERY

MW-4
SE BOREHOLE
8,740

MW-3
11,400

MW-6
11,400

6,000

10,000

12,000

250

500

1,000

2,000

3,000

4,000

5,000

12,500
WW-1

MONITORING WELL DATA

WELL NUMBER	TOP OF CASING ELEVATION (FEET) AMSL	GROUND ELEVATION (FEET AMSL)
MW-1	3571.61	3568.16
MW-2	3571.12	3568.44
MW-3	3570.70	3568.08
MW-4	3571.07	3568.50
MW-5	3569.31	3566.80
MW-6	3569.53	3567.00
MW-7	3572.46	3569.95
MW-8	3577.66	3575.02
WW-1	3562.54	3562.54

LEGEND

MW-1
5,280
MONITORING WELL LOCATION AND CHLORIDE CONCENTRATION IN GROUNDWATER (MG/L), 5/4/04

WW-1
12,500
WATER WELL LOCATION AND CHLORIDE CONCENTRATION IN GROUNDWATER (MG/L), 5/4/04

3000
CONTOUR OF CHLORIDE CONCENTRATIONS IN GROUNDWATER (MG/L), 5/4/04

GRAPHIC SCALE IN FEET
0 100' 200'
Scale: 1" = 100'

FIGURE # 5

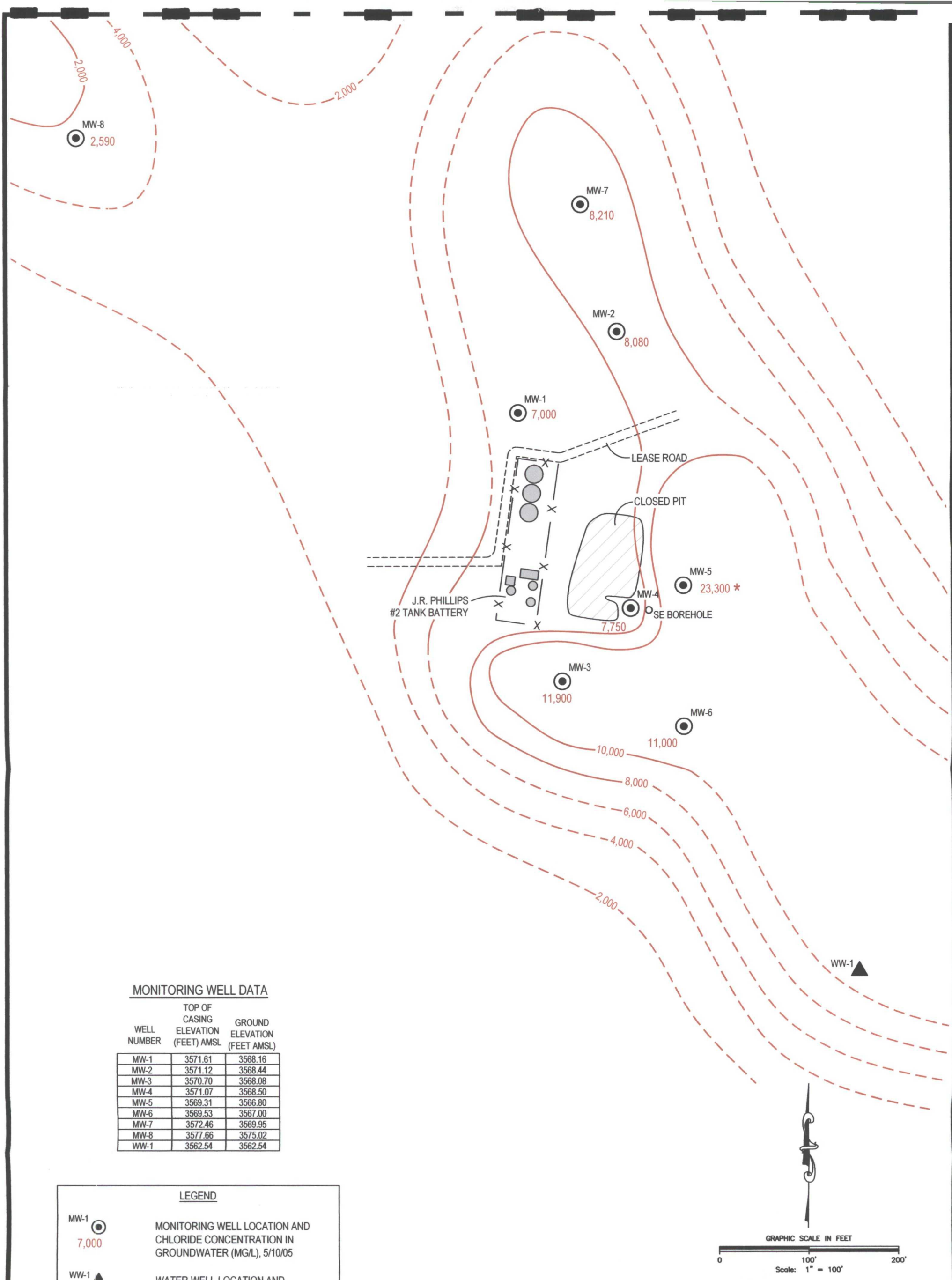
LEA COUNTY, NEW MEXICO

Chevron
NORTH AMERICA EXPLORATION AND PRODUCTION COMPANY
J. R. PHILLIPS #2 TANK BATTERY
SE/4, NW/4, SEC. 6, T-20-S, R-37-E

ISOPLETH MAP OF CHLORIDE CONCENTRATIONS IN GROUNDWATER
MAY 4, 2004

DATE 08-15-05
NAME: SJA
FILE: 0-0104

Larson & Associates, inc.
Environmental Consultants



MONITORING WELL DATA

WELL NUMBER	TOP OF CASING ELEVATION (FEET) AMSL	GROUND ELEVATION (FEET AMSL)
MW-1	3571.61	3568.16
MW-2	3571.12	3568.44
MW-3	3570.70	3568.08
MW-4	3571.07	3568.50
MW-5	3569.31	3566.80
MW-6	3569.53	3567.00
MW-7	3572.46	3569.95
MW-8	3577.66	3575.02
WW-1	3562.54	3562.54

LEGEND

MW-1 ◉ 7,000 — MONITORING WELL LOCATION AND CHLORIDE CONCENTRATION IN GROUNDWATER (MG/L), 5/10/05

WW-1 ▲ 121 — WATER WELL LOCATION AND CHLORIDE CONCENTRATION IN GROUNDWATER (MG/L), 5/10/05

4,000 — CONTOUR OF CHLORIDE CONCENTRATIONS IN GROUNDWATER (MG/L), 5/10/05

* — QUESTIONABLE DATA

FIGURE # 6

LEA COUNTY, NEW MEXICO

Chevron

NORTH AMERICA EXPLORATION AND PRODUCTION COMPANY

J. R. PHILLIPS #2 TANK BATTERY

SE/4, NW/4, SEC. 6, T-20-S, R-37-E

ISOPLETH MAP OF CHLORIDE CONCENTRATIONS IN GROUNDWATER MAY 10, 2005

DATE 08-17-05

NAME: SJA

FILE: 0-0104

Larson & Associates, inc.
Environmental Consultants

MW-8
1,370

MW-7
1,930

MW-2
1,950

MW-1
1,620

1,200

600

LEASE ROAD

CLOSED PIT

J.R. PHILLIPS
#2 TANK BATTERY

MW-5
2,310

MW-4
SE BOREHOLE
3,170

MW-3
4,750

MW-6
4,310

2,400

1,800

1,200

600

1,880
WW-1

MONITORING WELL DATA

WELL NUMBER	TOP OF CASING ELEVATION (FEET) AMSL	GROUND ELEVATION (FEET AMSL)
MW-1	3571.61	3568.16
MW-2	3571.12	3568.44
MW-3	3570.70	3568.08
MW-4	3571.07	3568.50
MW-5	3569.31	3566.80
MW-6	3569.53	3567.00
MW-7	3572.46	3569.95
MW-8	3577.66	3575.02
WW-1	3562.54	3562.54

LEGEND

MW-1
1,620
MONITORING WELL LOCATION AND SULFATE CONCENTRATION IN GROUNDWATER (MG/L), 5/04/04

WW-1
1,880
WATER WELL LOCATION AND SULFATE CONCENTRATION IN GROUNDWATER (MG/L), 5/04/04

600
CONTOUR OF SULFATE CONCENTRATIONS IN GROUNDWATER (MG/L), 5/04/04

DIRECTION OF GROUNDWATER FLOW

GRAPHIC SCALE IN FEET
0 100' 200'
Scale: 1" = 100'

FIGURE # 7

LEA COUNTY, NEW MEXICO

Chevron
NORTH AMERICA EXPLORATION AND PRODUCTION COMPANY
J. R. PHILLIPS #2 TANK BATTERY
SE/4, NW/4, SEC. 6, T-20-S, R-37-E

ISOPLETH MAP OF SULFATE CONCENTRATIONS IN GROUNDWATER
MAY 04, 2004

DATE 08–15–05
NAME: SJA
FILE: 0–0104

Larson & Associates, inc.
Environmental Consultants

MW-8
936

MW-7
1,810

MW-2
2,090

MW-1
2,360

LEASE ROAD

CLOSED PIT

J.R. PHILLIPS
#2 TANK BATTERY

MW-5
2,380

MW-4
SE BOREHOLE
2,010

MW-3
4,190

MW-6
4,050

40,000
30,000
2,400
2,100
1,800
1,200
600

WW-1

MONITORING WELL DATA

WELL NUMBER	TOP OF CASING ELEVATION (FEET) AMSL	GROUND ELEVATION (FEET AMSL)
MW-1	3571.61	3568.16
MW-2	3571.12	3568.44
MW-3	3570.70	3568.08
MW-4	3571.07	3568.50
MW-5	3569.31	3566.80
MW-6	3569.53	3567.00
MW-7	3572.46	3569.95
MW-8	3577.66	3575.02
WW-1	3562.54	3562.54

LEGEND

MW-1 2,360 — MONITORING WELL LOCATION AND SULFATE CONCENTRATION IN GROUNDWATER (MG/L), 5/10/05

WW-1 63.4 — WATER WELL LOCATION AND SULFATE CONCENTRATION IN GROUNDWATER (MG/L), 5/10/05

600 — CONTOUR OF SULFATE CONCENTRATIONS IN GROUNDWATER (MG/L), 5/10/05

GRAPHIC SCALE IN FEET

0 100' 200'

Scale: 1" = 100'

FIGURE # 8

LEA COUNTY, NEW MEXICO

Chevron

NORTH AMERICA EXPLORATION AND PRODUCTION COMPANY

J. R. PHILLIPS #2 TANK BATTERY

SE/4, NW/4, SEC. 6, T-20-S, R-37-E

ISOPLETH MAP OF SULFATE CONCENTRATIONS IN GROUNDWATER MAY 10, 2005

DATE 08-17-05

NAME: SJA

FILE: 0-0104

Larson & Associates, inc.
Environmental Consultants

MW-8
12,750

MW-7
16,600

MW-2
12,520

MW-1
11,260

LEASE ROAD

CLOSED PIT

J.R. PHILLIPS
#2 TANK BATTERY

MW-5
16,800

MW-4

SE BOREHOLE

15,800

MW-3
22,500

MW-6
23,850

23,400
WW-1

10,000

15,000

20,000

15,000

10,000

5,000

1,000

MONITORING WELL DATA

WELL NUMBER	TOP OF CASING ELEVATION (FEET) AMSL	GROUND ELEVATION (FEET AMSL)
MW-1	3571.61	3568.16
MW-2	3571.12	3568.44
MW-3	3570.70	3568.08
MW-4	3571.07	3568.50
MW-5	3569.31	3566.80
MW-6	3569.53	3567.00
MW-7	3572.46	3569.95
MW-8	3577.66	3575.02
WW-1	3562.54	3562.54

LEGEND

MW-1
11,260
MONITORING WELL LOCATION AND TDS CONCENTRATION IN GROUNDWATER (MG/L), 5/04/04

WW-1
23,400
WATER WELL LOCATION AND TDS CONCENTRATION IN GROUNDWATER (MG/L), 5/04/04

1,000
CONTOUR OF TDS CONCENTRATIONS IN GROUNDWATER (MG/L), 5/04/04

GRAPHIC SCALE IN FEET

0 100' 200'

Scale: 1" = 100'

FIGURE # 9

LEA COUNTY, NEW MEXICO

Chevron

NORTH AMERICA EXPLORATION AND PRODUCTION COMPANY

J. R. PHILLIPS #2 TANK BATTERY

SE/4, NW/4, SEC. 6, T-20-S, R-37-E

ISOPLETH MAP OF TDS CONCENTRATIONS IN GROUNDWATER
MAY 04, 2004

DATE 08-15-05

NAME: SJA

FILE: 0-0104

LA arson & Associates, inc.
Environmental Consultants

MW-8
5,635

MW-7
14,600

MW-2
17,050

MW-1
16,250

LEASE ROAD

CLOSED PIT

MW-5
17,400

MW-4
SE BOREHOLE
26,700

J.R. PHILLIPS
#2 TANK BATTERY

MW-3
26,750

MW-6
24,200

1,000
5,000
10,000
15,000
20,000

WW-1

MONITORING WELL DATA

WELL NUMBER	TOP OF CASING ELEVATION (FEET) AMSL	GROUND ELEVATION (FEET AMSL)
MW-1	3571.61	3568.16
MW-2	3571.12	3568.44
MW-3	3570.70	3568.08
MW-4	3571.07	3568.50
MW-5	3569.31	3566.80
MW-6	3569.53	3567.00
MW-7	3572.46	3569.95
MW-8	3577.66	3575.02
WW-1	3562.54	3562.54

LEGEND

MW-1
16,250
MONITORING WELL LOCATION AND TDS CONCENTRATION IN GROUNDWATER (MG/L), 5/10/05

WW-1
336
WATER WELL LOCATION AND TDS CONCENTRATION IN GROUNDWATER (MG/L), 5/10/05

1,000
CONTOUR OF TDS CONCENTRATION IN GROUNDWATER (MG/L), 5/10/05

GRAPHIC SCALE IN FEET
0 100' 200'
Scale: 1" = 100'

FIGURE # 10

LEA COUNTY, NEW MEXICO

Chevron
NORTH AMERICA EXPLORATION AND PRODUCTION COMPANY
J. R. PHILLIPS #2 TANK BATTERY
SE/4, NW/4, SEC. 6, T-20-S, R-37-E

ISOPLETH MAP OF TDS CONCENTRATIONS IN GROUNDWATER
MAY 10, 2005

DATE 08-17-05
NAME: SJA
FILE: 0-0104

Larson & Associates, inc.
Environmental Consultants

APPENDIX A

NMOCD Correspondence

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Jennifer A. Salisbury
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

December 27, 2001

CERTIFIED MAIL
RETURN RECEIPT NO. 7000-1670-0012-5357-8116

Mr. Rodney Bailey
Texaco Exploration & Production, Inc.
500 N. Loraine
Midland, Texas 79701

RE: CASE #1R0255
J.R. PHILLIPS #2 TANK BATTERY SITE
MONUMENT, NEW MEXICO

Dear Mr. Bailey:

The New Mexico Oil Conservation Division (OCD) has reviewed Texaco Exploration & Production, Inc.'s (Texaco) May 24, 2001 "GROUNDWATER ASSESSMENT REPORT, TEXACO EXPLORATION AND PRODUCTION INC., J.R. PHILLIPS TANK BATTERY #2, SE/4, NW/4, SECTION 6, TOWNSHIP 20 SOUTH, RANGE 37 EAST, LEA COUNTY, NEW MEXICO, MAY 24, 2001" which was submitted on behalf of Texaco by their consultant Larson & Associates, Inc. This document contains the results of Texaco's investigation of the extent of ground water contamination related to a former emergency pit at the J.R. Phillips #2 Tank Battery south of Monument, New Mexico. The document also contains a proposal for further ground water monitoring at the site.

The above referenced monitoring proposal is approved with the following conditions:

1. Ground water from the monitoring wells shall also be analyzed for concentrations of benzene, toluene, ethylbenzene and xylene (BTEX).

2. Texaco shall notify the OCD at least 48 hours in advance of scheduled activities such that the OCD has the opportunity to witness the events and split samples.

Please be advised that OCD approval does not relieve Texaco of responsibility if the work plan fails to adequately monitor contamination related to Texaco's activities, or if contamination exists which is outside the scope of the work plan. In addition, OCD approval does not relieve Texaco of responsibility for compliance with any other federal, state or local laws and regulations.

If you have any questions, please contact me at (505) 476-3491.

Sincerely,

William C. Olson
Hydrologist
Environmental Bureau

xc: Chris Williams, OCD Hobbs District Office
Mark Larson, Larson & Associates, Inc.

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary

Mark E. Fesmire, P.E.
Director
Oil Conservation Division

October 1, 2004

Mr. Rodney Bailey
ChevronTexaco
15 Smith Road
Midland, Texas 79705

RE: CASE #1R0255
J.R. PHILLIPS #2 TANK BATTERY SITE
MONUMENT, NEW MEXICO

Dear Mr. Bailey:

The New Mexico Oil Conservation Division (OCD) has reviewed ChevronTexaco's May 10, 2004 "ANNUAL GROUNDWATER MONITORING REPORT, CHEVRONTEXACO EXPLORATION AND PRODUCTION COMPANY, J.R.PHILLIPS TANK BATTERY NO. 2, NW/4 SE/4, SECTION 30, TOWNSHIP 18 SOUTH, RANGE 38 EAST, LEA COUNTY, NEW MEXICO" which was submitted on behalf of ChevronTexaco by their consultant Larson & Associates, Inc. This document contains the results of ChevronTexaco's 2003 remediation and monitoring of contaminated ground water at the J.R. Phillips #2 Tank Battery south of Monument, New Mexico . The document also proposes to change the sampling schedule of ground water monitoring wells from semi-annual to annual sampling.

The above-referenced monitoring proposal is approved. Please be advised that OCD approval does not limit ChevronTexaco to the proposed work plan should the plan fail to adequately remediate or monitor contamination related to ChevronTexaco's activities, or if contamination exists which is outside the scope of the work plan. In addition, OCD approval does not relieve ChevronTexaco of responsibility for compliance with any other federal, state or local laws and regulations. If you have any questions, please contact me at (505) 476-3491.

Sincerely,

William C. Olson
Hydrologist
Environmental Bureau

xc: Chris Williams, OCD Hobbs District Office
Cindy K. Crain, Larson & Associates, Inc.

APPENDIX B

Laboratory Analyses and Chain of Custody Documentation

TRACEANALYSIS, INC.

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

Analytical and Quality Control Report

Cindy Crain
Larson and Associates, Inc.
P. O. Box 50685
Midland, Tx 79710

Report Date: May 17, 2004

Work Order: 4050605

Project Name: J.R.Phillips
Project Number: 0-0104

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

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
33140	WW-1	water	2004-05-04	11:45	2004-05-05
33141	MW-1	water	2004-05-04	14:40	2004-05-05
33142	MW-2	water	2004-05-04	14:29	2004-05-05
33143	MW-3	water	2004-05-04	12:30	2004-05-05
33144	MW-4	water	2004-05-04	12:55	2004-05-05
33145	MW-5	water	2004-05-04	13:10	2004-05-05
33146	MW-6	water	2004-05-04	12:10	2004-05-05
33147	MW-7	water	2004-05-04	13:45	2004-05-05
33148	MW-8	water	2004-05-04	14:10	2004-05-05
33155	Dup	water	2004-05-04	00:00	2004-05-05

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

Dr. Blair Leftwich, Director

Analytical Report

Sample: 33140 - WW-1

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	9583	Date Analyzed:	2004-05-12	Analyzed By:	RS
Prep Batch:	8500	Date Prepared:	2004-05-12	Prepared By:	RS

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

Sample: 33140 - WW-1

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	9557	Date Analyzed:	2004-05-11	Analyzed By:	MT
Prep Batch:	8479	Date Prepared:	2004-05-11	Prepared By:	MT

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0950	mg/L	1	0.100	95	78.4 - 118
4-Bromofluorobenzene (4-BFB)		0.0771	mg/L	1	0.100	77	53.1 - 149

Sample: 33140 - WW-1

Analysis:	Cations	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	9630	Date Analyzed:	2004-05-13	Analyzed By:	BC
Prep Batch:	8469	Date Prepared:	2004-05-11	Prepared By:	TP

Parameter	Flag	Result	RL	Units	Dilution	RL
Dissolved Calcium		1540		mg/L	1	0.500
Dissolved Potassium		47.0		mg/L	1	0.500
Dissolved Magnesium		450		mg/L	1	0.500
Dissolved Sodium		3470		mg/L	1	0.500

Sample: 33140 - WW-1

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	9456	Date Analyzed:	2004-05-07	Analyzed By:	JSW

[1] Sample had an initial pH of 4.2

Prep Batch: 8396 Date Prepared: 2004-05-06 Prepared By: JSW

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		12500		mg/L	1000	0.500
Fluoride		<8.00		mg/L	40	0.200
Sulfate		1880		mg/L	40	0.500

Sample: 33140 - WW-1

Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A
QC Batch: 9456 Date Analyzed: 2004-05-07 Analyzed By: JSW
Prep Batch: 8396 Date Prepared: 2004-05-06 Prepared By: JSW

Parameter	Flag	Result	RL	Units	Dilution	RL
Nitrate-N		<8.00		mg/L	40	0.200

Sample: 33140 - WW-1

Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A
QC Batch: 9463 Date Analyzed: 2004-05-07 Analyzed By: JSW
Prep Batch: 8402 Date Prepared: 2004-05-06 Prepared By: JSW

Parameter	Flag	Result	RL	Units	Dilution	RL
Total Dissolved Solids		23400		mg/L	50	10.00

Sample: 33141 - MW-1

Analysis: Alkalinity Analytical Method: SM 2320B Prep Method: N/A
QC Batch: 9583 Date Analyzed: 2004-05-12 Analyzed By: RS
Prep Batch: 8500 Date Prepared: 2004-05-12 Prepared By: RS

Parameter	Flag	Result	RL	Units	Dilution	RL
Hydroxide Alkalinity		<1.00		mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00		mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		438		mg/L as CaCo3	1	4.00
Total Alkalinity		438		mg/L as CaCo3	1	4.00

Sample: 33141 - MW-1

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5030B
QC Batch: 9557 Date Analyzed: 2004-05-11 Analyzed By: MT
Prep Batch: 8479 Date Prepared: 2004-05-11 Prepared By: MT

continued ...

sample 33141 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0986	mg/L	1	0.100	99	78.4 - 118
4-Bromofluorobenzene (4-BFB)		0.0798	mg/L	1	0.100	80	53.1 - 149

Sample: 33141 - MW-1

Analysis:	Cations	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	9630	Date Analyzed:	2004-05-13	Analyzed By:	BC
Prep Batch:	8469	Date Prepared:	2004-05-11	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		272	mg/L	1	0.500
Dissolved Potassium		49.1	mg/L	1	0.500
Dissolved Magnesium		115	mg/L	1	0.500
Dissolved Sodium		3030	mg/L	1	0.500

Sample: 33141 - MW-1

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	9456	Date Analyzed:	2004-05-07	Analyzed By:	JSW
Prep Batch:	8396	Date Prepared:	2004-05-06	Prepared By:	JSW

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		5280	mg/L	500	0.500
Fluoride		<4.00	mg/L	20	0.200
Sulfate		1620	mg/L	500	0.500

Sample: 33141 - MW-1

Analysis:	NO3 (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	9456	Date Analyzed:	2004-05-07	Analyzed By:	JSW
Prep Batch:	8396	Date Prepared:	2004-05-06	Prepared By:	JSW

continued ...

sample 33141 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL

Parameter	Flag	RL Result	Units	Dilution	RL
Nitrate-N		<4.00	mg/L	20	0.200

Sample: 33141 - MW-1

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	9568	Date Analyzed:	2004-05-12	Analyzed By:	JSW
Prep Batch:	8484	Date Prepared:	2004-05-11	Prepared By:	JSW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		11260	mg/L	20	10.00

Sample: 33142 - MW-2

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	9583	Date Analyzed:	2004-05-12	Analyzed By:	RS
Prep Batch:	8500	Date Prepared:	2004-05-12	Prepared By:	RS

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		530	mg/L as CaCo3	1	4.00
Total Alkalinity		530	mg/L as CaCo3	1	4.00

Sample: 33142 - MW-2

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	9557	Date Analyzed:	2004-05-11	Analyzed By:	MT
Prep Batch:	8479	Date Prepared:	2004-05-11	Prepared By:	MT

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.105	mg/L	1	0.100	105	78.4 - 118
4-Bromofluorobenzene (4-BFB)		0.0834	mg/L	1	0.100	83	53.1 - 149

Sample: 33142 - MW-2

Analysis:	Cations	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	9630	Date Analyzed:	2004-05-13	Analyzed By:	BC
Prep Batch:	8469	Date Prepared:	2004-05-11	Prepared By:	TP

Parameter	Flag	Result	RL	Units	Dilution	RL
Dissolved Calcium		326		mg/L	1	0.500
Dissolved Potassium		43.8		mg/L	1	0.500
Dissolved Magnesium		136		mg/L	1	0.500
Dissolved Sodium		3300		mg/L	1	0.500

Sample: 33142 - MW-2

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	9456	Date Analyzed:	2004-05-07	Analyzed By:	JSW
Prep Batch:	8396	Date Prepared:	2004-05-06	Prepared By:	JSW

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		6040		mg/L	500	0.500
Fluoride		<4.00		mg/L	20	0.200
Sulfate		1950		mg/L	500	0.500

Sample: 33142 - MW-2

Analysis:	NO3 (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	9456	Date Analyzed:	2004-05-07	Analyzed By:	JSW
Prep Batch:	8396	Date Prepared:	2004-05-06	Prepared By:	JSW

Parameter	Flag	Result	RL	Units	Dilution	RL
Nitrate-N		<4.00		mg/L	20	0.200

Sample: 33142 - MW-2

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	9568	Date Analyzed:	2004-05-12	Analyzed By:	JSW
Prep Batch:	8484	Date Prepared:	2004-05-11	Prepared By:	JSW

Parameter	Flag	Result	RL	Units	Dilution	RL
Total Dissolved Solids		12520		mg/L	20	10.00

Sample: 33143 - MW-3

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	9583	Date Analyzed:	2004-05-12	Analyzed By:	RS
Prep Batch:	8500	Date Prepared:	2004-05-12	Prepared By:	RS

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		478	mg/L as CaCo3	1	4.00
Total Alkalinity		478	mg/L as CaCo3	1	4.00

Sample: 33143 - MW-3

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	9557	Date Analyzed:	2004-05-11	Analyzed By:	MT
Prep Batch:	8479	Date Prepared:	2004-05-11	Prepared By:	MT

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0971	mg/L	1	0.100	97	78.4 - 118
4-Bromofluorobenzene (4-BFB)		0.0807	mg/L	1	0.100	81	53.1 - 149

Sample: 33143 - MW-3

Analysis:	Cations	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	9630	Date Analyzed:	2004-05-13	Analyzed By:	BC
Prep Batch:	8469	Date Prepared:	2004-05-11	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		808	mg/L	1	0.500
Dissolved Potassium		54.1	mg/L	1	0.500
Dissolved Magnesium		291	mg/L	1	0.500
Dissolved Sodium		5290	mg/L	1	0.500

Sample: 33143 - MW-3

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	9457	Date Analyzed:	2004-05-07	Analyzed By:	JSW
Prep Batch:	8397	Date Prepared:	2004-05-06	Prepared By:	JSW

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		11400	mg/L	1000	0.500
Fluoride		<8.00	mg/L	40	0.200
Sulfate		4750	mg/L	1000	0.500

Sample: 33143 - MW-3

Analysis:	NO3 (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	9457	Date Analyzed:	2004-05-07	Analyzed By:	JSW
Prep Batch:	8397	Date Prepared:	2004-05-06	Prepared By:	JSW

Parameter	Flag	RL Result	Units	Dilution	RL
Nitrate-N		<8.00	mg/L	40	0.200

Sample: 33143 - MW-3

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	9568	Date Analyzed:	2004-05-12	Analyzed By:	JSW
Prep Batch:	8484	Date Prepared:	2004-05-11	Prepared By:	JSW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		22500	mg/L	50	10.00

Sample: 33144 - MW-4

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	9583	Date Analyzed:	2004-05-12	Analyzed By:	RS
Prep Batch:	8500	Date Prepared:	2004-05-12	Prepared By:	RS

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		900	mg/L as CaCo3	1	4.00
Total Alkalinity		900	mg/L as CaCo3	1	4.00

Sample: 33144 - MW-4

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	9557	Date Analyzed:	2004-05-11	Analyzed By:	MT
Prep Batch:	8479	Date Prepared:	2004-05-11	Prepared By:	MT

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.106	mg/L	1	0.100	106	78.4 - 118
4-Bromofluorobenzene (4-BFB)		0.0900	mg/L	1	0.100	90	53.1 - 149

Sample: 33144 - MW-4

Analysis:	Cations	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	9630	Date Analyzed:	2004-05-13	Analyzed By:	BC
Prep Batch:	8469	Date Prepared:	2004-05-11	Prepared By:	TP

Parameter	Flag	Result	RL	Units	Dilution	RL
Dissolved Calcium		240		mg/L	1	0.500
Dissolved Potassium		25.8		mg/L	1	0.500
Dissolved Magnesium		191		mg/L	1	0.500
Dissolved Sodium		3660		mg/L	1	0.500

Sample: 33144 - MW-4

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	9457	Date Analyzed:	2004-05-07	Analyzed By:	JSW
Prep Batch:	8397	Date Prepared:	2004-05-06	Prepared By:	JSW

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		8740		mg/L	1000	0.500
Fluoride		<6.00		mg/L	30	0.200
Sulfate		3170		mg/L	1000	0.500

Sample: 33144 - MW-4

Analysis:	NO3 (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	9457	Date Analyzed:	2004-05-07	Analyzed By:	JSW
Prep Batch:	8397	Date Prepared:	2004-05-06	Prepared By:	JSW

Parameter	Flag	Result	RL	Units	Dilution	RL
Nitrate-N		<6.00		mg/L	30	0.200

Sample: 33144 - MW-4

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	9568	Date Analyzed:	2004-05-12	Analyzed By:	JSW
Prep Batch:	8484	Date Prepared:	2004-05-11	Prepared By:	JSW

Parameter	Flag	Result	RL	Units	Dilution	RL
Total Dissolved Solids		15800		mg/L	50	10.00

Sample: 33145 - MW-5

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	9583	Date Analyzed:	2004-05-12	Analyzed By:	RS
Prep Batch:	8500	Date Prepared:	2004-05-12	Prepared By:	RS

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		534	mg/L as CaCo3	1	4.00
Total Alkalinity		534	mg/L as CaCo3	1	4.00

Sample: 33145 - MW-5

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	9557	Date Analyzed:	2004-05-11	Analyzed By:	MT
Prep Batch:	8479	Date Prepared:	2004-05-11	Prepared By:	MT

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0972	mg/L	1	0.100	97	78.4 - 118
4-Bromofluorobenzene (4-BFB)		0.0827	mg/L	1	0.100	83	53.1 - 149

Sample: 33145 - MW-5

Analysis:	Cations	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	9630	Date Analyzed:	2004-05-13	Analyzed By:	BC
Prep Batch:	8469	Date Prepared:	2004-05-11	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		365	mg/L	1	0.500
Dissolved Potassium		47.8	mg/L	1	0.500
Dissolved Magnesium		152	mg/L	1	0.500
Dissolved Sodium		3850	mg/L	1	0.500

Sample: 33145 - MW-5

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	9457	Date Analyzed:	2004-05-07	Analyzed By:	JSW
Prep Batch:	8397	Date Prepared:	2004-05-06	Prepared By:	JSW

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		6630	mg/L	500	0.500
Fluoride		<4.00	mg/L	20	0.200
Sulfate		2310	mg/L	500	0.500

Sample: 33145 - MW-5

Analysis:	NO3 (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	9457	Date Analyzed:	2004-05-07	Analyzed By:	JSW
Prep Batch:	8397	Date Prepared:	2004-05-06	Prepared By:	JSW

Parameter	Flag	RL Result	Units	Dilution	RL
Nitrate-N		<4.00	mg/L	20	0.200

Sample: 33145 - MW-5

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	9568	Date Analyzed:	2004-05-12	Analyzed By:	JSW
Prep Batch:	8484	Date Prepared:	2004-05-11	Prepared By:	JSW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		16800	mg/L	50	10.00

Sample: 33146 - MW-6

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	9583	Date Analyzed:	2004-05-12	Analyzed By:	RS
Prep Batch:	8500	Date Prepared:	2004-05-12	Prepared By:	RS

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		466	mg/L as CaCo3	1	4.00
Total Alkalinity		466	mg/L as CaCo3	1	4.00

Sample: 33146 - MW-6

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	9557	Date Analyzed:	2004-05-11	Analyzed By:	MT
Prep Batch:	8479	Date Prepared:	2004-05-11	Prepared By:	MT

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.100	mg/L	1	0.100	100	78.4 - 118
4-Bromofluorobenzene (4-BFB)		0.0853	mg/L	1	0.100	85	53.1 - 149

Sample: 33146 - MW-6

Analysis:	Cations	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	9630	Date Analyzed:	2004-05-13	Analyzed By:	BC
Prep Batch:	8469	Date Prepared:	2004-05-11	Prepared By:	TP

Parameter	Flag	Result	RL	Units	Dilution	RL
Dissolved Calcium		869		mg/L	1	0.500
Dissolved Potassium		49.0		mg/L	1	0.500
Dissolved Magnesium		350		mg/L	1	0.500
Dissolved Sodium		5590		mg/L	1	0.500

Sample: 33146 - MW-6

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	9457	Date Analyzed:	2004-05-07	Analyzed By:	JSW
Prep Batch:	8397	Date Prepared:	2004-05-06	Prepared By:	JSW

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		11400		mg/L	1000	0.500
Fluoride		<8.00		mg/L	40	0.200
Sulfate		4310		mg/L	1000	0.500

Sample: 33146 - MW-6

Analysis:	NO3 (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	9457	Date Analyzed:	2004-05-07	Analyzed By:	JSW
Prep Batch:	8397	Date Prepared:	2004-05-06	Prepared By:	JSW

Parameter	Flag	Result	RL	Units	Dilution	RL
Nitrate-N		<8.00		mg/L	40	0.200

Sample: 33146 - MW-6

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	9568	Date Analyzed:	2004-05-12	Analyzed By:	JSW
Prep Batch:	8484	Date Prepared:	2004-05-11	Prepared By:	JSW

Parameter	Flag	Result	RL	Units	Dilution	RL
Total Dissolved Solids		23850		mg/L	50	10.00

Sample: 33147 - MW-7

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	9583	Date Analyzed:	2004-05-12	Analyzed By:	RS
Prep Batch:	8500	Date Prepared:	2004-05-12	Prepared By:	RS

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		418	mg/L as CaCo3	1	4.00
Total Alkalinity		418	mg/L as CaCo3	1	4.00

Sample: 33147 - MW-7

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	9557	Date Analyzed:	2004-05-11	Analyzed By:	MT
Prep Batch:	8479	Date Prepared:	2004-05-11	Prepared By:	MT

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.104	mg/L	1	0.100	104	78.4 - 118
4-Bromofluorobenzene (4-BFB)		0.0803	mg/L	1	0.100	80	53.1 - 149

Sample: 33147 - MW-7

Analysis:	Cations	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	9630	Date Analyzed:	2004-05-13	Analyzed By:	BC
Prep Batch:	8469	Date Prepared:	2004-05-11	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		527	mg/L	1	0.500
Dissolved Potassium		47.1	mg/L	1	0.500
Dissolved Magnesium		188	mg/L	1	0.500
Dissolved Sodium		3460	mg/L	1	0.500

Sample: 33147 - MW-7

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	9457	Date Analyzed:	2004-05-07	Analyzed By:	JSW
Prep Batch:	8397	Date Prepared:	2004-05-06	Prepared By:	JSW

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		6610	mg/L	500	0.500
Fluoride		<4.00	mg/L	20	0.200
Sulfate		1930	mg/L	500	0.500

Sample: 33147 - MW-7

Analysis:	NO3 (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	9457	Date Analyzed:	2004-05-07	Analyzed By:	JSW
Prep Batch:	8397	Date Prepared:	2004-05-06	Prepared By:	JSW

Parameter	Flag	RL Result	Units	Dilution	RL
Nitrate-N		<4.00	mg/L	20	0.200

Sample: 33147 - MW-7

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	9568	Date Analyzed:	2004-05-12	Analyzed By:	JSW
Prep Batch:	8484	Date Prepared:	2004-05-11	Prepared By:	JSW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		16600	mg/L	50	10.00

Sample: 33148 - MW-8

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	9583	Date Analyzed:	2004-05-12	Analyzed By:	RS
Prep Batch:	8500	Date Prepared:	2004-05-12	Prepared By:	RS

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		380	mg/L as CaCo3	1	4.00
Total Alkalinity		380	mg/L as CaCo3	1	4.00

Sample: 33148 - MW-8

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	9593	Date Analyzed:	2004-05-12	Analyzed By:	MT
Prep Batch:	8507	Date Prepared:	2004-05-12	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00500	mg/L	5	0.00100
Toluene		<0.00500	mg/L	5	0.00100
Ethylbenzene		<0.00500	mg/L	5	0.00100
Xylene		<0.00500	mg/L	5	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.459	mg/L	5	0.100	92	79.7 - 119
4-Bromofluorobenzene (4-BFB)		0.374	mg/L	5	0.100	75	65.6 - 141

Sample: 33148 - MW-8

Analysis:	Cations	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	9630	Date Analyzed:	2004-05-13	Analyzed By:	BC
Prep Batch:	8469	Date Prepared:	2004-05-11	Prepared By:	TP

Parameter	Flag	Result	RL	Units	Dilution	RL
Dissolved Calcium		912		mg/L	1	0.500
Dissolved Potassium		60.1		mg/L	1	0.500
Dissolved Magnesium		321		mg/L	1	0.500
Dissolved Sodium		2970		mg/L	1	0.500

Sample: 33148 - MW-8

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	9458	Date Analyzed:	2004-05-07	Analyzed By:	JSW
Prep Batch:	8398	Date Prepared:	2004-05-06	Prepared By:	JSW

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		7960		mg/L	1000	0.500
Fluoride		<6.00		mg/L	30	0.200
Sulfate		1370		mg/L	1000	0.500

Sample: 33148 - MW-8

Analysis:	NO3 (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	9458	Date Analyzed:	2004-05-07	Analyzed By:	JSW
Prep Batch:	8398	Date Prepared:	2004-05-06	Prepared By:	JSW

Parameter	Flag	Result	RL	Units	Dilution	RL
Nitrate-N		<6.00		mg/L	30	0.200

Sample: 33148 - MW-8

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	9568	Date Analyzed:	2004-05-12	Analyzed By:	JSW
Prep Batch:	8484	Date Prepared:	2004-05-11	Prepared By:	JSW

Parameter	Flag	Result	RL	Units	Dilution	RL
Total Dissolved Solids		12750		mg/L	50	10.00

Sample: 33155 - Dup

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	9583	Date Analyzed:	2004-05-12	Analyzed By:	RS
Prep Batch:	8500	Date Prepared:	2004-05-12	Prepared By:	RS

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		408	mg/L as CaCo3	1	4.00
Total Alkalinity		408	mg/L as CaCo3	1	4.00

Sample: 33155 - Dup

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	9636	Date Analyzed:	2004-05-13	Analyzed By:	MT
Prep Batch:	8549	Date Prepared:	2004-05-13	Prepared By:	MT

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00500	mg/L	5	0.00100
Toluene		<0.00500	mg/L	5	0.00100
Ethylbenzene		<0.00500	mg/L	5	0.00100
Xylene		<0.00500	mg/L	5	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	[2]	0.975	mg/L	5	0.200	98	79.7 - 119
4-Bromofluorobenzene (4-BFB)	[3]	0.841	mg/L	5	0.200	84	65.6 - 141

Sample: 33155 - Dup

Analysis:	Cations	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	9554	Date Analyzed:	2004-05-11	Analyzed By:	BC
Prep Batch:	8435	Date Prepared:	2004-05-10	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		957	mg/L	1	0.500
Dissolved Potassium		57.7	mg/L	1	0.500
Dissolved Magnesium		310	mg/L	1	0.500
Dissolved Sodium		3090	mg/L	1	0.500

Sample: 33155 - Dup

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	9458	Date Analyzed:	2004-05-07	Analyzed By:	JSW
Prep Batch:	8398	Date Prepared:	2004-05-06	Prepared By:	JSW

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		8980	mg/L	1000	0.500
Fluoride		<6.00	mg/L	30	0.200

continued ...

[2]Changed spike amount from 0.1 to 0.2 due to prep. Sample spiked with a double amount of surrogate.
[3]Changed spike amount from 0.1 to 0.2 due to prep. Sample spiked with a double amount of surrogate.

sample 33155 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL
Sulfate		1430	mg/L	30	0.500

Sample: 33155 - Dup

Analysis:	NO3 (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	9458	Date Analyzed:	2004-05-07	Analyzed By:	JSW
Prep Batch:	8398	Date Prepared:	2004-05-06	Prepared By:	JSW

Parameter	Flag	RL Result	Units	Dilution	RL
Nitrate-N		<6.00	mg/L	30	0.200

Sample: 33155 - Dup

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	9570	Date Analyzed:	2004-05-13	Analyzed By:	JSW
Prep Batch:	8486	Date Prepared:	2004-05-12	Prepared By:	JSW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		12700	mg/L	20	10.00

Method Blank (1) QC Batch: 9456

Parameter	Flag	Result	Units	RL
Nitrate-N		<0.200	mg/L	0.2

Method Blank (1) QC Batch: 9456

Parameter	Flag	Result	Units	RL
Chloride		<0.500	mg/L	0.5
Fluoride		<0.200	mg/L	0.2
Sulfate		<0.500	mg/L	0.5

Method Blank (1) QC Batch: 9457

continued ...

method blank continued ...

Parameter	Flag	Result	Units	RL

Parameter	Flag	Result	Units	RL
Nitrate-N		<0.200	mg/L	0.2

Method Blank (1) QC Batch: 9457

Parameter	Flag	Result	Units	RL
Chloride		<0.500	mg/L	0.5
Fluoride		<0.200	mg/L	0.2
Sulfate		<0.500	mg/L	0.5

Method Blank (1) QC Batch: 9458

Parameter	Flag	Result	Units	RL
Nitrate-N		<0.200	mg/L	0.2

Method Blank (1) QC Batch: 9458

Parameter	Flag	Result	Units	RL
Chloride		<0.500	mg/L	0.5
Fluoride		<0.200	mg/L	0.2
Sulfate		<0.500	mg/L	0.5

Method Blank (1) QC Batch: 9463

Parameter	Flag	Result	Units	RL
Total Dissolved Solids		<10.00	mg/L	10

Method Blank (1) QC Batch: 9554

Parameter	Flag	Result	Units	RL
Dissolved Calcium		<0.500	mg/L	0.5
Dissolved Potassium		<0.500	mg/L	0.5
Dissolved Magnesium		<0.500	mg/L	0.5

continued ...

method blank continued ...

Parameter	Flag	Result	Units	RL
Dissolved Sodium		<0.500	mg/L	0.5

Method Blank (1) QC Batch: 9557

Parameter	Flag	Result	Units	RL
Benzene		<0.00100	mg/L	0.001
Toluene		<0.00100	mg/L	0.001
Ethylbenzene		<0.00100	mg/L	0.001
Xylene		<0.00100	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.112	mg/L	1	0.100	112	79.3 - 117
4-Bromofluorobenzene (4-BFB)		0.0843	mg/L	1	0.100	84	43.7 - 132

Method Blank (1) QC Batch: 9568

Parameter	Flag	Result	Units	RL
Total Dissolved Solids		<10.00	mg/L	10

Method Blank (1) QC Batch: 9570

Parameter	Flag	Result	Units	RL
Total Dissolved Solids		<10.00	mg/L	10

Method Blank (1) QC Batch: 9583

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

Method Blank (1) QC Batch: 9593

Parameter	Flag	Result	Units	RL
Benzene		<0.00100	mg/L	0.001
Toluene		<0.00100	mg/L	0.001

continued ...

method blank continued ...

Parameter	Flag	Result	Units	RL
Ethylbenzene		<0.00100	mg/L	0.001
Xylene		<0.00100	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0946	mg/L	1	0.100	95	76.2 - 119
4-Bromofluorobenzene (4-BFB)		0.0776	mg/L	1	0.100	78	58.5 - 136

Method Blank (1) QC Batch: 9630

Parameter	Flag	Result	Units	RL
Dissolved Calcium		<0.500	mg/L	0.5
Dissolved Potassium		<0.500	mg/L	0.5
Dissolved Magnesium		<0.500	mg/L	0.5
Dissolved Sodium		<0.500	mg/L	0.5

Method Blank (1) QC Batch: 9636

Parameter	Flag	Result	Units	RL
Benzene		<0.00100	mg/L	0.001
Toluene		<0.00100	mg/L	0.001
Ethylbenzene		<0.00100	mg/L	0.001
Xylene		<0.00100	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.103	mg/L	1	0.100	103	76.2 - 119
4-Bromofluorobenzene (4-BFB)		0.0819	mg/L	1	0.100	82	58.5 - 136

Duplicate (1) QC Batch: 9463

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids	32350	33250	mg/L	50	3	8.7

Duplicate (1) QC Batch: 9568

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids	940.0	970.0	mg/L	2	3	8.7

Duplicate (1) QC Batch: 9570

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids	1010	1040	mg/L	2	3	8.7

Duplicate (1) QC Batch: 9583

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Hydroxide Alkalinity	<1.00	<1.00	mg/L as CaCo3	1	0	20
Carbonate Alkalinity	<1.00	<1.00	mg/L as CaCo3	1	0	20
Bicarbonate Alkalinity	420	418	mg/L as CaCo3	1	0	20
Total Alkalinity	420	418	mg/L as CaCo3	1	0	4.8

Laboratory Control Spike (LCS-1) QC Batch: 9456

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Nitrate-N	2.37	2.34	mg/L	1	2.50	<0.0217	95	1	90 - 110	20

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

Laboratory Control Spike (LCS-1) QC Batch: 9456

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Chloride	11.6	11.4	mg/L	1	12.5	<0.337	93	2	90 - 110	20
Fluoride	2.30	2.30	mg/L	1	2.50	<0.0594	92	0	90 - 110	20
Sulfate	11.9	11.7	mg/L	1	12.5	<0.409	95	2	90 - 110	20

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

Laboratory Control Spike (LCS-1) QC Batch: 9457

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Nitrate-N	2.34	2.35	mg/L	1	2.50	<0.0217	94	0	90 - 110	20

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

Laboratory Control Spike (LCS-1) QC Batch: 9457

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Chloride	11.2	11.3	mg/L	1	12.5	<0.337	90	1	90 - 110	20
Fluoride	2.27	2.29	mg/L	1	2.50	<0.0594	91	1	90 - 110	20
Sulfate	11.5	11.6	mg/L	1	12.5	<0.409	92	1	90 - 110	20

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

Laboratory Control Spike (LCS-1) QC Batch: 9458

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Nitrate-N	2.34	2.35	mg/L	1	2.50	<0.0217	94	0	90 - 110	20

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

Laboratory Control Spike (LCS-1) QC Batch: 9458

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Chloride	11.3	11.3	mg/L	1	12.5	<0.337	90	0	90 - 110	20
Fluoride	2.29	2.29	mg/L	1	2.50	<0.0594	92	0	90 - 110	20
Sulfate	11.6	11.6	mg/L	1	12.5	<0.409	93	0	90 - 110	20

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

Laboratory Control Spike (LCS-1) QC Batch: 9554

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Calcium	99.6	98.1	mg/L	1	100	<0.102	100	2	85 - 115	20
Dissolved Potassium	98.8	98.7	mg/L	1	100	<0.101	99	0	85 - 115	20
Dissolved Magnesium	101	99.0	mg/L	1	100	<0.110	101	2	85 - 115	20
Dissolved Sodium	104	101	mg/L	1	100	<0.120	104	3	85 - 115	20

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

Laboratory Control Spike (LCS-1) QC Batch: 9557

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Benzene	0.100	0.102	mg/L	1	0.100	<0.000136	100	2	86.2 - 113	20
Toluene	0.0995	0.103	mg/L	1	0.100	<0.000247	100	3	85 - 114	20
Ethylbenzene	0.0994	0.101	mg/L	1	0.100	<0.000550	99	2	83.6 - 116	20
Xylene	0.301	0.306	mg/L	1	0.300	<0.00156	100	2	82 - 115	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.103	0.103	mg/L	1	0.100	103	103	78.4 - 118
4-Bromofluorobenzene (4-BFB)	0.102	0.101	mg/L	1	0.100	102	101	53.1 - 149

Laboratory Control Spike (LCS-1) QC Batch: 9593

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Benzene	0.0967	0.0985	mg/L	1	0.100	<0.000338	97	2	84.6 - 117	20
Toluene	0.0944	0.0951	mg/L	1	0.100	<0.000299	94	1	80.9 - 115	20
Ethylbenzene	0.0905	0.0920	mg/L	1	0.100	<0.000469	90	2	77.6 - 119	20
Xylene	0.270	0.273	mg/L	1	0.300	<0.000787	90	1	76.2 - 122	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0926	0.0953	mg/L	1	0.100	93	95	79.7 - 119
4-Bromofluorobenzene (4-BFB)	0.0825	0.0849	mg/L	1	0.100	82	85	65.6 - 141

Laboratory Control Spike (LCS-1) QC Batch: 9630

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Calcium	94.5	94.8	mg/L	1	100	<0.102	94	0	85 - 115	20
Dissolved Potassium	98.8	99.0	mg/L	1	100	<0.101	99	0	85 - 115	20
Dissolved Magnesium	96.5	99.0	mg/L	1	100	<0.110	96	2	85 - 115	20
Dissolved Sodium	96.1	95.9	mg/L	1	100	<0.120	96	0	85 - 115	20

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

Laboratory Control Spike (LCS-1) QC Batch: 9636

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Benzene	0.101	0.0984	mg/L	1	0.100	<0.000338	101	3	84.6 - 117	20
Toluene	0.0970	0.0944	mg/L	1	0.100	<0.000299	97	3	80.9 - 115	20
Ethylbenzene	0.0924	0.0899	mg/L	1	0.100	<0.000469	92	3	77.6 - 119	20
Xylene	0.276	0.268	mg/L	1	0.300	<0.000787	92	3	76.2 - 122	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0950	0.0961	mg/L	1	0.100	95	96	79.7 - 119
4-Bromofluorobenzene (4-BFB)	0.0830	0.0833	mg/L	1	0.100	83	83	65.6 - 141

Matrix Spike (MS-1) QC Batch: 9456

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Nitrate-N	124	124	mg/L	50	2.50	10.4	91	0	79.6 - 109	20

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

Matrix Spike (MS-1) QC Batch: 9456

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Chloride	1200	1200	mg/L	50	12.5	654	87	0	74.3 - 118	20
Fluoride	118	116	mg/L	50	2.50	5.9	90	2	84.9 - 104	20
Sulfate	721	722	mg/L	50	12.5	149	92	0	77.8 - 112	20

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

Matrix Spike (MS-1) QC Batch: 9457

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Nitrate-N	2420	2450	mg/L	1000	2.50	<21.7	97	1	79.6 - 109	20

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

Matrix Spike (MS-1) QC Batch: 9457

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Chloride	22200	22100	mg/L	1000	12.5	11400	86	0	74.3 - 118	20
Fluoride	2250	2290	mg/L	1000	2.50	<59.4	90	2	84.9 - 104	20
Sulfate	15600	15600	mg/L	1000	12.5	4310	90	0	77.8 - 112	20

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

Matrix Spike (MS-1) QC Batch: 9458

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Nitrate-N	125	125	mg/L	50	2.50	10	92	0	79.6 - 109	20

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

Matrix Spike (MS-1) QC Batch: 9458

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Chloride	1330	1330	mg/L	50	12.5	780	88	0	74.3 - 118	20
Fluoride	117	118	mg/L	50	2.50	6.12	89	1	84.9 - 104	20
Sulfate	717	722	mg/L	50	12.5	145	92	1	77.8 - 112	20

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

Matrix Spike (MS-1) QC Batch: 9554

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Calcium		227	217	mg/L	1	100	137	90	4	75 - 125	20
Dissolved Potassium		116	111	mg/L	1	100	26.1	90	4	75 - 125	20
Dissolved Magnesium		242	242	mg/L	1	100	149	93	0	75 - 125	20
Dissolved Sodium	[4,5]	215	217	mg/L	1	100	155	60	1	75 - 125	20

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

Matrix Spike (MS-1) QC Batch: 9630

continued ...

[4]ms recovery out of limits due to matrix effect, use lcs/lcsd
[5]ms recovery out of limits due to matrix effect, use lcs/lcsd

matrix spikes continued ...

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Calcium [67]	1530	1680	mg/L	1	100	1540	10	9	75 - 125	20
Dissolved Potassium	134	146	mg/L	1	100	47	87	8	75 - 125	20
Dissolved Magnesium [8]	514	566	mg/L	1	100	450	64	10	75 - 125	20
Dissolved Sodium [910]	3440	3710	mg/L	1	100	3470	30	8	75 - 125	20

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

Standard (ICV-1) QC Batch: 9456

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		mg/L	2.50	2.35	94	90 - 110	2004-05-07

Standard (ICV-1) QC Batch: 9456

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.5	11.6	93	90 - 110	2004-05-07
Fluoride		mg/L	2.50	2.39	96	90 - 110	2004-05-07
Sulfate		mg/L	12.5	11.9	95	90 - 110	2004-05-07

Standard (CCV-1) QC Batch: 9456

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		mg/L	2.50	2.36	94	90 - 110	2004-05-07

Standard (CCV-1) QC Batch: 9456

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.5	11.3	90	90 - 110	2004-05-07
Fluoride		mg/L	2.50	2.31	92	90 - 110	2004-05-07
Sulfate		mg/L	12.5	11.6	93	90 - 110	2004-05-07

Standard (ICV-1) QC Batch: 9457

[6]ms recovery out of limits due to matrix effect, use lcs/lcsd
[7]ms recovery out of limits due to matrix effect, use lcs/lcsd
[8]ms recovery out of limits due to matrix effect, use lcs/lcsd
[9]ms recovery out of limits due to matrix effect, use lcs/lcsd
[10]ms recovery out of limits due to matrix effect, use lcs/lcsd

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		mg/L	2.50	2.36	94	90 - 110	2004-05-07

Standard (ICV-1) QC Batch: 9457

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.5	11.3	90	90 - 110	2004-05-07
Fluoride		mg/L	2.50	2.31	92	90 - 110	2004-05-07
Sulfate		mg/L	12.5	11.6	93	90 - 110	2004-05-07

Standard (CCV-1) QC Batch: 9457

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		mg/L	2.50	2.36	94	90 - 110	2004-05-07

Standard (CCV-1) QC Batch: 9457

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.5	11.2	90	90 - 110	2004-05-07
Fluoride		mg/L	2.50	2.30	92	90 - 110	2004-05-07
Sulfate		mg/L	12.5	11.5	92	90 - 110	2004-05-07

Standard (ICV-1) QC Batch: 9458

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		mg/L	2.50	2.36	94	90 - 110	2004-05-07

Standard (ICV-1) QC Batch: 9458

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.5	11.2	90	90 - 110	2004-05-07
Fluoride		mg/L	2.50	2.30	92	90 - 110	2004-05-07
Sulfate		mg/L	12.5	11.5	92	90 - 110	2004-05-07

Standard (CCV-1) QC Batch: 9458

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		mg/L	2.50	2.35	94	90 - 110	2004-05-07

Standard (CCV-1) QC Batch: 9458

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.5	11.3	90	90 - 110	2004-05-07
Fluoride		mg/L	2.50	2.30	92	90 - 110	2004-05-07
Sulfate		mg/L	12.5	11.6	93	90 - 110	2004-05-07

Standard (ICV-1) QC Batch: 9463

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	997.0	100	90 - 110	2004-05-07

Standard (CCV-1) QC Batch: 9463

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	1039	104	90 - 110	2004-05-07

Standard (ICV-1) QC Batch: 9554

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	25.0	25.1	100	90 - 110	2004-05-11
Dissolved Potassium		mg/L	25.0	24.9	100	90 - 110	2004-05-11
Dissolved Magnesium		mg/L	25.0	24.8	99	90 - 110	2004-05-11
Dissolved Sodium		mg/L	25.0	26.7	107	90 - 110	2004-05-11

Standard (CCV-1) QC Batch: 9554

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	25.0	25.2	101	90 - 110	2004-05-11
Dissolved Potassium		mg/L	25.0	24.3	97	90 - 110	2004-05-11
Dissolved Magnesium		mg/L	25.0	25.2	101	90 - 110	2004-05-11
Dissolved Sodium		mg/L	25.0	25.1	100	90 - 110	2004-05-11

Standard (ICV-1) QC Batch: 9557

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.0970	97	85 - 115	2004-05-11
Toluene		mg/L	0.100	0.0965	96	85 - 115	2004-05-11
Ethylbenzene		mg/L	0.100	0.0969	97	85 - 115	2004-05-11
Xylene		mg/L	0.300	0.294	98	85 - 115	2004-05-11

Standard (CCV-1) QC Batch: 9557

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.0954	95	85 - 115	2004-05-11
Toluene		mg/L	0.100	0.0961	96	85 - 115	2004-05-11
Ethylbenzene		mg/L	0.100	0.0974	97	85 - 115	2004-05-11
Xylene		mg/L	0.300	0.296	99	85 - 115	2004-05-11

Standard (CCV-2) QC Batch: 9557

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.0979	98	85 - 115	2004-05-11
Toluene		mg/L	0.100	0.0990	99	85 - 115	2004-05-11
Ethylbenzene		mg/L	0.100	0.0970	97	85 - 115	2004-05-11
Xylene		mg/L	0.300	0.297	99	85 - 115	2004-05-11

Standard (ICV-1) QC Batch: 9568

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	987.0	99	90 - 110	2004-05-12

Standard (CCV-1) QC Batch: 9568

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	1002	100	90 - 110	2004-05-12

Standard (ICV-1) QC Batch: 9570

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	1002	100	90 - 110	2004-05-13

Standard (CCV-1) QC Batch: 9570

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	993.0	99	90 - 110	2004-05-13

Standard (ICV-1) QC Batch: 9583

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hydroxide Alkalinity		mg/L as CaCo3	0.00	<1.00		0 - 200	2004-05-12
Carbonate Alkalinity		mg/L as CaCo3	0.00	<1.00		0 - 200	2004-05-12
Bicarbonate Alkalinity		mg/L as CaCo3	0.00	<4.00		0 - 200	2004-05-12
Total Alkalinity		mg/L as CaCo3	250	244	98	90 - 110	2004-05-12

Standard (CCV-1) QC Batch: 9583

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hydroxide Alkalinity		mg/L as CaCo3	0.00	<1.00		0 - 200	2004-05-12
Carbonate Alkalinity		mg/L as CaCo3	0.00	<1.00		0 - 200	2004-05-12
Bicarbonate Alkalinity		mg/L as CaCo3	0.00	<4.00		0 - 200	2004-05-12
Total Alkalinity		mg/L as CaCo3	250	242	97	90 - 110	2004-05-12

Standard (ICV-1) QC Batch: 9593

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.0998	100	85 - 115	2004-05-12
Toluene		mg/L	0.100	0.0974	97	85 - 115	2004-05-12
Ethylbenzene		mg/L	0.100	0.0949	95	85 - 115	2004-05-12
Xylene		mg/L	0.300	0.282	94	85 - 115	2004-05-12

Standard (CCV-1) QC Batch: 9593

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.0970	97	85 - 115	2004-05-12
Toluene		mg/L	0.100	0.100	100	85 - 115	2004-05-12
Ethylbenzene		mg/L	0.100	0.0919	92	85 - 115	2004-05-12
Xylene		mg/L	0.300	0.276	92	85 - 115	2004-05-12

Standard (ICV-1) QC Batch: 9630

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	25.0	24.5	98	90 - 110	2004-05-13

continued ...

standard continued ...

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Potassium		mg/L	25.0	26.1	104	90 - 110	2004-05-13
Dissolved Magnesium		mg/L	25.0	24.8	99	90 - 110	2004-05-13
Dissolved Sodium		mg/L	25.0	25.1	100	90 - 110	2004-05-13

Standard (CCV-1) QC Batch: 9630

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	25.0	24.6	98	90 - 110	2004-05-13
Dissolved Potassium		mg/L	25.0	25.7	103	90 - 110	2004-05-13
Dissolved Magnesium		mg/L	25.0	25.3	101	90 - 110	2004-05-13
Dissolved Sodium		mg/L	25.0	24.1	96	90 - 110	2004-05-13

Standard (ICV-1) QC Batch: 9636

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.103	103	85 - 115	2004-05-13
Toluene		mg/L	0.100	0.0981	98	85 - 115	2004-05-13
Ethylbenzene		mg/L	0.100	0.0947	95	85 - 115	2004-05-13
Xylene		mg/L	0.300	0.282	94	85 - 115	2004-05-13

Standard (CCV-1) QC Batch: 9636

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.0911	91	85 - 115	2004-05-13
Toluene		mg/L	0.100	0.0878	88	85 - 115	2004-05-13
Ethylbenzene	[11]	mg/L	0.100	0.0827	83	85 - 115	2004-05-13
Xylene	[12]	mg/L	0.300	0.247	82	85 - 115	2004-05-13

[11] Ethylbenzene outside normal limits in ICV/CCV. Average of ICV/CCV components within acceptable range.
[12] Xylene outside normal limits in ICV/CCV. Average of ICV/CCV components within acceptable range.

4050605

CHAIN—OF—CUSTODY RECORD

CLIENT NAME: Chevlx
SITE MANAGER: Cindy Cl...
PROJECT NO.: 0-0104
PROJECT NAME: JR Phillips
PAGE 1 OF 1
LAB. PO #

PARAMETERS/METHOD NUMBER: BTEX; Cations, Anions, TDS

DATE	TIME	WATER	SOIL	OTHER	SAMPLE IDENTIFICATION		NUMBER OF CONTAINERS	LAB. I.D. NUMBER (LAB USE ONLY)	REMARKS (I.E., FILTERED, UNFILTERED, PRESERVED, UNPRESERVED, GRAB COMPOSITE)
5/4	1145	✓			MW-1	33140	3		
	1338	✓			mw-1	141			
	1429	✓			mw-2	142			
	1230	✓			mw-3	143			
	1255	✓			mw-4	144			
	1310	✓			mw-5	145			
	1210	✓			mw-6	146			
	1345	✓			mw-7	147			
	1410	✓			mw-8	148			
					DUP	33155			

SAMPLED BY: (Signature) — DATE: 5/4/04 TIME: 1500
RELINQUISHED BY: (Signature) — DATE: 5/5/04 TIME: 0701
RECEIVED BY: (Signature) — DATE: 05/05/04 TIME: 0701

RELINQUISHED BY: (Signature) — DATE: 5/05/04 TIME: 1730
RECEIVED BY: (Signature) — DATE: 5-4-04 TIME: 10:00

SAMPLE SHIPPED BY: (Circle)
FEDEX BUS AIRBILL #:
HAND DELIVERED UPS OTHER: LONE STAR

COMMENTS: * Hold BTEX until notified *

TURNAROUND TIME NEEDED: Standard

RECEIVING LABORATORY: TRACE ANALYSIS RECEIVED BY: (Signature)
ADDRESS:
CONTACT: STATE: ZIP: PHONE: DATE: TIME:

WHITE – RECEIVING LAB
YELLOW – RECEIVING LAB (TO BE RETURNED TO LA AFTER RECEIPT)
PINK – PROJECT MANAGER
GOLD – QA/QC COORDINATOR

SAMPLE CONDITION WHEN RECEIVED:
LA CONTACT PERSON:
SAMPLE TYPE:

Lone Star P924218 4° 27 samples - ITS MT

Larson & Associates, Inc. Environmental Consultants
507 N. Marienfeld, Ste. 202 • Midland, TX 79701
Fax: 432-687-0456
432-687-0901

1- 432-550-8650

4050605

CHAIN—OF—CUSTODY RECORD

Larson & Associates, Inc.
Environmental Consultants
507 N. Marienfeld, Ste. 202 • Midland, TX 79701
Fax: 432-687-0456
432-687-0901

CLIENT NAME: Chevron

SITE MANAGER: Cindy Crowe

PROJECT NO.: 0-0104

PROJECT NAME: JR Phillips

PAGE 1 OF 1

LAB. PO #

PARAMETERS/METHOD NUMBER: BTEX; Cations, Anions, TDS (Ca, K, Mg, Na, Fl, Cl, NO3, SO4, Alk); TDS, Alk

DATE	TIME	WATER	SOIL	OTHER	SAMPLE IDENTIFICATION		NUMBER OF CONTAINERS	BTEX	Cations, Anions, TDS	TDS, Alk	LAB. I.D. NUMBER (LAB USE ONLY)	REMARKS (I.E., FILTERED, UNFILTERED, PRESERVED, UNPRESERVED, GRAB COMPOSITE)
5/4	1145	✓			WW-1	33140	3	•	•	•		✓
	~~1445~~ 1445	✓			MW-1	141		•	•	•		
	1427	✓			MW-2	142		•	•	•		Run BTEX per Mark 5-7
	1230	✓			MW-3	143		•	•	•		
	1255	✓			MW-4	144		•	•	•		
	1310	✓			MW-5	145		•	•	•		
	1210	✓			MW-6	146		•	•	•		
	~~1345~~ 1345	✓			MW-7	147		•	•	•		
	1410	✓			MW-8	148		•	•	•		
		✓			Dup	33155	1	•	•	•		

SAMPLED BY: (Signature) — DATE: 5/4/04 TIME: 1500

RELINQUISHED BY: (Signature) — DATE: 5/5/04 TIME: 0701

RECEIVED BY: (Signature) Helen Shelton — DATE: 05/05/04 TIME: 0701

RELINQUISHED BY: (Signature) Helen Shelton — DATE: 5/05/04 TIME: 1730

RECEIVED BY: (Signature) — DATE: 5-6-04 TIME: 10:00

SAMPLE SHIPPED BY: (Circle)
FEDEX BUS AIRBILL #:
HAND DELIVERED UPS OTHER: LONE STAR

COMMENTS: * Hold BTEX until notified *

TURNAROUND TIME NEEDED: Standard

RECEIVING LABORATORY: TRACE ANALYSIS

ADDRESS:

CITY: STATE: ZIP:

CONTACT: PHONE:

RECEIVED BY: (Signature)

DATE: TIME:

WHITE – RECEIVING LAB
YELLOW – RECEIVING LAB (TO BE RETURNED TO LA AFTER RECEIPT)
PINK – PROJECT MANAGER
GOLD – QA/QC COORDINATOR

SAMPLE CONDITION WHEN RECEIVED:

LA CONTACT PERSON:

SAMPLE TYPE:

Lone Star P924218 4° 27 samples - HS MT 5/7/04

TRACEANALYSIS, INC.

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

Analytical and Quality Control Report

Cindy Crain
Larson and Associates, Inc.
P. O. Box 50685
Midland, Tx 79710

Report Date: June 7, 2005

Work Order: 5051216

Project Name: J.R.Phillips
Project Number: 0-0104

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

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
62316	MW-1	water	2005-05-10	12:05	2005-05-12
62317	MW-2	water	2005-05-10	12:31	2005-05-12
62318	MW-7	water	2005-05-10	13:06	2005-05-12
62319	MW-5	water	2005-05-10	13:42	2005-05-12
62320	MW-4	water	2005-05-10	14:05	2005-05-12
62321	MW-3	water	2005-05-10	14:25	2005-05-12
62322	MW-6	water	2005-05-10	15:02	2005-05-12
62323	WW-1	water	2005-05-10	15:34	2005-05-12
62324	MW-8	water	2005-05-10	15:58	2005-05-12
62325	Dup-1	water	2005-05-10	00:00	2005-05-12

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

This report consists of a total of 28 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 62316 - MW-1

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	18145	Date Analyzed:	2005-05-17	Analyzed By:	RS
Prep Batch:	15980	Sample Preparation:	2005-05-17	Prepared By:	RS

Parameter	Flag	Result	RL	Units	Dilution	RL
Hydroxide Alkalinity		<1.00		mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00		mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		**412**		mg/L as CaCo3	1	4.00
Total Alkalinity		**412**		mg/L as CaCo3	1	4.00

Sample: 62316 - MW-1

Analysis:	Cations	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	18197	Date Analyzed:	2005-05-19	Analyzed By:	RR
Prep Batch:	15976	Sample Preparation:	2005-05-17	Prepared By:	DS

Parameter	Flag	Result	RL	Units	Dilution	RL
Dissolved Calcium		**453**		mg/L	10	0.500
Dissolved Potassium		**94.5**		mg/L	1	0.500
Dissolved Magnesium		**211**		mg/L	10	0.500
Dissolved Sodium		**3780**		mg/L	100	0.500

Sample: 62316 - MW-1

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	18090	Date Analyzed:	2005-05-12	Analyzed By:	WB
Prep Batch:	15943	Sample Preparation:	2005-05-12	Prepared By:	WB
QC Batch:	18092	Date Analyzed:	2005-05-12	Analyzed By:	WB
Prep Batch:	15944	Sample Preparation:	2005-05-12	Prepared By:	WB

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**7000**		mg/L	1000	0.500
Fluoride		<2.00		mg/L	10	0.200
Sulfate		**2360**		mg/L	100	0.500

Sample: 62316 - MW-1

Analysis:	NO3 (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	18092	Date Analyzed:	2005-05-12	Analyzed By:	WB
Prep Batch:	15944	Sample Preparation:	2005-05-12	Prepared By:	WB

continued ...

sample 62316 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL

Parameter	Flag	RL Result	Units	Dilution	RL
Nitrate-N		<2.00	mg/L	10	0.200

Sample: 62316 - MW-1

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	18180	Date Analyzed:	2005-05-15	Analyzed By:	WB
Prep Batch:	15916	Sample Preparation:	2005-05-13	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		**16250**	mg/L	50	10.00

Sample: 62317 - MW-2

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	18335	Date Analyzed:	2005-05-23	Analyzed By:	RS
Prep Batch:	16140	Sample Preparation:	2005-05-23	Prepared By:	RS

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		**502**	mg/L as CaCo3	1	4.00
Total Alkalinity		**502**	mg/L as CaCo3	1	4.00

Sample: 62317 - MW-2

Analysis:	Cations	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	18197	Date Analyzed:	2005-05-19	Analyzed By:	RR
Prep Batch:	15976	Sample Preparation:	2005-05-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		**385**	mg/L	10	0.500
Dissolved Potassium		**52.9**	mg/L	1	0.500
Dissolved Magnesium		**171**	mg/L	10	0.500
Dissolved Sodium		**4310**	mg/L	100	0.500

Sample: 62317 - MW-2

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	18092	Date Analyzed:	2005-05-12	Analyzed By:	WB
Prep Batch:	15944	Sample Preparation:	2005-05-12	Prepared By:	WB
QC Batch:	18216	Date Analyzed:	2005-05-17	Analyzed By:	WB
Prep Batch:	15947	Sample Preparation:	2005-05-12	Prepared By:	WB

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride	[1]	**8080**		mg/L	1000	0.500
Fluoride		**5.57**		mg/L	10	0.200
Sulfate	[2]	**2090**		mg/L	100	0.500

Sample: 62317 - MW-2

Analysis:	NO3 (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	18092	Date Analyzed:	2005-05-12	Analyzed By:	WB
Prep Batch:	15944	Sample Preparation:	2005-05-12	Prepared By:	WB

Parameter	Flag	Result	RL	Units	Dilution	RL
Nitrate-N		<2.00		mg/L	10	0.200

Sample: 62317 - MW-2

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	18180	Date Analyzed:	2005-05-15	Analyzed By:	WB
Prep Batch:	15916	Sample Preparation:	2005-05-13	Prepared By:	WB

Parameter	Flag	Result	RL	Units	Dilution	RL
Total Dissolved Solids		**17050**		mg/L	50	10.00

Sample: 62318 - MW-7

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	18335	Date Analyzed:	2005-05-23	Analyzed By:	RS
Prep Batch:	16140	Sample Preparation:	2005-05-23	Prepared By:	RS

Parameter	Flag	Result	RL	Units	Dilution	RL
Hydroxide Alkalinity		<1.00		mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00		mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		**450**		mg/L as CaCo3	1	4.00
Total Alkalinity		**450**		mg/L as CaCo3	1	4.00

[1] *Not entered*
[2] *Not entered*

Sample: 62318 - MW-7

Analysis:	Cations	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	18197	Date Analyzed:	2005-05-19	Analyzed By:	RR
Prep Batch:	15976	Sample Preparation:	2005-05-17	Prepared By:	DS

Parameter	Flag	Result	RL	Units	Dilution	RL
Dissolved Calcium		**506**		mg/L	10	0.500
Dissolved Potassium		**62.8**		mg/L	1	0.500
Dissolved Magnesium		**188**		mg/L	10	0.500
Dissolved Sodium		**3860**		mg/L	100	0.500

Sample: 62318 - MW-7

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	18092	Date Analyzed:	2005-05-12	Analyzed By:	WB
Prep Batch:	15944	Sample Preparation:	2005-05-12	Prepared By:	WB
QC Batch:	18216	Date Analyzed:	2005-05-17	Analyzed By:	WB
Prep Batch:	15947	Sample Preparation:	2005-05-12	Prepared By:	WB

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**8210**		mg/L	1000	0.500
Fluoride		**2.14**		mg/L	10	0.200
Sulfate		**1810**		mg/L	100	0.500

Sample: 62318 - MW-7

Analysis:	NO3 (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	18092	Date Analyzed:	2005-05-12	Analyzed By:	WB
Prep Batch:	15944	Sample Preparation:	2005-05-12	Prepared By:	WB

Parameter	Flag	Result	RL	Units	Dilution	RL
Nitrate-N		<2.00		mg/L	10	0.200

Sample: 62318 - MW-7

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	18180	Date Analyzed:	2005-05-15	Analyzed By:	WB
Prep Batch:	15916	Sample Preparation:	2005-05-13	Prepared By:	WB

Parameter	Flag	Result	RL	Units	Dilution	RL
Total Dissolved Solids		**14600**		mg/L	50	10.00

Sample: 62319 - MW-5

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	18335	Date Analyzed:	2005-05-23	Analyzed By:	RS
Prep Batch:	16140	Sample Preparation:	2005-05-23	Prepared By:	RS

Parameter	Flag	Result	RL	Units	Dilution	RL
Hydroxide Alkalinity		<1.00		mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00		mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		**536**		mg/L as CaCo3	1	4.00
Total Alkalinity		**536**		mg/L as CaCo3	1	4.00

Sample: 62319 - MW-5

Analysis:	Cations	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	18197	Date Analyzed:	2005-05-19	Analyzed By:	RR
Prep Batch:	15976	Sample Preparation:	2005-05-17	Prepared By:	DS

Parameter	Flag	Result	RL	Units	Dilution	RL
Dissolved Calcium		**362**		mg/L	10	0.500
Dissolved Potassium		**68.3**		mg/L	1	0.500
Dissolved Magnesium		**151**		mg/L	10	0.500
Dissolved Sodium		**4400**		mg/L	100	0.500

Sample: 62319 - MW-5

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	18092	Date Analyzed:	2005-05-12	Analyzed By:	WB
Prep Batch:	15944	Sample Preparation:	2005-05-12	Prepared By:	WB
QC Batch:	18216	Date Analyzed:	2005-05-17	Analyzed By:	WB
Prep Batch:	15947	Sample Preparation:	2005-05-12	Prepared By:	WB
QC Batch:	18666	Date Analyzed:	2005-06-03	Analyzed By:	WB
Prep Batch:	16426	Sample Preparation:	2005-06-03	Prepared By:	WB

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**23300**		mg/L	10000	0.500
Fluoride		<2.00		mg/L	10	0.200
Sulfate		**2380**		mg/L	100	0.500

Sample: 62319 - MW-5

Analysis:	NO3 (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	18092	Date Analyzed:	2005-05-12	Analyzed By:	WB
Prep Batch:	15944	Sample Preparation:	2005-05-12	Prepared By:	WB

continued ...

sample 62319 continued . . .

Parameter	Flag	RL Result	Units	Dilution	RL

Parameter	Flag	RL Result	Units	Dilution	RL
Nitrate-N		<2.00	mg/L	10	0.200

Sample: 62319 - MW-5

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	18180	Date Analyzed:	2005-05-15	Analyzed By:	WB
Prep Batch:	15916	Sample Preparation:	2005-05-13	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		**17400**	mg/L	50	10.00

Sample: 62320 - MW-4

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	18335	Date Analyzed:	2005-05-23	Analyzed By:	RS
Prep Batch:	16140	Sample Preparation:	2005-05-23	Prepared By:	RS

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		**708**	mg/L as CaCo3	1	4.00
Total Alkalinity		**708**	mg/L as CaCo3	1	4.00

Sample: 62320 - MW-4

Analysis:	Cations	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	18197	Date Analyzed:	2005-05-19	Analyzed By:	RR
Prep Batch:	15976	Sample Preparation:	2005-05-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		**330**	mg/L	10	0.500
Dissolved Potassium		**50.4**	mg/L	1	0.500
Dissolved Magnesium		**186**	mg/L	10	0.500
Dissolved Sodium		**4400**	mg/L	100	0.500

Sample: 62320 - MW-4

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	18092	Date Analyzed:	2005-05-12	Analyzed By:	WB
Prep Batch:	15944	Sample Preparation:	2005-05-12	Prepared By:	WB
QC Batch:	18217	Date Analyzed:	2005-05-20	Analyzed By:	WB
Prep Batch:	15948	Sample Preparation:	2005-05-12	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**7750**	mg/L	1000	0.500
Fluoride		**2.73**	mg/L	10	0.200
Sulfate		**2010**	mg/L	100	0.500

Sample: 62320 - MW-4

Analysis:	NO3 (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	18092	Date Analyzed:	2005-05-12	Analyzed By:	WB
Prep Batch:	15944	Sample Preparation:	2005-05-12	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Nitrate-N		<2.00	mg/L	10	0.200

Sample: 62320 - MW-4

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	18180	Date Analyzed:	2005-05-15	Analyzed By:	WB
Prep Batch:	15916	Sample Preparation:	2005-05-13	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		**26700**	mg/L	50	10.00

Sample: 62321 - MW-3

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	18335	Date Analyzed:	2005-05-23	Analyzed By:	RS
Prep Batch:	16140	Sample Preparation:	2005-05-23	Prepared By:	RS

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		**472**	mg/L as CaCo3	1	4.00
Total Alkalinity		**472**	mg/L as CaCo3	1	4.00

Sample: 62321 - MW-3

Analysis:	Cations	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	18197	Date Analyzed:	2005-05-19	Analyzed By:	RR
Prep Batch:	15976	Sample Preparation:	2005-05-17	Prepared By:	DS

Parameter	Flag	Result	RL	Units	Dilution	RL
Dissolved Calcium		**965**		mg/L	10	0.500
Dissolved Potassium		**86.7**		mg/L	1	0.500
Dissolved Magnesium		**356**		mg/L	10	0.500
Dissolved Sodium		**7320**		mg/L	100	0.500

Sample: 62321 - MW-3

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	18151	Date Analyzed:	2005-05-12	Analyzed By:	WB
Prep Batch:	15945	Sample Preparation:	2005-05-12	Prepared By:	WB
QC Batch:	18217	Date Analyzed:	2005-05-20	Analyzed By:	WB
Prep Batch:	15948	Sample Preparation:	2005-05-12	Prepared By:	WB

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**11900**		mg/L	1000	0.500
Fluoride		<2.00		mg/L	10	0.200
Sulfate		**4190**		mg/L	100	0.500

Sample: 62321 - MW-3

Analysis:	NO3 (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	18151	Date Analyzed:	2005-05-12	Analyzed By:	WB
Prep Batch:	15945	Sample Preparation:	2005-05-12	Prepared By:	WB

Parameter	Flag	Result	RL	Units	Dilution	RL
Nitrate-N		<2.00		mg/L	10	0.200

Sample: 62321 - MW-3

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	18180	Date Analyzed:	2005-05-15	Analyzed By:	WB
Prep Batch:	15916	Sample Preparation:	2005-05-13	Prepared By:	WB

Parameter	Flag	Result	RL	Units	Dilution	RL
Total Dissolved Solids		**26750**		mg/L	50	10.00

Sample: 62322 - MW-6

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	18335	Date Analyzed:	2005-05-23	Analyzed By:	RS
Prep Batch:	16140	Sample Preparation:	2005-05-23	Prepared By:	RS

Parameter	Flag	Result	RL	Units	Dilution	RL
Hydroxide Alkalinity		<1.00		mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00		mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		**476**		mg/L as CaCo3	1	4.00
Total Alkalinity		**476**		mg/L as CaCo3	1	4.00

Sample: 62322 - MW-6

Analysis:	Cations	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	18320	Date Analyzed:	2005-05-23	Analyzed By:	TP
Prep Batch:	15976	Sample Preparation:	2005-05-17	Prepared By:	DS

Parameter	Flag	Result	RL	Units	Dilution	RL
Dissolved Calcium		**801**		mg/L	10	0.500
Dissolved Potassium		**52.2**		mg/L	10	0.500
Dissolved Magnesium		**331**		mg/L	10	0.500
Dissolved Sodium		**6090**		mg/L	100	0.500

Sample: 62322 - MW-6

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	18151	Date Analyzed:	2005-05-12	Analyzed By:	WB
Prep Batch:	15945	Sample Preparation:	2005-05-12	Prepared By:	WB
QC Batch:	18163	Date Analyzed:	2005-05-13	Analyzed By:	WB
Prep Batch:	15946	Sample Preparation:	2005-05-12	Prepared By:	WB

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**11000**		mg/L	1000	0.500
Fluoride		**3.48**		mg/L	10	0.200
Sulfate		**4050**		mg/L	100	0.500

Sample: 62322 - MW-6

Analysis:	NO3 (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	18151	Date Analyzed:	2005-05-12	Analyzed By:	WB
Prep Batch:	15945	Sample Preparation:	2005-05-12	Prepared By:	WB

Parameter	Flag	Result	RL	Units	Dilution	RL
Nitrate-N		<2.00		mg/L	10	0.200

Sample: 62322 - MW-6

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	18180	Date Analyzed:	2005-05-15	Analyzed By:	WB
Prep Batch:	15916	Sample Preparation:	2005-05-13	Prepared By:	WB

Parameter	Flag	Result	RL	Units	Dilution	RL
Total Dissolved Solids		**24200**		mg/L	50	10.00

Sample: 62323 - WW-1

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	18335	Date Analyzed:	2005-05-23	Analyzed By:	RS
Prep Batch:	16140	Sample Preparation:	2005-05-23	Prepared By:	RS

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

Sample: 62323 - WW-1

Analysis:	Cations	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	18320	Date Analyzed:	2005-05-23	Analyzed By:	TP
Prep Batch:	15976	Sample Preparation:	2005-05-17	Prepared By:	DS

Parameter	Flag	Result	RL	Units	Dilution	RL
Dissolved Calcium		**39.8**		mg/L	1	0.500
Dissolved Potassium		**3.05**		mg/L	1	0.500
Dissolved Magnesium		**12.2**		mg/L	1	0.500
Dissolved Sodium		**10.2**		mg/L	1	0.500

Sample: 62323 - WW-1

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	18151	Date Analyzed:	2005-05-12	Analyzed By:	WB
Prep Batch:	15945	Sample Preparation:	2005-05-12	Prepared By:	WB

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**121**		mg/L	5	0.500
Fluoride		<1.00		mg/L	5	0.200
Sulfate		**63.4**		mg/L	5	0.500

Sample: 62323 - WW-1

Analysis:	NO3 (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	18151	Date Analyzed:	2005-05-12	Analyzed By:	WB
Prep Batch:	15945	Sample Preparation:	2005-05-12	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Nitrate-N		<1.00	mg/L	5	0.200

Sample: 62323 - WW-1

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	18180	Date Analyzed:	2005-05-15	Analyzed By:	WB
Prep Batch:	15916	Sample Preparation:	2005-05-13	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids	[3]	**336.0**	mg/L	1	10.00

Sample: 62324 - MW-8

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	18335	Date Analyzed:	2005-05-23	Analyzed By:	RS
Prep Batch:	16140	Sample Preparation:	2005-05-23	Prepared By:	RS

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		**446**	mg/L as CaCo3	1	4.00
Total Alkalinity		**446**	mg/L as CaCo3	1	4.00

Sample: 62324 - MW-8

Analysis:	Cations	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	18320	Date Analyzed:	2005-05-23	Analyzed By:	TP
Prep Batch:	15976	Sample Preparation:	2005-05-17	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		**228**	mg/L	10	0.500
Dissolved Potassium		**46.3**	mg/L	1	0.500
Dissolved Magnesium		**84.4**	mg/L	1	0.500
Dissolved Sodium		**1740**	mg/L	100	0.500

[3]Filtrate colored posibly due to samples passing through filter. •

Sample: 62324 - MW-8

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	18151	Date Analyzed:	2005-05-12	Analyzed By:	WB
Prep Batch:	15945	Sample Preparation:	2005-05-12	Prepared By:	WB
QC Batch:	18217	Date Analyzed:	2005-05-20	Analyzed By:	WB
Prep Batch:	15948	Sample Preparation:	2005-05-12	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**2590**	mg/L	50	0.500
Fluoride		**4.12**	mg/L	5	0.200
Sulfate		**936**	mg/L	50	0.500

Sample: 62324 - MW-8

Analysis:	NO3 (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	18151	Date Analyzed:	2005-05-12	Analyzed By:	WB
Prep Batch:	15945	Sample Preparation:	2005-05-12	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Nitrate-N		<1.00	mg/L	5	0.200

Sample: 62324 - MW-8

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	18181	Date Analyzed:	2005-05-15	Analyzed By:	WB
Prep Batch:	15917	Sample Preparation:	2005-05-13	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		**5635**	mg/L	5	10.00

Sample: 62325 - Dup-1

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	18335	Date Analyzed:	2005-05-23	Analyzed By:	RS
Prep Batch:	16140	Sample Preparation:	2005-05-23	Prepared By:	RS

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		**442**	mg/L as CaCo3	1	4.00
Total Alkalinity		**442**	mg/L as CaCo3	1	4.00

Sample: 62325 - Dup-1

Analysis:	Cations	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	18320	Date Analyzed:	2005-05-23	Analyzed By:	TP
Prep Batch:	15976	Sample Preparation:	2005-05-17	Prepared By:	DS

Parameter	Flag	Result	RL	Units	Dilution	RL
Dissolved Calcium		**584**		mg/L	10	0.500
Dissolved Potassium		**72.1**		mg/L	1	0.500
Dissolved Magnesium		**222**		mg/L	10	0.500
Dissolved Sodium		**4640**		mg/L	100	0.500

Sample: 62325 - Dup-1

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	18151	Date Analyzed:	2005-05-12	Analyzed By:	WB
Prep Batch:	15945	Sample Preparation:	2005-05-12	Prepared By:	WB
QC Batch:	18217	Date Analyzed:	2005-05-20	Analyzed By:	WB
Prep Batch:	15948	Sample Preparation:	2005-05-12	Prepared By:	WB

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		**8200**		mg/L	1000	0.500
Fluoride		**2.08**		mg/L	10	0.200
Sulfate		**1870**		mg/L	100	0.500

Sample: 62325 - Dup-1

Analysis:	NO3 (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	18151	Date Analyzed:	2005-05-12	Analyzed By:	WB
Prep Batch:	15945	Sample Preparation:	2005-05-12	Prepared By:	WB

Parameter	Flag	Result	RL	Units	Dilution	RL
Nitrate-N		<2.00		mg/L	10	0.200

Sample: 62325 - Dup-1

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	18180	Date Analyzed:	2005-05-15	Analyzed By:	WB
Prep Batch:	15916	Sample Preparation:	2005-05-13	Prepared By:	WB

Parameter	Flag	Result	RL	Units	Dilution	RL
Total Dissolved Solids		**16500**		mg/L	50	10.00

Method Blank (1) QC Batch: 18090

Parameter	Flag	MDL Result	Units	RL
Chloride		<0.0504	mg/L	0.5
Sulfate		<0.450	mg/L	0.5

Method Blank (1) QC Batch: 18092

Parameter	Flag	MDL Result	Units	RL
Nitrate-N		2.46	mg/L	0.2

Method Blank (1) QC Batch: 18092

Parameter	Flag	MDL Result	Units	RL
Fluoride		2.49	mg/L	0.2

Method Blank (1) QC Batch: 18145

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

Method Blank (1) QC Batch: 18151

Parameter	Flag	MDL Result	Units	RL
Nitrate-N		<0.00400	mg/L	0.2

Method Blank (1) QC Batch: 18151

Parameter	Flag	MDL Result	Units	RL
Chloride	[4]	<0.0504	mg/L	0.5
Fluoride		<0.0473	mg/L	0.2
Sulfate	[5]	<0.450	mg/L	0.5

[4]Not entered
[5]Not entered

Method Blank (1) QC Batch: 18163

Parameter	Flag	MDL Result	Units	RL
Chloride		<0.0504	mg/L	0.5
Sulfate		<0.450	mg/L	0.5

Method Blank (1) QC Batch: 18180

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

Method Blank (1) QC Batch: 18181

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

Method Blank (1) QC Batch: 18197

Parameter	Flag	MDL Result	Units	RL
Dissolved Calcium		<0.102	mg/L	0.5
Dissolved Potassium		<0.0454	mg/L	0.5
Dissolved Magnesium		<0.110	mg/L	0.5
Dissolved Sodium		<0.0114	mg/L	0.5

Method Blank (1) QC Batch: 18216

Parameter	Flag	MDL Result	Units	RL
Chloride		<0.0504	mg/L	0.5
Sulfate		<0.450	mg/L	0.5

Method Blank (1) QC Batch: 18217

Parameter	Flag	MDL Result	Units	RL
Chloride		<0.0504	mg/L	0.5
Sulfate		<0.450	mg/L	0.5

Method Blank (1) QC Batch: 18320

Parameter	Flag	MDL Result	Units	RL
Dissolved Calcium		<0.102	mg/L	0.5
Dissolved Potassium		<0.0454	mg/L	0.5
Dissolved Magnesium		<0.110	mg/L	0.5
Dissolved Sodium		<0.0114	mg/L	0.5

Method Blank (1) QC Batch: 18335

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

Method Blank (1) QC Batch: 18666

Parameter	Flag	MDL Result	Units	RL
Chloride		<0.0504	mg/L	0.5

Duplicate (1) QC Batch: 18145

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Hydroxide Alkalinity	<1.00	<1.00	mg/L as CaCo3	1	0	20
Carbonate Alkalinity	<1.00	<1.00	mg/L as CaCo3	1	0	20
Bicarbonate Alkalinity	92.0	90.0	mg/L as CaCo3	1	2	20
Total Alkalinity	92.0	90.0	mg/L as CaCo3	1	2	4.6

Duplicate (1) QC Batch: 18180

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids	15050	14600	mg/L	50	3	14.9

Duplicate (1) QC Batch: 18181

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids	5560	5635	mg/L	1	1	14.9

Duplicate (1) QC Batch: 18335

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Hydroxide Alkalinity	<1.00	<1.00	mg/L as CaCo3	1	0	20
Carbonate Alkalinity	8.00	12.0	mg/L as CaCo3	1	40	20
Bicarbonate Alkalinity	150	150	mg/L as CaCo3	1	0	20
Total Alkalinity	158	162	mg/L as CaCo3	1	2	4.6

Laboratory Control Spike (LCS-1) QC Batch: 18090

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Chloride	12.2	12.3	mg/L	1	12.5	<0.0504	98	1	90 - 110	20
Sulfate	12.3	12.4	mg/L	1	12.5	<0.450	98	1	90 - 110	20

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

Laboratory Control Spike (LCS-1) QC Batch: 18092

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Nitrate-N	2.57	2.47	mg/L	1	2.50	<0.00400	103	4	90 - 110	20

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

Laboratory Control Spike (LCS-1) QC Batch: 18092

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Fluoride	2.41	2.29	mg/L	1	2.50	<0.0473	96	5	90 - 110	20

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

Laboratory Control Spike (LCS-1) QC Batch: 18151

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Nitrate-N	2.49	2.50	mg/L	1	2.50	<0.00400	100	0	90 - 110	20

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

Laboratory Control Spike (LCS-1) QC Batch: 18151

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Chloride	<0.0504	0.00	mg/L	1	12.5	<0.0504			90 - 110	20
Fluoride	2.42	2.51	mg/L	1	2.50	<0.0473	97	4	90 - 110	20
Sulfate	<0.450	0.00	mg/L	1	12.5	<0.450			90 - 110	20

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

Laboratory Control Spike (LCS-1) QC Batch: 18163

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Chloride	<0.0504	0.00	mg/L	1	12.5	<0.0504			90 - 110	20
Sulfate	<0.450	0.00	mg/L	1	12.5	<0.450			90 - 110	20

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

Laboratory Control Spike (LCS-1) QC Batch: 18197

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Calcium	48.5	49.1	mg/L	1	50.0	<0.102	97	1	85 - 115	20
Dissolved Potassium	50.7	48.9	mg/L	1	50.0	<0.0454	101	4	85 - 115	20
Dissolved Magnesium	45.4	42.7	mg/L	1	50.0	<0.110	91	6	85 - 115	20
Dissolved Sodium	49.5	48.8	mg/L	1	50.0	<0.0114	99	1	85 - 115	20

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

Laboratory Control Spike (LCS-1) QC Batch: 18216

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Chloride	12.4	12.4	mg/L	1	12.5	<0.0504	99	0	90 - 110	20
Sulfate	12.3	12.4	mg/L	1	12.5	<0.450	98	1	90 - 110	20

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

Laboratory Control Spike (LCS-1) QC Batch: 18217

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Chloride	12.5	12.4	mg/L	1	12.5	<0.0504	100	1	90 - 110	20
Sulfate	12.5	12.4	mg/L	1	12.5	<0.450	100	1	90 - 110	20

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

Laboratory Control Spike (LCS-1) QC Batch: 18320

continued ...

control spikes continued...

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Calcium	55.0	55.1	mg/L	1	50.0	<0.102	110	0	85 - 115	20
Dissolved Potassium	53.7	53.7	mg/L	1	50.0	<0.0454	107	0	85 - 115	20
Dissolved Magnesium	48.1	53.9	mg/L	1	50.0	<0.110	96	11	85 - 115	20
Dissolved Sodium	52.7	53.2	mg/L	1	50.0	<0.0114	105	1	85 - 115	20

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

Laboratory Control Spike (LCS-1) QC Batch: 18666

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Chloride	11.8	11.8	mg/L	1	12.5	<0.0504	95	0	90 - 110	20

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

Matrix Spike (MS-1) QC Batch: 18090 Spiked Sample: 62316

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Chloride	19400	19300	mg/L	1000	12.5	7000	99	0	70.7 - 124	20
Sulfate	15600	15400	mg/L	1000	12.5	3070	100	1	82.5 - 123	20

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

Matrix Spike (MS-1) QC Batch: 18092 Spiked Sample: 62319

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Nitrate-N	287	265	mg/L	100	2.50	<0.400	115	8	78.8 - 116	20

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

Matrix Spike (MS-1) QC Batch: 18092 Spiked Sample: 62319

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Fluoride [6,7]	397	246	mg/L	100	2.50	<4.73	159	47	70.9 - 126	20

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

Matrix Spike (MS-1) QC Batch: 18151 Spiked Sample: 62322

[6]Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
[7]Matrix spike interfernces

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Nitrate-N	270	269	mg/L	100	2.50	<0.400	108	0	78.8 - 116	20

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

Matrix Spike (MS-1) QC Batch: 18151 Spiked Sample: 62322

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Chloride	<0.0504	0.00	mg/L	1	12.5	<0.0504			70.7 - 124	20
Fluoride	257	270	mg/L	100	2.50	12.3	98	5	70.9 - 126	20
Sulfate	<0.450	0.00	mg/L	1	12.5	<0.450			82.5 - 123	20

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

Matrix Spike (MS-1) QC Batch: 18163 Spiked Sample: 62322

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Chloride	23700	23500	mg/L	1000	12.5	11000	102	1	70.7 - 124	20
Sulfate	17500	17400	mg/L	1000	12.5	4560	104	1	82.5 - 123	20

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

Matrix Spike (MS-1) QC Batch: 18216 Spiked Sample: 62187

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Chloride	109000	111000	mg/L	5000	12.5	47400	98	2	70.7 - 124	20
Sulfate	75700	74900	mg/L	5000	12.5	11900	102	1	82.5 - 123	20

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

Matrix Spike (MS-1) QC Batch: 18217 Spiked Sample: 62325

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Chloride	<101	0.00	mg/L	2000	12.5	<101			70.7 - 124	20
Sulfate	<900	0.00	mg/L	2000	12.5	<900			82.5 - 123	20

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

Matrix Spike (MS-1) QC Batch: 18320 Spiked Sample: 62322

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Calcium	[8]	994	947	mg/L	1	50.0	894	200	5	75 - 125	20

continued ...

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

matrix spikes continued ...

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Potassium	[9,10]	158	153	mg/L	1	50.0	63.7	189	3	75 - 125	20
Dissolved Magnesium	[11,12]	469	462	mg/L	1	50.0	391	156	2	75 - 125	20
Dissolved Sodium	[13,14]	6700	6450	mg/L	1	50.0	6690	20	4	75 - 125	20

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

Matrix Spike (MS-1) QC Batch: 18666 Spiked Sample: 64312

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Chloride	152	151	mg/L	10	12.5	24.8	102	1	70.7 - 124	20

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

Standard (ICV-1) QC Batch: 18090

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.5	11.9	95	90 - 110	2005-05-12
Sulfate		mg/L	12.5	12.2	98	90 - 110	2005-05-12

Standard (CCV-1) QC Batch: 18090

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.5	12.1	97	90 - 110	2005-05-12
Sulfate		mg/L	12.5	12.4	99	90 - 110	2005-05-12

Standard (ICV-1) QC Batch: 18092

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		mg/L	2.50	2.49	100	90 - 110	2005-05-12

Standard (ICV-1) QC Batch: 18092

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

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Fluoride		mg/L	2.50	2.32	93	90 - 110	2005-05-12

Standard (CCV-1) QC Batch: 18092

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		mg/L	2.50	2.45	98	90 - 110	2005-05-12

Standard (CCV-1) QC Batch: 18092

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Fluoride		mg/L	2.50	2.32	93	90 - 110	2005-05-12

Standard (ICV-1) QC Batch: 18145

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Alkalinity		mg/L as CaCo3	250	240	96	90 - 110	2005-05-17

Standard (CCV-1) QC Batch: 18145

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Alkalinity		mg/L as CaCo3	250	240	96	90 - 110	2005-05-17

Standard (ICV-1) QC Batch: 18151

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		mg/L	2.50	2.45	98	90 - 110	2005-05-12

Standard (ICV-1) QC Batch: 18151

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.5	<0.0504		90 - 110	2005-05-12
Fluoride		mg/L	2.50	2.32	93	90 - 110	2005-05-12
Sulfate		mg/L	12.5	<0.450		90 - 110	2005-05-12

Standard (CCV-1) QC Batch: 18151

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		mg/L	2.50	2.49	100	90 - 110	2005-05-12

Standard (CCV-1) QC Batch: 18151

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.5	<0.0504		90 - 110	2005-05-12
Fluoride		mg/L	2.50	2.44	98	90 - 110	2005-05-12
Sulfate		mg/L	12.5	<0.450		90 - 110	2005-05-12

Standard (ICV-1) QC Batch: 18163

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.5	12.2	98	90 - 110	2005-05-13
Sulfate		mg/L	12.5	12.6	101	90 - 110	2005-05-13

Standard (CCV-1) QC Batch: 18163

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.5	12.2	98	90 - 110	2005-05-13
Sulfate		mg/L	12.5	12.4	99	90 - 110	2005-05-13

Standard (ICV-1) QC Batch: 18180

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	1014	101	90 - 110	2005-05-15

Standard (CCV-1) QC Batch: 18180

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	1025	102	90 - 110	2005-05-15

Standard (ICV-1) QC Batch: 18181

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	1025	102	90 - 110	2005-05-15

Standard (CCV-1) QC Batch: 18181

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	1024	102	90 - 110	2005-05-15

Standard (CCV-1) QC Batch: 18197

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	50.0	54.1	108	90 - 110	2005-05-19
Dissolved Potassium		mg/L	50.0	55.0	110	90 - 110	2005-05-19
Dissolved Magnesium		mg/L	50.0	53.8	108	90 - 110	2005-05-19
Dissolved Sodium		mg/L	50.0	53.9	108	90 - 110	2005-05-19

Standard (CCV-2) QC Batch: 18197

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	50.0	45.3	91	90 - 110	2005-05-19
Dissolved Potassium		mg/L	50.0	47.6	95	90 - 110	2005-05-19
Dissolved Magnesium		mg/L	50.0	45.4	91	90 - 110	2005-05-19
Dissolved Sodium		mg/L	50.0	46.5	93	90 - 110	2005-05-19

Standard (ICV-1) QC Batch: 18216

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.5	12.2	98	90 - 110	2005-05-17
Sulfate		mg/L	12.5	12.4	99	90 - 110	2005-05-17

Standard (CCV-1) QC Batch: 18216

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.5	12.4	99	90 - 110	2005-05-17
Sulfate		mg/L	12.5	12.5	100	90 - 110	2005-05-17

Standard (ICV-1) QC Batch: 18217

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.5	12.4	99	90 - 110	2005-05-20
Sulfate		mg/L	12.5	12.5	100	90 - 110	2005-05-20

Standard (CCV-1) QC Batch: 18217

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.5	<0.0504		90 - 110	2005-05-20
Sulfate		mg/L	12.5	<0.450		90 - 110	2005-05-20

Standard (ICV-1) QC Batch: 18320

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	50.0	54.0	108	90 - 110	2005-05-23
Dissolved Potassium		mg/L	50.0	52.7	105	90 - 110	2005-05-23
Dissolved Magnesium		mg/L	50.0	55.0	110	90 - 110	2005-05-23
Dissolved Sodium		mg/L	50.0	52.0	104	90 - 110	2005-05-23

Standard (CCV-1) QC Batch: 18320

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	50.0	53.2	106	90 - 110	2005-05-23
Dissolved Potassium		mg/L	50.0	52.4	105	90 - 110	2005-05-23
Dissolved Magnesium		mg/L	50.0	51.6	103	90 - 110	2005-05-23
Dissolved Sodium		mg/L	50.0	50.7	101	90 - 110	2005-05-23

Standard (ICV-1) QC Batch: 18335

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Alkalinity		mg/L as CaCo3	250	242	97	90 - 110	2005-05-23

Standard (CCV-1) QC Batch: 18335

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Alkalinity		mg/L as CaCo3	250	240	96	90 - 110	2005-05-23

Standard (ICV-1) QC Batch: 18666

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.5	12.6	101	90 - 110	2005-06-03

Standard (CCV-1) QC Batch: 18666

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.5	11.8	94	90 - 110	2005-06-03

5051216

CHAIN—OF—CUSTODY RECORD

LA Larson & Associates, Inc. Environmental Consultants
Fax: 432-687-0456
432-687-0901
507 N. Marienfeld, Ste. 202 • Midland, TX 79701

CLIENT NAME: CheuTex
SITE MANAGER: Cindy Crain
PROJECT NO.: 0-0104
PROJECT NAME: JR Phillips T.B.
PAGE 1 OF 1
LAB. PO #

DATE	TIME	WATER	SOIL	OTHER	SAMPLE IDENTIFICATION		NUMBER OF CONTAINERS	PARAMETERS/METHOD NUMBER: CATIONS	ANIONS	TDS	LAB. I.D. NUMBER (LAB USE ONLY)	REMARKS (I.E., FILTERED, UNFILTERED, PRESERVED, UNPRESERVED, GRAB COMPOSITE)
5/10/05	1205	✓			MW-1	16 2316	1	1	1	1		
	1231				MW-2	17						
	1306				MW-7	18						
	1342				MW-5	19						
	1405				MW-4	20						
	1425				MW-3	21						
	1502				MW-6	22						
	1534				~~Rinse~~ WW-1	23						
	1558				MW-8	24						
5/10					DUP1	25						

SAMPLED BY: (Signature) DATE: 5/10/05 TIME: 1600
RELINQUISHED BY: (Signature) DATE: 5/11/05 TIME: 1100
RECEIVED BY: (Signature) DATE: 5/11/05 TIME: 1209
RELINQUISHED BY: (Signature) Helen Shelton DATE: 5/11/05 TIME: 1930
RECEIVED BY: (Signature) DATE: 5/12/05 TIME: 1035
SAMPLE SHIPPED BY: (Circle)
FEDEX BUS AIRBILL #:
HAND DELIVERED UPS OTHER:
P1394610

COMMENTS:
TURNAROUND TIME NEEDED

RECEIVING LABORATORY: Trace Analysis
ADDRESS:
CITY: Lubbock STATE: ZIP:
CONTACT: PHONE:
RECEIVED BY: (Signature)
DATE: TIME:

WHITE – RECEIVING LAB
YELLOW – RECEIVING LAB (TO BE RETURNED TO LA AFTER RECEIPT)
PINK – PROJECT MANAGER
GOLD – QA/QC COORDINATOR

SAMPLE CONDITION WHEN RECEIVED: 4°C
LA CONTACT PERSON:
SAMPLE TYPE:

10 samples - RS

5051216

CHAIN—OF—CUSTODY RECORD

Larson & Associates, Inc.
Environmental Consultants
Fax: 432-687-0456
432-687-0901
507 N. Marienfeld, Ste. 202 • Midland, TX 79701

CLIENT NAME: CheuTex
SITE MANAGER: Cindy Crain
PROJECT NO.: 0-0104
PROJECT NAME: JR Phillips T.B.
PAGE 1 OF 1
LAB. PO #

PARAMETERS/METHOD NUMBER

DATE	TIME	WATER	SOIL	OTHER	SAMPLE IDENTIFICATION		NUMBER OF CONTAINERS	CATIONS	ANIONS	TDS	A/K, Cl, SO4						LAB. I.D. NUMBER (LAB USE ONLY)	REMARKS (I.E., FILTERED, UNFILTERED, PRESERVED, UNPRESERVED, GRAB COMPOSITE)
5/10/05	1205	✓			mw-1	62316	1	1	1	1								
	1231				mw-2	17												
	1306				mw-7	18												
	1342				mw-5	19												
	1405				mw-4	20												
	1425				mw-3	21												
	1502				mw-6	22												
	1534				~~mw~~ ww-1	23												
	1558				mw-8	24												
5/10					DUP1	25												

SAMPLED BY: (Signature) [signature] DATE: 5/10/05 TIME: 1600
RELINQUISHED BY: (Signature) [signature] DATE: 5/11/05 TIME: 1200
RECEIVED BY: (Signature) Helen Shelton DATE: 5/11/05 TIME: 1200

RELINQUISHED BY: (Signature) Helen Shelton DATE: 5/11/05 TIME: 1930
RECEIVED BY: (Signature) Jerral Lyalco DATE: 5/12/05 TIME: 10:35

SAMPLE SHIPPED BY: (Circle)
FEDEX BUS AIRBILL #:
HAND DELIVERED UPS OTHER: Lone Star
P1394616

COMMENTS:

TURNAROUND TIME NEEDED

WHITE – RECEIVING LAB
YELLOW – RECEIVING LAB (TO BE RETURNED TO LA AFTER RECEIPT)
PINK – PROJECT MANAGER
GOLD – QA/QC COORDINATOR

RECEIVING LABORATORY: Trace Analysis
ADDRESS:
CITY: Lubbock STATE: ZIP:
CONTACT: PHONE:

RECEIVED BY: (Signature)
DATE: TIME:

SAMPLE CONDITION WHEN RECEIVED: 4°C

LA CONTACT PERSON:

SAMPLE TYPE:

10 samples – RS 6/7 Gp

Summary Report

Cindy Crain
Larson and Associates, Inc.
P. O. Box 50685
Midland, Tx 79710

Report Date: May 18, 2005

Work Order: 5051503

Project Name: J.R.Phillips
Project Number: 0-0104

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
62676	MW-4	water	2005-05-12	12:10	2005-05-14
62677	MW-8	water	2005-05-12	12:20	2005-05-14

	BTEX				MTBE
Sample - Field Code	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylene (mg/L)	MTBE (mg/L)
62676 - MW-4	<0.00500	<0.00500	<0.00500	<0.00500	
62677 - MW-8	<0.00100	<0.00100	<0.00100	<0.00100	

TRACEANALYSIS, INC.

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

Analytical and Quality Control Report

Cindy Crain
Larson and Associates, Inc.
P. O. Box 50685
Midland, Tx 79710

Report Date: May 18, 2005

Work Order: 5051503

Project Name: J.R.Phillips
Project Number: 0-0104

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

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
62676	MW-4	water	2005-05-12	12:10	2005-05-14
62677	MW-8	water	2005-05-12	12:20	2005-05-14

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

Dr. Blair Leftwich, Director

Analytical Report

Sample: 62676 - MW-4

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	18155	Date Analyzed:	2005-05-17	Analyzed By:	
Prep Batch:	15992	Sample Preparation:	2005-05-17	Prepared By:	

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00500	mg/L	5	0.00100
Toluene		<0.00500	mg/L	5	0.00100
Ethylbenzene		<0.00500	mg/L	5	0.00100
Xylene		<0.00500	mg/L	5	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.458	mg/L	5	0.100	92	73.8 - 121
4-Bromofluorobenzene (4-BFB)		0.318	mg/L	5	0.100	64	52.4 - 119

Sample: 62677 - MW-8

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	18121	Date Analyzed:	2005-05-16	Analyzed By:	MT
Prep Batch:	15966	Sample Preparation:	2005-05-16	Prepared By:	MT

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

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0833	mg/L	1	0.100	83	77.6 - 123
4-Bromofluorobenzene (4-BFB)		0.0826	mg/L	1	0.100	83	63 - 119

Method Blank (1) QC Batch: 18121

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.000338	mg/L	0.001
Toluene		<0.000299	mg/L	0.001
Ethylbenzene		<0.000469	mg/L	0.001
Xylene		<0.000787	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.103	mg/L	1	0.100	103	75.8 - 126
4-Bromofluorobenzene (4-BFB)		0.0943	mg/L	1	0.100	94	51.4 - 119

Method Blank (1) QC Batch: 18155

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.000136	mg/L	0.001
Toluene		<0.000247	mg/L	0.001
Ethylbenzene		<0.000552	mg/L	0.001
Xylene		<0.00156	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0917	mg/L	1	0.100	92	73.8 - 121
4-Bromofluorobenzene (4-BFB)		0.0602	mg/L	1	0.100	60	52.4 - 113

Laboratory Control Spike (LCS-1) QC Batch: 18121

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Benzene	0.0983	0.0985	mg/L	1	0.100	<0.000338	98	0	79.2 - 122	8.8
Toluene	0.0972	0.0982	mg/L	1	0.100	<0.000299	97	1	76.2 - 116	9.4
Ethylbenzene	0.0970	0.0983	mg/L	1	0.100	<0.000469	97	1	73.2 - 116	8.5
Xylene	0.292	0.296	mg/L	1	0.300	<0.000787	97	1	72.5 - 116	8.4

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.104	0.102	mg/L	1	0.100	104	102	77.6 - 123
4-Bromofluorobenzene (4-BFB)	0.0965	0.0962	mg/L	1	0.100	96	96	63 - 119

Laboratory Control Spike (LCS-1) QC Batch: 18155

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Benzene	0.0963	0.0964	mg/L	1	0.100	<0.000136	96	0	72.8 - 113	20
Toluene	0.0964	0.0968	mg/L	1	0.100	<0.000247	96	0	75.2 - 112	20
Ethylbenzene	0.0970	0.0972	mg/L	1	0.100	<0.000550	97	0	81 - 112	20
Xylene	0.296	0.296	mg/L	1	0.300	<0.00156	99	0	82.9 - 119	20

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

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0951	0.0956	mg/L	1	0.100	95	96	72.9 - 121
4-Bromofluorobenzene (4-BFB)	0.0986	0.0975	mg/L	1	0.100	99	98	77.8 - 119

Standard (ICV-1) QC Batch: 18121

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.0995	100	85 - 115	2005-05-16
Toluene		mg/L	0.100	0.0992	99	85 - 115	2005-05-16
Ethylbenzene		mg/L	0.100	0.0994	99	85 - 115	2005-05-16
Xylene		mg/L	0.300	0.299	100	85 - 115	2005-05-16

Standard (CCV-1) QC Batch: 18121

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.0956	96	85 - 115	2005-05-16
Toluene		mg/L	0.100	0.0968	97	85 - 115	2005-05-16
Ethylbenzene		mg/L	0.100	0.0956	96	85 - 115	2005-05-16
Xylene		mg/L	0.300	0.288	96	85 - 115	2005-05-16

Standard (ICV-1) QC Batch: 18155

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.0956	96	85 - 115	2005-05-17
Toluene		mg/L	0.100	0.0962	96	85 - 115	2005-05-17
Ethylbenzene		mg/L	0.100	0.0965	96	85 - 115	2005-05-17
Xylene		mg/L	0.300	0.294	98	85 - 115	2005-05-17

Standard (CCV-1) QC Batch: 18155

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.0928	93	85 - 115	2005-05-17
Toluene		mg/L	0.100	0.0941	94	85 - 115	2005-05-17
Ethylbenzene		mg/L	0.100	0.0949	95	85 - 115	2005-05-17
Xylene		mg/L	0.300	0.291	97	85 - 115	2005-05-17

5051503

CHAIN—OF—CUSTODY RECORD

Larson & Associates, Inc. Environmental Consultants
Fax: 432-687-0456
432-687-0901
507 N. Marienfeld, Ste. 202 • Midland, TX 79701

CLIENT NAME:	SITE MANAGER:
ChevTex	CINDY CRAIN
PROJECT NO.:	**PROJECT NAME:**
0-0104	JR Phillips
PAGE 1 OF 1	LAB. PO #

DATE	TIME	WATER	SOIL	OTHER	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	PARAMETERS/METHOD NUMBER: BTEX	LAB. I.D. NUMBER (LAB USE ONLY)	REMARKS (I.E., FILTERED, UNFILTERED, PRESERVED, UNPRESERVED, GRAB COMPOSITE)
5/12/05	1210	✓			MW-4 (62676)	2	2		
5/12/05	1220	✓			MW-8 (62677)	1	1		

SAMPLED BY: (Signature) DATE: 5/12/05 TIME: 1230

RELINQUISHED BY: (Signature) DATE: 5/13/05 TIME: 1135

RECEIVED BY: (Signature) DATE: 5/13/05 TIME: 1135

RELINQUISHED BY: (Signature) DATE: 5/13/05 TIME: 1730

RECEIVED BY: (Signature) DATE: 5/14/05 TIME: 10:30

SAMPLE SHIPPED BY: (Circle) Ground GL#
FEDEX 2d BUS AIRBILL #: 1166-130523-9
HAND DELIVERED UPS OTHER:

COMMENTS:

TURNAROUND TIME NEEDED

RECEIVING LABORATORY: Stat Analysis
ADDRESS: 6701 Aberdeen
CITY: STATE: TX ZIP:
CONTACT: PHONE:

RECEIVED BY: (Signature) Stella Medina
DATE: 5-14-05 TIME: 10:30

WHITE – RECEIVING LAB
YELLOW – RECEIVING LAB (TO BE RETURNED TO LA AFTER RECEIPT)
PINK – PROJECT MANAGER
GOLD – QA/QC COORDINATOR

SAMPLE CONDITION WHEN RECEIVED:

LA CONTACT PERSON:

SAMPLE TYPE:

4 samples - HS

505505

CHAIN—OF—CUSTODY RECORD

Larson & Associates, Inc.
Environmental Consultants
Fax: 432-687-0456
432-687-0901
507 N. Marienfeld, Ste. 202 • Midland, TX 79701

CLIENT NAME: ChevTex
SITE MANAGER: CINDY CRAIN
PROJECT NO.: 0-0104
PROJECT NAME: JR Phillips
PAGE 1 OF 1
LAB. PO #

DATE	TIME	WATER	SOIL	OTHER	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	PARAMETERS/METHOD NUMBER: BTEX	LAB. I.D. NUMBER (LAB USE ONLY)	REMARKS (I.E., FILTERED, UNFILTERED, PRESERVED, UNPRESERVED, GRAB COMPOSITE)
5/12/05	1210	✓			MW-4 62676	2	2		
5/12/05	1220	✓			MW-8 62677	1	1		

SAMPLED BY: (Signature) DATE: 5/12/05 TIME: 1230
RELINQUISHED BY: (Signature) DATE: 5/13/05 TIME: 1135
RECEIVED BY: (Signature) Helen Shelton DATE: 5/13/05 TIME: 1135
RELINQUISHED BY: (Signature) Helen Shelton DATE: 5/13/05 TIME: 1730
RECEIVED BY: (Signature) Stella Medina DATE: 5/14/05 TIME: 10:30
SAMPLE SHIPPED BY: (Circle) Greyhound FEDEX 2E BUS UPS HAND DELIVERED OTHER: GL# AIRBILL #: 1106-130523-9

COMMENTS:

TURNAROUND TIME NEEDED

RECEIVING LABORATORY: Trace Analysis
ADDRESS: 6701 Aberdeen
CITY: STATE: TX ZIP:
CONTACT: PHONE:
RECEIVED BY: (Signature) Stella Medina
DATE: 5-14-05 TIME: 10:30

WHITE – RECEIVING LAB
YELLOW – RECEIVING LAB (TO BE RETURNED TO LA AFTER RECEIPT)
PINK – PROJECT MANAGER
GOLD – QA/QC COORDINATOR

SAMPLE CONDITION WHEN RECEIVED:

LA CONTACT PERSON:

SAMPLE TYPE: 5/19/05

4 samples - HS

P, E, F