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

Prepared for:

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May 10, 2004

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Annual Groundwater Monitoring Report

J. R. Phillips Tank Battery No. 2

Lea County, New Mexico

1.0 INTRODUCTION

ChevronTexaco Exploration and Production Company (ChevronTexaco), 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.

3.0 GROUNDWATER MONITORING

LA conducted monitoring at the Site in May, September, and November 2003, completing the two-year monitoring schedule approved by the NMOCD. On May 13, 2003, depth to groundwater measurements were collected from all monitoring wells (MW-1 through MW-8). On September 3, 2003, and November 20, 2003, depth to groundwater measurements were collected from all monitoring wells (MW-1 through MW-8), and water well (WW-1) located southeast of the Site. Depth to groundwater ranged from 40.21 feet (MW-5) to 43.30 feet (MW-8) below top of casing (TOC) on the May 13th event, from 35.51 feet (WW-1) to 43.52 feet (MW-8) below TOC on the September 3rd event, and from 35.56 feet (WW-1) to 43.87 feet (MW-8) below TOC on the November 20th 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 13, 2003. Figure 4 shows the groundwater gradient on November 20, 2003.

Groundwater samples were collected on May 15, 2003, 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 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, except MW-4, where benzene was detected at 0.001 milligrams per liter (mg/L), and MW-8, where benzene was detected at 0.0138 mg/L. The dissolved benzene concentration in groundwater collected from monitoring well MW-4, is below the New Mexico Water Quality Conservation Commission (NMWQCC) standard of 0.01 mg/L.

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

- MW-1 (5,150 mg/L)
- MW-2 (5,850 mg/L)
- MW-3 (10,700 mg/L)
- MW-4 (7,140 mg/L)
- MW-5 (6,800 mg/L)
- MW-6 (10,700 mg/L)
- MW-7 (7,180 mg/L)
- MW-8 (7,300 mg/L)
- WW-1 (11,800 mg/L).

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

- MW-1 (1,710 mg/L)
- MW-2 (1,990 mg/L)
- MW-3 (4,220 mg/L)
- MW-4 (1,210 mg/L)

- MW-5 (2,320 mg/L)
- MW-6 (4,310 mg/L)
- MW-7 (2,350 mg/L)
- MW-8 (1,690 mg/L)
- WW-1 (1,780 mg/L).

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

- MW-1 (5,990 mg/L)
- MW-2 (14,000 mg/L)
- MW-3 (24,200 mg/L)
- MW-4 (15,200 mg/L)
- MW-5 (16,000 mg/L)
- MW-6 (23,800 mg/L)
- MW-7 (16,800 mg/L)
- MW-8 (15,700 mg/L)
- WW-1 (21,400 mg/L).

Figure 5 shows the chloride concentrations in groundwater on May 15, 2003. Figure 7 shows the sulfate concentrations in groundwater on May 15, 2003. Figure 9 shows the TDS concentrations in groundwater on May 15, 2003.

On September 3, 2003, 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-3. The groundwater samples were submitted under chain-of-custody control to Environmental Lab of Texas

I, Ltd., in Odessa, Texas, and analyzed for chloride. 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.

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

- MW-1 (5,320 mg/L)
- MW-2 (6,470 mg/L)
- MW-3 (10,300 mg/L)
- MW-4 (7,800 mg/L)
- MW-5 (7,090 mg/L)
- MW-6 (10,300 mg/L)
- MW-7 (6,910 mg/L)
- MW-8 (7,270 mg/L).

The chloride concentration in groundwater collected from water well WW-1 was less than the test method detection limit. This data is noted as questionable.

Groundwater samples were collected on November 20 and 21, 2003, from all monitoring wells (MW-1 through MW-8) and the water well (WW-1). A duplicate sample was collected from monitoring well MW-6 on November 20, 2003, and from monitoring well MW-3 on November 21, 2003. The groundwater samples were submitted under chain-of-custody control to Trace, and were analyzed for BTEX, 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 2 presents a 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, except monitoring well MW-3, where ethylbenzene was detected at a concentration of 0.0029 mg/L, and xylene was detected at a concentration of 0.0079 mg/L. The duplicate sample collected from well MW-3 reported concentrations of BTEX below the test method detection limit. The NMWQCC human health standard for ethylbenzene is 0.75 mg/L, and 0.62 mg/L for xylene.

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

- MW-1 (4,910 mg/L)
- MW-2 (5,790 mg/L)
- MW-3 (10,500 mg/L)
- MW-4 (7,500 mg/L)
- MW-5 (7,010 mg/L)
- MW-6 (10,000 mg/L)
- MW-7 (6,360 mg/L)
- MW-8 (8,190 mg/L)
- WW-1 (10,000 mg/L).

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

- MW-1 (1,730 mg/L)
- MW-2 (2,100 mg/L)
- MW-3 (4,480 mg/L)

- MW-4 (2,720 mg/L)
- MW-5 (3,170 mg/L)
- MW-6 (4,410 mg/L)
- MW-7 (2,110 mg/L)
- MW-8 (2,570 mg/L)
- WW-1 (2,180 mg/L).

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

- MW-1 (11,540 mg/L)
- MW-2 (14,080 mg/L)
- MW-3 (23,100 mg/L)
- MW-4 (17,350 mg/L)
- MW-5 (16,850 mg/L)
- MW-6 (23,500 mg/L)
- MW-7 (14,500 mg/L)
- MW-8 (14,040 mg/L)
- WW-1 (18,900 mg/L).

Groundwater levels consistently decreased in all monitoring wells and the water well (WW-1) during the monitoring period. Chloride concentrations have decreased in all wells since they were originally sampled in 2001, with the exception of up-gradient monitoring well MW-8. The chloride concentration in groundwater collected from monitoring well MW-8 has increased from 7,445 mg/L during the first sampling event on May 2, 2001, to 8,190 mg/L during the most recent sampling event on November 20, 2003. Concentrations of sulfate have increased in monitoring wells MW-2,

MW-3, MW-4, MW-5, MW-6, MW-8 and WW-1 since the May 3, 2001 sampling event, and TDS concentrations have increased in wells MW-8 and WW-1. Figure 6 shows the chloride concentrations in groundwater on November 20 and 21, 2003. Figure 8 shows the sulfate concentrations in groundwater on November 20 and 21, 2003. Figure 10 shows the TDS concentrations in groundwater on November 20 and 21, 2003.

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 258 gallons.

5.0 CONCLUSIONS

1. Depth to groundwater ranged from 40.21 feet (MW-5) to 43.30 feet (MW-8) below top of casing (TOC) on May 13, 2003.
2. Depth to groundwater ranged from 35.51 feet (WW-1) to 43.52 feet (MW-8) below TOC on September 3, 2003.
3. Depth to groundwater ranged from 35.56 feet (WW-1) to 43.87 feet (MW-8) below TOC on November 20, 2003.
4. The groundwater gradient was approximately 0.002 feet per foot during each monitoring event.
5. Groundwater flow at the Site has remained consistent, and is from northwest to southeast.
6. From the May 15, 2003 sampling event, BTEX was not reported above test method detection limits in any groundwater samples, except MW-4, where benzene was detected at 0.001 milligrams per liter (mg/L), and MW-8, where benzene was detected at 0.0138 mg/L. Chloride, sulfate and TDS concentrations exceeded the New Mexico Water Quality Conservation Commission (NMWQCC) standard in all monitoring wells.

7. From the September 3, 2003 sampling event, chloride concentrations exceeded the NMWQCC standard (250 mg/L) in all monitoring wells.
8. From the November 2003 sampling event, BTEX was not reported above test method detection limits in any groundwater samples, except monitoring well MW-3, where ethylbenzene was detected at a concentration of 0.0029 mg/L, and xylene was detected at a concentration of 0.0079 mg/L. Chloride, sulfate and TDS concentrations exceeded the New Mexico Water Quality Conservation Commission (NMWQCC) standard in all monitoring wells.
9. Groundwater levels consistently decreased in all monitoring wells and the water well (WW-1) during the monitoring period.
10. Chloride concentrations have decreased in all wells since they were originally sampled in 2001, with the exception of up-gradient monitoring well MW-8. The chloride concentration in groundwater collected from monitoring well MW-8 has increased from 7,445 mg/L on May 2, 2001, to 8,190 mg/L during the most recent sampling event on November 20, 2003.
11. Concentrations of sulfate have increased in monitoring wells MW-2, MW-3, MW-4, MW-5, MW-6, MW-8 and WW-1 since the May 3, 2001 sampling event, and TDS concentrations have increased in wells MW-8 and WW-1.

6.0 RECOMMENDATIONS

ChevronTexaco proposes an adjustment to the groundwater monitoring schedule from semi-annual (twice yearly) to annual (yearly), analyzing groundwater samples for anions, cations and TDS. Since BTEX constituents in groundwater samples from the Site have remained below the NMWQCC standards, BTEX analysis will be omitted from the required laboratory analysis. An annual report will be submitted to the NMOCD, detailing results of groundwater monitoring activities.

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
05/13/03	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

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
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
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
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
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
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
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
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
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

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
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)						

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. *: 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)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	TDS (mg/L)
	NMWQCC Standard				**250**	**600**					**1000**
MW-1	10-Apr-01	7.01	0	556	7,300	2,061	445	175	44.00	5,058	15,816
	03-May-01	6.77	<2	500	6,913	2,020	323.4	172.5	52.11	3,756	14,501
	23-May-02	--	<1	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
MW-2	10-Apr-01	6.91	0	566	8,704	2,611	569	296	31.00	5,871	19,312
	03-May-01	6.77	<2	516	7,799	2,670	412.4	221.7	30.31	4,424	16,857
	22-May-02	--	<1	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
MW-3	03-May-01	6.50	<2	458	11,078	3,525	984.0	431.9	38.89	6,114	24,135
	23-May-02	--	<1	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	47.5	7,540	23,100
MW-4	03-May-01	6.51	<2	618	9,572	2,755	467.7	299.8	49.25	5,435	20,118
	22-May-02	--	<1	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	39.7	4,760	17,350

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)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	TDS (mg/L)
	NMWQCC Standard				**250**	**600**					**1000**
MW-5	03-May-01	6.60	<2	416	8,685	3,045	430.9	237.1	44.36	4,651	18,846
	23-May-02	--	<1	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	54.9	4,300	16,850
MW-6	03-May-01	6.41	<2	460	11,876	4,380	1,004	429.9	52.27	6,281	25,288
	23-May-02	--	<1	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	42.5	5,610	23,500
MW-7	02-May-01	6.70	<2	436	8,154	2,430	599.5	289.8	34.57	4,578	18,578
	22-May-02	--	<1	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	52.7	3,770	14,500
MW-8	02-May-01	6.67	<2	426	7,445	1,213	766.7	295.7	52.68	2,999	16,325
	23-May-02	--	<1	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
WW-1	--	--	--	--	13,152	--	--	--	--	--	--
	03-May-01	4.38	<2	<2	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	--	--	--	*<5.0	--	--	--	--	--	--
	21-Nov-03	--	<1.00	<4.00	10,000	2,180	1,650	461	52.7	3,630	18,900

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)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	TDS (mg/L)
NMWQCC Standard					**250**	**600**					**1000**
Duplicate (WW-1)	03-May-01	4.24	<2	<2	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

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
4. * Questionable Data

FIGURES

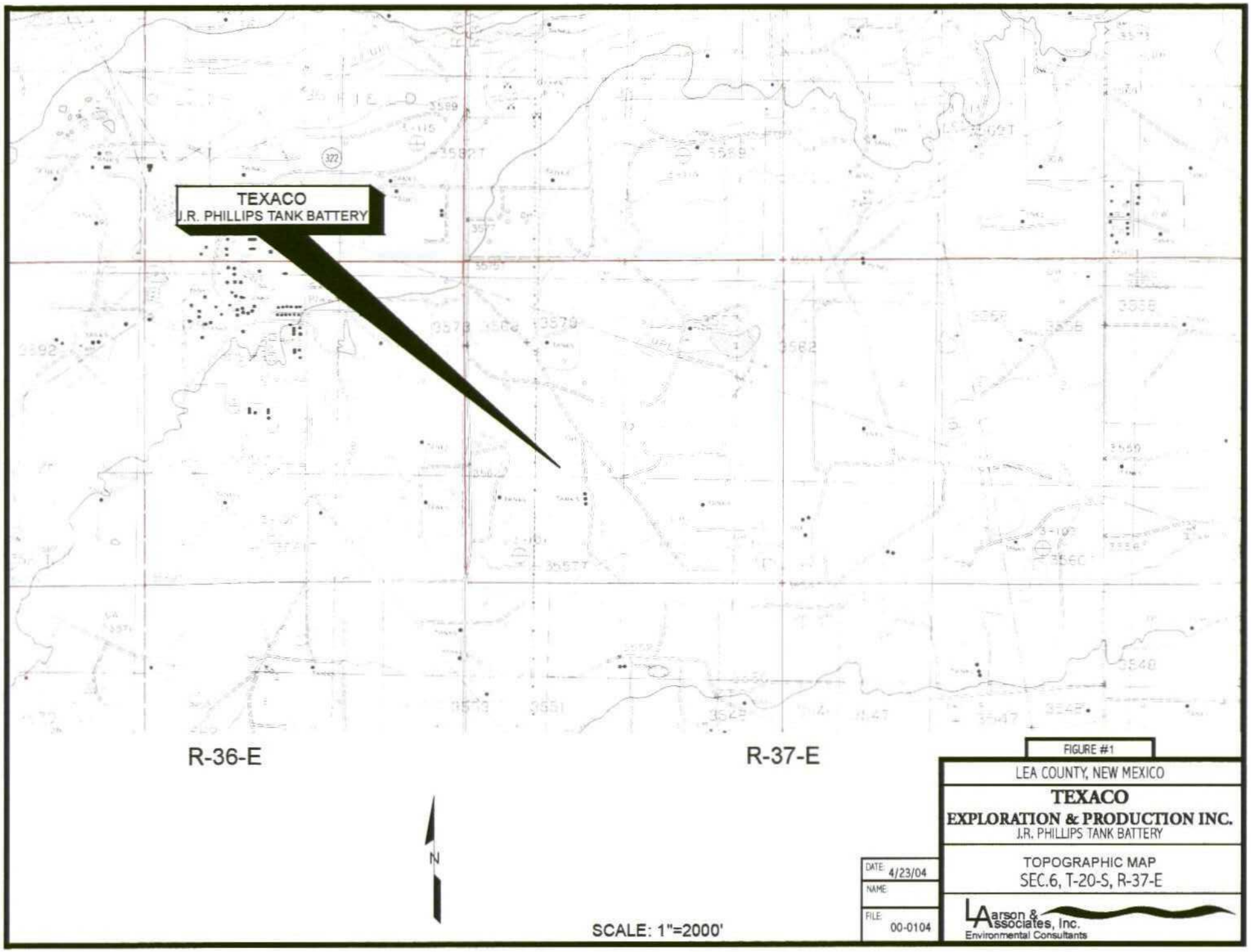


FIGURE #1

LEA COUNTY, NEW MEXICO

TEXACO

EXPLORATION & PRODUCTION INC.

J.R. PHILLIPS TANK BATTERY

TOPOGRAPHIC MAP

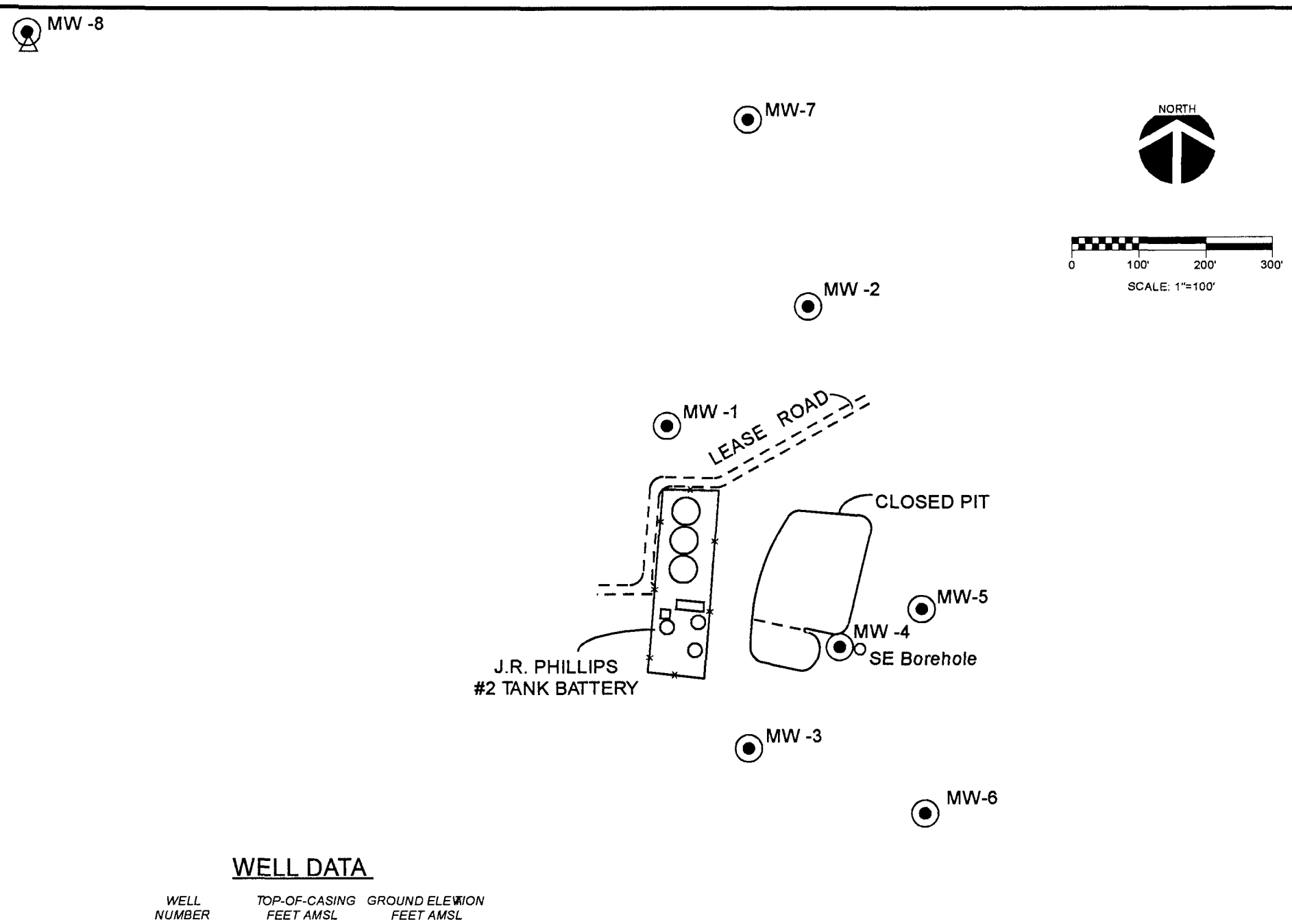
SEC.6, T-20-S, R-37-E

DATE: 4/23/04

NAME:

FILE: 00-0104

Larson & Associates, Inc.
Environmental Consultants



WELL DATA

WELL NUMBER	TOP-OF-CASING 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-3 ◉ MONITORING WELL LOCATION

WW-1 ▲ WATER WELL LOCATION (INACTIVE)

FIGURE #2

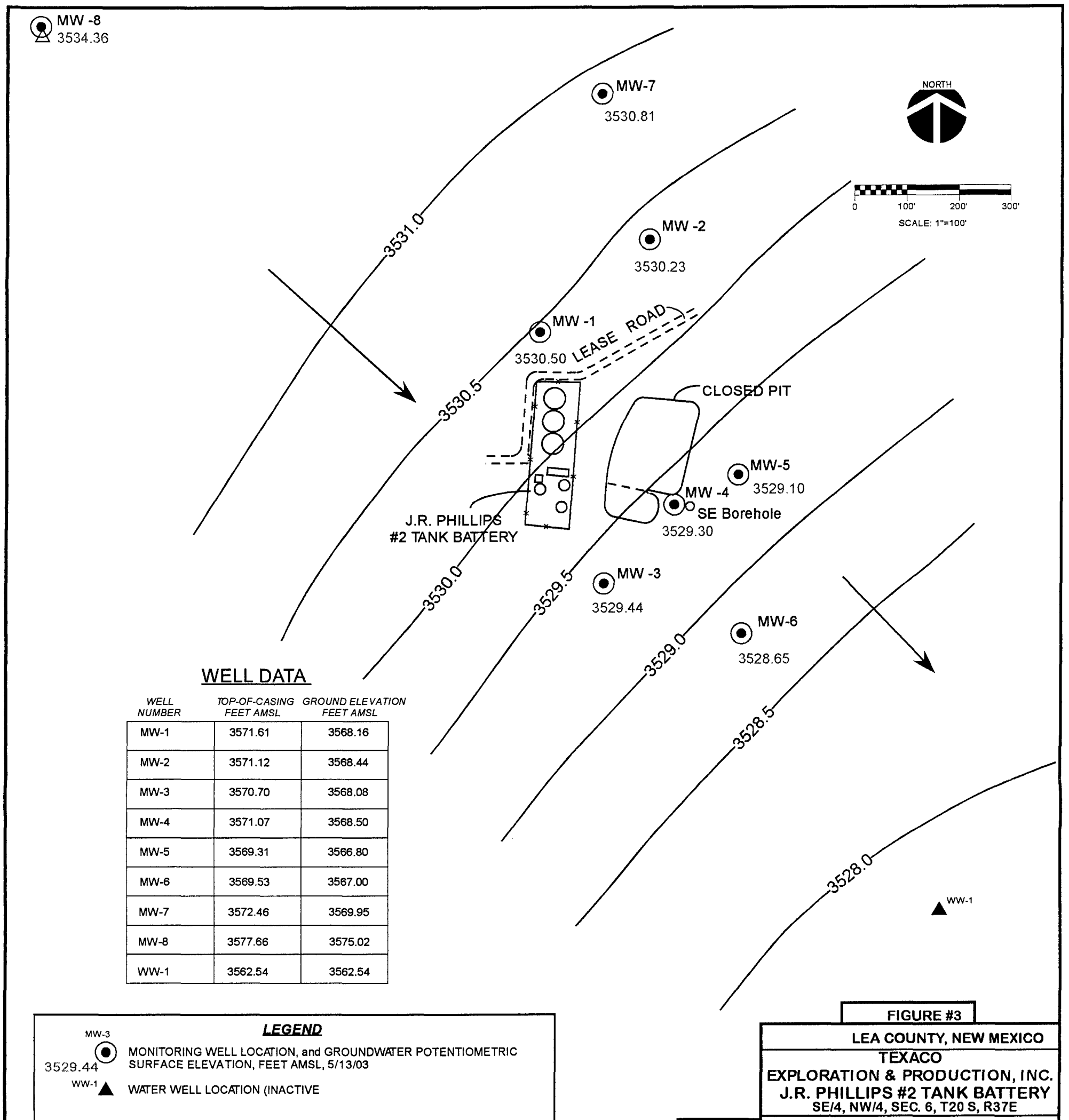
LEA COUNTY, NEW MEXICO

TEXACO
EXPLORATION & PRODUCTION, INC.
J.R. PHILLIPS #2 TANK BATTERY
SE/4, NW/4, SEC. 6, T20 S, R37E

SITE DRAWING

DATE: 4/23/04
NAME:
FILE: 0-0104

Larson & Associates, Inc.
Environmental Consultants



WELL DATA

WELL NUMBER	TOP-OF-CASING 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-3 / 3529.44 — MONITORING WELL LOCATION, and GROUNDWATER POTENTIOMETRIC SURFACE ELEVATION, FEET AMSL, 5/13/03

WW-1 — WATER WELL LOCATION (INACTIVE

3530.0 — CONTOUR of GROUNDWATER POTENTIOMETRIC SURFACE ELEVATION, FEET AMSL, 5/13/03

DIRECTION of GROUNDWATER FLOW

FIGURE #3

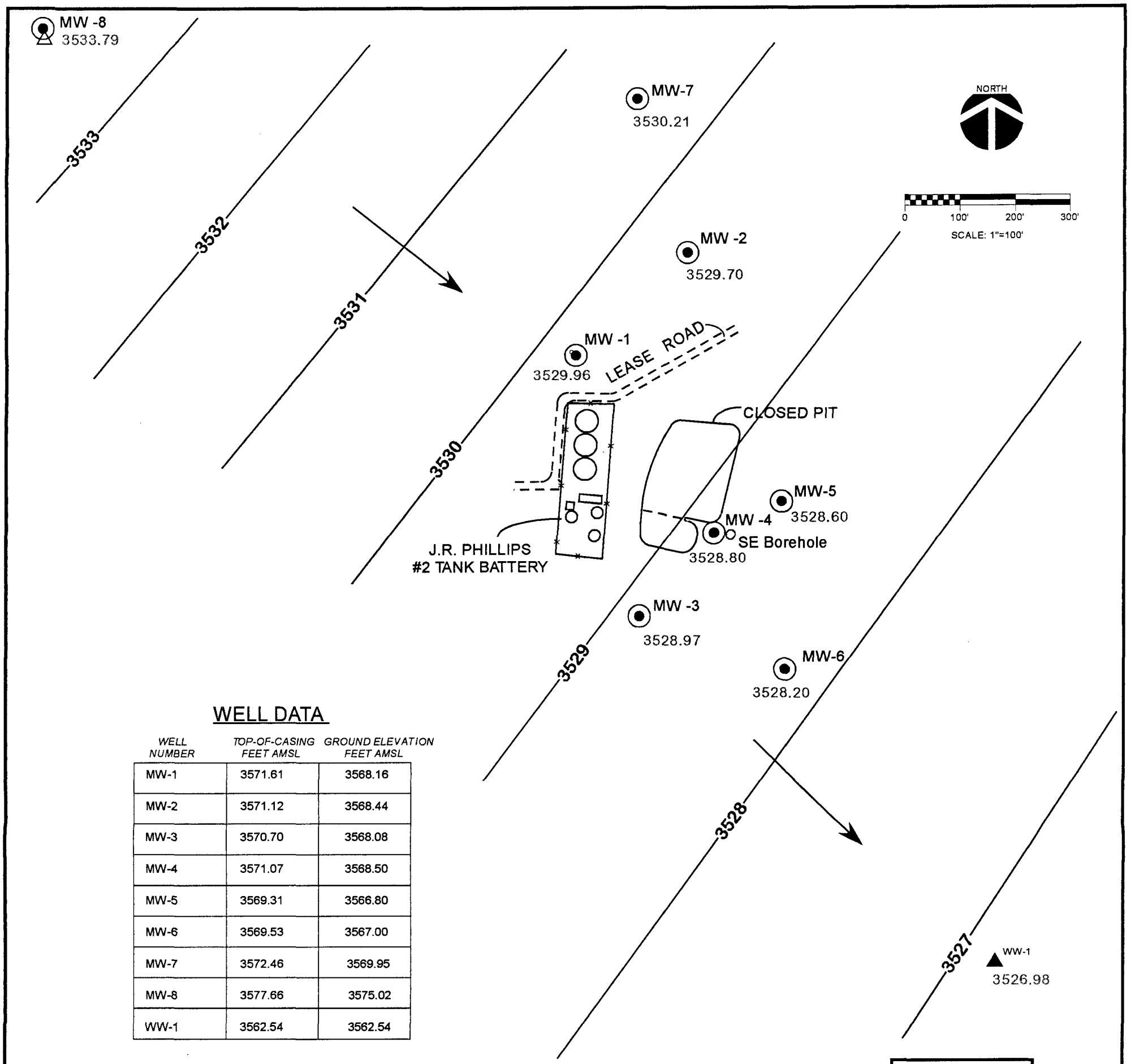
LEA COUNTY, NEW MEXICO

TEXACO
EXPLORATION & PRODUCTION, INC.
J.R. PHILLIPS #2 TANK BATTERY
SE/4, NW/4, SEC. 6, T20 S, R37E

GROUNDWATER POTENTIOMETRIC SURFACE MAP
MAY 13, 2003

DATE: 4/23/04
NAME:
FILE: 0-0104

Larson & Associates, Inc.
Environmental Consultants



WELL DATA

WELL NUMBER	TOP-OF-CASING 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-3 / 3528.97 — MONITORING WELL LOCATION, and GROUNDWATER POTENTIOMETRIC SURFACE ELEVATION, FEET AMSL, 11/20/03

WW-1 / 3526.98 — WATER WELL LOCATION (INACTIVE), and GROUNDWATER POTENTIOMETRIC SURFACE ELEVATION, FEET AMSL, 11/20/03

3528 — CONTOUR of GROUNDWATER POTENTIOMETRIC SURFACE ELEVATION, FEET AMSL, 11/20/03

DIRECTION of GROUNDWATER FLOW

FIGURE #4

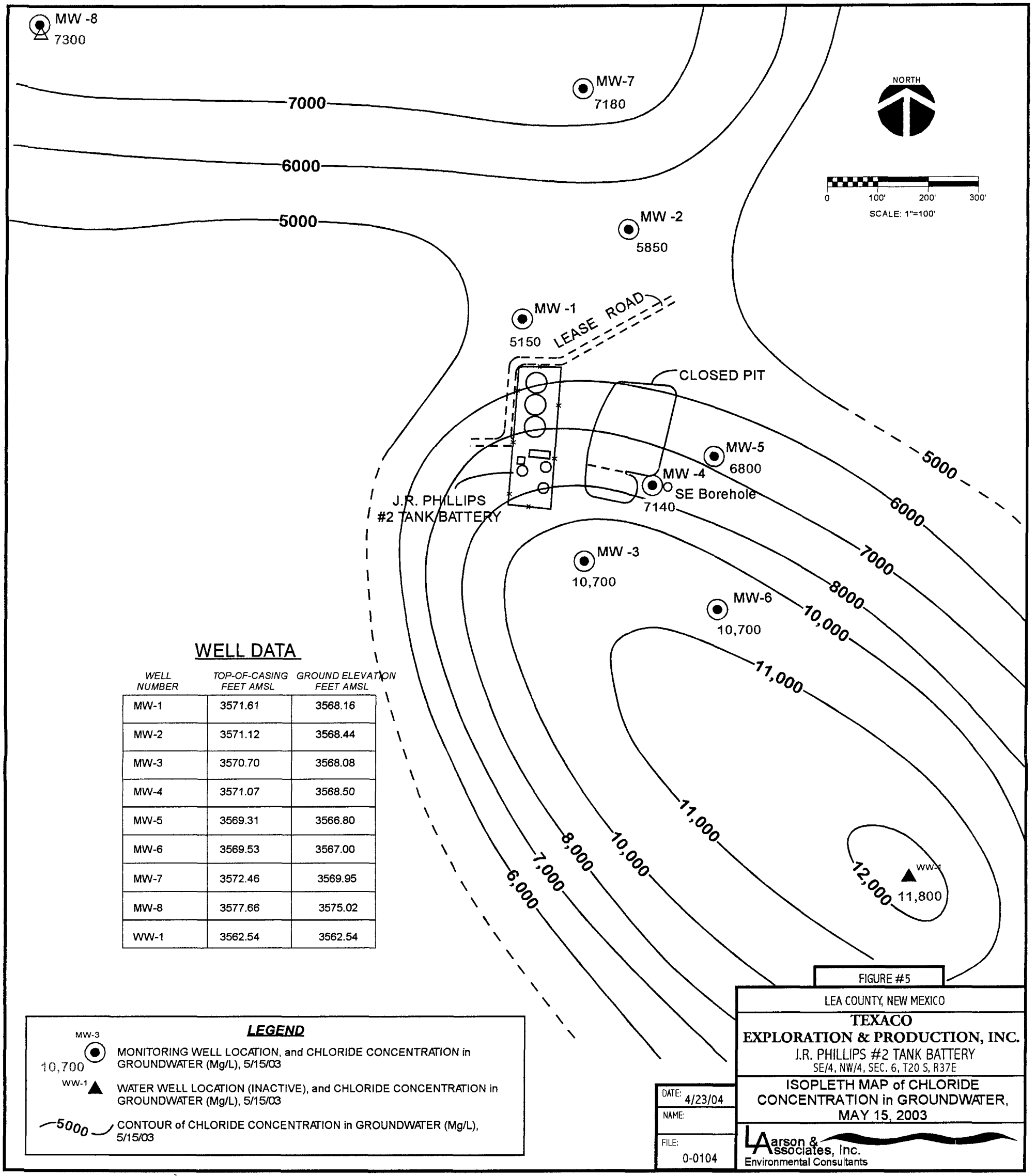
LEA COUNTY, NEW MEXICO

TEXACO
EXPLORATION & PRODUCTION, INC.
J.R. PHILLIPS #2 TANK BATTERY
SE/4, NW/4, SEC. 6, T20 S, R37E

GROUNDWATER POTENTIOMETRIC SURFACE MAP
NOVEMBER 20,2003

DATE: 4/23/04
NAME:
FILE: 0-0104

Larson & Associates, Inc.
Environmental Consultants



WELL DATA

WELL NUMBER	TOP-OF-CASING 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-3 / 10,700 — MONITORING WELL LOCATION, and CHLORIDE CONCENTRATION in GROUNDWATER (Mg/L), 5/15/03

WW-1 ▲ — WATER WELL LOCATION (INACTIVE), and CHLORIDE CONCENTRATION in GROUNDWATER (Mg/L), 5/15/03

5000 — CONTOUR of CHLORIDE CONCENTRATION in GROUNDWATER (Mg/L), 5/15/03

FIGURE #5

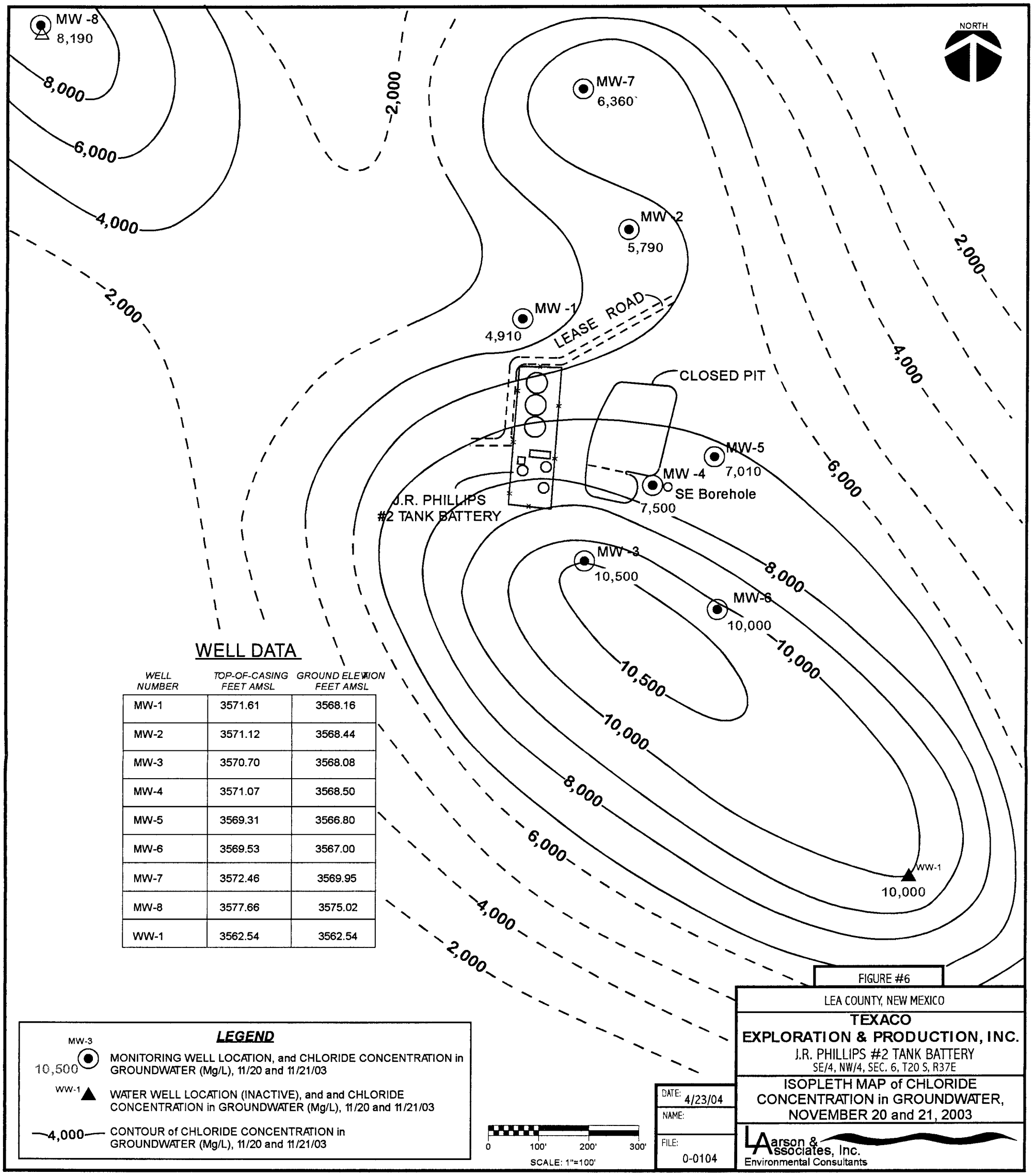
LEA COUNTY, NEW MEXICO

TEXACO
EXPLORATION & PRODUCTION, INC.
J.R. PHILLIPS #2 TANK BATTERY
SE/4, NW/4, SEC. 6, T20 S, R37E

ISOPLETH MAP of CHLORIDE CONCENTRATION in GROUNDWATER, MAY 15, 2003

DATE: 4/23/04
NAME:
FILE: 0-0104

Larson & Associates, Inc.
Environmental Consultants



WELL DATA

WELL NUMBER	TOP-OF-CASING 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-3 / 10,500 — MONITORING WELL LOCATION, and CHLORIDE CONCENTRATION in GROUNDWATER (Mg/L), 11/20 and 11/21/03

WW-1 — WATER WELL LOCATION (INACTIVE), and and CHLORIDE CONCENTRATION in GROUNDWATER (Mg/L), 11/20 and 11/21/03

4,000 — CONTOUR of CHLORIDE CONCENTRATION in GROUNDWATER (Mg/L), 11/20 and 11/21/03

0 100' 200' 300'

SCALE: 1"=100'

FIGURE #6

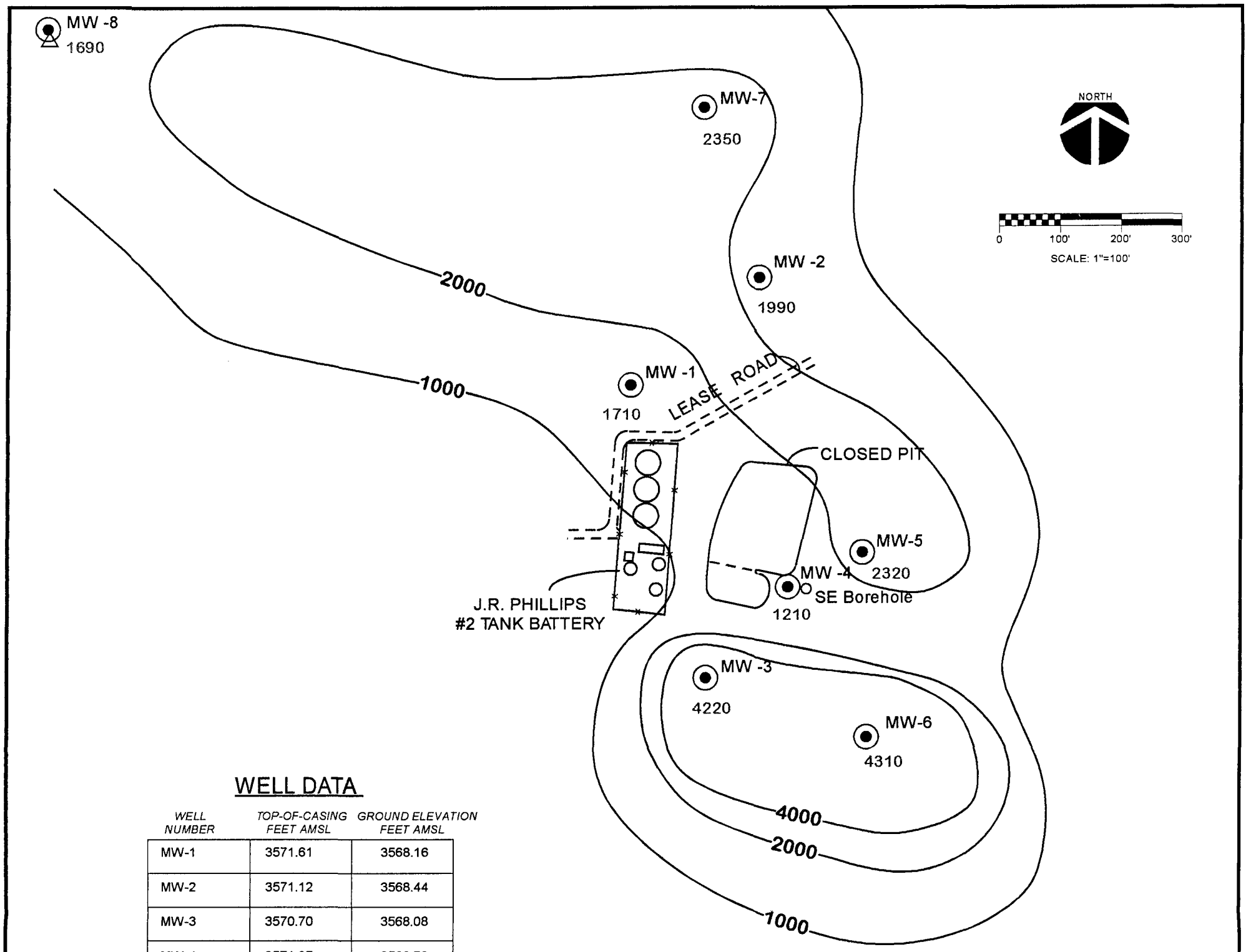
LEA COUNTY, NEW MEXICO

TEXACO
EXPLORATION & PRODUCTION, INC.
J.R. PHILLIPS #2 TANK BATTERY
SE/4, NW/4, SEC. 6, T20 S, R37E

ISOPLETH MAP of CHLORIDE CONCENTRATION in GROUNDWATER, NOVEMBER 20 and 21, 2003

DATE: 4/23/04
NAME:
FILE: 0-0104

Larson & Associates, Inc.
Environmental Consultants



WELL DATA

WELL NUMBER	TOP-OF-CASING 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-3
4220 — MONITORING WELL LOCATION, and SULFATE CONCENTRATION in GROUNDWATER (Mg/L), 5/15,2003

WW-1
1780 — WATER WELL LOCATION (INACTIVE), and SULFATE CONCENTRATION in GROUNDWATER (Mg/L), 5/15,2003

1000 — CONTOUR of SULFATE CONCENTRATION in GROUNDWATER (Mg/L), 5/15,2003

FIGURE #7

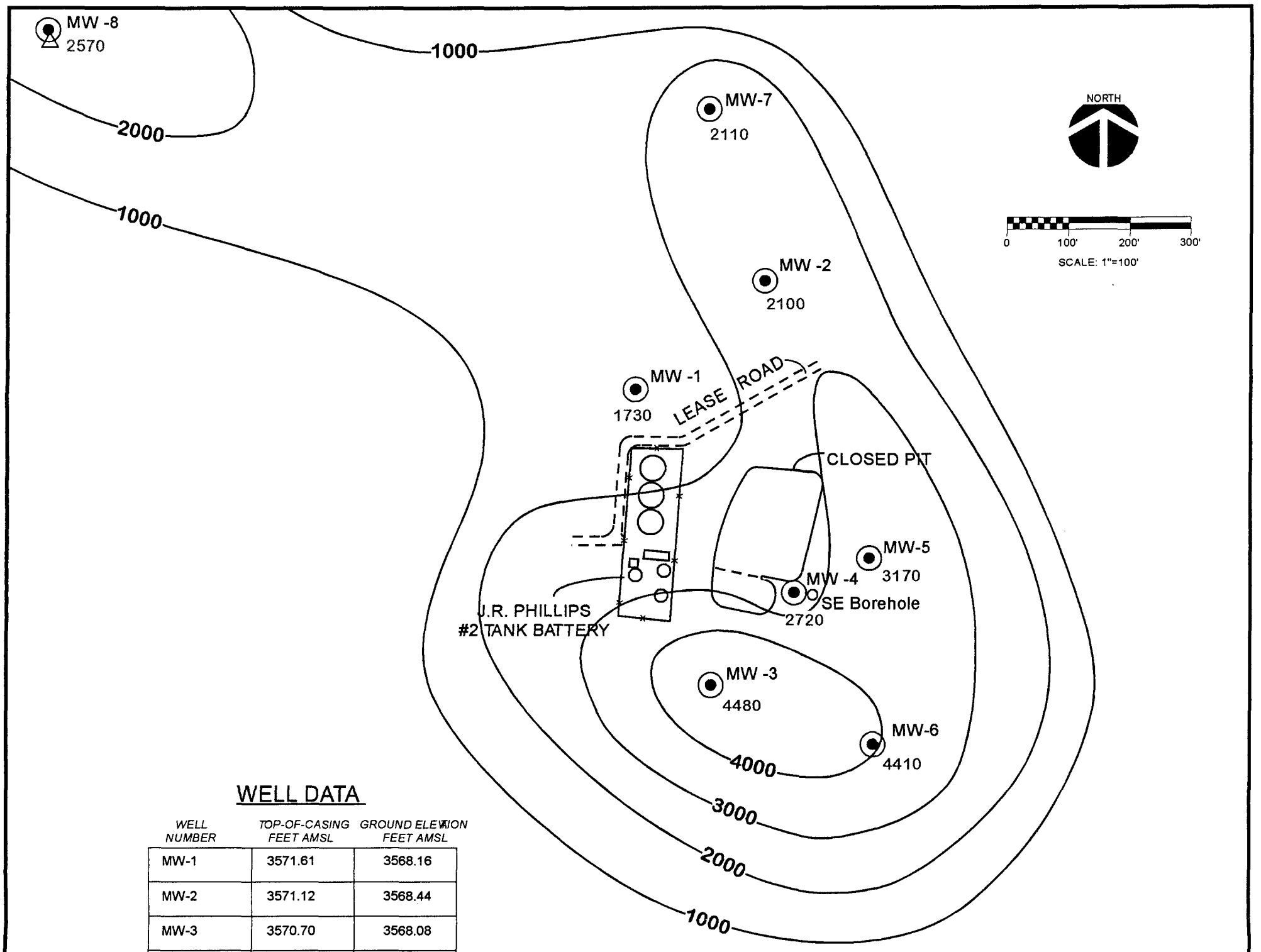
LEA COUNTY, NEW MEXICO

TEXACO
EXPLORATION & PRODUCTION, INC.
J.R. PHILLIPS #2 TANK BATTERY
SE/4, NW/4, SEC. 6, T20 S, R37E

ISOPLETH MAP of SULFATE CONCENTRATION in GROUNDWATER, MAY 15, 2003

DATE: 4/23/04
NAME:
FILE: 0-0104

Larson & Associates, Inc.
Environmental Consultants



WELL DATA

WELL NUMBER	TOP-OF-CASING 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-3
4480 — MONITORING WELL LOCATION, and SULFATE CONCENTRATION in GROUNDWATER (Mg/L), 11/20 and 11/21, 2003

WW-1
2180 — WATER WELL LOCATION (INACTIVE), and SULFATE CONCENTRATION in GROUNDWATER (Mg/L), 11/20 and 11/21, 2003

1000 — CONTOUR of SULFATE CONCENTRATION in GROUNDWATER (Mg/L), 11/20 and 11/21, 2003

FIGURE #8

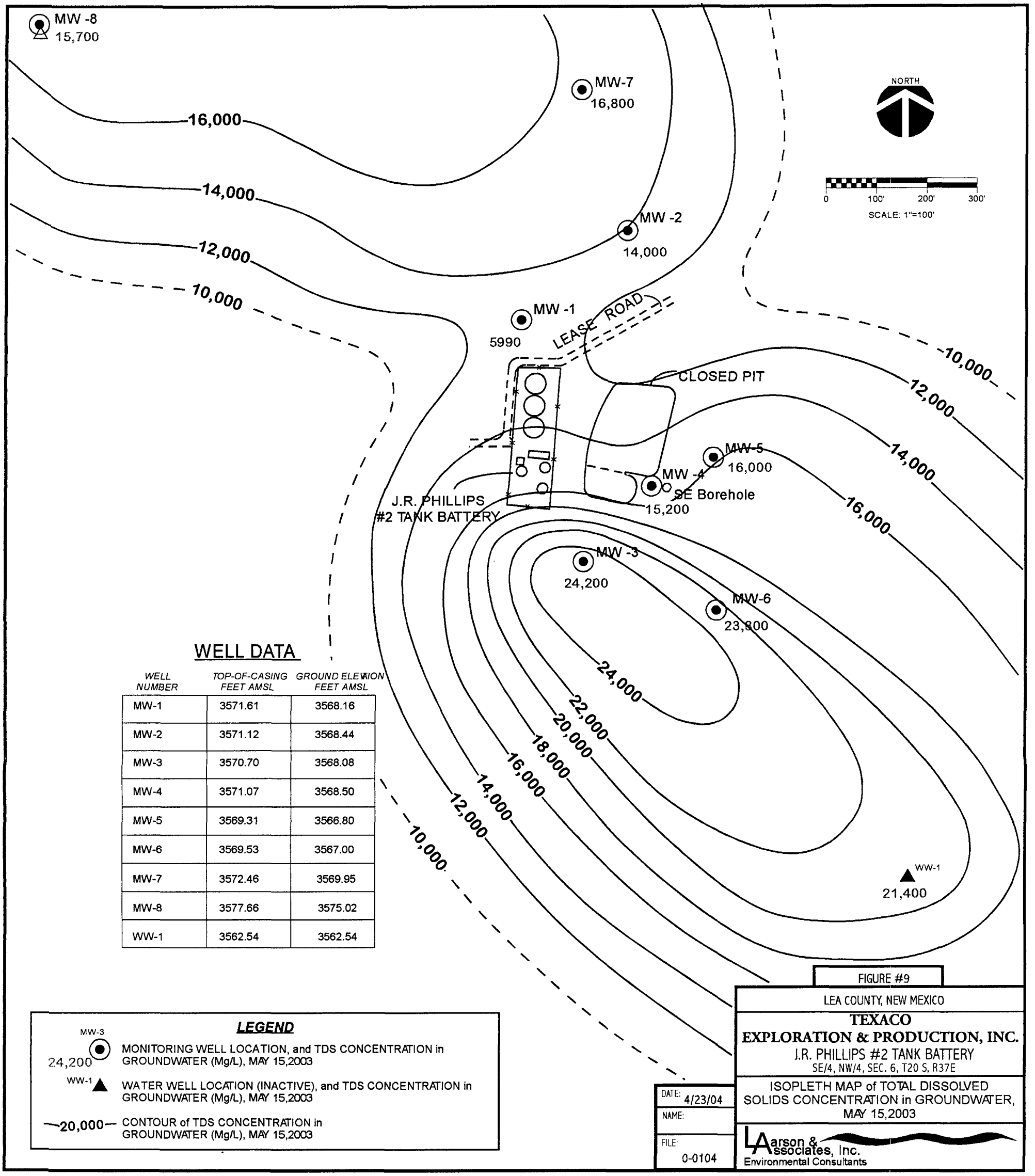
LEA COUNTY, NEW MEXICO

TEXACO
EXPLORATION & PRODUCTION, INC.
J.R. PHILLIPS #2 TANK BATTERY
SE/4, NW/4, SEC. 6, T20 S, R37E

ISOPLETH MAP of SULFATE CONCENTRATIONS in GROUNDWATER, NOVEMBER 20 AND 21, 2003

DATE: 4/23/04
NAME:
FILE: 0-0104

Larson & Associates, Inc.
Environmental Consultants



WELL DATA

WELL NUMBER	TOP-OF-CASING 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-3 / 24,200 — MONITORING WELL LOCATION, and TDS CONCENTRATION in GROUNDWATER (Mg/L), MAY 15,2003

WW-1 ▲ — WATER WELL LOCATION (INACTIVE), and TDS CONCENTRATION in GROUNDWATER (Mg/L), MAY 15,2003

—20,000— CONTOUR of TDS CONCENTRATION in GROUNDWATER (Mg/L), MAY 15,2003

FIGURE #9

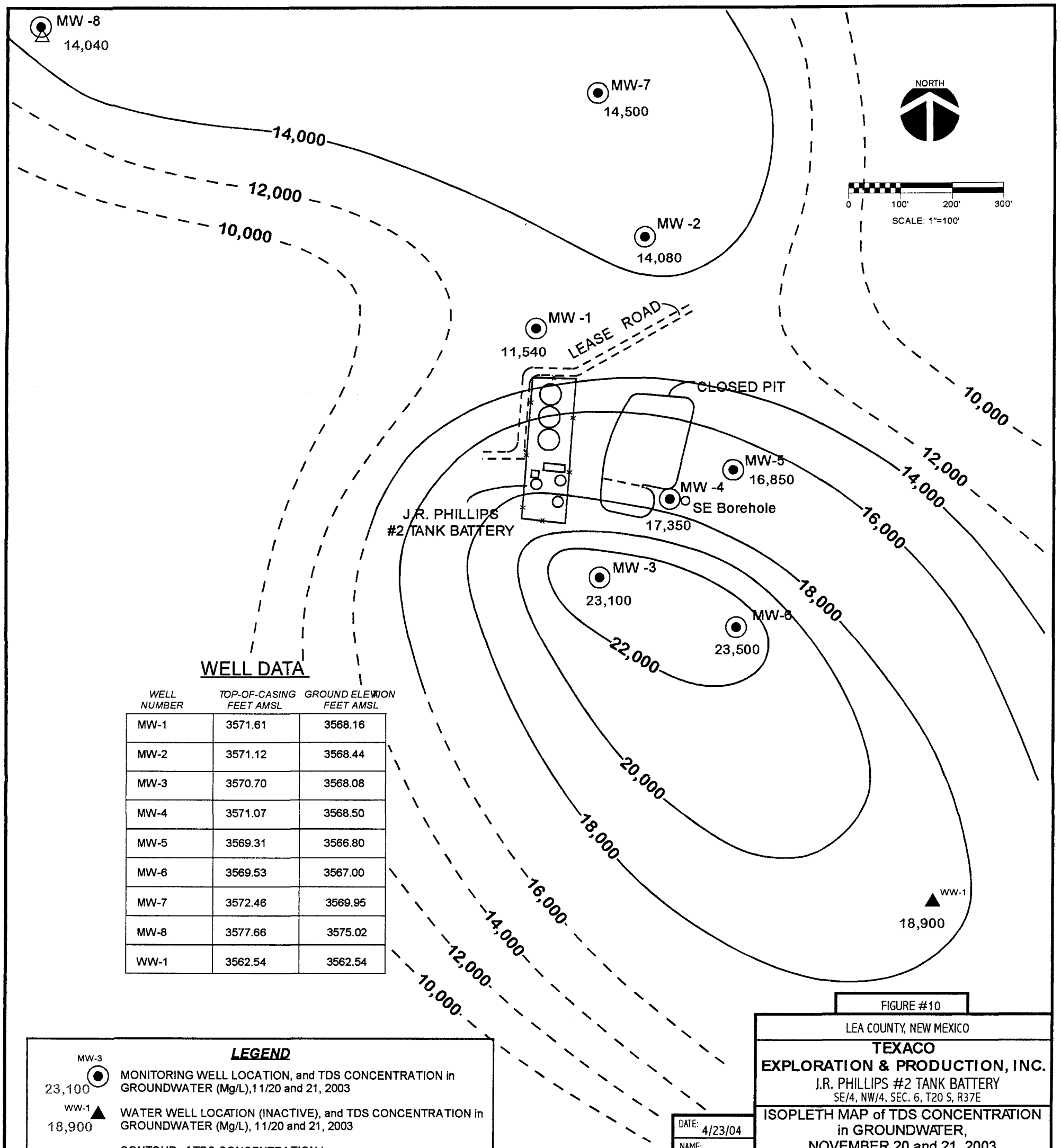
LEA COUNTY, NEW MEXICO

TEXACO
EXPLORATION & PRODUCTION, INC.
J.R. PHILLIPS #2 TANK BATTERY
SE/4, NW/4, SEC. 6, T20 S, R37E

ISOPLETH MAP of TOTAL DISSOLVED SOLIDS CONCENTRATION in GROUNDWATER, MAY 15,2003

DATE: 4/23/04
NAME:
FILE: 0-0104

Larson & Associates, Inc.
Environmental Consultants



WELL DATA

WELL NUMBER	TOP-OF-CASING 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-3 / 23,100 — MONITORING WELL LOCATION, and TDS CONCENTRATION in GROUNDWATER (Mg/L),11/20 and 21, 2003

WW-1 / 18,900 — WATER WELL LOCATION (INACTIVE), and TDS CONCENTRATION in GROUNDWATER (Mg/L), 11/20 and 21, 2003

—12,000— CONTOUR of TDS CONCENTRATION in GROUNDWATER (Mg/L), 11/20 and 21, 2003

FIGURE #10

LEA COUNTY, NEW MEXICO

TEXACO EXPLORATION & PRODUCTION, INC.

J.R. PHILLIPS #2 TANK BATTERY

SE/4, NW/4, SEC. 6, T20 S, R37E

ISOPLETH MAP of TDS CONCENTRATION in GROUNDWATER, NOVEMBER 20 and 21, 2003

DATE: 4/23/04

NAME:

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.

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

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

Report Date: June 10, 2003

Work Order: 3051612

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
7619	WW-1	water	2003-05-15	13:05	2003-05-16
7620	MW-2	water	2003-05-15	13:40	2003-05-16
7621	MW-1	water	2003-05-15	13:55	2003-05-16
7622	MW-7	water	2003-05-15	14:00	2003-05-16
7623	MW-8	water	2003-05-15	14:15	2003-05-16
7624	MW-3	water	2003-05-15	14:30	2003-05-16
7625	MW-6	water	2003-05-15	14:45	2003-05-16
7626	MW-4	water	2003-05-15	15:00	2003-05-16
7627	MW-5	water	2003-05-15	15:15	2003-05-16
7628	Duplicate	water	2003-05-15	00:00	2003-05-16

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: 7619 - WW-1

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	1778	Date Analyzed:	2003-05-22	Analyzed By:	RS
Prep Batch:	1601	Date Prepared:	2003-05-22	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		<4.00	mg/L as CaCo3	1	4.00
Total Alkalinity		<4.00	mg/L as CaCo3	1	4.00

Sample: 7619 - WW-1

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	1628	Date Analyzed:	2003-05-17	Analyzed By:	DK
Prep Batch:	1457	Date Prepared:	2003-05-17	Prepared By:	DK

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 (isomers)		<0.00500	mg/L	5	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.51	mg/L	5	0.100	102	78.7 - 110
4-Bromofluorobenzene (4-BFB)		0.464	mg/L	5	0.100	93	77.8 - 110

Sample: 7619 - WW-1

Analysis:	Cations	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	2070	Date Analyzed:	2003-06-06	Analyzed By:	BC
Prep Batch:	1590	Date Prepared:	2003-05-22	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		1490	mg/L	1	0.500
Dissolved Potassium		28.9	mg/L	1	0.500
Dissolved Magnesium		403	mg/L	1	0.500
Dissolved Sodium		3360	mg/L	1	0.500

Sample: 7619 - WW-1

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	1731	Date Analyzed:	2003-05-21	Analyzed By:	JSW
Prep Batch:	1574	Date Prepared:	2003-05-21	Prepared By:	JSW

Parameter	Flag	Result	RL	Units	Dilution	RL
Specific Conductance		28800		μMHOS/cm	1	0.00

Sample: 7619 - WW-1

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	1634	Date Analyzed:	2003-05-18	Analyzed By:	JSW
Prep Batch:	1463	Date Prepared:	2003-05-16	Prepared By:	JSW
QC Batch:	1681	Date Analyzed:	2003-05-20	Analyzed By:	JSW
Prep Batch:	1514	Date Prepared:	2003-05-19	Prepared By:	JSW

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		11800		mg/L	1000	0.500
Fluoride		<10.0		mg/L	50	0.200
Sulfate		1780		mg/L	1000	0.500

Sample: 7619 - WW-1

Analysis:	NO3 (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	1681	Date Analyzed:	2003-05-20	Analyzed By:	JSW
Prep Batch:	1514	Date Prepared:	2003-05-19	Prepared By:	JSW

Parameter	Flag	Result	RL	Units	Dilution	RL
Nitrate-N		<10.0		mg/L	50	0.200

Sample: 7619 - WW-1

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	1788	Date Analyzed:	2003-05-23	Analyzed By:	RS
Prep Batch:	1615	Date Prepared:	2003-05-21	Prepared By:	JSW

Parameter	Flag	Result	RL	Units	Dilution	RL
Total Dissolved Solids		21400		mg/L	50	10.00

Sample: 7620 - MW-2

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	1778	Date Analyzed:	2003-05-22	Analyzed By:	RS
Prep Batch:	1601	Date Prepared:	2003-05-22	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		498		mg/L as CaCo3	1	4.00
Total Alkalinity		498		mg/L as CaCo3	1	4.00

Sample: 7620 - MW-2

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	1716	Date Analyzed:	2003-05-20	Analyzed By:	DK
Prep Batch:	1543	Date Prepared:	2003-05-20	Prepared By:	DK

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 (isomers)		<0.00500	mg/L	5	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.468	mg/L	5	0.100	94	78.7 - 110
4-Bromofluorobenzene (4-BFB)		0.406	mg/L	5	0.100	81	77.8 - 110

Sample: 7620 - MW-2

Analysis:	Cations	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	2070	Date Analyzed:	2003-06-06	Analyzed By:	BC
Prep Batch:	1590	Date Prepared:	2003-05-22	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		312	mg/L	1	0.500
Dissolved Potassium		31.3	mg/L	1	0.500
Dissolved Magnesium		150	mg/L	1	0.500
Dissolved Sodium		4670	mg/L	1	0.500

Sample: 7620 - MW-2

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	1731	Date Analyzed:	2003-05-21	Analyzed By:	JSW
Prep Batch:	1574	Date Prepared:	2003-05-21	Prepared By:	JSW

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		20700	μMHOS/cm	1	0.00

Sample: 7620 - MW-2

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	1634	Date Analyzed:	2003-05-18	Analyzed By:	JSW
Prep Batch:	1463	Date Prepared:	2003-05-16	Prepared By:	JSW
QC Batch:	1694	Date Analyzed:	2003-05-20	Analyzed By:	JSW
Prep Batch:	1521	Date Prepared:	2003-05-19	Prepared By:	JSW

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		5850	mg/L	500	0.500

continued ...

sample 7620 continued ...

Parameter	Flag	Result	RL	Units	Dilution	RL
Fluoride		<10.0		mg/L	50	0.200
Sulfate		1990		mg/L	500	0.500

Sample: 7620 - MW-2

Analysis:	NO3 (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	1694	Date Analyzed:	2003-05-20	Analyzed By:	JSW
Prep Batch:	1521	Date Prepared:	2003-05-19	Prepared By:	JSW

Parameter	Flag	Result	RL	Units	Dilution	RL
Nitrate-N		<10.0		mg/L	50	0.200

Sample: 7620 - MW-2

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	1788	Date Analyzed:	2003-05-23	Analyzed By:	RS
Prep Batch:	1615	Date Prepared:	2003-05-21	Prepared By:	JSW

Parameter	Flag	Result	RL	Units	Dilution	RL
Total Dissolved Solids		14000		mg/L	20	10.00

Sample: 7621 - MW-1

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	1778	Date Analyzed:	2003-05-22	Analyzed By:	RS
Prep Batch:	1601	Date Prepared:	2003-05-22	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		430		mg/L as CaCo3	1	4.00
Total Alkalinity		430		mg/L as CaCo3	1	4.00

Sample: 7621 - MW-1

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	1630	Date Analyzed:	2003-05-17	Analyzed By:	DK
Prep Batch:	1459	Date Prepared:	2003-05-17	Prepared By:	DK

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

continued ...

sample 7621 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene (isomers)		<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	78.7 - 110
4-Bromofluorobenzene (4-BFB)		0.101	mg/L	1	0.100	101	77.8 - 110

Sample: 7621 - MW-1

Analysis:	Cations	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	2070	Date Analyzed:	2003-06-06	Analyzed By:	BC
Prep Batch:	1590	Date Prepared:	2003-05-22	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		312	mg/L	1	0.500
Dissolved Potassium		42.8	mg/L	1	0.500
Dissolved Magnesium		121	mg/L	1	0.500
Dissolved Sodium		3970	mg/L	1	0.500

Sample: 7621 - MW-1

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	1731	Date Analyzed:	2003-05-21	Analyzed By:	JSW
Prep Batch:	1574	Date Prepared:	2003-05-21	Prepared By:	JSW

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		18300	μMHOS/cm	1	0.00

Sample: 7621 - MW-1

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	1634	Date Analyzed:	2003-05-18	Analyzed By:	JSW
Prep Batch:	1463	Date Prepared:	2003-05-16	Prepared By:	JSW
QC Batch:	1694	Date Analyzed:	2003-05-20	Analyzed By:	JSW
Prep Batch:	1521	Date Prepared:	2003-05-19	Prepared By:	JSW

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		5150	mg/L	500	0.500
Fluoride		<10.0	mg/L	50	0.200
Sulfate		1710	mg/L	500	0.500

Sample: 7621 - MW-1

Analysis:	NO3 (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	1694	Date Analyzed:	2003-05-20	Analyzed By:	JSW
Prep Batch:	1521	Date Prepared:	2003-05-19	Prepared By:	JSW

Parameter	Flag	RL Result	Units	Dilution	RL
Nitrate-N		<10.0	mg/L	50	0.200

Sample: 7621 - MW-1

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	1788	Date Analyzed:	2003-05-23	Analyzed By:	RS
Prep Batch:	1615	Date Prepared:	2003-05-21	Prepared By:	JSW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		5990	mg/L	10	10.00

Sample: 7622 - MW-7

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	1778	Date Analyzed:	2003-05-22	Analyzed By:	RS
Prep Batch:	1601	Date Prepared:	2003-05-22	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		438	mg/L as CaCo3	1	4.00
Total Alkalinity		438	mg/L as CaCo3	1	4.00

Sample: 7622 - MW-7

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	1630	Date Analyzed:	2003-05-17	Analyzed By:	DK
Prep Batch:	1459	Date Prepared:	2003-05-17	Prepared By:	DK

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 (isomers)		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.109	mg/L	1	0.100	109	78.7 - 110
4-Bromofluorobenzene (4-BFB)		0.103	mg/L	1	0.100	103	77.8 - 110

Sample: 7622 - MW-7

Analysis:	Cations	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	2070	Date Analyzed:	2003-06-06	Analyzed By:	BC
Prep Batch:	1590	Date Prepared:	2003-05-22	Prepared By:	TP

Parameter	Flag	Result	RL	Units	Dilution	RL
Dissolved Calcium		583		mg/L	1	0.500
Dissolved Potassium		33.3		mg/L	1	0.500
Dissolved Magnesium		220		mg/L	1	0.500
Dissolved Sodium		4970		mg/L	1	0.500

Sample: 7622 - MW-7

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	1736	Date Analyzed:	2003-05-21	Analyzed By:	JSW
Prep Batch:	1576	Date Prepared:	2003-05-21	Prepared By:	JSW

Parameter	Flag	Result	RL	Units	Dilution	RL
Specific Conductance		24000		μMHOS/cm	1	0.00

Sample: 7622 - MW-7

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	1634	Date Analyzed:	2003-05-18	Analyzed By:	JSW
Prep Batch:	1463	Date Prepared:	2003-05-16	Prepared By:	JSW
QC Batch:	1694	Date Analyzed:	2003-05-20	Analyzed By:	JSW
Prep Batch:	1521	Date Prepared:	2003-05-19	Prepared By:	JSW

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		7180		mg/L	500	0.500
Fluoride		<10.0		mg/L	50	0.200
Sulfate		2350		mg/L	500	0.500

Sample: 7622 - MW-7

Analysis:	NO3 (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	1694	Date Analyzed:	2003-05-20	Analyzed By:	JSW
Prep Batch:	1521	Date Prepared:	2003-05-19	Prepared By:	JSW

Parameter	Flag	Result	RL	Units	Dilution	RL
Nitrate-N		<10.0		mg/L	50	0.200

Sample: 7622 - MW-7

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	1788	Date Analyzed:	2003-05-23	Analyzed By:	RS
Prep Batch:	1615	Date Prepared:	2003-05-21	Prepared By:	JSW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		16800	mg/L	20	10.00

Sample: 7623 - MW-8

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	1778	Date Analyzed:	2003-05-22	Analyzed By:	RS
Prep Batch:	1601	Date Prepared:	2003-05-22	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		468	mg/L as CaCo3	1	4.00
Total Alkalinity		468	mg/L as CaCo3	1	4.00

Sample: 7623 - MW-8

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	1630	Date Analyzed:	2003-05-17	Analyzed By:	DK
Prep Batch:	1459	Date Prepared:	2003-05-17	Prepared By:	DK

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		0.0138	mg/L	5	0.00100
Toluene		<0.00500	mg/L	5	0.00100
Ethylbenzene		<0.00500	mg/L	5	0.00100
Xylene (isomers)		<0.00500	mg/L	5	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.512	mg/L	5	0.100	102	78.7 - 110
4-Bromofluorobenzene (4-BFB)		0.488	mg/L	5	0.100	98	77.8 - 110

Sample: 7623 - MW-8

Analysis:	Cations	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	2070	Date Analyzed:	2003-06-06	Analyzed By:	BC
Prep Batch:	1590	Date Prepared:	2003-05-22	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		777	mg/L	1	0.500
Dissolved Potassium		55.1	mg/L	1	0.500
Dissolved Magnesium		265	mg/L	1	0.500
Dissolved Sodium		4580	mg/L	1	0.500

Sample: 7623 - MW-8

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A

QC Batch:	1736	Date Analyzed:	2003-05-21	Analyzed By:	JSW
Prep Batch:	1576	Date Prepared:	2003-05-21	Prepared By:	JSW

Parameter	Flag	Result	RL	Units	Dilution	RL
Specific Conductance		23400		µMHOS/cm	1	0.00

Sample: 7623 - MW-8

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	1635	Date Analyzed:	2003-05-18	Analyzed By:	JSW
Prep Batch:	1464	Date Prepared:	2003-05-16	Prepared By:	JSW
QC Batch:	1694	Date Analyzed:	2003-05-20	Analyzed By:	JSW
Prep Batch:	1521	Date Prepared:	2003-05-19	Prepared By:	JSW

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		7300		mg/L	500	0.500
Fluoride		<10.0		mg/L	50	0.200
Sulfate		1690		mg/L	500	0.500

Sample: 7623 - MW-8

Analysis:	NO3 (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	1694	Date Analyzed:	2003-05-20	Analyzed By:	JSW
Prep Batch:	1521	Date Prepared:	2003-05-19	Prepared By:	JSW

Parameter	Flag	Result	RL	Units	Dilution	RL
Nitrate-N		<10.0		mg/L	50	0.200

Sample: 7623 - MW-8

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	1788	Date Analyzed:	2003-05-23	Analyzed By:	RS
Prep Batch:	1615	Date Prepared:	2003-05-21	Prepared By:	JSW

Parameter	Flag	Result	RL	Units	Dilution	RL
Total Dissolved Solids		15700		mg/L	20	10.00

Sample: 7624 - MW-3

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	1778	Date Analyzed:	2003-05-22	Analyzed By:	RS
Prep Batch:	1601	Date Prepared:	2003-05-22	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

continued ...

sample 7624 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL
Bicarbonate Alkalinity		462	mg/L as CaCo3	1	4.00
Total Alkalinity		462	mg/L as CaCo3	1	4.00

Sample: 7624 - MW-3

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	1630	Date Analyzed:	2003-05-17	Analyzed By:	DK
Prep Batch:	1459	Date Prepared:	2003-05-17	Prepared By:	DK

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 (isomers)		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.107	mg/L	1	0.100	107	78.7 - 110
4-Bromofluorobenzene (4-BFB)		0.103	mg/L	1	0.100	103	77.8 - 110

Sample: 7624 - MW-3

Analysis:	Cations	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	2070	Date Analyzed:	2003-06-06	Analyzed By:	BC
Prep Batch:	1590	Date Prepared:	2003-05-22	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		921	mg/L	1	0.500
Dissolved Potassium		34.1	mg/L	1	0.500
Dissolved Magnesium		315	mg/L	1	0.500
Dissolved Sodium		5870	mg/L	1	0.500

Sample: 7624 - MW-3

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	1736	Date Analyzed:	2003-05-21	Analyzed By:	JSW
Prep Batch:	1576	Date Prepared:	2003-05-21	Prepared By:	JSW

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		32500	μMHOS/cm	1	0.00

Sample: 7624 - MW-3

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A

QC Batch:	1635	Date Analyzed:	2003-05-18	Analyzed By:	JSW
Prep Batch:	1464	Date Prepared:	2003-05-16	Prepared By:	JSW
QC Batch:	1694	Date Analyzed:	2003-05-20	Analyzed By:	JSW
Prep Batch:	1521	Date Prepared:	2003-05-19	Prepared By:	JSW

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		10700		mg/L	1000	0.500
Fluoride		<10.0		mg/L	50	0.200
Sulfate		4220		mg/L	1000	0.500

Sample: 7624 - MW-3

Analysis:	NO3 (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	1694	Date Analyzed:	2003-05-20	Analyzed By:	JSW
Prep Batch:	1521	Date Prepared:	2003-05-19	Prepared By:	JSW

Parameter	Flag	Result	RL	Units	Dilution	RL
Nitrate-N		<10.0		mg/L	50	0.200

Sample: 7624 - MW-3

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	1788	Date Analyzed:	2003-05-23	Analyzed By:	RS
Prep Batch:	1615	Date Prepared:	2003-05-21	Prepared By:	JSW

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

Sample: 7625 - MW-6

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	1778	Date Analyzed:	2003-05-22	Analyzed By:	RS
Prep Batch:	1601	Date Prepared:	2003-05-22	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		470		mg/L as CaCo3	1	4.00
Total Alkalinity		470		mg/L as CaCo3	1	4.00

Sample: 7625 - MW-6

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	1630	Date Analyzed:	2003-05-17	Analyzed By:	DK
Prep Batch:	1459	Date Prepared:	2003-05-17	Prepared By:	DK

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 (isomers)		<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	78.7 - 110
4-Bromofluorobenzene (4-BFB)		0.102	mg/L	1	0.100	102	77.8 - 110

Sample: 7625 - MW-6

Analysis:	Cations	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	2070	Date Analyzed:	2003-06-06	Analyzed By:	BC
Prep Batch:	1590	Date Prepared:	2003-05-22	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		1000	mg/L	1	0.500
Dissolved Potassium		34.1	mg/L	1	0.500
Dissolved Magnesium		388	mg/L	1	0.500
Dissolved Sodium		5760	mg/L	1	0.500

Sample: 7625 - MW-6

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	1736	Date Analyzed:	2003-05-21	Analyzed By:	JSW
Prep Batch:	1576	Date Prepared:	2003-05-21	Prepared By:	JSW

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		33300	μMHOS/cm	1	0.00

Sample: 7625 - MW-6

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	1635	Date Analyzed:	2003-05-18	Analyzed By:	JSW
Prep Batch:	1464	Date Prepared:	2003-05-16	Prepared By:	JSW
QC Batch:	1694	Date Analyzed:	2003-05-20	Analyzed By:	JSW
Prep Batch:	1521	Date Prepared:	2003-05-19	Prepared By:	JSW

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		10700	mg/L	1000	0.500
Fluoride		<10.0	mg/L	50	0.200
Sulfate		4310	mg/L	1000	0.500

Sample: 7625 - MW-6

Analysis:	NO3 (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	1694	Date Analyzed:	2003-05-20	Analyzed By:	JSW
Prep Batch:	1521	Date Prepared:	2003-05-19	Prepared By:	JSW

Parameter	Flag	Result	RL	Units	Dilution	RL
Nitrate-N		<10.0		mg/L	50	0.200

Sample: 7625 - MW-6

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	1788	Date Analyzed:	2003-05-23	Analyzed By:	RS
Prep Batch:	1615	Date Prepared:	2003-05-21	Prepared By:	JSW

Parameter	Flag	Result	RL	Units	Dilution	RL
Total Dissolved Solids		23800		mg/L	50	10.00

Sample: 7626 - MW-4

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	1778	Date Analyzed:	2003-05-22	Analyzed By:	RS
Prep Batch:	1601	Date Prepared:	2003-05-22	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		1050		mg/L as CaCo3	1	4.00
Total Alkalinity		1050		mg/L as CaCo3	1	4.00

Sample: 7626 - MW-4

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	1630	Date Analyzed:	2003-05-17	Analyzed By:	DK
Prep Batch:	1459	Date Prepared:	2003-05-17	Prepared By:	DK

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 (isomers)		<0.00100		mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	[1]	0.113	mg/L	1	0.100	113	78.7 - 110
4-Bromofluorobenzene (4-BFB)		0.11	mg/L	1	0.100	110	77.8 - 110

Sample: 7626 - MW-4

[1]High TFT surrogate recovery due to peak interference.

Analysis:	Cations	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	2070	Date Analyzed:	2003-06-06	Analyzed By:	BC
Prep Batch:	1590	Date Prepared:	2003-05-22	Prepared By:	TP

Parameter	Flag	Result	RL Units	Dilution	RL
Dissolved Calcium		185	mg/L	1	0.500
Dissolved Potassium		14.8	mg/L	1	0.500
Dissolved Magnesium		179	mg/L	1	0.500
Dissolved Sodium		5250	mg/L	1	0.500

Sample: 7626 - MW-4

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	1736	Date Analyzed:	2003-05-21	Analyzed By:	JSW
Prep Batch:	1576	Date Prepared:	2003-05-21	Prepared By:	JSW

Parameter	Flag	Result	RL Units	Dilution	RL
Specific Conductance		23400	μMHOS/cm	1	0.00

Sample: 7626 - MW-4

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	1635	Date Analyzed:	2003-05-18	Analyzed By:	JSW
Prep Batch:	1464	Date Prepared:	2003-05-16	Prepared By:	JSW
QC Batch:	1694	Date Analyzed:	2003-05-20	Analyzed By:	JSW
Prep Batch:	1521	Date Prepared:	2003-05-19	Prepared By:	JSW

Parameter	Flag	Result	RL Units	Dilution	RL
Chloride		7140	mg/L	500	0.500
Fluoride		<10.0	mg/L	50	0.200
Sulfate		1210	mg/L	500	0.500

Sample: 7626 - MW-4

Analysis:	NO3 (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	1694	Date Analyzed:	2003-05-20	Analyzed By:	JSW
Prep Batch:	1521	Date Prepared:	2003-05-19	Prepared By:	JSW

Parameter	Flag	Result	RL Units	Dilution	RL
Nitrate-N		<10.0	mg/L	50	0.200

Sample: 7626 - MW-4

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	1788	Date Analyzed:	2003-05-23	Analyzed By:	RS
Prep Batch:	1615	Date Prepared:	2003-05-21	Prepared By:	JSW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		15200	mg/L	20	10.00

Sample: 7627 - MW-5

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	1778	Date Analyzed:	2003-05-22	Analyzed By:	RS
Prep Batch:	1601	Date Prepared:	2003-05-22	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		562	mg/L as CaCo3	1	4.00
Total Alkalinity		562	mg/L as CaCo3	1	4.00

Sample: 7627 - MW-5

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	1630	Date Analyzed:	2003-05-17	Analyzed By:	DK
Prep Batch:	1459	Date Prepared:	2003-05-17	Prepared By:	DK

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 (isomers)		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	[2]	0.112	mg/L	1	0.100	112	78.7 - 110
4-Bromofluorobenzene (4-BFB)		0.1	mg/L	1	0.100	100	77.8 - 110

Sample: 7627 - MW-5

Analysis:	Cations	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	2070	Date Analyzed:	2003-06-06	Analyzed By:	BC
Prep Batch:	1590	Date Prepared:	2003-05-22	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		383	mg/L	1	0.500
Dissolved Potassium		30.9	mg/L	1	0.500
Dissolved Magnesium		167	mg/L	1	0.500
Dissolved Sodium		5300	mg/L	1	0.500

Sample: 7627 - MW-5

[2]High surrogate recovery due to peak interference.

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	1736	Date Analyzed:	2003-05-21	Analyzed By:	JSW
Prep Batch:	1576	Date Prepared:	2003-05-21	Prepared By:	JSW

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		23700	µMHOS/cm	1	0.00

Sample: 7627 - MW-5

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	1635	Date Analyzed:	2003-05-18	Analyzed By:	JSW
Prep Batch:	1464	Date Prepared:	2003-05-16	Prepared By:	JSW
QC Batch:	1694	Date Analyzed:	2003-05-20	Analyzed By:	JSW
Prep Batch:	1521	Date Prepared:	2003-05-19	Prepared By:	JSW

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		6800	mg/L	500	0.500
Fluoride		<10.0	mg/L	50	0.200
Sulfate		2320	mg/L	500	0.500

Sample: 7627 - MW-5

Analysis:	NO3 (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	1694	Date Analyzed:	2003-05-20	Analyzed By:	JSW
Prep Batch:	1521	Date Prepared:	2003-05-19	Prepared By:	JSW

Parameter	Flag	RL Result	Units	Dilution	RL
Nitrate-N		<10.0	mg/L	50	0.200

Sample: 7627 - MW-5

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	1788	Date Analyzed:	2003-05-23	Analyzed By:	RS
Prep Batch:	1615	Date Prepared:	2003-05-21	Prepared By:	JSW

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		16000	mg/L	20	10.00

Sample: 7628 - Duplicate

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	1778	Date Analyzed:	2003-05-22	Analyzed By:	RS
Prep Batch:	1601	Date Prepared:	2003-05-22	Prepared By:	RS

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

continued ...

sample 7628 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		482	mg/L as CaCo3	1	4.00
Total Alkalinity		482	mg/L as CaCo3	1	4.00

Sample: 7628 - Duplicate

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	1630	Date Analyzed:	2003-05-17	Analyzed By:	DK
Prep Batch:	1459	Date Prepared:	2003-05-17	Prepared By:	DK

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		0.0155	mg/L	10	0.00100
Toluene		<0.0100	mg/L	10	0.00100
Ethylbenzene		<0.0100	mg/L	10	0.00100
Xylene (isomers)		<0.0100	mg/L	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.982	mg/L	10	0.100	98	78.7 - 110
4-Bromofluorobenzene (4-BFB)		0.917	mg/L	10	0.100	92	77.8 - 110

Sample: 7628 - Duplicate

Analysis:	Cations	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	2070	Date Analyzed:	2003-06-06	Analyzed By:	BC
Prep Batch:	1590	Date Prepared:	2003-05-22	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		779	mg/L	1	0.500
Dissolved Potassium		53.6	mg/L	1	0.500
Dissolved Magnesium		272	mg/L	1	0.500
Dissolved Sodium		4610	mg/L	1	0.500

Sample: 7628 - Duplicate

Analysis:	Conductivity	Analytical Method:	SM 2510B	Prep Method:	N/A
QC Batch:	1736	Date Analyzed:	2003-05-21	Analyzed By:	JSW
Prep Batch:	1576	Date Prepared:	2003-05-21	Prepared By:	JSW

Parameter	Flag	RL Result	Units	Dilution	RL
Specific Conductance		23300	μMHOS/cm	1	0.00

Sample: 7628 - Duplicate

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	1636	Date Analyzed:	2003-05-18	Analyzed By:	JSW
Prep Batch:	1465	Date Prepared:	2003-05-16	Prepared By:	JSW
QC Batch:	1753	Date Analyzed:	2003-05-21	Analyzed By:	JSW
Prep Batch:	1585	Date Prepared:	2003-05-20	Prepared By:	JSW

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		7170		mg/L	500	0.500
Fluoride		<10.0		mg/L	50	0.200
Sulfate		1660		mg/L	500	0.500

Sample: 7628 - Duplicate

Analysis:	NO3 (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	1753	Date Analyzed:	2003-05-21	Analyzed By:	JSW
Prep Batch:	1585	Date Prepared:	2003-05-20	Prepared By:	JSW

Parameter	Flag	Result	RL	Units	Dilution	RL
Nitrate-N		<10.0		mg/L	50	0.200

Sample: 7628 - Duplicate

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	1788	Date Analyzed:	2003-05-23	Analyzed By:	RS
Prep Batch:	1615	Date Prepared:	2003-05-21	Prepared By:	JSW

Parameter	Flag	Result	RL	Units	Dilution	RL
Total Dissolved Solids		15600		mg/L	20	10.00

Method Blank (1) QC Batch: 1628

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 (isomers)		<0.00100	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	[3]	0	mg/L	1	0.100	0	78.7 - 110
4-Bromofluorobenzene (4-BFB)	[4]	0	mg/L	1	0.100	0	77.8 - 110

Method Blank (1) QC Batch: 1630

[3]No surrogate was added to the method blank.
[4]No surrogate was added to the method blank.

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 (isomers)		<0.00100	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0976	mg/L	1	0.100	98	78.7 - 110
4-Bromofluorobenzene (4-BFB)		0.0828	mg/L	1	0.100	83	77.8 - 110

Method Blank (1) QC Batch: 1634

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

Method Blank (1) QC Batch: 1635

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

Method Blank (1) QC Batch: 1636

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

Method Blank (1) QC Batch: 1681

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

Method Blank (1) QC Batch: 1681

Parameter	Flag	Result	Units	RL
Fluoride		<0.200	mg/L	0.2

Method Blank (1) QC Batch: 1694

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

Method Blank (1) QC Batch: 1694

Parameter	Flag	Result	Units	RL
Fluoride		<0.200	mg/L	0.2

Method Blank (1) QC Batch: 1716

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 (isomers)		<0.00100	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0951	mg/L	1	0.100	95	78.7 - 110
4-Bromofluorobenzene (4-BFB)		0.0865	mg/L	1	0.100	86	77.8 - 110

Method Blank (1) QC Batch: 1731

Parameter	Flag	Result	Units	RL
Specific Conductance		6.33	μMHOS/cm	

Method Blank (1) QC Batch: 1736

Parameter	Flag	Result	Units	RL
Specific Conductance		6.33	μMHOS/cm	

Method Blank (1) QC Batch: 1753

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

Method Blank (1) QC Batch: 1753

Parameter	Flag	Result	Units	RL
Fluoride		<0.200	mg/L	0.2

Method Blank (1) QC Batch: 1778

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: 1788

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

Method Blank (1) QC Batch: 2070

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

Duplicate (1) QC Batch: 1731

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Specific Conductance	10300	10200	μMHOS/cm	1	1	2.9

Duplicate (1) QC Batch: 1736

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Specific Conductance	2330	2320	μMHOS/cm	1	0	2.9

Duplicate (1) QC Batch: 1778

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Hydroxide Alkalinity	<1.00	<1.00	mg/L as CaCo3	1	0	5.81

continued ...

duplicate continued ...

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Carbonate Alkalinity	<1.00	<1.00	mg/L as CaCo3	1	0	5.81
Bicarbonate Alkalinity	492	482	mg/L as CaCo3	1	2	5.81
Total Alkalinity	492	482	mg/L as CaCo3	1	2	5.81

Duplicate (1) QC Batch: 1788

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids	16100	15600	mg/L	20	3	9.41

Laboratory Control Spike (LCS-1) QC Batch: 1628

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Benzene	0.102	0.103	mg/L	1	0.100	<0.000410	102	1	80.5 - 113	20
Toluene	0.0998	0.102	mg/L	1	0.100	<0.000760	100	2	81.2 - 112	20
Ethylbenzene	0.104	0.0989	mg/L	1	0.100	<0.00120	104	4	82.2 - 112	20
Xylene (isomers)	0.313	0.298	mg/L	1	0.300	<0.00183	104	5	80.6 - 112	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)	0.102	0.0892	mg/L	1	0.100	102	89	78.7 - 110
4-Bromofluorobenzene (4-BFB)	0.0879	0.0918	mg/L	1	0.100	88	92	77.8 - 110

Laboratory Control Spike (LCS-1) QC Batch: 1630

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Benzene	0.0989	0.0997	mg/L	1	0.100	<0.000410	99	1	80.5 - 113	20
Toluene	0.0989	0.0998	mg/L	1	0.100	<0.000760	99	1	81.2 - 112	20
Ethylbenzene	0.0982	0.0994	mg/L	1	0.100	<0.00120	98	1	82.2 - 112	20
Xylene (isomers)	0.294	0.298	mg/L	1	0.300	<0.00183	98	1	80.6 - 112	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)	0.0853	0.0864	mg/L	1	0.100	85	86	78.7 - 110
4-Bromofluorobenzene (4-BFB)	0.0874	0.0887	mg/L	1	0.100	87	89	77.8 - 110

Laboratory Control Spike (LCS-1) QC Batch: 1634

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Chloride	11.4	11.3	mg/L	1	12.5	<1.49	91	1	90 - 110	20
Sulfate	11.7	11.5	mg/L	1	12.5	<0.171	94	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: 1635

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	<1.49	90	1	90 - 110	20
Sulfate	11.6	11.7	mg/L	1	12.5	<0.171	93	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: 1636

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Chloride	11.2	11.2	mg/L	1	12.5	<1.49	90	0	90 - 110	20
Sulfate	11.6	11.5	mg/L	1	12.5	<0.171	93	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: 1681

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Nitrate-N	2.29	2.28	mg/L	1	2.50	<0.630	92	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: 1681

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Fluoride	2.42	2.33	mg/L	1	2.50	<0.0153	97	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: 1694

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Nitrate-N	2.26	2.31	mg/L	1	2.50	<0.630	90	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: 1694

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Fluoride	2.33	2.40	mg/L	1	2.50	<0.0153	93	3	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: 1716

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Benzene	0.0966	0.0989	mg/L	1	0.100	<0.000410	97	2	80.5 - 113	20
Toluene	0.0967	0.0985	mg/L	1	0.100	<0.000760	97	2	81.2 - 112	20
Ethylbenzene	0.0959	0.0982	mg/L	1	0.100	<0.00120	96	2	82.2 - 112	20
Xylene (isomers)	0.288	0.295	mg/L	1	0.300	<0.00183	96	2	80.6 - 112	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)	0.0909	0.0962	mg/L	1	0.100	91	96	78.7 - 110
4-Bromofluorobenzene (4-BFB)	0.0910	0.0984	mg/L	1	0.100	91	98	77.8 - 110

Laboratory Control Spike (LCS-1) QC Batch: 1753

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Nitrate-N	2.30	2.31	mg/L	1	2.50	<0.630	92	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: 1753

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Fluoride	2.34	2.33	mg/L	1	2.50	<0.0153	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: 2070

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Calcium	99.8	102	mg/L	1	100	<0.183	100	2	85 - 115	20
Dissolved Potassium	106	103	mg/L	1	100	<0.135	106	3	85 - 115	20
Dissolved Magnesium	99.7	99.2	mg/L	1	100	<0.183	100	0	85 - 115	20
Dissolved Sodium	103	104	mg/L	1	100	<0.105	103	1	85 - 115	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: 1634

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Chloride	835	833	mg/L	50	12.5	271	90	0	32.7 - 136	20
Sulfate	638	647	mg/L	50	12.5	62	92	1	69.9 - 114	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: 1635

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Chloride	21800	21800	mg/L	1000	12.5	10700	89	0	32.7 - 136	20
Sulfate	15600	15900	mg/L	1000	12.5	4310	90	2	69.9 - 114	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: 1636

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Chloride	132	132	mg/L	10	12.5	23.1	87	0	32.7 - 136	20
Sulfate	572	568	mg/L	10	12.5	471	81	1	69.9 - 114	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: 1681

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Nitrate-N	118	117	mg/L	50	2.50	<31.5	94	1	62.2 - 121	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: 1681

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Fluoride	139	152	mg/L	50	2.50	<0.767	111	9	30.1 - 187	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: 1694

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Nitrate-N	238	240	mg/L	100	2.50	<63.0	87	1	62.2 - 121	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: 1694

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Fluoride	232	226	mg/L	100	2.50	10.4	89	3	30.1 - 187	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: 1753

continued ...

matrix spikes continued ...

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Nitrate-N	124	126	mg/L	50	2.50	<31.5	89	2	62.2 - 121	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: 1753

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Fluoride	115	117	mg/L	50	2.50	5.7	87	2	30.1 - 187	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: 2070

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Calcium	[5]	878	923	mg/L	1	100	779	99	5	75 - 125	20
Dissolved Potassium	[6]	171	182	mg/L	1	100	53.6	117	6	75 - 125	20
Dissolved Magnesium	[7]	363	401	mg/L	1	100	272	91	10	75 - 125	20
Dissolved Sodium	[8][9]	4750	4750	mg/L	1	100	4610	140	0	75 - 125	20

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

Standard (CCV-1) QC Batch: 1628

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.100	100	85 - 115	2003-05-17
Toluene		mg/L	0.100	0.100	100	85 - 115	2003-05-17
Ethylbenzene		mg/L	0.100	0.101	101	85 - 115	2003-05-17
Xylene (isomers)		mg/L	0.300	0.300	100	85 - 115	2003-05-17

Standard (CCV-2) QC Batch: 1628

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	2003-05-17
Toluene		mg/L	0.100	0.101	101	85 - 115	2003-05-17
Ethylbenzene		mg/L	0.100	0.0994	99	85 - 115	2003-05-17
Xylene (isomers)		mg/L	0.300	0.296	99	85 - 115	2003-05-17

Standard (ICV-1) QC Batch: 1630

[5]Recovery is out of control due to matrix effect/dilution factor
[6]Recovery is out of control due to matrix effect/dilution factor
[7]Recovery is out of control due to matrix effect/dilution factor
[8]Recovery is out of control due to matrix effect/dilution factor
[9]Recovery is out of control due to matrix effect/dilution factor

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	2003-05-17
Toluene		mg/L	0.100	0.101	101	85 - 115	2003-05-17
Ethylbenzene		mg/L	0.100	0.0994	99	85 - 115	2003-05-17
Xylene (isomers)		mg/L	0.300	0.296	99	85 - 115	2003-05-17

Standard (CCV-1) QC Batch: 1630

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.100	100	85 - 115	2003-05-17
Toluene		mg/L	0.100	0.100	100	85 - 115	2003-05-17
Ethylbenzene		mg/L	0.100	0.0993	99	85 - 115	2003-05-17
Xylene (isomers)		mg/L	0.300	0.299	100	85 - 115	2003-05-17

Standard (ICV-1) QC Batch: 1634

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.5	11.4	91	90 - 110	2003-05-18
Sulfate		mg/L	12.5	11.8	94	90 - 110	2003-05-18

Standard (CCV-1) QC Batch: 1634

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	2003-05-18
Sulfate		mg/L	12.5	11.8	94	90 - 110	2003-05-18

Standard (ICV-1) QC Batch: 1635

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	2003-05-18
Sulfate		mg/L	12.5	11.8	94	90 - 110	2003-05-18

Standard (CCV-1) QC Batch: 1635

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	2003-05-18
Sulfate		mg/L	12.5	11.6	93	90 - 110	2003-05-18

Standard (ICV-1) QC Batch: 1636

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	2003-05-18
Sulfate		mg/L	12.5	11.6	93	90 - 110	2003-05-18

Standard (CCV-1) QC Batch: 1636

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	2003-05-18
Sulfate		mg/L	12.5	11.6	93	90 - 110	2003-05-18

Standard (ICV-1) QC Batch: 1681

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		mg/L	2.50	2.37	95	90 - 110	2003-05-20

Standard (ICV-1) QC Batch: 1681

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Fluoride		mg/L	2.50	2.33	93	90 - 110	2003-05-20

Standard (CCV-1) QC Batch: 1681

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		mg/L	2.50	2.28	91	90 - 110	2003-05-20

Standard (CCV-1) QC Batch: 1681

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Fluoride		mg/L	2.50	2.35	94	90 - 110	2003-05-20

Standard (ICV-1) QC Batch: 1694

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		mg/L	2.50	2.29	92	90 - 110	2003-05-20

Standard (ICV-1) QC Batch: 1694

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	2003-05-20

Standard (CCV-1) QC Batch: 1694

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		mg/L	2.50	2.32	93	90 - 110	2003-05-20

Standard (CCV-1) QC Batch: 1694

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Fluoride		mg/L	2.50	2.41	96	90 - 110	2003-05-20

Standard (ICV-1) QC Batch: 1716

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.0974	97	85 - 115	2003-05-20
Toluene		mg/L	0.100	0.0977	98	85 - 115	2003-05-20
Ethylbenzene		mg/L	0.100	0.0964	96	85 - 115	2003-05-20
Xylene (isomers)		mg/L	0.300	0.291	97	85 - 115	2003-05-20

Standard (CCV-1) QC Batch: 1716

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.0978	98	85 - 115	2003-05-20
Toluene		mg/L	0.100	0.0987	99	85 - 115	2003-05-20
Ethylbenzene		mg/L	0.100	0.0974	97	85 - 115	2003-05-20
Xylene (isomers)		mg/L	0.300	0.293	98	85 - 115	2003-05-20

Standard (ICV-1) QC Batch: 1731

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		μMHOS/cm	1410	1400	99	90 - 110	2003-05-21

Standard (CCV-1) QC Batch: 1731

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		µMHOS/cm	1410	1410	100	90 - 110	2003-05-21

Standard (ICV-1) QC Batch: 1736

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		µMHOS/cm	1410	1390	99	90 - 110	2003-05-21

Standard (CCV-1) QC Batch: 1736

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		µMHOS/cm	1410	1400	99	90 - 110	2003-05-21

Standard (ICV-1) QC Batch: 1753

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		mg/L	2.50	2.32	93	90 - 110	2003-05-21

Standard (ICV-1) QC Batch: 1753

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Fluoride		mg/L	2.50	2.41	96	90 - 110	2003-05-21

Standard (CCV-1) QC Batch: 1753

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		mg/L	2.50	2.31	92	90 - 110	2003-05-21

Standard (CCV-1) QC Batch: 1753

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Fluoride		mg/L	2.50	2.39	96	90 - 110	2003-05-21

Standard (ICV-1) QC Batch: 1778

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hydroxide Alkalinity	[10]	mg/L as CaCo3	0.00	<1.00		0 - 200	2003-05-22
Carbonate Alkalinity	[11]	mg/L as CaCo3	0.00	232		0 - 200	2003-05-22
Bicarbonate Alkalinity	[12]	mg/L as CaCo3	0.00	6.00		0 - 200	2003-05-22
Total Alkalinity		mg/L as CaCo3	250	238	95	90 - 110	2003-05-22

Standard (CCV-1) QC Batch: 1778

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hydroxide Alkalinity	[13]	mg/L as CaCo3	0.00	<1.00		0 - 200	2003-05-22
Carbonate Alkalinity	[14]	mg/L as CaCo3	0.00	220		0 - 200	2003-05-22
Bicarbonate Alkalinity	[15]	mg/L as CaCo3	0.00	12.0		0 - 200	2003-05-22
Total Alkalinity		mg/L as CaCo3	250	232	93	90 - 110	2003-05-22

Standard (ICV-1) QC Batch: 1788

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	1013	101	90 - 110	2003-05-23

Standard (CCV-1) QC Batch: 1788

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	2003-05-23

Standard (ICV-1) QC Batch: 2070

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	2003-06-06
Dissolved Potassium		mg/L	25.0	27.1	108	90 - 110	2003-06-06
Dissolved Magnesium		mg/L	25.0	24.7	99	90 - 110	2003-06-06
Dissolved Sodium		mg/L	25.0	27.1	108	90 - 110	2003-06-06

Standard (CCV-1) QC Batch: 2070

[10]Recovery is out of control
[11]Recovery is out of control
[12]Recovery is out of control
[13]Recovery is out of control
[14]Recovery is out of control
[15]Recovery is out of control

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	2003-06-06
Dissolved Potassium		mg/L	25.0	25.1	100	90 - 110	2003-06-06
Dissolved Magnesium		mg/L	25.0	23.5	94	90 - 110	2003-06-06
Dissolved Sodium		mg/L	25.0	25.8	103	90 - 110	2003-06-06

7619-28

3051612

CHAIN—OF—CUSTODY RECORD

Larson & Associates, Inc.
Environmental Consultants
Fax: 915-687-0456
915-687-0901
507 N. Marienfeld, Ste. 202 • Midland, TX 79701

CLIENT NAME: ChevronTexaco
SITE MANAGER: M. Larson
PROJECT NO.: 0-0104
PROJECT NAME: JR Phillips
PAGE 1 OF 1
LAB. PO #

DATE	TIME	WATER	SOIL	OTHER	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	BTEX	Anions	Cations	TDS	LAB. I.D. NUMBER (LAB USE ONLY)	REMARKS (I.E., FILTERED, UNFILTERED, PRESERVED, UNPRESERVED, GRAB COMPOSITE)
5/15/03	1305	✓			WW-1	3	✓	✓	✓	✓	7619	
↓	1340	✓			MW-2	3	✓	✓	✓	✓	7620	
	1355	✓			MW-1	3	✓	✓	✓	✓	7621	
	1400	✓			MW-7	3	✓	✓	✓	✓	7622	
	1415	✓			MW-8	3	✓	✓	✓	✓	7623	
	1430	✓			MW-3	3	✓	✓	✓	✓	7624	
	1445	✓			MW-6	3	✓	✓	✓	✓	7625	
	1500	✓			MW-4	3	✓	✓	✓	✓	7626	
	1515	✓			MW-5	3	✓	✓	✓	✓	7627	
↓	–	✓			Duplicate	3	✓	✓	✓	✓	7628	

SAMPLED BY: (Signature) [signature] DATE: 5/15/03 TIME: 1515
RELINQUISHED BY: (Signature) Helen Skelton DATE: 5/15/03 TIME: 1730
RECEIVED BY: (Signature) DATE: TIME:

RELINQUISHED BY: (Signature) [signature] DATE: 5/15/03 TIME: 1730
RECEIVED BY: (Signature) Helen Skelton DATE: 5/15/03 TIME: 1730
SAMPLE SHIPPED BY: (Circle) FEDEX (BUS) 3° C AIRBILL #: 466130382-0 HAND DELIVERED UPS OTHER:

COMMENTS:

TURNAROUND TIME NEEDED: Std

RECEIVING LABORATORY: Trace Analysis, Inc.
ADDRESS: 6701 Aberdeen, Ste. 9
CITY: Lubbock STATE: TX ZIP: 79424
CONTACT: Neil PHONE: 806-794-1296
RECEIVED BY: (Signature) Vicky Unsley DATE: 5-16-03 TIME: 10:25

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: Mark Larson
SAMPLE TYPE: Water

MS 1:40 6/11 FIF

ANALYTICAL REPORT

Prepared for:

CINDY CRAIN
LARSON AND ASSOCIATES, INC.
P.O. BOX 50685
MIDLAND, TX 79710

Project:	JR Phillips TB
PO#:	
Order#:	G0307383
Report Date:	09/08/2003

Certificates
US EPA Laboratory Code TX00158

ENVIRONMENTAL LAB OF TEXAS

SAMPLE WORK LIST

LARSON AND ASSOCIATES, INC.
P.O. BOX 50685
MIDLAND, TX 79710
915-687-0456

Order#: G0307383
Project: 0-0104
Project Name: JR Phillips TB
Location: None Given

The samples listed below were submitted to Environmental Lab of Texas and were received under chain of custody. Environmental Lab of Texas makes no representation or certification as to the method of sample collection, sample identification, or transportation/handling procedures used prior to the receipt of samples by Environmental Lab of Texas, unless otherwise noted.

Lab ID:	Sample :	Matrix:	Date / Time Collected	Date / Time Received	Container	Preservative
0307383-01	MW-8	WATER	9/3/03 9:40	9/4/03 16:25	250 mL HDPE	none
	Lab Testing: Chloride	**Rejected:** No		**Temp:** 32.0 C		
0307383-02	MW-3	WATER	9/3/03 10:15	9/4/03 16:25	250 mL HDPE	none
	Lab Testing: Chloride	**Rejected:** No		**Temp:** 32.0 C		
0307383-03	MW-4	WATER	9/3/03 10:40	9/4/03 16:25	250 mL HDPE	none
	Lab Testing: Chloride	**Rejected:** No		**Temp:** 32.0 C		
0307383-04	MW-5	WATER	9/3/03 11:06	9/4/03 16:25	250 mL HDPE	none
	Lab Testing: Chloride	**Rejected:** No		**Temp:** 32.0 C		
0307383-05	MW-7	WATER	9/3/03 11:53	9/4/03 16:25	250 mL HDPE	none
	Lab Testing: Chloride	**Rejected:** No		**Temp:** 32.0 C		
0307383-06	WW-1	WATER	9/3/03 12:45	9/4/03 16:25	250 mL HDPE	none
	Lab Testing: Chloride	**Rejected:** No		**Temp:** 32.0 C		
0307383-07	MW-6	WATER	9/3/03 13:01	9/4/03 16:25	250 mL HDPE	none
	Lab Testing: Chloride	**Rejected:** No		**Temp:** 32.0 C		
0307383-08	MW-2	WATER	9/3/03 13:08	9/4/03 16:25	250 mL HDPE	none
	Lab Testing: Chloride	**Rejected:** No		**Temp:** 32.0 C		

ENVIRONMENTAL LAB OF TEXAS

SAMPLE WORK LIST

LARSON AND ASSOCIATES, INC.
P.O. BOX 50685
MIDLAND, TX 79710
915-687-0456

Order#: G0307383
Project: 0-0104
Project Name: JR Phillips TB
Location: None Given

The samples listed below were submitted to Environmental Lab of Texas and were received under chain of custody. Environmental Lab of Texas makes no representation or certification as to the method of sample collection, sample identification, or transportation/handling procedures used prior to the receipt of samples by Environmental Lab of Texas, unless otherwise noted.

Lab ID:	Sample :	Matrix:	Date / Time Collected	Date / Time Received	Container	Preservative
0307383-09	DUP	WATER	9/3/03	9/4/03 16:25	250 mL HDPE	none
	Lab Testing: Chloride	**Rejected:** No		**Temp:** 32.0 C		
0307383-10	MW-1	WATER	9/3/03 13:20	9/4/03 16:25	250 mL HDPE	none
	Lab Testing: Chloride	**Rejected:** No		**Temp:** 32.0 C		

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

CINDY CRAIN
LARSON AND ASSOCIATES, INC.
P.O. BOX 50685
MIDLAND, TX 79710

Order#: G0307383
Project: 0-0104
Project Name: JR Phillips TB
Location: None Given

Lab ID: 0307383-01
Sample ID: MW-8

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	7270	mg/L	1	5.00	9253	9/8/03	SB

Lab ID: 0307383-02
Sample ID: MW-3

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	10300	mg/L	1	5.00	9253	9/8/03	SB

Lab ID: 0307383-03
Sample ID: MW-4

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	7800	mg/L	1	5.00	9253	9/8/03	SB

Lab ID: 0307383-04
Sample ID: MW-5

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	7090	mg/L	1	5.00	9253	9/8/03	SB

Lab ID: 0307383-05
Sample ID: MW-7

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	6910	mg/L	1	5.00	9253	9/8/03	SB

Lab ID: 0307383-06
Sample ID: WW-1

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	<5.00	mg/L	1	5.00	9253	9/8/03	SB

RL = Reporting Limit N/A = Not Applicable

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

CINDY CRAIN
LARSON AND ASSOCIATES, INC.
P.O. BOX 50685
MIDLAND, TX 79710

Order#: G0307383
Project: 0-0104
Project Name: JR Phillips TB
Location: None Given

Lab ID: 0307383-07
Sample ID: MW-6

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	10300	mg/L	1	5.00	9253	9/8/03	SB

Lab ID: 0307383-08
Sample ID: MW-2

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	6470	mg/L	1	5.00	9253	9/8/03	SB

Lab ID: 0307383-09
Sample ID: DUP

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	10300	mg/L	1	5.00	9253	9/8/03	SB

Lab ID: 0307383-10
Sample ID: MW-1

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	5320	mg/L	1	5.00	9253	9/8/03	SB

Approval: Raland K Tuttle 9-12-03
Raland K. Tuttle, Lab Director, QA Officer — Date
Celey D. Keene, Org. Tech. Director
Jeanne McMurrey, Inorg. Tech. Director
Sandra Biezugbe, Lab Tech.
Sara Molina, Lab Tech.

RL = Reporting Limit N/A = Not Applicable

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Test Parameters

Order#: G0307383

BLANK WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/L	0006718-01			<5.00		
MS WATER	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
Chloride-mg/L	0307383-01	7270	5000	12200	98.6%	
MSD WATER	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
Chloride-mg/L	0307383-01	7270	5000	12100	96.6%	0.8%
SRM WATER	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
Chloride-mg/L	0006718-04		5000	4960	99.2%	

CHAIN—OF—CUSTODY RECORD

Larson & Associates, Inc.
Environmental Consultants
507 N. Marienfeld, Ste. 202 • Midland, TX 79701
Fax: 915-687-0456
915-687-0901

CLIENT NAME: Dev. TX

SITE MANAGER: Cindy Crain

PROJECT NO.: 0-0104

PROJECT NAME: JR Phillips TB

PAGE 1 OF 1

LAB. PO #

PARAMETERS/METHOD NUMBER: CHLORIDES

	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)
01	9/3	0940	✓			MW-8		0307383	
02	9/3	1015	✓			MW-3			
03	9/3	1040	✓			MW-4			
04	9/3	1102	✓			MW-5			
05	9/3	1153	✓			MW-7			
06	9/3	1245	✓			MW-1			
07	9/3	1301	✓			MW-6			
08	9/3	1308	✓			MW-2			
09	9/3		✓			Dup	1		
10	9/3	1320	✓			MW-1			

SAMPLED BY: (Signature) DATE: 9/4/03 TIME: 1325

RELINQUISHED BY: (Signature) DATE: TIME:

RECEIVED BY: (Signature) DATE: TIME:

RELINQUISHED BY: (Signature) DATE: TIME:

RECEIVED BY: (Signature) DATE: TIME:

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

COMMENTS:

TURNAROUND TIME NEEDED: Standard

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

RECEIVING LABORATORY:
ADDRESS:
CITY: STATE: ZIP:
CONTACT: PHONE:

RECEIVED BY: (Signature) Pam Anderson
DATE: 9/4/03 TIME: 1625

SAMPLE CONDITION WHEN RECEIVED:

LA CONTACT PERSON: Cindy Crain

SAMPLE TYPE: 250 mL HDPE
32.0°C

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: December 5, 2003

Work Order: 3112507

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
22170	MW-8	water	2003-11-20	11:50	2003-11-25
22171	MW-7	water	2003-11-20	12:28	2003-11-25
22172	MW-6	water	2003-11-20	13:17	2003-11-25
22173	WW-1	water	2003-11-21	10:56	2003-11-25
22174	MW-3	water	2003-11-21	11:36	2003-11-25
22175	MW-4	water	2003-11-21	12:12	2003-11-25
22176	MW-5	water	2003-11-21	12:40	2003-11-25
22177	MW-1	water	2003-11-21	13:05	2003-11-25
22178	MW-2	water	2003-11-21	12:55	2003-11-25
22179	Dup	water	2003-11-20	00:00	2003-11-25
22180	Dup	water	2003-11-21	00:00	2003-11-25

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: 22170 - MW-8

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	6116	Date Analyzed:	2003-12-02	Analyzed By:	RS
Prep Batch:	5458	Date Prepared:	2003-12-02	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		438	mg/L as CaCo3	1	4.00
Total Alkalinity		438	mg/L as CaCo3	1	4.00

Sample: 22170 - MW-8

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	6008	Date Analyzed:	2003-11-25	Analyzed By:	MT
Prep Batch:	5369	Date Prepared:	2003-11-25	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 (isomers)		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.112	mg/L	1	0.100	112	70 - 130
4-Bromofluorobenzene (4-BFB)	[1]	0.136	mg/L	1	0.100	136	70 - 130

Sample: 22170 - MW-8

Analysis:	Cations	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	6134	Date Analyzed:	2003-12-03	Analyzed By:	BC
Prep Batch:	5410	Date Prepared:	2003-12-01	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		881	mg/L	1	0.500
Dissolved Potassium		64.5	mg/L	1	0.500
Dissolved Magnesium		280	mg/L	1	0.500
Dissolved Sodium		3560	mg/L	1	0.500

Sample: 22170 - MW-8

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	6001	Date Analyzed:	2003-11-26	Analyzed By:	JSW

[1]High surrogate recovery due to prep. TFT surrogate recovery shows the method to be in control.

Prep Batch: 5367 Date Prepared: 2003-11-25 Prepared By: JSW

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		8190	mg/L	1000	0.500
Fluoride		5.18	mg/L	20	0.200
Sulfate		2570	mg/L	1000	0.500

Sample: 22170 - MW-8

Analysis:	NO3 (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	6001	Date Analyzed:	2003-11-26	Analyzed By:	JSW
Prep Batch:	5367	Date Prepared:	2003-11-25	Prepared By:	JSW

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

Sample: 22170 - MW-8

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	6029	Date Analyzed:	2003-12-01	Analyzed By:	JSW
Prep Batch:	5395	Date Prepared:	2003-11-26	Prepared By:	RS

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		14040	mg/L	20	10.00

Sample: 22171 - MW-7

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	6116	Date Analyzed:	2003-12-02	Analyzed By:	RS
Prep Batch:	5458	Date Prepared:	2003-12-02	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		434	mg/L as CaCo3	1	4.00
Total Alkalinity		434	mg/L as CaCo3	1	4.00

Sample: 22171 - MW-7

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	6008	Date Analyzed:	2003-11-25	Analyzed By:	MT
Prep Batch:	5369	Date Prepared:	2003-11-25	Prepared By:	MT

continued ...

sample 22171 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 (isomers)		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.109	mg/L	1	0.100	109	70 - 130
4-Bromofluorobenzene (4-BFB)		0.130	mg/L	1	0.100	130	70 - 130

Sample: 22171 - MW-7

Analysis:	Cations	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	6134	Date Analyzed:	2003-12-03	Analyzed By:	BC
Prep Batch:	5410	Date Prepared:	2003-12-01	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		532	mg/L	1	0.500
Dissolved Potassium		52.7	mg/L	1	0.500
Dissolved Magnesium		204	mg/L	1	0.500
Dissolved Sodium		3770	mg/L	1	0.500

Sample: 22171 - MW-7

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	6001	Date Analyzed:	2003-11-26	Analyzed By:	JSW
Prep Batch:	5367	Date Prepared:	2003-11-25	Prepared By:	JSW

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		6360	mg/L	500	0.500
Fluoride		4.04	mg/L	20	0.200
Sulfate		2110	mg/L	500	0.500

Sample: 22171 - MW-7

Analysis:	NO3 (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	6001	Date Analyzed:	2003-11-26	Analyzed By:	JSW
Prep Batch:	5367	Date Prepared:	2003-11-25	Prepared By:	JSW

continued ...

sample 22171 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: 22171 - MW-7

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	6029	Date Analyzed:	2003-12-01	Analyzed By:	JSW
Prep Batch:	5395	Date Prepared:	2003-11-26	Prepared By:	RS

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		14500	mg/L	20	10.00

Sample: 22172 - MW-6

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	6116	Date Analyzed:	2003-12-02	Analyzed By:	RS
Prep Batch:	5458	Date Prepared:	2003-12-02	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		480	mg/L as CaCo3	1	4.00
Total Alkalinity		480	mg/L as CaCo3	1	4.00

Sample: 22172 - MW-6

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	6008	Date Analyzed:	2003-11-25	Analyzed By:	MT
Prep Batch:	5369	Date Prepared:	2003-11-25	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 (isomers)		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.109	mg/L	1	0.100	109	70 - 130
4-Bromofluorobenzene (4-BFB)	[2]	0.132	mg/L	1	0.100	132	70 - 130

[2]High surrogate recovery due to prep. TFT surrogate recovery shows the method to be in control.

Sample: 22172 - MW-6

Analysis:	Cations	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	6134	Date Analyzed:	2003-12-03	Analyzed By:	BC
Prep Batch:	5410	Date Prepared:	2003-12-01	Prepared By:	TP

Parameter	Flag	Result	RL	Units	Dilution	RL
Dissolved Calcium		904		mg/L	1	0.500
Dissolved Potassium		42.5		mg/L	1	0.500
Dissolved Magnesium		399		mg/L	1	0.500
Dissolved Sodium		5610		mg/L	1	0.500

Sample: 22172 - MW-6

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	6001	Date Analyzed:	2003-11-26	Analyzed By:	JSW
Prep Batch:	5367	Date Prepared:	2003-11-25	Prepared By:	JSW

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		10000		mg/L	1000	0.500
Fluoride		4.58		mg/L	20	0.200
Sulfate		4410		mg/L	1000	0.500

Sample: 22172 - MW-6

Analysis:	NO3 (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	6001	Date Analyzed:	2003-11-26	Analyzed By:	JSW
Prep Batch:	5367	Date Prepared:	2003-11-25	Prepared By:	JSW

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

Sample: 22172 - MW-6

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	6029	Date Analyzed:	2003-12-01	Analyzed By:	JSW
Prep Batch:	5395	Date Prepared:	2003-11-26	Prepared By:	RS

Parameter	Flag	Result	RL	Units	Dilution	RL
Total Dissolved Solids		23500		mg/L	50	10.00

Sample: 22173 - WW-1

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	6115	Date Analyzed:	2003-12-02	Analyzed By:	RS
Prep Batch:	5459	Date Prepared:	2003-12-02	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		<4.00	mg/L as CaCo3	1	4.00
Total Alkalinity		<4.00	mg/L as CaCo3	1	4.00

Sample: 22173 - WW-1

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	6008	Date Analyzed:	2003-11-25	Analyzed By:	MT
Prep Batch:	5369	Date Prepared:	2003-11-25	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 (isomers)		<0.00500	mg/L	5	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.530	mg/L	5	0.100	106	70 - 130
4-Bromofluorobenzene (4-BFB)		0.624	mg/L	5	0.100	125	70 - 130

Sample: 22173 - WW-1

Analysis:	Cations	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	6134	Date Analyzed:	2003-12-03	Analyzed By:	BC
Prep Batch:	5410	Date Prepared:	2003-12-01	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		1650	mg/L	1	0.500
Dissolved Potassium		52.7	mg/L	1	0.500
Dissolved Magnesium		461	mg/L	1	0.500
Dissolved Sodium		3630	mg/L	1	0.500

Sample: 22173 - WW-1

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	6001	Date Analyzed:	2003-11-26	Analyzed By:	JSW
Prep Batch:	5367	Date Prepared:	2003-11-25	Prepared By:	JSW

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		10000	mg/L	1000	0.500
Fluoride		<4.00	mg/L	20	0.200
Sulfate		2180	mg/L	1000	0.500

Sample: 22173 - WW-1

Analysis:	NO3 (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	6001	Date Analyzed:	2003-11-26	Analyzed By:	JSW
Prep Batch:	5367	Date Prepared:	2003-11-25	Prepared By:	JSW

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

Sample: 22173 - WW-1

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	6030	Date Analyzed:	2003-12-01	Analyzed By:	JSW
Prep Batch:	5396	Date Prepared:	2003-11-26	Prepared By:	RS

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		18900	mg/L	50	10.00

Sample: 22174 - MW-3

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	6115	Date Analyzed:	2003-12-02	Analyzed By:	RS
Prep Batch:	5459	Date Prepared:	2003-12-02	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		464	mg/L as CaCo3	1	4.00
Total Alkalinity		464	mg/L as CaCo3	1	4.00

Sample: 22174 - MW-3

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	6008	Date Analyzed:	2003-11-25	Analyzed By:	MT
Prep Batch:	5369	Date Prepared:	2003-11-25	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		0.00290	mg/L	1	0.00100
Xylene (isomers)		0.00790	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	70 - 130
4-Bromofluorobenzene (4-BFB)		0.128	mg/L	1	0.100	128	70 - 130

Sample: 22174 - MW-3

Analysis:	Cations	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	6134	Date Analyzed:	2003-12-03	Analyzed By:	BC
Prep Batch:	5410	Date Prepared:	2003-12-01	Prepared By:	TP

Parameter	Flag	Result	RL	Units	Dilution	RL
Dissolved Calcium		972		mg/L	1	0.500
Dissolved Potassium		47.5		mg/L	1	0.500
Dissolved Magnesium		333		mg/L	1	0.500
Dissolved Sodium		7540		mg/L	1	0.500

Sample: 22174 - MW-3

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	6001	Date Analyzed:	2003-11-26	Analyzed By:	JSW
Prep Batch:	5367	Date Prepared:	2003-11-25	Prepared By:	JSW

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		10500		mg/L	1000	0.500
Fluoride		4.30		mg/L	20	0.200
Sulfate		4480		mg/L	1000	0.500

Sample: 22174 - MW-3

Analysis:	NO3 (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	6001	Date Analyzed:	2003-11-26	Analyzed By:	JSW
Prep Batch:	5367	Date Prepared:	2003-11-25	Prepared By:	JSW

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

Sample: 22174 - MW-3

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	6030	Date Analyzed:	2003-12-01	Analyzed By:	JSW
Prep Batch:	5396	Date Prepared:	2003-11-26	Prepared By:	RS

Parameter	Flag	Result	RL	Units	Dilution	RL
Total Dissolved Solids		23100		mg/L	50	10.00

Sample: 22175 - MW-4

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	6115	Date Analyzed:	2003-12-02	Analyzed By:	RS
Prep Batch:	5459	Date Prepared:	2003-12-02	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		770	mg/L as CaCo3	1	4.00
Total Alkalinity		770	mg/L as CaCo3	1	4.00

Sample: 22175 - MW-4

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	6008	Date Analyzed:	2003-11-25	Analyzed By:	MT
Prep Batch:	5369	Date Prepared:	2003-11-25	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 (isomers)		<0.00500	mg/L	5	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.524	mg/L	5	0.100	105	70 - 130
4-Bromofluorobenzene (4-BFB)		0.651	mg/L	5	0.100	130	70 - 130

Sample: 22175 - MW-4

Analysis:	Cations	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	6134	Date Analyzed:	2003-12-03	Analyzed By:	BC
Prep Batch:	5410	Date Prepared:	2003-12-01	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		334	mg/L	1	0.500
Dissolved Potassium		39.7	mg/L	1	0.500
Dissolved Magnesium		198	mg/L	1	0.500
Dissolved Sodium		4760	mg/L	1	0.500

Sample: 22175 - MW-4

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	6015	Date Analyzed:	2003-11-26	Analyzed By:	JSW
Prep Batch:	5377	Date Prepared:	2003-11-25	Prepared By:	JSW

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		7500	mg/L	1000	0.500
Fluoride		4.52	mg/L	20	0.200
Sulfate		2720	mg/L	1000	0.500

Sample: 22175 - MW-4

Analysis:	NO3 (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	6015	Date Analyzed:	2003-11-26	Analyzed By:	JSW
Prep Batch:	5377	Date Prepared:	2003-11-25	Prepared By:	JSW

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

Sample: 22175 - MW-4

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	6030	Date Analyzed:	2003-12-01	Analyzed By:	JSW
Prep Batch:	5396	Date Prepared:	2003-11-26	Prepared By:	RS

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		17350	mg/L	50	10.00

Sample: 22176 - MW-5

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	6115	Date Analyzed:	2003-12-02	Analyzed By:	RS
Prep Batch:	5459	Date Prepared:	2003-12-02	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		522	mg/L as CaCo3	1	4.00
Total Alkalinity		522	mg/L as CaCo3	1	4.00

Sample: 22176 - MW-5

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	6008	Date Analyzed:	2003-11-25	Analyzed By:	MT
Prep Batch:	5369	Date Prepared:	2003-11-25	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 (isomers)		<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	70 - 130
4-Bromofluorobenzene (4-BFB)		0.130	mg/L	1	0.100	130	70 - 130

Sample: 22176 - MW-5

Analysis:	Cations	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	6134	Date Analyzed:	2003-12-03	Analyzed By:	BC
Prep Batch:	5410	Date Prepared:	2003-12-01	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		434	mg/L	1	0.500
Dissolved Potassium		54.9	mg/L	1	0.500
Dissolved Magnesium		178	mg/L	1	0.500
Dissolved Sodium		4300	mg/L	1	0.500

Sample: 22176 - MW-5

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	6015	Date Analyzed:	2003-11-26	Analyzed By:	JSW
Prep Batch:	5377	Date Prepared:	2003-11-25	Prepared By:	JSW

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		7010	mg/L	1000	0.500
Fluoride		4.28	mg/L	20	0.200
Sulfate		3170	mg/L	1000	0.500

Sample: 22176 - MW-5

Analysis:	NO3 (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	6015	Date Analyzed:	2003-11-26	Analyzed By:	JSW
Prep Batch:	5377	Date Prepared:	2003-11-25	Prepared By:	JSW

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

Sample: 22176 - MW-5

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	6030	Date Analyzed:	2003-12-01	Analyzed By:	JSW
Prep Batch:	5396	Date Prepared:	2003-11-26	Prepared By:	RS

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		16850	mg/L	50	10.00

Sample: 22177 - MW-1

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	6115	Date Analyzed:	2003-12-02	Analyzed By:	RS
Prep Batch:	5459	Date Prepared:	2003-12-02	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		460	mg/L as CaCo3	1	4.00
Total Alkalinity		460	mg/L as CaCo3	1	4.00

Sample: 22177 - MW-1

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	6008	Date Analyzed:	2003-11-25	Analyzed By:	MT
Prep Batch:	5369	Date Prepared:	2003-11-25	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 (isomers)		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.107	mg/L	1	0.100	107	70 - 130
4-Bromofluorobenzene (4-BFB)	[3]	0.136	mg/L	1	0.100	136	70 - 130

Sample: 22177 - MW-1

Analysis:	Cations	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	6134	Date Analyzed:	2003-12-03	Analyzed By:	BC
Prep Batch:	5410	Date Prepared:	2003-12-01	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		302	mg/L	1	0.500
Dissolved Potassium		54.6	mg/L	1	0.500
Dissolved Magnesium		121	mg/L	1	0.500
Dissolved Sodium		3360	mg/L	1	0.500

Sample: 22177 - MW-1

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	6015	Date Analyzed:	2003-11-26	Analyzed By:	JSW
Prep Batch:	5377	Date Prepared:	2003-11-25	Prepared By:	JSW

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		4910	mg/L	500	0.500
Fluoride		<4.00	mg/L	20	0.200
Sulfate		1730	mg/L	500	0.500

[3]High surrogate recovery due to prep. TFT surrogate recovery shows the method to be in control.

Sample: 22177 - MW-1

Analysis:	NO3 (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	6015	Date Analyzed:	2003-11-26	Analyzed By:	JSW
Prep Batch:	5377	Date Prepared:	2003-11-25	Prepared By:	JSW

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

Sample: 22177 - MW-1

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	6030	Date Analyzed:	2003-12-01	Analyzed By:	JSW
Prep Batch:	5396	Date Prepared:	2003-11-26	Prepared By:	RS

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		11540	mg/L	20	10.00

Sample: 22178 - MW-2

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	6115	Date Analyzed:	2003-12-02	Analyzed By:	RS
Prep Batch:	5459	Date Prepared:	2003-12-02	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		510	mg/L as CaCo3	1	4.00
Total Alkalinity		510	mg/L as CaCo3	1	4.00

Sample: 22178 - MW-2

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	6008	Date Analyzed:	2003-11-25	Analyzed By:	MT
Prep Batch:	5369	Date Prepared:	2003-11-25	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 (isomers)		<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	70 - 130
4-Bromofluorobenzene (4-BFB)	[4]	0.131	mg/L	1	0.100	131	70 - 130

[4]High surrogate recovery due to prep. TFT surrogate recovery shows the method to be in control.

Sample: 22178 - MW-2

Analysis:	Cations	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	6134	Date Analyzed:	2003-12-03	Analyzed By:	BC
Prep Batch:	5410	Date Prepared:	2003-12-01	Prepared By:	TP

Parameter	Flag	Result	RL	Units	Dilution	RL
Dissolved Calcium		378		mg/L	1	0.500
Dissolved Potassium		52.1		mg/L	1	0.500
Dissolved Magnesium		158		mg/L	1	0.500
Dissolved Sodium		3770		mg/L	1	0.500

Sample: 22178 - MW-2

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	6015	Date Analyzed:	2003-11-26	Analyzed By:	JSW
Prep Batch:	5377	Date Prepared:	2003-11-25	Prepared By:	JSW

Parameter	Flag	Result	RL	Units	Dilution	RL
Chloride		5790		mg/L	500	0.500
Fluoride		<4.00		mg/L	20	0.200
Sulfate		2100		mg/L	500	0.500

Sample: 22178 - MW-2

Analysis:	NO3 (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	6015	Date Analyzed:	2003-11-26	Analyzed By:	JSW
Prep Batch:	5377	Date Prepared:	2003-11-25	Prepared By:	JSW

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

Sample: 22178 - MW-2

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	6030	Date Analyzed:	2003-12-01	Analyzed By:	JSW
Prep Batch:	5396	Date Prepared:	2003-11-26	Prepared By:	RS

Parameter	Flag	Result	RL	Units	Dilution	RL
Total Dissolved Solids		14080		mg/L	20	10.00

Sample: 22179 - Dup

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	6115	Date Analyzed:	2003-12-02	Analyzed By:	RS

Prep Batch: 5459 Date Prepared: 2003-12-02 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		492	mg/L as CaCo3	1	4.00
Total Alkalinity		492	mg/L as CaCo3	1	4.00

Sample: 22179 - Dup

Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5030B
QC Batch: 6008 Date Analyzed: 2003-11-25 Analyzed By: MT
Prep Batch: 5369 Date Prepared: 2003-11-25 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 (isomers)		<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	70 - 130
4-Bromofluorobenzene (4-BFB)	[5]	0.135	mg/L	1	0.100	135	70 - 130

Sample: 22179 - Dup

Analysis: Cations Analytical Method: S 6010B Prep Method: S 3005A
QC Batch: 6134 Date Analyzed: 2003-12-03 Analyzed By: BC
Prep Batch: 5410 Date Prepared: 2003-12-01 Prepared By: TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		980	mg/L	1	0.500
Dissolved Potassium		45.9	mg/L	1	0.500
Dissolved Magnesium		389	mg/L	1	0.500
Dissolved Sodium		6330	mg/L	1	0.500

Sample: 22179 - Dup

Analysis: Ion Chromatography Analytical Method: E 300.0 Prep Method: N/A
QC Batch: 6015 Date Analyzed: 2003-11-26 Analyzed By: JSW
Prep Batch: 5377 Date Prepared: 2003-11-25 Prepared By: JSW

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		9960	mg/L	1000	0.500

continued ...

[5]High surrogate recovery due to prep. TFT surrogate recovery shows the method to be in control.

sample 22179 continued ...

Parameter	Flag	Result	RL	Units	Dilution	RL
Fluoride		<5.00		mg/L	25	0.200
Sulfate		4220		mg/L	1000	0.500

Sample: 22179 - Dup

Analysis:	NO3 (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	6015	Date Analyzed:	2003-11-26	Analyzed By:	JSW
Prep Batch:	5377	Date Prepared:	2003-11-25	Prepared By:	JSW

Parameter	Flag	Result	RL	Units	Dilution	RL
Nitrate-N		<5.00		mg/L	25	0.200

Sample: 22179 - Dup

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	6030	Date Analyzed:	2003-12-01	Analyzed By:	JSW
Prep Batch:	5396	Date Prepared:	2003-11-26	Prepared By:	RS

Parameter	Flag	Result	RL	Units	Dilution	RL
Total Dissolved Solids		24500		mg/L	50	10.00

Sample: 22180 - Dup

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	6115	Date Analyzed:	2003-12-02	Analyzed By:	RS
Prep Batch:	5459	Date Prepared:	2003-12-02	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		488		mg/L as CaCo3	1	4.00
Total Alkalinity		488		mg/L as CaCo3	1	4.00

Sample: 22180 - Dup

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	6008	Date Analyzed:	2003-11-25	Analyzed By:	MT
Prep Batch:	5369	Date Prepared:	2003-11-25	Prepared By:	MT

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

continued ...

sample 22180 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene (isomers)		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.107	mg/L	1	0.100	107	70 - 130
4-Bromofluorobenzene (4-BFB)		0.130	mg/L	1	0.100	130	70 - 130

Sample: 22180 - Dup

Analysis:	Cations	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	6134	Date Analyzed:	2003-12-03	Analyzed By:	BC
Prep Batch:	5410	Date Prepared:	2003-12-01	Prepared By:	TP

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		985	mg/L	1	0.500
Dissolved Potassium		48.2	mg/L	1	0.500
Dissolved Magnesium		331	mg/L	1	0.500
Dissolved Sodium		6280	mg/L	1	0.500

Sample: 22180 - Dup

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	6077	Date Analyzed:	2003-12-02	Analyzed By:	JSW
Prep Batch:	5434	Date Prepared:	2003-12-01	Prepared By:	JSW

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		9080	mg/L	1000	0.500
Fluoride		<6.00	mg/L	30	0.200
Sulfate		3860	mg/L	1000	0.500

Sample: 22180 - Dup

Analysis:	NO3 (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	6077	Date Analyzed:	2003-12-02	Analyzed By:	JSW
Prep Batch:	5434	Date Prepared:	2003-12-01	Prepared By:	JSW

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

Sample: 22180 - Dup

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	6030	Date Analyzed:	2003-12-01	Analyzed By:	JSW
Prep Batch:	5396	Date Prepared:	2003-11-26	Prepared By:	RS

Parameter	Flag	Result	RL Units	Dilution	RL
Total Dissolved Solids		23200	mg/L	50	10.00

Method Blank (1) QC Batch: 6001

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

Method Blank (1) QC Batch: 6001

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: 6008

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 (isomers)		<0.00100	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.104	mg/L	1	0.100	104	70 - 130
4-Bromofluorobenzene (4-BFB)		0.126	mg/L	1	0.100	126	70 - 130

Method Blank (1) QC Batch: 6015

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

Method Blank (1) QC Batch: 6015

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: 6029

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

Method Blank (1) QC Batch: 6030

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

Method Blank (1) QC Batch: 6077

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

Method Blank (1) QC Batch: 6077

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: 6115

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: 6116

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: 6134

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

Duplicate (1) QC Batch: 6030

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids	1130	1110	mg/L	2	2	14.2

Duplicate (1) QC Batch: 6115

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	480	488	mg/L as CaCo3	1	2	20
Total Alkalinity	480	488	mg/L as CaCo3	1	2	5.16

Duplicate (1) QC Batch: 6116

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	482	480	mg/L as CaCo3	1	0	20
Total Alkalinity	482	480	mg/L as CaCo3	1	0	5.16

Laboratory Control Spike (LCS-1) QC Batch: 6001

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Nitrate-N	2.33	2.33	mg/L	1	2.50	<0.126	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: 6001

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Chloride	13.4	13.1	mg/L	1	12.5	<1.49	107	2	90 - 110	20
Fluoride	2.32	2.34	mg/L	1	2.50	<0.0153	93	1	90 - 110	20
Sulfate	12.9	12.8	mg/L	1	12.5	<0.171	103	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: 6008

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Benzene	0.110	0.113	mg/L	1	0.100	<0.000238	110	3	70 - 130	20
Benzene	0.110	0.113	mg/L	1	0.100	<0.000238	110	3	70 - 130	20
Toluene	0.107	0.126	mg/L	1	0.100	<0.000532	107	16	70 - 130	20
Toluene	0.107	0.126	mg/L	1	0.100	<0.000532	107	16	70 - 130	20
Ethylbenzene	0.112	0.107	mg/L	1	0.100	<0.00160	112	4	70 - 130	20
Ethylbenzene	0.112	0.107	mg/L	1	0.100	<0.00160	112	4	70 - 130	20
Xylene (isomers)	0.348	0.333	mg/L	1	0.300	<0.00571	116	4	70 - 130	20
Xylene (isomers)	0.348	0.333	mg/L	1	0.300	<0.00571	116	4	70 - 130	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)		0.110	0.107	mg/L	1	0.100	110	107	70 - 130
Trifluorotoluene (TFT)		0.110	0.107	mg/L	1	0.100	110	107	70 - 130
4-Bromofluorobenzene (4-BFB)	[6][7]	0.136	0.140	mg/L	1	0.100	136	140	70 - 130
4-Bromofluorobenzene (4-BFB)	[8][9]	0.136	0.140	mg/L	1	0.100	136	140	70 - 130

Laboratory Control Spike (LCS-1) QC Batch: 6015

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Nitrate-N	2.32	2.31	mg/L	1	2.50	<0.126	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: 6015

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Chloride	13.2	13.0	mg/L	1	12.5	<1.49	106	2	90 - 110	20
Fluoride	2.30	2.31	mg/L	1	2.50	<0.0153	92	0	90 - 110	20
Sulfate	12.9	12.8	mg/L	1	12.5	<0.171	103	1	90 - 110	20

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

[6]High BFB surrogate recovery due to prep. Other LCS/LCSD components show the method to be in control.
[7]High BFB surrogate recovery due to prep. Other LCS/LCSD components show the method to be in control.
[8]High BFB surrogate recovery due to prep. Other LCS/LCSD components show the method to be in control.
[9]High BFB surrogate recovery due to prep. Other LCS/LCSD components show the method to be in control.

Laboratory Control Spike (LCS-1) QC Batch: 6077

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Nitrate-N	2.35	2.36	mg/L	1	2.50	<0.126	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: 6077

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Chloride	12.0	12.1	mg/L	1	12.5	<1.49	96	1	90 - 110	20
Fluoride	2.31	2.32	mg/L	1	2.50	<0.0153	92	0	90 - 110	20
Sulfate	12.5	12.4	mg/L	1	12.5	<0.171	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: 6134

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Calcium	100	98.8	mg/L	1	100	<0.183	100	1	85 - 115	20
Dissolved Potassium	99.1	96.3	mg/L	1	100	<0.135	99	3	85 - 115	20
Dissolved Magnesium	101	99.2	mg/L	1	100	<0.183	101	2	85 - 115	20
Dissolved Sodium	95.3	96.5	mg/L	1	100	<0.105	95	1	85 - 115	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: 6001

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Nitrate-N	2450	2430	mg/L	1000	2.50	<126	98	1	65.8 - 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: 6001

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Chloride	23400	23200	mg/L	1000	12.5	10500	103	1	56.4 - 130	20
Fluoride	2370	2360	mg/L	1000	2.50	<15.3	95	0	65.1 - 121	20
Sulfate	17200	17200	mg/L	1000	12.5	4480	102	0	69.9 - 114	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: 6015

continued ...

matrix spikes continued ...

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Nitrate-N	2430	2430	mg/L	1000	2.50	<126	97	0	65.8 - 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: 6015

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Chloride	23000	23000	mg/L	1000	12.5	9660	107	0	56.4 - 130	20
Fluoride	2370	2380	mg/L	1000	2.50	<15.3	95	0	65.1 - 121	20
Sulfate	16900	17000	mg/L	1000	12.5	4220	101	0	69.9 - 114	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: 6077

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Nitrate-N	130	129	mg/L	50	2.50	14.5	92	1	65.8 - 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: 6077

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Chloride	860	867	mg/L	50	12.5	208	104	1	56.4 - 130	20
Fluoride	123	126	mg/L	50	2.50	8.55	92	2	65.1 - 121	20
Sulfate	977	976	mg/L	50	12.5	317	106	0	69.9 - 114	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: 6134

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Calcium	[10][11]	934	1020	mg/L	1	100	881	53	9	75 - 125	20
Dissolved Potassium	[12]	175	190	mg/L	1	100	64.5	110	8	75 - 125	20
Dissolved Magnesium	[13]	381	415	mg/L	1	100	280	101	8	75 - 125	20
Dissolved Sodium	[14][15]	3700	3850	mg/L	1	100	3560	140	4	75 - 125	20

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

[10]ms recovery out of limits due to matrix effect, use lcs/lcsd
[11]ms recovery out of limits due to matrix effect, use lcs/lcsd
[12]ms recovery out of limits due to matrix effect, use lcs/lcsd
[13]ms recovery out of limits due to matrix effect, use lcs/lcsd
[14]ms recovery out of limits due to matrix effect, use lcs/lcsd
[15]ms recovery out of limits due to matrix effect, use lcs/lcsd

Matrix Spike (MS-2) QC Batch: 6134

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Calcium	[16]	1080	1110	mg/L	1	100	980	100	3	75 - 125	20
Dissolved Potassium	[17][18]	172	179	mg/L	1	100	45.9	126	4	75 - 125	20
Dissolved Magnesium		514	513	mg/L	1	100	389	125	0	75 - 125	20
Dissolved Sodium	[19][20]	6030	6270	mg/L	1	100	6330	300	4	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: 6001

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		mg/L	2.50	2.34	94	90 - 110	2003-11-26

Standard (ICV-1) QC Batch: 6001

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.5	11.7	94	90 - 110	2003-11-26
Fluoride		mg/L	2.50	2.32	93	90 - 110	2003-11-26
Sulfate		mg/L	12.5	12.0	96	90 - 110	2003-11-26

Standard (CCV-1) QC Batch: 6001

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		mg/L	2.50	2.33	93	90 - 110	2003-11-26

Standard (CCV-1) QC Batch: 6001

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.5	13.1	105	90 - 110	2003-11-26
Fluoride		mg/L	2.50	2.33	93	90 - 110	2003-11-26
Sulfate		mg/L	12.5	12.9	103	90 - 110	2003-11-26

Standard (ICV-1) QC Batch: 6008

[16]ms recovery out of range due to matrix effect/dilution factor, use lcs/lcsd
[17]ms recovery out of range due to matrix effect/dilution factor, use lcs/lcsd
[18]ms recovery out of range due to matrix effect/dilution factor, use lcs/lcsd
[19]ms recovery out of range due to matrix effect/dilution factor, use lcs/lcsd
[20]ms recovery out of range due to matrix effect/dilution factor, use lcs/lcsd

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.105	105	85 - 115	2003-11-25
Toluene		mg/L	0.100	0.103	103	85 - 115	2003-11-25
Ethylbenzene		mg/L	0.100	0.108	108	85 - 115	2003-11-25
Xylene (isomers)		mg/L	0.300	0.331	110	85 - 115	2003-11-25

Standard (CCV-1) QC Batch: 6008

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.110	110	85 - 115	2003-11-25
Toluene		mg/L	0.100	0.107	107	85 - 115	2003-11-25
Ethylbenzene		mg/L	0.100	0.112	112	85 - 115	2003-11-25
Xylene (isomers)	[21]	mg/L	0.300	0.347	116	85 - 115	2003-11-25

Standard (CCV-2) QC Batch: 6008

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.111	111	85 - 115	2003-11-25
Toluene		mg/L	0.100	0.109	109	85 - 115	2003-11-25
Ethylbenzene		mg/L	0.100	0.115	115	85 - 115	2003-11-25
Xylene (isomers)	[22]	mg/L	0.300	0.364	121	85 - 115	2003-11-25

Standard (ICV-1) QC Batch: 6015

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		mg/L	2.50	2.33	93	90 - 110	2003-11-26

Standard (ICV-1) QC Batch: 6015

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.5	13.1	105	90 - 110	2003-11-26
Fluoride		mg/L	2.50	2.33	93	90 - 110	2003-11-26
Sulfate		mg/L	12.5	12.9	103	90 - 110	2003-11-26

Standard (CCV-1) QC Batch: 6015

[21] Xylene outside normal limits in ICV/CCV. Average of ICV/CCV components within acceptable range.
[22] Xylene outside normal limits in ICV/CCV. Average of ICV/CCV components within acceptable range.

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		mg/L	2.50	2.31	92	90 - 110	2003-11-26

Standard (CCV-1) QC Batch: 6015

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.5	13.1	105	90 - 110	2003-11-26
Fluoride		mg/L	2.50	2.33	93	90 - 110	2003-11-26
Sulfate		mg/L	12.5	12.9	103	90 - 110	2003-11-26

Standard (ICV-1) QC Batch: 6029

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	979.0	98	90 - 110	2003-12-01

Standard (CCV-1) QC Batch: 6029

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	981.0	98	90 - 110	2003-12-01

Standard (ICV-1) QC Batch: 6030

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	994.0	99	90 - 110	2003-12-01

Standard (CCV-1) QC Batch: 6030

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	1013	101	90 - 110	2003-12-01

Standard (ICV-1) QC Batch: 6077

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		mg/L	2.50	2.38	95	90 - 110	2003-12-02

Standard (ICV-1) QC Batch: 6077

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.5	12.0	96	90 - 110	2003-12-02
Fluoride		mg/L	2.50	2.35	94	90 - 110	2003-12-02
Sulfate		mg/L	12.5	12.6	101	90 - 110	2003-12-02

Standard (CCV-1) QC Batch: 6077

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		mg/L	2.50	2.37	95	90 - 110	2003-12-02

Standard (CCV-1) QC Batch: 6077

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.5	12.0	96	90 - 110	2003-12-02
Fluoride		mg/L	2.50	2.33	93	90 - 110	2003-12-02
Sulfate		mg/L	12.5	12.6	101	90 - 110	2003-12-02

Standard (ICV-1) QC Batch: 6115

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	2003-12-02
Carbonate Alkalinity		mg/L as CaCo3	0.00	<1.00		0 - 200	2003-12-02
Bicarbonate Alkalinity		mg/L as CaCo3	0.00	<4.00		0 - 200	2003-12-02
Total Alkalinity		mg/L as CaCo3	250	242	97	90 - 110	2003-12-02

Standard (CCV-1) QC Batch: 6115

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	2003-12-02
Carbonate Alkalinity		mg/L as CaCo3	0.00	<1.00		0 - 200	2003-12-02
Bicarbonate Alkalinity		mg/L as CaCo3	0.00	<4.00		0 - 200	2003-12-02
Total Alkalinity		mg/L as CaCo3	250	240	96	90 - 110	2003-12-02

Standard (ICV-1) QC Batch: 6116

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	2003-12-02
Carbonate Alkalinity		mg/L as CaCo3	0.00	<1.00		0 - 200	2003-12-02
Bicarbonate Alkalinity		mg/L as CaCo3	0.00	<4.00		0 - 200	2003-12-02

continued ...

standard continued ...

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	2003-12-02

Standard (CCV-1) QC Batch: 6116

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	2003-12-02
Carbonate Alkalinity		mg/L as CaCo3	0.00	<1.00		0 - 200	2003-12-02
Bicarbonate Alkalinity		mg/L as CaCo3	0.00	242		0 - 200	2003-12-02
Total Alkalinity		mg/L as CaCo3	250	242	97	90 - 110	2003-12-02

Standard (ICV-1) QC Batch: 6134

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	25.0	24.7	99	90 - 110	2003-12-03
Dissolved Potassium		mg/L	25.0	24.2	97	90 - 110	2003-12-03
Dissolved Magnesium		mg/L	25.0	24.8	99	90 - 110	2003-12-03
Dissolved Sodium		mg/L	25.0	24.1	96	90 - 110	2003-12-03

Standard (CCV-1) QC Batch: 6134

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	25.0	25.3	101	90 - 110	2003-12-03
Dissolved Potassium		mg/L	25.0	23.9	96	90 - 110	2003-12-03
Dissolved Magnesium		mg/L	25.0	24.6	98	90 - 110	2003-12-03
Dissolved Sodium		mg/L	25.0	24.5	98	90 - 110	2003-12-03

Standard (CCV-2) QC Batch: 6134

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	25.0	26.9	108	90 - 110	2003-12-03
Dissolved Potassium		mg/L	25.0	25.3	101	90 - 110	2003-12-03
Dissolved Magnesium		mg/L	25.0	26.5	106	90 - 110	2003-12-03
Dissolved Sodium		mg/L	25.0	25.8	103	90 - 110	2003-12-03

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CHAIN—OF—CUSTODY RECORD

Larson & Associates, Inc.
Environmental Consultants
Fax: 915-687-0456
915-687-0901
507 N. Marienfeld, Ste. 202 • Midland, TX 79701

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

DATE	TIME	WATER	SOIL	OTHER	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	BTEX	Cation	Anion	TDS	LAB. I.D. NUMBER (LAB USE ONLY)	REMARKS (I.E., FILTERED, UNFILTERED, PRESERVED, UNPRESERVED, GRAB COMPOSITE)
11/20/03	1150	✓			mw-8	3	✓	✓	✓	✓	22170	
11/20/03	1223	✓			mw-7	3	✓	✓	✓	✓	22171	
11/20/03	1317	✓			mw-6	3	✓	✓	✓	✓	22172	
11/21/03	1056	✓			ww-1	3	✓	✓	✓	✓	22173	
11/21	1136	✓			mw-3	3	✓	✓	✓	✓	22174	
11/21	1212	✓			mw-4	2 3	✓	✓	✓	✓	22175	1 vial received broken
11/21	1240	✓			mw-5	3	✓	✓	✓	✓	22176	
11/21	1305	✓			mw-1	3	✓	✓	✓	✓	22177	
11/21	1355	✓			mw-2	3	✓	✓	✓	✓	22178	
11/20		✓			Dup	3	✓	✓	✓	✓	22179	
11/21		✓			Dup	3	✓	✓	✓	✓	22180	

SAMPLED BY: (Signature) Jerry Jones DATE: 11/21/03 TIME: 1305
RELINQUISHED BY: (Signature) [Received] Helen Shelton DATE: 11/24/03 TIME: 8:30AM
RECEIVED BY: (Signature) DATE: TIME:

RELINQUISHED BY: (Signature) Jerry Jones DATE: 11/24/03 TIME: 8:30AM
RECEIVED BY: (Signature) Helen Shelton DATE: 11/24/03 TIME: 1700
SAMPLE SHIPPED BY: (Circle) FEDEX BUS AIRBILL #: P524902 HAND DELIVERED UPS OTHER: Lone Star

COMMENTS:
TURNAROUND TIME NEEDED: Stn.

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) Brenda Ward DATE: 11/25/03 TIME: 9:26

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

33 samples - HS
4.0

22170-80 311250?

CHAIN—OF—CUSTODY RECORD

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11/20/03	1150	✓			MW-8	3	✓	✓	✓	✓						22170	
11/20/03	1223	✓			MW-7	3	✓	✓	✓	✓						22171	
11/20/03	1317	✓			MW-6	3	✓	✓	✓	✓						22172	
11/21/03	1056	✓			WW-1	3	✓	✓	✓	✓						22173	
11/21	1136	✓			MW-3	3	✓	✓	✓	✓						22174	
11/21	1212	✓			MW-4	2 3	✓	✓	✓	✓						22175	1 vial received broken
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11/21	1305	✓			MW-1	3	✓	✓	✓	✓						22177	
11/21	1255	✓			MW-2	3	✓	✓	✓	✓						22178	
11/20		✓			Dup	3	✓	✓	✓	✓						22179	
11/21		✓			Dup	3	✓	✓	✓	✓						22180	

SAMPLED BY: (Signature) Tony Jones — DATE: 11/21/03 TIME: 1305
~~RELINQUISHED~~ Received BY: (Signature) Helen Shelton — DATE: 11/24/03 TIME: 8:30 AM
RECEIVED BY: (Signature) — DATE: TIME:

RELINQUISHED BY: (Signature) Tony Jones — DATE: 11/24/03 TIME: 8:30 AM
~~RECEIVED~~ Relinquished BY: (Signature) Helen Shelton — DATE: 11/24/03 TIME: 1700

SAMPLE SHIPPED BY: (Circle)
FEDEX BUS AIRBILL #: P524002
HAND DELIVERED UPS OTHER:

COMMENTS:
TURNAROUND TIME NEEDED: Stan.

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

RECEIVED BY: (Signature) Brenda Ward
DATE: 11/25/03 TIME: 9:26

WHITE – RECEIVING LAB
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SAMPLE CONDITION WHEN RECEIVED:
LA CONTACT PERSON:
SAMPLE TYPE:

33 samples - HS MA

124SPlD 4°