

GW - 107

MONITORING REPORTS

DATE:

2001

**2001 ANNUAL
GROUNDWATER REMEDIATION
REPORT
JAL NO. 4 PLANT
LEA COUNTY, NEW MEXICO**

Prepared for:

**EL PASO CORPORATION
614 REILLY AVENUE
FARMINGTON, NEW MEXICO 87401
(505) 599-2124**

Prepared by:

**ATKINS BENHAM, INC.
ENVIRONMENTAL DIVISION
2488 East 81st Street, Suite 610
Tulsa, Oklahoma 74137
(918) 496-0059**

February 15, 2002

TABLE OF CONTENTS

Section	Page
LIST OF TABLES	II
LIST OF FIGURES.....	III
LIST OF GRAPHS.....	IV
LIST OF APPENDICES	VIII
1.0 INTRODUCTION	1
1.1 Program Wells and Sampling Schedule	1
1.2 Non-Program Wells and Sampling Schedule	3
1.3 Depth to Groundwater Measurements.....	4
1.4 Sampling Procedures	4
2.0 RESULTS OF MONITORING ACTIVITIES	6
2.1 Field Measurements	6
2.2 Inorganic Constituents.....	7
2.3 Organic Constituents	9
3.0 GROUNDWATER REMEDIATION SYSTEM	12
4.0 GROUNDWATER MODEL	14
5.0 CONCLUSIONS	15
6.0 RECOMMENDATIONS	17

LIST OF TABLES

TABLE

- 1 Summary of Depth to Groundwater Measurements
- 2 Summary of Laboratory Analyses of Groundwater Samples
- 3 Summary of Groundwater Recovery/Disposal Volumes

LIST OF FIGURES

FIGURE

- 1 Plant Location and Topographic Features
- 2 Groundwater Potentiometric Surface of Uppermost Groundwater System on February 20, 2001
- 3 Groundwater Potentiometric Surface of Uppermost Groundwater System on May 1-6, 2001
- 4 Groundwater Potentiometric Surface of Uppermost Groundwater System on August 1, 2001
- 5 Groundwater Potentiometric Surface of Uppermost Groundwater System on October 22-25, 2001
- 6 Isopleth of Chloride Concentrations in Groundwater in 2001
- 7 Isopleth of Benzene Concentrations in Groundwater in 2001

LIST OF GRAPHS

GRAPH

- 1 Concentration Trend of Total Dissolved Solids in Groundwater Samples taken from Monitor Well ACW-01
- 2 Concentration Trends of Chloride and Sodium in Groundwater Samples taken from Monitor Well ACW-01
- 3 Concentration Trend of Benzene in Groundwater Samples taken from Monitor Well ACW-01
- 4 Concentration Trend of Total Dissolved Solids in Groundwater Samples taken from Monitor Well ACW-02A
- 5 Concentration Trends of Chloride and Sodium in Groundwater Samples taken from Monitor Well ACW-02A
- 6 Concentration Trend of Benzene in Groundwater Samples taken from Monitor Well ACW-02A
- 7 Concentration Trend of Total Dissolved Solids in Groundwater Samples taken from Monitor Well ACW-04
- 8 Concentration Trends of Chloride and Sodium in Groundwater Samples taken from Monitor Well ACW-04
- 9 Concentration Trend of Benzene in Groundwater Samples taken from Monitor Well ACW-04
- 10 Concentration Trend of Total Dissolved Solids in Groundwater Samples taken from Monitor Well ACW-05
- 11 Concentration Trends of Chloride and Sodium in Groundwater Samples taken from Monitor Well ACW-05
- 12 Concentration Trend of Benzene in Groundwater Samples taken from Monitor Well ACW-05
- 13 Concentration Trend of Total Dissolved Solids in Groundwater Samples taken from Monitor Well ACW-06

LIST OF GRAPHS - continued**GRAPH**

- 14 Concentration Trends of Chloride and Sodium in Groundwater Samples taken from Monitor Well ACW-06
- 15 Concentration Trend of Benzene in Groundwater Samples taken from Monitor Well ACW-06
- 16 Concentration Trend of Total Dissolved Solids in Groundwater Samples taken from Monitor Well ACW-07
- 17 Concentration Trends of Chloride and Sodium in Groundwater Samples taken from Monitor Well ACW-07
- 18 Concentration Trend of Benzene in Groundwater Samples taken from Monitor Well ACW-07
- 19 Concentration Trend of Total Dissolved Solids in Groundwater Samples taken from Monitor Well ACW-08
- 20 Concentration Trends of Chloride and Sodium in Groundwater Samples taken from Monitor Well ACW-08
- 21 Concentration Trend of Benzene in Groundwater Samples taken from Monitor Well ACW-08
- 22 Concentration Trend of Total Dissolved Solids in Groundwater Samples taken from Monitor Well ACW-09
- 23 Concentration Trends of Chloride and Sodium in Groundwater Samples taken from Monitor Well ACW-09
- 24 Concentration Trend of Benzene in Groundwater Samples taken from Monitor Well ACW-09
- 25 Concentration Trend of Total Dissolved Solids in Groundwater Samples taken from Monitor Well ACW-10
- 26 Concentration Trends of Chloride and Sodium in Groundwater Samples taken from Monitor Well ACW-10

LIST OF GRAPHS - continued**GRAPH**

- 27 Concentration Trend of Benzene in Groundwater Samples taken from Monitor Well ACW-10
- 28 Concentration Trend of Total Dissolved Solids in Groundwater Samples taken from Monitor Well ACW-11
- 29 Concentration Trends of Chloride and Sodium in Groundwater Samples taken from Monitor Well ACW-11
- 30 Concentration Trend of Benzene in Groundwater Samples taken from Monitor Well ACW-11
- 31 Concentration Trend of Total Dissolved Solids in Groundwater Samples taken from Monitor Well ACW-12
- 32 Concentration Trends of Chloride and Sodium in Groundwater Samples taken from Monitor Well ACW-12
- 33 Concentration Trend of Benzene in Groundwater Samples taken from Monitor Well ACW-12
- 34 Concentration Trend of Total Dissolved Solids in Groundwater Samples taken from Monitor Well ACW-13
- 35 Concentration Trends of Chloride and Sodium in Groundwater Samples taken from Monitor Well ACW-13
- 36 Concentration Trend of Benzene in Groundwater Samples taken from Monitor Well ACW-13
- 37 Concentration Trend of Total Dissolved Solids in Groundwater Samples taken from Monitor Well ACW-14
- 38 Concentration Trends of Chloride and Sodium in Groundwater Samples taken from Monitor Well ACW-14
- 39 Concentration Trend of Benzene in Groundwater Samples taken from Monitor Well ACW-14

LIST OF GRAPHS - continued

GRAPH

- 40 Concentration Trend of Total Dissolved Solids in Groundwater Samples taken from Monitor Well ACW-15
- 41 Concentration Trends of Chloride and Sodium in Groundwater Samples taken from Monitor Well ACW-15
- 42 Concentration Trend of Benzene in Groundwater Samples taken from Monitor Well ACW-15

LIST OF APPENDICES

APPENDIX

- A Laboratory Analytical Reports for Groundwater Samples Collected During 2001

**2001 ANNUAL
GROUNDWATER REMEDIATION
REPORT
JAL NO. 4 PLANT
LEA COUNTY, NEW MEXICO**

1.0 INTRODUCTION

Atkins Benham, Inc. Environmental Division (ABI) has been retained by El Paso Corporation (EPC) to compile the 2001 Annual Groundwater Remediation Report for the Jal No. 4 Plant (Plant) located in Lea County, New Mexico. The remedial activities conducted at the Plant have been performed under EPC's Project Work Plan, dated February 1995 (Plan). This Plan was approved by the New Mexico Oil Conservation Division (NMOCD) on April 27, 1995, with subsequent revisions approved on August 10, 1995 and July 8, 1997.

The Plant was constructed by an EPC entity (El Paso Natural Gas Company, or EPNG) in 1952 to treat, compress and transport natural gas to EPC's main transmission lines. EPNG sold the Plant in 1987. Currently, the Plant is owned and operated by Christie Gas Corporation (Christie). The Plant property is comprised of approximately 181 acres of land located west of State Highway 18, approximately 9 miles north of the town of Jal, New Mexico. The location of the Plant property and topographic features are shown on Figure 1. As is shown, the Plant property occupies portions of Sections 31 and 32 of Township 23 South, Range 37 East, and Sections 5 and 6 of Township 24 South, Range 37 East, all in Lea County, New Mexico.

1.1 Program Wells and Sampling Schedule

To assess brine and hydrocarbon impacts to the shallow groundwater system in the Plant area, EPC has installed 18 monitor wells, 1 piezometer, and 2 recovery wells on

2001 ANNUAL GROUNDWATER REMEDIATION REPORT

El Paso Corporation - Jal No. 4 Plant

February 15, 2002

Plant property and adjoining properties to the east (located hydraulically downgradient). In accordance with the NMOCD's approval of the revised Plan, obtained July 8, 1997, EPC designated thirteen (13) monitor wells as **"program monitor wells"** from which groundwater samples are frequently collected and submitted to an analytical laboratory for mineral composition, organic compounds, and metals analyses. Monitor well ACW-15 was added to this list in 1999, bringing the total number of monitor wells designated as **"program monitor wells"** to fourteen (14). The locations of these wells are shown on Figures 2 through 7.

A list of EPC's program monitor wells and the calendar year 2001 sample collection schedule for each well is as follows:

Monitor Well	Sampled February ¹ , May ¹ , August ¹ , October ³	Sampled May ² , October ³
ACW-1		X
ACW-2A		X
ACW-4		X
ACW-5		X
ACW-6		X
ACW-7		X
ACW-8		X
ACW-9		X
ACW-10		X
ACW-11		X
ACW-12	X	
ACW-13	X	
ACW-14	X	
ACW-15	X	

Notes:

1. Groundwater samples collected during these sample events were submitted to the laboratory for the following analyses: benzene, toluene, ethylbenzene, and total xylenes (collectively referred to as BTEX), total dissolved solids (TDS), specific conductance, pH, temperature and the major cations and anions

(including bromide, calcium, chloride, fluoride, magnesium, nitrate, potassium, silica, sodium, sulfate, alkalinity and hardness).

2. Groundwater samples collected during these sample events were submitted to the laboratory for the following analyses: TDS, specific conductance and chloride.
3. Groundwater samples collected during this sample event were submitted to the laboratory for the following analyses: BTEX, TDS, specific conductance, pH, temperature and the major cations and anions (including aluminum, arsenic, barium, boron, bromide, cadmium, calcium, chloride, chromium, cobalt, copper, fluoride, iron, lead, magnesium, manganese, mercury, molybdenum, nickel, nitrate, potassium, selenium, silica, silver, sodium, sulfate, zinc, alkalinity and hardness).

1.2 Non-Program Wells and Sampling Schedule

In addition to these program monitor wells, EPC also collects groundwater samples from three (3) non-program monitor wells (ENSR-1, ENSR-2 and ENSR-3), one (1) piezometer (PTP-1), one (1) upgradient water supply well (EPNG-1), and two (2) downgradient active water supply wells (Oxy Production Well and Doom Production Well). The ENSR monitor wells are located within the Plant process areas as shown on Figures 2 through 7. Water supply well EPNG-1 is located at the northwest corner of the Plant property. The Oxy Production Well is located approximately in the center of Section 5-T24S-R37E and provides potable water to Oxy's Myers Langlie Mattix Unit Water Injection Station. The locations of the Oxy injection station and supply well are shown on Figures 2 through 7. The Doom Production Well is a private water supply well that provides water to the residence of Jimmie J. and Rebecca J. Doom, and is located in the approximate center of the northwest quarter of Section 8-T24S-R37E. The location of the Doom Production Well is not shown on the Figures provided, however, the well is approximately 5,800 feet south of the Oxy water injection station. It should be noted that this location description for the Doom Production Well corrects the location description presented in previous annual reports.

To date, EPC has collected groundwater samples from these non-program wells at least annually. With the exception of the Oxy Production Well and the Doom

Production Well, the groundwater samples taken from these non-program wells were submitted to the laboratory for the following analyses: BTEX, TDS, specific conductance and chloride. The Oxy Production and the Doom Production Wells were each sampled quarterly in 2001. The February, May and August samples were submitted to the laboratory for the following analyses: BTEX, TDS, specific conductance, pH, temperature and the major cations and anions (including bromide, calcium, chloride, fluoride, magnesium, nitrate, silica, sodium, sulfate, alkalinity and hardness). The groundwater samples collected during the October 2001 sample event were submitted to the laboratory for the following analyses: BTEX, TDS, specific conductance, pH, temperature and the major cations and anions (including aluminum, arsenic, barium, boron, bromide, cadmium, calcium, chloride, chromium, cobalt, copper, fluoride, iron, lead, magnesium, manganese, mercury, molybdenum, nickel, nitrate, potassium, selenium, silica, silver, sodium, sulfate, zinc, alkalinity and hardness).

1.3 Depth to Groundwater Measurements

During each groundwater sampling event, and prior to disturbing the water columns within each well, EPC personnel measured the static depths to groundwater within the well casings using an electronic water level indicator. All depths to groundwater were measured relative to the surveyed top of casing (TOC) datums so that groundwater elevations could be determined. Table 1 provides a summary of the depths to groundwater, TOC elevations, and groundwater elevations that have been compiled throughout EPC's monitoring program.

1.4 Sampling Procedures

The groundwater samples were collected by EPC personnel in accordance with EPA methods and quality assurance/quality control guidance. All monitor wells were purged thoroughly prior to sample collection using electric submersible pumps. Groundwater produced during purging operations was contained and disposed of within the Plant's lined Surface Impoundment #9.

2001 ANNUAL GROUNDWATER REMEDIATION REPORT

El Paso Corporation - Jal No. 4 Plant

February 15, 2002

Upon collection, the groundwater samples were placed directly into laboratory-prepared containers, labeled as to source, packed on ice, and placed under chain-of-custody control for transfer to the laboratory. Samples collected during each of the 2001 sampling events were submitted to NEL Laboratories, Inc. (Las Vegas, Nevada). The results of the 2001 groundwater analyses and all previous analyses are summarized on Table 2. The complete 2001 laboratory analytical reports and chain-of-custody documents are provided in Appendix A.

It should be noted that the groundwater samples taken from monitor wells ACW-14 and ACW-15, throughout the 2001 sampling events, were labeled and submitted to the analytical laboratory as "ACW-15" and "ACW-17", respectively. Groundwater samples taken from recovery well RW-2, throughout the 2001 sampling events, were labeled and submitted to the analytical laboratory as "ACW-14". ABI has corrected these well nomenclature errors on the data summary tables and figures provided herein, however, the laboratory analytical reports and chain-of-custody documents were not changed. EPC has taken measures to prevent such errors from occurring in future sample events.

2.0 RESULTS OF MONITORING ACTIVITIES

The following sections summarize the field measurements and laboratory analytical results obtained throughout the 2001 groundwater sampling program. These data have been compared with historic data to assess any trends that may be apparent. To facilitate these comparisons, forty-two (42) trend graphs have been prepared that show the TDS, chloride, sodium, and benzene concentrations that have been detected within the groundwater samples taken from the fourteen (14) program monitor wells. These graphs are presented in the section of this report tabbed "Graphs".

An analysis of the five (5) years of analytical results developed for both the program and non-program monitor wells indicates that many of the constituents that are being analyzed for are either below detection limits, or are present at concentrations less than regulatory levels established in New Mexico Administrative Code (NMAC) 20.6.2.3103. Based upon the extensive analytical database developed to date for the Plant, and the fact that many of the constituents that are being analyzed for are non-detectable in groundwater or are consistently at low concentrations, it is ABI's opinion that a reduction in the sampling frequency and/or the laboratory analytical testing parameters could be justified.

2.1 Field Measurements

Depth to groundwater measurements taken during each of the sampling events are shown on Table 1. These data indicate that the depths to groundwater across the Plant are approximately 100 feet below ground surface, and that the static groundwater elevations exhibit little seasonal variability. With the exception of ACW-5 and ACW-9, the fluctuations in the groundwater elevations observed in the wells have been less than one (1) foot since monitoring began in 1997. In 2001, the depth to groundwater elevations for ACW-5 and ACW-9 appear to be influenced by groundwater withdrawals from ENSR-2 and RW-2 resulting in groundwater elevations fluctuations greater than one (1) foot.

Groundwater potentiometric surface maps have been prepared for each sampling quarter. These maps are presented on Figures 2 through 5. As is shown on these figures, the groundwater flow direction across the Plant, in general, is from northwest to southeast (S46E). The hydraulic gradient across the Plant is approximately 0.002 feet per foot. Both groundwater flow direction and hydraulic gradient appear to have changed little since 1997.

2.2 Inorganic Constituents

The primary inorganic parameters being utilized to assess plume migration at the Plant include: TDS, chloride and sodium. ABI has reviewed the concentration trend graphs for these parameters in each of the program monitor wells. As can be seen from the 2001 trend graphs, the Q4/2000 chloride, sodium and TDS concentrations reported for monitor wells ACW-13, ACW-14 and ACW-15 in the **2000 Annual Groundwater Remediation Report** were elevated from the previous trends for these analytes. However, these upward trends were not sustained, and the concentrations of these analytes observed during the 2001 monitoring year fell within the historical ranges for these wells.

It is ABI's opinion, based upon our review, that certain trends are apparent in the levels of these parameters. The following table summarizes ABI's opinions of the trends that are observable from the inorganic database provided herein. The trends observed in calendar year 2000 are shown in parentheses.

2001 ANNUAL GROUNDWATER REMEDIATION REPORT

El Paso Corporation - Jal No. 4 Plant

February 15, 2002

MONITOR WELL	CONCENTRATION TRENDS		
	TDS	CHLORIDE	SODIUM
ACW-1	↓ (↑)	↓ (↑)	↓ (↓)
ACW-2A	↓ (↓)	↓ (↓)	↓ (↔)
ACW-4	↓ (↓)	↓ (↓)	↓ (↓)
ACW-5	↓ (↓)	↑ (↑)	↔ (↓)
ACW-6	↓ (↓)	↓ (↑)	↓ (↓)
ACW-7	↑ (↑)	↑ (↑)	↑ (↓)
ACW-8	↓ (↔)	↓ (↓)	↔ (↓)
ACW-9	↑ (↑)	↑ (↑)	↑ (↔)
ACW-10	↑ (↑)	↑ (↑)	↔ (↑)
ACW-11	↑ (↑)	↑ (↑)	↑ (↑)
ACW-12	↑ (↑)	↑ (↑)	↔ (↑)
ACW-13	↔ (↑)	↔ (↑)	↔ (↑)
ACW-14	↔ (↑)	↔ (↑)	↔ (↑)
ACW-15	↓ (↑)	↓ (↑)	↓ (↑)

Key: ↔ denotes no observable trend, ↓ denotes a decreasing trend, ↑ denotes an increasing trend, trends shown in parentheses were reported in previous years monitoring program.

In general, these trends indicate that the overall levels of inorganic constituents are decreasing in six (6) wells, increasing in five (5) wells, and no observable trend in three (3) wells. The wells and their overall trends for inorganic constituents can be grouped as follows:

Monitor Wells with Decreasing Overall Inorganic Levels

ACW-1	ACW-2A	ACW-4
ACW-6	ACW-8	ACW-15

Monitor Wells with Increasing Overall Inorganic Levels

ACW-7	ACW-9	ACW-10
ACW-11	ACW-12	

Monitor Wells with No Observable Overall Inorganic Levels

ACW-5

ACW-13

ACW-14

On Figure 6, ABI has prepared an isopleth of the chloride concentrations detected in groundwater during the 2001 sampling program. NMAC 20.6.2.3103 (B) has established a standard for Other Standards for Domestic Water Supply of 250 mg/L for chloride in groundwater containing Total Dissolved Solids (TDS) levels of 10,000 mg/L or less. On this isopleth, the value posted at each well location represents the highest chloride concentration detected in any groundwater sample taken from that well during the 2001 monitoring program.

Decreasing chloride trends are evident in the monitor wells immediately adjacent to RW-1 and ENSR-2 (i.e., monitor wells ACW-2A, ACW-4 and ACW-8). These trends indicate the remediation system is effective in removing the highest levels of brine impact and that fresher groundwater is converging on these wells.

2.3 Organic Constituents

The primary organic constituent being utilized to assess plume migration at the Plant is benzene. NMAC regulation 20.6.2.3103 (A) has established a Human Health Standard of 0.01 mg/L for benzene in groundwater containing TDS levels of 10,000 mg/L or less. ABI has reviewed the concentration trend graphs for benzene in each of the program monitor wells. It is ABI's opinion, based upon our review, that certain trends are apparent in the levels of this compound. The following table summarizes ABI's opinions of the trends that are observable from the benzene database provided herein. The trends observed in calendar year 2000 are shown in parentheses.

2001 ANNUAL GROUNDWATER REMEDIATION REPORT

El Paso Corporation - Jal No. 4 Plant

February 15, 2002

MONITOR WELL	BENZENE CONCENTRATION TREND
ACW-1	↔ (↔)
ACW-2A	↓ (↓)
ACW-4	↓ (↓)
ACW-5	↔ (↓)
ACW-6	↑ (↔)
ACW-7	↔ (↓)
ACW-8	↓ (↓)
ACW-9	↔ (↔)
ACW-10	↔ (↓)
ACW-11	↑ (↑)
ACW-12	↔ (↓)
ACW-13	↔ (↔)
ACW-14	↔ (↔)
ACW-15	↔ (↔)

Key: ↔ denotes no observable trend, ↓ denotes a decreasing trend, ↑ denotes an increasing trend, trends shown in parentheses were reported in previous years monitoring program.

In general, these trends indicate that benzene levels are remaining relatively constant or are decreasing slightly across the Plant (9 stable and 3 decreasing trends). However, an increasing benzene trend is indicated in monitor wells ACW-6 and ACW-11. These monitor wells are located along the eastern Plant property boundary. ACW-11 is located on Plant and ACW-6 is located immediately off Plant.

On Figure 7, ABI has prepared an isopleth of the benzene concentrations detected in groundwater during the 2001 sampling program. On this isopleth, the value posted at each well location represents the highest benzene concentration detected in any groundwater sample taken from that well during the 2001 monitoring program. As can be seen on Figure 7, the highest benzene concentration observed in sample year 2001 was detected in the groundwater sample taken from on Plant monitor well ACW-11 (59 µg/L). In addition, benzene was detected in three (3) off Plant monitor wells during the

2001 ANNUAL GROUNDWATER REMEDIATION REPORT

El Paso Corporation - Jal No. 4 Plant

February 15, 2002

sample year 2001. These wells were ACW-6 (5.6 µg/L), ACW-7 (7.4 µg/L) and ACW-12 (2.4 µg/L).

3.0 GROUNDWATER REMEDIATION SYSTEM

To date, EPC has installed two (2) groundwater recovery wells to mitigate impacts to the shallow groundwater system. These wells are identified as RW-1 and RW-2, and the locations of these wells are shown on Figures 2 through 7. Due to chronic scaling problems that were occurring within the electrical submersible pump in RW-1, monitor well ENSR-2 was converted to a recovery well in 2001. As shown on these figures, ENSR-2 is located on Plant property in very close proximity to RW-1, and to areas that have likely been sources for brine and hydrocarbon impacts to groundwater. RW-2 is located hydraulically downgradient relative to recovery well ENSR-2 and is approximately 780 feet east of the Plant property boundary. EPC has also installed a below-grade pipeline that connects recovery wells RW-1 and RW-2 to a Class II water disposal well located immediately north of the Plant in the northwest quarter, of the southwest quarter, of Section 32-T23S-R37E. This well, referred to as the SWD-214, was approved for disposal by NMOCD on October 23, 1979 and has a perforated injection interval of 3,866 to 3,982 feet below ground level. During 2001, ENSR-2 was connected to this disposal system. SWD-214 is currently owned and operated by Christie, and in 1999 EPC entered into an agreement with Christie that provides EPC with access to the disposal well for the purpose of disposing of all groundwater recovered from the remediation system.

Groundwater recovery began from recovery well RW-1 in October 1999, RW-2 in January 2000, and ENSR-2 in August 2000. Table 3 provides a summary of the volumes of groundwater pumped from each of these wells.

Through ABI's review of the 2001 groundwater recovery/disposal volumes, an error was discovered in the volumes reported in the **2000 Annual Groundwater Remediation Report**. The 2000 annual report stated that 1,490,680 gallons were removed from RW-1 and 3,967,385 gallons were removed from RW-2 for a total volume of 5,458,065 gallons (16.7 acre-feet). The actual volumes of groundwater removed during calendar year 2000 were 1,575,510 gallons from RW-1, 3,967,385 gallons from RW-2, and

2001 ANNUAL GROUNDWATER REMEDIATION REPORT

El Paso Corporation - Jal No. 4 Plant

February 15, 2002

780,240 gallons from ENSR-2, for a total of 6,323,135 gallons. This corrected total volume for the 2000 monitor period is equivalent to 19.4 acre-feet of water.

Due to Christie's operations at the Plant, EPC had limited access to the disposal well in calendar year 2001. Therefore, groundwater recovery operations at the Plant were limited to less than one-half of the year. Groundwater recoveries from recovery wells RW-2 and ENSR-2 in calendar year 2001 totaled 1,672,990 gallons and 566,126 gallons, respectively, and totaled 2,239,116 gallons. This total volume is equivalent to 6.9 acre-feet of water. Groundwater permits for recovery wells RW-1 and RW-2, obtained in June 1997 from the New Mexico State Engineer's Office, established production limits of 35 acre-feet of water per year from all combined sources at the Plant.

A summary of the amount of groundwater recovered from the wells is presented on the following table. This table presents total number of gallons recovered per well, per year. In addition, the total amount of water recovered per year is presented in gallons and in acre-feet.

Groundwater Recovery Volumes					
Year	RW-1 (gallons)	RW-2 (gallons)	ENSR-2 (gallons)	Total (gallons)	Total (acre-feet)
1999	319,280	0	0	319,280	1.0
2000	1,575,510	3,967,385	780,240	6,323,135	19.4
2001	0	1,672,990	566,126	2,239,116	6.9
Cumulative Total	1,894,790	5,640,375	1,346,366	8,881,531	27.3

4.0 GROUNDWATER MODEL

During calendar year 2001, as proposed in the **2000 Annual Groundwater Remediation Report**, ABI prepared a computer model of the upper-most groundwater system present under the Plant to provide a capture zone analysis for the groundwater remediation system. This model required the input of several hydraulic and geologic parameters including the hydraulic conductivity of the groundwater saturated interval, transmissivity, and storativity. In preparation of this model, ABI attempted to calculate these parameters from the results of a pump test conducted at the Plant by K.W. Brown on behalf of EPC, in December 1990. However, after a thorough review of these pump test data, ABI concluded that the data was unreliable because: 1) the drawdown measurements within the pumped well (ENSR-3) ended two (2) minutes into the pump test, 2) the duration of the discharge was approximately six (6) hours, substantially less than the 24-hour period recommended for unconfined aquifers, and 3) the groundwater model would not calibrate using the limited results obtained from this pump test.

ABI recommends that a second pump test be conducted at the Plant during first quarter of calendar year 2002. Upon complete analysis of the data obtained from this pump test, the computer groundwater model will be completed and the capture zone of the groundwater remediation system evaluated. A complete copy of the groundwater modeling report will be included in the 2002 Annual Groundwater Remediation Report.

5.0 CONCLUSIONS

Based upon ABI's review of the data presented herein, the following conclusions are presented:

- The uppermost occurrence of groundwater in the Plant area occurs within a shallow groundwater system with saturation occurring at approximately 100 feet below ground surface.
- The groundwater elevations of the shallow groundwater system locally are quite stable. With the exception of two (2) wells, the observed groundwater elevations in all monitor wells have fluctuated less than 1-foot over the last five (5) years.
- Groundwater flow directions at the Plant within the shallow groundwater system appear quite stable with flows occurring from northwest to southeast (S46E) with a hydraulic gradient of approximately 0.002 feet per foot.
- The shallow groundwater system in the Plant area has been impacted by chloride. The groundwater analytical data indicate that a plume containing elevated levels of chloride has migrated hydraulically downgradient from the Plant area.
- In general, chloride concentrations in groundwater appear to be increasing along the eastern property boundary of the Plant, and along a line between RW-1 and monitor well ACW-15.
- The shallow groundwater system in the Plant area has been impacted by benzene. The groundwater analytical data indicate that detectable levels of benzene are present hydraulically downgradient of the Plant area.

2001 ANNUAL GROUNDWATER REMEDIATION REPORT

El Paso Corporation - Jal No. 4 Plant

February 15, 2002

- In general, benzene concentrations in groundwater appear to be remaining constant or may be decreasing slightly along the eastern property boundary of the Plant. Only the benzene levels in monitor wells ACW-6 and ACW-11 appear to have an increasing trend.
- The data derived from the pump test conducted in the monitor well ENSR-3 and Piezometer PTP-1 in 1990 appears to be unreliable. A pump test should be preformed to determine the hydraulic properties of the subject groundwater system.

6.0 RECOMMENDATIONS

Based upon a thorough review of the data contained within this report, ABI has formulated the following recommendations:

- Continue operation of the Jal No. 4 Plant groundwater remediation system at maximum design capacity throughout calendar year 2002. Throughout the year, each recovery well should be routinely monitored to identify groundwater recovery volumes, pumping rates, pumping times, and the quality of groundwater being discharged (via field measurements of specific conductance and chloride concentration). In addition, concurrent depth to groundwater measurements should also be taken monthly within both recovery and monitoring wells to assess the cones of depression created by the groundwater removal.
- Efforts should be made to improve access to and capacity in Christie's SWD-214 disposal well to maximize groundwater recovery volumes. Ideally, EPC's disposal capacity and recovery well configuration should be sufficient to allow hydraulic capture of the chloride and benzene impacts to groundwater. If adequate disposal capacity cannot be developed and maintained, EPC should pursue another disposal well(s) that can provide the disposal capacity required.
- Remediation efforts should focus on capturing the most highly impacted groundwater (i.e., groundwater with chloride levels greater than 5,000 mg/L). Particular emphasis should be placed upon evaluating vertical variations in brine concentrations that may be present within the groundwater system. Construction of future recovery wells should target those groundwater intervals containing the most highly affected groundwater.
- Develop a more complete understanding of the scaling problems that are occurring within the remediation system and take the necessary measures to eliminate down-time that results from equipment failures.

- Conduct a pump test within existing monitor wells (ENSR-3 and PTP-1 recommended) to provide the needed hydraulic information for the impacted groundwater system. These data will be used to develop a groundwater model capable of predicting the capture zone of the remediation system. Specifically, the model will be used to determine if additional recovery wells area needed, and if so, to locate these recovery wells.
- Drill and install an additional recovery well(s), to enhance the effectiveness of the groundwater remediation system, and prevent further downgradient movement of impacted groundwater.
- Based upon the database created by the last five (5) years of groundwater monitoring, ABI recommends that the sampling program be modified. The recommended modifications to the sampling program include:
 - 1st Quarter - sample monitor wells ACW-13, ACW-14 and ACW-15 for the following: BTEX, TDS, specific conductance, chloride and sodium.
 - 2nd Quarter - sample monitor wells ACW-13, ACW-14 and ACW-15 for the following: BTEX, calcium, hardness, alkalinity, TDS, specific conductance, chloride, pH, temperature and sodium.
 - 3rd Quarter - sample monitor wells ACW-13, ACW-14 and ACW-15 for the following: BTEX, TDS, specific conductance, chloride and sodium.
 - 4th Quarter - sample all program and non program wells for the following: BTEX, calcium, hardness, alkalinity, TDS, specific conductance, chloride, pH, temperature, sodium, magnesium, sulfate, bromide, fluoride, nitrate-N, nitrate as NO₃, arsenic, boron, iron, manganese, potassium and silica.

TABLES

**TABLE 1: SUMMARY OF DEPTH TO GROUNDWATER MEASUREMENTS,
JAL NO. 4 PLANT, EL PASO CORPORATION, LEA COUNTY, NEW MEXICO**

MONITOR WELL	SCREENED INTERVAL (FEET-BGL)	TOP OF CASING ELEVATION (FEET-AMSL)	DEPTH TO GROUNDWATER MEASUREMENT DATE	DEPTH TO GROUNDWATER (FEET-TOC)	GROUNDWATER ELEVATION (FEET-AMSL)
ACW-01	110 to 130	3,300.87	02/19/97	106.65	3,194.22
			05/07/97	105.59	3,195.28
			08/19/97	105.61	3,195.26
			10/21/97	105.71	3,195.16
			02/24/98	105.62	3,195.25
			05/12/98	105.59	3,195.28
			08/11/98	105.61	3,195.26
			10/20/98	105.67	3,195.20
			02/23/99	105.72	3,195.15
			05/11/99	105.66	3,195.21
			08/11/99	105.68	3,195.19
			10/18/99	105.73	3,195.14
			02/22/00	105.81	3,195.06
			05/09/00	105.90	3,194.97
			08/07/00	105.99	3,194.88
			10/26/00	106.10	3,194.77
			02/20/01	106.19	3,194.68
			05/01/01	105.90	3,194.97
ACW-2a	98 to 118	3,300.88	05/12/99	106.00	3,194.88
			10/18/99	106.09	3,194.79
			05/08/00	107.27	3,193.61
			10/26/00	107.51	3,193.37
			05/02/01	106.31	3,194.57
			10/22/01	106.85	3,194.03
ACW-03	112 to 132	3,300.34	05/08/00	105.98	3,194.36
			10/26/00	106.21	3,194.13
			05/01/01	105.94	3,194.40
			10/23/01	106.15	3,194.19
ACW-04	154 to 169	3,299.48	05/08/00	113.57	3,185.91
			10/26/00	113.25	3,186.23
			05/02/01	106.00	3,193.48
			10/22/01	107.99	3,191.49
ACW-05	105 to 115	3,294.75	02/19/97	103.08	3,191.67
			05/07/97	103.06	3,191.69
			08/19/97	103.07	3,191.68
			10/22/97	103.06	3,191.69
			02/24/98	103.10	3,191.65
			05/13/98	103.10	3,191.65
			08/11/98	103.15	3,191.60
			10/21/98	103.22	3,191.53
			02/23/99	103.26	3,191.49
			05/13/99	103.17	3,191.58
			08/11/99	103.17	3,191.58
			10/21/99	103.25	3,191.50
			02/22/00	103.30	3,191.45
			05/10/00	103.32	3,191.43
			08/07/00	103.40	3,191.35
			10/26/00	103.50	3,191.25
			02/20/01	103.62	3,191.13
			05/06/01	103.57	3,191.18
			08/01/01	103.46	3,191.29
			10/24/01	103.70	3,191.05
ACW-06	110 to 120	3,300.53	02/19/97	107.53	3,193.00
			05/08/97	107.50	3,193.03
			08/18/97	107.51	3,193.02
			10/22/97	107.57	3,192.96
			02/24/98	107.54	3,192.99
			05/13/98	107.55	3,192.98
			08/11/98	107.57	3,192.96
			10/21/98	107.70	3,192.83
			02/23/99	107.68	3,192.85

**TABLE 1: SUMMARY OF DEPTH TO GROUNDWATER MEASUREMENTS,
JAL NO. 4 PLANT, EL PASO CORPORATION, LEA COUNTY, NEW MEXICO**

MONITOR WELL	SCREENED INTERVAL (FEET-BGL)	TOP OF CASING ELEVATION (FEET-AMSL)	DEPTH TO GROUNDWATER MEASUREMENT DATE	DEPTH TO GROUNDWATER (FEET-TOC)	GROUNDWATER ELEVATION (FEET-AMSL)
ACW-06 cont	110-120	3,300.53	05/13/99	107.62	3,192.91
			08/11/99	107.60	3,192.93
			10/21/99	107.68	3,192.85
			02/22/00	107.72	3,192.81
			05/10/00	107.75	3,192.78
			08/07/00	107.84	3,192.69
			10/26/00	107.90	3,192.63
			02/20/01	108.00	3,192.53
			05/06/01	107.95	3,192.58
			08/01/01	107.87	3,192.66
ACW-07	105 to 115	3,295.36	10/24/01	108.09	3,192.44
			05/12/99	102.62	3,192.74
			10/21/99	102.75	3,192.61
			05/10/00	102.92	3,192.44
			10/26/00	103.20	3,192.16
			05/06/01	103.08	3,192.28
ACW-08	140 to 173	3,297.27	10/24/01	103.35	3,192.01
			05/11/99	104.17	3,193.10
			10/18/99	104.29	3,192.98
			05/09/00	104.40	3,192.87
			10/26/00	104.64	3,192.63
			05/01/01	104.48	3,192.79
ACW-09	140 to 160	3,302.47	10/24/01	104.60	3,192.67
			02/19/97	110.24	3,192.23
			05/08/97	110.25	3,192.22
			08/19/97	110.26	3,192.21
			10/23/97	110.28	3,192.19
			02/24/98	110.29	3,192.18
			05/13/98	110.30	3,192.17
			08/11/98	110.32	3,192.15
			10/21/98	110.40	3,192.07
			02/23/99	110.54	3,191.93
			05/13/99	110.45	3,192.02
			08/11/99	110.45	3,192.02
			10/22/99	110.50	3,191.97
			02/22/00	111.18	3,191.29
			05/12/00	111.89	3,190.58
			08/07/00	111.22	3,191.25
			10/26/00	112.20	3,190.27
ACW-10	140 to 160	3,297.57	02/20/01	112.41	3,190.06
			05/04/01	110.85	3,191.62
			08/01/01	110.70	3,191.77
			10/25/01	112.17	3,190.30
			02/19/97	106.31	3,191.26
			05/08/97	106.32	3,191.25
			08/19/97	106.33	3,191.24
			10/23/97	106.35	3,191.22
			02/24/98	106.38	3,191.19
			05/14/98	106.38	3,191.19
			08/11/98	106.41	3,191.16
			10/22/98	106.54	3,191.03
			02/23/99	106.52	3,191.05
			05/14/99	106.45	3,191.12
			08/11/99	106.47	3,191.10
			10/22/99	106.52	3,191.05
			02/22/00	106.39	3,191.18
			05/12/00	106.63	3,190.94
			08/07/00	106.77	3,190.80
			10/26/00	106.89	3,190.68
			02/20/01	106.99	3,190.58
			05/06/01	106.82	3,190.75
			08/01/01	106.76	3,190.81
			10/25/01	107.01	3,190.56

**TABLE 1: SUMMARY OF DEPTH TO GROUNDWATER MEASUREMENTS,
JAL NO. 4 PLANT, EL PASO CORPORATION, LEA COUNTY, NEW MEXICO**

MONITOR WELL	SCREENED INTERVAL (FEET-BGL)	TOP OF CASING ELEVATION (FEET-AMSL)	DEPTH TO GROUNDWATER MEASUREMENT DATE	DEPTH TO GROUNDWATER (FEET-TOC)	GROUNDWATER ELEVATION (FEET-AMSL)
ACW-11	140 to 160	3,299.33	02/19/97	106.01	3,193.32
			05/06/97	105.95	3,193.38
			08/19/97	106.00	3,193.33
			10/21/97	106.02	3,193.31
			02/24/98	106.02	3,193.31
			05/12/98	106.00	3,193.33
			08/11/98	106.07	3,193.26
			10/20/98	106.17	3,193.16
			02/23/99	106.20	3,193.13
			05/12/99	106.07	3,193.26
			08/11/99	106.15	3,193.18
			10/20/99	106.16	3,193.17
			02/22/00	106.27	3,193.06
			05/09/00	106.31	3,193.02
			08/07/00	106.54	3,192.79
			10/26/00	106.65	3,192.68
			02/20/01	106.70	3,192.63
			05/01/01	106.45	3,192.88
			08/01/01	106.40	3,192.93
			10/23/01	106.57	3,192.76
ACW-12	150 to 170	3,299.56	02/19/97	109.32	3,190.24
			05/08/97	109.32	3,190.24
			08/20/97	99.29	3,200.27
			10/23/97	109.39	3,190.17
			02/24/98	109.38	3,190.18
			05/14/98	109.35	3,190.21
			08/11/98	109.40	3,190.16
			10/22/98	109.51	3,190.05
			02/23/99	109.54	3,190.02
			05/14/99	109.44	3,190.12
			08/11/99	109.54	3,190.02
			10/22/99	109.52	3,190.04
			02/22/00	109.50	3,190.06
			05/11/00	109.57	3,189.99
			08/07/00	109.65	3,189.91
			10/26/00	109.78	3,189.78
			02/20/01	109.90	3,189.66
			05/03/01	109.75	3,189.81
			08/01/01	109.76	3,189.80
			10/25/01	109.99	3,189.57
ACW-13	153 to 173	3,289.46	02/20/97	99.28	3,190.18
			05/08/97	99.29	3,190.17
			08/20/97	99.29	3,190.17
			10/23/97	99.27	3,190.19
			02/24/98	99.31	3,190.15
			05/14/98	99.31	3,190.15
			08/11/98	99.36	3,190.10
			10/22/98	99.40	3,190.06
			02/23/99	99.45	3,190.01
			05/14/99	99.38	3,190.08
			08/11/99	99.44	3,190.02
			10/22/99	99.44	3,190.02
			02/23/00	99.48	3,189.98
			05/11/00	99.47	3,189.99
			08/07/00	99.53	3,189.93
			10/26/00	99.50	3,189.96
			02/20/01	99.65	3,189.81
			05/06/01	99.62	3,189.84
			08/01/01	99.61	3,189.85
			10/25/01	99.61	3,189.85
ACW-14	157 to 177	3,291.18	02/19/97	NM	NM
			05/06/97	NM	NM
			08/20/97	100.41	3,190.77

**TABLE 1: SUMMARY OF DEPTH TO GROUNDWATER MEASUREMENTS,
JAL NO. 4 PLANT, EL PASO CORPORATION, LEA COUNTY, NEW MEXICO**

MONITOR WELL	SCREENED INTERVAL (FEET-BGL)	TOP OF CASING ELEVATION (FEET-AMSL)	DEPTH TO GROUNDWATER MEASUREMENT DATE	DEPTH TO GROUNDWATER (FEET-TOC)	GROUNDWATER ELEVATION (FEET-AMSL)
ACW-14 cont	157-177	3,291.18	10/22/97	100.38	3,190.80
			02/24/98	100.47	3,190.71
			05/13/98	100.42	3,190.76
			08/11/98	100.47	3,190.71
			10/21/98	100.54	3,190.64
			02/23/99	100.57	3,190.61
			05/13/99	100.49	3,190.69
			08/09/99	100.49	3,190.69
			10/21/99	100.55	3,190.63
			02/22/00	100.56	3,190.62
			05/10/00	100.52	3,190.66
			08/07/00	100.61	3,190.57
			10/26/00	100.62	3,190.56
			02/20/01	100.75	3,190.43
			05/03/01	100.72	3,190.46
			08/01/01	100.75	3,190.43
ACW-15	150 to 170	3,290.54	10/24/01	100.75	3,190.43
			10/23/99	102.39	3,188.15
			02/23/00	102.41	3,188.13
			05/11/00	102.42	3,188.12
			08/07/00	102.45	3,188.09
			10/26/00	102.42	3,188.12
			02/20/01	102.55	3,187.99
			05/06/01	102.51	3,188.03
			08/01/01	102.58	3,187.96
			10/25/01	102.56	3,187.98

NOTES:

1. TOC : Top of Casing
2. AMSL : Above Mean Sea Level
3. NM : No Measurement Taken
4. BGL: Below Ground Level

Table 2: SUMMARY OF LABORATORY ANALYSES OF GROUNDWATER SAMPLES,
JAL #4 PLANT, EL PASO CORPORATION, LEA COUNTY, NEW MEXICO

LABORATORY SAMPLE NUMBER	SAMPLE DESCRIPTION	Sample Date	Benzene, µg/l	Toluene, µg/l	Ethylbenzene, µg/l	Total Xylene, µg/l	MTBE, µg/l	Gasoline Range Organics, mg/l	Acenaphthene, µg/l	Acenaphthylene, µg/l	Anthracene, µg/l	Benz(a)anthracene, µg/l	Benz(b)fluoranthene, µg/l	Benz(k)fluoranthene, µg/l	Benz(g,h,i)perylene, µg/l	Benzo(a)pyrene, µg/l	Chrysene, µg/l	Dibenzo(a,h)anthracene, µg/l	Fluoranthene, µg/l	Fluorene, µg/l	Indeno(1,2,3-cd)pyrene, µg/l	Naphthalene, µg/l	Phenanthrene, µg/l	Pyrene, µg/l
ACW #01	ACW #01	05-Mar-93	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #01	ACW #01	15-Sep-93	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #01	ACW #01	10-Nov-93	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #01	ACW #01	20-Apr-94	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #01	ACW #01	27-Oct-94	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #01	ACW #01	16-May-95	<5	<10	<5	0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #01	ACW #01	27-Jun-95	4.6	4.6	<2.5	140	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #01	ACW #01	29-Aug-95	6	<10	<5	<15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #01	ACW #01	06-Feb-96	6.1	3	1.9	2.8	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #01	ACW #01	06-Feb-96	5.6	2.7	3	<7.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #01	ACW #01	08-May-96	6.3	2.03	<1.0	<3.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #01	ACW #01	13-Aug-96	3.5	1.2	<1.0	<2.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #01	ACW #01	05-Nov-96	5.6	2.5	<1.0	1.3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #01	ACW #01	06-May-97	14	15	<5.0	5.7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #01	ACW #01	21-Nov-97	6.1	4.8	<0.5	2.4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #01D	ACW #01D	21-Nov-97	6.7	5.7	<0.5	2.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #01	ACW #01	12-May-98	6.8	11	4.4	3.4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0458	ACW #01	20-Oct-98	7	4	<2 Jm	<2 Jm	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0005	ACW #01	11-May-99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0187	ACW #01	19-Oct-99	7.5	3.6	<2	<4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0081	ACW #01	09-May-00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0219	ACW #01	26-Oct-00	<2	<2	<2	8.3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0133	ACW #01	01-May-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0469	ACW #01	22-Oct-01	<2	<2	<2	11.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #02A	ACW #02A	06-May-97	140	100	<50	<100	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #02A	ACW #02A	20-Oct-97	89	100	13	26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0167	ACW #02A	11-May-98	120	210	20	33	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0455	ACW #02A	19-Oct-98	180	340	38	72	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0013	ACW #02A	12-May-99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0181	ACW #02A	18-Oct-99	17 P	42 P	8.1 P	14 P	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0078	ACW #02A	08-May-00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0215	ACW #02A	26-Oct-00	35	78	16	32	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0136	ACW #02A	02-May-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0468	ACW #02A	22-Oct-01	39	34	30	57	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #03	ACW #03	06-May-97	350	22	110	43	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #03	ACW #03	20-Oct-97	160	8.2	69	32	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0157	ACW #03	11-May-98	130	21	41	19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0456	ACW #03	19-Oct-98	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0011	ACW #03	12-May-99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0185	ACW #03	19-Oct-99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Table 2: SUMMARY OF LABORATORY ANALYSES OF GROUNDWATER SAMPLES,
JAL #4 PLANT, EL PASO CORPORATION, LEA COUNTY, NEW MEXICO

LABORATORY SAMPLE NUMBER	SAMPLE DESCRIPTION	Sample Date	Specific Conductance, umh/cm	pH, s.u.	Total Dissolved Solids, mg/L	Chloride, mg/l	Sulfate, mg/l	pH Temperature °C	Bromide, mg/l	Fluoride, mg/l	Nitrate-N, mg/l	Nitrate as NO ₃ , mg/l	Aluminum, mg/l	Arsenic, mg/l	Barium, mg/l	Boron, mg/l	Cadmium, mg/l	Calcium, mg/l	Chromium, mg/l	Cobalt, mg/l	Copper, mg/l
ACW #01	ACW #01	05-Mar-93	14,350	---	8,505	4,045	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #01	ACW #01	15-Sep-93	10,360	---	6,016	2,915	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #01	ACW #01	10-Nov-93	11,780	---	7,340	3,683	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #01	ACW #01	20-Apr-94	16,520	---	8,430	5,400	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #01	ACW #01	27-Oct-94	14,630	---	8,440	3,700	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #01	ACW #01	16-May-95	14,000	8.3	8,200	4,100	240	---	1.8	25	<2.0	---	---	---	---	0.9	---	66	---	---	<0.025
ACW #01	ACW #01	27-Jun-95	1,400	8.4	8,400	6,700	260	---	1.9	22	<2.0	---	---	---	---	1.0	---	74	---	---	<0.025
ACW #01	ACW #01	29-Aug-95	21,000	8.2	12,000	3,300	210	---	2.2	18	<2.0	---	---	---	---	0.8	---	67	---	---	<0.025
ACW #01	ACW #01	06-Feb-96	16,000	8.3	9,700	5,200	280	---	2.1	0.88	0.02	---	---	---	---	1.0	---	78	---	---	<0.006
ACW #01	ACW #01	06-Feb-96	16,170	8.2	9,440	5,770	293	---	2.06	2.1	<1.25	---	---	---	---	1.1	---	84	---	---	<0.1
ACW #01	ACW #01	08-May-96	14,620	8.2	8,190	4,130	268	---	<1.25	2.2	<1.25	---	---	---	---	1.0	---	93	---	---	0.01
ACW #01	ACW #01	13-Aug-96	12,000	8.1	7,400	3,500	270	---	1.9	4.9	<0.05	---	---	---	---	1.1	---	110	---	---	0.019
ACW #01	ACW #01	05-Nov-96	11,000	8.1	7,200	3,700	250	---	2	4.4	<0.05	---	---	---	---	1.0	---	81	---	---	<0.007
ACW #01	ACW #01	08-May-97	14,800	---	8,800	5,200	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #01	ACW #01	21-Nov-97	20,800	8.4	12,000	7,800	320	---	<2	2.1	<0.5	---	---	---	---	1.0	---	83	---	---	<0.01
ACW #01D	ACW #01D	21-Nov-97	20,700	8.2	12,000	7,500	320	---	2	2.2	<0.5	---	---	---	---	0.9	---	76	---	---	<0.01
S98-0170	ACW #01	12-May-98	16,000	---	9,600	5,200	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0458	ACW #01	20-Oct-98	20,300	8.18	12,900	6,100	260	17.7	<5	2.3	<0.05	---	---	---	---	1.1	---	100	---	---	<0.0025
M99-0005	ACW #01	11-May-99	16,900	---	8,500	5,400	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0187	ACW #01	19-Oct-99	14,800	8.02	7,800	5,500	210	20.6	<4	2.2	<0.05	---	0.047	0.62	0.33	1.2	<0.002	160	<0.005	<0.005	<0.0025
M00-0081	ACW #01	09-May-00	19,300	---	11,300	7,000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0219	ACW #01	26-Oct-00	15,500	8.13	9,900	5,500	300	15.2	<2	2.3	<1	---	---	0.30	0.29	1.0	<0.01	120	<0.01	---	<0.005
M01-0133	ACW #01	01-May-01	14,200	---	7,640	5,300	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0469	ACW #01	22-Oct-01	12,400	7.92	6,580	4,400	380	20.3	<5	2.5	<2.5	---	---	<0.05	0.21	0.24	<0.005	82	<0.01	<0.01	<0.005
ACW #02A	ACW #02A	06-May-97	26,800	---	17,000	11,000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #02A	ACW #02A	20-Oct-97	24,400	9.2	16,000	8,600	<10	---	5	7.6	<0.5	---	---	---	---	1.1	---	3	---	---	<0.01
S98-0167	ACW #02A	11-May-98	26,000	---	16,000	8,200	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0455	ACW #02A	19-Oct-98	25,200	9.40	20,200	7,800	17	18.3	<5	12	<0.05	---	---	---	---	1.4	---	3.0	---	---	<0.0025
M99-0013	ACW #02A	12-May-99	24,400	---	12,000	7,400	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0181	ACW #02A	18-Oct-99	24,000	9.42	13,000	7,600	25	19.8	<4	16	<0.05	---	0.35	3.6	0.48	2.3	0.016	4.2	<0.005	0.0041	0.0086
M00-0078	ACW #02A	08-May-00	21,500	---	13,600	7,200	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0215	ACW #02A	26-Oct-00	19,100	9.75	12,800	6,500	28	14.1	<2	11	<1	---	---	1.4	0.31	1.2	0.018	6.4	0.018	---	0.034
M01-0136	ACW #02A	02-May-01	18,500	---	10,900	5,400	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0468	ACW #02A	22-Oct-01	19,900	9.88	12,100	4,600	6.5	19.8	<10	11	<5	---	0.16	1.4	0.26	1.4	0.016	3.3	<0.01	<0.01	<0.005
ACW #03	ACW #03	06-May-97	18,500	---	11,000	6,900	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #03	ACW #03	20-Oct-97	23,000	---	13,000	7,800	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0157	ACW #03	11-May-98	24,000	---	15,000	8,500	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0456	ACW #03	19-Oct-98	20,800	---	12,400	7,700	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0011	ACW #03	12-May-99	19,600	---	10,100	6,600	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0185	ACW #03	19-Oct-99	18,900	---	9,120	6,900	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Table 2: SUMMARY OF LABORATORY ANALYSES OF GROUNDWATER SAMPLES,
JAL #4 PLANT, EL PASO CORPORATION, LEA COUNTY, NEW MEXICO

LABORATORY SAMPLE NUMBER	SAMPLE DESCRIPTION	Sample Date	Iron, mg/l	Lead, mg/l	Magnesium, mg/l	Manganese, mg/l	Mercury, mg/l	Molybdenum, mg/l	Nickel, mg/l	Potassium, mg/l	Selenium	Silica, mg/l	Silver, mg/l	Sodium, mg/l	Uranium, mg/l	Zinc, mg/l	Alkalinity (as CaCO ₃), mg/l	Alkalinity - Bicarbonate, mg/l	Alkalinity - Carbonate, mg/l	Alkalinity - Hydroxide, mg/l	Hardness (as CaCO ₃), mg/l
ACW #01	ACW #01	05-Mar-93	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #01	ACW #01	15-Sep-93	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #01	ACW #01	10-Nov-93	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #01	ACW #01	20-Apr-94	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #01	ACW #01	27-Oct-94	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #01	ACW #01	16-May-95	0.38	---	72	0.062	---	---	---	12	---	33	---	2,600	---	<0.020	700	---	---	---	470
ACW #01	ACW #01	27-Jun-95	0.59	---	92	0.077	---	---	---	15	---	35	---	3,200	---	<0.02	710	---	---	---	510
ACW #01	ACW #01	29-Aug-95	0.18	---	78	0.069	---	---	---	11	---	28	---	2,400	---	<0.02	820	---	---	---	590
ACW #01	ACW #01	06-Feb-96	0.56	---	100	0.069	---	---	---	16	---	36	---	4,300	---	<0.010	830	---	---	---	620
ACW #01	ACW #01	06-Feb-96	0.7	---	102	0.1	---	---	---	17	---	41	---	3,900	---	<0.1	759	---	---	---	630
ACW #01	ACW #01	08-May-96	0.6	---	118	0.09	---	---	---	18	---	54	---	3,070	---	<0.05	310	---	---	---	718
ACW #01	ACW #01	13-Aug-96	0.88	---	100	0.078	---	---	---	8.6	---	41	---	2,400	---	0.008	730	---	---	---	690
ACW #01	ACW #01	05-Nov-96	0.59	---	98	0.062	---	---	---	11	---	16	---	3,000	---	0.011	810	---	---	---	610
ACW #01	ACW #01	06-May-97	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #01	ACW #01	21-Nov-97	0.6	---	110	0.06	---	---	---	20	---	14	---	3,900	---	0.04	680	---	---	---	---
ACW #01D	ACW #01D	21-Nov-97	0.5	---	100	0.07	---	---	---	20	---	13	---	4,000	---	0.03	670	---	---	---	---
S98-0170	ACW #01	12-May-98	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0458	ACW #01	20-Oct-98	0.74	---	110	0.062	---	---	---	16	---	15	---	3,800	---	<0.05	840	---	<25	<25	700
M99-0005	ACW #01	11-May-99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0187	ACW #01	19-Oct-99	1.6	<0.005	110	0.13	<0.0002	0.013	<0.02	13	---	24	<0.005	3,100	<0.005	<0.05	780	---	<25	<25	870
M00-0081	ACW #01	09-May-00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0219	ACW #01	26-Oct-00	3.6	<0.05	82	0.21	<0.0002	---	---	9.5	<0.1	25	<0.02	2,600	---	<0.1	720	---	<25	<25	640
M01-0133	ACW #01	01-May-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0469	ACW #01	22-Oct-01	2.3	<0.05	60	0.18	<0.0002	<0.01	<0.04	11	<0.1	26	<0.02	3,000	<0.005	<0.1	600	---	<25	<25	450
ACW #02A	ACW #02A	06-May-97	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #02A	ACW #02A	20-Oct-97	0.2	---	<1	<0.01	---	---	---	12	---	10	---	6,000	---	<0.02	2,200	---	---	---	---
S98-0167	ACW #02A	11-May-98	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0455	ACW #02A	19-Oct-98	0.37	---	0.96	<0.0025	---	---	---	12	---	12	---	6,400	---	<0.05	2,400	---	860	<25	11
M99-0013	ACW #02A	12-May-99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0181	ACW #02A	18-Oct-99	0.30	<0.005	1.1	0.0041	0.00051	0.085	0.041	14	---	26	<0.005	6,100	0.037	<0.05	2,700	---	990	<50	15
M00-0078	ACW #02A	08-May-00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0215	ACW #02A	26-Oct-00	1.0	<0.05	1.0	0.011	0.0002	---	---	8.5	<0.1	28	<0.02	3,600	---	<0.1	870	---	<25	<25	18
M01-0136	ACW #02A	02-May-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0468	ACW #02A	22-Oct-01	0.4	<0.05	0.23	0.0062	0.00066	0.053	<0.04	8.9	<0.1	36	<0.02	5,200	0.027	<0.1	3,700	---	2,400	<125	9.2
ACW #03	ACW #03	06-May-97	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #03	ACW #03	20-Oct-97	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0157	ACW #03	11-May-98	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0456	ACW #03	19-Oct-98	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0011	ACW #03	12-May-99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0185	ACW #03	19-Oct-99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

**Table 2: SUMMARY OF LABORATORY ANALYSES OF GROUNDWATER SAMPLES,
JAL #4 PLANT, EL PASO CORPORATION, LEA COUNTY, NEW MEXICO**

LABORATORY SAMPLE NUMBER	SAMPLE DESCRIPTION	Sample Date	Benzene, ug/l	Toluene, ug/l	Ethylbenzene, ug/l	Total Xylene, ug/l	MTBE, ug/l	Gasoline Range Organics, mg/l	Acenaphthene, ug/l	Acenaphthylene, ug/l	Anthracene, ug/l	Benzo(a)anthracene, ug/l	Benzo(b)fluoranthene, ug/l	Benzo(k)fluoranthene, ug/l	Benzo(g,h,i)perylene, ug/l	Benzo(a)pyrene, ug/l	Chrysene, ug/l	Dibenzo(a,h)anthracene, ug/l	Fluoranthene, ug/l	Fluorene, ug/l	Indeno(1,2,3-cd)pyrene, ug/l	Naphthalene, ug/l	Phenanthrene, ug/l	Pyrene, ug/l
M00-0077	ACW #03	08-May-00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0217	ACW #03	26-Oct-00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0132	ACW #03	01-May-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0474	ACW #3	23-Oct-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #04	ACW #04	06-May-97	29	12	<5.0	<10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #04	ACW #04	20-Oct-97	170	150	<5.0	110	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0168	ACW #04	12-May-98	190	170	60	100	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0454	ACW #04	19-Oct-98	190	140	49	90	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0012	ACW #04	12-May-99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0184	ACW #04	19-Oct-99	240	160	44	81	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0079	ACW #04	08-May-00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0216	ACW #04	26-Oct-00	63	17	41	190	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0137	ACW #04	02-May-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0467	ACW #04	22-Oct-01	12	3	32	100	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #05	ACW #05	10-Mar-93	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #05	ACW #05	17-Jun-93	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #05	ACW #05	16-Sep-93	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #05	ACW #05	09-Nov-93	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #05	ACW #05	21-Apr-94	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #05	ACW #05	28-Oct-94	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #05	ACW #05	31-Jan-95	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #05	ACW #05	16-May-95	<5	<10	<5	0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #05	ACW #05	27-Jun-95	<2.5	<2.5	<2.5	<5.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #05	ACW #05	30-Aug-95	<5	<10	<5	<15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #05	ACW #05	06-Feb-96	<1.0	<1.0	<2.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #05	ACW #05	06-Feb-96	<2.5	<2.5	<2.5	<7.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #05	ACW #05	08-May-96	<1.0	<1.0	<3.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #05	ACW #05	13-Aug-96	<1.0	1.2	<1.0	<2.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #05	ACW #05	06-Nov-96	1.1	1.4	1.2	<2.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #05	ACW #05	07-May-97	0.84	1.2	0.93	<1.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #05	ACW #05	22-Oct-97	0.9	1.6	0.8	1.9	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0183	ACW #05	13-May-98	0.79	1.5	0.77*	12*	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0470	ACW #05	21-Oct-98	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0020	ACW #05	13-May-99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0196	ACW #05	21-Oct-99	<2	2.7	<2	<4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0092	ACW #05	10-May-00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0234	ACW #05	02-Nov-00	<5	<5	<5	<10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0157	ACW #05	06-May-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0481	ACW #05	24-Oct-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #06	ACW #06	18-Jun-93	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Table 2: SUMMARY OF LABORATORY ANALYSES OF GROUNDWATER SAMPLES,
JAL #4 PLANT, EL PASO CORPORATION, LEA COUNTY, NEW MEXICO

LABORATORY SAMPLE NUMBER	SAMPLE DESCRIPTION	Sample Date	Specific Conductance, umh/cm	pH, s.u.	Total Dissolved Solids, mg/L	Chloride, mg/l	Sulfate, mg/l	pH Temperature °C	Bromide, mg/l	Fluoride, mg/l	Nitrate-N, mg/l	Nitrate as NO ₃ , mg/l	Aluminum, mg/l	Arsenic, mg/l	Barium, mg/l	Boron, mg/l	Cadmium, mg/l	Calcium, mg/l	Chromium, mg/l	Cobalt, mg/l	Copper, mg/l
M00-0077	ACW #03	08-May-00	19,400	---	11,900	7,600	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0217	ACW #03	26-Oct-00	17,500	---	11,900	7,400	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0132	ACW #03	01-May-01	19,200	---	9,900	9,500	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0474	ACW #3	23-Oct-01	18,800	---	10,600	7,100	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #04	ACW #04	06-May-97	48,500	---	25,000	21,000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #04	ACW #04	20-Oct-97	172,000	7.3	94,000	58,000	2,100	---	33	<0.5	<0.5	---	---	---	---	0.7	---	580	---	---	<0.01
S98-0168	ACW #04	12-May-98	160,000	---	99,000	74,000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0454	ACW #04	19-Oct-98	121,000	6.74	83,100	56,000	1,800	17.6	<20	0.51	<0.5	---	---	---	---	1.1	---	610	---	---	<0.0025
M99-0012	ACW #04	12-May-99	131,000	---	84,800	45,000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0184	ACW #04	19-Oct-99	95,000	6.95	46,300	44,000	1,300	20.7	<20	0.64	<0.05	---	<0.025	0.092	0.15	1.4	<0.002	650	<0.005	0.018	0.0080
M00-0079	ACW #04	08-May-00	106,000	---	72,300	47,000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0216	ACW #04	26-Oct-00	25,600	7.73	16,300	10,000	88	15.1	<2	12	<1	---	---	0.47	0.87	2.0	<0.01	57	<0.01	---	<0.005
M01-0137	ACW #04	02-May-01	29,600	---	17,400	12,000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0467	ACW #04	22-Oct-01	35,300	7.15	21,400	13,000	200	20.2	<20	8.2	<10	---	<0.05	0.31	0.81	1.5	<0.005	290	<0.01	<0.01	<0.005
ACW #05	ACW #05	10-Mar-93	10,400	---	6,110	2,544	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #05	ACW #05	17-Jun-93	4,480	---	323	1,228	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #05	ACW #05	16-Sep-93	4,140	---	3,064	650	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #05	ACW #05	09-Nov-93	4,390	---	3,202	720	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #05	ACW #05	21-Apr-94	4,131	---	3,300	800	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #05	ACW #05	28-Oct-94	4,500	---	3,112	550	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #05	ACW #05	31-Jan-95	4,050	---	2,848	499	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #05	ACW #05	16-May-95	3,900	7.0	2,800	530	1,100	---	1.3	<1.0	3.5	---	---	---	---	0.9	---	270	---	---	<0.025
ACW #05	ACW #05	27-Jun-95	3,800	7.3	2,800	460	800	---	1.1	<1.0	3.4	---	---	---	---	1.0	---	270	---	---	<0.025
ACW #05	ACW #05	30-Aug-95	3,900	7.0	2,700	510	890	---	1	<1.0	<20	---	---	---	---	---	---	240	---	---	<0.025
ACW #05	ACW #05	06-Feb-96	3,800	7.5	2,200	510	920	---	0.92	0.12	4.7	---	---	---	---	1.4	---	240	---	---	<0.006
ACW #05	ACW #05	06-Feb-96	3,090	7.3	2,745	506	835	---	<1.25	0.29	4.9	---	---	---	---	1.4	---	240	---	---	<0.1
ACW #05	ACW #05	08-May-96	3,650	7.2	2,460	519	653	---	4.5	0.42	5	---	---	---	---	0.8	---	167	---	---	0.01
ACW #05	ACW #05	13-Aug-96	3,400	7.3	2,500	500	710	---	1	0.7	5.4	---	---	---	---	2.0	---	200	---	---	<0.006
ACW #05	ACW #05	06-Nov-96	3,300	7.5	2,300	500	710	---	1.2	0.57	<0.05	---	---	---	---	1.9	---	180	---	---	<0.007
ACW #05	ACW #05	07-May-97	3,020	---	2,000	430	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #05	ACW #05	22-Oct-97	3,160	7.7	2,000	470	320	---	1.7	0.6	6	---	---	---	---	1.3	---	170	---	---	<0.01
S98-0183	ACW #05	13-May-98	3,100	---	2,800	570	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0470	ACW #05	21-Oct-98	2,930	---	1,910	440	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0020	ACW #05	13-May-99	3,190	---	1,960	450	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0196	ACW #05	21-Oct-99	3,250	7.23	1,890	1,000	440	18.5	<2	0.77	6.5	---	0.094	0.0061	0.034	1.1	<0.002	190	0.019	<0.005	<0.0025
M00-0092	ACW #05	10-May-00	3,180	---	1,960	750	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0234	ACW #05	02-Nov-00	2,650	7.3	1,920	860	750	18.5	<40	0.85	5.3	---	---	<0.1	0.051	1.1	<0.01	200	0.028	---	0.0095
M01-0157	ACW #05	06-May-01	3,030	---	1,920	540	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0481	ACW #05	24-Oct-01	3,120	---	1,860	590	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #06	ACW #06	18-Jun-93	8,220	---	5,027	2,108	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Table 2: SUMMARY OF LABORATORY ANALYSES OF GROUNDWATER SAMPLES,
JAL #4 PLANT, EL PASO CORPORATION, LEA COUNTY, NEW MEXICO

LABORATORY SAMPLE NUMBER	SAMPLE DESCRIPTION	Sample Date	Iron, mg/l	Lead, mg/l	Magnesium, mg/l	Manganese, mg/l	Mercury, mg/l	Molybdenum, mg/l	Nickel, mg/l	Potassium, mg/l	Selenium	Silica, mg/l	Silver, mg/l	Sodium, mg/l	Uranium, mg/l	Zinc, mg/l	Alkalinity (as CaCO ₃), mg/l	Alkalinity - Bicarbonate, mg/l	Alkalinity - Carbonate, mg/l	Alkalinity - Hydroxide, mg/l	Hardness (as CaCO ₃), mg/l
M00-0077	ACW #03	08-May-00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0217	ACW #03	26-Oct-00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0132	ACW #03	01-May-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0474	ACW #3	23-Oct-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #04	ACW #04	06-May-97	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #04	ACW #04	20-Oct-97	0.2	---	360	6.1	---	---	---	250	---	13	---	33,000	---	<0.02	500	---	---	---	---
S98-0168	ACW #04	12-May-98	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0454	ACW #04	19-Oct-98	0.14	---	370	7.0	---	---	---	170	---	10	---	37,000	---	<0.05	480	480	<25	<25	3100
M99-0012	ACW #04	12-May-99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0184	ACW #04	19-Oct-99	0.23	<0.005	370	12	<0.0002	0.0076	<0.02	170	---	14	<0.005	42,000	0.14	<0.05	500	500	<25	<25	3200
M00-0079	ACW #04	08-May-00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0216	ACW #04	26-Oct-00	1.7	<0.05	28	0.50	<0.0002	---	---	23	<0.1	25	<0.02	3,600	---	<0.1	1600	1600	<25	<25	260
M01-0137	ACW #04	02-May-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0467	ACW #04	22-Oct-01	1.5	<0.05	110	0.58	0.00086	0.032	<0.04	32	<0.1	30	<0.02	7,300	0.0066	<0.1	970	970	<25	<25	1200
ACW #05	ACW #05	10-Mar-93	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #05	ACW #05	17-Jun-93	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #05	ACW #05	16-Sep-93	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #05	ACW #05	09-Nov-93	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #05	ACW #05	21-Apr-94	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #05	ACW #05	28-Oct-94	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #05	ACW #05	31-Jan-95	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #05	ACW #05	16-May-95	0.46	---	39	0.026	---	---	---	6.6	---	57	---	540	---	<0.020	320	---	---	---	980
ACW #05	ACW #05	27-Jun-95	0.34	---	40	0.02	---	---	---	6.9	---	56	---	530	---	<0.020	320	---	---	---	240
ACW #05	ACW #05	30-Aug-95	<0.10	---	36	<0.015	---	---	---	8.7	---	44	---	550	---	<0.020	310	---	---	---	810
ACW #05	ACW #05	06-Feb-96	1.5	---	32	0.026	---	---	---	6.5	---	64	---	580	---	0.015	260	---	---	---	740
ACW #05	ACW #05	06-Feb-96	2	---	32	0.1	---	---	---	8.1	---	66	---	580	---	<0.1	284	---	---	---	730
ACW #05	ACW #05	08-May-96	0.2	---	24	<0.05	---	---	---	8	---	35	---	506	---	<0.05	190	---	---	---	515
ACW #05	ACW #05	13-Aug-96	0.024	---	28	<0.007	---	---	---	6.3	---	58	---	520	---	0.033	320	---	---	---	620
ACW #05	ACW #05	06-Nov-96	0.3	---	25	0.008	---	---	---	6	---	27	---	520	---	0.022	350	---	---	---	560
ACW #05	ACW #05	07-May-97	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #05	ACW #05	22-Oct-97	0.5	---	24	<0.01	---	---	---	5	---	26	---	480	---	<0.02	320	---	---	---	---
S98-0183	ACW #05	13-May-98	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0470	ACW #05	21-Oct-98	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0020	ACW #05	13-May-99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0196	ACW #05	21-Oct-99	0.15	<0.005	24	0.011	<0.0002	<0.005	<0.02	6.3	---	26.0	<0.005	540	0.0055	0.81	270	270	<25	<25	560
M00-0092	ACW #05	10-May-00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0234	ACW #05	02-Nov-00	1.6	<0.05	23	0.032	<0.0002	---	---	6.1	<0.1	34	<0.02	450	---	<0.1	280	280	<25	<25	590
M01-0157	ACW #05	06-May-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0481	ACW #05	24-Oct-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #06	ACW #06	18-Jun-93	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Table 2: SUMMARY OF LABORATORY ANALYSES OF GROUNDWATER SAMPLES,
JAL #4 PLANT, EL PASO CORPORATION, LEA COUNTY, NEW MEXICO

LABORATORY SAMPLE NUMBER	SAMPLE DESCRIPTION	Sample Date	Benzene, ug/l	Toluene, ug/l	Ethylbenzene, ug/l	Total Xylene, ug/l	MTBE, ug/l	Gasoline Range Organics, mg/l	Acenaphthene, ug/l	Acenaphthylene, ug/l	Anthracene, ug/l	Benzo(a)anthracene, ug/l	Benzo(b)fluoranthene, ug/l	Benzo(k)fluoranthene, ug/l	Benzo(g,h,i)perylene, ug/l	Benzo(a)pyrene, ug/l	Chrysene, ug/l	Dibenzo(a,h)anthracene, ug/l	Fluoranthene, ug/l	Fluorene, ug/l	Indeno(1,2,3-cd)pyrene, ug/l	Naphthalene, ug/l	Phenanthrene, ug/l	Pyrene, ug/l
ACW #06		16-Sep-93	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #06		08-Nov-93	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #06		21-Apr-94	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #06		28-Oct-94	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #06		31-Jan-95	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #06		16-May-95	<5	<10	<5	0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #06		27-Jun-95	14	<2.5	<2.5	<5.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #06		29-Aug-95	7	<10	<5	<15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #06		06-Feb-96	6.6	3.2	<1.0	<2.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #06		06-Feb-96	<2.5	<2.5	<2.5	<7.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #06		08-May-96	4.08	1.58	<1.0	<3.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #06		14-Aug-96	4.2	2.6	<2.0	<2.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #06		06-Nov-96	4.5	1.5	<1.0	<2.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #06		06-Nov-96	4.6	1.5	<1.0	<2.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #06		08-May-97	8.2	2.8	2.6	2.7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #06		22-Oct-97	10	3.8	1.4	1.2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #06D		22-Oct-97	9.5	3.1	1.2	1.2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #06		13-May-98	15	12	<0.50	3.8	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0181		21-Oct-98	11	6	3	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0469		13-May-99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0019		21-Oct-99	<20	<20	<20	<40	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0195		10-May-00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0089		02-Nov-00	<5	<5	<5	<10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0232		06-May-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0156		24-Oct-01	5.6	<2	<2	18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0480		07-May-97	7.3	2.5	3.1	1.7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #07		22-Oct-97	6.4	3.4	3	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #07		13-May-98	7.0	3.2	2.1*	1.7*	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0182		21-Oct-98	8	3	2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0467		12-May-99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0017		21-Oct-99	7.2	5.3	2.4	<4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0194		10-May-00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0088		02-Nov-00	<5	<5	<5	<10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0231		06-May-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0152		24-Oct-01	7.4	<2	<2	2.4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0153		06-May-97	99	10	4.1	3.9	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0477		21-Nov-97	36	3.9	2	14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #08		12-May-98	37	4.5	2.9	1.6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #08		20-Oct-98	140	13	6	6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0173																								
S98-0459																								

Table 2: SUMMARY OF LABORATORY ANALYSES OF GROUNDWATER SAMPLES,
JAL #4 PLANT, EL PASO CORPORATION, LEA COUNTY, NEW MEXICO

LABORATORY SAMPLE NUMBER	SAMPLE DESCRIPTION	Sample Date	Specific Conductance, umho/cm	pH, s.u.	Total Dissolved Solids, mg/L	Chloride, mg/l	Sulfate, mg/l	pH Temperature °C	Bromide, mg/l	Fluoride, mg/l	Nitrate-N, mg/l	Nitrate as NO ₃ , mg/l	Aluminum, mg/l	Arsenic, mg/l	Barium, mg/l	Boron, mg/l	Cadmium, mg/l	Calcium, mg/l	Chromium, mg/l	Cobalt, mg/l	Copper, mg/l
ACW #06		16-Sep-93	11,130	---	6,656	2,737	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #06		08-Nov-93	8,540	---	5,646	2,154	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #06		21-Apr-94	11,080	---	6,930	3,800	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #06		28-Oct-94	11,988	---	6,910	2,100	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #06		31-Jan-95	11,530	---	6,755	2,873	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #06		16-May-95	10,000	8.1	6,400	2,800	110	---	1.4	31	<2.0	---	---	---	---	0.9	---	70	---	---	<0.025
ACW #06		27-Jun-95	10,000	9.0	8,600	3,500	110	---	1.8	44	<2.0	---	---	---	---	1.1	---	64	---	---	<0.025
ACW #06		29-Aug-95	12,000	8.4	7,100	3,000	110	---	1.8	26	<2.0	---	---	---	---	0.9	---	42	---	---	<0.025
ACW #06		06-Feb-96	11,000	8.0	6,600	2,600	72	---	1.3	3.8	<0.0071	---	---	---	---	1.1	---	91	---	---	<0.006
ACW #06		06-Feb-96	10,320	7.8	5,630	3,180	79	---	1.52	10	<1.25	---	---	---	---	1.3	---	76	---	---	<0.1
ACW #06		08-May-96	10,620	7.7	6,460	2,880	48	---	<1.25	6.4	<1.25	---	---	---	---	1.3	---	35	---	---	0.02
ACW #06		14-Aug-96	11,000	7.9	7,100	2,900	88	---	1.8	21	<0.05	---	---	---	---	1.2	---	85	---	---	<0.006
ACW #06		06-Nov-96	12,000	8.6	7,700	3,400	74	---	1.3	18	<0.05	---	---	---	---	1.2	---	98	---	---	<0.007
ACW #06		06-Nov-96	12,000	8.6	7,700	3,600	62	---	1.3	18	<0.05	---	---	---	---	1.1	---	88	---	---	<0.007
ACW #06		08-May-97	8,450	---	5,500	2,300	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #06		22-Oct-97	10,200	8.2	6,500	2,900	100	---	3	16.5	<0.05	---	---	---	---	0.9	---	68	---	---	<0.01
ACW #06D		22-Oct-97	10,700	8.3	6,200	2,900	98	---	3	17.2	<0.05	---	---	---	---	0.9	---	68	---	---	<0.01
S98-0181		13-May-98	12,000	---	10,000	3,300	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0469		21-Oct-98	11,600	8.00	6,530	3,000	74	20.1	<5	25	<0.05	---	---	---	---	1.2	---	64	---	---	<0.0025
M99-0019		13-May-99	11,200	---	6,620	2,900	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0195		21-Oct-99	11,500	8.54	6,170	2,800	230	19.1	<4	28	<0.05	---	0.083	1.7	0.35	1.3	0.0061	69	0.0045	0.0084	<0.0025
M00-0089		10-May-00	10,300	---	6,290	3,600	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0232		02-Nov-00	8,520	8.2	4,350	3,100	340	18.4	---	22.9	<0.05	---	---	0.82	0.28	1.5	<0.01	83	<0.01	---	0.016
M01-0156		06-May-01	9,020	---	5,240	2,600	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0480		24-Oct-01	8,350	8.2	4,730	2,400	220	19.5	<10	22	<2.5	---	0.180	0.58	0.21	1.3	<0.005	57	<0.01	<0.01	<0.005
ACW #07		07-May-97	13,200	---	8,100	3,600	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #07		22-Oct-97	13,800	7.3	7,500	4,400	50	---	4	4	<0.05	---	---	---	---	0.6	---	200	---	---	<0.01
S98-0182		13-May-98	14,000	---	11,000	4,300	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0467		21-Oct-98	14,000	7.05	8,290	4,400	130	20.3	<5	3.8	<0.05	---	---	---	---	0.77	---	220	---	---	<0.0025
M99-0017		12-May-99	14,300	---	7,420	4,900	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0194		21-Oct-99	14,700	7.05	8,010	4,800	160	18.7	<4	3.4	<0.05	---	0.11	0.091	1.2	0.79	<0.002	270	<0.005	<0.005	<0.0025
M00-0088		10-May-00	14,900	---	8,900	7,100	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0231		02-Nov-00	12,500	7.1	8,400	5,100	200	19.0	<20	3.0	<0.05	---	---	<0.1	0.94	0.75	<0.01	240	0.012	---	0.0052
M01-0152		06-May-01	16,400	---	8,980	6,800	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0153		06-May-01	16,300	---	9,640	6,500	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0477		24-Oct-01	17,400	7.11 H3	9,180	8,500	110	21.0	<20	2.9	<5	---	0.29	<0.1	1.30	0.74	<0.005	230	0.012	<0.01	<0.005
ACW #08		06-May-97	89,200	---	50,000	29,000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #08		21-Nov-97	49,200	7.0	29,000	17,000	800	---	<5	0.6	<0.5	---	---	---	---	0.6	---	440	---	---	<0.01
S98-0173		12-May-98	48,000	---	28,000	34,000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0459		20-Oct-98	44,200	6.79	28,700	24,000	740	17.9	<10	0.82	<0.05	---	---	---	---	0.82	---	370	---	---	<0.0025

Table 2: SUMMARY OF LABORATORY ANALYSES OF GROUNDWATER SAMPLES,
JAL #4 PLANT, EL PASO CORPORATION, LEA COUNTY, NEW MEXICO

LABORATORY SAMPLE NUMBER	SAMPLE DESCRIPTION	Sample Date	Iron, mg/l	Lead, mg/l	Magnesium, mg/l	Manganese, mg/l	Mercury, mg/l	Molybdenum, mg/l	Nickel, mg/l	Potassium, mg/l	Selenium	Silica, mg/l	Silver, mg/l	Sodium, mg/l	Uranium, mg/l	Zinc, mg/l	Alkalinity (as CaCO ₃), mg/l	Alkalinity - Bicarbonate, mg/l	Alkalinity - Carbonate, mg/l	Alkalinity - Hydroxide, mg/l	Hardness (as CaCO ₃), mg/l
ACW #06		16-Sep-93	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #06		08-Nov-93	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #06		21-Apr-94	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #06		28-Oct-94	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #06		31-Jan-95	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #06		16-May-95	3.9	---	19	0.079	---	---	---	<5.0	---	48	---	2,200	---	<0.020	1,300	---	---	---	200
ACW #06		27-Jun-95	5.8	---	16	0.082	---	---	---	<5.0	---	44	---	3,000	---	<0.080	1,500	---	---	---	130
ACW #06		29-Aug-95	0.54	---	16	0.04	---	---	---	<5.0	---	42	---	2,500	---	<0.020	1,500	---	---	---	200
ACW #06		06-Feb-96	4.6	---	23	0.12	---	---	---	3.6	---	62	---	2,700	---	0.029	1,400	---	---	---	320
ACW #06		06-Feb-96	5	---	21	0.1	---	---	---	3.6	---	50	---	2,400	---	<0.1	1,315	---	---	---	275
ACW #06		08-May-96	4.1	---	21	0.14	---	---	---	4	---	40	---	2,380	---	<0.05	1,396	---	---	---	175
ACW #06		14-Aug-96	4.5	---	23	0.13	---	---	---	3.4	---	60	---	2,900	---	0.024	1,400	---	---	---	310
ACW #06		06-Nov-96	5.3	---	27	0.16	---	---	---	3.8	---	32	---	2,800	---	0.032	1,600	---	---	---	360
ACW #06		06-Nov-96	4	---	22	0.13	---	---	---	3.6	---	27	---	2,400	---	0.019	1,600	---	---	---	310
ACW #06		08-May-97	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #06		22-Oct-97	2.6	---	19	0.11	---	---	---	3	---	21	---	2,200	---	<0.02	1,400	---	---	---	---
ACW #06D		22-Oct-97	2.3	---	19	0.11	---	---	---	3	---	21	---	2,200	---	<0.02	1,400	---	---	---	---
ACW #06		13-May-98	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0181		21-Oct-98	2.4	---	23	0.099	---	---	---	2.7	---	22	---	2,640	---	<0.05	1,600	1,600	<25	<25	250
S98-0469		13-May-99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0195		21-Oct-99	2.2	<0.005	19	0.087	<0.0002	0.080	0.030	2.3	---	29	<0.005	2,900	<0.005	<0.05	1,500	1,400	130	<25	250
M00-0089		10-May-00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0232		02-Nov-00	9.7	<0.05	22	0.13	<0.0002	---	---	6.9	<0.1	30	<0.02	710	---	<0.1	1,200	1,200	14	<25	300
M01-0156		06-May-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0480		24-Oct-01	1.8	<0.05	16	0.081	<0.0002	0.052	<0.04	2.9	<0.1	35	<0.02	1,900	<0.005	<0.1	1,100	1,100	<25	<25	210
ACW #07		07-May-97	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #07		22-Oct-97	14.4	---	80	0.2	---	---	---	3	---	18	---	2,500	---	<0.2	730	---	---	---	---
S98-0182		13-May-98	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0467		21-Oct-98	15	---	91	0.15	---	---	---	4.3	---	23	---	3,100	---	<0.05	830	830	<25	<25	920
M99-0017		12-May-99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0194		21-Oct-99	14	<0.005	93	0.13	<0.0002	0.025	<0.02	3.8	---	23	<0.005	3,300	<0.005	<0.05	870	870	<25	<25	1000
M00-0088		10-May-00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0231		02-Nov-00	12	<0.05	87	0.11	<0.0002	---	---	4.2	<0.1	31	<0.02	710	---	<0.1	840	840	<25	<25	960
M01-0152		06-May-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0153		06-May-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0477		24-Oct-01	15	0.075	100	0.11	<0.0002	0.025	<0.04	4.2	<0.1	43	<0.02	3,600	<0.005	<0.1	820	820	<25	<25	990
ACW #08		06-May-97	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #08		21-Nov-97	1.3	---	210	2.2	---	---	---	57	---	19	---	9,300	---	<0.02	520	---	---	---	---
S98-0173		12-May-98	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0459		20-Oct-98	1.5	---	200	1.7	---	---	---	46	---	19	---	11,000	---	<0.05	430	430	<25	<25	1,700

Table 2: SUMMARY OF LABORATORY ANALYSES OF GROUNDWATER SAMPLES,
JAL #4 PLANT, EL PASO CORPORATION, LEA COUNTY, NEW MEXICO

LABORATORY SAMPLE NUMBER	SAMPLE DESCRIPTION	Sample Date	Benzene, ug/l	Toluene, ug/l	Ethylbenzene, ug/l	Total Xylene, ug/l	MTBE, ug/l	Gasoline Range Organics, mg/l	Acenaphthene, ug/l	Acenaphthylene, ug/l	Anthracene, ug/l	Benzo(a)anthracene, ug/l	Benzo(b)fluoranthene, ug/l	Benzo(k)fluoranthene, ug/l	Benzog(h,i)perylene, ug/l	Benzo(a)pyrene, ug/l	Chrysene, ug/l	Dibenzo(a,h)anthracene, ug/l	Fluoranthene, ug/l	Indeno(1,2,3-cd)pyrene, ug/l	Naphthalene, ug/l	Phenanthrene, ug/l	Pyrene, ug/l
M99-0010	ACW #08	11-May-99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0186	ACW #08	19-Oct-99	32	6.2	3.7	<4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0086	ACW #08	09-May-00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0218	ACW #08	26-Oct-00	15	<2	2.1	10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0134	ACW #08	01-May-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0475	ACW #08	23-Oct-01	41	5	3.1	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #09	ACW #09	17-Jun-93	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #09	ACW #09	14-Sep-93	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #09	ACW #09	09-Nov-93	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #09	ACW #09	22-Apr-94	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #09	ACW #09	01-Dec-94	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #09	ACW #09	31-Jan-95	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #09	ACW #09	17-May-95	<5	22	<5	0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #09	ACW #09	28-Jun-95	<2.5	<2.5	<2.5	<5.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #09	ACW #09	30-Aug-95	<5	<10	<5	<15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #09	ACW #09	07-Feb-96	1.8	<1.0	<1.0	<2.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #09	ACW #09	07-Feb-96	<2.5	<2.5	<2.5	<7.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #09	ACW #09	08-May-96	<1.0	<1.0	<1.0	<3.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #09	ACW #09	14-Aug-96	1.4	1.6	<1.0	<2.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #09	ACW #09	07-Nov-96	2.3	2.2	<1.0	<2.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #09	ACW #09	19-Feb-97	1.3	4.0	10	4.2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #09	ACW #09	08-May-97	2.6	2.6	1.4	1.7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #09	ACW #09	23-Oct-97	<0.5	<0.5	<0.5	<1.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0185	ACW #09	13-May-98	<0.50	<0.50	<0.50	<1.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0472	ACW #09	21-Oct-98	6	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0022	ACW #09	13-May-99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0199	ACW #09	22-Oct-99	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0100	ACW #09	12-May-00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0101	ACW #09D	12-May-00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0237	ACW #09	03-Nov-00	<2	<2	<2	<4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0238	ACW #09D	03-Nov-00	<2	<2	<2	<4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0147	ACW #09	06-May-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0483	ACW #09	25-Oct-01	<2	<2	<2	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0484	ACW #9D	25-Oct-01	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #10	ACW #10	18-Jun-93	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #10	ACW #10	14-Sep-93	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #10	ACW #10	09-Nov-93	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #10	ACW #10	22-Apr-94	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #10	ACW #10	28-Oct-94	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #10	ACW #10	01-Feb-95	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Table 2: SUMMARY OF LABORATORY ANALYSES OF GROUNDWATER SAMPLES,
JAL #4 PLANT, EL PASO CORPORATION, LEA COUNTY, NEW MEXICO

LABORATORY SAMPLE NUMBER	SAMPLE DESCRIPTION	Sample Date	Specific Conductance, umho/cm	pH, s.u.	Total Dissolved Solids, mg/L	Chloride, mg/l	Sulfate, mg/l	pH Temperature °C	Bromide, mg/l	Fluoride, mg/l	Nitrate-N, mg/l	Nitrate as NO ₃ , mg/l	Aluminum, mg/l	Arsenic, mg/l	Barium, mg/l	Boron, mg/l	Cadmium, mg/l	Calcium, mg/l	Chromium, mg/l	Cobalt, mg/l	Copper, mg/l
M99-0010	ACW #08	11-May-99	52,500	---	29,800	21,000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0186	ACW #08	19-Oct-99	36,400	7.09	17,700	15,000	580	20.5	<10	0.86	<0.05	---	<0.025	<0.005	0.11	0.83	<0.002	500	<0.005	<0.005	<0.0025
M00-0086	ACW #08	09-May-00	62,900	---	41,800	32,000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0218	ACW #08	26-Oct-00	36,300	6.85	26,000	17,000	740	15.0	<2	0.92	<1	---	---	<0.1	0.15	0.79	<0.01	440	<0.01	---	<0.005
M01-0134	ACW #08	01-May-01	51,300	---	28,200	25,000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0475	ACW #08	23-Oct-01	33,400	7.02	20,000	11,000	590	21.6	<20	1.1	<10	---	<0.05	<0.1	0.12	0.62	<0.005	410	<0.01	<0.01	<0.005
ACW #09	ACW #09	17-Jun-93	5,900	---	4,435	2,288	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #09	ACW #09	14-Sep-93	3,100	---	2,119	915	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #09	ACW #09	09-Nov-93	3,670	---	2,300	1,184	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #09	ACW #09	22-Apr-94	3,900	---	2,508	1,150	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #09	ACW #09	01-Dec-94	5,450	---	3,510	1,650	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #09	ACW #09	31-Jan-95	7,110	---	4,240	2,083	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #09	ACW #09	17-May-95	11,000	6.6	8,800	5,600	440	---	2.1	<1.0	<2.0	---	---	---	---	0.4	---	820	---	---	<0.025
ACW #09	ACW #09	28-Jun-95	9,100	7.0	6,200	3,500	360	---	1.9	<1.0	<2.0	---	---	---	---	0.4	---	770	---	---	<0.025
ACW #09	ACW #09	30-Aug-95	7,150	6.5	4,500	2,500	370	---	1.5	<1.0	<2.0	---	---	---	---	0.4	---	640	---	---	<0.025
ACW #09	ACW #09	07-Feb-96	7,500	7.7	5,400	2,400	320	---	1.5	0.16	0.039	---	---	---	---	0.4	---	570	---	---	<0.006
ACW #09	ACW #09	07-Feb-96	7,450	6.8	4,620	2,300	341	---	1.85	0.36	<1.25	---	---	---	---	0.4	---	600	---	---	<0.1
ACW #09	ACW #09	08-May-96	7,530	6.8	4,210	2,210	322	---	3	0.35	<1.25	---	---	---	---	<0.5	---	508	---	---	0.01
ACW #09	ACW #09	14-Aug-96	4,400	7.4	3,600	1,200	180	---	1.2	1.4	0.13	---	---	---	---	0.4	---	490	---	---	<0.006
ACW #09	ACW #09	07-Nov-96	4,200	7.3	3,100	1,200	---	---	---	1.1	0.055	---	---	---	---	0.3	---	360	---	---	<0.007
ACW #09	ACW #09	19-Feb-97	4,110	---	2,500	1,260	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #09	ACW #09	08-May-97	2,800	---	2,100	830	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #09	ACW #09	23-Oct-97	3,380	7.2	1,600	880	130	---	1.3	1.2	<0.05	---	---	---	---	0.2	---	270	---	---	<0.01
ACW #09	ACW #09	13-May-98	5,100	---	4,500	1,600	---	---	---	1.1	---	---	---	---	---	---	---	---	---	---	---
S98-0472	ACW #09	21-Oct-98	13,200	6.49	8,980	4,100	440	20.8	<5	0.40	<0.05	---	---	---	---	0.49	---	1,200	---	---	<0.0025
M99-0022	ACW #09	13-May-99	11,100	---	6,400	3,400	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0199	ACW #09	22-Oct-99	8,580	6.78	5,950	2,900	280	19.6	<4	0.71	<0.05	---	0.030	0.0066	0.13	0.43	<0.002	820	<0.005	<0.005	<0.0025
M00-0100	ACW #09	12-May-00	7,830	---	4,810	2,500	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0101	ACW #09D	12-May-00	7,960	---	4,930	3,100	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0237	ACW #09	03-Nov-00	7,630	6.8	5,860	3,000	230	19.0	<20	0.68	<0.05	---	---	<0.1	0.14	0.57	<0.01	500	<0.01	---	0.0062
M00-0238	ACW #09D	03-Nov-00	7,620	6.8	11,200	2,900	260	19.1	<20	0.66	<0.05	---	---	<0.1	0.13	0.57	<0.01	490	<0.01	---	0.0073
M01-0147	ACW #09	06-May-01	8,300	---	4,640	2,800	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0483	ACW #09	25-Oct-01	7,820	6.8 H3	4,390	4,000	200	20.1	<5	0.88	<1.25	---	<0.05	<0.1	0.10	0.46	<0.005	280	<0.01	<0.01	<0.005
M01-0484	ACW #09D	25-Oct-01	7,700	6.84 H3	4,400	3,700	190	19.9	<5	0.99	<1.25	---	0.075	<0.1	0.11	0.49	<0.005	290	<0.01	<0.01	<0.005
ACW #10	ACW #10	18-Jun-93	1061	---	701	1027	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #10	ACW #10	14-Sep-93	1,349	---	1,190	421	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #10	ACW #10	09-Nov-93	1,800	---	1,238	420	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #10	ACW #10	22-Apr-94	2,440	---	1,638	700	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #10	ACW #10	28-Oct-94	2,592	---	1,694	600	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #10	ACW #10	01-Feb-95	2,660	---	1,426	619	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Table 2: SUMMARY OF LABORATORY ANALYSES OF GROUNDWATER SAMPLES,
JAL #4 PLANT, EL PASO CORPORATION, LEA COUNTY, NEW MEXICO

LABORATORY SAMPLE NUMBER	SAMPLE DESCRIPTION	Sample Date	Iron, mg/l	Lead, mg/l	Magnesium, mg/l	Manganese, mg/l	Mercury, mg/l	Molybdenum, mg/l	Nickel, mg/l	Potassium, mg/l	Selenium	Silica, mg/l	Silver, mg/l	Sodium, mg/l	Uranium, mg/l	Zinc, mg/l	Alkalinity (as CaCO ₃), mg/l	Alkalinity - Bicarbonate, mg/l	Alkalinity - Carbonate, mg/l	Alkalinity - Hydroxide, mg/l	Hardness (as CaCO ₃), mg/l
M99-0010	ACW #08	11-May-99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0186	ACW #08	19-Oct-99	2.7	<0.005	230	2.4	<0.0002	0.031	<0.02	99	---	16	<0.005	12,000	0.048	<0.05	490	490	<25	<25	2,300
M00-0086	ACW #08	09-May-00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0218	ACW #08	26-Oct-00	3.3	<0.05	220	2.1	<0.0002	---	---	69	<0.1	24	<0.02	3,600	---	<0.1	410	410	<25	<25	2,000
M01-0134	ACW #08	01-May-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0475	ACW #08	23-Oct-01	2.6	0.12	200	1.9	<0.0002	<0.01	<0.04	58	<0.1	26	<0.02	11,000	0.037	<0.1	350	350	<25	<25	1,800
ACW #09	ACW #09	17-Jun-93	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #09	ACW #09	14-Sep-93	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #09	ACW #09	09-Nov-93	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #09	ACW #09	22-Apr-94	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #09	ACW #09	01-Dec-94	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #09	ACW #09	31-Jan-95	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #09	ACW #09	17-May-95	0.17	---	280	1	---	---	---	16	---	49	---	910	---	0.025	320	---	---	---	4,500
ACW #09	ACW #09	28-Jun-95	0.28	---	250	0.98	---	---	---	15	---	51	---	1,000	---	<0.020	300	---	---	---	2,700
ACW #09	ACW #09	30-Aug-95	0.19	---	220	0.86	---	---	---	14	---	43	---	880	---	<0.040	240	---	---	---	2,000
ACW #09	ACW #09	07-Feb-96	0.48	---	180	0.71	---	---	---	14	---	47	---	810	---	<0.010	300	---	---	---	2,200
ACW #09	ACW #09	07-Feb-96	0.4	---	175	0.7	---	---	---	16	---	56	---	810	---	<0.1	291	---	---	---	2,220
ACW #09	ACW #09	08-May-96	0.4	---	183	0.49	---	---	---	17	---	60	---	687	---	<0.05	209	---	---	---	2,020
ACW #09	ACW #09	14-Aug-96	0.66	---	160	0.65	---	---	---	13	---	53	---	730	---	0.027	220	---	---	---	1,900
ACW #09	ACW #09	07-Nov-96	0.4	---	110	0.44	---	---	---	10	---	---	---	510	---	0.029	---	---	---	---	---
ACW #09	ACW #09	19-Feb-97	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #09	ACW #09	08-May-97	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #09	ACW #09	23-Oct-97	0.6	---	84	0.31	---	---	---	10	---	17	---	320	---	0.05	200	---	---	---	---
S98-0185	ACW #09	13-May-98	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0472	ACW #09	21-Oct-98	0.63	---	400	1.4	---	---	---	25	---	31	---	1,400	---	<0.05	340	340	<25	<25	4,600
M99-0022	ACW #09	13-May-99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0199	ACW #09	22-Oct-99	0.96	<0.005	230	0.80	<0.0002	0.0062	<0.02	22	---	29	<0.005	990	0.032	<0.05	270	270	<25	<25	3,000
M00-0100	ACW #09	12-May-00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0101	ACW #09D	12-May-00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0237	ACW #09	03-Nov-00	1.4	<0.05	160	0.43	<0.0002	---	---	18	<0.1	32	<0.02	670	---	<0.1	500	500	<25	<25	1,900
M00-0238	ACW #09D	03-Nov-00	1.4	<0.05	150	0.42	<0.0002	---	---	18	<0.1	31	<0.02	630	---	<0.1	510	510	<25	<25	1,900
M01-0147	ACW #09	06-May-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0483	ACW #09	25-Oct-01	1.2	0.058	89	0.22	<0.0002	<0.01	<0.04	14	<0.1	36	<0.02	1,200	0.034	<0.1	460	460	<25	<25	1,100
M01-0484	ACW #9D	25-Oct-01	1.3	0.067	96	0.23	<0.0002	<0.01	<0.04	14	<0.1	36	<0.02	1,300	0.036	<0.1	440	440	<25	<25	1,100
ACW #10	ACW #10	18-Jun-93	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #10	ACW #10	14-Sep-93	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #10	ACW #10	09-Nov-93	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #10	ACW #10	22-Apr-94	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #10	ACW #10	28-Oct-94	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #10	ACW #10	01-Feb-95	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Table 2: SUMMARY OF LABORATORY ANALYSES OF GROUNDWATER SAMPLES,
JAL #4 PLANT, EL PASO CORPORATION, LEA COUNTY, NEW MEXICO

LABORATORY SAMPLE NUMBER	SAMPLE DESCRIPTION	Sample Date	Benzene, µg/l	Toluene, µg/l	Ethylbenzene, µg/l	Total Xylene, µg/l	MTBE, µg/l	Gasoline Range Organics, mg/l	Acenaphthene, µg/l	Acenaphthylene, µg/l	Anthracene, µg/l	Benz(a)anthracene, µg/l	Benz(b)fluoranthene, µg/l	Benz(k)fluoranthene, µg/l	Benz(g,h,i)perylene, µg/l	Benz(a)pyrene, µg/l	Chrysene, µg/l	Dibenzo(a,h)anthracene, µg/l	Fluoranthene, µg/l	Fluorene, µg/l	Indeno(1,2,3-cd)pyrene, µg/l	Naphthalene, µg/l	Phenanthrene, µg/l	Pyrene, µg/l
ACW #10	ACW #10	17-May-95	<5	<10	<5	0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #10	ACW #10	28-Jun-95	<2.5	<2.5	<2.5	<5.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #10	ACW #10	30-Aug-95	<5	<10	<5	<15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #10	ACW #10	07-Feb-96	3.9	<1.0	<1.0	<2.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #10	ACW #10	07-Feb-96	4.3	<2.5	<2.5	<7.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #10	ACW #10	08-May-96	1.22	<1.0	<1.0	<3.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #10	ACW #10	14-Aug-96	<1.0	<1.0	<1.0	<2.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #10	ACW #10	07-Nov-96	1.2	1.5	<1.0	<2.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #10	ACW #10	08-May-97	1.3	1	<0.5	<1.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #10	ACW #10	23-Oct-97	1.14	1.17	<0.5	0.58	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0187	ACW #10	14-May-98	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0473	ACW #10	22-Oct-98	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0023	ACW #10	13-May-99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0201	ACW #10	22-Oct-99	<2	<2	<2	<4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0099	ACW #10	11-May-00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0243	ACW #10	06-Nov-00	<2	<2	<2	<4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0158	ACW #10	06-May-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0487	ACW #10	25-Oct-01	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #11	ACW #11	19-Jun-93	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #11	ACW #11	15-Sep-93	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #11	ACW #11	09-Nov-93	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #11	ACW #11	21-Apr-94	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #11	ACW #11	27-Oct-94	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #11	ACW #11	27-Oct-94	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #11	ACW #11	01-Feb-95	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #11	ACW #11	17-May-95	<5	<10	<5	0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #11	ACW #11	27-Jun-95	5.1	<2.5	<2.5	<5.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #11	ACW #11	29-Aug-95	8	<10	<5	<15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #11	ACW #11	07-Feb-96	6.9	<1.0	<1.0	<2.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #11	ACW #11	07-Feb-96	7.6	<2.5	<2.5	<7.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #11	ACW #11	08-May-96	6.76	<1.0	<1.0	<3.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #11	ACW #11	13-Aug-96	7.9	2.2	<1.0	<2.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #11	ACW #11	05-Nov-96	32	1.7	<1.0	1.2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #11	ACW #11	06-May-97	21	5.3	3.1	3.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #11	ACW #11	21-Nov-97	28	3.1	<0.5	2.8	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0174	ACW #11	12-May-98	70	8.2	1.3	4.3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0460	ACW #11	20-Oct-98	51	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0014	ACW #11	12-May-99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0192	ACW #11	20-Oct-99	14	4.5	<2	<4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0087	ACW #11	09-May-00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

**Table 2: SUMMARY OF LABORATORY ANALYSES OF GROUNDWATER SAMPLES,
JAL #4 PLANT, EL PASO CORPORATION, LEA COUNTY, NEW MEXICO**

LABORATORY SAMPLE NUMBER	SAMPLE DESCRIPTION	Sample Date	Specific Conductance, umho/cm	pH, s.u.	Total Dissolved Solids, mg/L	Chloride, mg/l	Sulfate, mg/l	pH Temperature °C	Bromide, mg/l	Fluoride, mg/l	Nitrate-N, mg/l	Nitrate as NO ₃ , mg/l	Aluminum, mg/l	Arsenic, mg/l	Barium, mg/l	Boron, mg/l	Cadmium, mg/l	Calcium, mg/l	Chromium, mg/l	Cobalt, mg/l	Copper, mg/l
ACW #10		17-May-95	3,900	6.9	2,300	1,600	300	---	1.1	<1.0	1.1	---	---	---	---	0.3	---	320	---	---	<0.025
ACW #10		28-Jun-95	3,100	7.3	2,300	1,900	230	---	0.98	<1.0	<2.0	---	---	---	---	0.3	---	280	---	---	<0.025
ACW #10		30-Aug-95	3,100	7.0	2,200	790	210	---	0.9	<1.0	<2.0	---	---	---	---	0.2	---	280	---	---	<0.025
ACW #10		07-Feb-96	3,200	7.8	2,300	850	230	---	0.88	0.24	0.42	---	---	---	---	0.3	---	320	---	---	<0.006
ACW #10		07-Feb-96	3,100	7.1	2,100	829	242	---	<1.25	0.44	<1.25	---	---	---	---	0.3	---	320	---	---	<0.1
ACW #10		08-May-96	2,322	7.2	1,290	603	190	---	4.5	0.46	2.2	---	---	---	---	<0.5	---	206	---	---	<0.01
ACW #10		14-Aug-96	2,400	7.6	1,900	560	160	---	0.82	1.4	0.58	---	---	---	---	0.3	---	210	---	---	<0.006
ACW #10		07-Nov-96	250	7.5	1,800	610	170	---	0.83	1.1	0.49	---	---	---	---	0.2	---	200	---	---	<0.007
ACW #10		08-May-97	1,880	---	1,500	480	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #10		23-Oct-97	2,870	7.2	1,500	670	210	---	1.2	1	0.36	---	---	---	---	0.2	---	220	---	---	<0.01
ACW #10		14-May-98	2,400	---	1,200	540	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0473		22-Oct-98	2,900	7.06	1,960	800	210	20.8	<2	0.90	0.83	---	---	---	---	0.29	---	300	---	---	<0.0025
M99-0023		13-May-99	2,810	---	1,660	730	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0201		22-Oct-99	2,470	7.23	1,720	660	160	19.4	<2	1.2	0.62	---	0.037	0.010	0.091	0.26	<0.002	260	<0.005	<0.005	<0.0025
M00-0099		11-May-00	3,620	---	2,430	1,400	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0243		06-Nov-00	3,100	7.1	2,840	980	220	16.4	<2	1.0	<1	---	---	---	---	0.37	<0.01	470	<0.01	---	0.0061
M01-0158		06-May-01	3,660	---	2,360	1,000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0487		25-Oct-01	3,350	7.02	2,270	930	220	19.8	2.1	1.0	<0.5	---	0.057	<0.1	0.10	0.30	<0.005	300	<0.01	<0.01	<0.005
ACW #11		19-Jun-93	25,000	---	18,670	9,737	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #11		15-Sep-93	10,570	---	6,820	3,437	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #11		09-Nov-93	10,160	---	6,592	3,620	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #11		21-Apr-94	16,290	---	9,520	6,400	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #11		27-Oct-94	20,060	---	13,280	6,200	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #11		27-Oct-94	20,550	---	12,900	6,600	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #11		01-Feb-95	32,200	---	19,880	11,582	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #11		17-May-95	12,000	6.8	7,200	4,400	250	---	1.9	<1.0	<2.0	---	---	---	---	0.3	---	740	---	---	<0.025
ACW #11		27-Jun-95	11,000	7.2	7,000	6,500	210	---	1.6	<1.0	<2.0	---	---	---	---	0.4	---	720	---	---	<0.025
ACW #11		29-Aug-95	10,000	6.8	6,000	3,400	220	---	2.2	6.2	<2.0	---	---	---	---	0.3	---	550	---	---	<0.025
ACW #11		07-Feb-96	11,000	7.8	7,400	3,400	230	---	1.5	0.15	0.087	---	---	---	---	0.3	---	660	---	---	<0.006
ACW #11		07-Feb-96	11,030	7.2	6,740	3,770	248	---	1.6	0.39	<1.25	---	---	---	---	0.4	---	668	---	---	<0.1
ACW #11		08-May-96	9,840	7.3	5,080	3,120	206	---	<1.25	0.37	<1.25	---	---	---	---	<0.5	---	484	---	---	0.02
ACW #11		13-Aug-96	12,000	7.3	10,000	4,200	230	---	2	1.0	0.18	---	---	---	---	0.4	---	540	---	---	0.013
ACW #11		05-Nov-96	29	7.3	25,000	13,000	560	---	2.9	0.4	0.31	---	---	---	---	0.3	---	1,200	---	---	<0.007
ACW #11		06-May-97	10,200	---	6,700	3,600	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #11		21-Nov-97	27,900	7.6	16,000	9,800	520	---	<4	<0.5	0.16	---	---	---	---	0.3	---	1,000	---	---	<0.01
ACW #11		12-May-98	36,000	---	22,000	13,000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0174		20-Oct-98	42,500	6.60	29,600	17,000	680	18.5	<10	0.43	0.11	---	---	---	---	0.32	---	1,500	---	---	<0.0025
M99-0014		12-May-99	19,800	---	11,100	7,200	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0192		20-Oct-99	19,300	6.94	13,600	7,800	340	19.1	<4	0.60	0.055	---	0.096	0.0088	0.42	0.30	<0.002	1,100	<0.005	<0.005	0.0039
M00-0087		09-May-00	31,500	---	21,000	18,000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Table 2: SUMMARY OF LABORATORY ANALYSES OF GROUNDWATER SAMPLES,
JAL #4 PLANT, EL PASO CORPORATION, LEA COUNTY, NEW MEXICO

LABORATORY SAMPLE NUMBER	SAMPLE DESCRIPTION	Sample Date	Iron, mg/l	Lead, mg/l	Magnesium, mg/l	Manganese, mg/l	Mercury, mg/l	Molybdenum, mg/l	Nickel, mg/l	Potassium, mg/l	Selenium	Silica, mg/l	Silver, mg/l	Sodium, mg/l	Uranium, mg/l	Zinc, mg/l	Alkalinity (as CaCO ₃), mg/l	Alkalinity - Bicarbonate, mg/l	Alkalinity - Carbonate, mg/l	Alkalinity - Hydroxide, mg/l	Hardness (as CaCO ₃), mg/l
ACW #10		17-May-95	0.12	---	110	0.037	---	---	---	8	---	43	---	170	---	<0.020	190	---	---	---	1,300
ACW #10		28-Jun-95	0.28	---	94	0.029	---	---	---	7.5	---	46	---	160	---	<0.020	190	---	---	---	1,200
ACW #10		30-Aug-95	<0.20	---	95	0.034	---	---	---	52	---	42	---	150	---	<0.040	180	---	---	---	1,100
ACW #10		07-Feb-96	0.24	---	110	0.032	---	---	---	8.4	---	36	---	190	---	0.011	200	---	---	---	1,200
ACW #10		07-Feb-96	0.4	---	107	<0.1	---	---	---	9.4	---	54	---	190	---	<0.1	194	---	---	---	1,240
ACW #10		08-May-96	0.1	---	92	<0.05	---	---	---	8	---	62	---	127	---	<0.05	137	---	---	---	893
ACW #10		14-Aug-96	0.14	---	71	0.019	---	---	---	7	---	47	---	140	---	0.037	170	---	---	---	810
ACW #10		07-Nov-96	0.22	---	70	0.017	---	---	---	7.4	---	20	---	150	---	0.025	170	---	---	---	800
ACW #10		08-May-97	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #10		23-Oct-97	0.2	---	71	0.02	---	---	---	6	---	20	---	140	---	<0.02	200	---	---	---	---
ACW #10		14-May-98	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0187		22-Oct-98	0.099	---	110	0.0068	---	---	---	9.0	---	27	---	180	---	<0.05	180	---	<25	<25	1,200
ACW #10		13-May-99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0023		22-Oct-99	0.26	<0.005	84	0.020	<0.0002	<0.005	<0.02	7.9	---	19	<0.005	170	0.013	<0.05	160	---	<25	<25	1,000
M99-0201		11-May-00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0099		06-Nov-00	0.27	<0.05	140	0.026	<0.0002	---	---	16	<0.1	30	<0.02	330	---	<0.1	180	---	<25	<25	1,800
M00-0243		06-May-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0158		25-Oct-01	0.19	0.068	95	0.021	<0.0002	<0.01	<0.04	9.6	<0.1	35	<0.02	180	0.028	<0.1	160	---	<25	<25	1,100
M01-0487		19-Jun-93	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #11		15-Sep-93	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #11		09-Nov-93	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #11		21-Apr-94	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #11		27-Oct-94	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #11		27-Oct-94	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #11		01-Feb-95	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #11		17-May-95	0.36	---	260	0.23	---	---	---	16	---	42	---	1,200	---	<0.020	230	---	---	---	3,300
ACW #11		27-Jun-95	0.29	---	270	0.2	---	---	---	16	---	45	---	980	---	<0.020	210	---	---	---	2,800
ACW #11		29-Aug-95	0.17	---	210	0.088	---	---	---	16	---	44	---	880	---	<0.020	220	---	---	---	2,700
ACW #11		07-Feb-96	0.38	---	230	0.13	---	---	---	26	---	47	---	1,500	---	<0.010	210	---	---	---	2,600
ACW #11		07-Feb-96	0.5	---	224	0.1	---	---	---	31	---	46	---	1,400	---	<0.1	200	---	---	---	2,590
ACW #11		08-May-96	0.3	---	220	0.09	---	---	---	29	---	50	---	1,160	---	<0.05	111	---	---	---	2,110
ACW #11		13-Aug-96	0.28	---	190	0.061	---	---	---	24	---	47	---	1,700	---	0.12	160	---	---	---	2,100
ACW #11		05-Nov-96	0.25	---	430	0.14	---	---	---	35	---	21	---	5,100	---	0.068	170	---	---	---	4,700
ACW #11		06-May-97	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #11		21-Nov-97	0.4	---	330	0.22	---	---	---	27	---	18	---	2,700	---	0.21	170	---	---	---	---
ACW #11		12-May-98	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0174		20-Oct-98	0.68	---	520	0.35	---	---	---	41.0	---	22	---	5,100	---	<0.05	180	---	<25	<25	5,900
ACW #11		12-May-99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0014		20-Oct-99	0.68	<0.005	280	0.17	<0.0002	0.0045	<0.02	27	---	19	<0.005	2,300	0.013	<0.05	140	---	<25	<25	3,900
M99-0192		09-May-00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0087			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Table 2: SUMMARY OF LABORATORY ANALYSES OF GROUNDWATER SAMPLES,
JAL #4 PLANT, EL PASO CORPORATION, LEA COUNTY, NEW MEXICO

LABORATORY SAMPLE NUMBER	SAMPLE DESCRIPTION	Sample Date	Benzene, ug/l	Toluene, ug/l	Ethylbenzene, ug/l	Total Xylene, ug/l	MTBE, ug/l	Gasoline Range Organics, mg/l	Acenaphthene, ug/l	Acenaphthylene, ug/l	Anthracene, ug/l	Benz(a)anthracene, ug/l	Benz(b)fluoranthene, ug/l	Benz(k)fluoranthene, ug/l	Benz(g,h,i)perylene, ug/l	Benzo(a)pyrene, ug/l	Chrysene, ug/l	Dibenzo(a,h)anthracene, ug/l	Fluoranthene, ug/l	Fluorene, ug/l	Indeno(1,2,3-cd)pyrene, ug/l	Naphthalene, ug/l	Phenanthrene, ug/l	Pyrene, ug/l
M00-0227	ACW #11	01-Nov-00	16	<2	<2	<4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0135	ACW #11	01-May-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0476	ACW #11	23-Oct-01	59	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #12	ACW #12	19-Feb-97	<0.5	<0.5	1.5	<1.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #12D	ACW #12D	19-Feb-97	2.9	<0.5	<0.5	<1.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #12	ACW #12	08-May-97	3	0.89	<0.5	<1.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #12	ACW #12	20-Aug-97	1.2	<0.5	<0.5	<1.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #12D	ACW #12D	20-Aug-97	1.4	<0.5	<0.5	<1.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #12	ACW #12	23-Oct-97	1.4	0.58	<0.5	<1.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #12	ACW #12	24-Feb-98	7.3	<0.50	<0.50	<1.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0058	ACW #12D	24-Feb-98	6.7	<0.50	<0.50	<1.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0059	ACW #12D	01-Jun-98	<0.50	1.2	<0.50	<1.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0188	ACW #12	01-Jun-98	4.4	2.5	6.1	2.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0189	ACW #12D	01-Jun-98	4.4	2.5	6.1	2.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0294	ACW #12	11-Aug-98	2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0295	ACW #12D	11-Aug-98	2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0474	ACW #12	22-Oct-98	6	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0475	ACW #12D	22-Oct-98	6	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0083	ACW #12	23-Feb-99	6	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0084	ACW #12D	23-Feb-99	5	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0024	ACW #12	14-May-99	4	<2	<2	<2	<0.25	<0.25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0026	ACW #12D	14-May-99	4	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0087	ACW #12	11-Aug-99	5.3	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0088	ACW #12D	11-Aug-99	2.4	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0202	ACW #12	22-Oct-99	4.7	<2	<2	<4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0204	ACW #12D	22-Oct-99	4.4	<2	<2	<4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0024	ACW #12	22-Feb-00	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0098	ACW #12	11-May-00	<5	<5	<5	<10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0197	ACW #12	07-Aug-00	<2	<2	<2	<4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0240	ACW #12	03-Nov-00	<2	<2	<2	<4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0011	ACW #12	20-Feb-01	<2	<2	<2	<4	<5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0145	ACW #12	03-May-01	2.4	<2	<2	<2	<5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0146	ACW #12D	03-May-01	2.1	<2	<2	<2	<5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0405	ACW #12	01-Aug-01	<2	<2	<2 Jc	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0486	ACW #12	25-Oct-01	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #13	ACW #13	20-Feb-97	<0.5	<0.5	1.5	<1.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #13	ACW #13	08-May-97	0.61	0.58	<0.5	<1.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #13D	ACW #13D	08-May-97	0.65	0.62	<0.5	<1.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #13	ACW #13	20-Aug-97	<0.5	<0.5	<0.5	<1.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #13	ACW #13	23-Oct-97	0.59	0.76	<0.5	<1.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0060	ACW #13	24-Feb-98	<0.50	<0.50	<0.50	<1.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Table 2: SUMMARY OF LABORATORY ANALYSES OF GROUNDWATER SAMPLES,
JAL #4 PLANT, EL PASO CORPORATION, LEA COUNTY, NEW MEXICO

LABORATORY SAMPLE NUMBER	SAMPLE DESCRIPTION	Sample Date	Specific Conductance, umho/cm	pH, s.u.	Total Dissolved Solids, mg/L	Chloride, mg/l	Sulfate, mg/l	pH Temperature °C	Bromide, mg/l	Fluoride, mg/l	Nitrate-N, mg/l	Nitrate as NO ₃ , mg/l	Aluminum, mg/l	Arsenic, mg/l	Barium, mg/l	Boron, mg/l	Cadmium, mg/l	Calcium, mg/l	Chromium, mg/l	Cobalt, mg/l	Copper, mg/l
M00-0227	ACW #11	01-Nov-00	25,700	6.82	21,900	10,000	490	13.1	<2	<0.4	<1	---	---	<0.1	0.37	0.46	<0.01	1,730	<0.01	---	<0.005
M01-0135	ACW #11	01-May-01	32,800	---	20,000	15,000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0476	ACW #11	23-Oct-01	47,800	6.55	32,900	17,000	800	21.5	<20	0.41	<10	---	<0.05	>0.1	0.26	0.36	<0.005	2,500	<0.01	<0.01	>0.005
ACW #12	ACW #12	19-Feb-97	1,610	---	950	380	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #12D	ACW #12D	19-Feb-97	1,630	---	960	390	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #12	ACW #12	08-May-97	1,240	---	900	290	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #12	ACW #12	20-Aug-97	1,120	8.1	740	260	85	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #12D	ACW #12D	20-Aug-97	1,150	8.1	740	280	90	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #12	ACW #12	23-Oct-97	1,810	7.5	850	380	120	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.01
S98-0058	ACW #12	24-Feb-98	2,050	7.9	1,200	470	150	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.01
S98-0059	ACW #12D	24-Feb-98	2,090	7.9	1,220	490	160	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.01
S98-0188	ACW #12	01-Jun-98	2,000	7.5	1,500	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0189	ACW #12D	01-Jun-98	2,300	7.4	1,700	540	150	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0294	ACW #12	11-Aug-98	1,790	7.61	1,240	440	130	19.8	<2	1.3	1.4	---	---	---	---	---	---	---	---	---	---
S98-0295	ACW #12D	11-Aug-98	2,020	7.51	1,300	520	140	19.3	<1	1.1	<2.5	---	---	---	---	---	---	---	---	---	---
S98-0474	ACW #12	22-Oct-98	2,280	7.39	1,520	610	170	20.0	<2	0.99	0.44	---	---	---	---	---	---	---	---	---	<0.0025
S98-0475	ACW #12D	22-Oct-98	2,310	7.36	1,690	600	170	20.1	<2	0.90	0.51	---	---	---	---	---	---	---	---	---	<0.0025
S99-0083	ACW #12	23-Feb-99	2,020	7.68	1,240	500	120	12.3	<2	1.2	0.18	---	---	---	---	---	---	---	---	---	---
S99-0084	ACW #12D	23-Feb-99	2,050	7.67	1,280	480	140	12.8	<2	1.1	0.23	---	---	---	---	---	---	---	---	---	---
M99-0024	ACW #12	14-May-99	2,390	7.47	1,440	500	120	23.8	<2	0.86	0.14	---	---	---	---	---	---	---	---	---	0.0063
M99-0026	ACW #12D	14-May-99	2,350	7.42	1,410	590	150	23.9	<2	0.86	0.18	---	---	---	---	---	---	---	---	---	0.0044
M99-0087	ACW #12	11-Aug-99	2,650	7.35	1,750	750	160	21.7	<0.2	0.85	0.45	---	---	---	---	---	---	---	---	---	---
M99-0088	ACW #12D	11-Aug-99	2,630	7.33	1,880	810	160	21.1	<1	0.85	0.53	---	---	---	---	---	---	---	---	---	---
M99-0202	ACW #12	22-Oct-99	2,180	7.50	1,620	650	130	19.8	<2	0.98	0.41	---	---	0.034	0.0094	0.13	<0.002	220	<0.005	<0.005	<0.0025
M99-0204	ACW #12D	22-Oct-99	2,170	7.48	1,390	560	140	19.8	<2	0.95	0.32	---	---	0.031	0.0084	0.13	<0.002	230	<0.005	<0.005	<0.0025
M00-0024	ACW #12	22-Feb-00	1,950	7.38	1,260	680	130	16.4	<1.0	1.1	<0.5	---	---	---	---	---	---	---	---	---	---
M00-0098	ACW #12	11-May-00	1,590	7.88	989	470	100	18.5	0.47	1.2	0.15	---	---	---	---	---	---	---	---	---	---
M00-0197	ACW #12	07-Aug-00	1,800	7.63	1,270	460	110	25.4	0.47	1.1	0.087	---	---	---	---	---	---	---	---	---	---
M00-0240	ACW #12	03-Nov-00	2,520	7.5	1,780	890	130	19.2	<20	1.1	0.30	---	---	<0.1	0.14	0.29	<0.01	200	<0.01	---	0.0059
M01-0011	ACW #12	20-Feb-01	2,230	7.44 Hr	1,210	670	140	21.5	0.74	0.88	0.28	---	---	---	---	---	---	---	---	---	---
M01-0145	ACW #12	03-May-01	2,100	7.4	1,060	570	110 D2	22.2	1.4	1.00	<1	---	---	---	---	---	---	---	---	---	---
M01-0146	ACW #12D	03-May-01	2,120	7.44	1,150	510	110 D2	22.5	1.3	0.97	<1	---	---	---	---	---	---	---	---	---	---
M01-0405	ACW #12	01-Aug-01	2,080	7.34	1,290	490	120	24.6	<2	0.97	<1	---	---	---	---	---	---	---	---	---	---
M01-0486	ACW #12	25-Oct-01	1,890	7.43 H3	1,220	1400	110	19.7	<2	1.10	<0.5	---	<0.05	<0.1	0.11	0.25	<0.005	160	<0.01	<0.01	<0.005
ACW #13	ACW #13	20-Feb-97	681	---	440	53	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #13	ACW #13	08-May-97	643	---	460	57	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #13D	ACW #13D	08-May-97	630	---	460	52	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #13	ACW #13	20-Aug-97	654	8.3	440	55	96	---	0.4	1.3	0.99	---	---	---	---	---	---	---	---	---	<0.01
ACW #13	ACW #13	23-Oct-97	728	8.3	400	50	95	---	0.4	1.3	1	---	---	---	---	---	---	---	---	---	<0.01
S98-0060	ACW #13	24-Feb-98	727	8.4	450	59	100	---	0.5	1.6	1.2	---	---	---	---	---	---	---	---	---	---

Table 2: SUMMARY OF LABORATORY ANALYSES OF GROUNDWATER SAMPLES,
JAL #4 PLANT, EL PASO CORPORATION, LEA COUNTY, NEW MEXICO

LABORATORY SAMPLE NUMBER	SAMPLE DESCRIPTION	Sample Date	Iron, mg/l	Lead, mg/l	Magnesium, mg/l	Manganese, mg/l	Mercury, mg/l	Molybdenum, mg/l	Nickel, mg/l	Potassium, mg/l	Selenium	Silica, mg/l	Silver, mg/l	Sodium, mg/l	Uranium, mg/l	Zinc, mg/l	Alkalinity (as CaCO ₃), mg/l	Alkalinity - Bicarbonate, mg/l	Alkalinity - Carbonate, mg/l	Alkalinity - Hydroxide, mg/l	Hardness (as CaCO ₃), mg/l
M00-0227	ACW #11	01-Nov-00	1.1	<0.05	560	0.37	0.00028	---	---	33	<0.1	26	<0.02	4,440	---	<0.1	190	190	<25	<25	6,600
M01-0135	ACW #11	01-May-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0476	ACW #11	23-Oct-01	1.4	0.53	840	0.38	0.00049	<0.01	<0.04	57	<0.1	31	<0.01	9,500	0.068	<0.1	160	160	<25	<25	9,700
ACW #12	ACW #12	19-Feb-97	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #12D	ACW #12D	19-Feb-97	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #12	ACW #12	08-May-97	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #12	ACW #12	20-Aug-97	0.5	---	31	0.05	---	---	---	23	---	18	---	100	---	<0.02	130	---	---	---	---
ACW #12D	ACW #12D	20-Aug-97	0.4	---	34	0.05	---	---	---	22	---	19	---	100	---	<0.02	120	---	---	---	---
ACW #12	ACW #12	23-Oct-97	0.2	---	54	0.03	---	---	---	13	---	20	---	120	---	<0.02	160	---	---	---	---
S98-0058	ACW #12	24-Feb-98	---	---	60	---	---	---	---	10	---	21	---	120	---	---	160	---	---	---	---
S98-0059	ACW #12D	24-Feb-98	---	---	60	---	---	---	---	10	---	21	---	120	---	---	150	---	---	---	---
S98-0188	ACW #12	01-Jun-98	---	---	73	---	---	---	---	9	---	23	---	130	---	---	150	---	---	---	---
S98-0189	ACW #12D	01-Jun-98	---	---	71	---	---	---	---	9	---	22	---	130	---	---	150	---	---	---	---
S98-0294	ACW #12	11-Aug-98	---	---	62	---	---	---	---	9.8	---	21	---	130	---	---	140	<25	<25	<25	710
S98-0295	ACW #12D	11-Aug-98	---	---	61	---	---	---	---	9.7	---	24	---	130	---	---	160	<25	<25	<25	700
S98-0474	ACW #12	22-Oct-98	0.17	---	80	0.032	---	---	---	10	---	23	---	140	---	<0.05	150	<25	<25	<25	850
S98-0475	ACW #12D	22-Oct-98	0.17	---	72	0.029	---	---	---	10	---	24	---	130	---	<0.05	150	<25	<25	<25	810
S98-0083	ACW #12	23-Feb-99	---	---	73	---	---	---	---	8.8	---	25	---	160	---	---	160	<25	<25	<25	810
S99-0084	ACW #12D	23-Feb-99	---	---	68	---	---	---	---	8.5	---	26	---	160	---	---	160	<25	<25	<25	750
M99-0024	ACW #12	14-May-99	0.16	---	74	0.026	---	---	---	9.5	---	23	---	150	---	<0.05	150	<25	<25	<25	840
M99-0026	ACW #12D	14-May-99	0.16	---	73	0.025	---	---	---	9.0	---	26	---	140	---	<0.05	150	<25	<25	<25	810
M99-0087	ACW #12	11-Aug-99	---	---	96	---	---	---	---	9.0	---	29	---	160	---	---	140	<25	<25	<25	1100
M99-0088	ACW #12D	11-Aug-99	---	---	98	---	---	---	---	9.2	---	36	---	160	---	---	140	<25	<25	<25	1100
M99-0202	ACW #12	22-Oct-99	0.14	<0.005	0.77	0.024	<0.0002	0.0043	<0.02	8.4	---	21	<0.005	140	0.0088	<0.05	140	<25	<25	<25	860
M99-0204	ACW #12D	22-Oct-99	0.16	<0.005	79	0.024	<0.0002	<0.005	<0.02	8.7	---	20	<0.005	140	0.0086	<0.05	140	<25	<25	<25	890
M00-0024	ACW #12	22-Feb-00	---	---	71	---	---	---	---	9.2	---	22	---	130	---	---	130	<25	<25	<25	800
M00-0098	ACW #12	11-May-00	---	---	51	---	---	---	---	9.3	---	28	---	120	---	---	140	<25	<25	<25	590
M00-0197	ACW #12	07-Aug-00	---	---	45	---	---	---	---	10	---	33	---	110	---	---	140	<25	<25	<25	520
M00-0240	ACW #12	03-Nov-00	1.9	<0.05	71	0.053	<0.0002	---	---	16	<0.1	29	<0.02	280	---	<0.1	140	<25	<25	<25	800
M01-0011	ACW #12	20-Feb-01	---	---	68	---	---	---	---	11	---	31	---	170	---	---	150	<25	<25	<25	750
M01-0145	ACW #12	03-May-01	---	---	56	---	---	---	---	9.2	---	32	---	150	---	---	140	<25	<25	<25	630
M01-0146	ACW #12D	03-May-01	---	---	57	---	---	---	---	8.9	---	31	---	150	---	---	150	<25	<25	<25	630
M01-0405	ACW #12	01-Aug-01	---	---	64	---	---	---	---	9.6	---	28	---	140	---	---	140	<25	<25	<25	710
M01-0486	ACW #12	25-Oct-01	0.29	<0.05	56	0.032	<0.0002	<0.01	<0.04	9.3	<0.1	34	<0.02	120	0.011	<0.1	140	<25	<25	<25	630
ACW #13	ACW #13	20-Feb-97	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #13	ACW #13	08-May-97	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #13D	ACW #13D	08-May-97	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #13	ACW #13	20-Aug-97	0.3	---	14	0.02	---	---	---	10	---	20	---	79	---	<0.02	160	---	---	---	---
ACW #13	ACW #13	23-Oct-97	0.2	---	14	<0.01	---	---	---	15	---	21	---	84	---	<0.02	170	---	---	---	---
S98-0060	ACW #13	24-Feb-98	---	---	14	---	---	---	---	17	---	21	---	87	---	---	170	---	---	---	---

Table 2: SUMMARY OF LABORATORY ANALYSES OF GROUNDWATER SAMPLES,
JAL #4 PLANT, EL PASO CORPORATION, LEA COUNTY, NEW MEXICO

LABORATORY SAMPLE NUMBER	SAMPLE DESCRIPTION	Sample Date	Benzene, µg/l	Toluene, µg/l	Ethylbenzene, µg/l	Total Xylene, µg/l	MTBE, µg/l	Gasoline Range Organics, mg/l	Acenaphthene, µg/l	Acenaphthylene, µg/l	Anthracene, µg/l	Benzo(a)anthracene, µg/l	Benzo(b)fluoranthene, µg/l	Benzo(k)fluoranthene, µg/l	Benzo(g,h,i)perylene, µg/l	Benzo(a)pyrene, µg/l	Chrysene, µg/l	Dibenzo(a,h)anthracene, µg/l	Fluoranthene, µg/l	Fluorene, µg/l	Indeno(1,2,3-cd)pyrene, µg/l	Naphthalene, µg/l	Phenanthrene, µg/l	Pyrene, µg/l
S98-0190	ACW #13	01-Jun-98	<0.50	<0.50	<0.50	<1.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0296	ACW #13	11-Aug-98	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0476	ACW #13	22-Oct-98	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0085	ACW #13	23-Feb-99	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0027	ACW #13	14-May-99	<2	<2	<2	<2	---	<0.25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0089	ACW #13	11-Aug-99	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0205	ACW #13	22-Oct-99	<2	<2	<2	<4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0028	ACW #13	23-Feb-00	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0096	ACW #13	11-May-00	<5	<5	<5	<10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0198	ACW #13	08-Aug-00	<2	<2	<2	<4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0199	ACW #13D	08-Aug-00	<2	<2	<2	<4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0242	ACW #13	06-Nov-00	<2	<2	<2	<4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0013	ACW #13	20-Feb-01	<2	<2	<2	<4	<5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0159	ACW #13	07-May-01	<2	<2	<2	<2	<5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0406	ACW #13	01-Aug-01	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0407	ACW #13D	01-Aug-01	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0490	ACW #13	25-Oct-01	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #14	ACW #14	20-Feb-97	<0.5	<0.5	<0.5	<1.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #14	ACW #14	07-May-97	0.88	1.1	0.52	<1.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #14	ACW #14	20-Aug-97	<0.5	<0.5	<0.5	<1.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #14	ACW #14	22-Oct-97	<0.5	1.2	<0.5	1.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0173	ACW #14	24-Feb-98	<0.50	<0.50	<0.50	0.58J	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0184	ACW #14	13-May-98	0.75	<0.50	<0.50	<1.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0293	ACW #14	11-Aug-98	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0471	ACW #14	21-Oct-98	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0080	ACW #14	23-Feb-99	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0021	ACW #14	13-May-99	<2	<2	<2	<2	---	<0.25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0086	ACW #14	09-Aug-99	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0197	ACW #14	21-Oct-99	<2	<2	<2	<4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0023	ACW #14	22-Feb-00	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0093	ACW #14	10-May-00	<5	<5	<5	<10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0195	ACW #14	07-Aug-00	<2	<2	<2	<4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0230	ACW #14	01-Nov-00	<2	<2	<2	<4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0017	ACW #14	21-Feb-01	<2	<2	<2	<4	<5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0144	ACW #14	03-May-01	<2	<2	<2	<2	<5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0411	ACW #14	02-Aug-01	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0482	ACW #14	24-Oct-01	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0206	ACW #15	23-Oct-99	3.2	5.3	<2	<4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0026	ACW #15	23-Feb-00	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0027	ACW #15D	23-Feb-00	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Table 2: SUMMARY OF LABORATORY ANALYSES OF GROUNDWATER SAMPLES,
JAL #4 PLANT, EL PASO CORPORATION, LEA COUNTY, NEW MEXICO

LABORATORY SAMPLE NUMBER	SAMPLE DESCRIPTION	Sample Date	Specific Conductance, umho/cm	pH, s.u.	Total Dissolved Solids, mg/L	Chloride, mg/l	Sulfate, mg/l	pH Temperature °C	Bromide, mg/l	Fluoride, mg/l	Nitrate-N, mg/l	Nitrate as NO ₃ , mg/l	Aluminum, mg/l	Arsenic, mg/l	Barium, mg/l	Boron, mg/l	Cadmium, mg/l	Calcium, mg/l	Chromium, mg/l	Cobalt, mg/l	Copper, mg/l
S98-0190	ACW #13	01-Jun-98	700	8.0	450	---	---	---	---	---	1.2	---	---	---	---	---	---	40	---	---	---
S98-0296	ACW #13	11-Aug-98	679	7.93	467	48	110	19.7	<5	1.6	3.3	---	---	---	---	---	---	43	---	---	---
S98-0476	ACW #13	22-Oct-98	686	7.94	439	47	92	19.9	<5	1.3	1.3	---	---	---	---	0.23	---	48	---	---	<0.0025
S99-0085	ACW #13	23-Feb-99	792	8.18	493	74	93	12.6	0.3	1.5	0.74	---	---	---	---	---	---	44	---	---	---
M99-0027	ACW #13	14-May-99	693	7.96	403	45	96	24.1	0.4	1.3	1.4	---	---	---	---	0.25	---	46	---	---	0.0062
M99-0089	ACW #13	11-Aug-99	676	7.95	359	41	97	21.9	1.2	1.4	1.4	---	---	---	---	---	---	49	---	---	---
M99-0205	ACW #13	22-Oct-99	674	7.98	436	48	93	20.0	0.36	1.4	1.3	---	0.11	0.013	0.057	0.23	<0.002	49	0.0055	<0.005	<0.0025
M00-0028	ACW #13	23-Feb-00	697	7.84	479	53	98	16.9	<1.0	1.5	1.4	---	---	---	---	---	---	44	---	---	---
M00-0096	ACW #13	11-May-00	697	8.00	459	47	120	18.2	0.33	1.3	1.5	---	---	---	---	---	---	48	---	---	---
M00-0198	ACW #13	08-Aug-00	676	7.90	363	41	100	25.6	0.31	1.3	1.2	---	---	---	---	---	---	49	---	---	---
M00-0199	ACW #13D	08-Aug-00	662	7.94	381	44	95	25.7	0.30	1.4	1.2	---	---	---	---	---	---	50	---	---	---
M00-0242	ACW #13	06-Nov-00	1,330	7.7	947	360	110	16.7	<2	1.4	1.0	---	---	<0.1	0.061	0.26	<0.01	55	<0.01	---	<0.005
M01-0013	ACW #13	20-Feb-01	893	7.81 Hr	518	110	90	21.6	0.39	1.3	1.4	---	---	---	---	---	---	48	---	---	---
M01-0159	ACW #13	07-May-01	685	7.79 Hr	444	57	110 D2	26.6	0.34	1.3	1.5	---	---	---	---	---	---	47	---	---	---
M01-0406	ACW #13	01-Aug-01	694	7.73	402	42	98	23.3	<2	1.4	1.6	---	---	---	---	---	---	46	---	---	---
M01-0407	ACW #13D	01-Aug-01	690	7.73	439	45	98	23.6	<2	1.3	1.6	---	---	---	---	---	---	42	---	---	---
M01-0490	ACW #13	25-Oct-01	690	7.75	422	42	96	20.0	<1	1.4	1.5	---	<0.05	<0.1	0.046	0.22	<0.005	45	<0.01	<0.01	<0.005
ACW #14	ACW #14	20-Feb-97	830	---	570	86	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #14	ACW #14	07-May-97	746	---	480	72	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #14	ACW #14	20-Aug-97	691	7.8	460	80	82	---	0.4	1.6	0.94	---	---	---	---	0.2	---	45	---	---	<0.01
ACW #14	ACW #14	22-Oct-97	747	8.1	440	71	95	---	0.5	1.5	0.9	---	---	---	---	0.2	---	46	---	---	<0.01
S98-0173	ACW #14	24-Feb-98	755	8.2	470	40	130	---	0.5	2	1.8	---	---	---	---	---	---	46	---	---	---
S98-0184	ACW #14	13-May-98	880	7.9	530	58	110	---	<2	1.7	1.7	---	---	---	---	---	---	47	---	---	---
S98-0293	ACW #14	11-Aug-98	730	7.76	496	160	110	19.2	<5	1.9	2.5	---	---	---	---	---	---	48	---	---	---
S98-0471	ACW #14	21-Oct-98	771	7.70	466	71	100	20.2	<2	1.9	1.7	---	---	---	---	0.25	---	52	---	---	0.0026
S99-0080	ACW #14	23-Feb-99	859	7.92	524	88	92	12.2	0.3	1.8	1.9	---	---	---	---	---	---	47	---	---	---
M99-0021	ACW #14	13-May-99	764	7.89	500	62	100	23.5	0.4	1.6	2.0	---	---	---	---	0.27	---	49	---	---	0.016
M99-0086	ACW #14	09-Aug-99	791	7.80	471	58	120	21.3	0.3	1.6	1.8	---	---	---	---	---	---	52	---	---	---
M99-0197	ACW #14	21-Oct-99	753	7.79	469	68	100	20.4	0.37	1.8	2.0	---	0.078	0.013	0.046	0.24	<0.002	48	<0.005	<0.005	<0.0025
M00-0023	ACW #14	22-Feb-00	738	7.65	499	53	97	16.1	<1.0	1.6	2.0	---	---	---	---	---	---	62	---	---	---
M00-0093	ACW #14	10-May-00	761	7.66	485	61	110	21.2	0.38	1.5	1.8	---	---	---	---	---	---	51	---	---	---
M00-0195	ACW #14	07-Aug-00	750	7.69	439	65	110	25.4	0.27	1.5	1.8	---	---	---	---	---	---	50	---	---	---
M00-0230	ACW #14	01-Nov-00	1,630	7.78	1,090	420	120	17.1	<2	1.6	1.4	---	---	<0.1	0.068	0.30	<0.01	65	<0.01	---	<0.005
M01-0017	ACW #14	21-Feb-01	883	7.78 Hr	517	100	100	21.7	<2	1.6	2.1	---	---	---	---	---	---	47	---	---	---
M01-0144	ACW #14	03-May-01	809	7.66	499	89	100 D2	22.7	1	1.6	3.7	---	---	---	---	---	---	54	---	---	---
M01-0411	ACW #14	02-Aug-01	771	7.90	476	70	110	22.8	0.42	1.6	1.9	---	---	---	---	---	---	45	---	---	---
M01-0482	ACW #14	24-Oct-01	761	7.63	449	71	100	20.0	<2	1.8	1.8	---	<0.05	<0.1	0.041	0.22	<0.005	46	<0.01	<0.01	<0.005
M99-0206	ACW #15	23-Oct-99	1,010	8.24	587	180	87	21.2	<2	1.6	0.81	---	0.79	0.0089	0.11	0.21	<0.002	66	0.022	<0.005	0.0039
M00-0026	ACW #15	23-Feb-00	665	7.71	402	42	84	16.6	<1.0	1.4	1.2	---	---	---	---	---	---	62	---	---	---
M00-0027	ACW #15D	23-Feb-00	660	7.71	394	42	92	16.6	<2.0	1.5	1.1	---	---	---	---	---	---	58	---	---	---

Table 2: SUMMARY OF LABORATORY ANALYSES OF GROUNDWATER SAMPLES,
JAL #4 PLANT, EL PASO CORPORATION, LEA COUNTY, NEW MEXICO

LABORATORY SAMPLE NUMBER	SAMPLE DESCRIPTION	Sample Date	Iron, mg/l	Lead, mg/l	Magnesium, mg/l	Manganese, mg/l	Mercury, mg/l	Molybdenum, mg/l	Nickel, mg/l	Potassium, mg/l	Selenium	Silica, mg/l	Silver, mg/l	Sodium, mg/l	Uranium, mg/l	Zinc, mg/l	Alkalinity (as CaCO ₃), mg/l	Alkalinity - Bicarbonate, mg/l	Alkalinity - Carbonate, mg/l	Alkalinity - Hydroxide, mg/l	Hardness (as CaCO ₃), mg/l
S98-0190	ACW #13	01-Jun-98	---	---	14	---	---	---	---	10	---	21	---	85	---	---	170	170	---	---	---
S98-0296	ACW #13	11-Aug-98	---	---	14	---	---	---	---	9.4	---	15	---	85	---	---	170	170	<25	<25	170
S98-0476	ACW #13	22-Oct-98	0.37	---	16	0.017	---	---	---	7.5	---	23	---	87	---	<0.05	170	170	<25	<25	190
S99-0085	ACW #13	23-Feb-99	---	---	15	---	---	---	---	7.0	---	23	---	110	---	---	180	180	<25	<25	170
M99-0027	ACW #13	14-May-99	0.17	---	15	0.0084	---	---	---	5.3	---	28	---	86	---	<0.05	170	170	<25	<25	180
M99-0029	ACW #13	11-Aug-99	---	---	16	---	---	---	---	5.0	---	26	---	86	---	---	170	170	<25	<25	190
M99-0205	ACW #13	22-Oct-99	0.23	<0.005	15	0.018	<0.0002	0.0044	<0.02	5.9	---	19	<0.005	89	<0.005	<0.05	160	160	<25	<25	190
M00-0028	ACW #13	23-Feb-00	---	---	14	---	---	---	---	6.3	---	14	---	82	---	---	160	160	<25	<25	170
M00-0036	ACW #13	11-May-00	---	---	16	---	---	---	---	6.6	---	30	---	88	---	---	170	170	<25	<25	190
M00-0198	ACW #13	08-Aug-00	---	---	15	---	---	---	---	5.8	---	<2.0	---	82	---	---	160	160	<25	<25	180
M00-0199	ACW #13D	08-Aug-00	---	---	16	---	---	---	---	6.0	---	37	---	84	---	---	160	160	<25	<25	180
M00-0242	ACW #13	06-Nov-00	0.34	<0.05	19	0.024	<0.0002	---	---	11	<0.1	29	<0.02	210	---	<0.1	170	170	<25	<25	220
M01-0013	ACW #13	20-Feb-01	---	---	16	---	---	---	---	7.5	---	34	---	130	---	---	160	160	<25	<25	190
M01-0159	ACW #13	07-May-01	---	---	6	---	---	---	---	4.6	---	33	---	88	---	---	180	180	<25	<25	180
M01-0406	ACW #13	01-Aug-01	---	---	16	---	---	---	---	6.1	---	29	---	86	---	---	170	170	<25	<25	180
M01-0407	ACW #13D	01-Aug-01	---	---	14	---	---	---	---	6	---	30	---	80	---	---	160	160	<25	<25	160
M01-0490	ACW #13	25-Oct-01	0.17	<0.05	15	0.02	<0.0002	<0.01	<0.04	6	<0.1	34	<0.02	78	<0.005	<0.1	170	170	<25	<25	170
ACW #14	ACW #14	20-Feb-97	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #14	ACW #14	07-May-97	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ACW #14	ACW #14	20-Aug-97	0.5	---	15	0.03	---	---	---	5	---	20	---	81	---	0.03	150	---	---	---	---
ACW #14	ACW #14	22-Oct-97	0.3	---	16	0.01	---	---	---	5	---	20	---	81	---	<0.02	180	---	---	---	---
S98-0173	ACW #14	24-Feb-98	---	---	16	---	---	---	---	5	---	22	---	87	---	---	180	---	---	---	---
S98-0184	ACW #14	13-May-98	---	---	18	---	---	---	---	6	---	24	---	97	---	---	170	170	---	---	---
S98-0293	ACW #14	11-Aug-98	---	---	16	---	---	---	---	5.5	---	25	---	90	---	---	170	170	<25	<25	190
S98-0471	ACW #14	21-Oct-98	0.20	---	19	0.014	---	---	---	6.2	---	25	---	97	---	<0.05	170	170	<25	<25	210
S99-0080	ACW #14	23-Feb-99	---	---	17	---	---	---	---	6.0	---	25	---	110	---	---	180	180	<25	<25	190
M99-0021	ACW #14	13-May-99	0.17	---	18	0.011	---	---	---	5.7	---	28	---	95	---	<0.05	170	170	<25	<25	200
M99-0086	ACW #14	09-Aug-99	---	---	19	---	---	---	---	5.3	---	24	---	91	---	---	170	170	<25	<25	210
M99-0197	ACW #14	21-Oct-99	0.21	<0.005	18	0.012	<0.0002	<0.005	<0.02	5.8	---	21	<0.005	98	0.0062	<0.05	170	170	<25	<25	200
M00-0023	ACW #14	22-Feb-00	---	---	22	---	---	---	---	5.4	---	46	---	97	---	---	160	160	<25	<25	250
M00-0093	ACW #14	10-May-00	---	---	19	---	---	---	---	6.6	---	34	---	110	---	---	170	170	<25	<25	200
M00-0195	ACW #14	07-Aug-00	---	---	18	---	---	---	---	6.0	---	39	---	95	---	---	170	170	<25	<25	200
M00-0230	ACW #14	01-Nov-00	0.27	<0.05	23	0.037	<0.0002	---	---	14	<0.1	25	<0.02	300	---	<0.1	170	170	<25	<25	260
M01-0017	ACW #14	21-Feb-01	---	---	18	---	---	---	---	7.2	---	33	---	110	---	---	170	170	<25	<25	190
M01-0144	ACW #14	03-May-01	---	---	20	---	---	---	---	6.8	---	35	---	100	---	---	160	160	<25	<25	220
M01-0411	ACW #14	02-Aug-01	---	---	17	---	---	---	---	5.8	---	35	---	89	---	---	160	160	<25	<25	180
M01-0482	ACW #14	24-Oct-01	0.26	<0.05	16	0.012	<0.0002	<0.01	<0.04	6.0	<0.1	34	<0.02	82	0.0085	<0.1	160	160	<25	<25	190
M99-0206	ACW #15	23-Oct-99	0.75	<0.005	20	0.051	<0.0002	0.040	<0.02	28	---	30	<0.005	130	<0.000	0.096	130	130	<25	<25	250
M00-0026	ACW #15	23-Feb-00	---	---	15	---	---	---	---	5.7	---	27	---	81	---	---	170	170	<25	<25	220
M00-0027	ACW #15D	23-Feb-00	---	---	15	---	---	---	---	5.8	---	24	---	82	---	---	180	180	<25	<25	210

**Table 2: SUMMARY OF LABORATORY ANALYSES OF GROUNDWATER SAMPLES,
JAL #4 PLANT, EL PASO CORPORATION, LEA COUNTY, NEW MEXICO**

LABORATORY SAMPLE NUMBER	SAMPLE DESCRIPTION	Sample Date	Benzene, ug/l	Toluene, ug/l	Ethylbenzene, ug/l	Total Xylene, ug/l	MTBE, ug/l	Gasoline Range Organics, mg/l	Acenaphthene, ug/l	Acenaphthylene, ug/l	Anthracene, ug/l	Benz(a)anthracene, ug/l	Benz(b)fluoranthene, ug/l	Benz(k)fluoranthene, ug/l	Benz(g,h,i)perylene, ug/l	Benz(a)pyrene, ug/l	Chrysene, ug/l	Dibenzo(a,h)anthracene, ug/l	Fluoranthene, ug/l	Fluorene, ug/l	Indeno(1,2,3-cd)pyrene, ug/l	Naphthalene, ug/l	Phenanthrene, ug/l	Pyrene, ug/l
M00-0095	ACW #15	11-May-00	<5	<5	<5	<10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0200	ACW #15	08-Aug-00	<2	<2	<2	<4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0236	ACW #15	02-Nov-00	<5	<5	<5	<10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0014	ACW #15	20-Feb-01	<2	<2	<2	<4	<5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0015	ACW #15D	20-Feb-01	<2	<2	<2	<4	<5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0160	ACW #15	07-May-01	<2	<2	<2	<2	<5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0161	ACW #15D	07-May-01	<2	<2	<2	<2	<5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0410	ACW #15	02-Aug-01	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0489	ACW #15	25-Oct-01	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0241	RW #1	03-Nov-00	130	40	73	120	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0239	RW #2	03-Nov-00	<5	<5	<5	<10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0485	RW #2	25-Oct-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ENSR #1	ENSR #1	07-May-97	7.3	3.7	2.4	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ENSR #1	ENSR #1	21-Oct-97	13	6.3	4.2	5.6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0172	ENSR #1	12-May-98	13	4.6	4.0	4.4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0457	ENSR #1	20-Oct-98	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0004	ENSR #1	11-May-99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0188	ENSR #1	20-Oct-99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0082	ENSR #1	09-May-00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0220	ENSR #1	27-Oct-00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0221	ENSR #1D	27-Oct-00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0141	ENSR #1	02-May-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0470	ENSR #1	23-Oct-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0471	ENSR #1D	23-Oct-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ENSR #2	ENSR #2	06-May-97	250	230	110	190	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ENSR #2	ENSR #2	20-Oct-97	130	160	77	120	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0169	ENSR #2	12-May-98	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0453	ENSR #2	19-Oct-98	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0009	ENSR #2	11-May-99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0183	ENSR #2	19-Oct-99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0080	ENSR #2	09-May-00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0495	ENSR #2	29-Oct-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ENSR #3	ENSR #3	07-May-97	7.6	3.3	2.9	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ENSR #3D	ENSR #3D	07-May-97	6.8	3.1	2.8	2.9	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ENSR #3	ENSR #3	21-Oct-97	5	2.5	3	4.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0175	ENSR #3	12-May-98	9.5	3.4	1.9	2.7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0176	ENSR #3D	12-May-98	14	4.4	2.3	4.4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0461	ENSR #3	20-Oct-98	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0462	ENSR #3D	20-Oct-98	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0006	ENSR #3	11-May-99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Table 2: SUMMARY OF LABORATORY ANALYSES OF GROUNDWATER SAMPLES,
JAL #4 PLANT, EL PASO CORPORATION, LEA COUNTY, NEW MEXICO

LABORATORY SAMPLE NUMBER	SAMPLE DESCRIPTION	Sample Date	Specific Conductance, umho/cm	pH, s.u.	Total Dissolved Solids, mg/L	Chloride, mg/l	Sulfate, mg/l	pH Temperature °C	Bromide, mg/l	Fluoride, mg/l	Nitrate-N, mg/l	Nitrate as NO ₃ , mg/l	Aluminum, mg/l	Arsenic, mg/l	Barium, mg/l	Boron, mg/l	Cadmium, mg/l	Calcium, mg/l	Chromium, mg/l	Cobalt, mg/l	Copper, mg/l
M00-0095	ACW #15	11-May-00	654	7.95	431	49	91	18.4	0.34	1.4	0.86							47			
M00-0200	ACW #15	08-Aug-00	605	7.94	340	35	84	25.6	0.25	1.4	0.91							45			
M00-0236	ACW #15	02-Nov-00	1,380	7.8	876	360	100	18.4	<20	1.4	0.93						<0.01	53	<0.01		<0.005
M01-0014	ACW #15	20-Feb-01	725	7.89 Hr	423	64	78	21.5	0.33	1.3	1							40			
M01-0015	ACW #15D	20-Feb-01	727	7.87 Hr	413	65	81	21.7	0.34	1.3	1							38			
M01-0160	ACW #15	07-May-01	629	7.81 Hr	416	52	84 D2	26.0	0.28	1.3	0.99							42			
M01-0161	ACW #15D	07-May-01	628	7.84 Hr	396	46	80 D2	25.8	0.31	1.3	1							42			
M01-0410	ACW #15	02-Aug-01	627	8.03	397	82	75	22.9	0.39	1.3	0.98							38			
M01-0489	ACW #15	25-Oct-01	627	7.86	393	56	85	19.9	<1	1.4	1		<0.05	<0.1	0.042	0.22	<0.005	37	<0.01	<0.01	<0.005
M00-0241	RW #1	03-Nov-00	62,000	8.3	43,900	32,000	790	19.3	<200	6.0	0.10							760	<0.05		<0.025
M00-0239	RW #2	03-Nov-00	7,340	6.8	5,660	2,800	240	19.3	<20	0.44	0.11							610	0.012		<0.005
M01-0485	RW #2	25-Oct-01	8,380		5,050	2,400															
ENSR #1	ENSR #1	07-May-97	8,620		5,200	3,200															
ENSR #1	ENSR #1	21-Oct-97	13,800		7,600	4,400															
S98-0172	ENSR #1	12-May-98	12,000		6,700	3,600															
S98-0457	ENSR #1	20-Oct-98	12,400		7,590	4,200															
M99-0004	ENSR #1	11-May-99	14,700		8,450	5,500															
M99-0188	ENSR #1	20-Oct-99	12,400		6,290	4,100															
M00-0082	ENSR #1	09-May-00	12,800		7,420	6,200															
M00-0220	ENSR #1	27-Oct-00	10,200		6,690	3,800															
M00-0221	ENSR #1D	27-Oct-00	10,600		7,140	4,000															
M01-0141	ENSR #1	02-May-01	19,200		10,200	7,600															
M01-0470	ENSR #1	23-Oct-01	15,300		8,050	5,100															
M01-0471	ENSR #1D	23-Oct-01	11,400		6,070	3,600															
ENSR #2	ENSR #2	06-May-97	50,000		27,000	17,000															
ENSR #2	ENSR #2	20-Oct-97	57,900		30,000	17,000															
S98-0169	ENSR #2	12-May-98	38,000		21,000	13,000															
S98-0453	ENSR #2	19-Oct-98	44,800		30,000	18,000															
M99-0009	ENSR #2	11-May-99	49,100		31,200	18,000															
M99-0183	ENSR #2	19-Oct-99	28,900		16,600	9,400															
M00-0080	ENSR #2	09-May-00	42,900		26,700	18,000															
M01-0495	ENSR #2	29-Oct-01	42,000		25,100	13,000															
ENSR #3	ENSR #3	07-May-97	2,050		1,500	650															
ENSR #3D	ENSR #3D	07-May-97	1,990		1,400	480															
ENSR #3	ENSR #3	21-Oct-97	2,230		1,300	580															
S98-0175	ENSR #3	12-May-98	2,400		1,400	610															
S98-0176	ENSR #3D	12-May-98	2,200		1,300	550															
S98-0461	ENSR #3	20-Oct-98	2,260		1,580	590															
S98-0462	ENSR #3D	20-Oct-98	2,240		1,290	540															
M99-0006	ENSR #3	11-May-99	2,490		1,370	500															

Table 2: SUMMARY OF LABORATORY ANALYSES OF GROUNDWATER SAMPLES,
JAL #4 PLANT, EL PASO CORPORATION, LEA COUNTY, NEW MEXICO

LABORATORY SAMPLE NUMBER	SAMPLE DESCRIPTION	Sample Date	Iron, mg/l	Lead, mg/l	Magnesium, mg/l	Manganese, mg/l	Mercury, mg/l	Molybdenum, mg/l	Nickel, mg/l	Potassium, mg/l	Selenium	Silica, mg/l	Silver, mg/l	Sodium, mg/l	Uranium, mg/l	Zinc, mg/l	Alkalinity (as CaCO ₃), mg/l	Alkalinity - Bicarbonate, mg/l	Alkalinity - Carbonate, mg/l	Alkalinity - Hydroxide, mg/l	Hardness (as CaCO ₃), mg/l
M00-0095	ACW #15	11-May-00	---	---	14	---	---	---	---	4.9	---	29	---	76	---	---	170	170	<25	<25	170
M00-0200	ACW #15	08-Aug-00	---	---	14	---	---	---	---	9.1	---	34	---	77	---	---	170	170	<25	<25	160
M00-0236	ACW #15	02-Nov-00	---	---	18	0.026	<0.0002	---	---	16	<0.1	27	<0.02	250	---	<0.1	180	180	<25	<25	210
M01-0014	ACW #15	20-Feb-01	---	---	14	---	---	---	---	8.6	---	31	---	100	---	---	160	160	<25	<25	160
M01-0015	ACW #15D	20-Feb-01	---	---	13	---	---	---	---	7.5	---	31	---	96	---	---	180	180	<25	<25	150
M01-0160	ACW #15	07-May-01	---	---	14	---	---	---	---	5.8	---	32	---	80	---	---	180	180	<25	<25	160
M01-0161	ACW #15D	07-May-01	---	---	14	---	---	---	---	6.2	---	32	---	81	---	---	180	180	<25	<25	160
M01-0410	ACW #15	02-Aug-01	---	---	13	---	---	---	---	9.2	---	35	---	76	---	---	170	170	<25	<25	150
M01-0489	ACW #15	25-Oct-01	0.17	<0.05	13	0.0073	0.0003	<0.01	<0.04	72	<0.1	34	<0.02	72	<0.005	<0.1	170	170	<25	<25	150
M00-0241	RW #1	03-Nov-00	<0.5	<0.25	330	2.5	0.0029	---	---	100	<0.5	19	<0.1	22,000	---	<0.5	1,500	1,500	25	<25	3,200
M00-0239	RW #2	03-Nov-00	0.12	<0.05	190	0.83	<0.0002	---	---	15	<0.1	39	<0.02	680	---	<0.1	470	470	<25	<25	2,300
M01-0485	RW #2	25-Oct-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ENSR #1	ENSR #1	07-May-97	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ENSR #1	ENSR #1	21-Oct-97	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0172	ENSR #1	12-May-98	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0457	ENSR #1	20-Oct-98	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0004	ENSR #1	11-May-99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0188	ENSR #1	20-Oct-99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0082	ENSR #1	09-May-00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0220	ENSR #1	27-Oct-00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0221	ENSR #1D	27-Oct-00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0141	ENSR #1	02-May-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0470	ENSR #1	23-Oct-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0471	ENSR #1D	23-Oct-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ENSR #2	ENSR #2	06-May-97	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ENSR #2	ENSR #2	20-Oct-97	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0169	ENSR #2	12-May-98	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0453	ENSR #2	19-Oct-98	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0009	ENSR #2	11-May-99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0183	ENSR #2	19-Oct-99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0080	ENSR #2	09-May-00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0495	ENSR #2	29-Oct-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ENSR #3	ENSR #3	07-May-97	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ENSR #3D	ENSR #3D	07-May-97	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
ENSR #3	ENSR #3	21-Oct-97	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0175	ENSR #3	12-May-98	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0176	ENSR #3D	12-May-98	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0461	ENSR #3	20-Oct-98	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0462	ENSR #3D	20-Oct-98	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0006	ENSR #3	11-May-99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

**Table 2: SUMMARY OF LABORATORY ANALYSES OF GROUNDWATER SAMPLES,
JAL #4 PLANT, EL PASO CORPORATION, LEA COUNTY, NEW MEXICO**

LABORATORY SAMPLE NUMBER	SAMPLE DESCRIPTION	Sample Date	Benzene, ug/l	Toluene, ug/l	Ethylbenzene, ug/l	Total Xylene, ug/l	MTBE, ug/l	Gasoline Range Organics, mg/l	Acenaphthene, ug/l	Acenaphthylene, ug/l	Anthracene, ug/l	Benz(a)anthracene, ug/l	Benz(b)fluoranthene, ug/l	Benz(k)fluoranthene, ug/l	Benz(g,h,i)perylene, ug/l	Benzo(a)pyrene, ug/l	Chrysene, ug/l	Dibenzo(a,h)anthracene, ug/l	Fluoranthene, ug/l	Fluorene, ug/l	Indeno(1,2,3-cd)pyrene, ug/l	Naphthalene, ug/l	Phenanthrene, ug/l	Pyrene, ug/l
M99-0007	ENSR #3D	11-May-99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0189	ENSR #3	20-Oct-99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0190	ENSR #3D	20-Oct-99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M00-0083	ENSR #3	09-May-00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M00-0084	ENSR #3D	09-May-00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M00-0222	ENSR #3	27-Oct-00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M01-0138	ENSR #3	02-May-01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M01-0139	ENSR #3D	02-May-01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M01-0472	ENSR #3	23-Oct-01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0063	Oxy Production Well	24-Feb-98	<0.50	<0.50	<0.50	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0186	Oxy Production Well	13-May-98	<0.50	<0.50	<0.50	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0299	Oxy Production Well	11-Aug-98	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0465	Oxy Production Well	20-Oct-98	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S99-0082	Oxy Production Well	23-Feb-99	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0025	Oxy Production Well	13-May-99	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0093	Oxy Production Well	11-Aug-99	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0203	Oxy Production Well	22-Oct-99	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M00-0025	Oxy Production Well	23-Feb-00	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M00-0097	Oxy Production Well	11-May-00	<5	<5	<5	<10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M00-0196	Oxy Production Well	07-Aug-00	<2	<2	<2	<4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M00-0235	Oxy Production Well	02-Nov-00	<2	<2	<2	<4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M01-0016	Oxy Production Well	20-Feb-01	<2	<2	<2	<4	<5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M01-0165	Oxy Production Well	07-May-01	<2	<2	<2	<2	<5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M01-0408	Oxy Production Well	01-Aug-01	<2	<2	<2	<2	<5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M01-0488	Oxy Production Well	25-Oct-01	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Production Well #1	Production Well #1	08-May-97	0.56	0.55	<0.5	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Production Well #1	Production Well #1	23-Oct-97	<0.5	<0.5	<0.5	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0193	Production Well #1	14-May-98	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0194	Production Well #1D	14-May-98	<0.50	<0.50	<0.50	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0479	Production Well #1	22-Oct-98	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0030	Production Well #1	14-May-99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0210	Production Well #1	23-Oct-99	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M00-0224	Production Well #1	27-Oct-00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M01-0496	Production Well #1	29-Oct-01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0057	Production Well Dooms	24-Feb-98	<0.50	<0.50	<0.50	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0180	Production Well Dooms	13-May-98	<0.50	<0.50	<0.50	<1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0292	Production Well Dooms	10-Aug-98	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S98-0484	Production Well Dooms	20-Oct-98	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S99-0081	Production Well Dooms	23-Feb-99	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
M99-0018	Production Well Dooms	13-May-99	<2	<2	<2	<2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Table 2: SUMMARY OF LABORATORY ANALYSES OF GROUNDWATER SAMPLES,
JAL #4 PLANT, EL PASO CORPORATION, LEA COUNTY, NEW MEXICO

LABORATORY SAMPLE NUMBER	SAMPLE DESCRIPTION	Sample Date	Specific Conductance, umho/cm	pH, s.u.	Total Dissolved Solids, mg/L	Chloride, mg/l	Sulfate, mg/l	pH Temperature °C	Bromide, mg/l	Fluoride, mg/l	Nitrate-N, mg/l	Nitrate as NO ₃ , mg/l	Aluminum, mg/l	Arsenic, mg/l	Barium, mg/l	Boron, mg/l	Cadmium, mg/l	Calcium, mg/l	Chromium, mg/l	Cobalt, mg/l	Copper, mg/l
M99-0007	ENSR #3D	11-May-99	2,480	---	1,380	510	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0189	ENSR #3	20-Oct-99	2,390	---	1,630	600	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0190	ENSR #3D	20-Oct-99	2,390	---	1,560	590	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0083	ENSR #3	09-May-00	2,360	---	1,580	710	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0084	ENSR #3D	09-May-00	2,410	---	1,580	710	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0222	ENSR #3	27-Oct-00	2,410	---	1,870	640	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0138	ENSR #3	02-May-01	2,480	---	1,240	510	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0139	ENSR #3D	02-May-01	2,490	---	1,270	680	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0472	ENSR #3	23-Oct-01	2,480	---	1,300	620	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0063	Oxy Production Well	24-Feb-98	802	8.1	480	120	68	---	0.7	1.3	0.9	---	---	---	---	---	---	60	---	---	---
S98-0196	Oxy Production Well	13-May-98	800	7.8	480	120	61	---	<2	1.1	0.93	---	---	---	---	---	---	66	---	---	---
S98-0299	Oxy Production Well	11-Aug-98	762	7.78	604	120	58	20.2	<1	<0.4	.85/<0.0	3.7	---	---	---	---	---	72	---	---	---
S98-0465	Oxy Production Well	20-Oct-98	734	7.79	488	100	55	17.3	<2	1.1	0.76	---	---	---	---	---	---	---	---	---	---
S98-0082	Oxy Production Well	23-Feb-99	810	7.99	407	120	45	14.5	0.5	1.0	0.71	---	---	---	---	---	---	80	---	---	---
M99-0025	Oxy Production Well	13-May-99	808	7.91	468	120	59	23.6	0.6	0.96	0.27	---	---	---	---	0.20	---	74	---	---	<0.0025
M99-0093	Oxy Production Well	11-Aug-99	831	7.67	466	140	59	20.5	0.5	1.0	0.78	---	---	---	---	---	---	75	---	---	---
M99-0203	Oxy Production Well	22-Oct-99	788	7.86	490	130	56	19.2	0.53	1.0	0.41	---	<0.025	0.011	0.10	0.18	---	72	<0.005	<0.005	0.022
M00-0025	Oxy Production Well	23-Feb-00	630	7.85	392	38	77	17.6	<1.0	1.1	1.2	---	---	---	---	---	---	48	---	---	---
M00-0097	Oxy Production Well	11-May-00	835	7.96	504	120	63	19.6	0.50	0.99	0.84	---	---	---	---	---	---	71	---	---	---
M00-0196	Oxy Production Well	07-Aug-00	802	7.96	433	120	59	25.9	0.44	0.99	0.71	---	---	---	---	---	---	74	---	---	---
M00-0235	Oxy Production Well	02-Nov-00	662	7.8	475	120	60	18.6	<2	1.1	0.70	---	---	<0.1	0.095	0.21	<0.01	76	<0.01	---	<0.005
M01-0016	Oxy Production Well	20-Feb-01	805	7.83 Hr	442	130	52	22.6	0.57	0.99	0.70	---	---	---	---	---	---	67	---	---	---
M01-0165	Oxy Production Well	07-May-01	781	7.7 Hr	481	140	58 D2	24.9	0.61	1.0	0.82	---	---	---	---	---	---	69	---	---	---
M01-0408	Oxy Production Well	01-Aug-01	807	7.7	532	120	57	22.5	<2	1	1	---	---	---	---	---	---	68	---	---	---
M01-0488	Oxy Production Well	25-Oct-01	822	7.69	500	120	62	20.3	1.1	1.1	0.9	---	<0.05	<0.1	0.095	0.18	<0.005	67	<0.01	<0.01	<0.005
Production Well #1	Production Well #1	08-May-97	718	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Production Well #1	Production Well #1	23-Oct-97	890	---	470	91	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0193	Production Well #1	14-May-98	850	---	500	67	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0194	Production Well #1D	14-May-98	860	---	520	67	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0479	Production Well #1	22-Oct-98	994	---	659	56	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0030	Production Well #1	14-May-99	846	---	469	70	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0210	Production Well #1	23-Oct-99	891	---	540	2.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0224	Production Well #1	27-Oct-00	850	---	603	94	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0496	Production Well #1	29-Oct-01	890	---	523	65	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0057	Production Well Dooms	24-Feb-98	634	8.1	410	38	85	---	0.3	1.1	1.2	---	---	---	---	---	---	46	---	---	---
S98-0180	Production Well Dooms	13-May-98	640	7.8	410	30	81	---	<2	1.2	1.2	---	---	---	---	---	---	---	---	---	---
S98-0292	Production Well Dooms	10-Aug-98	629	7.76	450	34	83	20.2	<1	<0.4	1.2/<0.05	5.3	---	---	---	---	---	53	---	---	---
S98-0464	Production Well Dooms	20-Oct-98	636	7.71	464	35	80	18.0	<2	1.0	1.2	---	---	---	---	0.22	---	52	---	---	<0.0025
S99-0081	Production Well Dooms	23-Feb-99	627	7.86	364	31	73	14.9	0.3	0.89	0.89	---	---	---	---	---	---	48	---	---	---
M99-0018	Production Well Dooms	13-May-99	630	7.76	381	34	80	23.6	0.4	0.84	0.62	---	---	---	---	0.24	---	51	---	---	<0.0025

Table 2: SUMMARY OF LABORATORY ANALYSES OF GROUNDWATER SAMPLES,
JAL #4 PLANT, EL PASO CORPORATION, LEA COUNTY, NEW MEXICO

LABORATORY SAMPLE NUMBER	SAMPLE DESCRIPTION	Sample Date	Iron, mg/l	Lead, mg/l	Magnesium, mg/l	Manganese, mg/l	Mercury, mg/l	Molybdenum, mg/l	Nickel, mg/l	Potassium, mg/l	Selenium	Silica, mg/l	Silver, mg/l	Sodium, mg/l	Uranium, mg/l	Zinc, mg/l	Alkalinity (as CaCO ₃), mg/l	Alkalinity - Bicarbonate, mg/l	Alkalinity - Carbonate, mg/l	Alkalinity - Hydroxide, mg/l	Hardness (as CaCO ₃), mg/l
M99-0007	ENSR #3D	11-May-99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0189	ENSR #3	20-Oct-99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0190	ENSR #3D	20-Oct-99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0083	ENSR #3	09-May-00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0084	ENSR #3D	09-May-00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0222	ENSR #3	27-Oct-00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0138	ENSR #3	02-May-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0139	ENSR #3D	02-May-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0472	ENSR #3	23-Oct-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0063	Oxy Production Well	24-Feb-98	---	---	18	---	---	---	---	4	---	24	---	60	---	---	160	---	---	---	---
S98-0186	Oxy Production Well	13-May-98	---	---	20	---	---	---	---	5	---	27	---	65	---	---	150	---	---	---	---
S98-0299	Oxy Production Well	11-Aug-98	---	---	20	---	---	---	---	5.0	---	28	---	67	---	---	150	---	---	---	---
S98-0465	Oxy Production Well	20-Oct-98	---	---	---	---	---	---	---	---	---	---	---	---	---	---	160	---	---	---	---
S99-0082	Oxy Production Well	23-Feb-99	---	---	24	---	---	---	---	6.2	---	24	---	82	---	---	160	---	---	---	---
M99-0025	Oxy Production Well	13-May-99	0.74	---	22	0.015	---	---	---	5.1	---	32	---	71	---	0.28	150	---	---	---	---
M99-0093	Oxy Production Well	11-Aug-99	---	---	22.0	---	---	---	---	4.7	---	27	---	72	---	---	140	---	---	---	---
M99-0203	Oxy Production Well	22-Oct-99	2.8	0.0057	21	0.078	0.0049	0.0049	<0.02	4.8	---	21	<0.005	73	<0.005	0.50	140	---	---	---	---
M00-0025	Oxy Production Well	23-Feb-00	---	---	16	---	---	---	---	4.1	---	23	---	71	---	---	190	---	---	---	---
M00-0097	Oxy Production Well	11-May-00	---	---	21	---	---	---	---	5.0	---	35	---	72	---	---	150	---	---	---	---
M00-0196	Oxy Production Well	07-Aug-00	---	---	21	---	---	---	---	5.2	---	48	---	68	---	---	150	---	---	---	---
M00-0235	Oxy Production Well	02-Nov-00	0.93	<0.05	22	0.019	<0.0002	---	---	5.8	<0.1	31	<0.02	71	---	0.32	150	---	---	---	---
M01-0016	Oxy Production Well	20-Feb-01	---	---	20	---	---	---	---	5.8	---	33	---	68	---	---	140	---	---	---	---
M01-0165	Oxy Production Well	07-May-01	---	---	20	---	---	---	---	4.8	---	34	---	65	---	---	160	---	---	---	---
M01-0408	Oxy Production Well	01-Aug-01	---	---	21	---	---	---	---	4.3	---	32	---	66	---	---	150	---	---	---	---
M01-0488	Oxy Production Well	25-Oct-01	0.31	<0.05	20	0.0088	<0.0002	<0.01	<0.04	5.1	<0.1	47	<0.02	64	<0.005	0.21	140	---	---	---	---
Production Well #1	Production Well #1	08-May-97	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Production Well #1	Production Well #1	23-Oct-97	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0193	Production Well #1	14-May-98	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0194	Production Well #1D	14-May-98	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0479	Production Well #1	22-Oct-98	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0030	Production Well #1	14-May-99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0210	Production Well #1	23-Oct-99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0224	Production Well #1	27-Oct-00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0496	Production Well #1	29-Oct-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0057	Production Well Dooms	24-Feb-98	---	---	16	---	---	---	---	4	---	25	---	64	---	---	200	---	---	---	---
S98-0180	Production Well Dooms	13-May-98	---	---	17	---	---	---	---	4.3	---	27	---	71	---	---	190	---	---	---	---
S98-0292	Production Well Dooms	10-Aug-98	---	---	---	---	---	---	---	---	---	---	---	---	---	---	200	---	---	---	---
S98-0464	Production Well Dooms	20-Oct-98	0.060	---	17	<0.0025	---	---	---	4.1	---	29	---	69	---	<0.05	190	---	---	---	---
S99-0081	Production Well Dooms	23-Feb-99	---	---	16	---	---	---	---	4.1	---	26	---	72	---	---	190	---	---	---	---
M99-0018	Production Well Dooms	13-May-99	0.14	---	17	0.039	---	---	---	4.0	---	33	---	72	---	0.089	180	---	---	---	---

Table 2: SUMMARY OF LABORATORY ANALYSES OF GROUNDWATER SAMPLES,
JAL #4 PLANT, EL PASO CORPORATION, LEA COUNTY, NEW MEXICO

LABORATORY SAMPLE NUMBER	SAMPLE DESCRIPTION	Sample Date	Benzene, µg/l	Toluene, µg/l	Ethylbenzene, µg/l	Total Xylene, µg/l	MTBE, µg/l	Gasoline Range Organics, mg/l	Acenaphthene, µg/l	Acenaphthylene, µg/l	Anthracene, µg/l	Benz(a)anthracene, µg/l	Benz(b)fluoranthene, µg/l	Benz(k)fluoranthene, µg/l	Benz(g,h,i)perylene, µg/l	Benz(a)pyrene, µg/l	Chrysene, µg/l	Dibenzo(a,h)anthracene, µg/l	Fluoranthene, µg/l	Fluorene, µg/l	Indeno(1,2,3-cd)pyrene, µg/l	Naphthalene, µg/l	Phenanthrene, µg/l	Pyrene, µg/l
M99-0092	Production Well Dooms	11-Aug-99	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0193	Production Well Dooms	21-Oct-99	<2	<2	<2	<4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0022	Production Well Dooms	23-Feb-00	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0084	Production Well Dooms	10-May-00	<5	<5	<5	<10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0204	Production Well Dooms	14-Aug-00	<5	<5	<5	<10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0233	Production Well Dooms	02-Nov-00	<2	<2	<2	<4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0010	Production Well Dooms	20-Feb-01	<2	<2	<2	<4	<5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0143	Production Well Dooms	03-May-01	<2	<2	<2	<2	<5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0409	Production Well Dooms	01-Aug-01	<2	<2	<2	<2	<5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0497	Production Well Dooms	29-Oct-01	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PTP #1	PTP #1	07-May-97	38	0.51	22	8.4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PTP #1	PTP #1	21-Oct-97	7.9	<0.5	18	3.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0177	PTP #1	12-May-98	62	1.6	21	13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0463	PTP #1	20-Oct-98	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0008	PTP #1	11-May-99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0191	PTP #1	20-Oct-99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0085	PTP #1	09-May-00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0223	PTP #1	27-Oct-00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0140	PTP #1	02-May-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0473	PTP #1	23-Oct-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0451	Bailer Blank	19-Oct-98	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0066	Bailer Blank Pre Sample	24-Feb-98	<0.50	<0.50	<0.50	<1.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0158	Bailer Blank Pre Sample	11-May-98	<0.50	<0.50	<0.50	<1.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0290	Bailer Blank Pre Sample	10-Aug-98	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0178	Bailer Blank-Middle Sample	12-May-98	<0.50	<0.50	<0.50	<1.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0466	Bailer Blank-Middle Sample	21-Oct-98	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0061	Bailer Blank Post Sample	24-Feb-98	<0.50	<0.50	<0.50	<1.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0191	Bailer Blank Post Sample	14-May-98	0.66	<0.50	<0.50	<1.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0225	Bailer Blank Post Sample	01-Jun-98	12	<0.50	<0.50	<1.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0297	Bailer Blank Post Sample	11-Aug-98	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0478	Bailer Blank Post Sample	22-Oct-98	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S99-0078	Bailer Blank Before	23-Feb-99	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S99-0087	Bailer Blank After Sampling	23-Feb-99	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0002	Bailer Blank Before Sampling	10-May-99	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0016	Bailer Blank Middle	12-May-99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0029	Bailer Blank After Sampling	14-May-99	<2	<2	<2	<2	<0.25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0085	Bailer Blank Before Sampling	09-Aug-99	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0090	Bailer Blank After Sampling	11-Aug-99	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0182	Bailer Blank Before Sampling	18-Oct-99	<2	<2	<2	<4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0198	Bailer Blank Middle	22-Oct-99	<2	<2	<2	<4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Table 2: SUMMARY OF LABORATORY ANALYSES OF GROUNDWATER SAMPLES,
JAL #4 PLANT, EL PASO CORPORATION, LEA COUNTY, NEW MEXICO

LABORATORY SAMPLE NUMBER	SAMPLE DESCRIPTION	Sample Date	Specific Conductance, umho/cm	pH, s.u.	Total Dissolved Solids, mg/L	Chloride, mg/l	Sulfate, mg/l	pH Temperature °C	Bromide, mg/l	Fluoride, mg/l	Nitrate-N, mg/l	Nitrate as NO ₃ , mg/l	Aluminum, mg/l	Arsenic, mg/l	Barium, mg/l	Boron, mg/l	Cadmium, mg/l	Calcium, mg/l	Chromium, mg/l	Cobalt, mg/l	Copper, mg/l
M99-0092	Production Well Doods	11-Aug-99	629	7.69	372	30	79	19.8	0.2	0.83	1.1	---	---	---	---	---	---	51	---	---	---
M99-0193	Production Well Doods	21-Oct-99	617	7.74	400	32	74	19.2	0.29	0.86	1.1	---	0.042	0.0096	0.047	0.23	<0.002	51	<0.005	<0.005	0.0021
M00-0022	Production Well Doods	23-Feb-00	814	7.92	506	130	54	17.4	0.58	1.1	0.72	---	---	---	---	---	---	68	---	---	---
M00-0094	Production Well Doods	10-May-00	619	7.69	417	31	77	21.3	0.27	0.82	1.2	---	---	---	---	---	---	44	---	---	---
M00-0204	Production Well Doods	14-Aug-00	597	7.72	400	28	75	27.2	<0.2	0.93	1.2	---	---	---	---	---	---	50	---	---	---
M00-0233	Production Well Doods	02-Nov-00	530	7.8	375	32	79	18.4	<2	1.0	0.95	---	---	<0.1	0.045	0.25	<0.01	53	<0.01	---	0.037
M01-0010	Production Well Doods	20-Feb-01	619	7.75 Hr	372	33	66	23.0	0.35	0.85	1.1	---	---	---	---	---	---	46	---	---	---
M01-0143	Production Well Doods	03-May-01	615	7.75	419	30	74	22.7	0.51	0.91	1	---	---	---	---	---	---	49	---	---	---
M01-0409	Production Well Doods	01-Aug-01	618	7.72	374	28	75	22.7	<2	0.92	1.2	---	---	---	---	---	---	44	---	---	---
M01-0497	Production Well Doods	29-Oct-01	622	7.80	396	28	74	22.7	<2	0.96	1.2	---	<0.05	<0.1	0.037	0.21	<0.005	44	<0.01	<0.01	<0.005
PTP #1	PTP #1	07-May-97	2,420	---	1,500	490	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PTP #1	PTP #1	21-Oct-97	2,250	---	1,400	470	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0177	PTP #1	12-May-98	2,300	---	1,400	480	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0463	PTP #1	20-Oct-98	2,090	---	1,410	380	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0008	PTP #1	11-May-99	2,250	---	1,240	330	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0191	PTP #1	20-Oct-99	2,300	---	1,630	460	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0085	PTP #1	09-May-00	2,210	---	1,400	510	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0223	PTP #1	27-Oct-00	2,050	---	1,570	530	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0140	PTP #1	02-May-01	2,370	---	1,240	520	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0473	PTP #1	23-Oct-01	2,370	---	1,280	550	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0451	Bailer Blank	19-Oct-98	1.13	5.95	<25	<0.1	<0.1	17.8	<0.2	<0.4	<0.05	---	---	---	---	<0.01	---	0.49	---	---	<0.0025
S98-0066	Bailer Blank Pre Sample	24-Feb-98	3	5.7	<20	<0.2	<1	---	<0.2	<0.1	<0.2	---	---	---	---	---	---	<1	---	---	---
S98-0158	Bailer Blank Pre Sample	11-May-98	9.6	5.8	<20	<0.2	<1	---	<0.2	<0.1	<0.05	---	---	---	---	---	---	<1	---	---	---
S98-0290	Bailer Blank Pre Sample	10-Aug-98	4.45	5.08	30	<0.1	<2.0	18.8	<0.1	<0.10	<1.25	---	---	---	---	---	---	<0.25	---	---	---
S98-0178	Bailer Blank Middle Sample	12-May-98	24	5.6	<20	<0.2	<1	---	<0.2	<0.1	<0.05	---	---	---	---	---	---	<0.25	---	---	---
S98-0466	Bailer Blank Middle Sample	21-Oct-98	16.9	7.34	<25	<0.1	<0.1	21.0	<0.2	<0.4	<0.05	---	---	---	---	<0.01	---	3.2	---	---	<0.0025
S98-0081	Bailer Blank Post Sample	24-Feb-98	1	6.0	<20	<0.2	<1	---	<0.2	<0.1	<0.2	---	---	---	---	---	---	<1	---	---	---
S98-0191	Bailer Blank Post Sample	14-May-98	15	5.6	<20	<0.2	<1	---	<0.2	<0.1	<0.05	---	---	---	---	---	---	<1	---	---	---
S98-0225	Bailer Blank Post Sample	01-Jun-98	12	5.5	<20	<0.2	<1	---	<0.2	<0.1	0.09	---	---	---	---	---	---	<1	---	---	---
S98-0297	Bailer Blank Post Sample	11-Aug-98	3.83	5.16	31	<0.1	<2.0	19.9	<0.1	<0.10	<2.5	---	---	---	---	---	---	<0.25	---	---	---
S98-0478	Bailer Blank Post Sample	22-Oct-98	1.22	5.77	<25	<0.1	<0.1	21.2	<0.2	<0.4	<0.05	---	---	---	---	0.01	---	<0.25	---	---	<0.0025
S99-0078	Bailer Blank Before	23-Feb-99	2.17	5.83	<25	<0.1	<0.1	14.3	<0.2	<0.4	0.09	---	---	---	---	---	---	<0.25	---	---	---
S99-0087	Bailer Blank After Sampling	23-Feb-99	1.35	5.78	<25	<0.1	<0.1	16.9	<0.2	<0.4	<0.05	---	---	---	---	---	---	<0.25	---	---	---
M99-0002	Bailer Blank Before Sampling	10-May-99	1.63	5.86	32	0.1	0.1	22.7	<0.2	<0.4	<0.05	---	---	---	---	<0.01	---	<0.25	---	---	<0.0025
M99-0016	Bailer Blank Middle	12-May-99	1.21	---	<25	<0.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0029	Bailer Blank After Sampling	14-May-99	1.52	5.86	<25	<0.1	<0.1	24.6	<0.2	<0.4	<0.05	---	---	---	---	<0.01	---	<0.25	---	---	<0.0025
M99-0085	Bailer Blank Before Sampling	09-Aug-99	898	7.57	565	88	190	19.1	0.5	1.6	<0.05	---	---	---	---	---	---	97	---	---	---
M99-0090	Bailer Blank After Sampling	11-Aug-99	580	8.41	266	48	1.0	21.0	<1	<0.4	0.74	---	---	---	---	---	---	0.68	---	---	---
M99-0182	Bailer Blank Before Sampling	18-Oct-99	4.00	6.04	<15	0.34	<0.5	20.2	<0.2	<0.4	0.064	---	<0.025	<0.005	<0.0025	<0.01	<0.002	<0.005	<0.005	<0.0025	<0.0025
M99-0198	Bailer Blank Middle	22-Oct-99	4.00	6.04	<15	0.31	<0.5	20.2	<0.2	<0.4	0.072	---	<0.025	<0.005	<0.0025	<0.01	<0.002	<0.005	<0.005	<0.0025	<0.0025

Table 2: SUMMARY OF LABORATORY ANALYSES OF GROUNDWATER SAMPLES,
JAL #4 PLANT, EL PASO CORPORATION, LEA COUNTY, NEW MEXICO

LABORATORY SAMPLE NUMBER	SAMPLE DESCRIPTION	Sample Date	Iron, mg/l	Lead, mg/l	Magnesium, mg/l	Manganese, mg/l	Mercury, mg/l	Molybdenum, mg/l	Nickel, mg/l	Potassium, mg/l	Selenium	Silica, mg/l	Silver, mg/l	Sodium, mg/l	Uranium, mg/l	Zinc, mg/l	Alkalinity (as CaCO ₃), mg/l	Alkalinity - Bicarbonate, mg/l	Alkalinity - Carbonate, mg/l	Alkalinity - Hydroxide, mg/l	Hardness (as CaCO ₃), mg/l
M99-0092	Production Well Dooms	11-Aug-99	---	---	17	---	---	---	---	3.8	---	27	---	73	---	---	190	190	<25	<25	200
M99-0193	Production Well Dooms	21-Oct-99	0.16	<0.001	18	0.0093	<0.0002	0.0048	<0.02	4.7	---	24	<0.005	77	0.0055	0.11	180	180	<25	<25	200
M00-0022	Production Well Dooms	23-Feb-00	---	---	20	---	---	---	---	4.9	---	12	---	69	---	---	140	140	<25	<25	250
M00-0094	Production Well Dooms	10-May-00	---	---	15	---	---	---	---	4.2	---	29	---	72	---	---	190	190	<25	<25	170
M00-0204	Production Well Dooms	14-Aug-00	---	---	16	---	---	---	---	7.0	---	30	---	4.2	---	---	180	180	<25	<25	190
M00-0233	Production Well Dooms	02-Nov-00	0.28	<0.05	18	0.013	<0.0002	---	---	5.0	<0.1	32	<0.02	79	---	0.19	190	190	<25	<25	210
M01-0010	Production Well Dooms	20-Feb-01	---	---	15	---	---	---	---	4.8	---	35	---	67	---	---	190	190	<25	<25	180
M01-0143	Production Well Dooms	03-May-01	---	---	16	---	---	---	---	3.8	---	34	---	73	---	---	180	180	<25	<25	190
M01-0409	Production Well Dooms	01-Aug-01	---	---	15	---	---	---	---	5.0	---	26	---	66	---	---	190	190	<25	<25	170
M01-0497	Production Well Dooms	29-Oct-01	0.10	<0.05	15	0.018	<0.0002	<0.01	<0.04	3.7	<0.1	38	<0.02	64	0.0084	<0.1	180	180	<25	<25	170
PTP #1	PTP #1	07-May-97	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PTP #1	PTP #1	21-Oct-97	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0177	PTP #1	12-May-98	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0463	PTP #1	20-Oct-98	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0008	PTP #1	11-May-99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0191	PTP #1	20-Oct-99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0085	PTP #1	09-May-00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0223	PTP #1	27-Oct-00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0140	PTP #1	02-May-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0473	PTP #1	23-Oct-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0451	Bailer Blank	19-Oct-98	<0.05	---	<0.25	<0.0025	---	---	---	<1	---	<0.25	---	1.1	---	<0.05	<25	<25	<25	<25	1.2
S98-0066	Bailer Blank Pre Sample	24-Feb-98	---	---	<1	---	---	---	---	<1	---	<0.05	---	<1	---	---	<5	---	---	---	---
S98-0158	Bailer Blank Pre Sample	11-May-98	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<5	<5	---	---	---
S98-0290	Bailer Blank Pre Sample	10-Aug-98	---	---	<0.25	---	---	---	---	<0.25	---	<10	---	0.68	---	---	<25	<25	<25	<25	<1
S98-0178	Bailer Blank-Middle Sample	12-May-98	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<5	<5	---	---	---
S98-0466	Bailer Blank-Middle Sample	21-Oct-98	<0.05	---	<0.25	<0.0025	---	---	---	<1	---	<0.25	---	0.30	---	<0.05	<25	<25	<25	<25	7.9
S98-0061	Bailer Blank Post Sample	24-Feb-98	---	---	<1	---	---	---	---	<1	---	<0.05	---	<1	---	---	<5	---	---	---	---
S98-0191	Bailer Blank Post Sample	14-May-98	---	---	<1	---	---	---	---	<1	---	<0.05	---	<1	---	---	<5	<5	---	---	---
S98-0225	Bailer Blank Post Sample	01-Jun-98	---	---	<1	---	---	---	---	<1	---	0.16	---	---	---	---	<5	<5	---	---	---
S98-0297	Bailer Blank Post Sample	11-Aug-98	---	---	<0.25	---	---	---	---	<0.25	---	<10	---	<0.25	---	---	<25	<25	<25	<25	<1
S98-0478	Bailer Blank Post Sample	22-Oct-98	<0.05	---	<0.25	<0.0025	---	---	---	<1	---	<0.25	---	<0.25	---	<0.05	<25	<25	<25	<25	<0.5
S99-0078	Bailer Blank Before	23-Feb-99	---	---	<0.25	---	---	---	---	<1	---	<1	---	0.27	---	---	<25	<25	<25	<25	<1
S99-0087	Bailer Blank After Sampling	23-Feb-99	---	---	<0.25	---	---	---	---	<1	---	<1	---	<0.25	---	---	<25	<25	<25	<25	<1
M99-0002	Bailer Blank Before Sampling	10-May-99	<0.05	---	<0.25	<0.0025	---	---	---	<1	---	<0.2	---	<0.25	---	<0.05	<25	<25	<25	<25	<1
M99-0016	Bailer Blank Middle	12-May-99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0029	Bailer Blank After Sampling	14-May-99	<0.05	---	<0.25	<0.0025	---	---	---	<1	---	<0.2	---	0.41	---	<0.05	<25	<25	<25	<25	<1
M99-0085	Bailer Blank Before Sampling	09-Aug-99	---	---	22	---	---	---	---	5.2	---	21	---	80	---	---	110	110	<25	<25	330
M99-0090	Bailer Blank After Sampling	11-Aug-99	---	---	<0.25	---	---	---	---	1.4	---	10	---	140	---	---	220	220	2	<25	2.6
M99-0182	Bailer Blank Before Sampling	18-Oct-99	0.060	<0.005	<0.25	<0.0025	<0.0002	<0.005	<0.02	<1	---	<1	<0.005	<0.25	<0.005	<0.05	<25	<25	<25	<25	<1
M99-0198	Bailer Blank Middle	22-Oct-99	<0.05	<0.005	<0.25	<0.0025	<0.0002	<0.005	<0.02	<1	---	<1	<0.005	<0.25	<0.005	<0.05	<25	<25	<25	<25	<1

Table 2: SUMMARY OF LABORATORY ANALYSES OF GROUNDWATER SAMPLES,
JAL #4 PLANT, EL PASO CORPORATION, LEA COUNTY, NEW MEXICO

LABORATORY SAMPLE NUMBER	SAMPLE DESCRIPTION	Sample Date	Benzene, µg/l	Toluene, µg/l	Ethylbenzene, µg/l	Total Xylene, µg/l	MTBE, µg/l	Gasoline Range Organics, mg/l	Acenaphthene, µg/l	Acenaphthylene, µg/l	Anthracene, µg/l	Benzo(a)anthracene, µg/l	Benzo(b)fluoranthene, µg/l	Benzo(k)fluoranthene, µg/l	Benzo(g,h,i)perylene, µg/l	Benzo(a)pyrene, µg/l	Chrysene, µg/l	Dibenzo(a,h)anthracene, µg/l	Fluoranthene, µg/l	Fluorene, µg/l	Indeno(1,2,3-cd)pyrene, µg/l	Naphthalene, µg/l	Phenanthrene, µg/l	Pyrene, µg/l
M99-0208	Bailer Blank After Sampling	23-Oct-99	<2	<2	<2	<4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0021	Bailer Blank Before Sampling	22-Feb-00	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0030	Bailer Blank After Sampling	23-Feb-00	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0076	Bailer Blank Before Sampling	08-May-00	<5	<5	<5	<10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0091	Bailer Blank Middle of Sampling	10-May-00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0102	Bailer Blank After Sampling	12-May-00	<5	<5	<5	<10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0194	Bailer Blank Before Sampling	07-Aug-00	<2	<2	<2	<4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0201	Bailer Blank After Sampling	08-Aug-00	<2	<2	<2	<4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0214	Bailer Blank Before Sampling	26-Oct-00	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0229	Bailer Blank Middle of Sampling	01-Nov-00	<2	<2	<2	<4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0245	Bailer Blank After Sampling	08-Nov-00	<2	<2	<2	<4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0012	Bailer Blank Before Sampling	20-Feb-01	<2	<2	<2	<4	<5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0018	Bailer Blank After Sampling	21-Feb-01	<2	<2	<2	<4	<5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0131	Bailer Blank Before Sampling	02-May-01	<2	<2	<2	<2	<5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0155	Bailer Blank Middle of Sampling Wells	06-May-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0163	Bailer After Sampling Wells	07-May-01	<2	<2	<2	<2	<5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0404	Bailer Blank Before Sampling	01-Aug-01	<2	<2	<2Jc	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0412	Bailer After Sampling Wells	02-Aug-01	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0466	Bailer Blank Before Sampling	22-Oct-01	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0479	Bailer Blank Middle of Sampling Wells	24-Oct-01	<2	<2	<2	4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0493	Bailer After Sampling Wells	29-Oct-01	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0477	EMP #3 Post Purge	22-Oct-98	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0452	EMP #3 Pre Purge Blank	19-Oct-98	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0179	EMP #3 Pump Blank Middle Sample	12-May-98	30	20	6.5	1.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0468	EMP #3 Pump Blank Middle Sample	21-Oct-98	2	3	2	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0062	EMP #3 Pump Blank Post Sample	24-Feb-98	<0.50	<0.50	<0.50	<1.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0192	EMP #3 Pump Blank Post Sample	14-May-98	3.0	3.4	1.4	2.8	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0224	EMP #3 Pump Blank Post Sample	01-Jun-98	<0.50	0.83	<0.50	<1.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0298	EMP #3 Pump Blank Post Sample	11-Aug-98	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0065	EMP #3 Pump Blank Pre Sample	24-Feb-98	<0.50	1.1	0.74	1.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0156	EMP #3 Pump Blank Pre Sample	11-May-98	6.7	1.7	<0.50	6.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0289	EMP #3 Pump Blank Pre Sample	10-Aug-98	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S99-0079	EMP #3 Pump Blank Before	23-Feb-99	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S99-0086	EMP #3 Pump Blank After	23-Feb-99	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0003	EMP #3 Before Purging Wells	10-May-99	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0015	EMP #3 Middle	12-May-99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0028	EMP #3 After Purging	14-May-99	<2	3	<2	<2	<0.25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0084	EMP #3 Pump Blank Before	09-Aug-99	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0091	EMP #3 Pump Blank After	11-Aug-99	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0180	EMP #3 Before Purging Wells	18-Oct-99	14	31	2.0	4.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Table 2: SUMMARY OF LABORATORY ANALYSES OF GROUNDWATER SAMPLES,
JAL #4 PLANT, EL PASO CORPORATION, LEA COUNTY, NEW MEXICO

LABORATORY SAMPLE NUMBER	SAMPLE DESCRIPTION	Sample Date	Specific Conductance, umho/cm	pH, s.u.	Total Dissolved Solids, mg/L	Chloride, mg/l	Sulfate, mg/l	pH Temperature °C	Bromide, mg/l	Fluoride, mg/l	Nitrate-N, mg/l	Nitrate as NO ₃ , mg/l	Aluminum, mg/l	Arsenic, mg/l	Barium, mg/l	Boron, mg/l	Cadmium, mg/l	Calcium, mg/l	Chromium, mg/l	Cobalt, mg/l	Copper, mg/l
M99-0208	Bailer Blank After Sampling	23-Oct-99	3.75	6.03	<15	0.32	<0.5	22.4	<0.2	<0.4	0.088	---	<0.025	<0.005	<0.0025	<0.01	<0.002	0.32	<0.005	<0.005	<0.0025
M00-0021	Bailer Blank Before Sampling	22-Feb-00	3	5.88	<15	<0.1	<0.1	15.9	<0.2	<0.4	<0.1	---	---	---	---	---	---	<0.5	---	---	---
M00-0030	Bailer Blank After Sampling	23-Feb-00	3	5.88	<15	<0.1	<0.1	17.3	<0.2	<0.4	<0.1	---	---	---	---	---	---	<0.5	---	---	---
M00-0076	Bailer Blank Before Sampling	08-May-00	4	5.52	21	<0.1	<0.1	21.3	<0.2	<0.4	<0.1	---	---	---	---	---	---	<0.5	---	---	---
M00-0091	Bailer Blank Middle of Sampling	10-May-00	2	---	19	<0.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0102	Bailer Blank After Sampling	12-May-00	41	7.13	42	6.1	1.4	18.5	<0.2	<0.4	<0.1	---	---	---	---	---	---	<0.5	---	---	---
M00-0194	Bailer Blank Before Sampling	07-Aug-00	8.0	6.15	<15	<0.1	<0.1	25.6	<0.2	<0.4	<0.05	---	---	---	---	---	---	<0.5	---	---	---
M00-0201	Bailer Blank After Sampling	08-Aug-00	4.0	5.63	<15	<0.1	<0.1	25.8	<0.2	<0.4	<0.05	---	---	---	---	---	---	<0.5	---	---	---
M00-0214	Bailer Blank Before Sampling	26-Oct-00	13	5.22	<15	3.3	<0.1	16.2	<0.2	<0.4	<0.1	---	---	<0.1	<0.005	0.12	<0.01	<0.5	<0.01	---	0.088
M00-0229	Bailer Blank Middle of Sampling	01-Nov-00	11.4	5.09	<15	3.3	<0.1	15.1	<0.2	<0.4	<0.1	---	---	<0.1	<0.005	0.14	<0.01	0.22	<0.01	---	0.093
M00-0245	Bailer Blank After Sampling	06-Nov-00	13.40	5.3	55	3.3	<0.1	16.9	<0.2	<0.4	<0.1	---	---	<0.1	<0.005	0.13	<0.01	<0.5	<0.01	---	0.092
M01-0012	Bailer Blank Before Sampling	20-Feb-01	1	6.28 Hr	<15	<0.1	<0.1	21.6	<0.2	<0.4	<0.1	---	---	---	---	---	---	<0.5	---	---	---
M01-0018	Bailer Blank After Sampling	21-Feb-01	2	6.18 Hr	<15	<0.1	<0.1	21.8	<0.2	<0.4	<0.1	---	---	---	---	---	---	<0.5	---	---	---
M01-0131	Bailer Blank Before Sampling	02-May-01	1	7.69	<15	<0.1	36	18.6	<0.2	<0.4	<0.1	---	---	---	---	---	---	0.91	---	---	---
M01-0155	Bailer Blank Middle of Sampling Wells	06-May-01	198	---	115	15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0163	Bailer After Sampling Wells	07-May-01	578	8.24 Hr	327	65	<2	25.4	0.17	<0.4	0.62	---	---	---	---	---	---	<0.5	---	---	---
M01-0404	Bailer Blank Before Sampling	01-Aug-01	1.82	6.21	<15	1.6	<1	22.5	<2	<0.4	<1	---	---	---	---	---	---	<0.5	---	---	---
M01-0412	Bailer After Sampling Wells	02-Aug-01	1.66	6.54	<15	<0.1	<0.1	20.1	<0.2	<0.4	<0.05	---	---	---	---	---	---	0.56	---	---	---
M01-0466	Bailer Blank Before Sampling	22-Oct-01	1.67	5.84	<15	0.16	<0.1	23.5	<0.2	<0.4	<0.1	---	<0.05	<0.1	<0.005	<0.1	<0.005	<0.5	<0.01	<0.01	<0.005
M01-0479	Bailer Blank Middle of Sampling Wells	24-Oct-01	1.52	6.47 H3	<15	0.23	<0.1	20.1	<0.2	<0.4	<0.05	---	<0.05	<0.1	<0.005	<0.1	<0.005	<0.5	<0.01	<0.01	<0.005
M01-0493	Bailer After Sampling Wells	29-Oct-01	1.32	6.39 H3	<15	<0.1	<0.1	23.3	<0.2	<0.4	<0.05	---	<0.05	<0.1	<0.005	<0.1	<0.005	<0.5	<0.01	<0.01	<0.005
S98-0477	EMP #3 Post Purge	22-Oct-98	662	8.26	424	100	50	20.1	<5	1.6	<0.05	---	---	---	---	0.19	---	45	---	---	<0.0025
S98-0452	EMP #3 Pre Purge Blank	19-Oct-98	631	8.26	369	100	50	17.1	<2	1.6	<0.05	---	---	---	---	<0.01	---	<0.25	---	---	<0.0025
S98-0179	EMP #3 Pump Blank Middle Sample	12-May-98	720	7.9	390	87	57	---	<2	1.7	<0.05	---	---	---	---	---	---	50	---	---	---
S98-0468	EMP #3 Pump Blank Middle Sample	21-Oct-98	649	8.23	373	110	48	19.8	2.0	1.5	<0.05	---	---	---	---	0.19	---	40	---	---	<0.0025
S98-0062	EMP #3 Pump Blank Post Sample	24-Feb-98	738	8.2	420	98	60	---	0.7	2	<0.2	---	---	---	---	---	---	51	---	---	---
S98-0192	EMP #3 Pump Blank Post Sample	14-May-98	670	8.1	400	88	57	---	0.63	1.8	0.05	---	---	---	---	---	---	48	---	---	---
S98-0224	EMP #3 Pump Blank Post Sample	01-Jun-98	690	8.0	420	91	53	---	0.64	1.7	<0.05	---	---	---	---	---	---	50	---	---	---
S98-0298	EMP #3 Pump Blank Post Sample	11-Aug-98	641	8.13	392	95	54	19.8	<5	1.8	<2.5	---	---	---	---	---	---	47	---	---	---
S98-0065	EMP #3 Pump Blank Pre Sample	24-Feb-98	746	8.2	432	99	62.2	---	0.7	1.9	<0.2	---	---	---	---	---	---	52	---	---	---
S98-0156	EMP #3 Pump Blank Pre Sample	11-May-98	970	7.7	630	98	200	---	<2	1.8	<0.05	---	---	---	---	---	---	91	---	---	---
S98-0289	EMP #3 Pump Blank Pre Sample	10-Aug-98	676	7.84	458	96	57	19.9	<2.5	1.9	<1.25	---	---	---	---	---	---	47Jm	---	---	---
S99-0079	EMP #3 Pump Blank Before	23-Feb-99	1170	8.44	681	210	42	14.1	<2	1.7	<0.05	---	---	---	---	---	---	52	---	---	---
S99-0086	EMP #3 Pump Blank After	23-Feb-99	1610	8.66	981	350	45	13.5	<2	1.8	<0.05	---	---	---	---	---	---	51	---	---	---
M99-0003	EMP #3 Before Purging Wells	10-May-99	1120	7.86	646	210	51	22.3	0.6	1.5	<0.05	---	---	---	---	0.22	---	50	---	---	<0.0025
M99-0015	EMP #3 Middle	12-May-99	609	---	379	73	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0028	EMP #3 After Purging	14-May-99	599	8.27	356	66	53	24.0	0.5	1.8	<0.05	---	---	---	---	0.21	---	44	---	---	0.0060
M99-0084	EMP #3 Pump Blank Before	09-Aug-99	578	8.30	305	49	1.1	20.1	<0.2	<0.4	0.70	---	---	---	---	---	---	0.79	---	---	---
M99-0091	EMP #3 Pump Blank After	11-Aug-99	588	8.32	305	70	53	22.1	2.1	1.7	<0.05	---	---	---	---	---	---	45	---	---	---
M99-0180	EMP #3 Before Purging Wells	18-Oct-99	1070	7.37	673	140	200	20.7	0.65	1.7	0.29	---	0.043	0.0076	0.053	0.22	<0.002	88	<0.005	<0.005	0.0035

Table 2: SUMMARY OF LABORATORY ANALYSES OF GROUNDWATER SAMPLES,
JAL #4 PLANT, EL PASO CORPORATION, LEA COUNTY, NEW MEXICO

LABORATORY SAMPLE NUMBER	SAMPLE DESCRIPTION	Sample Date	Iron, mg/l	Lead, mg/l	Magnesium, mg/l	Manganese, mg/l	Mercury, mg/l	Molybdenum, mg/l	Nickel, mg/l	Potassium, mg/l	Selenium	Silica, mg/l	Silver, mg/l	Sodium, mg/l	Uranium, mg/l	Zinc, mg/l	Alkalinity (as CaCO ₃), mg/l	Alkalinity - Bicarbonate, mg/l	Alkalinity - Carbonate, mg/l	Alkalinity - Hydroxide, mg/l	Hardness (as CaCO ₃), mg/l
M99-0208	Bailer Blank After Sampling	23-Oct-99	<0.05	<0.005	<0.25	<0.0025	<0.0002	<0.005	<0.02	<1	---	<1	<0.005	<0.25	<0.005	<0.05	<25	<25	<25	<25	<1
M00-0021	Bailer Blank Before Sampling	23-Feb-00	---	---	<0.5	---	---	---	---	<2	---	<1	---	<0.5	---	---	<25	<25	<25	<25	<2
M00-0030	Bailer Blank After Sampling	23-Feb-00	---	---	<0.5	---	---	---	---	<2	---	<1	---	<0.5	---	---	<25	<25	<25	<25	<2
M00-0076	Bailer Blank Before Sampling	08-May-00	---	---	<0.5	---	---	---	---	<2	---	<1	---	<0.5	---	---	<25	<25	<25	<25	<2
M00-0091	Bailer Blank Middle of Sampling	10-May-00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<25	<25	<25	<25	---
M00-0102	Bailer Blank After Sampling	12-May-00	---	---	<0.5	---	---	---	---	<2	---	<1	---	<0.5	---	---	<25	<25	<25	<25	<2
M00-0194	Bailer Blank Before Sampling	07-Aug-00	---	---	<0.5	---	---	---	---	<2	---	<1	---	<0.5	---	---	<25	<25	<25	<25	<2
M00-0201	Bailer Blank After Sampling	08-Aug-00	---	---	<0.5	---	---	---	---	<2	---	<1	---	<0.5	---	---	<25	<25	<25	<25	<2
M00-0214	Bailer Blank Before Sampling	26-Oct-00	<0.1	<0.05	<0.5	<0.005	<0.0002	---	---	<2	<0.1	1.3	<0.02	1.9	---	<0.1	<25	<25	<25	<25	<2
M00-0229	Bailer Blank Middle of Sampling	01-Nov-00	0.19	<0.05	<0.5	<0.005	<0.0002	---	---	<2	<0.1	1.1	<0.02	2.3	---	<0.1	<25	<25	<25	<25	<2
M00-0245	Bailer Blank After Sampling	06-Nov-00	<0.1	<0.05	<0.5	<0.005	<0.0002	---	---	<2	<0.1	1.3	<0.02	2.4	---	<0.1	<25	<25	<25	<25	<2
M01-0012	Bailer Blank Before Sampling	20-Feb-01	---	---	<0.5	---	---	---	---	<2	---	<1	---	<0.5	---	---	<25	<25	<25	<25	<2
M01-0018	Bailer Blank After Sampling	21-Feb-01	---	---	<0.5	---	---	---	---	<2	---	<1	---	<0.5	---	---	<25	<25	<25	<25	<2
M01-0131	Bailer Blank Before Sampling	02-May-01	---	---	0.49	---	---	---	---	0.52	---	<1	---	2.4	---	---	<25	<25	<25	<25	4.3
M01-0155	Bailer Blank Middle of Sampling Wells	06-May-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<25	<25	<25	<25	---
M01-0163	Bailer After Sampling Wells	07-May-01	---	---	<0.5	---	---	---	---	<2	---	11	---	140.0	---	---	240	240	<25	<25	<2
M01-0404	Bailer Blank Before Sampling	01-Aug-01	---	---	<0.5	---	---	---	---	<2	---	<1	---	<0.5	---	---	<25	<25	<25	<25	<2
M01-0412	Bailer After Sampling Wells	02-Aug-01	---	---	<0.5	---	---	---	---	<2	---	<1	---	6.7	---	---	<25	<25	<25	<25	<2
M01-0466	Bailer Blank Before Sampling	22-Oct-01	<0.1	<0.05	<0.5	<0.005	<0.0002	<0.01	<0.04	<2	<0.1	<1	<0.02	<0.5	<0.005	<0.1	<25	<25	<25	<25	<2
M01-0479	Bailer Blank Middle of Sampling Wells	24-Oct-01	<0.1	<0.05	<0.5	0.0067	<0.0002	<0.01	<0.04	<2	<0.1	<1	<0.02	1.5	<0.005	<0.1	<25	<25	<25	<25	<5
M01-0493	Bailer After Sampling Wells	29-Oct-01	<0.1	<0.05	<0.5	<0.005	<0.0002	<0.01	<0.04	<2	<0.1	<1	<0.02	1.6	<0.005	<0.1	<25	<25	<25	<25	<5
S98-0477	EMP #3 Post Purge	22-Oct-98	0.77	---	13	0.050	---	---	---	4.0	---	15	---	75	---	<0.05	130	130	<25	<25	160
S98-0452	EMP #3 Pre Purge Blank	19-Oct-98	<0.05	---	<0.25	<0.0025	---	---	---	<1	---	13	---	<0.25	---	<0.05	110	110	<25	<25	<1
S98-0179	EMP #3 Pump Blank Middle Sample	12-May-98	---	---	13	---	---	---	---	4	---	18	---	75	---	---	150	150	<25	<25	---
S98-0468	EMP #3 Pump Blank Middle Sample	21-Oct-98	0.77	---	12	0.047	---	---	---	4.0	---	14	---	95	---	<0.05	130	130	<25	<25	150
S98-0062	EMP #3 Pump Blank Post Sample	24-Feb-98	---	---	14	---	---	---	---	4	---	14	---	72	---	---	160	---	---	---	---
S98-0192	EMP #3 Pump Blank Post Sample	14-May-98	---	---	12	---	---	---	---	4	---	17	---	72	---	---	140	140	<25	<25	---
S98-0224	EMP #3 Pump Blank Post Sample	01-Jun-98	---	---	13	---	---	---	---	4	---	16	---	76	---	---	150	150	<25	<25	---
S98-0298	EMP #3 Pump Blank Post Sample	11-Aug-98	---	---	12	---	---	---	---	4.1	---	17	---	78	---	---	130	130	<25	<25	170
S98-0065	EMP #3 Pump Blank Pre Sample	24-Feb-98	---	---	14	---	---	---	---	4	---	13	---	75	---	---	161.8	---	---	---	---
S98-0156	EMP #3 Pump Blank Pre Sample	11-May-98	---	---	23	---	---	---	---	5	---	13	---	74	---	---	110	110	<25	<25	---
S98-0289	EMP #3 Pump Blank Pre Sample	10-Aug-98	---	---	12	---	---	---	---	4.2	---	19	---	79	---	---	140	140	<25	<25	170
S99-0079	EMP #3 Pump Blank Before	23-Feb-99	---	---	14	---	---	---	---	4.2	---	18	---	190	---	---	180	170	6	<25	180
S99-0086	EMP #3 Pump Blank After	23-Feb-99	---	---	14	---	---	---	---	4.7	---	18	---	270	---	---	180	160	16	<25	190
M99-0003	EMP #3 Before Purging Wells	10-May-99	0.45	---	14	0.040	---	---	---	4.3	---	22	---	170	---	0.15	160	160	<25	<25	180
M99-0015	EMP #3 Middle	12-May-99	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0028	EMP #3 After Purging	14-May-99	0.76	---	11	0.054	---	---	---	4.2	---	19	---	65	---	<0.05	150	150	<25	<25	150
M99-0084	EMP #3 Pump Blank Before	09-Aug-99	---	---	<0.25	---	---	---	---	<1	---	11	---	140	---	---	220	220	2	<25	2.8
M99-0091	EMP #3 Pump Blank After	11-Aug-99	---	---	11	---	---	---	---	3.9	---	18	---	77	---	---	130	130	<25	<25	160
M99-0180	EMP #3 Before Purging Wells	18-Oct-99	0.69	<0.005	21	0.051	<0.0002	0.0062	<0.02	5.6	---	25	<0.005	92	<0.005	0.11	96	96	<25	<25	310

Table 2: SUMMARY OF LABORATORY ANALYSES OF GROUNDWATER SAMPLES,
JAL #4 PLANT, EL PASO CORPORATION, LEA COUNTY, NEW MEXICO

LABORATORY SAMPLE NUMBER	SAMPLE DESCRIPTION	Sample Date	Benzene, µg/l	Toluene, µg/l	Ethylbenzene, µg/l	Total Xylene, µg/l	MTBE, µg/l	Gasoline Range Organics, mg/l	Acenaphthene, µg/l	Acenaphthylene, µg/l	Anthracene, µg/l	Benz(a)anthracene, µg/l	Benz(b)fluoranthene, µg/l	Benz(k)fluoranthene, µg/l	Benzo(g,h,i)perylene, µg/l	Benzo(a)pyrene, µg/l	Chrysene, µg/l	Dibenzo(a,h)anthracene, µg/l	Fluoranthene, µg/l	Fluorene, µg/l	Indeno(1,2,3-cd)pyrene, µg/l	Naphthalene, µg/l	Phenanthrene, µg/l	Pyrene, µg/l
M99-0200	EMP #3 Middle	22-Oct-99	2.6	7.7	2.6	4.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0207	EMP #3 After Purging	23-Oct-99	<2	7.4	2.6	4.4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0020	EMP #3 Pump Blank Before Purging	22-Feb-00	<2	<2	<2	7.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0029	EMP #3 After Purging Wells	23-Feb-00	<2	<2	<2	2.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0075	EMP #3 Before Purging Wells	08-May-00	<5	<5	<5	<10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0090	EMP #3 Middle of Sampling	10-May-00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0103	EMP #3 Pump Blank After Sampling	12-May-00	<5	<5	<5	<10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0193	EMP #3 Before Purging Wells	07-Aug-00	<2	<2	<2	<4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0202	EMP #3 Pump Blank After Purging	08-Aug-00	<2	<2	<2	<4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0213	EMP #3 Before Purging Wells	26-Oct-00	<2	<2	<2	6.3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0228	EMP #3 Middle of Sampling	01-Nov-00	<2	<2	<2	<4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0244	EMP #3 After Purging Wells	06-Nov-00	<2	<2	<2	<4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0009	EMP #3 Pump Blank Before Sampling	20-Feb-01	<2	<2	<2	<4	<5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0019	EMP #3 After Purging Wells	21-Feb-01	<2	<2	<2	<4	<5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0130	EMP #3 Pump Blank Before Purging Wells	02-May-01	<2	<2	<2	3.8	<5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0154	EMP #3 Pump Blank Middle of Purging Wells	06-May-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0162	EMP #3 After Purging Wells	07-May-01	<2	<2	<2	5.2	<5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0403	EMP #3 Before Purging Wells	01-Aug-01	<2	<2	<2	4.6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0413	EMP #3 After Purging Wells	02-Aug-01	<2	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0465	EMP #3 Pump Blank Before Purging Wells	22-Oct-01	<2	<2	<2	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0478	EMP #3 Middle of Purging Wells	24-Oct-01	<2	<2	<2	3.2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0492	EMP #3 After Purging Wells	29-Oct-01	2.2	<2	<2	6.2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0064	Field Blank	24-Feb-98	<0.50	0.93	<0.50	2.3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0171	Field Blank	12-May-98	<0.50	<0.50	<0.50	<1.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0223	Field Blank	01-Jun-98	17	100	<0.50	120	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0291	Field Blank	10-Aug-98	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S98-0480	Field Blank	22-Oct-98	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S99-0077	Field Blank	23-Feb-99	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0001	Field Blank	10-May-99	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M99-0209	Field Blank	23-Oct-99	<2	<2	<2	<4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0031	Field Blank	23-Feb-00	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0104	Field Blank	12-May-00	<5	<5	<5	<10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0203	Field Blank	08-Aug-00	<2	<2	<2	<4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0246	Field Blank	06-Nov-00	<2	<2	<2	<4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0020	Field Blank	21-Feb-01	<2	<2	<2	<4	<5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0164	Field Blank	07-May-01	<2	<2	<2	<2	<5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0414	Field Blank	02-Aug-01	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0491	Field Blank	25-Oct-01	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0494	Field Blank	29-Oct-01	<2	<2	<2	<2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Table 2: SUMMARY OF LABORATORY ANALYSES OF GROUNDWATER SAMPLES,
JAL #4 PLANT, EL PASO CORPORATION, LEA COUNTY, NEW MEXICO

LABORATORY SAMPLE NUMBER	SAMPLE DESCRIPTION	Sample Date	Specific Conductance, umho/cm	pH, s.u.	Total Dissolved Solids, mg/L	Chloride, mg/l	Sulfate, mg/l	pH Temperature °C	Bromide, mg/l	Fluoride, mg/l	Nitrate-N, mg/l	Nitrate as NO ₃ , mg/l	Aluminum, mg/l	Arsenic, mg/l	Barium, mg/l	Boron, mg/l	Cadmium, mg/l	Calcium, mg/l	Chromium, mg/l	Cobalt, mg/l	Copper, mg/l
M99-0200	EMP #3 Middle	22-Oct-99	624	8.22	397	110	50	19.4	0.60	1.6	<0.05	---	0.033	0.0066	0.075	0.20	<0.002	44	<0.005	<0.005	<0.0025
M99-0207	EMP #3 After Purging	23-Oct-99	640	8.29	367	96	50	21.4	0.58	1.6	<0.05	---	0.059	0.0062	0.092	0.20	<0.002	50	<0.005	<0.005	<0.0025
M00-0020	EMP #3 Pump Blank Before Purging	22-Feb-00	683	6.60	490	86	54	16.6	<1	1.8	<0.5	---	---	---	---	---	---	47	---	---	---
M00-0029	EMP #3 After Purging Wells	23-Feb-00	681	6.99	460	82	52	17.0	0.63	1.8	<0.5	---	---	---	---	---	---	46	---	---	---
M00-0075	EMP #3 Before Purging Wells	08-May-00	653	7.16	482	83	51	21.8	0.46	1.7	<1	---	---	---	---	---	---	46	---	---	---
M00-0090	EMP #3 Middle of Sampling	10-May-00	648	---	373	98	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0103	EMP #3 Pump Blank After Sampling	12-May-00	670	8.22	405	91	52	18.5	0.54	1.6	<0.1	---	---	---	---	---	---	49	---	---	---
M00-0193	EMP #3 Before Purging Wells	07-Aug-00	552	7.49	369	81	38	25.8	0.29	1.1	<0.05	---	---	---	---	---	---	30	---	---	---
M00-0202	EMP #3 Pump Blank After Purging	08-Aug-00	600	8.18	317	58	45	25.9	0.50	1.7	0.21	---	---	---	---	---	---	44	---	---	---
M00-0213	EMP #3 Before Purging Wells	26-Oct-00	3,030	7.11	1,920	1,300	80	14.5	<2	1.7	<1	---	---	<0.1	0.13	0.23	<0.01	62	<0.01	---	0.0055
M00-0228	EMP #3 Middle of Sampling	01-Nov-00	9,200	8.03	6,080	3,300	240	14.4	<2	1.9	<1	---	---	<0.1	0.25	0.31	<0.01	120	<0.01	---	0.0061
M00-0244	EMP #3 After Purging Wells	06-Nov-00	4,400	8.1	3,500	2,100	150	16.7	<4	1.9	<2	---	---	<0.1	0.14	0.28	<0.01	72	<0.01	---	<0.005
M01-0009	EMP # 3 Pump Blank Before Sampling	20-Feb-01	1,380	8.17 Hr	736	340	52	21.5	0.56	1.7	<0.1	---	---	---	---	---	---	36	---	---	---
M01-0019	EMP #3 After Purging Wells	21-Feb-01	1,120	8.24 Hr	592	240	52	21.9	0.53	1.8	0.19	---	---	---	---	---	---	36	---	---	---
M01-0130	EMP #3 Pump Blank Before Purging Wells	02-May-01	565	7.67	321	67	<2	18.9	<1	0.99	<0.5	---	---	---	---	---	---	34	---	---	---
M01-0154	EMP #3 Pump Blank Middle of Purging Wells	06-May-01	733	---	426	110	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0162	EMP #3 After Purging Wells	07-May-01	724	8.19 Hr	426	130	62 D2	25.6	0.60	1.8	<1	---	---	---	---	---	---	34	---	---	---
M01-0403	EMP #3 Before Purging Wells	01-Aug-01	622	7.4	418	71	35	23.3	<2	1.7	<1	---	---	---	---	---	---	35	---	---	---
M01-0413	EMP #3 After Purging Wells	02-Aug-01	516	8.2	303	74	52	22.9	0.48	1.7	<0.05	---	---	---	---	---	---	34	---	---	---
M01-0465	EMP #3 Pump Blank Before Purging Wells	22-Oct-01	501	7.27	375	66	24	21.5	<2	1.8	<1	---	<0.05	<0.1	0.045	0.20	<0.005	32	<0.01	<0.01	<0.005
M01-0478	EMP #3 Middle of Purging Wells	24-Oct-01	565	8.22 H3	310	76	44	20.3	<2	1.7	<0.5	---	0.067	<0.1	0.059	0.19	<0.005	40	<0.01	<0.01	<0.005
M01-0492	EMP #3 After Purging Wells	29-Oct-01	572	8.01 H3	343	59	47	23.3	<2	1.8	<0.5	---	0.400	<0.1	0.051	0.23	<0.005	38	<0.01	<0.01	<0.005
S88-0064	Field Blank	24-Feb-98	2	5.8	<20	<0.2	<1	---	<0.2	<0.1	<0.2	---	---	---	---	---	---	<1	---	---	---
S98-0171	Field Blank	12-May-98	54	5.7	<20	<0.2	<1	---	<0.2	<0.1	<0.05	---	---	---	---	---	---	<1	---	---	---
S98-0223	Field Blank	01-Jun-98	3.2	6.0	<20	0.33	<1	---	<0.2	<0.1	<0.05	---	---	---	---	---	---	<1	---	---	---
S98-0291	Field Blank	10-Aug-98	20.7	9.56	31	<0.1	<2.0	19.3	<0.1	<0.10	<1.25	---	---	---	---	---	---	3.6	---	---	---
S98-0480	Field Blank	22-Oct-98	1.23	5.67	59	<0.1	<0.1	21.8	<0.2	<0.4	<0.05	---	---	---	---	0.016	---	<0.25	---	---	<0.0025
S99-0077	Field Blank	23-Feb-99	2.46	5.35	<25	<0.1	<0.1	14.8	<0.2	<0.4	<0.05	---	---	---	---	---	---	<0.25	---	---	---
M99-0001	Field Blank	10-May-99	1.32	6.18	41	<0.1	<0.1	21.5	<0.2	<0.4	<0.05	---	---	---	---	<0.01	---	<0.25	---	---	<0.0025
M99-0209	Field Blank	23-Oct-99	3.70	5.94	<15	0.32	<0.5	21.7	<0.2	<0.4	0.080	---	<0.025	<0.005	<0.0025	<0.01	<0.002	0.33	<0.005	<0.005	<0.0025
M00-0031	Field Blank	23-Feb-00	1	6.04	<15	<0.1	<0.1	17.4	<0.2	<0.4	<0.1	---	---	---	---	---	---	<0.5	---	---	---
M00-0104	Field Blank	12-May-00	6	5.47	17	<0.1	<0.1	18.6	<0.2	<0.4	<0.1	---	---	---	---	---	---	<0.5	---	---	---
M00-0203	Field Blank	08-Aug-00	2.0	6.20	<15	<0.1	<0.1	25.8	<0.2	<0.4	<0.05	---	---	---	---	---	---	<0.5	---	---	---
M00-0246	Field Blank	06-Nov-00	11.0	5.4	<15	3.3	<0.1	17.2	<0.2	<0.4	<0.1	---	---	<0.1	<0.005	0.12	<0.01	<0.5	<0.01	---	0.10
M01-0020	Field Blank	21-Feb-01	1.0	6.14 Hr	<15	<0.1	<0.1	22.0	<0.2	<0.4	<0.1	---	---	---	---	---	---	<0.5	---	---	---
M01-0164	Field Blank	07-May-01	577.0	8.19 Hr	342	84	<2	25.2	0.17	<0.4	0.630	---	---	---	---	---	---	<0.5	---	---	---
M01-0414	Field Blank	02-Aug-01	33.2	6.04	28	6.5	1	22.8	0.13	<0.4	0.62	---	---	---	---	---	---	0.51	---	---	---
M01-0491	Field Blank	25-Oct-01	1.3	6.38	<15	<0.1	<0.1	19.6	<0.2	<0.4	<0.05	---	<0.05	<0.1	<0.005	<0.1	<0.005	<0.5	<0.01	<0.01	<0.005
M01-0494	Field Blank	29-Oct-01	1.73	6.25 H3	<15	<0.1	<0.1	22.8	<0.2	<0.4	<0.05	---	<0.05	<0.1	<0.005	<0.1	<0.005	<0.5	<0.01	<0.01	<0.005

Table 2: SUMMARY OF LABORATORY ANALYSES OF GROUNDWATER SAMPLES,
JAL #4 PLANT, EL PASO CORPORATION, LEA COUNTY, NEW MEXICO

LABORATORY SAMPLE NUMBER	SAMPLE DESCRIPTION	Sample Date	Iron, mg/l	Lead, mg/l	Magnesium, mg/l	Manganese, mg/l	Mercury, mg/l	Molybdenum, mg/l	Nickel, mg/l	Potassium, mg/l	Selenium	Silica, mg/l	Silver, mg/l	Sodium, mg/l	Uranium, mg/l	Zinc, mg/l	Alkalinity (as CaCO ₃), mg/l	Alkalinity - Bicarbonate, mg/l	Alkalinity - Carbonate, mg/l	Alkalinity - Hydroxide, mg/l	Hardness (as CaCO ₃), mg/l
M99-0200	EMP #3 Middle	22-Oct-99	0.72	<0.005	12	0.051	<0.0002	0.0069	<0.02	4.3	---	17	<0.005	80	<0.005	<0.05	120	120	<25	<25	160
M99-0207	EMP #3 After Purging	23-Oct-99	0.89	<0.005	13	0.058	<0.0002	0.0083	<0.02	4.4	---	20	<0.005	80	<0.005	<0.05	130	130	<25	<25	180
M00-0020	EMP #3 Pump Blank Before Purging	22-Feb-00	---	---	12	---	---	---	---	5.0	---	19	---	74	---	---	87	87	<25	<25	170
M00-0029	EMP #3 After Purging Wells	23-Feb-00	---	---	12	---	---	---	---	5.2	---	13	---	76	---	---	95	95	<25	<25	160
M00-0075	EMP #3 Before Purging Wells	08-May-00	---	---	12	---	---	---	---	4.7	---	25	---	73	---	---	130	130	<25	<25	160
M00-0090	EMP #3 Middle of Sampling	10-May-00	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M00-0103	EMP #3 Pump Blank After Sampling	12-May-00	---	---	13	---	---	---	---	4.4	---	22	---	72	---	---	150	150	<25	<25	170
M00-0193	EMP #3 Before Purging Wells	07-Aug-00	---	---	9.5	---	---	---	---	3.1	---	21	---	78	---	---	140	140	<25	<25	110
M00-0202	EMP #3 Pump Blank After Purging	08-Aug-00	---	---	12	---	---	---	---	4.1	---	21	---	72	---	---	130	130	<25	<25	150
M00-0213	EMP #3 Before Purging Wells	26-Oct-00	2.9	<0.05	20	0.13	<0.0002	---	---	19	<0.1	26	<0.02	540	---	<0.1	140	140	<25	<25	240
M00-0228	EMP #3 Middle of Sampling	01-Nov-00	3.0	<0.05	45	0.29	<0.0002	---	---	65	<0.1	19	<0.02	800	---	<0.1	140	140	<25	<25	480
M00-0244	EMP #3 After Purging Wells	06-Nov-00	1.2	<0.05	27	0.15	<0.0002	---	---	40	<0.1	23	<0.02	600	---	<0.1	150	150	<25	<25	290
M01-0009	EMP # 3 Pump Blank Before Sampling	20-Feb-01	---	---	12	---	---	---	---	11	---	23	---	220	---	---	140	140	<25	<25	140
M01-0019	EMP #3 After Purging Wells	21-Feb-01	---	---	12	---	---	---	---	9.1	---	22	---	180	---	---	150	150	<25	<25	140
M01-0130	EMP #3 Pump Blank Before Purging Wells	02-May-01	---	---	13	---	---	---	---	3.2	---	22	---	76	---	---	160	160	<25	<25	140
M01-0154	EMP #3 Pump Blank Middle of Purging Wells	06-May-01	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
M01-0162	EMP #3 After Purging Wells	07-May-01	---	---	11	---	---	---	---	5.5	---	21	---	93	---	---	150	150	<25	<25	130
M01-0403	EMP #3 Before Purging Wells	01-Aug-01	---	---	9.7	---	---	---	---	5.3	---	26	---	75	---	---	150	150	<25	<25	130
M01-0413	EMP #3 After Purging Wells	02-Aug-01	---	---	8.3	---	---	---	---	4.7	---	25	---	59	---	---	130	130	<25	<25	120
M01-0465	EMP #3 Pump Blank Before Purging Wells	22-Oct-01	1.4	<0.05	7.9	0.056	<0.0002	<0.01	<0.04	4.1	<0.1	25	<0.02	58	<0.005	<0.1	130	130	<25	<25	110
M01-0478	EMP #3 Middle of Purging Wells	24-Oct-01	0.64	<0.05	9.8	0.043	<0.0002	<0.01	<0.04	4.0	<0.1	25	<0.02	61	<0.005	<0.1	140	140	<25	<25	140
M01-0492	EMP #3 After Purging Wells	29-Oct-01	0.41	<0.05	9.8	0.032	<0.0002	0.01	<0.04	3.7	<0.1	25	<0.02	59	<0.005	<0.1	140	140	<25	<25	140
S98-0064	Field Blank	24-Feb-98	---	---	<1	---	---	---	<---	<1	---	<0.05	---	<1	---	---	<5	---	---	---	---
S98-0171	Field Blank	12-May-98	---	---	<1	---	---	---	---	<1	---	<0.05	---	<1	---	---	<5	<5	---	---	---
S98-0223	Field Blank	01-Jun-98	---	---	<1	---	---	---	---	<1	---	<0.05	---	<1	---	---	<5	<5	---	---	---
S98-0291	Field Blank	10-Aug-98	---	---	<0.25	---	---	---	---	<0.25	---	<10	---	<0.25	---	---	<25	<25	<25	<25	9.0
S98-0480	Field Blank	22-Oct-98	<0.05	---	<0.25	<0.0025	---	---	---	<1	---	<0.25	---	<0.25	---	<0.05	<25	<25	<25	<25	<0.5
S99-0077	Field Blank	23-Feb-99	---	---	<0.25	---	---	---	---	<1	---	<1	---	<0.25	---	---	<25	<25	<25	<25	<1
M99-0001	Field Blank	10-May-99	<0.05	---	<0.25	<0.0025	---	---	---	<1	---	<0.2	---	<0.25	---	<0.05	<25	<25	<25	<25	<1
M99-0209	Field Blank	23-Oct-99	<0.05	0.0062	<0.25	<0.0025	<0.0002	<0.005	<0.02	<1	---	<1	<0.005	<0.25	<0.005	<0.05	<25	<25	<25	<25	<1
M00-0031	Field Blank	23-Feb-00	---	---	<0.5	---	---	---	---	<2	---	<1	---	<0.5	---	---	<25	<25	<25	<25	<2
M00-0104	Field Blank	12-May-00	---	---	<0.5	---	---	---	---	<2	---	<1	---	<0.5	---	---	<25	<25	<25	<25	<2
M00-0203	Field Blank	08-Aug-00	---	---	<0.5	---	---	---	---	<2	---	<1	---	<0.5	---	---	<25	<25	<25	<25	<2
M00-0246	Field Blank	06-Nov-00	<0.1	<0.05	<0.5	<0.005	<0.0002	---	---	<2	<0.1	1.2	<0.02	1.5	---	<0.1	<25	<25	<25	<25	<2
M01-0020	Field Blank	21-Feb-01	---	---	<0.5	---	---	---	---	<2	---	<1	---	<0.5	---	---	<25	<25	<25	<25	<2
M01-0164	Field Blank	07-May-01	---	---	<0.5	---	---	---	---	<2	---	11	---	140.0	---	---	240	240	<25	<25	<2
M01-0414	Field Blank	02-Aug-01	---	---	<0.5	---	---	---	---	<2	---	<1	---	6.0	---	---	<25	<25	<25	<25	<2
M01-0491	Field Blank	25-Oct-01	<0.1	<0.05	<0.5	<0.005	<0.0002	<0.01	<0.04	<2	<0.1	<1	<0.02	<0.5	<0.005	<0.1	<25	<25	<25	<2	
M01-0494	Field Blank	29-Oct-01	<0.1	<0.05	<0.5	<0.005	<0.0002	<0.01	---	<2	<0.1	<1	<0.02	1.4	<0.005	<0.1	<25	<25	<25	<5	

**Table 2: SUMMARY OF LABORATORY ANALYSES OF GROUNDWATER SAMPLES,
JAL #4 PLANT, EL PASO CORPORATION, LEA COUNTY, NEW MEXICO**

LABORATORY SAMPLE NUMBER	SAMPLE DESCRIPTION	Sample Date	Benzene, µg/l	Toluene, µg/l	Ethylbenzene, µg/l	Total Xylene, µg/l	MTBE, µg/l	Gasoline Range Organics, mg/l	Acenaphthene, µg/l	Acenaphthylene, µg/l	Anthracene, µg/l	Benzo(a)anthracene, µg/l	Benzo(b)fluoranthene, µg/l	Benzo(k)fluoranthene, µg/l	Benzo(g,h,i)perylene, µg/l	Benzo(a)pyrene, µg/l	Chrysene, µg/l	Dibenzo(a,h)anthracene, µg/l	Fluoranthene, µg/l	Fluorene, µg/l	Indeno(1,2,3-cd)pyrene, µg/l	Naphthalene, µg/l	Phenanthrene, µg/l	Pyrene, µg/l
-----------------------------	--------------------	----------------	---------------	---------------	--------------------	--------------------	------------	----------------------------------	--------------------	----------------------	------------------	--------------------------	----------------------------	----------------------------	----------------------------	----------------------	----------------	---------------------------------	--------------------	----------------	---------------------------------	-------------------	--------------------	--------------

Notes:

1. < : Denotes a sample value of less than the laboratory reporting limit.
2. Jm : Estimated value--possible matrix effect.
3. * : Method blank had detectable levels of this compound.
4. 1.2/<0.05 : NEL Lab result/Montgomery Watson Lab result
5. P : Denotes sample was received with a pH greater than 2.
6. Hr: Sample was received beyond holding time for this parameter.
7. Jc: This concentration may be biased because the continuing calibration verification (CCV) standard did not meet QC requirements for this analyte. However, overall CCV standard recoveries meet method requirements and analytical results are in control.
8. H3: Sample was received and analyzed past holding time.
9. D2: Sample required dilution due to high concentration of target analyte.

**TABLE 1: SUMMARY OF DEPTH TO GROUNDWATER MEASUREMENTS,
JAL NO. 4 PLANT, EL PASO CORPORATION, LEA COUNTY, NEW MEXICO**

MONITOR WELL	SCREENED INTERVAL (FEET-BGL)	TOP OF CASING ELEVATION (FEET-AMSL)	DEPTH TO GROUNDWATER MEASUREMENT DATE	DEPTH TO GROUNDWATER (FEET-TOC)	GROUNDWATER ELEVATION (FEET-AMSL)
ACW-01	110 to 130	3,300.87	02/19/97	106.65	3,194.22
			05/07/97	105.59	3,195.28
			08/19/97	105.61	3,195.26
			10/21/97	105.71	3,195.16
			02/24/98	105.62	3,195.25
			05/12/98	105.59	3,195.28
			08/11/98	105.61	3,195.26
			10/20/98	105.67	3,195.20
			02/23/99	105.72	3,195.15
			05/11/99	105.66	3,195.21
			08/11/99	105.68	3,195.19
			10/18/99	105.73	3,195.14
			02/22/00	105.81	3,195.06
			05/09/00	105.90	3,194.97
			08/07/00	105.99	3,194.88
			10/26/00	106.10	3,194.77
			02/20/01	106.19	3,194.68
			05/01/01	105.90	3,194.97
			08/01/01	105.89	3,194.98
			10/22/01	106.05	3,194.82
ACW-2a	98 to 118	3,300.88	05/12/99	106.00	3,194.88
			10/18/99	106.09	3,194.79
			05/08/00	107.27	3,193.61
			10/26/00	107.51	3,193.37
			05/02/01	106.31	3,194.57
ACW-03	112 to 132	3,300.34	10/22/01	106.85	3,194.03
			05/08/00	105.98	3,194.36
			10/26/00	106.21	3,194.13
			05/01/01	105.94	3,194.40
ACW-04	154 to 169	3,299.48	10/23/01	106.15	3,194.19
			05/08/00	113.57	3,185.91
			10/26/00	113.25	3,186.23
			05/02/01	106.00	3,193.48
ACW-05	105 to 115	3,294.75	10/22/01	107.99	3,191.49
			02/19/97	103.08	3,191.67
			05/07/97	103.06	3,191.69
			08/19/97	103.07	3,191.68
			10/22/97	103.06	3,191.69
			02/24/98	103.10	3,191.65
			05/13/98	103.10	3,191.65
			08/11/98	103.15	3,191.60
			10/21/98	103.22	3,191.53
			02/23/99	103.26	3,191.49
			05/13/99	103.17	3,191.58
			08/11/99	103.17	3,191.58
			10/21/99	103.25	3,191.50
			02/22/00	103.30	3,191.45
			05/10/00	103.32	3,191.43
			08/07/00	103.40	3,191.35
			10/26/00	103.50	3,191.25
			02/20/01	103.62	3,191.13
			05/06/01	103.57	3,191.18
ACW-06	110 to 120	3,300.53	08/01/01	103.46	3,191.29
			10/24/01	103.70	3,191.05
			02/19/97	107.53	3,193.00
			05/08/97	107.50	3,193.03
			08/18/97	107.51	3,193.02
			10/22/97	107.57	3,192.96
			02/24/98	107.54	3,192.99
			05/13/98	107.55	3,192.98
			08/11/98	107.57	3,192.96
			10/21/98	107.70	3,192.83
			02/23/99	107.68	3,192.85

**TABLE 1: SUMMARY OF DEPTH TO GROUNDWATER MEASUREMENTS,
JAL NO. 4 PLANT, EL PASO CORPORATION, LEA COUNTY, NEW MEXICO**

MONITOR WELL	SCREENED INTERVAL (FEET-BGL)	TOP OF CASING ELEVATION (FEET-AMSL)	DEPTH TO GROUNDWATER MEASUREMENT DATE	DEPTH TO GROUNDWATER (FEET-TOC)	GROUNDWATER ELEVATION (FEET-AMSL)
ACW-06 cont	110-120	3,300.53	05/13/99	107.62	3,192.91
			08/11/99	107.60	3,192.93
			10/21/99	107.68	3,192.85
			02/22/00	107.72	3,192.81
			05/10/00	107.75	3,192.78
			08/07/00	107.84	3,192.69
			10/26/00	107.90	3,192.63
			02/20/01	108.00	3,192.53
			05/06/01	107.95	3,192.58
			08/01/01	107.87	3,192.66
ACW-07	105 to 115	3,295.36	10/24/01	108.09	3,192.44
			05/12/99	102.62	3,192.74
			10/21/99	102.75	3,192.61
			05/10/00	102.92	3,192.44
			10/26/00	103.20	3,192.16
			05/06/01	103.08	3,192.28
ACW-08	140 to 173	3,297.27	10/24/01	103.35	3,192.01
			05/11/99	104.17	3,193.10
			10/18/99	104.29	3,192.98
			05/09/00	104.40	3,192.87
			10/26/00	104.64	3,192.63
			05/01/01	104.48	3,192.79
ACW-09	140 to 160	3,302.47	10/24/01	104.60	3,192.67
			02/19/97	110.24	3,192.23
			05/08/97	110.25	3,192.22
			08/19/97	110.26	3,192.21
			10/23/97	110.28	3,192.19
			02/24/98	110.29	3,192.18
			05/13/98	110.30	3,192.17
			08/11/98	110.32	3,192.15
			10/21/98	110.40	3,192.07
			02/23/99	110.54	3,191.93
			05/13/99	110.45	3,192.02
			08/11/99	110.45	3,192.02
			10/22/99	110.50	3,191.97
			02/22/00	111.18	3,191.29
			05/12/00	111.89	3,190.58
			08/07/00	111.22	3,191.25
			10/26/00	112.20	3,190.27
			02/20/01	112.41	3,190.06
			05/04/01	110.85	3,191.62
ACW-10	140 to 160	3,297.57	08/01/01	110.70	3,191.77
			10/25/01	112.17	3,190.30
			02/19/97	106.31	3,191.26
			05/08/97	106.32	3,191.25
			08/19/97	106.33	3,191.24
			10/23/97	106.35	3,191.22
			02/24/98	106.38	3,191.19
			05/14/98	106.38	3,191.19
			08/11/98	106.41	3,191.16
			10/22/98	106.54	3,191.03
			02/23/99	106.52	3,191.05
			05/14/99	106.45	3,191.12
			08/11/99	106.47	3,191.10
			10/22/99	106.52	3,191.05
			02/22/00	106.39	3,191.18
			05/12/00	106.63	3,190.94
			08/07/00	106.77	3,190.80
			10/26/00	106.89	3,190.68
			02/20/01	106.99	3,190.58
			05/06/01	106.82	3,190.75
			08/01/01	106.76	3,190.81
			10/25/01	107.01	3,190.56

**TABLE 1: SUMMARY OF DEPTH TO GROUNDWATER MEASUREMENTS,
JAL NO. 4 PLANT, EL PASO CORPORATION, LEA COUNTY, NEW MEXICO**

MONITOR WELL	SCREENED INTERVAL (FEET-BGL)	TOP OF CASING ELEVATION (FEET-AMSL)	DEPTH TO GROUNDWATER MEASUREMENT DATE	DEPTH TO GROUNDWATER (FEET-TOC)	GROUNDWATER ELEVATION (FEET-AMSL)
ACW-11	140 to 160	3,299.33	02/19/97	106.01	3,193.32
			05/06/97	105.95	3,193.38
			08/19/97	106.00	3,193.33
			10/21/97	106.02	3,193.31
			02/24/98	106.02	3,193.31
			05/12/98	106.00	3,193.33
			08/11/98	106.07	3,193.26
			10/20/98	106.17	3,193.16
			02/23/99	106.20	3,193.13
			05/12/99	106.07	3,193.26
			08/11/99	106.15	3,193.18
			10/20/99	106.16	3,193.17
			02/22/00	106.27	3,193.06
			05/09/00	106.31	3,193.02
			08/07/00	106.54	3,192.79
			10/26/00	106.65	3,192.68
			02/20/01	106.70	3,192.63
			05/01/01	106.45	3,192.88
			08/01/01	106.40	3,192.93
			10/23/01	106.57	3,192.76
ACW-12	150 to 170	3,299.56	02/19/97	109.32	3,190.24
			05/08/97	109.32	3,190.24
			08/20/97	99.29	3,200.27
			10/23/97	109.39	3,190.17
			02/24/98	109.38	3,190.18
			05/14/98	109.35	3,190.21
			08/11/98	109.40	3,190.16
			10/22/98	109.51	3,190.05
			02/23/99	109.54	3,190.02
			05/14/99	109.44	3,190.12
			08/11/99	109.54	3,190.02
			10/22/99	109.52	3,190.04
			02/22/00	109.50	3,190.06
			05/11/00	109.57	3,189.99
			08/07/00	109.65	3,189.91
			10/26/00	109.78	3,189.78
			02/20/01	109.90	3,189.66
			05/03/01	109.75	3,189.81
			08/01/01	109.76	3,189.80
			10/25/01	109.99	3,189.57
ACW-13	153 to 173	3,289.46	02/20/97	99.28	3,190.18
			05/08/97	99.29	3,190.17
			08/20/97	99.29	3,190.17
			10/23/97	99.27	3,190.19
			02/24/98	99.31	3,190.15
			05/14/98	99.31	3,190.15
			08/11/98	99.36	3,190.10
			10/22/98	99.40	3,190.06
			02/23/99	99.45	3,190.01
			05/14/99	99.38	3,190.08
			08/11/99	99.44	3,190.02
			10/22/99	99.44	3,190.02
			02/23/00	99.48	3,189.98
			05/11/00	99.47	3,189.99
			08/07/00	99.53	3,189.93
			10/26/00	99.50	3,189.96
			02/20/01	99.65	3,189.81
			05/06/01	99.62	3,189.84
			08/01/01	99.61	3,189.85
			10/25/01	99.61	3,189.85
ACW-14	157 to 177	3,291.18	02/19/97	NM	NM
			05/06/97	NM	NM
			08/20/97	100.41	3,190.77

**TABLE 1: SUMMARY OF DEPTH TO GROUNDWATER MEASUREMENTS,
JAL NO. 4 PLANT, EL PASO CORPORATION, LEA COUNTY, NEW MEXICO**

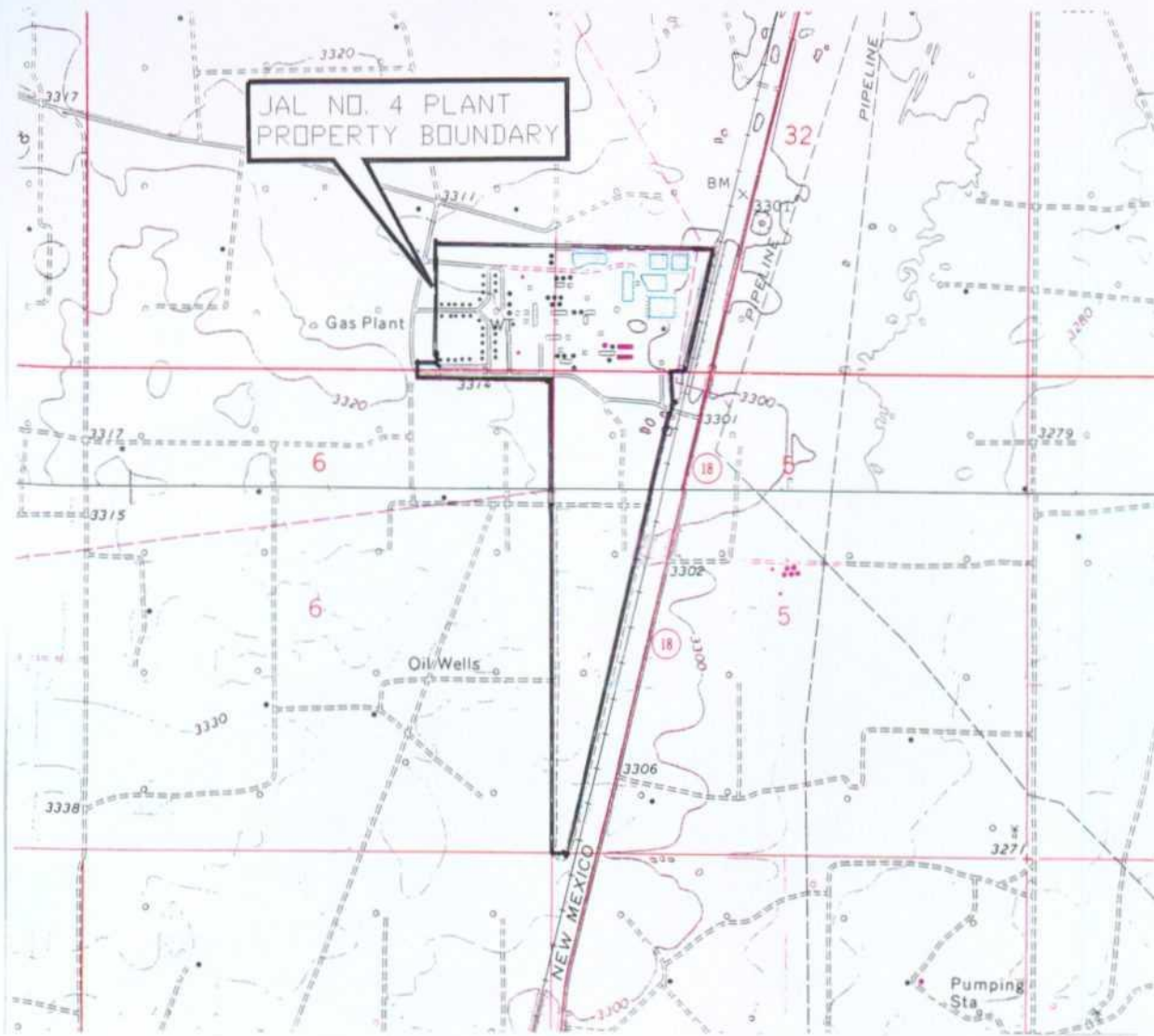
MONITOR WELL	SCREENED INTERVAL (FEET-BGL)	TOP OF CASING ELEVATION (FEET-AMSL)	DEPTH TO GROUNDWATER MEASUREMENT DATE	DEPTH TO GROUNDWATER (FEET-TOC)	GROUNDWATER ELEVATION (FEET-AMSL)
ACW-14 cont	157-177	3,291.18	10/22/97	100.38	3,190.80
			02/24/98	100.47	3,190.71
			05/13/98	100.42	3,190.76
			08/11/98	100.47	3,190.71
			10/21/98	100.54	3,190.64
			02/23/99	100.57	3,190.61
			05/13/99	100.49	3,190.69
			08/09/99	100.49	3,190.69
			10/21/99	100.55	3,190.63
			02/22/00	100.56	3,190.62
			05/10/00	100.52	3,190.66
			08/07/00	100.61	3,190.57
			10/26/00	100.62	3,190.56
			02/20/01	100.75	3,190.43
			05/03/01	100.72	3,190.46
			08/01/01	100.75	3,190.43
ACW-15	150 to 170	3,290.54	10/24/01	100.75	3,190.43
			10/23/99	102.39	3,188.15
			02/23/00	102.41	3,188.13
			05/11/00	102.42	3,188.12
			08/07/00	102.45	3,188.09
			10/26/00	102.42	3,188.12
			02/20/01	102.55	3,187.99
			05/06/01	102.51	3,188.03
			08/01/01	102.58	3,187.96
			10/25/01	102.56	3,187.98

NOTES:

1. TOC : Top of Casing
2. AMSL : Above Mean Sea Level
3. NM : No Measurement Taken
4. BGL: Below Ground Level

FIGURES

R 37 E



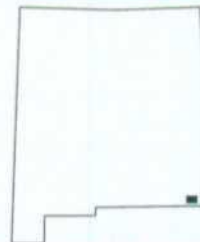
T
2
3
S

T
2
4
S

AFTER U.S.G.S. 7.5 MIN. TOPO. QUAD., RATTLESNAKE CANYON, N.M., 1979, AND JAL NW, N.M., 1979



NEW MEXICO



**Atkins
Benham**

ENVIRONMENTAL DIVISION
2488 E. 81st Street, Suite 7000
Tulsa, Oklahoma 74137
(918) 496-0059

www.atkinsbenham.com

a member of the WS Atkins
group of companies

WS Atkins

FIGURE TITLE

**SITE LOCATION AND
TOPOGRAPHIC FEATURES**

DOCUMENT TITLE

**2001 ANNUAL GROUNDWATER
REMEDATION REPORT**

CLIENT

EL PASO CORPORATION

LOCATION

**JAL #4 PLANT
LEA COUNTY, NEW MEXICO**

DATE 1/15/02

SCALE AS SHOWN

DESIGNED BY BEM

APPROVED BY BEM

DRAWN BY SKG

PROJECT NUMBER

9717101

FIGURE NUMBER

1

H:\1997\97171\CAD\97171F01-2001.DWG on Jan 16, 2002-11:20am

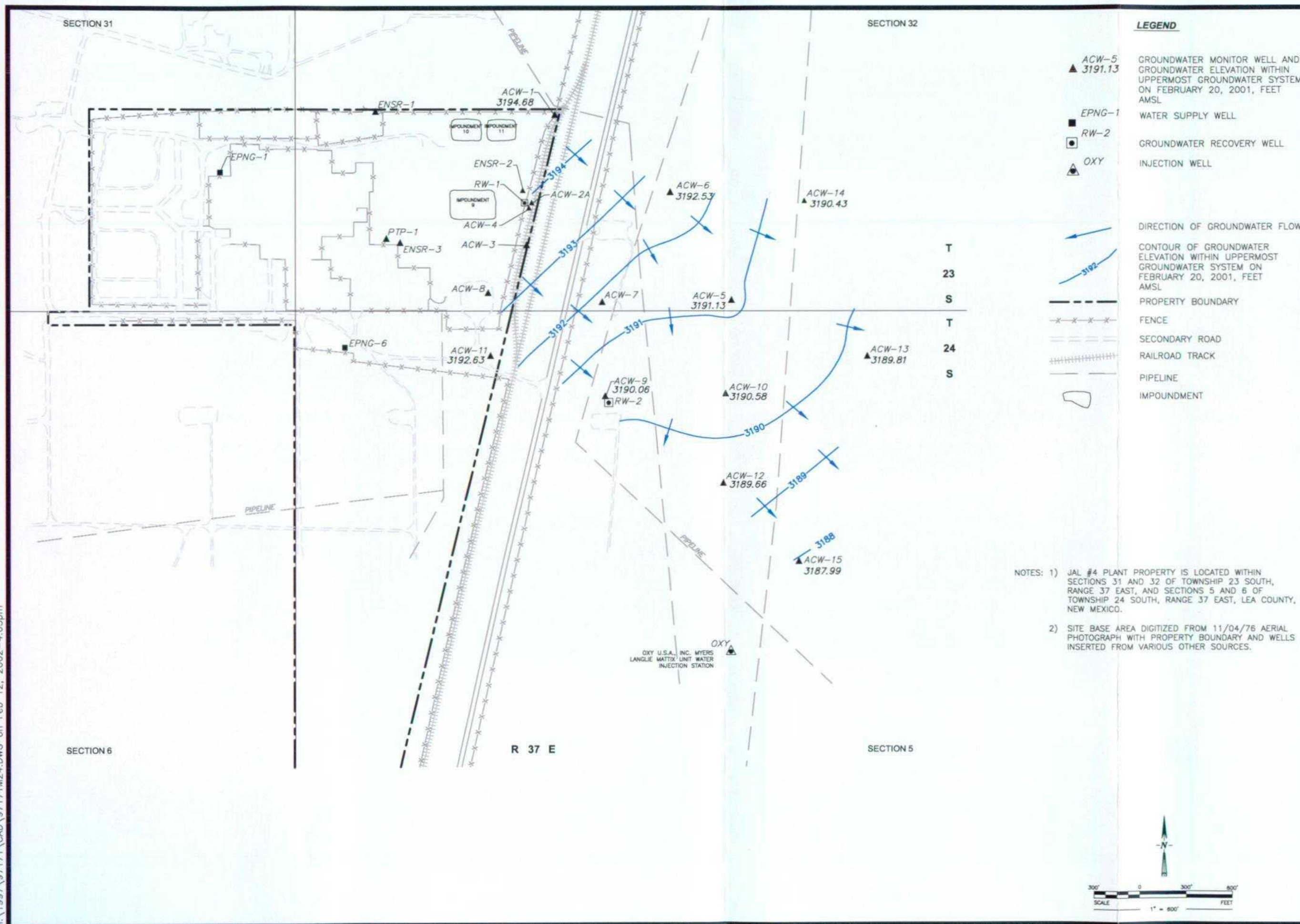


FIGURE TITLE
GROUNDWATER POTENTIAL SURFACE OF UPPERMOST GROUNDWATER SYSTEM ON FEBRUARY 20, 2001

DOCUMENT TITLE
2001 ANNUAL
GROUNDWATER REMEDIATION REPORT

CLIENT
EL PASO CORPORATION

LOCATION
JAL #4 PLANT
LEA COUNTY, NEW MEXICO

Atkins Benham
ENVIRONMENTAL DIVISION

3700 W. Robinson, Suite 200
Norman, Oklahoma 73072
(405) 321-3895

2488 E. 81st Street, Suite 610
Tulsa, Oklahoma 74137
(918) 496-0059

2225 E. Randol Mill Rd., Suite 315
Arlington, Texas 76011
(817) 640-6407

www.atkinsbenham.com
a member of the WS Atkins
group of companies

ws/Atkins

DATE	1/14/02
SCALE	1"=600'
DESIGNED BY	BEM
APPROVED BY	GHR
DRAWN BY	SKG

PROJECT NUMBER

9717101 M24

FIGURE NUMBER

2

SECTION 32

R 37 E

SECTION 5

LEGEND

- ▲ ACW-5
3191.18
- EPNG-1
-
- RW-2
- △ OXY
- GROUNDWATER MONITOR WELL
AND GROUNDWATER ELEVATION
WITHIN UPPERMOST
GROUNDWATER SYSTEM, ON MAY
1-6, 2001, FEET AMSL
- WATER SUPPLY WELL
- GROUNDWATER RECOVERY WELL
- INJECTION WELL

DIRECTION OF GROUNDWATER FLOW

CONTOUR OF GROUNDWATER
ELEVATION WITHIN UPPERMOST
GROUNDWATER SYSTEM ON
MAY 1-6, 2001, FEET AMSL

PROPERTY BOUNDARY

FENCE

SECONDARY ROAD

RAILROAD TRACK

PIPELINE

IMPOUNDMENT

NOTES: 1) JAL #4 PLANT PROPERTY IS LOCATED WITHIN SECTIONS 31 AND 32 OF TOWNSHIP 23 SOUTH, RANGE 37 EAST, AND SECTIONS 5 AND 6 OF TOWNSHIP 24 SOUTH, RANGE 37 EAST, LEA COUNTY, NEW MEXICO.

2) SITE BASE AREA DIGITIZED FROM 11/04/76 AERIAL PHOTOGRAPH WITH PROPERTY BOUNDARY AND WELLS INSERTED FROM VARIOUS OTHER SOURCES.

GROUNDWATER POTENTIOMETRIC SURFACE OF UPPERMOST
GROUNDWATER SYSTEM ON MAY 1 - 6, 2001

2001 ANNUAL
GROUNDWATER REMEDIATION REPORT

EL PASO CORPORATION

JAL #4 PLANT
LEA COUNTY, NEW MEXICO



Atkins
Benham

ENVIRONMENTAL DIVISION

3700 W. Robinson, Suite 200
Norman, Oklahoma 73072
(405) 321-3895

2488 E. 81st Street, Suite 610
Tulsa, Oklahoma 74137
(918) 496-0059

2225 E. Randol Mill Rd., Suite 315
Arlington, Texas 76011
(817) 640-6407

www.atkinsbenham.com
a member of the WS Atkins
group of companies

DATE	12/3/01
------	---------

SCALE	1"=600'
-------	---------

DESIGNED BY	BEM
-------------	-----

APPROVED BY	GHR
-------------	-----

DRAWN BY	SKG
----------	-----

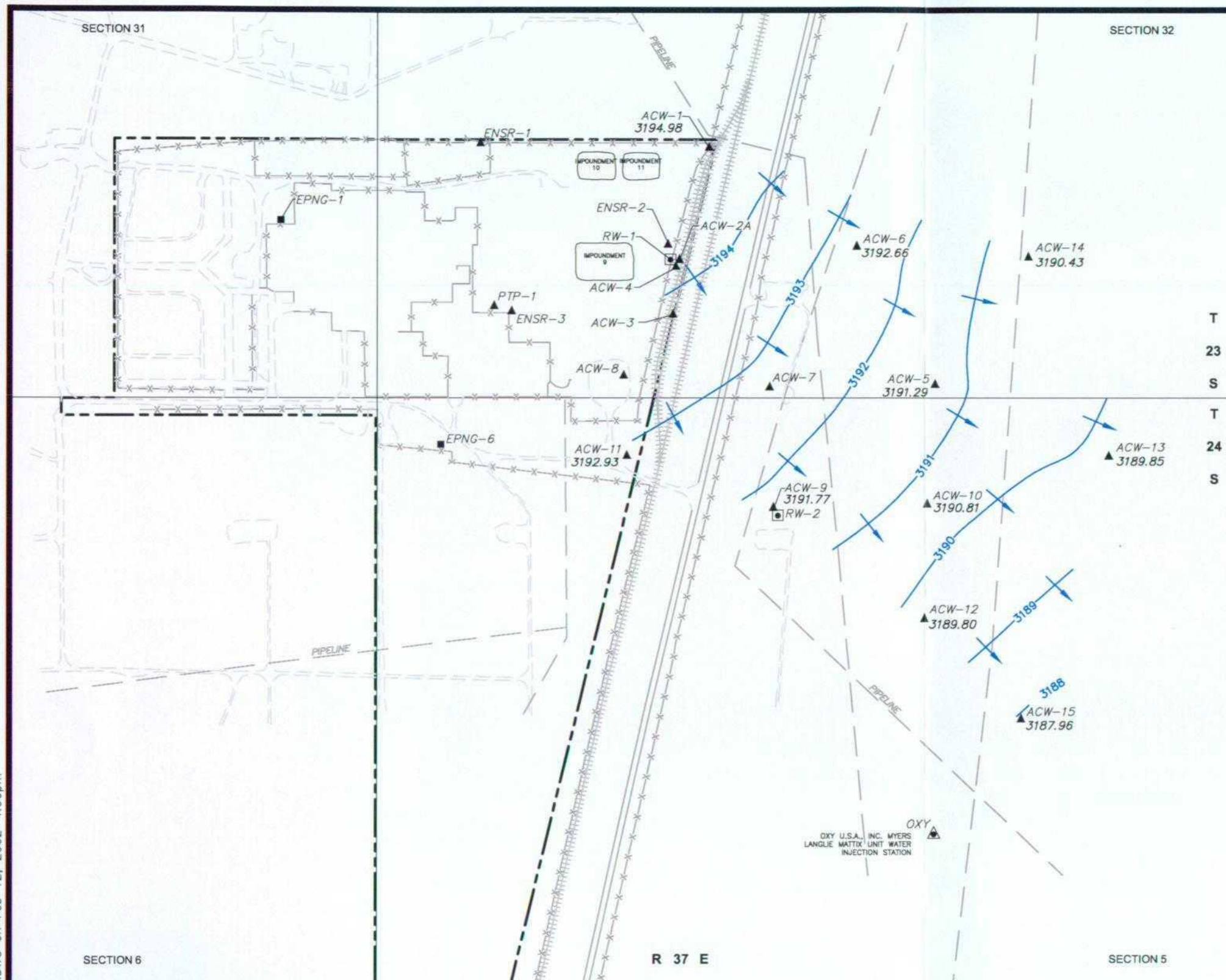
PROJECT NUMBER

9717101 M25

FIGURE NUMBER

3

H:\1997\97171\CAD\97171M26.DWG on Feb 12, 2002-4:06pm



LEGEND

▲ ACW-5
3191.29

GROUNDWATER MONITOR WELL AND
GROUNDWATER ELEVATION WITHIN
UPPERMOST GROUNDWATER SYSTEM,
ON AUGUST 1, 2001, FEET AMSL

■ EPNG-1

WATER SUPPLY WELL

● RW-2

GROUNDWATER RECOVERY WELL

▲ OXY

INJECTION WELL

DIRECTION OF GROUNDWATER FLOW

CONTOUR OF GROUNDWATER
ELEVATION WITHIN UPPERMOST
GROUNDWATER SYSTEM ON
AUGUST 1, 2001, FEET AMSL

PROPERTY BOUNDARY

FENCE

SECONDARY ROAD

RAILROAD TRACK

PIPELINE

IMPOUNDMENT

- NOTES: 1) JAL #4 PLANT PROPERTY IS LOCATED WITHIN SECTIONS 31 AND 32 OF TOWNSHIP 23 SOUTH, RANGE 37 EAST, AND SECTIONS 5 AND 6 OF TOWNSHIP 24 SOUTH, RANGE 37 EAST, LEA COUNTY, NEW MEXICO.
- 2) SITE BASE AREA DIGITIZED FROM 11/04/76 AERIAL PHOTOGRAPH WITH PROPERTY BOUNDARY AND WELLS INSERTED FROM VARIOUS OTHER SOURCES.

FIGURE TITLE
GROUNDWATER POTENTIOMETRIC SURFACE OF UPPERMOST
GROUNDWATER SYSTEM ON AUGUST 1, 2001

DOCUMENT TITLE
2001 ANNUAL
GROUNDWATER REMEDIATION REPORT

CLIENT
EL PASO CORPORATION

LOCATION
JAL #4 PLANT
LEA COUNTY, NEW MEXICO

**Atkins
Benham**
ENVIRONMENTAL DIVISION

3700 W. Robinson, Suite 200
Norman, Oklahoma 73072
(405) 321-3895

2488 E. 81st Street, Suite 610
Tulsa, Oklahoma 74137
(918) 496-0059

2225 E. Randol Mill Rd., Suite 315
Arlington, Texas 76011
(817) 640-6407

www.atkinsbenham.com
a member of the WS Atkins
group of companies

ws/Atkins

DATE 1/14/02

SCALE 1"=600'

DESIGNED BY BEM

APPROVED BY GHR

DRAWN BY SKG

PROJECT NUMBER

9717101 M26

FIGURE NUMBER

4

H:\1997\97171\CAD\97171M27.DWG on Feb 12, 2002-4:07pm

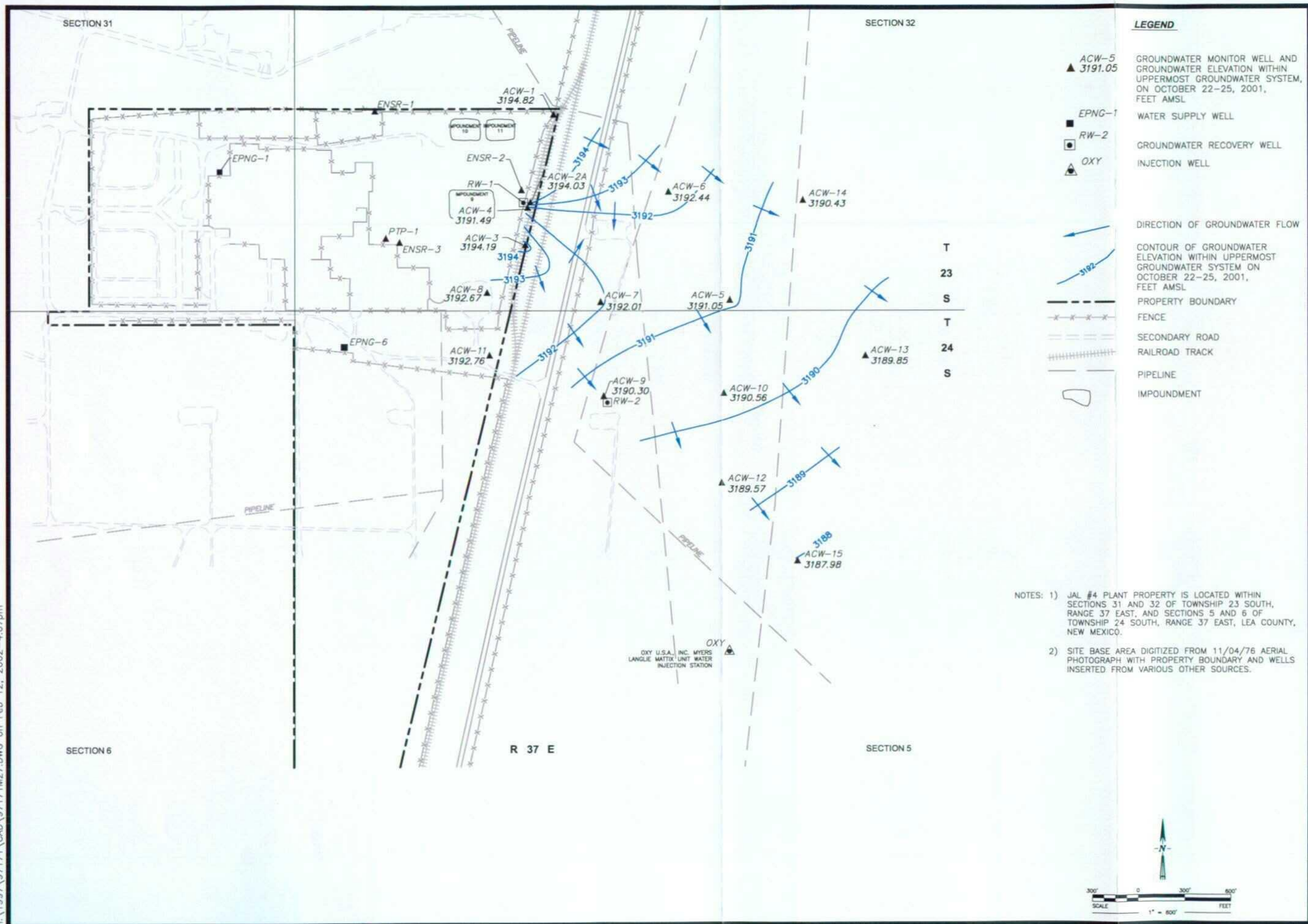


FIGURE TITLE
GROUNDWATER POTENTIOMETRIC SURFACE OF UPPERMOST
GROUNDWATER SYSTEM ON OCTOBER 22 - 25, 2001

DOCUMENT TITLE
2001 ANNUAL
GROUNDWATER REMEDIATION REPORT

CLIENT
EL PASO CORPORATION

LOCATION
JAL #4 PLANT
LEA COUNTY, NEW MEXICO

Atkins Benham
ENVIRONMENTAL DIVISION
3700 W. Robinson, Suite 200
Norman, Oklahoma 73072
(405) 321-3895

2488 E. 81st Street, Suite 610
Tulsa, Oklahoma 74137
(918) 496-0059

2225 E. Randol Mill Rd., Suite 315
Arlington, Texas 76011
(817) 640-6407

www.atkinsbenham.com
a member of the WS Atkins
group of companies

WS Atkins

DATE	1/14/02
SCALE	1"=600'
DESIGNED BY	BEM
APPROVED BY	GHR
DRAWN BY	SKG

PROJECT NUMBER
9717101 M27

FIGURE NUMBER
5

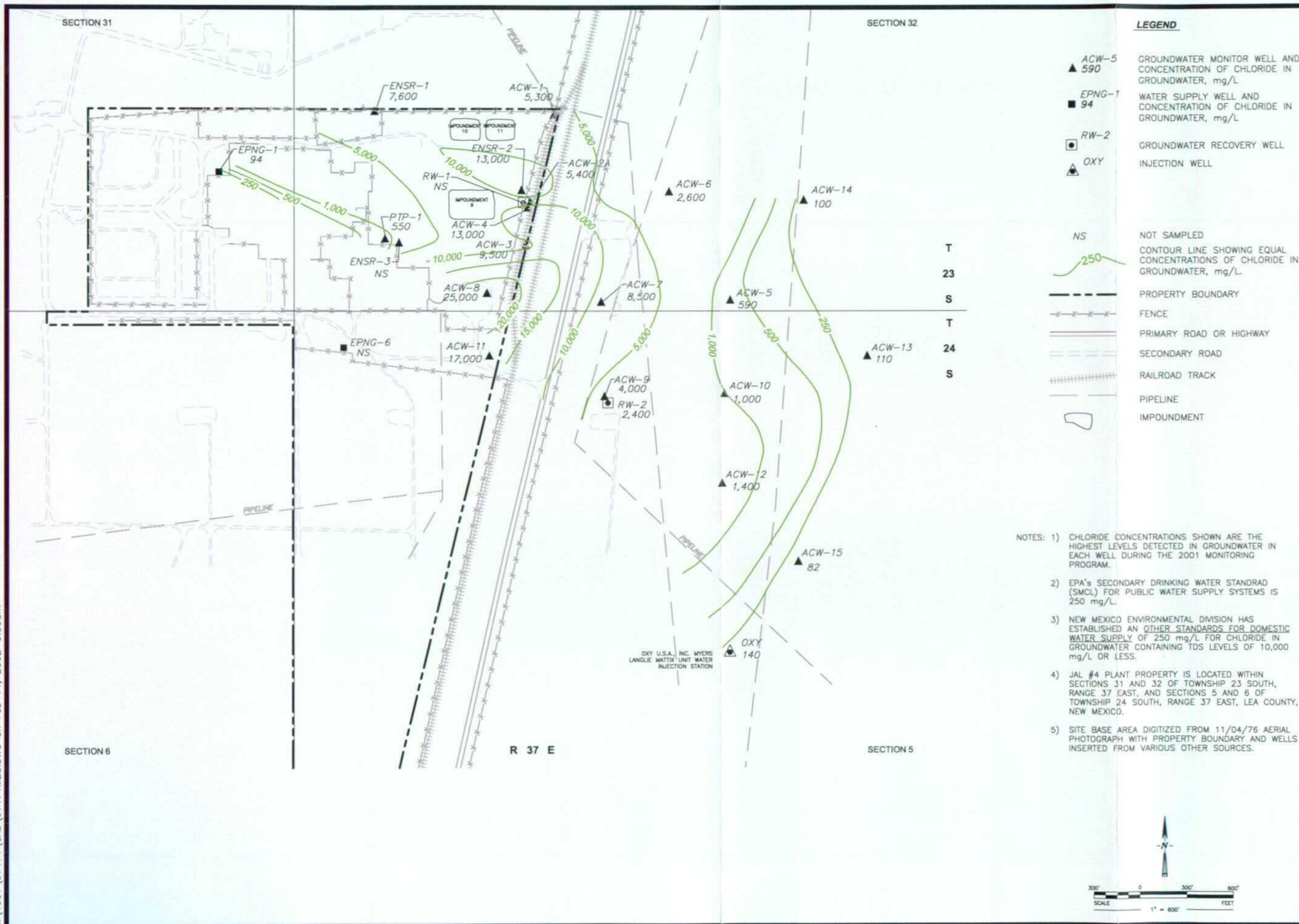


FIGURE TITLE
**ISOPLETH OF CHLORIDE CONCENTRATIONS
IN GROUNDWATER IN 2001**

DOCUMENT TITLE
**2001 ANNUAL
GROUNDWATER REMEDIATION REPORT**

CLIENT
EL PASO CORPORATION

LOCATION
**JAL #4 PLANT
LEA COUNTY, NEW MEXICO**



2488 E. 81st Street, Suite 610
Tulsa, Oklahoma 74137
(918) 496-0059

www.atkinsbenham.com
a member of the WS Atkins
group of companies



DATE	2/13/02
SCALE	1"=600'
DESIGNED BY	BEM
APPROVED BY	GHR
DRAWN BY	SKG

PROJECT NUMBER

9717101 M28

FIGURE NUMBER

6

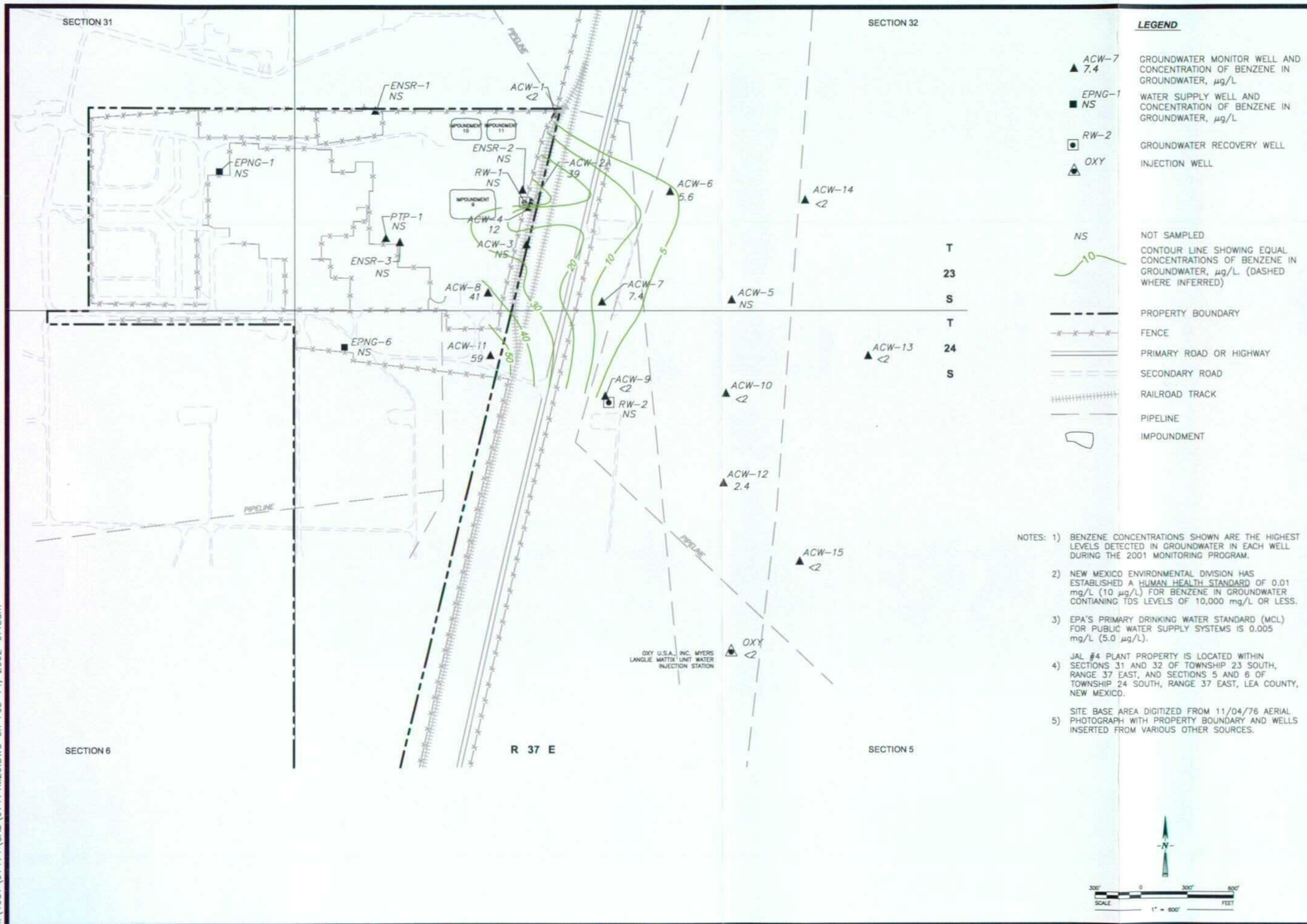


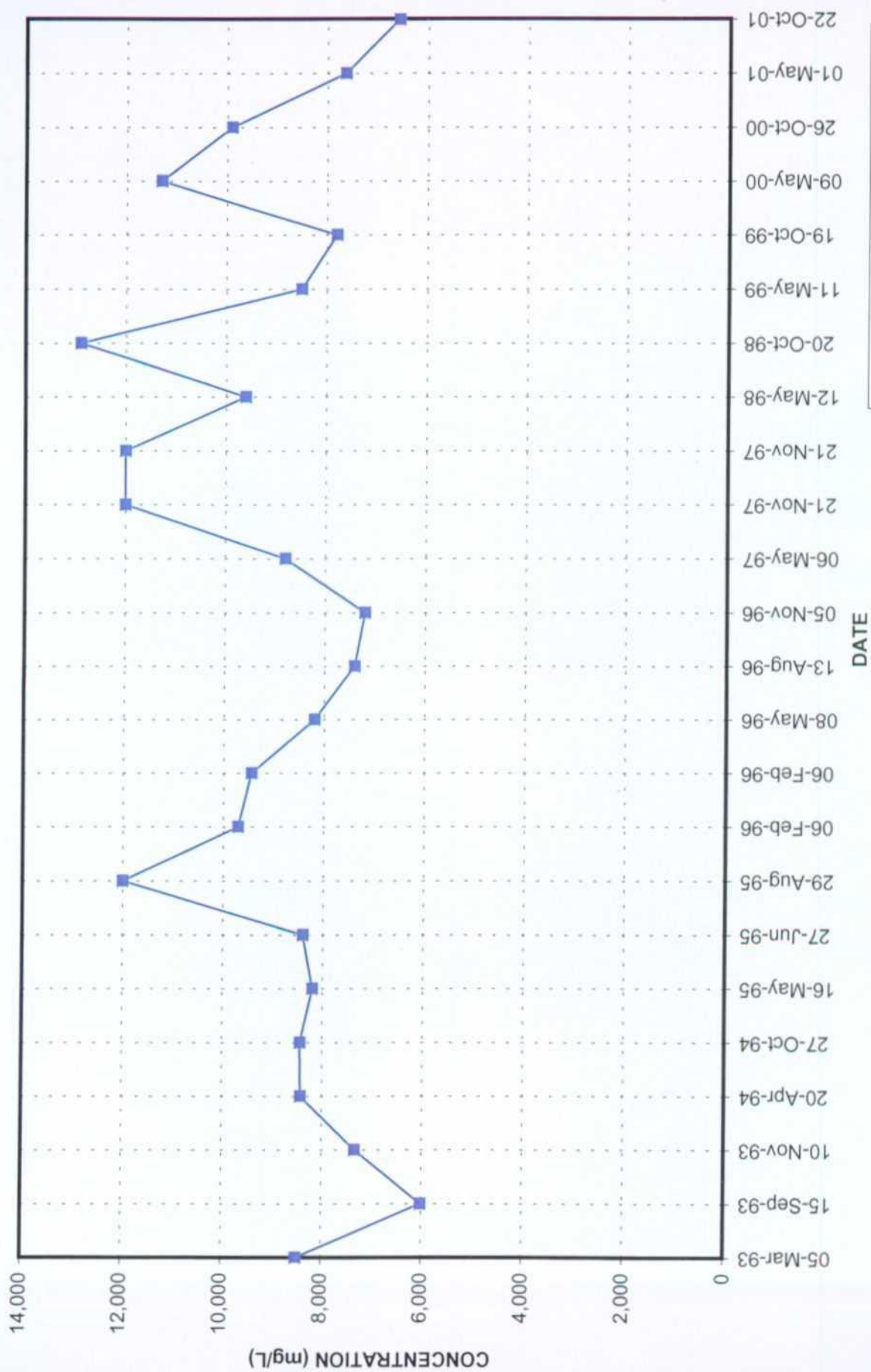
FIGURE TITLE	ISOPLETH OF BENZENE CONCENTRATIONS IN GROUNDWATER IN 2001
DOCUMENT TITLE	2001 ANNUAL GROUNDWATER REMEDIATION REPORT
CLIENT	EL PASO CORPORATION
LOCATION	JAL #4 PLANT LEA COUNTY, NEW MEXICO

Atkins Benham ENVIRONMENTAL DIVISION	
2488 E. 81st Street, Suite 610 Tulsa, Oklahoma 74137 (918) 496-0059	
www.atkinsbenham.com a member of the WS Atkins group of companies	
ws/Atkins	
DATE	2/13/02
SCALE	1"=600'
DESIGNED BY	BEM
APPROVED BY	GHR
DRAWN BY	SKG

PROJECT NUMBER
9717101 M29
FIGURE NUMBER
7

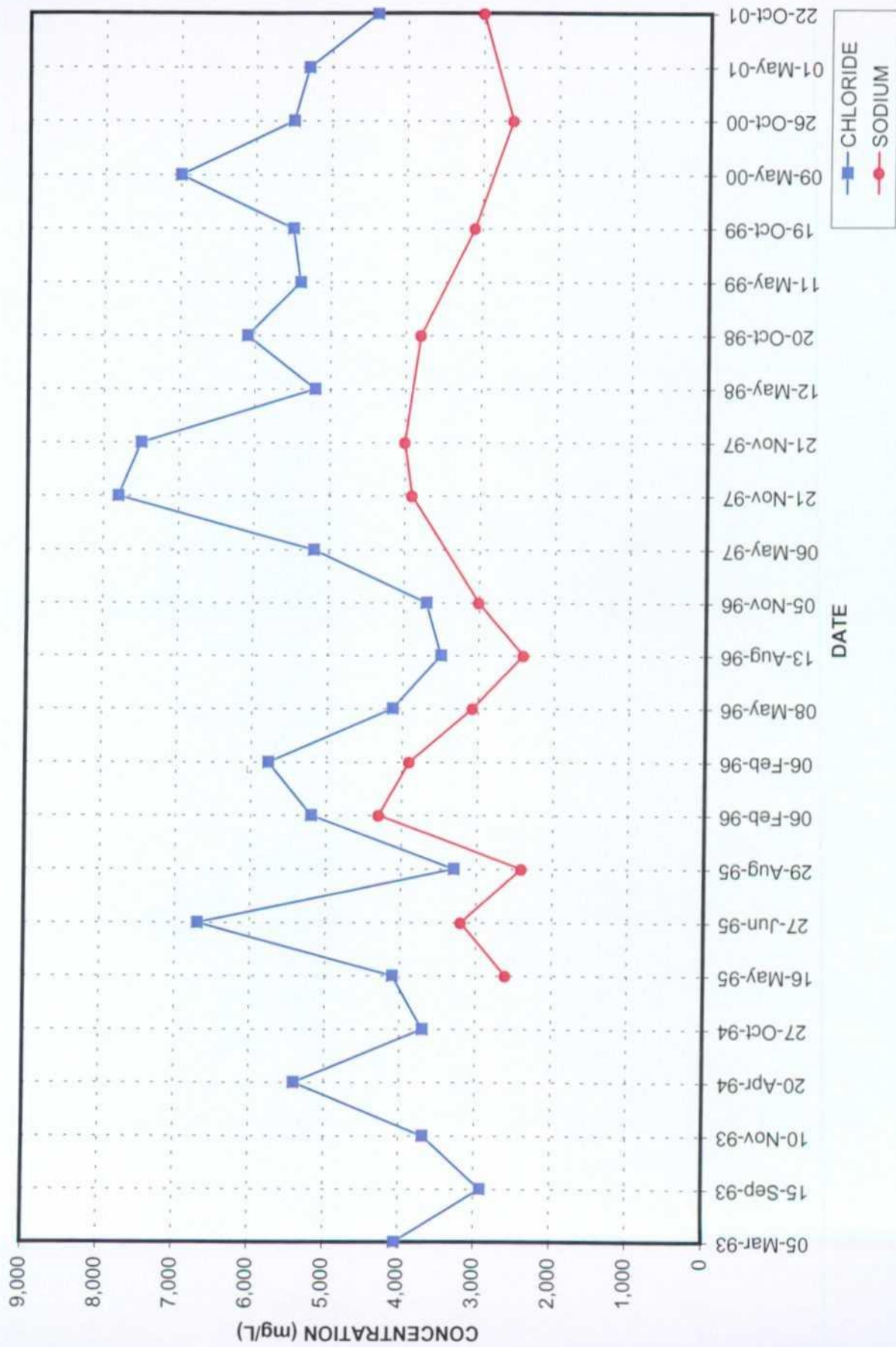
GRAPHS

MONITOR WELL ACW-01



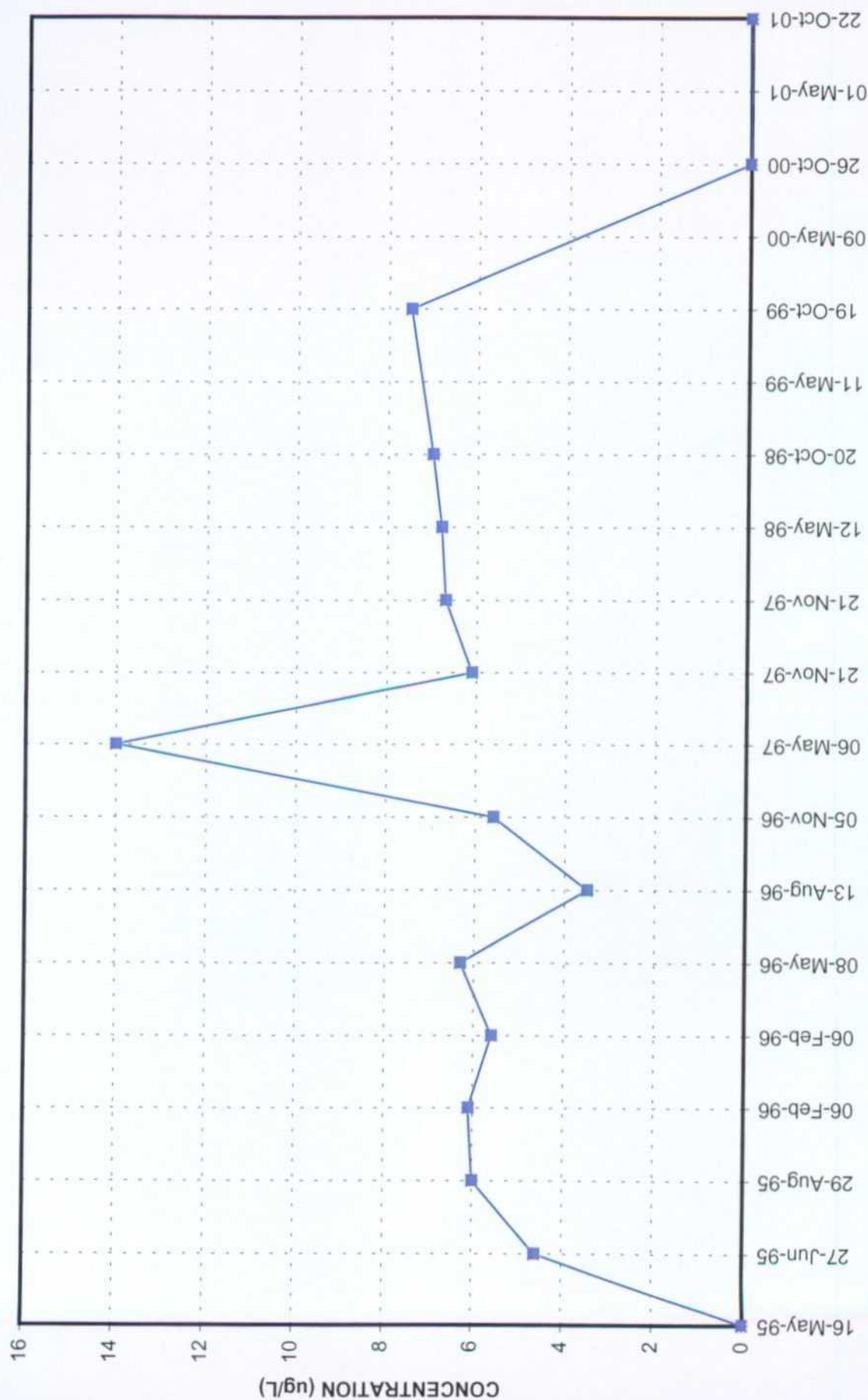
GRAPH 1

MONITOR WELL ACW-01



GRAPH 2

MONITOR WELL ACW-01

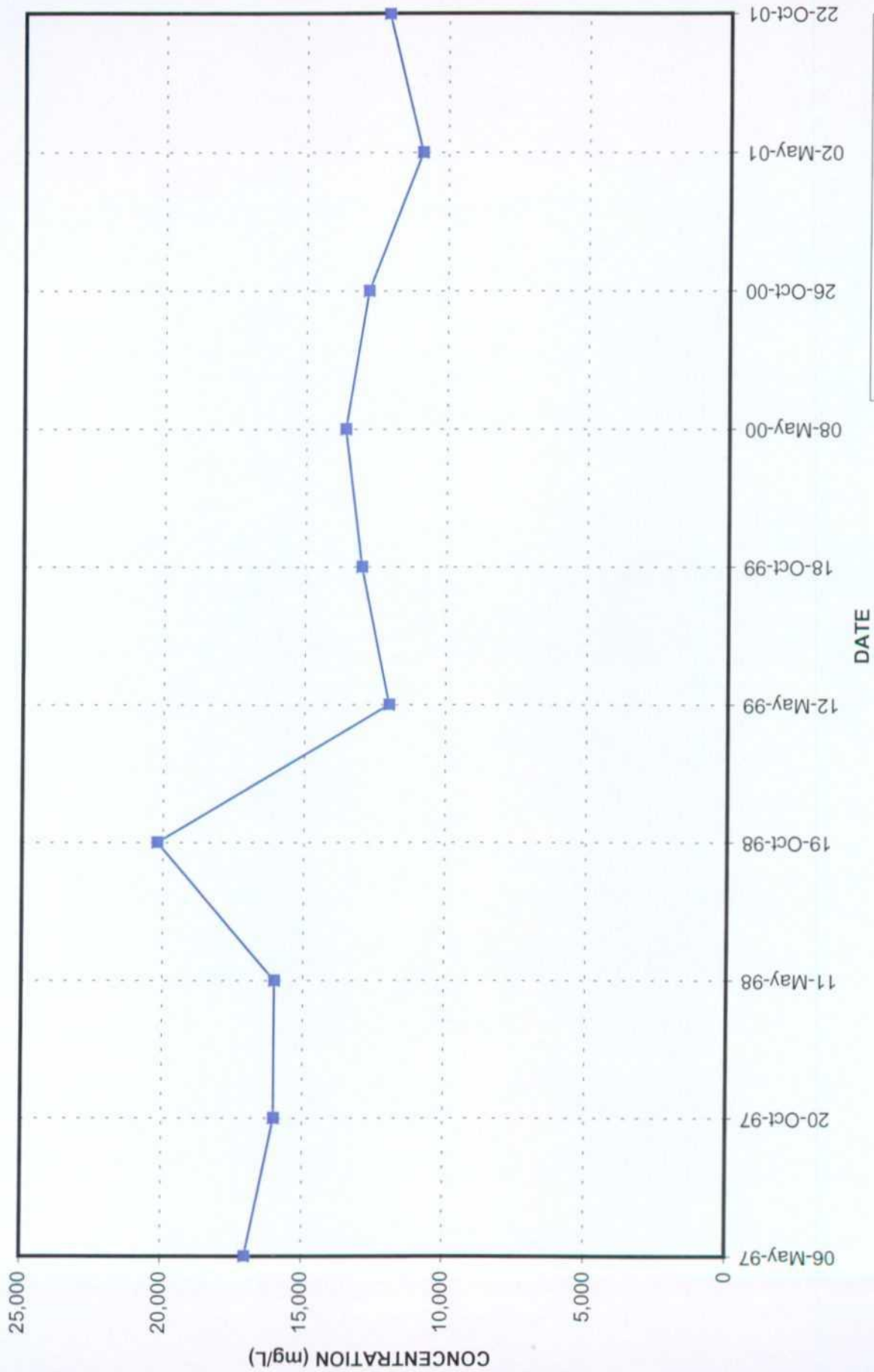


A concentration of zero (0) has been used for analytical results reported as less than the laboratory detection limit.

—■— BENZENE

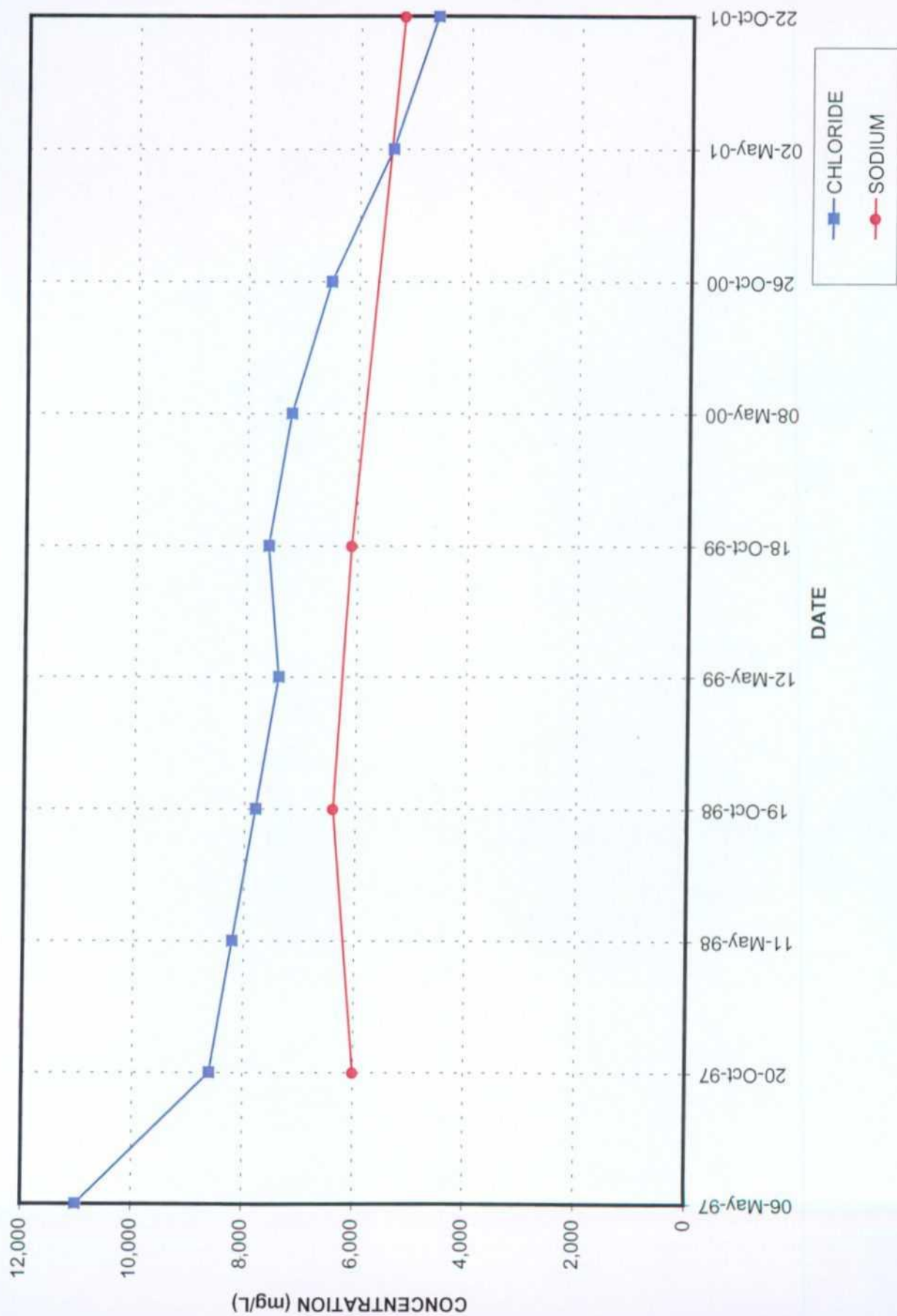
GRAPH 3

MONITOR WELL ACW-02A



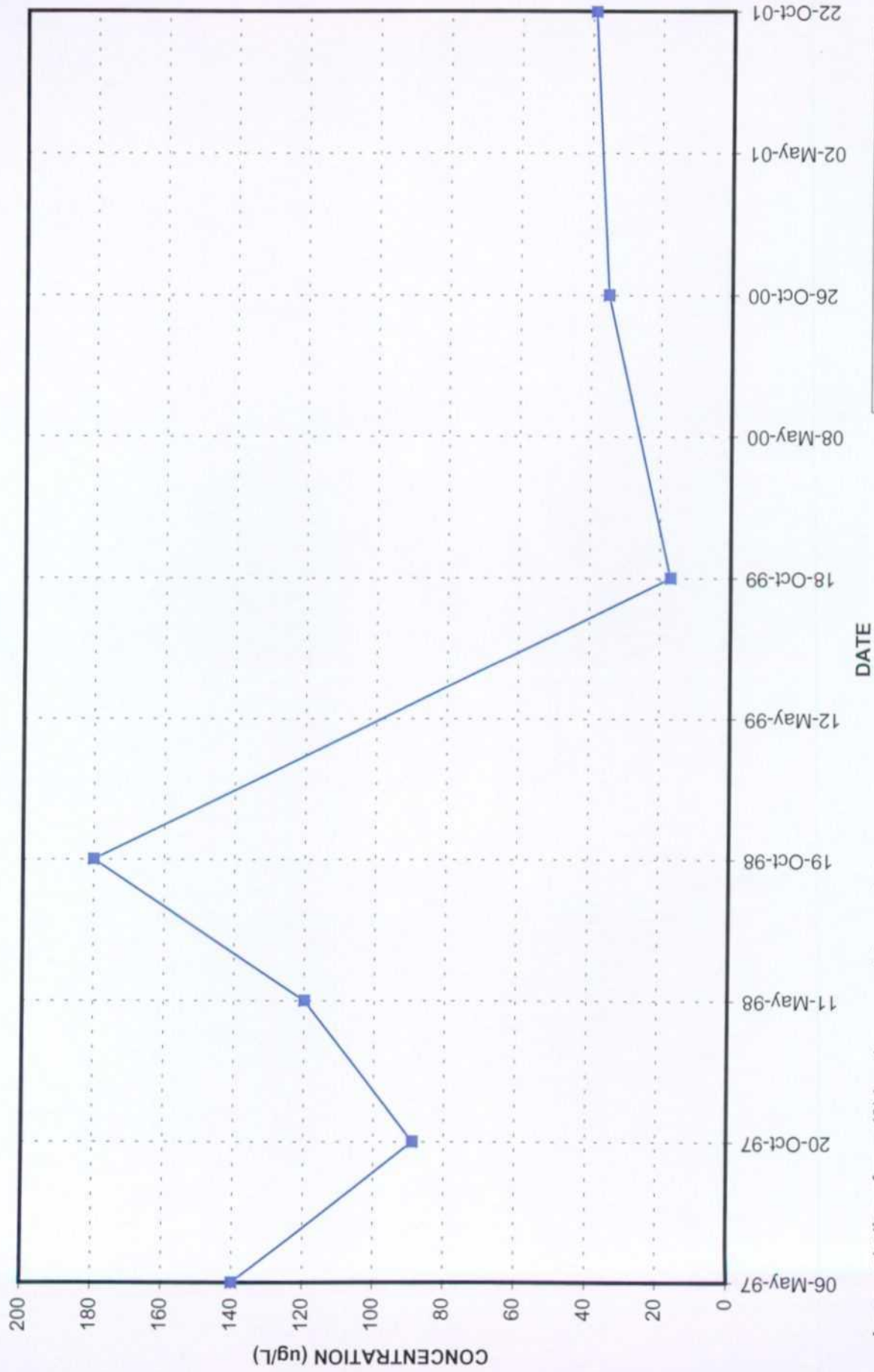
GRAPH 4

MONITOR WELL ACW-02A



GRAPH 5

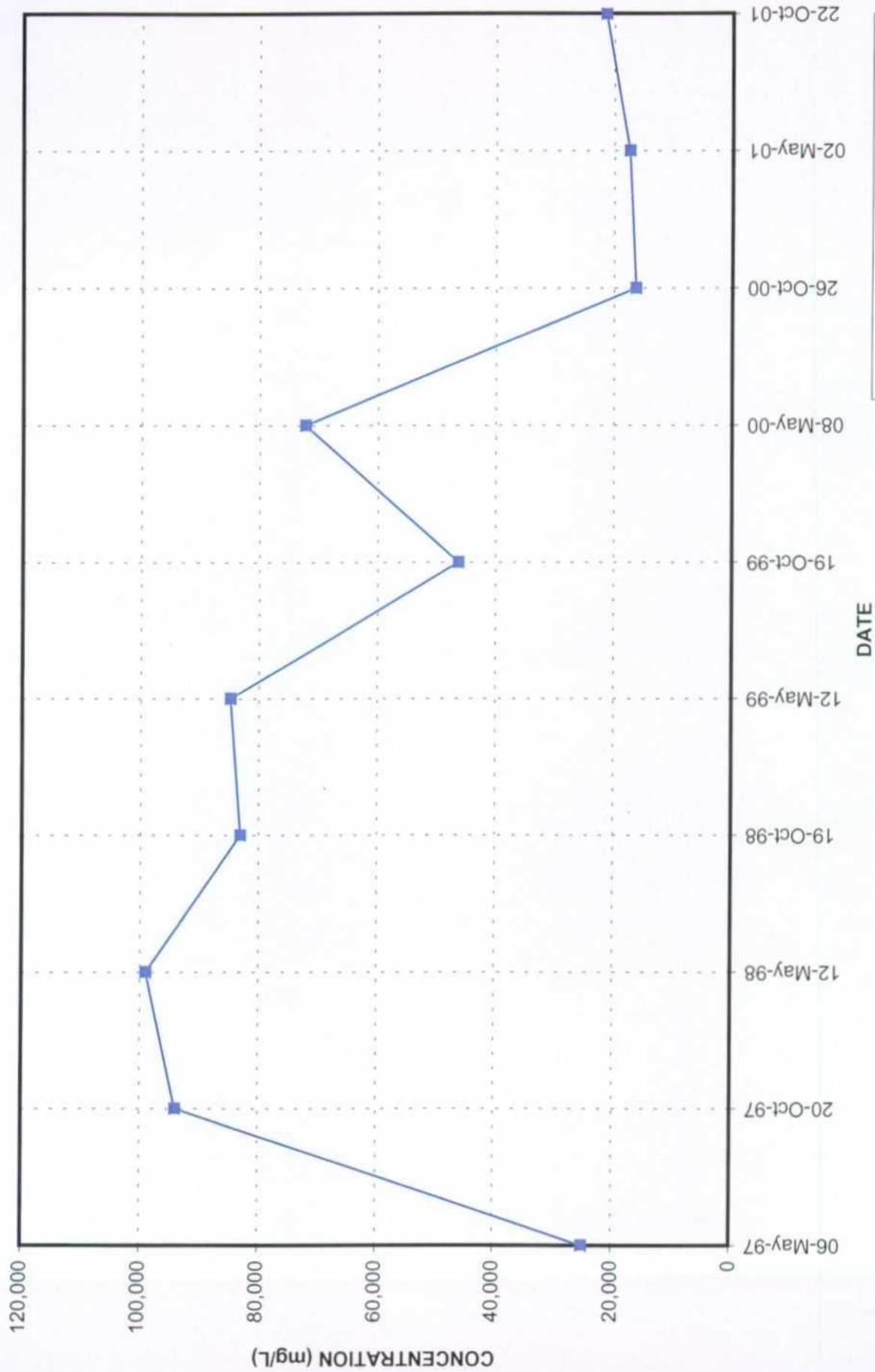
MONITOR WELL ACW-02A



A concentration of zero (0) has been used for analytical results reported as less than the laboratory detection limit.

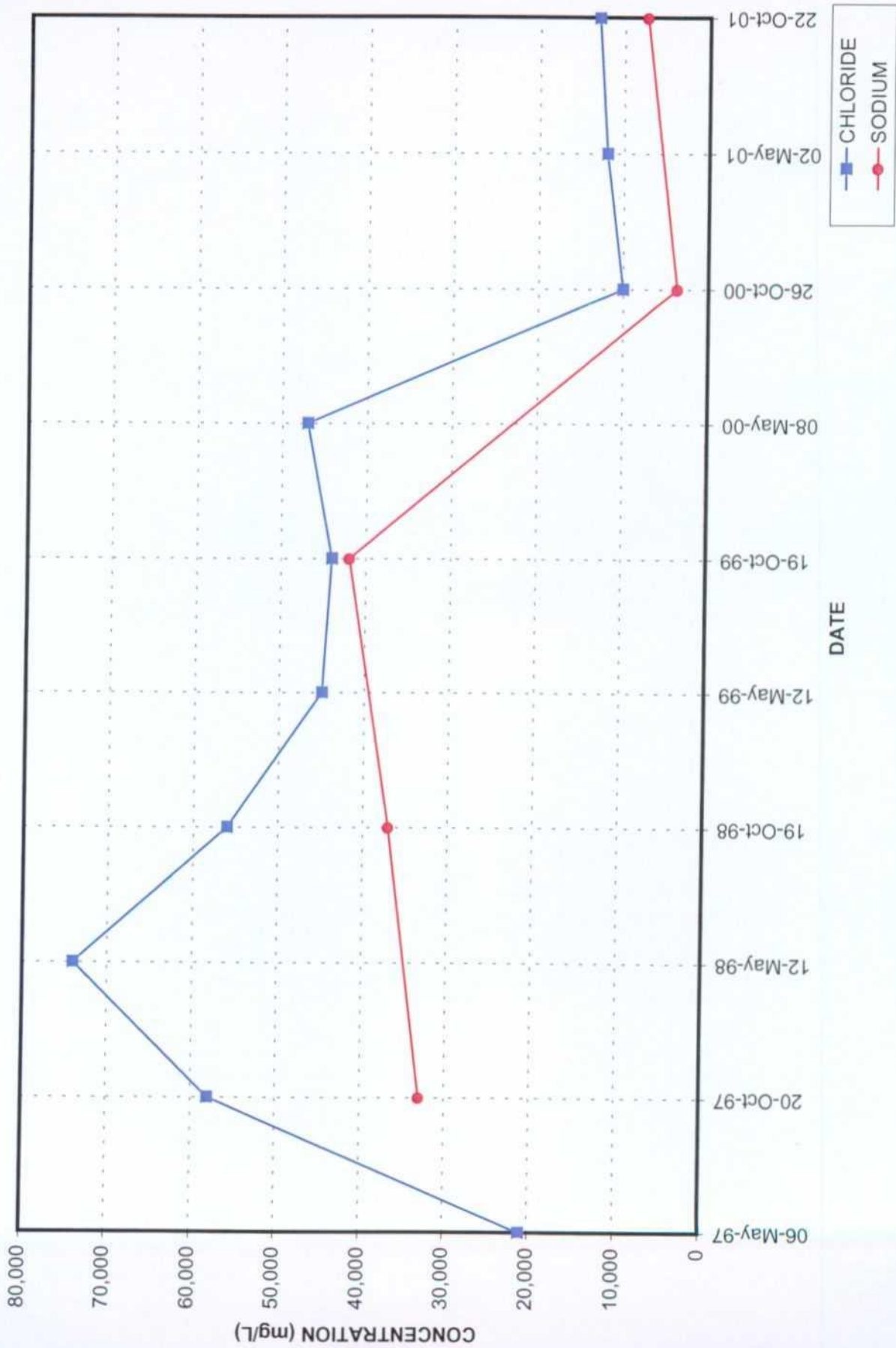
GRAPH 6

MONITOR WELL ACW-04



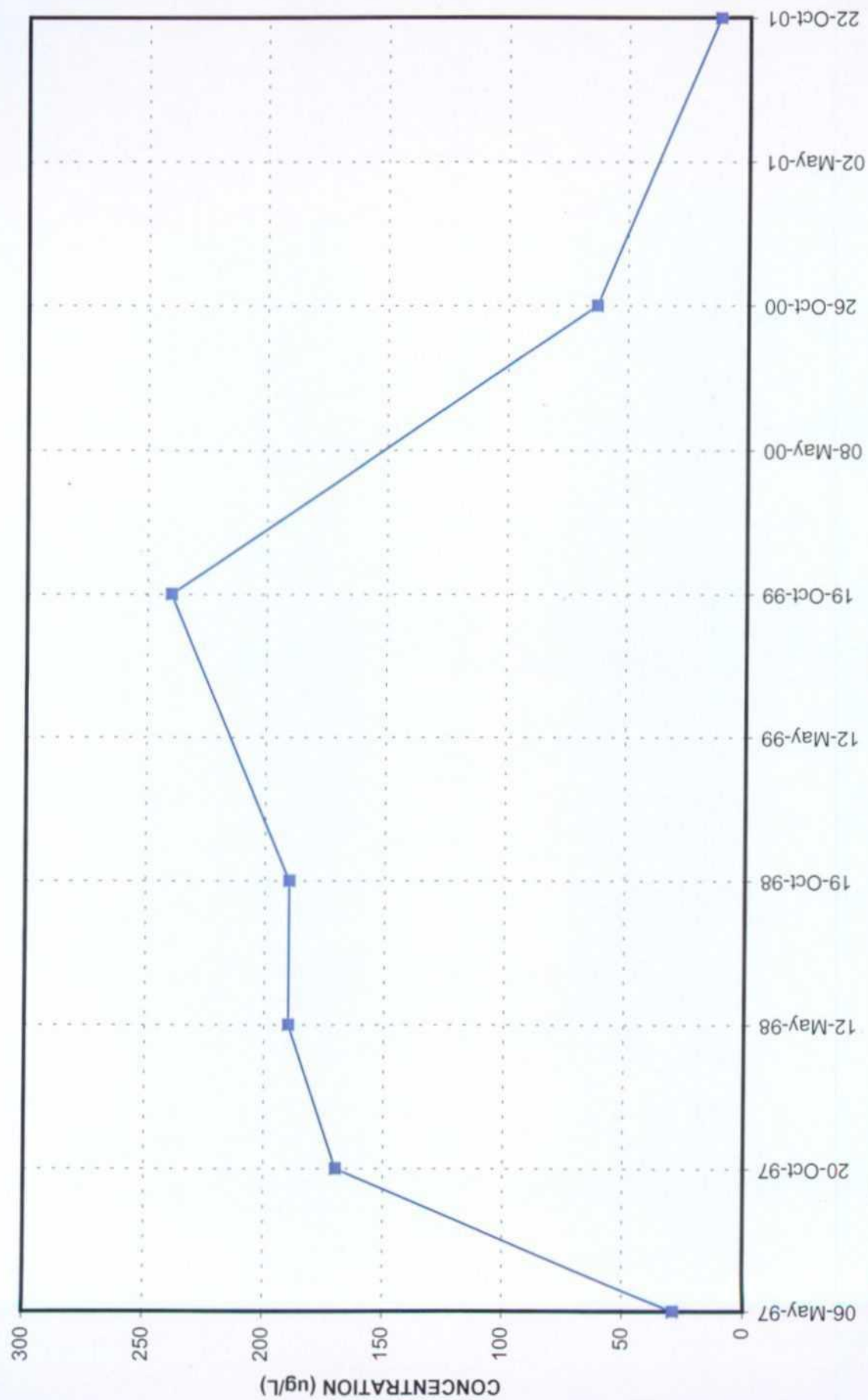
GRAPH 7

MONITOR WELL ACW-04



GRAPH 8

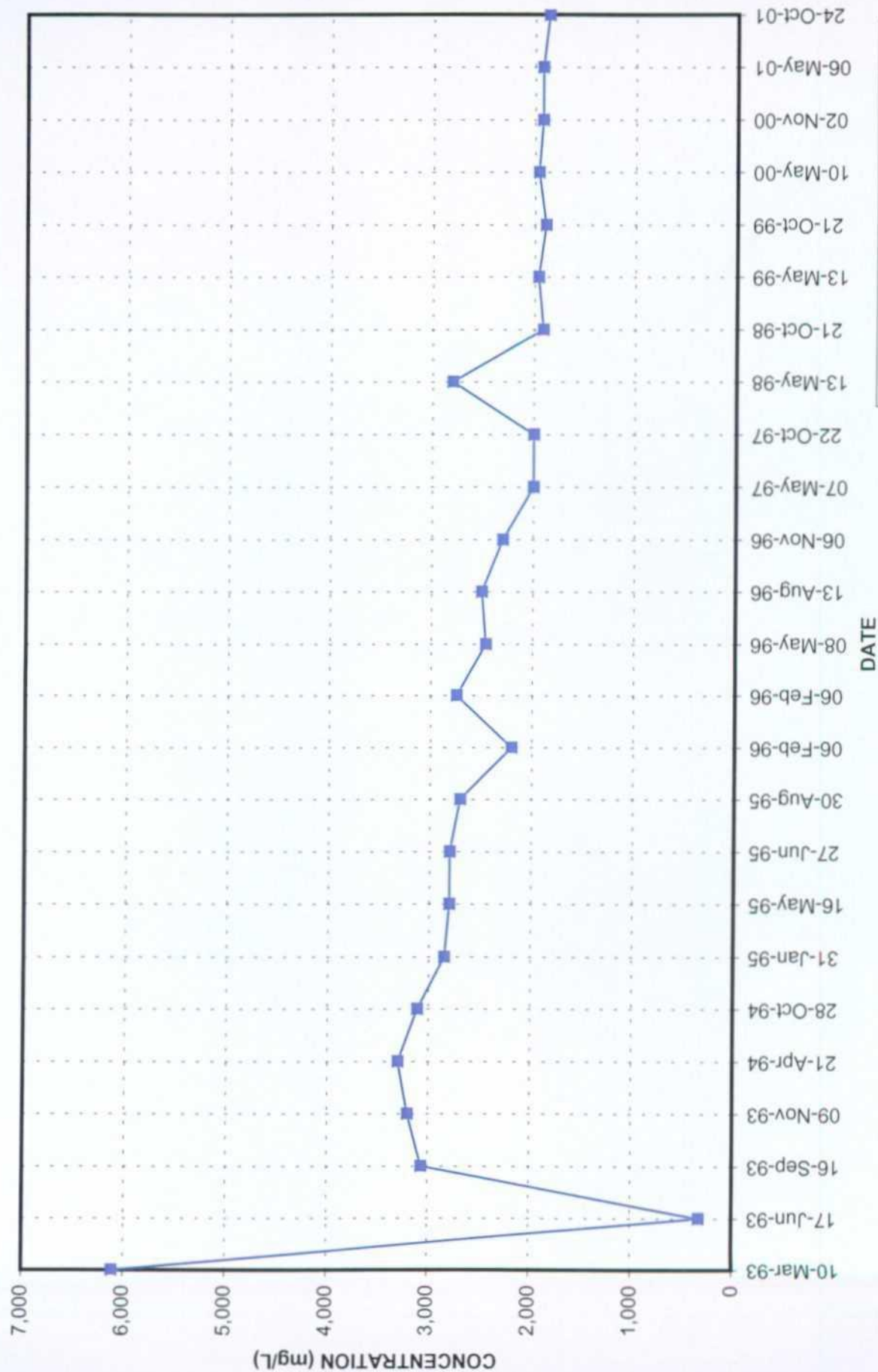
MONITOR WELL ACW-04



A concentration of zero (0) has been used for analytical results reported as less than the laboratory detection limit.

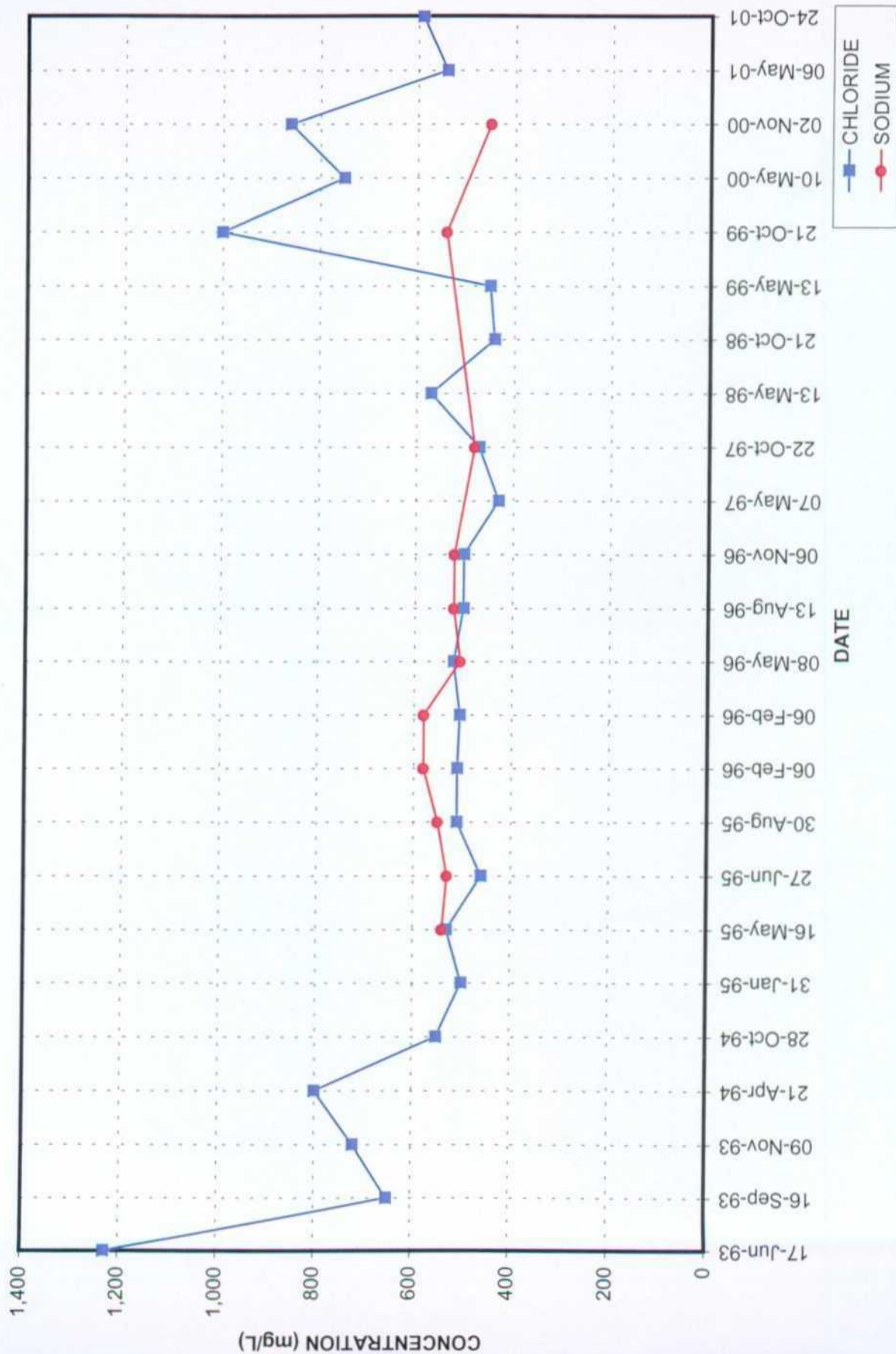
GRAPH 9

MONITOR WELL ACW-05



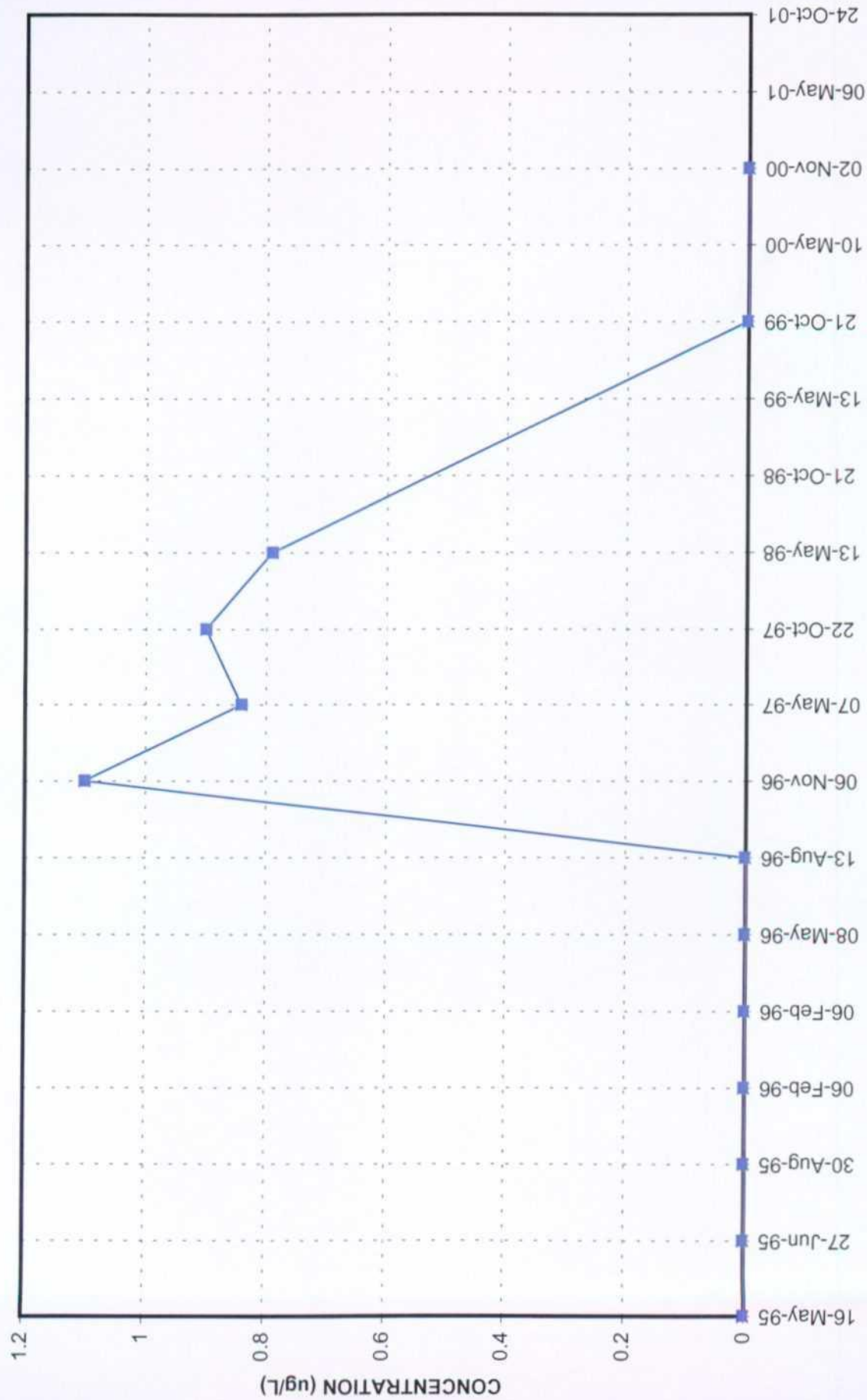
GRAPH 10

MONITOR WELL ACW-05



GRAPH 11

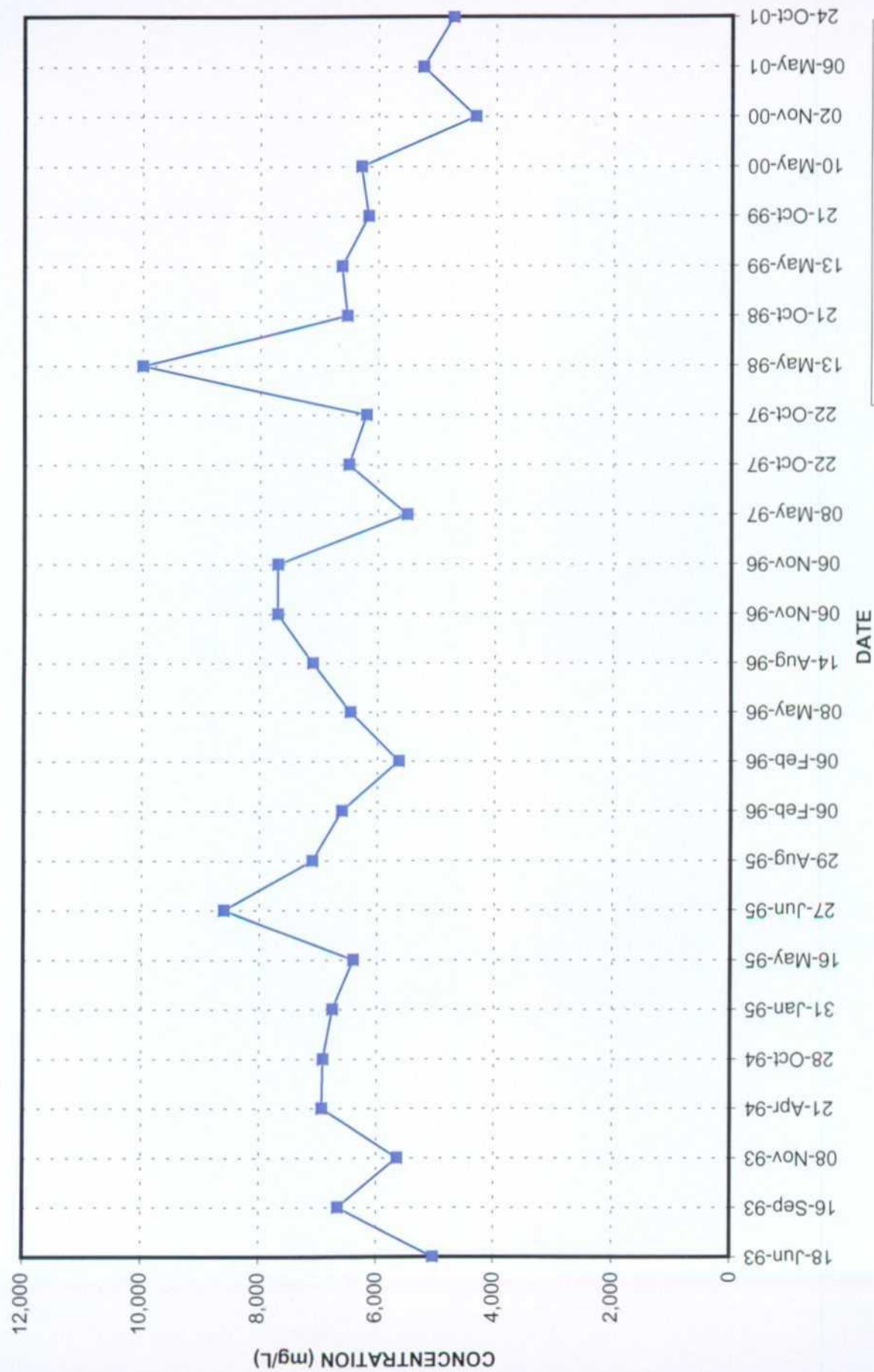
MONITOR WELL ACW-05



A concentration of zero (0) has been used for analytical results reported as less than the laboratory detection limit.

GRAPH 12

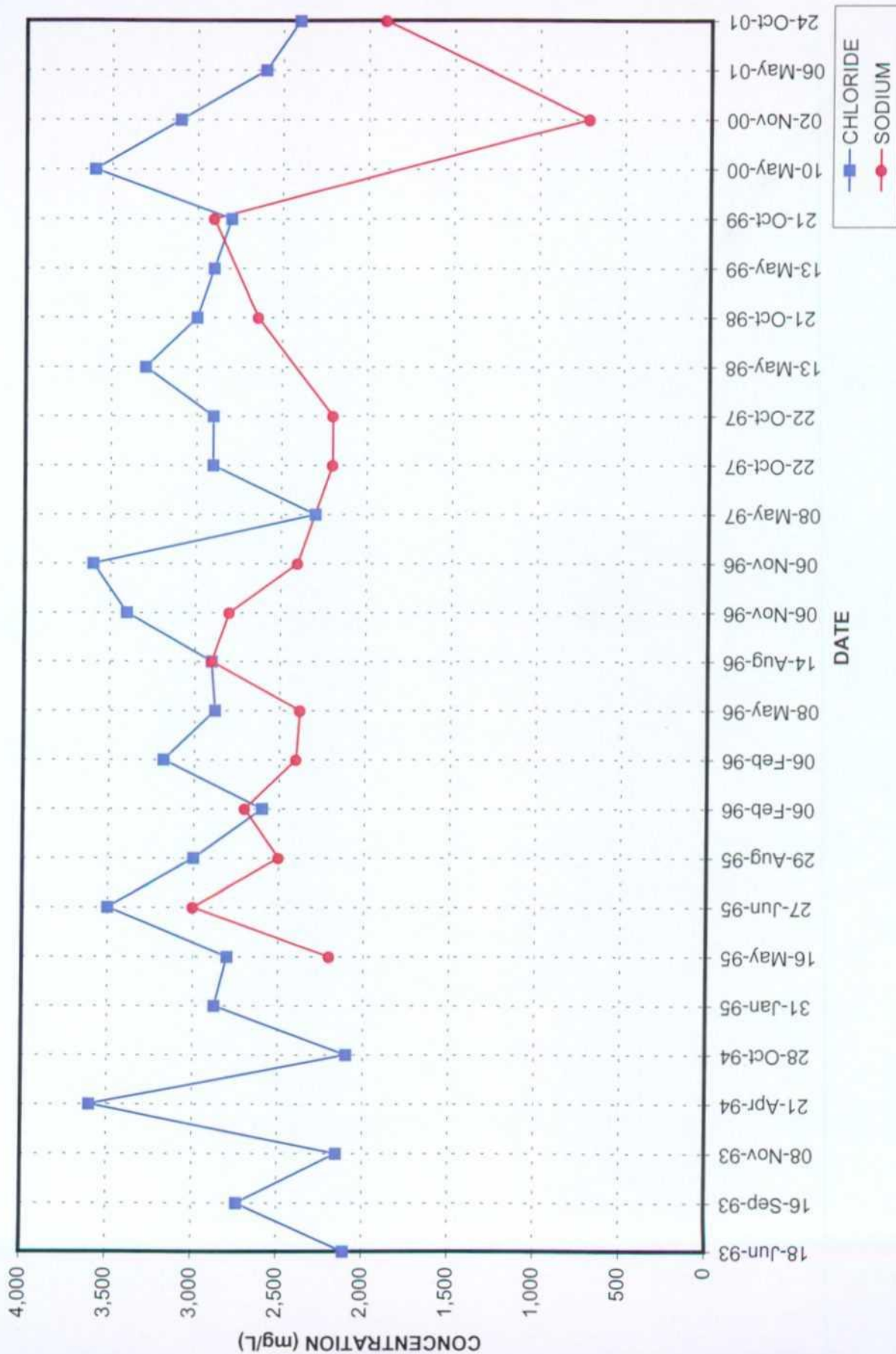
MONITOR WELL ACW-06



—■— TOTAL DISSOLVED SOLIDS

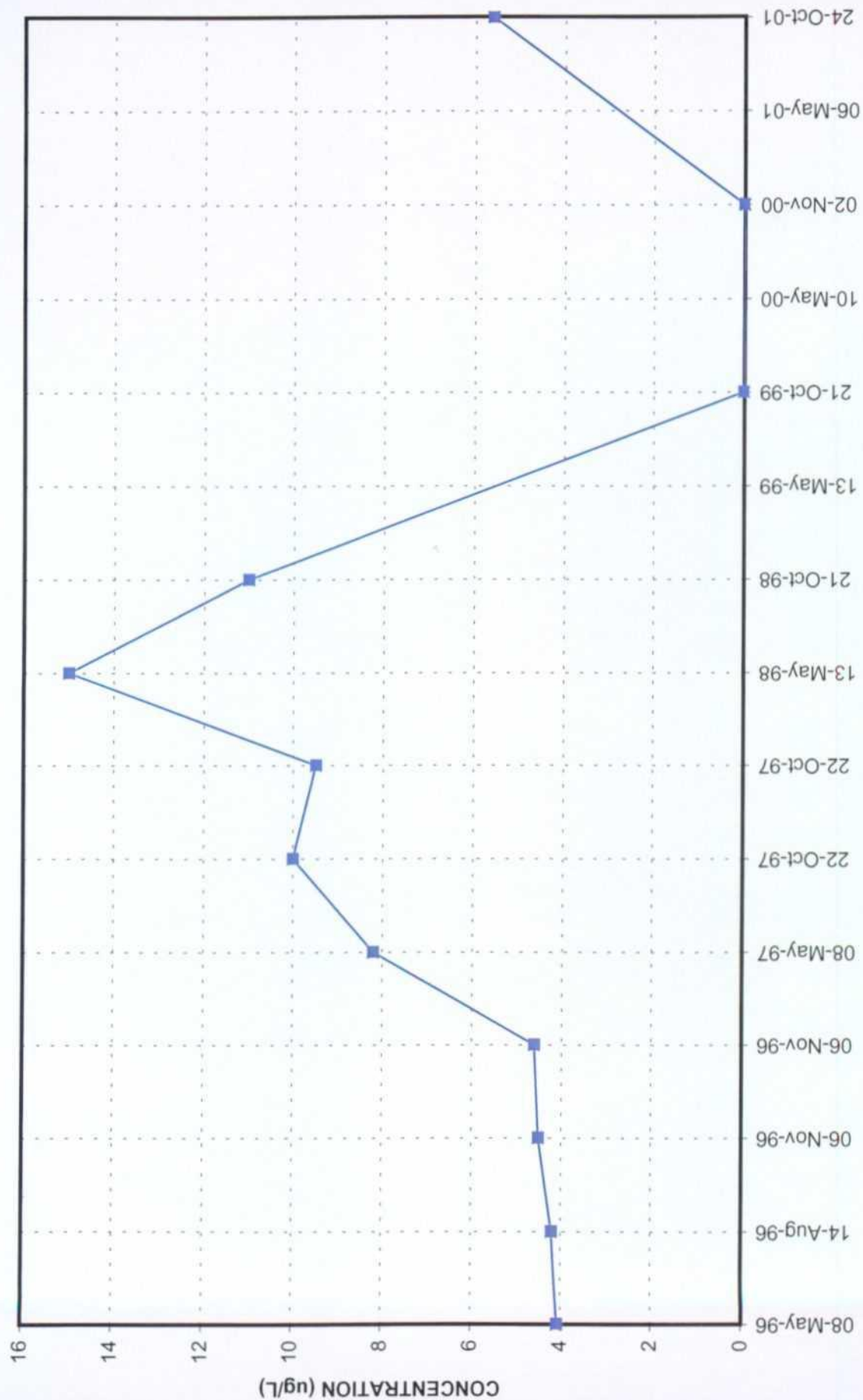
GRAPH 13

MONITOR WELL ACW-06



GRAPH 14

MONITOR WELL ACW-06



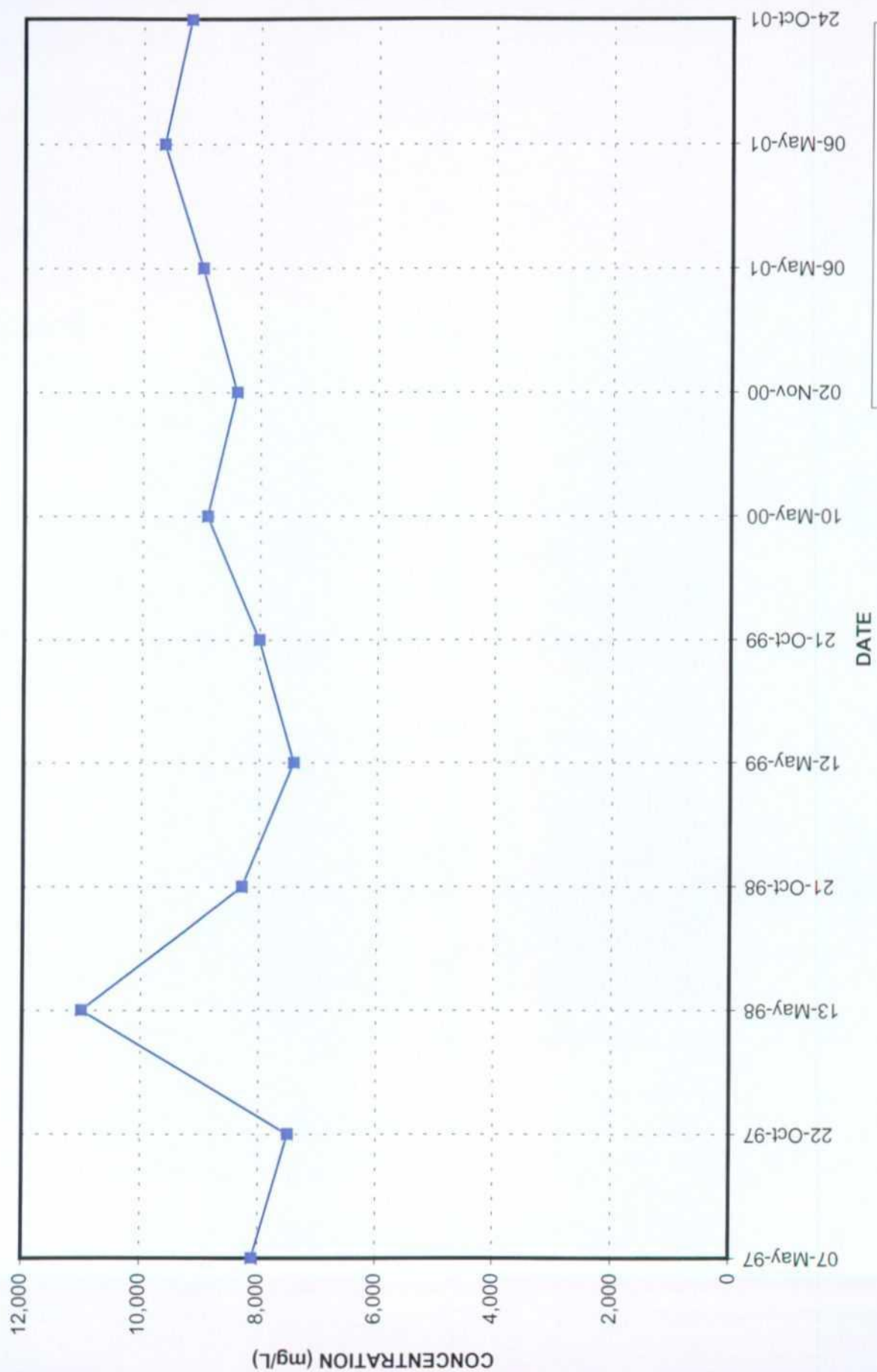
DATE

A concentration of zero (0) has been used for analytical results reported as less than the laboratory detection limit.

—■— BENZENE

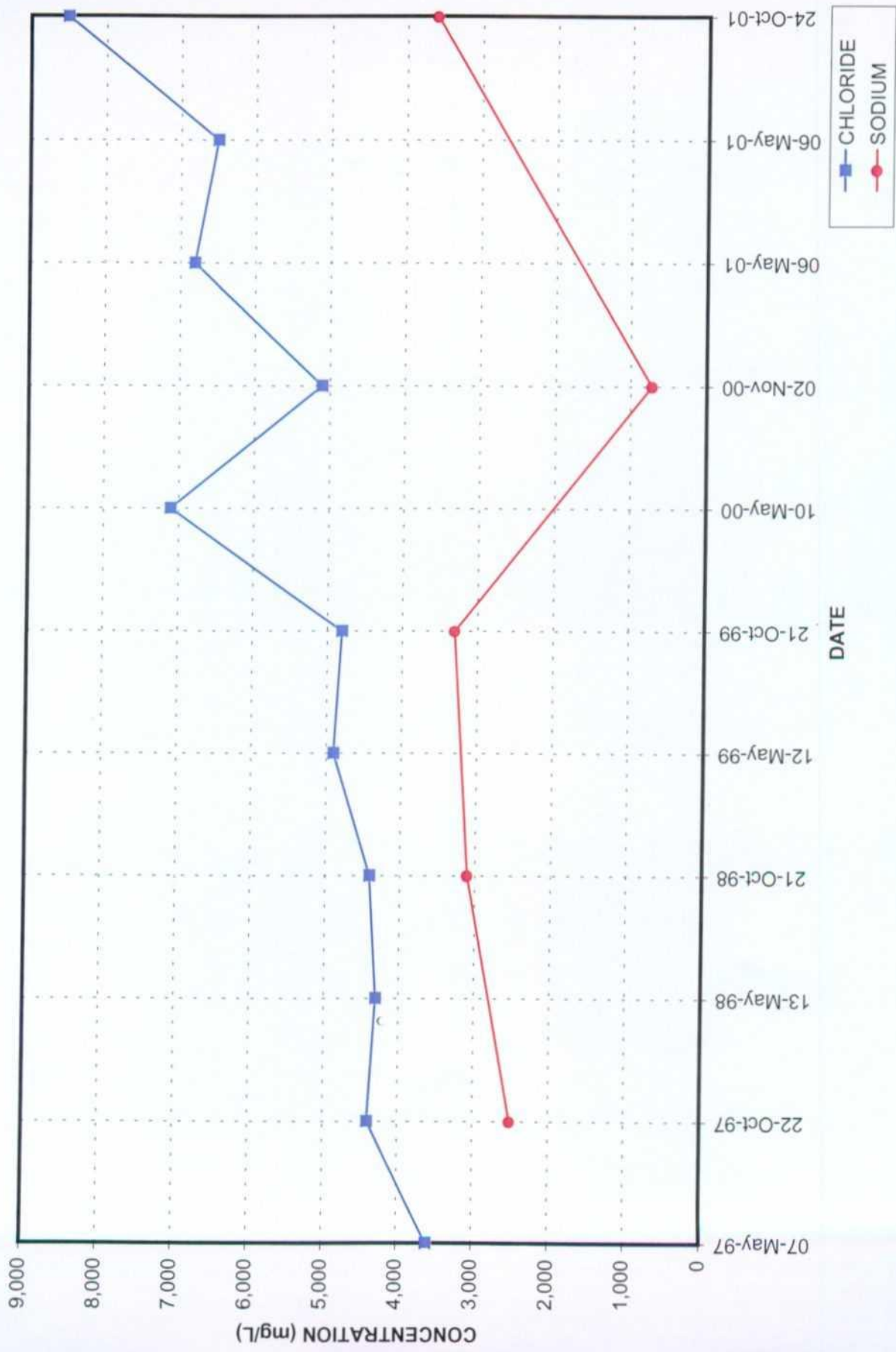
GRAPH 15

MONITOR WELL ACW-07



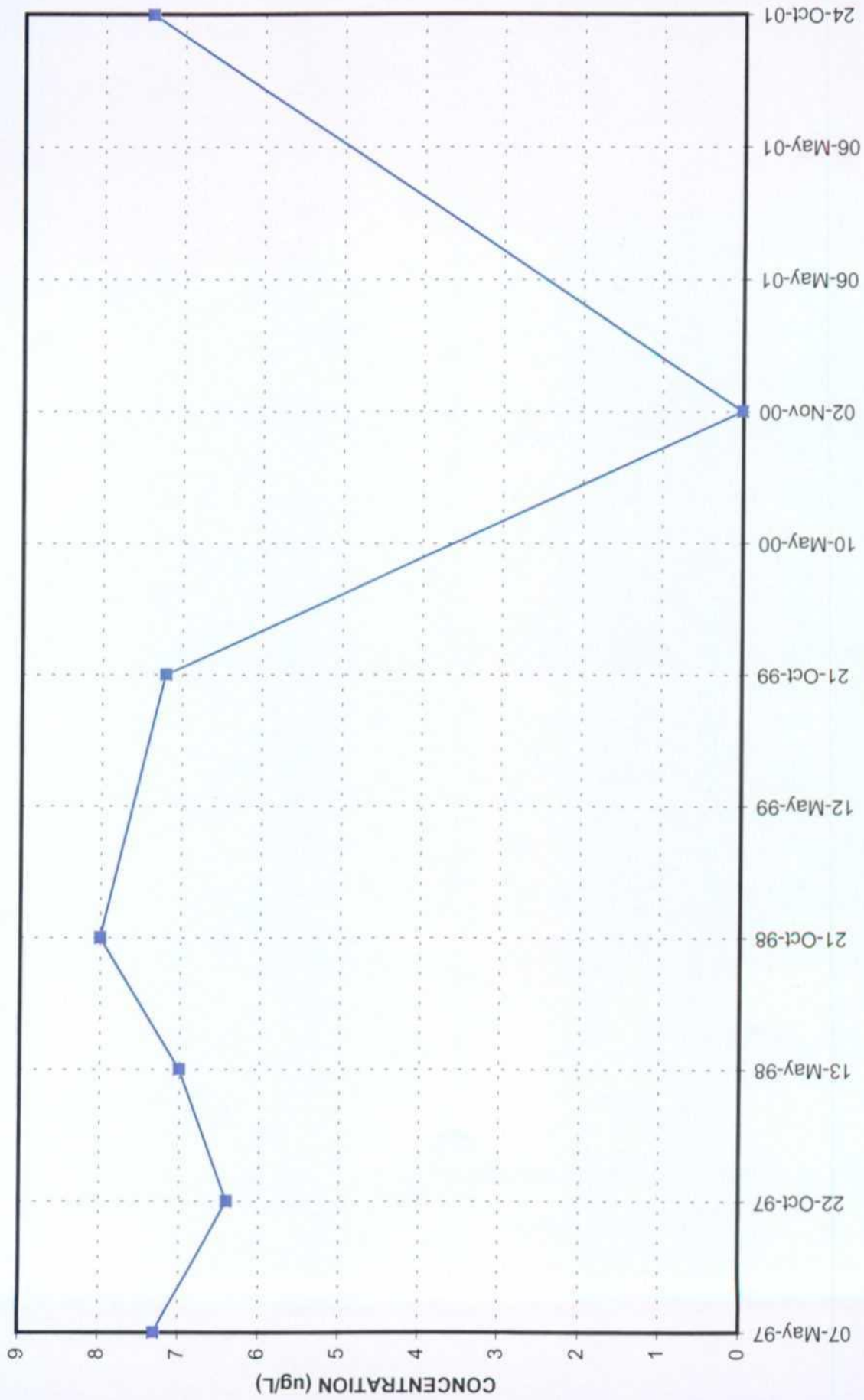
GRAPH 16

MONITOR WELL ACW-07



GRAPH 17

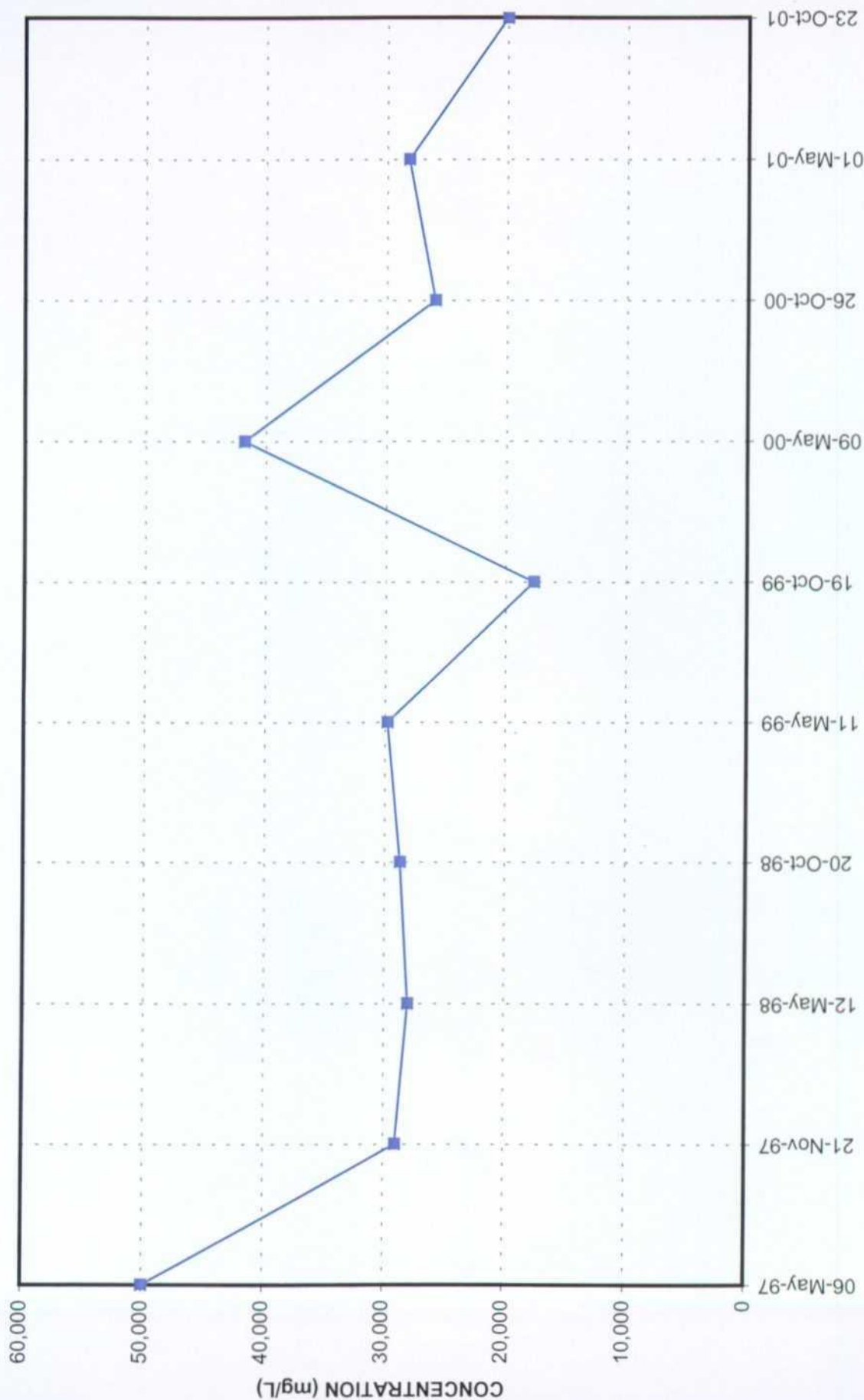
MONITOR WELL ACW-07



A concentration of zero (0) has been used for analytical results reported as less than the laboratory detection limit.

GRAPH 18

MONITOR WELL ACW-08

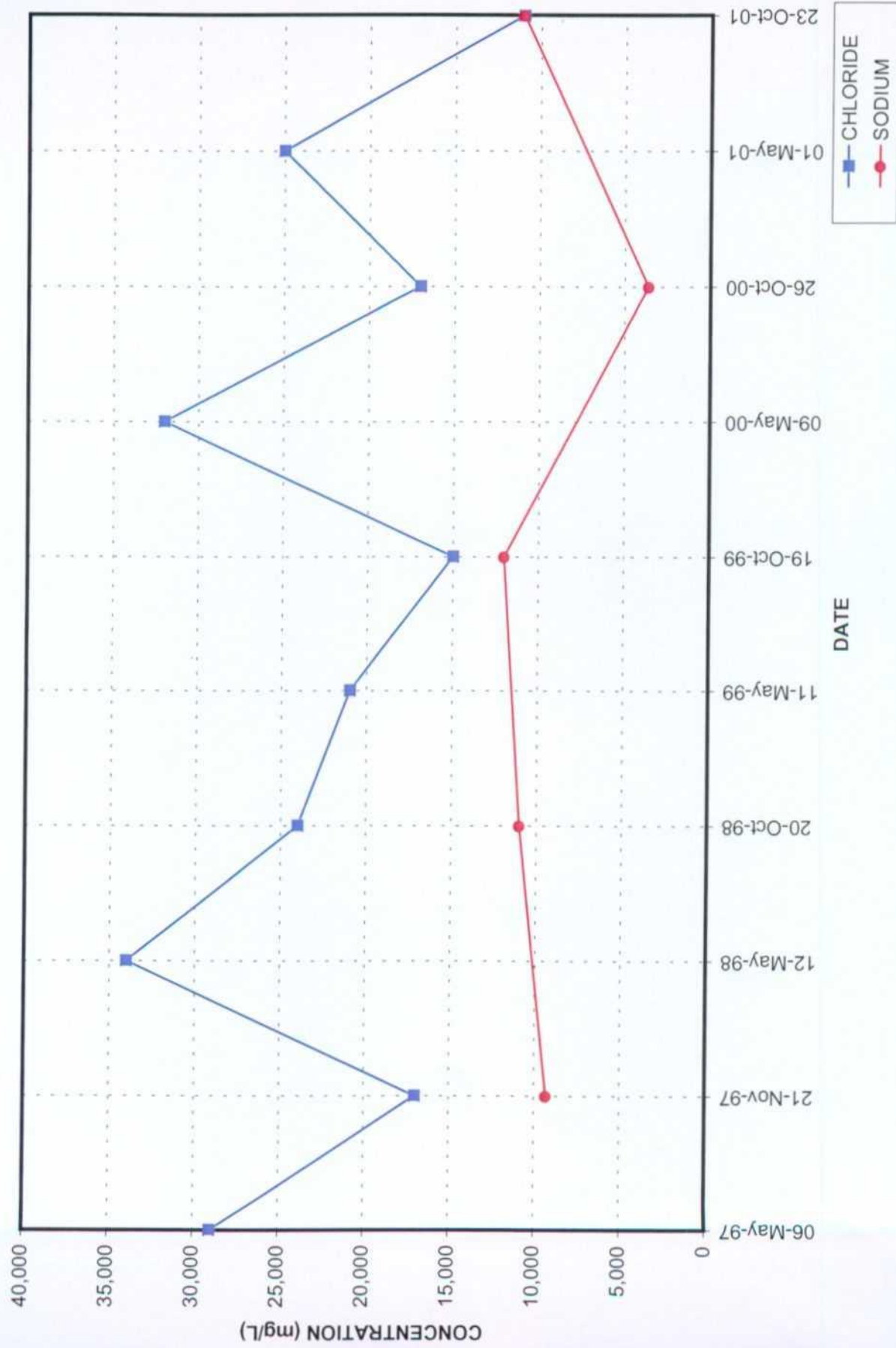


—■— TOTAL DISSOLVED SOLIDS

DATE

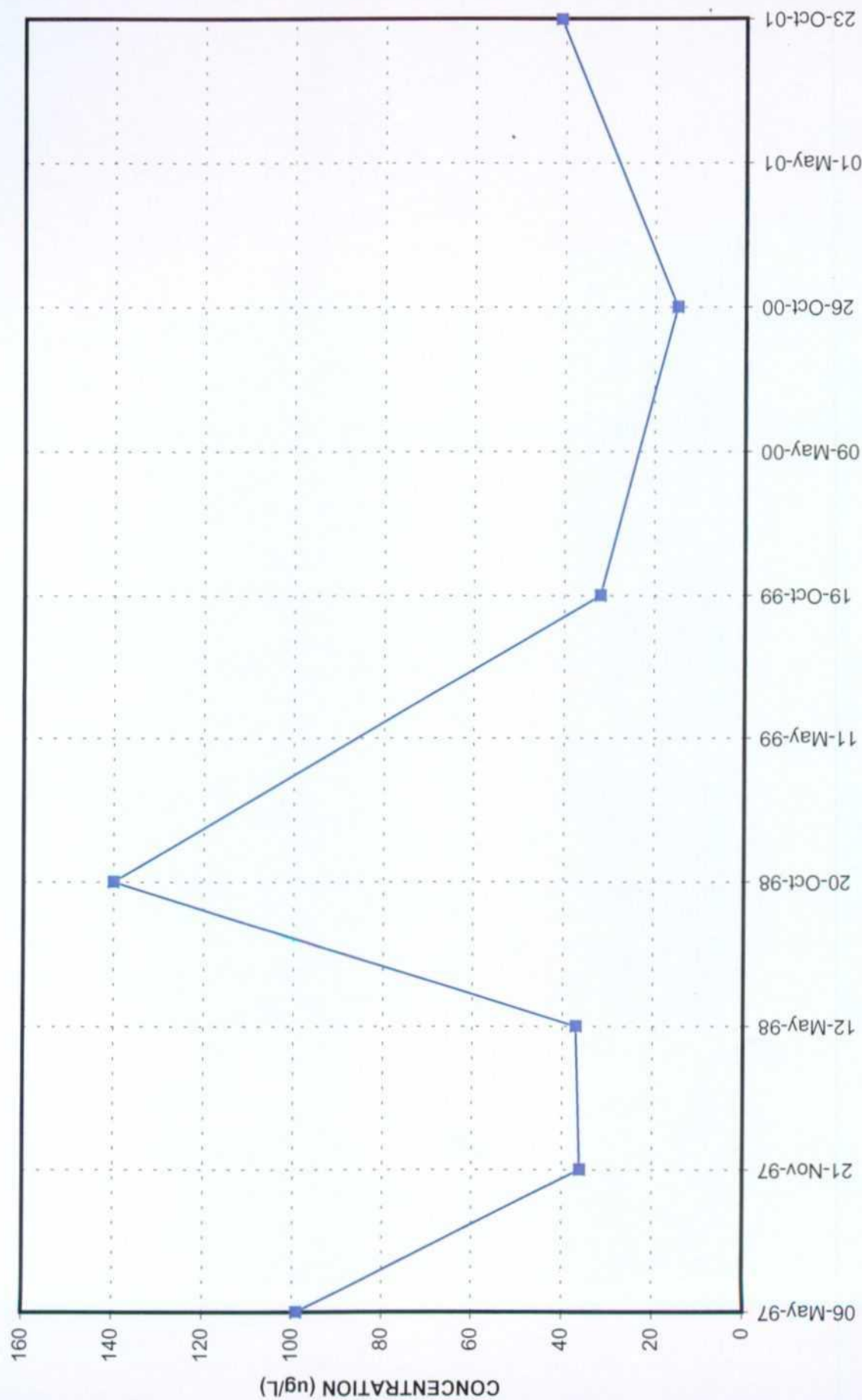
GRAPH 19

MONITOR WELL ACW-08



GRAPH 20

MONITOR WELL ACW-08



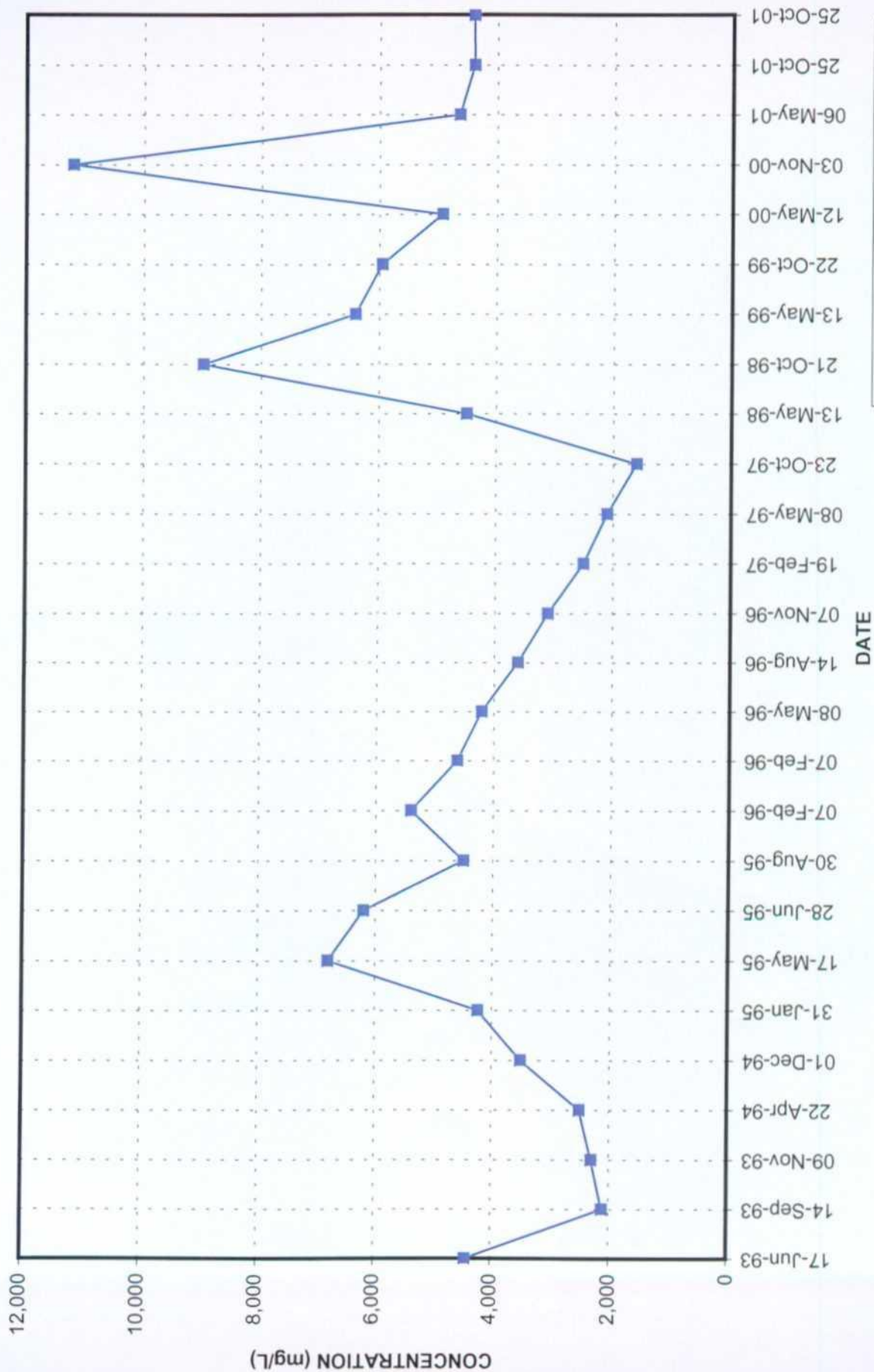
DATE

A concentration of zero (0) has been used for analytical results reported as less than the laboratory detection limit.

—■— BENZENE

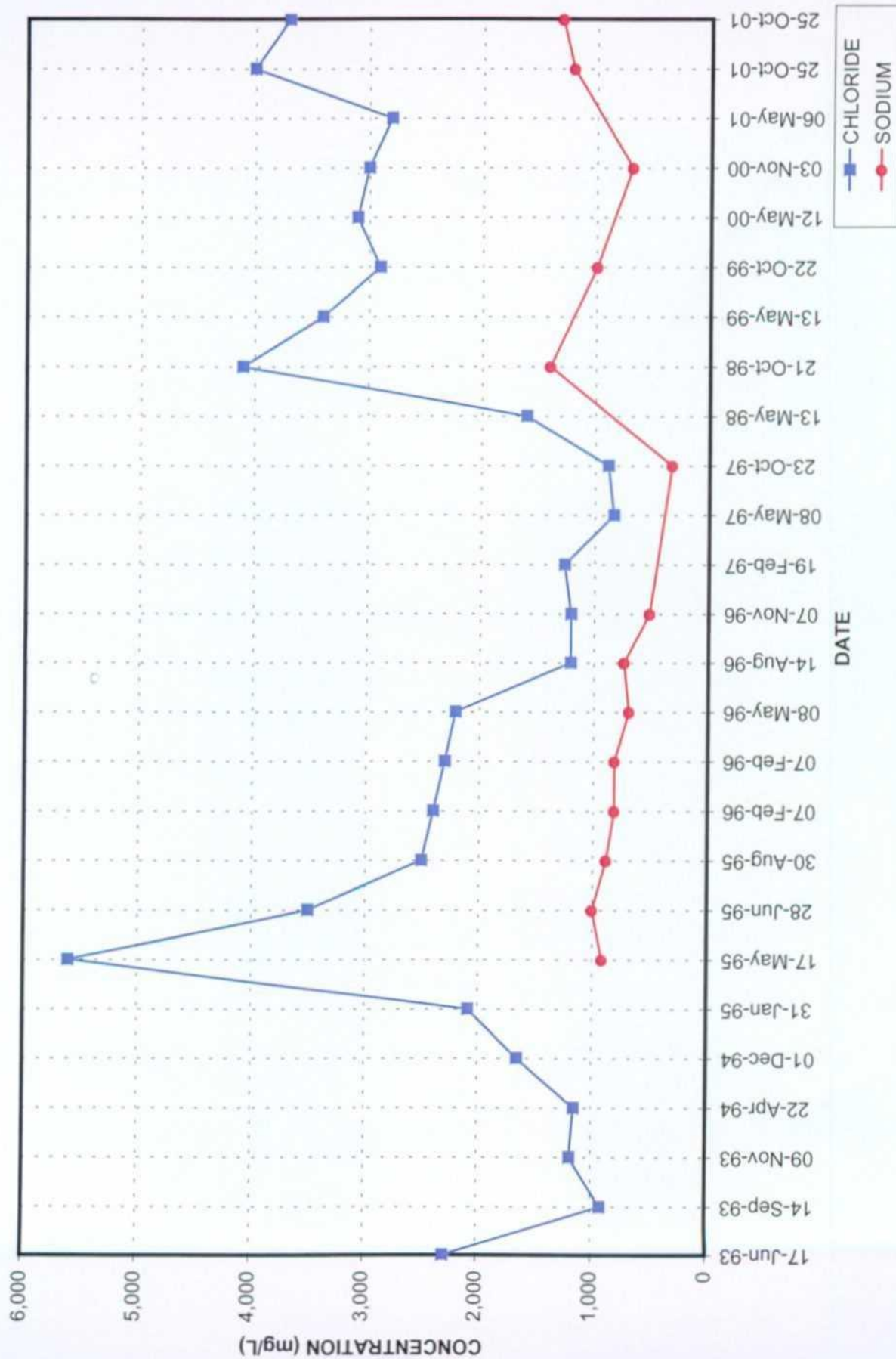
GRAPH 21

MONITOR WELL ACW-09



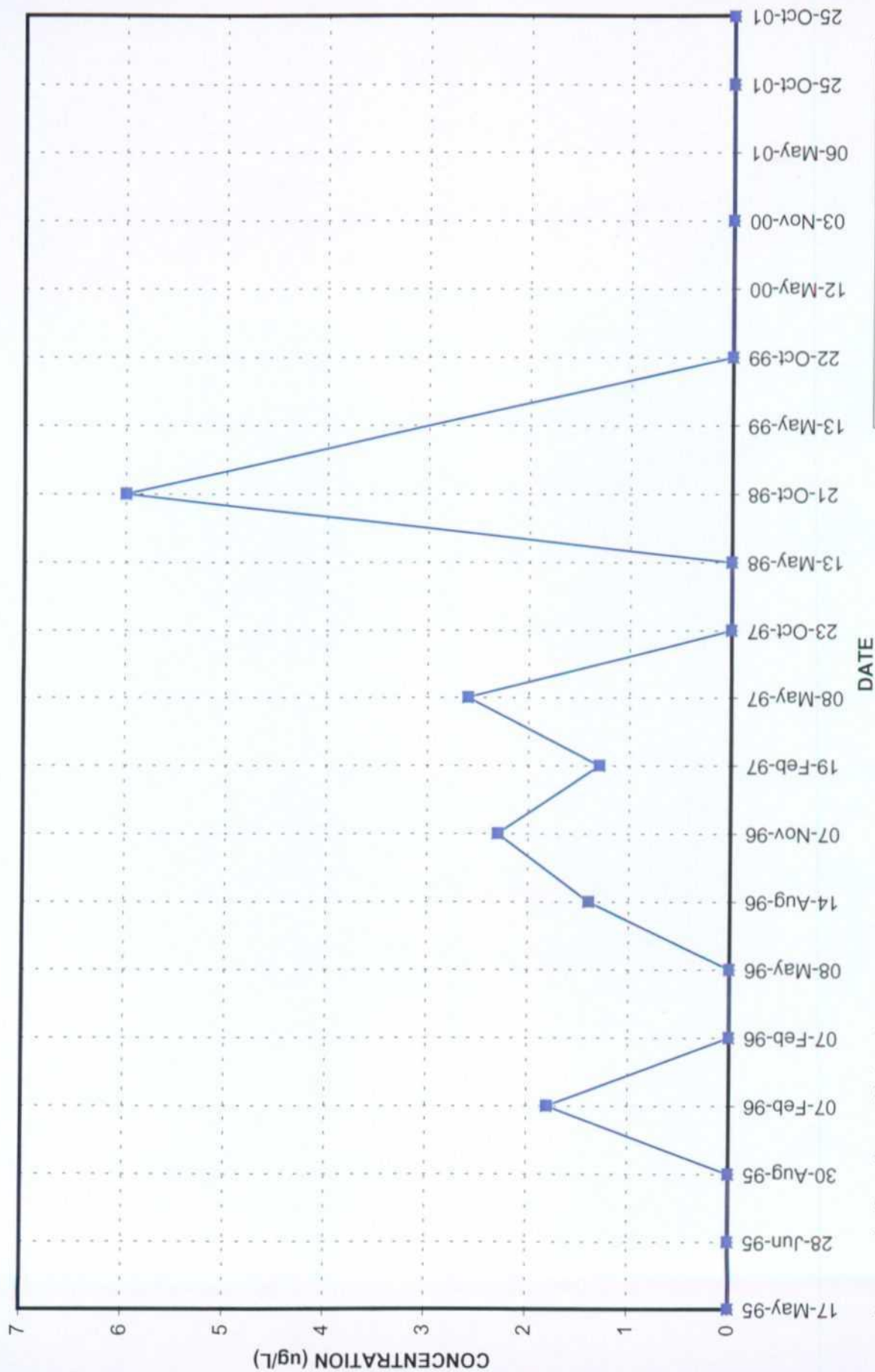
GRAPH 22

MONITOR WELL ACW-09



GRAPH 23

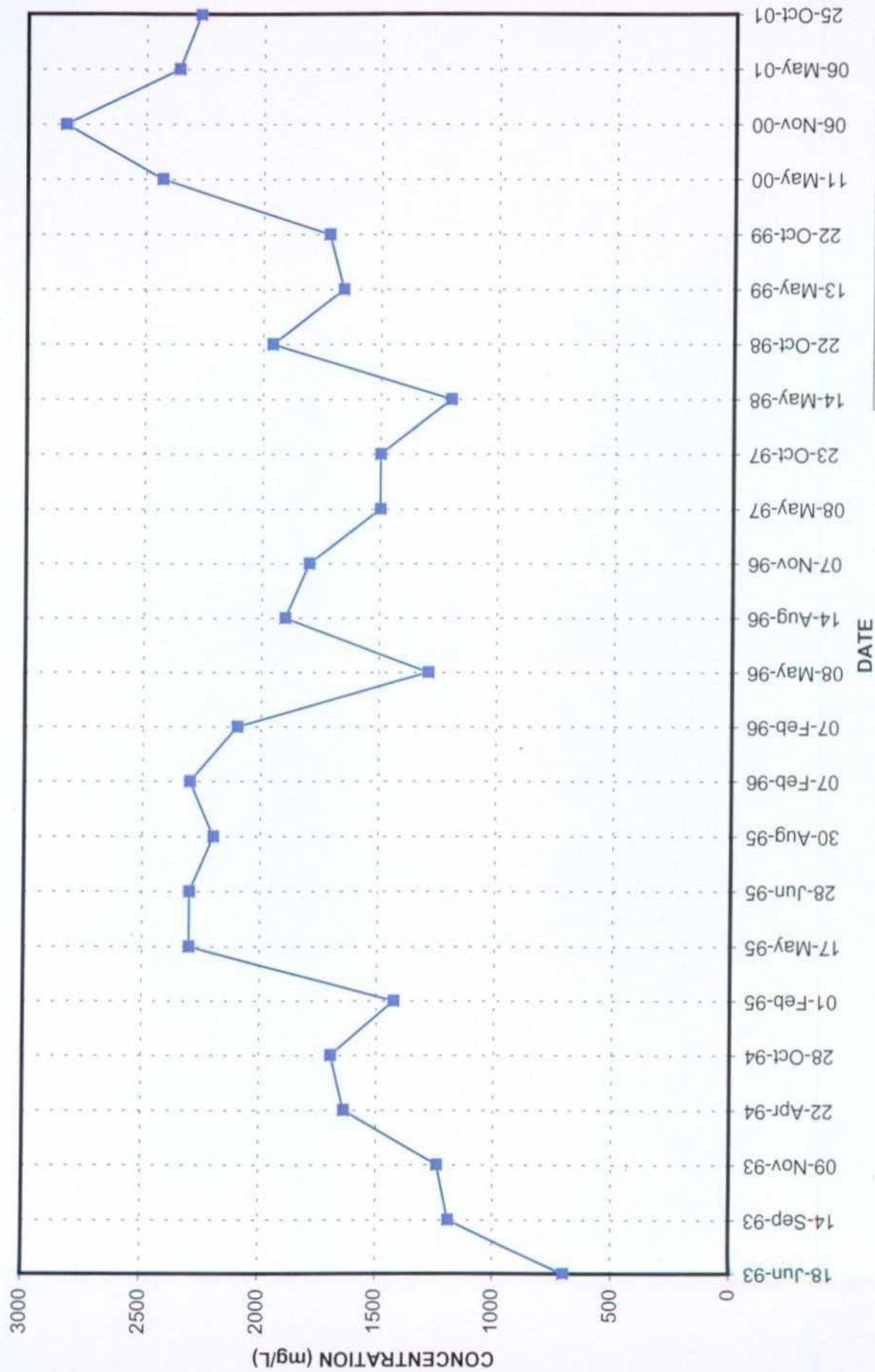
MONITOR WELL ACW-09



A concentration of zero (0) has been used for analytical results reported as less than the laboratory detection limit.

GRAPH 24

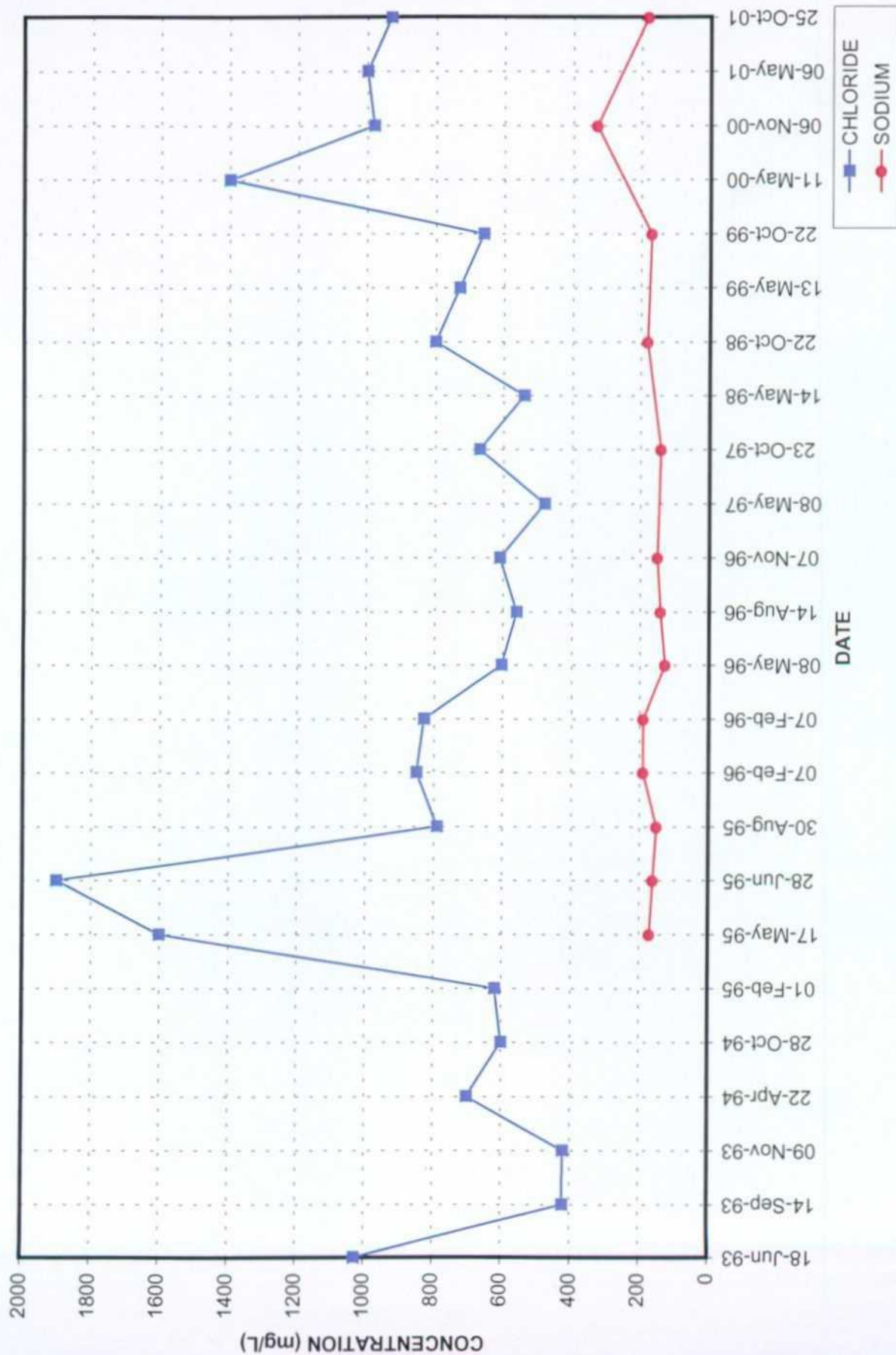
MONITOR WELL ACW-10



—■— TOTAL DISSOLVED SOLIDS

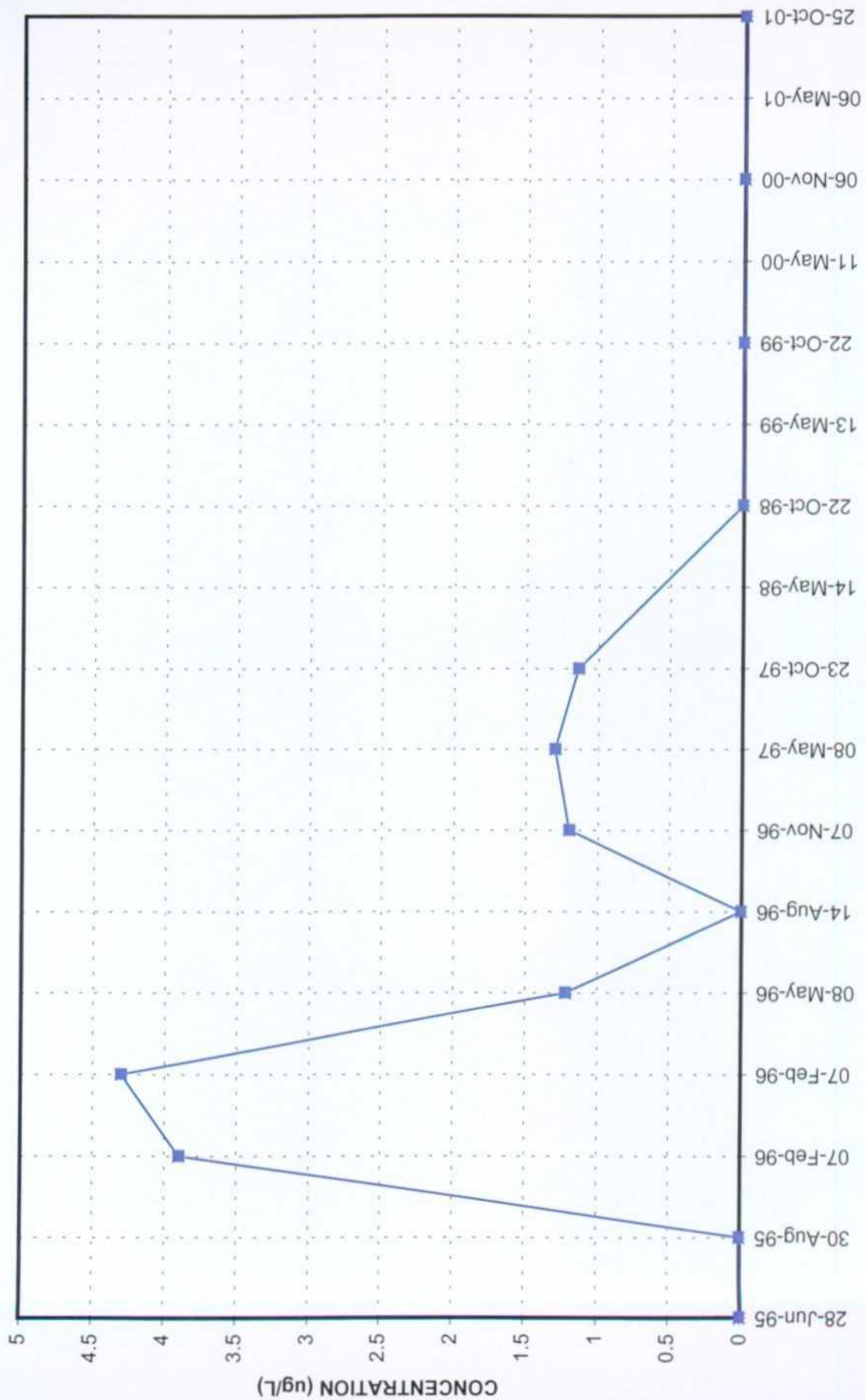
GRAPH 25

MONITOR WELL ACW-10



GRAPH 26

MONITOR WELL ACW-10



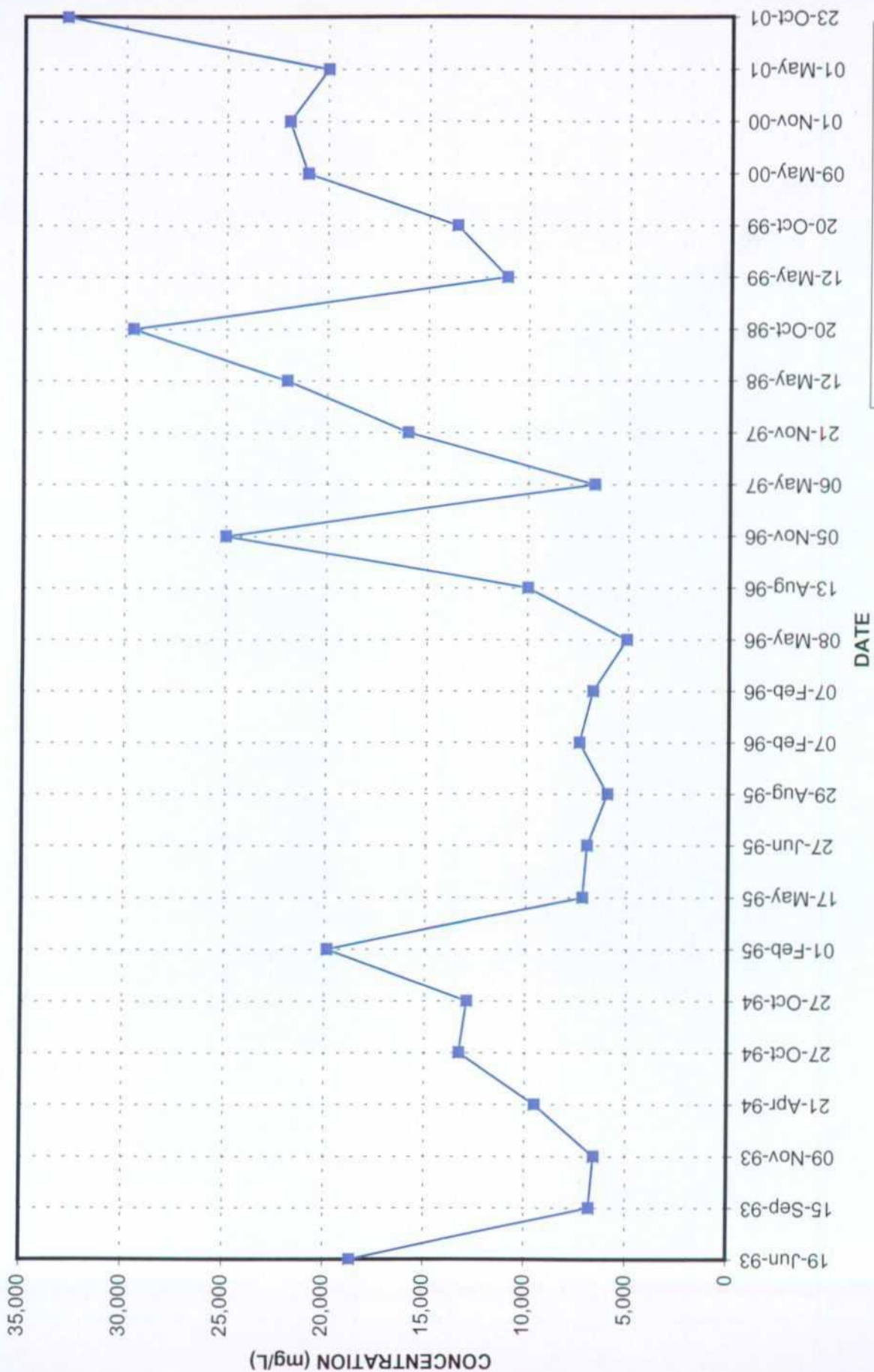
DATE

A concentration of zero (0) has been used for analytical results reported as less than the laboratory detection limit.

—■— BENZENE

GRAPH 27

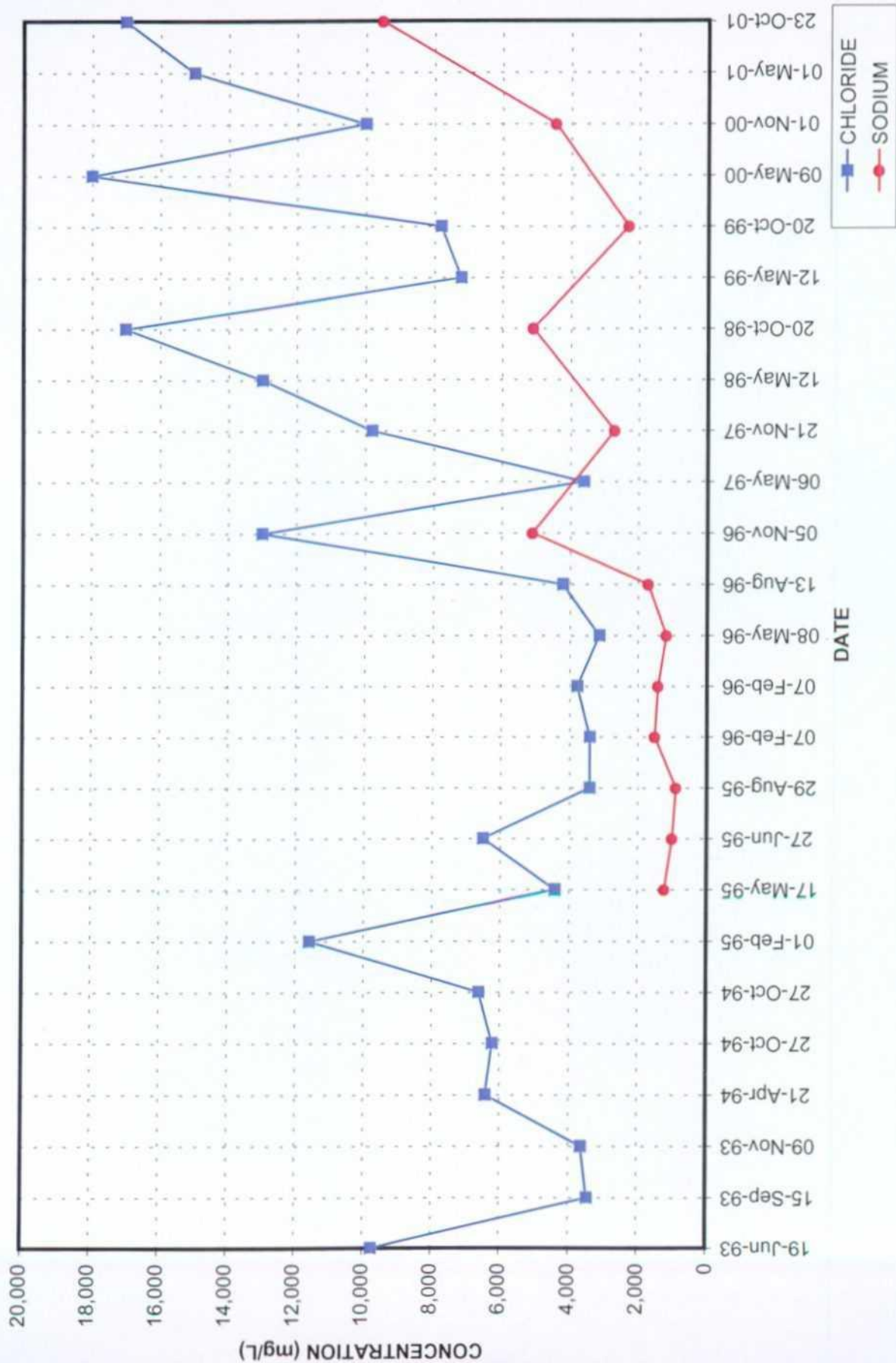
MONITOR WELL ACW-11



—■— TOTAL DISSOLVED SOLIDS

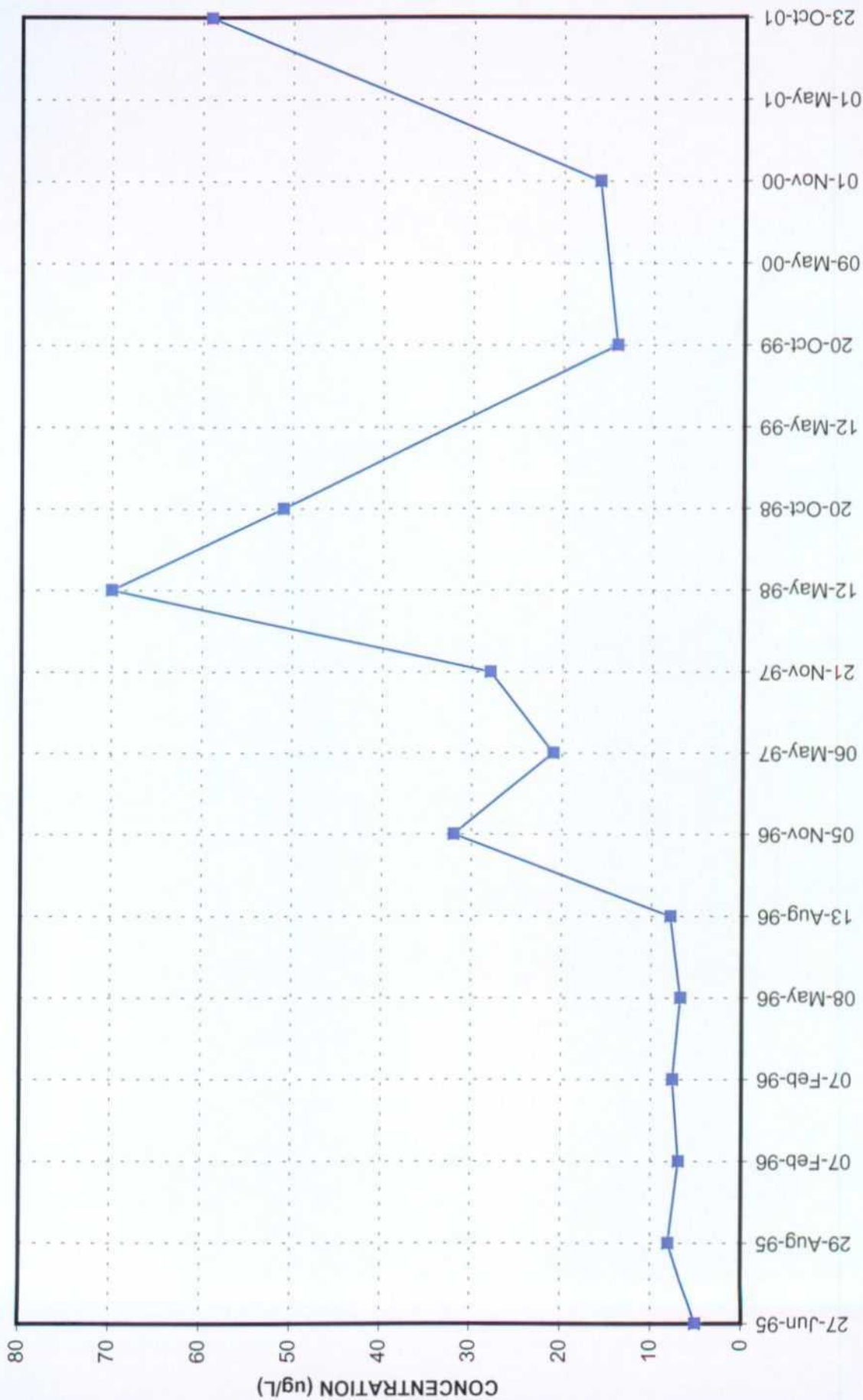
GRAPH 28

MONITOR WELL ACW-11



GRAPH 29

MONITOR WELL ACW-11



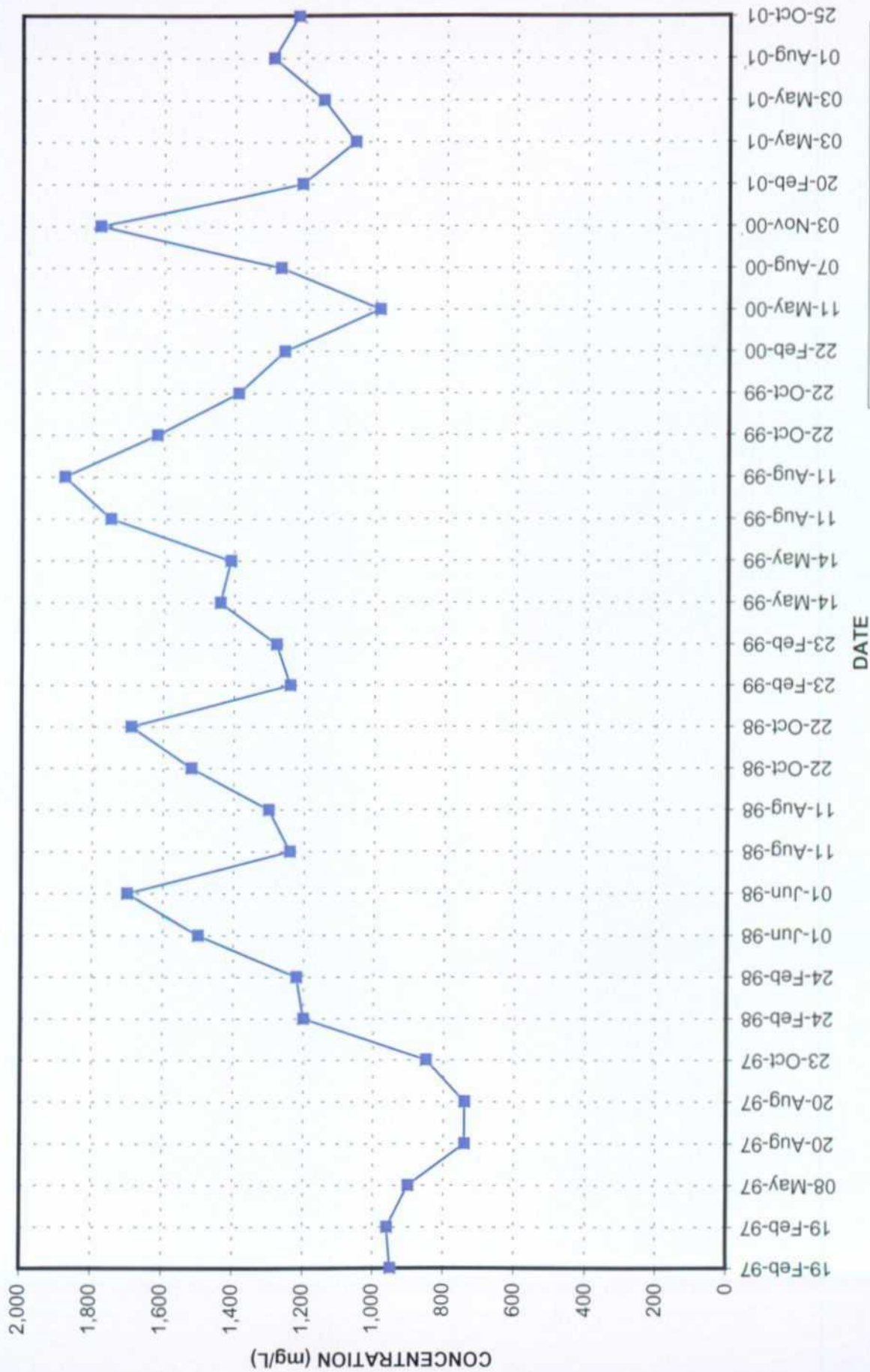
DATE

A concentration of zero (0) has been used for analytical results reported as less than the laboratory detection limit.

—■— BENZENE

GRAPH 30

MONITOR WELL ACW-12

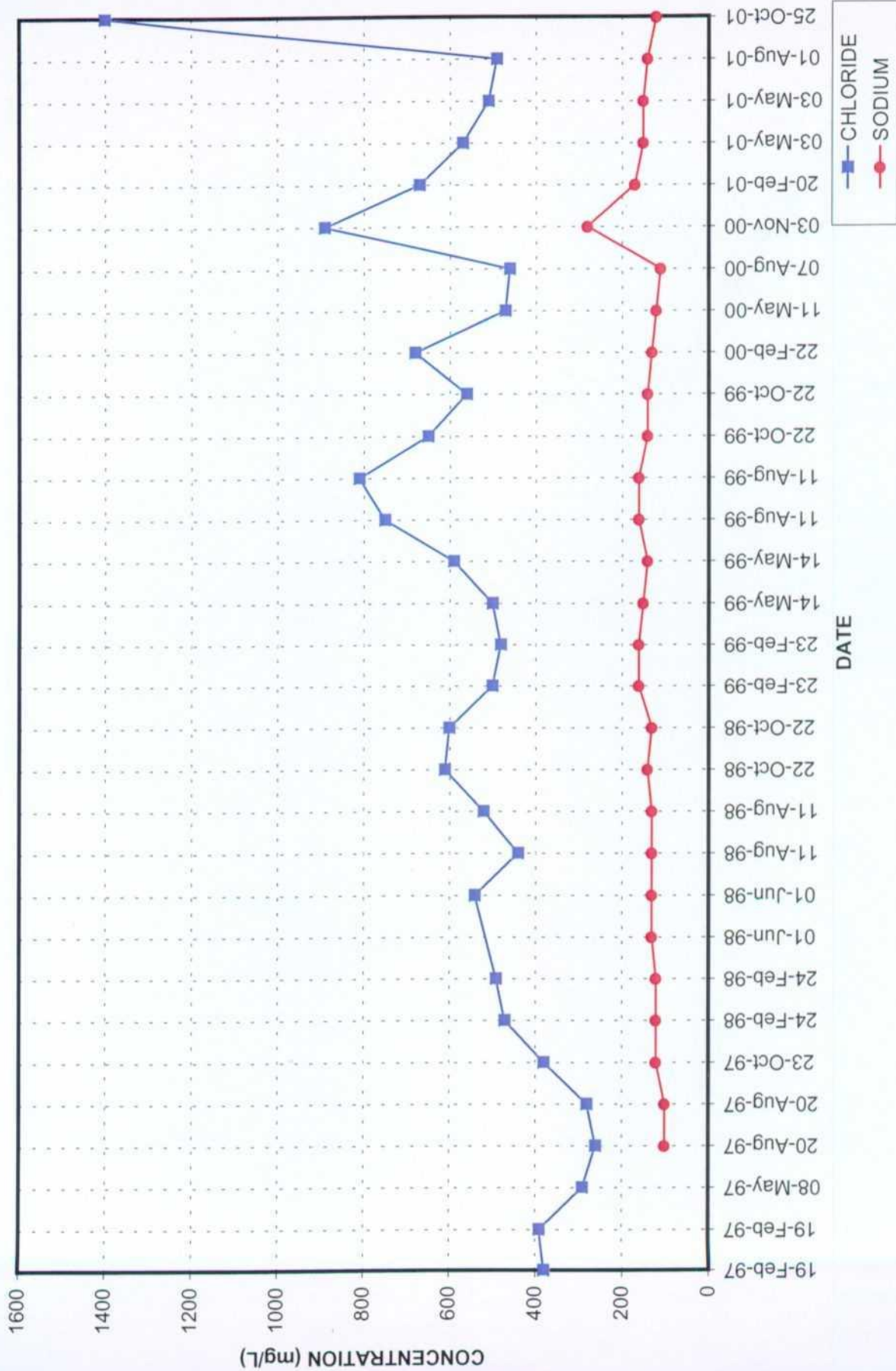


—■— TOTAL DISSOLVED SOLIDS

DATE

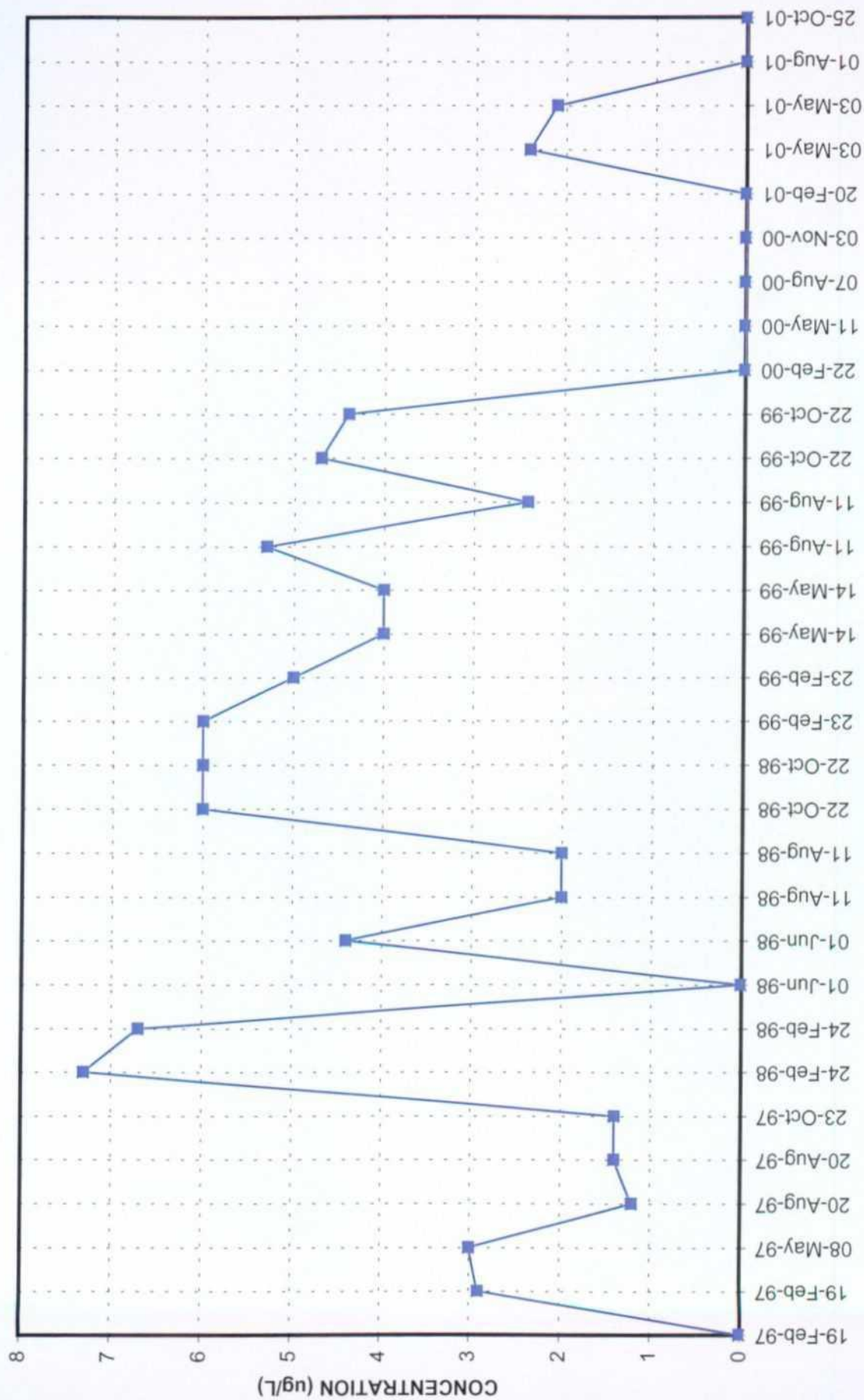
GRAPH 31

MONITOR WELL ACW-12



GRAPH 32

MONITOR WELL ACW-12



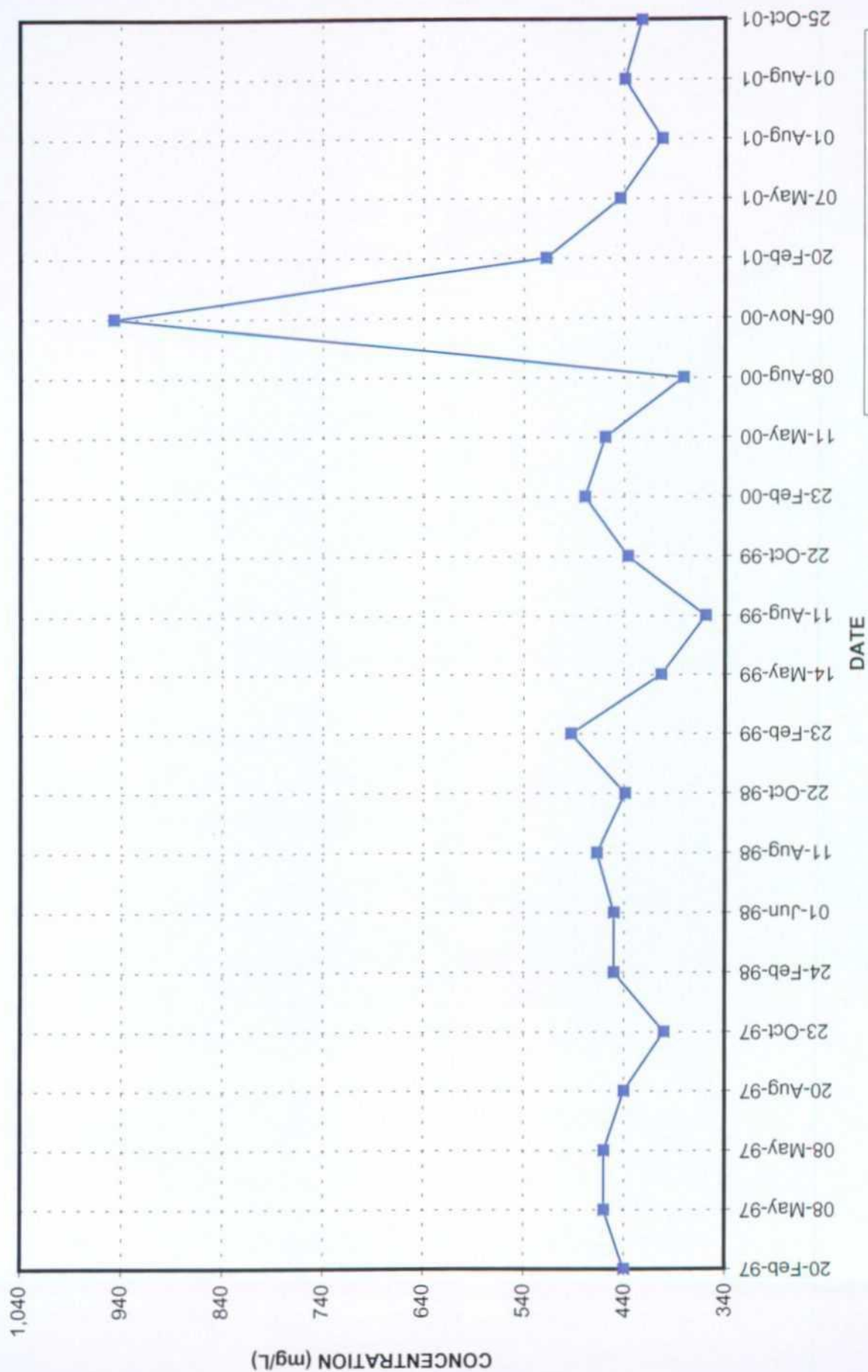
A concentration of zero (0) has been used for analytical results reported as less than the laboratory detection limit.

DATE

—■— BENZENE

GRAPH 33

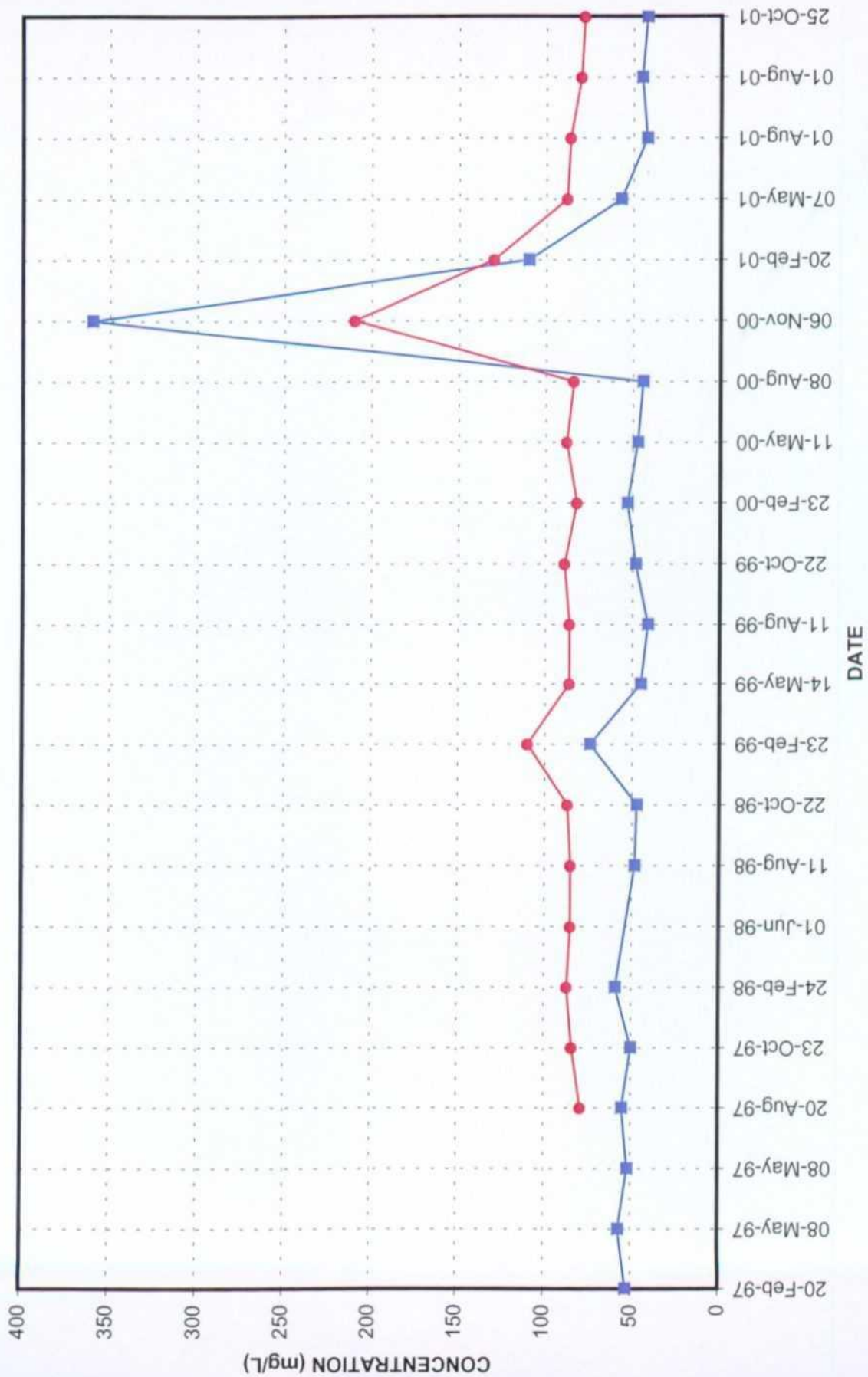
MONITOR WELL ACW-13



—■— TOTAL DISSOLVED SOLIDS

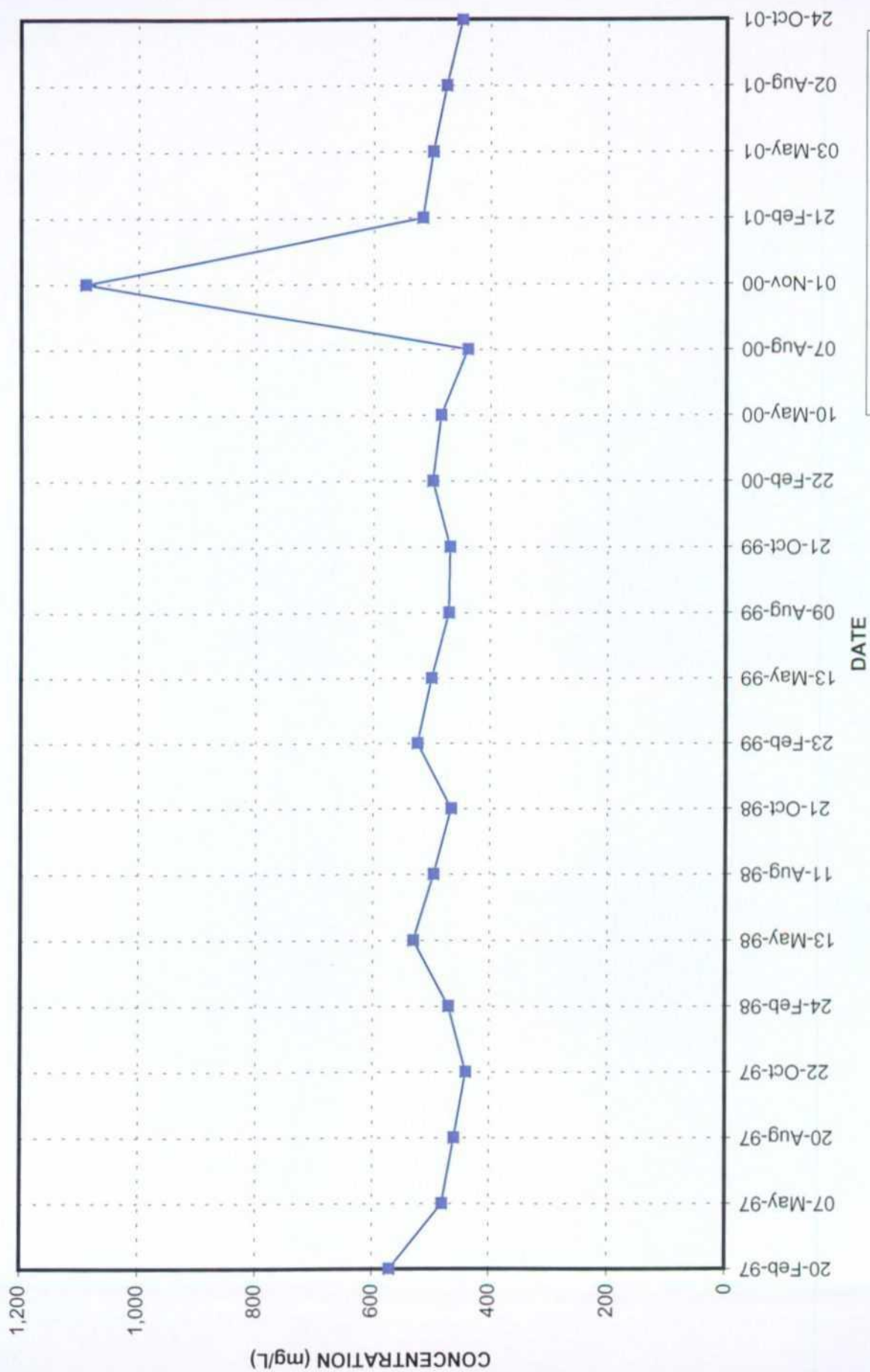
GRAPH 34

MONITOR WELL ACW-13



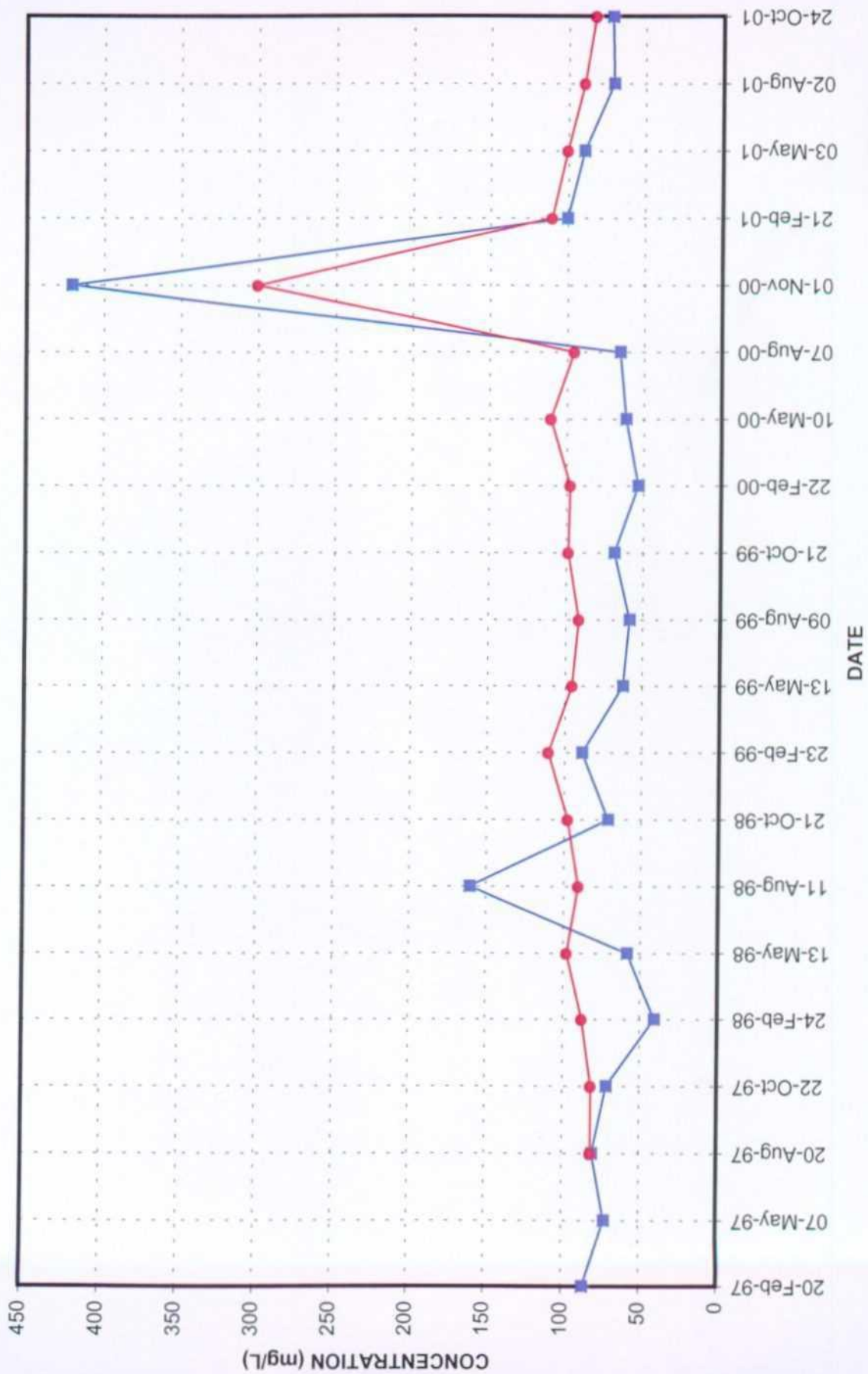
GRAPH 35

MONITOR WELL ACW-14



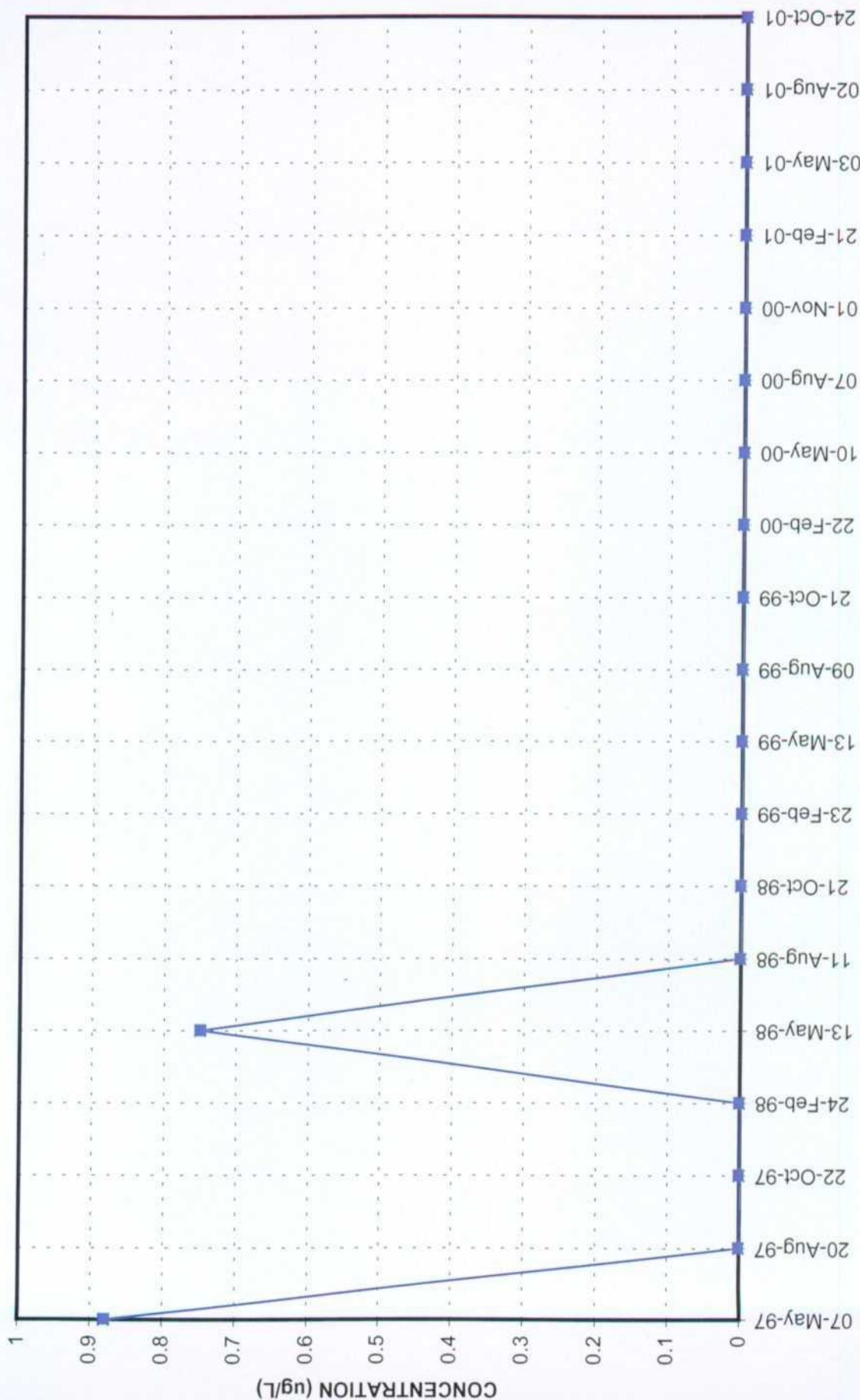
GRAPH 37

MONITOR WELL ACW-14



GRAPH 38

MONITOR WELL ACW-14



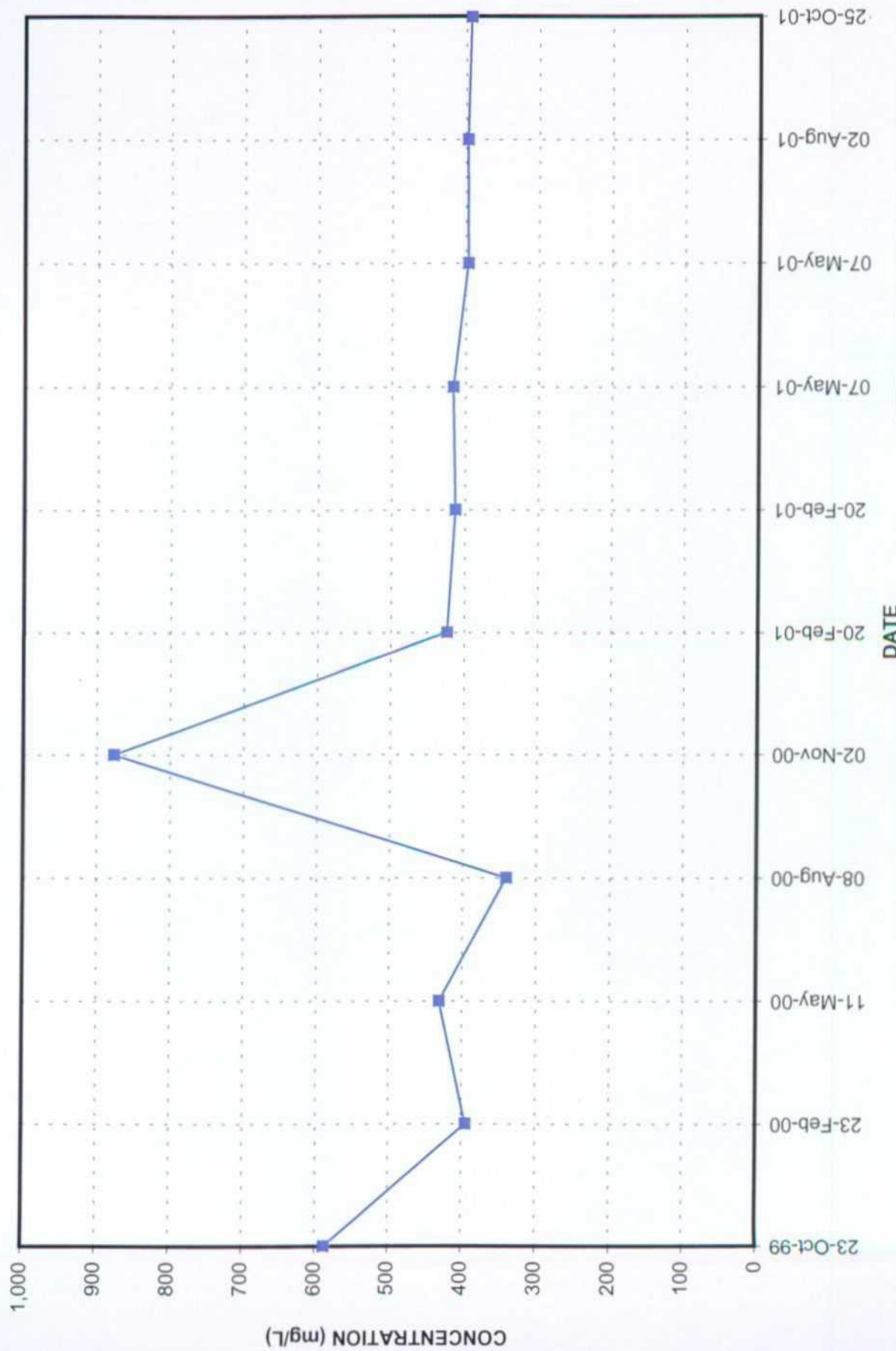
DATE

A concentration of zero (0) has been used for analytical results reported as less than the laboratory detection limit.

—■— BENZENE

GRAPH 39

MONITOR WELL ACW-15

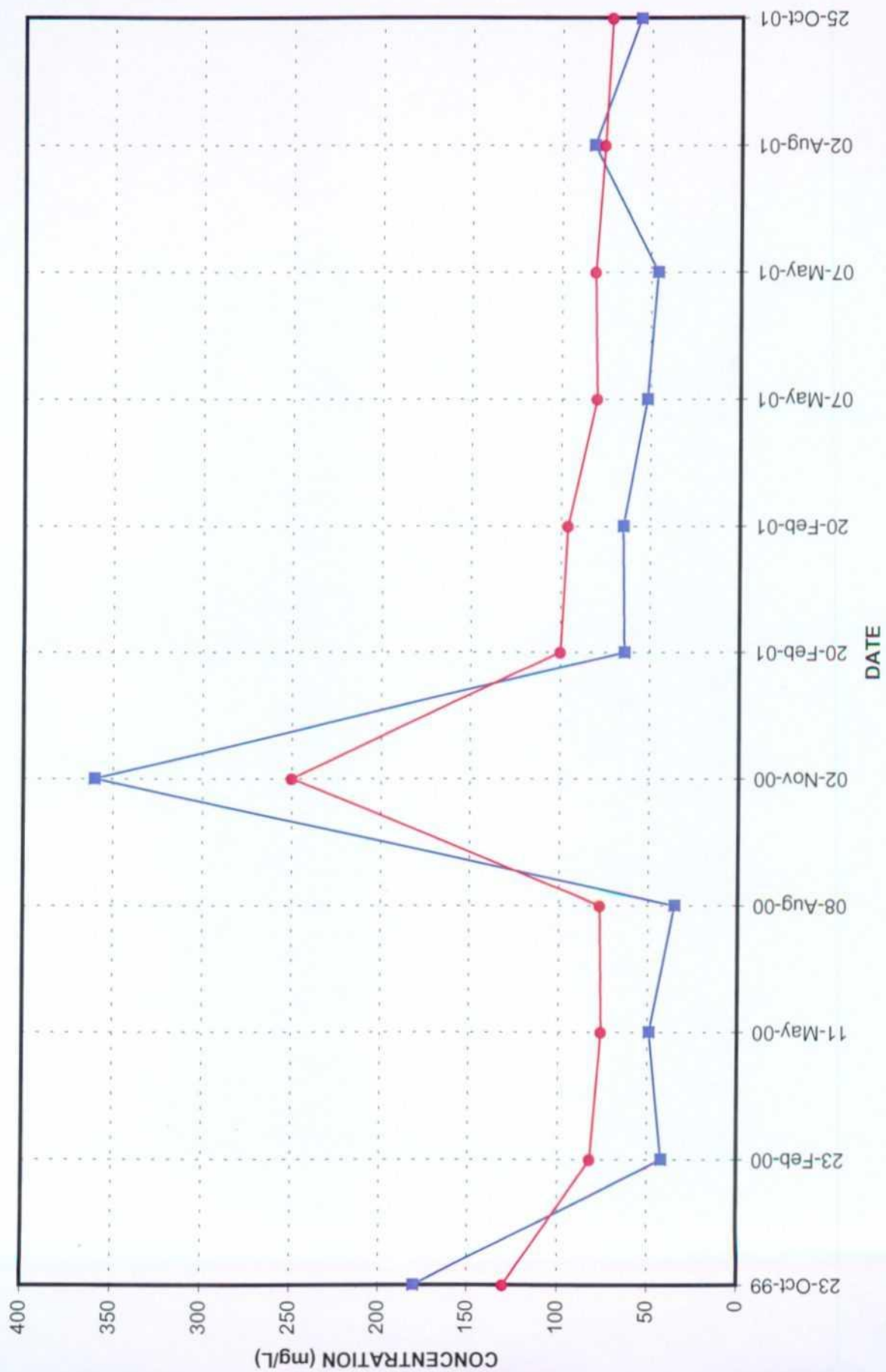


—■— TOTAL DISSOLVED SOLIDS

DATE

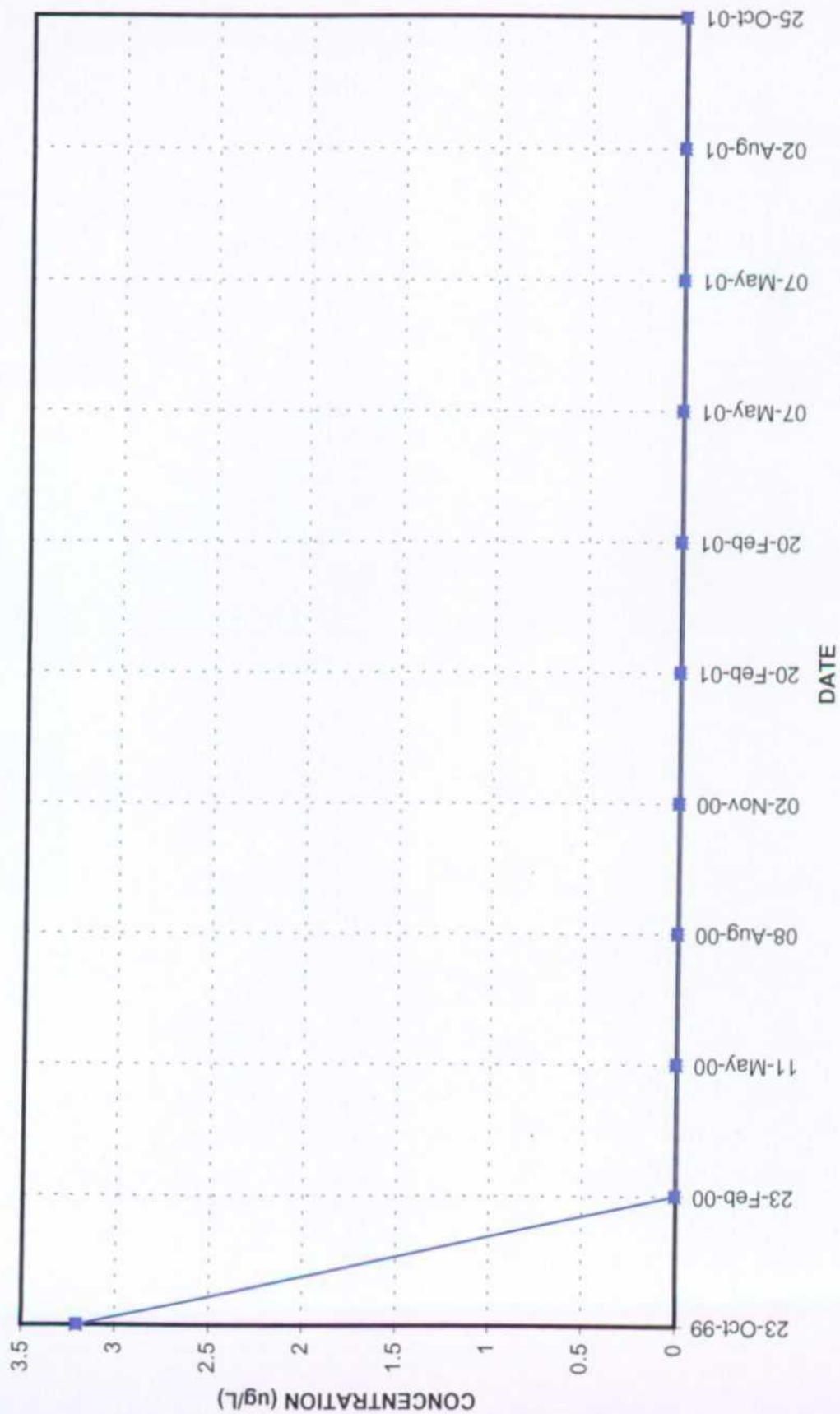
GRAPH 40

MONITOR WELL ACW-15



GRAPH 41

MONITOR WELL ACW-15



—■— BENZENE

A concentration of zero (0) has been used for analytical results reported as less than the laboratory detection limit.

GRAPH 42

APPENDICES

APPENDIX A

**LABORATORY ANALYTICAL REPORTS
FOR GROUNDWATER SAMPLES
COLLECTED DURING 2001**

JAL #4 PLANT

MONITOR WELL	INSTALLED BY	DATE INSTALLED	SCREENED INT	WELL DEPTH TD FEET	BORING RECORD
ENSR-1	ENSR/DALLAS*	7/89	123-148	153	CONST ONL
ENSR-2	↓	↓	121-146	151	↓
ENSR-3	↓	↓	123-148	151	↓
EPNG-1 SUP					
EPNG-5 SUP					
EPNG-6 SUP					
EPNG-12 SUP			175-234		NO
Acw-1	KW BROWN	11/12/90	110-130	135.4	YES
Acw-2	↓	11/14/90	106-126	131.4	YES
Acw-2a	↓	12/10/90	98-118	123.0	YES
Acw-3	↓	11/15/90	112-132	137.4	YES
PTP-1	↓	11/13/90	110-130	135.4	YES
Acw-4	BURLINGTON ENV.	7/8/92	154-169	169	YES
Acw-5	↓	7/10/92	105-115	115	↓
Acw-6	↓	7/15/92	110-120	120	↓
Acw-7	↓	7/14/92	105-115	115	↓
Acw-8	BURLINGTON ENV.	6/15/93	140-160	160	YES
Acw-9	↓	6/16/93	140-160	160	↓
Acw-10	↓	6/17/93	140-160	160	↓
Acw-11	↓	6/18/93	140-160	160	↓
Acw-12	PHILLIPS ENV.	DECEMBER 10/95	150-170	170	NO
Acw-13	↓	AND 9/96	153-173	173	↓
Acw-14	↓		157-177	177	↓
(Acw-15)					
(Acw-14)	PHILLIPS ENV.	6/23/96	109-179	180	CONST ONL
(Acw-16)	PHILLIPS ENV.	6/30/96	105-175	177	↓
(AW-17)	HIGHAMORE ENV.	10/20/99	150-170	169	YES

* ENSR/DALLAS - FORMERLY ERT

* ACW-2 HAD INSUFFICIENT YIELD TO DEVELOP (REPLACED BY ACW-2a)

● ACW DEVOTES AQUIFER CHARACTERIZATION WELL

SAMPLE KEY

SAMPLE NUMBER: M01-0009 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: EMP #3 pump blank before sampling
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 10:55 SAMPLE DATE: 02/20/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0010 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Production well - Doods
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 11:30 SAMPLE DATE: 02/20/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0011 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor well ACW #12
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 13:20 SAMPLE DATE: 02/20/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0012 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Bailer blank before sampling
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 12:30 SAMPLE DATE: 02/20/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0013 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor well ACW #13
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 15:40 SAMPLE DATE: 02/20/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0014 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor well ACW #17
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 17:25 SAMPLE DATE: 02/20/2001
BY: Brisbin

ORIGINAL

SAMPLE KEY

SAMPLE NUMBER: M01-0015 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor well ACW #17 DUP.
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 17:25 SAMPLE DATE: 02/20/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0016 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Production well OXY
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 17:50 SAMPLE DATE: 02/20/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0017 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor well ACW #15
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 08:56 SAMPLE DATE: 02/21/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0018 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Bailer blank after sampling
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 09:25 SAMPLE DATE: 02/21/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0019 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: EMP #3 after purging wells
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 09:30 SAMPLE DATE: 02/21/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0020 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Field Blank
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 09:35 SAMPLE DATE: 02/21/2001
BY: Brisbin

NEL LABORATORIES

Reno • Las Vegas • Boise
Phoenix • Sacramento

Las Vegas Division
4208 Arcata Way, Suite A • Las Vegas, NV 89030
(702) 657-1010 • Fax: (702) 657-1577
1-888-368-3282

CLIENT: El Paso Natural Gas Company
8645 Railroad Drive
El Paso, TX 79904
ATTN: Darrell Campbell

PROJECT NAME: JAL #4
PROJECT NUMBER: NA

NEL ORDER ID: P0102085

Attached are the analytical results for samples in support of the above referenced project.

Samples submitted for this project were not sampled by NEL Laboratories. Samples were received by NEL in good condition, under chain of custody on 2/22/01.

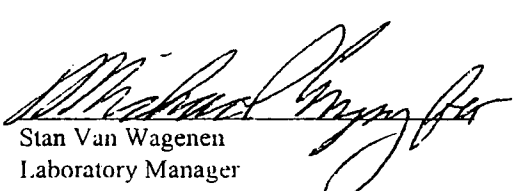
Should you have any questions or comments, please feel free to contact our Client Services department at (602) 437-0099.

Some results have been flagged as follows:

Hr - Sample was received beyond holding time for this parameter.

Some QA results have been flagged as follows:

- C - Sample concentration is a least 5 times greater than spike contribution. Spike recovery criteria do not apply.
- Il - The batch MS and/or MSD were outside acceptance limits. The batch LCS was acceptable.


Stan Van Wagenen
Laboratory Manager

3/15/01
Date

CERTIFICATIONS:

	Reno	Las Vegas	S. California
Arizona	AZ0520	AZ0518	AZ0605
California	1707	2002	2264
US Army Corps of Engineers	Certified	Certified	

	Reno	Las Vegas	S. California
Idaho	Certified	Certified	
Montana	Certified	Certified	
Nevada	NV033	NV052	CA084
L.A.C.S.D.			10228

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0009
DATE SAMPLED: 2/20/01
NEL SAMPLE ID: P0102085-01

TEST: Cations by EPA 6010A
MATRIX: Aqueous

ANALYST: FKA - Division

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	36	0.5 mg/L	1	EPA 6010	2/26/01	2/26/01
Magnesium	12	0.5 mg/L	1	EPA 6010	2/26/01	2/26/01
Potassium	11	2. mg/L	1	EPA 6010	2/26/01	2/26/01
Silica	23	1. mg/L	1	SM 4500Si-D	2/26/01	2/26/01
Sodium	220	0.5 mg/L	1	EPA 6010	2/26/01	2/26/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0012
DATE SAMPLED: 2/20/01
NEL SAMPLE ID: P0102085-02

TEST: Cations by EPA 6010A
MATRIX: Aqueous

ANALYST: FKA - Division

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	ND	0.5 mg/L	1	EPA 6010	2/26/01	2/26/01
Magnesium	ND	0.5 mg/L	1	EPA 6010	2/26/01	2/26/01
Potassium	ND	2. mg/L	1	EPA 6010	2/26/01	2/26/01
Silica	ND	1. mg/L	1	SM 4500Si-D	2/26/01	2/26/01
Sodium	ND	0.5 mg/L	1	EPA 6010	2/26/01	2/26/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0011
DATE SAMPLED: 2/20/01
NEL SAMPLE ID: P0102085-03

TEST: Cations by EPA 6010A
MATRIX: Aqueous

ANALYST: FKA - Division

<u>PARAMETER</u>	<u>RESULT</u> mg/L	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	190	0.5 mg/L	1	EPA 6010	2/26/01	2/26/01
Magnesium	68	0.5 mg/L	1	EPA 6010	2/26/01	2/26/01
Potassium	11	2. mg/L	1	EPA 6010	2/26/01	2/26/01
Silica	31	1. mg/L	1	SM 4500Si-D	2/26/01	2/26/01
Sodium	170	0.5 mg/L	1	EPA 6010	2/26/01	2/26/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0013
DATE SAMPLED: 2/20/01
NEI SAMPLE ID: P0102085-04

TEST: Cations by EPA 6010A
MATRIX: Aqueous

ANALYST: FKA - Division

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	48	0.5 mg/L	1	EPA 6010	2/26/01	2/26/01
Magnesium	16	0.5 mg/L	1	EPA 6010	2/26/01	2/26/01
Potassium	7.5	2. mg/L	1	EPA 6010	2/26/01	2/26/01
Silica	34	1. mg/L	1	SM 4500Si-D	2/26/01	2/26/01
Sodium	130	0.5 mg/L	1	EPA 6010	2/26/01	2/26/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0014
DATE SAMPLED: 2/20/01
NEL SAMPLE ID: P0102085-05

TEST: Cations by EPA 6010A
MATRIX: Aqueous

ANALYST: FKA - Division

<u>PARAMETER</u>	<u>RESULT</u> mg/L	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	40	0.5 mg/L	1	EPA 6010	2/26/01	2/26/01
Magnesium	14	0.5 mg/L	1	EPA 6010	2/26/01	2/26/01
Potassium	8.6	2. mg/L	1	EPA 6010	2/26/01	2/26/01
Silica	31	1. mg/L	1	SM 4500Si-D	2/26/01	2/26/01
Sodium	100	0.5 mg/L	1	EPA 6010	2/26/01	2/26/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0015
DATE SAMPLED: 2/20/01
NEL SAMPLE ID: P0102085-06

TEST: Cations by EPA 6010A
MATRIX: Aqueous

ANALYST: FKA - Division

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	38	0.5 mg/L	1	EPA 6010	2/26/01	2/26/01
Magnesium	13	0.5 mg/L	1	EPA 6010	2/26/01	2/26/01
Potassium	7.5	2. mg/L	1	EPA 6010	2/26/01	2/26/01
Silica	31	1. mg/L	1	SM 4500Si-D	2/26/01	2/26/01
Sodium	96	0.5 mg/L	1	EPA 6010	2/26/01	2/26/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0017
DATE SAMPLED: 2/21/01
NEL SAMPLE ID: P0102085-07

TEST: Cations by EPA 6010A
MATRIX: Aqueous

ANALYST: FKA - Division

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	47	0.5 mg/L	1	EPA 6010	2/26/01	2/26/01
Magnesium	18	0.5 mg/L	1	EPA 6010	2/26/01	2/26/01
Potassium	7.2	2. mg/L	1	EPA 6010	2/26/01	2/26/01
Silica	33	1. mg/L	1	SM 4500Si-D	2/26/01	2/26/01
Sodium	110	0.5 mg/L	1	EPA 6010	2/26/01	2/26/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0018
DATE SAMPLED: 2/21/01
NEL SAMPLE ID: P0102085-08

TEST: Cations by EPA 6010A
MATRIX: Aqueous

ANALYST: FKA - Division

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	ND	0.5 mg/L	1	EPA 6010	2/26/01	2/26/01
Magnesium	ND	0.5 mg/L	1	EPA 6010	2/26/01	2/26/01
Potassium	ND	2. mg/L	1	EPA 6010	2/26/01	2/26/01
Silica	ND	1. mg/L	1	SM 4500Si-D	2/26/01	2/26/01
Sodium	ND	0.5 mg/L	1	EPA 6010	2/26/01	2/26/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0019
DATE SAMPLED: 2/21/01
NEL SAMPLE ID: P0102085-09

TEST: Cations by EPA 6010A
MATRIX: Aqueous

ANALYST: FKA - Division

<u>PARAMETER</u>	<u>RESULT</u> mg/L	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	36	0.5 mg/L	1	EPA 6010	2/26/01	2/26/01
Magnesium	12	0.5 mg/L	1	EPA 6010	2/26/01	2/26/01
Potassium	9.1	2. mg/L	1	EPA 6010	2/26/01	2/26/01
Silica	22	1. mg/L	1	SM 4500Si-D	2/26/01	2/26/01
Sodium	180	0.5 mg/L	1	EPA 6010	2/26/01	2/26/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0020
DATE SAMPLED: 2/21/01
NEL SAMPLE ID: P0102085-10

TEST: Cations by EPA 6010A
MATRIX: Aqueous

ANALYST: FKA - Division

<u>PARAMETER</u>	<u>RESULT</u> mg/L	<u>REPORTING</u> LIMIT	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	ND	0.5 mg/L	1	EPA 6010	2/26/01	2/26/01
Magnesium	ND	0.5 mg/L	1	EPA 6010	2/26/01	2/26/01
Potassium	ND	2. mg/L	1	EPA 6010	2/26/01	2/26/01
Silica	ND	1. mg/L	1	SM 4500Si-D	2/26/01	2/26/01
Sodium	ND	0.5 mg/L	1	EPA 6010	2/26/01	2/26/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0010
DATE SAMPLED: 2/20/01
NEL SAMPLE ID: P0102085-11

TEST: Cations by EPA 6010A
MATRIX: Aqueous

ANALYST: FKA - Division

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	46	0.5 mg/L	1	EPA 6010	2/26/01	2/26/01
Magnesium	15	0.5 mg/L	1	EPA 6010	2/26/01	2/26/01
Potassium	4.8	2. mg/L	1	EPA 6010	2/26/01	2/26/01
Silica	35	1. mg/L	1	SM 4500Si-D	2/26/01	2/26/01
Sodium	67	0.5 mg/L	1	EPA 6010	2/26/01	2/26/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0016
DATE SAMPLED: 2/20/01
NEL SAMPLE ID: P0102085-12

TEST: Cations by EPA 6010A
MATRIX: Aqueous

ANALYST: FKA - Division

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	67	0.5 mg/L	1	EPA 6010	2/26/01	2/26/01
Magnesium	20	0.5 mg/L	1	EPA 6010	2/26/01	2/26/01
Potassium	5.8	2. mg/L	1	EPA 6010	2/26/01	2/26/01
Silica	33	1. mg/L	1	SM 4500Si-D	2/26/01	2/26/01
Sodium	68	0.5 mg/L	1	EPA 6010	2/26/01	2/26/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010226SI-BLK

TEST:

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Silica	ND	1. mg/L	1	SM 4500Si-D	2/26/01	2/26/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: P1020851-BLK

TEST: Cations by EPA 6010A

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	ND	0.5 mg/L	1	EPA 6010	2/26/01	2/26/01
Magnesium	ND	0.5 mg/L	1	EPA 6010	2/26/01	2/26/01
Potassium	ND	2. mg/L	1	EPA 6010	2/26/01	2/26/01
Sodium	ND	0.5 mg/L	1	EPA 6010	2/26/01	2/26/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0009
DATE SAMPLED: 2/20/01
NEL SAMPLE ID: P0102085-01

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	140		1	SM 2320 B	mg/L	2/28/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	2/28/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	2/28/01
Alkalinity, Total as CaCO ₃	140	25.	1	SM 2320 B	mg/L	2/28/01
Bromide	0.56	0.2	1	EPA 300.0	mg/L	2/22/01
Chloride	340	10.	100	EPA 300.0	mg/L	2/28/01
Fluoride	1.7	0.4	1	SM 4500-F C	mg/L	2/22/01
Hardness, Total (as CaCO ₃)	140	2.	1	EPA 200.7	mg/L	2/26/01
Nitrate, as N	ND	0.1	1	EPA 300.0	mg/L-N	2/22/01
pH	8.17	Hr 2.	1	EPA 150.1	pH Units	2/22/01
pH Temperature	21.5	1.	1	EPA 150.1	°C	2/22/01
Specific Conductance	1380	1.	1	SM 2510 B	µS/cm	2/22/01
Sulfate	52	5.	50	EPA 300.0	mg/L	2/27/01
Total Dissolved Solids	736	15.	1	SM 2540 C	mg/L	2/22/01

R.L. - Reporting Limit

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0012
DATE SAMPLED: 2/20/01
NEL SAMPLE ID: P0102085-02

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	2/28/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	2/28/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	2/28/01
Alkalinity, Total as CaCO ₃	ND	25.	1	SM 2320 B	mg/L	2/28/01
Bromide	ND	0.2	1	EPA 300.0	mg/L	2/22/01
Chloride	ND	0.1	1	EPA 300.0	mg/L	2/22/01
Fluoride	ND	0.4	1	SM 4500-F C	mg/L	2/22/01
Hardness, Total (as CaCO ₃)	ND	2.	1	EPA 200.7	mg/L	2/26/01
Nitrate, as N	ND	0.1	1	EPA 300.0	mg/L-N	2/22/01
pH	6.28	Hr 2.	1	EPA 150.1	ph Units	2/22/01
pH Temperature	21.6	1.	1	EPA 150.1	°C	2/22/01
Specific Conductance	1.00	1.	1	SM 2510 B	µS/cm	2/22/01
Sulfate	ND	0.1	1	EPA 300.0	mg/L	2/22/01
Total Dissolved Solids	ND	15.	1	SM 2540 C	mg/L	2/22/01

R.L. - Reporting Limit

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0011
DATE SAMPLED: 2/20/01
NEL SAMPLE ID: P0102085-03

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	150		1	SM 2320 B	mg/L	2/28/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	2/28/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	2/28/01
Alkalinity, Total as CaCO ₃	150	25.	1	SM 2320 B	mg/L	2/28/01
Bromide	0.74	0.2	1	EPA 300.0	mg/L	2/22/01
Chloride	670	50.	500	EPA 300.0	mg/L	2/26/01
Fluoride	0.88	0.4	1	SM 4500-F C	mg/L	2/22/01
Hardness, Total (as CaCO ₃)	750	2.	1	EPA 200.7	mg/L	2/26/01
Nitrate, as N	0.28	0.1	1	EPA 300.0	mg/L-N	2/22/01
pH	7.44	Hr 2.	1	EPA 150.1	pH Units	2/22/01
pH Temperature	21.5	1.	1	EPA 150.1	°C	2/22/01
Specific Conductance	2230	1.	1	SM 2510 B	µS/cm	2/22/01
Sulfate	140	2.	20	EPA 300.0	mg/L	3/7/01
Total Dissolved Solids	1210	30.	2	SM 2540 C	mg/L	2/22/01

R.L. - Reporting Limit

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0013
DATE SAMPLED: 2/20/01
NEL SAMPLE ID: P0102085-04

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	160		1	SM 2320 B	mg/L	2/28/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	2/28/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	2/28/01
Alkalinity, Total as CaCO ₃	160	25.	1	SM 2320 B	mg/L	2/28/01
Bromide	0.39	0.2	1	EPA 300.0	mg/L	2/22/01
Chloride	110	5.	50	EPA 300.0	mg/L	2/26/01
Fluoride	1.3	0.4	1	SM 4500-F C	mg/L	2/22/01
Hardness, Total (as CaCO ₃)	190	2.	1	EPA 200.7	mg/L	2/26/01
Nitrate, as N	1.4	0.1	1	EPA 300.0	mg/L-N	2/22/01
pH	7.81	Hr 2.	1	EPA 150.1	pH Units	2/22/01
pH Temperature	21.6	1.	1	EPA 150.1	°C	2/22/01
Specific Conductance	893	1.	1	SM 2510 B	µS/cm	2/22/01
Sulfate	90	5.	50	EPA 300.0	mg/L	2/26/01
Total Dissolved Solids	518	15.	1	SM 2540 C	mg/L	2/22/01

R.L. - Reporting Limit

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0014
DATE SAMPLED: 2/20/01
NEL SAMPLE ID: P0102085-05

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	160		1	SM 2320 B	mg/L	2/28/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	2/28/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	2/28/01
Alkalinity, Total as CaCO ₃	160	25.	1	SM 2320 B	mg/L	2/28/01
Bromide	0.33	0.2	1	EPA 300.0	mg/L	2/22/01
Chloride	64	5.	50	EPA 300.0	mg/L	2/26/01
Fluoride	1.3	0.4	1	SM 4500-F C	mg/L	2/22/01
Hardness, Total (as CaCO ₃)	160	2.	1	EPA 200.7	mg/L	2/26/01
Nitrate, as N	1.0	0.1	1	EPA 300.0	mg/L-N	2/22/01
pH	7.89	Hr 2.	1	EPA 150.1	pH Units	2/22/01
pH Temperature	21.5	1.	1	EPA 150.1	°C	2/22/01
Specific Conductance	725	1.	1	SM 2510 B	µS/cm	2/22/01
Sulfate	78	5.	50	EPA 300.0	mg/L	2/26/01
Total Dissolved Solids	423	15.	1	SM 2540 C	mg/L	2/22/01

R.L. - Reporting Limit

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0015
DATE SAMPLED: 2/20/01
NEL SAMPLE ID: P0102085-06

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	180		1	SM 2320 B	mg/L	2/28/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	2/28/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	2/28/01
Alkalinity, Total as CaCO ₃	180	25.	1	SM 2320 B	mg/L	2/28/01
Bromide	0.34	0.2	1	EPA 300.0	mg/L	2/22/01
Chloride	65	5.	50	EPA 300.0	mg/L	2/26/01
Fluoride	1.3	0.4	1	SM 4500-F C	mg/L	2/22/01
Hardness, Total (as CaCO ₃)	150	2.	1	EPA 200.7	mg/L	2/26/01
Nitrate, as N	1.0	0.1	1	EPA 300.0	mg/L-N	2/22/01
pH	7.87	Hr 2.	1	EPA 150.1	pH Units	2/22/01
pH Temperature	21.7	1.	1	EPA 150.1	°C	2/22/01
Specific Conductance	727	1.	1	SM 2510 B	µS/cm	2/22/01
Sulfate	81	5.	50	EPA 300.0	mg/L	2/26/01
Total Dissolved Solids	413	15.	1	SM 2540 C	mg/L	2/22/01

R.L. - Reporting Limit

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0017
DATE SAMPLED: 2/21/01
NEL SAMPLE ID: P0102085-07

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	170		1	SM 2320 B	mg/L	2/28/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	2/28/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	2/28/01
Alkalinity, Total as CaCO ₃	170	25.	1	SM 2320 B	mg/L	2/28/01
Bromide	ND	2.	10	EPA 300.0	mg/L	2/22/01
Chloride	100	2.5	25	EPA 300.0	mg/L	2/26/01
Fluoride	1.6	0.4	1	SM 4500-F C	mg/L	2/22/01
Hardness, Total (as CaCO ₃)	190	2.	1	EPA 200.7	mg/L	2/26/01
Nitrate, as N	2.1	1.	10	EPA 300.0	mg/L-N	2/22/01
pH	7.78	Hr 2.	1	EPA 150.1	pH Units	2/22/01
pH Temperature	21.7	1.	1	EPA 150.1	°C	2/22/01
Specific Conductance	883	1.	1	SM 2510 B	µS/cm	2/22/01
Sulfate	100	2.5	25	EPA 300.0	mg/L	2/26/01
Total Dissolved Solids	517	15.	1	SM 2540 C	mg/L	2/22/01

R.L. - Reporting Limit

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0018
DATE SAMPLED: 2/21/01
NEL SAMPLE ID: P0102085-08

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	2/28/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	2/28/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	2/28/01
Alkalinity, Total as CaCO ₃	ND	25.	1	SM 2320 B	mg/L	2/28/01
Bromide	ND	0.2	1	EPA 300.0	mg/L	2/22/01
Chloride	ND	0.1	1	EPA 300.0	mg/L	2/22/01
Fluoride	ND	0.4	1	SM 4500-F C	mg/L	2/22/01
Hardness, Total (as CaCO ₃)	ND	2.	1	EPA 200.7	mg/L	2/26/01
Nitrate, as N	ND	0.1	1	EPA 300.0	mg/L-N	2/22/01
pH	6.18	Hr 2.	1	EPA 150.1	pH Units	2/22/01
pH Temperature	21.8	1.	1	EPA 150.1	°C	2/22/01
Specific Conductance	2.00	1.	1	SM 2510 B	µS/cm	2/22/01
Sulfate	ND	0.1	1	EPA 300.0	mg/L	2/22/01
Total Dissolved Solids	ND	15.	1	SM 2540 C	mg/L	2/22/01

R.L. - Reporting Limit

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0019
DATE SAMPLED: 2/21/01
NEL SAMPLE ID: P0102085-09

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	150		1	SM 2320 B	mg/L	3/1/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	3/1/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	3/1/01
Alkalinity, Total as CaCO ₃	150	25.	1	SM 2320 B	mg/L	3/1/01
Bromide	0.53	0.2	1	EPA 300.0	mg/L	2/22/01
Chloride	240	5.	50	EPA 300.0	mg/L	2/26/01
Fluoride	1.8	0.4	1	SM 4500-F C	mg/L	2/22/01
Hardness, Total (as CaCO ₃)	140	2.	1	EPA 200.7	mg/L	2/26/01
Nitrate, as N	0.19	0.1	1	EPA 300.0	mg/L-N	2/22/01
pH	8.24	Hr 2.	1	EPA 150.1	pH Units	2/22/01
pH Temperature	21.9	1.	1	EPA 150.1	°C	2/22/01
Specific Conductance	1120	1.	1	SM 2510 B	µS/cm	2/22/01
Sulfate	52	5.	50	EPA 300.0	mg/L	2/26/01
Total Dissolved Solids	592	15.	1	SM 2540 C	mg/L	2/22/01

R.L. - Reporting Limit

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0020
DATE SAMPLED: 2/21/01
NEL SAMPLE ID: P0102085-10

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	3/1/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	3/1/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	3/1/01
Alkalinity, Total as CaCO ₃	ND	25.	1	SM 2320 B	mg/L	3/1/01
Bromide	ND	0.2	1	EPA 300.0	mg/L	2/22/01
Chloride	ND	0.1	1	EPA 300.0	mg/L	2/22/01
Fluoride	ND	0.4	1	SM 4500-F C	mg/L	2/22/01
Hardness, Total (as CaCO ₃)	ND	2.	1	EPA 200.7	mg/L	2/26/01
Nitrate, as N	ND	0.1	1	EPA 300.0	mg/L-N	2/22/01
pH	6.14	Hr 2.	1	EPA 150.1	pH Units	2/22/01
pH Temperature	22.0	1.	1	EPA 150.1	°C	2/22/01
Specific Conductance	1.0	1.	1	SM 2510 B	µS/cm	2/22/01
Sulfate	ND	0.1	1	EPA 300.0	mg/L	2/22/01
Total Dissolved Solids	ND	15.	1	SM 2540 C	mg/L	2/22/01

R.L. - Reporting Limit

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0010
DATE SAMPLED: 2/20/01
NEL SAMPLE ID: P0102085-11

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	190		1	SM 2320 B	mg/L	3/1/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	3/1/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	3/1/01
Alkalinity, Total as CaCO ₃	190	25.	1	SM 2320 B	mg/L	3/1/01
Bromide	0.35	0.2	1	EPA 300.0	mg/L	2/22/01
Chloride	33	5.	50	EPA 300.0	mg/L	2/26/01
Fluoride	0.85	0.4	1	SM 4500-F C	mg/L	2/22/01
Hardness, Total (as CaCO ₃)	180	2.	1	EPA 200.7	mg/L	2/26/01
Nitrate, as N	1.1	0.1	1	EPA 300.0	mg/L-N	2/22/01
pH	7.75	Hr 2.	1	EPA 150.1	pH Units	2/22/01
pH Temperature	23.0	1.	1	EPA 150.1	°C	2/22/01
Specific Conductance	619	1.	1	SM 2510 B	µS/cm	2/22/01
Sulfate	66	5.	50	EPA 300.0	mg/L	2/26/01
Total Dissolved Solids	372	15.	1	SM 2540 C	mg/L	2/22/01

R.L. - Reporting Limit

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0016
DATE SAMPLED: 2/20/01
NEL SAMPLE ID: P0102085-12

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	140		1	SM 2320 B	mg/L	3/1/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	3/1/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	3/1/01
Alkalinity, Total as CaCO ₃	140	25.	1	SM 2320 B	mg/L	3/1/01
Bromide	0.57	0.2	1	EPA 300.0	mg/L	2/22/01
Chloride	130	5.	50	EPA 300.0	mg/L	2/26/01
Fluoride	0.99	0.4	1	SM 4500-F C	mg/L	2/22/01
Hardness, Total (as CaCO ₃)	250	2.	1	EPA 200.7	mg/L	2/26/01
Nitrate, as N	0.70	0.1	1	EPA 300.0	mg/L-N	2/22/01
pH	7.83	Hr 2.	1	EPA 150.1	pH Units	2/22/01
pH Temperature	22.6	1.	1	EPA 150.1	°C	2/22/01
Specific Conductance	805	1.	1	SM 2510 B	µS/cm	2/22/01
Sulfate	52	5.	50	EPA 300.0	mg/L	2/26/01
Total Dissolved Solids	442	15.	1	SM 2540 C	mg/L	2/22/01

R.L. - Reporting Limit

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010222BR-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Bromide	ND	0.2	1	EPA 300.0	mg/L	2/22/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010222cl-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	ND	0.1	1	EPA 300.0	mg/L	2/22/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010222F2-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Fluoride	ND	0.4	1	SM 4500-F C	mg/L	2/22/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010222NO3-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Nitrate, as N	ND	0.1	1	EPA 300.0	mg/L-N	2/22/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010222so4-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Sulfate	ND	0.1	1	EPA 300.0	mg/L	2/22/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010222TDS2-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Total Dissolved Solids	ND	15	1	SM 2540 C	mg/L	2/22/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010226CL-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	ND	0.1	1	EPA 300.0	mg/L	2/26/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010226SO4-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Sulfate	ND	0.1	1	EPA 300.0	mg/L	2/26/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010227SO4-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Sulfate	ND	0.1	1	EPA 300.0	mg/L	2/27/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010228ALK2-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Alkalinity - Bicarbonate as CaC	ND		1	SM 2320 B	mg/L	2/28/01
Alkalinity - Carbonate as CaCO	ND		1	SM 2320 B	mg/L	2/28/01
Alkalinity - Hydroxide as CaCO	ND		1	SM 2320 B	mg/L	2/28/01
Alkalinity, Total as CaCO3	ND	25	1	SM 2320 B	mg/L	2/28/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010228CL-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	ND	0.1	1	EPA 300.0	mg/L	2/28/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010301ALK-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Alkalinity - Bicarbonate as CaC	ND		1	SM 2320 B	mg/L	3/1/01
Alkalinity - Carbonate as CaCO	ND		1	SM 2320 B	mg/L	3/1/01
Alkalinity - Hydroxide as CaCO	ND		1	SM 2320 B	mg/L	3/1/01
Alkalinity, Total as CaCO ₃	ND	25	1	SM 2320 B	mg/L	3/1/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010307ASO4-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Sulfate	ND	0.1	1	EPA 300.0	mg/L	3/7/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0009
DATE SAMPLED: 2/20/01
NEL SAMPLE ID: P0102085-01

TEST: Volatile Organic Compounds by EPA SW846 Method 8260B, Dec. 1996

METHOD: EPA 8260B

ANALYST: SJO - Las Vegas Division

MATRIX: Aqueous

EXTRACTED: NA

DILUTION: 1

ANALYZED: 2/23/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
MTBE	ND	5. µg/L
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	4. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	94	80 - 120
Toluene-d8	95	80 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0012
DATE SAMPLED: 2/20/01
NEL SAMPLE ID: P0102085-02

TEST: Volatile Organic Compounds by EPA SW846 Method 8260B, Dec. 1996
METHOD: EPA 8260B
MATRIX: Aqueous
DILUTION: 1

ANALYST: SJO - Las Vegas Division
EXTRACTED: NA
ANALYZED: 2/23/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
MTBE	ND	5. µg/L
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	4. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	104	80 - 120
Toluene-d8	97	80 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0011
DATE SAMPLED: 2/20/01
NEL SAMPLE ID: P0102085-03

TEST: Volatile Organic Compounds by EPA SW846 Method 8260B, Dec. 1996

METHOD: EPA 8260B

ANALYST: SJO - Las Vegas Division

MATRIX: Aqueous

EXTRACTED: NA

DILUTION: 1

ANALYZED: 2/23/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
MTBE	ND	5. µg/L
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	4. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	106	80 - 120
Toluene-d8	100	80 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0013
DATE SAMPLED: 2/20/01
NEL SAMPLE ID: P0102085-04

TEST: Volatile Organic Compounds by EPA SW846 Method 8260B, Dec. 1996

METHOD: EPA 8260B

ANALYST: SJO - Las Vegas Division

MATRIX: Aqueous

EXTRACTED: NA

DILUTION: 1

ANALYZED: 2/23/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
MTBE	ND	5. µg/L
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	4. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	102	80 - 120
Toluene-d8	101	80 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0014
DATE SAMPLED: 2/20/01
NEL SAMPLE ID: P0102085-05

TEST: Volatile Organic Compounds by EPA SW846 Method 8260B, Dec. 1996

METHOD: EPA 8260B

ANALYST: SJO - Las Vegas Division

MATRIX: Aqueous

EXTRACTED: NA

DILUTION: 1

ANALYZED: 2/23/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
MTBE	ND	5. µg/L
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	4. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	105	80 - 120
Toluene-d8	108	80 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0015
DATE SAMPLED: 2/20/01
NEL SAMPLE ID: P0102085-06

TEST: Volatile Organic Compounds by EPA SW846 Method 8260B, Dec. 1996

METHOD: EPA 8260B

ANALYST: SJO - Las Vegas Division

MATRIX: Aqueous

EXTRACTED: NA

DILUTION: 1

ANALYZED: 2/23/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
MTBE	ND	5. µg/L
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	4. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	102	80 - 120
Toluene-d8	99	80 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0017
DATE SAMPLED: 2/21/01
NEL SAMPLE ID: P0102085-07

TEST: Volatile Organic Compounds by EPA SW846 Method 8260B, Dec. 1996

METHOD: EPA 8260B

ANALYST: SJO - Las Vegas Division

MATRIX: Aqueous

EXTRACTED: NA

DILUTION: 1

ANALYZED: 2/23/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
MTBE	ND	5. µg/L
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	4. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	106	80 - 120
Toluene-d8	101	80 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0018
DATE SAMPLED: 2/21/01
NEL SAMPLE ID: P0102085-08

TEST: Volatile Organic Compounds by EPA SW846 Method 8260B, Dec. 1996

METHOD: EPA 8260B

ANALYST: SJO - Las Vegas Division

MATRIX: Aqueous

EXTRACTED: NA

DILUTION: 1

ANALYZED: 2/23/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
MTBE	ND	5. µg/L
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	4. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	102	80 - 120
Toluene-d8	98	80 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0019
DATE SAMPLED: 2/21/01
NEL SAMPLE ID: P0102085-09

TEST: Volatile Organic Compounds by EPA SW846 Method 8260B, Dec. 1996

METHOD: EPA 8260B

ANALYST: SJO - Las Vegas Division

MATRIX: Aqueous

EXTRACTED: NA

DILUTION: 1

ANALYZED: 2/23/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
MTBE	ND	5. µg/L
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	4. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	107	80 - 120
Toluene-d8	105	80 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0020
DATE SAMPLED: 2/21/01
NEL SAMPLE ID: P0102085-10

TEST: Volatile Organic Compounds by EPA SW846 Method 8260B, Dec. 1996

METHOD: EPA 8260B

ANALYST: SJO - Las Vegas Division

MATRIX: Aqueous

EXTRACTED: NA

DILUTION: 1

ANALYZED: 2/23/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
MTBE	ND	5. µg/L
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	4. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	105	80 - 120
Toluene-d8	105	80 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0010
DATE SAMPLED: 2/20/01
NEL SAMPLE ID: P0102085-11

TEST: Volatile Organic Compounds by EPA SW846 Method 8260B, Dec. 1996

METHOD: EPA 8260B

ANALYST: SJO - Las Vegas Division

MATRIX: Aqueous

EXTRACTED: NA

DILUTION: 1

ANALYZED: 2/23/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
MTBE	ND	5. µg/L
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	4. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	102	80 - 120
Toluene-d8	98	80 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0016
DATE SAMPLED: 2/20/01
NEL SAMPLE ID: P0102085-12

TEST: Volatile Organic Compounds by EPA SW846 Method 8260B, Dec. 1996

METHOD: EPA 8260B

ANALYST: SJO - Las Vegas Division

MATRIX: Aqueous

EXTRACTED: NA

DILUTION: 1

ANALYZED: 2/23/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
MTBE	ND	5. µg/L
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	4. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	105	80 - 120
Toluene-d8	101	80 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010223AQ60BX_3A-BLK

TEST: Volatile Organic Compounds by EPA SW846 Method 8260B, Dec. 1996

METHOD: EPA 8260B

ANALYST: SJO - Las Vegas Division

MATRIX: Aqueous

EXTRACTED: NA

ANALYZED: 2/23/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
MTBE	ND	5. µg/L
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	4. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
4-Bromofluorobenzene	108	80 - 120
Toluene-d8	81	80 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Bromide	010222BR-LCS	100	103	103	90 - 110	
Bromide	010222BR-LCSD	100	101	101	90 - 110	2.
Bromide	P0102085-07-MS	10	11.6	116	80 - 120	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Chloride	010222cl-LCS	100	104	104	90 - 110	
Chloride	010222cl-LCSD	100	104	104	90 - 110	0.
Chloride	P0102060-01-MS	500	814	91	80 - 120	
Chloride	P0102060-01-MSD	500	870	102	80 - 120	11.6

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Specific Conductance	010222COND-LCS	1412	1408	100	95 - 105	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Fluoride	010222F2-LCS	2	1.91	96	84 - 109	
Fluoride	010222F2-LCSD	2	1.9	95	84 - 109	0.5
Fluoride	P0102085-01-MS	1	2.77	107	71 - 126	
Fluoride	P0102085-01-MSD	1	2.8	110	71 - 126	2.8

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Nitrate, as N	010222NO3-LCS	100	101	101	90 - 110	
Nitrate, as N	010222NO3-LCSD	100	101	101	90 - 110	0.
Nitrate, as N	P0102074-01-MS	20	19.6	87	80 - 120	
Nitrate, as N	P0102074-01-MSD	20	19.8	88	80 - 120	1.1

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
7.00 Buffer	010222PH2-LCS	7	7	100	99 - 101	
7.00 Buffer	010222PH2-LCSD	7	7	100	99 - 101	0.

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Sulfate	010222so4-LCS	100	108	108	90 - 110	
Sulfate	010222so4-LCSD	100	106	106	90 - 110	1.9
Sulfate	P0102060-01-MS	25	184	96	80 - 120	
Sulfate	P0102060-01-MSD	25	184	96	80 - 120	0.

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Total Dissolved Solids	010222TDS2-LCS	1000	1006	101	94 - 102	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 PROJECT #: NA
 TEST: Volatile Organic Compounds by EPA SW846 Method 8260B, Dec. 1996
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Benzene	010223AQ60BX_3A-LCS	50	45.81	92	80 - 120	
Benzene	P0102085-01-MS	50	41.14	82	80 - 120	
Benzene	P0102085-01-MSD	50	50.12	100	80 - 120	19.7
Toluene	010223AQ60BX_3A-LCS	50	45.03	90	80 - 120	
Toluene	P0102085-01-MS	50	40.04	80	80 - 120	
Toluene	P0102085-01-MSD	50	48.63	97	80 - 120	19.4
Ethylbenzene	010223AQ60BX_3A-LCS	50	45.42	91	80 - 120	
Ethylbenzene	P0102085-01-MS	50	38.22	76 JI	80 - 120	
Ethylbenzene	P0102085-01-MSD	50	45.64	91	80 - 120	17.7
Total Xylenes	010223AQ60BX_3A-LCS	150	154.14	103	80 - 120	
Total Xylenes	P0102085-01-MS	150	130.88	87	80 - 120	
Total Xylenes	P0102085-01-MSD	150	156.3	104	80 - 120	17.7
MTBE	010223AQ60BX_3A-LCS	50	51.3	103	80 - 120	
MTBE	P0102085-01-MS	50	36.86	74 JI	80 - 120	
MTBE	P0102085-01-MSD	50	46.67	93	80 - 120	23.5

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Chloride	010226CL-LCS	100	101	101	90 - 110	
Chloride	010226CL-LCSD	100	101	101	90 - 110	0.
Chloride	P0102074-01-MS	250	442	102	80 - 120	
Chloride	P0102074-01-MSD	250	439	101	80 - 120	1.2

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Sulfate	010226SO4-LCS	100	103	103	90 - 110	
Sulfate	010226SO4-LCSD	100	102	102	90 - 110	1.
Sulfate	L0102186-05-MS	10000	13900	105	80 - 120	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Sulfate	010227SO4-LCS	100	99	99	90 - 110	
Sulfate	010227SO4-LCSD	100	96	96	90 - 110	3.1

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Alkalinity, Total	010228ALK2-LCS	125	122.86	98	90 - 110	
Alkalinity, Total	010228ALK2-LCSD	125	123.58	99	90 - 110	0.6

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Chloride	010228CL-LCS	100	103	103	90 - 110	
Chloride	010228CL-LCSD	100	103	103	90 - 110	0.

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Alkalinity, Total	010301ALK-LCS	125	123.4	99	90 - 110	
Alkalinity, Total	010301ALK-LCSD	125	123.46	99	90 - 110	0.

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike</u>	<u>Spike</u>	<u>Percent</u>	<u>Acceptable</u>	<u>RPD</u>
		<u>Amount</u>	<u>Result</u>	<u>Recovery</u>	<u>Range</u>	
Sulfate	010307ASO4-LCS	10	10	100	90 - 110	
Sulfate	L0103029-03-MS	2500	3400	103	80 - 120	
Sulfate	L0103029-03-MSD	2500	3500	107	80 - 120	3.8

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 PROJECT #: NA
 TEST: Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Calcium	P102085I-LCS	20	20	100	85 - 115	
Calcium	P0102085-01-MS	20	56.1	101	75 - 125	
Calcium	P0102085-01-MSD	20	59.2	116	75 - 125	14.3
Magnesium	P102085I-LCS	20	19.5	98	85 - 115	
Magnesium	P0102085-01-MS	20	31.2	96	75 - 125	
Magnesium	P0102085-01-MSD	20	32.2	101	75 - 125	5.1
Potassium	P102085I-LCS	20	20.1	101	85 - 115	
Potassium	P0102085-01-MS	20	30.2	96	75 - 125	
Potassium	P0102085-01-MSD	20	30.3	97	75 - 125	0.5
Sodium	P102085I-LCS	20	21.1	106	85 - 115	
Sodium	P0102085-01-MS	20	239	95	75 - 125	
Sodium	P0102085-01-MSD	20	253	165 C	75 - 125	53.8

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.



3/1

CHAIN OF CUSTODY RECORD

00102080

5

N
N

[illegible]



SAMPLE KEY

SAMPLE NUMBER: M01-0130 LOCATION: Jal #4 Plant
MATRIX: Water
SAMPLE DESCRIPTION: EMP #3 pump blank before purging wells
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 11:00 SAMPLE DATE: 05/02/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0131 LOCATION: Jal #4 Plant
MATRIX: Water
SAMPLE DESCRIPTION: Bailer blank before sampling
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 11:05 SAMPLE DATE: 05/02/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0132 LOCATION: Jal #4 Plant
MATRIX: Water
SAMPLE DESCRIPTION: Monitor well ACW #3
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 12:15 SAMPLE DATE: 05/01/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0133 LOCATION: Jal #4 Plant
MATRIX: Water
SAMPLE DESCRIPTION: Monitor well ACW #1
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 13:05 SAMPLE DATE: 05/01/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0134 LOCATION: Jal #4 Plant
MATRIX: Water
SAMPLE DESCRIPTION: Monitor well ACW #8
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 14:20 SAMPLE DATE: 05/01/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0135 LOCATION: Jal #4 Plant
MATRIX: Water
SAMPLE DESCRIPTION: Monitor well ACW #11
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 15:50 SAMPLE DATE: 05/01/2001
BY: Brisbin

ORIGINAL

SAMPLE KEY

SAMPLE NUMBER: M01-0136 LOCATION: Jal #4 Plant
MATRIX: Water
SAMPLE DESCRIPTION: Monitor well ACW #2A
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 09:45 SAMPLE DATE: 05/02/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0137 LOCATION: Jal #4 Plant
MATRIX: Water
SAMPLE DESCRIPTION: Monitor well ACW #4
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 11:05 SAMPLE DATE: 05/02/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0138 LOCATION: Jal #4 Plant
MATRIX: Water
SAMPLE DESCRIPTION: Monitor well ENSR#3
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 12:24 SAMPLE DATE: 05/02/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0139 LOCATION: Jal #4 Plant
MATRIX: Water
SAMPLE DESCRIPTION: Monitor well ENSR#3 DUP.
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 12:24 SAMPLE DATE: 05/02/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0140 LOCATION: Jal #4 Plant
MATRIX: Water
SAMPLE DESCRIPTION: Monitor well PTP #1
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 13:05 SAMPLE DATE: 05/02/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0141 LOCATION: Jal #4 Plant
MATRIX: Water
SAMPLE DESCRIPTION: Monitor well ENSR #1
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 14:20 SAMPLE DATE: 05/02/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0143 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor Well #Dooms
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 13:00 SAMPLE DATE: 05/03/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0144 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor Well ACW #15
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 14:19 SAMPLE DATE: 05/03/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0145 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor Well ACW #12
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 15:55 SAMPLE DATE: 05/03/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0146 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor Well ACW #12 Dup.
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 15:55 SAMPLE DATE: 05/03/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0147 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor Well ACW #9
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 09:35 SAMPLE DATE: 05/04/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0152 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor Well ACW #7
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 08:08 SAMPLE DATE: 05/06/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0153 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor Well ACW #7 Dup.
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 08:08 SAMPLE DATE: 05/06/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0154 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: EMP #3 middle of purging wells
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 08:15 SAMPLE DATE: 05/06/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0155 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Bailer blank middle of sampling wells
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 08:20 SAMPLE DATE: 05/06/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0156 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor Well ACW #6
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 09:34 SAMPLE DATE: 05/06/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0157 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor Well ACW #5
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 09:59 SAMPLE DATE: 05/06/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0158 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor Well ACW #10
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 12:25 SAMPLE DATE: 05/06/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0159 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor Well ACW #13
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 07:45 SAMPLE DATE: 05/07/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0160 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor Well ACW #17
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 08:00 SAMPLE DATE: 05/07/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0161 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor Well ACW #17 Dup.
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 08:00 SAMPLE DATE: 05/07/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0162 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: EMP #3 after purging wells
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 08:10 SAMPLE DATE: 05/07/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0163 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Bailer after sampling
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 08:15 SAMPLE DATE: 05/07/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0164 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Field Blank
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 08:20 SAMPLE DATE: 05/07/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0165 LOCATION: Jal #4

MATRIX: Water

SAMPLE DESCRIPTION: OXY's water well

S D CONTINUED:

S D CONTINUED:

SAMPLE TIME: 08:30 SAMPLE DATE: 05/07/2001

BY: Brisbin

NEL LABORATORIES

Reno • Las Vegas • Boise
Phoenix • Sacramento

Las Vegas Division
4208 Arcata Way, Suite A • Las Vegas, Nevada 89030
702-657-1010 • Fax: 702-657-1577
1-888-368-3282

CLIENT: El Paso Natural Gas Company
8645 Railroad Drive
El Paso, TX 79904
ATTN: Darrell Campbell

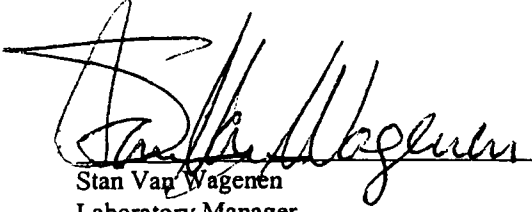
PROJECT NAME: Jal #4 M.W.
PROJECT NUMBER: NA

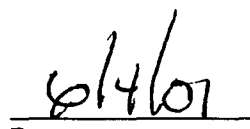
NEL ORDER ID: P0105008

Attached are the analytical results for samples in support of the above referenced project.

Samples submitted for this project were not sampled by NEL Laboratories. Samples were received by NEL in good condition, under chain of custody on 5/3/01.

Should you have any questions or comments, please feel free to contact our Client Services department at (602) 437-0099.


Stan Van Wagenen
Laboratory Manager


Date

CERTIFICATIONS:

	Reno	Las Vegas	S. California
Arizona	AZ0520	AZ0518	AZ0605
California	1707	2002	2264
US Army Corps of Engineers	Certified	Certified	

	Reno	Las Vegas	S. California
Idaho	Certified	Certified	
Montana	Certified	Certified	
Nevada	NV033	NV052	CA084
L.A.C.S.D.			10228

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.
PROJECT #: NA

CLIENT ID: M01-0130
DATE SAMPLED: 5/2/01
NEL SAMPLE ID: P0105008-01

Cations by EPA 6010A
MATRIX: Aqueous

ANALYST: PEG - Division

<u>PARAMETER</u>	<u>RESULT</u> mg/L	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	34	0.5 mg/L	1	EPA 6010	5/4/01	5/8/01
Magnesium	13	0.5 mg/L	1	EPA 6010	5/4/01	5/8/01
Potassium	3.2	2. mg/L	1	EPA 6010	5/4/01	5/8/01
Silica	22	1. mg/L	1	SM 4500Si-D	5/8/01	5/8/01
Sodium	76	0.5 mg/L	1	EPA 6010	5/4/01	5/8/01

Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.
PROJECT #: NA

CLIENT ID: M01-0131
DATE SAMPLED: 5/2/01
NEL SAMPLE ID: P0105008-02

MATRIX: Cations by EPA 6010A
Aqueous

ANALYST: PEG - Division

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	0.91	0.5 mg/L	1	EPA 6010	5/4/01	5/8/01
Magnesium	0.49	0.5 mg/L	1	EPA 6010	5/4/01	5/8/01
Potassium	0.52	2. mg/L	1	EPA 6010	5/4/01	5/8/01
Silica	ND	1. mg/L	1	SM 4500Si-D	5/8/01	5/8/01
Sodium	2.4	0.5 mg/L	1	EPA 6010	5/4/01	5/8/01

Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010508SI-BLK

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Silica	ND	1. mg/L	1	SM 4500Si-D	5/8/01	5/8/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: L05025i-BLK

Cations by EPA 6010A

<u>PARAMETER</u>	<u>RESULT</u> mg/L	<u>REPORTING</u> LIMIT	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	ND	0.5 mg/L	1	EPA 6010	5/4/01	5/8/01
Magnesium	ND	0.5 mg/L	1	EPA 6010	5/4/01	5/8/01
Potassium	ND	2. mg/L	1	EPA 6010	5/4/01	5/8/01
Sodium	ND	0.5 mg/L	1	EPA 6010	5/4/01	5/8/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.
PROJECT #: NA

CLIENT ID: M01-0130
DATE SAMPLED: 5/2/01
NEL SAMPLE ID: P0105008-01

Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	160		1	SM 2320 B	mg/L	5/9/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	5/9/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	5/9/01
Alkalinity, Total as CaCO ₃	160	25.	1	SM 2320 B	mg/L	5/9/01
Bromide	ND	1.	5	EPA 300.0	mg/L	5/4/01
Chloride	67	10.	100	EPA 300.0	mg/L	5/9/01
Fluoride	0.99	0.4	1	SM 4500-F C	mg/L	5/7/01
Hardness, Total (as CaCO ₃)	140	2.	1	EPA 200.7	mg/L	5/8/01
Nitrate, as N	ND	0.5	5	EPA 300.0	mg/L-N	5/4/01
pH	7.67	2.	1	EPA 150.1	pH Units	5/3/01
pH Temperature	18.9	1.	1	EPA 150.1	°C	5/3/01
Specific Conductance	565	1.	1	SM 2510 B	µS/cm	5/3/01
Total Dissolved Solids	321	15.	1	SM 2540 C	mg/L	5/8/01

Reporting Limit
Dilution Factor
ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.
PROJECT #: NA

CLIENT ID: M01-0131
DATE SAMPLED: 5/2/01
NEL SAMPLE ID: P0105008-02

Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	5/9/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	5/9/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	5/9/01
Alkalinity, Total as CaCO ₃	ND	25.	1	SM 2320 B	mg/L	5/9/01
Bromide	ND	0.2	1	EPA 300.0	mg/L	5/4/01
Chloride	ND	0.1	1	EPA 300.0	mg/L	5/4/01
Fluoride	ND	0.4	1	SM 4500-F C	mg/L	5/7/01
Hardness, Total (as CaCO ₃)	4.3	2.	1	EPA 200.7	mg/L	5/8/01
Nitrate, as N	ND	0.1	1	EPA 300.0	mg/L-N	5/4/01
pH	7.69	2.	1	EPA 150.1	pH Units	5/3/01
pH Temperature	18.6	1.	1	EPA 150.1	°C	5/3/01
Specific Conductance	1.41	1.	1	SM 2510 B	µS/cm	5/3/01
Total Dissolved Solids	ND	15.	1	SM 2540 C	mg/L	5/8/01

Reporting Limit
Dilution Factor
ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010504BR-BLK

Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Bromide	ND	0.2	1	EPA 300.0	mg/L	5/4/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010504CL-BLK

Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	ND	0.1	1	EPA 300.0	mg/L	5/4/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.
PROJECT #: NA
Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010504NO3-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Nitrate, as N	ND	0.1	1	EPA 300.0	mg/L-N	5/4/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010507F-BLK

Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Fluoride	ND	0.4	1	SM 4500-F C	mg/L	5/7/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010508TDS-BLK

Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Total Dissolved Solids	ND	15	1	SM 2540 C	mg/L	5/8/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010509ALK2-BLK

Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Alkalinity - Bicarbonate as CaC	ND		1	SM 2320 B	mg/L	5/9/01
Alkalinity - Carbonate as CaCO	ND		1	SM 2320 B	mg/L	5/9/01
Alkalinity - Hydroxide as CaCO	ND		1	SM 2320 B	mg/L	5/9/01
Alkalinity, Total as CaCO ₃	ND	25	1	SM 2320 B	mg/L	5/9/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010509CL-BLK

Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	ND	0.1	1	EPA 300.0	mg/L	5/9/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.
PROJECT #: NA

CLIENT ID: M01-0130
DATE SAMPLED: 5/2/01
NEL SAMPLE ID: P0105008-01

BTEX by EPA SW846 Method 8021B, Dec. 1996

METHOD: EPA 8021B
MATRIX: Aqueous
DILUTION: 1

ANALYST: JQT - Las Vegas Division
EXTRACTED: NA
ANALYZED: 5/8/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
MTBE	ND	5. µg/L
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	3.8 µg/L	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	97	69 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.
PROJECT #: NA

CLIENT ID: M01-0131
DATE SAMPLED: 5/2/01
NEL SAMPLE ID: P0105008-02

BTEX by EPA SW846 Method 8021B, Dec. 1996

METHOD: EPA 8021B
MATRIX: Aqueous
DILUTION: 1

ANALYST: JQT - Las Vegas Division
EXTRACTED: NA
ANALYZED: 5/8/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
MTBE	ND	5. µg/L
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	102	69 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010508BTEX-BLK

BTEX by EPA SW846 Method 8021B, Dec. 1996

METHOD: EPA 8021B
MATRIX: Aqueous

ANALYST: JQT - Las Vegas Division
EXTRACTED: NA
ANALYZED: 5/8/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
MTBE	ND	5. µg/L
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	104	69 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company

PROJECT ID: Jal #4 M.W.

PROJECT #: NA

ANALYSIS: Inorganic Non-Metals

MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Specific Conductance	010503COND1-LCS	1412	1421	101	95 - 105	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.
PROJECT #: NA
MATRIX: Inorganic Non-Metals
Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
7.00 Buffer	010503PH-LCS	7	7.01	100	99 - 101	
7.00 Buffer	010503PH-LCSD	7	7.04	101	99 - 101	0.4

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.
PROJECT #: NA
MATRIX: Inorganic Non-Metals
Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Bromide	010504BR-LCS	100	100	100	90 - 110	
Bromide	010504BR-LCSD	100	101	101	90 - 110	1.
Bromide	L0105008-01-MS	100	123	102	80 - 120	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.
PROJECT #: NA
MATRIX: Inorganic Non-Metals
Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Chloride	010504CL-LCS	100	106	106	90 - 110	
Chloride	010504CL-LCSD	100	110	110	90 - 110	3.7
Chloride	L0105008-01-MS	100	120	111	80 - 120	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.
PROJECT #: NA
Inorganic Non-Metals
XIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Nitrate, as N	010504NO3-LCS	100	99	99	90 - 110	
Nitrate, as N	010504NO3-LCSD	100	99	99	90 - 110	0.
Nitrate, as N	L0105024-02-MS	100	120	108	80 - 120	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.
PROJECT #: NA
MATRIX: Inorganic Non-Metals
Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike</u>	<u>Spike</u>	<u>Percent</u>	<u>Acceptable</u>	<u>RPD</u>
		<u>Amount</u>	<u>Result</u>	<u>Recovery</u>	<u>Range</u>	
Fluoride	010507F-LCS	2	1.9	95	84 - 109	
Fluoride	010507F-LCSD	1	0.93	93	84 - 109	2.1
Fluoride	P0105008-01-MS	1	1.9	91	71 - 126	
Fluoride	P0105008-01-MSD	1	2.1	111	71 - 126	19.8

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company

PROJECT ID: Jal #4 M.W.

PROJECT #: NA

BTEX by EPA SW846 Method 8021B, Dec. 1996

PHASE: Aqueous

PARAMETER	NEL Sample ID	<u>Spike</u>	<u>Spike</u>	<u>Percent</u>	<u>Acceptable</u>	RPD
		<u>Amount</u>	<u>Result</u>	<u>Recovery</u>	<u>Range</u>	
Benzene	010508BTEX-LCS	50	52.428	105	85 - 115	
Benzene	010508BTEX-LCSD	50	48.95	98	80 - 120	6.9
Benzene	P0105008-01-MS	50	52.1	104	70 - 130	
Benzene	P0105008-01-MSD	50	52.4	105	70 - 130	0.6
Toluene	010508BTEX-LCS	50	53.557	107	85 - 115	
Toluene	010508BTEX-LCSD	50	50.026	100	80 - 120	6.8
Toluene	P0105008-01-MS	50	52	104	70 - 130	
Toluene	P0105008-01-MSD	50	51.8	104	70 - 130	0.4
Ethylbenzene	010508BTEX-LCS	50	55.087	110	85 - 115	
Ethylbenzene	010508BTEX-LCSD	50	49.958	100	80 - 120	9.8
Ethylbenzene	P0105008-01-MS	50	52.3	105	70 - 130	
Ethylbenzene	P0105008-01-MSD	50	52.3	105	70 - 130	0.
Total Xylenes	010508BTEX-LCS	150	170.865	114	85 - 115	
Total Xylenes	010508BTEX-LCSD	150	153.862	103	80 - 120	10.5
Total Xylenes	P0105008-01-MS	150	165	107	70 - 130	
Total Xylenes	P0105008-01-MSD	150	166	108	70 - 130	0.6

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.
PROJECT #: NA
Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike</u> <u>Amount</u>	<u>Spike</u> <u>Result</u>	<u>Percent</u> <u>Recovery</u>	<u>Acceptable</u> <u>Range</u>	<u>RPD</u>
Total Dissolved Solids	010508TDS-LCS	1000	945	95	80 - 120	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.
PROJECT #: NA
MATRIX: Inorganic Non-Metals
Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Alkalinity, Total	010509ALK2-LCS	125	134	107	90 - 110	
Alkalinity, Total	010509ALK2-LCSD	125	122	98	90 - 110	9.4

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.
PROJECT #: NA
NINE: Inorganic Non-Metals
Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Chloride	010509CL-LCS	100	106	106	90 - 110	
Chloride	010509CL-LCSD	100	108	108	90 - 110	1.9
Chloride	P0105008-01-MS	100	169	102	80 - 120	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.



Precision Analytical Laboratories, Inc.

A Subsidiary of Aerotech Laboratories, Inc.

May 31, 2001

Ephraim Morris
NEL Laboratories
3021 S. 35th Street
Suite B-6
Phoenix, AZ 85034
TEL: (602) 437-0099
FAX (602) 437-2225

RE: P0105008

Order No.: 0105285

Dear Ephraim Morris:

Precision Analytical Laboratories, Inc. received 2 samples on 5/8/01 for the analyses presented in the following report.

This report includes the following information:

- Case Narrative. The case narrative contains a listing of common method references, data qualifiers, and any comments that may be needed regarding the analytical results.
- Analytical Report. Analysis results are reported with the compound name first, followed by the test result, report limit (Limit), any required data qualifier (Qual), units, dilution factor (DF), and date analyzed.
- QC Summary Report. This section includes quality control results for some or all of the following: method blanks, sample duplicates, sample matrix spikes, sample matrix spike duplicates, laboratory control spikes, and laboratory control spike duplicates.

If you have any questions regarding these test results, please do not hesitate to call.

Sincerely,

Carlene McCutcheon
Project Manager

CC:



Precision Analytical Laboratories, Inc.

Date: 31-May-01

A Subsidiary of Aerotech Laboratories, Inc.

CLIENT: NEL Laboratories

Project: P0105008

Lab Order: 0105285

CASE NARRATIVE

Data Qualifiers

Listed below are data qualifiers which may be used in your analytical report to explain any analytical or quality control issues. If one or more of the following data qualifiers is associated with your analytical or quality control data it will be noted in your report under the column header "QUAL". Any quality control deficiencies that cannot be adequately described by these qualifiers will be addressed in the analytical comments section of this case narrative.

- B1 Target analyte detected in method blank at or above the method reporting limit.
- D1 Sample required dilution due to matrix interference.
- D2 Sample required dilution due to high concentration of target analyte.
- D3 Sample dilution required due to insufficient sample.
- D4 Minimum reporting level (MRL) adjusted to reflect sample amount received and analyzed.
- E1 Concentration estimated. Analyte exceeded calibration range. Reanalysis not possible due to insufficient sample.
- E2 Concentration estimated. Analyte exceeded calibration range. Reanalysis not performed due to sample matrix.
- E3 Concentration estimated. Analyte exceeded calibration range. Reanalysis not performed due to holding time requirements.
- E4 Concentration estimated. Analyte was detected below laboratory minimum reporting level (MRL).
- E6 Concentration estimated. Internal standard recoveries did not meet method acceptance criteria.
- E7 Concentration estimated. Internal standard recoveries did not meet laboratory acceptance criteria.
- H1 Sample analysis performed past holding time. See case narrative.
- H2 Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
- H3 Sample was received and analyzed past holding time.
- H4 Sample was extracted past required extraction holding time, but analyzed within analysis holding time. See case narrative.
- K1 The sample dilutions set-up for the BOD analysis did not meet the oxygen depletion criteria of at least 2 mg/L. The reported result is an estimated value.
- K2 The sample dilutions set up for the BOD analysis failed to meet the criteria of a residual dissolved oxygen of at least 1 mg/L. The reported result is estimated.
- L1 The associated blank spike recovery was above laboratory acceptance limits. See case narrative.
- L2 The associated blank spike recovery was below laboratory acceptance limits. See



Precision Analytical Laboratories, Inc.

A Subsidiary of Tech Laboratories, Inc.

Project:

P0105008

Lab Order:

0105285

CASE NARRATIVE

case narrative.

- M1 Matrix spike recovery was high, the method control sample recovery was acceptable.
- M2 Matrix spike recovery was low, the method control sample recovery was acceptable.
- M3 The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
- M4 The analysis of the spiked sample required a dilution such that the spike concentration was diluted below the reporting limit. The method control sample recovery was acceptable.
- M5 Analyte concentration was determined by the method of standard addition (MSA).
- N1 See case narrative.
- Q1 Sample integrity was not maintained. See case narrative.
- Q2 Sample received with head space.
- Q3 Sample received with improper chemical preservation.
- Q5 Sample received without chemical preservation, but preserved by the laboratory.
- Q6 Sample was received above recommended temperature.
- Q7 Sample inadequately dechlorinated.
- Q8 Insufficient sample received to meet method QC requirements. QC requirements satisfy ADEQ policies 0154 and 0155.
- Q10 Sample received in inappropriate sample container.
- Q11 Sample is heterogeneous. Sample homogeneity could not be readily achieved using routine laboratory practices.
- R2 RPD exceeded the laboratory control limit. See case narrative.
- R3 Sample RPD between the primary and confirmatory analysis exceeded 40%. Per EPA Method 8000B, the higher value was reported.
- R4 RPD exceeded the method control limit. Recovery met acceptance criteria.
- R5 RPD exceeded the laboratory control limit. Recovery met acceptance criteria.
- S2 Surrogate recovery was above laboratory and method acceptance limits.
- S4 Surrogate recovery was above laboratory and method acceptance limits. No target analytes were detected in the sample.
- S6 Surrogate recovery was below laboratory and method acceptance limits. Reextraction and/or reanalysis confirms low recovery caused by matrix effect.
- S7 Surrogate recovery was below laboratory and method acceptance limits. Unable to confirm matrix effect.
- S9 The analysis of the sample required a dilution such that the surrogate concentration was diluted below the laboratory acceptance criteria. The method control sample recovery was acceptable.
- S10 Surrogate recovery was above laboratory and method acceptance limits. See case narrative (N1).



Precision Analytical Laboratories, Inc.

A Subsidiary of Protech Laboratories, Inc.

P0105008

Lab Order:

0105285

CASE NARRATIVE

- T2 Cited ADHS licensed method does not contain this analyte as part of method compound list.
- T4 Tentatively identified compound. Concentration is estimated and based on the closest internal standard.
- V1 CCV recovery was above method acceptance limits. This target analyte was not detected in the sample.
- V2 CCV recovery was above method acceptance limits. This target analyte was detected in the sample. The sample could not be reanalyzed due to insufficient sample.
- V5 CCV recovery after a group of samples was above acceptance limits. This target analyte was not detected in the sample. Acceptable per EPA Method 8000B.

Samples were analyzed using methods outlined in references such as:

Standard Methods for the Examination of Water and Wastewater, 18th Edition, 1992 and 19th Edition, 1995.

Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Revised March 1983

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition.

40 CFR, Part 136, Revised 1995. Appendix A to Part 136- Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater.

NIOSH Manual of Analytical Methods, Fourth Edition, 1994.

Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition, 1999.

Precision Analytical Laboratories, Inc (PAL) holds the following certifications:

Arizona (certification no. AZ0610) and California (I-2410).

PAL- Tucson laboratory Arizona certification number: AZ0609.

PAL- North Phoenix laboratory Arizona certification number: AZ0611.

PAL participates in the AIHA Proficiency Analytical Testing (PAT) program for metals, solvents, and formaldehyde.

Analytical Comments:

All method blanks and laboratory control spikes met EPA method and/or laboratory quality control



Precision Analytical Laboratories, Inc.

A Subsidiary of Biotech Laboratories, Inc.

Project:

P0105008

Lab Order:

0105285

CASE NARRATIVE

objectives for the analyses included in this report.



Precision Analytical Laboratories, Inc.

Date: 31-May-01

A Subsidiary of Aerotech Laboratories, Inc.

CLIENT: NEL Laboratories
Lab Order: 0105285
Project: P0105008
Lab ID: 0105285-01A

Client Sample ID: M01-0130
Tag Number:
Collection Date: 5/2/01 11:00:00 AM
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY		E300				Analyst: LH
Sulfate	< 2.0	2.0		mg/L	1	5/24/01

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

1



Precision Analytical Laboratories, Inc.

A Subsidiary of Aerotech Laboratories, Inc.

Date: 31-May-01

CLIENT: NEL Laboratories
Lab Order: 0105285
Project: P0105008
Lab ID: 0105285-02A

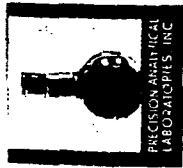
Client Sample ID: M01-0131
Tag Number:
Collection Date: 5/2/01 11:05:00 AM
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY						
Sulfate	36	E300	2.0	mg/L	1	5/21/01

Analyst: GL

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range



Precision Analytical Laboratories, Inc.

Date: 31-May-01

CLIENT: NEL Laboratories
Work Order: 0105285
Project: P0105008

QC SUMMARY REPORT
Method Blank

Sample ID: MB-R10303	Batch ID: R10303	Test Code: E300	Units: mg/L	Analysis Date 5/21/01	Prep Date:
Client ID:	Run ID: IC 1_010521A	SeqNo: 111999			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Sulfate	< 2.0	2			
Sample ID: MB-R10382	Batch ID: R10382	Test Code: E300	Units: mg/L	Analysis Date 5/24/01	Prep Date:
Client ID:	Run ID: IC 1_010523A	SeqNo: 113219			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Sulfate	< 2.0	2			

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank
/



Precision Analytical Laboratories, Inc.

Date: 31-May-01

CLIENT: NEL Laboratories

Work Order: 0105285

Project: P0105008

QC SUMMARY REPORT

Sample Duplicate

Sample ID: 0105368-01A DUP		Batch ID: R10303		Test Code: E300		Units: mg/L		Analysis Date 5/21/01		Prep Date:	
Client ID:				Run ID: IC 1_010521A				SeqNo: 112010			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	5.64	2	0	0	0	0	0	6.03	6.68	20	

Sample ID: 0105454-02A DUP		Batch ID: R10382		Test Code: E300		Units: mg/L		Analysis Date 5/24/01		Prep Date:	
Client ID:				Run ID: IC 1_010523A				SeqNo: 113226			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	6.92	2	0	0	0	0	0	7.195	3.9	20	

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits 2



Precision Analytical Laboratories, Inc.

Date: 31-May-01

CLIENT: NEL Laboratories
Work Order: 0105285
Project: P0105008

QC SUMMARY REPORT
Sample Matrix Spike

Sample ID: 0105368-01A MS		Batch ID: R10303		Test Code: E300		Units: mg/L		Analysis Date 5/21/01		Prep Date:	
Client ID:				Run ID: IC 1_010521A				SeqNo: 112011			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	28.15	2	20	6.03	111	80	120	0			

Sample ID: 0105454-02A MS		Batch ID: R10382		Test Code: E300		Units: mg/L		Analysis Date 5/24/01		Prep Date:	
Client ID:				Run ID: IC 1_010523A				SeqNo: 113227			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	28.61	2	20	7.195	107	80	120	0			

Qualifiers:	ND - Not Detected at the Reporting Limit	S - Spike Recovery outside accepted recovery limits	B - Analyte detected in the associated Method Blank
	J - Analyte detected below quantitation limits	R - RPD outside accepted recovery limits	3



Precision Analytical Laboratories, Inc.

Date: 31-May-01

CLIENT: NEL Laboratories

Work Order: 0105285

Project: P0105008

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: LCS-R10303	Batch ID: R10303	Test Code: E300	Units: mg/L	Analysis Date 5/21/01	Prep Date:
Client ID:	Run ID: IC 1_010521A	SeqNo: 112000			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Sulfate	19.21	2	20	0	96 110 0
Sample ID: LCS-R10382	Batch ID: R10382	Test Code: E300	Units: mg/L	Analysis Date 5/24/01	Prep Date:
Client ID:	Run ID: IC 1_010523A	SeqNo: 113220			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Sulfate	20.52	2	20	0	103 110 0

Qualifiers:	ND - Not Detected at the Reporting Limit	S - Spike Recovery outside accepted recovery limits	B - Analyte detected in the associated Method Blank
	J - Analyte detected below quantitation limits	R - RPD outside accepted recovery limits	4



Date 5/10/01

CHAIN OF CUSTODY RECORD
Las Vegas (cc)

0050100

Page of

[illegible]

19 2536 (4.8 10 23)

Testing Laboratory: Canary - EPNG Lab Pink - Field Sampler

NEL LABORATORIES

Reno • Las Vegas • Boise
Phoenix • Sacramento

Las Vegas Division
4208 Arcata Way, Suite A • Las Vegas, Nevada 89030
702-657-1010 • Fax: 702-657-1577
1-888-368-3282

CLIENT: El Paso Natural Gas Company
8645 Railroad Drive
El Paso, TX 79904
ATTN: Darrell Campbell

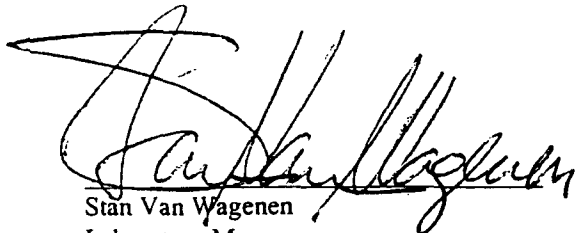
PROJECT NAME: JAL #4
PROJECT NUMBER: NA

NEL ORDER ID: P0105007

Attached are the analytical results for samples in support of the above referenced project.

Samples submitted for this project were not sampled by NEL Laboratories. Samples were received by NEL in good condition, under chain of custody on 5/3/01.

Should you have any questions or comments, please feel free to contact our Client Services department at (602) 437-0099.


Stan Van Wagenen
Laboratory Manager

5/11/01
Date

CERTIFICATIONS:

	Reno	Las Vegas	S. California
Arizona	AZ0520	AZ0518	AZ0605
California	1707	2002	2264
US Army Corps of Engineers	Certified	Certified	

	Reno	Las Vegas	S. California
Idaho	Certified	Certified	
Montana	Certified	Certified	
Nevada	NV033	NV052	CA084
L.A.C.S.D.			10228

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

CLIENT ID: M01-0132
DATE SAMPLED: 5/1/01
NEL SAMPLE ID: P0105007-01

<u>PARAMETER</u>	<u>RESULT</u>	<u>R. L.</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	9500	1000.	10000	EPA 300.0	mg/L	5/9/01
Specific Conductance	19200	1.	1	SM 2510 B	μS/cm	5/7/01
Total Dissolved Solids	9900	300.	20	SM 2540 C	mg/L	5/7/01

Reporting Limit
D.F. - Dilution Factor
ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

CLIENT ID: M01-0133
DATE SAMPLED: 5/1/01
NEL SAMPLE ID: P0105007-02

<u>PARAMETER</u>	<u>RESULT</u>	<u>R. L.</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	5300	500.	5000	EPA 300.0	mg/L	5/9/01
Specific Conductance	14200	1.	1	SM 2510 B	μS/cm	5/7/01
Total Dissolved Solids	7640	150.	10	SM 2540 C	mg/L	5/7/01

Reporting Limit
D.F. - Dilution Factor
ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

CLIENT ID: M01-0134
DATE SAMPLED: 5/1/01
NEL SAMPLE ID: P0105007-03

<u>PARAMETER</u>	<u>RESULT</u>	<u>R. L.</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	25000	1000.	10000	EPA 300.0	mg/L	5/9/01
Specific Conductance	51300	1.	1	SM 2510 B	μS/cm	5/7/01
Total Dissolved Solids	28200	1500.	100	SM 2540 C	mg/L	5/7/01

Reporting Limit
D.F. - Dilution Factor
ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
CT #: NA

CLIENT ID: M01-0135
DATE SAMPLED: 5/1/01
NEL SAMPLE ID: P0105007-04

TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>RESULT</u>	<u>R. L.</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	15000	1000.	10000	EPA 300.0	mg/L	5/9/01
Specific Conductance	32800	1.	1	SM 2510 B	μ S/cm	5/7/01
Total Dissolved Solids	20000	1500.	100	SM 2540 C	mg/L	5/7/01

Reporting Limit
D.F. - Dilution Factor
ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
CT #: NA

CLIENT ID: M01-0136
DATE SAMPLED: 5/2/01
NEL SAMPLE ID: P0105007-05

TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>RESULT</u>	<u>R. L.</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	5400	500.	5000	EPA 300.0	mg/L	5/9/01
Specific Conductance	18500	1.	1	SM 2510 B	μS/cm	5/7/01
Total Dissolved Solids	10900	300.	20	SM 2540 C	mg/L	5/7/01

Reporting Limit
D.F. - Dilution Factor
ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
TEST: Inorganic Non-Metals
MATRIX: Aqueous

CLIENT ID: M01-0137
DATE SAMPLED: 5/2/01
NEL SAMPLE ID: P0105007-06

<u>PARAMETER</u>	<u>RESULT</u>	<u>R. L.</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	12000	1000.	10000	EPA 300.0	mg/L	5/9/01
Specific Conductance	29600	1.	1	SM 2510 B	µS/cm	5/7/01
Total Dissolved Solids	17400	300.	20	SM 2540 C	mg/L	5/7/01

Reporting Limit
D.F. - Dilution Factor
ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0138
DATE SAMPLED: 5/2/01
NEL SAMPLE ID: P0105007-07

TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>RESULT</u>	<u>R. L.</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	610	50.	500	EPA 300.0	mg/L	5/9/01
Specific Conductance	2480	1.	1	SM 2510 B	µS/cm	5/7/01
Total Dissolved Solids	1240	30.	2	SM 2540 C	mg/L	5/7/01

Reporting Limit
D.F. - Dilution Factor
ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

CLIENT ID: M01-0139
DATE SAMPLED: 5/2/01
NEL SAMPLE ID: P0105007-08

<u>PARAMETER</u>	<u>RESULT</u>	<u>R. L.</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	680	50.	500	EPA 300.0	mg/L	5/9/01
Specific Conductance	2490	1.	1	SM 2510 B	μS/cm	5/7/01
Total Dissolved Solids	1270	30.	2	SM 2540 C	mg/L	5/7/01

Reporting Limit
D.F. - Dilution Factor
ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
CT #: NA

CLIENT ID: M01-0140
DATE SAMPLED: 5/2/01
NEL SAMPLE ID: P0105007-09

TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>RESULT</u>	<u>R. L.</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	520	50.	500	EPA 300.0	mg/L	5/9/01
Specific Conductance	2370	1.	1	SM 2510 B	µS/cm	5/7/01
Total Dissolved Solids	1240	30.	2	SM 2540 C	mg/L	5/7/01

Reporting Limit
D.F. - Dilution Factor
ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
CT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

CLIENT ID: M01-0141
DATE SAMPLED: 5/2/01
NEL SAMPLE ID: P0105007-10

<u>PARAMETER</u>	<u>RESULT</u>	<u>R. L.</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	7600	500.	5000	EPA 300.0	mg/L	5/9/01
Specific Conductance	19200	1.	1	SM 2510 B	μS/cm	5/7/01
Total Dissolved Solids	10200	300.	20	SM 2540 C	mg/L	5/7/01

Reporting Limit
D.F. - Dilution Factor
ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA
Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010507TDS-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Total Dissolved Solids	ND	15	1	SM 2540 C	mg/L	5/7/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
P. CT #: NA
Test: Non-Metals

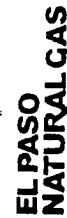
CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010509CL-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	ND	0.1	1	EPA 300.0	mg/L	5/9/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.



10/0/5

CHAIN OF CUSTODY RECORD

P0105007

Page _____ of _____

PROJECT NUMBER		PROJECT NAME		DATE		SAMPLE NUMBER		REQUESTED ANALYSIS		REMARKS	
LAB ID		DATE		TIME		MATRIX		TOTAL NUMBER OF CONTAINERS		COMPOSITE OR GRAB	
01	5/1/01	1215	1220	M01-0132							
02	5/1/01	1305	1320	M01-0133							
03	5/1/01	1420	1420	M01-0134							
04	5/1/01	1550	1620	M01-0135							
05	5/1/01	0945	1120	M01-0136							
06	5/1/01	1105	1120	M01-0137							
07	5/1/01	1224	1320	M01-0138							
08	5/1/01	1224	1320	M01-0139							
09	5/1/01	1305	1420	M01-0140							
10	5/1/01	1420	1420	M01-0141							

RECEIVED BY: (Signature) *[Signature]*

DATE/TIME: 5/1/01 1630

RECEIVED BY: (Signature) *[Signature]*

DATE/TIME: 5/3 0900

RECEIVED BY: (Signature) *[Signature]*

DATE/TIME: 5/3 0900

RECEIVED BY: (Signature) *[Signature]*

DATE/TIME: 5/3 0900

RECEIVED BY: (Signature) *[Signature]*

DATE/TIME: 5/3 0900

RECEIVED BY: (Signature) *[Signature]*

DATE/TIME: 5/3 0900

RECEIVED BY: (Signature) *[Signature]*

DATE/TIME: 5/3 0900

RECEIVED BY: (Signature) *[Signature]*

DATE/TIME: 5/3 0900

RECEIVED BY: (Signature) *[Signature]*

DATE/TIME: 5/3 0900

RECEIVED BY: (Signature) *[Signature]*

DATE/TIME: 5/3 0900

RECEIVED BY: (Signature) *[Signature]*

DATE/TIME: 5/3 0900

RECEIVED BY: (Signature) *[Signature]*

DATE/TIME: 5/3 0900

RECEIVED BY: (Signature) *[Signature]*

DATE/TIME: 5/3 0900

RECEIVED BY: (Signature) *[Signature]*

DATE/TIME: 5/3 0900

RECEIVED BY: (Signature) *[Signature]*

DATE/TIME: 5/3 0900

RECEIVED BY: (Signature) *[Signature]*

DATE/TIME: 5/3 0900

RECEIVED BY: (Signature) *[Signature]*

DATE/TIME: 5/3 0900

RECEIVED BY: (Signature) *[Signature]*

DATE/TIME: 5/3 0900

RECEIVED BY: (Signature) *[Signature]*

DATE/TIME: 5/3 0900

RECEIVED BY: (Signature) *[Signature]*

DATE/TIME: 5/3 0900

RECEIVED BY: (Signature) *[Signature]*

DATE/TIME: 5/3 0900

RECEIVED BY: (Signature) *[Signature]*

DATE/TIME: 5/3 0900

RECEIVED BY: (Signature) *[Signature]*

DATE/TIME: 5/3 0900

RECEIVED BY: (Signature) *[Signature]*

DATE/TIME: 5/3 0900

RECEIVED BY: (Signature) *[Signature]*

DATE/TIME: 5/3 0900

RECEIVED BY: (Signature) *[Signature]*

DATE/TIME: 5/3 0900

RECEIVED BY: (Signature) *[Signature]*

DATE/TIME: 5/3 0900

RECEIVED BY: (Signature) *[Signature]*

DATE/TIME: 5/3 0900

RECEIVED BY: (Signature) *[Signature]*

DATE/TIME: 5/3 0900

RECEIVED BY: (Signature) *[Signature]*

DATE/TIME: 5/3 0900

RECEIVED BY: (Signature) *[Signature]*

DATE/TIME: 5/3 0900

RECEIVED BY: (Signature) *[Signature]*

DATE/TIME: 5/3 0900

RECEIVED BY: (Signature) *[Signature]*

DATE/TIME: 5/3 0900

RECEIVED BY: (Signature) *[Signature]*

DATE/TIME: 5/3 0900

RECEIVED BY: (Signature) *[Signature]*

DATE/TIME: 5/3 0900

RECEIVED BY: (Signature) *[Signature]*

DATE/TIME: 5/3 0900

RECEIVED BY: (Signature) *[Signature]*

DATE/TIME: 5/3 0900

RECEIVED BY: (Signature) *[Signature]*

DATE/TIME: 5/3 0900

RECEIVED BY: (Signature) *[Signature]*

DATE/TIME: 5/3 0900

RECEIVED BY: (Signature) *[Signature]*

DATE/TIME: 5/3 0900

RECEIVED BY: (Signature) *[Signature]*

DATE/TIME: 5/3 0900

RECEIVED BY: (Signature) *[Signature]*

DATE/TIME: 5/3 0900

RECEIVED BY: (Signature) *[Signature]*

DATE/TIME: 5/3 0900

RECEIVED BY: (Signature) *[Signature]*

DATE/TIME: 5/3 0900

RECEIVED BY: (Signature) *[Signature]*

DATE/TIME: 5/3 0900

RECEIVED BY: (Signature) *[Signature]*

DATE/TIME: 5/3 0900

RECEIVED BY: (Signature) *[Signature]*

DATE/TIME: 5/3 0900

RECEIVED BY: (Signature) *[Signature]*

DATE/TIME: 5/3 0900

RECEIVED BY: (Signature) *[Signature]*

DATE/TIME: 5/3 0900

RECEIVED BY: (Signature) *[Signature]*

DATE/TIME: 5/3 0900

NEL LABORATORIES

Reno • Las Vegas • Boise
Phoenix • Sacramento

Las Vegas Division
4208 Arcata Way, Suite A • Las Vegas, Nevada 89030
702-657-1010 • Fax: 702-657-1577
1-888-368-3282

CLIENT: El Paso Natural Gas Company
8645 Railroad Drive
El Paso, TX 79904
ATTN: Darrell Campbell

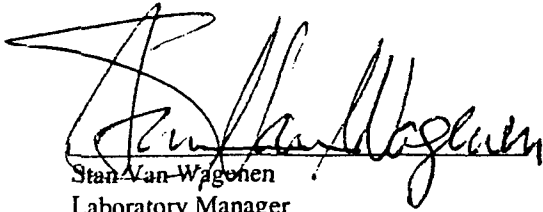
PROJECT NAME: JAL #4 Monitor Wells
PROJECT NUMBER: NA

NEL ORDER ID: P0105010

Attached are the analytical results for samples in support of the above referenced project.

Samples submitted for this project were not sampled by NEL Laboratories. Samples were received by NEL in good condition, under chain of custody on 5/4/01.

Should you have any questions or comments, please feel free to contact our Client Services department at (602) 437-0099.


Stan Van Wagonen
Laboratory Manager

6/4/01
Date

CERTIFICATIONS:

	<u>Reno</u>	<u>Las Vegas</u>	<u>S. California</u>
Arizona	AZ0520	AZ0518	AZ0605
California	1707	2002	2264
US Army Corps of Engineers	Certified	Certified	

	<u>Reno</u>	<u>Las Vegas</u>	<u>S. California</u>
Idaho	Certified	Certified	
Montana	Certified	Certified	
Nevada	NV033	NV052	CA084
L.A.C.S.D.			10228

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0143
DATE SAMPLED: 5/3/01
NEL SAMPLE ID: P0105010-01

Cations by EPA 6010A
MATRIX: Aqueous

ANALYST: RAA - Reno Division

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	49	0.5 mg/L	1	EPA 6010	5/8/01	5/8/01
Magnesium	16	0.5 mg/L	1	EPA 6010	5/8/01	5/8/01
Potassium	3.8	2. mg/L	1	EPA 6010	5/8/01	5/8/01
Silica	34	1. mg/L	1	SM 4500Si-D	5/8/01	5/8/01
Sodium	73	0.5 mg/L	1	EPA 6010	5/8/01	5/8/01

Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010508SI-BLK

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Silica	ND	1. mg/L	1	SM 4500Si-D	5/8/01	5/8/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: P5010I-BLK

Cations by EPA 6010A

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	ND	0.5 mg/L	1	EPA 6010	5/8/01	5/8/01
Magnesium	ND	0.5 mg/L	1	EPA 6010	5/8/01	5/8/01
Potassium	ND	2. mg/L	1	EPA 6010	5/8/01	5/8/01
Sodium	ND	0.5 mg/L	1	EPA 6010	5/8/01	5/8/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA
Inorganic Non-Metals
MATRIX: Aqueous

CLIENT ID: M01-0143
DATE SAMPLED: 5/3/01
NEL SAMPLE ID: P0105010-01

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	180		1	SM 2320 B	mg/L	5/15/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	5/15/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	5/15/01
Alkalinity, Total as CaCO ₃	180	25.	1	SM 2320 B	mg/L	5/15/01
Bromide	0.51	1.	5	EPA 300.0	mg/L	5/4/01
Chloride	30	2.5	25	EPA 300.0	mg/L	5/9/01
Fluoride	0.91	0.4	1	SM 4500-F C	mg/L	5/7/01
Hardness, Total (as CaCO ₃)	190	2.	1	EPA 200.7	mg/L	5/8/01
Nitrate, as N	1.0	0.25	5	SM 4500-NO ₃	mg/L-N	5/4/01
pH	7.75	2.	1	EPA 150.1	pH Units	5/4/01
pH Temperature	22.7	1.	1	EPA 150.1	°C	5/4/01
Specific Conductance	615	1.	1	SM 2510 B	µS/cm	5/7/01
Total Dissolved Solids	419	15.	1	SM 2540 C	mg/L	5/7/01

Reporting Limit
Dilution Factor
ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010504BR-BLK

Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Bromide	ND	0.2	1	EPA 300.0	mg/L	5/4/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
EJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010504NO3-BLK

Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Nitrate, as N	ND	0.05	1	SM 4500-NO3	mg/L-N	5/4/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010507F-BLK

Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Fluoride	ND	0.4	1	SM 4500-F C	mg/L	5/7/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
F CT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010507TDS2-BLK

Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Total Dissolved Solids	ND	15	1	SM 2540 C	mg/L	5/7/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
CT #: NA
Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010509CL-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	ND	0.1	1	EPA 300.0	mg/L	5/9/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
F CT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010515ALK-BLK

Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Alkalinity - Bicarbonate as CaC	ND		1	SM 2320 B	mg/L	5/15/01
Alkalinity - Carbonate as CaCO	ND		1	SM 2320 B	mg/L	5/15/01
Alkalinity - Hydroxide as CaCO	ND		1	SM 2320 B	mg/L	5/15/01
Alkalinity, Total as CaCO ₃	ND	25	1	SM 2320 B	mg/L	5/15/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0143
DATE SAMPLED: 5/3/01
NEL SAMPLE ID: P0105010-01

TEST: BTEX by EPA SW846 Method 8021B, Dec. 1996

METHOD: EPA 8021B

ANALYST: JQT - Las Vegas Division

MATRIX: Aqueous

EXTRACTED: NA

DILUTION: 1

ANALYZED: 5/8/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
MTBE	ND	5. µg/L
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	99	69 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010508BTEX-BLK

BTEX by EPA SW846 Method 8021B, Dec. 1996

METHOD: EPA 8021B
MATRIX: Aqueous

ANALYST: JQT - Las Vegas Division
EXTRACTED: NA
ANALYZED: 5/8/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
MTBE	ND	5. µg/L
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	104	69 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA
Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike</u>	<u>Spike</u>	<u>Percent</u>	<u>Acceptable</u>	<u>RPD</u>
		<u>Amount</u>	<u>Result</u>	<u>Recovery</u>	<u>Range</u>	
Bromide	010504BR-LCS	100	100	100	90 - 110	
Bromide	010504BR-LCSD	100	101	101	90 - 110	1.
Bromide	L0105008-01-MS	100	123	102	80 - 120	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA
Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Nitrate, as N	010504NO3-LCS	100	99	99	90 - 110	
Nitrate, as N	010504NO3-LCSD	100	99	99	90 - 110	0.
Nitrate, as N	L0105024-02-MS	100	120	108	80 - 120	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA
Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
7.00 Buffer	010504PH-LCS	7	6.98	100	99 - 101	
7.00 Buffer	010504PH-LCSD	7	6.99	100	99 - 101	0.1

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA
MATRIX: Inorganic Non-Metals
Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Specific Conductance	010507COND-LCS	1412	1417	100	95 - 105	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
ECT #: NA
Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Fluoride	010507F-LCS	2	1.9	95	84 - 109	
Fluoride	010507F-LCSD	1	0.93	93	84 - 109	2.1
Fluoride	P0105008-01-MS	1	1.9	91	71 - 126	
Fluoride	P0105008-01-MSD	1	2.1	111	71 - 126	19.8

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
EJECT #: NA
MATRIX: Inorganic Non-Metals
Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Total Dissolved Solids	010507TDS2-LCS	1000	961	96	80 - 120	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4 Monitor Wells
 PROJECT #: NA
 BTEX by EPA SW846 Method 8021B, Dec. 1996
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Benzene	010508BTEX-LCS	50	52.428	105	85 - 115	
Benzene	010508BTEX-LCSD	50	48.95	98	80 - 120	6.9
Benzene	P0105008-01-MS	50	52.1	104	70 - 130	
Benzene	P0105008-01-MSD	50	52.4	105	70 - 130	0.6
Toluene	010508BTEX-LCS	50	53.557	107	85 - 115	
Toluene	010508BTEX-LCSD	50	50.026	100	80 - 120	6.8
Toluene	P0105008-01-MS	50	52	104	70 - 130	
Toluene	P0105008-01-MSD	50	51.8	104	70 - 130	0.4
Ethylbenzene	010508BTEX-LCS	50	55.087	110	85 - 115	
Ethylbenzene	010508BTEX-LCSD	50	49.958	100	80 - 120	9.8
Ethylbenzene	P0105008-01-MS	50	52.3	105	70 - 130	
Ethylbenzene	P0105008-01-MSD	50	52.3	105	70 - 130	0.
Total Xylenes	010508BTEX-LCS	150	170.865	114	85 - 115	
Total Xylenes	010508BTEX-LCSD	150	153.862	103	80 - 120	10.5
Total Xylenes	P0105008-01-MS	150	165	107	70 - 130	
Total Xylenes	P0105008-01-MSD	150	166	108	70 - 130	0.6

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA
MATRIX: Inorganic Non-Metals
Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike</u> <u>Amount</u>	<u>Spike</u> <u>Result</u>	<u>Percent</u> <u>Recovery</u>	<u>Acceptable</u> <u>Range</u>	<u>RPD</u>
Chloride	010509CL-LCS	100	106	106	90 - 110	
Chloride	010509CL-LCSD	100	108	108	90 - 110	1.9
Chloride	P0105008-01-MS	100	169	102	80 - 120	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA
ANALYSIS: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Alkalinity, Total	010515ALK-LCS	125	126	101	90 - 110	
Alkalinity, Total	010515ALK-LCSD	125	122	98	90 - 110	3.2

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4 Monitor Wells
 PROJECT #: NA
 ANALYSIS: Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Calcium	P5010I-LCS	20	20	100	85 - 115	
Calcium	P0105010-01-MS	20	67.2	91	75 - 125	
Calcium	P0105010-01-MSD	20	66.2	86	75 - 125	5.6
Magnesium	P5010I-LCS	20	19.6	98	85 - 115	
Magnesium	P0105010-01-MS	20	35.4	97	75 - 125	
Magnesium	P0105010-01-MSD	20	34.9	95	75 - 125	2.6
Potassium	P5010I-LCS	20	19.8	99	85 - 115	
Potassium	P0105010-01-MS	20	24	101	75 - 125	
Potassium	P0105010-01-MSD	20	23.8	100	75 - 125	1.
Sodium	P5010I-LCS	20	20.1	101	85 - 115	
Sodium	P0105010-01-MS	20	92.6	98	75 - 125	
Sodium	P0105010-01-MSD	20	90.5	88	75 - 125	11.3

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.



Precision Analytical Laboratories, Inc.

A Subsidiary of Aerotech Laboratories, Inc.

May 31, 2001

Ephraim Morris
NEL Laboratories
3021 S. 35th Street
Suite B-6
Phoenix, AZ 85034
TEL: (602) 437-0099
FAX (602) 437-2225

RE: P0105010

Order No.: 0105286

Dear Ephraim Morris:

Precision Analytical Laboratories, Inc. received 1 sample on 5/8/01 for the analyses presented in the following report.

This report includes the following information:

- Case Narrative. The case narrative contains a listing of common method references, data qualifiers, and any comments that may be needed regarding the analytical results.
- Analytical Report. Analysis results are reported with the compound name first, followed by the test result, report limit (Limit), any required data qualifier (Qual), units, dilution factor (DF), and date analyzed.
- QC Summary Report. This section includes quality control results for some or all of the following: method blanks, sample duplicates, sample matrix spikes, sample matrix spike duplicates, laboratory control spikes, and laboratory control spike duplicates.

If you have any questions regarding these test results, please do not hesitate to call.

Sincerely,

Carlene McCutcheon
Project Manager

CC:



Precision Analytical Laboratories, Inc.

Date: 31-May-01

A Subsidiary of Aerotech Laboratories, Inc.

CLIENT: NEL Laboratories
Project: P0105010
Lab Order: 0105286

CASE NARRATIVE

Data Qualifiers

Listed below are data qualifiers which may be used in your analytical report to explain any analytical or quality control issues. If one or more of the following data qualifiers is associated with your analytical or quality control data it will be noted in your report under the column header "QUAL". Any quality control deficiencies that cannot be adequately described by these qualifiers will be addressed in the analytical comments section of this case narrative.

- B1 Target analyte detected in method blank at or above the method reporting limit.
- D1 Sample required dilution due to matrix interference.
- D2 Sample required dilution due to high concentration of target analyte.
- D3 Sample dilution required due to insufficient sample.
- D4 Minimum reporting level (MRL) adjusted to reflect sample amount received and analyzed.
- E1 Concentration estimated. Analyte exceeded calibration range. Reanalysis not possible due to insufficient sample.
- E2 Concentration estimated. Analyte exceeded calibration range. Reanalysis not performed due to sample matrix.
- E3 Concentration estimated. Analyte exceeded calibration range. Reanalysis not performed due to holding time requirements.
- E4 Concentration estimated. Analyte was detected below laboratory minimum reporting level (MRL).
- E6 Concentration estimated. Internal standard recoveries did not meet method acceptance criteria.
- E7 Concentration estimated. Internal standard recoveries did not meet laboratory acceptance criteria.
- H1 Sample analysis performed past holding time. See case narrative.
- H2 Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
- H3 Sample was received and analyzed past holding time.
- H4 Sample was extracted past required extraction holding time, but analyzed within analysis holding time. See case narrative.
- K1 The sample dilutions set-up for the BOD analysis did not meet the oxygen depletion criteria of at least 2 mg/L. The reported result is an estimated value.
- K2 The sample dilutions set up for the BOD analysis failed to meet the criteria of a residual dissolved oxygen of at least 1 mg/L. The reported result is estimated.
- L1 The associated blank spike recovery was above laboratory acceptance limits. See case narrative.
- L2 The associated blank spike recovery was below laboratory acceptance limits. See



Precision Analytical Laboratories, Inc.

A Subsidiary of Analytical Tech Laboratories, Inc.

Project: P0105010
Lab Order: 0105286

CASE NARRATIVE

case narrative.

- M1 Matrix spike recovery was high, the method control sample recovery was acceptable.
- M2 Matrix spike recovery was low, the method control sample recovery was acceptable.
- M3 The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
- M4 The analysis of the spiked sample required a dilution such that the spike concentration was diluted below the reporting limit. The method control sample recovery was acceptable.
- M5 Analyte concentration was determined by the method of standard addition (MSA).
- N1 See case narrative.
- Q1 Sample integrity was not maintained. See case narrative.
- Q2 Sample received with head space.
- Q3 Sample received with improper chemical preservation.
- Q5 Sample received without chemical preservation, but preserved by the laboratory.
- Q6 Sample was received above recommended temperature.
- Q7 Sample inadequately dechlorinated.
- Q8 Insufficient sample received to meet method QC requirements. QC requirements satisfy ADEQ policies 0154 and 0155.
- Q10 Sample received in inappropriate sample container.
- Q11 Sample is heterogeneous. Sample homogeneity could not be readily achieved using routine laboratory practices.
- R2 RPD exceeded the laboratory control limit. See case narrative.
- R3 Sample RPD between the primary and confirmatory analysis exceeded 40%. Per EPA Method 8000B, the higher value was reported.
- R4 RPD exceeded the method control limit. Recovery met acceptance criteria.
- R5 RPD exceeded the laboratory control limit. Recovery met acceptance criteria.
- S2 Surrogate recovery was above laboratory and method acceptance limits.
- S4 Surrogate recovery was above laboratory and method acceptance limits. No target analytes were detected in the sample.
- S6 Surrogate recovery was below laboratory and method acceptance limits. Reextraction and/or reanalysis confirms low recovery caused by matrix effect.
- S7 Surrogate recovery was below laboratory and method acceptance limits. Unable to confirm matrix effect.
- S9 The analysis of the sample required a dilution such that the surrogate concentration was diluted below the laboratory acceptance criteria. The method control sample recovery was acceptable.
- S10 Surrogate recovery was above laboratory and method acceptance limits. See case narrative (N1).



Precision Analytical Laboratories, Inc.

A Subsidiary of Tech Laboratories, Inc.

Project: P0105010
Lab Order: 0105286

CASE NARRATIVE

- T2 Cited ADHS licensed method does not contain this analyte as part of method compound list.
- T4 Tentatively identified compound. Concentration is estimated and based on the closest internal standard.
- V1 CCV recovery was above method acceptance limits. This target analyte was not detected in the sample.
- V2 CCV recovery was above method acceptance limits. This target analyte was detected in the sample. The sample could not be reanalyzed due to insufficient sample.
- V5 CCV recovery after a group of samples was above acceptance limits. This target analyte was not detected in the sample. Acceptable per EPA Method 8000B.

Samples were analyzed using methods outlined in references such as:

Standard Methods for the Examination of Water and Wastewater, 18th Edition, 1992 and 19th Edition, 1995.

Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Revised March 1983

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition.

40 CFR, Part 136, Revised 1995. Appendix A to Part 136- Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater.

NIOSH Manual of Analytical Methods, Fourth Edition, 1994.

Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition, 1999.

Precision Analytical Laboratories, Inc (PAL) holds the following certifications:

Arizona (certification no. AZ0610) and California (I-2410).

PAL- Tucson laboratory Arizona certification number: AZ0609.

PAL- North Phoenix laboratory Arizona certification number: AZ0611.

PAL participates in the AIHA Proficiency Analytical Testing (PAT) program for metals, solvents, and formaldehyde.

Analytical Comments:

All method blanks and laboratory control spikes met EPA method and/or laboratory quality control



Precision Analytical Laboratories, Inc.

A Subsidiary of HPL Laboratories, Inc.

Project:

P0105010

CASE NARRATIVE

Lab Order:

0105286

objectives for the analyses included in this report.



Precision Analytical Laboratories, Inc.

Date: 31-May-01

A Subsidiary of Aerotech Laboratories, Inc.

CLIENT: NEL Laboratories

Client Sample ID: M01-0143

Lab Order: 0105286

Tag Number:

Project: P0105010

Collection Date: 5/3/01 1:00:00 PM

Lab ID: 0105286-01A

Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY	E300					Analyst: LH
Sulfate	74	10	D2	mg/L	5	5/24/01

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

1



Precision Analytical Laboratories, Inc.

Date: 31-May-01

CLIENT: NEL Laboratories

Work Order: 0105286

Project: P0105010

QC SUMMARY REPORT

Method Blank

Sample ID: MB-R10382	Batch ID: R10382	Test Code: E300	Units: mg/L	Analysis Date: 5/24/01	Prep Date:						
Client ID:	Run ID: IC 1_010523A	SeqNo: 113219									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	< 2.0										

Qualifiers: ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank



Precision Analytical Laboratories, Inc.

Date: 31-May-01

CLIENT: NEL Laboratories

Work Order: 0105286

Project: P0105010

QC SUMMARY REPORT

Sample Duplicate

Sample ID: 0105454-02A DUP	Batch ID: R10382	Test Code: E300	Units: mg/L	Analysis Date 5/24/01	Prep Date:						
Client ID:	Run ID: IC 1_010523A	SeqNo: 113226									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	6.92	2	0	0	0	0	0	7.195	3.9	20	

Qualifiers: ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

2



Precision Analytical Laboratories, Inc.

Date: 31-May-01

CLIENT: NEL Laboratories

Work Order: 0105286

Project: P0105010

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: 0105454-02A MS	Batch ID: R10382	Test Code: E300	Units: mg/L	Analysis Date 5/24/01	Prep Date:						
Client ID:		Run ID: IC 1_010523A		SeqNo: 113227							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	28.61	2	20	7.195	107	80	120	0			

Qualifiers:	ND - Not Detected at the Reporting Limit	S - Spike Recovery outside accepted recovery limits	B - Analyte detected in the associated Method Blank
	J - Analyte detected below quantitation limits	R - RPD outside accepted recovery limits	3



Precision Analytical Laboratories, Inc.

Date: 31-May-01

CLIENT: NEL Laboratories

Work Order: 0105286

Project: P0105010

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: LCS-R10382	Batch ID: R10382	Test Code: E300	Units: mg/L	Analysis Date 5/24/01	Prep Date:						
Client ID:	Run ID: IC 1_010523A	SeqNo: 113220									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	20.52	2	20	0	103	90	110	0			

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

4

10-11-12

CHAIN OF CUSTODY RECORD
LAS Vegas Lead

[illegible]

NEL LABORATORIES

Reno • Las Vegas • Boise
Phoenix • Sacramento

Las Vegas Division
4208 Arcata Way, Suite A • Las Vegas, Nevada 89030
702-657-1010 • Fax: 702-657-1577
1-888-368-3282

CLIENT: El Paso Natural Gas Company
8645 Railroad Drive
El Paso, TX 79904
ATTN: Darrell Campbell

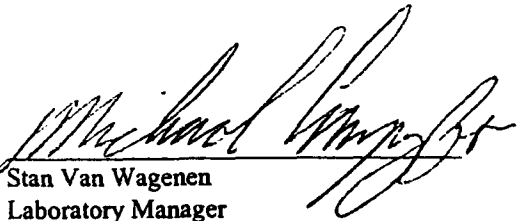
PROJECT NAME: JAL #4 Monitor Wells
PROJECT NUMBER: NA

NEL ORDER ID: P0105011

Attached are the analytical results for samples in support of the above referenced project.

Samples submitted for this project were not sampled by NEL Laboratories. Samples were received by NEL in good condition, under chain of custody on 5/4/01.

Should you have any questions or comments, please feel free to contact our Client Services department at (602) 437-0099.


Stan Van Wagenen
Laboratory Manager

6/6/01
Date

CERTIFICATIONS:

	<u>Reno</u>	<u>Las Vegas</u>	<u>S. California</u>
Arizona	AZ0520	AZ0518	AZ0605
California	1707	2002	2264
US Army Corps of Engineers	Certified	Certified	

	<u>Reno</u>	<u>Las Vegas</u>	<u>S. California</u>
Idaho	Certified	Certified	
Montana	Certified	Certified	
Nevada	NV033	NV052	CA084
L.A.C.S.D.			10228

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0145
DATE SAMPLED: 5/3/01
NEL SAMPLE ID: P0105011-02

MATRIX: Aqueous
Cations by EPA 6010A

ANALYST: RAA - Reno Division

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	160	0.5 mg/L	1	EPA 6010	5/8/01	5/8/01
Magnesium	56	0.5 mg/L	1	EPA 6010	5/8/01	5/8/01
Potassium	9.2	2. mg/L	1	EPA 6010	5/8/01	5/8/01
Silica	32	1. mg/L	1	SM 4500Si-D	5/8/01	5/8/01
Sodium	150	0.5 mg/L	1	EPA 6010	5/8/01	5/8/01

● Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
ECT #: NA

CLIENT ID: M01-0146
DATE SAMPLED: 5/3/01
NEL SAMPLE ID: P0105011-03

MATRIX: Cations by EPA 6010A
Aqueous

ANALYST: RAA - Reno Division

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	160	0.5 mg/L	1	EPA 6010	5/8/01	5/8/01
Magnesium	57	0.5 mg/L	1	EPA 6010	5/8/01	5/8/01
Potassium	8.9	2. mg/L	1	EPA 6010	5/8/01	5/8/01
Silica	31	1. mg/L	1	SM 4500Si-D	5/8/01	5/8/01
Sodium	150	0.5 mg/L	1	EPA 6010	5/8/01	5/8/01

Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010508SI-BLK

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Silica	ND	1. mg/L	1	SM 4500Si-D	5/8/01	5/8/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: P5010I-BLK

Cations by EPA 6010A

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	ND	0.5 mg/L	1	EPA 6010	5/8/01	5/8/01
Magnesium	ND	0.5 mg/L	1	EPA 6010	5/8/01	5/8/01
Potassium	ND	2. mg/L	1	EPA 6010	5/8/01	5/8/01
Sodium	ND	0.5 mg/L	1	EPA 6010	5/8/01	5/8/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0144
DATE SAMPLED: 5/3/01
NEL SAMPLE ID: P0105011-01

Inorganic Non-Metals

MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	160		1	SM 2320 B	mg/L	5/9/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	5/9/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	5/9/01
Alkalinity, Total as CaCO ₃	160	25.	1	SM 2320 B	mg/L	5/9/01
Bromide	1.0	2.	10	EPA 300.0	mg/L	5/4/01
Chloride	89	25.	250	EPA 300.0	mg/L	5/9/01
Fluoride	1.6	0.4	1	SM 4500-F C	mg/L	5/8/01
Hardness, Total (as CaCO ₃)	220	2.	1	EPA 200.7	mg/L	5/8/01
Nitrate, as N	3.7	1.	10	EPA 300.0	mg/L-N	5/4/01
pH	7.66	2.	1	EPA 150.1	pH Units	5/4/01
pH Temperature	22.7	1.	1	EPA 150.1	°C	5/4/01
Specific Conductance	809	1.	1	SM 2510 B	µS/cm	5/7/01
Total Dissolved Solids	499	15.	1	SM 2540 C	mg/L	5/7/01

Reporting Limit

Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0145
DATE SAMPLED: 5/3/01
NEL SAMPLE ID: P0105011-02

ANALYSIS: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	140		1	SM 2320 B	mg/L	5/9/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	5/9/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	5/9/01
Alkalinity, Total as CaCO ₃	140	25.	1	SM 2320 B	mg/L	5/9/01
Bromide	1.4	2.	10	EPA 300.0	mg/L	5/4/01
Chloride	570	50.	500	EPA 300.0	mg/L	5/9/01
Fluoride	1.0	0.4	1	SM 4500-F C	mg/L	5/8/01
Hardness, Total (as CaCO ₃)	630	2.	1	EPA 200.7	mg/L	5/8/01
Nitrate, as N	ND	1.	10	EPA 300.0	mg/L-N	5/4/01
pH	7.40	2.	1	EPA 150.1	pH Units	5/4/01
pH Temperature	22.2	1.	1	EPA 150.1	°C	5/4/01
Specific Conductance	2100	1.	1	SM 2510 B	µS/cm	5/7/01
Total Dissolved Solids	1060	30.	2	SM 2540 C	mg/L	5/7/01

Reporting Limit
Dilution Factor
ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0146
DATE SAMPLED: 5/3/01
NEL SAMPLE ID: P0105011-03

ANALYSIS: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	150		1	SM 2320 B	mg/L	5/9/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	5/9/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	5/9/01
Alkalinity, Total as CaCO ₃	150	25.	1	SM 2320 B	mg/L	5/9/01
Bromide	1.3	2.	10	EPA 300.0	mg/L	5/4/01
Chloride	510	50.	500	EPA 300.0	mg/L	5/9/01
Fluoride	0.97	0.4	1	SM 4500-F C	mg/L	5/8/01
Hardness, Total (as CaCO ₃)	630	2.	1	EPA 200.7	mg/L	5/8/01
Nitrate, as N	ND	1.	10	EPA 300.0	mg/L-N	5/4/01
pH	7.44	2.	1	EPA 150.1	pH Units	5/4/01
pH Temperature	22.5	1.	1	EPA 150.1	°C	5/4/01
Specific Conductance	2120	1.	1	SM 2510 B	µS/cm	5/7/01
Total Dissolved Solids	1150	30.	2	SM 2540 C	mg/L	5/7/01

Reporting Limit
Dilution Factor
ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010504BR-BLK

Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Bromide	ND	0.2	1	EPA 300.0	mg/L	5/4/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010504NO3-BLK

Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Nitrate, as N	ND	0.1	1	EPA 300.0	mg/L-N	5/4/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010507TDS-BLK

Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Total Dissolved Solids	ND	15	1	SM 2540 C	mg/L	5/7/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010509ALK2-BLK

Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Alkalinity - Bicarbonate as CaC	ND		1	SM 2320 B	mg/L	5/9/01
Alkalinity - Carbonate as CaCO	ND		1	SM 2320 B	mg/L	5/9/01
Alkalinity - Hydroxide as CaCO	ND		1	SM 2320 B	mg/L	5/9/01
Alkalinity, Total as CaCO ₃	ND	25	1	SM 2320 B	mg/L	5/9/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010509CL-BLK

Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	ND	0.1	1	EPA 300.0	mg/L	5/9/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0144
DATE SAMPLED: 5/3/01
NEL SAMPLE ID: P0105011-01

BTEX by EPA SW846 Method 8021B, Dec. 1996

METHOD: EPA 8021B
MATRIX: Aqueous
DILUTION: 1

ANALYST: JQT - Las Vegas Division
EXTRACTED: NA
ANALYZED: 5/10/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
MTBE	ND	5. µg/L
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
1,1,1-Trifluorotoluene	91	69 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0145
DATE SAMPLED: 5/3/01
NEL SAMPLE ID: P0105011-02

BTEX by EPA SW846 Method 8021B, Dec. 1996

METHOD: EPA 8021B
MATRIX: Aqueous
DILUTION: 1

ANALYST: JQT - Las Vegas Division
EXTRACTED: NA
ANALYZED: 5/8/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
MTBE	ND	5. µg/L
Benzene	2.4 µg/L	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	98	69 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0146
DATE SAMPLED: 5/3/01
NEL SAMPLE ID: P0105011-03

BTEX by EPA SW846 Method 8021B, Dec. 1996

METHOD: EPA 8021B
MATRIX: Aqueous
DILUTION: 1

ANALYST: JQT - Las Vegas Division
EXTRACTED: NA
ANALYZED: 5/8/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
MTBE	ND	5. µg/L
Benzene	2.1 µg/L	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	99	69 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010508BTEX-BLK

BTEX by EPA SW846 Method 8021B, Dec. 1996

METHOD: EPA 8021B
MATRIX: Aqueous

ANALYST: JQT - Las Vegas Division
EXTRACTED: NA
ANALYZED: 5/8/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
MTBE	ND	5. µg/L
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	104	69 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010510BTEX-BLK

BTEX by EPA SW846 Method 8021B, Dec. 1996

METHOD: EPA 8021B
MATRIX: Aqueous

ANALYST: JQT - Las Vegas Division
EXTRACTED: NA
ANALYZED: 5/10/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
MTBE	ND	5. µg/L
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	91	69 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA
ANALYSIS: Inorganic Non-Metals
MEDIUM: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Bromide	010504BR-LCS	100	100	100	90 - 110	
Bromide	010504BR-LCSD	100	101	101	90 - 110	1.
Bromide	L0105008-01-MS	100	123	102	80 - 120	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA
ANALYSIS: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Nitrate, as N	010504NO3-LCS	100	99	99	90 - 110	
Nitrate, as N	010504NO3-LCSD	100	99	99	90 - 110	0.
Nitrate, as N	L0105024-02-MS	100	120	108	80 - 120	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4 Monitor Wells
 PROJECT #: NA
 ANALYSIS: Inorganic Non-Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
7.00 Buffer	010504PH-LCS	7	6.98	100	99 - 101	
7.00 Buffer	010504PH-LCSD	7	6.99	100	99 - 101	0.1

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA
Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Specific Conductance	010507COND-LCS	1412	1417	100	95 - 105	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA
METHOD: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Total Dissolved Solids	010507TDS-LCS	1000	932	93	80 - 120	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4 Monitor Wells
 PROJECT #: NA
 BTEX by EPA SW846 Method 8021B, Dec. 1996
 MATRIX: Aqueous

PARAMETER	NEL Sample ID	Spike	Spike	Percent	Acceptable	RPD
		Amount	Result	Recovery	Range	
Benzene	010508BTEX-LCS	50	52.428	105	85 - 115	
Benzene	010508BTEX-LCSD	50	48.95	98	80 - 120	6.9
Benzene	P0105008-01-MS	50	52.1	104	70 - 130	
Benzene	P0105008-01-MSD	50	52.4	105	70 - 130	0.6
Toluene	010508BTEX-LCS	50	53.557	107	85 - 115	
Toluene	010508BTEX-LCSD	50	50.026	100	80 - 120	6.8
Toluene	P0105008-01-MS	50	52	104	70 - 130	
Toluene	P0105008-01-MSD	50	51.8	104	70 - 130	0.4
Ethylbenzene	010508BTEX-LCS	50	55.087	110	85 - 115	
Ethylbenzene	010508BTEX-LCSD	50	49.958	100	80 - 120	9.8
Ethylbenzene	P0105008-01-MS	50	52.3	105	70 - 130	
Ethylbenzene	P0105008-01-MSD	50	52.3	105	70 - 130	0.
Total Xylenes	010508BTEX-LCS	150	170.865	114	85 - 115	
Total Xylenes	010508BTEX-LCSD	150	153.862	103	80 - 120	10.5
Total Xylenes	P0105008-01-MS	150	165	107	70 - 130	
Total Xylenes	P0105008-01-MSD	150	166	108	70 - 130	0.6

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA
ANALYSIS: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Fluoride	010508F-LCS	1	0.96	96	84 - 109	
Fluoride	010508F-LCSD	1	1.01	101	84 - 109	5.1
Fluoride	P0105011-01-MS	1	2.6	100	71 - 126	
Fluoride	P0105011-01-MSD	1	2.7	110	71 - 126	9.5

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA
MATRIX: Inorganic Non-Metals
Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Alkalinity, Total	010509ALK2-LCS	125	134	107	90 - 110	
Alkalinity, Total	010509ALK2-LCSD	125	122	98	90 - 110	9.4

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA
MATRIX: Inorganic Non-Metals
Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Chloride	010509CL-LCS	100	106	106	90 - 110	
Chloride	010509CL-LCSD	100	108	108	90 - 110	1.9
Chloride	P0105008-01-MS	100	169	102	80 - 120	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4 Monitor Wells
 CT #: NA
 BTEX by EPA SW846 Method 8021B, Dec. 1996
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Benzene	010510BTEX-LCS	50	52.03	104	85 - 115	
Benzene	010510BTEX-LCSD	50	49.671	99	80 - 120	4.6
Benzene	P0105015-01-MS	50	50.612	101	70 - 130	
Benzene	P0105015-01-MSD	50	49.233	98	70 - 130	2.8
Toluene	010510BTEX-LCS	50	53.481	107	85 - 115	
Toluene	010510BTEX-LCSD	50	48.882	98	80 - 120	9.
Toluene	P0105015-01-MS	50	51.343	103	70 - 130	
Toluene	P0105015-01-MSD	50	49.135	98	70 - 130	4.4
Ethylbenzene	010510BTEX-LCS	50	51.958	104	85 - 115	
Ethylbenzene	010510BTEX-LCSD	50	50.906	102	80 - 120	2.
Ethylbenzene	P0105015-01-MS	50	49.761	100	70 - 130	
Ethylbenzene	P0105015-01-MSD	50	47.838	96	70 - 130	3.9
Total Xylenes	010510BTEX-LCS	150	163.049	109	85 - 115	
Total Xylenes	010510BTEX-LCSD	150	157.479	105	80 - 120	3.5
Total Xylenes	P0105015-01-MS	150	154.765	103	70 - 130	
Total Xylenes	P0105015-01-MSD	150	150.356	100	70 - 130	2.9

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4 Monitor Wells
 PROJECT #: NA
 ANALYSIS: Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Calcium	P5010I-LCS	20	20	100	85 - 115	
Calcium	P0105010-01-MS	20	67.2	91	75 - 125	
Calcium	P0105010-01-MSD	20	66.2	86	75 - 125	5.6
Magnesium	P5010I-LCS	20	19.6	98	85 - 115	
Magnesium	P0105010-01-MS	20	35.4	97	75 - 125	
Magnesium	P0105010-01-MSD	20	34.9	95	75 - 125	2.6
Potassium	P5010I-LCS	20	19.8	99	85 - 115	
Potassium	P0105010-01-MS	20	24	101	75 - 125	
Potassium	P0105010-01-MSD	20	23.8	100	75 - 125	1.
Sodium	P5010I-LCS	20	20.1	101	85 - 115	
Sodium	P0105010-01-MS	20	92.6	98	75 - 125	
Sodium	P0105010-01-MSD	20	90.5	88	75 - 125	11.3

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.



Precision Analytical Laboratories, Inc.

A Subsidiary of Aerotech Laboratories, Inc.

June 06, 2001

Ephraim Morris
NEL Laboratories
3021 S. 35th Street
Suite B-6
Phoenix, AZ 85034
TEL: (602) 437-0099
FAX (602) 437-2225

RE: P0105011

Order No.: 0105287

Dear Ephraim Morris:

Precision Analytical Laboratories, Inc. received 3 samples on 5/8/01 for the analyses presented in the following report.

This report includes the following information:

- Case Narrative. The case narrative contains a listing of common method references, data qualifiers, and any comments that may be needed regarding the analytical results.
- Analytical Report. Analysis results are reported with the compound name first, followed by the test result, report limit (Limit), any required data qualifier (Qual), units, dilution factor (DF), and date analyzed.
- QC Summary Report. This section includes quality control results for some or all of the following: method blanks, sample duplicates, sample matrix spikes, sample matrix spike duplicates, laboratory control spikes, and laboratory control spike duplicates.

If you have any questions regarding these test results, please do not hesitate to call.

Sincerely,

Carlene McCutcheon
Project Manager

CC:



Precision Analytical Laboratories, Inc.

A Subsidiary of Biotech Laboratories, Inc.

Project: P0105011

Lab Order: 0105287

CASE NARRATIVE

- T2 Cited ADHS licensed method does not contain this analyte as part of method compound list.
- T4 Tentatively identified compound. Concentration is estimated and based on the closest internal standard.
- V1 CCV recovery was above method acceptance limits. This target analyte was not detected in the sample.
- V2 CCV recovery was above method acceptance limits. This target analyte was detected in the sample. The sample could not be reanalyzed due to insufficient sample.
- V5 CCV recovery after a group of samples was above acceptance limits. This target analyte was not detected in the sample. Acceptable per EPA Method 8000B.

Samples were analyzed using methods outlined in references such as:

Standard Methods for the Examination of Water and Wastewater, 18th Edition, 1992 and 19th Edition, 1995.

Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Revised March 1983

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition.

40 CFR, Part 136, Revised 1995. Appendix A to Part 136- Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater.

NIOSH Manual of Analytical Methods, Fourth Edition, 1994.

Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition, 1999.

Precision Analytical Laboratories, Inc (PAL) holds the following certifications:

Arizona (certification no. AZ0610) and California (I-2410).

PAL- Tucson laboratory Arizona certification number: AZ0609.

PAL- North Phoenix laboratory Arizona certification number: AZ0611.

PAL participates in the AIHA Proficiency Analytical Testing (PAT) program for metals, solvents, and formaldehyde.

Analytical Comments:

All method blanks and laboratory control spikes met EPA method and/or laboratory quality control



Precision Analytical Laboratories, Inc.

A Subsidiary of Aerotech Laboratories, Inc.
NEL Laboratories

Project: P0105011

Lab Order: 0105287

CASE NARRATIVE

objectives for the analyses included in this report.



Precision Analytical Laboratories, Inc.

Date: 06-Jun-01

A Subsidiary of Aerotech Laboratories, Inc.

CLIENT: NEL Laboratories
Lab Order: 0105287
Project: P0105011
Lab ID: 0105287-01A

Client Sample ID: M01-0144
Tag Number:
Collection Date: 5/3/01 2:19:00 PM
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY		E300				Analyst: LH
Sulfate	100	10	D2	mg/L	5	5/23/01

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

1



Precision Analytical Laboratories, Inc.

Date: 06-Jun-01

A Subsidiary of Aerotech Laboratories, Inc.

CLIENT: NEL Laboratories
Lab Order: 0105287
Project: P0105011
Lab ID: 0105287-02A

Client Sample ID: M01-0145
Tag Number:
Collection Date: 5/3/01 3:55:00 PM
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY						
		E300				Analyst: LH
Sulfate	110	10	D2	mg/L	5	5/24/01

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range



Precision Analytical Laboratories, Inc.

Date: 06-Jun-01

A Subsidiary of Aerotech Laboratories, Inc.

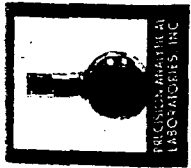
CLIENT: NEL Laboratories
Lab Order: 0105287
Project: P0105011
Lab ID: 0105287-03A

Client Sample ID: M01-0146
Tag Number:
Collection Date: 5/3/01 3:55:00 PM
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY						
		E300				Analyst: GL
Sulfate	110	40	D2	mg/L	20	5/18/01

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range



Precision Analytical Laboratories, Inc.

Date: 06-Jun-01

CLIENT: NEL Laboratories

Work Order: 0105287

Project: P0105011

QC SUMMARY REPORT

Method Blank

Sample ID: MB-R10296	Batch ID: R10296	Test Code: E300	Units: mg/L	Analysis Date 5/18/01	Prep Date:
Client ID:	Run ID: IC 1_010518E	SeqNo: 111887			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Sulfate	< 2.0	2			
Sample ID: MB-R10382	Batch ID: R10382	Test Code: E300	Units: mg/L	Analysis Date 5/24/01	Prep Date:
Client ID:	Run ID: IC 1_010523A	SeqNo: 113219			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Sulfate	< 2.0	2			

Qualifiers: ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank



Precision Analytical Laboratories, Inc.

Date: 06-Jun-01

CLIENT: NEL Laboratories

Work Order: 0105287

Project: P0105011

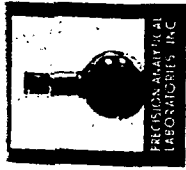
QC SUMMARY REPORT

Sample Duplicate

Sample ID: 0105368-02A DUP		Batch ID: R10296		Test Code: E300		Units: mg/L		Analysis Date 5/18/01		Prep Date:	
Client ID:		Run ID: IC 1_010518E		SeqNo: 111893							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	3.86	2	0	0	0	0	0	4.21	8.67	20	

Sample ID: 0105454-02A DUP		Batch ID: R10382		Test Code: E300		Units: mg/L		Analysis Date 5/24/01		Prep Date:	
Client ID:		Run ID: IC 1_010523A		SeqNo: 113226							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	6.92	2	0	0	0	0	0	7.195	3.9	20	

Qualifiers:	ND - Not Detected at the Reporting Limit	S - Spike Recovery outside accepted recovery limits	B - Analyte detected in the associated Method Blank
	J - Analyte detected below quantitation limits	R - RPD outside accepted recovery limits	



Precision Analytical Laboratories, Inc.

Date: 06-Jun-01

CLIENT: NEL Laboratories

Work Order: 0105287

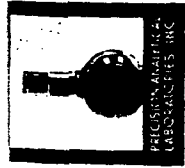
Project: P0105011

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: 0105368-02A MS	Batch ID: R10296	Test Code: E300	Units: mg/L	Analysis Date 5/18/01	Prep Date:
Client ID:	Run ID: IC 1_010518E	SeqNo: 111894			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Sulfate	25.28	2	20	4.21	105 80 120 0
Sample ID: 0105454-02A MS	Batch ID: R10382	Test Code: E300	Units: mg/L	Analysis Date 5/24/01	Prep Date:
Client ID:	Run ID: IC 1_010523A	SeqNo: 113227			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Sulfate	28.61	2	20	7.195	107 80 120 0

Qualifiers:	ND - Not Detected at the Reporting Limit	S - Spike Recovery outside accepted recovery limits	B - Analyte detected in the associated Method Blank
	J - Analyte detected below quantitation limits	R - RPD outside accepted recovery limits	3



Precision Analytical Laboratories, Inc.

Date: 06-Jun-01

CLIENT: NEL Laboratories

Work Order: 0105287

Project: P0105011

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: LCS-R10296	Batch ID: R10296	Test Code: E300	Units: mg/L	Analysis Date 5/18/01	Prep Date:
Client ID:	Run ID: IC 1_010518E			SeqNo: 111888	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Sulfate	21.07	2	20	0	105 90 110 0
Sample ID: LCS-R10382	Batch ID: R10382	Test Code: E300	Units: mg/L	Analysis Date 5/24/01	Prep Date:
Client ID:	Run ID: IC 1_010523A			SeqNo: 113220	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Sulfate	20.52	2	20	0	103 90 110 0

Qualifiers:	ND - Not Detected at the Reporting Limit	S - Spike Recovery outside accepted recovery limits	B - Analyte detected in the associated Method Blank
	J - Analyte detected below quantitation limits	R - RPD outside accepted recovery limits	4

NEL LABORATORIES

Reno • Las Vegas • Boise
Phoenix • Sacramento

Las Vegas Division
4208 Arcata Way, Suite A • Las Vegas, Nevada 89030
702-657-1010 • Fax: 702-657-1577
1-888-368-3282

CLIENT: El Paso Natural Gas Company
8645 Railroad Drive
El Paso, TX 79904
ATTN: Darrell Campbell

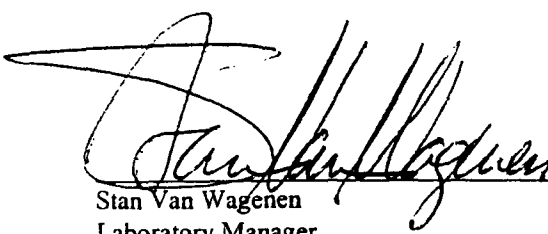
PROJECT NAME: JAL#4 Monitor Wells
PROJECT NUMBER: NA

NEL ORDER ID: P0105016

Attached are the analytical results for samples in support of the above referenced project.

Samples submitted for this project were not sampled by NEL Laboratories. Samples were received by NEL in good condition, under chain of custody on 5/8/01.

Should you have any questions or comments, please feel free to contact our Client Services department at (602) 437-0099.


Stan Van Wagenen
Laboratory Manager

5/15/01
Date

CERTIFICATIONS:

	<u>Reno</u>	<u>Las Vegas</u>	<u>S. California</u>
Arizona	AZ0520	AZ0518	AZ0605
California	1707	2002	2264
US Army Corps of Engineers	Certified	Certified	

	<u>Reno</u>	<u>Las Vegas</u>	<u>S. California</u>
Idaho	Certified	Certified	
Montana	Certified	Certified	
Nevada	NV033	NV052	CA084
L.A.C.S.D.			10228

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL#4 Monitor Wells
ECT #: NA

CLIENT ID: M01-0147
DATE SAMPLED: 5/6/01
NEL SAMPLE ID: P0105016-01

 Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>RESULT</u>	<u>R. L.</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	2800	100.	1000	EPA 300.0	mg/L	5/10/01
Specific Conductance	8300	1.	1	SM 2510 B	µS/cm	5/10/01
Total Dissolved Solids	4640	150.	10	SM 2540 C	mg/L	5/10/01

 Reporting Limit
Dilution Factor
ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL#4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0152
DATE SAMPLED: 5/6/01
NEL SAMPLE ID: P0105016-02

Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>RESULT</u>	<u>R. L.</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	6800	250.	2500	EPA 300.0	mg/L	5/10/01
Specific Conductance	16400	1.	1	SM 2510 B	µS/cm	5/10/01
Total Dissolved Solids	8980	300.	20	SM 2540 C	mg/L	5/10/01

Reporting Limit
Dilution Factor
ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL#4 Monitor Wells
PROJECT #: NA
Inorganic Non-Metals
MATRIX: Aqueous

CLIENT ID: M01-053
DATE SAMPLED: 5/6/01
NEL SAMPLE ID: P0105016-03

<u>PARAMETER</u>	<u>RESULT</u>	<u>R. L.</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	6500	200.	2000	EPA 300.0	mg/L	5/10/01
Specific Conductance	16300	1.	1	SM 2510 B	µS/cm	5/10/01
Total Dissolved Solids	9640	300.	20	SM 2540 C	mg/L	5/10/01

Reporting Limit
Dilution Factor
ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL#4 Monitor Wells
ECT #: NA

CLIENT ID: M01-0154
DATE SAMPLED: 5/6/01
NEL SAMPLE ID: P0105016-04

Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>RESULT</u>	<u>R. L.</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	110	5.	50	EPA 300.0	mg/L	5/10/01
Specific Conductance	733	1.	1	SM 2510 B	µS/cm	5/10/01
Total Dissolved Solids	426	15.	1	SM 2540 C	mg/L	5/10/01

Reporting Limit
Dilution Factor
ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL#4 Monitor Wells
PROJECT #: NA
Inorganic Non-Metals
MATRIX: Aqueous

CLIENT ID: M01-0155
DATE SAMPLED: 5/6/01
NEL SAMPLE ID: P0105016-05

<u>PARAMETER</u>	<u>RESULT</u>	<u>R. L.</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	15	2.5	25	EPA 300.0	mg/L	5/10/01
Specific Conductance	198	1.	1	SM 2510 B	µS/cm	5/10/01
Total Dissolved Solids	115	15.	1	SM 2540 C	mg/L	5/10/01

Reporting Limit
Dilution Factor
ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL#4 Monitor Wells
PROJECT #: NA
Inorganic Non-Metals
MATRIX: Aqueous

CLIENT ID: M01-0156
DATE SAMPLED: 5/6/01
NEL SAMPLE ID: P0105016-06

<u>PARAMETER</u>	<u>RESULT</u>	<u>R. L.</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	2600	250.	2500	EPA 300.0	mg/L	5/10/01
Specific Conductance	9020	1.	1	SM 2510 B	μS/cm	5/10/01
Total Dissolved Solids	5240	150.	10	SM 2540 C	mg/L	5/10/01

Reporting Limit
Dilution Factor
ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL#4 Monitor Wells
ECT #: NA

CLIENT ID: M01-0157
DATE SAMPLED: 5/6/01
NEL SAMPLE ID: P0105016-07

Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>RESULT</u>	<u>R. L.</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	540	50.	500	EPA 300.0	mg/L	5/10/01
Specific Conductance	3030	1.	1	SM 2510 B	μS/cm	5/10/01
Total Dissolved Solids	1920	30.	2	SM 2540 C	mg/L	5/10/01

Reporting Limit
Dilution Factor
ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL#4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0158
DATE SAMPLED: 5/6/01
NEL SAMPLE ID: P0105016-08

Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>RESULT</u>	<u>R. L.</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	1000	50.	500	EPA 300.0	mg/L	5/10/01
Specific Conductance	3660	1.	1	SM 2510 B	μS/cm	5/10/01
Total Dissolved Solids	2360	30.	2	SM 2540 C	mg/L	5/10/01

Reporting Limit
Dilution Factor
ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL#4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010510CL-BLK

Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	ND	0.1	1	EPA 300.0	mg/L	5/10/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL#4 Monitor Wells
PROJECT #: NA
Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010510TDS-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Total Dissolved Solids	ND	15	1	SM 2540 C	mg/L	5/10/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.



5/15/01

CHAIN OF CUSTODY RECORD
Los Vegas Lead

PO103016

Page 1 of 1

PROJECT NUMBER		PROJECT NAME		TOTAL NUMBER OF CONTAINERS		COMPOSITE OR GRAB		REQUESTED ANALYSIS		CONTRACT LABORATORY	
SAMPLERS: (Signature)		DATE: 5/14/01									
LAB ID	DATE	TIME	MATRIX	SAMPLE NUMBER						REMARKS	
01	5/14/01	0935	H ₂ O	M01-0147							
02	5/16/01	0800	H ₂ O	M01-0152							
03	5/16/01	0800	H ₂ O	M01-0153							
04	5/16/01	0815	H ₂ O	M01-0154							
05	5/16/01	0830	H ₂ O	M01-0155							
06	5/16/01	0934	H ₂ O	M01-0156							
07	5/16/01	0959	H ₂ O	M01-0157							
08	5/16/01	1035	H ₂ O	M01-0158							
Custody Seal Intact: Y N (None) Temp: 4°C Condition when received: Poor (Good)											
RELINQUISHED BY: (Signature)		DATE/TIME		RECEIVED BY: (Signature)		DATE/TIME		RELINQUISHED BY: (Signature)		DATE/TIME	
[Signature]		5/16/01 1100		[Signature]		5/16/01 1100		[Signature]		5/16/01 1100	
RELINQUISHED BY: (Signature)		DATE/TIME		RECEIVED BY: (Signature)		DATE/TIME		RELINQUISHED BY: (Signature)		DATE/TIME	
[Signature]				[Signature]				[Signature]			
REQUESTED TURNAROUND TIME: ☐ ROUTINE ☐ RUSH				SAMPLE RECEIPT REMARKS				RESULTS & INVOICES TO:			
CARRIER CO.								LABORATORY SERVICES EL PASO CORPORATION 8645 RAILROAD DRIVE EL PASO, TEXAS 79904			
BILL NO.:				CHARGE CODE				915-587-3729 FAX: 915-587-3835			

NEL LABORATORIES

Reno • Las Vegas • Boise
Phoenix • Sacramento

Las Vegas Division
4208 Arcata Way, Suite A • Las Vegas, Nevada 89030
702-657-1010 • Fax: 702-657-1577
1-888-368-3282

CLIENT: El Paso Natural Gas Company
8645 Railroad Drive
El Paso, TX 79904
ATTN: Darrell Campbell

PROJECT NAME: Jal #4 M.W.'s
PROJECT NUMBER: NA

NEL ORDER ID: P0105015

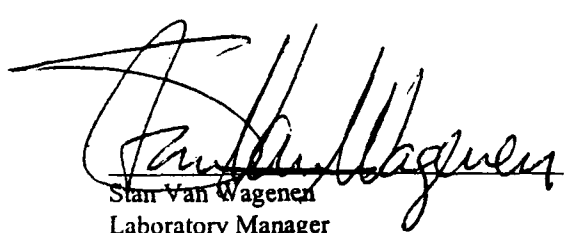
Attached are the analytical results for samples in support of the above referenced project.

Samples submitted for this project were not sampled by NEL Laboratories. Samples were received by NEL in good condition, under chain of custody on 5/8/01.

Should you have any questions or comments, please feel free to contact our Client Services department at (602) 437-0099.

Some results have been flagged as follows:

Hr - Sample was received beyond holding time for this parameter.


Stan Van Wageningen
Laboratory Manager

5/30/01
Date

CERTIFICATIONS:

	Reno	Las Vegas	S. California
Arizona	AZ0520	AZ0518	AZ0605
California	1707	2002	2264
US Army Corps of Engineers	Certified	Certified	

	Reno	Las Vegas	S. California
Idaho	Certified	Certified	
Montana	Certified	Certified	
Nevada	NV033	NV052	CA084
L.A.C.S.D.			10228

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.'s
PROJECT #: NA

CLIENT ID: M01-0159
DATE SAMPLED: 5/7/01
NEL SAMPLE ID: P0105015-01

MATRIX: Cations by EPA 6010A
Aqueous

ANALYST: RAA - Reno Division

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	47	0.5 mg/L	1	EPA 6010	5/10/01	5/10/01
Magnesium	16	0.5 mg/L	1	EPA 6010	5/10/01	5/10/01
Potassium	4.6	2. mg/L	1	EPA 6010	5/10/01	5/10/01
Silica	33	1. mg/L	1	SM 4500Si-D	5/10/01	5/10/01
Sodium	88	0.5 mg/L	1	EPA 6010	5/10/01	5/10/01

Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.'s
PROJECT #: NA

CLIENT ID: M01-0160
DATE SAMPLED: 5/7/01
NEL SAMPLE ID: P0105015-02

ANALYSIS: Cations by EPA 6010A
MATRIX: Aqueous

ANALYST: RAA - Reno Division

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	42	0.5 mg/L	1	EPA 6010	5/10/01	5/10/01
Magnesium	14	0.5 mg/L	1	EPA 6010	5/10/01	5/10/01
Potassium	5.8	2. mg/L	1	EPA 6010	5/10/01	5/10/01
Silica	32	1. mg/L	1	SM 4500Si-D	5/10/01	5/10/01
Sodium	80	0.5 mg/L	1	EPA 6010	5/10/01	5/10/01

Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.'s
PROJECT #: NA

CLIENT ID: M01-0161
DATE SAMPLED: 5/7/01
NEL SAMPLE ID: P0105015-03

Cations by EPA 6010A
MATRIX: Aqueous

ANALYST: RAA - Reno Division

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	42	0.5 mg/L	1	EPA 6010	5/10/01	5/10/01
Magnesium	14	0.5 mg/L	1	EPA 6010	5/10/01	5/10/01
Potassium	6.2	2. mg/L	1	EPA 6010	5/10/01	5/10/01
Silica	32	1. mg/L	1	SM 4500Si-D	5/10/01	5/10/01
Sodium	81	0.5 mg/L	1	EPA 6010	5/10/01	5/10/01

Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.'s
PROJECT #: NA

CLIENT ID: M01-0162
DATE SAMPLED: 5/7/01
NEL SAMPLE ID: P0105015-04

Cations by EPA 6010A
MATRIX: Aqueous

ANALYST: RAA - Reno Division

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	34	0.5 mg/L	1	EPA 6010	5/10/01	5/10/01
Magnesium	11	0.5 mg/L	1	EPA 6010	5/10/01	5/10/01
Potassium	5.5	2. mg/L	1	EPA 6010	5/10/01	5/10/01
Silica	21	1. mg/L	1	SM 4500Si-D	5/10/01	5/10/01
Sodium	93	0.5 mg/L	1	EPA 6010	5/10/01	5/10/01

1 Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.'s
PROJECT #: NA

CLIENT ID: M01-0163
DATE SAMPLED: 5/7/01
NEL SAMPLE ID: P0105015-05

 MATRILX: Cations by EPA 6010A
Aqueous

ANALYST: RAA - Reno Division

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	ND	0.5 mg/L	1	EPA 6010	5/10/01	5/10/01
Magnesium	ND	0.5 mg/L	1	EPA 6010	5/10/01	5/10/01
Potassium	ND	2. mg/L	1	EPA 6010	5/10/01	5/10/01
Silica	11	1. mg/L	1	SM 4500Si-D	5/10/01	5/10/01
Sodium	140	0.5 mg/L	1	EPA 6010	5/10/01	5/10/01

 Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.'s
PROJECT #: NA

CLIENT ID: M01-0164
DATE SAMPLED: 5/7/01
NEL SAMPLE ID: P0105015-06

Cations by EPA 6010A
MATRIX: Aqueous

ANALYST: RAA - Reno Division

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	ND	0.5 mg/L	1	EPA 6010	5/10/01	5/10/01
Magnesium	ND	0.5 mg/L	1	EPA 6010	5/10/01	5/10/01
Potassium	ND	2. mg/L	1	EPA 6010	5/10/01	5/10/01
Silica	11	1. mg/L	1	SM 4500Si-D	5/10/01	5/10/01
Sodium	140	0.5 mg/L	1	EPA 6010	5/10/01	5/10/01

Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.'s
PROJECT #: NA

CLIENT ID: M01-0165
DATE SAMPLED: 5/7/01
NEL SAMPLE ID: P0105015-07

MATRIX: Cations by EPA 6010A
Aqueous

ANALYST: RAA - Reno Division

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	69	0.5 mg/L	1	EPA 6010	5/10/01	5/10/01
Magnesium	20	0.5 mg/L	1	EPA 6010	5/10/01	5/10/01
Potassium	4.8	2. mg/L	1	EPA 6010	5/10/01	5/10/01
Silica	34	1. mg/L	1	SM 4500Si-D	5/10/01	5/10/01
Sodium	65	0.5 mg/L	1	EPA 6010	5/10/01	5/10/01

Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.'s
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010510SI-BLK

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Silica	ND	1. mg/L	1	SM 4500Si-D	5/10/01	5/10/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.'s
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: P50151-2-BLK

Cations by EPA 6010A

<u>PARAMETER</u>	<u>RESULT</u> mg/L	<u>REPORTING</u> LIMIT	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	ND	0.5 mg/L	1	EPA 6010	5/10/01	5/10/01
Magnesium	ND	0.5 mg/L	1	EPA 6010	5/10/01	5/10/01
Potassium	ND	2. mg/L	1	EPA 6010	5/10/01	5/10/01
Sodium	ND	0.5 mg/L	1	EPA 6010	5/10/01	5/10/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.'s
TEST #:

CLIENT ID: M01-0159
DATE SAMPLED: 5/7/01
NEL SAMPLE ID: P0105015-01

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	180		1	SM 2320 B	mg/L	5/9/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	5/9/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	5/9/01
Alkalinity, Total as CaCO ₃	180	25.	1	SM 2320 B	mg/L	5/9/01
Bromide	0.34	0.2	1	EPA 300.0	mg/L	5/8/01
Chloride	57	10.	100	EPA 300.0	mg/L	5/9/01
Fluoride	1.3	0.4	1	SM 4500-F C	mg/L	5/8/01
Hardness, Total (as CaCO ₃)	180	2.	1	EPA 200.7	mg/L	5/10/01
Nitrate, as N	1.5	0.1	1	EPA 300.0	mg/L-N	5/8/01
pH	7.79	Hr 2.	1	EPA 150.1	pH Units	5/8/01
pH Temperature	26.6	1.	1	EPA 150.1	°C	5/8/01
Specific Conductance	685	1.	1	SM 2510 B	µS/cm	5/10/01
Total Dissolved Solids	444	15.	1	SM 2540 C	mg/L	5/10/01

Reporting Limit
D.F. - Dilution Factor
ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.'s
TEST: Inorganic Non-Metals
MATRIX: Aqueous

CLIENT ID: M01-0160
DATE SAMPLED: 5/7/01
NEL SAMPLE ID: P0105015-02

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	180		1	SM 2320 B	mg/L	5/9/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	5/9/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	5/9/01
Alkalinity, Total as CaCO ₃	180	25.	1	SM 2320 B	mg/L	5/9/01
Bromide	0.28	0.2	1	EPA 300.0	mg/L	5/8/01
Chloride	52	10.	100	EPA 300.0	mg/L	5/9/01
Fluoride	1.3	0.4	1	SM 4500-F C	mg/L	5/8/01
Hardness, Total (as CaCO ₃)	160	2.	1	EPA 200.7	mg/L	5/10/01
Nitrate, as N	0.99	0.1	1	EPA 300.0	mg/L-N	5/8/01
pH	7.81	2.	1	EPA 150.1	pH Units	5/8/01
pH Temperature	26.0	1.	1	EPA 150.1	°C	5/8/01
Specific Conductance	629	1.	1	SM 2510 B	µS/cm	5/10/01
Total Dissolved Solids	416	15.	1	SM 2540 C	mg/L	5/10/01

Reporting Limit
D.F. - Dilution Factor
ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.'s
TEST CT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

CLIENT ID: M01-0161
DATE SAMPLED: 5/7/01
NEL SAMPLE ID: P0105015-03

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	180		1	SM 2320 B	mg/L	5/9/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	5/9/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	5/9/01
Alkalinity, Total as CaCO ₃	180	25.	1	SM 2320 B	mg/L	5/9/01
Bromide	0.31	0.2	1	EPA 300.0	mg/L	5/8/01
Chloride	46	10.	100	EPA 300.0	mg/L	5/9/01
Fluoride	1.3	0.4	1	SM 4500-F C	mg/L	5/8/01
Hardness, Total (as CaCO ₃)	160	2.	1	EPA 200.7	mg/L	5/10/01
Nitrate, as N	1.0	0.1	1	EPA 300.0	mg/L-N	5/8/01
pH	7.84	Hr 2.	1	EPA 150.1	pH Units	5/8/01
pH Temperature	25.8	1.	1	EPA 150.1	°C	5/8/01
Specific Conductance	628	1.	1	SM 2510 B	µS/cm	5/10/01
Total Dissolved Solids	396	15.	1	SM 2540 C	mg/L	5/10/01

Reporting Limit
D.F. - Dilution Factor
ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.'s
TEST #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

CLIENT ID: M01-0162
DATE SAMPLED: 5/7/01
NEL SAMPLE ID: P0105015-04

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	150		1	SM 2320 B	mg/L	5/9/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	5/9/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	5/9/01
Alkalinity, Total as CaCO ₃	150	25.	1	SM 2320 B	mg/L	5/9/01
Bromide	0.60	0.2	1	EPA 300.0	mg/L	5/8/01
Chloride	130	10.	100	EPA 300.0	mg/L	5/9/01
Fluoride	1.8	0.4	1	SM 4500-F C	mg/L	5/8/01
Hardness, Total (as CaCO ₃)	130	2.	1	EPA 200.7	mg/L	5/10/01
Nitrate, as N	ND	0.1	1	EPA 300.0	mg/L-N	5/8/01
pH	8.19	Hr 2.	1	EPA 150.1	pH Units	5/8/01
pH Temperature	25.6	1.	1	EPA 150.1	°C	5/8/01
Specific Conductance	724	1.	1	SM 2510 B	µS/cm	5/10/01
Total Dissolved Solids	426	15.	1	SM 2540 C	mg/L	5/10/01

Reporting Limit
D.F. - Dilution Factor
ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
 PROJECT ID: Jal #4 M.W.'s
 PROJECT #: NA
 TEST: Inorganic Non-Metals
 MATRIX: Aqueous

CLIENT ID: M01-0163
 DATE SAMPLED: 5/7/01
 NEL SAMPLE ID: P0105015-05

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	240		1	SM 2320 B	mg/L	5/9/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	5/9/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	5/9/01
Alkalinity, Total as CaCO ₃	240	25.	1	SM 2320 B	mg/L	5/9/01
Bromide	0.17	0.2	1	EPA 300.0	mg/L	5/8/01
Chloride	65	10.	100	EPA 300.0	mg/L	5/9/01
Fluoride	ND	0.4	1	SM 4500-F C	mg/L	5/8/01
Hardness, Total (as CaCO ₃)	ND	2.	1	EPA 200.7	mg/L	5/10/01
Nitrate, as N	0.62	0.1	1	EPA 300.0	mg/L-N	5/8/01
pH	8.24	2.	1	EPA 150.1	pH Units	5/8/01
pH Temperature	25.4	1.	1	EPA 150.1	°C	5/8/01
Specific Conductance	578	1.	1	SM 2510 B	µS/cm	5/10/01
Total Dissolved Solids	327	15.	1	SM 2540 C	mg/L	5/10/01

Reporting Limit
 D.F. - Dilution Factor
 ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.'s
CT #: NA

CLIENT ID: M01-0164
DATE SAMPLED: 5/7/01
NEL SAMPLE ID: P0105015-06

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	240		1	SM 2320 B	mg/L	5/9/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	5/9/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	5/9/01
Alkalinity, Total as CaCO ₃	240	25.	1	SM 2320 B	mg/L	5/9/01
Bromide	0.17	0.2	1	EPA 300.0	mg/L	5/8/01
Chloride	84	10.	100	EPA 300.0	mg/L	5/9/01
Fluoride	ND	0.4	1	SM 4500-F C	mg/L	5/8/01
Hardness, Total (as CaCO ₃)	ND	2.	1	EPA 200.7	mg/L	5/10/01
Nitrate, as N	0.63	0.1	1	EPA 300.0	mg/L-N	5/8/01
pH	8.19	2.	1	EPA 150.1	pH Units	5/8/01
pH Temperature	25.2	1.	1	EPA 150.1	°C	5/8/01
Specific Conductance	577	1.	1	SM 2510 B	µS/cm	5/10/01
Total Dissolved Solids	342	15.	1	SM 2540 C	mg/L	5/10/01

Reporting Limit
D.F. - Dilution Factor
ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.'s
CT #: NA

CLIENT ID: M01-0165
DATE SAMPLED: 5/7/01
NEL SAMPLE ID: P0105015-07

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	160		1	SM 2320 B	mg/L	5/9/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	5/9/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	5/9/01
Alkalinity, Total as CaCO ₃	160	25.	1	SM 2320 B	mg/L	5/9/01
Bromide	0.61	0.2	1	EPA 300.0	mg/L	5/8/01
Chloride	140	10.	100	EPA 300.0	mg/L	5/9/01
Fluoride	1.0	0.4	1	SM 4500-F C	mg/L	5/8/01
Hardness, Total (as CaCO ₃)	250	2.	1	EPA 200.7	mg/L	5/10/01
Nitrate, as N	0.82	0.1	1	EPA 300.0	mg/L-N	5/8/01
pH	7.70	2.	1	EPA 150.1	pH Units	5/8/01
pH Temperature	24.9	1.	1	EPA 150.1	°C	5/8/01
Specific Conductance	781	1.	1	SM 2510 B	µS/cm	5/10/01
Total Dissolved Solids	481	15.	1	SM 2540 C	mg/L	5/10/01

Reporting Limit
D.F. - Dilution Factor
ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.'s
CT #: NA
Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010508BR-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Bromide	ND	0.2	1	EPA 300.0	mg/L	5/8/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.'s
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010508NO3-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Nitrate, as N	ND	0.1	1	EPA 300.0	mg/L-N	5/8/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.'s
PROJECT #: NA
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010509ALK1-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Alkalinity - Bicarbonate as CaC	ND		1	SM 2320 B	mg/L	5/9/01
Alkalinity - Carbonate as CaCO	ND		1	SM 2320 B	mg/L	5/9/01
Alkalinity - Hydroxide as CaCO	ND		1	SM 2320 B	mg/L	5/9/01
Alkalinity, Total as CaCO ₃	ND	25	1	SM 2320 B	mg/L	5/9/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.'s
TEST #: NA
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010509CL-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	ND	0.1	1	EPA 300.0	mg/L	5/9/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.'s
PROJECT #: NA
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010510TDS-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Total Dissolved Solids	ND	15	1	SM 2540 C	mg/L	5/10/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.'s
SCT #: NA

CLIENT ID: M01-0159
DATE SAMPLED: 5/7/01
NEL SAMPLE ID: P0105015-01

TEST: BTEX by EPA SW846 Method 8021B, Dec. 1996

METHOD: EPA 8021B
MATRIX: Aqueous
DILUTION: 1

ANALYST: JQT - Las Vegas Division
EXTRACTED: NA
ANALYZED: 5/10/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
MTBE	ND	5. µg/L
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	95	69 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.'s
PROJECT #: NA

CLIENT ID: M01-0160
DATE SAMPLED: 5/7/01
NEL SAMPLE ID: P0105015-02

TEST: BTEX by EPA SW846 Method 8021B, Dec. 1996

METHOD: EPA 8021B

ANALYST: JQT - Las Vegas Division

MATRIX: Aqueous

EXTRACTED: NA

DILUTION: 1

ANALYZED: 5/10/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
MTBE	ND	5. µg/L
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	94	69 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.'s
PROJECT #: NA

CLIENT ID: M01-0161
DATE SAMPLED: 5/7/01
NEL SAMPLE ID: P0105015-03

TEST: BTEX by EPA SW846 Method 8021B, Dec. 1996

METHOD: EPA 8021B
MATRIX: Aqueous
DILUTION: 1

ANALYST: JQT - Las Vegas Division
EXTRACTED: NA
ANALYZED: 5/10/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
MTBE	ND	5. µg/L
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	93	69 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.'s
PROJECT #: NA

CLIENT ID: M01-0162
DATE SAMPLED: 5/7/01
NEL SAMPLE ID: P0105015-04

TEST: BTEX by EPA SW846 Method 8021B, Dec. 1996
METHOD: EPA 8021B
MATRIX: Aqueous
DILUTION: 1

ANALYST: JQT - Las Vegas Division
EXTRACTED: NA
ANALYZED: 5/10/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
MTBE	ND	5. µg/L
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	5.2 µg/L	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	92	69 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.'s
PROJECT #: NA

CLIENT ID: M01-0163
DATE SAMPLED: 5/7/01
NEL SAMPLE ID: P0105015-05

TEST: BTEX by EPA SW846 Method 8021B, Dec. 1996

METHOD: EPA 8021B

ANALYST: JQT - Las Vegas Division

MATRIX: Aqueous

EXTRACTED: NA

DILUTION: 1

ANALYZED: 5/10/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
MTBE	ND	5. µg/L
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	95	69 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.'s
ECT #: NA

CLIENT ID: M01-0164
DATE SAMPLED: 5/7/01
NEL SAMPLE ID: P0105015-06

TEST: BTEX by EPA SW846 Method 8021B, Dec. 1996

METHOD: EPA 8021B
MATRIX: Aqueous
DILUTION: 1

ANALYST: JQT - Las Vegas Division
EXTRACTED: NA
ANALYZED: 5/10/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
MTBE	ND	5. µg/L
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	93	69 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.'s
ECT #: NA

CLIENT ID: M01-0165
DATE SAMPLED: 5/7/01
NEL SAMPLE ID: P0105015-07

TEST: BTEX by EPA SW846 Method 8021B, Dec. 1996

METHOD: EPA 8021B
MATRIX: Aqueous
DILUTION: 1

ANALYST: JQT - Las Vegas Division
EXTRACTED: NA
ANALYZED: 5/10/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
MTBE	ND	5. µg/L
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	95	69 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.'s
TEST #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010510BTEX-BLK

TEST: BTEX by EPA SW846 Method 8021B, Dec. 1996

METHOD: EPA 8021B

MATRIX: Aqueous

ANALYST: JQT - Las Vegas Division

EXTRACTED: NA

ANALYZED: 5/10/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
MTBE	ND	5. µg/L
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	91	69 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.'s
PROJECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Bromide	010508BR-LCS	100	92	92	90 - 110	
Bromide	010508BR-LCSD	100	93	93	90 - 110	1.1

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.'s
PROJECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Fluoride	010508F-LCS	1	0.96	96	84 - 109	
Fluoride	010508F-LCSD	1	1.01	101	84 - 109	5.1
Fluoride	P0105011-01-MS	1	2.6	100	71 - 126	
Fluoride	P0105011-01-MSD	1	2.7	110	71 - 126	9.5

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.'s
PROJECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Nitrate, as N	010508NO3-LCS	100	92	92	90 - 110	
Nitrate, as N	010508NO3-LCSD	100	91	91	90 - 110	1.1
Nitrate, as N	L0105060-04-MS	100	94	94	80 - 120	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.'s
PROJECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
7.00 Buffer	010508PH-LCS	7	7	100	99 - 101	
7.00 Buffer	010508PH-LCSD	7	7	100	99 - 101	0.

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
FACILITY ID: Jal #4 M.W.'s
CT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Alkalinity, Total	010509ALK1-LCS	125	138	110	90 - 110	
Alkalinity, Total	010509ALK1-LCSD	125	136	109	90 - 110	1.5

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.'s
PROJECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Chloride	010509CL-LCS	100	106	106	90 - 110	
Chloride	010509CL-LCSD	100	108	108	90 - 110	1.9
Chloride	P0105008-01-MS	100	169	102	80 - 120	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
 PROJECT ID: Jal #4 M.W.'s
 PROJECT #: NA
 TEST: BTEX by EPA SW846 Method 8021B, Dec. 1996
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Benzene	010510BTEX-LCS	50	52.03	104	85 - 115	
Benzene	010510BTEX-LCSD	50	49.671	99	80 - 120	4.6
Benzene	P0105015-01-MS	50	50.612	101	70 - 130	
Benzene	P0105015-01-MSD	50	49.233	98	70 - 130	2.8
Toluene	010510BTEX-LCS	50	53.481	107	85 - 115	
Toluene	010510BTEX-LCSD	50	48.882	98	80 - 120	9.
Toluene	P0105015-01-MS	50	51.343	103	70 - 130	
Toluene	P0105015-01-MSD	50	49.135	98	70 - 130	4.4
Ethylbenzene	010510BTEX-LCS	50	51.958	104	85 - 115	
Ethylbenzene	010510BTEX-LCSD	50	50.906	102	80 - 120	2.
Ethylbenzene	P0105015-01-MS	50	49.761	100	70 - 130	
Ethylbenzene	P0105015-01-MSD	50	47.838	96	70 - 130	3.9
Total Xylenes	010510BTEX-LCS	150	163.049	109	85 - 115	
Total Xylenes	010510BTEX-LCSD	150	157.479	105	80 - 120	3.5
Total Xylenes	P0105015-01-MS	150	154.765	103	70 - 130	
Total Xylenes	P0105015-01-MSD	150	150.356	100	70 - 130	2.9

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
F ECT ID: Jal #4 M.W.'s
CT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Specific Conductance	010510COND-LCS	1412	1421	101	95 - 105	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.'s
PROJECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Total Dissolved Solids	010510TDS-LCS	1000	1027	103	80 - 120	

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
 PROJECT ID: Jal #4 M.W.'s
 CT #: NA
 TEST: Metals
 MATRIX: Aqueous

<u>PARAMETER</u>	<u>NEL Sample ID</u>	<u>Spike Amount</u>	<u>Spike Result</u>	<u>Percent Recovery</u>	<u>Acceptable Range</u>	<u>RPD</u>
Calcium	P5015I-2-LCS	20	19.9	100	85 - 115	
Calcium	P0105015-01-MS	20	69	110	75 - 125	
Calcium	P0105015-01-MSD	20	66.2	96	75 - 125	13.6
Magnesium	P5015I-2-LCS	20	19.5	98	85 - 115	
Magnesium	P0105015-01-MS	20	36.1	101	75 - 125	
Magnesium	P0105015-01-MSD	20	35.4	97	75 - 125	3.5
Potassium	P5015I-2-LCS	20	19.3	97	85 - 115	
Potassium	P0105015-01-MS	20	24.6	100	75 - 125	
Potassium	P0105015-01-MSD	20	24.9	102	75 - 125	1.5
Sodium	P5015I-2-LCS	20	19.9	100	85 - 115	
Sodium	P0105015-01-MS	20	112	120	75 - 125	
Sodium	P0105015-01-MSD	20	106	90	75 - 125	28.6

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.



Precision Analytical Laboratories, Inc.

A Subsidiary of Aerotech Laboratories, Inc.

May 29, 2001

Ephraim Morris
NEL Laboratories
3021 S. 35th Street
Suite B-6
Phoenix, AZ 85034
TEL: (602) 437-0099
FAX (602) 437-2225

RE: P0105015

Order No.: 0105333

Dear Ephraim Morris:

Precision Analytical Laboratories, Inc. received 7 samples on 5/9/2001 for the analyses presented in the following report.

This report includes the following information:

- Case Narrative. The case narrative contains a listing of common method references, data qualifiers, and any comments that may be needed regarding the analytical results.
- Analytical Report. Analysis results are reported with the compound name first, followed by the test result, report limit (Limit), any required data qualifier (Qual), units, dilution factor (DF), and date analyzed.
- QC Summary Report. This section includes quality control results for some or all of the following: method blanks, sample duplicates, sample matrix spikes, sample matrix spike duplicates, laboratory control spikes, and laboratory control spike duplicates.

If you have any questions regarding these test results, please do not hesitate to call.

Sincerely,

Carlene McCutcheon
Project Manager

CC:



Precision Analytical Laboratories, Inc.

Date: 29-May-01

A Subsidiary of Aerotech Laboratories, Inc.

CLIENT:

NEL Laboratories

Project:

P0105015

Lab Order:

0105333

CASE NARRATIVE

Data Qualifiers

Listed below are data qualifiers which may be used in your analytical report to explain any analytical or quality control issues. If one or more of the following data qualifiers is associated with your analytical or quality control data it will be noted in your report under the column header "QUAL". Any quality control deficiencies that cannot be adequately described by these qualifiers will be addressed in the analytical comments section of this case narrative.

- B1 Target analyte detected in method blank at or above the method reporting limit.
- D1 Sample required dilution due to matrix interference.
- D2 Sample required dilution due to high concentration of target analyte.
- D3 Sample dilution required due to insufficient sample.
- D4 Minimum reporting level (MRL) adjusted to reflect sample amount received and analyzed.
- E1 Concentration estimated. Analyte exceeded calibration range. Reanalysis not possible due to insufficient sample.
- E2 Concentration estimated. Analyte exceeded calibration range. Reanalysis not performed due to sample matrix.
- E3 Concentration estimated. Analyte exceeded calibration range. Reanalysis not performed due to holding time requirements.
- E4 Concentration estimated. Analyte was detected below laboratory minimum reporting level (MRL).
- E6 Concentration estimated. Internal standard recoveries did not meet method acceptance criteria.
- E7 Concentration estimated. Internal standard recoveries did not meet laboratory acceptance criteria.
- H1 Sample analysis performed past holding time. See case narrative.
- H2 Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
- H3 Sample was received and analyzed past holding time.
- H4 Sample was extracted past required extraction holding time, but analyzed within analysis holding time. See case narrative.
- K1 The sample dilutions set-up for the BOD analysis did not meet the oxygen depletion criteria of at least 2 mg/L. The reported result is an estimated value.
- K2 The sample dilutions set up for the BOD analysis failed to meet the criteria of a residual dissolved oxygen of at least 1 mg/L. The reported result is estimated.
- L1 The associated blank spike recovery was above laboratory acceptance limits. See case narrative.
- L2 The associated blank spike recovery was below laboratory acceptance limits. See case narrative.



Precision Analytical Laboratories, Inc.

A Subsidiary of PPA Tech Laboratories, Inc.

Project: P0105015

Lab Order: 0105333

CASE NARRATIVE

- M1 Matrix spike recovery was high, the method control sample recovery was acceptable.
- M2 Matrix spike recovery was low, the method control sample recovery was acceptable.
- M3 The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
- M4 The analysis of the spiked sample required a dilution such that the spike concentration was diluted below the reporting limit. The method control sample recovery was acceptable.
- M5 Analyte concentration was determined by the method of standard addition (MSA).
- N1 See case narrative.
- Q1 Sample integrity was not maintained. See case narrative.
- Q2 Sample received with head space. ☐
- Q3 Sample received with improper chemical preservation.
- Q5 Sample received without chemical preservation, but preserved by the laboratory.
- Q6 Sample was received above recommended temperature.
- Q7 Sample inadequately dechlorinated.
- Q8 Insufficient sample received to meet method QC requirements. QC requirements satisfy ADEQ policies 0154 and 0155.
- Q10 Sample received in inappropriate sample container.
- Q11 Sample is heterogeneous. Sample homogeneity could not be readily achieved using routine laboratory practices.
- R2 RPD exceeded the laboratory control limit. See case narrative.
- R3 Sample RPD between the primary and confirmatory analysis exceeded 40%. Per EPA Method 8000B, the higher value was reported.
- R4 RPD exceeded the method control limit. Recovery met acceptance criteria.
- R5 RPD exceeded the laboratory control limit. Recovery met acceptance criteria.
- S2 Surrogate recovery was above laboratory and method acceptance limits.
- S4 Surrogate recovery was above laboratory and method acceptance limits. No target analytes were detected in the sample.
- S6 Surrogate recovery was below laboratory and method acceptance limits. Reextraction and/or reanalysis confirms low recovery caused by matrix effect.
- S7 Surrogate recovery was below laboratory and method acceptance limits. Unable to confirm matrix effect.
- S9 The analysis of the sample required a dilution such that the surrogate concentration was diluted below the laboratory acceptance criteria. The method control sample recovery was acceptable.
- S10 Surrogate recovery was above laboratory and method acceptance limits. See case narrative (N1).
- T2 Cited ADHS licensed method does not contain this analyte as part of method



Precision Analytical Laboratories, Inc.

Date: 29-May-01

A Subsidiary of Aerotech Laboratories, Inc.

CLIENT: NEL Laboratories
Lab Order: 0105333
Project: P0105015
Lab ID: 0105333-01A

Client Sample ID: M01-0159
Tag Number:
Collection Date: 5/7/2001 7:45:00 AM
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY		E300				Analyst: LH
Sulfate	110	10	D2	mg/L	5	5/25/2001

Qualifiers:

ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

E - Value above quantitation range

* - Value exceeds Maximum Contaminant Level

/



Precision Analytical Laboratories, Inc.

Date: 29-May-01

A Subsidiary of Aerotech Laboratories, Inc.

CLIENT: NEL Laboratories
Lab Order: 0105333
Project: P0105015
Lab ID: 0105333-02A

Client Sample ID: M01-0160
Tag Number:
Collection Date: 5/7/2001 8:00:00 AM
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY		E300				Analyst: LH
Sulfate	84	10	D2	mg/L	5	5/25/2001

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range



Precision Analytical Laboratories, Inc.

A Subsidiary of NEE Laboratories, Inc.

Project:

P0105015

Lab Order:

0105333

CASE NARRATIVE

compound list.

- T4 Tentatively identified compound. Concentration is estimated and based on the closest internal standard.
- V1 CCV recovery was above method acceptance limits. This target analyte was not detected in the sample.
- V2 CCV recovery was above method acceptance limits. This target analyte was detected in the sample. The sample could not be reanalyzed due to insufficient sample.
- V5 CCV recovery after a group of samples was above acceptance limits. This target analyte was not detected in the sample. Acceptable per EPA Method 8000B.

Samples were analyzed using methods outlined in references such as:

Standard Methods for the Examination of Water and Wastewater, 18th Edition, 1992 and 19th Edition, 1995.

Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Revised March 1983

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition.

40 CFR, Part 136, Revised 1995. Appendix A to Part 136- Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater.

NIOSH Manual of Analytical Methods, Fourth Edition, 1994.

Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition, 1999.

Precision Analytical Laboratories, Inc (PAL) holds the following certifications:

Arizona (certification no. AZ0610) and California (I-2410).

PAL- Tucson laboratory Arizona certification number: AZ0609.

PAL- North Phoenix laboratory Arizona certification number: AZ0611.

PAL participates in the AIHA Proficiency Analytical Testing (PAT) program for metals, solvents, and formaldehyde.

Analytical Comments:

All method blanks and laboratory control spikes met EPA method and/or laboratory quality control objectives for the analyses included in this report.



Precision Analytical Laboratories, Inc.

Date: 29-May-01

A Subsidiary of Aerotech Laboratories, Inc.

CLIENT: NEL Laboratories
Lab Order: 0105333
Project: P0105015
Lab ID: 0105333-03A

Client Sample ID: M01-0161
Tag Number:
Collection Date: 5/7/2001 8:00:00 AM
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY		E300				Analyst: LH
Sulfate	80	10	D2	mg/L	5	5/25/2001

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range



Precision Analytical Laboratories, Inc.

Date: 29-May-01

A Subsidiary of Aerotech Laboratories, Inc.

CLIENT: NEL Laboratories
Lab Order: 0105333
Project: P0105015
Lab ID: 0105333-04A

Client Sample ID: M01-0162
Tag Number:
Collection Date: 5/7/2001 8:10:00 AM
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY		E300				Analyst: LH
Sulfate	62	4.0	D2	mg/L	2	5/25/2001

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range



Precision Analytical Laboratories, Inc.

Date: 29-May-01

A Subsidiary of Aerotech Laboratories, Inc.

CLIENT: NEL Laboratories
Lab Order: 0105333
Project: P0105015
Lab ID: 0105333-05A

Client Sample ID: M01-0163
Tag Number:
Collection Date: 5/7/2001 8:15:00 AM
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY		E300				Analyst: LH
Sulfate	< 2.0	2.0		mg/L	1	5/26/2001

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range



Precision Analytical Laboratories, Inc.

Date: 29-May-01

A Subsidiary of Aerotech Laboratories, Inc.

CLIENT: NEL Laboratories
Lab Order: 0105333
Project: P0105015
Lab ID: 0105333-06A

Client Sample ID: M01-0164
Tag Number:
Collection Date: 5/7/2001 8:20:00 AM
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY		E300				Analyst: LH
Sulfate	< 2.0	2.0		mg/L	1	5/26/2001

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range



Precision Analytical Laboratories, Inc.

Date: 29-May-01

A Subsidiary of Aerotech Laboratories, Inc.

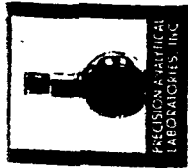
CLIENT: NEL Laboratories
Lab Order: 0105333
Project: P0105015
Lab ID: 0105333-07A

Client Sample ID: M01-0165
Tag Number:
Collection Date: 5/7/2001 8:30:00 AM
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY		E300				Analyst: LH
Sulfate	58	4.0	D2	mg/L	2	5/28/2001

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range



Precision Analytical Laboratories, Inc.

Date: 29-May-01

CLIENT: NEL Laboratories

Work Order: 0105333

Project: P0105015

QC SUMMARY REPORT

Method Blank

Sample ID	MB-R10397	Batch ID: R10397	Test Code: E300	Units: mg/L	Analysis Date 5/25/2001	Prep Date
Client ID:		Run ID: IC 1_010525A	SeqNo: 113613			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val
Sulfate		< 2.0	2			%RPD RPDLimit Qual
Sample ID	MB-R10404	Batch ID: R10404	Test Code: E300	Units: mg/L	Analysis Date 5/28/2001	Prep Date
Client ID:		Run ID: IC 1_010528A	SeqNo: 113848			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val
Sulfate		< 2.0	2			%RPD RPDLimit Qual

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank



Precision Analytical Laboratories, Inc.

Date: 29-May-01

CLIENT: NEL Laboratories

Work Order: 0105333

Project: P0105015

QC SUMMARY REPORT

Sample Duplicate

Sample ID	0105333-06A DUP	Batch ID: R10397	Test Code: E300	Units: mg/L	Analysis Date	5/25/2001	Prep Date					
Client ID:	M01-0164	Run ID:	IC 1_010525A	SeqNo:	113622							
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate		<2.0	2	0	0	0	0	0	0	0	20	

Sample ID	0105454-02A DUP	Batch ID: R10404	Test Code: E300	Units: mg/L	Analysis Date	5/28/2001	Prep Date					
Client ID:		Run ID:	IC 1_010528A	SeqNo:	113857							
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate		6.64	2	0	0	0	0	0	6.33	4.78	20	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

2



Precision Analytical Laboratories, Inc.

Date: 29-May-01

CLIENT: NEL Laboratories

Work Order: 0105333

Project: P0105015

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID	0105333-06A MS	Batch ID: R10397	Test Code: E300	Units: mg/L	Analysis Date	5/25/2001	Prep Date					
Client ID:	M01-0164	Run ID:	IC 1_010525A	SeqNo:	113623							
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate		20.94	2	20	0	105	80	120	0			

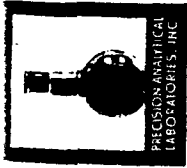
Sample ID	0105454-02A MS	Batch ID: R10404	Test Code: E300	Units: mg/L	Analysis Date	5/28/2001	Prep Date					
Client ID:		Run ID:	IC 1_010528A	SeqNo:	113858							
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate		27.22	2	20	6.33	104	80	120	0			

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

3



Precision Analytical Laboratories, Inc.

Date: 29-May-01

CLIENT: NEL Laboratories
Work Order: 0105333
Project: P0105015

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID	LCS-R10397	Batch ID: R10397	Test Code: E300	Units: mg/L	Analysis Date	5/25/2001	Prep Date
Client ID:		Run ID: IC 1_010525A			SeqNo:	113814	
Analyte		Result	PQL	SPK value	%REC	LowLimit	HighLimit
Sulfate		18.74	2	20	93.7	90	110
				SPK Ref Val	%RPD	RPDLimit	Qual
				0			0
Sample ID	LCS-R10404	Batch ID: R10404	Test Code: E300	Units: mg/L	Analysis Date	5/28/2001	Prep Date
Client ID:		Run ID: IC 1_010528A			SeqNo:	113849	
Analyte		Result	PQL	SPK value	%REC	LowLimit	HighLimit
Sulfate		18.49	2	20	92.4	90	110
				SPK Ref Val	%RPD	RPDLimit	Qual
				0			0

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits 4

NEL Work Order:

LAB COPY



P0105015

CHAIN OF CUSTODY RECORD
LOS VEGAS LEGAL

Page 1 of 1

PROJECT NUMBER		PROJECT NAME		TOTAL NUMBERS OF CONTAINERS		COMPOSITE OR GRAB		REQUESTED ANALYSIS				CONTRACT LABORATORY	
SAMPLERS: Signature		DATE		SAMPLE NUMBER				RTX 8021 RT					
LAB ID	DATE	TIME	MATRIX					Attached	TS	SP	CD	REMARKS	
01	5/10/01	0745	H2O	M01-01159	5			X	X	X	X	Received pH's out of Hold	
02	5/10/01	0800	H2O	M01-01160	5			X	X	X	X	Informed Darrell that pH are out of	
03	5/10/01	0800	H2O	M01-01161	5			X	X	X	X	Hold. Run Anyway. per client 5/9/01	
04	5/10/01	0810	H2O	M01-01162	5			X	X	X	X		
05	5/10/01	0815	H2O	M01-01163	5			X	X	X	X		
06	5/10/01	0820	H2O	M01-01164	5			X	X	X	X		
07	5/10/01	0830	H2O	M01-01165	5			X	X	X	X		
Received 100% M01-01164													
Custody Seal Intact Y N None Temp: 60 Condition when received: Poor Good													
RELINQUISHED BY: (Signature)		DATE/TIME		RECEIVED BY: (Signature)		DATE/TIME		RELINQUISHED BY: (Signature)		DATE/TIME		RECEIVED BY: (Signature)	
[Signature]		5/10/01 1100		VIA FedEx		5/8 0825		[Signature]		5/8 0825		[Signature]	
RELINQUISHED BY: (Signature)		DATE/TIME		RECEIVED BY: (Signature)		DATE/TIME		RELINQUISHED BY: (Signature)		DATE/TIME		RECEIVED BY: (Signature)	
[Signature]													
REQUESTED TURNAROUND TIME:				SAMPLE RECEIPT REMARKS				RESULTS & INVOICES TO:					
ROUTINE ☐ RUSH ☐								LABORATORY SERVICES EL PASO CORPORATION 8645 RAILROAD DRIVE EL PASO, TEXAS 79904					
CARRIER CO.				CHARGE CODE				915-587-3729 FAX 915-587-3835					
BILL NO:								08-0566 (Rev. 2001)					



SAMPLE KEY

SAMPLE NUMBER: M01-0403 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: EMP #3 before purging wells
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 10:55 SAMPLE DATE: 08/01/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0404 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Bailer blank before sampling
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 11:00 SAMPLE DATE: 08/01/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0405 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor well ACW #12
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 12:40 SAMPLE DATE: 08/01/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0406 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor well ACW #13
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 12:40 SAMPLE DATE: 08/01/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0407 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor well ACW #13 Dup
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 12:40 SAMPLE DATE: 08/01/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0408 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: production well OXY
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 15:30 SAMPLE DATE: 08/01/2001
BY: Brisbin

ORIGINAL

SAMPLE KEY

SAMPLE NUMBER: M01-0409 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: production well DOOMS .
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 15:50 SAMPLE DATE: 08/01/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0410 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor Well # ACW 17
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 09:00 SAMPLE DATE: 08/02/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0411 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor Well # ACW 15
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 10:39 SAMPLE DATE: 08/02/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0412 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Bailer after sampling wells
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 10:50 SAMPLE DATE: 08/02/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0413 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: EMP #3 after purging wells
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 11:00 SAMPLE DATE: 08/02/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0414 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Field Blank
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 12:00 SAMPLE DATE: 08/02/2001
BY: Brisbin

Page 1

NEL LABORATORIES

Reno • Las Vegas
Phoenix • Boise

Las Vegas Division
4208 Arcata Way, Suite A • Las Vegas, Nevada 89030
702-657-1010 • Fax: 702-657-1577
1-888-368-3282

CLIENT: El Paso Natural Gas Company
8645 Railroad Drive
El Paso, TX 79904
ATTN: Darrell Campbell

PROJECT NAME: JAL #4
PROJECT NUMBER: NA

NEL ORDER ID: P0108005

Attached are the analytical results for samples in support of the above referenced project.

Samples submitted for this project were not sampled by NEL Laboratories. Samples were received by NEL in good condition, under chain of custody on 8/2/01.

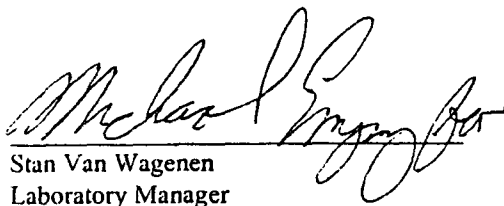
Should you have any questions or comments, please feel free to contact our Client Services department at (602) 437-0099.

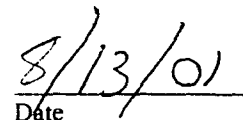
Some results have been flagged as follows:

Jc - This concentration may be biased because the continuing calibration verification (CCV) standard did not meet QC requirements for this analyte. However, overall CCV standard recoveries meet method requirements and analytical results are in control.

Some QA results have been flagged as follows:

Jc - This concentration may be biased because the continuing calibration verification (CCV) standard did not meet QC requirements for this analyte. However, overall CCV standard recoveries meet method requirements and analytical results are in control.


Stan Van Wagenen
Laboratory Manager


Date

CERTIFICATIONS:

	Reno	Las Vegas	S. California
Arizona	AZ0520	AZ0518	AZ0605
California	1707	2002	2264
US Army Corps of Engineers	Certified	Certified	

	Reno	Las Vegas	S. California
Idaho	Certified	Certified	
Montana	Certified	Certified	
Nevada	NV033	NV052	CA084
L.A.C.S.D.			10228

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
ECT #: NA

CLIENT ID: M01-0403
DATE SAMPLED: 8/1/01
NEL SAMPLE ID: P0108005-01

Cations by EPA 6010A
MATRIX: Aqueous

ANALYST: JY - Reno Division

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	35	0.5 mg/L	1	EPA 6010	8/3/01	8/8/01
Magnesium	9.7	0.5 mg/L	1	EPA 6010	8/3/01	8/8/01
Potassium	5.3	2. mg/L	1	EPA 6010	8/3/01	8/8/01
Silica	26	1. mg/L	1	SM 4500Si-D	8/6/01	8/6/01
Sodium	75	0.5 mg/L	1	EPA 6010	8/3/01	8/8/01

Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
ECT #: NA

CLIENT ID: M01-0404
DATE SAMPLED: 8/1/01
NEL SAMPLE ID: P0108005-02

Cations by EPA 6010A
MATRIX: Aqueous

ANALYST: JY - Reno Division

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	ND	0.5 mg/L	1	EPA 6010	8/3/01	8/8/01
Magnesium	ND	0.5 mg/L	1	EPA 6010	8/3/01	8/8/01
Potassium	ND	2. mg/L	1	EPA 6010	8/3/01	8/8/01
Silica	ND	1. mg/L	1	SM 4500Si-D	8/6/01	8/6/01
Sodium	ND	0.5 mg/L	1	EPA 6010	8/3/01	8/8/01

Dilution Factor
ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
ECT #: NA

CLIENT ID: M01-0405
DATE SAMPLED: 8/1/01
NEL SAMPLE ID: P0108005-03

Cations by EPA 6010A
MATRIX: Aqueous

ANALYST: JY - Reno Division

<u>PARAMETER</u>	<u>RESULT</u> mg/L	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	180	0.5 mg/L	1	EPA 6010	8/3/01	8/8/01
Magnesium	64	0.5 mg/L	1	EPA 6010	8/3/01	8/8/01
Potassium	9.6	2. mg/L	1	EPA 6010	8/3/01	8/8/01
Silica	28	1. mg/L	1	SM 4500Si-D	8/6/01	8/6/01
Sodium	140	0.5 mg/L	1	EPA 6010	8/3/01	8/8/01

L Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0406
DATE SAMPLED: 8/1/01
NEL SAMPLE ID: P0108005-04

Cations by EPA 6010A
MATRIX: Aqueous

ANALYST: JY - Reno Division

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	46	0.5 mg/L	1	EPA 6010	8/3/01	8/8/01
Magnesium	16	0.5 mg/L	1	EPA 6010	8/3/01	8/8/01
Potassium	6.1	2. mg/L	1	EPA 6010	8/3/01	8/8/01
Silica	29	1. mg/L	1	SM 4500Si-D	8/6/01	8/6/01
Sodium	86	0.5 mg/L	1	EPA 6010	8/3/01	8/8/01

Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0407
DATE SAMPLED: 8/1/01
NEL SAMPLE ID: P0108005-05

Cations by EPA 6010A
MATRIX: Aqueous

ANALYST: JY - Reno Division

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	42	0.5 mg/L	1	EPA 6010	8/3/01	8/8/01
Magnesium	14	0.5 mg/L	1	EPA 6010	8/3/01	8/8/01
Potassium	6.0	2. mg/L	1	EPA 6010	8/3/01	8/8/01
Silica	30	1. mg/L	1	SM 4500Si-D	8/6/01	8/6/01
Sodium	80	0.5 mg/L	1	EPA 6010	8/3/01	8/8/01

Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010806SIB-BLK

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Silica	ND	1. mg/L	1	SM 4500Si-D	8/6/01	8/6/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 0803-2.2a-BLK

Cations by EPA 6010A

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	ND	0.5 mg/L	1	EPA 6010	8/3/01	8/8/01
Magnesium	ND	0.5 mg/L	1	EPA 6010	8/3/01	8/8/01
Potassium	ND	2. mg/L	1	EPA 6010	8/3/01	8/8/01
Sodium	ND	0.5 mg/L	1	EPA 6010	8/3/01	8/8/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0403
DATE SAMPLED: 8/1/01
NEL SAMPLE ID: P0108005-01

ANALYSIS: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	150		1	SM 2320 B	mg/L	8/9/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	8/9/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	8/9/01
Alkalinity, Total as CaCO ₃	150	25.	1	SM 2320 B	mg/L	8/9/01
Bromide	ND	2.	10	EPA 300.0	mg/L	8/2/01
Chloride	71	5.	50	EPA 300.0	mg/L	8/9/01
Fluoride	1.7	0.4	1	SM 4500-F C	mg/L	8/9/01
Hardness, Total (as CaCO ₃)	130	2.	1	EPA 6010	mg/L	8/8/01
Nitrate, as N	ND	1.	10	EPA 300.0	mg/L-N	8/2/01
pH	7.40	2.	1	EPA 150.1	pH Units	8/2/01
pH Temperature	23.3	1.	1	EPA 150.1	°C	8/2/01
Specific Conductance	622	1.	1	SM 2510 B	µS/cm	8/2/01
Sulfate	35	1.	10	EPA 300.0	mg/L	8/2/01
Total Dissolved Solids	418	15.	1	SM 2540 C	mg/L	8/6/01

Reporting Limit
Dilution Factor
ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
ECT #: NA

CLIENT ID: M01-0404
DATE SAMPLED: 8/1/01
NEL SAMPLE ID: P0108005-02

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	8/9/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	8/9/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	8/9/01
Alkalinity, Total as CaCO ₃	ND	25.	1	SM 2320 B	mg/L	8/9/01
Bromide	ND	2.	10	EPA 300.0	mg/L	8/2/01
Chloride	1.6	1.	10	EPA 300.0	mg/L	8/2/01
Fluoride	ND	0.4	1	SM 4500-F C	mg/L	8/9/01
Hardness, Total (as CaCO ₃)	ND	2.	1	EPA 6010	mg/L	8/8/01
Nitrate, as N	ND	1.	10	EPA 300.0	mg/L-N	8/2/01
pH	6.21	2.	1	EPA 150.1	pH Units	8/2/01
pH Temperature	22.5	1.	1	EPA 150.1	°C	8/2/01
Specific Conductance	1.82	1.	1	SM 2510 B	µS/cm	8/2/01
Sulfate	ND	1.	10	EPA 300.0	mg/L	8/2/01
Total Dissolved Solids	ND	15.	1	SM 2540 C	mg/L	8/6/01

Reporting Limit
D.F. - Dilution Factor
ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA
TEST: Inorganic Non-Metals
MATRIX: Aqueous

CLIENT ID: M01-0405
DATE SAMPLED: 8/1/01
NEL SAMPLE ID: P0108005-03

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	140		1	SM 2320 B	mg/L	8/9/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	8/9/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	8/9/01
Alkalinity, Total as CaCO ₃	140	25.	1	SM 2320 B	mg/L	8/9/01
Bromide	ND	2.	10	EPA 300.0	mg/L	8/2/01
Chloride	490	25.	250	EPA 300.0	mg/L	8/10/01
Fluoride	0.97	0.4	1	SM 4500-F C	mg/L	8/9/01
Hardness, Total (as CaCO ₃)	710	2.	1	EPA 6010	mg/L	8/8/01
Nitrate, as N	ND	1.	10	EPA 300.0	mg/L-N	8/2/01
pH	7.34	2.	1	EPA 150.1	pH Units	8/2/01
pH Temperature	24.6	1.	1	EPA 150.1	°C	8/2/01
Specific Conductance	2080	1.	1	SM 2510 B	µS/cm	8/2/01
Sulfate	120	10.	100	EPA 300.0	mg/L	8/9/01
Total Dissolved Solids	1290	30.	2	SM 2540 C	mg/L	8/6/01

Reporting Limit
D.F. Dilution Factor
ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
ECT #: NA

CLIENT ID: M01-0406
DATE SAMPLED: 8/1/01
NEL SAMPLE ID: P0108005-04

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	170		1	SM 2320 B	mg/L	8/9/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	8/9/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	8/9/01
Alkalinity, Total as CaCO ₃	170	25.	1	SM 2320 B	mg/L	8/9/01
Bromide	ND	2.	10	EPA 300.0	mg/L	8/2/01
Chloride	42	1.	10	EPA 300.0	mg/L	8/2/01
Fluoride	1.4	0.4	1	SM 4500-F C	mg/L	8/9/01
Hardness, Total (as CaCO ₃)	180	2.	1	EPA 6010	mg/L	8/8/01
Nitrate, as N	1.6	1.	10	EPA 300.0	mg/L-N	8/2/01
pH	7.73	2.	1	EPA 150.1	pH Units	8/2/01
pH Temperature	23.3	1.	1	EPA 150.1	°C	8/2/01
Specific Conductance	694	1.	1	SM 2510 B	µS/cm	8/2/01
Sulfate	98	1.	10	EPA 300.0	mg/L	8/2/01
Total Dissolved Solids	402	15.	1	SM 2540 C	mg/L	8/6/01

Reporting Limit
D.F. - Dilution Factor
ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
TEST #: NA

CLIENT ID: M01-0407
DATE SAMPLED: 8/1/01
NEL SAMPLE ID: P0108005-05

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	160		1	SM 2320 B	mg/L	8/9/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	8/9/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	8/9/01
Alkalinity, Total as CaCO ₃	160	25.	1	SM 2320 B	mg/L	8/9/01
Bromide	ND	2.	10	EPA 300.0	mg/L	8/2/01
Chloride	45	1.	10	EPA 300.0	mg/L	8/2/01
Fluoride	1.3	0.4	1	SM 4500-F C	mg/L	8/9/01
Hardness, Total (as CaCO ₃)	160	2.	1	EPA 6010	mg/L	8/8/01
Nitrate, as N	1.6	1.	10	EPA 300.0	mg/L-N	8/2/01
pH	7.73	2.	1	EPA 150.1	pH Units	8/2/01
pH Temperature	23.6	1.	1	EPA 150.1	°C	8/2/01
Specific Conductance	690	1.	1	SM 2510 B	µS/cm	8/2/01
Sulfate	98	1.	10	EPA 300.0	mg/L	8/2/01
Total Dissolved Solids	439	15.	1	SM 2540 C	mg/L	8/6/01

Reporting Limit
D.F. = Dilution Factor
ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
ECT #: NA
Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010802BR-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Bromide	ND	0.2	1	EPA 300.0	mg/L	8/2/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
ECT #: NA
Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010802CL-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	ND	0.1	1	EPA 300.0	mg/L	8/2/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA
Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010802NO3-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Nitrate, as N	ND	0.1	1	EPA 300.0	mg/L-N	8/2/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
ECT #: NA
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010802SO4-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Sulfate	ND	0.5	1	EPA 300.0	mg/L	8/2/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
CT #: NA
Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010806TDS-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Total Dissolved Solids	ND	15	1	SM 2540 C	mg/L	8/6/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010809ALK-BLK

Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Alkalinity - Bicarbonate as CaC	ND		1	SM 2320 B	mg/L	8/9/01
Alkalinity - Carbonate as CaCO	ND		1	SM 2320 B	mg/L	8/9/01
Alkalinity - Hydroxide as CaCO	ND		1	SM 2320 B	mg/L	8/9/01
Alkalinity, Total as CaCO ₃	ND	25	1	SM 2320 B	mg/L	8/9/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010809CL-BLK

Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	ND	0.1	1	EPA 300.0	mg/L	8/9/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010809F-BLK

Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Fluoride	ND	0.4	1	SM 4500-F C	mg/L	8/9/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010809SO4-BLK

Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Sulfate	ND	0.1	1	EPA 300.0	mg/L	8/9/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010810CL-BLK

Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	ND	0.1	1	EPA 300.0	mg/L	8/10/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0403
DATE SAMPLED: 8/1/01
NEL SAMPLE ID: P0108005-01

TEST: BTEX by EPA SW846 Method 8021B, Dec. 1996

METHOD: EPA 8021B
MATRIX: Aqueous
DILUTION: 1

ANALYST: PXC - Division
EXTRACTED: 8/3/01
ANALYZED: 8/3/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND Jc	2. µg/L
Total Xylenes	4.6 µg/L	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	87	60 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0404
DATE SAMPLED: 8/1/01
NEL SAMPLE ID: P0108005-02

BTEX by EPA SW846 Method 8021B, Dec. 1996

METHOD: EPA 8021B
MATRIX: Aqueous
DILUTION: 1

ANALYST: PXC - Division
EXTRACTED: 8/3/01
ANALYZED: 8/3/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND Jc	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	76	60 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0405
DATE SAMPLED: 8/1/01
NEL SAMPLE ID: P0108005-03

METHOD: EPA 8021B
MATRIX: Aqueous
DILUTION: 1

ANALYST: PXC - Division
EXTRACTED: 8/3/01
ANALYZED: 8/3/01

PARAMETER	Result	Reporting Limit
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND Jc	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

Surrogate	% Recovery	Acceptable Range
a,a,a-Trifluorotoluene	79	60 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0406
DATE SAMPLED: 8/1/01
NEL SAMPLE ID: P0108005-04

BTEX by EPA SW846 Method 8021B, Dec. 1996

METHOD: EPA 8021B
MATRIX: Aqueous
DILUTION: 1

ANALYST: PXC - Division
EXTRACTED: 8/3/01
ANALYZED: 8/3/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND Jc	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	83	60 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0407
DATE SAMPLED: 8/1/01
NEL SAMPLE ID: P0108005-05

ANALYSIS: BTEX by EPA SW846 Method 8021B, Dec. 1996

METHOD: EPA 8021B
MATRIX: Aqueous
DILUTION: 1

ANALYST: PXC - Division
EXTRACTED: 8/3/01
ANALYZED: 8/3/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND Jc	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	74	60 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010803BTEXA-BLK

BTEX by EPA SW846 Method 8021B, Dec. 1996

METHOD: EPA 8021B
MATRIX: Aqueous

ANALYST: PXC - Division
EXTRACTED: 8/3/01
ANALYZED: 8/3/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	89	60 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.



Due 8/9

CHAIN OF CUSTODY RECORD
Las Vegas head

00108005

Page _____ of _____

[illegible]

NEL LABORATORIES

Reno • Las Vegas
Phoenix • Boise

Las Vegas Division
4208 Arcata Way, Suite A • Las Vegas, Nevada 89030
702-657-1010 • Fax: 702-657-1577
1-888-368-3282

CLIENT: El Paso Natural Gas Company
8645 Railroad Drive
El Paso, TX 79904
ATTN: Darrell Campbell

PROJECT NAME: Jal #4 Wells
PROJECT NUMBER: NA

NEL ORDER ID: P0108006

Attached are the analytical results for samples in support of the above referenced project.

Samples submitted for this project were not sampled by NEL Laboratories. Samples were received by NEL in good condition, under chain of custody on 8/2/01.

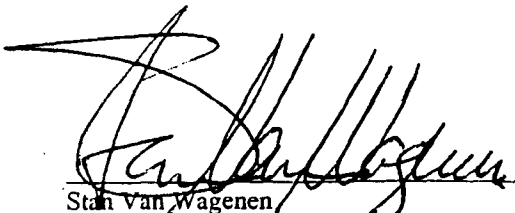
Should you have any questions or comments, please feel free to contact our Client Services department at (602) 437-0099.

Some results have been flagged as follows:

Jc - This concentration may be biased because the continuing calibration verification (CCV) standard did not meet QC requirements for this analyte. However, overall CCV standard recoveries meet method requirements and analytical results are in control.

Some QA results have been flagged as follows:

Jc - This concentration may be biased because the continuing calibration verification (CCV) standard did not meet QC requirements for this analyte. However, overall CCV standard recoveries meet method requirements and analytical results are in control.


Stan Van Wagenen
Laboratory Manager


Date

CERTIFICATIONS:

	Reno	Las Vegas	S. California
Arizona	AZ0520	AZ0518	AZ0605
California	1707	2002	2264
US Army Corps of Engineers	Certified	Certified	

	Reno	Las Vegas	S. California
Idaho	Certified	Certified	
Montana	Certified	Certified	
Nevada	NV033	NV052	CA084
L.A.C.S.D.			10228

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 Wells
PROJECT #: NA

CLIENT ID: M01-0408
DATE SAMPLED: 8/1/01
NEL SAMPLE ID: P0108006-01

Cations by EPA 6010A
MATRIX: Aqueous

ANALYST: JY - Reno Division

<u>PARAMETER</u>	<u>RESULT</u> mg/L	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	68	0.5 mg/L	1	EPA 6010	8/3/01	8/8/01
Magnesium	21	0.5 mg/L	1	EPA 6010	8/3/01	8/8/01
Potassium	4.3	2. mg/L	1	EPA 6010	8/3/01	8/8/01
Silica	32	1. mg/L	1	SM 4500Si-D	8/6/01	8/6/01
Sodium	66	0.5 mg/L	1	EPA 6010	8/3/01	8/8/01

1. Dilution Factor

Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 Wells
PROJECT #: NA

CLIENT ID: M01-0409
DATE SAMPLED: 8/1/01
NEL SAMPLE ID: P0108006-02

MATRIX: Cations by EPA 6010A
Aqueous

ANALYST: JY - Reno Division

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	44	0.5 mg/L	1	EPA 6010	8/3/01	8/8/01
Magnesium	15	0.5 mg/L	1	EPA 6010	8/3/01	8/8/01
Potassium	5.0	2. mg/L	1	EPA 6010	8/3/01	8/8/01
Silica	26	1. mg/L	1	SM 4500Si-D	8/6/01	8/6/01
Sodium	66	0.5 mg/L	1	EPA 6010	8/3/01	8/8/01

Dilution Factor

Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010806SIB-BLK

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Silica	ND	1. mg/L	1	SM 4500Si-D	8/6/01	8/6/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 0803-2.1a-BLK

Cations by EPA 6010A

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	ND	0.5 mg/L	1	EPA 6010	8/3/01	8/8/01
Magnesium	ND	0.5 mg/L	1	EPA 6010	8/3/01	8/8/01
Potassium	ND	2. mg/L	1	EPA 6010	8/3/01	8/8/01
Sodium	ND	0.5 mg/L	1	EPA 6010	8/3/01	8/8/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 Wells
PROJECT #: NA

CLIENT ID: M01-0408
DATE SAMPLED: 8/1/01
NEL SAMPLE ID: P0108006-01

Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	150		1	SM 2320 B	mg/L	8/9/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	8/9/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	8/9/01
Alkalinity, Total as CaCO ₃	150	25.	1	SM 2320 B	mg/L	8/9/01
Bromide	ND	2.	10	EPA 300.0	mg/L	8/2/01
Chloride	120	5.	50	EPA 300.0	mg/L	8/9/01
Fluoride	1.0	0.4	1	SM 4500-F C	mg/L	8/9/01
Hardness, Total (as CaCO ₃)	260	2.	1	EPA 6010	mg/L	8/8/01
Nitrate, as N	1.0	0.5	10	SM 4500-NO ₃	mg/L-N	8/2/01
pH	7.70	2.	1	EPA 150.1	pH Units	8/2/01
pH Temperature	22.5	1.	1	EPA 150.1	°C	8/2/01
Specific Conductance	807	1.	1	SM 2510 B	µS/cm	8/2/01
Sulfate	57	1.	10	EPA 300.0	mg/L	8/2/01
Total Dissolved Solids	532	15.	1	SM 2540 C	mg/L	8/6/01

Reporting Limit
Dilution Factor
ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 Wells
PROJECT #: NA

CLIENT ID: M01-0409
DATE SAMPLED: 8/1/01
NEL SAMPLE ID: P0108006-02

Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	190		1	SM 2320 B	mg/L	8/9/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	8/9/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	8/9/01
Alkalinity, Total as CaCO ₃	190	25.	1	SM 2320 B	mg/L	8/9/01
Bromide	ND	2.	10	EPA 300.0	mg/L	8/2/01
Chloride	28	1.	10	EPA 300.0	mg/L	8/2/01
Fluoride	0.92	0.4	1	SM 4500-F C	mg/L	8/9/01
Hardness, Total (as CaCO ₃)	170	2.	1	EPA 6010	mg/L	8/8/01
Nitrate, as N	1.2	0.5	10	SM 4500-NO ₃	mg/L-N	8/2/01
pH	7.72	2.	1	EPA 150.1	pH Units	8/2/01
pH Temperature	22.7	1.	1	EPA 150.1	°C	8/2/01
Specific Conductance	618	1.	1	SM 2510 B	µS/cm	8/2/01
Sulfate	75	1.	10	EPA 300.0	mg/L	8/2/01
Total Dissolved Solids	374	15.	1	SM 2540 C	mg/L	8/6/01

Reporting Limit
Dilution Factor
ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010802BR-BLK

Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Bromide	ND	0.2	1	EPA 300.0	mg/L	8/2/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0410
DATE SAMPLED: 8/2/01
NEL SAMPLE ID: P0108008-01

Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	170		1	SM 2320 B	mg/L	8/10/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	8/10/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	8/10/01
Alkalinity, Total as CaCO ₃	170	25.	1	SM 2320 B	mg/L	8/10/01
Bromide	0.39	0.2	1	EPA 300.0	mg/L	8/6/01
Chloride	82	50.	500	EPA 300.0	mg/L	8/9/01
Fluoride	1.3	0.4	1	SM 4500-F C	mg/L	8/10/01
Hardness, Total (as CaCO ₃)	150	2.	1	EPA 6010	mg/L	8/8/01
Nitrate, as N	0.98	0.05	1	SM 4500-NO ₃	mg/L-N	8/3/01
pH	8.03	2.	1	EPA 150.1	pH Units	8/3/01
pH Temperature	22.9	1.	1	EPA 150.1	°C	8/3/01
Specific Conductance	627	1.	1	SM 2510 B	µS/cm	8/7/01
Sulfate	75	50.	500	EPA 300.0	mg/L	8/9/01
Total Dissolved Solids	397	15.	1	SM 2540 C	mg/L	8/7/01

Reporting Limit
Dilution Factor
ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0411
DATE SAMPLED: 8/2/01
NEL SAMPLE ID: P0108008-02

Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	160		1	SM 2320 B	mg/L	8/10/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	8/10/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	8/10/01
Alkalinity, Total as CaCO ₃	160	25.	1	SM 2320 B	mg/L	8/10/01
Bromide	0.42	0.2	1	EPA 300.0	mg/L	8/6/01
Chloride	70	10.	100	EPA 300.0	mg/L	8/9/01
Fluoride	1.6	0.4	1	SM 4500-F C	mg/L	8/10/01
Hardness, Total (as CaCO ₃)	180	2.	1	EPA 6010	mg/L	8/8/01
Nitrate, as N	1.9	0.05	1	SM 4500-NO ₃	mg/L-N	8/3/01
pH	7.90	2.	1	EPA 150.1	pH Units	8/3/01
pH Temperature	22.8	1.	1	EPA 150.1	°C	8/3/01
Specific Conductance	771	1.	1	SM 2510 B	µS/cm	8/7/01
Sulfate	110	10.	100	EPA 300.0	mg/L	8/9/01
Total Dissolved Solids	476	15.	1	SM 2540 C	mg/L	8/7/01

Reporting Limit
Dilution Factor
ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0412
DATE SAMPLED: 8/2/01
NEL SAMPLE ID: P0108008-03

Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	8/10/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	8/10/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	8/10/01
Alkalinity, Total as CaCO ₃	ND	25.	1	SM 2320 B	mg/L	8/10/01
Bromide	ND	0.2	1	EPA 300.0	mg/L	8/6/01
Chloride	ND	0.1	1	EPA 300.0	mg/L	8/6/01
Fluoride	ND	0.4	1	SM 4500-F C	mg/L	8/10/01
Hardness, Total (as CaCO ₃)	ND	2.	1	EPA 6010	mg/L	8/8/01
Nitrate, as N	ND	0.05	1	SM 4500-NO ₃	mg/L-N	8/3/01
pH	6.54	2.	1	EPA 150.1	pH Units	8/3/01
pH Temperature	23.1	1.	1	EPA 150.1	°C	8/3/01
Specific Conductance	1.66	1.	1	SM 2510 B	µS/cm	8/7/01
Sulfate	ND	0.1	1	EPA 300.0	mg/L	8/6/01
Total Dissolved Solids	ND	15.	1	SM 2540 C	mg/L	8/7/01

Reporting Limit

Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0413
DATE SAMPLED: 8/2/01
NEL SAMPLE ID: P0108008-04

Inorganic Non-Metals

MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	130		1	SM 2320 B	mg/L	8/10/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	8/10/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	8/10/01
Alkalinity, Total as CaCO ₃	130	25.	1	SM 2320 B	mg/L	8/10/01
Bromide	0.48	0.2	1	EPA 300.0	mg/L	8/6/01
Chloride	74	10.	100	EPA 300.0	mg/L	8/9/01
Fluoride	1.7	0.4	1	SM 4500-F C	mg/L	8/10/01
Hardness, Total (as CaCO ₃)	120	2.	1	EPA 6010	mg/L	8/8/01
Nitrate, as N	ND	0.05	1	SM 4500-NO ₃	mg/L-N	8/3/01
pH	8.22	2.	1	EPA 150.1	pH Units	8/3/01
pH Temperature	22.9	1.	1	EPA 150.1	°C	8/3/01
Specific Conductance	516	1.	1	SM 2510 B	µS/cm	8/7/01
Sulfate	52	10.	100	EPA 300.0	mg/L	8/9/01
Total Dissolved Solids	303	15.	1	SM 2540 C	mg/L	8/7/01

Reporting Limit

Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0414
DATE SAMPLED: 8/2/01
NEL SAMPLE ID: P0108008-05

Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	8/10/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	8/10/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	8/10/01
Alkalinity, Total as CaCO ₃	ND	25.	1	SM 2320 B	mg/L	8/10/01
Bromide	0.13	0.2	1	EPA 300.0	mg/L	8/6/01
Chloride	6.5	1.	10	EPA 300.0	mg/L	8/9/01
Fluoride	ND	0.4	1	SM 4500-F C	mg/L	8/10/01
Hardness, Total (as CaCO ₃)	ND	2.	1	EPA 6010	mg/L	8/8/01
Nitrate, as N	0.62	0.05	1	SM 4500-NO ₃	mg/L-N	8/3/01
pH	6.04	2.	1	EPA 150.1	pH Units	8/3/01
pH Temperature	22.8	1.	1	EPA 150.1	°C	8/3/01
Specific Conductance	33.2	1.	1	SM 2510 B	µS/cm	8/7/01
Sulfate	1.0	0.1	1	EPA 300.0	mg/L	8/6/01
Total Dissolved Solids	28	15.	1	SM 2540 C	mg/L	8/9/01

Reporting Limit
Dilution Factor
ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010803NO32-BLK

Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Nitrate, as N	ND	0.05	1	SM 4500-NO3	mg/L-N	8/3/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010806BR-BLK

Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Bromide	ND	0.2	1	EPA 300.0	mg/L	8/6/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010806CL-BLK

Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	ND	0.1	1	EPA 300.0	mg/L	8/6/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010806SO4-BLK

Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Sulfate	ND	0.1	1	EPA 300.0	mg/L	8/6/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010807TDS-BLK

Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Total Dissolved Solids	ND	15	1	SM 2540 C	mg/L	8/7/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010809CL-BLK

Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	ND	0.1	1	EPA 300.0	mg/L	8/9/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010809SO4-BLK

Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Sulfate	ND	0.1	1	EPA 300.0	mg/L	8/9/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010809TDS-BLK

Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Total Dissolved Solids	ND	15	1	SM 2540 C	mg/L	8/9/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010810ALK-BLK

Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Alkalinity - Bicarbonate as CaC	ND		1	SM 2320 B	mg/L	8/10/01
Alkalinity - Carbonate as CaCO	ND		1	SM 2320 B	mg/L	8/10/01
Alkalinity - Hydroxide as CaCO	ND		1	SM 2320 B	mg/L	8/10/01
Alkalinity, Total as CaCO ₃	ND	25	1	SM 2320 B	mg/L	8/10/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010810F-BLK

Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Fluoride	ND	0.4	1	SM 4500-F C	mg/L	8/10/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0410
DATE SAMPLED: 8/2/01
NEL SAMPLE ID: P0108008-01

BTEX by EPA SW846 Method 8021B, Dec. 1996

METHOD: EPA 8021B
MATRIX: Aqueous
DILUTION: 1

ANALYST: PXC - Division
EXTRACTED: 8/13/01
ANALYZED: 8/13/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	98	60 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0411
DATE SAMPLED: 8/2/01
NEL SAMPLE ID: P0108008-02

BTEX by EPA SW846 Method 8021B, Dec. 1996

METHOD: EPA 8021B
MATRIX: Aqueous
DILUTION: 1

ANALYST: PXC - Division
EXTRACTED: 8/13/01
ANALYZED: 8/13/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	67	60 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0412
DATE SAMPLED: 8/2/01
NEL SAMPLE ID: P0108008-03

BTEX by EPA SW846 Method 8021B, Dec. 1996

METHOD: EPA 8021B
MATRIX: Aqueous
DILUTION: 1

ANALYST: PXC - Division
EXTRACTED: 8/13/01
ANALYZED: 8/13/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	73	60 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0413
DATE SAMPLED: 8/2/01
NEL SAMPLE ID: P0108008-04

BTEX by EPA SW846 Method 8021B, Dec. 1996

METHOD: EPA 8021B
MATRIX: Aqueous
DILUTION: 1

ANALYST: PXC - Division
EXTRACTED: 8/13/01
ANALYZED: 8/13/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	70	60 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0414
DATE SAMPLED: 8/2/01
NEL SAMPLE ID: P0108008-05

BTEX by EPA SW846 Method 8021B, Dec. 1996

METHOD: EPA 8021B
MATRIX: Aqueous
DILUTION: 1

ANALYST: PXC - Division
EXTRACTED: 8/13/01
ANALYZED: 8/13/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	74	60 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010813BTEXA-BLK

BTEX by EPA SW846 Method 8021B, Dec. 1996

METHOD: EPA 8021B
MATRIX: Aqueous

ANALYST: PXC - Division
EXTRACTED: 8/13/01
ANALYZED: 8/13/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	79	60 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.



DATE 6/18

CHAIN OF CUSTODY RECORD
 Was Lucas ~~lead~~

PO10808

Page

10

[illegible]

White - Testing Laboratory Canary - EPNG Lab Pink - Field Sampler

FLA-08-0560 (Fr. 10)

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010802CL-BLK

Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	ND	0.1	1	EPA 300.0	mg/L	8/2/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010802NO3-BLK

Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Nitrate, as N	ND	0.05	1	SM 4500-NO3	mg/L-N	8/2/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010802SO4-BLK

Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Sulfate	ND	0.5	1	EPA 300.0	mg/L	8/2/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010806TDS-BLK

Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Total Dissolved Solids	ND	15	1	SM 2540 C	mg/L	8/6/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 Wells
PROJECT #: NA
Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010809ALK-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Alkalinity - Bicarbonate as CaC	ND		1	SM 2320 B	mg/L	8/9/01
Alkalinity - Carbonate as CaCO	ND		1	SM 2320 B	mg/L	8/9/01
Alkalinity - Hydroxide as CaCO	ND		1	SM 2320 B	mg/L	8/9/01
Alkalinity, Total as CaCO ₃	ND	25	1	SM 2320 B	mg/L	8/9/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010809CL-BLK

Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	ND	0.1	1	EPA 300.0	mg/L	8/9/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 Wells
PROJECT #: NA
Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010809F-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Fluoride	ND	0.4	1	SM 4500-F C	mg/L	8/9/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 Wells
PROJECT #: NA

CLIENT ID: M01-0408
DATE SAMPLED: 8/1/01
NEL SAMPLE ID: P0108006-01

BTEX by EPA SW846 Method 8021B, Dec. 1996

METHOD: EPA 8021B
MATRIX: Aqueous
DILUTION: 1

ANALYST: PXC - Division
EXTRACTED: 8/3/01
ANALYZED: 8/3/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
MTBE	ND	5. µg/L
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND Jc	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	74	60 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 Wells
F CT #: NA

CLIENT ID: M01-0409
DATE SAMPLED: 8/1/01
NEL SAMPLE ID: P0108006-02

BTEX by EPA SW846 Method 8021B, Dec. 1996

METHOD: EPA 8021B
MATRIX: Aqueous
DILUTION: 1

ANALYST: PXC - Division
EXTRACTED: 8/3/01
ANALYZED: 8/3/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
MTBE	ND	5. µg/L
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND ^{Jc}	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	63	60 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010803BTEXA-BLK

BTEX by EPA SW846 Method 8021B, Dec. 1996

METHOD: EPA 8021B
MATRIX: Aqueous

ANALYST: PXC - Division
EXTRACTED: 8/3/01
ANALYZED: 8/3/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
MTBE	ND	5. µg/L
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	89	60 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.



EL PASO
NATURAL GAS

Date 8/9

CHAIN OF CUSTODY RECORD
Las Vegas head

20108006

Page

of

PROJECT NUMBER		PROJECT NAME		TOTAL NUMBER OF CONTAINERS		COMPOSITE OR GRAB		REQUESTED ANALYSIS				CONTRACT LABORATORY	
SAMPLERS: (Signature)		DATE		SAMPLE NUMBER									
LAB ID	DATE	TIME	MATRIX					SEF	Ally	TD	SPARK	BTEX	REMARKS
01	8/10	130	H ₂ O	M01-0408		5		X	X	X	X	X	Run 8060 BTEX 8-2-07
02	8/10	150	H ₂ O	M01-0409		5		X	X	X	X	X	1270 Run Robin &
PER STANLEY B. RUN													
8021 BTEX 8-2-01/133													
Custody Seal Intact? Y N None Temp 4°C													
Condition when received good													
RELINQUISHED BY: (Signature)		DATE/TIME		RECEIVED BY: (Signature)		RELINQUISHED BY: (Signature)		DATE/TIME		RECEIVED BY: (Signature)			
8/10/10		130		8/10/10		Vice FedEx		8/2		8/10		8/10	
RELINQUISHED BY: (Signature)		DATE/TIME		RECEIVED BY: (Signature)		RELINQUISHED BY: (Signature)		DATE/TIME		RECEIVED BY: (Signature)			
8/10/10		130		8/10/10		Vice FedEx		8/2		8/10		8/10	
REQUESTED TURNAROUND TIME.													
ROUTINE RUSH													
CARRIER CO.													
BILL NO.													
SAMPLE RECEIPT REMARKS													
RESULTS & INVOICES TO:													
LABORATORY SERVICES EL PASO NATURAL GAS COMPANY 8645 RAILROAD DRIVE EL PASO, TEXAS 79904													
915-587-3729 FAX: 915-587-3835													
CHARGE CODE													

NEL LABORATORIES

Reno • Las Vegas
Phoenix • Boise

Las Vegas Division
4208 Arcata Way, Suite A • Las Vegas, Nevada 89030
702-657-1010 • Fax: 702-657-1577
1-888-368-3282

CLIENT: El Paso Natural Gas Company
8645 Railroad Drive
El Paso, TX 79904
ATTN: Darrell Campbell

PROJECT NAME: JAL #4
PROJECT NUMBER: NA

NEL ORDER ID: P0108008

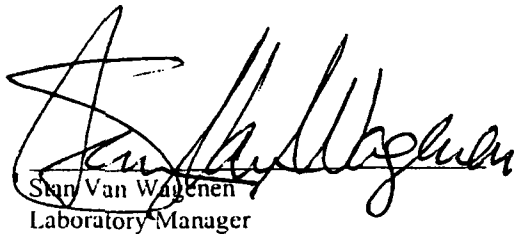
Attached are the analytical results for samples in support of the above referenced project.

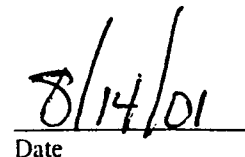
Samples submitted for this project were not sampled by NEL Laboratories. Samples were received by NEL in good condition, under chain of custody on 8/3/01.

Should you have any questions or comments, please feel free to contact our Client Services department at (602) 437-0099.

Some QA results have been flagged as follows:

J - This concentration should be considered an estimate due laboratory control sample failure.


Stan Van Wageningen
Laboratory Manager


Date

CERTIFICATIONS:

	Reno	Las Vegas	S. California
Arizona	AZ0520	AZ0518	AZ0605
California	1707	2002	2264
US Army Corps of Engineers	Certified	Certified	

	Reno	Las Vegas	S. California
Idaho	Certified	Certified	
Montana	Certified	Certified	
Nevada	NV033	NV052	CA084
L.A.C.S.D.			10228

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0410
DATE SAMPLED: 8/2/01
NEL SAMPLE ID: P0108008-01

Cations by EPA 6010A
MATRIX: Aqueous

ANALYST: JY - Reno Division

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	38	0.5 mg/L	1	EPA 6010	8/6/01	8/8/01
Magnesium	13	0.5 mg/L	1	EPA 6010	8/6/01	8/8/01
Potassium	9.2	2. mg/L	1	EPA 6010	8/6/01	8/8/01
Silica	35	1. mg/L	1	SM 4500Si-D	8/6/01	8/6/01
Sodium	76	0.5 mg/L	1	EPA 6010	8/6/01	8/8/01

L Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0411
DATE SAMPLED: 8/2/01
NEL SAMPLE ID: P0108008-02

Cations by EPA 6010A
MATRIX: Aqueous

ANALYST: JY - Reno Division

<u>PARAMETER</u>	<u>RESULT</u> mg/L	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	45	0.5 mg/L	1	EPA 6010	8/6/01	8/8/01
Magnesium	17	0.5 mg/L	1	EPA 6010	8/6/01	8/8/01
Potassium	5.8	2. mg/L	1	EPA 6010	8/6/01	8/8/01
Silica	35	1. mg/L	1	SM 4500Si-D	8/6/01	8/6/01
Sodium	89	0.5 mg/L	1	EPA 6010	8/6/01	8/8/01

L Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0412
DATE SAMPLED: 8/2/01
NEL SAMPLE ID: P0108008-03

Cations by EPA 6010A
MATRIX: Aqueous

ANALYST: JY - Reno Division

<u>PARAMETER</u>	<u>RESULT</u> mg/L	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	0.56	0.5 mg/L	1	EPA 6010	8/6/01	8/8/01
Magnesium	ND	0.5 mg/L	1	EPA 6010	8/6/01	8/8/01
Potassium	ND	2. mg/L	1	EPA 6010	8/6/01	8/8/01
Silica	ND	1. mg/L	1	SM 4500Si-D	8/6/01	8/6/01
Sodium	6.7	0.5 mg/L	1	EPA 6010	8/6/01	8/8/01

Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0413
DATE SAMPLED: 8/2/01
NEL SAMPLE ID: P0108008-04

MATRIX: Aqueous
Cations by EPA 6010A

ANALYST: JY - Reno Division

<u>PARAMETER</u>	<u>RESULT</u> mg/L	<u>REPORTING</u> LIMIT	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	34	0.5 mg/L	1	EPA 6010	8/6/01	8/8/01
Magnesium	8.3	0.5 mg/L	1	EPA 6010	8/6/01	8/8/01
Potassium	4.7	2. mg/L	1	EPA 6010	8/6/01	8/8/01
Silica	25	1. mg/L	1	SM 4500Si-D	8/6/01	8/6/01
Sodium	59	0.5 mg/L	1	EPA 6010	8/6/01	8/8/01

Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
E-CT #: NA

CLIENT ID: M01-0414
DATE SAMPLED: 8/2/01
NEL SAMPLE ID: P0108008-05

Cations by EPA 6010A
MATRIX: Aqueous

ANALYST: JY - Reno Division

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	0.51	0.5 mg/L	1	EPA 6010	8/6/01	8/8/01
Magnesium	ND	0.5 mg/L	1	EPA 6010	8/6/01	8/8/01
Potassium	ND	2. mg/L	1	EPA 6010	8/6/01	8/8/01
Silica	ND	1. mg/L	1	SM 4500Si-D	8/6/01	8/6/01
Sodium	6.0	0.5 mg/L	1	EPA 6010	8/6/01	8/8/01

Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 010806SIB-BLK

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Silica	ND	1. mg/L	1	SM 4500Si-D	8/6/01	8/6/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 0806-1.1b-BLK

Cations by EPA 6010A

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Calcium	ND	0.5 mg/L	1	EPA 6010	8/6/01	8/8/01
Magnesium	ND	0.5 mg/L	1	EPA 6010	8/6/01	8/8/01
Potassium	ND	2. mg/L	1	EPA 6010	8/6/01	8/8/01
Sodium	ND	0.5 mg/L	1	EPA 6010	8/6/01	8/8/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.



JAL No. 4

Oct-2001

Monitoring Well Survey Information

Well Number	Screened Interval (Feet)	Top of Casing (Feet MSL)
ACW-01	110-130	3,300.87
ACW-05	105-115	3,294.75
ACW-06	110-120	3,300.53
ACW-09	140-160	3,302.47
ACW-10	140-160	3,297.57
ACW-11	140-160	3,299.33
ACW-12	150-170	3,299.56
ACW-13	153-173	3,289.46
ACW-14	157-177	3,291.18
ACW-17	150-170	3,290.54

ACW-2a	98-118	3,300.88
ACW-3	112-132	3,300.34
ACW-4	154-169	3,299.48
ACW-7	105-115	3,295.36
ACW-8	140-173	3,297.27
ENSR-1	123-148	3,305.40
ENSR-2	121-148	3,301.60
ENSR-3	123-148	3,303.80
P.W.#1		
PTP-1	110-130	3,304.41

Water Level Measurements

Well Number	Date Measured	Depth to Water (Feet)
ACW-01	10/22/2001	106.05
ACW-05	10/24/2001	103.70
ACW-06	10/24/2001	108.09
ACW-09	10/25/2001	112.17
ACW-10	10/25/2001	107.01
ACW-11	10/23/2001	106.57
ACW-12	10/25/2001	109.99
ACW-13	10/25/2001	99.61
ACW-14	10/24/2001	100.75
ACW-17	10/25/2001	102.56

ACW-2a	10/22/2001	106.85
ACW-3	10/23/2001	106.15
ACW-4	10/22/2001	107.99
ACW-7	10/24/2001	103.35
ACW-8	10/24/2001	104.60
ENSR-1	10/23/2001	108.26
ENSR-2		
ENSR-3	10/23/2001	107.75
P.W.#1		
PTP-1	10/23/2001	108.49

Groundwater Elevations

Well Number	Top of Water Table (Feet MSL)
ACW-01	3,194.82
ACW-05	3,191.05
ACW-06	3,192.44
ACW-09	3,190.30
ACW-10	3,190.56
ACW-11	3,192.76
ACW-12	3,189.57
ACW-13	3,189.85
ACW-14	3,190.43
ACW-17	3,187.98

ACW-2a	3,194.03
ACW-3	3,194.19
ACW-4	3,191.49
ACW-7	3,192.01
ACW-8	3,192.67
ENSR-1	3,197.14
ENSR-2	3,301.60
ENSR-3	3,196.05
P.W.#1	0.00
PTP-1	3,195.92

SAMPLE KEY

SAMPLE NUMBER: M01-0465 LOCATION: Jal #4
MATRIX:
SAMPLE DESCRIPTION: EMP #3 pump blank before purging wells
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 10:20 SAMPLE DATE: 10/22/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0466 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Bailer blank before sampling
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 10:25 SAMPLE DATE: 10/22/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0467 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor Well ACW#4
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 12:35 SAMPLE DATE: 10/22/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0468 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor Well ACW#2A
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 14:25 SAMPLE DATE: 10/22/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0469 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor Well ACW#1
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 15:18 SAMPLE DATE: 10/22/2001
BY: Brisbin

ORIGINAL

SAMPLE KEY

SAMPLE NUMBER: M01-0470 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor Well ENSR #1
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 10:20 SAMPLE DATE: 10/23/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0471 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor Well ENSR #1 Dup
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 10:20 SAMPLE DATE: 10/23/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0472 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor Well ENSR #3
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 11:15 SAMPLE DATE: 10/23/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0473 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor Well PTP #1
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 11:50 SAMPLE DATE: 10/23/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0474 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor Well ACW #3
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 12:57 SAMPLE DATE: 10/23/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0475 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor Well ACW #8
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 14:00 SAMPLE DATE: 10/23/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0476 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor Well ACW #11
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 15:20 SAMPLE DATE: 10/23/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0477 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor Well ACW #7
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 10:25 SAMPLE DATE: 10/24/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0478 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: EMP #3 middle of purging wells
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 10:45 SAMPLE DATE: 10/24/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0479 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Bailer blank middle of sampling wells
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 10:55 SAMPLE DATE: 10/24/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0480 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor Well ACW#6
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 12:00 SAMPLE DATE: 10/24/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0481 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor Well ACW#5
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 13:25 SAMPLE DATE: 10/24/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0482 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor Well ACW#15
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 15:02 SAMPLE DATE: 10/24/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0483 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor Well ACW#9
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 10:07 SAMPLE DATE: 10/25/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0484 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor Well ACW#9 Dup.
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 10:07 SAMPLE DATE: 10/25/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0485 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor Well ACW#14
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 10:20 SAMPLE DATE: 10/25/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0486 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor Well ACW#12
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 11:40 SAMPLE DATE: 10/25/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0487 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor Well ACW#10
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 13:03 SAMPLE DATE: 10/25/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0488 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Production Well #OXY
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 13:45 SAMPLE DATE: 10/25/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0489 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor Well #17
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 14:25 SAMPLE DATE: 10/25/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0490 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Monitor Well #13
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 14:25 SAMPLE DATE: 10/25/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0491 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Field Blank
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 16:30 SAMPLE DATE: 10/25/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0492 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: EMP #3 after purging wells
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 09:15 SAMPLE DATE: 10/29/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0493 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Bailer after sampling wells
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 09:20 SAMPLE DATE: 10/29/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0494 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Field Blank
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 09:30 SAMPLE DATE: 10/29/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0495 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: ENSR #2
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 10:00 SAMPLE DATE: 10/29/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0496 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Production Well # 1
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 12:25 SAMPLE DATE: 10/29/2001
BY: Brisbin

SAMPLE KEY

SAMPLE NUMBER: M01-0497 LOCATION: Jal #4
MATRIX: Water
SAMPLE DESCRIPTION: Production Well # Dooms
S D CONTINUED:
S D CONTINUED:
SAMPLE TIME: 13:30 SAMPLE DATE: 10/29/2001
BY: Brisbin

October 2001

REMARKS:

NEL LABORATORIES

Reno • Las Vegas
Phoenix • Boise

Las Vegas Division
4208 Arcata Way, Suite A • Las Vegas, Nevada 89030
702-657-1010 • Fax: 702-657-1577
1-888-368-3282

CLIENT: El Paso Natural Gas Company
8645 Railroad Drive
El Paso, TX 79904
ATTN: Darrell Campbell

PROJECT NAME: JAL #4 Monitor Wells
PROJECT NUMBER: NA

NEL ORDER ID: P0110040

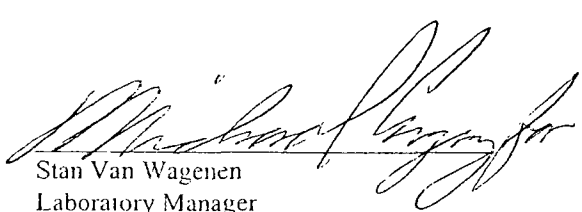
Attached are the analytical results for samples in support of the above referenced project.

Samples submitted for this project were not sampled by NEL Laboratories. Samples were received by NEL in good condition, under chain of custody on 10/23/01.

Should you have any questions or comments, please feel free to contact our Client Services department at (602) 437-0099.

Some QA results have been flagged as follows:

J1 - The batch MS and/or MSD were outside acceptance limits. The batch LCS was acceptable.


Stan Van Wagenen
Laboratory Manager

1/14/02 *TC-155140*
Date

CERTIFICATIONS:

	Reno	Las Vegas	S. California
Arizona	AZ0520	AZ0518	AZ0605
California	1707	2002	2264
US Army Corps of Engineers	Certified	Certified	

	Reno	Las Vegas	S. California
Idaho	Certified	Certified	
Montana	Certified	Certified	
Nevada	NV033	NV052	CA084
L.A.C.S.D.			10228

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0465
DATE SAMPLED: 10/22/01
NEL SAMPLE ID: P0110040-01

TEST: Metals
MATRIX: Aqueous

ANALYST: FIF - Reno Division

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Aluminum	ND	0.05 mg/L	1	EPA 6010	10/24/01	10/25/01
Arsenic	ND	0.1 mg/L	1	EPA 6010	10/24/01	10/25/01
Barium	0.045	0.005 mg/L	1	EPA 6010	10/24/01	10/25/01
Boron	0.20	0.1 mg/L	1	EPA 6010	10/24/01	10/25/01
Cadmium	ND	0.005 mg/L	1	EPA 6010	10/24/01	10/25/01
Calcium	32	0.5 mg/L	1	EPA 6010	10/24/01	10/25/01
Chromium	ND	0.01 mg/L	1	EPA 6010	10/24/01	10/25/01
Cobalt	ND	0.01 mg/L	1	EPA 6010	10/24/01	10/25/01
Copper	ND	0.005 mg/L	1	EPA 6010	10/24/01	10/25/01
Iron	1.4	0.1 mg/L	1	EPA 6010	10/24/01	10/25/01
Lead	ND	0.05 mg/L	1	EPA 6010	10/24/01	10/25/01
Magnesium	7.9	0.5 mg/L	1	EPA 6010	10/24/01	10/25/01
Manganese	0.056	0.005 mg/L	1	EPA 6010	10/24/01	10/25/01
Mercury	ND	0.0002 mg/L	1	EPA 7470A	10/29/01	10/29/01
Molybdenum	ND	0.01 mg/L	1	EPA 6010	10/24/01	10/25/01
Nickel	ND	0.04 mg/L	1	EPA 6010	10/24/01	10/25/01
Potassium	4.1	2. mg/L	1	EPA 6010	10/24/01	10/25/01
Selenium	ND	0.1 mg/L	1	EPA 6010	10/24/01	10/25/01
Vanadium	25	1. mg/L	1	SM 4500Si-D	10/31/01	10/31/01
Silver	ND	0.02 mg/L	1	EPA 6010	10/24/01	10/25/01
Sodium	58	0.5 mg/L	1	EPA 6010	10/24/01	10/25/01
Uranium	ND	0.005 mg/L	5	EPA 6020	1/8/02	1/10/02
Zinc	ND	0.1 mg/L	1	EPA 6010	10/24/01	10/25/01

DF - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0466
DATE SAMPLED: 10/22/01
NEL SAMPLE ID: P0110040-02

TEST: Metals
MATRIX: Aqueous

ANALYST: FIF - Reno Division

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Aluminum	ND	0.05 mg/L	1	EPA 6010	10/24/01	10/25/01
Arsenic	ND	0.1 mg/L	1	EPA 6010	10/24/01	10/25/01
Barium	ND	0.005 mg/L	1	EPA 6010	10/24/01	10/25/01
Boron	ND	0.1 mg/L	1	EPA 6010	10/24/01	10/25/01
Cadmium	ND	0.005 mg/L	1	EPA 6010	10/24/01	10/25/01
Calcium	ND	0.5 mg/L	1	EPA 6010	10/24/01	10/25/01
Chromium	ND	0.01 mg/L	1	EPA 6010	10/24/01	10/25/01
Cobalt	ND	0.01 mg/L	1	EPA 6010	10/24/01	10/25/01
Copper	ND	0.005 mg/L	1	EPA 6010	10/24/01	10/25/01
Iron	ND	0.1 mg/L	1	EPA 6010	10/24/01	10/25/01
Lead	ND	0.05 mg/L	1	EPA 6010	10/24/01	10/25/01
Magnesium	ND	0.5 mg/L	1	EPA 6010	10/24/01	10/25/01
Manganese	ND	0.005 mg/L	1	EPA 6010	10/24/01	10/25/01
Mercury	ND	0.0002 mg/L	1	EPA 7470A	10/29/01	10/29/01
Molybdenum	ND	0.01 mg/L	1	EPA 6010	10/24/01	10/25/01
Nickel	ND	0.04 mg/L	1	EPA 6010	10/24/01	10/25/01
Potassium	ND	2. mg/L	1	EPA 6010	10/24/01	10/25/01
Selenium	ND	0.1 mg/L	1	EPA 6010	10/24/01	10/25/01
Vanadium	ND	1. mg/L	1	SM 4500Si-D	10/31/01	10/31/01
Silver	ND	0.02 mg/L	1	EPA 6010	10/24/01	10/25/01
Sodium	ND	0.5 mg/L	1	EPA 6010	10/24/01	10/25/01
Uranium	ND	0.005 mg/L	5	EPA 6020	1/8/02	1/10/02
Zinc	ND	0.1 mg/L	1	EPA 6010	10/24/01	10/25/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0467
DATE SAMPLED: 10/22/01
NEL SAMPLE ID: P0110040-03

TEST: Metals
MATRIX: Aqueous

ANALYST: FIF - Reno Division

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Aluminum	ND	0.05 mg/L	1	EPA 6010	10/24/01	10/25/01
Arsenic	0.31	0.1 mg/L	1	EPA 6010	10/24/01	10/25/01
Barium	0.81	0.005 mg/L	1	EPA 6010	10/24/01	10/25/01
Boron	1.5	0.1 mg/L	1	EPA 6010	10/24/01	10/25/01
Cadmium	ND	0.005 mg/L	1	EPA 6010	10/24/01	10/25/01
Calcium	290	0.5 mg/L	1	EPA 6010	10/24/01	10/25/01
Chromium	ND	0.01 mg/L	1	EPA 6010	10/24/01	10/25/01
Cobalt	ND	0.01 mg/L	1	EPA 6010	10/24/01	10/25/01
Copper	ND	0.005 mg/L	1	EPA 6010	10/24/01	10/25/01
Iron	1.5	0.1 mg/L	1	EPA 6010	10/24/01	10/25/01
Lead	ND	0.05 mg/L	1	EPA 6010	10/24/01	10/25/01
Magnesium	110	0.5 mg/L	1	EPA 6010	10/24/01	10/25/01
Manganese	0.58	0.005 mg/L	1	EPA 6010	10/24/01	10/25/01
Mercury	0.00086	0.0002 mg/L	1	EPA 7470A	10/29/01	10/29/01
Molybdenum	0.032	0.01 mg/L	1	EPA 6010	10/24/01	10/25/01
Nickel	ND	0.04 mg/L	1	EPA 6010	10/24/01	10/25/01
Potassium	32	2. mg/L	1	EPA 6010	10/24/01	10/25/01
Selenium	ND	0.1 mg/L	1	EPA 6010	10/24/01	10/25/01
Silica	30	1. mg/L	1	SM 4500Si-D	10/31/01	10/31/01
Silver	ND	0.02 mg/L	1	EPA 6010	10/24/01	10/25/01
Sodium	7300	5. mg/L	10	EPA 6010	10/24/01	10/25/01
Uranium	0.0066	0.005 mg/L	5	EPA 6020	1/8/02	1/10/02
Zinc	ND	0.1 mg/L	1	EPA 6010	10/24/01	10/25/01

DF - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0468
DATE SAMPLED: 10/22/01
NEL SAMPLE ID: P0110040-04

TEST: Metals
MATRIX: Aqueous

ANALYST: FIF - Reno Division

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Aluminum	0.16	0.05 mg/L	1	EPA 6010	10/24/01	10/25/01
Arsenic	1.4	0.1 mg/L	1	EPA 6010	10/24/01	10/25/01
Barium	0.26	0.005 mg/L	1	EPA 6010	10/24/01	10/25/01
Boron	1.4	0.1 mg/L	1	EPA 6010	10/24/01	10/25/01
Cadmium	0.016	0.005 mg/L	1	EPA 6010	10/24/01	10/25/01
Calcium	3.3	0.5 mg/L	1	EPA 6010	10/24/01	10/25/01
Chromium	ND	0.01 mg/L	1	EPA 6010	10/24/01	10/25/01
Cobalt	ND	0.01 mg/L	1	EPA 6010	10/24/01	10/25/01
Copper	ND	0.005 mg/L	1	EPA 6010	10/24/01	10/25/01
Iron	0.40	0.1 mg/L	1	EPA 6010	10/24/01	10/25/01
Lead	ND	0.05 mg/L	1	EPA 6010	10/24/01	10/25/01
Magnesium	0.23	0.5 mg/L	1	EPA 6010	10/24/01	10/25/01
Manganese	0.0062	0.005 mg/L	1	EPA 6010	10/24/01	10/25/01
Mercury	0.00066	0.0002 mg/L	1	EPA 7470A	10/29/01	10/29/01
Molybdenum	0.053	0.01 mg/L	1	EPA 6010	10/24/01	10/25/01
Nickel	ND	0.04 mg/L	1	EPA 6010	10/24/01	10/25/01
Potassium	8.9	2. mg/L	1	EPA 6010	10/24/01	10/25/01
Selenium	ND	0.1 mg/L	1	EPA 6010	10/24/01	10/25/01
Silica	36	1. mg/L	1	SM 4500Si-D	10/31/01	10/31/01
Silver	ND	0.02 mg/L	1	EPA 6010	10/24/01	10/25/01
Sodium	5200	5. mg/L	10	EPA 6010	10/24/01	10/25/01
Uranium	0.027	0.005 mg/L	5	EPA 6020	1/8/02	1/10/02
Zinc	ND	0.1 mg/L	1	EPA 6010	10/24/01	10/25/01

DF - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0469
DATE SAMPLED: 10/22/01
NEL SAMPLE ID: P0110040-05

TEST: Metals
MATRIX: Aqueous

ANALYST: FIF - Reno Division

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Aluminum	ND	0.05 mg/L	1	EPA 6010	10/24/01	10/25/01
Arsenic	0.21	0.1 mg/L	1	EPA 6010	10/24/01	10/25/01
Barium	0.24	0.005 mg/L	1	EPA 6010	10/24/01	10/25/01
Boron	0.92	0.1 mg/L	1	EPA 6010	10/24/01	10/25/01
Cadmium	ND	0.005 mg/L	1	EPA 6010	10/24/01	10/25/01
Calcium	82	0.5 mg/L	1	EPA 6010	10/24/01	10/25/01
Chromium	ND	0.01 mg/L	1	EPA 6010	10/24/01	10/25/01
Cobalt	ND	0.01 mg/L	1	EPA 6010	10/24/01	10/25/01
Copper	ND	0.005 mg/L	1	EPA 6010	10/24/01	10/25/01
Iron	2.3	0.1 mg/L	1	EPA 6010	10/24/01	10/25/01
Lead	ND	0.05 mg/L	1	EPA 6010	10/24/01	10/25/01
Magnesium	60	0.5 mg/L	1	EPA 6010	10/24/01	10/25/01
Manganese	0.18	0.005 mg/L	1	EPA 6010	10/24/01	10/25/01
Mercury	ND	0.0002 mg/L	1	EPA 7470A	10/29/01	10/29/01
Molybdenum	ND	0.01 mg/L	1	EPA 6010	10/24/01	10/25/01
Nickel	ND	0.04 mg/L	1	EPA 6010	10/24/01	10/25/01
Potassium	11	2. mg/L	1	EPA 6010	10/24/01	10/25/01
Vanadium	ND	0.1 mg/L	1	EPA 6010	10/24/01	10/25/01
Silica	26	1. mg/L	1	SM 4500Si-D	10/31/01	10/31/01
Silver	ND	0.02 mg/L	1	EPA 6010	10/24/01	10/25/01
Sodium	3000	5. mg/L	10	EPA 6010	10/24/01	10/25/01
Uranium	ND	0.005 mg/L	5	EPA 6020	1/8/02	1/10/02
Zinc	ND	0.1 mg/L	1	EPA 6010	10/24/01	10/25/01

DF - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
OBJECT #: NA
TEST: Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 0108-4.1-BLK

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Uranium	ND	0.005 mg/L	5	EPA 6020	1/8/02	1/10/02

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011031SI-BLK

TEST:

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Silica	ND	1. mg/L	1	SM 4500Si-D	10/31/01	10/31/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4 Monitor Wells
 PROJECT #: NA
 TEST: Metals

CLIENT ID: Method Blank
 DATE SAMPLED: NA
 NEL SAMPLE ID: 1024-2.2-BLK

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Aluminum	ND	0.05 mg/L	1	EPA 6010	10/24/01	10/25/01
Arsenic	ND	0.1 mg/L	1	EPA 6010	10/24/01	10/25/01
Barium	ND	0.005 mg/L	1	EPA 6010	10/24/01	10/25/01
Boron	ND	0.1 mg/L	1	EPA 6010	10/24/01	10/25/01
Cadmium	ND	0.005 mg/L	1	EPA 6010	10/24/01	10/25/01
Calcium	ND	0.5 mg/L	1	EPA 6010	10/24/01	10/25/01
Chromium	ND	0.01 mg/L	1	EPA 6010	10/24/01	10/25/01
Cobalt	ND	0.01 mg/L	1	EPA 6010	10/24/01	10/25/01
Copper	ND	0.005 mg/L	1	EPA 6010	10/24/01	10/25/01
Iron	ND	0.1 mg/L	1	EPA 6010	10/24/01	10/25/01
Lead	ND	0.05 mg/L	1	EPA 6010	10/24/01	10/25/01
Magnesium	ND	0.5 mg/L	1	EPA 6010	10/24/01	10/25/01
Manganese	ND	0.005 mg/L	1	EPA 6010	10/24/01	10/25/01
Molybdenum	ND	0.01 mg/L	1	EPA 6010	10/24/01	10/25/01
Nickel	ND	0.04 mg/L	1	EPA 6010	10/24/01	10/25/01
Potassium	ND	2. mg/L	1	EPA 6010	10/24/01	10/25/01
Selenium	ND	0.1 mg/L	1	EPA 6010	10/24/01	10/25/01
Silver	ND	0.02 mg/L	1	EPA 6010	10/24/01	10/25/01
Thallium	ND	0.5 mg/L	1	EPA 6010	10/24/01	10/25/01
Zinc	ND	0.1 mg/L	1	EPA 6010	10/24/01	10/25/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA
TEST: Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: L0245HG-BLK

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Mercury	ND	0.0002 mg/L	1	EPA 7470A	10/29/01	10/29/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0465
DATE SAMPLED: 10/22/01
NEL SAMPLE ID: P0110040-01

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	130		1	SM 2320 B	mg/L	10/23/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	10/23/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	10/23/01
Alkalinity, Total as CaCO ₃	130	25.	1	SM 2320 B	mg/L	10/23/01
Bromide	ND	2.	10	EPA 300.0	mg/L	10/23/01
Chloride	66	20.	200	EPA 300.0	mg/L	10/29/01
Fluoride	1.8	0.4	1	SM 4500-F C	mg/L	10/25/01
Hardness, Total (as CaCO ₃)	110	2.	1	EPA 6010	mg/L	10/25/01
Nitrate, as N	ND	1.	10	EPA 300.0	mg/L-N	10/23/01
pH	7.27	2.	1	EPA 150.1	pH Units	10/23/01
pH Temperature	21.5	1.	1	EPA 150.1	°C	10/23/01
Specific Conductance	501	1.	1	SM 2510 B	µS/cm	10/25/01
Sulfate	24	1.	10	EPA 300.0	mg/L	10/23/01
Total Dissolved Solids	375	15.	1	SM 2540 C	mg/L	10/25/01

R.L. - Reporting Limit

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0466
DATE SAMPLED: 10/22/01
NEL SAMPLE ID: P0110040-02

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	10/23/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	10/23/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	10/23/01
Alkalinity, Total as CaCO ₃	ND	25.	1	SM 2320 B	mg/L	10/23/01
Bromide	ND	0.2	1	EPA 300.0	mg/L	10/23/01
Chloride	0.16	0.1	1	EPA 300.0	mg/L	10/23/01
Fluoride	ND	0.4	1	SM 4500-F C	mg/L	10/25/01
Hardness, Total (as CaCO ₃)	ND	2.	1	EPA 6010	mg/L	10/25/01
Nitrate, as N	ND	0.1	1	EPA 300.0	mg/L-N	10/23/01
pH	5.84	2.	1	EPA 150.1	pH Units	10/23/01
pH Temperature	20.5	1.	1	EPA 150.1	°C	10/23/01
Specific Conductance	1.67	1.	1	SM 2510 B	µS/cm	10/25/01
Sulfate	ND	0.1	1	EPA 300.0	mg/L	10/23/01
Total Dissolved Solids	ND	15.	1	SM 2540 C	mg/L	10/25/01

R.L. - Reporting Limit

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0467
DATE SAMPLED: 10/22/01
NEL SAMPLE ID: P0110040-03

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	970		1	SM 2320 B	mg/L	10/23/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	10/23/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	10/23/01
Alkalinity, Total as CaCO ₃	970	25.	1	SM 2320 B	mg/L	10/23/01
Bromide	ND	20.	100	EPA 300.0	mg/L	10/23/01
Chloride	13000	1000.	10000	EPA 300.0	mg/L	10/31/01
Fluoride	8.2	0.8	2	SM 4500-F C	mg/L	10/25/01
Hardness, Total (as CaCO ₃)	1200	2.	1	EPA 6010	mg/L	10/25/01
Nitrate, as N	ND	10.	100	EPA 300.0	mg/L-N	10/23/01
pH	7.15	2.	1	EPA 150.1	pH Units	10/23/01
pH Temperature	20.2	1.	1	EPA 150.1	°C	10/23/01
Specific Conductance	35300	1.	1	SM 2510 B	µS/cm	10/25/01
Sulfate	200	10.	100	EPA 300.0	mg/L	10/23/01
Total Dissolved Solids	21400	1500.	100	SM 2540 C	mg/L	10/25/01

R.L. - Reporting Limit

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4 Monitor Wells
 PROJECT #: NA

CLIENT ID: M01-0468
 DATE SAMPLED: 10/22/01
 NEL SAMPLE ID: P0110040-04

TEST: Inorganic Non-Metals
 MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	1300		5	SM 2320 B	mg/L	10/26/01
Alkalinity - Carbonate as CaCO ₃	2400		5	SM 2320 B	mg/L	10/26/01
Alkalinity - Hydroxide as CaCO ₃	ND		5	SM 2320 B	mg/L	10/26/01
Alkalinity, Total as CaCO ₃	3700	125.	5	SM 2320 B	mg/L	10/26/01
Bromide	ND	10.	50	EPA 300.0	mg/L	10/23/01
Chloride	4600	250.	2500	EPA 300.0	mg/L	10/29/01
Fluoride	11	1.6	4	SM 4500-F C	mg/L	10/25/01
Hardness, Total (as CaCO ₃)	9.2	2.	1	EPA 6010	mg/L	10/25/01
Nitrate, as N	ND	5.	50	EPA 300.0	mg/L-N	10/23/01
pH	9.88	2.	1	EPA 150.1	pH Units	10/23/01
pH Temperature	19.8	1.	1	EPA 150.1	°C	10/23/01
Specific Conductance	19900	1.	1	SM 2510 B	µS/cm	10/25/01
Sulfate	6.5	0.1	1	EPA 300.0	mg/L	10/29/01
Total Dissolved Solids	12100	300.	20	SM 2540 C	mg/L	10/25/01

R.L. - Reporting Limit

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0469
DATE SAMPLED: 10/22/01
NEL SAMPLE ID: P0110040-05

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	600		1	SM 2320 B	mg/L	10/23/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	10/23/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	10/23/01
Alkalinity, Total as CaCO ₃	600	25.	1	SM 2320 B	mg/L	10/23/01
Bromide	ND	5.	25	EPA 300.0	mg/L	10/23/01
Chloride	4400	250.	2500	EPA 300.0	mg/L	10/29/01
Fluoride	2.5	0.4	1	SM 4500-F C	mg/L	10/25/01
Hardness, Total (as CaCO ₃)	450	2.	1	EPA 6010	mg/L	10/25/01
Nitrate, as N	ND	2.5	25	EPA 300.0	mg/L-N	10/23/01
pH	7.92	2.	1	EPA 150.1	pH Units	10/23/01
pH Temperature	20.3	1.	1	EPA 150.1	°C	10/23/01
Specific Conductance	12400	1.	1	SM 2510 B	µS/cm	10/25/01
Sulfate	380	10.	100	EPA 300.0	mg/L	10/29/01
Total Dissolved Solids	6580	150.	10	SM 2540 C	mg/L	10/25/01

R.L. - Reporting Limit

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4 Monitor Wells
 PROJECT #: NA
 TEST: Non-Metals

CLIENT ID: Method Blank
 DATE SAMPLED: NA
 NEL SAMPLE ID: 011023ALK-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Alkalinity - Bicarbonate as CaC	ND		1	SM 2320 B	mg/L	10/23/01
Alkalinity - Carbonate as CaCO	ND		1	SM 2320 B	mg/L	10/23/01
Alkalinity - Hydroxide as CaCO	ND		1	SM 2320 B	mg/L	10/23/01
Alkalinity, Total as CaCO ₃	ND	25	1	SM 2320 B	mg/L	10/23/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4 Monitor Wells
 PROJECT #: NA
 TEST: Non-Metals

CLIENT ID: Method Blank
 DATE SAMPLED: NA
 NEL SAMPLE ID: 011023BR-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Bromide	ND	0.2	1	EPA 300.0	mg/L	10/23/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4 Monitor Wells
 RC T #: NA
 TEST: Non-Metals

CLIENT ID: Method Blank
 DATE SAMPLED: NA
 NEL SAMPLE ID: 011023CL-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	ND	0.1	1	EPA 300.0	mg/L	10/23/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PRC I #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011023NO3-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Nitrate, as N	ND	0.1	1	EPA 300.0	mg/L-N	10/23/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4 Monitor Wells
 RC T #: NA
 TEST: Non-Metals

CLIENT ID: Method Blank
 DATE SAMPLED: NA
 NEL SAMPLE ID: 011023SO4-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
sulfate	ND	0.1	1	EPA 300.0	mg/L	10/23/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4 Monitor Wells
 RC #: NA
 TEST: Non-Metals

CLIENT ID: Method Blank
 DATE SAMPLED: NA
 NEL SAMPLE ID: 011025F-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Fluoride	ND	0.4	1	SM 4500-F C	mg/L	10/25/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4 Monitor Wells
 RC #: NA

CLIENT ID: Method Blank
 DATE SAMPLED: NA
 NEL SAMPLE ID: 011025TDS2-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Total Dissolved Solids	ND	15	1	SM 2540 C	mg/L	10/25/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
RC #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011026ALK-BLK

EST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Alkalinity - Bicarbonate as CaC	ND		1	SM 2320 B	mg/L	10/26/01
Alkalinity - Carbonate as CaCO	ND		1	SM 2320 B	mg/L	10/26/01
Alkalinity - Hydroxide as CaCO	ND		1	SM 2320 B	mg/L	10/26/01
Alkalinity, Total as CaCO ₃	ND	25	1	SM 2320 B	mg/L	10/26/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011029CL-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	ND	0.1	1	EPA 300.0	mg/L	10/29/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4 Monitor Wells
 PR T #: NA

CLIENT ID: Method Blank
 DATE SAMPLED: NA
 NEL SAMPLE ID: 011029SO4-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Sulfate	ND	0.1	1	EPA 300.0	mg/L	10/29/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011031CL-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	ND	0.1	1	EPA 300.0	mg/L	10/31/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT:	El Paso Natural Gas Company	CLIENT ID:	M01-0465
PROJECT ID:	JAL #4 Monitor Wells	DATE SAMPLED:	10/22/01
PROJECT #:	NA	NEL SAMPLE ID:	P0110040-01
TEST:	BTEX by EPA SW846 Method 8021B, Dec. 1996		
METHOD:	EPA 8021B	ANALYST:	PXC - Division
MATRIX:	Aqueous	EXTRACTED:	10/30/01
DILUTION:	1	ANALYZED:	10/30/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	3.0 µg/L	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	97	60 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0466
DATE SAMPLED: 10/22/01
NEL SAMPLE ID: P0110040-02

T. BTEX by EPA SW846 Method 8021B, Dec. 1996

METHOD: EPA 8021B
MATRIX: Aqueous
DILUTION: 1

ANALYST: PXC - Division
EXTRACTED: 10/30/01
ANALYZED: 10/30/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	107	60 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4 Monitor Wells
 PROJECT #: NA

CLIENT ID: M01-0467
 DATE SAMPLED: 10/22/01
 NEL SAMPLE ID: P0110040-03

TEST: BTEX by EPA SW846 Method 8021B, Dec. 1996

METHOD: EPA 8021B

ANALYST: PXC - Division

MATRIX: Aqueous

EXTRACTED: 10/30/01

DILUTION: 1

ANALYZED: 10/30/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	12 µg/L	2. µg/L
Toluene	2.9 µg/L	2. µg/L
Ethylbenzene	32 µg/L	2. µg/L
Total Xylenes	100 µg/L	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	101	60 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4 Monitor Wells
 PROJECT #: NA

CLIENT ID: M01-0468
 DATE SAMPLED: 10/22/01
 NEL SAMPLE ID: P0110040-04

T. BTEX by EPA SW846 Method 8021B, Dec. 1996

METHOD: EPA 8021B
 MATRIX: Aqueous
 DILUTION: 1

ANALYST: PXC - Division
 EXTRACTED: 10/30/01
 ANALYZED: 10/30/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	39 µg/L	2. µg/L
Toluene	34 µg/L	2. µg/L
Ethylbenzene	30 µg/L	2. µg/L
Total Xylenes	57 µg/L	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	60	60 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0469
DATE SAMPLED: 10/22/01
NEL SAMPLE ID: P0110040-05

TEST: BTEX by EPA SW846 Method 8021B, Dec. 1996
METHOD: EPA 8021B
MATRIX: Aqueous
DILUTION: 1

ANALYST: PXC - Division
EXTRACTED: 10/30/01
ANALYZED: 10/30/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	11 µg/L	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	91	60 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4 Monitor Wells
 PROJECT #: NA

CLIENT ID: Method Blank
 DATE SAMPLED: NA
 NEL SAMPLE ID: 011030BTEX-BLK

TEST: BTEX by EPA SW846 Method 8021B, Dec. 1996

METHOD: EPA 8021B

MATRIX: Aqueous

ANALYST: PXC - Division

EXTRACTED: 10/30/01

ANALYZED: 10/30/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
MTBE	ND	5. µg/L
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	118	60 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

Reno • Las Vegas
Phoenix • Boise

Las Vegas Division
4208 Arcata Way, Suite A • Las Vegas, Nevada 89030
702-657-1010 • Fax: 702-657-1577
1-888-368-3282

CLIENT: El Paso Natural Gas Company
8645 Railroad Drive
El Paso, TX 79904
ATTN: Darrell Campbell

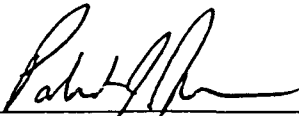
PROJECT NAME: JAL #4 Monitor Wells
PROJECT NUMBER: NA

NEL ORDER ID: P0110044

Attached are the analytical results for samples in support of the above referenced project.

Samples submitted for this project were not sampled by NEL Laboratories. Samples were received by NEL in good condition, under chain of custody on 10/24/01.

Should you have any questions or comments, please feel free to contact our Client Services department at (602) 437-0099.


Stan Van Wagenen
Laboratory Manager

11/2/01
Date

CERTIFICATIONS:

	Reno	Las Vegas	S. California
Arizona	AZ0520	AZ0518	AZ0605
California	1707	2002	2264
US Army Corps of Engineers	Certified	Certified	

	Reno	Las Vegas	S. California
Idaho	Certified	Certified	
Montana	Certified	Certified	
Nevada	NV033	NV052	CA084
L.A.C.S.D.			10228

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0470
DATE SAMPLED: 10/23/01
NEL SAMPLE ID: P0110044-01

TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>RESULT</u>	<u>R. L.</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	5100	200.	2000	EPA 300.0	mg/L	10/31/01
Specific Conductance	15300	1.	1	SM 2510 B	µS/cm	10/29/01
Total Dissolved Solids	8050	150.	10	SM 2540 C	mg/L	10/25/01

R. Reporting Limit

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0471
DATE SAMPLED: 10/23/01
NEL SAMPLE ID: P0110044-02

TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>RESULT</u>	<u>R. L.</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	3600	100.	1000	EPA 300.0	mg/L	10/31/01
Specific Conductance	11400	1.	1	SM 2510 B	µS/cm	10/29/01
Total Dissolved Solids	6070	150.	10	SM 2540 C	mg/L	10/25/01

R. Reporting Limit

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0472
DATE SAMPLED: 10/23/01
NEL SAMPLE ID: P0110044-03

TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>RESULT</u>	<u>R. L.</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	620	100.	1000	EPA 300.0	mg/L	10/31/01
Specific Conductance	2480	1.	1	SM 2510 B	µS/cm	10/29/01
Total Dissolved Solids	1300	30.	2	SM 2540 C	mg/L	10/25/01

R.L. - Reporting Limit

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0473
DATE SAMPLED: 10/23/01
NEL SAMPLE ID: P0110044-04

TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>RESULT</u>	<u>R. L.</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	550	100.	1000	EPA 300.0	mg/L	11/1/01
Specific Conductance	2370	1.	1	SM 2510 B	µS/cm	10/29/01
Total Dissolved Solids	1280	30.	2	SM 2540 C	mg/L	10/25/01

R. Reporting Limit

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0474
DATE SAMPLED: 10/23/01
NEL SAMPLE ID: P0110044-05

TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>RESULT</u>	<u>R. L.</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	7100	1000.	10000	EPA 300.0	mg/L	11/1/01
Specific Conductance	18800	1.	1	SM 2510 B	μS/cm	10/29/01
Total Dissolved Solids	10600	300.	20	SM 2540 C	mg/L	10/25/01

R.L. - Reporting Limit

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011025TDS2-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Total Dissolved Solids	ND	15	1	SM 2540 C	mg/L	10/25/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011031CL-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	ND	0.1	1	EPA 300.0	mg/L	10/31/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011101CL-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	ND	0.1	1	EPA 300.0	mg/L	11/1/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

Due 00/31

CHAIN OF CUSTODY RECORD

PO110044

[illegible]

NEL LABORATORIES

Reno • Las Vegas
Phoenix • Boise

Las Vegas Division
4208 Arcata Way, Suite A • Las Vegas, Nevada 89030
702-657-1010 • Fax: 702-657-1577
1-888-368-3282

CLIENT: El Paso Natural Gas Company
8645 Railroad Drive
El Paso, TX 79904
ATTN: Darrell Campbell

PROJECT NAME: Jal #4 M.W.
PROJECT NUMBER: NA

NEL ORDER ID: P0110043

Attached are the analytical results for samples in support of the above referenced project.

Samples submitted for this project were not sampled by NEL Laboratories. Samples were received by NEL in good condition, under chain of custody on 10/24/01.

Should you have any questions or comments, please feel free to contact our Client Services department at (602) 437-0099.

Some QA results have been flagged as follows:

M3 - The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.


Stan Van Wagenen
Laboratory Manager

11/2/01
Date

CERTIFICATIONS:

	Reno	Las Vegas	S. California
Arizona	AZ0520	AZ0518	AZ0605
California	1707	2002	2264
US Army Corps of Engineers	Certified	Certified	

	Reno	Las Vegas	S. California
Idaho	Certified	Certified	
Montana	Certified	Certified	
Nevada	NV033	NV052	CA084
L.A.C.S.D.			10228

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.
PROJECT #: NA

CLIENT ID: M01-0475
DATE SAMPLED: 10/23/01
NEL SAMPLE ID: P0110043-01

TEST: Metals
MATRIX: Aqueous

ANALYST: FIF - Reno Division

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Aluminum	ND	0.05 mg/L	1	EPA 6010	10/25/01	10/26/01
Arsenic	ND	0.1 mg/L	1	EPA 6010	10/25/01	10/26/01
Barium	0.12	0.005 mg/L	1	EPA 6010	10/25/01	10/26/01
Boron	0.62	0.1 mg/L	1	EPA 6010	10/25/01	10/26/01
Cadmium	ND	0.005 mg/L	1	EPA 6010	10/25/01	10/26/01
Calcium	410	0.5 mg/L	1	EPA 6010	10/25/01	10/26/01
Chromium	ND	0.01 mg/L	1	EPA 6010	10/25/01	10/26/01
Cobalt	ND	0.01 mg/L	1	EPA 6010	10/25/01	10/26/01
Copper	ND	0.005 mg/L	1	EPA 6010	10/25/01	10/26/01
Iron	2.6	0.05 mg/L	0.5	EPA 6010	10/25/01	10/26/01
Lead	0.12	0.05 mg/L	1	EPA 6010	10/25/01	10/26/01
Magnesium	200	0.5 mg/L	1	EPA 6010	10/25/01	10/26/01
Manganese	1.9	0.005 mg/L	1	EPA 6010	10/25/01	10/26/01
Mercury	ND	0.0002 mg/L	1	EPA 7470A	10/31/01	10/31/01
Molybdenum	ND	0.01 mg/L	1	EPA 6010	10/25/01	10/26/01
Nickel	ND	0.04 mg/L	1	EPA 6010	10/25/01	10/26/01
Potassium	58	2. mg/L	1	EPA 6010	10/25/01	10/26/01
Selenium	ND	0.1 mg/L	1	EPA 6010	10/25/01	10/26/01
Vanadium	26	1. mg/L	1	SM 4500Si-D	10/26/01	10/26/01
Silver	ND	0.02 mg/L	1	EPA 6010	10/25/01	10/26/01
Sodium	11000	50. mg/L	100	EPA 6010	10/25/01	10/26/01
Uranium	0.037	0.005 mg/L	5	EPA 6020	1/8/02	1/10/02
Zinc	ND	0.1 mg/L	1	EPA 6010	10/25/01	10/26/01

DF - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.
PROJECT #: NA

CLIENT ID: M01-0476
DATE SAMPLED: 10/23/01
NEL SAMPLE ID: P0110043-02

TEST: Metals
MATRIX: Aqueous

ANALYST: FIF - Reno Division

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Aluminum	ND	0.05 mg/L	1	EPA 6010	10/25/01	10/26/01
Arsenic	ND	0.1 mg/L	1	EPA 6010	10/25/01	10/26/01
Barium	0.26	0.005 mg/L	1	EPA 6010	10/25/01	10/26/01
Boron	0.36	0.1 mg/L	1	EPA 6010	10/25/01	10/26/01
Cadmium	ND	0.005 mg/L	1	EPA 6010	10/25/01	10/26/01
Calcium	2500	50. mg/L	100	EPA 6010	10/25/01	10/26/01
Chromium	ND	0.01 mg/L	1	EPA 6010	10/25/01	10/26/01
Cobalt	ND	0.01 mg/L	1	EPA 6010	10/25/01	10/26/01
Copper	ND	0.005 mg/L	1	EPA 6010	10/25/01	10/26/01
Iron	1.4	0.05 mg/L	0.5	EPA 6010	10/25/01	10/26/01
Lead	0.53	0.05 mg/L	1	EPA 6010	10/25/01	10/26/01
Magnesium	840	0.5 mg/L	1	EPA 6010	10/25/01	10/26/01
Manganese	0.38	0.005 mg/L	1	EPA 6010	10/25/01	10/26/01
Mercury	0.00049	0.0002 mg/L	1	EPA 7470A	10/31/01	10/31/01
Molybdenum	ND	0.01 mg/L	1	EPA 6010	10/25/01	10/26/01
Nickel	ND	0.04 mg/L	1	EPA 6010	10/25/01	10/26/01
Potassium	57	2. mg/L	1	EPA 6010	10/25/01	10/26/01
Selenium	ND	0.1 mg/L	1	EPA 6010	10/25/01	10/26/01
Silica	31	1. mg/L	1	SM 4500Si-D	10/26/01	10/26/01
Silver	ND	0.01 mg/L	0.5	EPA 6010	10/25/01	10/26/01
Sodium	9500	50. mg/L	100	EPA 6010	10/25/01	10/26/01
Uranium	0.068	0.005 mg/L	5	EPA 6020	1/8/02	1/10/02
Zinc	ND	0.1 mg/L	1	EPA 6010	10/25/01	10/26/01

- Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.
PROJECT #: NA
TEST: Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 0108-4.1-BLK

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Uranium	ND	0.005 mg/L	5	EPA 6020	1/8/02	1/10/02

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011026SI-BLK

TEST:

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Silica	ND	1. mg/L	1	SM 4500Si-D	10/26/01	10/26/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: Jal #4 M.W.
 PROJECT #: NA
 TEST: Metals

CLIENT ID: Method Blank
 DATE SAMPLED: NA
 NEL SAMPLE ID: 1025-3.1-BLK

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Aluminum	ND	0.05 mg/L	1	EPA 6010	10/25/01	10/26/01
Arsenic	ND	0.1 mg/L	1	EPA 6010	10/25/01	10/26/01
Barium	ND	0.005 mg/L	1	EPA 6010	10/25/01	10/26/01
Boron	ND	0.1 mg/L	1	EPA 6010	10/25/01	10/26/01
Cadmium	ND	0.005 mg/L	1	EPA 6010	10/25/01	10/26/01
Calcium	ND	0.5 mg/L	1	EPA 6010	10/25/01	10/26/01
Chromium	ND	0.01 mg/L	1	EPA 6010	10/25/01	10/26/01
Cobalt	ND	0.01 mg/L	1	EPA 6010	10/25/01	10/26/01
Copper	ND	0.005 mg/L	1	EPA 6010	10/25/01	10/26/01
Iron	ND	0.05 mg/L	0.5	EPA 6010	10/25/01	10/26/01
Lead	ND	0.05 mg/L	1	EPA 6010	10/25/01	10/26/01
Magnesium	ND	0.5 mg/L	1	EPA 6010	10/25/01	10/26/01
Manganese	ND	0.005 mg/L	1	EPA 6010	10/25/01	10/26/01
Molybdenum	ND	0.01 mg/L	1	EPA 6010	10/25/01	10/26/01
Nickel	ND	0.04 mg/L	1	EPA 6010	10/25/01	10/26/01
Potassium	ND	2. mg/L	1	EPA 6010	10/25/01	10/26/01
Selenium	ND	0.1 mg/L	1	EPA 6010	10/25/01	10/26/01
Silver	ND	0.02 mg/L	1	EPA 6010	10/25/01	10/26/01
Sodium	ND	0.5 mg/L	1	EPA 6010	10/25/01	10/26/01
Zinc	ND	0.1 mg/L	1	EPA 6010	10/25/01	10/26/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.
PROJECT #: NA
TEST: Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: P0055HG-BLK

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Mercury	ND	0.0002 mg/L	1	EPA 7470A	10/31/01	10/31/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.
PROJECT #: NA

CLIENT ID: M01-0475
DATE SAMPLED: 10/23/01
NEL SAMPLE ID: P0110043-01

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	350		1	SM 2320 B	mg/L	10/30/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	10/30/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	10/30/01
Alkalinity, Total as CaCO ₃	350	25.	1	SM 2320 B	mg/L	10/30/01
Bromide	ND	20.	100	EPA 300.0	mg/L	10/24/01
Chloride	11000	1000.	10000	EPA 300.0	mg/L	10/31/01
Fluoride	1.1	0.4	1	SM 4500-F C	mg/L	10/25/01
Hardness, Total (as CaCO ₃)	1800	5.	1	SM 2340 C	mg/L	10/27/01
Nitrate, as N	ND	10.	100	EPA 300.0	mg/L-N	10/24/01
pH	7.02	2.	1	EPA 150.1	pH Units	10/24/01
pH Temperature	21.6	1.	1	EPA 150.1	°C	10/24/01
Specific Conductance	33400	1.	1	SM 2510 B	µS/cm	10/25/01
Sulfate	590	10.	100	EPA 300.0	mg/L	10/24/01
Total Dissolved Solids	20000	1500.	100	SM 2540 C	mg/L	10/26/01

R. Reporting Limit

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.
PROJECT #: NA

CLIENT ID: M01-0476
DATE SAMPLED: 10/23/01
NEL SAMPLE ID: P0110043-02

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	160		1	SM 2320 B	mg/L	10/30/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	10/30/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	10/30/01
Alkalinity, Total as CaCO ₃	160	25.	1	SM 2320 B	mg/L	10/30/01
Bromide	ND	20.	100	EPA 300.0	mg/L	10/24/01
Chloride	17000	1000.	10000	EPA 300.0	mg/L	10/31/01
Fluoride	0.41	0.4	1	SM 4500-F C	mg/L	10/25/01
Hardness, Total (as CaCO ₃)	9700	5.	1	SM 2340 C	mg/L	10/27/01
Nitrate, as N	ND	10.	100	EPA 300.0	mg/L-N	10/24/01
pH	6.55	2.	1	EPA 150.1	pH Units	10/24/01
pH Temperature	21.5	1.	1	EPA 150.1	°C	10/24/01
Specific Conductance	47800	1.	1	SM 2510 B	µS/cm	10/25/01
Sulfate	800	10.	100	EPA 300.0	mg/L	10/24/01
Total Dissolved Solids	32900	1500.	100	SM 2540 C	mg/L	10/26/01

R. Reporting Limit

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: Jal #4 M.W.
 PROJECT #: NA

CLIENT ID: Method Blank
 DATE SAMPLED: NA
 NEL SAMPLE ID: 011024BR-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Bromide	ND	0.2	1	EPA 300.0	mg/L	10/24/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: Jal #4 M.W.
 PROJECT #: NA

CLIENT ID: Method Blank
 DATE SAMPLED: NA
 NEL SAMPLE ID: 011024NO3-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Nitrate, as N	ND	0.1	1	EPA 300.0	mg/L-N	10/24/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011024SO4A-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Sulfate	ND	0.1	1	EPA 300.0	mg/L	10/24/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: Jal #4 M.W.
 PROJECT #: NA

CLIENT ID: Method Blank
 DATE SAMPLED: NA
 NEL SAMPLE ID: 011025F-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Fluoride	ND	0.4	1	SM 4500-F C	mg/L	10/25/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: Jal #4 M.W.
 PROJECT #: NA

CLIENT ID: Method Blank
 DATE SAMPLED: NA
 NEL SAMPLE ID: 011026TDS-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Total Dissolved Solids	ND	15	1	SM 2540 C	mg/L	10/26/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011030ALK-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Alkalinity - Bicarbonate as CaC	ND		1	SM 2320 B	mg/L	10/30/01
Alkalinity - Carbonate as CaCO	ND		1	SM 2320 B	mg/L	10/30/01
Alkalinity - Hydroxide as CaCO	ND		1	SM 2320 B	mg/L	10/30/01
Alkalinity, Total as CaCO ₃	ND	25	1	SM 2320 B	mg/L	10/30/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: Jal #4 M.W.
 PROJECT #: NA

CLIENT ID: Method Blank
 DATE SAMPLED: NA
 NEL SAMPLE ID: 011031CL-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	ND	0.1	1	EPA 300.0	mg/L	10/31/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.
PROJECT #: NA

CLIENT ID: M01-0475
DATE SAMPLED: 10/23/01
NEL SAMPLE ID: P0110043-01

TEST: BTEX by EPA SW846 Method 8021B, Dec. 1996

METHOD: EPA 8021B

ANALYST: PXC - Division

MATRIX: Aqueous

EXTRACTED: 10/30/01

DILUTION: 1

ANALYZED: 10/30/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	41 µg/L	2. µg/L
Toluene	4.8 µg/L	2. µg/L
Ethylbenzene	3.1 µg/L	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	112	60 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 M.W.
PROJECT #: NA

CLIENT ID: M01-0476
DATE SAMPLED: 10/23/01
NEL SAMPLE ID: P0110043-02

TL: BTEX by EPA SW846 Method 8021B, Dec. 1996
METHOD: EPA 8021B
MATRIX: Aqueous
DILUTION: 1

ANALYST: PXC - Division
EXTRACTED: 10/30/01
ANALYZED: 10/30/01

PARAMETER	Result	Reporting Limit
Benzene	59 µg/L	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

Surrogate	% Recovery	Acceptable Range
a,a,a-Trifluorotoluene	107	60 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: Jal #4 M.W.
 PROJECT #: NA

CLIENT ID: Method Blank
 DATE SAMPLED: NA
 NEL SAMPLE ID: 011030BTEX-BLK

TEST: BTEX by EPA SW846 Method 8021B, Dec. 1996

METHOD: EPA 8021B

MATRIX: Aqueous

ANALYST: PXC - Division

EXTRACTED: 10/30/01

ANALYZED: 10/30/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
MTBE	ND	5. µg/L
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	118	60 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

Due 10/31

CHAIN OF CUSTODY RECORD
El Paso Gas Lead

20110043

Page

PROJECT NUMBER		PROJECT NAME		COMPOSITE OR TOTAL NUMBER OF CONTAINERS		REQUESTED ANALYSIS		CONTRACT LABORATORY	
SAMPLERS (Signature)		DATE		DATE		DATE		DATE	
LAB ID	DATE	TIME	MATRIX	SAMPLE NUMBER	DATE	TIME	MATRIX	SAMPLE NUMBER	DATE
01	10/31/11	1400	H ₂ O	M01-0475	5	4	5	4	5
02	10/31/11	1520	H ₂ O	M01-0476	5	4	5	4	5
Custody Seal Intact? Y N None Condition when received									
RECEIVED BY (Signature)		DATE/TIME		RECEIVED BY (Signature)		DATE/TIME		RECEIVED BY (Signature)	
10/31/11		1700		10/31/11		1700		10/31/11	
RECEIVED BY (Signature)		DATE/TIME		RECEIVED BY (Signature)		DATE/TIME		RECEIVED BY (Signature)	
10/31/11		1700		10/31/11		1700		10/31/11	
REQUESTED TURNAROUND TIME:									
ROUTINE ☐ RUSH ☐									
CARRIER CO.									
BILL NO.									
CHARGE CODE									
SAMPLE RECEIPT REMARKS									
RESULTS & INVOICES TO:									
LABORATORY SERVICES EL PASO CORPORATION 8645 RAILROAD DRIVE EL PASO, TEXAS 79904 915-587-3729 FAX: 915-587-3835									

NEL LABORATORIES

Reno • Las Vegas
Phoenix • Burbank

Las Vegas Division
4208 Arcata Way, Suite A • Las Vegas, NV 89030
(702) 657-1010 • Fax: (702) 657-1577
1-888-368-3282

CLIENT: El Paso Natural Gas Company
8645 Railroad Drive
El Paso, TX 79904
ATTN: Darrell Campbell

PROJECT NAME: JAL #4 Monitor Wells
PROJECT NUMBER: NA

NEL ORDER ID: P0110047

Attached are the analytical results for samples in support of the above referenced project.

Samples submitted for this project were not sampled by NEL Laboratories. Samples were received by NEL in good condition, under chain of custody on 10/25/01.

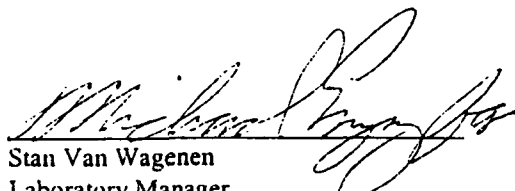
Should you have any questions or comments, please feel free to contact our Client Services department at (602) 437-0099.

Some results have been flagged as follows:

H3 - Sample was received and analyzed past holding time.

Some QA results have been flagged as follows:

C - Sample concentration is a least 5 times greater than spike contribution. Spike recovery criteria do not apply.
H3 - Sample was received and analyzed past holding time.


Stan Van Wagenen
Laboratory Manager

10/25/01
Date

CERTIFICATIONS:

	Reno	Las Vegas	S. California
Arizona	AZ0520	AZ0518	AZ0605
California	1707	2002	2264
US Army Corps of Engineers	Certified	Certified	

	Reno	Las Vegas	S. California
Idaho	Certified	Certified	
Montana	Certified	Certified	
Nevada	NV033	NV052	CA084
L.A.C.S.D.			10228

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0477
DATE SAMPLED: 10/24/01
NEL SAMPLE ID: P0110047-01

TEST: Metals
MATRIX: Aqueous

ANALYST: FIF - Reno Division

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Aluminum	0.29	0.05 mg/L	1	EPA 6010	10/29/01	10/30/01
Arsenic	ND	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Barium	1.3	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Boron	0.74	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Cadmium	ND	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Calcium	230	0.5 mg/L	1	EPA 6010	10/29/01	10/30/01
Chromium	0.012	0.01 mg/L	1	EPA 6010	10/29/01	10/30/01
Cobalt	ND	0.01 mg/L	1	EPA 6010	10/29/01	10/30/01
Copper	ND	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Iron	15	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Lead	0.075	0.05 mg/L	1	EPA 6010	10/29/01	10/30/01
Magnesium	100	0.5 mg/L	1	EPA 6010	10/29/01	10/30/01
Manganese	0.11	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Mercury	ND	0.0002 mg/L	1	EPA 7470A	10/31/01	10/31/01
Molybdenum	0.025	0.01 mg/L	1	EPA 6010	10/29/01	10/30/01
Nickel	ND	0.04 mg/L	1	EPA 6010	10/29/01	10/30/01
Potassium	4.2	2. mg/L	1	EPA 6010	10/29/01	10/30/01
Selenium	ND	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Vanadium	43	2. mg/L	2	SM 4500Si-D	11/1/01	11/1/01
Silver	ND	0.02 mg/L	1	EPA 6010	10/29/01	10/30/01
Sodium	3600	5. mg/L	10	EPA 6010	10/29/01	10/30/01
Uranium	ND	0.005 mg/L	5	EPA 6020	1/8/02	1/10/02
Zinc	ND	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01

ND - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0478
DATE SAMPLED: 10/24/01
NEL SAMPLE ID: P0110047-02

TEST: Metals
MATRIX: Aqueous

ANALYST: FIF - Reno Division

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Aluminum	0.067	0.05 mg/L	1	EPA 6010	10/29/01	10/30/01
Arsenic	ND	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Barium	0.059	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Boron	0.19	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Cadmium	ND	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Calcium	40	0.5 mg/L	1	EPA 6010	10/29/01	10/30/01
Chromium	ND	0.01 mg/L	1	EPA 6010	10/29/01	10/30/01
Cobalt	ND	0.01 mg/L	1	EPA 6010	10/29/01	10/30/01
Copper	ND	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Iron	0.64	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Lead	ND	0.05 mg/L	1	EPA 6010	10/29/01	10/30/01
Magnesium	9.8	0.5 mg/L	1	EPA 6010	10/29/01	10/30/01
Manganese	0.043	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Mercury	ND	0.0002 mg/L	1	EPA 7470A	10/31/01	10/31/01
Molybdenum	ND	0.01 mg/L	1	EPA 6010	10/29/01	10/30/01
Nickel	ND	0.04 mg/L	1	EPA 6010	10/29/01	10/30/01
Potassium	4.0	2. mg/L	1	EPA 6010	10/29/01	10/30/01
Selenium	ND	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Silica	25	1. mg/L	1	SM 4500Si-D	11/1/01	11/1/01
Silver	ND	0.02 mg/L	1	EPA 6010	10/29/01	10/30/01
Sodium	61	0.5 mg/L	1	EPA 6010	10/29/01	10/30/01
Uranium	ND	0.005 mg/L	5	EPA 6020	1/8/02	1/10/02
Zinc	ND	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01

DF - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0479
DATE SAMPLED: 10/24/01
NEL SAMPLE ID: P0110047-03

TEST: Metals
MATRIX: Aqueous

ANALYST: FIF - Reno Division

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Aluminum	ND	0.05 mg/L	1	EPA 6010	10/29/01	10/30/01
Arsenic	ND	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Barium	ND	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Boron	ND	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Cadmium	ND	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Calcium	ND	0.5 mg/L	1	EPA 6010	10/29/01	10/30/01
Chromium	ND	0.01 mg/L	1	EPA 6010	10/29/01	10/30/01
Cobalt	ND	0.01 mg/L	1	EPA 6010	10/29/01	10/30/01
Copper	ND	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Iron	ND	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Lead	ND	0.05 mg/L	1	EPA 6010	10/29/01	10/30/01
Magnesium	ND	0.5 mg/L	1	EPA 6010	10/29/01	10/30/01
Manganese	0.0067	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Mercury	ND	0.0002 mg/L	1	EPA 7470A	10/31/01	10/31/01
Molybdenum	ND	0.01 mg/L	1	EPA 6010	10/29/01	10/30/01
Nickel	ND	0.04 mg/L	1	EPA 6010	10/29/01	10/30/01
Potassium	ND	2. mg/L	1	EPA 6010	10/29/01	10/30/01
Selenium	ND	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Silica	ND	1. mg/L	1	SM 4500Si-D	11/1/01	11/1/01
Silver	ND	0.02 mg/L	1	EPA 6010	10/29/01	10/30/01
Sodium	1.5	0.5 mg/L	1	EPA 6010	10/29/01	10/30/01
Uranium	ND	0.005 mg/L	5	EPA 6020	1/8/02	1/10/02
Zinc	ND	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01

DF - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0480
DATE SAMPLED: 10/24/01
NEL SAMPLE ID: P0110047-04

TEST: Metals
MATRIX: Aqueous

ANALYST: FIF - Reno Division

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Aluminum	0.18	0.05 mg/L	1	EPA 6010	10/29/01	10/30/01
Arsenic	0.58	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Barium	0.21	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Boron	1.3	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Cadmium	ND	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Calcium	57	0.5 mg/L	1	EPA 6010	10/29/01	10/30/01
Chromium	ND	0.01 mg/L	1	EPA 6010	10/29/01	10/30/01
Cobalt	ND	0.01 mg/L	1	EPA 6010	10/29/01	10/30/01
Copper	ND	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Iron	1.8	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Lead	ND	0.05 mg/L	1	EPA 6010	10/29/01	10/30/01
Magnesium	16	0.5 mg/L	1	EPA 6010	10/29/01	10/30/01
Manganese	0.081	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Mercury	ND	0.0002 mg/L	1	EPA 7470A	10/31/01	10/31/01
Molybdenum	0.052	0.01 mg/L	1	EPA 6010	10/29/01	10/30/01
Nickel	ND	0.04 mg/L	1	EPA 6010	10/29/01	10/30/01
Potassium	2.9	2. mg/L	1	EPA 6010	10/29/01	10/30/01
Selenium	ND	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Silica	35	1. mg/L	1	SM 4500Si-D	11/1/01	11/1/01
Silver	ND	0.02 mg/L	1	EPA 6010	10/29/01	10/30/01
Sodium	1900	5. mg/L	10	EPA 6010	10/29/01	10/30/01
Uranium	ND	0.005 mg/L	5	EPA 6020	1/8/02	1/10/02
Zinc	ND	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
OBJECT #: NA

CLIENT ID: M01-0482
DATE SAMPLED: 10/24/01
NEL SAMPLE ID: P0110047-05

TEST: Metals
MATRIX: Aqueous

ANALYST: FIF - Reno Division

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Aluminum	ND	0.05 mg/L	1	EPA 6010	10/29/01	10/30/01
Arsenic	ND	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Barium	0.041	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Boron	0.22	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Cadmium	ND	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Calcium	46	0.5 mg/L	1	EPA 6010	10/29/01	10/30/01
Chromium	ND	0.01 mg/L	1	EPA 6010	10/29/01	10/30/01
Cobalt	ND	0.01 mg/L	1	EPA 6010	10/29/01	10/30/01
Copper	ND	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Iron	0.26	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Lead	ND	0.05 mg/L	1	EPA 6010	10/29/01	10/30/01
Magnesium	16	0.5 mg/L	1	EPA 6010	10/29/01	10/30/01
Manganese	0.012	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Mercury	ND	0.0002 mg/L	1	EPA 7470A	10/31/01	10/31/01
Molybdenum	ND	0.01 mg/L	1	EPA 6010	10/29/01	10/30/01
Nickel	ND	0.04 mg/L	1	EPA 6010	10/29/01	10/30/01
Potassium	6.0	2. mg/L	1	EPA 6010	10/29/01	10/30/01
Selenium	ND	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Vanadium	34	1. mg/L	1	SM 4500Si-D	11/1/01	11/1/01
Silver	ND	0.02 mg/L	1	EPA 6010	10/29/01	10/30/01
Sodium	82	0.5 mg/L	1	EPA 6010	10/29/01	10/30/01
Uranium	0.0085	0.005 mg/L	5	EPA 6020	1/8/02	1/10/02
Zinc	ND	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01

DF - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA
TEST: Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 0108-4.1-BLK

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Uranium	ND	0.005 mg/L	5	EPA 6020	1/8/02	1/10/02

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: **Method Blank**
DATE SAMPLED: NA
NEL SAMPLE ID: 011101SI-BLK

TEST:

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Silica	ND	1. mg/L	1	SM 4500Si-D	11/1/01	11/1/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4 Monitor Wells
 PROJECT #: NA
 TEST: Metals

CLIENT ID: Method Blank
 DATE SAMPLED: NA
 NEL SAMPLE ID: 1029-2.1-BLK

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Aluminum	ND	0.05 mg/L	1	EPA 6010	10/29/01	10/30/01
Arsenic	ND	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Barium	ND	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Boron	ND	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Cadmium	ND	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Calcium	ND	0.5 mg/L	1	EPA 6010	10/29/01	10/30/01
Chromium	ND	0.01 mg/L	1	EPA 6010	10/29/01	10/30/01
Cobalt	ND	0.01 mg/L	1	EPA 6010	10/29/01	10/30/01
Copper	ND	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Iron	ND	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Lead	ND	0.05 mg/L	1	EPA 6010	10/29/01	10/30/01
Magnesium	ND	0.5 mg/L	1	EPA 6010	10/29/01	10/30/01
Manganese	ND	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Molybdenum	ND	0.01 mg/L	1	EPA 6010	10/29/01	10/30/01
Nickel	ND	0.04 mg/L	1	EPA 6010	10/29/01	10/30/01
Potassium	ND	2. mg/L	1	EPA 6010	10/29/01	10/30/01
Selenium	ND	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Silver	ND	0.02 mg/L	1	EPA 6010	10/29/01	10/30/01
Uranium	ND	0.5 mg/L	1	EPA 6010	10/29/01	10/30/01
Zinc	ND	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA
TEST: Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: P0055HG-BLK

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Mercury	ND	0.0002 mg/L	1	EPA 7470A	10/31/01	10/31/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0477
DATE SAMPLED: 10/24/01
NEL SAMPLE ID: P0110047-01

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	820		1	SM 2320 B	mg/L	10/30/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	10/30/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	10/30/01
Alkalinity, Total as CaCO ₃	820	25.	1	SM 2320 B	mg/L	10/30/01
Bromide	ND	20.	100	EPA 300.0	mg/L	10/25/01
Chloride	8500	1000.	10000	EPA 300.0	mg/L	10/31/01
Fluoride	2.9	0.4	1	SM 4500-F C	mg/L	10/31/01
Hardness, Total (as CaCO ₃)	990	5.	1	SM 2340 C	mg/L	10/30/01
Nitrate, as N	ND	5.	100	SM 4500-NO ₃	mg/L-N	10/25/01
pH	7.11	H3 2.	1	EPA 150.1	pH Units	10/25/01
pH Temperature	21.0	1.	1	EPA 150.1	°C	10/25/01
Specific Conductance	17400	1.	1	SM 2510 B	µS/cm	10/29/01
Sulfate	110	10.	100	EPA 300.0	mg/L	10/25/01
Total Dissolved Solids	9180	300.	20	SM 2540 C	mg/L	10/29/01

R. Reporting Limit

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0478
DATE SAMPLED: 10/24/01
NEL SAMPLE ID: P0110047-02

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	140		1	SM 2320 B	mg/L	10/30/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	10/30/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	10/30/01
Alkalinity, Total as CaCO ₃	140	25.	1	SM 2320 B	mg/L	10/30/01
Bromide	ND	2.	10	EPA 300.0	mg/L	10/25/01
Chloride	76	10.	100	EPA 300.0	mg/L	10/31/01
Fluoride	1.7	0.4	1	SM 4500-F C	mg/L	10/31/01
Hardness, Total (as CaCO ₃)	140	5.	1	SM 2340 C	mg/L	10/30/01
Nitrate, as N	ND	0.5	10	SM 4500-NO ₃	mg/L-N	10/25/01
pH	8.22	H3 2.	1	EPA 150.1	pH Units	10/25/01
pH Temperature	20.3	1.	1	EPA 150.1	°C	10/25/01
Specific Conductance	565	1.	1	SM 2510 B	µS/cm	10/29/01
Sulfate	44	1.	10	EPA 300.0	mg/L	10/25/01
Total Dissolved Solids	310	15.	1	SM 2540 C	mg/L	10/29/01

R. Reporting Limit

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0479
DATE SAMPLED: 10/24/01
NEL SAMPLE ID: P0110047-03

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	10/30/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	10/30/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	10/30/01
Alkalinity, Total as CaCO ₃	ND	25.	1	SM 2320 B	mg/L	10/30/01
Bromide	ND	0.2	1	EPA 300.0	mg/L	10/25/01
Chloride	0.23	0.1	1	EPA 300.0	mg/L	10/25/01
Fluoride	ND	0.4	1	SM 4500-F C	mg/L	10/31/01
Hardness, Total (as CaCO ₃)	ND	5.	1	SM 2340 C	mg/L	10/30/01
Nitrate, as N	ND	0.05	1	SM 4500-NO ₃	mg/L-N	10/25/01
pH	6.47	H3 2.	1	EPA 150.1	pH Units	10/25/01
pH Temperature	20.1	1.	1	EPA 150.1	°C	10/25/01
Specific Conductance	1.52	1.	1	SM 2510 B	µS/cm	10/29/01
Sulfate	ND	0.1	1	EPA 300.0	mg/L	10/25/01
Total Dissolved Solids	ND	15.	1	SM 2540 C	mg/L	10/29/01

R. Reporting Limit

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0480
DATE SAMPLED: 10/24/01
NEL SAMPLE ID: P0110047-04

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	1100		1	SM 2320 B	mg/L	10/30/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	10/30/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	10/30/01
Alkalinity, Total as CaCO ₃	1100	25.	1	SM 2320 B	mg/L	10/30/01
Bromide	ND	10.	50	EPA 300.0	mg/L	10/25/01
Chloride	2400	500.	5000	EPA 300.0	mg/L	10/31/01
Fluoride	22	4.	10	SM 4500-F C	mg/L	10/31/01
Hardness, Total (as CaCO ₃)	210	5.	1	SM 2340 C	mg/L	10/30/01
Nitrate, as N	ND	2.5	50	SM 4500-NO ₃	mg/L-N	10/25/01
pH	8.02	2.	1	EPA 150.1	pH Units	10/25/01
pH Temperature	19.5	1.	1	EPA 150.1	°C	10/25/01
Specific Conductance	8350	1.	1	SM 2510 B	µS/cm	10/29/01
Sulfate	220	5.	50	EPA 300.0	mg/L	10/25/01
Total Dissolved Solids	4730	150.	10	SM 2540 C	mg/L	10/29/01

R.. Reporting Limit

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0482
DATE SAMPLED: 10/24/01
NEL SAMPLE ID: P0110047-05

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	160		1	SM 2320 B	mg/L	10/30/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	10/30/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	10/30/01
Alkalinity, Total as CaCO ₃	160	25.	1	SM 2320 B	mg/L	10/30/01
Bromide	ND	2.	10	EPA 300.0	mg/L	10/25/01
Chloride	71	10.	100	EPA 300.0	mg/L	10/31/01
Fluoride	1.8	0.4	1	SM 4500-F C	mg/L	10/31/01
Hardness, Total (as CaCO ₃)	190	5.	1	SM 2340 C	mg/L	10/30/01
Nitrate, as N	1.8	0.5	10	SM 4500-NO ₃	mg/L-N	10/25/01
pH	7.63	2.	1	EPA 150.1	pH Units	10/25/01
pH Temperature	20.0	1.	1	EPA 150.1	°C	10/25/01
Specific Conductance	761	1.	1	SM 2510 B	µS/cm	10/29/01
Sulfate	100	10.	100	EPA 300.0	mg/L	10/31/01
Total Dissolved Solids	449	15.	1	SM 2540 C	mg/L	10/29/01

R.L. - Reporting Limit

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011025BR-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Bromide	ND	0.2	1	EPA 300.0	mg/kg	10/25/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011025CL-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	ND	0.1	1	EPA 300.0	mg/L	10/25/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011025SO4-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Sulfate	ND	0.1	1	EPA 300.0	mg/L	10/25/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011029TDS-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Total Dissolved Solids	ND	15	1	SM 2540 C	mg/L	10/29/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011030ALK-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Alkalinity - Bicarbonate as CaC	ND		1	SM 2320 B	mg/L	10/30/01
Alkalinity - Carbonate as CaCO	ND		1	SM 2320 B	mg/L	10/30/01
Alkalinity - Hydroxide as CaCO	ND		1	SM 2320 B	mg/L	10/30/01
Alkalinity, Total as CaCO ₃	ND	25	1	SM 2320 B	mg/L	10/30/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011031CL-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	ND	0.1	1	EPA 300.0	mg/L	10/31/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011031F-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Fluoride	ND	0.4	1	SM 4500-F C	mg/L	10/31/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011031SO4-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Sulfate	ND	0.1	1	EPA 300.0	mg/L	10/31/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0477
DATE SAMPLED: 10/24/01
NEL SAMPLE ID: P0110047-01

TEST: BTEX by EPA SW846 Method 8021B, Dec. 1996

METHOD: EPA 8021B

ANALYST: PXC - Division

MATRIX: Aqueous

EXTRACTED: 10/31/01

DILUTION: 1

ANALYZED: 10/31/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	7.4 µg/L	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	2.4 µg/L	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	108	60 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0478
DATE SAMPLED: 10/24/01
NEL SAMPLE ID: P0110047-02

TEST: BTEX by EPA SW846 Method 8021B, Dec. 1996

METHOD: EPA 8021B

MATRIX: Aqueous

DILUTION: 1

ANALYST: PXC - Division

EXTRACTED: 10/31/01

ANALYZED: 10/31/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	3.2 µg/L	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	101	60 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0479
DATE SAMPLED: 10/24/01
NEL SAMPLE ID: P0110047-03

TEST: BTEX by EPA SW846 Method 8021B, Dec. 1996

METHOD: EPA 8021B

ANALYST: PXC - Division

MATRIX: Aqueous

EXTRACTED: 10/31/01

DILUTION: 1

ANALYZED: 10/31/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	4.0 µg/L	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	103	60 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0480
DATE SAMPLED: 10/24/01
NEL SAMPLE ID: P0110047-04

TEST: BTEX by EPA SW846 Method 8021B, Dec. 1996
METHOD: EPA 8021B
MATRIX: Aqueous
DILUTION: 1

ANALYST: PXC - Division
EXTRACTED: 10/31/01
ANALYZED: 10/31/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	5.6 µg/L	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	18 µg/L	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	109	60 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0482
DATE SAMPLED: 10/24/01
NEL SAMPLE ID: P0110047-05

TEST: BTEX by EPA SW846 Method 8021B, Dec. 1996

METHOD: EPA 8021B

ANALYST: PXC - Division

MATRIX: Aqueous

EXTRACTED: 10/31/01

DILUTION: 1

ANALYZED: 10/31/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	92	60 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011031BTEX-BLK

TEST: BTEX by EPA SW846 Method 8021B, Dec. 1996

METHOD: EPA 8021B

ANALYST: PXC - Division

MATRIX: Aqueous

EXTRACTED: 10/31/01

ANALYZED: 10/31/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
MTBE	ND	5. µg/L
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	85	60 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

Reno • Las Vegas
Phoenix • Boise

Las Vegas Division
4208 Arcata Way, Suite A • Las Vegas, Nevada 89030
702-657-1010 • Fax: 702-657-1577
1-888-368-3282

CLIENT: El Paso Natural Gas Company
8645 Railroad Drive
El Paso, TX 79904
ATTN: Darrell Campbell

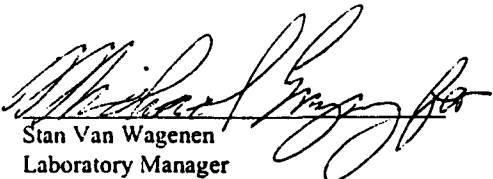
PROJECT NAME: JAL #4 Monitor Wells
PROJECT NUMBER: NA

NEL ORDER ID: P0110049

Attached are the analytical results for samples in support of the above referenced project.

Samples submitted for this project were not sampled by NEL Laboratories. Samples were received by NEL in good condition, under chain of custody on 10/25/01.

Should you have any questions or comments, please feel free to contact our Client Services department at (602) 437-0099.


Stan Van Wagenen
Laboratory Manager

11/1/01
Date

CERTIFICATIONS:

	<u>Reno</u>	<u>Las Vegas</u>	<u>S. California</u>
Arizona	AZ0520	AZ0518	AZ0605
California	1707	2002	2264
US Army Corps of Engineers	Certified	Certified	

	<u>Reno</u>	<u>Las Vegas</u>	<u>S. California</u>
Idaho	Certified	Certified	
Montana	Certified	Certified	
Nevada	NV033	NV052	CA084
L.A.C.S.D.			10228

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0481
DATE SAMPLED: 10/24/01
NEL SAMPLE ID: P0110049-01

TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>RESULT</u>	<u>R. L.</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	590	100.	1000	EPA 300.0	mg/L	10/31/01
Specific Conductance	3120	1.	1	SM 2510 B	μS/cm	10/29/01
Total Dissolved Solids	1860	30.	2	SM 2540 C	mg/L	10/29/01

R. Reporting Limit

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011029TDS-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Total Dissolved Solids	ND	15	1	SM 2540 C	mg/L	10/29/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011031CL-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	ND	0.1	1	EPA 300.0	mg/L	10/31/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

Dec 11/11

2019

10

White - Testing Laboratory **Canary - EP Corp.** **Pink - Field Sampler**

NEL LABORATORIES

Reno • Las Vegas
Phoenix • So. California

Las Vegas Division
4208 Arcata Way, Suite A • Las Vegas, NV 89030
(702) 657-1010 • Fax: (702) 657-1577
1-888-368-3282

CLIENT: El Paso Natural Gas Company
8645 Railroad Drive
El Paso, TX 79904
ATTN: Darrell Campbell

PROJECT NAME: JAL #4 Monitor Wells
PROJECT NUMBER: NA

NEL ORDER ID: P0110055

Attached are the analytical results for samples in support of the above referenced project.

Samples submitted for this project were not sampled by NEL Laboratories. Samples were received by NEL in good condition, under chain of custody on 10/26/01.

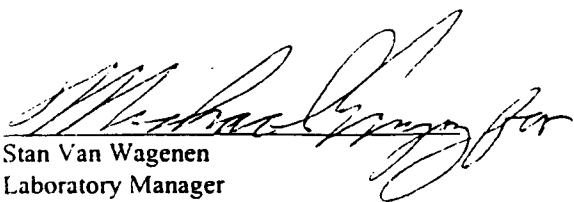
Should you have any questions or comments, please feel free to contact our Client Services department at (602) 437-0099.

Some results have been flagged as follows:

H3 - Sample was received and analyzed past holding time.

Some QA results have been flagged as follows:

C - Sample concentration is a least 5 times greater than spike contribution. Spike recovery criteria do not apply.


Stan Van Wagenen
Laboratory Manager

11/6/01
Date

CERTIFICATIONS:

	Reno	Las Vegas	S. California
Arizona	AZ0520	AZ0518	AZ0605
California	1707	2002	2264
US Army Corps of Engineers	Certified	Certified	

	Reno	Las Vegas	S. California
Idaho	Certified	Certified	
Montana	Certified	Certified	
Nevada	NV033	NV052	CA084
L.A.C.S.D.			10228

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
OBJECT #: NA

CLIENT ID: M01-0483
DATE SAMPLED: 10/25/01
NEL SAMPLE ID: P0110055-01

TEST: Metals
MATRIX: Aqueous

ANALYST: JTY - Reno Division

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Aluminum	ND	0.05 mg/L	1	EPA 6010	10/29/01	10/30/01
Arsenic	ND	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Barium	0.10	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Boron	0.46	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Cadmium	ND	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Calcium	280	0.5 mg/L	1	EPA 6010	10/29/01	10/30/01
Chromium	ND	0.01 mg/L	1	EPA 6010	10/29/01	10/30/01
Cobalt	ND	0.01 mg/L	1	EPA 6010	10/29/01	10/30/01
Copper	ND	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Iron	1.2	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Lead	0.058	0.05 mg/L	1	EPA 6010	10/29/01	10/30/01
Magnesium	89	0.5 mg/L	1	EPA 6010	10/29/01	10/30/01
Manganese	0.22	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Mercury	ND	0.0002 mg/L	1	EPA 7470A	10/31/01	10/31/01
Molybdenum	ND	0.01 mg/L	1	EPA 6010	10/29/01	10/30/01
Nickel	ND	0.04 mg/L	1	EPA 6010	10/29/01	10/30/01
Potassium	14	2. mg/L	1	EPA 6010	10/29/01	10/30/01
Selenium	ND	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Vanadium	36	1. mg/L	1	SM 4500Si-D	11/2/01	11/2/01
Silver	ND	0.02 mg/L	1	EPA 6010	10/29/01	10/30/01
Sodium	1200	5. mg/L	10	EPA 6010	10/29/01	10/30/01
Uranium	0.034	0.005 mg/L	5	EPA 6020	1/8/02	1/10/02
Zinc	ND	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01

DF - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
OBJECT #: NA

CLIENT ID: M01-0484
DATE SAMPLED: 10/25/01
NEL SAMPLE ID: P0110055-02

TEST: Metals
MATRIX: Aqueous

ANALYST: JTY - Reno Division

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Aluminum	0.075	0.05 mg/L	1	EPA 6010	10/29/01	10/30/01
Arsenic	ND	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Barium	0.11	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Boron	0.49	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Cadmium	ND	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Calcium	290	0.5 mg/L	1	EPA 6010	10/29/01	10/30/01
Chromium	ND	0.01 mg/L	1	EPA 6010	10/29/01	10/30/01
Cobalt	ND	0.01 mg/L	1	EPA 6010	10/29/01	10/30/01
Copper	ND	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Iron	1.3	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Lead	0.067	0.05 mg/L	1	EPA 6010	10/29/01	10/30/01
Magnesium	96	0.5 mg/L	1	EPA 6010	10/29/01	10/30/01
Manganese	0.23	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Mercury	ND	0.0002 mg/L	1	EPA 7470A	10/31/01	10/31/01
Molybdenum	ND	0.01 mg/L	1	EPA 6010	10/29/01	10/30/01
Nickel	ND	0.04 mg/L	1	EPA 6010	10/29/01	10/30/01
Potassium	14	2. mg/L	1	EPA 6010	10/29/01	10/30/01
Selenium	ND	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Vanadium	36	1. mg/L	1	SM 4500Si-D	11/2/01	11/2/01
Silver	ND	0.02 mg/L	1	EPA 6010	10/29/01	10/30/01
Sodium	1300	5. mg/L	10	EPA 6010	10/29/01	10/30/01
Uranium	0.036	0.005 mg/L	5	EPA 6020	1/8/02	1/10/02
Zinc	ND	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01

DF - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
OBJECT #: NA

CLIENT ID: M01-0486
DATE SAMPLED: 10/25/01
NEL SAMPLE ID: P0110055-03

TEST: Metals
MATRIX: Aqueous

ANALYST: JTY - Reno Division

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Aluminum	ND	0.05 mg/L	1	EPA 6010	10/29/01	10/30/01
Arsenic	ND	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Barium	0.11	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Boron	0.25	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Cadmium	ND	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Calcium	160	0.5 mg/L	1	EPA 6010	10/29/01	10/30/01
Chromium	ND	0.01 mg/L	1	EPA 6010	10/29/01	10/30/01
Cobalt	ND	0.01 mg/L	1	EPA 6010	10/29/01	10/30/01
Copper	ND	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Iron	0.29	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Lead	ND	0.05 mg/L	1	EPA 6010	10/29/01	10/30/01
Magnesium	56	0.5 mg/L	1	EPA 6010	10/29/01	10/30/01
Manganese	0.032	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Mercury	ND	0.0002 mg/L	1	EPA 7470A	10/31/01	10/31/01
Molybdenum	ND	0.01 mg/L	1	EPA 6010	10/29/01	10/30/01
Nickel	ND	0.04 mg/L	1	EPA 6010	10/29/01	10/30/01
Potassium	9.3	2. mg/L	1	EPA 6010	10/29/01	10/30/01
Selenium	ND	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Silica	34	1. mg/L	1	SM 4500Si-D	11/2/01	11/2/01
Silver	ND	0.02 mg/L	1	EPA 6010	10/29/01	10/30/01
Sodium	120	0.5 mg/L	1	EPA 6010	10/29/01	10/30/01
Uranium	0.011	0.005 mg/L	5	EPA 6020	1/8/02	1/10/02
Zinc	ND	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0487
DATE SAMPLED: 10/25/01
NEL SAMPLE ID: P0110055-04

TEST: Metals
MATRIX: Aqueous

ANALYST: JTY - Reno Division

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Aluminum	0.057	0.05 mg/L	1	EPA 6010	10/29/01	10/30/01
Arsenic	ND	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Barium	0.10	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Boron	0.30	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Cadmium	ND	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Calcium	300	0.5 mg/L	1	EPA 6010	10/29/01	10/30/01
Chromium	ND	0.01 mg/L	1	EPA 6010	10/29/01	10/30/01
Cobalt	ND	0.01 mg/L	1	EPA 6010	10/29/01	10/30/01
Copper	ND	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Iron	0.19	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Lead	0.068	0.05 mg/L	1	EPA 6010	10/29/01	10/30/01
Magnesium	95	0.5 mg/L	1	EPA 6010	10/29/01	10/30/01
Manganese	0.021	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Mercury	ND	0.0002 mg/L	1	EPA 7470A	10/31/01	10/31/01
Molybdenum	ND	0.01 mg/L	1	EPA 6010	10/29/01	10/30/01
Nickel	ND	0.04 mg/L	1	EPA 6010	10/29/01	10/30/01
Potassium	9.6	2. mg/L	1	EPA 6010	10/29/01	10/30/01
Selenium	ND	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Vanadium	35	1. mg/L	1	SM 4500Si-D	11/2/01	11/2/01
Silver	ND	0.02 mg/L	1	EPA 6010	10/29/01	10/30/01
Sodium	180	0.5 mg/L	1	EPA 6010	10/29/01	10/30/01
Uranium	0.028	0.005 mg/L	5	EPA 6020	1/8/02	1/10/02
Zinc	ND	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0489
DATE SAMPLED: 10/25/01
NEL SAMPLE ID: P0110055-05

TEST: Metals
MATRIX: Aqueous

ANALYST: JTY - Reno Division

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Aluminum	ND	0.05 mg/L	1	EPA 6010	10/29/01	10/30/01
Arsenic	ND	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Barium	0.042	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Boron	0.22	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Cadmium	ND	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Calcium	37	0.5 mg/L	1	EPA 6010	10/29/01	10/30/01
Chromium	ND	0.01 mg/L	1	EPA 6010	10/29/01	10/30/01
Cobalt	ND	0.01 mg/L	1	EPA 6010	10/29/01	10/30/01
Copper	ND	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Iron	0.17	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Lead	ND	0.05 mg/L	1	EPA 6010	10/29/01	10/30/01
Magnesium	13	0.5 mg/L	1	EPA 6010	10/29/01	10/30/01
Manganese	0.0073	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Mercury	0.00030	0.0002 mg/L	1	EPA 7470A	10/31/01	10/31/01
Molybdenum	ND	0.01 mg/L	1	EPA 6010	10/29/01	10/30/01
Nickel	ND	0.04 mg/L	1	EPA 6010	10/29/01	10/30/01
Potassium	72	2. mg/L	1	EPA 6010	10/29/01	10/30/01
Selenium	ND	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Silica	34	1. mg/L	1	SM 4500Si-D	11/2/01	11/2/01
Silver	ND	0.02 mg/L	1	EPA 6010	10/29/01	10/30/01
Sodium	72	0.5 mg/L	1	EPA 6010	10/29/01	10/30/01
Uranium	ND	0.005 mg/L	5	EPA 6020	1/8/02	1/10/02
Zinc	ND	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
OBJECT #: NA

CLIENT ID: M01-0490
DATE SAMPLED: 10/25/01
NEL SAMPLE ID: P0110055-06

TEST: Metals
MATRIX: Aqueous

ANALYST: JTY - Reno Division

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Aluminum	ND	0.05 mg/L	1	EPA 6010	10/29/01	10/30/01
Arsenic	ND	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Barium	0.046	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Boron	0.22	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Cadmium	ND	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Calcium	45	0.5 mg/L	1	EPA 6010	10/29/01	10/30/01
Chromium	ND	0.01 mg/L	1	EPA 6010	10/29/01	10/30/01
Cobalt	ND	0.01 mg/L	1	EPA 6010	10/29/01	10/30/01
Copper	ND	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Iron	0.17	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Lead	ND	0.05 mg/L	1	EPA 6010	10/29/01	10/30/01
Magnesium	15	0.5 mg/L	1	EPA 6010	10/29/01	10/30/01
Manganese	0.020	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Mercury	ND	0.0002 mg/L	1	EPA 7470A	10/31/01	10/31/01
Molybdenum	ND	0.01 mg/L	1	EPA 6010	10/29/01	10/30/01
Nickel	ND	0.04 mg/L	1	EPA 6010	10/29/01	10/30/01
Potassium	6.0	2. mg/L	1	EPA 6010	10/29/01	10/30/01
Selenium	ND	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Silica	34	1. mg/L	1	SM 4500Si-D	11/2/01	11/2/01
Silver	ND	0.02 mg/L	1	EPA 6010	10/29/01	10/30/01
Sodium	78	0.5 mg/L	1	EPA 6010	10/29/01	10/30/01
Uranium	ND	0.005 mg/L	5	EPA 6020	1/8/02	1/10/02
Zinc	ND	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01

DF - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
OBJECT #: NA

CLIENT ID: M01-0491
DATE SAMPLED: 10/25/01
NEL SAMPLE ID: P0110055-07

TEST: Metals
MATRIX: Aqueous

ANALYST: JTY - Reno Division

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Aluminum	ND	0.05 mg/L	1	EPA 6010	10/29/01	10/30/01
Arsenic	ND	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Barium	ND	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Boron	ND	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Cadmium	ND	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Calcium	ND	0.5 mg/L	1	EPA 6010	10/29/01	10/30/01
Chromium	ND	0.01 mg/L	1	EPA 6010	10/29/01	10/30/01
Cobalt	ND	0.01 mg/L	1	EPA 6010	10/29/01	10/30/01
Copper	ND	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Iron	ND	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Lead	ND	0.05 mg/L	1	EPA 6010	10/29/01	10/30/01
Magnesium	ND	0.5 mg/L	1	EPA 6010	10/29/01	10/30/01
Manganese	ND	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Mercury	ND	0.0002 mg/L	1	EPA 7470A	10/31/01	10/31/01
Molybdenum	ND	0.01 mg/L	1	EPA 6010	10/29/01	10/30/01
Nickel	ND	0.04 mg/L	1	EPA 6010	10/29/01	10/30/01
Potassium	ND	2. mg/L	1	EPA 6010	10/29/01	10/30/01
Selenium	ND	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Silica	ND	1. mg/L	1	SM 4500Si-D	11/2/01	11/2/01
Silver	ND	0.02 mg/L	1	EPA 6010	10/29/01	10/30/01
Sodium	ND	0.5 mg/L	1	EPA 6010	10/29/01	10/30/01
Uranium	ND	0.005 mg/L	5	EPA 6020	1/8/02	1/10/02
Zinc	ND	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01

DF - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA
TEST: Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 0108-4.1-BLK

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Uranium	ND	0.005 mg/L	5	EPA 6020	1/8/02	1/10/02

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011102SI-BLK

TEST:

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Silica	ND	1. mg/L	1	SM 4500Si-D	11/2/01	11/2/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4 Monitor Wells
 OBJECT #: NA
 TEST: Metals

CLIENT ID: Method Blank
 DATE SAMPLED: NA
 NEL SAMPLE ID: 1029-2.1-BLK

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Aluminum	ND	0.05 mg/L	1	EPA 6010	10/29/01	10/30/01
Arsenic	ND	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Barium	ND	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Boron	ND	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Cadmium	ND	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Calcium	ND	0.5 mg/L	1	EPA 6010	10/29/01	10/30/01
Chromium	ND	0.01 mg/L	1	EPA 6010	10/29/01	10/30/01
Cobalt	ND	0.01 mg/L	1	EPA 6010	10/29/01	10/30/01
Copper	ND	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Iron	ND	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Lead	ND	0.05 mg/L	1	EPA 6010	10/29/01	10/30/01
Magnesium	ND	0.5 mg/L	1	EPA 6010	10/29/01	10/30/01
Manganese	ND	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Molybdenum	ND	0.01 mg/L	1	EPA 6010	10/29/01	10/30/01
Nickel	ND	0.04 mg/L	1	EPA 6010	10/29/01	10/30/01
Potassium	ND	2. mg/L	1	EPA 6010	10/29/01	10/30/01
Selenium	ND	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Silver	ND	0.02 mg/L	1	EPA 6010	10/29/01	10/30/01
Sodium	ND	0.5 mg/L	1	EPA 6010	10/29/01	10/30/01
Zinc	ND	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA
TEST: Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: P0055HG-BLK

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Mercury	ND	0.0002 mg/L	1	EPA 7470A	10/31/01	10/31/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0483
DATE SAMPLED: 10/25/01
NEL SAMPLE ID: P0110055-01

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	460		1	SM 2320 B	mg/L	10/31/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	10/31/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	10/31/01
Alkalinity, Total as CaCO ₃	460	25.	1	SM 2320 B	mg/L	10/31/01
Bromide	ND	5.	25	EPA 300.0	mg/L	10/26/01
Chloride	4000	250.	2500	EPA 300.0	mg/L	10/31/01
Fluoride	0.88	0.4	1	SM 4500-F C	mg/L	10/31/01
Hardness, Total (as CaCO ₃)	1100	2.	1	EPA 200.7	mg/L	10/30/01
Nitrate, as N	ND	1.25	25	SM 4500-NO ₃	mg/L-N	10/26/01
pH	6.80	H3 2.	1	EPA 150.1	pH Units	10/26/01
pH Temperature	20.1	1.	1	EPA 150.1	°C	10/26/01
Specific Conductance	7820	1.	1	SM 2510 B	µS/cm	10/29/01
Sulfate	200	2.5	25	EPA 300.0	mg/L	10/26/01
Total Dissolved Solids	4390	60.	4	SM 2540 C	mg/L	10/29/01

R. Reporting Limit

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0484
DATE SAMPLED: 10/25/01
NEL SAMPLE ID: P0110055-02

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	440		1	SM 2320 B	mg/L	10/31/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	10/31/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	10/31/01
Alkalinity, Total as CaCO ₃	440	25.	1	SM 2320 B	mg/L	10/31/01
Bromide	ND	5.	25	EPA 300.0	mg/L	10/26/01
Chloride	3700	250.	2500	EPA 300.0	mg/L	10/31/01
Fluoride	0.99	0.4	1	SM 4500-F C	mg/L	10/31/01
Hardness, Total (as CaCO ₃)	1100	2.	1	EPA 200.7	mg/L	10/30/01
Nitrate, as N	ND	1.25	25	SM 4500-NO ₃	mg/L-N	10/26/01
pH	6.84	H3 2.	1	EPA 150.1	pH Units	10/26/01
pH Temperature	19.9	1.	1	EPA 150.1	°C	10/26/01
Specific Conductance	7700	1.	1	SM 2510 B	µS/cm	10/29/01
Sulfate	190	2.5	25	EPA 300.0	mg/L	10/26/01
Total Dissolved Solids	4400	60.	4	SM 2540 C	mg/L	10/29/01

R. Reporting Limit
D.F. - Dilution Factor
ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0486
DATE SAMPLED: 10/25/01
NEL SAMPLE ID: P0110055-03

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	140		1	SM 2320 B	mg/L	10/31/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	10/31/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	10/31/01
Alkalinity, Total as CaCO ₃	140	25.	1	SM 2320 B	mg/L	10/31/01
Bromide	ND	2.	10	EPA 300.0	mg/L	10/26/01
Chloride	1400	100.	1000	EPA 300.0	mg/L	10/31/01
Fluoride	1.1	0.4	1	SM 4500-F C	mg/L	10/31/01
Hardness, Total (as CaCO ₃)	630	2.	1	EPA 200.7	mg/L	10/30/01
Nitrate, as N	ND	0.5	10	SM 4500-NO ₃	mg/L-N	10/26/01
pH	7.43	H3 2.	1	EPA 150.1	pH Units	10/26/01
pH Temperature	19.7	1.	1	EPA 150.1	°C	10/26/01
Specific Conductance	1890	1.	1	SM 2510 B	µS/cm	10/29/01
Sulfate	110	10.	100	EPA 300.0	mg/L	10/31/01
Total Dissolved Solids	1220	15.	1	SM 2540 C	mg/L	10/29/01

R. Reporting Limit

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0487
DATE SAMPLED: 10/25/01
NEL SAMPLE ID: P0110055-04

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	160		1	SM 2320 B	mg/L	10/31/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	10/31/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	10/31/01
Alkalinity, Total as CaCO ₃	160	25.	1	SM 2320 B	mg/L	10/31/01
Bromide	2.1	2.	10	EPA 300.0	mg/L	10/26/01
Chloride	930	100.	1000	EPA 300.0	mg/L	10/31/01
Fluoride	1.0	0.4	1	SM 4500-F C	mg/L	10/31/01
Hardness, Total (as CaCO ₃)	1100	2.	1	EPA 200.7	mg/L	10/30/01
Nitrate, as N	ND	0.5	10	SM 4500-NO ₃	mg/L-N	10/26/01
pH	7.02	2.	1	EPA 150.1	pH Units	10/26/01
pH Temperature	19.8	1.	1	EPA 150.1	°C	10/26/01
Specific Conductance	3350	1.	1	SM 2510 B	µS/cm	10/29/01
Sulfate	220	10.	100	EPA 300.0	mg/L	10/31/01
Total Dissolved Solids	2270	30.	2	SM 2540 C	mg/L	10/29/01

R. Reporting Limit

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0489
DATE SAMPLED: 10/25/01
NEL SAMPLE ID: P0110055-05

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	170		1	SM 2320 B	mg/L	10/31/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	10/31/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	10/31/01
Alkalinity, Total as CaCO ₃	170	25.	1	SM 2320 B	mg/L	10/31/01
Bromide	ND	1.	5	EPA 300.0	mg/L	10/26/01
Chloride	56	25.	250	EPA 300.0	mg/L	10/31/01
Fluoride	1.4	0.4	1	SM 4500-F C	mg/L	10/31/01
Hardness, Total (as CaCO ₃)	150	2.	1	EPA 200.7	mg/L	10/30/01
Nitrate, as N	1.0	0.25	5	SM 4500-NO ₃	mg/L-N	10/26/01
pH	7.86	2.	1	EPA 150.1	pH Units	10/26/01
pH Temperature	19.9	1.	1	EPA 150.1	°C	10/26/01
Specific Conductance	627	1.	1	SM 2510 B	µS/cm	10/29/01
Sulfate	85	5.	50	EPA 300.0	mg/L	10/31/01
Total Dissolved Solids	393	15.	1	SM 2540 C	mg/L	10/29/01

R. Reporting Limit

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0490
DATE SAMPLED: 10/25/01
NEL SAMPLE ID: P0110055-06

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	170		1	SM 2320 B	mg/L	10/31/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	10/31/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	10/31/01
Alkalinity, Total as CaCO ₃	170	25.	1	SM 2320 B	mg/L	10/31/01
Bromide	ND	1.	5	EPA 300.0	mg/L	10/26/01
Chloride	42	5.	50	EPA 300.0	mg/L	10/31/01
Fluoride	1.4	0.4	1	SM 4500-F C	mg/L	10/31/01
Hardness, Total (as CaCO ₃)	170	2.	1	EPA 200.7	mg/L	10/30/01
Nitrate, as N	1.5	0.25	5	SM 4500-NO ₃	mg/L-N	10/26/01
pH	7.75	2.	1	EPA 150.1	pH Units	10/26/01
pH Temperature	20.0	1.	1	EPA 150.1	°C	10/26/01
Specific Conductance	690	1.	1	SM 2510 B	µS/cm	10/29/01
Sulfate	96	5.	50	EPA 300.0	mg/L	10/31/01
Total Dissolved Solids	422	15.	1	SM 2540 C	mg/L	10/29/01

R - Reporting Limit

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0491
DATE SAMPLED: 10/25/01
NEL SAMPLE ID: P0110055-07

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	10/31/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	10/31/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	10/31/01
Alkalinity, Total as CaCO ₃	ND	25.	1	SM 2320 B	mg/L	10/31/01
Bromide	ND	0.2	1	EPA 300.0	mg/L	10/26/01
Chloride	ND	0.1	1	EPA 300.0	mg/L	10/26/01
Fluoride	ND	0.4	1	SM 4500-F C	mg/L	10/31/01
Hardness, Total (as CaCO ₃)	ND	2.	1	EPA 200.7	mg/L	10/30/01
Nitrate, as N	ND	0.05	1	SM 4500-NO ₃	mg/L-N	10/26/01
pH	6.38	2.	1	EPA 150.1	pH Units	10/26/01
pH Temperature	19.6	1.	1	EPA 150.1	°C	10/26/01
Specific Conductance	1.30	1.	1	SM 2510 B	µS/cm	10/29/01
Sulfate	ND	0.1	1	EPA 300.0	mg/L	10/26/01
Total Dissolved Solids	ND	15.	1	SM 2540 C	mg/L	10/29/01

R Reporting Limit

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011026BR-BLK

T. Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Bromide	ND	0.2	1	EPA 300.0	mg/L	10/26/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011026CL-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	ND	0.1	1	EPA 300.0	mg/L	10/26/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011026NO3-BLK

TL Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Nitrate, as N	ND	0.05	1	SM 4500-NO3	mg/L-N	10/26/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011026SO4-BLK

TL Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Sulfate	ND	0.1	1	EPA 300.0	mg/L	10/26/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011029TDS-BLK

T_u Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Total Dissolved Solids	ND	15	1	SM 2540 C	mg/L	10/29/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011031ALK-BLK

Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Alkalinity - Bicarbonate as CaC	ND		1	SM 2320 B	mg/L	10/31/01
Alkalinity - Carbonate as CaCO	ND		1	SM 2320 B	mg/L	10/31/01
Alkalinity - Hydroxide as CaCO	ND		1	SM 2320 B	mg/L	10/31/01
Alkalinity, Total as CaCO ₃	ND	25	1	SM 2320 B	mg/L	10/31/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011031CL-BLK

T. Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	ND	0.1	1	EPA 300.0	mg/L	10/31/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011031F-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Fluoride	ND	0.4	1	SM 4500-F C	mg/L	10/31/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011031SO4-BLK

TL Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Sulfate	ND	0.1	1	EPA 300.0	mg/L	10/31/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0483
DATE SAMPLED: 10/25/01
NEL SAMPLE ID: P0110055-01

TEST: BTEX by EPA SW846 Method 8021B, Dec. 1996

METHOD: EPA 8021B

ANALYST: PXC - Division

MATRIX: Aqueous

EXTRACTED: 10/31/01

DILUTION: 1

ANALYZED: 10/31/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	2.0 µg/L	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	98	60 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0484
DATE SAMPLED: 10/25/01
NEL SAMPLE ID: P0110055-02

TEST: BTEX by EPA SW846 Method 8021B, Dec. 1996

METHOD: EPA 8021B

ANALYST: PXC - Division

MATRIX: Aqueous

EXTRACTED: 10/31/01

DILUTION: 1

ANALYZED: 10/31/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	98	60 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0486
DATE SAMPLED: 10/25/01
NEL SAMPLE ID: P0110055-03

TEST: BTEX by EPA SW846 Method 8021B, Dec. 1996
METHOD: EPA 8021B
MATRIX: Aqueous
DILUTION: 1

ANALYST: PXC - Division
EXTRACTED: 10/31/01
ANALYZED: 10/31/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a.a.a-Trifluorotoluene	88	60 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0487
DATE SAMPLED: 10/25/01
NEL SAMPLE ID: P0110055-04

T BTEX by EPA SW846 Method 8021B, Dec. 1996

METHOD: EPA 8021B

ANALYST: PXC - Division

MATRIX: Aqueous

EXTRACTED: 10/31/01

DILUTION: 1

ANALYZED: 10/31/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	102	60 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0489
DATE SAMPLED: 10/25/01
NEL SAMPLE ID: P0110055-05

TECH: BTEX by EPA SW846 Method 8021B, Dec. 1996

METHOD: EPA 8021B

ANALYST: PXC - Division

MATRIX: Aqueous

EXTRACTED: 10/31/01

DILUTION: 1

ANALYZED: 10/31/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	95	60 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0490
DATE SAMPLED: 10/25/01
NEL SAMPLE ID: P0110055-06

TL: BTEN by EPA SW846 Method 8021B, Dec. 1996

METHOD: EPA 8021B

ANALYST: PXC - Division

MATRIX: Aqueous

EXTRACTED: 10/31/01

DILUTION: 1

ANALYZED: 10/31/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a.a.a-Trifluorotoluene	95	60 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0491
DATE SAMPLED: 10/25/01
NEL SAMPLE ID: P0110055-07

TEST: BTEX by EPA SW846 Method 8021B, Dec. 1996
METHOD: EPA 8021B
MATRIX: Aqueous
DILUTION: 1

ANALYST: PXC - Division
EXTRACTED: 10/31/01
ANALYZED: 10/31/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	96	60 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011031BTEX-BLK

TL: BTEX by EPA SW846 Method 8021B, Dec. 1996

METHOD: EPA 8021B

MATRIX: Aqueous

ANALYST: PXC - Division

EXTRACTED: 10/31/01

ANALYZED: 10/31/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
MTBE	ND	5. µg/L
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	85	60 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

Due 11/2

CHAIN OF CUSTODY/RECORD

Rollins

Index

[illegible]

NEL LABORATORIES

Reno • Las Vegas
Phoenix • Boise

Las Vegas Division
4208 Arcata Way, Suite A • Las Vegas, Nevada 89030
702-657-1010 • Fax: 702-657-1577
1-888-368-3282

CLIENT: El Paso Natural Gas Company
8645 Railroad Drive
El Paso, TX 79904
ATTN: Darrell Campbell

PROJECT NAME: JAL #4 Monitor Wells
PROJECT NUMBER: NA

NEL ORDER ID: P0110053

Attached are the analytical results for samples in support of the above referenced project.

Samples submitted for this project were not sampled by NEL Laboratories. Samples were received by NEL in good condition, under chain of custody on 10/26/01.

Should you have any questions or comments, please feel free to contact our Client Services department at (602) 437-0099.


Stan Van Wageningen
Laboratory Manager

11/2/01
Date

CERTIFICATIONS:

	Reno	Las Vegas	S. California
Arizona	AZ0520	AZ0518	AZ0605
California	1707	2002	2264
US Army Corps of Engineers	Certified	Certified	

	Reno	Las Vegas	S. California
Idaho	Certified	Certified	
Montana	Certified	Certified	
Nevada	NV033	NV052	CA084
L.A.C.S.D.			10228

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0485
DATE SAMPLED: 10/25/01
NEL SAMPLE ID: P0110053-01

TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>RESULT</u>	<u>R. L.</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	2400	100.	1000	EPA 300.0	mg/L	10/31/01
Specific Conductance	8380	1.	1	SM 2510 B	μS/cm	10/29/01
Total Dissolved Solids	5050	150.	10	SM 2540 C	mg/L	10/29/01

R - Reporting Limit

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011029TDS-BLK

TE Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Total Dissolved Solids	ND	15	1	SM 2540 C	mg/L	10/29/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011031CL-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	ND	0.1	1	EPA 300.0	mg/L	10/31/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

El Paso

Dec. 11/2

CHAIN OF CUSTODY RECORD

PA110053

Page:

PROJECT NUMBER		PROJECT NAME		TOTAL NUMBER OF CONTAINERS		COMPOSITE OR GRAF		REQUESTED ANALYSIS		CONTRACT LABORATORY							
SAMPLERS (Signature)		DATE		SAMPLE NUMBER													
LAB ID	DATE	TIME	MATRIX	SAMPLE NUMBER						REMARKS							
01	10/26/04	1030	H ₂ O	MARCHES		1		2		2							
Custody Seal Intact? Y N <i>cc</i>												RECEIVED BY (Signature)		DATE/TIME	RECEIVED BY (Signature)		DATE/TIME
												<i>[Signature]</i>		10/26/04	<i>[Signature]</i>		10/26/04
												RECEIVED BY (Signature)		DATE/TIME	RECEIVED BY (Signature)		DATE/TIME
												<i>[Signature]</i>		10/26/04	<i>[Signature]</i>		10/26/04
												RECEIVED BY (Signature)		DATE/TIME	RECEIVED BY (Signature)		DATE/TIME
												<i>[Signature]</i>		10/26/04	<i>[Signature]</i>		10/26/04
												RECEIVED BY (Signature)		DATE/TIME	RECEIVED BY (Signature)		DATE/TIME
												<i>[Signature]</i>		10/26/04	<i>[Signature]</i>		10/26/04
												RECEIVED BY (Signature)		DATE/TIME	RECEIVED BY (Signature)		DATE/TIME
												<i>[Signature]</i>		10/26/04	<i>[Signature]</i>		10/26/04
REQUESTED TURNAROUND TIME						RESULTS & INVOICES TO:											
ROUTINE						LABORATORY SERVICES											
RUSH						EL PASO CORPORATION											
CARRIER CO.						8645 RAILROAD DRIVE											
						EL PASO, TEXAS 79904											
BILL NO.						915-587-3729 FAX: 915-587-3635											

NEL LABORATORIES

Reno • Las Vegas
Phoenix • So. California

Las Vegas Division
4208 Arcata Way, Suite A • Las Vegas, NV 89030
(702) 657-1010 • Fax: (702) 657-1577
1-888-368-3282

CLIENT: El Paso Natural Gas Company
8645 Railroad Drive
El Paso, TX 79904
ATTN: Darrell Campbell

PROJECT NAME: JAL #4
PROJECT NUMBER: NA

NEL ORDER ID: P0110054

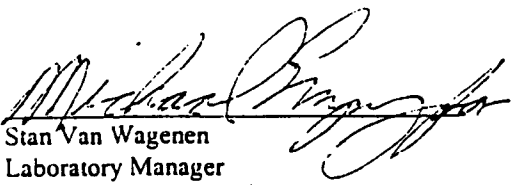
Attached are the analytical results for samples in support of the above referenced project.

Samples submitted for this project were not sampled by NEL Laboratories. Samples were received by NEL in good condition, under chain of custody on 10/26/01.

Should you have any questions or comments, please feel free to contact our Client Services department at (602) 437-0099.

Some QA results have been flagged as follows:

C - Sample concentration is a least 5 times greater than spike contribution. Spike recovery criteria do not apply.


Stan Van Wagenen
Laboratory Manager

11/5/01
Date

CERTIFICATIONS:

	<u>Reno</u>	<u>Las Vegas</u>	<u>S. California</u>
Arizona	AZ0520	AZ0518	AZ0605
California	1707	2002	2264
US Army Corps of Engineers	Certified	Certified	

	<u>Reno</u>	<u>Las Vegas</u>	<u>S. California</u>
Idaho	Certified	Certified	
Montana	Certified	Certified	
Nevada	NV033	NV052	CA084
L.A.C.S.D.			10228

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0488
DATE SAMPLED: 10/25/01
NEL SAMPLE ID: P0110054-01

TEST: Metals
MATRIX: Aqueous

ANALYST: JTY - Reno Division

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Aluminum	ND	0.05 mg/L	1	EPA 6010	10/29/01	10/30/01
Arsenic	ND	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Barium	0.095	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Boron	0.18	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Cadmium	ND	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Calcium	67	0.5 mg/L	1	EPA 6010	10/29/01	10/30/01
Chromium	ND	0.01 mg/L	1	EPA 6010	10/29/01	10/30/01
Cobalt	ND	0.01 mg/L	1	EPA 6010	10/29/01	10/30/01
Copper	ND	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Iron	0.31	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Lead	ND	0.05 mg/L	1	EPA 6010	10/29/01	10/30/01
Magnesium	20	0.5 mg/L	1	EPA 6010	10/29/01	10/30/01
Manganese	0.0088	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Mercury	ND	0.0002 mg/L	1	EPA 7470A	10/31/01	10/31/01
Molybdenum	ND	0.01 mg/L	1	EPA 6010	10/29/01	10/30/01
Nickel	ND	0.04 mg/L	1	EPA 6010	10/29/01	10/30/01
Potassium	5.1	2. mg/L	1	EPA 6010	10/29/01	10/30/01
Selenium	ND	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Silica	47	2. mg/L	2	SM 4500Si-D	11/2/01	11/2/01
Silver	ND	0.02 mg/L	1	EPA 6010	10/29/01	10/30/01
Sodium	64	0.5 mg/L	1	EPA 6010	10/29/01	10/30/01
Uranium	ND	0.005 mg/L	5	EPA 6020	1/8/02	1/10/02
Zinc	0.21	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA
TEST: Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 0108-4.1B-BLK

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Uranium	ND	0.005 mg/L	5	EPA 6020	1/8/02	1/10/02

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011102SI-BLK

TEST:

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Silica	ND	1. mg/L	1	SM 4500Si-D	11/2/01	11/2/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4
 PROJECT #: NA
 TEST: Metals

CLIENT ID: Method Blank
 DATE SAMPLED: NA
 NEL SAMPLE ID: 1029-2.1-BLK

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Aluminum	ND	0.05 mg/L	1	EPA 6010	10/29/01	10/30/01
Arsenic	ND	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Barium	ND	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Boron	ND	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Cadmium	ND	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Calcium	ND	0.5 mg/L	1	EPA 6010	10/29/01	10/30/01
Chromium	ND	0.01 mg/L	1	EPA 6010	10/29/01	10/30/01
Cobalt	ND	0.01 mg/L	1	EPA 6010	10/29/01	10/30/01
Copper	ND	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Iron	ND	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Lead	ND	0.05 mg/L	1	EPA 6010	10/29/01	10/30/01
Magnesium	ND	0.5 mg/L	1	EPA 6010	10/29/01	10/30/01
Manganese	ND	0.005 mg/L	1	EPA 6010	10/29/01	10/30/01
Molybdenum	ND	0.01 mg/L	1	EPA 6010	10/29/01	10/30/01
Nickel	ND	0.04 mg/L	1	EPA 6010	10/29/01	10/30/01
Potassium	ND	2. mg/L	1	EPA 6010	10/29/01	10/30/01
Selenium	ND	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01
Silver	ND	0.02 mg/L	1	EPA 6010	10/29/01	10/30/01
Sodium	ND	0.5 mg/L	1	EPA 6010	10/29/01	10/30/01
Zinc	ND	0.1 mg/L	1	EPA 6010	10/29/01	10/30/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA
TEST: Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: P0055HG-BLK

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Mercury	ND	0.0002 mg/L	1	EPA 7470A	10/31/01	10/31/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0488
DATE SAMPLED: 10/25/01
NEL SAMPLE ID: P0110054-01

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	140		1	SM 2320 B	mg/L	10/31/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	10/31/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	10/31/01
Alkalinity, Total as CaCO ₃	140	25.	1	SM 2320 B	mg/L	10/31/01
Bromide	1.1	1.	5	EPA 300.0	mg/L	10/26/01
Chloride	120	10.	100	EPA 300.0	mg/L	10/31/01
Fluoride	1.1	0.4	1	SM 4500-F C	mg/L	10/31/01
Hardness, Total (as CaCO ₃)	250	2.	1	EPA 200.7	mg/L	10/30/01
Nitrate, as N	0.90	0.25	5	SM 4500-NO ₃	mg/L-N	10/26/01
pH	7.69	2.	1	EPA 150.1	pH Units	10/26/01
pH Temperature	20.3	1.	1	EPA 150.1	°C	10/26/01
Specific Conductance	822	1.	1	SM 2510 B	µS/cm	10/29/01
Sulfate	62	10.	100	EPA 300.0	mg/L	10/31/01
Total Dissolved Solids	500	15.	1	SM 2540 C	mg/L	10/29/01

R.L. - Reporting Limit

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011026BR-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Bromide	ND	0.2	1	EPA 300.0	mg/L	10/26/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-492
DATE SAMPLED: 10/29/01
NEL SAMPLE ID: P0110059-01

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	140		1	SM 2320 B	mg/L	11/1/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	11/1/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	11/1/01
Alkalinity, Total as CaCO ₃	140	25.	1	SM 2320 B	mg/L	11/1/01
Bromide	ND	2.	10	EPA 300.0	mg/L	10/31/01
Chloride	59	5.	50	EPA 300.0	mg/L	11/6/01
Fluoride	1.8	0.4	1	SM 4500-F C	mg/L	10/31/01
Hardness, Total (as CaCO ₃)	140	5.	1	SM 2340 C	mg/L	11/3/01
Nitrate, as N	ND	0.5	10	SM 4500-NO ₃	mg/L-N	10/31/01
pH	8.01	H3 2.	1	EPA 150.1	pH Units	10/30/01
pH Temperature	23.3	1.	1	EPA 150.1	°C	10/30/01
Specific Conductance	572	1.	1	SM 2510 B	µS/cm	10/31/01
Sulfate	47	1.	10	EPA 300.0	mg/L	10/31/01
Total Dissolved Solids	343	15.	1	SM 2540 C	mg/L	11/1/01

R. Reporting Limit

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PP TCT #: NA

CLIENT ID: M01-0493
DATE SAMPLED: 10/29/01
NEL SAMPLE ID: P0110059-02

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	11/1/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	11/1/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	11/1/01
Alkalinity, Total as CaCO ₃	ND	25.	1	SM 2320 B	mg/L	11/1/01
Bromide	ND	0.2	1	EPA 300.0	mg/L	10/31/01
Chloride	ND	0.1	1	EPA 300.0	mg/L	10/31/01
Fluoride	ND	0.4	1	SM 4500-F C	mg/L	10/31/01
Hardness, Total (as CaCO ₃)	ND	5.	1	SM 2340 C	mg/L	11/3/01
Nitrate, as N	ND	0.05	1	SM 4500-NO ₃	mg/L-N	10/31/01
pH	6.39 H3	2.	1	EPA 150.1	pH Units	10/30/01
pH Temperature	23.3	1.	1	EPA 150.1	°C	10/30/01
Specific Conductance	1.32	1.	1	SM 2510 B	µS/cm	10/31/01
Sulfate	ND	0.1	1	EPA 300.0	mg/L	10/31/01
Total Dissolved Solids	ND	15.	1	SM 2540 C	mg/L	11/1/01

R. Reporting Limit

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4 Monitor Wells
 PROJECT #: NA

CLIENT ID: M01-0494
 DATE SAMPLED: 10/29/01
 NEL SAMPLE ID: P0110059-03

TEST: Inorganic Non-Metals
 MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	11/1/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	11/1/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	11/1/01
Alkalinity, Total as CaCO ₃	ND	25.	1	SM 2320 B	mg/L	11/1/01
Bromide	ND	0.2	1	EPA 300.0	mg/L	10/31/01
Chloride	ND	0.1	1	EPA 300.0	mg/L	10/31/01
Fluoride	ND	0.4	1	SM 4500-F C	mg/L	10/31/01
Hardness, Total (as CaCO ₃)	ND	5.	1	SM 2340 C	mg/L	11/3/01
Nitrate, as N	ND	0.05	1	SM 4500-NO ₃	mg/L-N	10/31/01
pH	6.25 H3	2.	1	EPA 150.1	pH Units	10/30/01
pH Temperature	22.8	1.	1	EPA 150.1	°C	10/30/01
Specific Conductance	1.73	1.	1	SM 2510 B	µS/cm	10/31/01
Sulfate	ND	0.1	1	EPA 300.0	mg/L	10/31/01
Total Dissolved Solids	ND	15.	1	SM 2540 C	mg/L	11/1/01

R.L. Reporting Limit

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011031BR-BLK

TITLE: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Bromide	ND	0.2	1	EPA 300.0	mg/L	10/31/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011031CL-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	ND	0.1	1	EPA 300.0	mg/L	10/31/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011031F-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Fluoride	ND	0.4	1	SM 4500-F C	mg/L	10/31/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0488
DATE SAMPLED: 10/25/01
NEL SAMPLE ID: P0110054-01

TEST: BTEX by EPA SW846 Method 8021B, Dec. 1996

METHOD: EPA 8021B

MATRIX: Aqueous

DILUTION: 1

ANALYST: PXC - Division

EXTRACTED: 10/30/01

ANALYZED: 10/30/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	87	60 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011030BTEX-BLK

TEST: BTEX by EPA SW846 Method 8021B, Dec. 1996

METHOD: EPA 8021B

MATRIX: Aqueous

ANALYST: PXC - Division

EXTRACTED: 10/30/01

ANALYZED: 10/30/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
MTBE	ND	5. µg/L
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	118	60 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

Dec 11/2

CHAIN OF CUSTODY RECORD

Page 1 of 1

P011054

PROJECT NUMBER	PROJECT NAME	DATE	SAMPLE NUMBER	LAB ID	DATE	TIME	MATRIX	TOTAL NUMBERS OF CONTAINERS	COMPOSITE OR GRAPE	REQUESTED ANALYSIS	REMARKS
101345	1345 H2O	10/26/10	101-0488					5	4	ATTACHED TDS SP. COND. BTEX TOXIC BOD H ₂ O, BOD, Cd, Pb	
RECEIVED BY: (Signature) <i>[Signature]</i> RECEIVED BY: (Signature) <i>[Signature]</i> DATE/TIME: 10/26/10 DATE/TIME: 10/26/10 RELINQUISHED BY: (Signature) <i>[Signature]</i> RELINQUISHED BY: (Signature) <i>[Signature]</i>											
REQUESTED TURNAROUND TIME: 3 ROUTINE 3 RUSH CARRIER CO. SAMPLE RECEIPT REMARKS RESULTS & INVOICES TO:											
LABORATORY SERVICES EL PASO CORPORATION 8645 RAILROAD DRIVE EL PASO, TEXAS 79904 915-587-3729 FAX: 915-587-3835											

NEL LABORATORIES

Reno • Las Vegas
Phoenix • Boise

Las Vegas Division
4208 Arcata Way, Suite A • Las Vegas, Nevada 89030
702-657-1010 • Fax: 702-657-1577
1-888-368-3282

CLIENT: El Paso Natural Gas Company
8645 Railroad Drive
El Paso, TX 79904
ATTN: Darrell Campbell

PROJECT NAME: JAL #4 Monitor Wells
PROJECT NUMBER: NA

NEL ORDER ID: P0110059

Attached are the analytical results for samples in support of the above referenced project.

Samples submitted for this project were not sampled by NEL Laboratories. Samples were received by NEL in good condition, under chain of custody on 10/30/01.

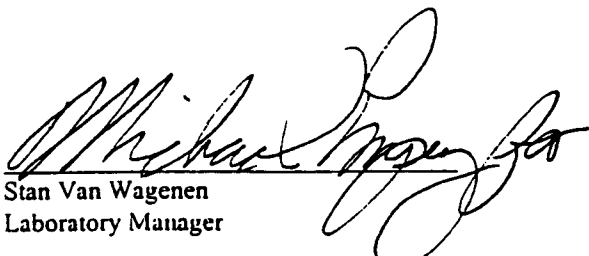
Should you have any questions or comments, please feel free to contact our Client Services department at (602) 437-0099.

Some results have been flagged as follows:

H3 - Sample was received and analyzed past holding time.

Some QA results have been flagged as follows:

Hr - Sample was received beyond holding time for this parameter.


Stan Van Wagenen
Laboratory Manager

11/6/01
Date

CERTIFICATIONS:

	Reno	Las Vegas	S. California
Arizona	AZ0520	AZ0518	AZ0605
California	1707	2002	2264
US Army Corps of Engineers	Certified	Certified	

	Reno	Las Vegas	S. California
Idaho	Certified	Certified	
Montana	Certified	Certified	
Nevada	NV033	NV052	CA084
L.A.C.S.D.			10228

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-492
DATE SAMPLED: 10/29/01
NEL SAMPLE ID: P0110059-01

TEST: Metals
MATRIX: Aqueous

ANALYST: FIF - Reno Division

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Aluminum	0.40	0.05 mg/L	1	EPA 6010	10/31/01	11/3/01
Arsenic	ND	0.1 mg/L	1	EPA 6010	10/31/01	11/3/01
Barium	0.051	0.005 mg/L	1	EPA 6010	10/31/01	11/3/01
Boron	0.23	0.1 mg/L	1	EPA 6010	10/31/01	11/3/01
Cadmium	ND	0.005 mg/L	1	EPA 6010	10/31/01	11/3/01
Calcium	38	0.5 mg/L	1	EPA 6010	10/31/01	11/3/01
Chromium	ND	0.01 mg/L	1	EPA 6010	10/31/01	11/3/01
Cobalt	ND	0.01 mg/L	1	EPA 6010	10/31/01	11/3/01
Copper	ND	0.005 mg/L	1	EPA 6010	10/31/01	11/3/01
Iron	0.41	0.1 mg/L	1	EPA 6010	10/31/01	11/3/01
Lead	ND	0.05 mg/L	1	EPA 6010	10/31/01	11/3/01
Magnesium	9.8	0.5 mg/L	1	EPA 6010	10/31/01	11/3/01
Manganese	0.032	0.005 mg/L	1	EPA 6010	10/31/01	11/3/01
Mercury	ND	0.0002 mg/L	1	EPA 7470A	11/5/01	11/5/01
Molybdenum	0.010	0.01 mg/L	1	EPA 6010	10/31/01	11/3/01
Nickel	ND	0.04 mg/L	1	EPA 6010	10/31/01	11/3/01
Potassium	3.7	2. mg/L	1	EPA 6010	10/31/01	11/3/01
Selenium	ND	0.1 mg/L	1	EPA 6010	10/31/01	11/3/01
Silica	25	1. mg/L	1	SM 4500Si-D	11/6/01	11/6/01
Silver	ND	0.02 mg/L	1	EPA 6010	10/31/01	11/3/01
Sodium	59	0.5 mg/L	1	EPA 6010	10/31/01	11/3/01
Uranium	ND	0.005 mg/L	5	EPA 6020	1/8/02	1/10/02
Zinc	ND	0.1 mg/L	1	EPA 6010	10/31/01	11/3/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0493
DATE SAMPLED: 10/29/01
NEL SAMPLE ID: P0110059-02

TEST: Metals
MATRIX: Aqueous

ANALYST: FIF - Reno Division

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Aluminum	ND	0.05 mg/L	1	EPA 6010	10/31/01	11/3/01
Arsenic	ND	0.1 mg/L	1	EPA 6010	10/31/01	11/3/01
Barium	ND	0.005 mg/L	1	EPA 6010	10/31/01	11/3/01
Boron	ND	0.1 mg/L	1	EPA 6010	10/31/01	11/3/01
Cadmium	ND	0.005 mg/L	1	EPA 6010	10/31/01	11/3/01
Calcium	ND	0.5 mg/L	1	EPA 6010	10/31/01	11/3/01
Chromium	ND	0.01 mg/L	1	EPA 6010	10/31/01	11/3/01
Cobalt	ND	0.01 mg/L	1	EPA 6010	10/31/01	11/3/01
Copper	ND	0.005 mg/L	1	EPA 6010	10/31/01	11/3/01
Iron	ND	0.1 mg/L	1	EPA 6010	10/31/01	11/3/01
Lead	ND	0.05 mg/L	1	EPA 6010	10/31/01	11/3/01
Magnesium	ND	0.5 mg/L	1	EPA 6010	10/31/01	11/3/01
Manganese	ND	0.005 mg/L	1	EPA 6010	10/31/01	11/3/01
Mercury	ND	0.0002 mg/L	1	EPA 7470A	11/5/01	11/5/01
Molybdenum	ND	0.01 mg/L	1	EPA 6010	10/31/01	11/3/01
Nickel	ND	0.04 mg/L	1	EPA 6010	10/31/01	11/3/01
Potassium	ND	2. mg/L	1	EPA 6010	10/31/01	11/3/01
Selenium	ND	0.1 mg/L	1	EPA 6010	10/31/01	11/3/01
Silica	ND	1. mg/L	1	SM 4500Si-D	11/6/01	11/6/01
Silver	ND	0.02 mg/L	1	EPA 6010	10/31/01	11/3/01
Sodium	1.6	0.5 mg/L	1	EPA 6010	10/31/01	11/3/01
Uranium	ND	0.005 mg/L	5	EPA 6020	1/8/02	1/10/02
Zinc	ND	0.1 mg/L	1	EPA 6010	10/31/01	11/3/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0494
DATE SAMPLED: 10/29/01
NEL SAMPLE ID: P0110059-03

TEST: Metals
MATRIX: Aqueous

ANALYST: FIF - Reno Division

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Aluminum	ND	0.05 mg/L	1	EPA 6010	10/31/01	11/3/01
Arsenic	ND	0.1 mg/L	1	EPA 6010	10/31/01	11/3/01
Barium	ND	0.005 mg/L	1	EPA 6010	10/31/01	11/3/01
Boron	ND	0.1 mg/L	1	EPA 6010	10/31/01	11/3/01
Cadmium	ND	0.005 mg/L	1	EPA 6010	10/31/01	11/3/01
Calcium	ND	0.5 mg/L	1	EPA 6010	10/31/01	11/3/01
Chromium	ND	0.01 mg/L	1	EPA 6010	10/31/01	11/3/01
Cobalt	ND	0.01 mg/L	1	EPA 6010	10/31/01	11/3/01
Copper	ND	0.005 mg/L	1	EPA 6010	10/31/01	11/3/01
Iron	ND	0.1 mg/L	1	EPA 6010	10/31/01	11/3/01
Lead	ND	0.05 mg/L	1	EPA 6010	10/31/01	11/3/01
Magnesium	ND	0.5 mg/L	1	EPA 6010	10/31/01	11/3/01
Manganese	ND	0.005 mg/L	1	EPA 6010	10/31/01	11/3/01
Mercury	ND	0.0002 mg/L	1	EPA 7470A	11/5/01	11/5/01
Molybdenum	ND	0.01 mg/L	1	EPA 6010	10/31/01	11/3/01
Nickel	ND	0.04 mg/L	1	EPA 6010	10/31/01	11/3/01
Potassium	ND	2. mg/L	1	EPA 6010	10/31/01	11/3/01
Vanadium	ND	0.1 mg/L	1	EPA 6010	10/31/01	11/3/01
Silica	ND	1. mg/L	1	SM 4500Si-D	11/6/01	11/6/01
Silver	ND	0.02 mg/L	1	EPA 6010	10/31/01	11/3/01
Sodium	1.4	0.5 mg/L	1	EPA 6010	10/31/01	11/3/01
Uranium	ND	0.005 mg/L	5	EPA 6020	1/8/02	1/10/02
Zinc	ND	0.1 mg/L	1	EPA 6010	10/31/01	11/3/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA
TEST: Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 0108-4.1B-BLK

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Uranium	ND	0.005 mg/L	5	EPA 6020	1/8/02	1/10/02

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011106SI-BLK

TEST:

<u>PARAMETER</u>	<u>RESULT</u> mg/L	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Silica	ND	1. mg/L	1	SM 4500Si-D	11/6/01	11/6/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4 Monitor Wells
 PROJECT #: NA
 TEST: Metals

CLIENT ID: Method Blank
 DATE SAMPLED: NA
 NEL SAMPLE ID: 1031-1.2-BLK

<u>PARAMETER</u>	<u>RESULT</u> mg/L	<u>REPORTING</u> LIMIT	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Aluminum	ND	0.05 mg/L	1	EPA 6010	10/31/01	11/3/01
Arsenic	ND	0.1 mg/L	1	EPA 6010	10/31/01	11/3/01
Barium	ND	0.005 mg/L	1	EPA 6010	10/31/01	11/3/01
Boron	ND	0.1 mg/L	1	EPA 6010	10/31/01	11/3/01
Cadmium	ND	0.005 mg/L	1	EPA 6010	10/31/01	11/3/01
Calcium	ND	0.5 mg/L	1	EPA 6010	10/31/01	11/3/01
Chromium	ND	0.01 mg/L	1	EPA 6010	10/31/01	11/3/01
Cobalt	ND	0.01 mg/L	1	EPA 6010	10/31/01	11/3/01
Copper	ND	0.005 mg/L	1	EPA 6010	10/31/01	11/3/01
Iron	ND	0.1 mg/L	1	EPA 6010	10/31/01	11/3/01
Lead	ND	0.05 mg/L	1	EPA 6010	10/31/01	11/3/01
Magnesium	ND	0.5 mg/L	1	EPA 6010	10/31/01	11/3/01
Manganese	ND	0.005 mg/L	1	EPA 6010	10/31/01	11/3/01
Molybdenum	ND	0.01 mg/L	1	EPA 6010	10/31/01	11/3/01
Potassium	ND	2. mg/L	1	EPA 6010	10/31/01	11/3/01
Selenium	ND	0.1 mg/L	1	EPA 6010	10/31/01	11/3/01
Silver	ND	0.02 mg/L	1	EPA 6010	10/31/01	11/3/01
Sodium	ND	0.5 mg/L	1	EPA 6010	10/31/01	11/3/01
	ND	0.1 mg/L	1	EPA 6010	10/31/01	11/3/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA
TEST: Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: L0303HG-BLK

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Mercury	ND	0.0002 mg/L	1	EPA 7470A	11/5/01	11/5/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: M01-0488
DATE SAMPLED: 10/25/01
NEL SAMPLE ID: P0110054-01

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	140		1	SM 2320 B	mg/L	10/31/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	10/31/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	10/31/01
Alkalinity, Total as CaCO ₃	140	25.	1	SM 2320 B	mg/L	10/31/01
Bromide	1.1	1.	5	EPA 300.0	mg/L	10/26/01
Chloride	120	10.	100	EPA 300.0	mg/L	10/31/01
Fluoride	1.1	0.4	1	SM 4500-F C	mg/L	10/31/01
Hardness, Total (as CaCO ₃)	250	2.	1	EPA 200.7	mg/L	10/30/01
Nitrate, as N	0.90	0.25	5	SM 4500-NO ₃	mg/L-N	10/26/01
pH	7.69	2.	1	EPA 150.1	pH Units	10/26/01
pH Temperature	20.3	1.	1	EPA 150.1	°C	10/26/01
Specific Conductance	822	1.	1	SM 2510 B	µS/cm	10/29/01
Sulfate	62	10.	100	EPA 300.0	mg/L	10/31/01
Total Dissolved Solids	500	15.	1	SM 2540 C	mg/L	10/29/01

R.L. - Reporting Limit

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011026BR-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Bromide	ND	0.2	1	EPA 300.0	mg/L	10/26/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011026NO3-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Nitrate, as N	ND	0.05	1	SM 4500-NO3	mg/L-N	10/26/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011029TDS-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Total Dissolved Solids	ND	15	1	SM 2540 C	mg/L	10/29/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011031ALK-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Alkalinity - Bicarbonate as CaC	ND		1	SM 2320 B	mg/L	10/31/01
Alkalinity - Carbonate as CaCO	ND		1	SM 2320 B	mg/L	10/31/01
Alkalinity - Hydroxide as CaCO	ND		1	SM 2320 B	mg/L	10/31/01
Alkalinity, Total as CaCO ₃	ND	25	1	SM 2320 B	mg/L	10/31/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4 Monitor Wells
 PROJECT #: NA

CLIENT ID: Method Blank
 DATE SAMPLED: NA
 NEL SAMPLE ID: 011031BR-BLK

TEL: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Bromide	ND	0.2	1	EPA 300.0	mg/L	10/31/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011031CL-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	ND	0.1	1	EPA 300.0	mg/L	10/31/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011031F-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Fluoride	ND	0.4	1	SM 4500-F C	mg/L	10/31/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011031NO3-BLK

T. Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Nitrate, as N	ND	0.05	1	SM 4500-NO3	mg/L-N	10/31/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011031SO4-BLK

T. Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Sulfate	ND	0.1	1	EPA 300.0	mg/L	10/31/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011101ALK-BLK

T. Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Alkalinity - Bicarbonate as CaC	ND		1	SM 2320 B	mg/L	11/1/01
Alkalinity - Carbonate as CaCO	ND		1	SM 2320 B	mg/L	11/1/01
Alkalinity - Hydroxide as CaCO	ND		1	SM 2320 B	mg/L	11/1/01
Alkalinity, Total as CaCO ₃	ND	25	1	SM 2320 B	mg/L	11/1/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011101TDS-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Total Dissolved Solids	ND	15	1	SM 2540 C	mg/L	11/1/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4 Monitor Wells
 PROJECT #: NA

CLIENT ID: Method Blank
 DATE SAMPLED: NA
 NEL SAMPLE ID: 011106CL-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	ND	0.1	1	EPA 300.0	mg/L	11/6/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4 Monitor Wells
 PROJECT #: NA

CLIENT ID: M01-492
 DATE SAMPLED: 10/29/01
 NEL SAMPLE ID: P0110059-01

TEST: BTEX by EPA SW846 Method 8021B, Dec. 1996

METHOD: EPA 8021B
 MATRIX: Aqueous
 DILUTION: 1

ANALYST: PXC - Division
 EXTRACTED: 10/31/01
 ANALYZED: 10/31/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	2.2 µg/L	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	6.2 µg/L	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	98	60 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0493
DATE SAMPLED: 10/29/01
NEL SAMPLE ID: P0110059-02

TEST: BTEX by EPA SW846 Method 8021B, Dec. 1996

METHOD: EPA 8021B

MATRIX: Aqueous

DILUTION: 1

ANALYST: PXC - Division

EXTRACTED: 10/31/01

ANALYZED: 10/31/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	97	60 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0494
DATE SAMPLED: 10/29/01
NEL SAMPLE ID: P0110059-03

TEST: BTEX by EPA SW846 Method 8021B, Dec. 1996

METHOD: EPA 8021B

MATRIX: Aqueous

DILUTION: 1

ANALYST: PXC - Division

EXTRACTED: 10/31/01

ANALYZED: 10/31/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	88	60 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011031BTEX-BLK

TEL: BTEX by EPA SW846 Method 8021B, Dec. 1996
METHOD: EPA 8021B
MATRIX: Aqueous

ANALYST: PXC - Division
EXTRACTED: 10/31/01
ANALYZED: 10/31/01

PARAMETER	Result	Reporting Limit
MTBE	ND	5. µg/L
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

Surrogate	% Recovery	Acceptable Range
a,a,a-Trifluorotoluene	85	60 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CHAIN OF CUSTODY RECORD

Page 2[illegible]

NEL LABORATORIES

Reno • Las Vegas
Phoenix • Boise

Las Vegas Division
4208 Arcata Way, Suite A • Las Vegas, Nevada 89030
702-657-1010 • Fax: 702-657-1577
1-888-368-3282

CLIENT: El Paso Natural Gas Company
3645 Railroad Drive
El Paso, TX 79904
ATTN: Darrell Campbell

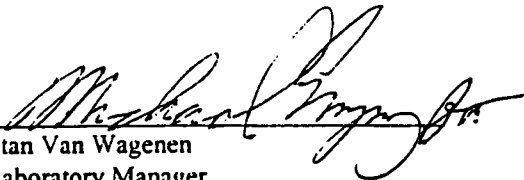
PROJECT NAME: Jal #4 Wells
PROJECT NUMBER: NA

NEL ORDER ID: P0110060

Attached are the analytical results for samples in support of the above referenced project.

Samples submitted for this project were not sampled by NEL Laboratories. Samples were received by NEL in good condition, under chain of custody on 10/30/01.

Should you have any questions or comments, please feel free to contact our Client Services department at (602) 437-0099.


Stan Van Wagenen
Laboratory Manager

11/6/01
Date

CERTIFICATIONS:

	<u>Reno</u>	<u>Las Vegas</u>	<u>S. California</u>
Arizona	AZ0520	AZ0518	AZ0605
California	1707	2002	2264
US Army Corps of Engineers	Certified	Certified	

	<u>Reno</u>	<u>Las Vegas</u>	<u>S. California</u>
Idaho	Certified	Certified	
Montana	Certified	Certified	
Nevada	NV033	NV052	CA084
L.A.C.S.D.			10228

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 Wells
PROJECT #: NA

CLIENT ID: M01-0495
DATE SAMPLED: 10/29/01
NEL SAMPLE ID: P0110060-01

TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>RESULT</u>	<u>R. L.</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	13000	1000.	10000	EPA 300.0	mg/L	11/6/01
Specific Conductance	42000	1.	1	SM 2510 B	μS/cm	10/31/01
Total Dissolved Solids	25100	1500.	100	SM 2540 C	mg/L	10/31/01

R. Reporting Limit

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: Jal #4 Wells
 PROJECT #: NA

CLIENT ID: M01-0496
 DATE SAMPLED: 10/29/01
 NEL SAMPLE ID: P0110060-02

TEST: Inorganic Non-Metals
 MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Chloride	65	5.	50	EPA 300.0	mg/L	11/6/01
Specific Conductance	890	1.	1	SM 2510 B	μS/cm	10/31/01
Total Dissolved Solids	523	15.	1	SM 2540 C	mg/L	10/31/01

R. Reporting Limit

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4 Monitor Wells
 PROJECT #: NA

CLIENT ID: M01-0494
 DATE SAMPLED: 10/29/01
 NEL SAMPLE ID: P0110059-03

TEST: Metals
 MATRIX: Aqueous

ANALYST: RAA - Reno Division

<u>PARAMETER</u>	<u>RESULT</u> mg/L	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Arsenic	ND	0.1 mg/L	1	EPA 6010	10/31/01	11/3/01
Barium	ND	0.005 mg/L	1	EPA 6010	10/31/01	11/3/01
Boron	ND	0.1 mg/L	1	EPA 6010	10/31/01	11/3/01
Cadmium	ND	0.005 mg/L	1	EPA 6010	10/31/01	11/3/01
Calcium	ND	0.5 mg/L	1	EPA 6010	10/31/01	11/3/01
Chromium	ND	0.01 mg/L	1	EPA 6010	10/31/01	11/3/01
Copper	ND	0.005 mg/L	1	EPA 6010	10/31/01	11/3/01
Iron	ND	0.1 mg/L	1	EPA 6010	10/31/01	11/3/01
Lead	ND	0.05 mg/L	1	EPA 6010	10/31/01	11/3/01
Magnesium	ND	0.5 mg/L	1	EPA 6010	10/31/01	11/3/01
Manganese	ND	0.005 mg/L	1	EPA 6010	10/31/01	11/3/01
Mercury	ND	0.0002 mg/L	1	EPA 7470A	11/5/01	11/5/01
Potassium	ND	2. mg/L	1	EPA 6010	10/31/01	11/3/01
Selenium	ND	0.1 mg/L	1	EPA 6010	10/31/01	11/3/01
Silica	ND	1. mg/L	1	SM 4500Si-D	11/6/01	11/6/01
Silver	ND	0.02 mg/L	1	EPA 6010	10/31/01	11/3/01
Sodium	1.4	0.5 mg/L	1	EPA 6010	10/31/01	11/3/01
Zinc	ND	0.1 mg/L	1	EPA 6010	10/31/01	11/3/01

D.. Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011029TDS-BLK

TL Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Total Dissolved Solids	ND	15	1	SM 2540 C	mg/L	10/29/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011031TDS-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Total Dissolved Solids	ND	15	1	SM 2540 C	mg/L	10/31/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: Jal #4 Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011106CL-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	ND	0.1	1	EPA 300.0	mg/L	11/6/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CHAIN OF CUSTODY RECORD

[illegible]

NEL LABORATORIES

Reno • Las Vegas
Phoenix • Boise

Las Vegas Division
4208 Arcata Way, Suite A • Las Vegas, Nevada 89030
702-657-1010 • Fax: 702-657-1577
1-888-368-3282

CLIENT: El Paso Natural Gas Company
8645 Railroad Drive
El Paso, TX 79904
ATTN: Darrell Campbell

PROJECT NAME: JAL #4 Monitor Wells
PROJECT NUMBER: NA

NEL ORDER ID: P0110061

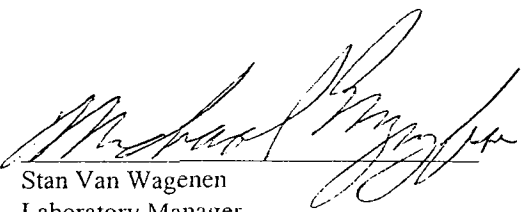
Attached are the analytical results for samples in support of the above referenced project.

Samples submitted for this project were not sampled by NEL Laboratories. Samples were received by NEL in good condition, under chain of custody on 10/30/01.

Should you have any questions or comments, please feel free to contact our Client Services department at (602) 437-0099.

Some QA results have been flagged as follows:

- Hr - Sample was received beyond holding time for this parameter.
- II - The batch MS and/or MSD were outside acceptance limits. The batch LCS was acceptable.


Stan Van Wagenen
Laboratory Manager

1/14/02 RG-15540
Date

CERTIFICATIONS:

	Reno	Las Vegas	S. California
Arizona	AZ0520	AZ0518	AZ0605
California	1707	2002	2264
US Army Corps of Engineers	Certified	Certified	

	Reno	Las Vegas	S. California
Idaho	Certified	Certified	
Montana	Certified	Certified	
Nevada	NV033	NV052	CA084
L.A.C.S.D.			10228

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0497
DATE SAMPLED: 10/29/01
NEL SAMPLE ID: P0110061-01

TEST: Metals
MATRIX: Aqueous

ANALYST: FIF - Reno Division

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Aluminum	ND	0.05 mg/L	1	EPA 6010	10/31/01	11/3/01
Arsenic	ND	0.1 mg/L	1	EPA 6010	10/31/01	11/3/01
Barium	0.037	0.005 mg/L	1	EPA 6010	10/31/01	11/3/01
Boron	0.21	0.1 mg/L	1	EPA 6010	10/31/01	11/3/01
Cadmium	ND	0.005 mg/L	1	EPA 6010	10/31/01	11/3/01
Calcium	44	0.5 mg/L	1	EPA 6010	10/31/01	11/3/01
Chromium	ND	0.01 mg/L	1	EPA 6010	10/31/01	11/3/01
Cobalt	ND	0.01 mg/L	1	EPA 6010	10/31/01	11/3/01
Copper	ND	0.005 mg/L	1	EPA 6010	10/31/01	11/3/01
Iron	0.10	0.1 mg/L	1	EPA 6010	10/31/01	11/3/01
Lead	ND	0.05 mg/L	1	EPA 6010	10/31/01	11/3/01
Magnesium	15	0.5 mg/L	1	EPA 6010	10/31/01	11/3/01
Manganese	0.018	0.005 mg/L	1	EPA 6010	10/31/01	11/3/01
Mercury	ND	0.0002 mg/L	1	EPA 7470A	11/5/01	11/5/01
Molybdenum	ND	0.01 mg/L	1	EPA 6010	10/31/01	11/3/01
Nickel	ND	0.04 mg/L	1	EPA 6010	10/31/01	11/3/01
Potassium	3.7	2. mg/L	1	EPA 6010	10/31/01	11/3/01
Selenium	ND	0.1 mg/L	1	EPA 6010	10/31/01	11/3/01
Silica	38	1. mg/L	1	SM 4500Si-D	11/6/01	11/6/01
Silver	ND	0.02 mg/L	1	EPA 6010	10/31/01	11/3/01
Sodium	64	0.5 mg/L	1	EPA 6010	10/31/01	11/3/01
Uranium	0.0084	0.005 mg/L	5	EPA 6020	1/8/02	1/10/02
Zinc	ND	0.1 mg/L	1	EPA 6010	10/31/01	11/3/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA
TEST: Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 0108-4.1B-BLK

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Uranium	ND	0.005 mg/L	5	EPA 6020	1/8/02	1/10/02

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011106SI-BLK

TEST:

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Silica	ND	1. mg/L	1	SM 4500Si-D	11/6/01	11/6/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4 Monitor Wells
 PROJECT #: NA
 TEST: Metals

CLIENT ID: Method Blank
 DATE SAMPLED: NA
 NEL SAMPLE ID: 1031-1.2-BLK

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Aluminum	ND	0.05 mg/L	1	EPA 6010	10/31/01	11/3/01
Arsenic	ND	0.1 mg/L	1	EPA 6010	10/31/01	11/3/01
Barium	ND	0.005 mg/L	1	EPA 6010	10/31/01	11/3/01
Boron	ND	0.1 mg/L	1	EPA 6010	10/31/01	11/3/01
Cadmium	ND	0.005 mg/L	1	EPA 6010	10/31/01	11/3/01
Calcium	ND	0.5 mg/L	1	EPA 6010	10/31/01	11/3/01
Chromium	ND	0.01 mg/L	1	EPA 6010	10/31/01	11/3/01
Cobalt	ND	0.01 mg/L	1	EPA 6010	10/31/01	11/3/01
Copper	ND	0.005 mg/L	1	EPA 6010	10/31/01	11/3/01
Iron	ND	0.1 mg/L	1	EPA 6010	10/31/01	11/3/01
Lead	ND	0.05 mg/L	1	EPA 6010	10/31/01	11/3/01
Magnesium	ND	0.5 mg/L	1	EPA 6010	10/31/01	11/3/01
Manganese	ND	0.005 mg/L	1	EPA 6010	10/31/01	11/3/01
Molybdenum	ND	0.01 mg/L	1	EPA 6010	10/31/01	11/3/01
Potassium	ND	2. mg/L	1	EPA 6010	10/31/01	11/3/01
Selenium	ND	0.1 mg/L	1	EPA 6010	10/31/01	11/3/01
Silver	ND	0.02 mg/L	1	EPA 6010	10/31/01	11/3/01
Sodium	ND	0.5 mg/L	1	EPA 6010	10/31/01	11/3/01
Zinc	ND	0.1 mg/L	1	EPA 6010	10/31/01	11/3/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: L0303HG-BLK

TEST: Metals

<u>PARAMETER</u>	<u>RESULT</u> <u>mg/L</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>DIGESTED</u>	<u>ANALYZED</u>
Mercury	ND	0.0002 mg/L	1	EPA 7470A	11/5/01	11/5/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: M01-0497
DATE SAMPLED: 10/29/01
NEL SAMPLE ID: P0110061-01

TEST: Inorganic Non-Metals
MATRIX: Aqueous

PARAMETER	RESULT	R. L.	D. F.	METHOD	UNITS	ANALYZED
Alkalinity - Bicarbonate as CaCO ₃	180		1	SM 2320 B	mg/L	11/1/01
Alkalinity - Carbonate as CaCO ₃	ND		1	SM 2320 B	mg/L	11/1/01
Alkalinity - Hydroxide as CaCO ₃	ND		1	SM 2320 B	mg/L	11/1/01
Alkalinity, Total as CaCO ₃	180	25.	1	SM 2320 B	mg/L	11/1/01
Bromide	ND	2.	10	EPA 300.0	mg/L	10/31/01
Chloride	28	1.	10	EPA 300.0	mg/L	10/31/01
Fluoride	0.96	0.4	1	SM 4500-F C	mg/L	10/31/01
Hardness, Total (as CaCO ₃)	170	5.	1	SM 2340 C	mg/L	11/3/01
Nitrate, as N	1.2	0.5	10	SM 4500-NO ₃	mg/L-N	10/31/01
pH	7.80	2.	1	EPA 150.1	pH Units	10/30/01
pH Temperature	22.7	1.	1	EPA 150.1	°C	10/30/01
Specific Conductance	622	1.	1	SM 2510 B	µS/cm	10/31/01
Sulfate	74	1.	10	EPA 300.0	mg/L	10/31/01
Total Dissolved Solids	396	15.	1	SM 2540 C	mg/L	11/1/01

R.L. - Reporting Limit

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4 Monitor Wells
 PROJECT #: NA

CLIENT ID: Method Blank
 DATE SAMPLED: NA
 NEL SAMPLE ID: 011031BR-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Bromide	ND	0.2	1	EPA 300.0	mg/L	10/31/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011031CL-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Chloride	ND	0.1	1	EPA 300.0	mg/L	10/31/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011031F-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Fluoride	ND	0.4	1	SM 4500-F C	mg/L	10/31/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4 Monitor Wells
 PROJECT #: NA

CLIENT ID: Method Blank
 DATE SAMPLED: NA
 NEL SAMPLE ID: 011031NO3-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Nitrate, as N	ND	0.05	1	SM 4500-NO3	mg/L-N	10/31/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011031SO4-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Sulfate	ND	0.1	1	EPA 300.0	mg/L	10/31/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
PROJECT ID: JAL #4 Monitor Wells
PROJECT #: NA

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 011101ALK-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Alkalinity - Bicarbonate as CaC	ND		1	SM 2320 B	mg/L	11/1/01
Alkalinity - Carbonate as CaCO	ND		1	SM 2320 B	mg/L	11/1/01
Alkalinity - Hydroxide as CaCO	ND		1	SM 2320 B	mg/L	11/1/01
Alkalinity, Total as CaCO ₃	ND	25	1	SM 2320 B	mg/L	11/1/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4 Monitor Wells
 PROJECT #: NA

CLIENT ID: Method Blank
 DATE SAMPLED: NA
 NEL SAMPLE ID: 011101TDS-BLK

TEST: Non-Metals

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Total Dissolved Solids	ND	15	1	SM 2540 C	mg/L	11/1/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company
 PROJECT ID: JAL #4 Monitor Wells
 PROJECT #: NA

CLIENT ID: M01-0497
 DATE SAMPLED: 10/29/01
 NEL SAMPLE ID: P0110061-01

TEST: BTEX by EPA SW846 Method 8021B, Dec. 1996

METHOD: EPA 8021B

MATRIX: Aqueous

DILUTION: 1

ANALYST: PXC - Division

EXTRACTED: 10/31/01

ANALYZED: 10/31/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	93	60 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

NEL LABORATORIES

CLIENT: El Paso Natural Gas Company	CLIENT ID: Method Blank
PROJECT ID: JAL #4 Monitor Wells	DATE SAMPLED: NA
PROJECT #: NA	NEL SAMPLE ID: 011031BTEX-BLK
TEST: BTEX by EPA SW846 Method 8021B, Dec. 1996	
METHOD: EPA 8021B	ANALYST: PXC - Division
MATRIX: Aqueous	EXTRACTED: 10/31/01
	ANALYZED: 10/31/01

<u>PARAMETER</u>	<u>Result</u>	<u>Reporting Limit</u>
MTBE	ND	5. µg/L
Benzene	ND	2. µg/L
Toluene	ND	2. µg/L
Ethylbenzene	ND	2. µg/L
Total Xylenes	ND	2. µg/L

QUALITY CONTROL DATA:

<u>Surrogate</u>	<u>% Recovery</u>	<u>Acceptable Range</u>
a,a,a-Trifluorotoluene	85	60 - 120

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

