AP - 069
(GW - 039)

ANNUAL MONITORING REPORT 3/30/2005

3R0027
GW039

elpaso

Via Federal Express

March 30, 2005

Mr. Ed Martin
New Mexico Oil Conservation Division
1220 St. Francis Dr.
Santa Fe, NM 87504

BP GW-39 (SEE GW 33)

RE: 2004 ANNUAL REPORT FOR THE JAQUEZ COM E #1 AND C #1 AND THE SAN JUAN RIVER PLANT 3RP 27

EPNG SAN JUAN GP

Dear Mr. Martin:

El Paso Field Services (EPFS) hereby submits the 2004 Annual Report for the Jaquez Com E #1 and C #1 located near Blanco, New Mexico and the San Juan River Plant located near Kirtland, New Mexico. The enclosed reports detail the remediation and sampling activities for the year 2004.

If you have any questions concerning the enclosed reports, please call me at (719) 520-4433.

Sincerely,

Scott T. Pope

Scott T. Pope P.G.
Senior Environmental Scientist

Enclosures: as stated

xc: Mr. Denny Foust, NMOCD, Aztec - w / enclosures; via **Fed Ex**
Mr. John Jaquez, Landowner, Jaquez Report Only - w / enclosures; via **Fed Ex**

FINAL

2004 ANNUAL REPORT
SAN JUAN RIVER PLANT

March 2005

Prepared for:

EL PASO NATURAL GAS COMPANY
2 North Nevada
Colorado Springs, Colorado 80903

Prepared by:

MWH
1475 Pine Grove Road, Suite 109
Steamboat Springs, Colorado 80487

Table of Contents

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES AND GRAPHS

LIST OF APPENDICES

LIST OF ACRONYMS

AESE	A.E. Schmidt Environmental
bgs	Below ground surface
BTEX	Benzene, toluene, ethylbenzene, and total xylenes
cy	Cubic yards
EPNG	El Paso Natural Gas Company
mg/kg	Milligrams per kilogram
mg/L	Milligrams per liter
µg/L	Micrograms per liter
NMOCD	New Mexico Oil Conservation Division
NMWQCC	New Mexico Water Quality Control Commission
O&M	Operation and maintenance
ORC	Oxygen-releasing compound
SJRP	San Juan River Plant
TDS	total dissolved solids
WGR	Western Gas Resources, Inc

Executive Summary

MWH
MONTGOMERY WATSON HARZA

EXECUTIVE SUMMARY

The San Juan River Plant is located in San Juan County, near Kirtland, New Mexico. The plant is used to process natural gas collected from production wells located in the San Juan Basin of New Mexico and southern Utah. The Plant was sold to Western Gas Resources, Inc. in June 1992. Closure of evaporation ponds, pits, and other potential source areas within the San Juan River Plant occurred in 1992 through 1995. Based on past soil and soil gas investigations, the dissolved-phase hydrocarbons are associated with limited soil contamination. Groundwater monitoring has been performed at the site since 1995.

Dissolved-phase hydrocarbons in groundwater have been observed at the site in the area near MW-8 and MW-9. El Paso Natural Gas (EPNG) has been aggressively pursuing active groundwater remediation, consisting of chemical oxygen enhancement and air sparging, to reduce dissolved-phase hydrocarbons in the vicinity of MW-8 and MW-9. Historic groundwater sampling conducted at the San Juan River Plant suggests that the air sparging activities have successfully reduced dissolved-phase hydrocarbon concentrations in the vicinity of MW-9. Concentrations in monitoring well MW-8 have also declined as a result of chemical oxygen enhancement using oxygen-releasing compound socks within this well. During the first quarterly sampling event of 2004, monitoring wells MW-8 and MW-9 contained hydrocarbon concentrations below the New Mexico Water Quality Control Commission standards. The air sparging system was shut down in March 2004, and remained off for the remainder of 2004, in order to assess groundwater conditions. Concentrations of benzene at MW-9 showed gradual rebounding conditions in the second, third, and fourth quarters of 2004, with a maximum benzene concentration of 35.9 µg/L in November. The benzene concentration at MW-8 remained below closure standards during the second and third quarters, but demonstrated rebounding conditions in the fourth quarter. Currently, the air sparging system is not operating as groundwater monitoring continues. During 2005, the decision to re-start the air sparging system will be based on the first quarter sampling event results at MW-8 and MW-9. In general, remediation efforts at monitoring wells MW-8 and MW-9 will continue, as needed, until quarterly sampling results indicate compliance with standards. The systems will then be taken off-line (or remain off-line) and quarterly closure monitoring will be initiated.

New Mexico Oil Conservation Division (NMOCD) requested annual monitoring of metals and inorganic parameters in all on-site monitoring wells as part of the current site-wide groundwater monitoring program. Elevated concentrations of some inorganic constituents, including total dissolved solids and sulfate, have historically been detected in various wells. It is possible that these elevated concentrations may be associated with past practices; however, past closure activities have addressed any site-related sources of these constituents to groundwater, and regionally this area is known to contain elevated total dissolved solids concentrations and associated inorganic parameters. There are no downgradient users of the groundwater. In addition, based on a recent request from NMOCD, EPNG has agreed to monitor three wells near the Praxair Facility for BTEX compounds during the next five, annual sampling events.

1.0 INTRODUCTION

This annual report has been prepared on behalf of El Paso Natural Gas Company (EPNG) to present a summary of physical activities performed and analytical data collected at the San Juan River Plant (SJRP) during 2004. This site is located in San Juan County, Township 29N, Range 15W, Section 1, near Kirtland, New Mexico, as shown on Figure 1.

EPNG is aggressively conducting active groundwater remediation of dissolved-phase hydrocarbons in the vicinity of monitoring wells MW-8 and MW-9. Remedial actions currently operating at the SJRP include air sparging and in-situ oxygen enhancement of groundwater through use of oxygen-releasing compound (ORC). In addition to the active remediation activities, a site-wide groundwater sampling program is administered at this site.

Site Description. The SJRP was previously owned by EPNG, but has been owned and operated by Western Gas Resources, Inc (WGR) since June 1992. The plant is used to process natural gas collected from production wells located in the San Juan Basin of New Mexico and southern Utah. The SJRP is a 630-acre facility that has contained gas processing facilities, two raw water ponds (now closed), three wastewater evaporation ponds (now closed), a sulfur recovery plant, water and hydrocarbon tanks, a pigging station, flare pits, and several 16- to 24-inch diameter natural gas pipelines that cross the facility. Recently, the Praxair Nitrogen Plant was built in the area north of the SJRP, to the south of monitoring wells MW-8 and MW-9. Figure 2 presents a detailed site map of the SJRP. Closure of the evaporation ponds, flare pits, and other potential contaminant source areas was completed during 1992 through 1995. Groundwater has been monitored at this site since 1995.

Report Organization. This report is organized into six sections and supporting appendices. Section 2.0 provides a discussion of the SJRP project history, Section 3.0 includes summary of field activities conducted at the SJRP during 2004, and Section 4.0 provides a discussion of results. Conclusions and recommendations are provided in Section 5.0, and references are listed in Section 6.0.

2.0 PROJECT HISTORY

The SJRP was previously owned by EPNG, but was sold to the current operator, WGR, on June 19, 1992. Investigation and remediation activities conducted at the SJRP have included the following components:

- Several investigations were conducted at the SJRP between 1985 and 1995. As a result, 24 monitoring wells have been installed at various locations at the plant.
- The north and south flare pits were closed in 1992 after removing 18,200 cubic yards (cy) and 3,520 cy of contaminated material from the north and south pits, respectively.
- The former wastewater evaporation ponds were closed during 1995 and early 1996. The pit and pond closure activities included capping the ponds with compacted, low-permeability soils.
- EPNG abandoned 17 monitoring wells, upgraded two wells, installed five new monitoring wells, and conducted a soil gas investigation during the summer of 1995. Results of the soil gas investigation indicated shallow hydrocarbon contamination near monitoring wells MW-8 and MW-9.
- EPNG submitted a groundwater remediation work plan to the New Mexico Oil Conservation Division (NMOCD) in January 2001, to address elevated benzene in monitoring wells MW-8 and MW-9, and received approval to begin remedial actions on June 4, 2001. The work plan included provisions to install an air sparging system with two air sparging wells; one injection point located within 10 feet of each monitoring well.
- The air sparging system air injection wells (SW-8 and SW-9) were installed on October 30, 2001. Both wells were developed on November 12, 2001.
- A pre-pilot air sparging test was conducted at both wells on November 13, 2001. Results from this test indicated good communication between SW-9 and MW-9, but poor communication between MW-8 and SW-8.

- Because of poor communication between MW-8 and SW-8, an ORC sock consisting of magnesium peroxide and manufactured by Regenesis Inc. was recommended for remediation in this area. The ORC sock was installed in MW-8 on November 14, 2001.

- The air sparging pilot test was also initiated on November 14, 2001. With the exception of a 48-hour shut-down prior to the four-week sampling event on December 26, 2001, the air sparging system operated continuously from November 14, 2001 to January 18, 2002. The air sparging pilot test culminated with a sampling event on January 25, 2002. An additional sampling event was performed on February 21, 2002 to evaluate the potential for contaminant concentration rebound following a four-week shutdown.

- From February 2002 through December 2002 site activities included continued operation and maintenance (O&M) of the air sparging system and site-wide annual groundwater monitoring.

- During 2003, site activities included periodic O&M of the air sparging system, replacement of ORC socks into MW-8, quarterly sampling of MW-8 and MW-9, and site-wide annual groundwater monitoring.

- Based on benzene, toluene, ethylbenzene and total xylenes (BTEX) concentrations below New Mexico Water Quality Control Commission (NMWQCC) standards, the air sparging system was shut-down in February 2004 through the end of the year to assess static groundwater conditions at the site. Currently the system is not operating.

- During 2004, site activities included replacement of ORC socks into MW-8, quarterly sampling of MW-8 and MW-9, and site-wide annual groundwater monitoring.

3.0 SUMMARY OF 2004 ACTIVITIES

The current environmental program at the SJRP consists of dissolved-phase hydrocarbon remediation (air sparging (as needed) and chemical oxygen enhancement) and site-wide groundwater monitoring, as specified by the NMOCD. In February 2004, the air sparging system was shut down in anticipation of groundwater sampling. As a result of groundwater concentrations below NMWQCC standards, the system remained off pending additional closure sampling. Subsequent quarterly sampling found rebounding conditions at MW-9 (2nd, 3rd, and 4th quarters) and MW-8 (4th quarter). The following section details site activities conducted at the SJRP during 2004.

3.1 GROUNDWATER MONITORING PROGRAM

The groundwater monitoring program included the following components during 2004:

- On August 27, 2004, the seven site monitoring wells (W-2, MW-4 through MW-9) were sampled annually for BTEX compounds, NMWQCC trace metals, total dissolved solids (TDS), alkalinity, chloride, and sulfate.
- Remediation monitoring wells MW-8 and MW-9 were sampled quarterly in February, May, August, and November 2004 and analyzed for BTEX compounds to evaluate the effectiveness of hydrocarbon remediation activities.
- Groundwater elevation measurements were collected at each well quarterly and immediately prior to sampling.

All 2004 groundwater monitoring data were collected by Lodestar, Inc. (Martin Nee). Laboratory analyses for all samples were provided by Accutest Laboratories in Houston, Texas.

3.2 HYDROCARBON REMEDIATION

Dissolved-phase hydrocarbon remediation activities at the SJRP include air sparging (as needed) at SW-9 and oxygen enhancement using ORC socks in MW-8. The following paragraphs describe activities associated with these remedial systems.

Air Sparging System. Air sparging was conducted at the site in January 2004. During an operation and maintenance (O&M) visit on February 3, 2004, the system was found without electricity and was kept off in preparation for first quarterly sampling. As a result of groundwater concentrations below NMWQCC standards in February, the system was kept off. In order to assess static groundwater conditions at the site, the system remained off for the rest of the year. Problems with the electrical system are being investigated to find the cause of the unplanned outages.

The air sparging system was designed to provide additional oxygen to the groundwater in the vicinity of monitoring well MW-9. Following construction in October 2001, the air sparging system was subject to a 12-week pilot test. The system continued to operate on an 8-hour per day, seven days per week schedule during 2002, with the exception of a few shut-down periods for maintenance or groundwater sampling. In 2003, the system operated intermittently and on an as-needed basis to address rebounding conditions when detected.

ORC Enhancement. In November 2004, the ORC socks in MW-8 were replaced. The dissolved oxygen concentration was measured at 3.92 mg/L, indicating that some oxygen was still available for biodegredation; however, the level was low enough to justify replacement. ORC socks will generally be replaced annually, or as-needed, based on quarterly monitoring of dissolved oxygen concentrations in this well.

4.0 DISCUSSION OF 2004 RESULTS

This section describes the results of activities conducted at the SJRP during 2004.

4.1 SITE-WIDE GROUNDWATER MONITORING RESULTS

Groundwater Elevation Monitoring. Groundwater elevation monitoring was performed quarterly during 2004. Groundwater elevation maps for each quarter are presented in Figures 3 through 6. In general, groundwater flows radially outward from the topographic rise on which the SJRP is located. Groundwater levels in the north plant area are higher and groundwater flows towards the northwest. Groundwater elevation measurements in the south area of the site indicate that the maximum groundwater elevations occur in the vicinity of MW-6 located in the east-central portion of the plant. Groundwater beneath the southern portion of the plant generally flows to the southwest. Field documentation for water level monitoring activities is presented in Appendix A.

BTEX Sampling Results. (Results for monitoring wells MW-8 and MW-9 are discussed separately in the context of hydrocarbon remediation activities in Section 4.2, below.) BTEX results from annual samples collected during 2004 are presented in Table 4-1. During the annual sampling event in August 2004, BTEX concentrations in all site wells (except MW-8 and MW-9) were below analytical detection limits. This is consistent with the results from 2003 and 2002. Documentation of 2004 field activities and laboratory reports are presented in Appendix A and Appendix B, respectively.

Inorganic Sampling Results. Results for inorganic samples collected during 2004 are presented in Table 4-2. Elevated concentrations of some inorganic constituents, including TDS and sulfate, were detected in various wells. This finding is consistent with previous annual sampling events. Isoconcentration maps presenting TDS and sulfate concentrations for samples collected during August 2004 are shown on Figures 7 and 8, respectively. It is possible that these elevated concentrations may be associated with past practices; however, past closure activities have addressed any site-related sources of these

parameters to groundwater, and regionally this area is known to contain elevated TDS and associated inorganic parameter concentrations. There are no downgradient users of the groundwater. Documentation of field activities and laboratory reports are presented in Appendix A and Appendix B, respectively.

4.2 HYDROCARBON REMEDIATION RESULTS

During the first sampling event (February) of 2004, BTEX concentrations in MW-8 and MW-9 (as well as all other site wells) were below NMWQCC standards. In response to these results, and to assess static groundwater conditions at the site, the air sparging system was turned off for the remainder of the year. During subsequent, quarterly sampling, the benzene concentrations in MW-9 rebounded to above standards (15.2 µg/L, 29.5 µg/L and 35.9 µg/L), during each respective quarter. These concentrations represent an overall historic decline in BTEX concentrations, and are similar to concentrations in 2002. These results also indicate that air sparging in the area has been effective, and that continued remediation, possibly addition of ORC socks, would help to further reduce BTEX concentrations.

Benzene concentrations in MW-8 remained below detection in the second and third quarters of 2004, but rebounded during the fourth quarterly event to 157 µg/L. This concentration represents a decrease from the 2003 highest concentration of 891 µg/L, and suggests that the ORC socks placed in MW-8 are enhancing natural biodegredation of BTEX compounds in this well.

BTEX concentrations in well MW-5, located downgradient of MW-8 and MW-9, were below detection in 2004, which is consistent with historic data. Historic BTEX concentrations through 2004 for monitoring wells MW-5, MW-8 and MW-9 are presented in Graphs 1, 2 and 3, respectively.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The following conclusions and recommendations are provided based on the information presented in this report.

5.1 SITE-WIDE GROUNDWATER MONITORING PROGRAM

Groundwater sampling performed as part of the site-wide groundwater monitoring at SJRP resulted in the following conclusions and recommendations:

- Groundwater flows radially away from the topographic rise on which SJRP is located. In the north plant area, groundwater flow is towards the northwest; in the south plant area groundwater flow is primarily towards the southwest.
- During the 2004 annual sampling event, BTEX concentrations in all site wells were below NMWQCC standards (except in wells MW-8 and MW-9).
- Consistent with 2002/2003 monitoring, inorganic constituents were measured above NMWQCC standards during the August 2004 sampling event. The elevated concentrations of TDS and sulfate may result from past site practices; however, it is likely that some elevated concentrations are naturally occurring in the region.
- EPNG recommends continuation of the annual site-wide groundwater monitoring program.

5.2 HYDROCARBON REMEDIATION PROGRAM

The following conclusions and recommendations are provided regarding the hydrocarbon remediation performed near wells MW-8 and MW-9:

- During the first quarterly sampling event of 2004, monitoring wells MW-8 and MW-9 contained BTEX concentrations below the NMWQCC standards. The air sparging system was shut down in February 2004 for the remainder of the year, to assess static groundwater conditions at the site.

- During the second, third and fourth quarterly sampling events, benzene concentrations in MW-9 rebounded to above standards. During the fourth quarter, the benzene concentration in MW-8 also rebounded to above closure standards. In November, the ORC socks were replaced in MW-8.
- EPNG recommends continuation of quarterly monitoring at MW-8 and MW-9 for BTEX concentrations and dissolved oxygen content.
- If BTEX concentrations in MW-9 fall below closure standards during the first quarter 2005 sampling event, the air sparging system will remain off and closure sampling will continue. However, if concentrations remain above standards, ORC socks will be placed into MW-9 to enhance natural biodegradation of BTEX compounds.
- ORC socks will be replaced in MW-8, and MW-9 as needed, based on quarterly monitoring of dissolved oxygen concentrations.
- In November 2004, EPNG received a letter from NMOCD requesting a work plan to address hydrocarbon contamination discovered at the Praxair facility in nearby monitoring wells. Despite any supporting evidence to justify the supposition that the hydrocarbon contamination occurred during EPNG ownership of the site (i.e., prior to the sale of the plant from EPNG to Western Gas Resources in 1992), EPNG has agreed to monitor the three monitoring wells near the Praxair Facility as part of the annual sampling program for the next five years (2005 – 2009). The results of this sampling will be reported to NMOCD in subsequent SJRP Annual Reports.

6.0 REFERENCES

AE Schmidt Environmental, 2002, *Air Sparge Pilot Test Data, San Juan River Plant, Kirtland, NM,* prepared for Montgomery Watson Harza, Inc., Albuquerque, New Mexico, February 2002.

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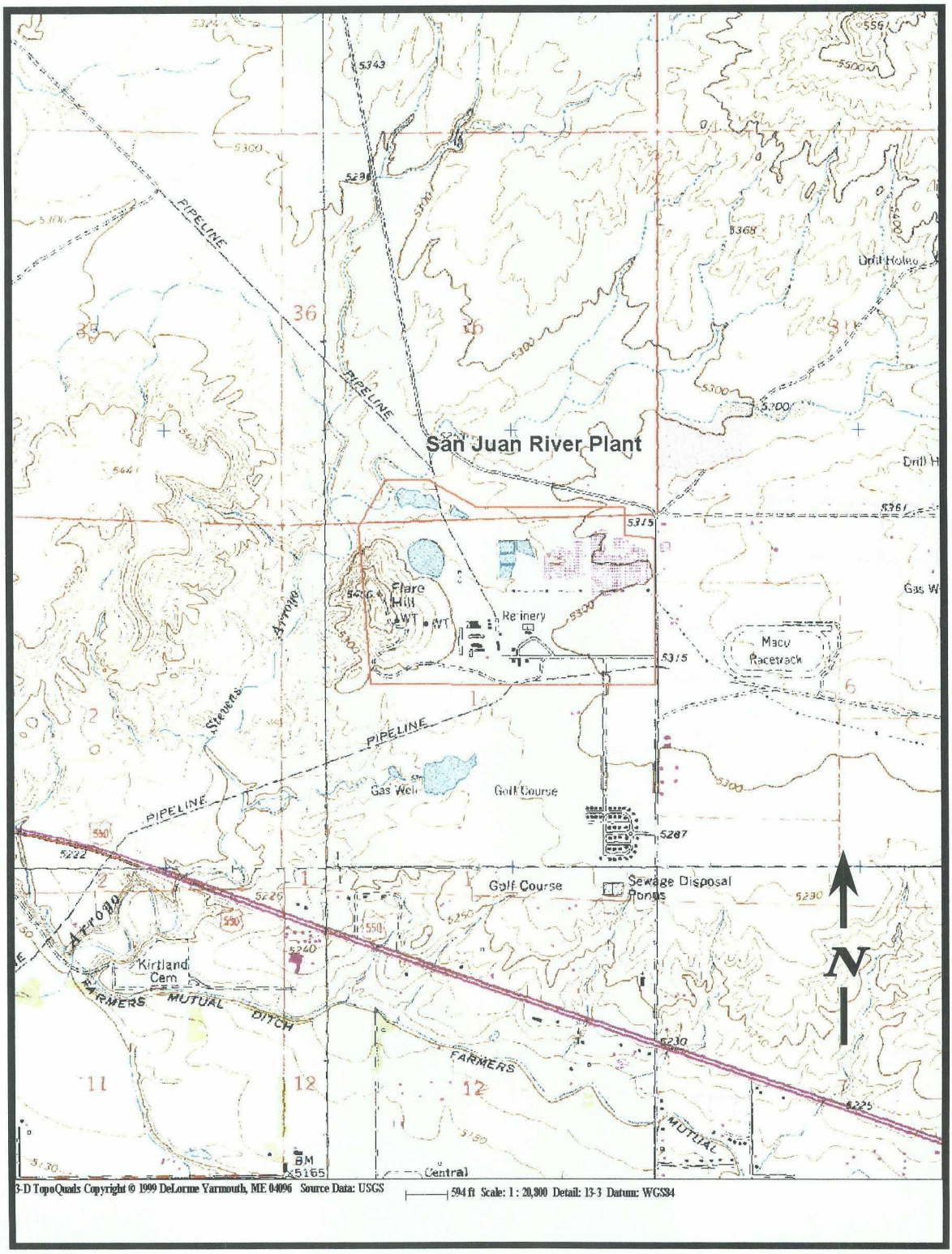
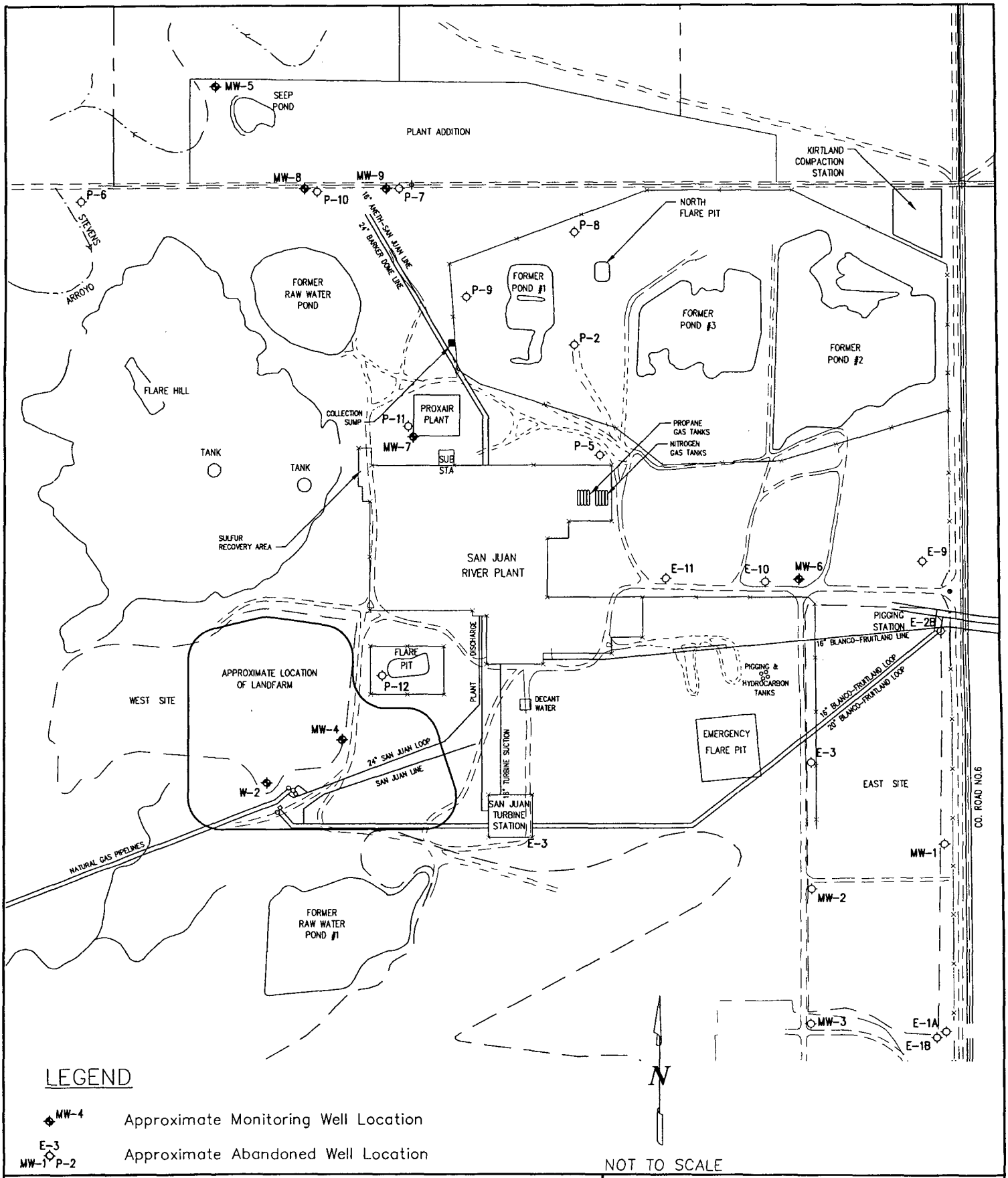
Figures



San Juan River Plant Site Location Map	Figure 1



LEGEND

MW-4 — Approximate Monitoring Well Location

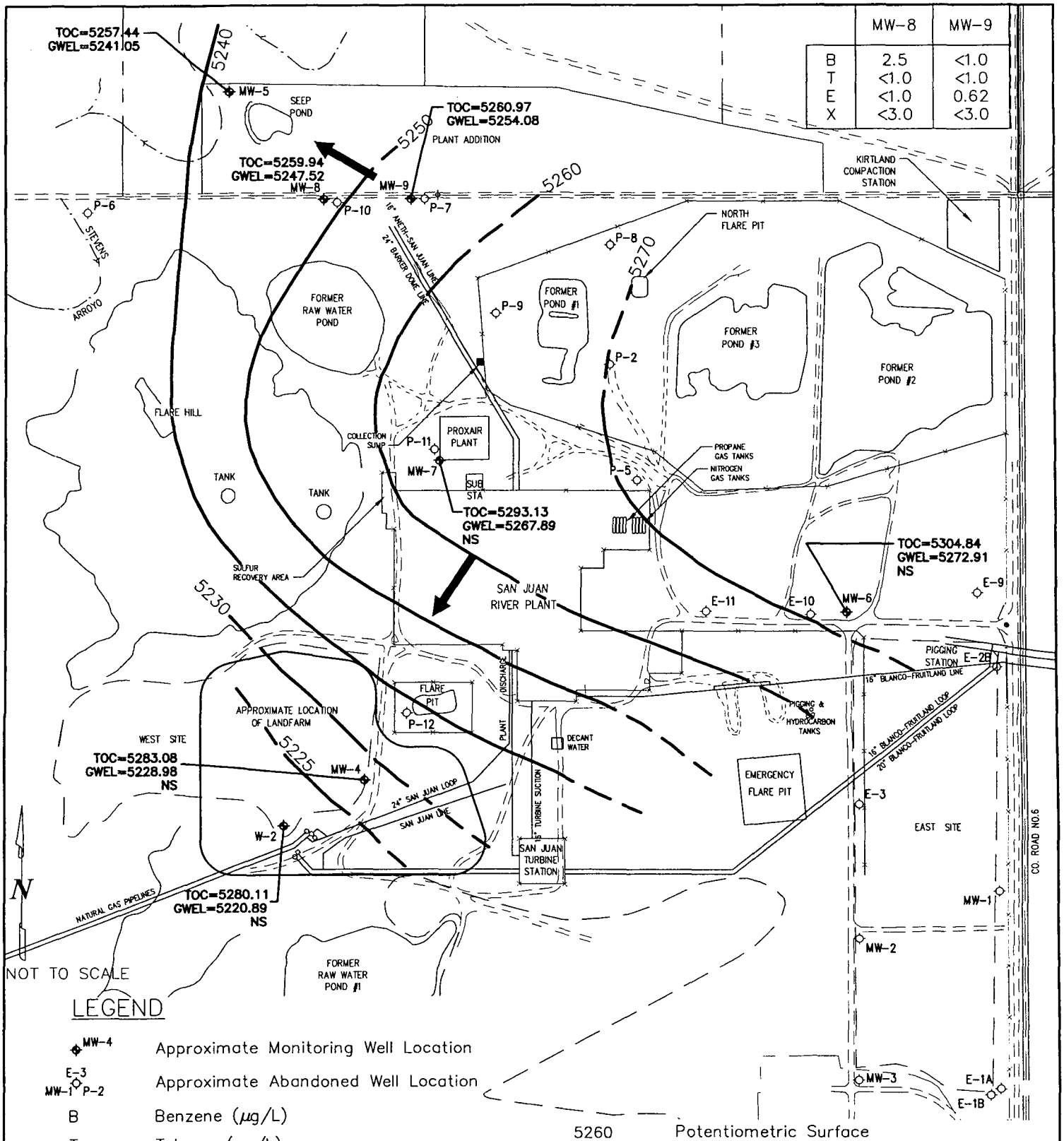
E-3 / MW-1 / P-2 — Approximate Abandoned Well Location

SITE LAYOUT MAP
SAN JUAN RIVER PLANT

EL PASO NATURAL GAS

FIGURE 2

SJRP_04ANREPORT



LEGEND

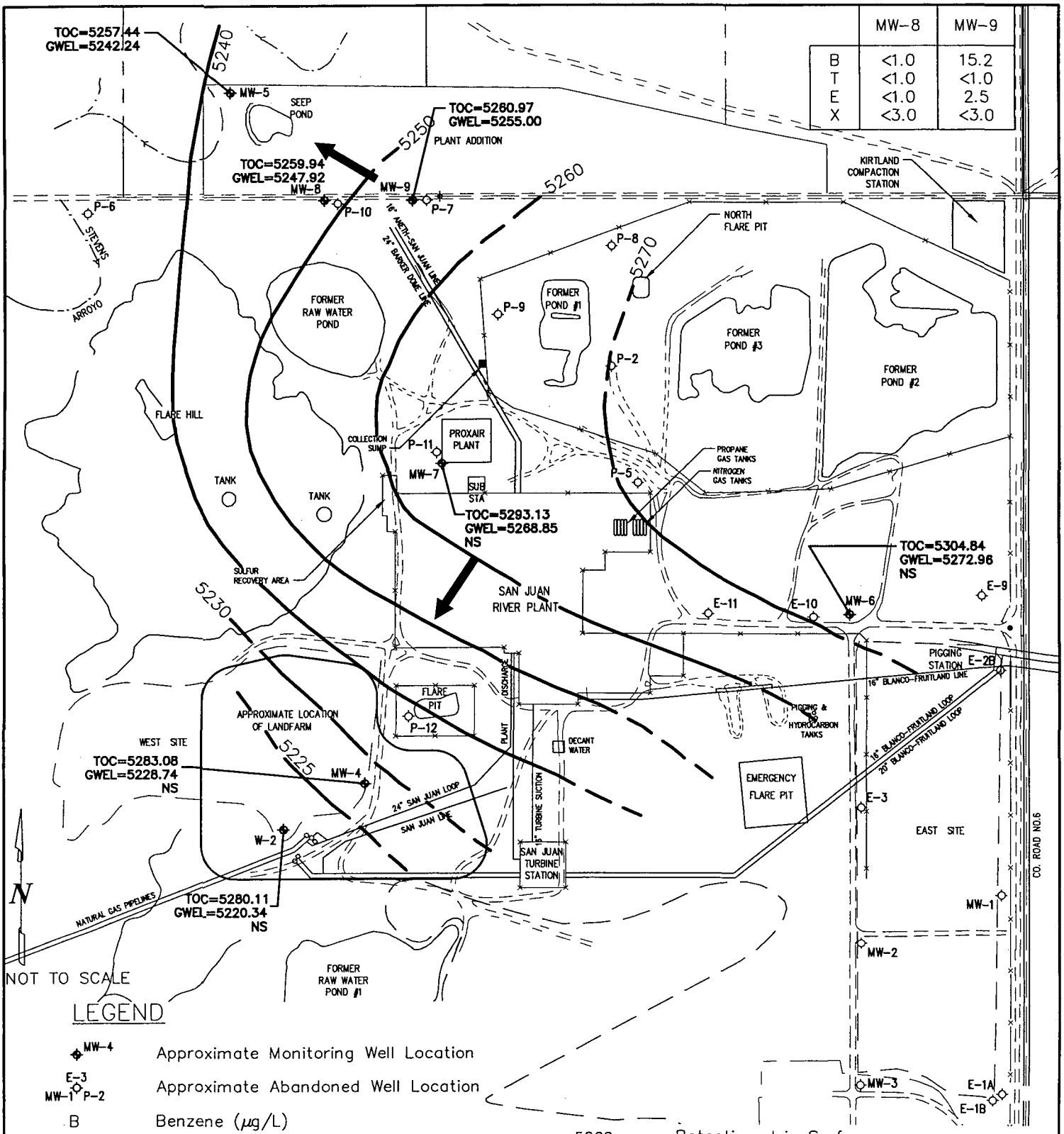
MW-4	Approximate Monitoring Well Location
E-3 / MW-1 / P-2	Approximate Abandoned Well Location
B	Benzene (µg/L)
T	Toluene (µg/L)
E	Ethylbenzene (µg/L)
X	Total Xylenes (µg/L)
→	Direction of Groundwater Flow (Estimated)
5260	Potentiometric Surface (Approximate & Assumed Where Dashed)
GWEL	Groundwater Elevation (FT Above Mean Sea Level Unless Noted Otherwise)
TOC	Top of Casing

GROUNDWATER ELEVATION MAP
FEBRUARY 2004
SAN JUAN RIVER PLANT

EL PASO NATURAL GAS

FIGURE 3

SJRP_03-ANREPORT

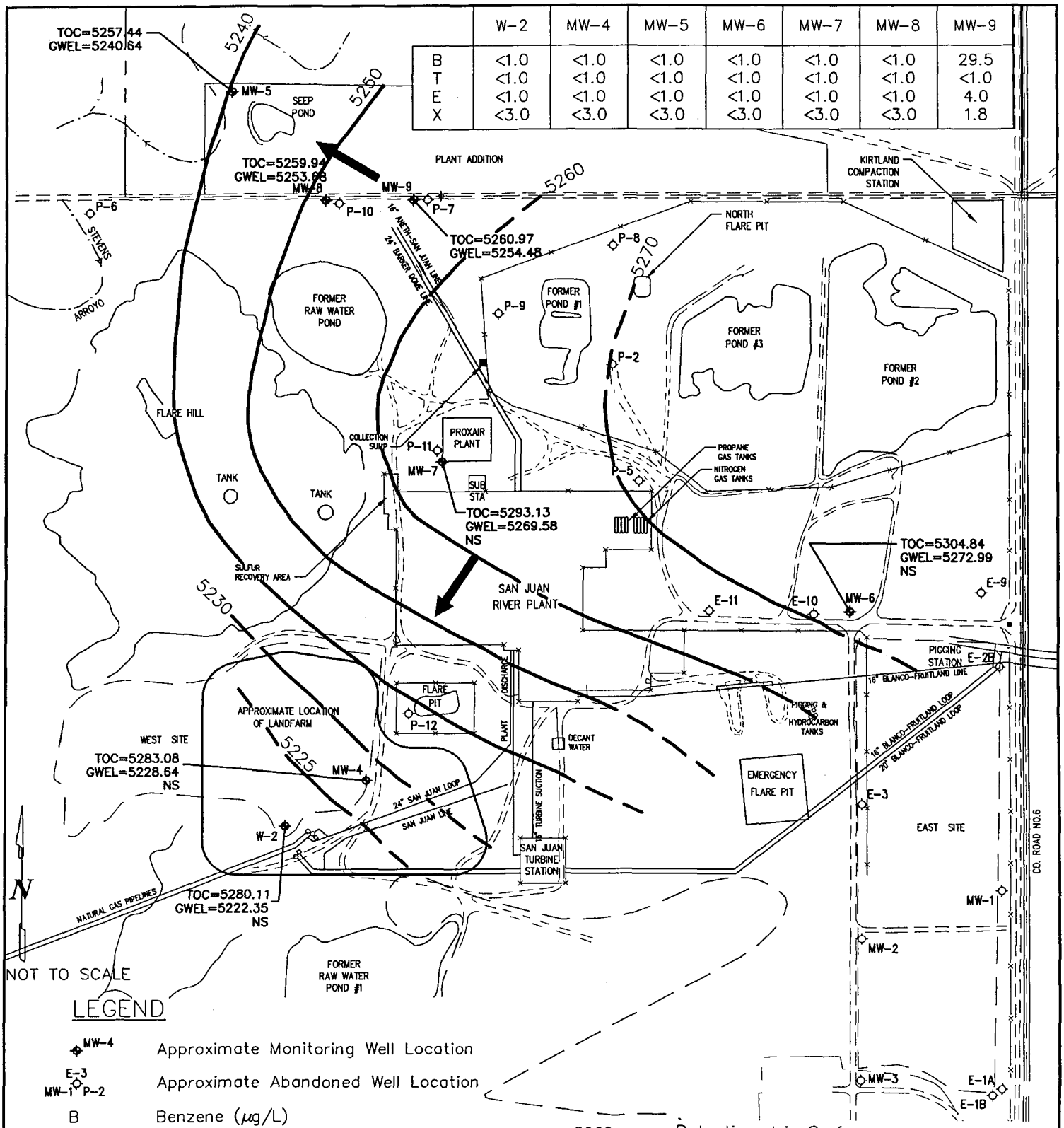


GROUNDWATER ELEVATION MAP
MAY 2004
SAN JUAN RIVER PLANT

EL PASO NATURAL GAS

FIGURE 4

SJRP_04-ANREPORT



	W-2	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9
B	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	29.5
T	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
E	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	4.0
X	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	1.8

LEGEND

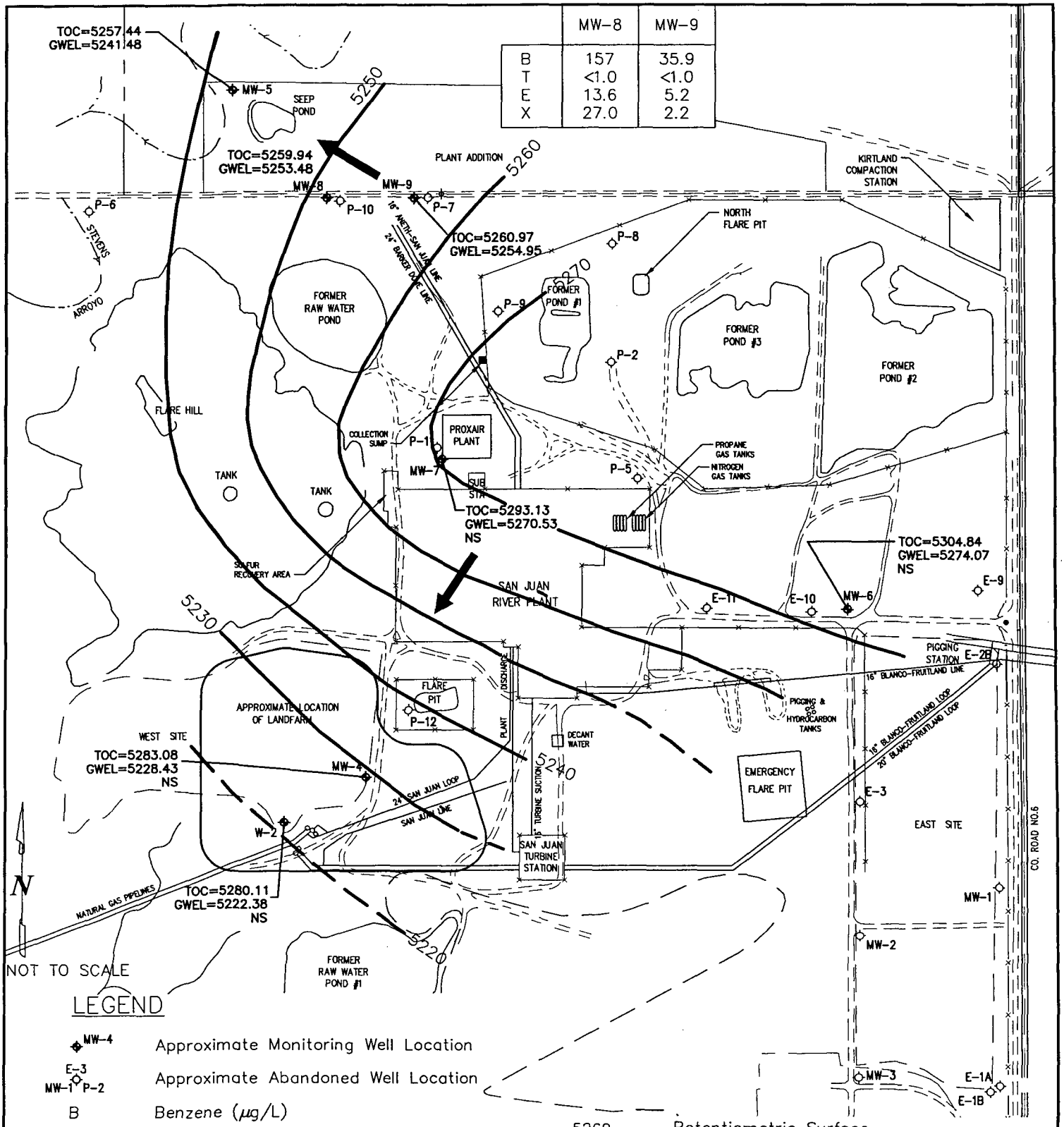
- MW-4 — Approximate Monitoring Well Location
- E-3, MW-1, P-2 — Approximate Abandoned Well Location
- B — Benzene (µg/L)
- T — Toluene (µg/L)
- E — Ethylbenzene (µg/L)
- X — Total Xylenes (µg/L)
- → — Direction of Groundwater Flow (Estimated)
- 5260 — Potentiometric Surface (Approximate & Assumed Where Dashed)
- GWEL — Groundwater Elevation (Feet Above Mean Sea Level Unless Noted Otherwise)
- TOC — Top of Casing

GROUNDWATER ELEVATION MAP
AUGUST 2004
SAN JUAN RIVER PLANT

EL PASO NATURAL GAS

FIGURE 5

SJRP 8_04-ANREPORT

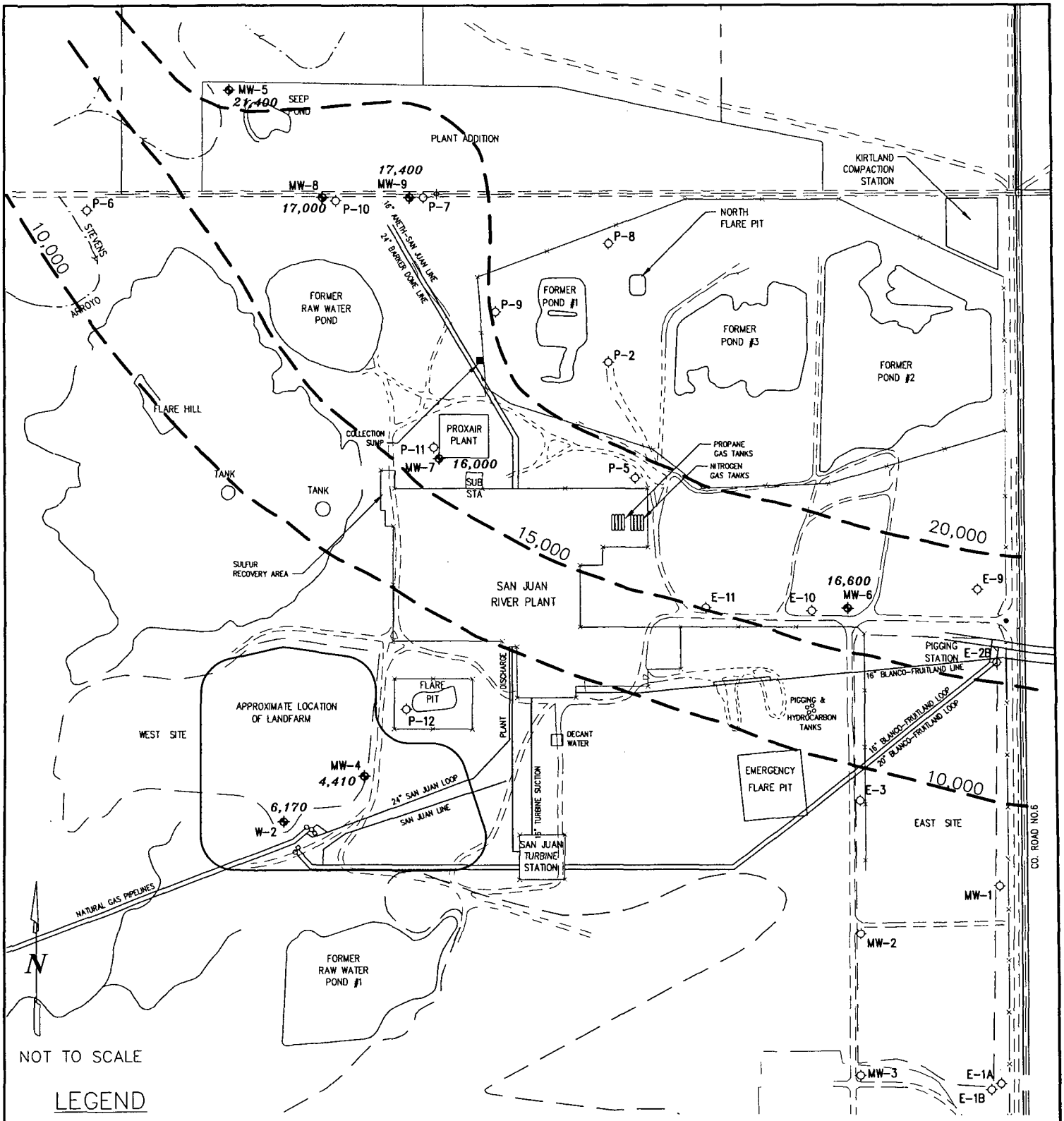


GROUNDWATER ELEVATION MAP
NOVEMBER 2004
SAN JUAN RIVER PLANT

EL PASO NATURAL GAS

FIGURE 6

SJRP 11_04-ANREPORT



NOT TO SCALE

LEGEND

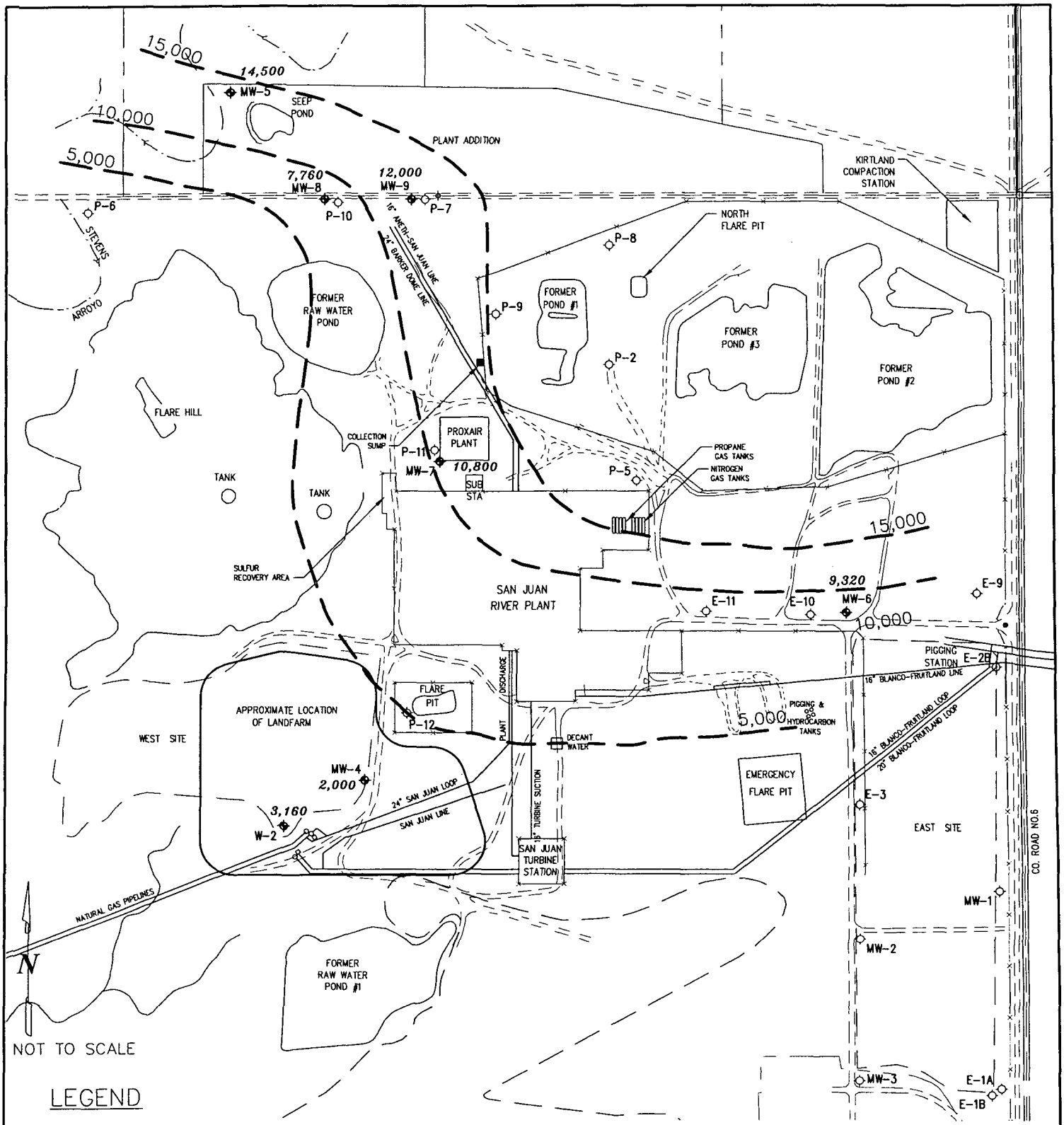
- MW-4 — Approximate Monitoring Well Location
- E-3 / MW-1 / P-2 — Approximate Abandoned Well Location
- 16,500 — Total Dissolved Solids (mg/L)
- 10,000 — Total Dissolved Solids Isoconcentration (mg/L) (Estimated where dashed)

TDS ISOCONCENTRATION MAP
AUGUST 2004
SAN JUAN RIVER PLANT

EL PASO NATURAL GAS

FIGURE 7

SJRP TDS Iso 04-ANREPORT



LEGEND

- MW-4 — Approximate Monitoring Well Location
- E-3 MW-1 P-2 — Approximate Abandoned Well Location
- 3,600 — Sulfate Concentration in ppm
- —10— — Sulfate Isoconcentration (ppm) (Estimated)

SULFATE ISOCONCENTRATION MAP
AUGUST 2004
SAN JUAN RIVER PLANT

EL PASO NATURAL GAS

FIGURE 8

SJRP_Sulfate Iso 04-ANREPORT

Tables

MWH

TABLE 4-1

SUMMARY OF 2004 BTEX ANALYTICAL AND FIELD DATA

SAN JUAN RIVER PLANT SITE

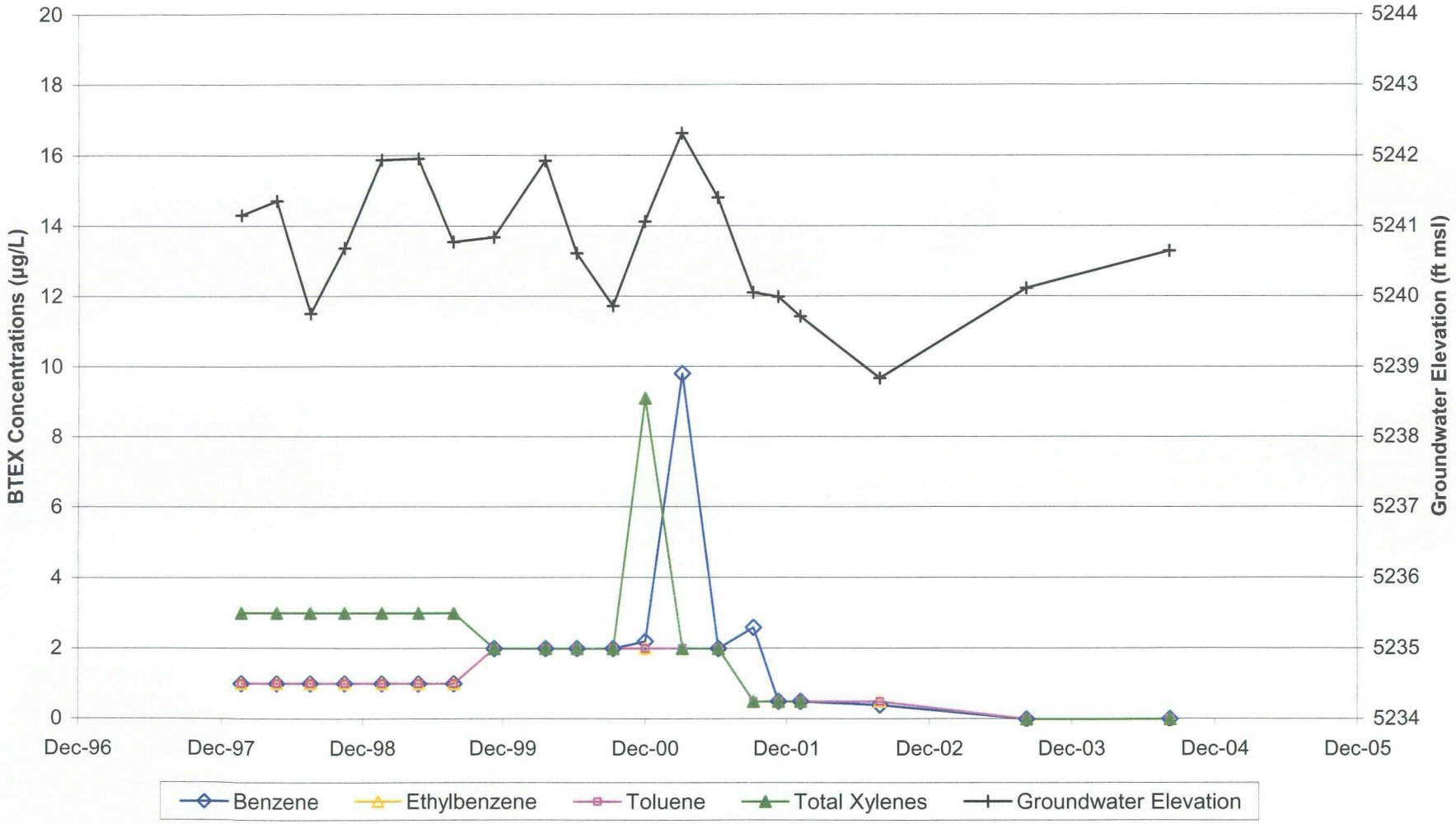
Location Identification	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	m,p-Xylene (µg/L)	o-Xylene (µg/L)	Total Xylenes (µg/L)	Field pH (su)	Temperature (C)	Conductivity (µmhos/cm)	Depth to Water (feet bgs)
W-2	8/27/2004	<1.0	<1.0	<1.0	<2.0	<1.0	<3.0	7.24	62.6	5310	57.76
MW-4	8/27/2004	<1.0	<1.0	<1.0	<2.0	<1.0	<3.0	6.65	64.6	4450	54.44
MW-5	8/27/2004	<1.0	<1.0	<1.0	<2.0	<1.0	<3.0	6.61	63.2	14670	16.80
MW-6	8/27/2004	<1.0	<1.0	<1.0	<2.0	<1.0	<3.0	4.94	62.0	12890	31.85
MW-7	8/27/2004	<1.0	<1.0	<1.0	<2.0	<1.0	<3.0	6.6	64.0	13580	23.55
MW-8	2/17/2004	2.5	<1.0	<1.0	NA	NA	<3.0	8.85	56.3	10010	12.42
MW-8	5/18/2004	<1.0	<1.0	<1.0	<2.0	<1.0	<3.0	7.73	62.3	7500	12.02
MW-8	8/27/2004	<1.0	<1.0	<1.0	<2.0	<1.0	<3.0	8.12	63.1	13130	6.26
MW-8	11/17/2004	157	<1.0	13.6	26.8	<1.0	27	7.48	56.2	10600	6.46
MW-9	2/17/2004	<1.0	<1.0	0.6	NA	NA	<3.0	4.65	54.4	13720	6.89
MW-9	5/18/2004	15.2	<1.0	2.5	<2.0	<1.0	<3.0	4.22	60.7	8270	5.97
MW-9	8/27/2004	29.5	<1.0	4.0	1.8	<1.0	1.8	4.93	60.8	13070	6.49
MW-9	11/17/2004	35.9	<1.0	5.2	2	<1.0	2.2	5.26	55.8	14030	6.02

TABLE 4-2
SUMMARY OF 2004 INORGANIC ANALYTICAL DATA
SAN JUAN RIVER PLANT SITE

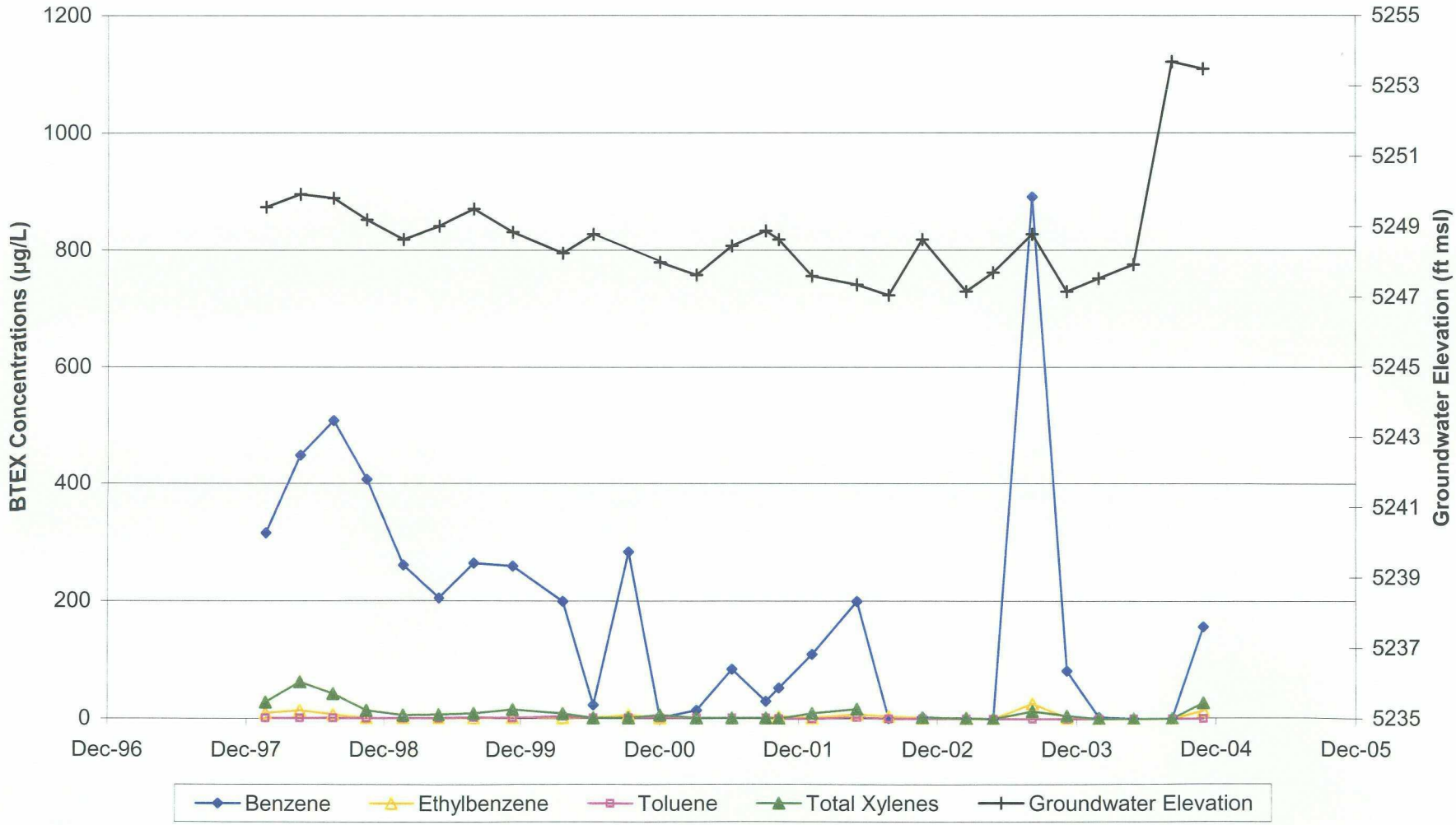
Parameter	NMWQCC Standard	W-2 2/27/2004	MW-4 8/27/2004	MW-5 8/27/2004	MW-6 2/27/2004	MW-7 8/27/2004	MW-8 8/27/2004	MW-9 8/27/2004
Metals								
Aluminum (µg/L)	5,000	604	268	9,820	23,400	33,600	14,400	30,100
Arsenic (µg/L)	100.0	<5.0	18.0	<5.0	<5.0	8.9	20.7	<5.0
Barium (µg/L)	1000	<200	<200	<200	<200	265	<200	<200
Cadmium (µg/L)	10	<4.0	<4.0	<4.0	10.20	<4.0	<4.0	8.1
Calcium (µg/L)	NE	353,000	245,000	407,000	361,000	430,000	100,000	328,000
Chromium (µg/L)	50	<10	<10	<10	<10	18.7	<10	10.4
Cobalt (µg/L)	50	<50	166	<50	206	<50	<50	225
Copper (µg/L)	1,000	46.1	51.7	51.3	78.6	86.6	64.0	102.0
Iron (µg/L)	1,000	519	12,100	7,350	6,150	28,100	8,710	16,500
Lead (µg/L)	50	<3.0	<3.0	<3.0	<3.0	15.5	7.4	7.0
Magnesium (µg/L)	NE	103,000	96,000	202,000	320,000	194,000	563,000	248,000
Manganese (µg/L)	200	19	7,810	5,760	7,450	3,510	799	7,860
Mercury (µg/L)	2	<0.20	0.29	<0.20	<0.20	<0.20	<0.20	<0.20
Molybdenum (µg/L)	1,000	NA	NA	NA	NA	NA	NA	NA
Nickel (µg/L)	200	<40	277	58	250	44	<40	332
Potassium (µg/L)	NE	5,470	8,500	40,800	36,500	29,300	106,000	27,400
Selenium (µg/L)	50	115	<5.0	7.5	331	9.8	6.2	6.5
Silver (µg/L)	50	<10	<10	<10	<10	<10	<10	<10
Sodium (µg/L)	NE	1,130,000	1,070,000	3,450,000	2,610,000	3,040,000	3,030,000	2,770,000
Zinc (µg/L)	10,000	30.3	196	71	734	164	53.8	647
Inorganics								
Alkalinity as CaCO3 (mg/L)	NE	180	888	393	11	1040	4920	24.5
Chloride (mg/L)	250	431	453	773	1340	694	806	969
Nitrate+Nitrite (mg/L)	10	20.2	<10	<20	78.3	<20	<20	<20
Sulfate (mg/L)	600	3,160	2,000	14,500	9,320	10,800	7,760	12,000
Total Dissolved Solids (mg/L)	1,000	6,170	4,410	21,400	16,600	16,000	17,000	17,400

NE = Not established

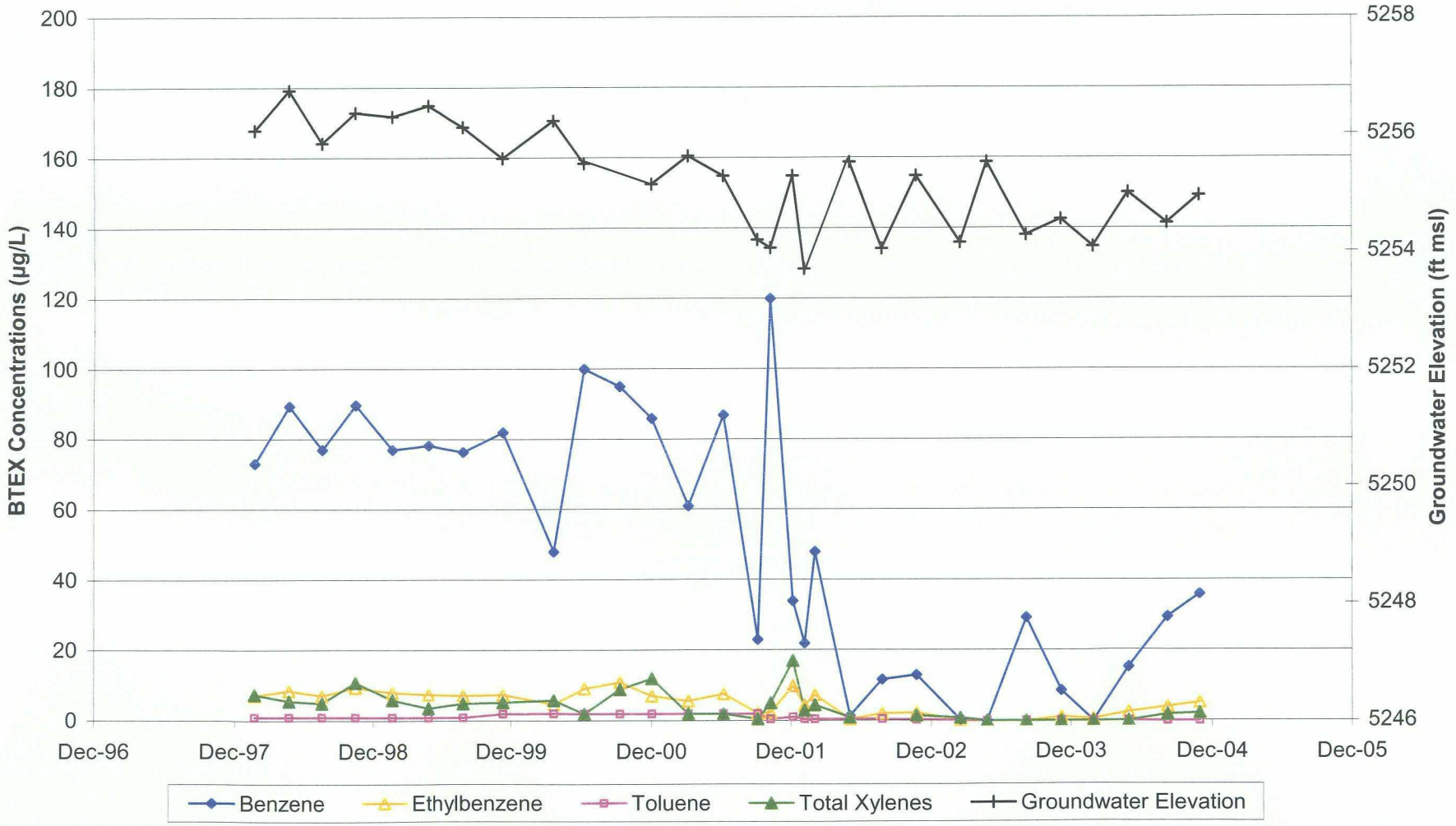
GRAPH 1
Historic BTEX Concentrations and Groundwater Elevations
MW-5, San Juan River Plant Site



GRAPH 2
Historic BTEX Concentrations and Groundwater Elevations
MW-8, San Juan River Plant Site



GRAPH 3
Historic BTEX Concentrations and Groundwater Elevations
MW-9, San Juan River Plant Site



Appendix A

MWH

APPENDIX A

2004 DOCUMENTATION OF FIELD ACTIVITIES

(Included electronically on attached CD)

Appendix B

MWH

APPENDIX B

2004 LABORATORY REPORTS

(Included electronically on attached CD)