AP - 069

ANNUAL MONITORING REPORT

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MAR 31 2006

Oil Conservation Division
Environmental Bureau

elpaso

Via Federal Express

March 30, 2006

Mr. Glenn von Gonten
New Mexico Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

RE: 2005 ANNUAL REPORT FOR THE SAN JUAN RIVER PLANT

Dear Mr. von Gonten:

El Paso Natural Gas Company (EPNG) hereby submits the 2005 Annual Report for the San Juan River Plant located near Kirtland, New Mexico. The enclosed report details the remediation and sampling activities for the year 2005.

If you have any questions concerning the enclosed reports, please call me at (719) 520-4761.

Sincerely,

Chandler S. Cole

for
Todd J. Muelhoefer, P.G.
Project Manager

Enclosures: as stated

xc: Mr. Denny Foust, NMOCD, Aztec - w / enclosures; via **Fed Ex**

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MAR 31 2006

Oil Conservation Division
Environmental

2005 ANNUAL REPORT
SAN JUAN RIVER PLANT

March 2006

Prepared for:

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

Prepared by:

MWH
1801 California Street, Suite 2900
Denver, Colorado 80202

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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

EXECUTIVE SUMMARY

The San Juan River Plant (SJRP) is located in San Juan County, near Kirtland, New Mexico. The SJRP is used to process natural gas collected from production wells located in the San Juan Basin of New Mexico and southern Utah. The SJRP was sold to Western Gas Resources, Inc. in June 1992. Closure of evaporation ponds, pits, and other potential source areas within the SJRP 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 SJRP since 1995.

Dissolved-phase hydrocarbons in groundwater have been observed at the SJRP 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 SJRP suggests that concentrations in monitoring well MW-8 have declined as a result of chemical oxygen enhancement using oxygen-releasing compound socks within this well. The benzene concentration at MW-8 remained below closure standards during the second and third quarters, but demonstrated rebounding conditions in the fourth quarter 2005 with a concentration of 164 µg/L. The air sparging system at MW-9 was shut down in February 2004, and has remained off through 2005, in order to assess groundwater conditions. Concentrations of benzene at MW-9 showed gradual rebounding conditions in 2004 and 2005, with a maximum benzene concentration of 133 µg/L in May 2005. Currently, the air sparging system is not operating as groundwater monitoring continues. 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, EPNG has initiated a Stage I Abatement Plan to investigate hydrocarbon impacts encountered in groundwater near the Praxair Facility, the results of the initial investigation will be discussed in the Stage I Interim Report, to be submitted by March 31, 2006.

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 2005. This site is located in San Juan County, Township 29N, Range 15W, Section 1, near Kirtland, New Mexico, as shown on Figure 1.

Remedial actions currently operating at the SJRP include in-situ oxygen enhancement of groundwater through use of oxygen-releasing compound (ORC) in monitoring well MW-8. 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 2005, 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 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.
- The sparge system remained off during 2005. Site activities included replacement of ORC socks into MW-8, quarterly sampling of MW-8 and MW-9, and site-wide annual groundwater monitoring.

- EPNG submitted a Stage I Abatement Plan to NMOCD in November 2005, to investigate hydrocarbon impacts encountered in groundwater near the Praxair evaporation pond at the SJRP, and received approval to begin investigative actions on January 23, 2006. Results of this investigation will be detailed in the Stage I Interim Report, to be submitted by March 31, 2006.

3.0 SUMMARY OF 2005 ACTIVITIES

The current environmental program at the SJRP consists of dissolved-phase hydrocarbon remediation (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. The system has remained off since that time in order to monitor static groundwater conditions at the site, and pending additional investigation in the area. The following section details site activities conducted at the SJRP during 2005.

3.1 GROUNDWATER MONITORING PROGRAM

The groundwater monitoring program included the following components during 2005:

- On August 24, 2005, 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 2005 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 2005 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 includes oxygen enhancement using ORC socks in MW-8. The following paragraphs describe activities associated with these remedial systems.

Air Sparging System. Air sparging has not been conducted at the site since 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. Pending additional investigation in the vicinity of MW-8 and MW-9, the system remained off through 2005.

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 2005, the ORC socks in MW-8 were replaced. The dissolved oxygen concentration was measured at 6.80 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 2005 RESULTS

This section describes the results of activities conducted at the SJRP during 2005.

4.1 SITE-WIDE GROUNDWATER MONITORING RESULTS

Groundwater Elevation Monitoring. Groundwater elevation monitoring was performed quarterly during 2005. 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 2005 are presented in Table 4-1. During the annual sampling event in August 2005, BTEX concentrations in W-2, MW-4, MW-5, MW-6, and MW-7 were below analytical detection limits. This is consistent with the results from 2002 through 2004. Documentation of 2005 field activities and laboratory reports are presented in Appendix A and Appendix B, respectively.

Inorganic Sampling Results. Results for inorganic samples collected during 2005 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 2005 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 2005 quarterly sampling events, the benzene concentrations in MW-8 were above NMWQCC standards at 159 µg/L in the first quarter of 2005, then fell below detection limits in the second and third quarters of 2005. The concentration rebounded during the fourth quarterly event to 164 µg/L, at which time a new ORC sock was placed in the well. These concentrations represents a decrease from the 2003 most elevated concentration of 891 µg/L, and suggest that the ORC socks placed in MW-8 are enhancing natural biodegredation of BTEX compounds in this well.

Benzene concentrations in MW-9 have rebounded to above standards (51.7 µg/L, 133 µg/L, 56.5 µg/L, and 164 µg/L), during each respective quarter. These results indicate that air sparging in the area has been effective when operational, and that continued remediation would help to further reduce BTEX concentrations.

BTEX concentrations in well MW-5, located downgradient of MW-8 and MW-9, were below detection in 2005, which is consistent with historic data. Historic BTEX concentrations through 2005 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 2005 annual sampling event, BTEX concentrations in all site wells were below NMWQCC standards (except in wells MW-8 and MW-9).
- Consistent with 2002-2004 monitoring, inorganic constituents were measured above NMWQCC standards during the August 2005 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:

- Benzene concentrations in MW-9 have 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.
- ORC socks will be replaced in MW-8, as needed, based on quarterly monitoring of dissolved oxygen concentrations.
- In November 2005, EPNG submitted a Stage I Abatement Plan to NMOCD, to investigate hydrocarbon impacts encountered in groundwater near the Praxair evaporation pond at the SJRP. Approval of this abatement plan was received from NMOCD on January 23, 2006, and the investigation was performed in February 2006. Results of the initial investigation will be detailed in the Stage I Interim Report, to be submitted by March 31, 2006.

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.

El Paso Energy Corporation, November 27, 2001, Electronic communication from Mr. Scott Pope (EPNG) to Mr. William Olson, New Mexico Oil Conservation Division, *Proposal to install an Oxygen Release Compound (ORC) sock for oxygenation of MW-8 in lieu of sparging,* documenting conversation between the parties on November 26, 2001.

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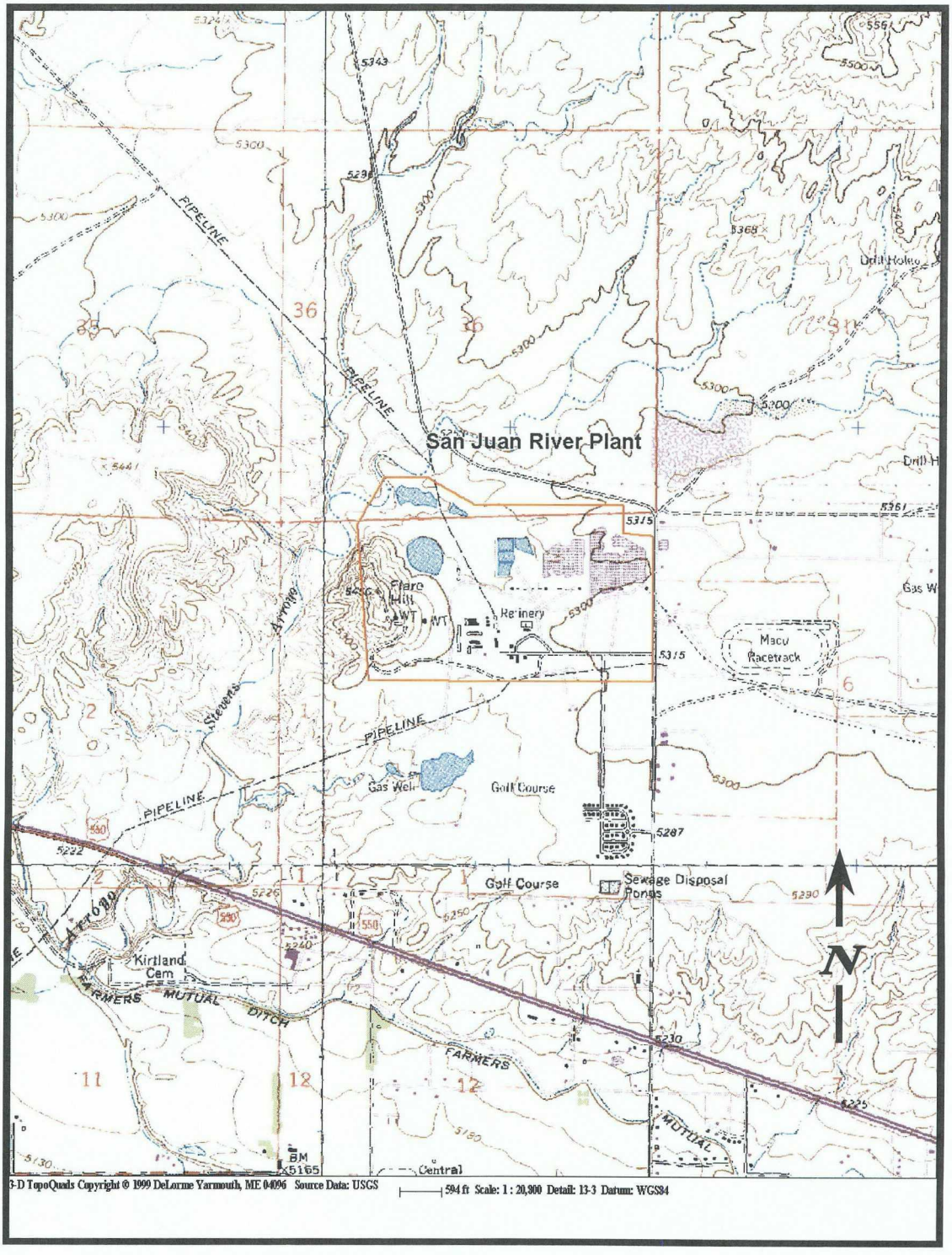
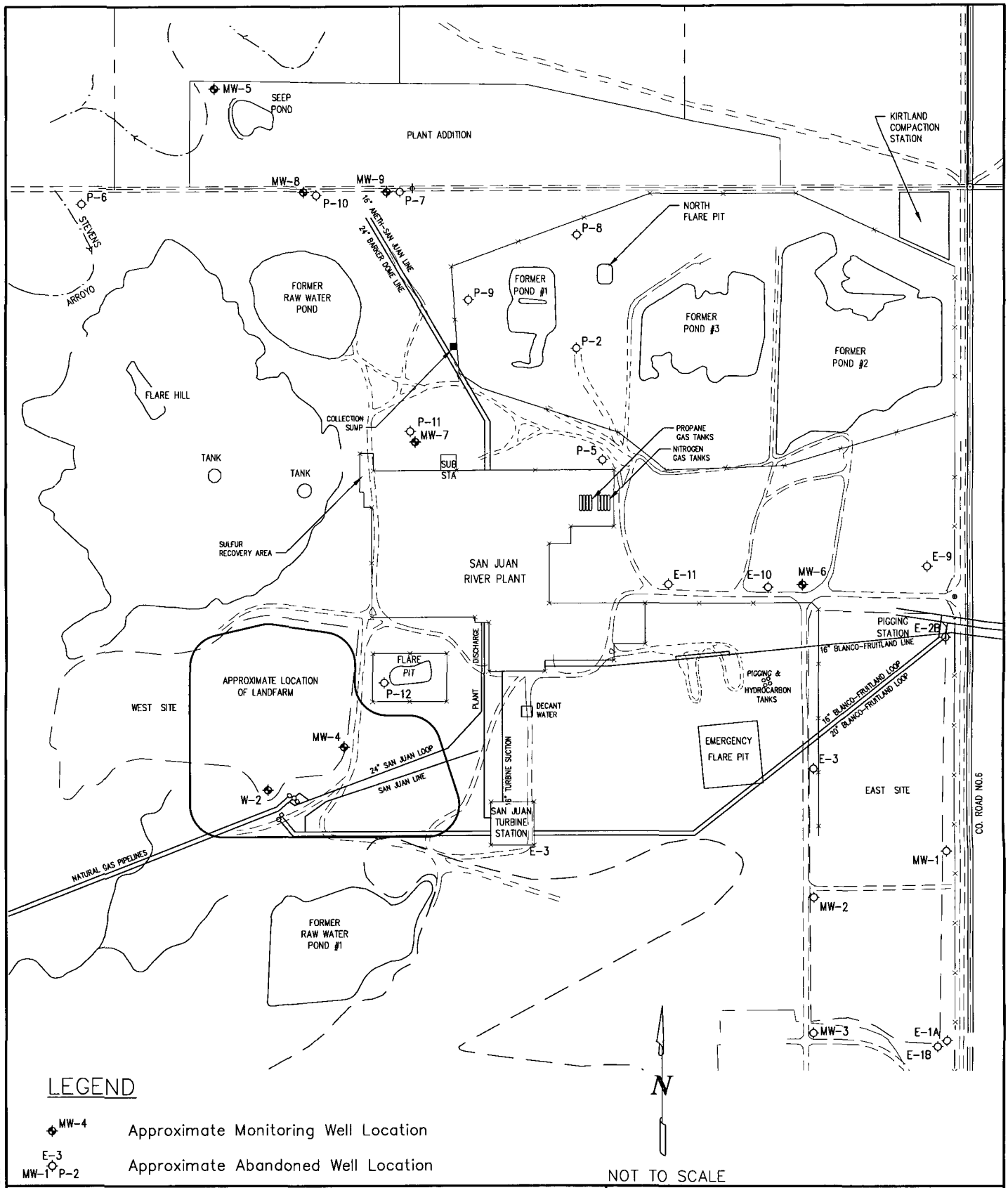
Philip Environmental, 1995, *Soil-Gas and Soil Survey, San Juan River Plant, Kirtland, New Mexico,* prepared for El Paso Natural Gas Company, Farmington, New Mexico, August 1995.

List of Figures

FIGURES



San Juan River Plant Site Location Map	Figure 1

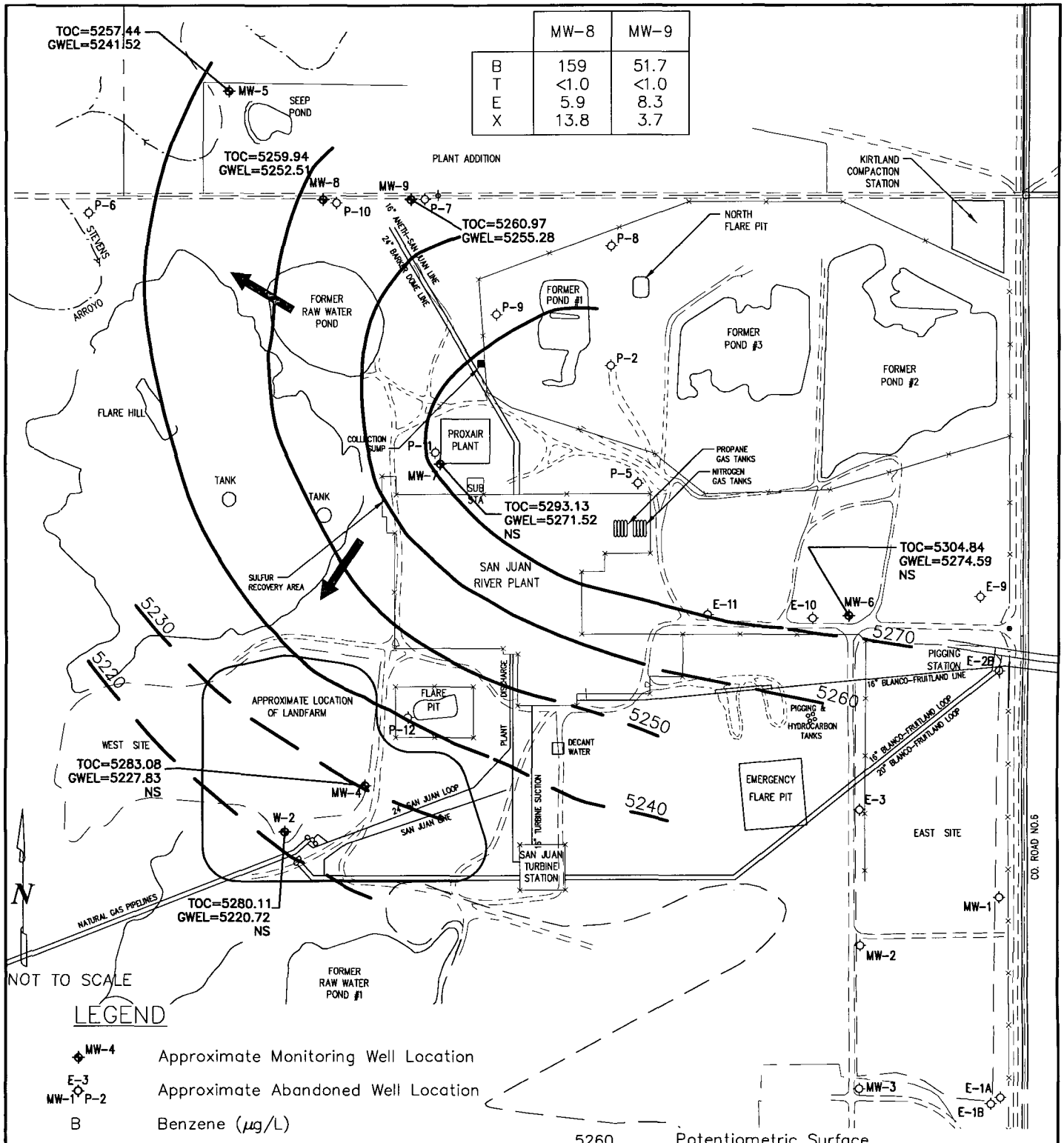


SITE LAYOUT MAP
SAN JUAN RIVER PLANT

EL PASO NATURAL GAS

FIGURE 2

SJRP_02-ANREPORT



	MW-8	MW-9
B	159	51.7
T	<1.0	<1.0
E	5.9	8.3
X	13.8	3.7

LEGEND

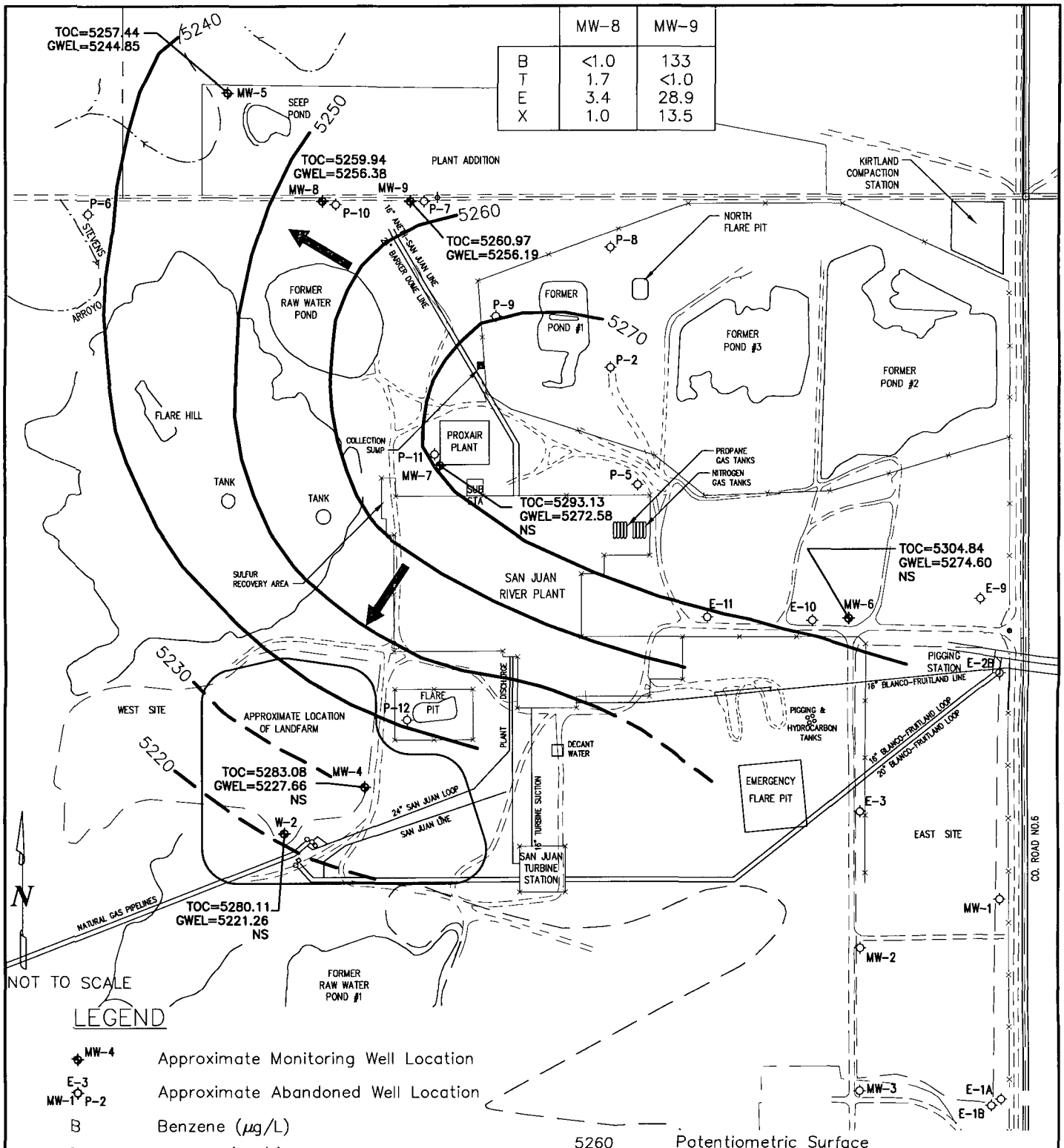
MW-4	Approximate Monitoring Well Location
E-3 MW-1 P-2	Approximate Abandoned Well Location
B	Benzene ($\mu g/L$)
T	Toluene ($\mu g/L$)
E	Ethylbenzene ($\mu g/L$)
X	Total Xylenes ($\mu g/L$)
→	Direction of Groundwater Flow (Estimated)
5260	Potentiometric Surface (Approximate & Assumed Where Dashed)
GWEL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

GROUNDWATER ELEVATION MAP
FEBRUARY 2005
SAN JUAN RIVER PLANT

EL PASO NATURAL GAS

FIGURE 3

SJRP 03-06 GW ELEV



	MW-8	MW-9
B	<1.0	133
T	1.7	<1.0
E	3.4	28.9
X	1.0	13.5

LEGEND

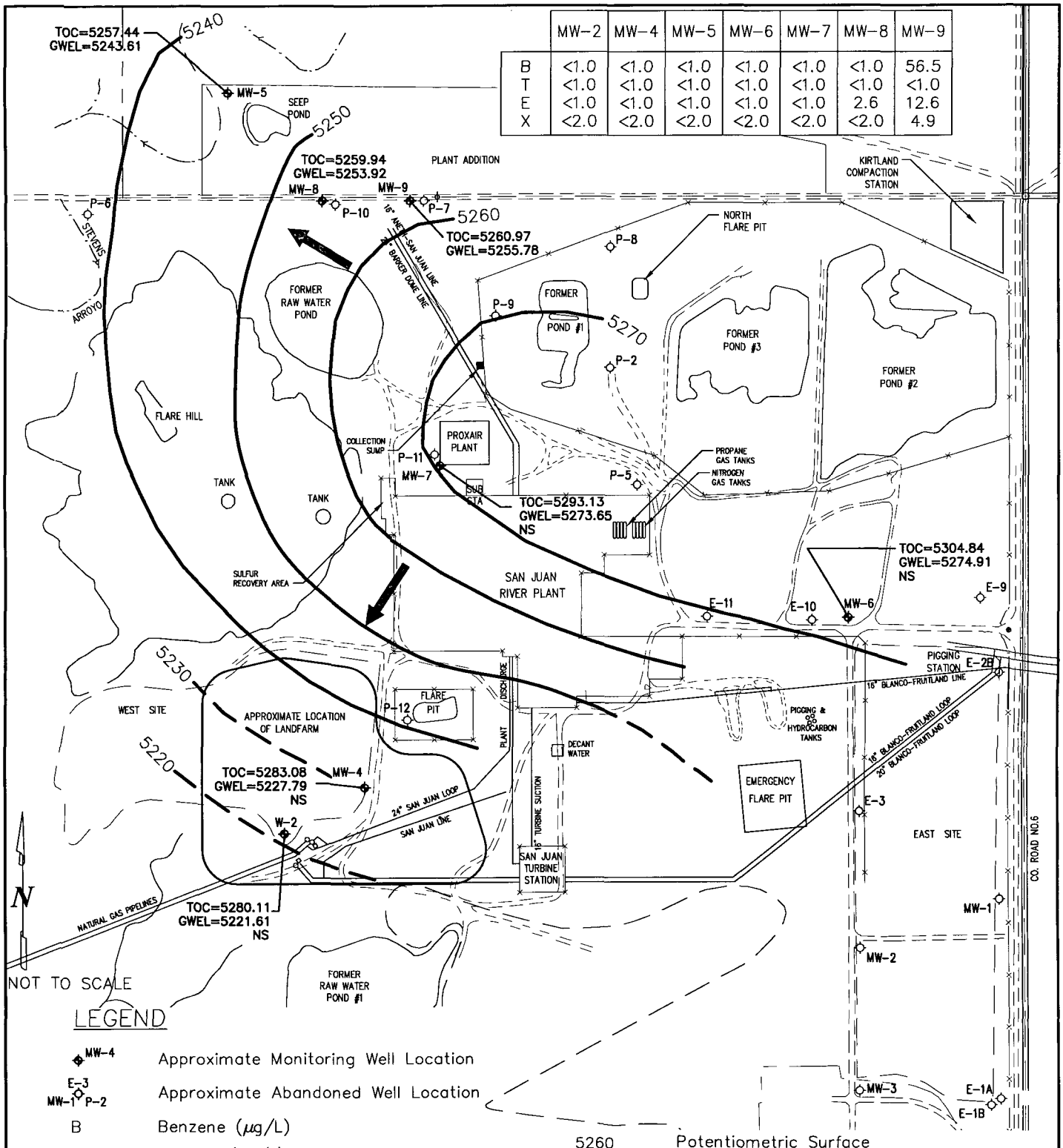
- MW-4 — Approximate Monitoring Well Location
- E-3 / MW-1 / P-2 — Approximate Abandoned Well Location
- B — Benzene (µg/L)
- T — Toluene (µg/L)
- E — Ethylbenzene (µg/L)
- X — Total Xylenes (µg/L)
- Direction of Groundwater Flow (Estimated)
- 5260 — Potentiometric Surface (Approximate & Assumed Where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

GROUNDWATER ELEVATION MAP
MAY 2005
SAN JUAN RIVER PLANT

EL PASO NATURAL GAS

FIGURE 4

SJRP 03-06-04 GW ELEV.dwg



	MW-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	56.5
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	2.6	12.6
X	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	4.9

LEGEND

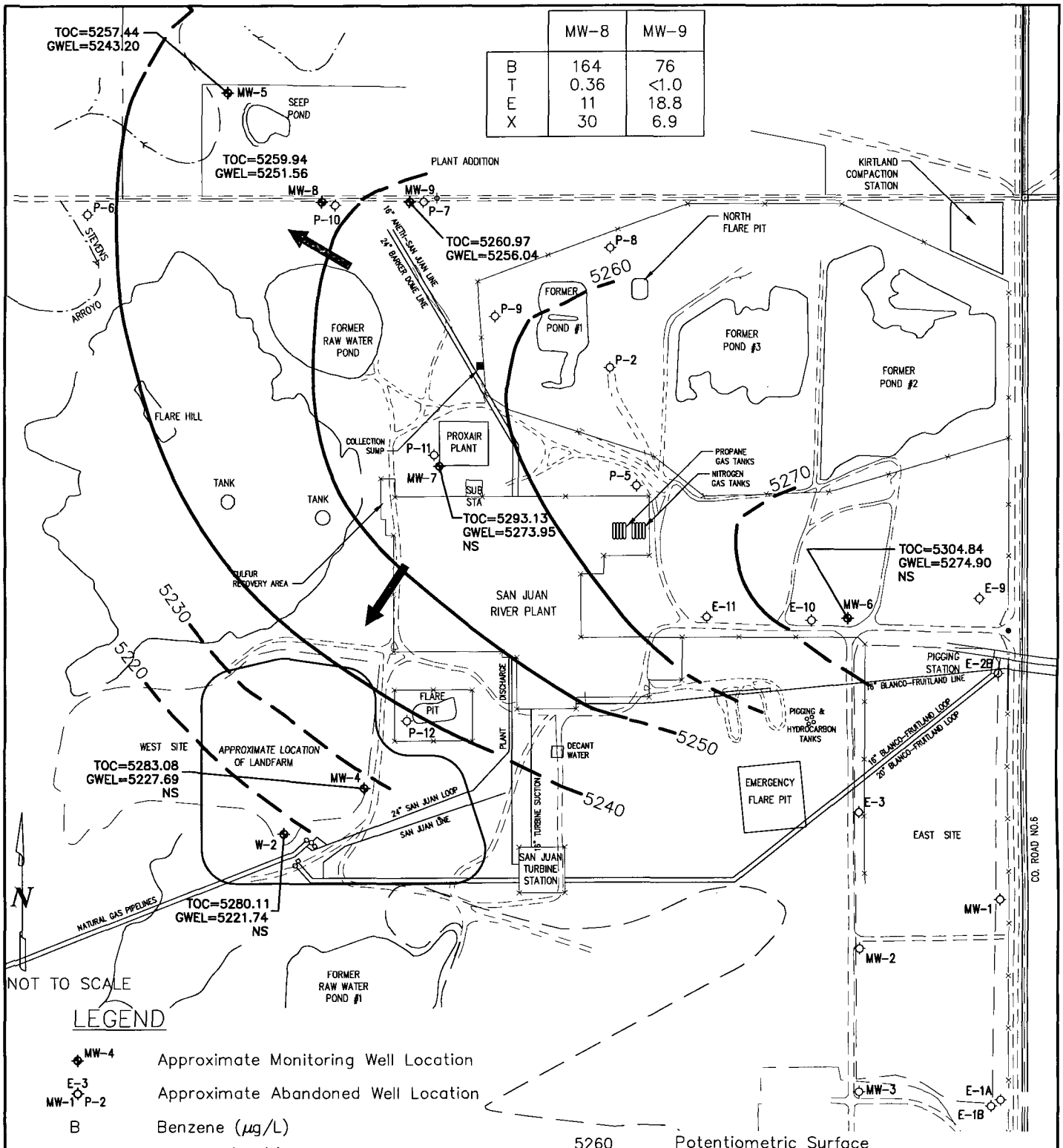
MW-4	Approximate Monitoring Well Location
E-3 MW-1 P-2	Approximate Abandoned Well Location
B	Benzene (µg/L)
T	Toluene (µg/L)
E	Ethylbenzene (µg/L)
X	Total Xylenes (µg/L)
→	Direction of Groundwater Flow (Estimated)
5260	Potentiometric Surface (Approximate & Assumed Where Dashed)
GWEL	Groundwater Elevation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

GROUNDWATER ELEVATION MAP
AUGUST 2005
SAN JUAN RIVER PLANT

EL PASO NATURAL GAS

FIGURE 5

SJRP 03-06-04 GW ELEV.dwg



	MW-8	MW-9
B	164	76
T	0.36	<1.0
E	11	18.8
X	30	6.9

LEGEND

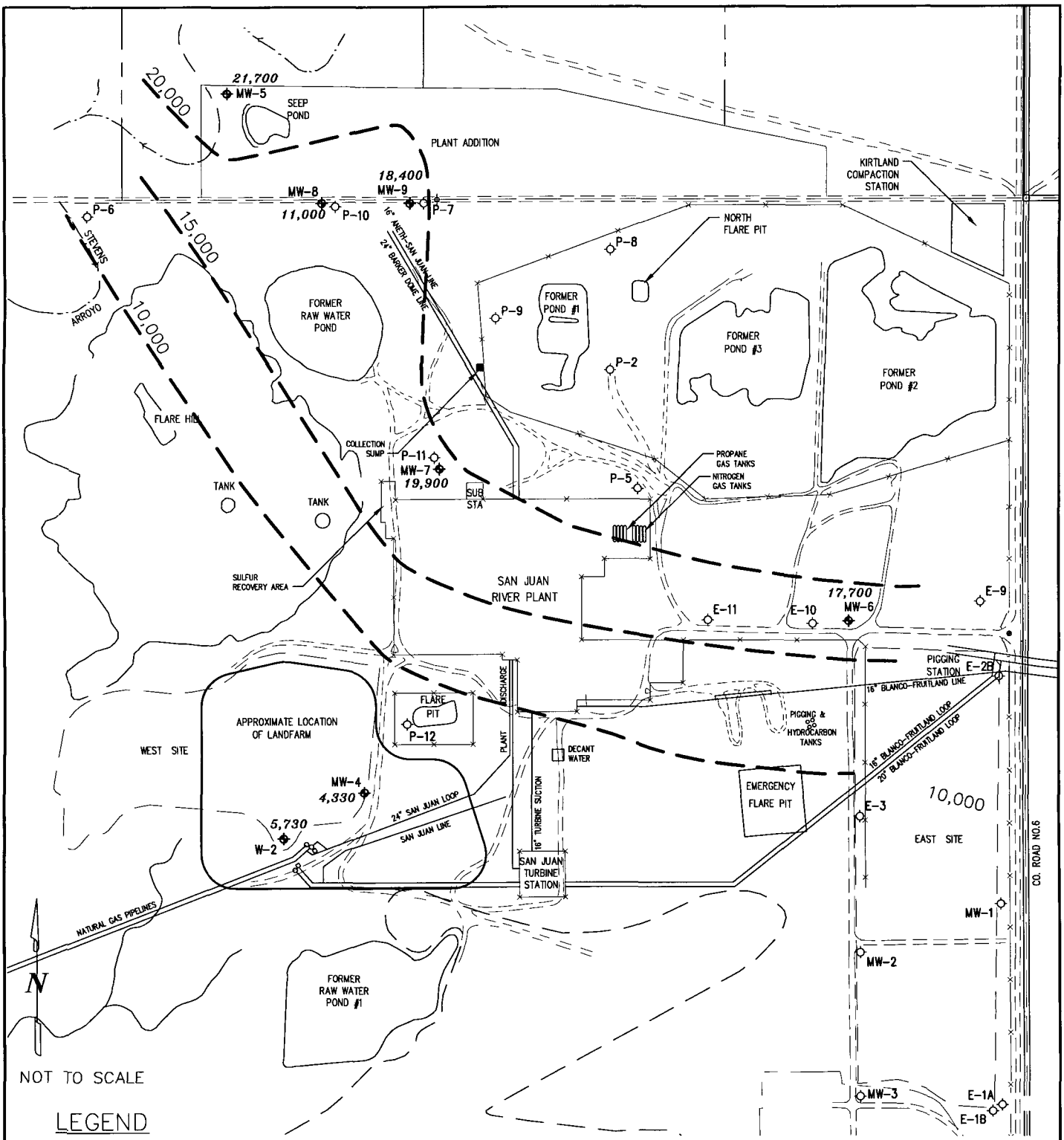
MW-4	Approximate Monitoring Well Location
E-3 MW-1 P-2	Approximate Abandoned Well Location
B	Benzene (µg/L)
T	Toluene (µg/L)
E	Ethylbenzene (µg/L)
X	Total Xylenes (µg/L)
→	Direction of Groundwater Flow (Estimated)
5260	Potentiometric Surface (Approximate & Assumed Where Dashed)
GWEL	Groundwater Elevation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

GROUNDWATER ELEVATION MAP
NOVEMBER 2005
SAN JUAN RIVER PLANT

EL PASO NATURAL GAS

FIGURE 6

SJRP 03-06-6 GW ELEV.dwg



LEGEND

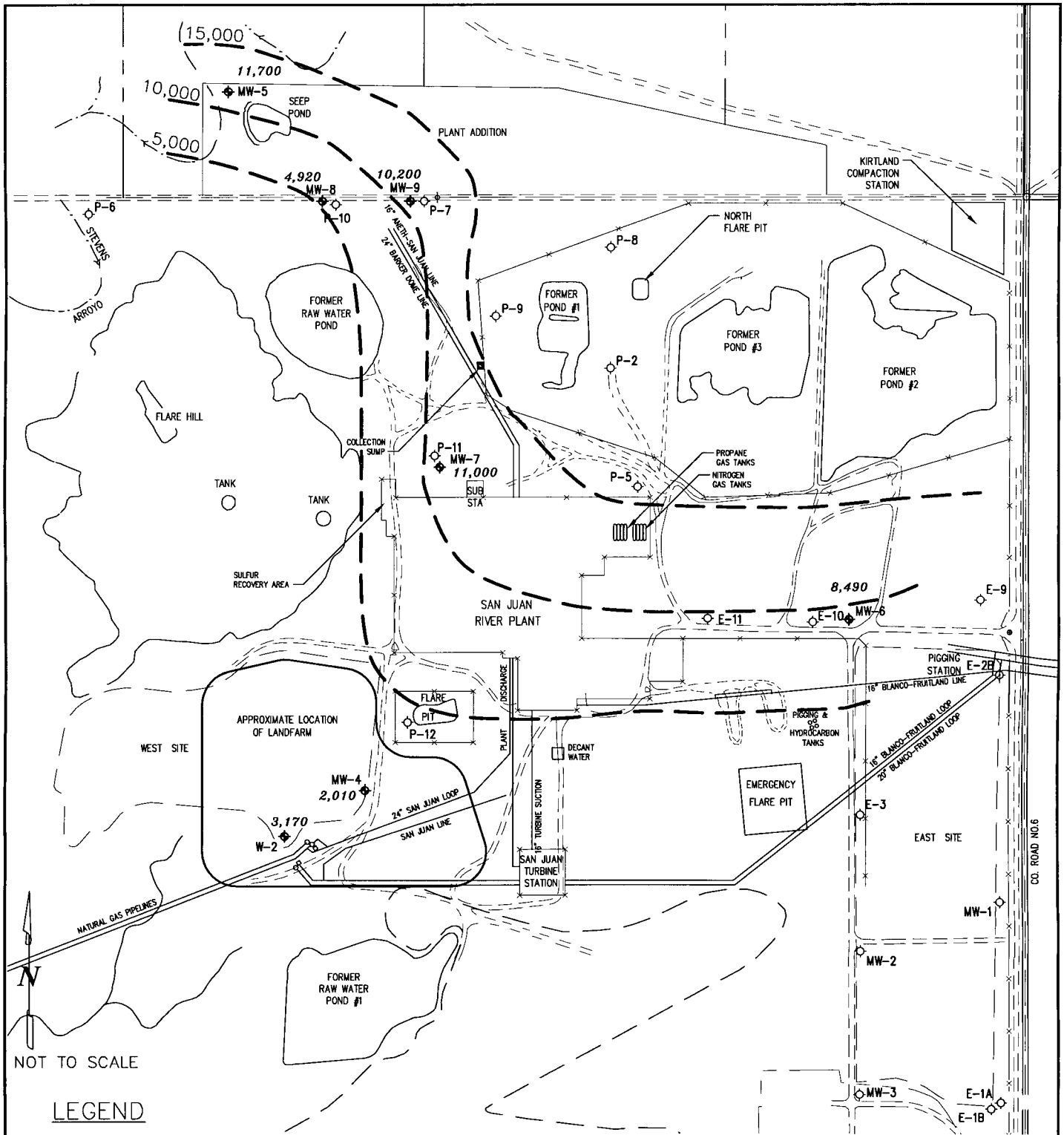
- MW-4 — Approximate Monitoring Well Location
- E-3 / MW-1 / P-2 — Approximate Abandoned Well Location
- 16,500 — Total Dissolved Solids (mg/L)
- 10,000 — Total Dissolved Solids Isoconcentration (mg/L) (Estimated where dashed)

TDS ISOCONCENTRATION MAP
AUGUST 2005
SAN JUAN RIVER PLANT

EL PASO NATURAL GAS

FIGURE 7

SJRP TDS Iso 06-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 2005
SAN JUAN RIVER PLANT

EL PASO NATURAL GAS

FIGURE 8

SJRP_Sulfate Iso 06-ANREPORT

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MWH

TABLES AND GRAPHS

TABLE 4-1

SUMMARY OF 2005 BTEX ANALYTICAL AND FIELD DATA

SAN JUAN RIVER PLANT SITE

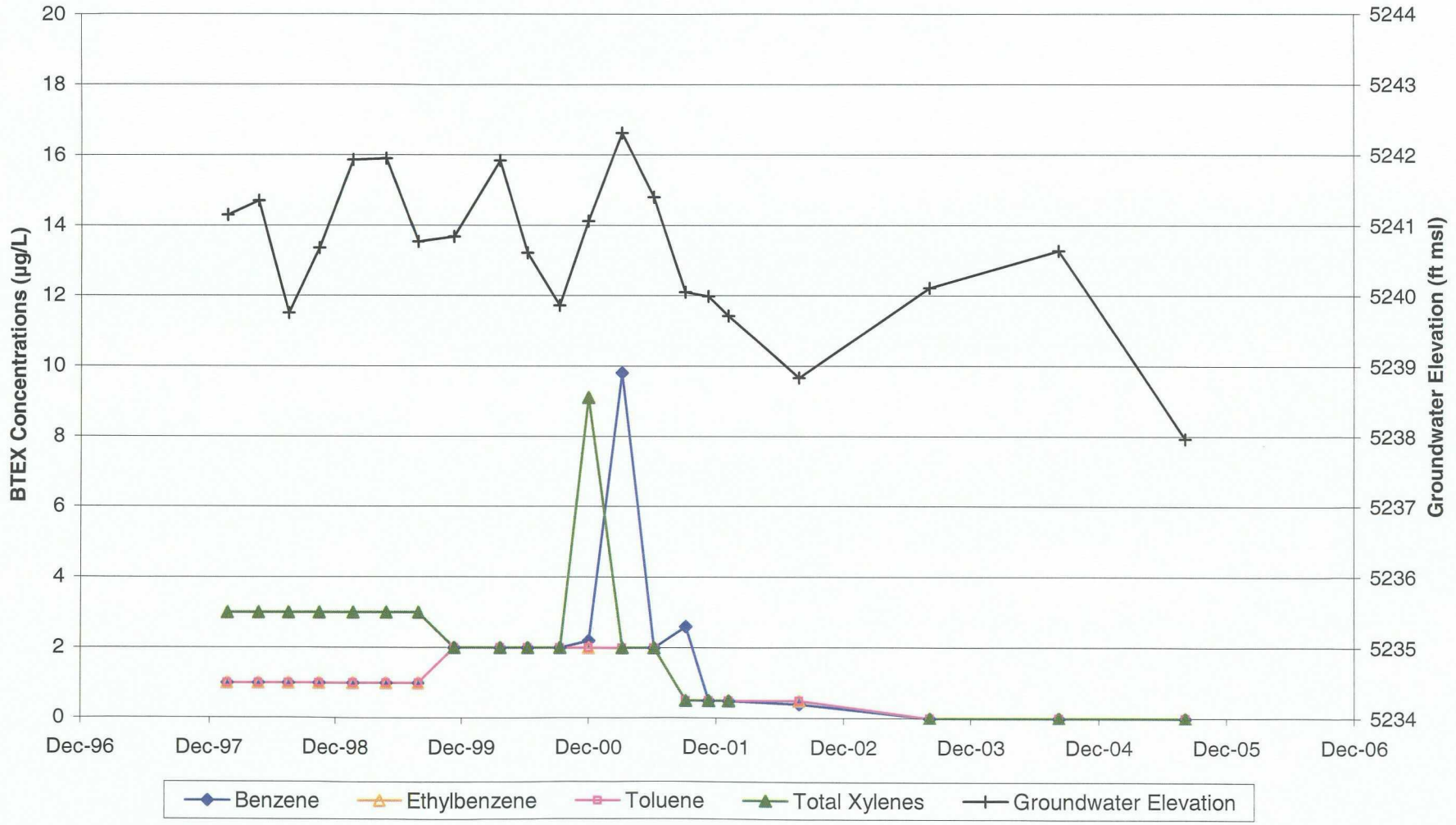
Location Identification	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	m,p-Xylene (µg/L)	o-Xylene (µg/L)	Total Xylenes (µg/L)	Field pH (su)	Temperature (C)	Conductivity (µmhos/cm)	Depth to Water (feet bgs)
W-2	8/24/2005	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 2.0	6.82	62.0	2290	58.50
MW-4	8/24/2005	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 2.0	6.43	61.2	2100	55.29
MW-5	8/24/2005	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 2.0	7.00	62.0	5520	13.83
MW-6	8/24/2005	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 2.0	6.53	62.6	4160	29.93
MW-7	8/24/2005	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 2.0	6.92	67.1	7850	19.48
MW-8	2/17/2005	159	< 1.0	5.9	13.6	< 1.0	13.8	7.52	55.2	6170	7.43
MW-8	5/19/2005	< 1.0	1.7	3.4	1.0	< 1.0	1.0	6.48	58.7	4080	3.56
MW-8	8/24/2005	< 1.0	< 1.0	2.6	< 2.0	< 1.0	< 2.0	8.12	63.1	13130	6.02
MW-8	11/9/2005	164	0.36	11	29.3	<1.0	30	6.59	58.6	5770	8.38
MW-9	2/17/2005	51.7	< 1.0	8.3	3.6	< 1.0	6.7	4.65	53.9	11680	5.69
MW-9	5/19/2005	133	< 1.0	28.9	13.5	< 1.0	13.5	4.65	53.9	11680	4.78
MW-9	8/24/2005	56.5	< 1.0	12.6	4.9	< 1.0	4.7	5.35	62.3	7560	5.19
MW-9	11/9/2005	76	<1.0	18.8	6.9	<1.0	6.6	6.61	57.2	8510	4.93

TABLE 4-2
SUMMARY OF 2005 INORGANIC ANALYTICAL DATA
SAN JUAN RIVER PLANT SITE

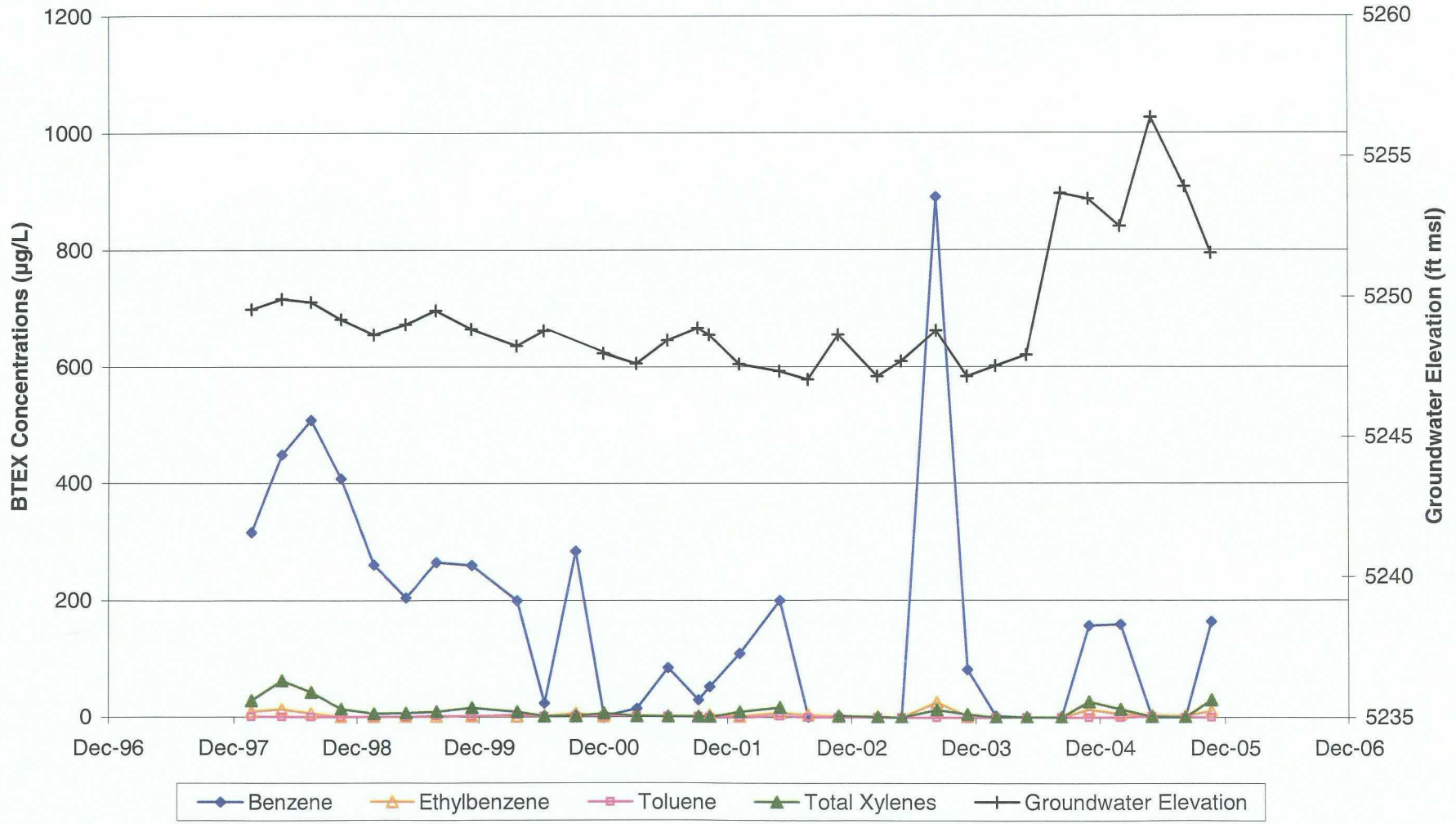
Parameter	NMWQCC Standard	W-2 8/24/2005	MW-4 8/24/2005	MW-5 8/24/2005	MW-6 8/24/2005	MW-7 8/24/2005	MW-8 8/24/2005	MW-9 8/24/2005
Metals								
Aluminum (µg/L)	5,000	1,240	< 200	1,190	14,500	600	634	13,600
Arsenic (µg/L)	100	< 5.0	26.2	< 5.0	< 5.0	< 5.0	6.2	< 5.0
Barium (µg/L)	1,000	< 200	< 200	< 200	< 200	< 200	< 200	< 200
Cadmium (µg/L)	10	< 4.0	< 4.0	< 4.0	11.4	< 4.0	< 4.0	8.9
Calcium (µg/L)	NE	454,000	286,000	418,000	447,000	462,000	155,000	385,000
Chromium (µg/L)	50	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Cobalt (µg/L)	50	< 50	144	< 50	219	< 50	< 50	212
Copper (µg/L)	1,000	< 25	62.9	< 25	37.8	25.6	< 25	59
Iron (µg/L)	1,000	1,580	10,200	3,180	427	226	831	4,390
Lead (µg/L)	50	9	16.5	13.4	10.3	9	6.9	11.1
Magnesium (µg/L)	NE	126,000	111,000	245,000	376,000	238,000	274,000	282,000
Manganese (µg/L)	200	163	8,780	8,650	8,250	5,340	1,230	7,870
Mercury (µg/L)	2	< 0.20	0.26	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Molybdenum (µg/L)	1,000	< 10	< 10	< 10	< 10	< 10	29.3	< 10
Nickel (µg/L)	200	< 40	260	153	275	< 40	< 40	335
Potassium (µg/L)	NE	5,840	9,620	42,800	37,600	27,700	75,600	25,900
Selenium (µg/L)	50	124	5.8	7.3	618	18.1	< 5.0	6.8
Silver (µg/L)	50	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Sodium (µg/L)	NE	1,400,000	1,190,000	6,050,000	4,370,000	5,540,000	2,610,000	4,650,000
Zinc (µg/L)	10,000	45.9	159	168	764	79.1	42.1	693
Inorganics								
Alkalinity as CaCO3 (mg/L)	NE	138	650	125	25	925	1880	19
Chloride (mg/L)	250	265	321	1150	1150	307	261	782
Nitrate+Nitrite (mg/L)	10	17	0.5	0.2	176	22	0.7	< 0.050
Sulfate (mg/L)	600	3,170	2,010	11,700	8,490	11,000	4,920	10,200
Total Dissolved Solids (mg/L)	1,000	5,730	4,330	21,700	17,700	19,900	11,000	18,400

NE = Not established

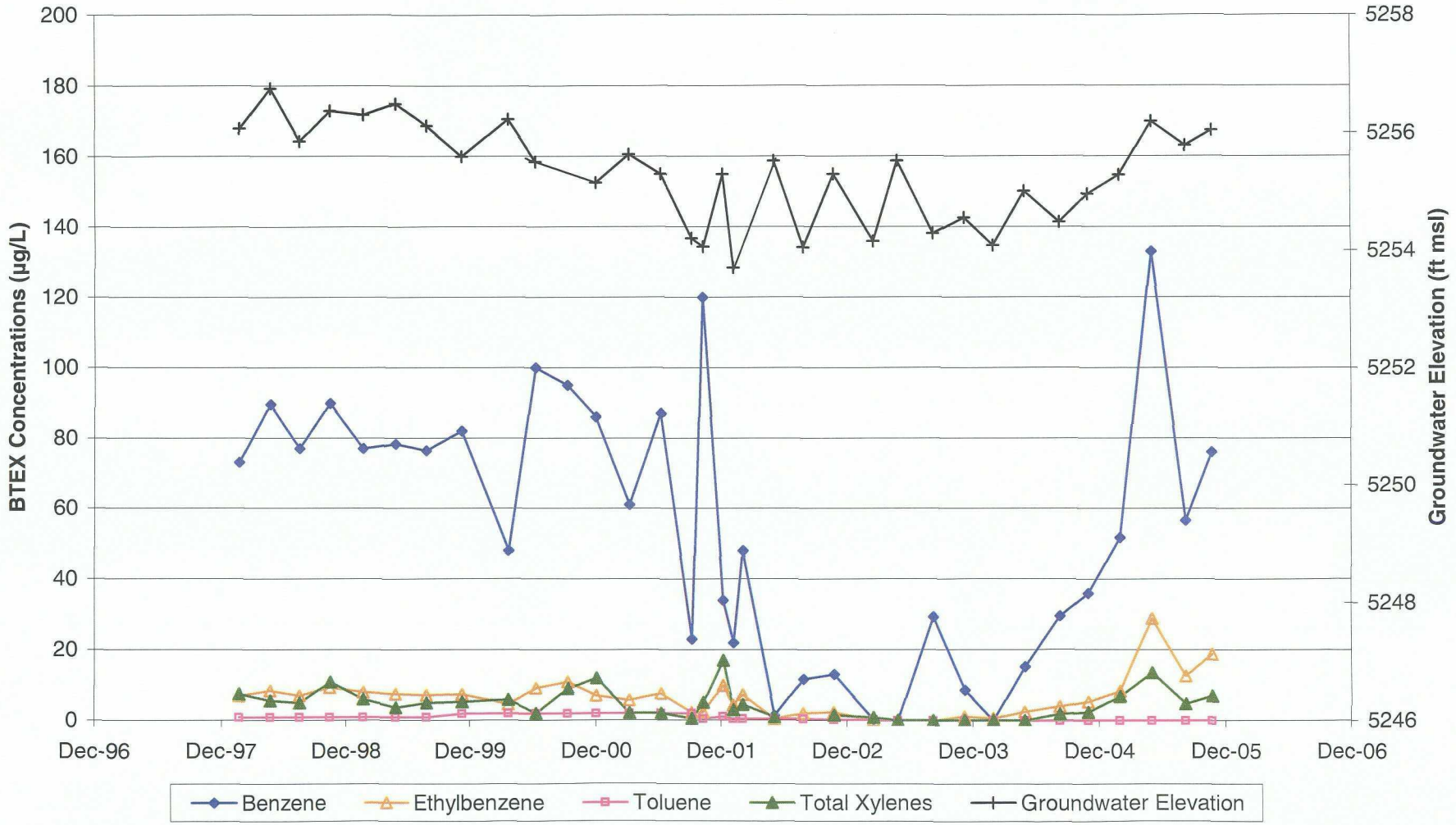
GRAPH 1
Historic BTEX Concentrations and Groundwater Elevations
MW-5, San Juan River Plant Site



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



Appendices

MWH

APPENDICES

APPENDIX A

2005 DOCUMENTATION OF FIELD ACTIVITIES

(Included electronically on attached CD)

APPENDIX B

2005 LABORATORY REPORTS

(Included electronically on attached CD)