Final Report

Technical Evaluation of Environmental Data Los Angeles County Sheriff's Department Temple Station, Temple City, California

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Acronyms and Abbreviations

Area 3	San Gabriel Valley Area 3 Superfund Site
bgs	below ground surface
CHHSL	California Human Health Screening Level
COPC	contaminant of potential concern
County	County of Los Angeles
ELCR	excess lifetime cancer risk
EPA	United States Environmental Protection Agency
HHRA	human health risk assessment
HI	hazard index
LACDPW	Los Angeles County Department of Public Works
LARWQCB	California Regional Water Quality Control Board - Los Angeles Region
LASD	Los Angeles County Sheriff's Department
MCL	maximum contaminant level
µg/kg	micrograms per kilogram
µg/L	micrograms per liter
mg/kg	milligrams per kilograms
mg/L	milligrams per liter
NOV	notice of violation
PCE	tetrachloroethene
ppmv	parts per million by volume
PRP	potentially responsible party
San Gabriel Basin	San Gabriel Valley Groundwater Basin
Site	LASD Temple Station
SVE	soil vapor extraction
SVOCs	semivolatile organic compounds
TCE	trichloroethene

Temple Station	LASD Temple Station
TPH	total petroleum hydrocarbon
USGS	United States Geological Survey
UST	underground storage tank
VOC	volatile organic compound

1. Introduction and Recommendations

1.1 Purpose and Organization of Technical Evaluation

This technical evaluation assesses environmental data for contamination in soil, soil vapor, and groundwater at the Los Angeles County Sheriff's Department (LASD) Temple Station ("Temple Station" or "the Site") in Temple City, California. The evaluation identifies remaining gaps in the current data set regarding the nature and extent of contamination at the Site.

The United States Environmental Protection Agency (EPA) initiated, and then halted, a non-time-critical removal action to address contamination at Temple Station. Based on current data, EPA has concluded that a federal action no longer is appropriate. Consequently, EPA is returning the lead role in regulatory oversight of the environmental investigation at Temple Station to the California Regional Water Quality Control Board-Los Angeles Region (LARWQCB).

The following technical evaluation is organized into four sections.

- **Section 1 –** Presents background information and a digest of outcomes of the technical evaluation.
- **Section 2 –** Summarizes the Site characterization data and soil vapor risk evaluation.
- **Section 3 –** Provides the conclusions and recommendation**s**.
- **Section 4 –** Presents a list of references used in preparation of the technical evaluation.

All tables and figures referenced in the text are included at the end of the report, along with two appendices that contain technical information to support the evaluation.

1.2 Background and Site Description

Figure 1-1 shows the location of Temple Station within the San Gabriel Valley Area 3 Superfund Site (Area 3). EPA is conducting a remedial investigation of regional groundwater contamination within Area 3.

Area 3 contains a large area (approximately 19 square miles) of groundwater contamination underlying portions of Temple City, including Temple Station, and portions of five neighboring cities and unincorporated areas in Los Angeles County.

Temple Station consists of 2.5 acres of property that contains a full-service law enforcement center, including administration offices and a jail (one multi-story structure, one single-story structure), and two vehicle maintenance facilities. Temple Station has two underground storage tanks (USTs) for petroleum products (one 10,000-gallon tank for gasoline and one 5,000-gallon tank for diesel) installed in 1991 to replace four older USTs. The vehicle maintenance facilities use motor oil and

transmission fluids that are stored in 55-gallon drums. Material safety data sheets maintained at the Site indicate the use of products containing volatile organic compounds (VOCs) (primarily tetrachloroethene [PCE] and trichloroethene [TCE]).

Concrete paving and asphalt cover the exterior areas, and a storm drain/wash grate is located in the middle of the property. Eaton Wash, a concrete-lined channel, creates the western property boundary. The Site is relatively flat and situated at an approximate elevation of 400 feet above mean sea level.

1.3 Site Investigation Overview

Table 1-1 summarizes the full chronology of activities at Temple Station, including previous and recent investigations and regulatory oversight. Investigations conducted at Temple Station during the early 1990s identified contamination from VOCs and total petroleum hydrocarbons (TPH) in soil, soil vapor, and groundwater. In 2004, the concentration of PCE in groundwater underlying the Site exceeded 190 times the maximum contaminant level (MCL) of 5 micrograms per liter (µg/L).

As indicated in Table 1-1, the County performed soil cleanup for the subsurface TPH contamination using soil vapor extraction (SVE) in the former UST excavation area. The SVE systems operated from March 1993 through January 1994 and removed approximately 33,000 pounds (of an originally estimated 150,000 pounds) of hydrocarbons.

In 2005, the status of the investigation at Temple Station prompted EPA to initiate a non-time-critical removal action. The data suggested that the Site was the source of PCE contamination in groundwater underlying the northeastern portion of Area 3 and progress on the investigation at Temple Station had stalled. EPA assumed responsibility for oversight of the investigation from LARWQCB.

In 2006, the County of Los Angeles (the County), the potentially responsible party (PRP), initiated further investigation of contamination at Temple Station. Investigation data collected by the County show that the source of PCE contamination likely is located upgradient of Temple Station. The location of the PCE source and the nature and extent of contamination upgradient of Temple Station, however, remain uncharacterized. Detection of other VOCs in soil indicates that a hydrocarbon mass remains onsite.

EPA is remitting oversight of the remaining investigation and the mitigation of contamination at Temple Station to LARWQCB. This technical evaluation identifies several unresolved data gaps regarding onsite contamination at the Site.

1.4 Conclusions

The following summary presents a digest of the outcome of this technical evaluation. Section 3 outlines EPA's complete conclusions and recommendations regarding Temple Station.

Contaminants of Potential Concern – "Contaminants of potential concern" (COPCs) include contaminants detected at concentrations that exceed the evaluation criteria for the

three environmental media: screening levels for soils and soil vapor and maximum contaminant levels (MCLs) for groundwater.

The most prevalent COPCs found onsite include benzene, toluene, total xylenes, PCE and 1,2-dichloroethane. All environmental media (including soil, soil vapor and groundwater) showed contamination from the five COPCs.

Less prevalent COPCs found onsite include 1,2-dibromoethane (in soil); TCE (in soil vapor and groundwater); and naphthalene (in groundwater). COPCs found offsite include PCE (in soil vapor and groundwater); and toluene and TCE (in soil vapor).

Distribution of COPCs – The COPCs detected onsite occur mainly in the excavation area of former USTs, where a petroleum release occurred. Limited benzene contamination in groundwater also appears related to the UST release.

The lateral and vertical extent of PCE contamination in onsite soil and soil vapor are incompletely defined, although PCE is present at concentrations that are unlikely to significantly impact groundwater. Concentrations of PCE in soil and soil vapor ranged from 0.016 to 670 micrograms per kilograms (µg/kg) and 0.3 to 1,400 µg/L, respectively. PCE found in groundwater underlying Temple Station and adjacent areas appears to originate from an unidentified, upgradient source to the northeast.

Refer to Section 2.2 for a detailed analysis of site investigation data and to Section 3.1 for EPA's detailed conclusions.

1.5 Recommendations

Further evaluate the source and extent of soil vapor and groundwater contamination onsite, downgradient and upgradient of Temple Station. Complete the assessment of contamination in soil and soil vapor in the vicinity of the former UST excavation, near existing clarifiers. Complete the assessment of potential intrusion of vapors into onsite buildings, and mitigate potential exposures if warranted. Refer to Section 3.2 for EPA's detailed recommendations.

2. Site Characterization

2.1 Site Description and Background

2.1.1 Site Location

Figure 2-1 shows the location of LASD Temple Station at 8838 Las Tunas Drive, Temple City, California, west of Rosemead Boulevard. The Site is located on United States Geological Survey (USGS) El Monte 7.5-minute topographic map (1966; photorevised 1981). Approximate latitude and longitude (North American Datum 27) of the Site fall within the following defined ranges.

- Latitude: 34° 06′ 04″ North to 34° 06′ 12″ North
- Longitude: 118° 04′ 29″ West to 118° 04′ 30″ West

The approximate geographic boundaries of Temple Station, which is located in the western portion of Temple City, include: Las Tunas Drive to the north, Rosemead Boulevard to the east, Muscatel Avenue to the west, and Broadway to the south. Land surrounding the Site is used for residences, commercial businesses, and industry.

Groundwater in the San Gabriel Basin currently serves as the primary supply of water for local residents and businesses. Historical records for Area 3 indicate that groundwater production is generally greatest during the summer (July through September) when annual temperatures in the San Gabriel Valley are highest.

2.1.2 Sensitive Ecosystems

Very limited habitat exists for birds or mammals at Temple Station. Concrete or asphalt surface covering precludes growth of vegetation. Because the risk of potential exposure to contaminants in soil and groundwater to ecological receptors is minimal, an ecological risk assessment is unnecessary for the Site.

2.1.3 Geology and Soil Types

2.1.3.1 Regional Geology and Hydrogeology

Figure 1-1 shows that the Site is located in the San Gabriel Valley Groundwater Basin (San Gabriel Basin), which contains a broad alluvial plain that slopes gradually to the south and covers an area of 170 square miles. The San Gabriel Mountains form the northern boundary of the San Gabriel Basin and range in elevation from 900 to over 10,000 feet above mean sea level. The eastern boundary of the basin consists of bedrock that separates the San Gabriel Basin from the Upper Santa Ana Valley Basin.

Figure 2-2A presents groundwater elevation contours for shallow groundwater in the vicinity of Temple Station developed using recent data. Figure 2-2B indicates the locations of the nearest production wells to Temple Station.

2.1.3.2 Site-Specific Geology and Hydrogeology

The local geology consists of interbedded layers of fine-grained sediments (silts, clayey sands, and clay) and coarse-grained sediments (sands and gravels) from depths of approximately 5 feet below ground surface (bgs) to 295 feet bgs.

Data from the onsite and offsite groundwater monitoring wells indicate that groundwater underlying Temple Station occurs at a depth of approximately 202 feet bgs. Groundwater levels rose from depths of 203 to 205 feet bgs in 1993 to depths of 198 to 200 feet bgs in 2004 (Fugro-McClelland, 1993a; Fugro-McClelland, 1993b; Miller Brooks, 2004; Kleinfelder, 2007). The groundwater elevation has stayed relatively consistent since 2004.

Groundwater generally flows in the southwest direction; however, local groundwater production strongly influences flow directions. The estimated southwesterly groundwater gradient based on 2007 groundwater monitoring data is 0.002 foot per foot (Kleinfelder, 2007).

2.2 Data Analysis

This section discusses the usability of the secondary data evaluated in EPA's assessment. Appendix A provides the site-specific data quality objectives and the data usability assessment for this technical evaluation. The information presented in the tables and other materials listed below supports the discussion of data evaluation.

- **Table 1-1 –** Presents a chronological summary of site investigation activities.
- **Tables 2-1 through 2-3 –** Summarize the analytical data for soil, soil vapor, and groundwater of the detected contaminants.
- **Figures 2-3 through 2-17 –** Provide Site maps that depict areas of TPH, benzene, and PCE contamination in soil, soil vapor, and groundwater.
- **Appendix B –** Provides analytical data tables and hydrogeologic cross-sections.

2.2.1 Data Usability

EPA confirmed through the data usability assessment presented in Appendix A that the data are of sufficient quality to meet the objectives of this technical evaluation. However, conducting a rigorous data review (i.e., equivalent to the standard EPA review for primary data) was infeasible because raw data were unavailable for most of the previous site investigations. The County completed a data review in accordance with EPA's recommendation.

Because site investigation data were collected by other agencies or organizations, EPA flagged all data used for this technical evaluation with "d2." The "d2" flag denotes that the data come from secondary sources of data collection and that EPA had no control over the data collection processes. The data generation processes focused on the data quality objectives of the organizations collecting the data, rather than on EPA's data quality objectives for this evaluation.

2.2.2 Analytical Data

2.2.2.1 Contamination in Soil

Table 2-1 provides the analytical data for contaminants detected in soil samples collected onsite and offsite. Soil sampling encompassed various depths for 19 soil borings installed between 1991 through 1994 and 2006/2007. Figures 2-3 through 2-6 show the locations of soil sample collection and present analytical data for TPH, benzene, and PCE. Appendix B presents the complete set of analytical data and hydrogeologic cross-sections. Figure B-1 shows the locations of the cross-sections in plan view. Figures B-2 and B-3 show the TPH data plotted on the cross-sections. Figures B-6 and B-7 present the PCE data plotted on the cross-sections.

The COPCs that exceed screening levels for soil include benzene, toluene, total xylenes, PCE, 1,2-dichloroethane, and 1,2-dibromoethane. The following exhibit summarizes the soil analytical data with respect to investigation date.

Exhibit 2-1
Distribution of COPCs in Soil

COPC	Year	Onsite Samples	Offsite Samples
TPH	1991-1994	Table 2-1 and Figure 2-3 show that TPH was detected predominantly west of the former USTs. Concentrations ranged from nondetect to 13,000,000 micrograms per kilogram (µg/kg) at depths between 30 and 180 feet bgs. BH-7, located west of the former UST excavation, showed the maximum concentration at 45.5 feet bgs.	Soil samples not collected.
	2004	No soil samples collected.	Soil samples not collected.
	2006-2007	TPH not analyzed.	TPH not analyzed.
Benzene	1991-1994	Table 2-1 and Figure 2-4 show detections of benzene predominantly west of the former USTs. Concentrations ranged from nondetect to120,000 µg/kg at depths between 25 and 180 feet bgs. Benzene concentrations at 14 sampling depths exceeded the residential and industrial screening levels. VE-1, located west of the former UST excavation, exhibited the maximum concentration at 60 feet bgs.	Soil samples not collected.
	2004	No soil samples collected.	Soil samples not collected.
	2006-2007	Table 2-1 and Figure 2-5 show detections of benzene predominantly west of the former USTs with concentrations ranging from nondetect to 40 µg/kg at depths between 55 and 170 feet bgs. MW-9, located southwest of the former UST excavation, showed the maximum concentration at 170 feet bgs. No screening level exceedances.	Benzene not detected in offsite soil.
Toluene	1991-1994	Table 2-1 shows that toluene concentrations ranged from nondetect to1,000,000 µg/kg at depths from 15 and 180 feet bgs. Toluene concentrations exceeded the residential and industrial screening levels at three sampling depths. BH-1, located in the southern portion of the former UST excavation, exhibited the maximum concentration at 80 feet bgs.	No soil samples collected.
	2004	No soil samples collected.	No soil samples collected.
	2006-2007	Table 2-1 shows that toluene concentrations ranged from nondetect to approximately 2,450 µg/kg at depths from 55 to 170 feet bgs. No screening level exceedances. MW-12, located south of the former UST excavation, showed the maximum concentration at 65 feet bgs.	No detections of toluene in offsite soil.

Exhibit 2-1
Distribution of COPCs in Soil

COPC	Year	Onsite Samples	Offsite Samples
Ethylbenzene	1991-1994	Table 2-1 shows that ethylbenzene concentrations ranged from nondetect to 270,000 µg/kg, but did not exceed residential and industrial screening levels. VE-1, located in the southern portion of the former UST excavation, showed the maximum concentration at 60 feet bgs.	No soil samples collected.
	2004	No soil samples collected.	No soil samples collected.
	2006-2007	Table 2-1 shows that ethylbenzene concentrations ranged from nondetect to approximately 4,280 µg/kg, detected at depths between 55 and 170 feet bgs. MW-9, located southwest of the former UST excavation, exhibited the maximum concentration at 55 feet bgs. No screening level exceedances.	No detections of ethylbenzene in offsite soil.
Total Xylenes	1991-1994	Table 2-1 shows that total xylenes concentrations ranged from nondetect to 2,001,000 µg/kg at depths from 15 to 180 feet bgs. Concentrations at 11 sampling depths exceeded the residential and industrial screening levels. BH-10, located in the western portion of the former UST excavation, exhibited the maximum concentration at 35 feet bgs.	No soil samples collected.
	2004	No soil samples collected.	No soil samples collected.
	2006-2007	Table 2-1 shows that total xylenes concentrations ranged from nondetect to approximately 17,460 µg/kg between 50 and 170 feet bgs. No screening level exceedances. MW-9 showed the maximum concentration at 55 feet bgs.	No detections of total xylenes in offsite soil.
Tetrachloroethene	1991-1994	Table 2-1 and Figure 2-6 show that PCE concentrations ranged from nondetect to 670 µg/kg at depths between 65 and 140 feet bgs. Data show exceedances of residential and industrial screening levels. VE-1, located west of the former UST excavation, exhibited the maximum concentration at 140 feet bgs.	No soil samples collected.
	2004	No soil samples collected.	No soil samples collected
	2006-2007	PCE detected (5 µg/kg) in MW-10, west of the former USTs at 210 feet bgs.	Table 2-2 shows that PCE concentrations detected predominately northeast of the Site, ranged from nondetect to 97 µg/kg between 10 and 200 feet bgs. MW-7, located northeast of the Site, had the maximum concentration at 200 feet bgs. No screening level exceedances.
1, 2-Dichloroethane	1991-1994	Table 2-1 shows that 1,2-dichloroethane concentrations ranged from nondetect to 5,500 µg/kg at depths between 15 and 140 feet bgs. Concentrations at nine sampling depths exceeded residential and industrial screening levels. BH-1A, located in the southern portion of the former UST excavation, exhibited the maximum concentration at 85 feet bgs.	No soil samples collected.
	2004	No soil samples collected.	No soil samples collected.
	2006-2007	1,2-Dichloroethane not detected in onsite soil.	1,2-Dichloroethane not detected in offsite soil.
1, 2-Dibromoethane	1991-1994	1,2-Dibromoethane not detected in onsite soil.	No soil samples collected.
	2004	No soil samples collected.	No soil samples collected.
	2006-2007	1,2-Dibromoethane detected in onsite soil (32 µg/kg) in MW-9 at 170 feet bgs.	1,2-Dibromoethane not detected in offsite soil.

2.2.2.2 Contamination in Soil Vapor

Table 2-2 presents the analytical data for contaminants detected in soil vapor sampled at various depths from 24 onsite and offsite locations. Figures 2-7 through 2-12 show the locations of soil vapor sample collection and present the analytical data for TPH, benzene, and PCE. Figures 2-13 through 2-15 present the PCE isoconcentration maps. Appendix B provides the complete set of analytical data and hydrogeologic cross-sections. Figures B-1 and B-10 shows the locations of the cross-sections in plan view. Figures B-4 and B-5 show the TPH data plotted on the cross-sections. Figures B-8, B-9, B-11, and B-12 present the PCE data plotted on the cross-sections.

The COPCs that exceed the California Human Health Screening Levels (CHHSLs) for soil vapor include benzene, toluene, total xylenes, PCE, TCE, and 1,2-dichloroethane. The following exhibit summarizes the soil vapor analytical data with respect to investigation date.

Exhibit 2-2
Distribution of COPCs in Soil Vapor

COPC	Year	Onsite Samples	Offsite Samples
TPH	1991-1994	Table 2-2 and Figure 2-7 show that TPH detections occurred west of the former USTs and concentrations ranged from 2,790 to 36,270 parts per million by volume (ppmv) and detected at depths between 10 and 160 feet bgs.	No soil vapor samples collected.
	2004	Table 2-2 and Figure 2-8 show that TPH soil vapor concentrations ranged from nondetect to 370,000 ppmv at depths between 5 and 183 feet bgs. BH-10, located in the western portion of the former UST excavation, exhibited the maximum concentration at 60 feet bgs.	No soil vapor samples collected.
	2006-2007	TPH analysis not conducted.	TPH analysis not conducted.
Benzene	1991-1994	Table 2-2 and Figure 2-9 show that benzene concentrations ranged from nondetect to 14,000 micrograms per liter (µg/L) at depths from 5 to 185 feet bgs. Benzene concentrations at 61 sampling depths exceeded the residential and industrial CHHSLs. BH-10, located in the western portion of the former UST excavation, exhibited the maximum concentration at 60 feet bgs.	No soil vapor samples collected.
	2004	Table 2-2 and Figure 2-10 show that benzene concentrations ranged from nondetect to 10,000 µg/L at depths between 5 and 185 feet bgs. Benzene concentrations exceeded the residential and industrial CHHSLs at ten sampling depths. BH-10 showed the maximum concentration at 60 feet bgs.	No soil vapor samples collected.
	2006-2007	Table 2-2 and Figure 2-10 show that benzene concentrations ranged from nondetect to 2,200 µg/L at depths between 30 and 180 feet bgs. Benzene concentrations at seven sampling depths exceeded the residential and industrial CHHSLs. MW-9, located southwest of the former UST excavation, exhibited the maximum concentration at 60 feet bgs.	Benzene not detected in soil vapor.

Exhibit 2-2
Distribution of COPCs in Soil Vapor

COPC	Year	Onsite Samples	Offsite Samples
Toluene	1991-1994	Table 2-2 shows that toluene concentrations ranged from nondetect to 17,000 µg/L at depths between 5 and 185 feet bgs. Toluene concentrations at 63 sampling depths exceeded residential and industrial CHHSLs. BH-11, located in the northern portion of the former UST excavation, showed the maximum concentration at 60 feet bgs.	No soil vapor samples collected.
	2004	Table 2-2 shows that toluene concentrations ranged from nondetect to 19,000 µg/L at depths between 5 and 183 feet bgs. BH-10 exhibited the maximum concentration at 60 feet bgs. Toluene concentrations at 11 sampling depths exceeded the residential and industrial CHHSLs.	No soil vapor samples collected.
	2006-2007	Table 2-2 shows that toluene concentrations ranged from nondetect to approximately 3,500 µg/L at depths between 5 and 183 feet bgs. Toluene concentrations at 11 sampling depths exceeded the residential and industrial CHHSLs. MW-9, located southwest of the former UST excavation, showed the maximum concentration at 120 feet bgs.	Table 2-2 shows that toluene concentrations ranged from nondetect to approximately 0.8 J µg/L at depths between 5 and 180 feet bgs. No CHHSL exceedances. KVP-8, located northeast of the Site, showed the maximum concentration at 65 feet bgs.
Total Xylenes	1991-1994	Table 2-2 shows that total xylenes concentrations ranged from nondetect to approximately 10,000 µg/L at depths from 5 to 185 feet bgs. Total xylenes concentrations at 32 sampling depths exceeded the residential and industrial CHHSLs. BH-10 had the maximum concentration at 40 feet bgs.	No soil vapor samples collected.
	2004	Table 2-2 shows that total xylenes concentrations ranged from nondetect to 7,500 µg/L between 5 and 183 feet bgs. Total xylenes concentrations at six sampling depths exceeded the residential and industrial CHHSLs. BH-10 exhibited the maximum concentration at 40 feet bgs.	No soil vapor samples collected.
	2006-2007	Table 2-2 shows that total xylenes concentrations ranged from nondetect to approximately 165 µg/L between 5 and 183 feet bgs. No CHHSL exceedances. MW-9 showed the maximum concentration at 120 feet bgs.	Table 2-2 shows that total xylenes not detected in offsite soil vapor.
Tetrachloroethene	1991-1994	Table 2-2 and Figure 2-11 show that PCE concentrations ranged from nondetect to 612 µg/L at depths between 5 and 185 feet bgs. Concentrations at 39 sampling depths exceeded residential and industrial CHHSLs. MW-1, located northeast of the former UST excavation, exhibited the maximum concentration at 65 feet bgs.	No soil vapor samples collected.
	2004	Table 2-2 and Figure 2-12 show that PCE concentrations ranged from nondetect to 1,400 µg/L at depths from 5 to 183 feet bgs. Concentrations at eight sampling depths exceeded residential and industrial CHHSLs. MW-1 showed the maximum concentration at 65 feet bgs.	No soil vapor samples collected.
	2006-2007	Table 2-2 and Figure 2-12 show that PCE concentrations ranged from nondetect to 100 µg/L. Concentrations at 24 sampling depths exceeded residential and industrial CHHSLs. KVP-1, located northeast of the former UST excavation, exhibited the maximum concentration at 20 feet bgs.	Table 2-2 shows that PCE concentrations occurred predominately northeast of the Site and ranged from nondetect to 890 µg/L at depths between 10 and 200 feet bgs. Concentrations at 30 sampling depths exceeded the residential and industrial CHHSLs. KVP-7, located northeast of the Site showed the maximum concentration at 65 feet bgs.

Exhibit 2-2
Distribution of COPCs in Soil Vapor

COPC	Year	Onsite Samples	Offsite Samples
Trichloroethene	1991-1994	Table 2-2 shows that TCE concentrations ranged from nondetect to 9.3 µg/L between 5 and 185 feet bgs. Concentrations at 16 sampling depths exceeded residential and industrial CHHSLs. MW-2, located south of the former UST excavation, exhibited the maximum concentration at 183 feet bgs.	No soil vapor samples collected.
	2004	Table 2-2 shows that TCE concentrations ranged from nondetect to 59 µg/L between 5 and 185 feet bgs. TCE concentrations at six sampling depths exceeded residential and industrial CHHSLs. BH-10, located in the western portion of the former UST excavation, showed the maximum concentration at 60 feet bgs.	No soil vapor samples collected.
	2006-2007	Table 2-2 shows that TCE concentrations ranged from nondetect to 0.2 J µg/L between 5 and 183 feet bgs. No CHHSL exceedances. MW-9, located southwest of the former UST excavation, showed the maximum concentration at 30 feet bgs.	Table 2-2 shows that TCE concentrations ranged from nondetect to 6.5 µg/L between 5 and 183 feet bgs. TCE concentrations at 12 sampling depths exceeded residential and industrial CHHSLs. MW-6, located north of the Site, exhibited the maximum concentration at 120 feet bgs.
1, 2-Dichloroethane	1991-1994	Table 2-2 shows that 1,2-dichloroethane concentrations ranged from nondetect to 370 µg/L between 5 and 185 feet bgs. Concentrations at 54 sampling depths exceeded residential and industrial CHHSLs. BH-10, located in the western portion of the former UST excavation, showed the maximum concentration at 60 feet bgs.	No soil vapor samples collected.
	2004	Table 2-2 shows that 1,2-dichloroethane concentrations ranged from nondetect to 71µg/L between 5 and 165 feet bgs. Concentrations at six sampling depths exceeded residential and industrial CHHSLs. BH-10 exhibited the maximum concentration at 60 feet bgs.	No soil vapor samples collected.
	2006-2007	Table 2-2 shows that 1,2-dichloroethane concentrations ranged from nondetect to 80 µg/L between 5 and 183 feet bgs and concentrations at seven sampling depths exceeded the residential and industrial CHHSLs. MW-9 exhibited the maximum concentration at 120 feet bgs.	1,2-Dichloroethane not detected in offsite soil vapor samples.

2.2.2.3 Contamination in Groundwater

Table 2-3 presents a summary of analytical data for contaminants detected in groundwater collected from seven onsite monitoring wells and four offsite monitoring wells. Figures 2-16 and 2-17 present a groundwater elevation contour map and a PCE concentration map, respectively.

The COPCs that exceed the MCLs for groundwater include benzene, toluene, total xylenes, PCE, TCE, 1,2-dichloroethane, and naphthalene. The following exhibit summarizes the soil analytical data with respect to investigation date.

Exhibit 2-3
Distribution of COPCs in Groundwater

COPC	Year	Onsite Samples	Offsite Samples
TPH	1991-1994	Table 2-3 shows that TPH concentrations ranged from nondetect to 910 µg/L. MW-2, located in the south of the former UST excavation, showed the maximum concentration.	No groundwater samples collected.
	2004	Table 2-3 shows that TPH concentrations ranged from nondetect to 7,700 µg/L. MW-2 exhibited the maximum concentration.	No groundwater samples collected.
	2006-2007	Table 2-3 shows that TPH not detected.	Table 2-3 shows that TPH not detected.
Benzene	1991-1994	Table 2-3 shows that benzene concentrations ranged from nondetect to 440 µg/L and exceeded MCLs in 11 samples collected. MW-2, located south of the former UST excavation, exhibited the maximum concentration.	No groundwater samples collected.
	2004	Table 2-3 shows that benzene concentrations ranged from nondetect to 790 µg/L with one MCL exceedance. MW-2 showed the maximum concentration.	No groundwater samples collected.
	2006-2007	Table 2-3 shows that benzene not detected.	Table 2-3 shows that benzene not detected.
Toluene	1991-1994	Table 2-3 shows that toluene concentrations ranged from nondetect to 140 µg/L. MW-2, located south of the former UST excavation, showed the maximum concentration.	No groundwater samples collected.
	2004	Table 2-3 shows toluene concentrations ranged from nondetect to 1,900 µg/L and exceeded the MCL in one sample. MW-2, located south of the former UST excavation, showed the maximum concentration.	No groundwater samples collected.
	2006-2007	Table 2-3 shows that toluene not detected.	Table 2-3 shows that toluene not detected.
Total Xylenes	1991-1994	Table 2-3 shows that total xylenes concentrations ranged from nondetect to 176 µg/L. MW-2 exhibited the maximum concentration.	No groundwater samples collected.
	2004	Table 2-3 shows that total xylenes concentrations ranged from nondetect to 2,080 µg/L and one sample exceeded the MCL. MW-2 showed the maximum concentration.	No groundwater samples collected.
	2006-2007	Table 2-3 shows that total xylenes not detected.	Table 2-3 shows that total xylenes not detected.
Tetrachloroethene	1991-1994	Table 2-3 and Figure 2-17 show that PCE concentrations ranged from 49 to 480 µg/L. PCE concentrations in 15 samples exceeded the MCL. MW-1, located northeast of the former UST excavation, exhibited the maximum concentration.	No groundwater samples collected.
	2004	Table 2-3 and Figure 2-17 show that PCE concentrations ranged from 370 to 950 µg/L. PCE concentrations in three samples exceeded the MCL. MW-1 showed the maximum concentration.	No groundwater samples collected.
	2006-2007	Table 2-3 and Figure 2-17 show that PCE concentrations ranged from 1.8 to 339 µg/L. PCE concentrations in six samples exceeded the MCL. MW-3 located west of the former UST excavation, exhibited the maximum concentration.	Table 2-3 and Figure 2-17 show that PCE concentrations ranged from approximately 19 to 640 µg/L. PCE concentration in four samples exceeded the MCL. MW-7, located northeast of the Site, exhibited the maximum concentration.

Exhibit 2-3
Distribution of COPCs in Groundwater

COPC	Year	Onsite Samples	Offsite Samples
Trichloroethene	1991-1994	Table 2-3 shows that TCE concentrations ranged from nondetect to 6.8 µg/L. MW-3, located west of the former UST excavation, exhibited the maximum concentration, which exceeded the MCL.	No groundwater samples collected.
	2004	Table 2-3 shows that TCE concentrations ranged from nondetect to 13 µg/L. MW-3, located west of the former UST excavation, showed the maximum TCE concentration. TCE concentrations exceeded the MCL in two samples.	No groundwater samples collected.
	2006-2007	Table 2-3 shows that TCE concentrations ranged from nondetect to approximately 13 µg/L. MW-3 showed the maximum TCE concentration, which exceeded the MCL.	Table 2-3 shows that TCE concentrations ranged from nondetect to approximately 4 µg/L. MW-6, located north of the Site, exhibited the maximum concentration.
1, 2-Dichloroethane	1991-1994	Table 2-3 shows that 1,2-dichloroethene concentrations in 11 samples exceeded the MCL. MW-2, located south of the former UST excavation, showed the maximum 1,2-dichloroethane concentration of 64 µg/L.	No groundwater samples collected.
	2004	Table 2-3 shows that 1,2-dichloroethane concentrations ranged from nondetect to 110 µg/L. MW-2, located south of the former UST excavation, exhibited the maximum concentration. 1,2-Dichloroethane concentrations exceeded the MCL in two samples.	No groundwater samples collected.
	2006-2007	Table 2-3 shows that 1,2-dichloroethane concentrations in two samples exceeded the MCL. MW-2, located south of the former UST excavation, exhibited the maximum 1,2-dichloroethane concentration.	1,2-Dichloroethane not detected.

2.3 Soil Vapor Risk Evaluation

This risk evaluation is a screening risk assessment that compares the limited site characterization data for soil vapor to health-based screening criteria. Potential exposure could result from volatilization of soil vapor contaminants into indoor air. This risk evaluation assesses the potential exposure pathways for future residential and commercial/industrial receptors through vapor intrusion of soil vapor into indoor air.

Table 2-4 shows the potential estimated excess lifetime cancer risks (ELCRs) and hazard indices (HIs) calculated based on soil vapor data collected at Temple Station in 2007. The ELCR values exceed the screening evaluation criterion of 1E-06, indicating a potential for cancer risks associated with VOC contaminants in the onsite soil vapor. This risk evaluation indicates that soil vapor may contain PCE, TCE, 1,2-dichloroethane, toluene, and total xylenes at levels of concern. The HI values fall well below the screening criterion of 1 for health hazards, indicating the absence of an adverse noncancer health hazard.

As discussed in Section 1.2, EPA is conducting a remedial investigation of groundwater contamination in Area 3. The remedial investigation includes a human health risk assessment (HHRA), which will present an evaluation of risks and hazards from potential

exposures to regional contamination in groundwater beneath Area 3. Therefore, the following risk evaluation focuses exclusively on the contaminants in soil vapor beneath Temple Station.

2.3.1 Approach and Methodology

This risk evaluation compares soil vapor characterization data to human health-based or risk-based screening values to determine the nature of the threat to public health, welfare, or the environment. The risk evaluation also identifies the COPCs; estimates how and to what extent people might be exposed to the COPCs; and assesses the potential adverse health effects associated with the presence of the COPCs at the Site.

Comparing the concentrations of COPCs to risk-based values identifies the exposure pathways for soil vapor that pose a potential threat to human health. This evaluation uses CHHSLs (Cal/EPA, 2005) as comparison values for soil vapor concentrations. The risk evaluation also uses methods consistent with EPA and the California Department of Toxic Substances Control (DTSC) risk assessment guidance, as documented in *Risk Assessment Guidance for Superfund, Volume I, Human Health Evaluation Manual (Part A)* (EPA, 1989) and *Guidance for the Evaluation and Mitigation Of Subsurface Vapor Intrusion To Indoor Air* (DTSC, 2005), respectively.

Table 2-5 presents a comparison of soil vapor concentrations for 2004 and 2007 to CHHSLs. Tables 2-6 and 2-7 provide the maximum soil vapor concentrations from 2004 and 2007 for samples collected at depths of 5 feet bgs and between 5 and 40 feet bgs for residential and commercial/industrial land uses, respectively. Section 2.3.3 describes how the cumulative risks and hazards were calculated.

2.3.2 Conceptual Site Model, Toxicity Values, Exposure Assessment, Risk Characterization

EPA used a human health conceptual site model diagram for Temple Station to plan the approach for the exposure assessment and risk characterization for the soil vapor risk evaluation.

2.3.2.1 Human Health Conceptual Site Model Diagram

Figure 2-18 presents a schematic diagram of the human health conceptual site model. The model depicts the connections between onsite chemical releases and potential human receptors resulting from transport through environmental media. The human health conceptual site model consists of the following components:

- Primary contaminant sources (Temple Station operations),
- Release mechanisms (e.g., spills, disposal, or leaks),
- Secondary contaminant sources (e.g., contaminated soil),
- Contaminant transport mechanisms (e.g., volatilization and intrusion into buildings),
- Contaminated exposure media (e.g., indoor air),
- Potentially complete exposure pathways,
- Exposure routes, and potentially exposed receptors (e.g., residents).

Although the current Site land use is commercial/industrial, the risk evaluation also considers the risks associated with potential future residential land use. Inmates confined at the onsite jail are potential residential receptors at the Site.

2.3.2.2 Evaluation of Exposure to Soil Vapor

For the vapor intrusion pathway, EPA recommends the characterization of exposure to subsurface contamination through the collection of soil vapor samples (EPA, 2002). Soil vapor data represent a direct measurement of the contaminants with potential to migrate into indoor air. Figure 2-18 illustrates the potential exposure pathways for vapor intrusion from onsite groundwater and soil matrix, and human populations that potentially could be exposed.

EPA characterized onsite risks due to vapor intrusion into indoor air using soil vapor data collected in 2007. The potential exposure pathways for contaminants in soil vapor begin with the emission of volatile chemicals from contaminated soil or groundwater and the subsequent potential intrusion of vapors into overlying buildings. In order to assess the greatest future beneficial use of the property, the risk evaluation considers both residential and commercial/industrial land uses.

2.3.3 Cumulative Risks and Hazards

This evaluation estimates potential future VOC exposures, and human cancer risks and health hazards associated with exposure to onsite soil vapor via vapor intrusion into indoor air. The evaluation considers the following criteria:

- ELCR values are compared to screening evaluation criterion of 1E-06 risk.
- For noncancer health effects, HI values (the sum of ratios of chemical intake to the reference dose [RfD] for all exposure routes) are compared to the screening evaluation criterion of 1. HI values greater than 1 indicate there is potential for adverse noncancer health effects (EPA, 1991).

2.3.3.1 Cumulative Cancer Risk for Soil Vapor

This risk evaluation uses a stepwise risk ratio approach to calculate the onsite soil vapor risks. This approach calculates a ratio of the maximum detected soil vapor concentration for each VOC and the corresponding CHHSL concentration, designated for cancer evaluation ("ca"). The ratio is multiplied by 1E-06 to estimate chemical-specific risk. The chemical-specific risks are summed to calculate a cumulative risk.

As shown in Tables 2-6 and 2-7, the cumulative risks for shallow soil vapor are 2E-04 and 6E-05, for residential and commercial/industrial receptors, respectively. For deep soil vapor, the cumulative risks are 6E-04 and 2E-04, for residential and commercial/industrial receptors, respectively. The estimated risks exceed the screening evaluation criterion of 1E-06. PCE contributes almost all (>95%) of the estimated risk.

2.3.3.2 Cumulative Noncancer Hazard for Soil Vapor

The risk evaluation also applies the hazard ratio approach to soil vapor data using CHHSLs. As shown in Tables 2-6 and 2-7, for the shallow soil vapor samples, the HIs for residential and commercial/industrial land use are 0.002 and 0.0008, respectively. For deep soil vapor,

the HIs for residential and commercial/industrial land use are 0.02 and 0.006, respectively. HIs below the screening criterion of 1 indicate the absence of an adverse noncancer health hazard.

2.3.4 Uncertainties of the Soil Vapor Risk Evaluation

The discussion below identifies several sources of uncertainty inherent in the risk evaluation for soil vapor conducted for Temple Station. Despite the uncertainties, the risk evaluation supports the conclusions and recommendations presented in Sections 1.4 and 3 of this technical evaluation.

The risk evaluation presents numerical estimates of risks, but not predictions of actual health outcomes. The conservative assumptions used for the risk assessment tend to overestimate risks. Thus, any actual risks are likely lower than the estimates.

Uncertainties associated with this risk assessment are due to the risk assessment process in general (e.g., use of the toxicological data) and exposures descriptions. These uncertainties are discussed below.

The use of toxicological data derived primarily from animal studies presents inherent uncertainties. General uncertainties associated with such data include extrapolation from high to low dose and from animals to humans. In laboratory studies, potential sources of uncertainty can include use of modeled animal species, gender differences, age, and strain differences in uptake, metabolism, organ distribution, and target site susceptibility. These uncertainties could be compounded when the data are used to assess risk and hazards to human populations, due to differences in diet, environment, activity patterns, and cultural factors.

The estimation of exposure requires numerous assumptions to describe potential exposure routes. A number of uncertainties exist regarding the likelihood of exposure, frequency of contact with contaminated media, the concentration of contaminants at exposure points, and the period of exposure. Assumptions used in this risk assessment tend to simplify and conservatively approximate actual site conditions, thereby serving to maximize confidence in decision making during the risk assessment.

The risk evaluation omits quantitative assessment of VOCs detected in soil vapor at Temple Station for which CHHSLs have not been established (including ethylbenzene, di-isopropylether and methylene chloride). However, this omission had no adverse impact on the conclusions of the soil risk evaluation: cancer risks estimated for the residential and commercial/industrial receptors already exceed the screening evaluation criterion of 1E-06.

3. Conclusions and Recommendations

3.1 Conclusions

Table 3-1 presents the Site conceptual model of Temple Station based on the characterization data discussed in Section 2.2. The following summary describes the COPCs identified at the Site during investigations that occurred from 1991 to 2007.

3.1.1 Soil Contamination

Contaminants in Soil – The COPCs found in soil include benzene, toluene, total xylenes, PCE, 1,2-dichloroethane, and 1,2-dibromoethane. Concentrations of the COPCs exceeded the screening levels in onsite soils. High concentrations of TPH detected onsite in 1991 indicate that a petroleum release occurred in the former UST excavation area. Concentrations of the COPCs found in the offsite soils did not exceed the screening levels.

Distribution of COPCs in Soil – The COPCs were detected in soil in the former UST excavation area, predominantly between depths of 40 to 70 feet bgs. The extent of TPH contamination in the former UST excavation area is incompletely defined. Figure 2-6 shows that PCE concentrations detected in soil ranged from 0.016 to 670 µg/kg. The lateral and vertical extents of PCE contamination in soil are incompletely defined, although PCE is present at concentrations that are unlikely to significantly impact groundwater.

3.1.2 Soil Vapor Contamination

Contaminants in Soil Vapor – The COPCs identified in soil vapor include benzene, toluene, total xylenes, PCE, TCE, and 1,2-dichloroethane. The concentrations of the COPCs exceeded the screening levels in onsite soil vapor. Elevated concentrations of TPH detected onsite in 1994 and 2004 indicate that a petroleum release occurred in the former UST excavation area. Concentrations of toluene, PCE, and TCE exceeded the screening levels in offsite soil vapor.

Distribution of COPCs in Soil Vapor – The COPCs were detected in soil vapor primarily in the vicinity of former and current USTs. The extent of TPH contamination in soil vapor remains incompletely defined. PCE and TCE were detected onsite at depths from 5 to 180 feet bgs. PCE concentrations detected in soil vapor ranged from 0.3 to 1,400 µg/L. Figures 2-11 through 2-15 present the PCE soil vapor data. The lateral and vertical extents of PCE contamination in soil vapor are incompletely defined, although PCE is present at concentrations that are unlikely to significantly impact groundwater.

3.1.3 Groundwater Contamination

Contaminants in Groundwater – Groundwater collected from onsite monitoring wells contained benzene, toluene, total xylenes, PCE, TCE, 1,2-dichloroethane, and naphthalene at concentrations that exceeded MCLs. Groundwater collected from offsite wells showed concentrations of PCE that exceeded the MCL.

Distribution of COPCs in Groundwater – PCE concentrations exceeded the MCL at all measurement points within the shallow aquifer. The presence of benzene appears related to the UST release. The downgradient extent of groundwater contamination remains undetermined. PCE found in groundwater underlying Temple Station and adjacent areas appears to originate from an unidentified, upgradient source to the northeast. Figure 2-16 illustrates the PCE concentrations found in the groundwater beneath Temple Station in 2007.

Direction of Groundwater Flow and Contaminant Migration – Groundwater generally flows in a southwesterly direction as shown in Figure 2-16; however, local groundwater production can strongly influence flow directions. The calculated groundwater gradient is 0.002 foot per foot (Kleinfelder, 2007).

3.2 Recommendations

Data collected from the existing monitoring wells only partially delineate the contamination. Table 3-2 presents the uncertainties in the analytical data set. The current data for Temple Station indicate a need to complete the following additional investigation activities:

- Install downgradient and cross-gradient soil vapor monitoring wells and upgradient and downgradient groundwater monitoring wells to further evaluate the source and extent of contamination onsite and downgradient of Temple Station.
- Collect additional analytical data for soil vapor and groundwater to fully assess the lateral and vertical distribution and extent of contamination. Collect additional analytical data to determine the potential contribution of the onsite PCE concentrations in soil and soil vapor to the groundwater contamination beneath Temple Station. Areas for focused data collection include: evaluating contamination in soil and soil vapor in the vicinity of the former UST excavation, near existing clarifiers; and evaluating contamination in groundwater upgradient and downgradient of Temple Station.
- Collect data for TPH using analytical methods with adequate sensitivity to ensure that laboratory reporting limits and detection limits do not exceed regulatory levels or site-specific action levels. (The analytical methods used to collect data for the other COPCs had adequate sensitivity.)
- Complete the assessment of potential intrusion of vapors into onsite buildings. Based on the results of the vapor intrusion assessment, indoor air quality in the onsite buildings may need to be evaluated. If indoor air impacts are found at the Site, mitigation will be needed to prevent potential exposure.

4. References

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Tables

TABLE 1-1
Chronology of Site Investigation Events
LASD Temple Station

Event[1]	Date
Routine UST testing uncovers vapor leak near vapor line connecting one UST to fuel dispenser.	1987
Preliminary soil investigation identifies potential petroleum hydrocarbon release. Soil testing reveals no VOCs.	January 1990
LACDPW issues a formal NOV associated with the use and storage of petroleum products following an inspection. LASD corrects the violations and receives a notice of compliance from LACDPW.	July through September 1990
LASD removes four USTs and installs nine shallow and deep soil borings (46 to 176 feet bgs) near former tank locations. Gasoline contamination and limited solvent contamination extend to deep soils (165 feet bgs). LASD submits tank removal documentation to state and local agencies.	April through June 1991
LASD installs vapor extraction well cluster with shallow and deep screened intervals (10-50 and 120-160 feet bgs, respectively) near the former tank excavation. Analytical testing reveals TPH and VOCs in deep soil (180 feet bgs), but solvents no deeper than 140 feet bgs. A SVE pilot test conducted by LASD indicates highly permeable sandy soil in the subsurface.	May 1992
LASD installs and samples three dual groundwater and soil vapor monitoring wells on the north, south and west side of the Site and installs five vapor extraction well clusters near the former tank excavation in suspected area of contamination. South Coast Air Quality Management District issues permit to operate SVE system.	January to February 1993*
Two soil borings within the former tank excavation reveal presence of hydrocarbon and 1,2-dichloroethane. Soil vapor contains benzene, toluene, and xylenes at concentrations that exceed maximum quantification levels, and PCE at concentrations that exceed maximum allowable concentrations established by State.[2] LASD installs seven shallow vapor probes (5 feet bgs) on the north side of the Site near MW-1 and the clarifier located in the service building, although testing detects no contaminants of concern.	March 1993*
LASD operates SVE system with catalyst. Catalyst fouling (with lead and sulfur) necessitates three catalyst replacements; one SVE unit replacement; and ultimately complete system shut down. Despite difficulties, in-situ system successfully destroys 28,200 pounds of hydrocarbons.	March 1993 through January 1994*
Soil vapor monitoring detects PCE in about 70% of samples (17 of 24 collected), with highest concentrations of PCE and TCE at 65 feet bgs (in MW-1 on the north side of the Site). Highest hydrocarbon concentrations detected in soil vapor in BH-10 within the former tank excavation. All three groundwater monitoring wells show presence of PCE.	June 1993*
A second, temporary SVE system remediates soil cuttings in roll-off bins. System destroys 5,600 pounds of hydrocarbons.	July to August 1993*
Groundwater monitoring shows increases in PCE concentrations compared to previous sampling event.	October 1993*
PCE detected in shallow soil vapor (20 feet bgs in BH-10); PCE concentrations remain highest at 65 feet bgs (in MW-1). All three groundwater wells show lower PCE concentrations than in previous monitoring event.	November 1993 through January 1994*
LARWQCB issues enforcement order, directing LASD to conduct additional activities to assess the current soil and groundwater conditions beneath the Site.	May 2003

TABLE 1-1
Chronology of Site Investigation Events
LASD Temple Station

Event[1]	Date
Data show that PCE concentrations increased in all groundwater monitoring wells, with highest concentration in well located on north end of Site (MW-1). All soil vapor samples show TPH and chlorinated solvent contamination, including concentrations that exceed maximum allowable concentrations established by State.[2] LASD submits work plan to LARWQCB for additional investigation work.	February to March 2004*
LARWQCB approves work plan and grants 30-day extension for submission of first technical progress report.	February 2005
EPA initiates process to conduct non-time-critical removal action.	September 2005
LARWQCB issues NOV to LASD for failure to submit technical reports.	October 2005
LARWQCB refers Site to EPA.	January 2006
EPA issues a general notice letter to Los Angeles County for potential liability for groundwater contamination in Area 3.	April 2006
Los Angeles County conducts supplemental site investigation to determine nature and extent of contamination at the Site. Offsite soil vapor and groundwater data indicates an upgradient PCE source. Onsite soil vapor and groundwater data shows PCE impacts, however concentrations have decreased from the 2004 levels. EPA observed field investigations on 12/19/2006, 01/12/2007, and 01/24/2007.	July 2006 through May 2007
EPA suspends non-time-critical removal action and completes technical evaluation and turns regulatory oversight back to the LARWQCB.	September 2008

bgs = below ground surface

EPA = United States Environmental Protection Agency

LACDPW = Los Angeles County Department of Public Works

LARWQCB = California Regional Water Quality Control Board, Los Angeles Region

LASD = Los Angeles County Sheriff Department

NOV = notice of violation

PCE = tetrachloroethene

SVE = soil vapor extraction

TCE = trichloroethene

TPH = total petroleum hydrocarbons

UST = underground storage tank

VOCs = volatile organic compounds

*LARWQCB performs oversight of field work.

[1] Tables 2-1 through 2-3 summarize the analytical results generated during the events described, and Figures 2-3 through 2-17 depict the well locations and sample collection points at the Site.

[2] *Interim Site Assessment and Cleanup Guidebook* (LARWQCB, 1996)

Table 2-1
Soil Analytical Results (Detected Analytes)
LASD Temple Station

Boring or Well	Date	Depth (ft bgs)	TPH (µg/kg)	Data Flag	Benzene (µg/kg)	Data Flag	Toluene (µg/kg)	Data Flag	Ethyl-benzene (µg/kg)	Data Flag	Xylenes (µg/kg)	Data Flag	PCE (µg/kg)	Data Flag	TCE (µg/kg)	Data Flag	1,2-DCA (µg/kg)	Data Flag	1,1-DCE (µg/kg)	Data Flag	1,1,2-TCA (µg/kg)	Data Flag	1,2-DBE (µg/kg)	Data Flag	DIPE (µg/kg)	Data Flag
Industrial Soil Screening Levels			NE		**1,400**		**520,000**		**400,000**		**420,000**		**1,300**		**6,500**		**600**		**410,000**		**1600**		**73**		**NE**	
Residential Soil Screening Levels			NE		**640**		**520,000**		**400,000**		**270,000**		**480**		**2,900**		**280**		**120,000**		**730**		**32**		**NE**	
Onsite Sample Locations																										
BH-1	5/17/91	65.5	**1,500,000**	d2	--		--		--		--		--		--		--		--		--		--		--	
	5/20/91	80.5	**9,500,000**	d2	**110,000**	d2	**1,000,000**	d2	**240,000**	d2	**1,300,000**	d2	--		--		--		--		--		--		--	
BH-1A	6/11/91	85	**--**		--		**--**		**--**		**--**		ND<200	d2	--		**5,500**	d2	ND<200	d2	ND<200	d2	--		--	
		140	**3,400,000**	d2	--		**--**		**--**		**--**		--		--		--		--		--		--		--	
		160	**1,400,000**	d2	--		**--**		**--**		**--**		--		--		--		--		--		--		--	
BH-2	5/20/91	85.5	**3,400,000**	d2	--		**--**		**--**		**--**		--		--		--		--		--		--		--	
		105.5	**450,000**	d2	--		**--**		**--**		**--**		--		--		--		--		--		--		--	
		146	**2,000**	d2	--		**--**		**--**		**--**		--		--		--		--		--		--		--	
		160	ND<1000	d2	ND<50	d2	**130**	d2	ND<50	d2	**120**	d2	--		--		--		--		--		--		--	
BH-3	5/22/91	40	**29,000**	d2	--		--		**--**		**--**		--		--		--		--		--		--		--	
BH-6	5/23/91	60.5	**7,700,000**	d2	--		--		**--**		**--**		--		--		--		--		--		--		--	
		95.5	**3,100**	d2	**180**	d2	**210**	d2	ND<50	d2	**250**	d2	--		--		--		--		--		--		--	
BH-7	5/24/91	30.5	**85,000**	d2	--		**--**		**--**		**--**		--		--		--		--		--		--		--	
		45.5	**13,000,000**	d2	--		**--**		**--**		**--**		--		--		--		--		--		--		--	
		75.5	**2,500,000**	d2	--		**--**		**--**		**--**		--		--		--		--		--		--		--	
		90.5	**3,200,000**	d2	--		**--**		**--**		**--**		--		--		--		--		--		--		--	
		110.5	**2,000,000**	d2	**41,000**	d2	**290,000**	d2	**86,000**	d2	**450,000**	d2	--		--		--		--		--		--		--	
BH-8	5/28/91	55.5	**2,300**	d2	**200**	d2	**420**	d2	**60**	d2	**330**	d2	--		--		--		--		--		--		--	
		60.5	ND<1,000	d2	**110**	d2	**150**	d2	ND<50	d2	**100**	d2	--		--		--		--		--		--		--	
BH-9	6/10/91	65	--		**170**	d2	**530**	d2	**340**	d2	**1,900**	d2	ND<200	d2	--		ND<200	d2	ND<200	d2	ND<200	d2	--		--	
		85.5	--		--		--		--		--		**430**	d2	--		**2,100**	d2	ND<200	d2	ND<200	d2	--		--	
		105.5	**1,700,000**	d2	**22,000**	d2	**190,000**	d2	**64,000**	d2	**340,000**	d2	**270**	d2	--		**470**	d2	**920**	d2	ND<200	d2	--		--	
		125.5	**78,000**	d2	--		**--**		**--**		**--**		--		--		--		--		--		--		--	
		135	**5,500**	d2	**170**	d2	**640**	d2	**80**	d2	**350**	d2	--		--		--		--		--		--		--	
		165	**16,000**	d2	--		--		--		--		--		--		--		--		--		--		--	
VE-1	5/12/92	60	**11,000,000**	d2	**120,000**	d2	**900,000**	d2	**270,000**	d2	**1,300,000**	d2	NA		--		**520**	d2	NA		NA		--		--	
		80	**4,300,000**	d2	--		--		--		--		NA		--		**170**	d2	NA		NA		--		--	
		100	--		--		--		--		--		**44**	d2	--		**270**	d2	NA		NA		--		--	
		120	--		**34,000**	d2	**380,000**	d2	**130,000**	d2	**590,000**	d2	NA		--		**110**	d2	NA		NA		--		--	
		140	--		--		--		--		--		**670**	d2	--		**78**	d2	NA		NA		--		--	
		160	**13,000**	d2	ND		**300**	d2	**160**	d2	**970**	d2	NA		--		NA		NA		NA		--		--	
		180	**14,000**	d2	**250**	d2	**1,200**	d2	**210**	d2	**1,400**	d2	NA		--		NA		NA		NA		--		--	
BH-10	3/11/93	15	--		ND<5		**100**	d2	**5**	d2	**50**	d2	ND<5	d2	--		ND<5	d2	ND<5	d2	ND<5	d2	--		--	
		25	--		**40**	d2	**17,110**	d2	**27,070**	d2	**206,260**	d2	ND<5	d2	--		ND<5	d2	ND<5	d2	ND<5	d2	--		--	
		35	--		**650**	d2	**554,010**	d2	**10,400**	d2	**2,001,850**	d2	ND<5	d2	--		**56**	d2	ND<5	d2	**49**	d2	--		--	
		45	--		**24,190**	d2	**435,140**	d2	**218,430**	d2	**839,570**	d2	ND<5	d2	--		**484**	d2	ND<5	d2	**14**	d2	--		--	
		55	--		**64,840**	d2	**413,030**	d2	**132,130**	d2	**636,800**	d2	ND<5	d2	--		**1,138**	d2	ND<5	d2	ND<5	d2	--		--	
		65	--		**60,630**	d2	**413,770**	d2	**143,760**	d2	**639,780**	d2	ND<5	d2	--		**2,079**	d2	ND<5	d2	**43**	d2	--		--	
BH-11	3/11/93	18	--		ND<5	d2	**140**	d2	ND<5	d2	**200**	d2	ND<5	d2	--		ND<5	d2	ND<5	d2	ND<5	d2	--		--	
		25	--		**40**	d2	**10**	d2	ND<5	d2	**160**	d2	ND<5	d2	--		ND<5	d2	ND<5	d2	ND<5	d2	--		--	
		35	--		**1,270**	d2	**29,110**	d2	**11,540**	d2	**225,560**	d2	ND<5	d2	--		ND<5	d2	ND<5	d2	ND<5	d2	--		--	
		45	--		**35,890**	d2	**373,180**	d2	**111,430**	d2	**544,630**	d2	ND<5	d2	--		**743**	d2	ND<5	d2	ND<5	d2	--		--	
		55	--		**720**	d2	**3,470**	d2	**1,110**	d2	**6,700**	d2	ND<5	d2	--		**14**	d2	ND<5	d2	ND<5	d2	--		--	
		65	--		**14,730**	d2	**174,840**	d2	**65,040**	d2	**320,290**	d2	**589**	d2	--		**491**	d2	ND<5	d2	ND<5	d2	--		--	

Yellow Highlight indicates concentration that exceeds PRGs

Appendix B provides the complete set of analytical data tables.
-- = Not Analyzed
d2 = Secondary data
DUP = duplicate
ft bgs = feet below ground surface

NA = not available
ND = Not detected above the laboratory detection limit
NE = PRGs not established
PRGs = Preliminary Remediation Goals
µg/kg= micrograms per kilogram

1,2-DCA = 1,2-dichloroethane
1,1-DCE = 1,1-dichloroethene
DIPE = diisopropylether
PCE = tetrachloroethene
1,1,1-TCA = 1,1,1- trichloroethane

TCE = trichloroethene
TCFM = trichlorofluoromethane

Table 2-1
Soil Analytical Results (Detected Analytes)
LASD Temple Station

Boring or Well	Date	Depth (ft bgs)	TPH (µg/kg)	Data Flag	Benzene (µg/kg)	Data Flag	Toluene (µg/kg)	Data Flag	Ethyl-benzene (µg/kg)	Data Flag	Xylenes (µg/kg)	Data Flag	PCE (µg/kg)	Data Flag	TCE (µg/kg)	Data Flag	1,2-DCA (µg/kg)	Data Flag	1,1-DCE (µg/kg)	Data Flag	1,1,2-TCA (µg/kg)	Data Flag	1,2-DBE (µg/kg)	Data Flag	DIPE (µg/kg)	Data Flag
Industrial Soil Screening Levels			NE		**1,400**		**520,000**		**400,000**		**420,000**		**1,300**		**6,500**		**600**		**410,000**		**1600**		**73**		**NE**	
Residential Soil Screening Levels			NE		**640**		**520,000**		**400,000**		**270,000**		**480**		**2,900**		**280**		**120,000**		**730**		**32**		**NE**	
MW-2	1/20/93	70	ND<2,000	d2	ND<5	d2	ND<5	d2	ND<5	d2	ND<10	d2	ND<5	d2	--		**5**	d2	ND<5	d2	ND<5	d2	--		--	
		110	ND<2,000	d2	**19**	d2	**19**	d2	ND<5	d2	**26**	d2	ND<5	d2	--		**50**	d2	ND<5	d2	ND<5	d2	--		--	
		135	**2,300**	d2	**230**	d2	**400**	d2	**64**	d2	**350**	d2	ND<5	d2	--		**29**	d2	ND<5	d2	ND<5	d2	--		--	
MW-3	1/29/93	80	ND<2,000	d2	ND<5	d2	ND<5	d2	ND<5	d2	**14**	d2	ND<5	d2	--		**14**	d2	ND<5	d2	ND<5	d2	--		--	
		100	ND<2,000	d2	**19**	d2	**44**	d2	**6.8**	d2	**57**	d2	ND<5	d2	--		**64**	d2	ND<5	d2	ND<5	d2	--		--	
		120	ND<2,000	d2	ND<5	d2	ND<5	d2	ND<5	d2	ND<10	d2	ND<5	d2	--		**7**	d2	ND<5	d2	ND<5	d2	--		--	
		140	ND<2,000	d2	**68,000**	d2	ND<5000	d2	ND<5,000	d2	ND<5,000	d2	**0.016**	d2	--		**0.009**	d2	**0.005**	d2	**0.021**	d2	--		--	
MW-9	11/30/06	55	--		**21**	d2	**1,564**	d2	**4,286**	d2	**17,463**	d2	ND<20	d2	ND<20	d2	ND<20	d2	ND<20	d2	ND<20	d2	ND<20	d2	ND<20	d2
	12/4/06	130	--		ND<10	d2	**122**	d2	**279**	d2	**2,454**	d2	ND<20	d2	ND<20	d2	ND<20	d2	ND<20	d2	ND<20	d2	ND<20	d2	ND<20	d2
		142.5	--		ND<1	d2	**19**	d2	**30**	d2	**213**	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	**2**	d2
		150	--		ND<1	d2	**14**	d2	**48**	d2	**392**	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	**14**	d2
		162	--		ND<1	d2	**4**	d2	**9**	d2	**78**	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<20	d2
		170	--		**40**	d2	**165**	d2	**25**	d2	**207**	d2	ND<2	d2	ND<2	d2	**50**	d2	ND<2	d2	ND<2	d2	**32**	d2	**90**	d2
MW-10	11/28/06	210	--		ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	**5**	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
MW-12	1/9/07	50	--		ND<1	d2	ND<1	d2	ND<1	d2	**3**	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		65	--		**31**	d2	**2,455**	d2	**2,874**	d2	**5,364**	d2	ND<10	d2	ND<10	d2	ND<10	d2	ND<10	d2	ND<10	d2	ND<10	d2	ND<10	d2
		70	--		ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		90	--		ND<1	d2	**2**	d2	**3**	d2	**12**	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
	1/10/07	130	--		ND<1	d2	**2**	d2	ND<1	d2	**2**	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	**2**	d2
		150	--		**2**	d2	**20**	d2	**11**	d2	**40**	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	**4**	d2
		170	--		ND<1	d2	**3**	d2	**3**	d2	**8**	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	**5**	d2
Offsite Sample Locations																										
MW-5	2/7/07	10	--		ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	**74.6**	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		70	--		ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	**12**	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		90	--		ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	**2**	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
MW-6	12/16/06	170	--		ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	**5**	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		190	--		ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	**3.5**	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
MW-7	2/14/07	40	--		ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	**29**	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		60	--		ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	**6**	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
	2/15/07	140	--		ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	**2**	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
	2/16/07	174	--		ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	**18**	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		180	--		ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	**3**	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
	2/17/07	200	--		ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	**97**	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2

Yellow Highlight indicates concentration that exceeds PRGs
Appendix B provides the complete set of analytical data tables.

-- = Not Analyzed
d2 = Secondary data
DUP = duplicate
ft bgs = feet below ground surface
NA = not available
ND = Not detected above the laboratory detection limit
NE = PRGs not established
PRGs = Preliminary Remediation Goals
µg/kg= micrograms per kilogram

1,2-DCA = 1,2-dichloroethane
1,1-DCE = 1,1-dichloroethene
DIPE = diisopropylether
PCE = tetrachloroethene
1,1,1-TCA = 1,1,1- trichloroethane
TCE = trichloroethene
TCFM = trichlorofluoromethane

Table 2-2
Soil Vapor Analytical Results (Detected Analytes)
LASD Temple Station

Location	Depth (ft bgs)	Sample Date	TPH (ppmv)	Data Flag	Benzene (µg/L)	Data Flag	Toluene (µg/L)	Data Flag	Ethyl-benzene (µg/L)	Data Flag	Total Xylenes (µg/L)	Data Flag	PCE (µg/L)	Data Flag	TCE (µg/L)	Data Flag	1,2-DCA (µg/L)	Data Flag	cis-1,2-DCE (µg/L)	Data Flag	Methylene Chloride (µg/L)	Data Flag	1,1,1-TCA (µg/L)	Data Flag	TCFM (µg/L)	Data Flag	DIPE (µg/L)	Data Flag
CHHSLs- Residential			NE		0.036		0.025		NE		315		0.18		0.528		0.050		15.9		NE		991		NE		NE	
CHHSLs- Commercial/Industrial			NE		0.12		378		NE		879		0.6		1.77		0.167		44.4		NE		2790		NE		NE	
Onsite Sample Locations																												
VE-1A	10 to 50	5/18/92	2,790	d2	19	d2	250	d2	39	d2	430	d2	ND	d2	ND	d2	ND	d2	--		ND	d2	ND	d2	ND	d2	--	
VE-1B	120 to 160	5/18/92	36,270	d2	700	d2	260	d2	230	d2	940	d2	ND	d2	ND	d2	ND	d2	--		8.7	d2	11	d2	ND	d2	--	
VP-1	5	5/20/93	--		4.5	d2	6	d2	ND<0.3	d2	0.6	d2	ND<0.3	d2	0.3	d2	0.3	d2	--		ND<0.3	d2	ND<0.3	d2	ND<0.6	d2	--	
		9/17/93	--		16	d2	28	d2	3.6	d2	24	d2	ND<1	d2	1	d2	1	d2	--		ND<1	d2	ND<1	d2	ND<1	d2	--	
		1/26/94	--		29	d2	57	d2	3.8	d2	54	d2	ND<0.3	d2	--		0.3	d2	--		--		--		--		--	
		3/8/04	320	d2	1.9	d2	23	d2	5.8	d2	36	d2	0.39	d2	0.058	d2	0.07	d2	--		--		--		--		--	
VP-6	5	5/19/93	--		0.5	d2	1.2	d2	ND<0.3	d2	0.3	d2	ND<0.3	d2	0.3	d2	0.3	d2	--		ND<0.3	d2	ND<0.3	d2	ND<0.6	d2	--	
		9/17/93	--		300	d2	1,200	d2	140	d2	530	d2	ND<1	d2	1	d2	1.1	d2	--		ND<1	d2	ND<1	d2	ND<1	d2	--	
		1/27/94	--		ND<0.3	d2	1.3	d2	ND<0.3	d2	2.7	d2	ND<0.3	d2	--		0.3	d2	--		--		--		--		--	
VP-7	5	5/19/93	--		1.9	d2	2.4	d2	ND<0.3	d2	0.5	d2	0.3	d2	0.3	d2	0.3	d2	--		ND<0.3	d2	3.4	d2	ND<0.6	d2	--	
		9/17/93	--		73	d2	420	d2	34	d2	340	d2	1.1	d2	1	d2	5.0	d2	--		ND<1	d2	ND<1	d2	ND<1	d2	--	
		1/27/94	--		ND<0.3	d2	ND<0.3	d2	ND<0.3	d2	0.7	d2	ND<0.3	d2	--	d2	0.3	d2	--		--		--		--		--	
		3/8/04	ND<1.8	d2	ND<2.2	d2	0.059	d2	ND<0.02	d2	0.05	d2	0.09	d2	0.003	d2	0.003	d2	--		--		--		--		--	
BH-10	15	3/11/93	--		24	d2	96	d2	27	d2	163	d2	ND<0.5	d2	0.5	d2	0.5	d2	--		ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	--	
	20	5/19/93	--		23	d2	44	d2	4.5	d2	120	d2	1	d2	0.3	d2	0.3	d2	--		ND<0.3		ND<0.3		ND<0.6		--	
		9/17/93	--		28	d2	130	d2	16	d2	160	d2	ND<1	d2	1	d2	1	d2	--		ND<1		ND<1		4.5		--	
		1/27/94	--		0.5	d2	1.8	d2	0.8	d2	14	d2	1.1	d2	--		0.3	d2	--		--		--		--		--	
		3/8/04	1,900	d2	30	d2	160	d2	42	d2	220	d2	40	d2	0.15	d2	0.17	d2	--		--		--		--		--	
	25	3/11/93	--		256	d2	> 2,139	d2	418	d2	> 2,106	d2	ND<0.5	d2	0.5	d2	0.5	d2	--		ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	--	
	35	3/11/93	--		> 2,122	d2	> 3,097	d2	395	d2	> 1,802	d2	ND<0.5	d2	0.5	d2	1.4	d2	--		ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	--	
	40	5/19/93	--		3,000	d2	7,100	d2	190	d2	2,300	d2	ND<0.3	d2	0.3	d2	9 < x <20	d2	--		ND<0.3	d2	ND<0.3	d2	ND<0.6	d2	--	
		9/17/93	--		5,600	d2	16,000	d2	1,100	d2	10,000	d2	ND<1	d2	1	d2	8.2	d2	--		ND<1	d2	ND<1	d2	ND<1	d2	--	
		1/27/94	--		670	d2	3,200	d2	200	d2	2,500	d2	3.3	d2	--		14	d2	--		--		--		--		--	
		3/8/04	94,000	d2	1,400	d2	8,500	d2	810	d2	7,500	d2	ND<44	d2	29	d2	35	d2	--		--		--		--		--	
	45	3/11/93	--		> 1,054	d2	> 1,561	d2	183	d2	> 1,015	d2	ND<0.5	d2	0.5	d2	16.9	d2	--		ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	--	
	60	5/19/93	--		3,200	d2	3,300	d2	800	d2	3,600	d2	ND<0.3	d2	0.3	d2	370	d2	--		ND<0.3	d2	ND<0.3	d2	ND<0.6	d2	--	
		9/17/93	--		14,000	d2	16,000	d2	890	d2	4,000	d2	ND<1	d2	1	d2	23	d2	--		ND<1	d2	ND<1	d2	ND<1	d2	--	
		1/27/94	--		5,400	d2	9,000	d2	1,400	d2	7,600	d2	ND<0.3	d2	--		79	d2	--		--		--		--		--	
		3/8/04	370,000	d2	10,000	d2	19,000	d2	1,500	d2	6,300	d2	ND<90	d2	59	d2	71	d2	--		--		--		--		--	
	65	3/11/93	--		> 2,998	d2	> 2,220	d2	142	d2	692	d2	ND<0.5	d2	0.5	d2	46.2	d2	--		ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	--	
		3/11/93 DUP	--		ND<0.5	d2	>1,440	d2	31	d2	148	d2	ND<0.5	d2	0.5	d2	27.8	d2	--		ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	--	

Yellow Highlight indicates concentrations that exceed CHHSLs

Appendix B provides the complete set of analytical data tables.
CHHSLs= California Human Health Screening Levels
d2 = Secondary data
DUP = duplicate
ft bgs = feet below ground surface

NA = Not Analyzed
ND = Not detected above the laboratory detection limit
NE = Not Established
ppmv = parts per million by volume
µg/L= micrograms per liter

1,2-DCA = 1,2-dichloroethane
DIPE = diisopropylether
PCE = tetrachloroethene
1,1,1-TCA = 1,1,1- trichloroethane

TCE = trichloroethene
TCFM = trichlorofluoromethane

Table 2-2
Soil Vapor Analytical Results (Detected Analytes)
LASD Temple Station

Location	Depth (ft bgs)	Sample Date	TPH (ppmv)	Data Flag	Benzene (µg/L)	Data Flag	Toluene (µg/L)	Data Flag	Ethyl-benzene (µg/L)	Data Flag	Total Xylenes (µg/L)	Data Flag	PCE (µg/L)	Data Flag	TCE (µg/L)	Data Flag	1,2-DCA (µg/L)	Data Flag	cis-1,2-DCE (µg/L)	Data Flag	Methylene Chloride (µg/L)	Data Flag	1,1,1-TCA (µg/L)	Data Flag	TCFM (µg/L)	Data Flag	DIPE (µg/L)	Data Flag
CHHSLs- Residential			NE		0.036		0.025		NE		315		0.18		0.528		0.050		15.9		NE		991		NE		NE	
CHHSLs- Commercial/Industrial			NE		0.12		378		NE		879		0.6		1.77		0.167		44.4		NE		2790		NE		NE	
BH-11	20	5/20/93	--		16	d2	20	d2	2.4	d2	38	d2	0.8	d2	0.3	d2	0.3	d2	--		ND<0.3	d2	ND<0.3	d2	ND<0.6	d2	--	
		9/17/93	--		160	d2	270	d2	110	d2	1,400	d2	7	d2	1	d2	1.6	d2	--		ND<1	d2	ND<1	d2	1.9	d2	--	
		1/26/94	--		1.1	d2	18	d2	8	d2	49	d2	9	d2	--		0.9	d2	--		--		--		--		--	
		3/8/04	33	d2	0.11	d2	1.9	d2	0.58	d2	3.8	d2	ND<0.02	d2	0.02	d2	0.02	d2	--		--		--		--		--	
	35	3/11/93	--		> 996	d2	> 954	d2	95	d2	> 630	d2	ND<0.5	d2	0.5	d2	0.5	d2	--		ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	--	
	40	5/20/93	--		1,800	d2	1,600	d2	53	d2	220	d2	2.5	d2	0.3	d2	5.1	d2	--		ND<0.3	d2	ND<0.3	d2	ND<0.6	d2	--	
		9/17/93	--		3,200	d2	8,500	d2	71	d2	4,900	d2	2.9	d2	1	d2	4.2	d2	--		ND<1	d2	ND<1	d2	ND<1	d2	--	
		1/26/94	--		800	d2	1,100	d2	41	d2	790	d2	1.8	d2	--	d2	8.4	d2	--		--		--		--		--	
		3/8/04	170,000	d2	2,700	d2	9,400	d2	1,000	d2	5,500	d2	41	d2	5.7	d2	6.9	d2	--		--		--		--		--	
	45	3/11/93	--		> 2,376	d2	> 1,992	d2	85	d2	451	d2	ND<0.5	d2	0.5	d2	22.1	d2	--		ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	--	
	55	3/11/93	--		> 2,460	d2	> 2,376	d2	131	d2	576	d2	8.7	d2	0.5	d2	40	d2	--		ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	--	
	60	5/20/93	--		2,700	d2	1,300	d2	11	d2	27	d2	5.3	d2	0.3	d2	86	d2	--		ND<0.3	d2	ND<0.3	d2	ND<0.6	d2	--	
		9/17/93	--		11,000	d2	17,000	d2	650	d2	4,200	d2	4.7	d2	1	d2	7.5	d2	--		ND<1	d2	ND<1	d2	1	d2	--	
		1/26/94	--		2,100	d2	4,500	d2	410	d2	1,600	d2	7.3	d2	--	d2	25	d2	--		--		--		--		--	
		3/8/04	250,000	d2	4,900	d2	15,000	d2	1,400	d2	5,800	d2	52	d2	30	d2	36	d2	--		--		--		--		--	
	65	3/11/93	--		> 2,670	d2	> 2,514	d2	198	d2	839	d2	21.2	d2	0.5	d2	41.5	d2	--		ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	--	
MW-1	65	2/23/93	--		ND<0.5	d2	1.9	d2	ND<0.5	d2	0.8	d2	88	d2	ND<0.5	d2	ND<0.5	d2	--		ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	--	
		2/23/93 DUP	--		ND<0.5	d2	3.1	d2	ND<0.5	d2	0.5	d2	79.3	d2	ND<0.5	d2	ND<0.5	d2	--		ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	--	
		5/19/93	--		10	d2	10	d2	0.5	d2	2.5	d2	550	d2	2.4	d2	ND<0.3	d2	--		ND<0.3	d2	ND<0.3	d2	1.3	d2	--	
		9/17/93	--		ND<1	d2	ND<1	d2	ND<1	d2	1	d2	320	d2	3.8	d2	3.8	d2	--		ND<1	d2	ND<1	d2	1	d2	--	
		1/27/94	--		0.8	d2	2	d2	ND<0.3	d2	2.1	d2	612	d2	--		ND<0.3	d2	--		--		--		--		--	
		3/8/04	310	d2	ND<3.9	d2	ND<1.8	d2	ND<2.1	d2	5.3	d2	1,400	d2	3.4	d2	ND<3.2	d2	--		--		--		--		--	
	125	2/23/93	--		1.8	d2	ND<0.5	d2	ND<0.5	d2	0.5	d2	57.4	d2	ND<0.5	d2	ND<0.5	d2	--		ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	--	
		5/19/93	--		31	d2	110	d2	5.8	d2	38	d2	9 < x <20	d2	ND<0.3	d2	0.4	d2	--		ND<0.3	d2	ND<0.3	d2	ND<0.6	d2	--	
		9/17/93	--		70	d2	150	d2	12	d2	60	d2	14	d2	ND<1	d2	ND<1	d2	--		ND<1	d2	ND<1	d2	14	d2	--	
		3/8/04	6.6	d2	ND<0.06	d2	ND<0.03	d2	ND<0.03	d2	0.08	d2	14	d2	ND<0.04	d2	0.05	d2	--		--		--		--		--	
	185	2/23/93	--		27.2	d2	7.5	d2	ND<0.5	d2	4.4	d2	89.3	d2	ND<0.5	d2	ND<0.5	d2	--		ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	--	
		5/19/93	--		100	d2	6.4	d2	ND<0.7	d2	3.2	d2	260	d2	ND<0.7	d2	ND<0.3	d2	--		ND<0.3	d2	ND<0.3	d2	ND<0.6	d2	--	
		9/17/93	--		62	d2	110	d2	7.9	d2	130	d2	19	d2	ND<1	d2	ND<1	d2	--		ND<1	d2	ND<1	d2	1.3	d2	--	
		1/27/94	--		42	d2	170	d2	20	d2	120	d2	ND<0.3	d2	--		ND<0.3	d2	--		--		--		--		--	
		3/8/04	8.3	d2	ND<0.09	d2	ND<0.04	d2	ND<0.05	d2	0.13	d2	36	d2	0.1	d2	ND<0.08	d2	--		--		--		--		--	
MW-2	60	2/23/93	--		755.7	d2	1050.7	d2	28.3	d2	113.8	d2	ND<0.5	d2	ND<0.5	d2	1.2	d2	--		ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	--	
		5/19/93	--		710	d2	500	d2	1,200	d2	4,300	d2	ND<0.3	d2	ND<0.3	d2	3.5	d2	--		ND<0.3	d2	ND<0.3	d2	ND<0.6	d2	--	
		9/17/93	--		3,600	d2	4,100	d2	270	d2	890	d2	ND<1	d2	ND<1	d2	2.6	d2	--		ND<1	d2	ND<1	d2	ND<1	d2	--	
	183	2/23/93	--		650.2	d2	962.1	d2	46.8	d2	181	d2	7.6	d2	ND<0.5	d2	7.7	d2	--		ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	--	
		5/19/93	--		620	d2	1,300	d2	110	d2	510	d2	0.1	d2	ND<0.3	d2	9 < x <20	d2	--		ND<0.3	d2	ND<0.3	d2	ND<0.6	d2	--	
		9/17/93	--		1,900	d2	1,300	d2	160	d2	840	d2	12	d2	9.3	d2	9.3	d2	--		ND<1	d2	ND<1	d2	ND<1	d2	--	
		3/8/04	210,000	d2	1,500	d2	8,300	d2	860	d2	4,200	d2	ND<82	d2	ND<54	d2	ND<65	d2	--		--		--		--		--	
		3/8/04 DUP	210,000	d2	1,300	d2	7,600	d2	800	d2	3,900	d2	ND<40	d2	ND<27	d2	ND<32	d2	--		--		--		--		--	

Yellow Highlight indicates concentrations that exceed CHHSLs

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d2 = Secondary data
DUP = duplicate
ft bgs = feet below ground surface

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1,2-DCA = 1,2-dichloroethane
DIPE = diisopropylether
PCE = tetrachloroethene
1,1,1-TCA = 1,1,1- trichloroethane

TCE = trichloroethene
TCFM = trichlorofluoromethane

Table 2-2
Soil Vapor Analytical Results (Detected Analytes)
LASD Temple Station

Location	Depth (ft bgs)	Sample Date	TPH (ppmv)	Data Flag	Benzene (µg/L)	Data Flag	Toluene (µg/L)	Data Flag	Ethyl-benzene (µg/L)	Data Flag	Total Xylenes (µg/L)	Data Flag	PCE (µg/L)	Data Flag	TCE (µg/L)	Data Flag	1,2-DCA (µg/L)	Data Flag	cis-1,2-DCE (µg/L)	Data Flag	Methylene Chloride (µg/L)	Data Flag	1,1,1-TCA (µg/L)	Data Flag	TCFM (µg/L)	Data Flag	DIPE (µg/L)	Data Flag
CHHSLs- Residential			NE		**0.036**		**0.025**		**NE**		**315**		**0.18**		**0.528**		**0.050**		**15.9**		**NE**		**991**		**NE**		**NE**	
CHHSLs- Commercial/Industrial			NE		**0.12**		**378**		**NE**		**879**		**0.6**		**1.77**		**0.167**		**44.4**		**NE**		**2790**		**NE**		**NE**	
MW-3	61	2/23/93	--		**110.4**	d2	**158.4**	d2	**5.4**	d2	**63.1**	d2	**0.9**	d2	ND<0.5	d2	**5.4**	d2	--		ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	--	
		5/20/93	--		**770**	d2	**230**	d2	**250**	d2	**940**	d2	**2.3**	d2	ND<0.3	d2	**31**	d2	--		ND<0.3	d2	ND<0.3	d2	ND<0.6	d2	--	
		9/17/93	--		**6,600**	d2	**15,000**	d2	**680**	d2	**5,500**	d2	**3.7**	d2	ND<1	d2	**12**	d2	--		ND<1	d2	ND<1	d2	ND<1	d2	--	
	121	2/23/93	--		**412.5**	d2	**540.1**	d2	**21.7**	d2	**158.1**	d2	**1.1**	d2	ND<0.5	d2	**6**	d2	--		ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	--	
		5/20/93	--		**830**	d2	**750**	d2	**36**	d2	**420**	d2	**6.9**	d2	**0.7**	d2	**11**	d2	--		ND<0.3	d2	ND<0.3	d2	ND<0.6	d2	--	
		9/17/93	--		**18**	d2	**120**	d2	**8.5**	d2	**110**	d2	**4.1**	d2	**1**	d2	**10**	d2	--		ND<1	d2	ND<1	d2	ND<1	d2	--	
		3/8/04	**3,800**	d2	**2.8**	d2	**15**	d2	**4**	d2	**77**	d2	**110**	d2	**4.8**	d2	ND<0.18	d2	--		--		--		--		--	
	181	2/23/93	--		**310**	d2	**423.8**	d2	**15.2**	d2	**90.3**	d2	**11.7**	d2	ND<0.5	d2	**1.8**	d2	--		ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	--	
		5/20/93	--		**500**	d2	**470**	d2	ND<0.5	d2	**490**	d2	**9 < x <20**	d2	**0.9**	d2	**4.8**	d2	--		ND<0.3	d2	ND<0.3	d2	ND<0.6	d2	--	
		9/17/93	--		**1,000**	d2	**600**	d2	**140**	d2	**1,600**	d2	**15**	d2	**1.7**	d2	**8.4**	d2	--		ND<1	d2	ND<1	d2	ND<1	d2	--	
KVP-1	5	12/20/06	--		ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	**34**	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<0.1	d2	ND<0.1	d2	ND<1.0	d2
	20		--		ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	**100**	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<0.1	d2	ND<0.1	d2	ND<1.0	d2
KVP-2	5	12/20/06	--		ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	**7.1**	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<0.1	d2	ND<0.1	d2	ND<1.0	d2
	20		--		ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	**60**	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<0.1	d2	ND<0.1	d2	ND<1.0	d2
KVP-3	5	12/20/06	--		ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	**1.9**	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<0.1	d2	ND<0.1	d2	ND<1.0	d2
	20		--		ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	**12**	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<0.1	d2	ND<0.1	d2	ND<1.0	d2
KVP-4	5	12/20/06	--		ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	**2.9**	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<0.1	d2	ND<0.1	d2	ND<1.0	d2
	20		--		ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	**10**	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<0.1	d2	ND<0.1	d2	ND<1.0	d2
	20 (DUP)		--		ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	**9.2**	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<0.1	d2	ND<0.1	d2	ND<1.0	d2
KVP-5	5	12/20/06	--		ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	**3**	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<0.1	d2	ND<0.1	d2	ND<1.0	d2
	20		--		ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	**13**	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<0.1	d2	ND<0.1	d2	ND<1.0	d2
KVP-6	5	01/23/07	--		ND<1.0	d2	**0.3J**	d2	ND<1.0	d2	ND<2.0	d2	**0.4J**	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<0.1	d2	ND<0.1	d2	ND<1.0	d2
	20		--		ND<1.0	d2	**0.1J**	d2	ND<1.0	d2	ND<2.0	d2	**8.7**	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<0.1	d2	ND<0.1	d2	ND<1.0	d2
	20 (DUP)		--		ND<1.0	d2	**0.1J**	d2	ND<1.0	d2	ND<2.0	d2	**8.1**	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<0.1	d2	ND<0.1	d2	ND<1.0	d2
MW-9	30	01/23/07	--		ND<1.0	d2	**1.3**	d2	0.6J	d2	**2.3J**	d2	**7.2**	d2	**0.2J**	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<0.1	d2	ND<0.1	d2	ND<1.0	d2
	60	12/19/06	--		**410**	d2	**970**	d2	**21**	d2	**48**	d2	**8.9**	d2	ND<1.0	d2	**11**	d2	ND<1.0	d2	ND<1.0	d2	ND<0.1	d2	ND<0.1	d2	**84**	d2
	60	01/24/07	--		**2,200**	d2	**2,900**	d2	**26**	d2	**21J**	d2	ND<25	d2	ND<1.0	d2	**54**	d2	ND<1.0	d2	ND<1.0	d2	ND<0.1	d2	ND<0.1	d2	**460**	d2
	90	01/23/07	--		**670**	d2	**3,300**	d2	**110**	d2	**165**	d2	**12**	d2	ND<1.0	d2	**30**	d2	ND<1.0	d2	ND<1.0	d2	ND<0.1	d2	ND<0.1	d2	**140**	d2
	120	01/23/07	--		**1,100**	d2	**3,500**	d2	**130**	d2	**165**	d2	**13**	d2	ND<1.0	d2	**80**	d2	ND<1.0	d2	ND<1.0	d2	ND<0.1	d2	ND<0.1	d2	**370**	d2
	150	12/20/06	--		**400**	d2	**790**	d2	**26**	d2	**59**	d2	**6.6J**	d2	ND<1.0	d2	**19**	d2	ND<1.0	d2	ND<1.0	d2	ND<0.1	d2	ND<0.1	d2	**170**	d2
	150	01/24/07	--		**1,100**	d2	**3,200**	d2	**100**	d2	**128J**	d2	**13J**	d2	ND<1.0	d2	**56**	d2	ND<1.0	d2	ND<1.0	d2	ND<0.1	d2	ND<0.1	d2	**350**	d2
	180	01/23/07	--		**1,400**	d2	**3,300**	d2	**100**	d2	**130**	d2	**12**	d2	ND<1.0	d2	**54**	d2	ND<1.0	d2	ND<1.0	d2	ND<0.1	d2	ND<0.1	d2	**370**	d2
MW-10	30	01/24/07	--		ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	**9.9**	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<0.1	d2	ND<0.1	d2	ND<1.0	d2
	180		--		ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	**70**	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<0.1	d2	ND<0.1	d2	**1.2**	d2
	180 (DUP)		--		ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	**74**	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<0.1	d2	ND<0.1	d2	**1.2**	d2

Yellow Highlight indicates concentrations that exceed CHHSLs

Appendix B provides the complete set of analytical data tables.
CHHSLs= California Human Health Screening Levels
d2 = Secondary data
DUP = duplicate
ft bgs = feet below ground surface

NA = Not Analyzed
ND = Not detected above the laboratory detection limit
NE = Not Established
ppmv = parts per million by volume
µg/L= micrograms per liter

1,2-DCA = 1,2-dichloroethane
DIPE = diisopropylether
PCE = tetrachloroethene
1,1,1-TCA = 1,1,1- trichloroethane

TCE = trichloroethene
TCFM = trichlorofluoromethane

Table 2-2
Soil Vapor Analytical Results (Detected Analytes)
LASD Temple Station

Location	Depth (ft bgs)	Sample Date	TPH (ppmv)	Data Flag	Benzene (µg/L)	Data Flag	Toluene (µg/L)	Data Flag	Ethyl-benzene (µg/L)	Data Flag	Total Xylenes (µg/L)	Data Flag	PCE (µg/L)	Data Flag	TCE (µg/L)	Data Flag	1,2-DCA (µg/L)	Data Flag	cis-1,2-DCE (µg/L)	Data Flag	Methylene Chloride (µg/L)	Data Flag	1,1,1-TCA (µg/L)	Data Flag	TCFM (µg/L)	Data Flag	DIPE (µg/L)	Data Flag
CHHSLs- Residential			NE		**0.036**		**0.025**		**NE**		**315**		**0.18**		**0.528**		**0.050**		**15.9**		**NE**		**991**		**NE**		**NE**	
CHHSLs- Commercial/Industrial			NE		**0.12**		**378**		**NE**		**879**		**0.6**		**1.77**		**0.167**		**44.4**		**NE**		**2790**		**NE**		**NE**	
Offsite Sample Locations																												
KVP-8	5	12/19/06	--		ND<1.0	d2	**0.2J**	d2	ND<1.0	d2	ND<2.0	d2	**13**	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<0.1	d2	ND<0.1	d2	ND<1.0	d2
	20		--		ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	**29**	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<0.1	d2	ND<0.1	d2	ND<1.0	d2
	35		--		ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	**30**	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<0.1	d2	ND<0.1	d2	ND<1.0	d2
	50		--		ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	**71**	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<0.1	d2	ND<0.1	d2	ND<1.0	d2
	65		--		ND<1.0	d2	**0.8J**	d2	ND<1.0	d2	ND<2.0	d2	**120**	d2	**0.5J**	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<0.1	d2	ND<0.1	d2	ND<1.0	d2
	65 (DUP)		--		ND<1.0	d2	**0.6J**	d2	ND<1.0	d2	ND<2.0	d2	**120**	d2	**0.4J**	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<0.1	d2	ND<0.1	d2	ND<1.0	d2
KVP-7	5	12/19/06	--		ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	**240**	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<0.1	d2	ND<0.1	d2	ND<1.0	d2
	20		--		ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	**340**	d2	**1.1**	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<0.1	d2	ND<0.1	d2	ND<1.0	d2
	35		--		ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	**570**	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<0.1	d2	ND<0.1	d2	ND<1.0	d2
	50		--		ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	**320**	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<0.1	d2	ND<0.1	d2	ND<1.0	d2
	65		--		ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	**890**	d2	**4.5J**	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<0.1	d2	ND<0.1	d2	ND<1.0	d2
MW-5	30	03/09/07	--		ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	**150**	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<0.1	d2	ND<0.1	d2	ND<1.0	d2
	60		--		ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	**220**	d2	**1.3**	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<0.1	d2	ND<0.1	d2	ND<1.0	d2
	90		--		ND<5.0	d2	ND<5.0	d2	ND<5.0	d2	ND<10.0	d2	**330**	d2	ND<5.0	d2	ND<5.0	d2	ND<5.0	d2	ND<1.0	d2	ND<0.1	d2	ND<0.1	d2	ND<5.0	d2
	120		--		ND<5.0	d2	ND<5.0	d2	ND<5.0	d2	ND<10.0	d2	**250**	d2	**2.1J**	d2	ND<5.0	d2	ND<5.0	d2	ND<1.0	d2	ND<0.1	d2	ND<0.1	d2	ND<5.0	d2
	150		--		ND<5.0	d2	ND<5.0	d2	ND<5.0	d2	ND<10.0	d2	**300**	d2	ND<5.0	d2	ND<5.0	d2	ND<5.0	d2	ND<1.0	d2	ND<0.1	d2	ND<0.1	d2	ND<5.0	d2
	180		--		ND<5.0	d2	ND<5.0	d2	ND<5.0	d2	ND<10.0	d2	**450**	d2	**2.2J**	d2	ND<5.0	d2	ND<5.0	d2	ND<1.0	d2	ND<0.1	d2	ND<0.1	d2	ND<5.0	d2
	180 (DUP)		--		ND<5.0	d2	ND<5.0	d2	ND<5.0	d2	ND<10.0	d2	**400**	d2	ND<5.0	d2	ND<5.0	d2	ND<5.0	d2	ND<1.0	d2	ND<0.1	d2	ND<0.1	d2	ND<5.0	d2
MW-6	60	01/23/07	--		ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	**160**	d2	**0.9J**	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<0.1	d2	ND<0.1	d2	ND<1.0	d2
	90		--		ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	**140**	d2	**0.4J**	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<0.1	d2	ND<0.1	d2	ND<1.0	d2
	120		--		ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	**430**	d2	**6.5**	d2	ND<1.0	d2	**2.2**	d2	ND<1.0	d2	ND<0.1	d2	ND<0.1	d2	ND<1.0	d2
	150		--		ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	**410**	d2	**2.1J**	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<0.1	d2	ND<0.1	d2	ND<1.0	d2
	180		--		ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	**280**	d2	ND<5.0	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<0.1	d2	ND<0.1	d2	ND<1.0	d2
MW-7	30	03/09/07	--		ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	**260**	d2	**0.4J**	d2	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<0.1	d2	ND<0.1	d2	ND<1.0	d2
	60		--		ND<5.0	d2	ND<5.0	d2	ND<5.0	d2	ND<10.0	d2	**340**	d2	ND<5.0	d2	ND<5.0	d2	ND<5.0	d2	ND<1.0	d2	ND<0.1	d2	ND<0.1	d2	ND<5.0	d2
	90		--		ND<5.0	d2	ND<5.0	d2	ND<5.0	d2	ND<10.0	d2	**420**	d2	**2.6J**	d2	ND<5.0	d2	ND<5.0	d2	ND<1.0	d2	ND<0.1	d2	ND<0.1	d2	ND<5.0	d2
	120		--		ND<5.0	d2	ND<5.0	d2	ND<5.0	d2	ND<10.0	d2	**650**	d2	**4.4J**	d2	ND<5.0	d2	ND<5.0	d2	ND<1.0	d2	ND<0.1	d2	ND<0.1	d2	ND<5.0	d2
	150		--		ND<5.0	d2	ND<5.0	d2	ND<5.0	d2	ND<10.0	d2	**450**	d2	**3.2J**	d2	ND<5.0	d2	ND<5.0	d2	ND<1.0	d2	ND<0.1	d2	ND<0.1	d2	ND<5.0	d2
	180		--		ND<5.0	d2	ND<5.0	d2	ND<5.0	d2	ND<10.0	d2	**540**	d2	**4.0J**	d2	ND<5.0	d2	ND<5.0	d2	ND<1.0	d2	ND<0.1	d2	ND<0.1	d2	ND<5.0	d2

Yellow Highlight indicates concentrations that exceed CHHSLs

Appendix B provides the complete set of analytical data tables.
CHHSLs= California Human Health Screening Levels
d2 = Secondary data
DUP = duplicate
ft bgs = feet below ground surface

NA = Not Analyzed
ND = Not detected above the laboratory detection limit
NE = Not Established
ppmv = parts per million by volume
µg/L= micrograms per liter

1,2-DCA = 1,2-dichloroethane
DIPE = diisopropylether
PCE = tetrachloroethene
1,1,1-TCA = 1,1,1- trichloroethane

TCE = trichloroethene
TCFM = trichlorofluoromethane

Table 2-3
Groundwater Analytical Results (Detected Analytes)
LASD Temple Station

Well	Date	TPH (µg/L)	Data Flag	Benzene (µg/L)	Data Flag	Toluene (µg/L)	Data Flag	Ethylbenzene (µg/L)	Data Flag	Total Xylenes (µg/L)	Data Flag	PCE (µg/L)	Data Flag	TCE (µg/L)	Data Flag	1,2-DCA (µg/L)	Data Flag	DIPE (µg/L)	Data Flag	TBA (µg/L)	Data Flag	1,1,1-TCA (µg/L)	Data Flag	Naphthalene (µg/L)	Data Flag
CA DHS MCL or NL		NE		1		150		300		1,750		5		5		0.5		NE		NE		200		17	
EPA MCL		NE		5		1,000		700		10,000		5		5		5		NE		NE		200		NE	
Onsite Wells																									
MW-1	2/24/93	ND<200	d2	2.2	d2	ND<0.5	d2	ND<0.5	d2	ND<1	d2	460	d2	4.6	d2	ND<0.5	d2	--		--		ND<0.5	d2	--	
	6/23/93	180	d2	8.8	d2	ND<0.5	d2	ND<0.5	d2	2.5	d2	390	d2	4.2	d2	0.5	d2	--		--		ND<0.5	d2	--	
	10/12/93	110	d2	ND<10	d2	ND<10	d2	ND<10	d2	ND<10	d2	430	d2	ND<10	d2	ND<10	d2	--		--		ND<10	d2	--	
	1/31/94	120	d2	ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	270	d2	2.6	d2	ND<0.5	d2	--		--		ND<0.5	d2	--	
	4/14/94	150	d2	ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	ND<1	d2	480	d2	ND<0.5	d2	ND<0.5	d2	--		--		ND<0.5	d2	--	
	2/18/04	210	d2	ND<0.5	d2	1.5	d2	ND<1	d2	1.2	d2	950	d2	6.6	d2	ND<0.5	d2	--		--		ND<1	d2	ND<10	d2
	1/22/07	ND<1,600	d2	ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	156	d2	1.5	d2	ND<0.5	d2	ND<1.0	d2	24.7	d2	--		--	
MW-2	2/24/93	200/230	d2	24/32	d2	15/22	d2	ND<0.5/ND<0.5	d2	23/28	d2	50/49	d2	ND<0.5/ND<0.5	d2	17/15	d2	--		--		ND<0.5/ND<0.5	d2	--	
	6/23/93	170/130	d2	29/9.2	d2	5.5/2.2	d2	ND<0.5/ND<0.5	d2	9.1/5.2	d2	82/81	d2	1.3/0.9	d2	7.7/2	d2	--		--		ND<0.5/ND<0.5	d2	--	
	10/12/93	910	d2	440	d2	140	d2	ND<5	d2	176	d2	150	d2	ND<1	d2	64	d2	--		--		ND<5	d2	--	
	1/31/94	260	d2	37	d2	ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	130	d2	ND<0.5	d2	21	d2	--		--		ND<0.5	d2	--	
	4/14/94	240/590	d2	11/74	d2	0.5/2.7	d2	ND<0.5/ND<0.5	d2	1/9.3	d2	120/--	d2	1.6/--	d2	15/--	d2	--		--		ND<0.5/ND<0.5	d2	--	
	2/18/04	7,700	d2	790	d2	1,900	d2	270	d2	2,080	d2	370	d2	3.5	d2	110	d2	--		--		ND<1	d2	24	d2
	1/22/07	ND<1,600	d2	ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	14.2	d2	ND<0.5	d2	ND<0.5	d2	ND<1.0	d2	44	d2	--		--	
MW-3	2/24/93	300	d2	49	d2	10	d2	ND<0.5	d2	25	d2	240	d2	2.4	d2	24	d2	--		--		ND<0.5	d2	--	
	6/23/93	340	d2	26	d2	8.6	d2	ND<0.5	d2	22.2	d2	320	d2	3.2	d2	9.8	d2	--		--		ND<0.5	d2	--	
	10/12/93	340/220	d2	17/26	d2	10/15	d2	ND<10/ND<10	d2	20/37	d2	370/400	d2	ND<10/ND<10	d2	19/28	d2	--		--		ND<10/ND<10	d2	--	
	1/31/94	100	d2	ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	120	d2	1.5	d2	4	d2	--		--		0.9	d2	--	
	4/14/94	770	d2	100	d2	2.8	d2	ND<0.5	d2	1.7	d2	470	d2	6.8	d2	30	d2	--		--		ND<0.5	d2	--	
	2/18/04	310	d2	0.55	d2	ND<1	d2	ND<1	d2	ND<1	d2	940	d2	13	d2	20	d2	--		--		ND<1	d2	ND<10	d2
	1/22/07	ND<1,600	d2	ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	338.8	d2	13.2	d2	2.1	d2	24.1	d2	15.2	d2	--		--	
MW-9	01/22/07	ND<1,600	d2	ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	20	d2	0.9	d2	ND<0.5	d2	1.7	d2	ND<10.0	d2	--		--	
MW-10	01/25/07	ND<1,600	d2	ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	100.0	d2	2.0	d2	ND<0.5	d2	41.8	d2	16.5	d2	--		--	
MW-11	01/22/07	ND<1,600	d2	ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	1.0	d2	21	d2	1.4	d2	1.7	d2	18.5	d2	ND<10.0	d2	--		--	
MW-12	01/29/07	ND<1,600	d2	ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	1.8	d2	ND<0.5	d2	ND<0.5	d2	ND<1.0	d2	47.1	d2	--		--	
Offsite Wells																									
MW-4	01/25/07	ND<1,600	d2	ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	24.7	d2	ND<0.5	d2	ND<0.5	d2	ND<1.0	d2	20.9	d2	--		--	
MW-5	03/13/07	ND<1,600	d2	ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	19.4	d2	ND<0.5	d2	--		NA	d2	NA	d2	--		--	
MW-6	01/29/07	ND<1,600	d2	ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	380.2	d2	4.3	d2	ND<0.5	d2	ND<1.0	d2	22.5	d2	--		--	
MW-7	03/13/07	ND<1,600	d2	ND<5.0	d2	ND<5.0	d2	ND<5.0	d2	ND<5.0	d2	639.5	d2	4.0	d2	--		NA	d2	NA	d2	--		--	

Contaminant concentration exceeds corresponding MCL
Duplicate sampling results separated by forward slash.
-- = Not applicable (not analyzed or no MCL exists).
CA DHS = California Department of Health Services
d2 = Secondary data
NL = notification level
MCL = Maximum Contaminant Level
µg/L = micrograms per liter

1,2-DCA = 1,2-dichloroethane
DIPE = Diisopropylether
PCE = tetrachloroethene
TBA = Tertiary Butyl Alcohol
1,1,1-TCA = 1,1,1- trichloroethane
TCE = trichloroethene
TPH = total petroleum hydrocarbons

Table 2-4
Summary of Risk Evaluation for Soil Vapor
LASD Temple Station

Cancer Risks (2007)		
	Shallow	**Deep**
Commercia/Industrial Land Use	6E-05	2E-04
Residential Land Use	2E-04	6E-04
Noncancer Chronic Hazards (2007)		
	Shallow	**Deep**
Commercia/Industrial Land Use	0.001	0.006
Residential Land Use	0.002	0.02

Notes:
Shallow samples were collected at 5 ft bgs
Deep samples were collected between 5 and 40 ft bgs

Table 2-5
Maximum Soil Vapor Concentrations
LASD Temple Station

Contaminant	CHHSL			2004 Deep = > 5 feet bgs			2007 Shallow = 5 feet bgs			2007 Deep = >5 feet bgs		
	Residential ($\mu g/m^3$)	Commercial/ Industrial ($\mu g/m^3$)	Basis	Sample ID	Depth (feet)	Maximum Soil Vapor Concentration $\mu g/m^3$	Sample ID	Depth (feet)	Maximum Soil Vapor Concentration $\mu g/m^3$	Sample ID	Depth (feet)	Maximum Soil Vapor Concentration $\mu g/m^3$
Benzene	36	122	ca	BH-11-40	40	2,700,000	--	--	NA	--	--	< 1,000
Tetrachloroethene	180	603	ca	BH-11-40	40	41,000	VP1-5	5	34,000	KVP1-20	20	100,000
Trichloroethene	528	1,770	ca	BH-10-40	40	< 29,000	--	--	NA	MW9VP-30	30	200
Toluene	135,000	378,000	nc	BH-11-40	40	9,400,000	VP6-5	5	300	MW9VP-30	30	1,300
Ethylbenzene	NA	NA	nc	BH-11-40	40	1,000,000	--	--	NA	MW9VP-30	30	600
Xylenes (total)	315,000	879,000	nc	BH-10-40	40	7,500,000	--	--	NA	MW9VP-30	30	2,300
1,2-Dichloroethane	50	167	ca	BH-10-40	40	< 35,000	--	--	NA	--	--	< 1,000

Notes:
bgs = below ground surface
ca = cancer
CHHSL = California Human Health Screening Levels (Vapor Intrusion) (Cal/EPA,2005)
NA = Not applicable; value not available
nc = noncancer
µg/m3 = micrograms per cubic meter
2007 and 2004 data were not collected during the same season/time.
2004 and 2007 Deep samples were collected between 5 and 40 ft bgs.
2007 Shallow soil vapor samples were collected at 5 feet bgs.

Table 2-6
Risk Evaluation for Soil Vapor - Residential Land Use (2007 Data)
LASD Temple Station

Soil Vapor Contaminant	Basis	Shallow = 5 feet bgs[a]					Deep = > 5 to 40 feet bgs[a]				
		Maximum Soil Vapor Concentration ($\mu g/m^3$)	CHHSL (cancer)[b]	Excess Lifetime Cancer Risk	CHHSL (noncancer)[b]	Noncancer Hazard Quotient	Maximum Soil Vapor Concentration ($\mu g/m^3$)	CHHSL (cancer)[b]	Excess Lifetime Cancer Risk	CHHSL (noncancer)[b]	Noncancer Hazard Quotient
Benzene	ca	--	36.2	--	NA	--	< 1,000	36.2	1.4E-05	NA	--
Tetrachloroethene	ca	34,000	180	1.9E-04	NA	--	100,000	180	5.6E-04	NA	--
Trichloroethene	ca	--	528	--	NA	--	200	528	3.8E-07	NA	--
1,2-Dichloroethane	ca	--	49.6	--	NA	--	< 1,000	49.6	1.0E-05	NA	--
Toluene	nc	300	NA	--	135,000	0.0022	1,300	NA	--	135,000	9.6E-03
Ethylbenzene	nc	--	NA	--	NA	--	600	NA	--	NA	--
Xylenes (total)	nc	--	NA	--	315,000	--	2,300	NA	--	315,000	7.3E-03
Cumulative Risk & Hazard Index				**1.9E-04**		**0.002**			**5.8E-04**		**0.02**

Notes:

(a) Shallow soil vapor samples were collected at 5 feet bgs. Deep soil vapor samples were collected between 5 and 40 feet bgs.

(b) CHHSL = California Human Health Screening Levels (Vapor Intrusion) (Cal/EPA,2005)

$\mu g/m^3$ = micrograms per cubic meter

ca = cancer

nc = noncancer

NA = Value not available

"<" Indicates sample result was below the detection limit (data gap for contaminants including benzene and 1,2-dichloroethane). For these samples, risk and hazard calculations were performed using 1/2 of the detection limit presented.

Table 2-7
Risk Evaluation for Soil Vapor - Commercial Industrial Land Use (2007 Data)
LASD Temple Station

Soil Vapor Contaminant	Basis	Shallow = 5 feet bgs[a]					Deep = >5 to 40 feet bgs[a]				
		Maximum Soil Vapor Concentration ($\mu g/m^3$)	CHHSL (cancer)[b]	Excess Lifetime Cancer Risk	CHHSL (noncancer)[b]	Noncancer Hazard Quotient	Maximum Soil Vapor Concentration ($\mu g/m^3$)	CHHSL (cancer)[b]	Excess Lifetime Cancer Risk	CHHSL (noncancer)[b]	Noncancer Hazard Quotient
Benzene	ca	--	122	--	NA	--	< 1,000	122	4.1E-06	NA	--
Tetrachloroethene	ca	34,000	603	5.6E-05	NA	--	100,000	603	1.7E-04	NA	--
Trichloroethene	ca	--	1770	--	NA	--	200	1770	1.1E-07	NA	--
1,2-Dichloroethane	ca	--	167	--	NA	--	< 1,000	167	3.0E-06	NA	--
Toluene	nc	300	NA	--	378,000	0.0008	1,300	NA	--	378,000	3.4E-03
Ethylbenzene	nc	--	NA	--	NA	--	600	NA	--	NA	--
Xylenes (total)	nc	--	NA	--	879,000	--	2,300	NA	--	879,000	2.6E-03
Cumulative Risk & Hazard Index				**5.6E-05**		**0.001**			**1.7E-04**		**0.006**

Notes:

(a) Shallow soil vapor samples were collected at 5 feet bgs. Deep soil vapor samples were collected between 5 and 40 feet bgs.

(b) CHHSL = California Human Health Screening Levels (Vapor Intrusion) (Cal/EPA,2005)

$\mu g/m^3$ = micrograms per cubic meter

ca = cancer

nc = noncancer

NA = Value not available

"<" Indicates sample result was below the detection limit (data gap for contaminants including benzene and 1,2-dichloroethane). For these samples, risk and hazard calculations were performed using 1/2 of the detection limit presented.

Table 3-1
Site Conceptual Model
LASD Temple Station

Matrix	Boring Locations	Nature of Matrix	Contaminants of Concern (Contaminants Exceeding Action Levels - PRGs, CHHSLs, or MCLs)	Distribution of Contaminants of Concern	Location of Suspected Contaminant Source	Contamination Migration/Flow Direction	Human Health Risks
Soil	**Onsite Borings**	Predominantly silt with sand layers	TPH, benzene, toluene, total xylenes, 1,2-dichloroethane, PCE	MW-9 and MW-12 are located at the central part of the site near former underground storage tanks; exceedances occur in the silt layer.	TPH, benzene, toluene, and total xylenes and 1,2-dichloroethane are related to the former underground storage tanks. Source locations of PCE and other detected chlorinated solvents have not been identified, but appear to be at the vicinities of former underground storage tanks.	Undetermined. Extent of source is unknown at this time. Large vadose zone exists and groundwater levels have not changed significantly.	Not Calculated
	Offsite Borings	Predominantly silt with sand layers	PCE	MW-5 and MW-7	PCE is likely related to an undefined source northeast of Temple Station.	Undetermined. Extent of source is unknown at this time. Large vadose zone exists and groundwater levels have not changed significantly.	Not Calculated
Soil Vapor	**Onsite Vapor probes**	Predominantly sand with silt layers	Benzene, toluene, total xylenes, 1,2-dichloroethane, PCE, TCE	MW-9 and KVP-6 are located at the vicinity of former underground storage tanks.	TPH, benzene, toluene, and total xylenes and 1,2-dichloroethane are related to the former underground storage tanks. Source locations of PCE and other detected chlorinated solvents have not been identified, but appear to be at the vicinities of former underground storage tanks.	PCE, benzene, toluene, and total xylenes in soil vapor generally increases with depth.	Shallow (5 ft bgs) 2E-04 and 6E-05 Deep (5-40 ft bgs) 6E-04 and 2E-04
	Offsite Vapor probes	Predominantly sand with silt layers	Toluene, PCE, TCE	KVP-7, KVP-8, MW-5, MW-6, and MW-7 are located north of site.	PCE , and TCE are likely related to undefined source northeast of Temple Station. Source of toluene is unknown.	PCE in soil vapor generally increases with depth. TCE in soil vapor exhibits higher concentrations in sand.	Not Calculated
Groundwater	**Onsite Groundwater monitoring wells**	Depth to groundwater varies between approximately 195 to 213 ft bgs	Total xylenes, PCE, TCE, 1,2-dichloroethane	MW-3 and MW-11 located at the central and southern part of site.	PCE and TCE are likely related to an undefined source northeast of Temple Station, but contribution of onsite soil and soil vapor concentrations unknown.	Likely in the direction of groundwater flow and also probable downward migration. Groundwater generally flows in the southwest direction.	Not Calculated
	Offsite Groundwater monitoring wells	Depth to groundwater varies between approximately 195 to 213 ft bgs	PCE, TCE	MW-4, MW-5, MW-6, and MW-7 are located to north and northwest of site.	PCE is likely related to an undefined source northeast of Temple Station and may also be from the vertical migration of PCE from onsite soil to groundwater.	Likely in the direction of groundwater flow and also probable downward migration. Groundwater generally flows in the southwest direction.	Not Calculated

Notes:
CHHSLs = California Human Health Screening Levels
ft bgs = Feet below ground surface
MCL = Maximum Contaminant Level
PRG = Preliminary Remediation Goal
µg/L = Micrograms per liter
PCE = Tetrachlorothene
TCE = Trichloroethene
TPH - Total Petroleum Hydrocarbons

Table 3-2
Identified Data Gaps
LASD Temple Station

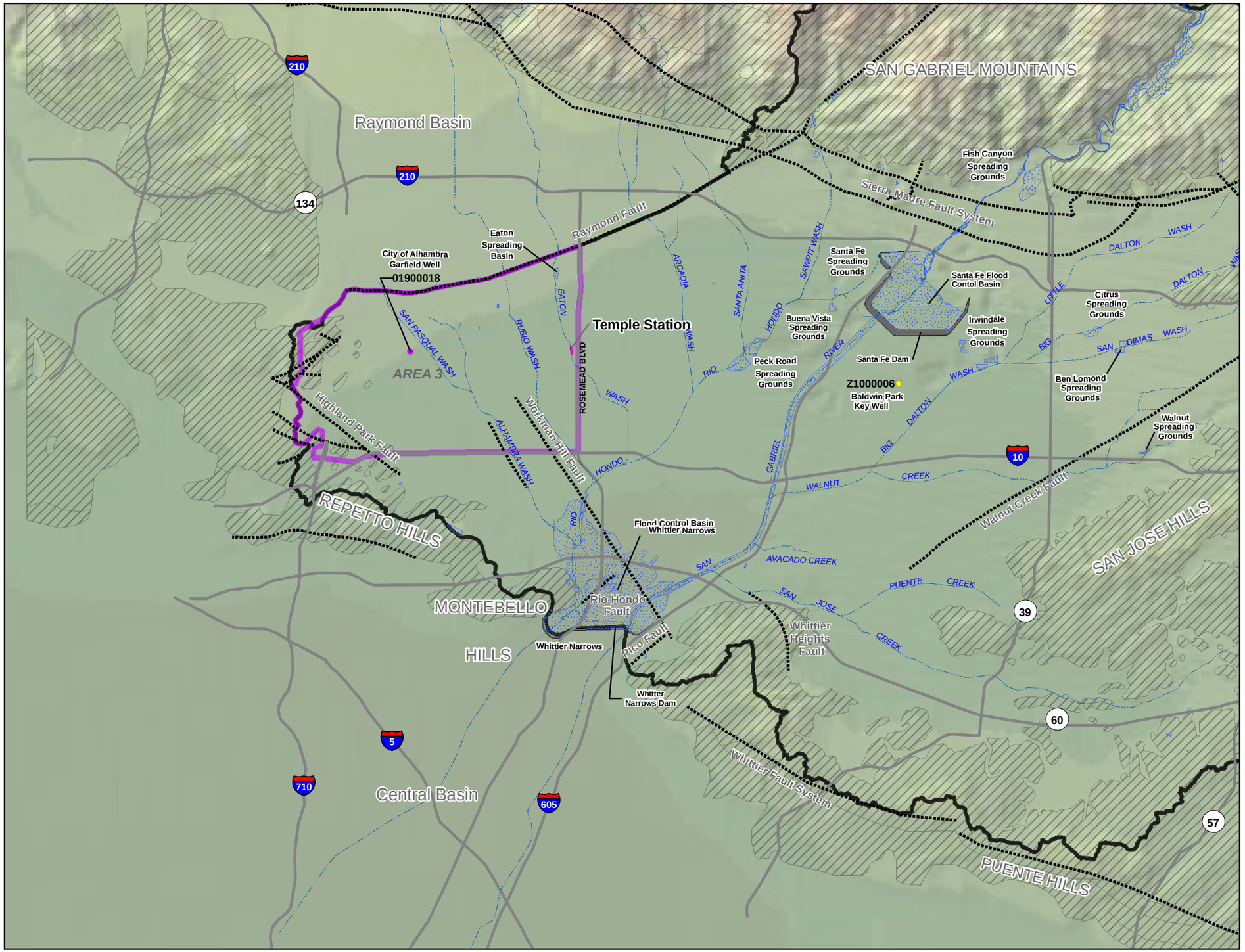
	Soil	Soil Vapor	Groundwater
Known	– Soil samples collected during the installation of soil borings and groundwater wells in the 1990s indicated that site is impacted with TPH, BTEX, PCE, and 1,2-DCA; Contaminants are located in the former USTs excavation. – Soil samples collected during the installation of eight new groundwater monitoring wells installed in 2006/2007 (4 onsite and 4 offsite) indicated that site is impacted with BTEX, PCE, 1,2-DBE, DIPE, and 1,2-DCA; BTEX and DIPE can be attributed to former leaking USTs.	– Eighteen soil vapor monitoring locations installed in the 1990s show high levels of TPH, PCE and benzene. – Thirteen soil vapor monitoring locations installed in 2006/2007 show high levels of PCE.	– PCE concentrations in MW-1, MW-2, and MW-3 increased from 1994 to 2004. – PCE concentrations in MW-1, MW-2, and MW-3 decreased from 2004 to 2007. – Eight new groundwater monitoring wells (4 onsite and 4 offsite) indicated 1,2-DCA, PCE and TCE impacts to groundwater. PCE concentrations are above MCLs, except in MW-12 (the deep onsite well).
Unknowns/ Uncertainties	– Source of PCE onsite and offsite contamination in soil. – Horizontal distribution and extent of TPH and VOC contamination. – Vertical distribution and extent of TPH and VOC contamination.	– Source of PCE onsite and offsite contamination in soil vapor. -- Current TPH levels in soil vapor. – Horizontal distribution and extent of TPH and VOC contamination. – Vertical distribution and extent of TPH and VOC contamination. – Indoor Air Quality.	– Source, nature and extent of PCE contamination in groundwater. What contribution have the soil and soil vapor concentrations made to the groundwater contamination beneath the Site? – Horizontal distribution and extent of TPH and VOC contamination. – Vertical distribution and extent of TPH and VOC contamination.
What data are needed?	– Analytical data for assessing lateral and vertical distribution and extent of contamination, specifically at the vicinity of former USTs, existing clarifiers, and to the immediate west and north of existing buildings. – Analytical data with detection limits related to regulatory levels. – Evaluate reporting limits and detection limits so that data comparison can be completed.	– Indoor Air Quality data collected for VOC analysis to assess human health risk due to indoor vapor migration, if any. – Additional analytical data and monitoring points for assessing lateral and vertical distribution and extent of contamination, specifically at the vicinity of former USTs and to the to the immediate west and north of existing buildings. – Deeper soil vapor samples within the Site boundary. – Soil vapor locations to the west and south of the Site. – Soil vapor samples from the vicinity of existing onsite clarifiers. – Analytical data with detection limits related to regulatory levels. – Evaluate reporting limits and detection limits so that data comparison can be completed.	– Data from upgradient and downgradient monitoring wells. – Evaluate reporting limits and detection limits so that data comparison can be completed.
Rationale for Data Collection	– Vertical and horizontal extent of TPH and BTEX contamination incompletely characterized at the vicinity of former USTs.	– Vertical and horizontal extent of VOC soil vapor contamination have not been have not been fully characterized at the vicinity of former USTs. – Soil vapor data is unavailable for depths below 20 feet within the Site, except for two locations (MW-9 and MW-10). This data will help in determining whether there could be a potential migration of soil vapor inside the buildings. – Vertical and horizontal extent of VOC soil vapor contamination incompletely characterized to the west and south of the Site. – No investigations have been conducted at the vicinity of existing clarifiers.	– Assess the horizontal and vertical distribution and extent of contamination.

Notes:

MCLs = maximum contaminant levels
SVE = soil vapor extraction
UST = underground storage tank
VOCs = volatile organic compounds

BTEX = benzene, toluene, ethylbenzene, and total xylenes
1,2-DBE = 1,2-dibromoethene
1,2-DCA = 1,2-dichloroethane
DIPE = diisopropylether
PCE = tetrachloroethene
TPH = total petroleum hydrocarbons

Figures



Legend

- 01900018 City of Alhambra Garfield Well
- Z1000006 Baldwin Park Key Well
- Major Street
- Stream
- Fault
- Temple Station
- Dam
- Basin Boundary
- Area 3 Site
- Spreading Ground
- Bedrock

N

0 1 2 4

Miles

Figure 1-1
Location of Temple Station within Area 3 and San Gabriel Basin Surfacewater and Geologic Features
LASD Temple Station

\\galt\GIS2\EPAF\ALOU\2007\MapFiles\ALOU_LASD_GeologicFeat.mxd

0 .25 .5 .75 1.0

Scale = Miles

FIGURE 2-1
Site Vicinity Map, Temple Station
LASD Temple Station

CH2MHILL

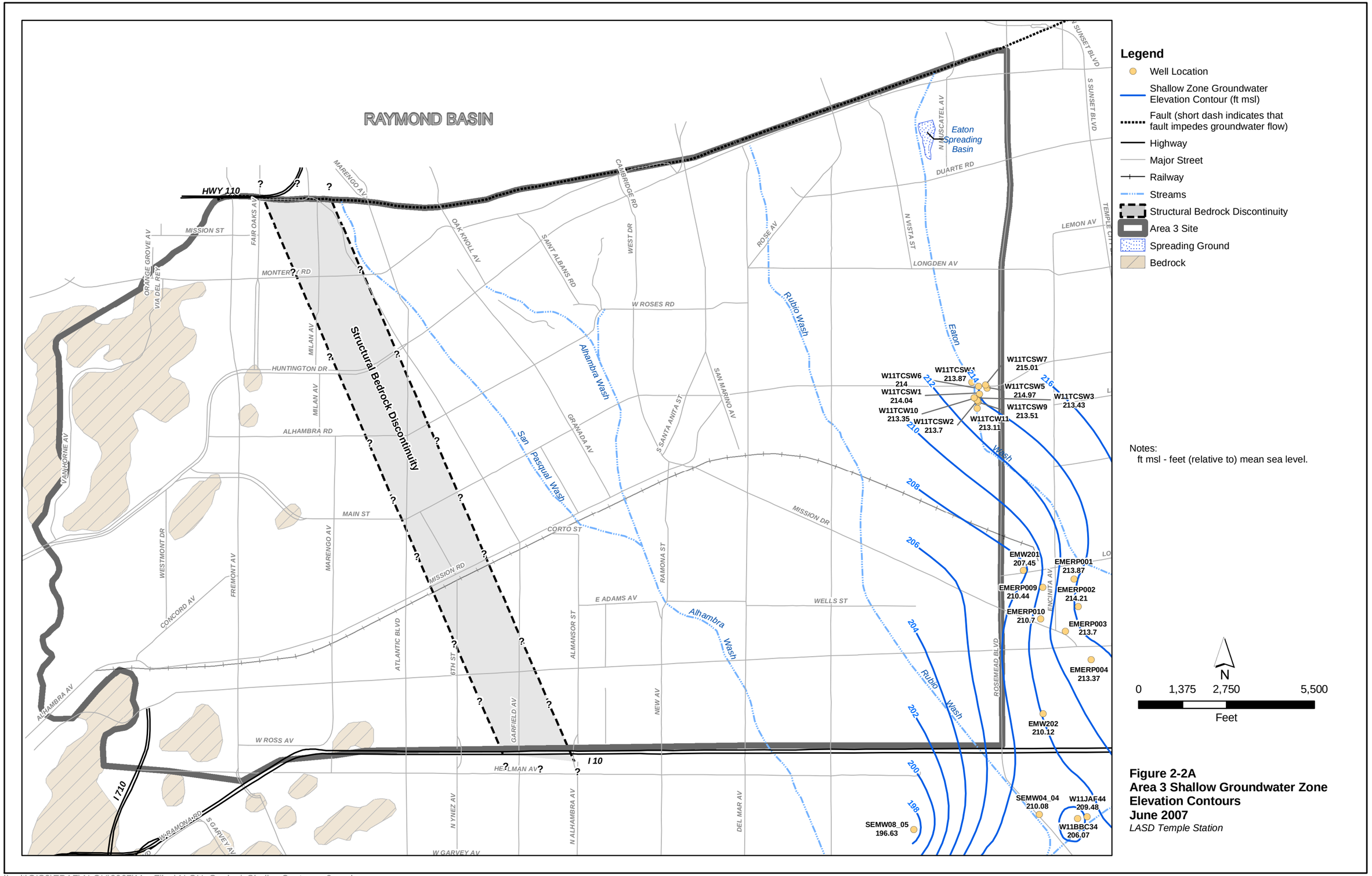


Figure 2-2A
Area 3 Shallow Groundwater Zone Elevation Contours
June 2007
LASD Temple Station

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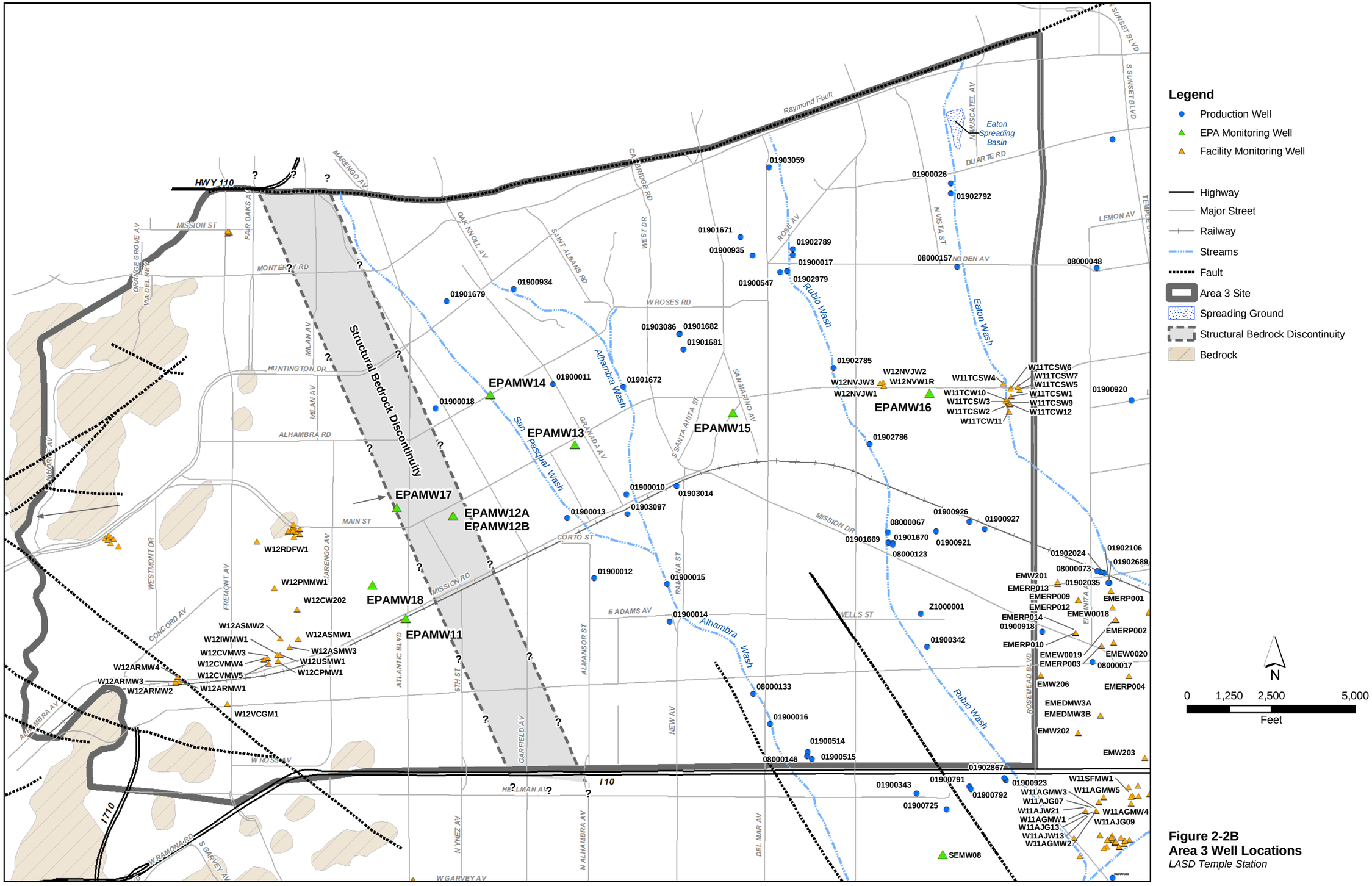

Figure 2-2B
Area 3 Well Locations
LASD Temple Station

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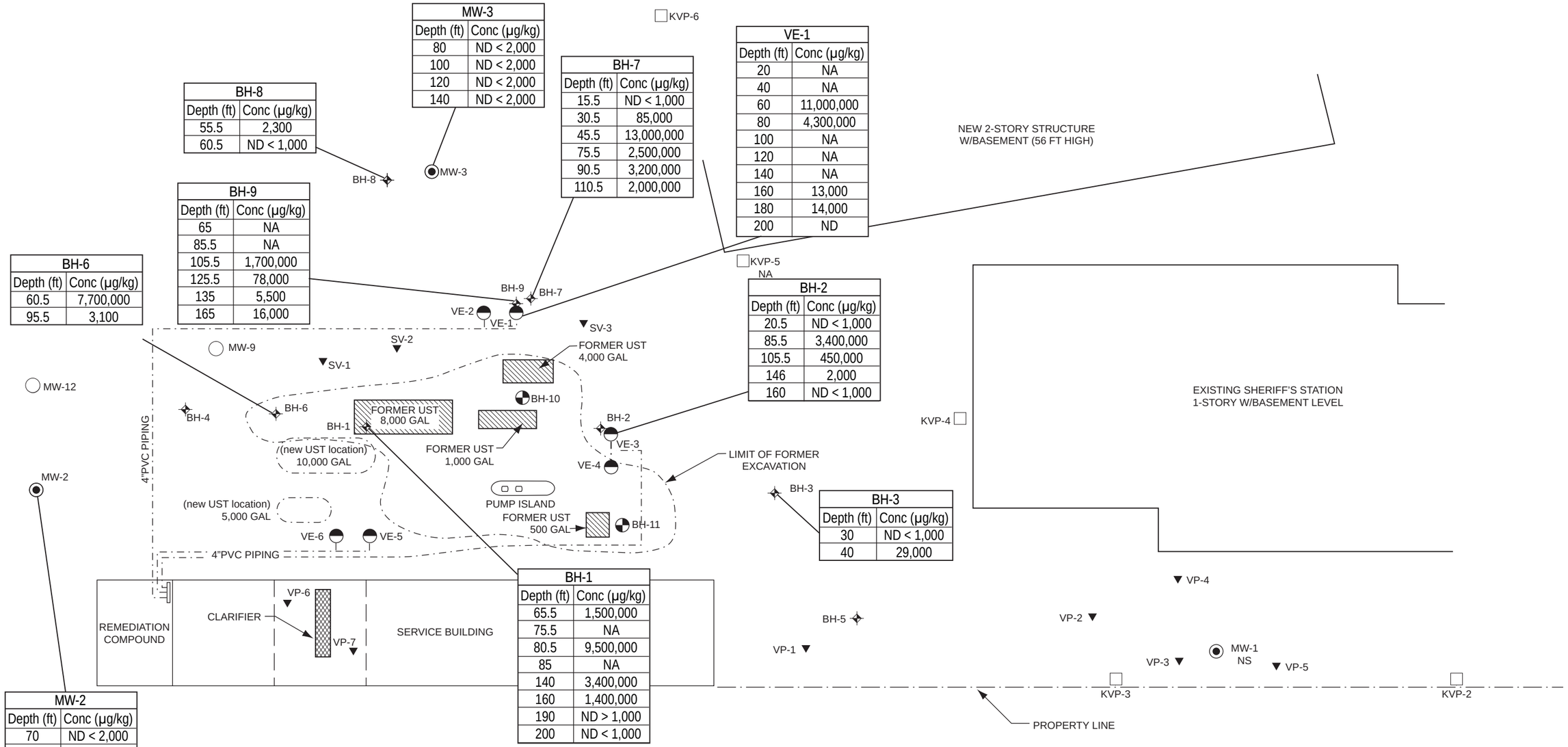


MW-3	
Depth (ft)	Conc (µg/kg)
80	ND < 2,000
100	ND < 2,000
120	ND < 2,000
140	ND < 2,000

BH-8	
Depth (ft)	Conc (µg/kg)
55.5	2,300
60.5	ND < 1,000

BH-7	
Depth (ft)	Conc (µg/kg)
15.5	ND < 1,000
30.5	85,000
45.5	13,000,000
75.5	2,500,000
90.5	3,200,000
110.5	2,000,000

VE-1	
Depth (ft)	Conc (µg/kg)
20	NA
40	NA
60	11,000,000
80	4,300,000
100	NA
120	NA
140	NA
160	13,000
180	14,000
200	ND

BH-9	
Depth (ft)	Conc (µg/kg)
65	NA
85.5	NA
105.5	1,700,000
125.5	78,000
135	5,500
165	16,000

BH-6	
Depth (ft)	Conc (µg/kg)
60.5	7,700,000
95.5	3,100

BH-2	
Depth (ft)	Conc (µg/kg)
20.5	ND < 1,000
85.5	3,400,000
105.5	450,000
146	2,000
160	ND < 1,000

BH-3	
Depth (ft)	Conc (µg/kg)
30	ND < 1,000
40	29,000

BH-1	
Depth (ft)	Conc (µg/kg)
65.5	1,500,000
75.5	NA
80.5	9,500,000
85	NA
140	3,400,000
160	1,400,000
190	ND > 1,000
200	ND < 1,000

MW-2	
Depth (ft)	Conc (µg/kg)
70	ND < 2,000
90	ND < 2,000
110	ND < 2,000
135	2,300

LEGEND

- Soil Boring (Schaffer Dixon)
- Soil Boring (Fugro-McClelland)
- Vapor Extraction Well (Fugro-McClelland)
- Groundwater Monitoring Well (Fugro-McClelland)
- Shallow Soil Vapor Probe (Fugro-McClelland)
- Shallow Soil Vapor Probe (Kleinfelder)
- Groundwater Monitoring Well (Kleinfelder)

Notes:

UST = Underground storage tank
TPH = Total Petroleum Hydrocarbons
µg/kg = Micrograms per kilogram
ND = Nondetect
> = Greater than
NA = Not Analyzed

NORTH

0 10 20
FEET

REFERENCE: Modified from Schaefer Dixon Associates, Inc., 1992

FIGURE 2-3
TPH Concentrations in Soil (1991-1994)
LASD Temple Station

CH2MHILL

VE-1	
Depth (ft)	Conc (µg/kg)
20	NA
40	NA
60	120,000
80	NA
100	NA
120	34,000
140	NA
160	ND
180	250
200	ND

BH-8	
Depth (ft)	Conc (µg/kg)
33.5	NA
55.5	200
60.5	110

MW-3	
Depth (ft)	Conc (µg/kg)
80	ND < 5
100	19
120	ND < 5
140	68,000

BH-9	
Depth (ft)	Conc (µg/kg)
65	170
85.5	NA
105.5	22,000
125.5	NA
135	170
165	NA

BH-7	
Depth (ft)	Conc (µg/kg)
15.5	NA
30.5	NA
45.5	NA
75.5	NA
90.5	NA
110.5	41,000

BH-1	
Depth (ft)	Conc (µg/kg)
65.5	NA
75.5	NA
80.5	110,000

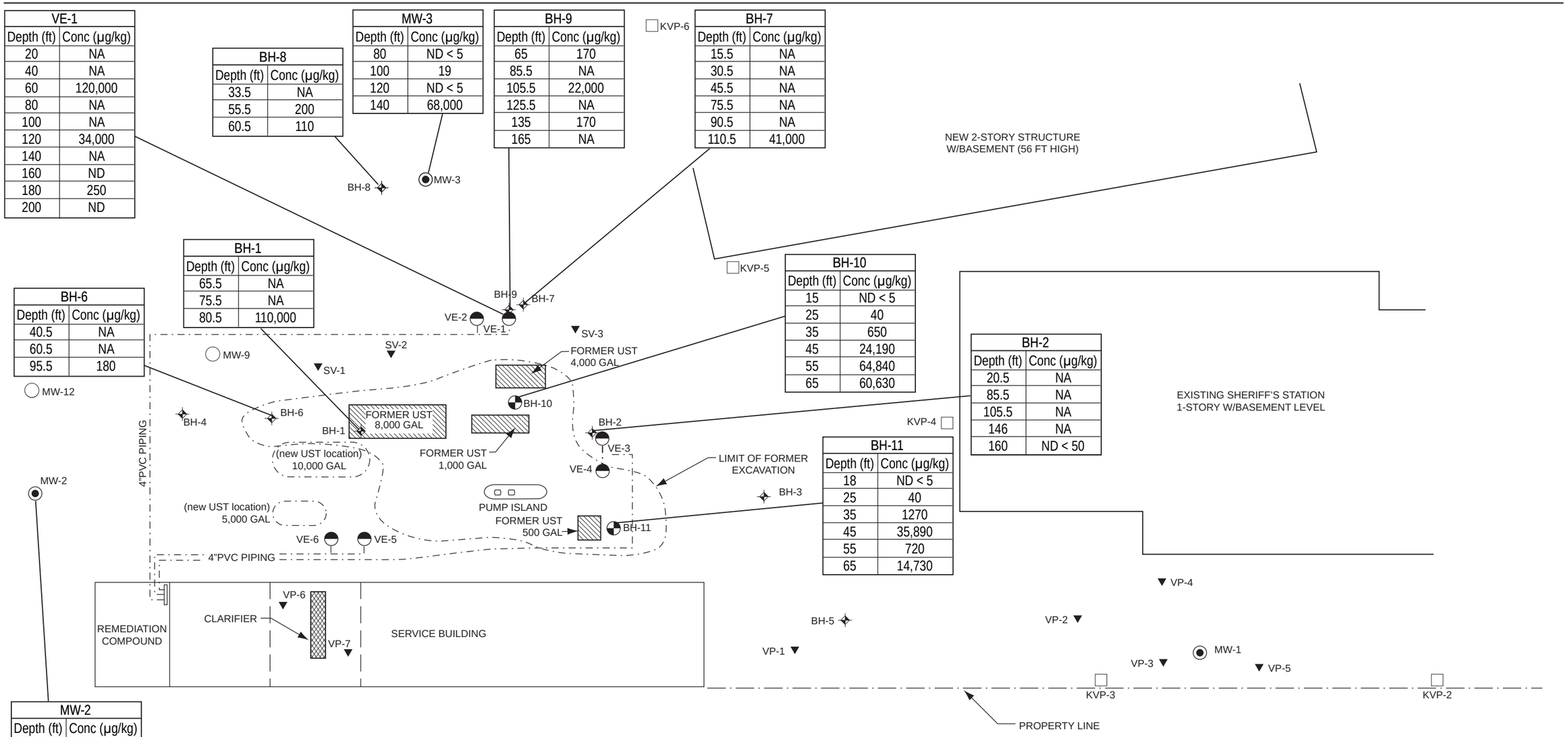
BH-6	
Depth (ft)	Conc (µg/kg)
40.5	NA
60.5	NA
95.5	180

BH-10	
Depth (ft)	Conc (µg/kg)
15	ND < 5
25	40
35	650
45	24,190
55	64,840
65	60,630

BH-2	
Depth (ft)	Conc (µg/kg)
20.5	NA
85.5	NA
105.5	NA
146	NA
160	ND < 50

BH-11	
Depth (ft)	Conc (µg/kg)
18	ND < 5
25	40
35	1270
45	35,890
55	720
65	14,730

MW-2	
Depth (ft)	Conc (µg/kg)
70	ND < 5
90	ND < 5
110	19
135	230



LEGEND

- Soil Boring (Schaffer Dixon)
- Soil Boring (Fugro-McClelland)
- Vapor Extraction Well (Fugro-McClelland)
- Groundwater Monitoring Well (Fugro-McClelland)
- Shallow Soil Vapor Probe (Fugro-McClelland)
- Shallow Soil Vapor Probe (Kleinfelder)
- Groundwater Monitoring Well (Kleinfelder)

Notes:

UST = Underground storage tank
µg/kg = Micrograms per kilogram
ND = Nondetect
NA = Not analyzed

NORTH

0 10 20
FEET

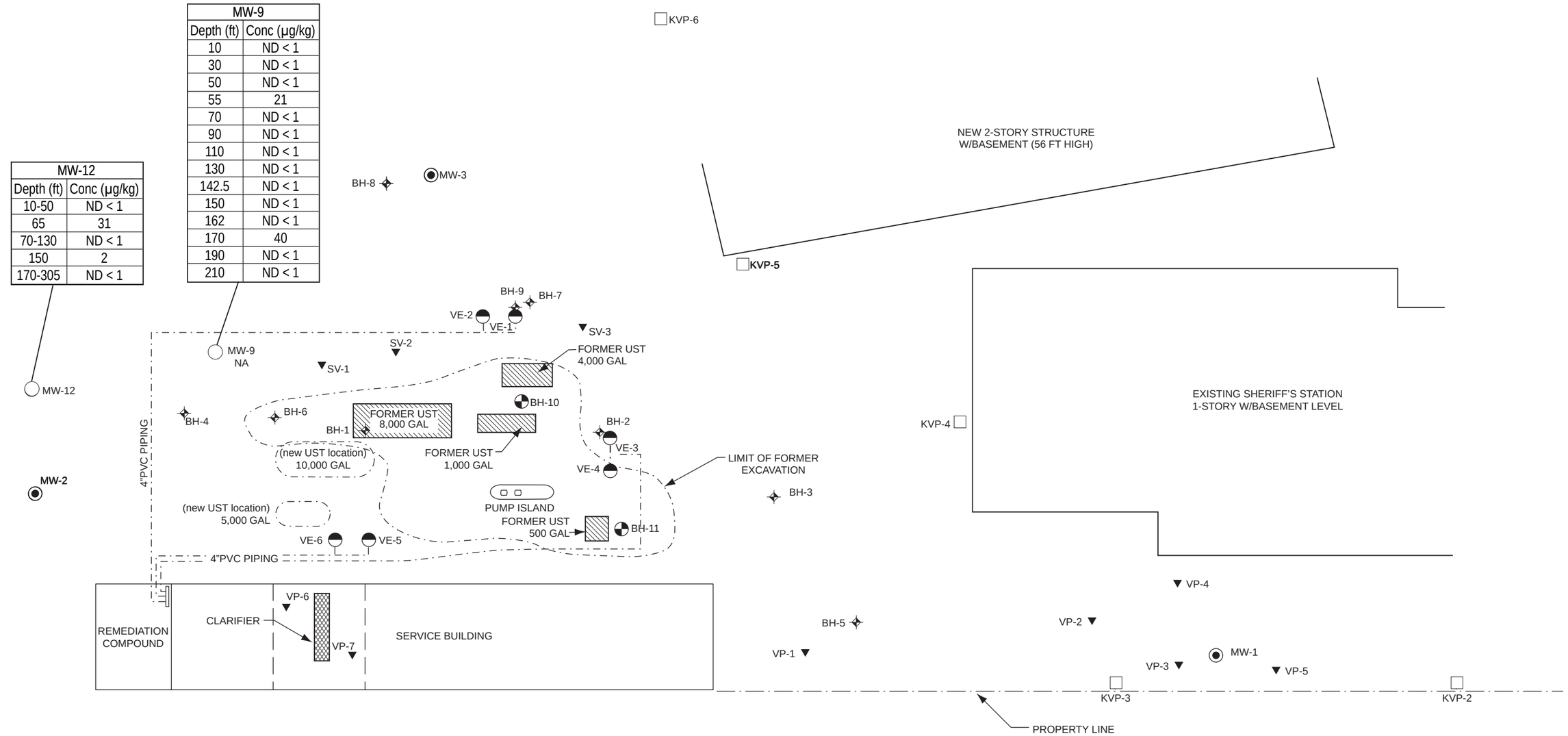
REFERENCE: Modified from Schaefer Dixon Associates, Inc., 1992

FIGURE 2-4
Benzene Concentrations in Soil (1991-1994)
LASD Temple Station

CH2MHILL

MW-9	
Depth (ft)	Conc (µg/kg)
10	ND < 1
30	ND < 1
50	ND < 1
55	21
70	ND < 1
90	ND < 1
110	ND < 1
130	ND < 1
142.5	ND < 1
150	ND < 1
162	ND < 1
170	40
190	ND < 1
210	ND < 1

MW-12	
Depth (ft)	Conc (µg/kg)
10-50	ND < 1
65	31
70-130	ND < 1
150	2
170-305	ND < 1



LEGEND

- Soil Boring (Schaffer Dixon)
- Soil Boring (Fugro-McClelland)
- Vapor Extraction Well (Fugro-McClelland)
- Groundwater Monitoring Well (Fugro-McClelland)
- Shallow Soil Vapor Probe (Fugro-McClelland)
- Shallow Soil Vapor Probe (Kleinfelder)
- Groundwater Monitoring Well (Kleinfelder)

Notes:

UST = Underground storage tank
µg/kg = Micrograms per kilograms
ND = Nondetect

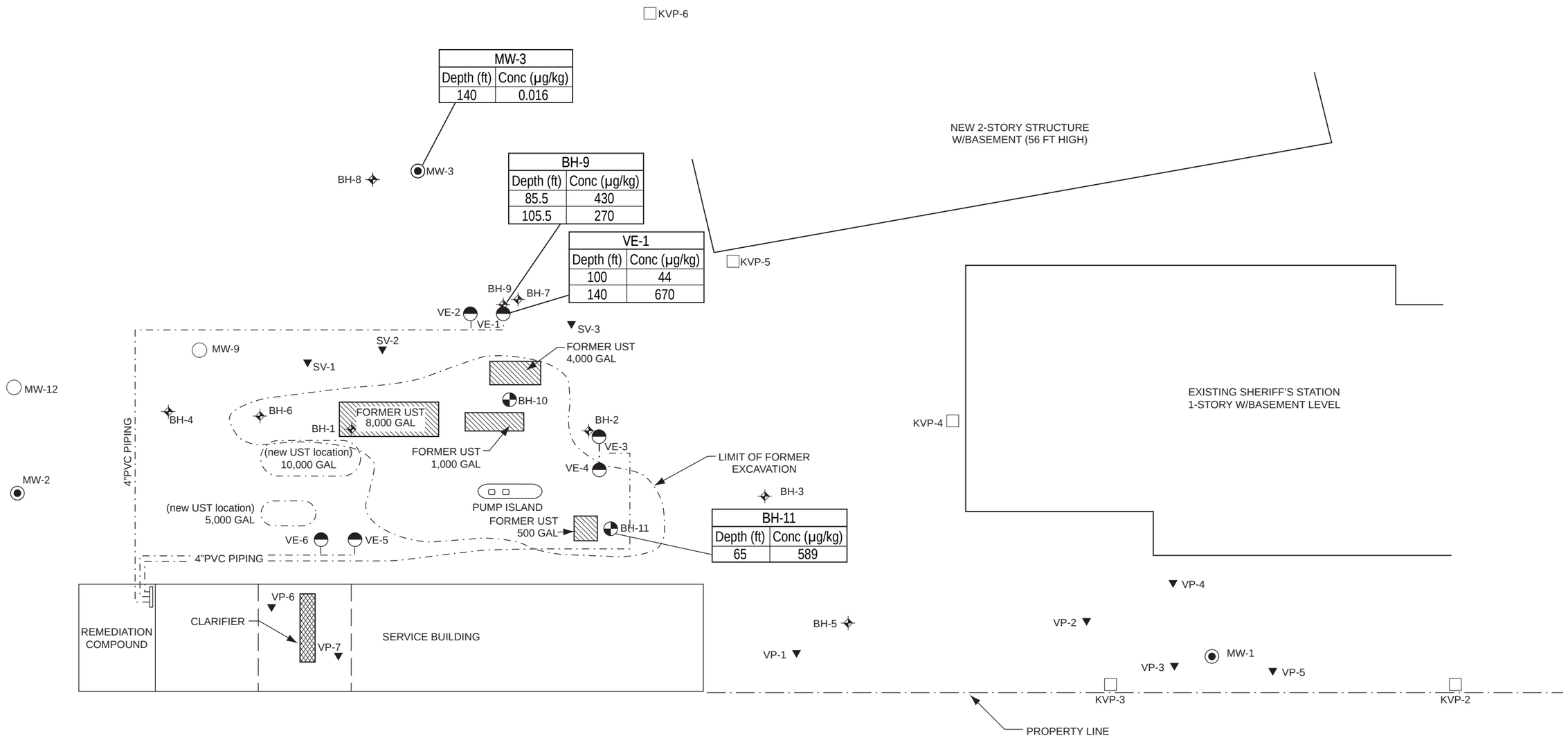
NORTH

0 10 20
FEET

REFERENCE: Modified from Schaefer Dixon Associates, Inc., 1992

FIGURE 2-5
Benzene Concentrations in Soil (2004-2007)
LASD Temple Station

CH2MHILL



LEGEND

- Soil Boring (Schaffer Dixon)
- Soil Boring (Fugro-McClelland)
- Vapor Extraction Well (Fugro-McClelland)
- Groundwater Monitoring Well (Fugro-McClelland)
- Shallow Soil Vapor Probe (Fugro-McClelland)
- Shallow Soil Vapor Probe (Kleinfelder)
- Groundwater Monitoring Well (Kleinfelder)

Notes:

PCE = Tetrachloroethene
UST = Underground storage tank
µg/kg = Micrograms per kilogram
ND = Nondetect

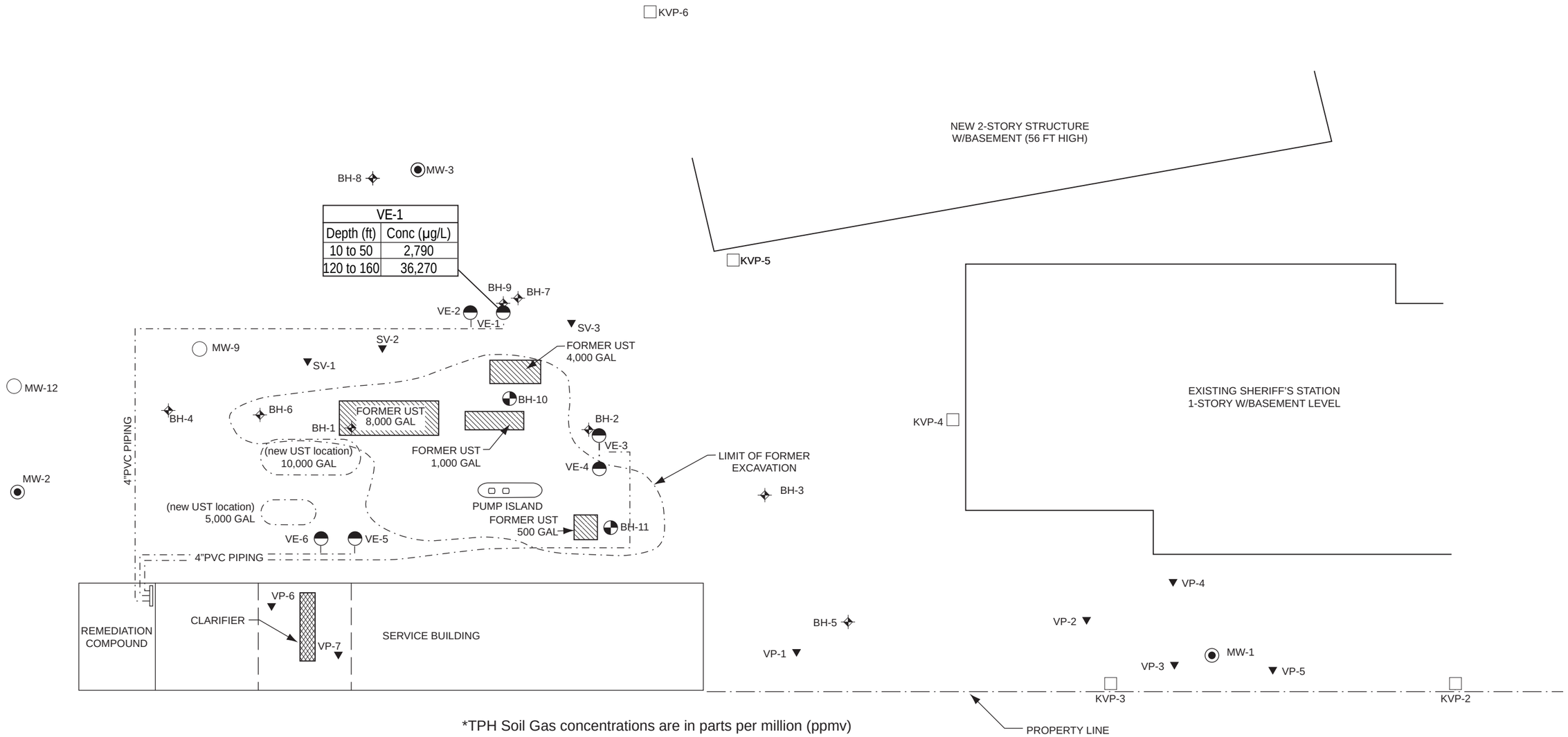
NORTH

0 10 20
FEET

REFERENCE: Modified from Schaefer Dixon Associates, Inc., 1992

FIGURE 2-6
PCE Concentrations in Soil (1991-1994)
LASD Temple Station

CH2MHILL



*TPH Soil Gas concentrations are in parts per million (ppmv)

LEGEND

- Soil Boring (Schaffer Dixon)
- Soil Boring (Fugro-McClelland)
- Vapor Extraction Well (Fugro-McClelland)
- Groundwater Monitoring Well (Fugro-McClelland)
- Shallow Soil Vapor Probe (Fugro-McClelland)
- Shallow Soil Vapor Probe (Kleinfelder)
- Groundwater Monitoring Well (Kleinfelder)

Notes:

UST = Underground storage tank
TPH = Total Petroleum Hydrocarbons
µg/L = Micrograms per liter
ND = Nondetect

NORTH

0 10 20
FEET

REFERENCE: Modified from Schaefer Dixon Associates, Inc., 1992

FIGURE 2-7
TPH Concentration in Soil Vapor (1991-1994)
LASD Temple Station

CH2MHILL

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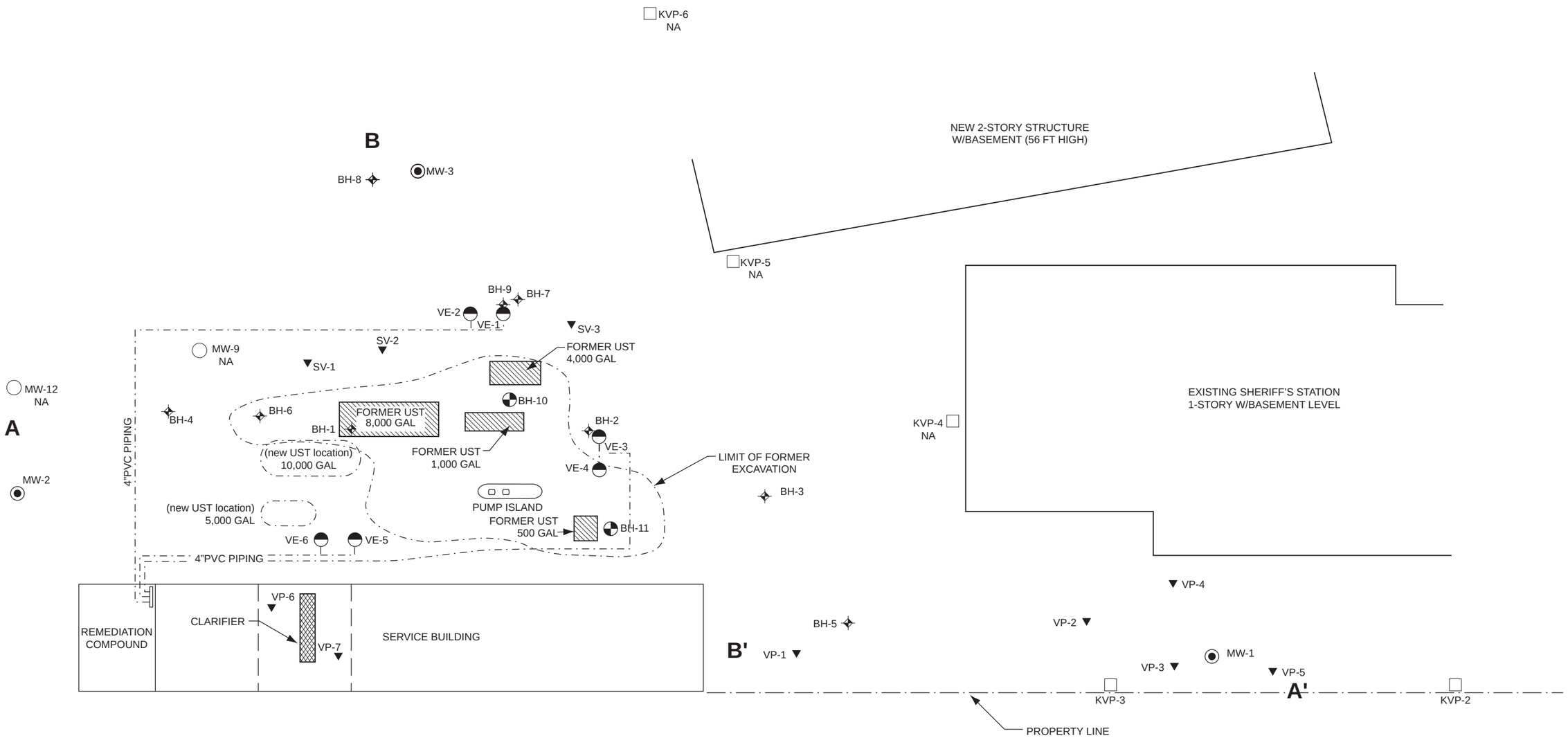


LEGEND

- Soil Boring (Schaffer Dixon)
- Soil Boring (Fugro-McClelland)
- Vapor Extraction Well (Fugro-McClelland)
- Groundwater Monitoring Well (Fugro-McClelland)
- Shallow Soil Vapor Probe (Fugro-McClelland)
- Shallow Soil Vapor Probe (Kleinfelder)
- Groundwater Monitoring Well (Kleinfelder)

Notes:

UST	= Underground storage tank
TPH	= Total Petroleum Hydrocarbons
µg/L	= Micrograms per liter
ND	= Nondetect
>	= Greater than
NA	= Not analyzed

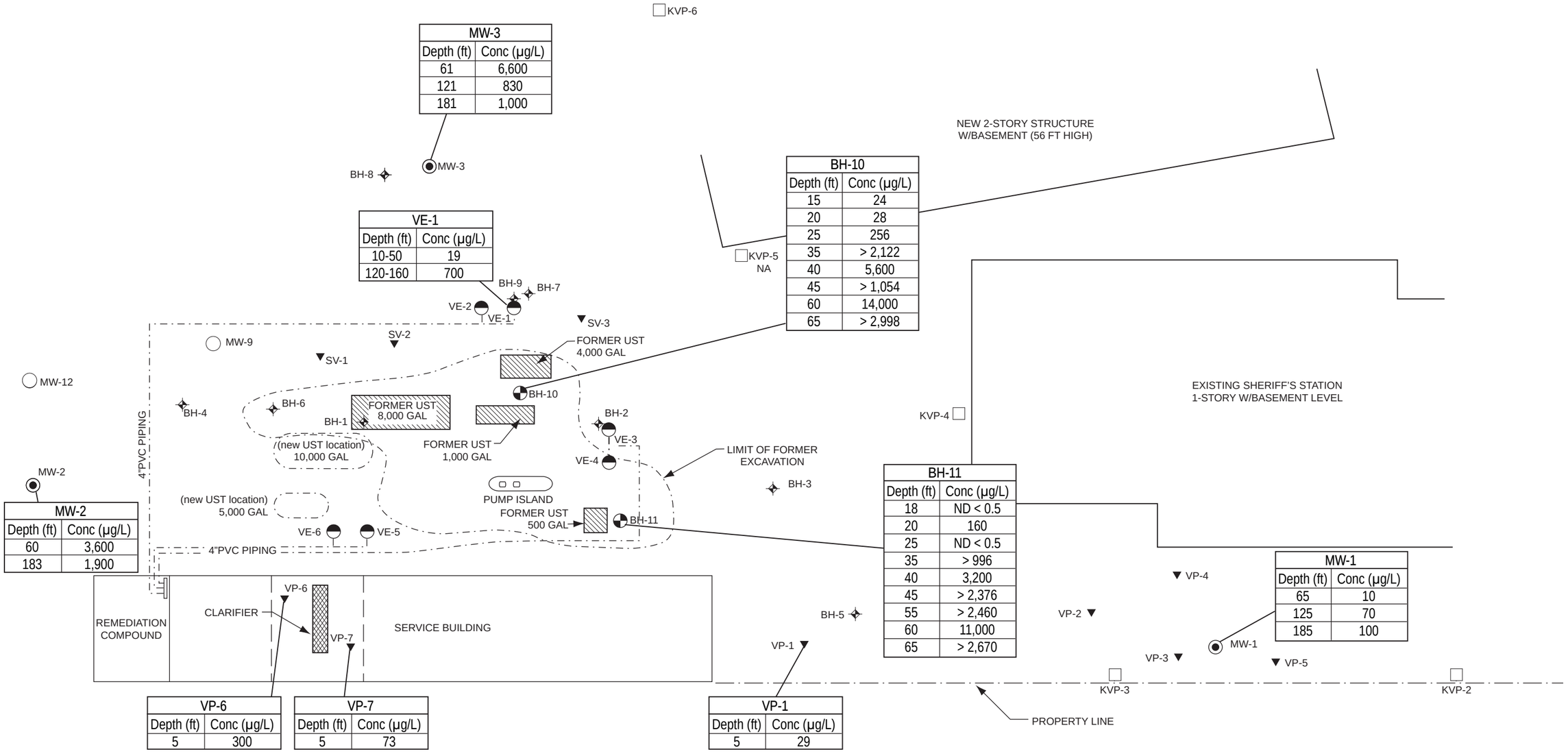
NORTH

0 10 20
FEET

REFERENCE: Modified from Schaefer Dixon Associates, Inc., 1992

FIGURE 2-8
TPH Concentration in Soil Vapor (2004-2007)
LASD Temple Station

CH2MHILL



MW-3	
Depth (ft)	Conc (µg/L)
61	6,600
121	830
181	1,000

VE-1	
Depth (ft)	Conc (µg/L)
10-50	19
120-160	700

BH-10	
Depth (ft)	Conc (µg/L)
15	24
20	28
25	256
35	> 2,122
40	5,600
45	> 1,054
60	14,000
65	> 2,998

BH-11	
Depth (ft)	Conc (µg/L)
18	ND < 0.5
20	160
25	ND < 0.5
35	> 996
40	3,200
45	> 2,376
55	> 2,460
60	11,000
65	> 2,670

MW-1	
Depth (ft)	Conc (µg/L)
65	10
125	70
185	100

MW-2	
Depth (ft)	Conc (µg/L)
60	3,600
183	1,900

VP-6	
Depth (ft)	Conc (µg/L)
5	300

VP-7	
Depth (ft)	Conc (µg/L)
5	73

VP-1	
Depth (ft)	Conc (µg/L)
5	29

LEGEND

- Soil Boring (Schaffer Dixon)
- Soil Boring (Fugro-McClelland)
- Vapor Extraction Well (Fugro-McClelland)
- Groundwater Monitoring Well (Fugro-McClelland)
- Shallow Soil Vapor Probe (Fugro-McClelland)
- Shallow Soil Vapor Probe (Kleinfelder)
- Groundwater Monitoring Well (Kleinfelder)

Notes:

UST = Underground storage tank
µg/L = Micrograms per liter
ND = Nondetect
> = Greater than

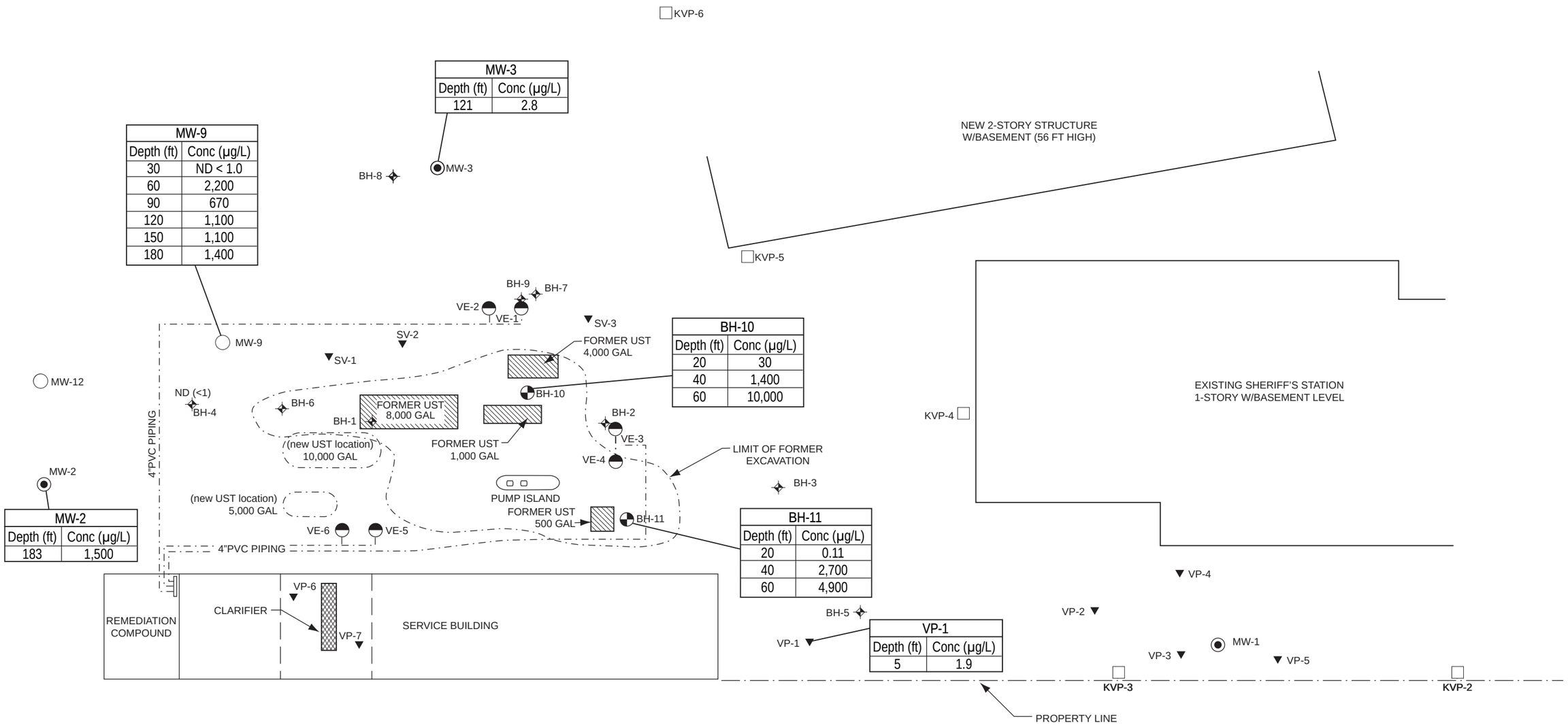
NORTH

0 10 20
FEET

REFERENCE: Modified from Schaefer Dixon Associates, Inc., 1992

FIGURE 2-9
Benzene Concentrations in Soil Vapor (1990-1994)
LASD Temple Station

CH2MHILL



LEGEND

- Soil Boring (Schaffer Dixon)
- Soil Boring (Fugro-McClelland)
- Vapor Extraction Well (Fugro-McClelland)
- Groundwater Monitoring Well (Fugro-McClelland)
- Shallow Soil Vapor Probe (Fugro-McClelland)
- Shallow Soil Vapor Probe (Kleinfelder)
- Groundwater Monitoring Well (Kleinfelder)

Notes:

UST = Underground storage tank
µg/L = Micrograms per liter
ND = Nondetect
< = Less than

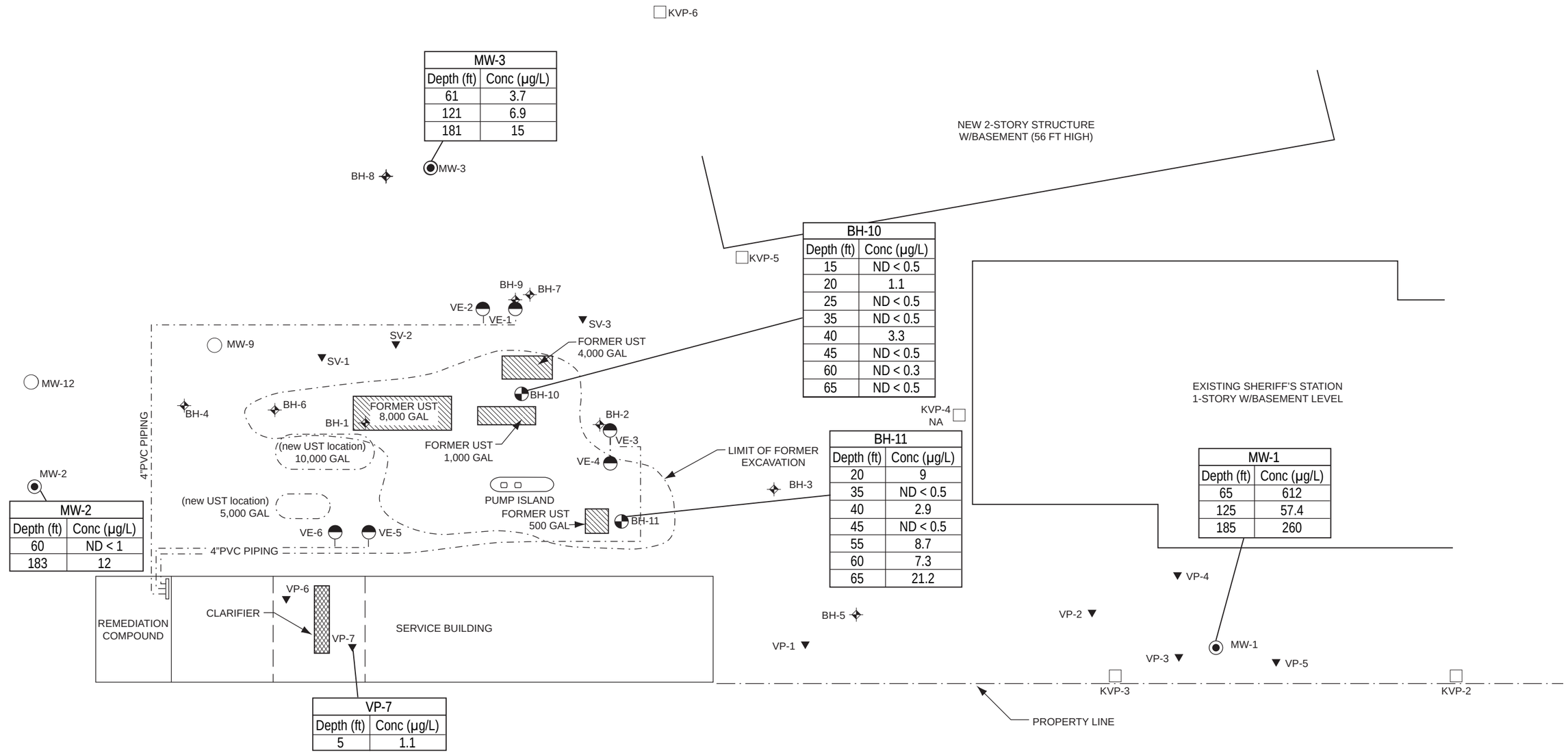
NORTH

0 10 20
FEET

REFERENCE: Modified from Schaefer Dixon Associates, Inc., 1992

FIGURE 2-10
Benzene Concentration in Soil Vapor (2004-2007)
LASD Temple Station

CH2MHILL



MW-3	
Depth (ft)	Conc (µg/L)
61	3.7
121	6.9
181	15

BH-10	
Depth (ft)	Conc (µg/L)
15	ND < 0.5
20	1.1
25	ND < 0.5
35	ND < 0.5
40	3.3
45	ND < 0.5
60	ND < 0.3
65	ND < 0.5

BH-11	
Depth (ft)	Conc (µg/L)
20	9
35	ND < 0.5
40	2.9
45	ND < 0.5
55	8.7
60	7.3
65	21.2

MW-1	
Depth (ft)	Conc (µg/L)
65	612
125	57.4
185	260

MW-2	
Depth (ft)	Conc (µg/L)
60	ND < 1
183	12

VP-7	
Depth (ft)	Conc (µg/L)
5	1.1

LEGEND

- Soil Boring (Schaffer Dixon)
- Soil Boring (Fugro-McClelland)
- Vapor Extraction Well (Fugro-McClelland)
- Groundwater Monitoring Well (Fugro-McClelland)
- Shallow Soil Vapor Probe (Fugro-McClelland)
- Shallow Soil Vapor Probe (Kleinfelder)
- Groundwater Monitoring Well (Kleinfelder)

Notes:

PCE = Tetrachloroethene
UST = Underground storage tank
µg/L = Micrograms per liter
ND = Nondetect

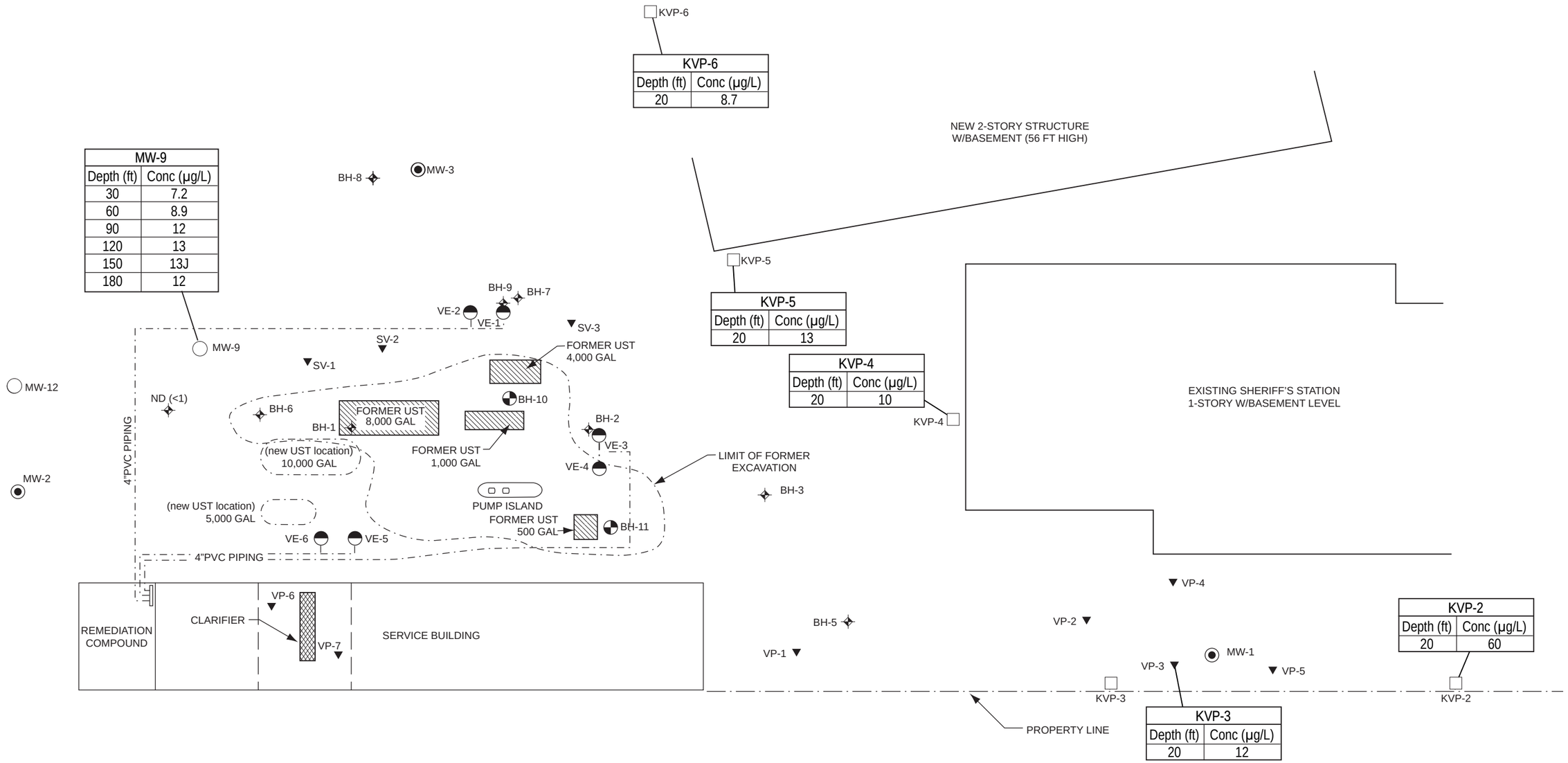
NORTH

0 10 20
FEET

REFERENCE: Modified from Schaefer Dixon Associates, Inc., 1992

FIGURE 2-11
PCE Concentration in Soil Vapor (1991-1994)
LASD Temple Station

CH2MHILL



LEGEND

- Soil Boring (Schaffer Dixon)
- Soil Boring (Fugro-McClelland)
- Vapor Extraction Well (Fugro-McClelland)
- Groundwater Monitoring Well (Fugro-McClelland)
- Shallow Soil Vapor Probe (Fugro-McClelland)
- Shallow Soil Vapor Probe (Kleinfelder)
- Groundwater Monitoring Well (Kleinfelder)

Notes:

PCE = Tetrachloroethene
UST = Underground storage tank
µg/L = Micrograms per liter
ND = Nondetect
J = Estimated value

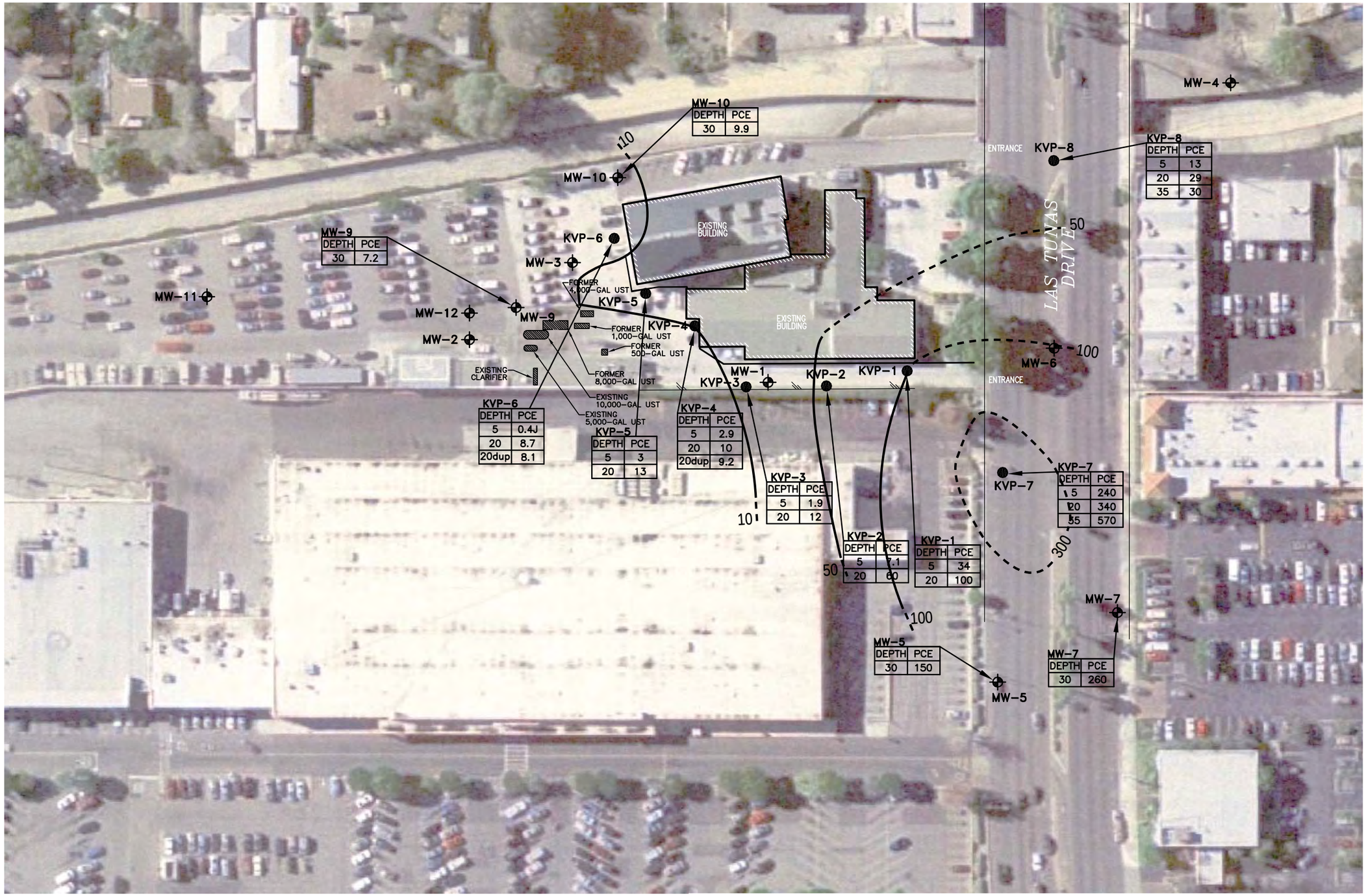
NORTH

0 10 20
FEET

REFERENCE: Modified from Schaefer Dixon Associates, Inc., 1992

FIGURE 2-12
PCE Concentration in Soil Vapor (2004-2007)
LASD Temple Station

CH2MHILL



EXPLANATION

MW-11	EXISTING MONITORING WELL LOCATION
	PCE CONTOUR DASHED WHERE INFERRED
KVP-9	EXISTING VAPOR PROBE LOCATION

NOTE: THE HIGHEST PCE CONCENTRATION FROM 20 AND 35 FEET BGS IS USED IN THE CONTOURING.

* DEPTH IN FEET BELOW SURFACE
*TETRACHLOROETHENE (PCE) CONCENTRATIONS IN SOIL VAPOR IN MICROGRAMS PER LITER (ug/L) OF AIR

0 FEET 80

FIGURE 2-13
2007 PCE Isoconcentration Contours in Soil Vapor (20-35 ft bgs)
First Quarter 2007
LASD Temple Station

Source: Kleinfelder, 2007

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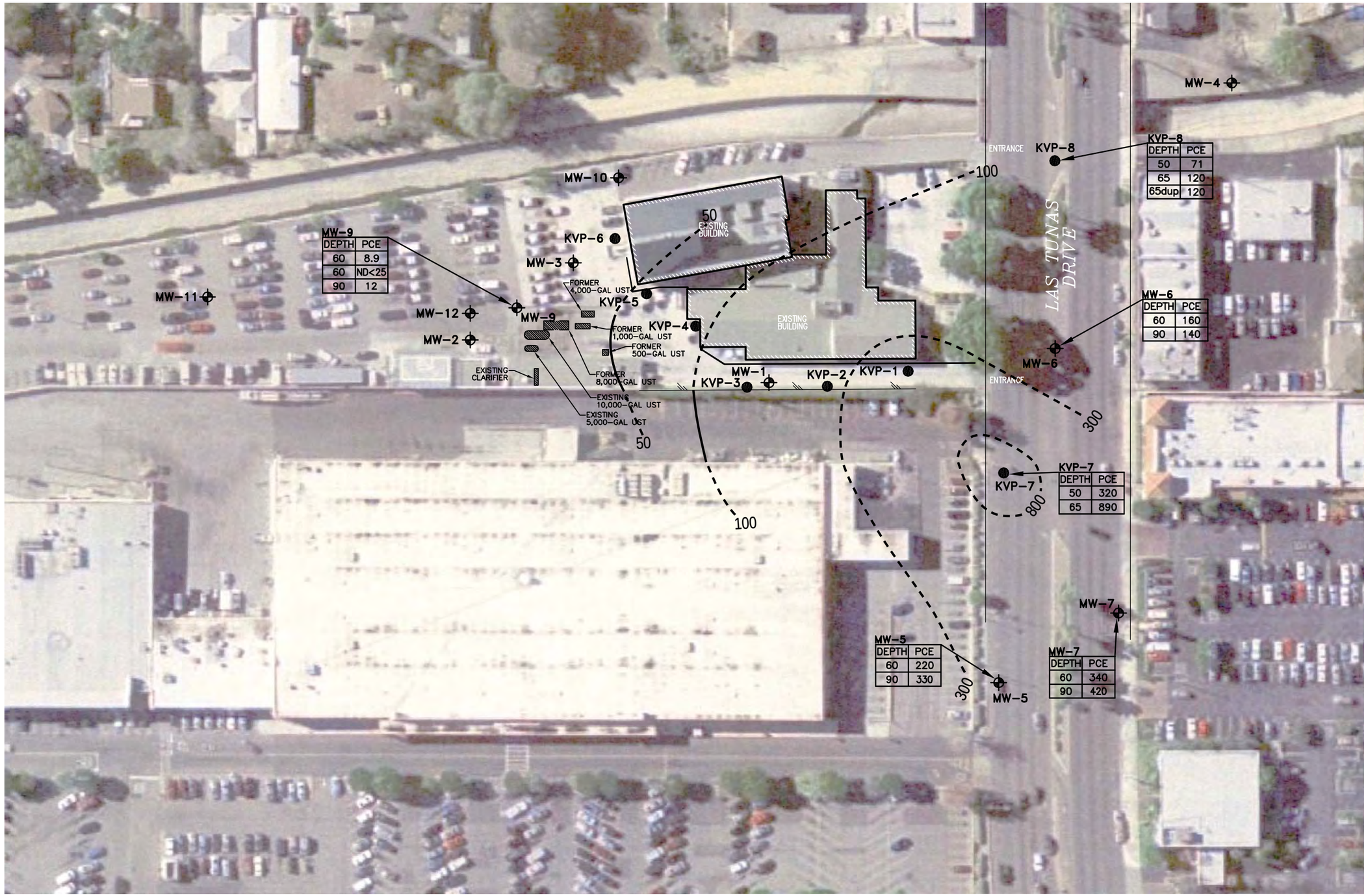


EXPLANATION

MW-11	EXISTING MONITORING WELL LOCATION
— — —	PCE CONTOUR DASHED WHERE INFERRED
KVP-9	EXISTING VAPOR PROBE LOCATION

NOTE: THE HIGHEST PCE CONCENTRATION FROM 50 AND 90 FEET BGS IS USED IN THE CONTOURING.

* DEPTH IN FEET BELOW SURFACE
*TETRACHLOROETHENE (PCE) CONCENTRATIONS IN SOIL VAPOR IN MICROGRAMS PER LITER (ug/L) OF AIR

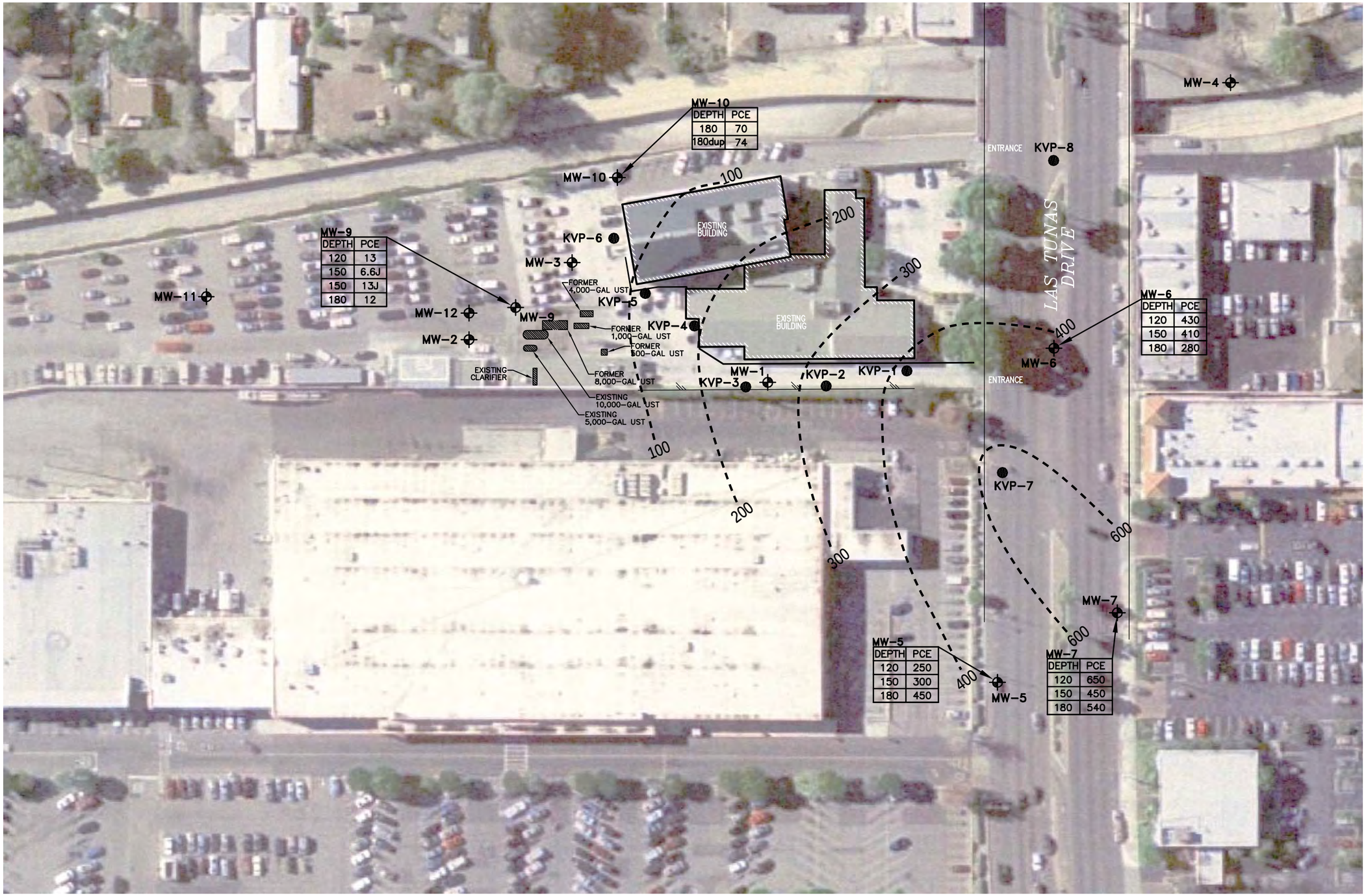
0 FEET 80

FIGURE 2-14
2007 PCE Isoconcentration Contours in Soil Vapor (50-90 ft bgs)
First Quarter 2007
LASD Temple Station

Source: Kleinfelder, 2007

ES012008008SCO335379.DE.01 TS_012.ai 8/08

CH2MHILL



EXPLANATION

MW-11	EXISTING MONITORING WELL LOCATION
	PCE CONTOUR DASHED WHERE INFERRED
KVP-9	EXISTING VAPOR PROBE LOCATION

NOTE: THE HIGHEST PCE CONCENTRATION FROM 120 AND 180 FEET BGS IS USED IN THE CONTOURING.

* DEPTH IN FEET BELOW SURFACE
*TETRACHLOROETHENE (PCE) CONCENTRATIONS IN SOIL VAPOR IN MICROGRAMS PER LITER (ug/L) OF AIR

0 FEET 80

FIGURE 2-15
2007 PCE Isoconcentration Contours in Soil Vapor (120-180 ft bgs)
First Quarter 2007
LASD Temple Station

Source: Kleinfelder, 2007

ES012008008SCO335379.DE.01 TS_013.ai 8/08

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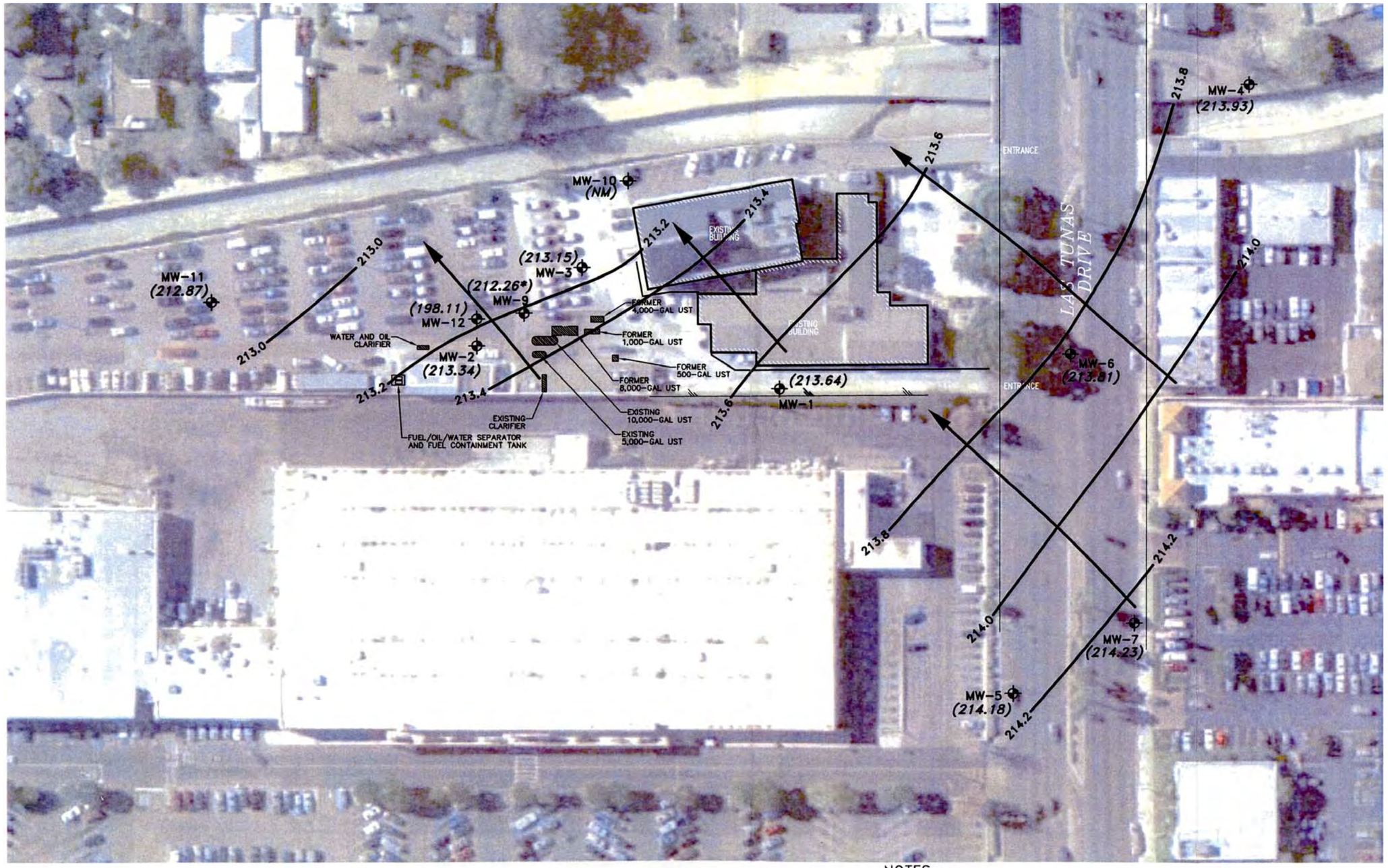


EXPLANATION

MW-11 ⊕	EXISTING MONITORING WELL LOCATION
214.2 ——	GROUNDWATER ELEVATION
(212.87)	GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL (amsl)
(NM)	NOT MEASURED
↖	GROUNDWATER FLOW DIRECTION

NOTES:

1) GROUNDWATER LEVELS WERE MEASURED ON MARCH 13, 2007.

2) WELL MW-12 IS SCREENED IN A DIFFERENT FORMATION, AND THEREFORE THE WATER ELEVATION FROM THIS WELL IS NOT USED IN CONTOURING. ALL OTHER WELLS ARE SCREENED AT THE WATER TABLE.

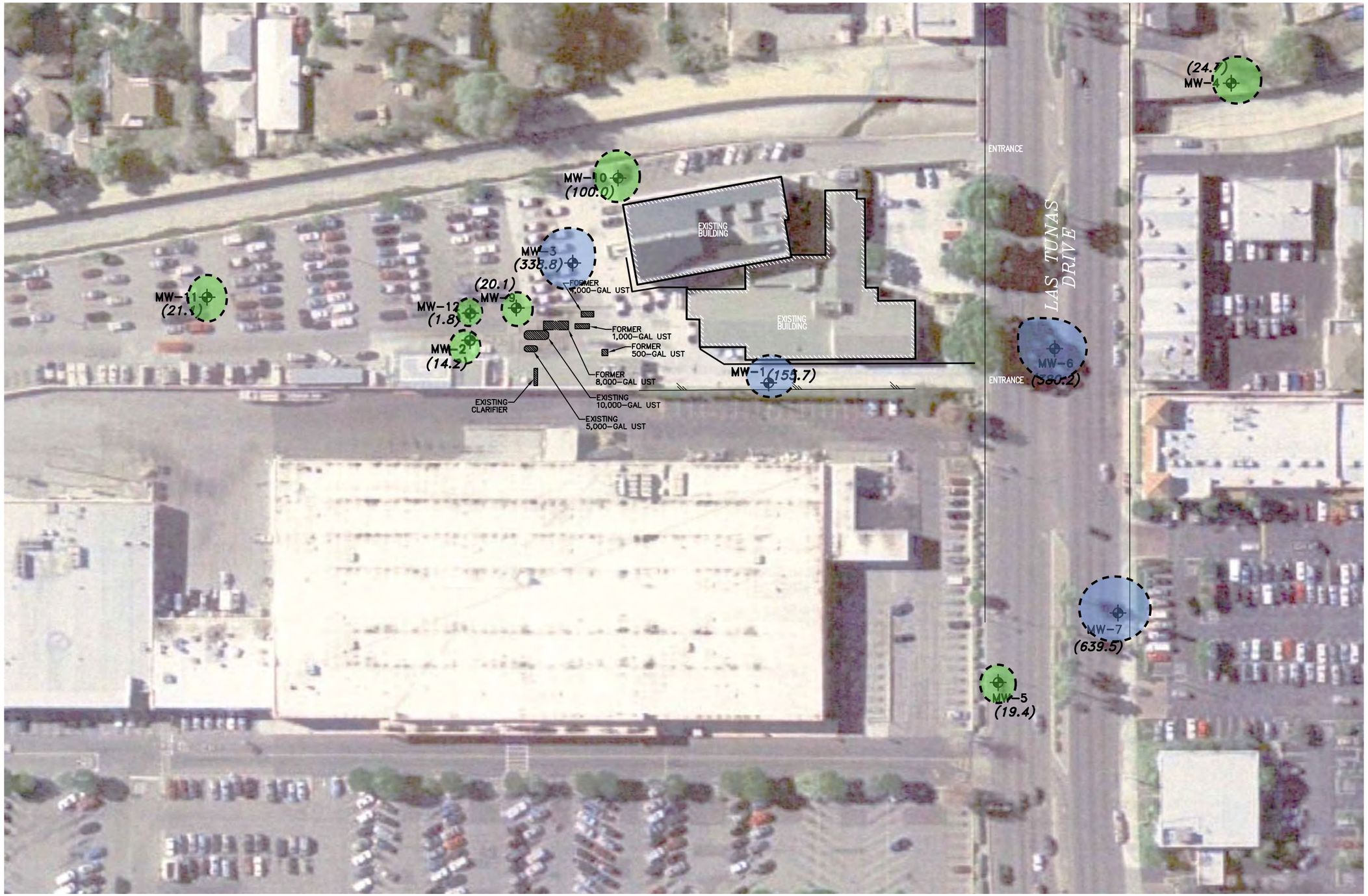
3) THE MEASUREMENT AT MW-9 WAS ANOMALOUS AND WAS NOT USED IN CONTOURING.

0 FEET 80

FIGURE 2-16
March 2007 Groundwater Elevation
LASD Temple Station

CH2MHILL

ES012008008SCO335379.DE.01 TS_014.ai 8/08



EXPLANATION

MW-11 EXISTING MONITORING WELL LOCATION

(213.57) TETRACHLOROETHENE (PCE) CONCENTRATIONS IN GROUNDWATER IN MICROGRAMS PER LITER (ug/L)

= ND to 100 ug/L

= 101 to 1000 ug/L

NOTE: GROUNDWATER SAMPLING OCCURRED JANUARY 22-29, 2007 FOR ALL MONITORING WELLS EXCEPT MW-5 AND MW-7, WHICH WERE SAMPLED MARCH 13, 2007.

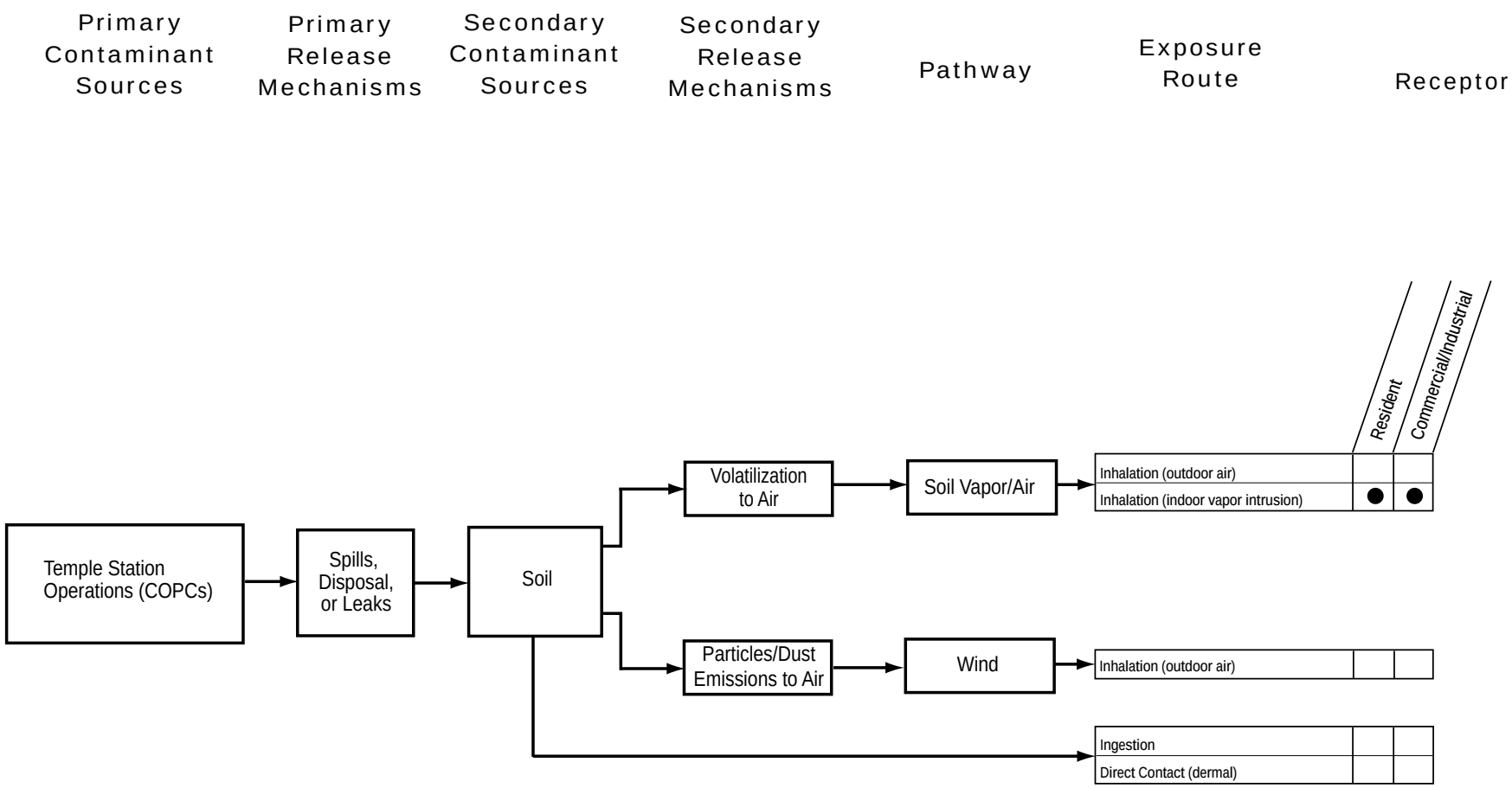
0 FEET 80

FIGURE 2-17
2007 PCE Concentrations in Groundwater
LASD Temple Station

Source: Kleinfelder, 2007

ES012008008SCO335379.DE.01 TS_015.ai 8/08

CH2MHILL



LEGEND:

● = Potentially Complete Pathway Evaluated in Soil Vapor Risk Evaluation

COPCs = Contaminants of Potential Concern

Figure 2-18
Preliminary Human Health Conceptual Site Model Diagram
LASD Temple Station

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ES012008008SCO335379.DE.01 TS_017a.ai 9/08

Appendix A
Data Quality Objectives and Data Usability Assessment

A. Data Usability Assessment

A.1 Introduction

This data usability assessment concludes that the data for Temple Station appear to be of sufficient quality to support the technical evaluation documented in this report. The older data (1991-1993 and 2004) appear potentially less reliable than the recent data. Consequently, all calculations of the potential risk associated with soil vapor involve use of the 2007 data.

Table A-1 summarizes the data quality objectives (DQOs) developed to guide the technical evaluation of the data set for Temple Station. The DQOs incorporate the following areas of consideration.

1. Basis of Evaluation
2. Possible Outcomes of Evaluation
3. Study Area Boundaries – Within Scope of the Technical Evaluation
4. Study Area Boundaries - Outside Scope of the Technical Evaluation
5. Data Needs and Uses
6. Data Usability
7. Maximizing Confidence in Decision Making
8. Optimization

A.2 Details of Data Usability Assessment

A.2.1 Temple Station Data Set

The data set for Temple Station consists of analytical results generated from the following investigations:

- Soil, soil vapor, and groundwater testing conducted from 1991 to 1994.
- Soil vapor and groundwater testing conducted in 2004.
- Soil, soil vapor and groundwater testing conducted in 2006/2007 after installation of additional soil vapor probes and groundwater monitoring wells.

Los Angeles County Sheriff's Department (LASD) performed the 1991-1994 and 2004 field work with oversight provided by the Los Angeles Regional Water Quality Control Board (LARWQCB). The County of Los Angeles performed the 2006/2007 field work in consultation with the United States Environmental Protection Agency (EPA).

Tables 2-1 through 2-3 of the technical evaluation present the data for detected analytes and Appendix B presents the data for all samples collected.

A.2.2 Assessment Methodology

EPA reviewed the investigation reports including available data packages and quality assurance/quality control (QA/QC) documentation. Tables A-2 to A-5 summarizes the

data assessment based on the five criteria listed below. Each of the tables also notes unavailable documentation.

- Data collection
- Sampling handling
- Analytical method requirements
- Field quality control requirements
  Data review and validation
  - Tier 1A, which provides a brief summary of key analytical issues/deficiencies which may affect data quality, and hence, user decisions based on the data.
  - Tier 1B, which produces an automated summary which reflects whether contract required QC criteria and quality objectives have been met.
  - Tier 3, which produces a detailed data validation report based on clearly defined and documented project-specific data quality objectives. This report identified significant data quality issues/deficiencies and indicates whether the quality of the data is sufficient for the intended use.

A.3 Results of the Data Usability Assessment

A.3.1 Previous Site Investigations (1991 to 2004)

The investigation records for data collected in 1991 through 1994 and 2004 show general adherence to acceptable sample collection and analytical procedures. However, as documented in Tables A-2 to A-4, the data usability assessment identified minor concerns regarding the efficacy of sample collection procedures, incomplete field QC procedures, high reporting limits for some of the contaminants of potential concern (COPCs), and omission of data validation.

Collection of soil vapor and groundwater samples appeared to conform to State of California guidance (including *Advisory-Active Soil Gas Investigation*, DTSC and LARWQCB, January 28, 2003; *Requirements for Groundwater Investigations*, State of California, LARWQCB, July 2000 Revision). However, the collection of groundwater samples likely involved use of bailers. Possible losses of volatile analytes may occur when bailers are used for sample collection.

A.3.1 Recent Site Investigations (2006 to 2007)

The investigation records for the 2006 and 2007 data indicate the use of acceptable sample collection and analytical procedures. Table A-5 shows that the data usability assessment identified no concerns regarding the usability of the data. A review of the associated QC data showed that all accuracy and precision results were within acceptable ranges. Tier 1A, Tier 1B, and Tier 3 data validation was completed for the data collected in the 2006/2007 investigation. The collection of soil vapor and groundwater samples conformed with the State of California guidance listed in Section A.3.1.

Table A-1
Data Quality Objectives - Technical Evaluation of Environmental Data
LASD Temple Station

Basis of Evaluation

Overall Goal (Decision)	Justification (Problem Statement)
Determine the appropriate action to address contamination at Temple Station by completing either a non-time critical removal action or another appropriate evaluation.	Soil, soil vapor, and groundwater contain contaminants of potential concern at concentrations that exceed preliminary remediation goals (PRGs), maximum contaminant levels (MCLs), or other regulatory levels/guidelines. Site data indicate the presence of total petroleum hydrocarbons (TPH), benzene, toluene, ethylbenzene, and total xylenes, (BTEX), and volatile organic compounds (VOCs).
Identify gaps in existing site characterization data and recommend objectives for further contaminant investigation by the PRP, as appropriate.	Contamination in soil and groundwater at the site is inadequately characterized.

Possible Outcomes of Evaluation (Decision Rules)

Possible Outcome	Consequences of Predicting/Reaching an Incorrect Outcome	Basis for Possible Incorrect Outcome	Methods for Avoiding an Incorrect Outcome
The evaluation identifies inadequacies in the data set and areas of the site that require further characterization. Focused additional site characterization will expedite implementation of an appropriate action.	Insufficiently identifying and communicating data gaps to the facility owner will delay progress and may increase the likelihood of overlooking areas of concern.	– Omission or incomplete review of site data. – Insufficient communication with the facility owner on site characterization gaps identified.	– Ensure that EPA obtains and evaluates all existing site data. – Ensure that EPA communicates the results of its analysis to the facility owner and solicits feedback. – Ensure that the facility owner understands EPA's expectations for follow up action, as appropriate (e.g., collection of additional data, cleanup actions, coordination with other regulatory agencies, etc.).
Selection of an appropriate follow up action to protect human health and the environment.	Implementing an inappropriate action may insufficiently protect human health and the environment. Risks or potential risks to human health may remain unaddressed. Implementing an ineffective (or marginally effective) action will delay completion of contaminant cleanup. Implementing an excessive or unwarranted action alternative will waste resources.	– Insufficient site characterization. – Insufficiently protective regulatory limits used in risk assessment.	– Collect additional site characterization data before identifying an appropriate cleanup action or other follow up action. – Evaluate the goals of a potential cleanup action. – Identify appropriate regulatory inputs for risk assessment.

Table A-1
Data Quality Objectives - Technical Evaluation of Environmental Data
LASD Temple Station

Study Area Boundaries --Within Scope of the Technical Evaluation

Study Areas* for Consideration (Geographic and Temporal Boundaries)	Justification for Consideration
Project Scope Boundary: Focus the evaluation on contamination at the Temple Station site.	EPA authorized a potential removal action to address contamination released at the Temple Station site.
Approximate Geographic Boundaries (based on the nearest city streets surrounding the site): Lateral Boundaries Las Tunas Drive to the north. Rosemead Boulevard to the east. Muscatel Avenue to the west. Broadway to the south. Vertical Boundaries Unknown vertical extent.	Limited site data presently preclude adequate characterization of the vertical and horizontal extent of contamination.
Temporal Boundary: Schedule for completion of the evaluation.	A delay in completing the evaluation will delay implementation of a potential cleanup action to mitigate contaminants.
Data Collection Boundaries: Use of existing data only to develop the evaluation. Recommend additional data collection by the facility owner, as appropriate	Collecting primary data by EPA would significantly extend the schedule for completing the evaluation and increase costs. Encouraging the facility owner to characterize and cleanup the site, as appropriate, will facilitate PRP-lead site characterization and implementation of the selected mitigation of potential risks to human health and the environment from the presence of contamination at the site.

* Can encompass either geographic areas or issues or problems for consideration.

Study Area Boundaries --Outside Scope of the Technical Evaluation

Excluded Areas of Study*	Justification for Exclusion
The investigation and mitigation of contaminant releases at other nearby facilities are outside the scope of the evaluation.	EPA authorized a potential focused action at the Temple Station site specifically.
The streamlined risk assessment will omit further evaluation of potential risks to ecological receptors.	Virtually no habitat currently exists for birds or mammals at Temple Station. The concrete or asphalt surface covering precludes growth of vegetation. Consequently, the potential for exposure of ecological receptors to soil or groundwater contaminants is minimal. EPA concluded that a screening-level ecological risk assessment is unnecessary for the site.

* Can encompass either geographic areas or issues or problems for consideration.

Table A-1
Data Quality Objectives - Technical Evaluation of Environmental Data
LASD Temple Station

Data Needs and Uses

Data Needs (Inputs)	Data Uses	Assessment Performed
Site Data Evaluation and Data Gap Analysis	– Develop a conceptual site model. – Recommend additional data collection activities to reduce uncertainty.	The data usability assessment evaluates the quality and usability of secondary data for EPA's technical evaluation.
Applicable or Relevant and Appropriate Requirements (ARARs) Evaluation	– Identify ARARs, as appropriate, to facilitate a potential cleanup action for the site; – Use ARARs as a basis for eliminating unsuitable cleanup alternatives from further consideration up front.	Not applicable. The technical evaluation omits analysis of cleanup alternatives.
Streamlined Risk Assessment	Identify current or potential future exposures that require mitigation.	The data usability assessment evaluates the suitability of secondary data for the risk assessment presented in Section 2.2.1 and Appendix A of the technical evaluation report.
Removal Action Goals (objectives)	Define an endpoint and provide a basis for assessing whether a potential cleanup action is complete.	Not applicable. The technical evaluation omits analysis of cleanup alternatives and, therefore, cleanup objectives.
List of Actions/Technologies	Assess a focused and selected number of alternatives capable of attaining the removal action objectives.	Not applicable. The technical evaluation omits analysis of cleanup alternatives.
Selection Criteria: • Effectiveness • Implementability • Cost • Public Input*	– Evaluate potential cleanup alternatives; – Ensure that cleanup alternatives considered, as appropriate, protect human health and the environment and comply with ARARs; – Use the modifying criteria (effectiveness, implementability, cost, etc.) to comparatively consider the attributes and benefits/disadvantages of possible cleanup alternatives.	Not applicable. The technical evaluation omits analysis of cleanup alternatives.
Community/Stakeholder involvement	– Keep the public informed using the community involvement plan; – Allow for public participation in the development, selection, and implementation of the removal action alternative.	Provide opportunities for community involvement through EPA's investigation and cleanup of the San Gabriel Valley Area 3 site. Because the technical evaluation omits identification of a cleanup alternative, a public comment period is inapplicable.

* See specific data needs.

Table A-1
Data Quality Objectives - Technical Evaluation of Environmental Data
LASD Temple Station

Data Usability

Data Type	Information on Data Generation Process & Data Reliability	Assessment Performed
Primary data.	The technical evaluation assesses secondary data only for Temple Station. Refer to item below pertaining to primary data used to evaluate regional groundwater flow conditions and groundwater quality.	Not applicable.
Removal action objectives.	Establish cleanup goals using a consensus-based process.	Not applicable. The technical evaluation omits analysis of cleanup alternatives.
Secondary data (including laboratory analytical results, groundwater level measurements, lithologic and well construction information, soil vapor extraction system performance results, etc.).	Soil, soil vapor, and groundwater analytical data collected by facility owner during field investigations conducted in 1991-1994, 2004, and 2007. Older data show relatively high detection limits for some constituents in soil vapor. Some equipment blanks show constituents that may indicate laboratory contamination. Bailers used for some groundwater sampling, which potentially yielded low-biased data.	The data usability assessment presented in Appendix A evaluates the secondary data set, including: – Verification of intended data uses. – Review of actual sample collection procedures. – Review of analytical data (e.g., split, duplicate, blank, and lab control sample results).
Information on regional groundwater flow conditions and regional groundwater contamination near Temple Station.	Primary and secondary data collected from monitoring wells and production wells in Area 3.	The data usability assessment for the Area 3 Site remedial investigation evaluates the quality and usability of the data set. All data considered adequate for use in this technical evaluation.
Toxicity values and EPA and Cal/EPA regulatory criteria.	Peer reviewed, formally published, generally of known and usable quality.	– No independent assessment of published values performed. – The review process confirmed the suitability of the toxicity values and the regulatory criteria used in the technical evaluation.

Table A-1
Data Quality Objectives - Technical Evaluation of Environmental Data
LASD Temple Station

Maximizing Confidence in Decision Making

Sources of Uncertainty	Specific Factors Contributing to Uncertainty	Methods for Maximizing Confidence/Minimizing Uncertainty
Insufficient Site Characterization	The extent of contamination in vertical and horizontal directions only partially assessed for all matrices (soil, soil vapor, and groundwater).	Conduct additional site characterization prior to implementing any cleanup action or site closure.
Risk Estimation	Conservative toxicity values may overestimate the risk.	The risk assessment can be refined to incorporate additional site data.

Optimization

Actions	Methods for Optimization
Implement a selected cleanup action or other appropriate follow up action.	Refine the conceptual site model, as appropriate, as new information becomes available through additional site assessment.

TABLE A-2
Data Usability Assessment – Soil Data – 1991, 1992, and 1993

QA Element	Procedures Reviewed	Assessment Standards	Assessment Outcome
Sample Collection Method	Description of sample collection procedures detailed in each investigation report. Description of equipment decontamination procedures not provided in the 1991 and 1992 investigation reports.	Proper sample collection and equipment decontamination procedures increase the integrity of the samples collected.	Proper sample collection procedures were followed. However, the adequacy of equipment decontamination procedures, unspecified in the 1991 and 1992 investigation reports, could not be assessed.
Sample Handling	Description of sample handling procedures included in the investigation reports and the chain-of-custody records, as available.	Proper handling, storage, transportation, and shipping of samples increases the confidence in the analytical results.	Proper sample handling procedures were followed. Review confirmed acceptable chain-of-custody records, storage, and shipment procedures in the 1991 and 1993 investigation reports. The 1992 investigation report omitted chain-of-custody records; therefore, the integrity of sample handling could not be verified.
Analytical Method Requirements	Use of appropriate laboratory analytical methods for sample analysis.	Evaluation of the method detection limits, and laboratory reporting limits aids in estimation of uncertainty in terms of project goals.	The 1991 investigation report documented high detection limits. The 1992 report omitted details regarding the analytical methods; therefore, the adequacy of the methods could not be reviewed. The 1993 report indicated the analytical methods provided adequate sensitivity - method detection limits were lower than screening levels.
Field Quality Control (QC) Requirements	Field QC samples (e.g., field duplicate samples, trip blanks, equipment blanks, etc.) not collected during the 1991 and 1992 sampling events.	Analysis of field QC samples helps to evaluate data quality.	Because field QC samples were not collected as part of the 1991 and 1992 investigations, the representativeness of the sample results could not be assessed. Although QC samples were collected as part of the 1993 investigation, the report did not provide enough details to complete the data quality determination.
Data Review and Validation	Original laboratory reports provided in the 1991 and 1993 investigation reports. Validation reports not provided.	Data review and validation increases the confidence that the data are of known and documented quality.	Original laboratory reports were evaluated, if available to verify data shown in report tables. No evidence to indicate the data were validated.
Overall Assessment	Based on uncertainties in the data set, the data are usable for qualitative and semi-quantitative evaluations, but usable only with limitations (or caution) for evaluations that require definitive data (e.g., risk assessments or site closures).		

TABLE A-3
Data Usability Assessment – Soil Vapor Data – 1992, 1993, 1994, and 2004

QA Element	Procedures Reviewed	Assessment Standards	Assessment Outcome
Sample Collection Method	Description of sample collection procedures detailed in each investigation report. Description of equipment decontamination procedures not provided in the investigation reports.	Proper sample collection and equipment decontamination procedures increase the integrity of the samples collected.	Proper sample collection procedures were followed. However, the adequacy of equipment decontamination procedures, unspecified in the investigation reports, could not be assessed.
Sample Handling	Description of sample handling procedures included in the investigation reports and the chain-of-custody records, as available.	Proper handling, storage, transportation, and shipping of samples increases the confidence in the analytical results.	Review showed that proper collection procedures were followed for the 1992, 1994, and 2004 investigations. The chain-of-custody records were not attached with the 1992 report and correct procedures could not be verified. Improper handling procedures noted in 1993 as air samples should not be stored on ice.
Analytical Method Requirements	Use of appropriate laboratory analytical methods for sample analysis.	Evaluation of the method detection limits, and laboratory reporting limits aids in estimation of uncertainty in terms of project goals.	Laboratory reports were not available in the 1992 investigation report for review to check the detection limits for the analytical methods. The 1993, 1994, and 2004 investigation reports indicated the analytical methods provided adequate sensitivity - method detection limits were lower than screening levels.
Field Quality Control (QC) Requirements	Field QC samples (e.g., field duplicate samples, trip blanks, equipment blanks, etc.) not collected during the 1992 and 1993 sampling events.	Analysis of field QC samples helps to evaluate data quality.	Because field QC samples were not collected as part of the 1992 and 1993 investigations, the representativeness of the sample results could not be assessed.
Data Review and Validation	Original laboratory reports provided in the 1992 investigation report. Validation reports not provided.	Data review and validation increases the confidence that the data are of known and documented quality.	Original laboratory reports were evaluated, if available, to verify data shown in report tables. No evidence to indicate the data were validated.
Overall Assessment	Based on uncertainties in the data set, the data are usable for qualitative and semi-quantitative evaluations, but usable only with limitations (or caution) for evaluations that require definitive data (e.g., risk assessments or site closures).		

TABLE A-4
Data Usability Assessment – Groundwater Data – 1993, 1994, and 2004

QA Element	Procedures Reviewed	Assessment Standards	Assessment Outcome
Sample Collection Method	Description of sample collection procedures detailed in each investigation report. Description of equipment decontamination procedures not provided in the 1993, 1994, and 2004 investigation reports.	Proper sample collection and equipment decontamination procedures increase the integrity of the samples collected.	Proper sample collection procedures were followed. Use of bailers can result in loss of VOCs. The adequacy of equipment decontamination procedures, unspecified in the investigation reports, could not be assessed.
Sample Handling	Description of sample handling procedures included in the investigation reports and the chain-of-custody records, as available.	Proper handling, storage, transportation, and shipping of samples increases the confidence in the analytical results.	Proper sample handling procedures were followed. Review confirmed acceptable chain-of-custody records, storage, and shipment procedures in the 1994 and 2004 investigation reports. The 1993 investigation report omitted chain-of-custody records; therefore, the integrity of sample handling could not be verified.
Analytical Method Requirements	Use of appropriate laboratory analytical methods for sample analysis.	Evaluation of the method detection limits, and laboratory reporting limits aids in estimation of uncertainty in terms of project goals.	The investigation reports indicated the analytical methods provided adequate sensitivity - method detection limits were lower than screening levels.
Field Quality Control (QC) Requirements	Field QC samples (e.g., field duplicate samples, trip blanks, equipment blanks, etc.) not collected during the 1994 and 2004 sampling events.	Analysis of field QC samples helps to evaluate data quality.	Because field QC samples were not collected as part of the 1994 and 2004 investigations, the representativeness of the sample results could not be assessed.
Data Review and Validation	Original laboratory reports provided in the 1993, 1994, and 2004 investigation reports. Validation reports not provided.	Data review and validation increases the confidence that the data are of known and documented quality.	Original laboratory reports were evaluated to verify data shown in report tables. No evidence to indicate the data were validated.
Overall Assessment	Based on uncertainties in the data set, the data are usable for qualitative and semi-quantitative evaluations, but usable only with limitations (or caution) for evaluations that require definitive data (e.g., risk assessments or site closures).		

TABLE A-5
Data Usability Assessment – 2007 Soil, Soil Vapor, and Groundwater Data

QA Element	Procedures Reviewed	Assessment Standards	Assessment Outcome
Sample Collection Method	Description of sample collection procedures detailed in the investigation report.	Proper sample collection and equipment decontamination procedures increase the integrity of the samples collected.	Proper sample collection procedures and decontamination procedures were followed. EPA observed field investigation on December 19, 2006, January 12, 2007, and January 24, 2007.
Sample Handling	Description of sample handling procedures included in the investigation reports and the chain-of-custody records.	Proper handling, storage, transportation, and shipping of samples increases the confidence in the analytical results.	Proper sample handling procedures were followed. Review confirmed acceptable chain-of-custody records, storage, and shipment procedures.
Analytical Method Requirements	Use of appropriate laboratory analytical methods for sample analysis.	Evaluation of the method detection limits, and laboratory reporting limits aids in estimation of uncertainty in terms of project goals.	The investigation report indicated the analytical methods provided adequate sensitivity - method detection limits were lower than screening levels.
Field Quality Control (QC) Requirements	Field QC samples (e.g., field duplicate samples, trip blanks, equipment blanks, etc.) collected during the sampling events.	Analysis of field QC samples helps to evaluate data quality.	No problems identified with the representativeness of the samples.
Data Review and Validation	Original laboratory reports and data validation reports were provided.	Data review and validation increases the confidence that the data are of known and documented quality.	Original laboratory reports were evaluated to verify data shown in report tables. All analytical data submitted for EPA Tier 1A and 1B data validation. Tier 3 data validation conducted on 10 percent of results for soil data.
Overall Assessment	The assessment indicates that the data are usable for qualitative and quantitative evaluations.		

Appendix B
Analytical Data and Hydrogeological Cross-Sections

Table B-1

Previous Soil Analytical Results (Select Analytes)[1]

LASD Temple Station

Boring or Well	Date	Depth (ft bgs)	TPH EPA 8015 (mg/kg)	Data Flag	Benzene EPA 8020 (mg/kg)	Data Flag	Toluene EPA 8020 (mg/kg)	Data Flag	Ethylbenzene EPA 8020 (mg/kg)	Data Flag	Xylenes EPA 8020 (mg/kg)	Data Flag	PCE EPA 8010 (µg/kg)	Data Flag	1,2-DCA EPA 8010 (µg/kg)	Data Flag	1,1-DCE EPA 8010 (µg/kg)	Data Flag	1,1,2-TCA EPA 8010 (µg/kg)	Data Flag	Total Lead EPA 7420 (mg/kg)	Data Flag
Industrial Soil Screening Levels			--		1.4		520		400		420		1,300		600		410,000		1,600		800	
Residential Soil Screening Levels			--		0.64		520		400		270		480		280		120,000		730		400	
BH-1	5/17/91	65.5	1,500	d2																		
	5/20/91	75.5																			22	d2
		80.5	9,500	d2	110	d2	1,000	d2	240	d2	1,300	d2										
BH-1(A)	6/11/91	85											200	d2	5,500	d2	200	d2	200	d2		
		140	3,400	d2																		
		160	1,400	d2																		
		190	1	d2	0.05	d2	0.05	d2	0.05	d2	0.05	d2										
		200	1	d2																		
BH-2	5/20/91	20.5	1	d2																		
		85.5	3,400	d2																		
		105.5	450	d2																		
		146	2	d2																		
		160	1	d2	0.05	d2	0.13	d2	0.05	d2	0.12	d2										
BH-4	5/21/91	45.5	1	d2																		
		55.5	1	d2																		
		90.5	1	d2																		
BH-3	5/22/91	30	1	d2																		
		40	29	d2																		
BH-5	5/22/91	20.5	1	d2																		
		40.5	1	d2																		
		55.5	1	d2																		
BH-6	5/23/91	40.5	1	d2																		
		60.5	7,700	d2																		
		95.5	3.1	d2	0.18	d2	0.21	d2	0.05	d2	0.25	d2										
BH-7	5/24/91	15.5	1	d2																		
		30.5	85	d2																		
		45.5	13,000	d2																		
		75.5	2,500	d2																		
		90.5	3,200	d2																		
		110.5	2,000	d2	41	d2	290	d2	86	d2	450	d2										
BH-8	5/28/91	35.5	1	d2																		
		55.5	2.3	d2	0.2	d2	0.42	d2	0.06	d2	0.33	d2										
		60.5	1	d2	0.11	d2	0.15	d2	0.05	d2	0.1	d2										
BH-9	6/10/91	65			0.17	d2	0.53	d2	0.34	d2	1.9	d2	200	d2	200	d2	200	d2	200	d2		
		85.5											430	d2	2,100	d2	200	d2	200	d2		
		105.5	1,700	d2	22	d2	190	d2	64	d2	340	d2	270	d2	470	d2	920	d2	200	d2		
		125.5	78	d2																		
		135	5.5	d2	0.17	d2	0.64	d2	0.08	d2	0.35	d2										
		165	16																			

Table B-1

Previous Soil Analytical Results (Select Analytes)[1]

LASD Temple Station

Boring or Well	Date	Depth (ft bgs)	TPH EPA 8015 (mg/kg)	Data Flag	Benzene EPA 8020 (mg/kg)	Data Flag	Toluene EPA 8020 (mg/kg)	Data Flag	Ethylbenzene EPA 8020 (mg/kg)	Data Flag	Xylenes EPA 8020 (mg/kg)	Data Flag	PCE EPA 8010 (µg/kg)	Data Flag	1,2-DCA EPA 8010 (µg/kg)	Data Flag	1,1-DCE EPA 8010 (µg/kg)	Data Flag	1,1,2-TCA EPA 8010 (µg/kg)	Data Flag	Total Lead EPA 7420 (mg/kg)	Data Flag
Industrial Soil Screening Levels			--		1.4		520		400		420		1,300		600		410,000		1,600		800	
Residential Soil Screening Levels			--		0.64		520		400		270		480		280		120,000		730		400	
VE-1	5/12/92	20																				
		40																				
		60	**11,000**	d2	**120**	d2	**900**	d2	**270**	d2	**1,300**	d2			**520**	d2						
		80	**4,300**	d2											**170**	d2						
		100											**44**	d2	**270**	d2						
		120			**34**	d2	**380**	d2	**130**	d2	**590**	d2			**110**	d2						
		140											**670**	d2	**78**	d2						
		160	**13**	d2	ND	d2	**0.3**	d2	**0.16**	d2	**0.97**											
		180	**14**	d2	**0.25**	d2	**1.2**	d2	**0.21**	d2	**1.4**											
		200	ND	d2	ND	d2	ND	d2	ND	d2	ND	d2										
BH-10	3/11/93	15			0.005	d2	**0.1**	d2	0.005	d2	**0.05**	d2	5	d2	5	d2	5	d2	5	d2		
		25			**0.04**	d2	**17.11**	d2	**27.07**	d2	**206.26**	d2	5	d2	5	d2	5	d2	5	d2		
		35			**0.65**	d2	**554.01**	d2	**10.4**	d2	**2,001.85**	d2	5	d2	**56**	d2	5	d2	**49**	d2		
		45			**24.19**	d2	**435.14**	d2	**218.43**	d2	**839.57**	d2	5	d2	**484**	d2	5	d2	**14**	d2		
		55			**64.84**	d2	**413.03**	d2	**132.13**	d2	**636.8**	d2	5	d2	**1,138**	d2	5	d2	5	d2		
		65			**60.63**	d2	**413.77**	d2	**143.76**	d2	**639.78**	d2	5	d2	**2,079**	d2	5	d2	**43**	d2		
BH-11	3/11/93	18			0.005	d2	**0.14**	d2	0.005	d2	**0.2**	d2	5	d2	5	d2	5	d2	5	d2		
		25			**0.04**	d2	**0.1**	d2	0.005	d2	**0.16**	d2	5	d2	5	d2	5	d2	5	d2		
		35			**1.27**	d2	**29.11**	d2	**11.54**	d2	**225.56**	d2	5	d2	5	d2	5	d2	5	d2		
		45			**35.89**	d2	**373.18**	d2	**111.43**	d2	**544.63**	d2	5	d2	**743**	d2	5	d2	5	d2		
		55			**0.72**	d2	**3.47**	d2	**1.11**	d2	**6.7**	d2	5	d2	**14**	d2	5	d2	5	d2		
		65			**14.73**	d2	**174.84**	d2	**65.04**	d2	**320.29**	d2	**589**	d2	**491**	d2	5	d2	5	d2		
MW-1	1/19/93	--																				
MW-2	1/20/93	70	2	d2	0.005	d2	0.005	d2	0.005	d2	0.01	d2	5	d2	**5**	d2	5	d2	5	d2		
		90	2	d2	0.005	d2	0.005	d2	0.005	d2	0.01	d2	5	d2	5	d2	5	d2	5	d2		
		110	2	d2	**0.019**	d2	**0.019**	d2	0.005	d2	**0.026**	d2	5	d2	**50**	d2	5	d2	5	d2		
		135	**2.3**	d2	**0.23**	d2	**0.4**	d2	**0.064**	d2	**0.35**	d2	5	d2	**29**	d2	5	d2	5	d2		
MW-3	1/29/93	80	2	d2	0.005	d2	0.005	d2	0.005	d2	**0.014**	d2	5	d2	**14**	d2	5	d2	5	d2		
		100	2	d2	**0.019**	d2	**0.044**	d2	**0.0068**	d2	**0.057**	d2	5	d2	**64**	d2	5	d2	5	d2		
		120	2	d2	0.005	d2	0.005	d2	0.005	d2	0.01	d2	5	d2	**7**	d2	5	d2	5	d2		
		140	2	d2	**68**	d2	5	d2	5	d2	5	d2	0.016	d2	**0.0086**	d2	0.005	d2	**0.021**	d2		

Notes:

[1]Previous investigations include 1991, 1992, 1993 and 2004

Bold = Contaminant Detection

Contaminant concentration exceeds corresponding PRG

Not Analyzed

Not Detected - Reporting limit not provided (ND) or value represents reporting limit.

-- = Not applicable (samples not collected or no PRG exists).

d2 = Secondary data

EPA = United States Environmental Protection Agency

ft bgs = feet below ground surface

mg/kg = milligrams per kilogram

µg/kg = micrograms per kilogram

1,2-DCA = 1,2-dichloroethane

1,1-DCE = 1,1-dichloroethene

PCE = tetrachloroethene

1,1,2-TCA = 1,1,2- trichloroethane

Table B-2
Recent Soil Analytical Results (Select Analytes)
LASD Temple Station

Sample ID	Date	Depth ft bgs	Benzene EPA 8260B (µg/kg)	Data Flag	Toluene EPA 8260B (µg/kg)	Data Flag	Ethylbenzene EPA 8260B (µg/kg)	Data Flag	Total Xylenes EPA 8260B (µg/kg)	Data Flag	1,2-DBE EPA 8260B (µg/kg)	Data Flag	1,2-DCA EPA 8260B (µg/kg)	Data Flag	PCE EPA 8260B (µg/kg)	Data Flag	TCE EPA 8260B (µg/kg)	Data Flag	DIPE EPA 8260B (µg/kg)	Data Flag
Industrial Soil Screening Levels			1,400		5.20E+05		4.00E+05		4.20E+05		73		600		1,300		6,500		NE	
Residential Soil Screening Levels			640		5.20E+05		4.00E+05		2.70E+05		32		280		480		2,900		NE	
MW-4	12/7/06	10	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		30	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		50	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		70	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		90	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		110	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		130	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
	12/11/06	150	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		170	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		190	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
	12/12/06	210	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		230	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
MW-5	2/7/07	10	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	74.6	d2	ND<2	d2	ND<2	d2
		30	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		50	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		70	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	12	d2	ND<2	d2	ND<2	d2
		90	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	2	d2	ND<2	d2	ND<2	d2
	2/8/07	110	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		130	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
	2/10/07	150	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		170	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
MW-6	12/13/06	10	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		30	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		50	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		70	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		90	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
	12/14/06	110	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
	12/15/06	130	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		150	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
	12/16/06	170	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	5	d2	ND<2	d2	ND<2	d2
	12/20/06	190	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	3.5	d2	ND<2	d2	ND<2	d2
		210	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2

Table B-2
Recent Soil Analytical Results (Select Analytes)
LASD Temple Station

Sample ID	Date	Depth ft bgs	Benzene EPA 8260B (µg/kg)	Data Flag	Toluene EPA 8260B (µg/kg)	Data Flag	Ethylbenzene EPA 8260B (µg/kg)	Data Flag	Total Xylenes EPA 8260B (µg/kg)	Data Flag	1,2-DBE EPA 8260B (µg/kg)	Data Flag	1,2-DCA EPA 8260B (µg/kg)	Data Flag	PCE EPA 8260B (µg/kg)	Data Flag	TCE EPA 8260B (µg/kg)	Data Flag	DIPE EPA 8260B (µg/kg)	Data Flag
Industrial Soil Screening Levels			1,400		5.20E+05		4.00E+05		4.20E+05		73		600		1,300		6,500		NE	
Residential Soil Screening Levels			640		5.20E+05		4.00E+05		2.70E+05		32		280		480		2,900		NE	
MW-7	2/14/07	20	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		40	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	29	d2	ND<2	d2	ND<2	d2
		60	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	6	d2	ND<2	d2	ND<2	d2
	2/15/07	80	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		100	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		120	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		137	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		140	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	2	d2	ND<2	d2	ND<2	d2
	2/16/07	160	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		174	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	18	d2	ND<2	d2	ND<2	d2
		180	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	3	d2	ND<2	d2	ND<2	d2
	2/17/07	200	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	97	d2	ND<2	d2	ND<2	d2
		220	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
MW-9	11/30/06	10	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		30	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		50	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		55	21	d2	1,564	d2	4,286	d2	17,463	d2	ND<20	d2	ND<20	d2	ND<20	d2	ND<20	d2	ND<20	d2
		70	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
	12/1/06	90	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		110	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
	12/4/06	130	ND<10	d2	122	d2	279	d2	2,454	d2	ND<20	d2	ND<20	d2	ND<20	d2	ND<20	d2	ND<20	d2
		142.5	ND<1	d2	19	d2	30	d2	213	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	2	d2
		150	ND<1	d2	14	d2	48	d2	392	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	14	d2
		162	ND<1	d2	4	d2	9	d2	78	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<20	d2
		170	40	d2	165	d2	25	d2	207	d2	32	d2	50	d2	ND<2	d2	ND<2	d2	90	d2
	12/5/06	190	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		210	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2

Table B-2
Recent Soil Analytical Results (Select Analytes)
LASD Temple Station

Sample ID	Date	Depth ft bgs	Benzene EPA 8260B (µg/kg)	Data Flag	Toluene EPA 8260B (µg/kg)	Data Flag	Ethylbenzene EPA 8260B (µg/kg)	Data Flag	Total Xylenes EPA 8260B (µg/kg)	Data Flag	1,2-DBE EPA 8260B (µg/kg)	Data Flag	1,2-DCA EPA 8260B (µg/kg)	Data Flag	PCE EPA 8260B (µg/kg)	Data Flag	TCE EPA 8260B (µg/kg)	Data Flag	DIPE EPA 8260B (µg/kg)	Data Flag
Industrial Soil Screening Levels			1,400		5.20E+05		4.00E+05		4.20E+05		73		600		1,300		6,500		NE	
Residential Soil Screening Levels			640		5.20E+05		4.00E+05		2.70E+05		32		280		480		2,900		NE	
MW-10	11/20/06	20	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		40	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		60	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		80	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		85	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
	11/21/06	100	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		120	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		140	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
	11/22/06	160	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
	11/28/06	180	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		200	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		210	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	5	d2	ND<2	d2	ND<2	d2
MW-11	11/13/06	10	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		30	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		40	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		50	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		70	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		90	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
	11/14/06	105	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		110	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		125	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		130	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		140	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
	11/15/06	150	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		162	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		170	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
	11/16/06	190	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		210	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2

Table B-2
Recent Soil Analytical Results (Select Analytes)
LASD Temple Station

Sample ID	Date	Depth ft bgs	Benzene EPA 8260B (µg/kg)	Data Flag	Toluene EPA 8260B (µg/kg)	Data Flag	Ethylbenzene EPA 8260B (µg/kg)	Data Flag	Total Xylenes EPA 8260B (µg/kg)	Data Flag	1,2-DBE EPA 8260B (µg/kg)	Data Flag	1,2-DCA EPA 8260B (µg/kg)	Data Flag	PCE EPA 8260B (µg/kg)	Data Flag	TCE EPA 8260B (µg/kg)	Data Flag	DIPE EPA 8260B (µg/kg)	Data Flag
Industrial Soil Screening Levels			1,400		5.20E+05		4.00E+05		4.20E+05		73		600		1,300		6,500		NE	
Residential Soil Screening Levels			640		5.20E+05		4.00E+05		2.70E+05		32		280		480		2,900		NE	
MW-12	1/8/07	**10**	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		30	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
	1/9/07	**50**	ND<1	d2	ND<1	d2	ND<1	d2	**3**	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		65	**31**	d2	**2,455**	d2	**2,874**	d2	**5,364**	d2	ND<10	d2	ND<10	d2	ND<10	d2	ND<10	d2	ND<10	d2
		70	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		90	ND<1	d2	**2**	d2	**3**	d2	**12**	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		110	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
	1/10/07	**130**	ND<1	d2	**2**	d2	ND<1	d2	**2**	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	**2**	d2
		150	**2**	d2	**20**	d2	**11**	d2	**40**	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	**4**	d2
		170	ND<1	d2	**3**	d2	**3**	d2	**8**	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	**5**	d2
		190	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
	1/11/07	**202**	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		250	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
	1/12/07	**270**	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		290	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2
		305	ND<1	d2	ND<1	d2	ND<1	d2	ND<1	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2	ND<2	d2

Notes:
Bold = Contaminant Detection
Contaminant concentration exceeds PRG
Not Detected- value represents reporting limit
d2 = Secondary data
ft bgs = feet below ground surface
ND = Not Detected
NE = Not Established
µg/kg = micrograms per kilogram
1,2-DBE = 1,2-Dibromoethane
1,2-DCA = 1,2-Dichloroethane
DIPE = Diisopropylether
PCE = tetrachloroethene
TCE = trichloroethene

Table B-3
Previous Soil Vapor Analytical Results (Select Analytes)[1]
LASD Temple Station

Location	Depth (ft bgs)	Sample Date	TPH (ppmv)	Data Flag	Benzene (µg/L)	Data Flag	Toluene (µg/L)	Data Flag	Ethylbenzene (µg/L)	Data Flag	Total Xylenes (µg/L)	Data Flag	PCE (µg/L)	Data Flag	1,2-DCA (µg/L)	Data Flag	Methylene Chloride (µg/L)	Data Flag	1,1,1-TCA (µg/L)	Data Flag	TCE (µg/L)	Data Flag	TCFM (µg/L)	Data Flag
CHHSLs- Residential			None		0.0362		0.025		None		315		0.18		0.0496		None		991		0.528		None	
CHHSLs- Commercial/Industrial			None		0.122		378		None		879		0.603		0.167		None		2,790		1.77		None	
VE-1A (ppmv)	10 to 50	5/18/92	2,790	d2	19	d2	250	d2	39	d2	430	d2	ND	d2	ND	d2	ND	d2	ND	d2	ND	d2	ND	d2
VE-1B (ppmv)	120 to 160	5/18/92	36,270	d2	700	d2	260	d2	230	d2	940	d2	ND	d2	ND	d2	8.7	d2	11	d2	ND	d2	ND	d2
VP-1	5	3/11/93			0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2
		5/20/93			4.5	d2	6	d2	0.3	d2	0.6	d2	0.3	d2	0.3	d2	0.3	d2	0.3	d2	0.3	d2	0.6	d2
		9/17/93			16	d2	28	d2	3.6	d2	24	d2	1	d2	1	d2	1	d2	1	d2	1	d2	1	d2
		1/26/94			29	d2	57	d2	3.8	d2	54	d2	0.3	d2	0.3	d2								
		3/8/04	320	d2	1.9	d2	23	d2	5.8	d2	36	d2	0.39	d2	0.07	d2					0.058	d2		
VP-2	5	3/11/93			0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2
VP-3	5	3/11/93			0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2
VP-4	5	3/11/93			0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2
VP-5	5	3/11/93			0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2
VP-6	5	3/11/93			0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2
		5/19/93			0.5	d2	1.2	d2	0.3	d2	0.3	d2	0.3	d2	0.3	d2	0.3	d2	0.3	d2	0.3	d2	0.6	d2
		9/17/93			300	d2	1,200	d2	140	d2	530	d2	1	d2	1.1	d2	1	d2	1	d2	1	d2	1	d2
		1/27/94			0.3	d2	1.3	d2	0.3	d2	2.7	d2	0.3	d2	0.3	d2								
VP-7	5	3/11/93			0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2
		5/19/93			1.9	d2	2.4	d2	0.3	d2	0.5	d2	0.3	d2	0.3	d2	0.3	d2	3.4	d2	0.3	d2	0.6	d2
		9/17/93			73	d2	420	d2	34	d2	340	d2	1.1	d2	5.0	d2	1	d2	1	d2	1	d2	1	d2
		1/27/94			0.3	d2	0.3	d2	0.3	d2	0.7	d2	0.3	d2	0.3	d2								
		3/8/04	1.8		2.2	d2	0.059	d2	0.022	d2	0.054	d2	0.086	d2	0.0032	d2					0.0027	d2		
BH-10	15	3/11/93			24	d2	96	d2	27	d2	163	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2
	20	5/19/93			23	d2	44	d2	4.5	d2	120	d2	1	d2	0.3	d2	0.3	d2	0.3	d2	0.3	d2	0.6	d2
		9/17/93			28	d2	130	d2	16	d2	160	d2	1	d2	1	d2	1	d2	1	d2	1	d2	4.5	d2
		1/27/94			0.5	d2	1.8	d2	0.8	d2	14	d2	1.1	d2	0.3	d2								
		3/8/04	1,900	d2	30	d2	160	d2	42	d2	220	d2	40	d2	0.17	d2					0.15	d2		
	25	3/11/93			256	d2	> 2,139	d2	418	d2	> 2,106	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2
	35	3/11/93			> 2,122	d2	> 3,097	d2	395	d2	> 1,802	d2	0.5	d2	1.4	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2
	40	5/19/93			3,000	d2	7,100	d2	190	d2	2,300	d2	0.3	d2	9 < x <20	d2	0.3	d2	0.3	d2	0.3	d2	0.6	d2
		9/17/93			5,600	d2	16,000	d2	1,100	d2	10,000	d2	1	d2	8.2	d2	1	d2	1	d2	1	d2	1	d2
		1/27/94			670	d2	3,200	d2	200	d2	2,500	d2	3.3	d2	14	d2								
		3/8/04	94,000	d2	1,400	d2	8,500	d2	810	d2	7,500	d2	44	d2	35	d2					29	d2		
BH-10 (continued)	45	3/11/93			> 1,054	d2	> 1,561	d2	183	d2	> 1,015	d2	0.5	d2	16.9	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2
	60	5/19/93			3,200	d2	3,300	d2	800	d2	3,600	d2	0.3	d2	370	d2	0.3	d2	0.3	d2	0.3	d2	0.6	d2
		9/17/93			14,000	d2	16,000	d2	890	d2	4,000	d2	1	d2	23	d2	1	d2	1	d2	1	d2	1	d2
		1/27/94			5,400	d2	9,000	d2	1,400	d2	7,600	d2	0.3	d2	79	d2								
		3/8/04	370,000	d2	10,000	d2	19,000	d2	1,500	d2	6,300	d2	90	d2	71	d2					59	d2		
	65	3/11/93			> 2,998	d2	> 2,220	d2	142	d2	692	d2	0.5	d2	46.2	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2
		3/11/93 DUP			0.5	d2	>1,440	d2	31	d2	148	d2	0.5	d2	27.8	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2

Table B-3
Previous Soil Vapor Analytical Results (Select Analytes)[1]
LASD Temple Station

Location	Depth (ft bgs)	Sample Date	TPH (ppmv)	Data Flag	Benzene (µg/L)	Data Flag	Toluene (µg/L)	Data Flag	Ethylbenzene (µg/L)	Data Flag	Total Xylenes (µg/L)	Data Flag	PCE (µg/L)	Data Flag	1,2-DCA (µg/L)	Data Flag	Methylene Chloride (µg/L)	Data Flag	1,1,1-TCA (µg/L)	Data Flag	TCE (µg/L)	Data Flag	TCFM (µg/L)	Data Flag
CHHSLs- Residential			None		0.0362		0.025		None		315		0.18		0.0496		None		991		0.528		None	
CHHSLs- Commercial/Industrial			None		0.122		378		None		879		0.603		0.167		None		2,790		1.77		None	
BH-11	18	3/11/93			0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2
	20	5/20/93			16	d2	20	d2	2.4	d2	38	d2	0.8	d2	0.3	d2	0.3	d2	0.3	d2	0.3	d2	0.6	d2
		9/17/93			160	d2	270	d2	110	d2	1,400	d2	7	d2	1.6	d2	1	d2	1	d2	1	d2	1.9	d2
		1/26/94			1.1	d2	18	d2	8	d2	49	d2	9	d2	0.9	d2								
		3/8/04	33	d2	0.11	d2	1.9	d2	0.58	d2	3.8	d2	0.022	d2	0.017	d2					0.017	d2		
	25	3/11/93			0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2
	35	3/11/93			> 996	d2	> 954	d2	95	d2	> 630	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2
	40	5/20/93			1,800	d2	1,600	d2	53	d2	220	d2	2.5	d2	5.1	d2	0.3	d2	0.3	d2	0.3	d2	0.6	d2
		9/17/93			3,200	d2	8,500	d2	71	d2	4,900	d2	2.9	d2	4.2	d2	1	d2	1	d2	1	d2	1	d2
		1/26/94			800	d2	1,100	d2	41	d2	790	d2	1.8	d2	8.4	d2								
		3/8/04	170,000	d2	2,700	d2	9,400	d2	1,000	d2	5,500	d2	41	d2	6.9	d2					5.7	d2		
	45	3/11/93			> 2,376	d2	> 1,992	d2	85	d2	451	d2	0.5	d2	22.1	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2
	55	3/11/93			> 2,460	d2	> 2,376	d2	131	d2	576	d2	8.7	d2	40	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2
	60	5/20/93			2,700	d2	1,300	d2	11	d2	27	d2	5.3	d2	86	d2	0.3	d2	0.3	d2	0.3	d2	0.6	d2
		9/17/93			11,000	d2	17,000	d2	650	d2	4,200	d2	4.7	d2	7.5	d2	1	d2	1	d2	1	d2	1	d2
		1/26/94			2,100	d2	4,500	d2	410	d2	1,600	d2	7.3	d2	25	d2								
		3/8/04	250,000	d2	4,900	d2	15,000	d2	1,400	d2	5,800	d2	52	d2	36	d2					30	d2		
	65	3/11/93			> 2,670	d2	> 2,514	d2	198	d2	839	d2	21.2	d2	41.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2
MW-1	65	2/23/93			0.5	d2	1.9	d2	0.5	d2	0.8	d2	88	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2
		2/23/93 DUP			0.5	d2	3.1	d2	0.5	d2	0.5	d2	79.3	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2
		5/19/93			10	d2	10	d2	0.5	d2	2.5	d2	550	d2	0.3	d2	0.3	d2	0.3	d2	2.4	d2	1.3	d2
		9/17/93			1	d2	1	d2	1	d2	1	d2	320	d2	3.8	d2	1	d2	1	d2	3.8	d2	1	d2
		1/27/94			0.8	d2	2	d2	0.3	d2	2.1	d2	612	d2	0.3	d2								
		3/8/04	310	d2	3.9	d2	1.8	d2	2.1	d2	5.3	d2	1,400	d2	3.2	d2					3.4	d2		
	125	2/23/93			1.8	d2	0.5	d2	0.5	d2	0.5	d2	57.4	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2
		5/19/93			31	d2	110	d2	5.8	d2	38	d2	9 < x <20	d2	0.4	d2	0.3	d2	0.3	d2	0.3	d2	0.6	d2
		9/17/93			70	d2	150	d2	12	d2	60	d2	14	d2	1	d2	1	d2	1	d2	1	d2	14	d2
		3/8/04	6.6	d2	0.06	d2	0.028	d2	0.033	d2	0.082	d2	14	d2	0.049	d2					0.04	d2		
MW-1 (continued)	185	2/23/93			27.2	d2	7.5	d2	0.5	d2	4.4	d2	89.3	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2
		5/19/93			100	d2	6.4	d2	0.7	d2	3.2	d2	260	d2	0.3	d2	0.3	d2	0.3	d2	0.7	d2	0.6	d2
		9/17/93			62	d2	110	d2	7.9	d2	130	d2	19	d2	1	d2	1	d2	1	d2	1	d2	1.3	d2
		1/27/94			42	d2	170	d2	20	d2	120	d2	0.3	d2	0.3	d2								
		3/8/04	8.3	d2	0.094	d2	0.044	d2	0.051	d2	0.13	d2	36	d2	0.076	d2					0.1	d2		
MW-2	60	2/23/93			755.7	d2	1050.7	d2	28.3	d2	113.8	d2	0.5	d2	1.2	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2
		5/19/93			710	d2	500	d2	1,200	d2	4,300	d2	0.3	d2	3.5	d2	0.3	d2	0.3	d2	0.3	d2	0.6	d2
		9/17/93			3,600	d2	4,100	d2	270	d2	890	d2	1	d2	2.6	d2	1	d2	1	d2	1	d2	1	d2
	183	2/23/93			650.2	d2	962.1	d2	46.8	d2	181	d2	7.6	d2	7.7	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2
		5/19/93			620	d2	1,300	d2	110	d2	510	d2	0.1	d2	9 < x <20	d2	0.3	d2	0.3	d2	0.3	d2	0.6	d2
		9/17/93			1,900	d2	1,300	d2	160	d2	840	d2	12	d2	9.3	d2	1	d2	1	d2	9.3	d2	1	d2
		3/8/04	210,000	d2	1,500	d2	8,300	d2	860	d2	4,200	d2	82	d2	65	d2					54	d2		
		3/8/04 DUP	210,000	d2	1,300	d2	7,600	d2	800	d2	3,900	d2	40	d2	32	d2					27	d2		

Table B-3

Previous Soil Vapor Analytical Results (Select Analytes)[1]

LASD Temple Station

Location	Depth (ft bgs)	Sample Date	TPH (ppmv)	Data Flag	Benzene (µg/L)	Data Flag	Toluene (µg/L)	Data Flag	Ethylbenzene (µg/L)	Data Flag	Total Xylenes (µg/L)	Data Flag	PCE (µg/L)	Data Flag	1,2-DCA (µg/L)	Data Flag	Methylene Chloride (µg/L)	Data Flag	1,1,1-TCA (µg/L)	Data Flag	TCE (µg/L)	Data Flag	TCFM (µg/L)	Data Flag
CHHSLs- Residential			None		0.0362		0.025		None		315		0.18		0.0496		None		991		0.528		None	
CHHSLs- Commercial/Industrial			None		0.122		378		None		879		0.603		0.167		None		2,790		1.77		None	
MW-3	61	2/23/93			**110.4**	d2	**158.4**	d2	**5.4**	d2	**63.1**	d2	**0.9**	d2	**5.4**	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2
		5/20/93			**770**	d2	**230**	d2	**250**	d2	**940**	d2	**2.3**	d2	**31**	d2	0.3	d2	0.3	d2	0.3	d2	0.6	d2
		9/17/93			**6,600**	d2	**15,000**	d2	**680**	d2	**5,500**	d2	**3.7**	d2	**12**	d2	1	d2	1	d2	1	d2	1	d2
	121	2/23/93			**412.5**	d2	**540.1**	d2	**21.7**	d2	**158.1**	d2	**1.1**	d2	**6**	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2
		5/20/93			**830**	d2	**750**	d2	**36**	d2	**420**	d2	**6.9**	d2	**11**	d2	0.3	d2	0.3	d2	**0.7**	d2	0.6	d2
		9/17/93			**18**	d2	**120**	d2	**8.5**	d2	**110**	d2	**4.1**	d2	**10**	d2	1	d2	1	d2	1	d2	1	d2
		3/8/04	**3,800**	d2	**2.8**	d2	**15**	d2	**4**	d2	**77**	d2	**110**	d2	0.18	d2					**4.8**	d2		
	181	2/23/93			**310**	d2	**423.8**	d2	**15.2**	d2	**90.3**	d2	**11.7**	d2	**1.8**	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2
		5/20/93			**500**	d2	**470**	d2	0.5	d2	**490**	d2	**9 < x <20**	d2	**4.8**	d2	0.3	d2	0.3	d2	**0.9**	d2	0.6	d2
		9/17/93			**1,000**	d2	**600**	d2	**140**	d2	**1,600**	d2	**15**	d2	**8.4**	d2	1	d2	1	d2	**1.7**	d2	1	d2
SV-1	10	2/26/93			0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2
SV-2	10	2/26/93			0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2
SV-3	10	2/26/93			0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2

Notes:

[1]Previous investigations include 1991, 1992, 1993 and 2004

Bold = Contaminant Detection

Contaminant concentration exceeds CHHSL

Not Detected- value represents reporting limit

Not Analyzed

CHHSLs = California Human Health Screening Levels

d2 = Secondary data

DUP = duplicate

EPA = United States Environmental Protection Agency

ft-bgs = feet below ground surface

J = Estimated results between the method detection limit (MDL) and reporting detection limit (RDL)

ND = Not Detected

NE = Not Established

ppmv = parts per million by volume

µg/L = micrograms per liter

cis-1,2-DCE = cis-1,2-dichloroethene

1,2-DCA = 1, 2-Dichloroethane

DIPE = Di-isopropyl ether

PCE = Tetrachloroethene

TCE = trichloroethene

TCFM = trichlorofluormethane

Table B-4
Recent Soil Vapor Analytical Results (Select Analytes)
LASD Temple Station

Sample ID	Date	Depth (ft bgs)	Benzene 8260B (µg/L)	Data Flag	Toluene 8260B (µg/L)	Data Flag	Ethyl-benzene 8260B (µg/L)	Data Flag	Total Xylenes 8260B (µg/L)	Data Flag	1,2-DCA 8260B (µg/L)	Data Flag	cis-1,2-DCE 8260B (µg/L)	Data Flag	PCE 8260B (µg/L)	Data Flag	TCE 8260B (µg/L)	Data Flag	DIPE 8260B (µg/L)	Data Flag
CHHSLs - Residential			0.0362		0.025		NE		315		0.0496		15.9		0.18		0.528		NE	
CHHSLs - Commercial/Industrial			0.122		378		NE		879		0.167		44.4		0.603		1.77		NE	
KVP1-5	12/20/06	**5**	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	ND<1.0	d2	ND<1.0	d2	**34**	d2	ND<1.0	d2	ND<1.0	d2
		20	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	ND<1.0	d2	ND<1.0	d2	**100**	d2	ND<1.0	d2	ND<1.0	d2
KVP2-5	12/20/06	**5**	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	ND<1.0	d2	ND<1.0	d2	**7.1**	d2	ND<1.0	d2	ND<1.0	d2
		20	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	ND<1.0	d2	ND<1.0	d2	**60**	d2	ND<1.0	d2	ND<1.0	d2
KVP3-5	12/20/06	**5**	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	ND<1.0	d2	ND<1.0	d2	**1.9**	d2	ND<1.0	d2	ND<1.0	d2
		20	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	ND<1.0	d2	ND<1.0	d2	**12**	d2	ND<1.0	d2	ND<1.0	d2
KVP4-5	12/20/06	**5**	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	ND<1.0	d2	ND<1.0	d2	**2.9**	d2	ND<1.0	d2	ND<1.0	d2
		20	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	ND<1.0	d2	ND<1.0	d2	**10**	d2	ND<1.0	d2	ND<1.0	d2
		20 (DUP)	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	ND<1.0	d2	ND<1.0	d2	**9.2**	d2	ND<1.0	d2	ND<1.0	d2
KVP5-5	12/20/06	**5**	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	ND<1.0	d2	ND<1.0	d2	**3**	d2	ND<1.0	d2	ND<1.0	d2
		20	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	ND<1.0	d2	ND<1.0	d2	**13**	d2	ND<1.0	d2	ND<1.0	d2
KVP6-5	01/23/07	**5**	ND<1.0	d2	**0.3J**	d2	ND<1.0	d2	ND<2.0	d2	ND<1.0	d2	ND<1.0	d2	**0.4J**	d2	ND<1.0	d2	ND<1.0	d2
		20	ND<1.0	d2	**0.1J**	d2	ND<1.0	d2	ND<2.0	d2	ND<1.0	d2	ND<1.0	d2	**8.7**	d2	ND<1.0	d2	ND<1.0	d2
		20 (DUP)	ND<1.0	d2	**0.1J**	d2	ND<1.0	d2	ND<2.0	d2	ND<1.0	d2	ND<1.0	d2	**8.1**	d2	ND<1.0	d2	ND<1.0	d2
KVP8-5	12/19/06	**5**	ND<1.0	d2	**0.2J**	d2	ND<1.0	d2	ND<2.0	d2	ND<1.0	d2	ND<1.0	d2	**13**	d2	ND<1.0	d2	ND<1.0	d2
		20	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	ND<1.0	d2	ND<1.0	d2	**29**	d2	ND<1.0	d2	ND<1.0	d2
		35	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	ND<1.0	d2	ND<1.0	d2	**30**	d2	ND<1.0	d2	ND<1.0	d2
		50	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	ND<1.0	d2	ND<1.0	d2	**71**	d2	ND<1.0	d2	ND<1.0	d2
		65	ND<1.0	d2	**0.8J**	d2	ND<1.0	d2	ND<2.0	d2	ND<1.0	d2	ND<1.0	d2	**120**	d2	**0.5J**	d2	ND<1.0	d2
		65 (DUP)	ND<1.0	d2	**0.6J**	d2	ND<1.0	d2	ND<2.0	d2	ND<1.0	d2	ND<1.0	d2	**120**	d2	**0.4J**	d2	ND<1.0	d2
KVP7-5	12/19/06	**5**	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	ND<1.0	d2	ND<1.0	d2	**240**	d2	ND<1.0	d2	ND<1.0	d2
		20	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	ND<1.0	d2	ND<1.0	d2	**340**	d2	**1.1**	d2	ND<1.0	d2
		35	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	ND<1.0	d2	ND<1.0	d2	**570**	d2	ND<1.0	d2	ND<1.0	d2
		50	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	ND<1.0	d2	ND<1.0	d2	**320**	d2	ND<1.0	d2	ND<1.0	d2
		65	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	ND<1.0	d2	ND<1.0	d2	**890**	d2	**4.5J**	d2	ND<1.0	d2
MW5VP	03/09/07	**30**	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	ND<1.0	d2	ND<1.0	d2	**150**	d2	ND<1.0	d2	ND<1.0	d2
		60	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	ND<1.0	d2	ND<1.0	d2	**220**	d2	**1.3**	d2	ND<1.0	d2
		90	ND<5.0	d2	ND<5.0	d2	ND<5.0	d2	ND<10.0	d2	ND<5.0	d2	ND<5.0	d2	**330**	d2	ND<5.0	d2	ND<5.0	d2
		120	ND<5.0	d2	ND<5.0	d2	ND<5.0	d2	ND<10.0	d2	ND<5.0	d2	ND<5.0	d2	**250**	d2	**2.1J**	d2	ND<5.0	d2
		150	ND<5.0	d2	ND<5.0	d2	ND<5.0	d2	ND<10.0	d2	ND<5.0	d2	ND<5.0	d2	**300**	d2	ND<5.0	d2	ND<5.0	d2
		180	ND<5.0	d2	ND<5.0	d2	ND<5.0	d2	ND<10.0	d2	ND<5.0	d2	ND<5.0	d2	**450**	d2	**2.2J**	d2	ND<5.0	d2
		180 (DUP)	ND<5.0	d2	ND<5.0	d2	ND<5.0	d2	ND<10.0	d2	ND<5.0	d2	ND<5.0	d2	**400**	d2	ND<5.0	d2	ND<5.0	d2
MW6VP	01/23/07	**60**	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	ND<1.0	d2	ND<1.0	d2	**160**	d2	**0.9J**	d2	ND<1.0	d2
		90	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	ND<1.0	d2	ND<1.0	d2	**140**	d2	**0.4J**	d2	ND<1.0	d2
		120	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	ND<1.0	d2	**2.2**	d2	**430**	d2	**6.5**	d2	ND<1.0	d2
		150	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	ND<1.0	d2	ND<1.0	d2	**410**	d2	**2.1J**	d2	ND<1.0	d2
		180	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	ND<1.0	d2	ND<1.0	d2	**280**	d2	ND<5.0	d2	ND<1.0	d2
MW7VP	03/09/07	**30**	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	ND<1.0	d2	ND<1.0	d2	**260**	d2	**0.4J**	d2	ND<1.0	d2
		60	ND<5.0	d2	ND<5.0	d2	ND<5.0	d2	ND<10.0	d2	ND<5.0	d2	ND<5.0	d2	**340**	d2	ND<5.0	d2	ND<5.0	d2
		90	ND<5.0	d2	ND<5.0	d2	ND<5.0	d2	ND<10.0	d2	ND<5.0	d2	ND<5.0	d2	**420**	d2	**2.6J**	d2	ND<5.0	d2
		120	ND<5.0	d2	ND<5.0	d2	ND<5.0	d2	ND<10.0	d2	ND<5.0	d2	ND<5.0	d2	**650**	d2	**4.4J**	d2	ND<5.0	d2
		150	ND<5.0	d2	ND<5.0	d2	ND<5.0	d2	ND<10.0	d2	ND<5.0	d2	ND<5.0	d2	**450**	d2	**3.2J**	d2	ND<5.0	d2
		180	ND<5.0	d2	ND<5.0	d2	ND<5.0	d2	ND<10.0	d2	ND<5.0	d2	ND<5.0	d2	**540**	d2	**4.0J**	d2	ND<5.0	d2
MW9VP	01/23/07	**30**	ND<1.0	d2	**1.3**	d2	0.6J	d2	**2.3J**	d2	ND<1.0	d2	ND<1.0	d2	**7.2**	d2	**0.2J**	d2	ND<1.0	d2
	12/19/06	**60**	**410**	d2	**970**	d2	**21**	d2	**48**	d2	**11**	d2	ND<1.0	d2	**8.9**	d2	ND<1.0	d2	**84**	d2
	01/24/07	**60**	**2,200**	d2	**2,900**	d2	**26**	d2	**21J**	d2	**54**	d2	ND<1.0	d2	ND<25	d2	ND<1.0	d2	**460**	d2
	01/23/07	**90**	**670**	d2	**3,300**	d2	**110**	d2	**165**	d2	**30**	d2	ND<1.0	d2	**12**	d2	ND<1.0	d2	**140**	d2
	01/23/07	**120**	**1,100**	d2	**3,500**	d2	**130**	d2	**165**	d2	**80**	d2	ND<1.0	d2	**13**	d2	ND<1.0	d2	**370**	d2
	12/20/06	**150**	**400**	d2	**790**	d2	**26**	d2	**59**	d2	**19**	d2	ND<1.0	d2	**6.6J**	d2	ND<1.0	d2	**170**	d2
	01/24/07	**150**	**1,100**	d2	**3,200**	d2	**100**	d2	**128J**	d2	**56**	d2	ND<1.0	d2	**13J**	d2	ND<1.0	d2	**350**	d2
	01/23/07	**180**	**1,400**	d2	**3,300**	d2	**100**	d2	**130**	d2	**54**	d2	ND<1.0	d2	**12**	d2	ND<1.0	d2	**370**	d2
MW10VP	01/24/07	**30**	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	ND<1.0	d2	ND<1.0	d2	**9.9**	d2	ND<1.0	d2	ND<1.0	d2
		180	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	ND<1.0	d2	ND<1.0	d2	**70**	d2	ND<1.0	d2	**1.2**	d2
		180 (DUP)	ND<1.0	d2	ND<1.0	d2	ND<1.0	d2	ND<2.0	d2	ND<1.0	d2	ND<1.0	d2	**74**	d2	ND<1.0	d2	**1.2**	d2

Notes:
Bold = Contaminant Detection
Contaminant concentration exceeds CHHSL
Not Detected- value represents reporting limit

CHHSLs = California Human Health Screening Levels
d2 = Secondary data
DUP = duplicate
EPA = United States Environmental Protection Agency
ft-bgs = feet below ground surface

J = Estimated results between the method detection limit (MDL) and reporting detection limit (RDL)
ND = Not Detected
NE = Not Established
µg/L = micrograms per liter

cis-1,2-DCE = cis-1,2-dichloroethene
1,2-DCA = 1, 2-Dichloroethane
DIPE = Di-isopropyl ether
PCE = Tetrachloroethene
TCE = trichloroethene

Table B-5

Previous Groundwater Analytical Results (Selected Analytes)[1]

LASD Temple Station

Well	Date	TPH EPA 8015M (µg/L)	Data Flag	Benzene EPA 8020 (µg/L)	Data Flag	Toluene EPA 8020 (µg/L)	Data Flag	Ethylbenzene EPA 8020 (µg/L)	Data Flag	Xylenes EPA 8020 (µg/L)	Data Flag	PCE EPA 8010 (µg/L)	Data Flag	1,2-DCA EPA 8010 (µg/L)	Data Flag	1,1,1-TCA EPA 8010 (µg/L)	Data Flag	TCE EPA 8010 (µg/L)	Data Flag	Naphthalene EPA 8260B (µg/L)	Data Flag
CA DHS MCL or NL		None		1		150		300		1,750		5		0.5		200		5		17	
EPA MCL		None		5		1,000		700		10,000		5		5		200		5		None	
MW-1	2/24/93	200	d2	**2.2**	d2	0.5	d2	0.5	d2	1	d2	**460**	d2	0.5	d2	0.5	d2	4.6	d2	--	--
	6/23/93	180	d2	**8.8**	d2	0.5	d2	0.5	d2	2.5	d2	**390**	d2	0.5	d2	0.5	d2	4.2	d2	--	--
	10/12/93	110	d2	10	d2	10	d2	10	d2	10	d2	**430**	d2	10	d2	10	d2	10	d2	--	--
	1/31/94	120	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	**270**	d2	0.5	d2	0.5	d2	2.6		--	--
	4/14/94	150	d2	0.5	d2	0.5	d2	0.5	d2	1	d2	**480**	d2	0.5	d2	0.5	d2	0.5	d2	--	--
	2/18/04	210	d2	0.5	d2	1.5	d2	1	d2	1.2	d2	**950**	d2	0.5	d2	1	d2	**6.6**	d2	10	d2
MW-2	2/24/93	200/230	d2	**24/32**	d2	15/22	d2	0.5/0.5	d2	23/28	d2	**50/49**	d2	**17/15**	d2	0.5/0.5	d2	0.5/0.5	d2	--	--
	6/23/93	170/130	d2	**29/9.2**	d2	5.5/2.2	d2	0.5/0.5	d2	9.1/5.2	d2	**82/81**	d2	**7.7/2**	d2	0.5/0.5	d2	1.3/0.9	d2	--	--
	10/12/93	910	d2	**440**	d2	140	d2	5	d2	176	d2	**150**	d2	**64**	d2	5	d2	5	d2	--	--
	1/31/94	260	d2	**37**	d2	0.5	d2	0.5	d2	0.5	d2	**130**	d2	**21**	d2	0.5	d2	0.5	d2	--	--
	4/14/94	240/590	d2	**11/74**	d2	0.5/2.7	d2	0.5/0.5	d2	1/9.3	d2	**120/--**	d2	**15/--**	d2	0.5/--	d2	1.6/--	d2	--	--
	2/18/04	7,700	d2	**790**	d2	**1,900**	d2	270	d2	2,080	d2	**370**	d2	**110**	d2	1	d2	3.5	d2	**24**	d2
MW-3	2/24/93	300	d2	**49**	d2	10	d2	0.5	d2	25	d2	**240**	d2	**24**	d2	0.5	d2	2.4	d2	--	--
	6/23/93	340	d2	**26**	d2	8.6	d2	0.5	d2	22.2	d2	**320**	d2	**9.8**	d2	0.5	d2	3.2	d2	--	--
	10/12/93	340/220	d2	**17/26**	d2	10/15	d2	10/10	d2	20/37	d2	**370/400**	d2	**19/28**	d2	10/10	d2	10/10	d2	--	--
	1/31/94	100	d2	0.5	d2	0.5	d2	0.5	d2	0.5	d2	**120**	d2	**4**	d2	0.9	d2	1.5	d2	--	--
	4/14/94	770	d2	**100**	d2	2.8	d2	0.5	d2	1.7	d2	**470**	d2	**30**	d2	0.5	d2	**6.8**	d2	--	--
	2/18/04	310	d2	0.55	d2	1	d2	1	d2	1	d2	**940**	d2	**20**	d2	1	d2	**13**	d2	10	d2

Notes:

[1]Previous investigations include 1991, 1992, 1993 and 2004

Bold = Contaminant Detection

Contaminant concentration exceeds corresponding MCL or NL

Not Detected- value represents reporting limit

Duplicate sampling results separated by forward slash.

-- = Not applicable (not analyzed or no MCL exists).

CA DHS = California Department of Health Services

d2 = Secondary data

EPA = United States Environmental Protection Agency

MCL = Maximum contaminant level

NA = Not Analyzed

ND = Not detected

NE = Not established

NL = Notification Level

µg/L = Micrograms per liter

1,2-DCA = 1,2-dichloroethane

DIPE = Diisopropylether

MTBE = Methyl Tertiary Butyl Ether

PCE = Tetrachlorothene

TBA = Tertiary Butyl Alcohol

1,1,1-TCA = 1,1,1- trichloroethane

TCE = Trichloroethene

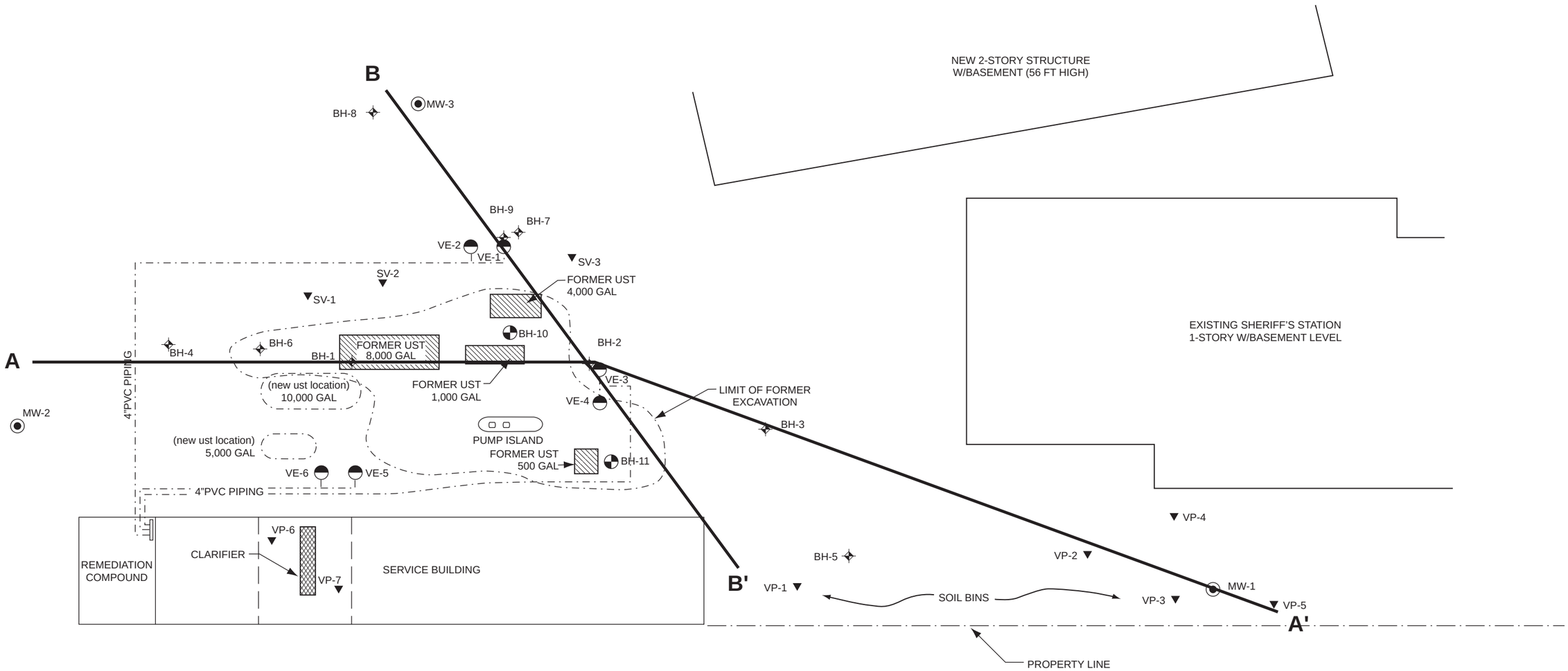
TPH = Total Petroleum Hydrocarbons

Table B-6
Recent Groundwater Analytical Results (Select Analytes)
LASD Temple Station

Well	Date	TPH (C4-C12) EPA 8015M (µg/L)	Data Flag	TPH (C13-C22) EPA 8015M (µg/L)	Data Flag	TPH (C23-C40) EPA 8015M (µg/L)	Data Flag	Benzene EPA 8260B (µg/L)	Data Flag	Toluene EPA 8260B (µg/L)	Data Flag	Ethyl-benzene EPA 8260B (µg/L)	Data Flag	Total Xylenes EPA 8260B (µg/L)	Data Flag	PCE EPA 8260B (µg/L)	Data Flag	TCE EPA 8260B (µg/L)	Data Flag	1,2-DCA EPA 8260B (µg/L)	Data Flag	MTBE EPA 8260B (µg/L)	Data Flag	DIPE EPA 8260B (µg/L)	Data Flag	TBA EPA 8260B (µg/L)	Data Flag
CA DHS MCL or NL		NE		NE		NE		1		150		300		1,750		5		5		0.5		13		NE		NE	
MCL		NE		NE		NE		1		150		300		1,750		5		5		0.5		13		NE		NE	
MW-1	01/22/07	ND<100	d2	ND<500	d2	ND<1,000	d2	ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	**155.7**	d2	1.5	d2	ND<0.5	d2	ND<1.0	d2	ND<1.0	d2	24.7	d2
MW-2	01/22/07	ND<100	d2	ND<500	d2	ND<1,000	d2	ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	**14.2**	d2	ND<0.5	d2	ND<0.5	d2	ND<1.0	d2	ND<1.0	d2	43.9	d2
MW-3	01/22/07	ND<100	d2	ND<500	d2	ND<1,000	d2	ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	**338.8**	d2	**13.2**	d2	**2.1**	d2	ND<1.0	d2	24.1	d2	15.2	d2
MW-4	01/25/07	ND<100	d2	ND<500	d2	ND<1,000	d2	ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	**24.7**	d2	ND<0.5	d2	ND<0.5	d2	ND<1.0	d2	ND<1.0	d2	20.9	d2
MW-5	03/13/07	ND<100	d2	ND<500	d2	ND<1,000	d2	ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	**19.4**	d2	ND<0.5	d2	NA	d2	ND<1.0	d2	NA	d2	NA	d2
MW-6	01/29/07	ND<100	d2	ND<500	d2	ND<1,000	d2	ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	**380.2**	d2	4.3	d2	ND<0.5	d2	ND<1.0	d2	ND<1.0	d2	22.5	d2
MW-7	03/13/07	ND<100	d2	ND<500	d2	ND<1,000	d2	ND<5.0	d2	ND<5.0	d2	ND<5.0	d2	ND<5.0	d2	**639.5**	d2	4.0	d2	NA	d2	ND<10.0	d2	NA	d2	NA	d2
MW-9	01/22/07	ND<100	d2	ND<500	d2	ND<1,000	d2	ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	**20.1**	d2	0.9	d2	ND<0.5	d2	ND<1.0	d2	1.7	d2	ND<10.0	d2
MW-10	01/25/07	ND<100	d2	ND<500	d2	ND<1,000	d2	ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	**100.0**	d2	2.0	d2	ND<0.5	d2	ND<1.0	d2	41.8	d2	16.5	d2
MW-11	01/22/07	ND<100	d2	ND<500	d2	ND<1,000	d2	ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	1.0	d2	**21.1**	d2	1.4	d2	**1.7**	d2	ND<1.0	d2	18.5	d2	ND<10.0	d2
MW-12	01/29/07	ND<100	d2	ND<500	d2	ND<1,000	d2	ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	ND<0.5	d2	1.8	d2	ND<0.5	d2	ND<0.5	d2	ND<1.0	d2	ND<1.0	d2	47.1	d2

Notes:
Bold = Contaminant Detection
Contaminant concentration exceeds corresponding MCL or NL
Not Detected- value represents reporting limit

CA DHS = California Department of Health Services
d2 = Secondary data
EPA = United States Environmental Protection Agency
MCL = Maximum contaminant level
NA = Not Analyzed
ND = Not detected
NE = Not established
NL = Notification Level
µg/L = Micrograms per liter
1,2-DCA = 1,2-dichloroethane
DIPE = Diisopropylether
MTBE = Methyl Tertiary Butyl Ether
PCE = Tetrachlorothene
TBA = Tertiary Butyl Alcohol
TCE = Trichloroethene
TPH = Total Petroleum Hydrocarbons



LEGEND

- Soil Boring(Schaffer Dixon)
- Soil Boring(Fugro-McClelland)
- Vapor Extraction Well (Fugro-McClelland)
- Groundwater Monitoring Well (Fugro-McClelland)
- Shallow Soil Vapor Probe (Fugro-McClelland)

Notes:

UST = Underground storage tank

NORTH

0 10 20
FEET

REFERENCE: Modified from Schaefer Dixon Associates, Inc., 1992

For Cross-Section A-A' see Figures B-2, B-4, B-6, and B-8

For Cross-Section B-B' see Figures B-3, B-5, B-7, and B-9

FIGURE B-1
Site Map with Cross-Section Location
LASD Temple Station

Date: August 18, 2006

ES012008008SCO335379.DE.01 TS_018.ai 8/08

CH2MHILL

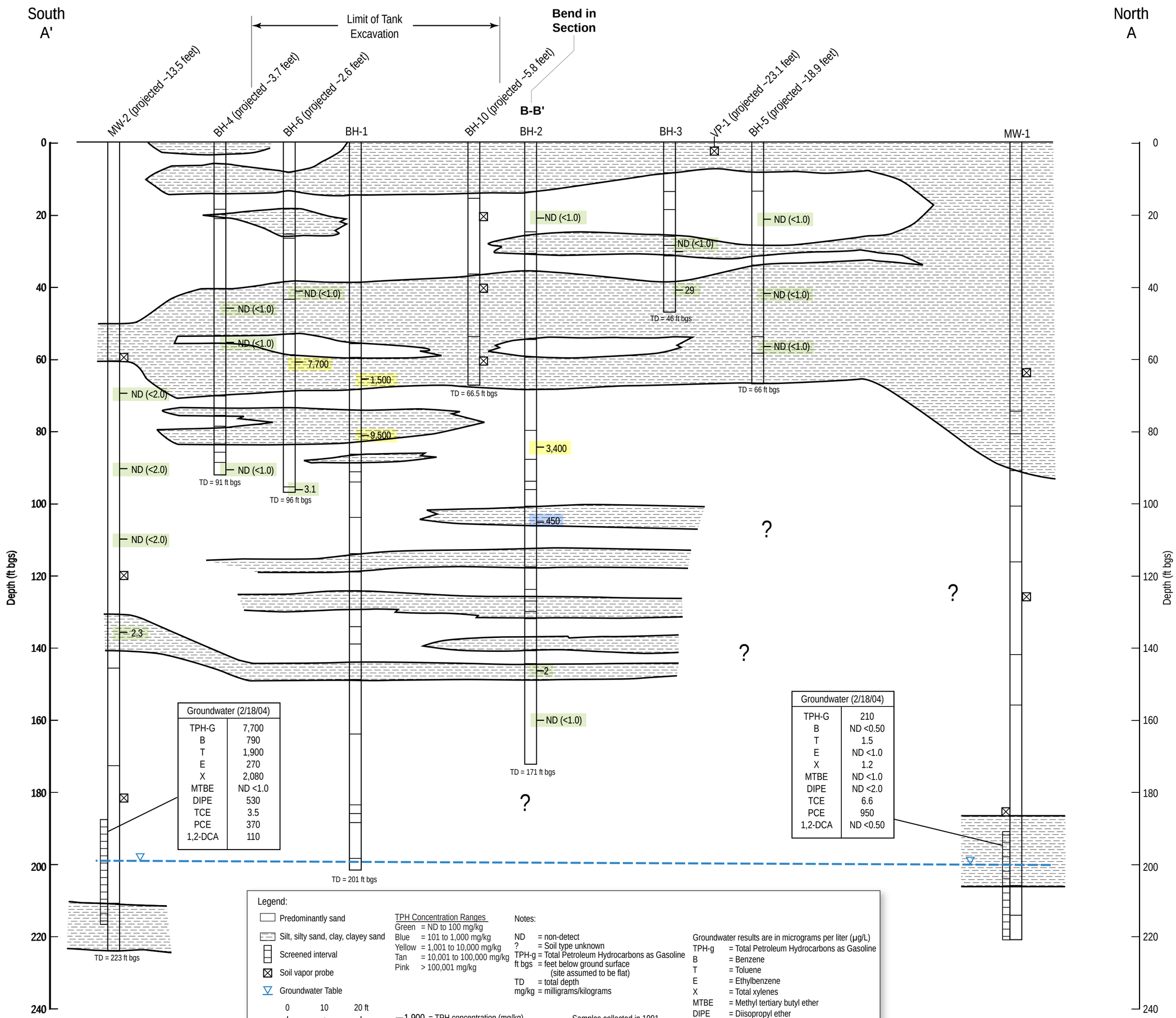


FIGURE B-2
TPH as Gasoline in Soil
LASD Temple Station

Date: August 18, 2006

ES012008008SCO335379.DE.01 TS_019.ai 8/08

CH2MHILL

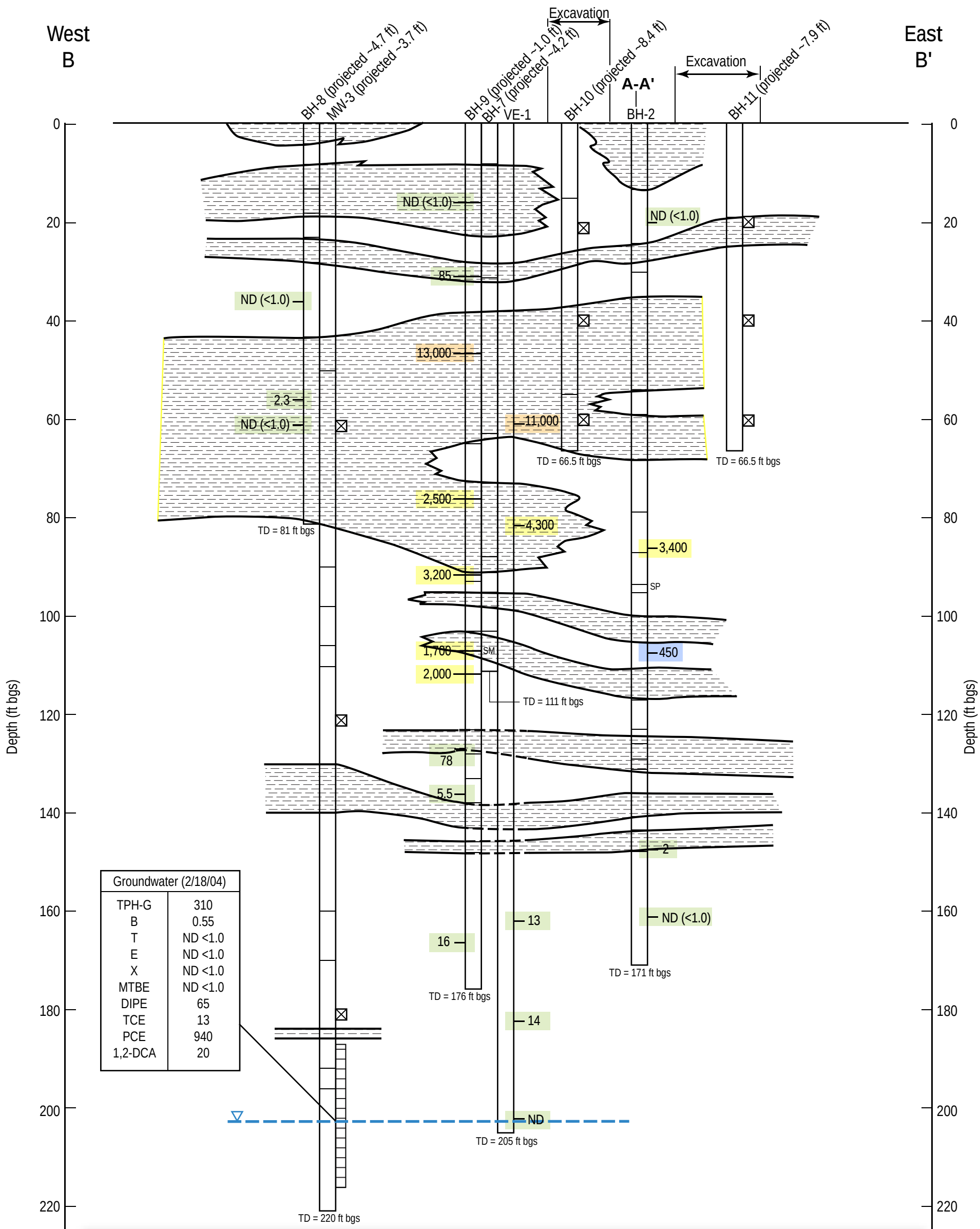


FIGURE B-3
TPH as Gasoline in Soil
LASD Temple Station

Date: August 18, 2006

CH2MHILL

ES012008008SCO335379.DE.01 TS_020.ai 8/08

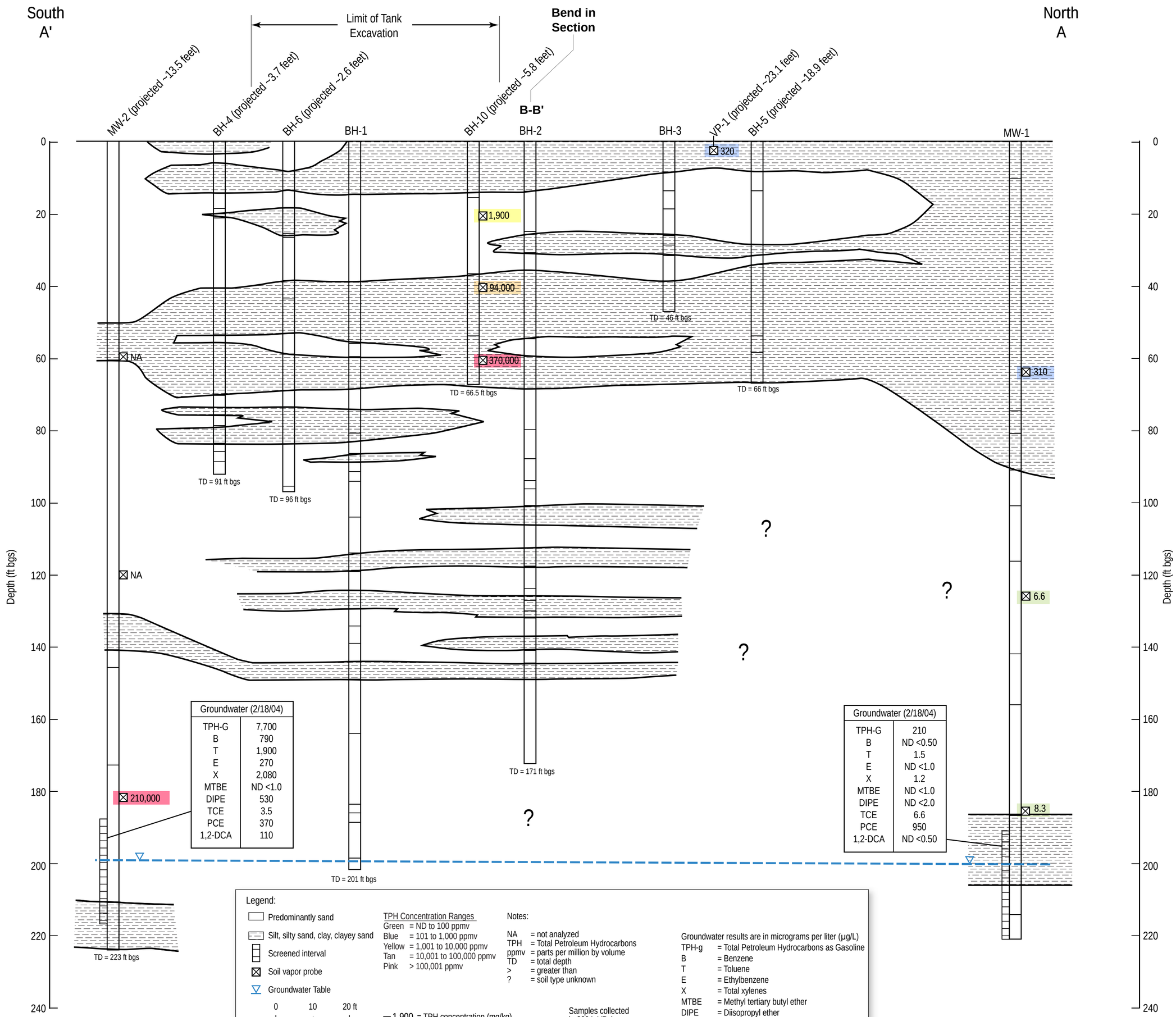


FIGURE B-4
TPH as Gasoline in Soil Vapor
LASD Temple Station

Date: August 18, 2006

ES012008008SCO335379.DE.01 TS_021.ai 8/08

CH2MHILL

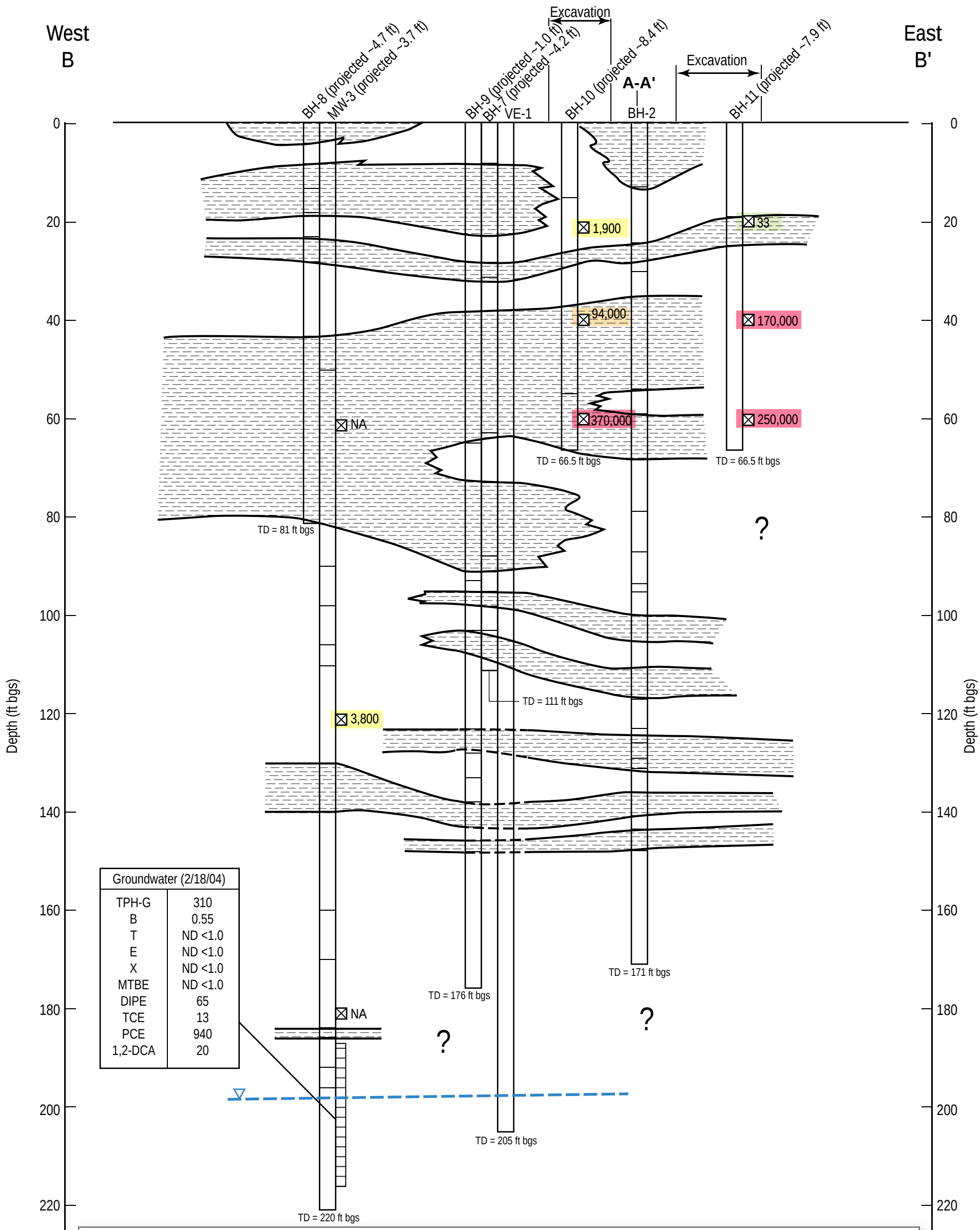


FIGURE B-5
TPH as Gasoline in Soil Vapor
LASD Temple Station

Date: August 18, 2006

CH2MHILL

ES012008008SCO335379.DE.01 TS_022.ai 8/08

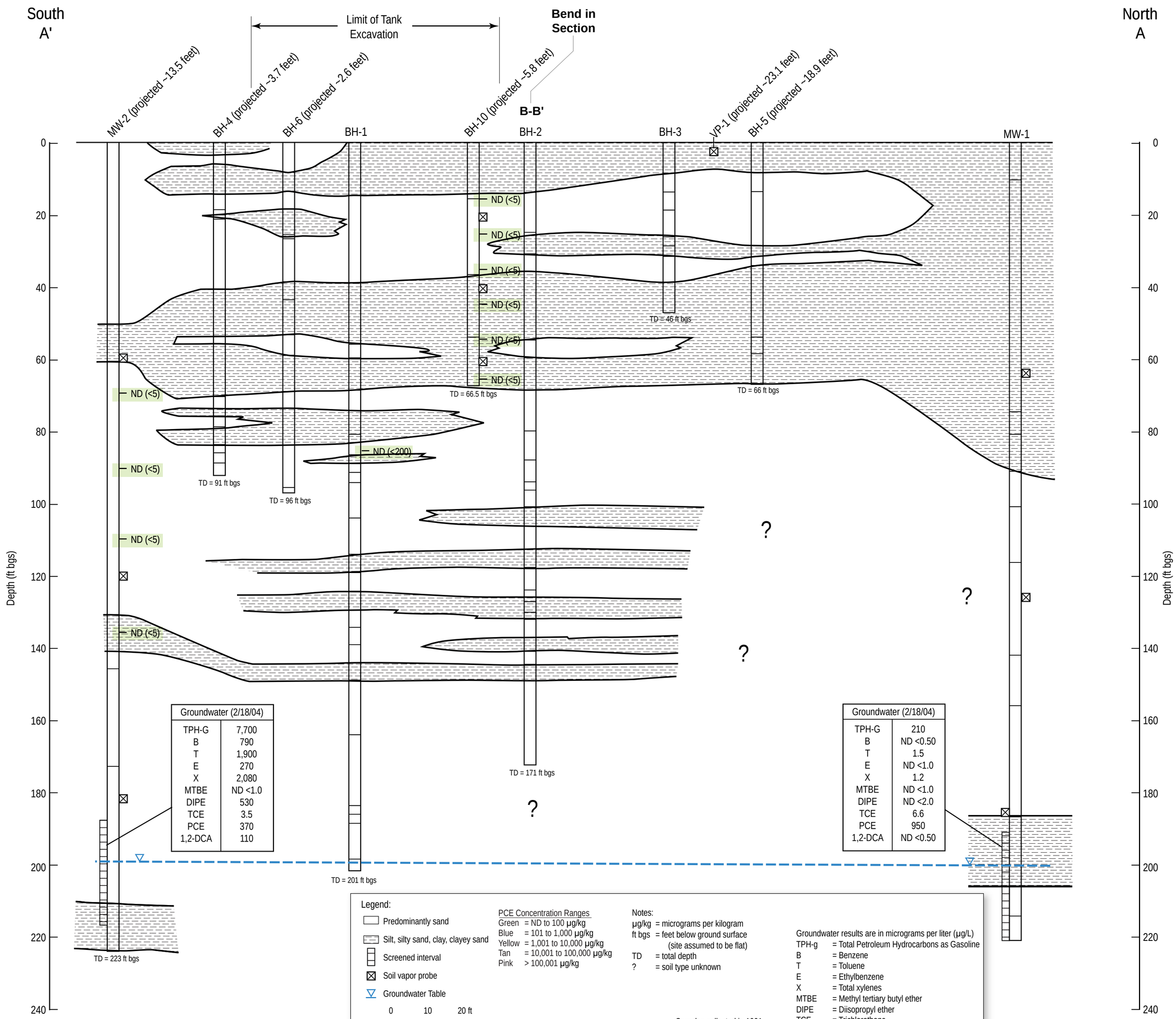


FIGURE B-6
PCE in Soil
LASD Temple Station

Date: August 18, 2006

ES012008008SCO335379.DE.01 TS_023.ai 8/08

CH2MHILL

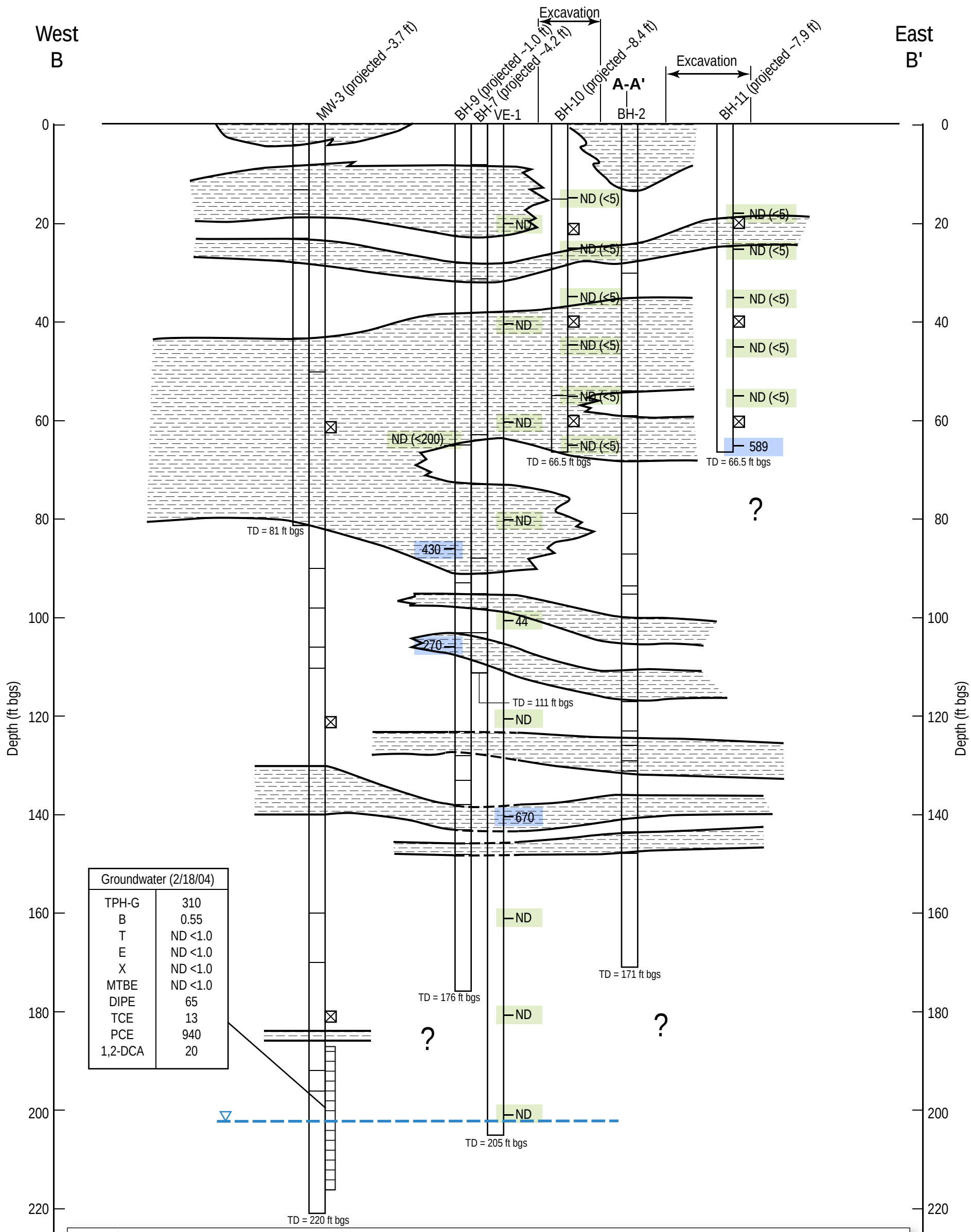


FIGURE B-7
PCE in Soil
LASD Temple Station

Date: August 18, 2006

CH2MHILL

ES012008008SCO335379.DE.01 TS_024.ai 8/08

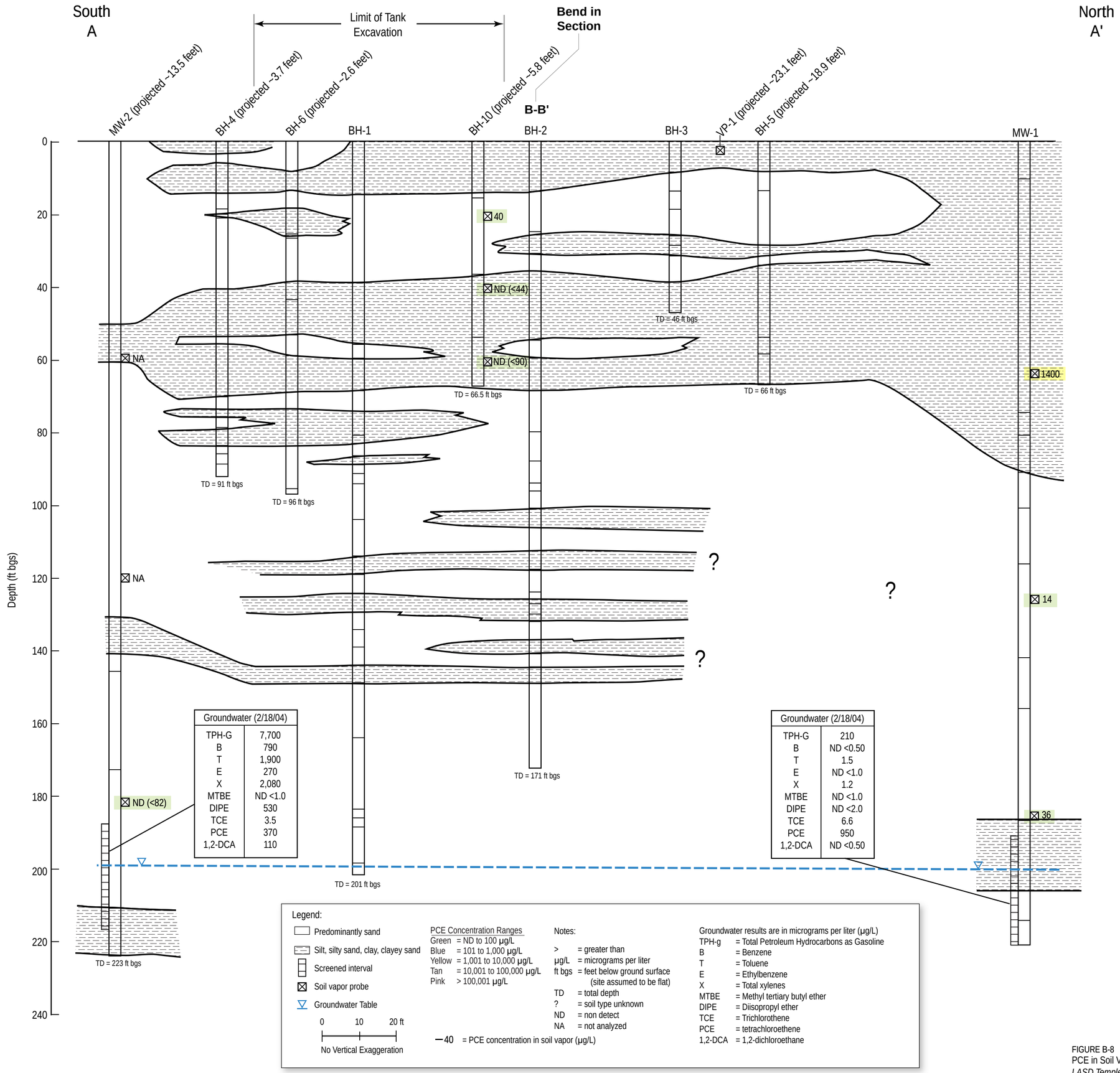
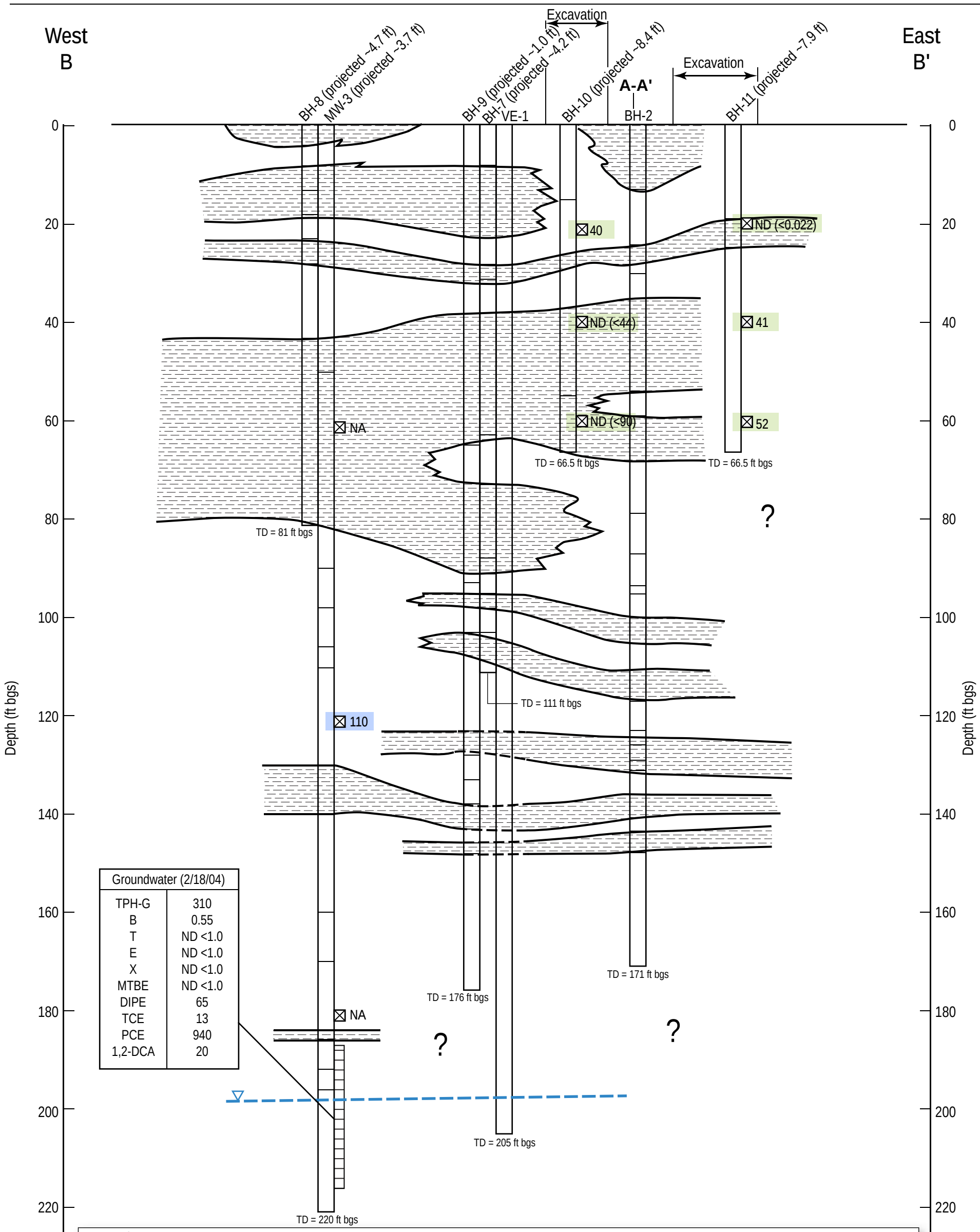


FIGURE B-8
PCE in Soil Vapor
LASD Temple Station

Date: August 18, 2006

ES012008008SCO335379.DE.01 TS_025.ai 8/08

CH2MHILL



Groundwater (2/18/04)	
TPH-G	310
B	0.55
T	ND <1.0
E	ND <1.0
X	ND <1.0
MTBE	ND <1.0
DIPE	65
TCE	13
PCE	940
1,2-DCA	20

Legend:

- Predominantly sand
- Silt, silty sand, clay, clayey sand
- Screened interval
- Soil vapor probe
- Groundwater Table

0 10 20 ft

No Vertical Exaggeration

PCE Concentration Ranges

Green = ND to 100 µg/L
Blue = 101 to 1,000 µg/L
Yellow = 1,001 to 10,000 µg/L
Tan = 10,001 to 100,000 µg/L
Pink > 100,001 µg/L

— 40 PCE concentration in soil vapor (µg/L)

Notes:

ft bgs = feet below ground surface (site assumed to be flat)
TD = total depth
ND = non detect
NA = not analyzed
? = soil type unknown
> = greater than

Samples collected in 2004.

Groundwater results are in micrograms per liter (µg/L)

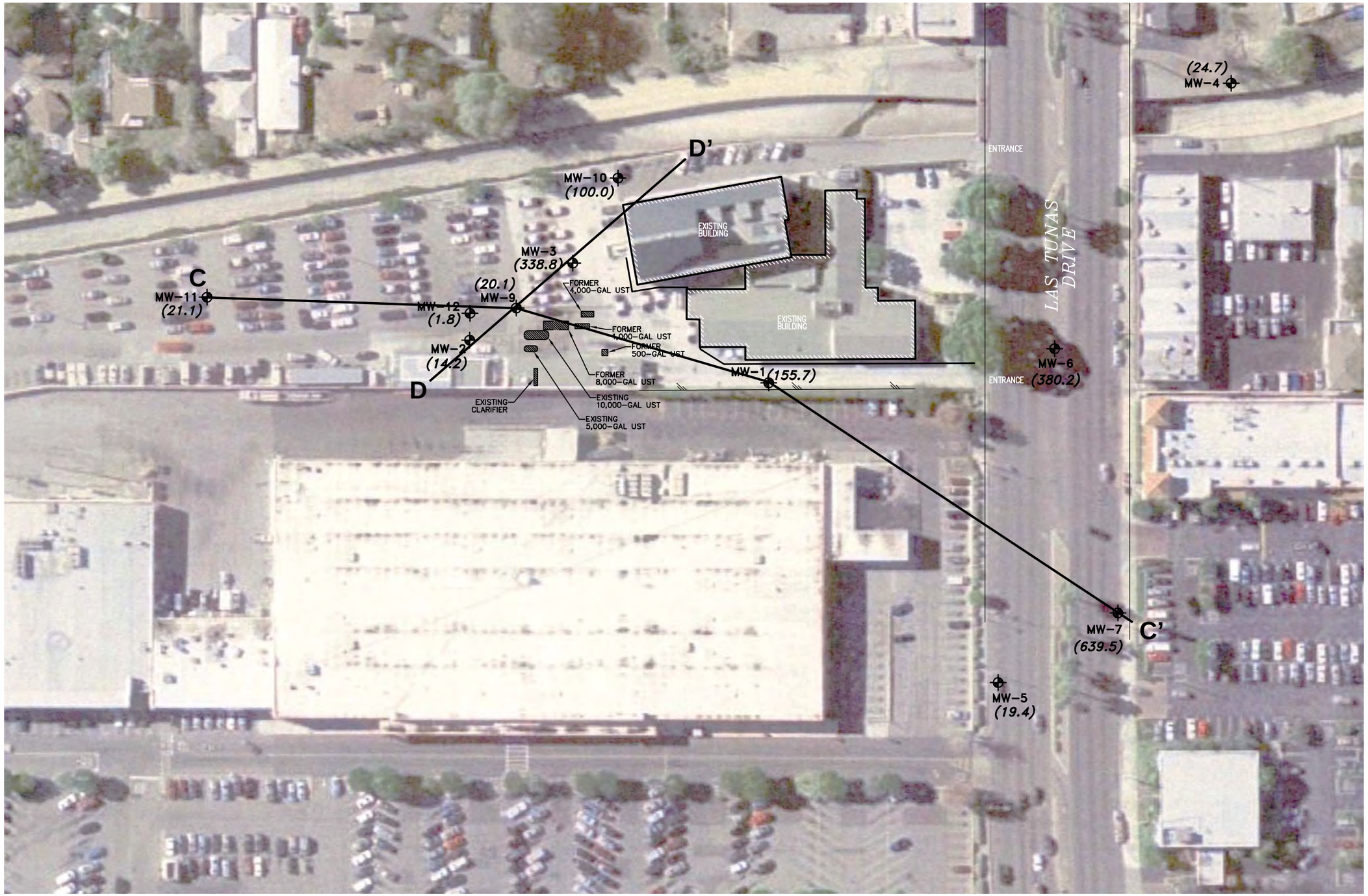
TPH-g = Total Petroleum Hydrocarbons as Gasoline
B = Benzene
T = Toluene
E = Ethylbenzene
X = Total xylenes
MTBE = Methyl tertiary butyl ether
DIPE = Diisopropyl ether
TCE = Trichlorothene
PCE = Tetrachloroethene
1,2-DCA = 1,2-dichloroethane

FIGURE B-9
PCE in Soil Vapor
LASD Temple Station

Date: August 18, 2006

CH2MHILL

ES012008008SCO335379.DE.01 TS_026.ai 8/08



EXPLANATION

MW-11 EXISTING MONITORING WELL LOCATION

(213.57) TETRACHLOROETHENE (PCE) CONCENTRATIONS IN GROUNDWATER IN MICROGRAMS PER LITER (ug/L)

NOTE: GROUNDWATER SAMPLING OCCURRED JANUARY 22-29, 2007 FOR ALL MONITORING WELLS EXCEPT MW-5 AND MW-7, WHICH WERE SAMPLED MARCH 13, 2007.

0 FEET 80

FOR CROSS-SECTION C-C' SEE FIGURE B-11
FOR CROSS-SECTION D-D' SEE FIGURE B-12

FIGURE B-10
Groundwater Monitoring Well Locations with Cross-section Locations
LASD Temple Station

Source: Kleinfelder, 2007

ES012008008SCO335379.DE.01 TS_027.ai 8/08

CH2MHILL

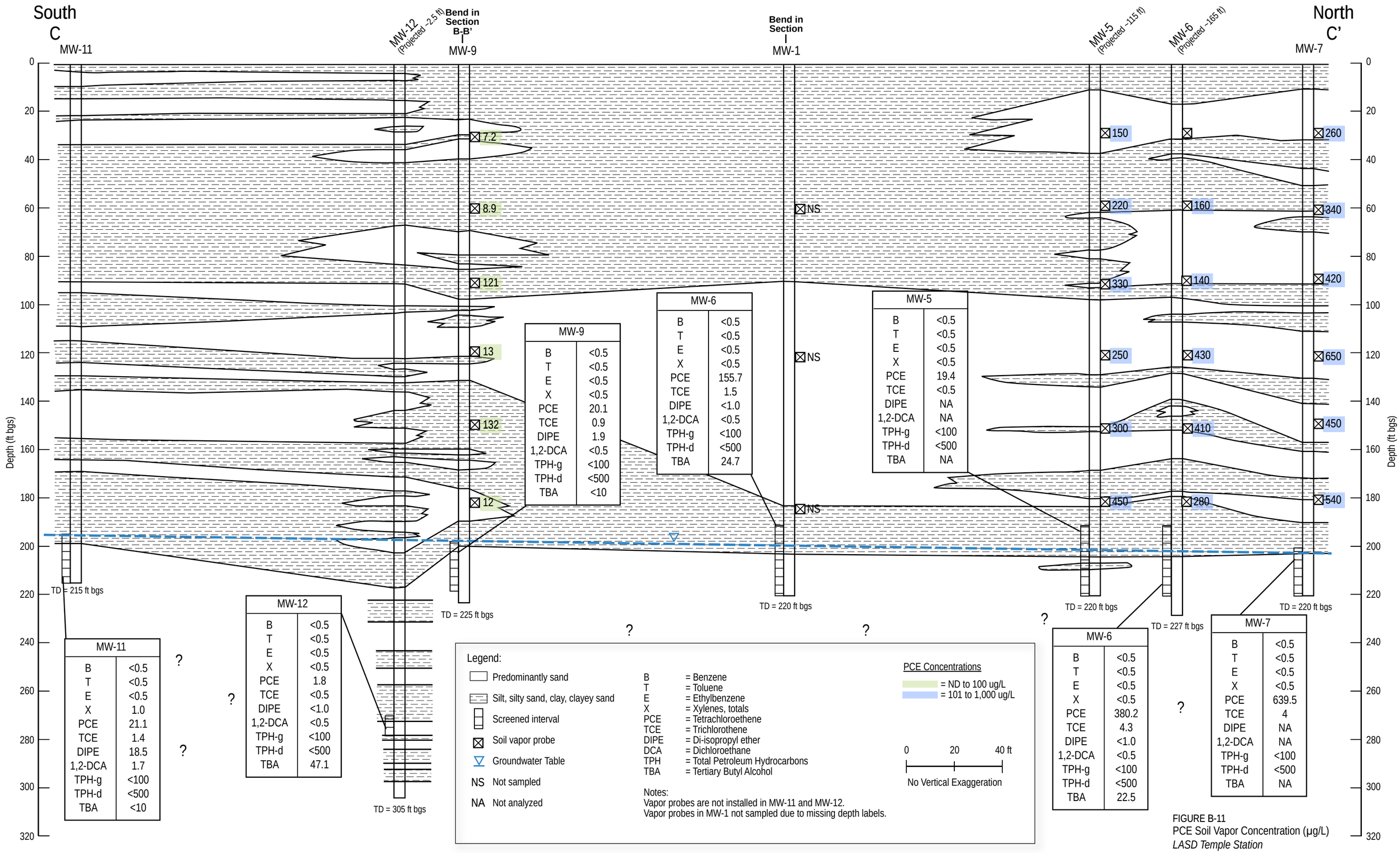
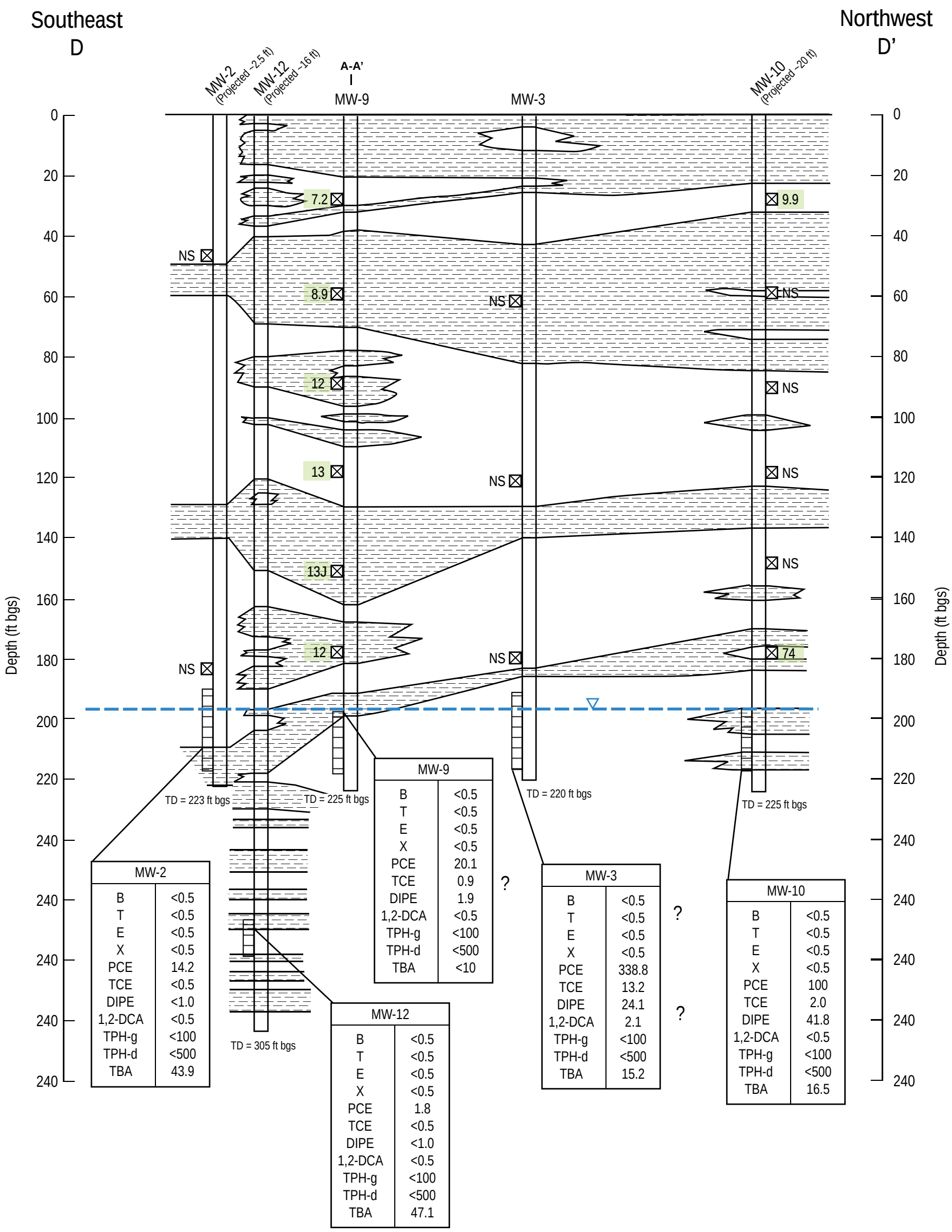


FIGURE B-11
PCE Soil Vapor Concentration (µg/L)
LASD Temple Station

CH2MHILL

ES012008008SCO335379.DE.01 TS_028.ai 8/08



Legend:

- Predominantly sand
- Silt, silty sand, clay, clayey sand
- Screened interval
- Soil vapor probe
- Groundwater Table
- NS Not sampled

B = Benzene
T = Toluene
E = Ethylbenzene
X = Xylenes, totals
PCE = Tetrachloroethene
TCE = Trichlorothene
DIPE = Di-isopropyl ether
TPH = Total Petroleum Hydrocarbons
TBA = Tertiary Butyl Alcohol

Notes:

Vapor probes are not installed in MW-12.
Vapor probes in MW-2 & MW-3 were not sampled due to missing depth labels.
Vapor probes in MW-10 at 60 feet, 90 feet, 120 feet & 150 feet were blocked and therefore not sampled.

PCE Concentrations

= ND to 100 µg/L
= 101 to 1,000 µg/L

0 20 40 ft

No Vertical Exaggeration

FIGURE B-12
PCE Soil Vapor Concentration (µg/L)
LASD Temple Station

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