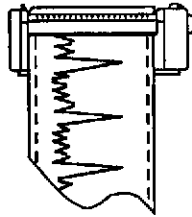


FOURTH QUARTER 1996
QUARTERLY GROUNDWATER MONITORING PROGRAM
REPORT

GERMAN AUTOCRAFT
301 E. 14TH STREET, SAN LEANDRO, CALIFORNIA

Prepared by:



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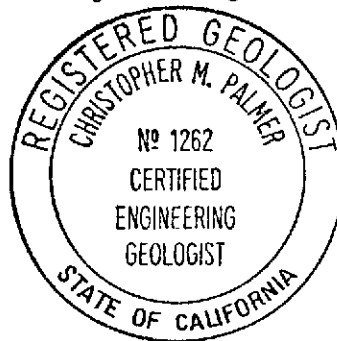
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Report issued January 21, 1997

ENVIRONMENTAL
PROTECTION
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I. INTRODUCTION

Following recommendations presented in the Soil and Groundwater Investigation (SWI) Workplan, dated June 7, 1995, Environmental Testing & Management (ETM) continued the Quarterly Monitoring Program (QMP) and related environmental activities completed during the calendar fourth quarter of 1996 at German Autocraft located at 301 East 14th Street in the City of San Leandro, Alameda County, California (**Figure 1**). This report is submitted to the Alameda County Department of Environmental Health (ACDEH) on behalf of Mr. Seung Lee, owner of German Autocraft.

The SWI involved an off-site soil and groundwater sampling program which defined the migration limit of the German Autocraft fuel release at approximately 240 feet northwest of the former tank pit in the shallow aquifer. The results of the SWI were presented in a technical report issued by ETM on July 12, 1996. To date, the ACDEH has not issued comment on the SWI report. The project is entering the corrective action phase. The QMP is continued to meet the requirements of the ACDEH.

The purpose of this QMP is to evaluate potential impacts from soil contamination on groundwater in the area of six former underground fuel storage tanks (USTs) that were removed in 1990. Data accumulated from the QMP will be used to assess seasonal groundwater level fluctuations, changing groundwater quality conditions, and provide data which will support the development of corrective action plans at the site.

The QMP presents a description of the groundwater monitoring activities, a compilation of groundwater quality and gradient data, maintenance of the passive skimmer system in the former tank pit area, and a brief description of the progress of the development of corrective actions at the site.

II. BACKGROUND

German Autocraft is located at 301 E. 14th Street in San Leandro (see Location Map, **Figure 1**). The approximate locations of buildings, property boundaries, and adjacent streets are presented on the Site Map, **Figure 2**. For detailed descriptions of prior environmental activities at the subject site, please refer to the references section of this report for a listing of reports which have been submitted to the ACDEH.

III. WORK PERFORMED DURING FOURTH QUARTER, 1996

Work included groundwater level monitoring and sampling, maintenance of the passive skimmer system installed in MW-4, data analysis, and report preparation. Activity highlights during this period are as follows:

- **October 21, 1996** - ETM measured groundwater elevations and collected groundwater samples from monitoring wells MW-1, MW-2, and MW-3. ETM inspected each well including MW-4 for the presence of floating product or sheen. A hydrocarbon sheen on the water was observed in wells MW-1, and MW-2. MW-3 and MW-4 did not exhibit sheen, however, detectable hydrocarbon odors were apparent. The samples from MW-1, MW-2, and MW-3 were submitted to a Department of Health Services (DHS)-certified laboratory for analysis of Total Petroleum Hydrocarbons as Gasoline (TPHg), and Benzene, Toluene, Ethyl Benzene, and Xylenes (BTEX), and Methyl-tert-butyl-ether (MtBE). No floating product was recovered from the passive skimmer system in MW-4. The height of the skimmer system was adjusted to account for the changing groundwater potentiometric surface elevation.
- **November 27, 1996** - ETM measured groundwater elevations in monitoring wells MW-1, MW-2, and MW-3. ETM inspected each well for the presence of floating product or sheen. No hydrocarbon sheen on the water was observed for wells MW-1, MW-2, MW-3, or MW-4

however, detectable hydrocarbon odors were apparent. No floating product was recovered from the passive skimmer system in MW-4.

- **December 27, 1996** - ETM measured groundwater elevations in monitoring wells MW-1, MW-2, and MW-3. No floating product was recovered from the passive skimmer system in MW-4, nor was sheen observed in MW-4 however, detectable hydrocarbon odors were apparent. The passive skimmer elevation was adjusted again to account for the changing groundwater elevation.

IV. GROUNDWATER ELEVATION AND GRADIENT

The groundwater flow direction consistently flowed to the south-southwest as determined by gauging on-site wells in October, November, and December 1996.

Static groundwater level elevation data collected from on-site groundwater wells on October 21, 1996, indicated that the elevation of the shallow groundwater surface beneath the site ranged from 23.43 to 23.63 feet above mean sea level. The estimated groundwater flow direction was to the south-southwest (approximate gradient = 0.002 ft/ft) which is consistent with the flow direction in the preceding quarter.

Static groundwater level elevation data collected from on-site groundwater wells on November 27, 1996, indicated that the elevation of the shallow groundwater surface beneath the site ranged from 24.09 to 24.28 feet above mean sea level. The estimated groundwater flow direction was to the south-southwest (approximate gradient = 0.002 ft/ft).

Static groundwater level elevation data collected from on-site groundwater wells on December 27, 1996, indicated that the elevation of the shallow groundwater surface beneath the site ranged from

28.03 to 28.23 feet above mean sea level. The estimated groundwater flow direction was to the south-southwest (approximate gradient = 0.002 ft/ft).

Table 1 presents the recent groundwater elevation data and **Figures 3a, 3b, and 3c** show estimated groundwater flow direction as interpreted from the groundwater potentiometric elevation data.

The groundwater elevation at the site was observed to rise over three (3) feet during the fourth quarter 1996 monitoring period compared to the last gauging event of the third quarter 1996 on September 17, 1996.

The observed hydraulic gradient at the subject site is very flat. The gradient may change due to groundwater recharge or extraction, seasonal changes and natural outflow.

V. GROUNDWATER SAMPLING AND ANALYTICAL RESULTS

On October 21, 1996, groundwater samples were collected from MW-1, MW-2, and MW-3 following the groundwater sampling procedures presented in the SWI work plan. Well sampling procedures are presented in **Appendix A**. The groundwater samples were analyzed for TPHg, BTEX, MtBE, and organic compounds using EPA Methods 5030, modified 8015, and 8020, by Entech Analytical Labs, Inc. of Sunnyvale, California. The laboratory report and chain-of-custody documents are included in **Appendix B**. The field sampling data sheets are presented in **Appendix C**. The quality assurance/quality control description is included in **Appendix D**. Historic groundwater chemical test data is presented in **Table 4**.

Compared to the previous quarter, the results of the recent groundwater sampling effort showed an general increase in TPHg and BTEX concentrations in MW-1 and MW-3 and a decrease at MW-2.

All of the constituents continue to exceed their respective California Drinking Water Maximum Contaminant Levels (MCLs) or Federal Action Levels (AL) (Table 3).

The sample from MW-1, located upgradient of the former gasoline tank area, contained: TPHg at 210,000 micrograms per liter ($\mu\text{g/L}$) (blind duplicate: 210,000 $\mu\text{g/L}$); benzene at 4,800 $\mu\text{g/L}$ (blind duplicate: 5,400 $\mu\text{g/L}$) which exceeds its MCL of 1 $\mu\text{g/L}$; toluene at 17,000 $\mu\text{g/L}$ (blind duplicate: 18,000 $\mu\text{g/L}$) which exceeds its MCL of 150 $\mu\text{g/L}$; ethyl benzene at 2,300 $\mu\text{g/L}$ of (blind duplicate: 2,600 $\mu\text{g/L}$) which exceeds its MCL of 700 $\mu\text{g/L}$, and ; total xylenes at 15,000 $\mu\text{g/L}$ (blind duplicate: 11,000 $\mu\text{g/L}$) which exceeds its MCL of 1,750 $\mu\text{g/L}$.

The sample from MW-2, located down gradient of the former gasoline tank area, contained 62,000 $\mu\text{g/L}$ of TPHg, 2,100 $\mu\text{g/L}$ of benzene, <0.5 $\mu\text{g/L}$ of toluene, 2,100 $\mu\text{g/L}$ of ethyl benzene, and 2,700 $\mu\text{g/L}$ of total xylenes.

Monitoring well MW-3, also located down gradient of the former gasoline tank area, contained 110,000 $\mu\text{g/L}$ of TPHg, 5,400 $\mu\text{g/L}$ of benzene, 2,400 $\mu\text{g/L}$ of toluene, 2,500 $\mu\text{g/L}$ of ethyl benzene, and 9,800 $\mu\text{g/L}$ of total xylenes.

VI. CONCLUSIONS

Available data, including data from the fourth quarter 1996 monitoring events, suggest that groundwater flow patterns beneath the site are consistent with previous monitoring events during 1995 and 1996. Groundwater flowed toward the south-southwest throughout the fourth quarter of 1996.

The recent groundwater sampling event showed an increase in concentrations of TPHg and BTEX in MW-1 and MW-3, and a decrease in MW-2 from those concentrations measured in the previous

quarter. The concentrations of the constituents of concern in all of the wells sampled remain above their respective MCL.

VII. RECOMMENDATIONS

We recommend that monthly gauging of groundwater levels at the site be suspended on the basis that the groundwater gradient direction has been characterized to range from northwest to southwest over the last eighteen (18) months of monthly gauging. The groundwater gradient direction has been observed to be predominantly to the southwest over this period. We recommend that the monitoring wells continue to be monitored and gauged quarterly basis to comply with the ACDEH requirements and to assess trends in constituent concentrations over time. The data will be used to support development of a corrective action plan at the site.

VIII. LIMITATIONS

The data, information, interpretations and recommendations contained in this report are presented to meet current suggested regulatory requirements for determining groundwater quality on the site. Environmental Testing & Mgmt. is not responsible for laboratory errors or completeness of other consultants reports, and no warranty is made or implied therein.

The conclusions and professional opinions presented herein were developed by ETM in accordance with current regulatory guidance and the opinions expressed are subject to revisions in light of new information which may develop in the future.

IX. REFERENCES

California Code of Regulations, Title 22, 66260.21, "Environmental Health Standards", 6/23/95.

Code of Federal Regulations, 40 CFR 260, "Hazardous Waste Management System: General, 7/1/94.

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Environmental Testing and Management, *Fourth Quarter 1995 Environmental Activities Report, German Autocraft, 301 East 14th Street, San Leandro, California*, February, 1995.

Woodward-Clyde Consultants, *Hydrogeology of Central San Leandro and Remedial Investigation of Regional Groundwater Contamination, San Leandro Plume, San Leandro, California, Volume I*, December 23, 1993.

TABLE 1. FOURTH QUARTER 1996 GROUNDWATER POTENTIOMETRIC SURFACE ELEVATION DATA

WELL	CASING ELEVATION ¹	October 21, 1996		November 27, 1996		December 27, 1996	
		Depth to	Groundwater	Depth to	Groundwater	Depth to	Groundwater
		Groundwater	Elevation	Groundwater	Elevation	Groundwater	Elevation
MW-1	49.61	25.98	23.63	25.33	24.28	21.38	28.23
MW-2	50.14	26.71	23.43	26.05	24.09	22.11	28.03
MW-3	49.44	25.96	23.48	25.31	24.13	21.33	28.11

¹Elevations in feet above mean sea level.

TABLE 2. HISTORIC GROUNDWATER POTENTIOMETRIC SURFACE ELEVATION DATA

DATE	Groundwater Surface Elevation ¹		
	MW-1	MW-2	MW-3
12/31/90	19.15 ²	-	-
2/10/95	29.59	29.62	29.57
7/7/95	26.63	26.47	26.50
8/10/95	25.58	25.40	25.44
9/11/95	24.68	24.49	24.54
10/2/95	24.12	23.94	24.00
11/7/95	23.36	23.13	23.21
12/8/95	22.77	22.55	22.62
1/12/96	24.35	24.20	24.25
2/12/96	29.04	29.03	29.00
3/12/96	31.75	31.60	31.67
4/13/96	29.43	29.25	29.26
5/14/96	27.89	27.68	27.71
6/20/96	27.19	26.97	27.00
7/26/96	25.95	25.74	25.76
8/19/96	25.16	24.97	25.01
9/17/96	24.44	24.22	24.27
10/21/96	23.63	23.43	23.48

¹Elevations in feet above mean sea level.

²This elevation was determined by using the depth of 30.46' measured by The Environmental Construction Company shortly after installation of MW-1 on December 31, 1990 and the surveyed top of casing elevation of 49.61 at MW-1 on January 6, 1995.

DATE	MW-1	MW-2	MW-3
11/27/96	24.28	24.09	24.13
12/27/96	28.23	28.03	28.11

TABLE 3. GROUNDWATER CHEMICAL TEST RESULTS

Locations: MW-1, MW-2, MW-3

Date Sampled: October 21, 1996 Units: µg/L

WELL	TPHg	BENZENE	TOLUENE	ETHYL-BENZENE	XYLENES	MtBE ³
MW-1	210,000	4,800	17,000	2,300	15,000	N/A
MW-1 ⁴	210,000	5,400	18,000	2,600	11,000	N/A
MW-2	62,000	2,100	<0.5	2,100	2,700	N/A
MW-3	110,000	5,400	2,400	2,500	9,800	N/A
MCL/AL ⁵	-	1	150	700	1,750	35

³MtBE = methyl-tert-butyl-ether. The California Regional Water Quality Control Board initiated the requirement of quantitation of MtBE as an additional analyte for EPA Method 8020 as of January 12, 1996.

⁴This sample was labeled 'MW-5' and submitted to the lab as a blind duplicate.

⁵Maximum Contaminant Level or Action Level as established by the State of California, Division of Drinking Water and Environmental Management, Department of Health Services "Summary, Maximum Contaminant and Action Levels" November, 1994.

TABLE 4. HISTORIC GROUNDWATER CHEMICAL TEST RESULTS

Locations: MW-1, MW-2, MW-3

Units: µg/L

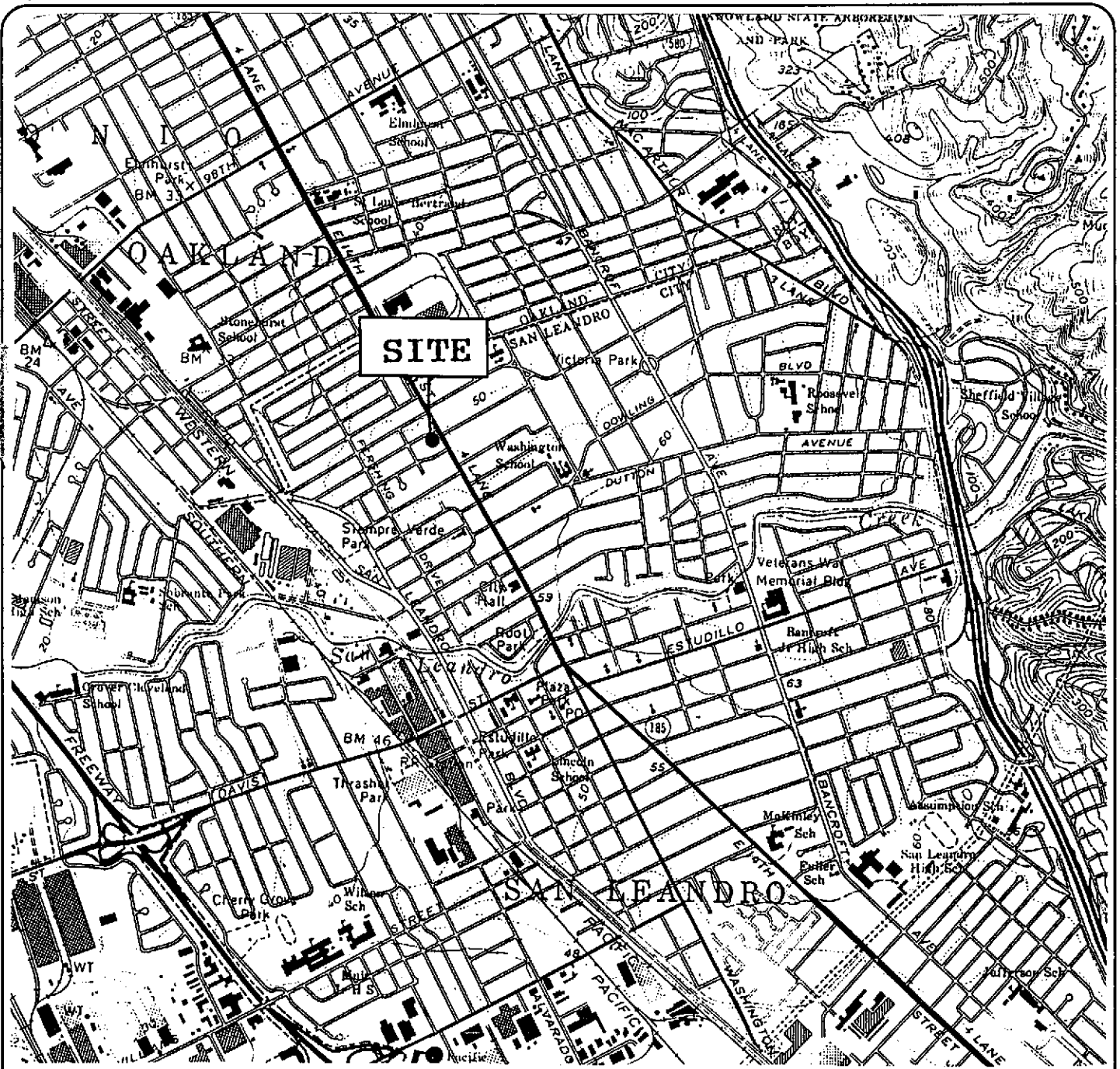
WELL	DATE	TPHg	BENZENE	TOLUENE	ETHYL- BENZENE	XYLENES	MtBE
MW-1	12/31/90	51,000	2,200	1,200	<0.5	760	N/A ⁶
	1/6/95	110,000	13,000	15,000	4,800	13,000	N/A
	1/6/95	580,000	29,000	41,000	17,000	43,000	N/A
	7/6/95	49,000	8,000	17,000	1,900	9,700	N/A
	7/6/95	47,000	4,800	9,500	930	5,000	N/A
	10/2/95	120,000	16,000	36,000	3,300	17,000	N/A
	10/2/95	160,000	20,000	47,000	5,000	23,000	N/A
	1/12/96	1,100,000	11,000	18,000	15,000	51,000	18,000 ⁷
	1/12/96	98,000	2,100	4,600	2,500	10,000	<5,000
	4/13/96	53,000	1,300	2,900	2,100	10,000	<5,000
	4/13/96	58,000	820	3,600	2,800	12,000	<5,000
	7/26/96	91,000	2,900	7,200	2,900	14,000	<5,000
	7/26/96	67,000	2,300	5,500	2,500	11,000	<5,000
	10/21/96	210,000	4,800	17,000	2,300	15,000	N/A
	10/21/96	210,000	5,400	18,000	2,600	11,000	N/A
MW-2	1/6/95	980,000	9,400	5,600	19,000	42,000	N/A
	7/6/95	71,000	5,300	1,800	6,100	9,000	N/A

⁶N/A = Not Analyzed. The California Regional Water Quality Control Board initiated the requirement of quantitation of MtBE as an additional analyte for EPA Method 8020 as of January 12, 1996. The samples not analyzed for MtBE in this table pre-date the recent new requirement.

⁷This value may be inaccurate. Please refer to the second quarter 1996 report which includes an evaluation of MtBE which cast doubt on the validity of this laboratory test.

WELL	DATE	TPHg	BENZENE	TOLUENE	ETHYL- BENZENE	XYLENES	MtBE
MW-2	10/2/95	40,000	2,900	200	2,800	3,600	N/A
	1/12/96	260,000	2,600	2,200	6,300	7,800	<12,500
	4/13/96	30,000	1,900	370	2,300	2,400	520 ⁸
	7/26/96	180,000	1,400	640	2,100	5,000	<5,000
	10/21/96	62,000	2,100	<0.5	2,100	2,700	N/A
MW-3	1/6/95	740,000	11,000	2,300	8,300	28,000	N/A
	7/6/95	86,000	12,000	8,600	4,900	19,000	N/A
	10/2/95	100,000	15,000	11,000	6,000	20,000	N/A
	1/12/96	84,000	6,500	4,100	3,200	12,000	<5,000
	4/13/96	48,000	7,600	3,600	2,800	9,400	<2,500
	7/26/96	62,000	6,400	3,100	3,000	11,000	<2,500
	10/21/96	110,000	5,400	2,400	2,500	9,800	N/A

⁸This value may be inaccurate. Please refer to the second quarter 1996 report which includes an evaluation of MtBE which cast doubt on the validity of this laboratory test.



EXPLANATION:

Scale: 1"=2000'

0 1000' 2000'



Base Map Reference:

U.S.G.S. San Leandro 7.5 Minute
Topographic, Quadrangle.

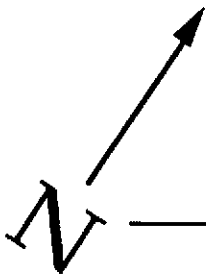


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LOCATION MAP
German Autocraft
301 East 14th Street
San Leandro, California

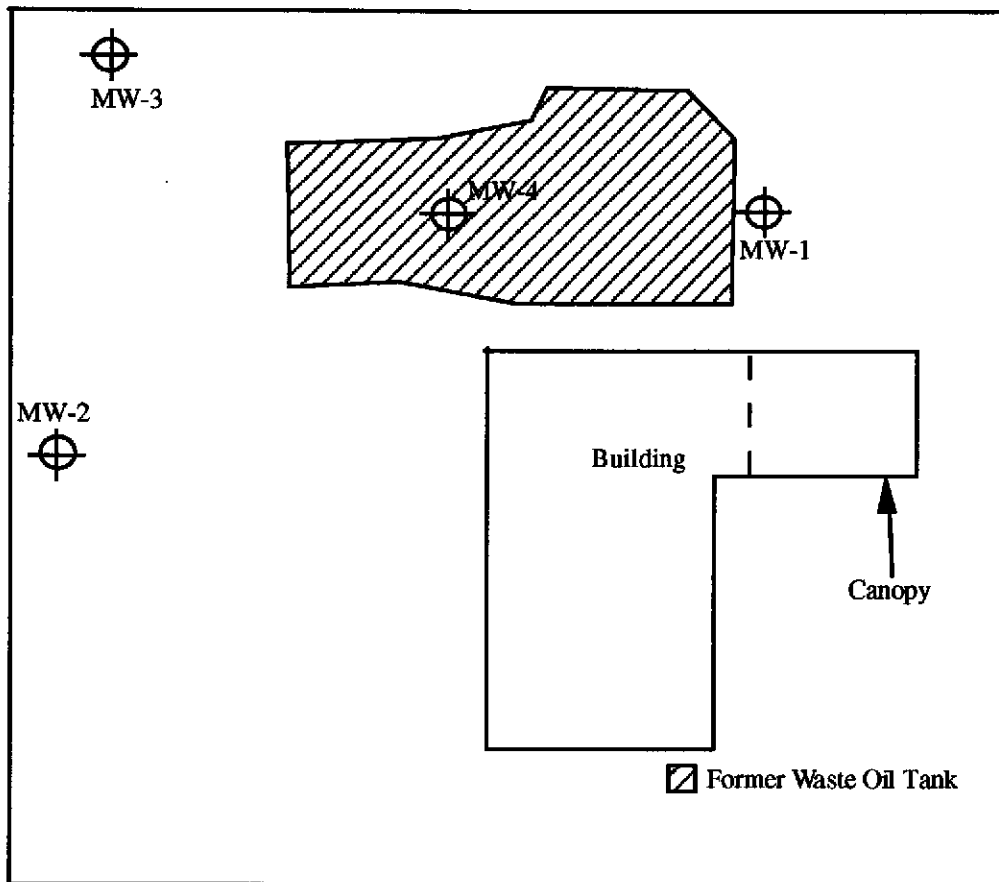
Figure 1

Project No.
94-52
Date: 8/95

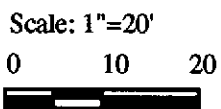


Garcia Avenue

Sidewalk

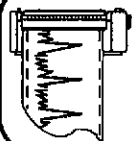


EXPLANATION:



MW-1 Monitoring Well

Former Tank Pit/Removed Asphalt Areas



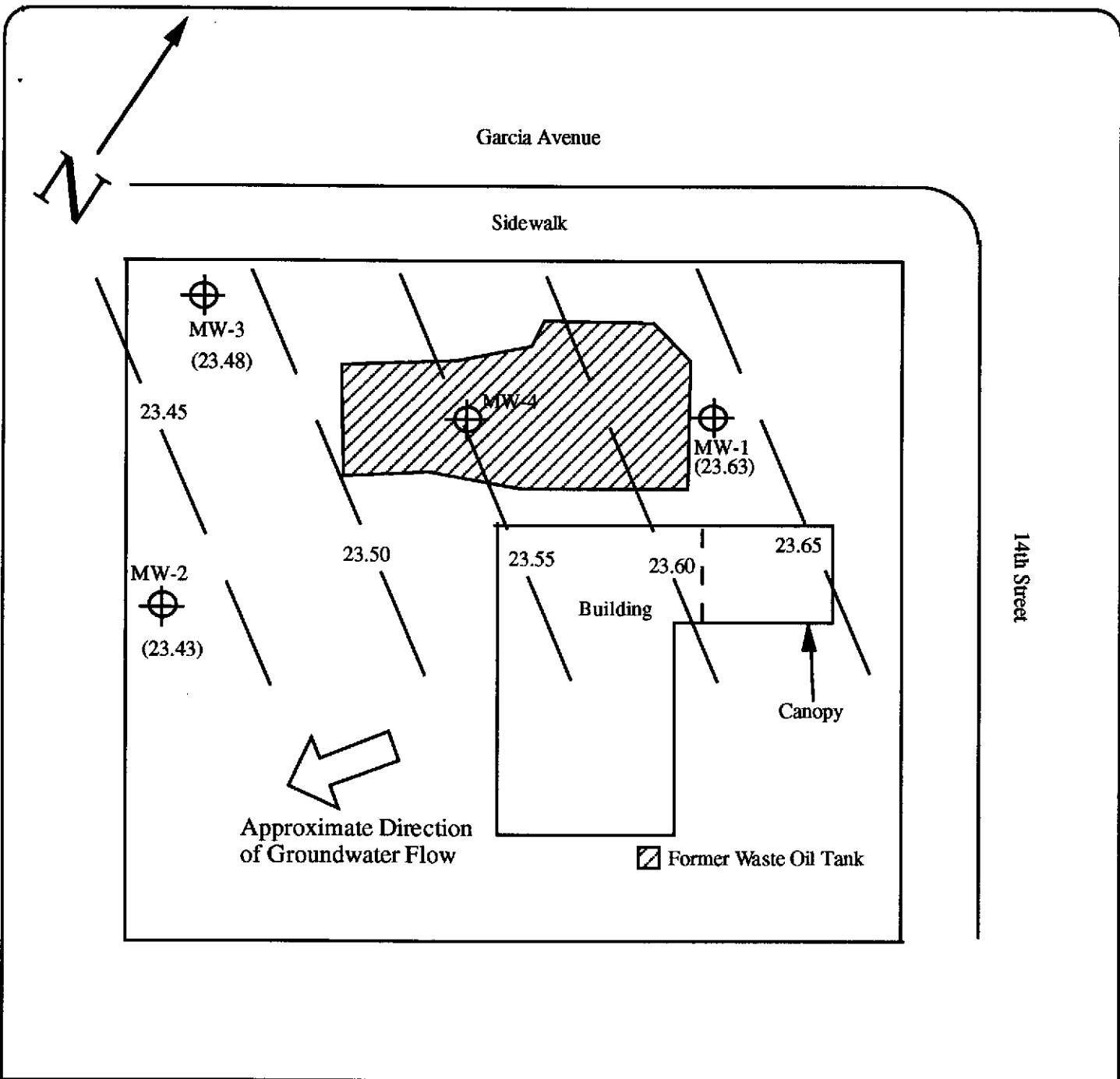
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SITE MAP

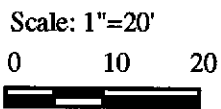
German Autocraft
 301 East 14th Street
 San Leandro, California

Figure 2

Project No.
 94-52
 Date: 1/97



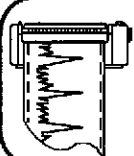
EXPLANATION:



MW-1 Monitoring Well

Former Tank Pit/Removed Asphalt Areas

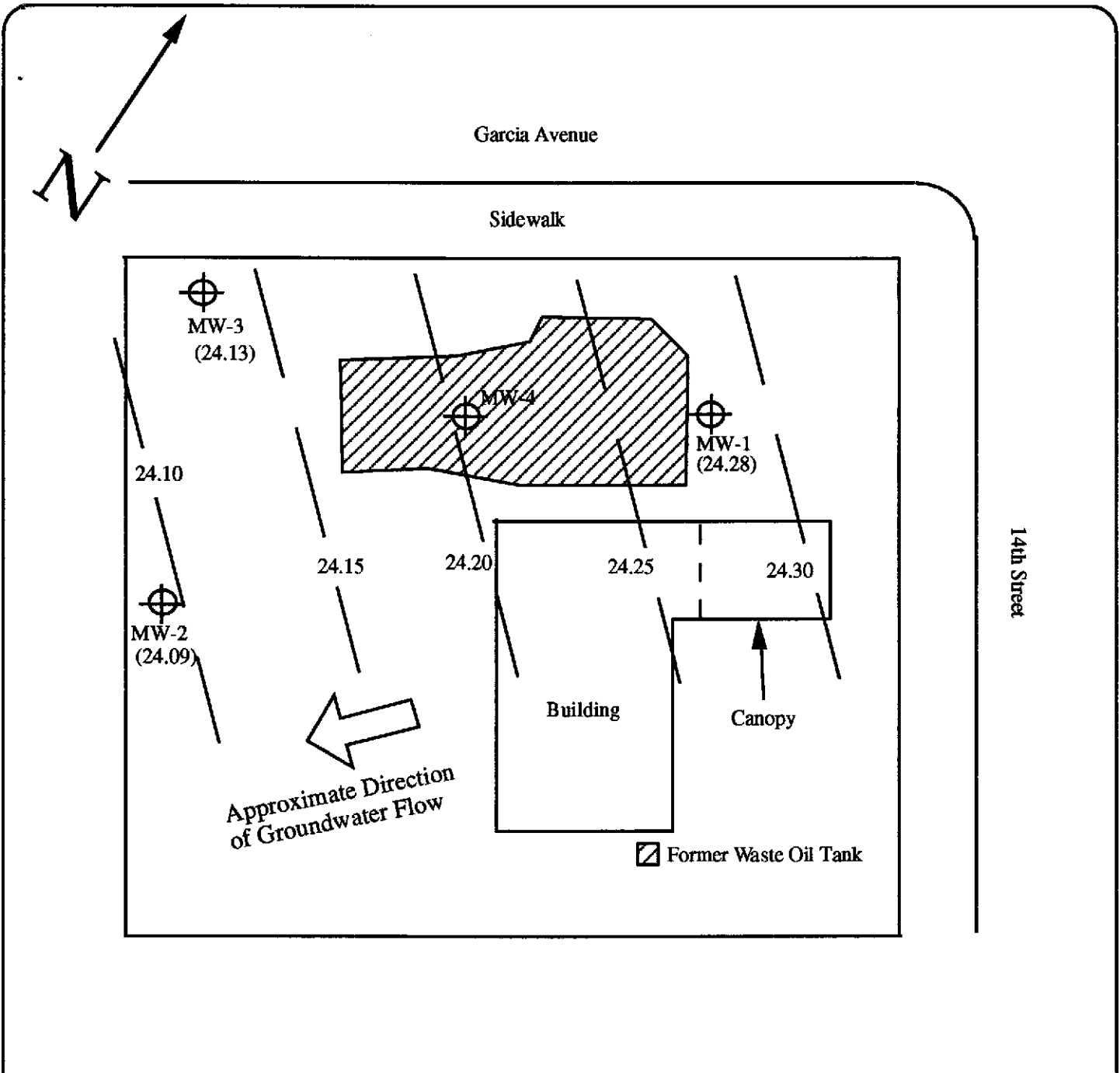
25.45 Groundwater Elevation Contour Line (Feet above Mean Sea Level)



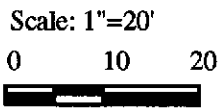
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**GROUNDWATER POTENTIOMETRIC SURFACE
ELEVATION CONTOUR MAP 10/21/96**
German Autocraft
301 East 14th Street
San Leandro, California

Figure 3a
Project No.
94-52
Date: 1/97



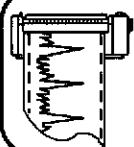
EXPLANATION:



⊕ MW-1 Monitoring Well

▨ Former Tank Pit/Removed Asphalt Areas

— 24.10 — Groundwater Elevation Contour Line (Feet above Mean Sea Level)

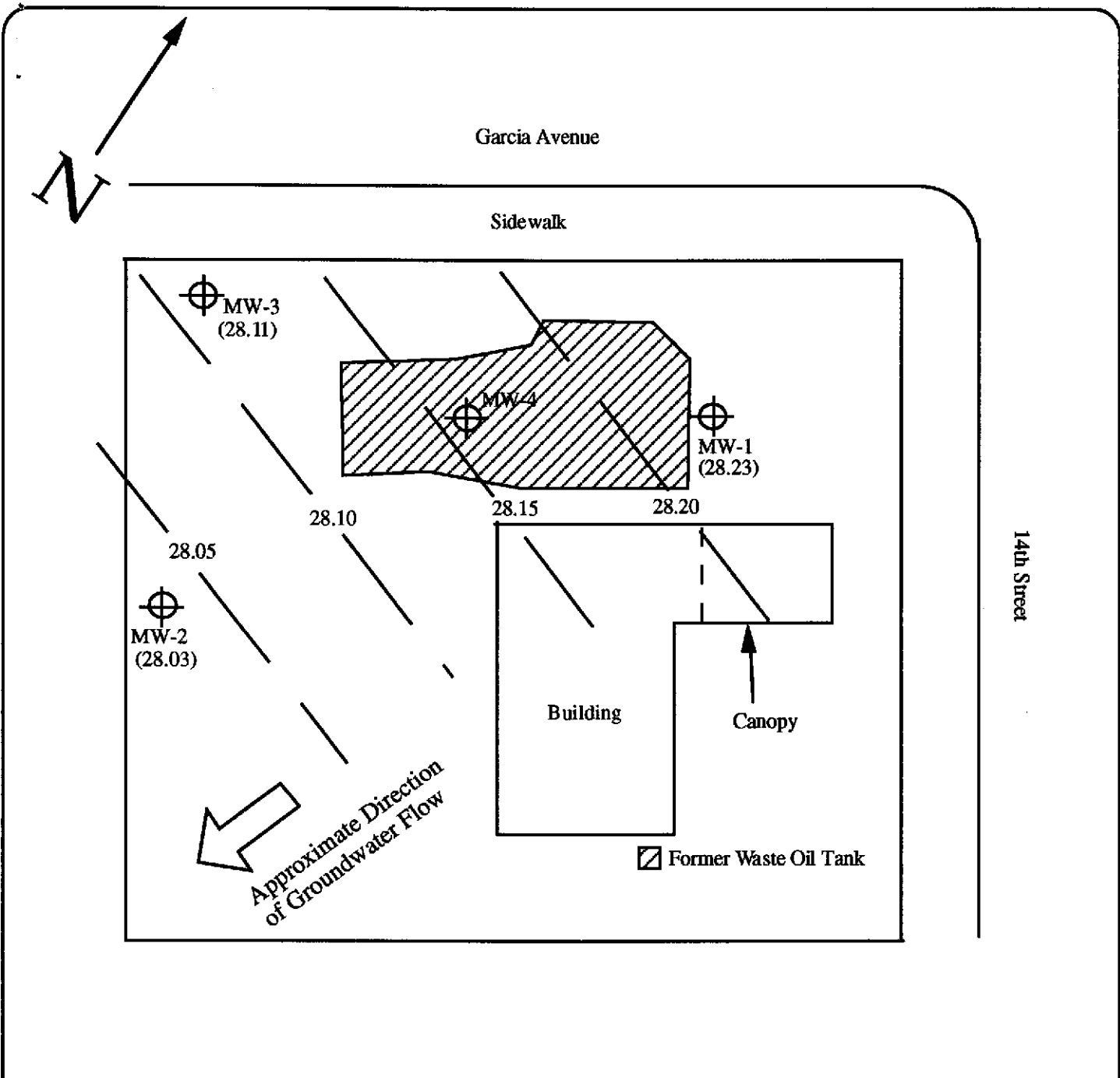


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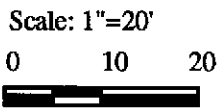
GROUNDWATER POTENTIOMETRIC SURFACE
ELEVATION CONTOUR MAP 11/27/96
German Autocraft
301 East 14th Street
San Leandro, California

Figure 3b

Project No.
94-52
Date: 1/97



EXPLANATION:



MW-1 Monitoring Well

Former Tank Pit/Removed Asphalt Areas

28.05 Groundwater Elevation Contour Line (Feet above Mean Sea Level)



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GROUNDWATER POTENTIOMETRIC SURFACE
 ELEVATION CONTOUR MAP 12/27/96
 German Autocraft
 301 East 14th Street
 San Leandro, California

Figure 3c

Project No.
 94-52
 Date: 1/97

APPENDIX A: FIELD SAMPLING AND GAUGING PROCEDURES

GROUNDWATER LEVEL MEASURING AND SAMPLING:

Sampling procedures commenced with measuring static water levels in monitoring wells using an electronic water level indicator accurate to 0.01 inch. Groundwater samples were collected using Teflon™ or stainless steel bailers. The bailers were cleaned prior to lowering into the groundwater by washing with Liquinox or laboratory grade detergent, rinsing with tap water, and followed by a distilled water rinse. Floating product thickness was measured by gently lowering a bailer or preferably an interface sampler into the well casing. The liquid level in the sampler was allowed to equilibrate with the liquid level in the well. After raising the sampler, the thickness of floating product, if present, was measured in the transparent sampler with a ruler or noting the presence of sheen and odor. The wells were then purged a minimum of four well volumes and/or until groundwater temperature, pH, and specific conductance stabilized. Groundwater sampling field data sheets are presented in **Appendix C**.

Groundwater samples were collected by gently pouring from the bailer into a 40-milliliter vial until a positive meniscus formed at the top of the vial, each vial was capped, and visually inspected to make sure no bubbles were present. Sample containers are labeled for sampling point reference and chilled on ice immediately after collection. Chain-of-custody documentation was maintained until the samples were received by the laboratory.

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2916 Magliocco Dr., Suite #2
San Jose, CA 95125

Date:	10/25/96
Date Received:	10/21/96
Date Analyzed:	10/24-10/25/96
Project:	GA
Sampled By:	Client

Certified Analytical Report

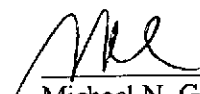
Water Sample Analysis:

Sample ID	Sample Date	Sample Time	Lab#	DF	TPH-Gas	Benzene	Toluene	Ethyl Benzene	Xylene
MW-1	10/21/96	1200	C14476	1,600	210,000	4,800	17,000	2,300	15,000
MW-2	10/21/96	100	C14477	200	62,000	2,100	ND	2,100	2,700
MW-3	10/21/96	130	C14478	200	110,000	5,400	2,400	2,500	9,800
MW-4	10/21/96	1215	C14479	1,600	210,000	5,400	18,000	2,600	11,000
Trip Blank			C14480	1	ND	ND	1.0	ND	0.87

1. DLR=DF x PQL
2. Analysis performed by Entech Analytical Labs, Inc. (CAELAP #1369)

Summary of Methods and Detection Limits:

	TPH-Gas	Benzene	Toluene	Ethylbenzene	Xylenes
EPA Method #	8015M	8020	8020	8020	8020
Units	µg/liter	µg/liter	µg/liter	µg/liter	µg/liter
PQL	50.0 µg/liter	0.5 µg/liter	0.5 µg/liter	0.5 µg/liter	0.5 µg/liter


Michael N. Golden, Lab Director

DF=Dilution Factor
DLR=Detection Reporting Limit

PQL=Practical Quantitation Limit
ND=None Detected at or above DLR

Entech Analytical Labs, Inc.

525 Del Rey Avenue, Suite E
Sunnyvale, CA 94086

QUALITY CONTROL RESULTS SUMMARY

METHOD: Gas Chromatography

QC Batch #: GBG5961023

Date Analyzed: 10/23/96

Matrix: Water

Units: µg/L

PARAMETER	Method #	MB µg/L	SA µg/L	SR µg/L	SP µg/L	SP % R	SPD µg/L	SPD %R	RPD	QC LIMITS (ADVISORY)	
										RPD	%R
MTBE	8020	<5.0	25	ND	24.5	98	24.0	96	2.1	25	50-150
Benzene	8020	<0.5	25	ND	25.2	101	25.6	102	1.6	25	50-150
Toluene	8020	<0.5	25	ND	20.9	84	22.2	89	6.0	25	50-150
Ethyl Benzene	8020	<0.5	25	ND	22.8	91	24.0	96	5.1	25	50-150
Xylenes	8020	<0.5	75	ND	70.0	93	71.9	96	2.7	25	50-150

Definition of Terms:

- na: Not Analyzed in QC batch
- MB: Method Blank
- SA: Spike Added
- SR: Sample Result
- RPD(%): Duplicate Analysis - Relative Percent Difference
- SP: Spike Result
- SP (%R): Spike % Recovery
- SPD: Spike Duplicate Result
- SPD (%R): Spike % Recovery
- NC: Not Calculated

Entech Analytical Labs, Inc.

525 Del Rey Avenue, Suite E
Sunnyvale, CA 94086

QUALITY CONTROL RESULTS SUMMARY

METHOD: Gas Chromatography

QC Batch #: GBG5961024

Date Analyzed: 10/24/96

Matrix: Water

Units: µg/L

PARAMETER	Method #	MB µg/L	SA µg/L	SR µg/L	SP µg/L	SP % R	SPD µg/L	SPD %R	RPD	QC LIMITS (ADVISORY)	
										RPD	%R
MTBE	8020	<5.0	25	ND	29.6	118	23.8	95	21.7	25	50-150
Benzene	8020	<0.5	25	ND	23.4	94	27.9	112	17.5	25	50-150
Toluene	8020	<0.5	25	ND	20.6	82	25.3	101	20.5	25	50-150
Ethyl Benzene	8020	<0.5	25	ND	23.2	93	27.6	110	17.3	25	50-150
Xylenes	8020	<0.5	75	ND	65.0	87	78.0	104	18.2	25	50-150

Definition of Terms:

- na: Not Analyzed in QC batch
- MB: Method Blank
- SA: Spike Added
- SR: Sample Result
- RPD(%): Duplicate Analysis - Relative Percent Difference
- SP: Spike Result
- SP (%R): Spike % Recovery
- SPD: Spike Duplicate Result
- SPD (%R): Spike % Recovery
- NC: Not Calculated

Entech Analytical Labs, Inc.

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • Telephone: (408) 735-1550 (800) 287-1799 • Fax: (408) 735-1554

Chain of Custody/Analysis Work Order

Client: Environmental Testing & Mgmt.
 Address: 2916 Magliocco Dr. Suite #2

Project ID: GA

Purchase Order #: _____

LAB USE ONLY

Samples arrived chilled and intact:

Yes No

Notes: _____

Contact: Tom Price

Telephone #: 408-248-5892

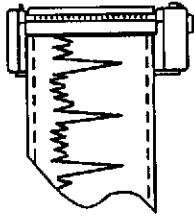
Date Received: _____

Turn Around: 5 day

Sampler/Company:	Telephone #:
Special Instructions/Comments	

Sample Information								Requested Analysis							
Lab #	Sample ID	Grab/Composite	Matrix	Date Collected	Time Collected	Pres.	Sample Container	TPUS	BTEX						
C14476	MW-1	Grab	W	10/21/96	1200	—	40 ml VOA	✓							
C14477	MW-2	"	W	10/21/96	100	✓	"	✓							
C14478	MW-3	"	W	"	130	—	"	✓							
C14479	MW-4	"	W	"	1215	—	"	✓							
C14480	Trip Blank					—	"	✓							

Relinq. By: <u>Tom Price</u>	Received By: <u>Kelley Loftis</u>	Date: <u>10/21/96</u>	Time: <u>2:55</u>
Relinq. By: _____	Received By: _____	Date: _____	Time: _____
Relinq. By: _____	Received By: _____	Date: _____	Time: _____



ENVIRONMENTAL TESTING & MGMT.
 2916 MAGLIOCCO DRIVE, SUITE #2
 SAN JOSE, CALIFORNIA 95128
 408.248.5892 FAX: 408.248.5899

Date: 10/21/96

Project Name: GA

Project No.: _____

Well No./Description: MW-1

Depth of Well: 45.95

1 Well Volume: 3.2

Depth to Water: 25.98

4 Well Volumes: 12.8

Casing Diameter: 2" 4"

Actual Volume Purged: _____

Calculations:

$20 \cdot 16 = 3.2$

2" - * 0.1632

4" - * 0.653

Purge Method: Bailer Displacement Pump Impinger/Vacuum

Sample Method: Bailer Other Specify: _____

Sheen: No Yes, Describe White purging.

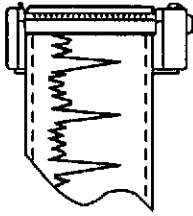
Odor: No Yes, Describe HC mild.

Field Measurements:

Time	Volume	pH	Temp.	E.C.	Color
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Remarks: duplicate labeled "MW-4"

Sampler: Tom Price



ENVIRONMENTAL TESTING & MGMT.
 2916 MAGLIOCCO DRIVE, SUITE #2
 SAN JOSE, CALIFORNIA 95128
 408.248.5892 FAX: 408.248.5899

Date: 10/21/96

Project Name: GIA

Project No.: _____

Well No./Description: MW-2

Depth of Well: 34.10

1 Well Volume: ~~2.9~~ 1.3

Depth to Water: 26.76

4 Well Volumes: ~~11.6~~ 5.2

Casing Diameter: 2" 4"

Actual Volume Purged: _____

Calculations:

2" - * 0.1632
 4" - * 0.653

$$\begin{array}{r} 2.9 \cdot 16 = 46.4 \\ 8 \cdot 16 = 128 \end{array}$$

Purge Method: Bailer Displacement Pump Impinger/Vacuum _____

Sample Method: Bailer Other Specify: _____

Sheen: No Yes, Describe swirling - heavy

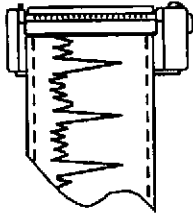
Odor: No Yes, Describe strong HC

Field Measurements:

Time	Volume	pH	Temp.	E.C.	Color
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Remarks: _____

Sampler: Tom Price



ENVIRONMENTAL TESTING & MGMT.
 2916 MAGLIOCCO DRIVE, SUITE #2
 SAN JOSE, CALIFORNIA 95128
 408.248.5892 FAX: 408.248.5899

Date: 10/21/96

Project Name: G.A.

Project No.: _____

Well No./Description: MW-3

Depth of Well: 35.56

1 Well Volume: 1.6

Depth to Water: 25.96

4 Well Volumes: 6.4

Casing Diameter: 2" 4"

Actual Volume Purged: 6.4

Calculations:

$2.10 \cdot 1.6 = 1.6$

2" - * 0.1632

4" - * 0.653

Purge Method: Bailer Displacement Pump Impinger/Vacuum

Sample Method: Bailer Other Specify: _____

Sheen: No Yes, Describe _____

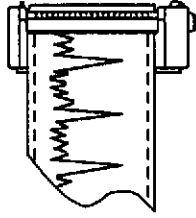
Odor: No Yes, Describe mild H.C.

Field Measurements:

Time	Volume	pH	Temp.	E.C.	Color
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Remarks: _____

Sampler: Tom Fine



ENVIRONMENTAL TESTING & MGMT.
 2916 MAGLIOCCO DRIVE, SUITE #2
 SAN JOSE, CALIFORNIA 95128
 408.248.5892 FAX: 408.248.5899

Date: 10/21/96

Project Name: GA

Project No.: _____

Well No./Description: MW-4

Depth of Well: _____

1 Well Volume: _____

Depth to Water: 26.2

4 Well Volumes: _____

Casing Diameter: 2" 4"

Actual Volume Purged: N/A

Calculations:

2" - * 0.1632

4" - * 0.653

Purge Method: Bailer Displacement Pump Impinger/Vacuum _____

Sample Method: Bailer Other Specify: _____

Sheen: No Yes, Describe _____

Odor: No Yes, Describe mild HC

Field Measurements:

Time	Volume	pH	Temp.	E.C.	Color
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Remarks: should replace screen on passive skimmer.
Adjusted passive skimmer height.

Sampler: _____

1
2
3
4

APPENDIX D: QUALITY ASSURANCE/QUALITY CONTROL PROGRAM

The quality assurance/quality control measures used for groundwater sampling conducted on October 21, 1996 included the following:

- Groundwater samples were collected in triplicate.
- One duplicate groundwater sample was collected from MW-1. This sample was labeled "MW-4" and submitted for testing as a blind duplicate along with the other samples.

APPENDIX E: REPORT DISTRIBUTION LIST

Copies of this report have been mailed to the attention of the following parties:

Scott O. Seery
Alameda County Department of Environmental Health
1131 Harbor Bay Parkway, #250
Alameda, California 94502-6577

Kevin Graves
Regional Water Quality Control Board
2101 Webster Street, Suite 500
Oakland, California 94612