# FOURTH QUARTER 2000

# QUARTERLY GROUNDWATER MONITORING PROGRAM

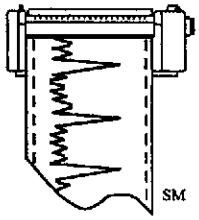
# GERMAN AUTOCRAFT
# 301 E. 14TH STREET, SAN LEANDRO, CALIFORNIA

Prepared For:

Mr. Seung Lee
German Autocraft



Prepared by:




ENVIRONMENTAL TESTING
1792 ROGERS AVENUE
SAN JOSE, CALIFORNIA 95112
408.453.1800 FAX: 408.453.1801

Tom Price, REA, CHMM
Project Manager

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## I. INTRODUCTION

Environmental Testing (ET) has continued the quarterly groundwater monitoring program during the calendar fourth quarter 2000 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 purpose of this quarterly monitoring program is to evaluate groundwater quality in the area of five former underground fuel storage tanks (USTs) that were removed in 1990. Data accumulated from the program 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 quarterly monitoring program presents a description of the groundwater monitoring activities, a compilation of groundwater quality and elevation data and a brief description of the progress of the development of corrective actions at the site.

The groundwater monitoring program this period involved sampling and testing selected monitoring wells and one (1) private well located at the Ramirez residence at 141 Farrelly Drive. Three additional monitoring wells were installed January 2001. The schedule of the monitoring program is as follows:

| | |
|---|---|
| Quarterly: | 141 Farrelly, MW-2, MW-3, MW-8, MW-9, and MW-10 |
| Semi-Annual: | MW-1A, MW-11, and MW-6 |
| Annual: | MW-1, MW-4, and MW-5 |

## 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 2000

Work for the groundwater monitoring program included groundwater level gauging and sampling, sample analysis, and report preparation.

Activity highlights during this period are as follows:

- **December 28, 2000** - ET measured groundwater elevations at wells and collected samples according to the scheduled monitoring program.

## IV. GROUNDWATER ELEVATION AND GRADIENT

Static groundwater level elevation data collected on December 28, 2000 indicated that over the area studied, the elevation of the shallow groundwater surface ranged from 24.03 to 24.63 feet above mean sea level. The estimated groundwater flow direction was westerly (approximate gradient = 0.002 ft/ft).

**Table 1** presents the recent groundwater elevation data and **Figure 3** shows estimated groundwater flow direction as interpreted from the groundwater potentiometric elevation data. **Table 2** presents historic groundwater elevation data.

The groundwater flow patterns observed this quarter is consistent with previous observations.

## V. GROUNDWATER SAMPLING AND ANALYTICAL RESULTS

On December 28, 2000, groundwater samples were collected from MW-2, MW-3, MW-8, MW-9, MW-10, and the private well at 141 Farrelly Drive following the groundwater sampling procedures presented in **Appendix A.** The groundwater samples were analyzed for TPHg, BTEX by EPA Methods 5030, 8015, and 8020 as tabulated on **Table 3.** In addition the sample collected at the private well at 141 Farrelly Drive was tested for MTBE and related oxygenates by EPA Method 8260 **(Table 4).** All samples were tested 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 by EPA Methods 5030, 8015, and 8020 is tabulated in **Table 5.** A City of San Leandro encroachment permit is included in **Appendix E.**

Selected BTEX chemical constituents continue to exceed their respective California Drinking Water Maximum Contaminant Levels (MCLs) or Federal Action Levels (AL) **(Table 3).**

The sample collected 12/28/00 from MW-2, located down gradient of the former gasoline tank area, contained: TPHg at 12,000 micrograms per liter (µg/L); benzene at 540 µg/L which exceeds its MCL of 1 µg/L; toluene at 30 µg/L which exceeds its MCL of 150 µg/L; ethyl benzene at 420 µg/L

which is below its MCL of 700 µg/L, and; total xylenes at 330 µg/L which is below its MCL of 1,750 µg/L.

The sample collected 12/28/00 from monitoring well MW-3, also located down gradient of the former gasoline tank area, contained 33,000 µg/L of TPHg, 4,700 µg/L of benzene, 450 µg/L of toluene, 2,100 µg/L of ethyl benzene, and 6,400 µg/L of total xylenes.

The sample collected 12/28/00 from monitoring well MW-8 contained 1,200 µg/L of TPHg, 47 µg/L of benzene, 3.7 µg/L of toluene, 17 µg/L of ethyl benzene, and 18 µg/L of total xylenes.

The sample collected 12/28/00 from monitoring well MW-9 contained 22,000 µg/L of TPHg, 100 µg/L of benzene, <100 µg/L of toluene, 610 µg/L of ethyl benzene, and 770 µg/L of total xylenes.

The sample collected 12/28/00 from monitoring well MW-10 contained 3,900 µg/L of TPHg, 55 µg/L of benzene, 13 µg/L of toluene, 98 µg/L of ethyl benzene, and 38 µg/L of total xylenes.

The private well sampled on 12/28/00 at 141 Farrelly did not contain gasoline above detection limits as follows: <50 µg/L of TPHg, <0.5 µg/L of benzene, <0.5 µg/L of toluene, <0.5 µg/L of ethyl benzene, and <0.5 µg/L of total xylenes. Also the sample did not contain oxygenates above detection limits as follows <5 µg/L Diisopropyl Ether (DIPE), <5 µg/L, Ethyl-t-butyl Ether (ETBE), <5 µg/L Methyl-t-butyl Ether (MTBE), <5 tert -Amyl Methyl Ether (TAME), and <20 µg/L tert-Butanol (TBA).

## VI. DISCUSSION AND CONCLUSIONS

Selected wells' various chemical constituents continue to exceed their respective California Drinking Water Maximum Contaminant Levels (MCLs) or Federal Action Levels (AL).

Available data, including data from the December 28, 2000 monitoring events, indicate that groundwater flow patterns beneath the site are consistent with previous monitoring events for the project.

## VII. 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 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 using site specific data 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.

## VIII. 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.

Chemist Enterprises, *Soil and Water Investigation at German Autocraft, 301 East 14th Street, San Leandro, California*, April 12, 1995

The Environmental Construction Company, *Preliminary Soil and Groundwater Contamination Assessment, German Autocraft, 301 East 14th Street, San Leandro, California,* February 1991.

The Environmental Construction Company, *Underground Storage Tank Removals, German Autocraft, 301 East 14th Street, San Leandro, California,* November 1990.

Environmental Testing *Fourth Quarter 2000 Quarterly Groundwater Monitoring Program German Autocraft, 301 East 14th Street, San Leandro, California*, March 26, 2001.

Environmental Testing *Third Quarter 2000 Quarterly Groundwater Monitoring Program German Autocraft, 301 East 14th Street, San Leandro, California*, October 20, 2000.

Environmental Testing *Second Quarter /July 2000 Quarterly Groundwater Monitoring Program German Autocraft, 301 East 14th Street, San Leandro, California*, August 14, 2000.

Environmental Testing and Management, *First Quarter 2000 Quarterly Groundwater Monitoring Program German Autocraft, 301 East 14th Street, San Leandro, California*, March 27, 2000.

Environmental Testing and Management, *Third and Fourth Quarters 1999 Quarterly Groundwater Monitoring Program German Autocraft, 301 East 14th Street, San Leandro, California*, February 4, 2000.

Environmental Testing and Management, *First Quarter 1999 Quarterly Groundwater Monitoring Report, German Autocraft, 301 East 14th Street, San Leandro, California*, July 13, 1999.

Environmental Testing and Management, *Fourth Quarter 1998 Quarterly Groundwater Monitoring Report, German Autocraft, 301 East 14th Street, San Leandro, California*, January 29, 1999.

Environmental Testing and Management, *Third Quarter 1998 Installation of Six Groundwater Monitoring Wells and Quarterly Monitoring Report, German Autocraft, 301 East 14th Street, San Leandro, California*, November 16, 1998.

Environmental Testing and Management, *Second Quarter 1998 Quarterly Groundwater Monitoring Report, German Autocraft, 301 East 14th Street, San Leandro, California*, July 10, 1998.

Environmental Testing and Management, *First Quarter 1998 Quarterly Groundwater Monitoring Report, German Autocraft, 301 East 14th Street, San Leandro, California*, May 21, 1998.

Environmental Testing and Management, *Fourth Quarter 1997 Quarterly Groundwater Monitoring Report, German Autocraft, 301 East 14th Street, San Leandro, California*, December 18, 1997.

Environmental Testing and Management, *Third Quarter 1997 Quarterly Groundwater Monitoring Report, German Autocraft, 301 East 14th Street, San Leandro, California*, August 4, 1997.

Environmental Testing and Management, *Second Quarter 1997 Quarterly Groundwater Monitoring Report, German Autocraft, 301 East 14th Street, San Leandro, California*, June 11, 1997.

Environmental Testing and Management, *First Quarter 1997 Quarterly Groundwater Monitoring Report, German Autocraft, 301 East 14th Street, San Leandro, California*, March 24, 1997.

Environmental Testing and Management, *Fourth Quarter 1996 Quarterly Groundwater Monitoring Report, German Autocraft, 301 East 14th Street, San Leandro, California*, January 21, 1997.

Environmental Testing and Management, *Third Quarter 1996 Quarterly Groundwater Monitoring Report, German Autocraft, 301 East 14th Street, San Leandro, California*, November 18, 1996.

Environmental Testing and Management, *Second Quarter 1996 Environmental Activities Report, German Autocraft, 301 East 14th Street, San Leandro, California*, August 8, 1996.

Environmental Testing and Management, *Continued Soil and Water and Offsite Investigation at German Autocraft, 301 East 14th Street, San Leandro, California*, July 12, 1996.

Environmental Testing and Management, *First Quarter 1996 Environmental Activities Report, German Autocraft, 301 East 14th Street, San Leandro, California*, May 20, 1996.

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

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 QUARTERS 2000 GROUNDWATER POTENTIOMETRIC SURFACE ELEVATION DATA

| | | DECEMBER 28, 2000 | |
|---|---|---|---|
| WELL | CASING ELEVATION[1] | Depth to Groundwater | Groundwater Elevation |
| MW-1 | 49.49 | 24.86 | 24.63 |
| MW-2 | 50.01 | 25.62 | 24.39 |
| MW-3 | 49.32 | 24.87 | 24.45 |
| MW-4 | 49.60 | 25.08 | 24.52 |
| MW-5 | 49.57 | Dry Well | - |
| MW-6 | 48.06 | 23.45 | 24.61 |
| MW-8 | 49.35 | 25.14 | 24.21 |
| MW-9 | 48.77 | 24.48 | 24.29 |
| MW-10 | 49.92 | 25.89 | 24.03 |
| MW-11 | 47.93 | 23.67 | 24.26 |
| MW-1A | 48.24 | 24.11 | 24.13 |
| 141 Farrelly | 48.81 | - | - |

[1]Elevations in feet above mean sea level.

## TABLE 2. HISTORICAL GROUNDWATER ELEVATION DATA

Elevation in Feet Above Mean Sea Level

| DATE | MW-1 | MW-2 | MW-3 | MW-4 | MW-5 | MW-6 | MW-8 | MW-9 | MW-10 | MW-11 | MW-1A | 141 Parralley |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12/21/90 | 19.15 | - | - | - | - | - | - | - | - | - | - | - |
| 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 | - | - | - | - | - | - | - | - | - |

| DATE | MW-1 | MW-2 | MW-3 | MW-4 | MW-5 | MW-6 | MW-8 | MW-9 | MW-10 | MW-11 | MW-1A | 141 Farralley |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | - | - | - | - | - | - | - | - | - |
| 11/27/96 | 24.28 | 24.09 | 24.13 | - | - | - | - | - | - | - | - | - |
| 12/27/96 | 28.23 | 28.03 | 28.11 | - | - | - | - | - | - | - | - | - |
| 1/28/97 | 33.02 | 32.71 | 32.78 | - | - | - | - | - | - | - | - | - |
| 4/25/97 | 27.14 | 26.88 | 26.94 | - | - | - | - | - | - | - | - | - |
| 7/17/97 | 24.55 | 24.31 | 24.37 | - | - | - | - | - | - | - | - | - |
| 10/21/97 | 22.85 | 22.69 | 22.73 | - | - | - | - | - | - | - | - | - |
| 3/10/98 | 34.35 | 34.20 | 34.13 | - | - | - | - | - | - | - | - | - |
| 6/6/98 | 30.69 | 30.41 | 30.47 | - | - | - | - | - | - | - | - | - |
| 9/30/98 | 25.95 | 25.68 | 25.75 | - | - | - | - | - | - | - | - | - |
| 12/30/98 | 25.13 | 24.93 | 24.99 | 25.05 | 25.06 | 25.14 | 24.75 | 24.79 | 24.78 | 24.78 | 24.64 | - |
| 3/13/99 | 29.98 | 29.80 | 29.83 | 29.89 | 29.93 | 29.97 | 29.58 | 29.58 | 29.31 | 29.56 | 29.39 | 28.84 |

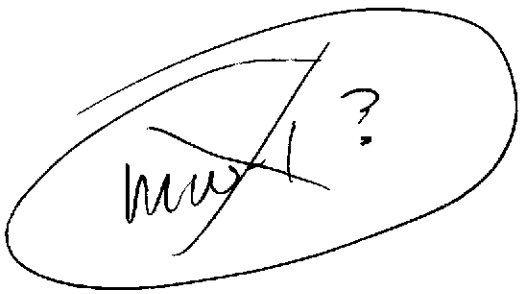
| DATE | MW-1 | MW-2 | MW-3 | MW-4 | MW-5 | MW-6 | MW-8 | MW-9 | MW-10 | MW-11 | MW-1A | 141 Farralley |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9/29/99 | 24.39 | 24.12 | 24.20 | 24.27 | 24.26 | 24.38 | 23.93 | 24.05 | 23.80 | 24.03 | 23.89 | - |
| 12/29/99 | 23.75 | 23.52 | 23.60 | 23.64 | 23.64 | 23.75 | 23.36 | 23.45 | 23.23 | 23.43 | 23.29 | - |
| 3/18/00 | 31.92 | 31.87 | 31.82 | 31.85 | 31.94 | 31.86 | 31.66 | 31.46 | 31.26 | 31.38 | 31.25 | 30.86 |
| 7/18/00 | 26.21 | 26.01 | 26.04 | - | - | 26.22 | 25.76 | 25.83 | 25.55 | 25.81 | 25.64 | - |
| 9/26/00 | 25.01 | 24.69 | 24.80 | - | - | 24.95 | 24.50 | 24.61 | 24.34 | 24.58 | 24.48 | 24.10 |
| 12/28/00 | 24.63 | 24.39 | 24.45 | 24.52 | - | 24.61 | 24.21 | 24.29 | 24.03 | 24.26 | 24.13 | - |

**TABLE 3. GROUNDWATER CHEMICAL TEST RESULTS (EPA METHOD 8015/8020)**

Locations: MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-8, MW-9, MW-10, MW-11, MW-1A, 141 Farrelly

Date Sampled: December 28, 2000 Units: µg/L

| WELL | TPHg | BENZENE | TOLUENE | ETHYL-BENZENE | XYLENES |
|---|---|---|---|---|---|
| MW-2 | 12,000 | 540 | 30 | 420 | 330 |
| MW-3 | 33,000 | 4,700 | 450 | 2,100 | 6,400 |
| MW-8 | 1,200 | 47 | 3.7 | 17 | 18 |
| MW-9 | 22,000 | 100 | <100 | 610 | 770 |
| MW-10 | 3,900 | 55 | 13 | 98 | 38 |
| 141 Farrelly | <50 | <0.5 | <0.5 | <0.5 | <0.5 |
| MCL/AL[2] | - | 1 | 150 | 700 | 1,750 |



[2]Maximum 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. GROUNDWATER CHEMICAL TEST RESULTS (EPA METHOD 8260)**

Location: 141 Farrelly

Date Sampled: December 28, 2000 Units: µg/L

| WELL | DIPE | ETBE | MTBE | TAME | TBA |
|---|---|---|---|---|---|
| 141 Farrelly | <5 | <5 | <5 | <5 | <20 |

**TABLE 5. HISTORIC GROUNDWATER CHEMICAL TEST RESULTS (EPA METHOD 8015/8020)**

Locations: MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-8, MW-9, MW-10, MW-11, MW-1A, 141 Farrelly Units: µg/L

| WELL | DATE | TPHg | BENZENE | TOLUENE | ETHYL-BENZENE | XYLENES |
|---|---|---|---|---|---|---|
| MW-1 | 12/31/90 | 51,000 | 2,200 | 1,200 | <0.5 | 760 |
| | 1/6/95 | 110,000 | 13,000 | 15,000 | 4,800 | 13,000 |
| | 1/6/95 | 580,000 | 29,000 | 41,000 | 17,000 | 43,000 |
| | 7/6/95 | 49,000 | 8,000 | 17,000 | 1,900 | 9,700 |
| | 7/6/95 | 47,000 | 4,800 | 9,500 | 930 | 5,000 |
| | 10/2/95 | 120,000 | 16,000 | 36,000 | 3,300 | 17,000 |
| | 10/2/95 | 160,000 | 20,000 | 47,000 | 5,000 | 23,000 |
| | 1/12/96 | 1,100,000 | 11,000 | 18,000 | 15,000 | 51,000 |
| | 1/12/96 | 98,000 | 2,100 | 4,600 | 2,500 | 10,000 |
| | 4/13/96 | 53,000 | 1,300 | 2,900 | 2,100 | 10,000 |
| | 4/13/96 | 58,000 | 820 | 3,600 | 2,800 | 12,000 |
| | 7/26/96 | 91,000 | 2,900 | 7,200 | 2,900 | 14,000 |
| | 7/26/96 | 67,000 | 2,300 | 5,500 | 2,500 | 11,000 |
| | 10/21/96 | 210,000 | 4,800 | 17,000 | 2,300 | 15,000 |
| | 10/21/96 | 210,000 | 5,400 | 18,000 | 2,600 | 11,000 |
| | 1/28/97 | 120,000 | 5,600 | 15,000 | 2,100 | 11,000 |
| | 1/28/97 | 130,000 | 5,500 | 15,000 | 2,300 | 12,000 |

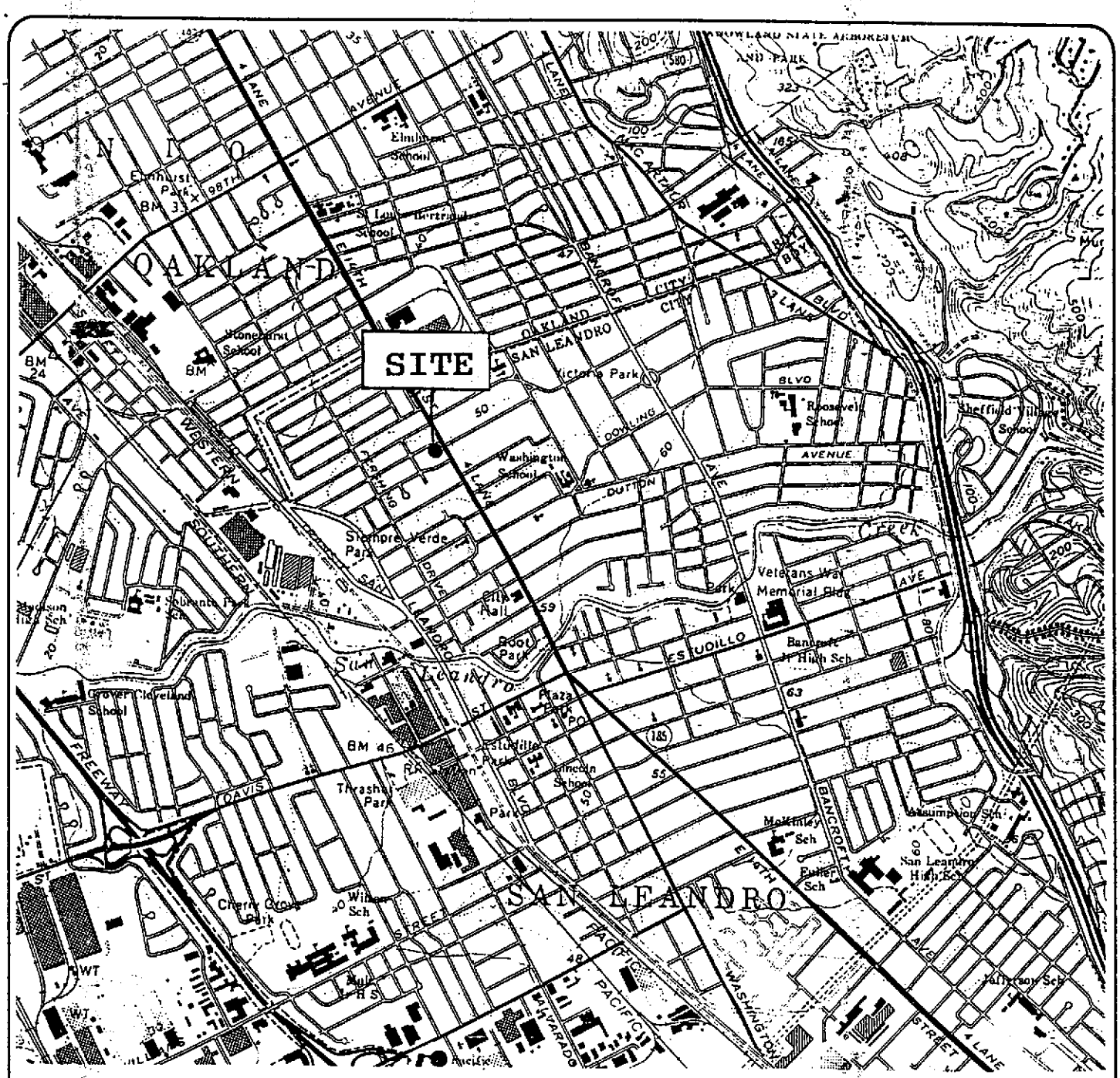
| WELL | DATE | TPHg | BENZENE | TOLUENE | ETHYL-BENZENE | XYLENES |
|---|---|---|---|---|---|---|
| MW-1 | 4/25/97 | 180,000 | 6,900 | 20,000 | 2,600 | 13,000 |
| | 4/25/97 | 170,000 | 6,500 | 20,000 | 2,500 | 13,000 |
| | 7/17/97 | 220,000 | 8,300 | 41,000 | 2,700 | 16,000 |
| | 10/21/97 | 240,000 | 9,400 | 33,000 | 3,300 | 22,000 |
| | 3/10/98 | 120,000 | 11,000 | 46,000 | 3,700 | 21,000 |
| | 6/6/98 | 110,000 | 7,600 | 32,000 | 4,800 | 23,000 |
| | 9/30/98 | 140,000 | 5,800 | 29,000 | 3,500 | 18,000 |
| | 12/30/98 | 78,000 | 5,200 | 24,000 | 3,200 | 19,000 |
| | 3/23/99 | 250,000 | 8,000 | 43,000 | 5,200 | 27,000 |
| | 9/29/99 | 140,000 | 6,100 | 35,000 | 5,400 | 27,000 |
| | 3/18/00 | 120,000 | 5,100 | 33,000 | 4,600 | 24,000 |
| MW-2 | 1/6/95 | 980,000 | 9,400 | 5,600 | 19,000 | 42,000 |
| | 7/6/95 | 71,000 | 5,300 | 1,800 | 6,100 | 9,000 |
| | 10/2/95 | 40,000 | 2,900 | 200 | 2,800 | 3,600 |
| | 1/12/96 | 260,000 | 2,600 | 2,200 | 6,300 | 7,800 |
| | 4/13/96 | 30,000 | 1,900 | 370 | 2,300 | 2,400 |
| | 7/26/96 | 180,000 | 1,400 | 640 | 2,100 | 5,000 |
| | 10/21/96 | 62,000 | 2,100 | <0.5 | 2,100 | 2,700 |
| | 1/28/97 | 46,000 | 1,500 | 94 | 1,800 | 2,000 |
| | 4/25/97 | 23,000 | 790 | 26 | 820 | 730 |
| | 7/17/97 | 95,000 | 2,200 | <0.5 | 3,100 | 4,300 |
| | 10/21/97 | 31,000 | 2,000 | <0.5 | 2,100 | 1,900 |
| | 3/10/98 | 19,000 | 730 | 44 | 820 | 1,000 |

| WELL | DATE | TPHg | BENZENE | TOLUENE | ETHYL-BENZENE | XYLENES |
|---|---|---|---|---|---|---|
| MW-2 | 6/6/98 | 16,000 | 670 | 1,100 | 510 | 1,200 |
| | 9/30/98 | 24,000 | 600 | 77 | 680 | 580 |
| | 12/30/98 | 9,300 | 510 | 96 | 450 | 480 |
| | 3/23/99 | 5,700 | 580 | 9.4 | 400 | 280 |
| | 9/29/99 | 17,000 | 880 | 240 | 830 | 1,000 |
| | 12/29/99 | 11,000 | 800 | 11 | 860 | 780 |
| | 3/18/00 | 11,000 | 790 | 14 | 520 | 450 |
| | 7/18/00 | 10,000 | 560 | 27 | 630 | 530 |
| | 9/26/00 | 6,800 | 450 | 7.4 | 290 | 200 |
| | 12/28/00 | 12,000 | 540 | 30 | 420 | 330 |
| MW-3 | 1/6/95 | 740,000 | 11,000 | 2,300 | 8,300 | 28,000 |
| | 7/6/95 | 86,000 | 12,000 | 8,600 | 4,900 | 19,000 |
| | 10/2/95 | 100,000 | 15,000 | 11,000 | 6,000 | 20,000 |
| | 1/12/96 | 84,000 | 6,500 | 4,100 | 3,200 | 12,000 |
| | 4/13/96 | 48,000 | 7,600 | 3,600 | 2,800 | 9,400 |
| | 7/26/96 | 62,000 | 6,400 | 3,100 | 3,000 | 11,000 |
| | 10/21/96 | 110,000 | 5,400 | 2,400 | 2,500 | 9,800 |
| | 1/28/97 | 130,000 | 5,500 | 15,000 | 2,300 | 12,000 |
| | 4/25/97 | 180,000 | 6,900 | 20,000 | 2,600 | 13,000 |
| | 7/17/97 | 69,000 | 5,100 | 1,100 | 1,800 | 8,600 |
| | 10/21/97 | 58,000 | 4,300 | 1,300 | 2,100 | 8,000 |
| | 3/10/98 | 25,000 | 3,000 | 1,300 | 1,100 | 3,700 |
| | 6/6/98 | 52,000 | 4,400 | 1,900 | 2,300 | 6,900 |

| WELL | DATE | TPHg | BENZENE | TOLUENE | ETHYL-BENZENE | XYLENES |
|---|---|---|---|---|---|---|
| MW-3 | 9/30/98 | 42,000 | 4,300 | 1,400 | 1,800 | 6,600 |
| | 12/30/98 | 34,000 | 4,200 | 770 | 2,300 | 9,000 |
| | 3/23/99 | 44,000 | 3,500 | 1000 | 1,700 | 5,200 |
| | 9/29/99 | 39,000 | 6,000 | 840 | 2,400 | 8,100 |
| | 12/29/99 | 39,000 | 4,600 | 790 | 2,400 | 8,100 |
| | 3/18/00 | 21,000 | 3,100 | 550 | 1,400 | 4,100 |
| | 7/18/00 | 30,000 | 5,000 | 950 | 2,000 | 5,700 |
| | 9/26/00 | 36,000 | 5,300 | 640 | 2,400 | 9,900 |
| | 12/28/00 | 33,000 | 4,700 | 450 | 2,100 | 6,400 |
| MW-4 | 12/30/98 | 12,000 | 1,200 | 1,100 | 290 | 1,400 |
| | 3/23/99 | 89,000 | 5,900 | 8,700 | 2,000 | 9,200 |
| | 9/29/99 | 48,000 | 5,300 | 6,800 | 1,700 | 7,700 |
| | 3/18/00 | 44,000 | 4,500 | 7,500 | 2,200 | 11,000 |
| MW-5 | 12/30/98 | 170 | 1.1 | <0.5 | <0.5 | 0.83 |
| | 3/22/99 | 470 | 3.8 | 0.51 | 2.0 | <0.5 |
| | 9/29/99 | 1,200 | 13 | 4.2 | 2.7 | 4.2 |
| | 3/18/00 | 660 | 5.5 | 0.62 | 1.6 | 1.7 |
| MW-6 | 12/30/98 | 400 | 1.0 | <0.5 | <0.5 | 4.8 |
| | 3/22/99 | 390 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 9/30/99 | 330 | 1.8 | 1.4 | 1.5 | <0.5 |
| | 3/18/00 | 200 | 1.3 | <0.5 | <0.5 | <0.5 |
| | 9/26/00 | 240 | 1.5 | <0.5 | <0.5 | <0.5 |
| MW-8 | 12/30/98 | 2,200 | 70 | 0.94 | 26 | 15 |

| WELL | DATE | TPHg | BENZENE | TOLUENE | ETHYL-BENZENE | XYLENES |
|---|---|---|---|---|---|---|
| MW-8 | 3/23/99 | 2,300 | 34 | 1.1 | 15 | 13 |
| | 9/30/99 | 8,800 | 140 | <50 | 53 | <50 |
| | 12/29/99 | 1,900 | 64 | 1.0 | 22 | 23 |
| | 3/18/00 | 1,400 | 36 | <0.5 | 12 | 9.3 |
| | 7/18/00 | 3,000 | 67 | 9.8 | 38 | 38 |
| | 9/26/00 | 1,200 | 24 | 3.0 | 24 | 15 |
| | 12/28/00 | 1,200 | 47 | 3.7 | 17 | 18 |
| MW-9 | 12/30/98 | 25,000 | 23 | <10 | 180 | 620 |
| | 3/23/99 | 27,000 | 35 | <20 | 600 | 920 |
| | 9/30/99 | 42,000 | 140 | 130 | 1,000 | 1,700 |
| | 12/29/99 | 1,100,000 | 1,200 | 1,300 | 4,300 | 8,700 |
| | 3/18/00 | 17,000 | 89 | 46 | 10 | 600 |
| | 7/18/00 | 12,000 | 39 | 8.2 | 540 | 760 |
| | 9/26/00 | 11,000 | 19 | <5 | 470 | 610 |
| | 12/28/00 | 22,000 | 100 | <100 | 610 | 770 |
| MW-10 | 12/30/98 | 6,900 | 130 | 19 | 140 | 210 |
| | 3/23/99 | 6,600 | 150 | 33 | 240 | 170 |
| | 9/30/99 | 9,300 | 60 | 38 | 280 | 150 |
| | 12/29/99 | 5,800 | 87 | 10 | 420 | 180 |
| | 3/18/00 | 3,800 | 180 | 11 | 220 | 120 |
| | 7/18/00 | 9,100 | 120 | 33 | 210 | 130 |
| | 9/26/00 | 4,500 | 22 | 8.8 | 1.3 | 18 |
| | 12/28/00 | 3,900 | 55 | 13 | 98 | 38 |

| WELL | DATE | TPHg | BENZENE | TOLUENE | ETHYL-BENZENE | XYLENES |
|---|---|---|---|---|---|---|
| MW-11 | 12/30/98 | 80 | <0.5 | <0.5 | 0.93 | 1.6 |
| | 3/23/99 | <50 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 9/30/99 | 94 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 3/18/00 | <50 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 9/26/00 | <50 | <0.5 | <0.5 | <0.5 | <0.5 |
| MW-1A | 5/30/97 | 12,000 | 18 | 8.7 | 90 | 540 |
| | 12/30/98 | 51 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 3/23/99 | 1,800 | 4.0 | <0.5 | 3.0 | 7.5 |
| | 3/23/99 | 2,200 | 10 | 0.52 | 3.1 | 7.1 |
| | 9/30/99 | 13,000 | 63 | 26 | 30 | 72 |
| | 3/8/00 | 6,100 | 36 | <5 | 9.7 | 45 |
| | 9/26/00 | 11,000 | 14 | <5 | 65 | 150 |
| 141 Farrelly | 4/6/96 | <50 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 10/2/99 | <50 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 3/18/00 | <50 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 7/13/00 | <50 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 9/26/00 | <50 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 12/29/00 | <50 | <0.5 | <0.5 | <0.5 | <0.5 |




EXPLANATION:

Scale: 1"=2000'

0 1000' 2000'

Base Map Reference: U.S.G.S. San Leandro 7.5 Minute Topographic, Quadrangle

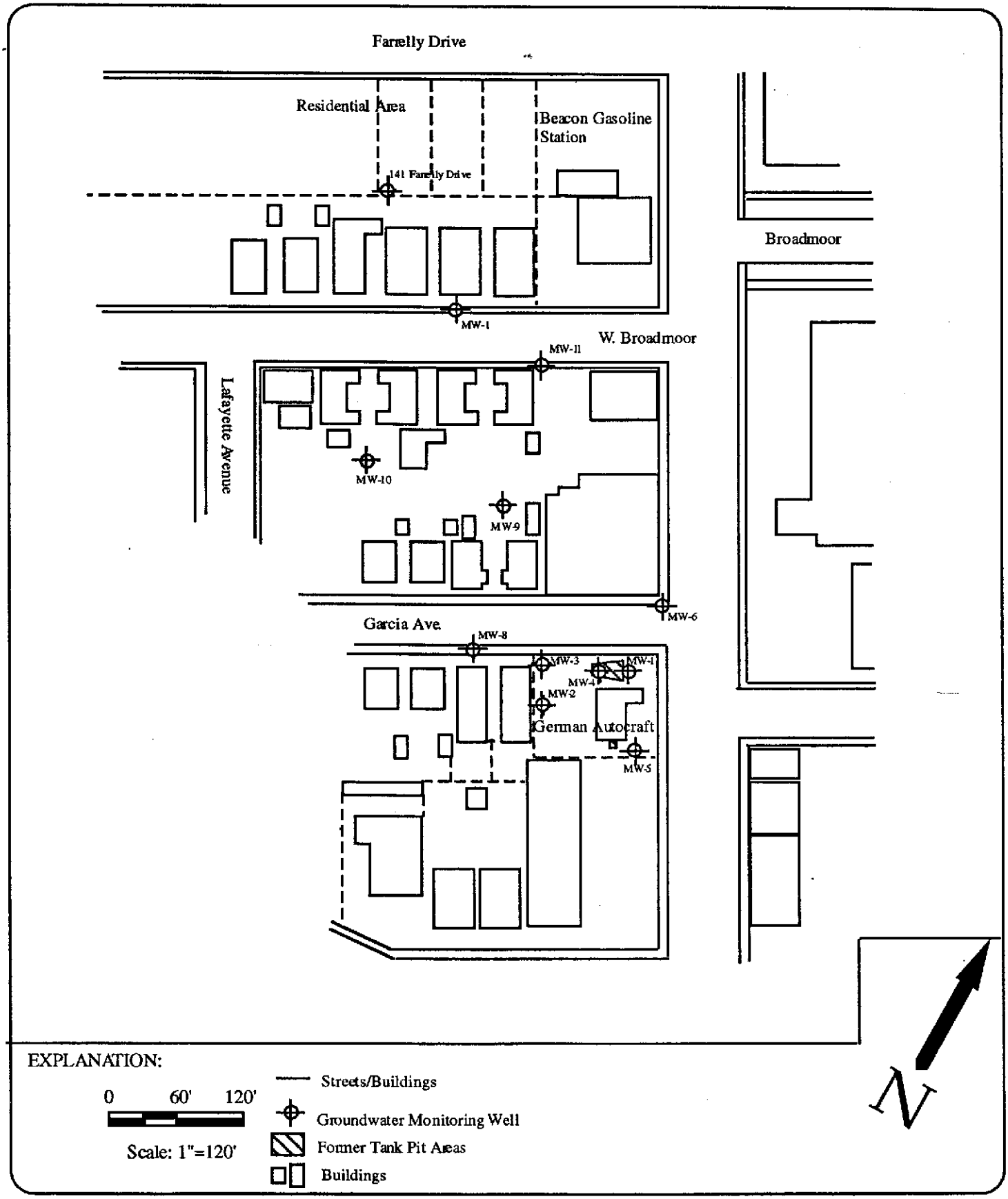
N


ENVIRONMENTAL TESTING & MGMT
111 N. MARKET ST. SUITE 600
SAN JOSE, CALIFORNIA 95113


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

Figure 1

Project No. 94-52
Date: 3/97



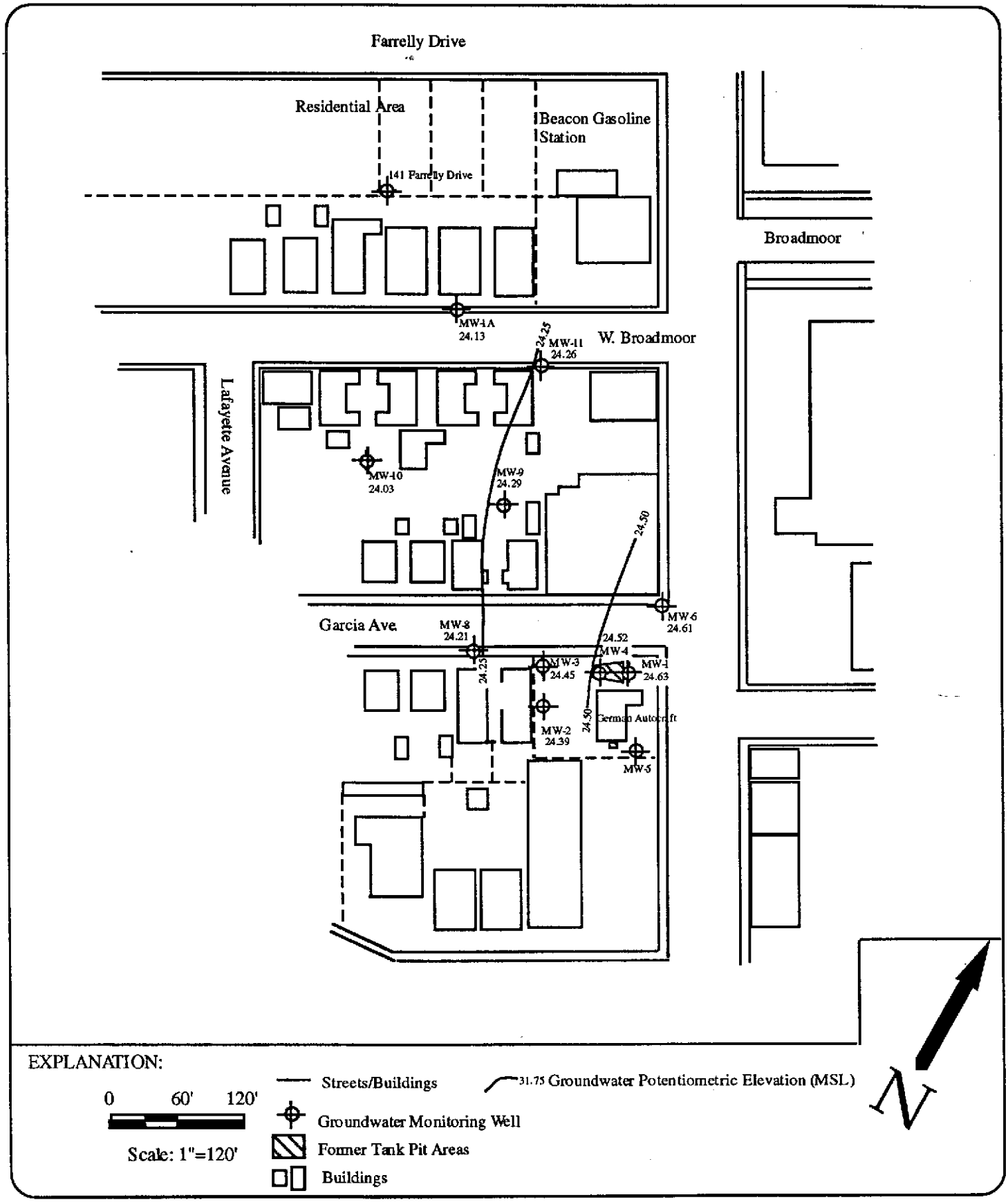


ENVIRONMENTAL TESTING & MGMT.
111 N. MARKET STREET 6TH FLOOR
SAN JOSE, CA 95113


German Autocraft
301 East 14th Street
San Leandro, California

Figure 2

Date: 11/98



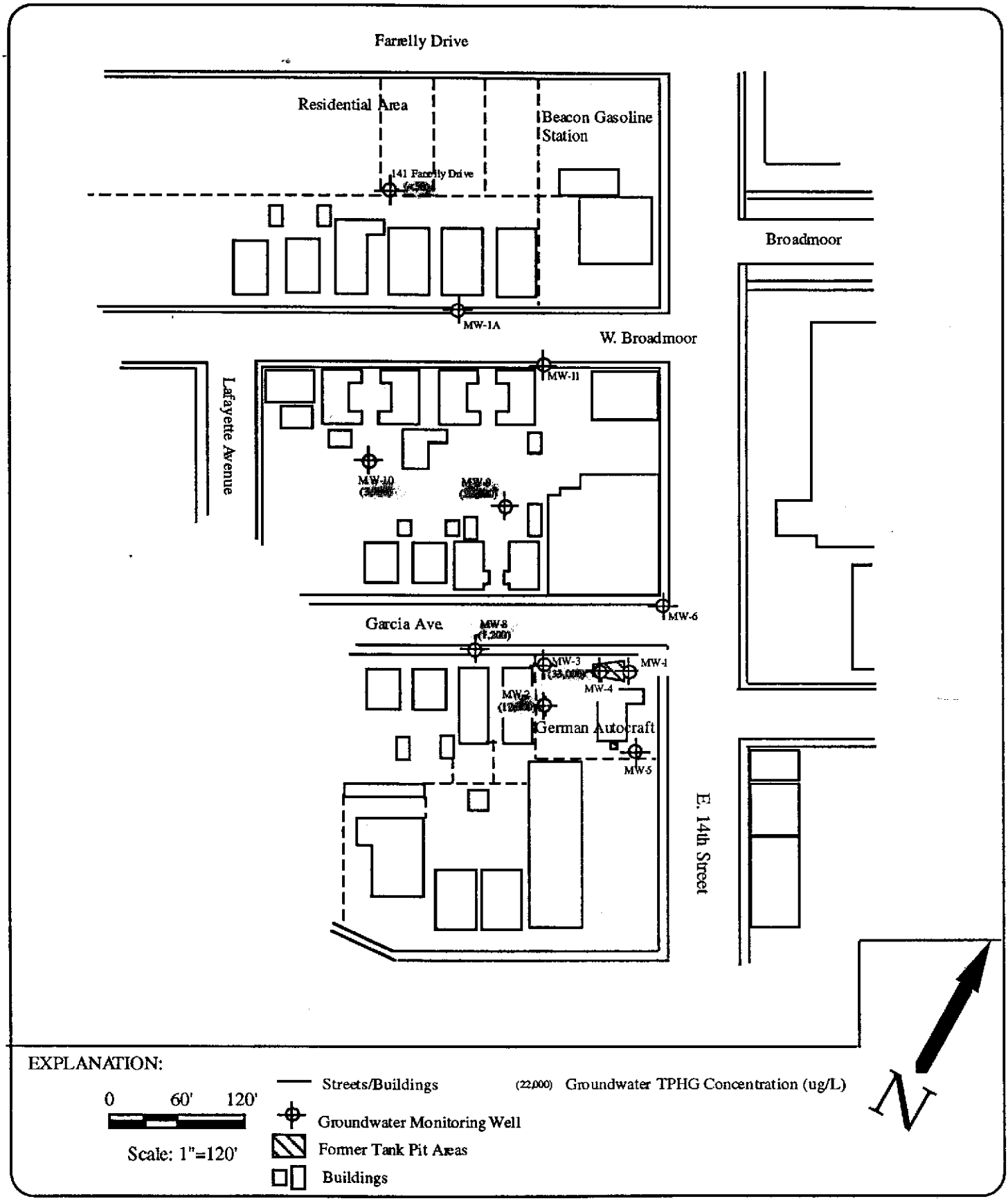


ENVIRONMENTAL TESTING & MGMT.
1792 ROGERS AVENUE
SAN JOSE, CALIFORNIA 95112
(408) 453-1800


GROUNDWATER POTENTIOMETRIC SURFACE ELEVATION ISOCONTOUR MAP (12/28/00)
German Autocraft
301 East 14th Street
San Leandro, California

Figure 3

Date: 3/01

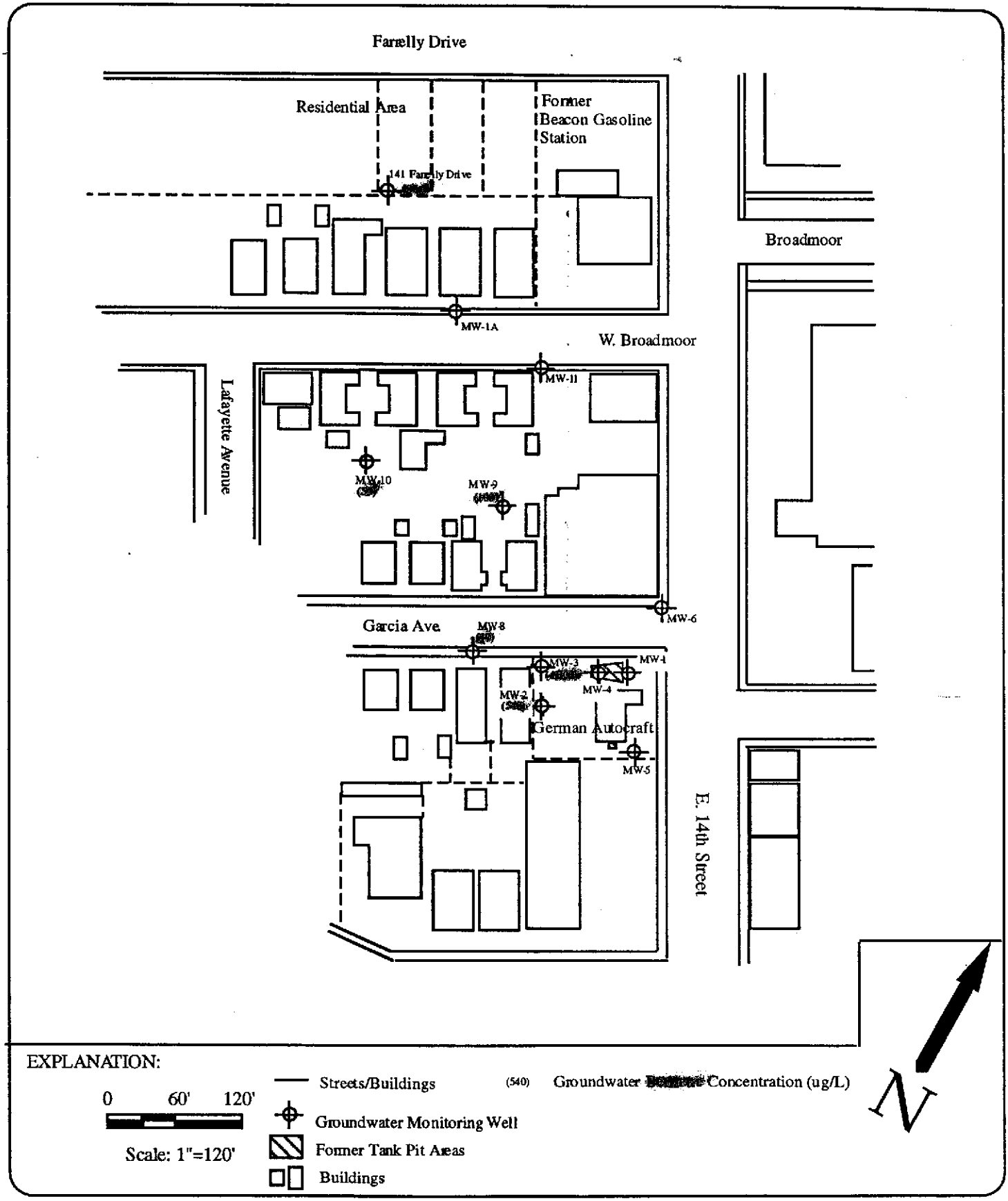



ENVIRONMENTAL TESTING
1792 ROGERS AVENUE
SAN JOSE, CA 95112
(408) 453-1800 FAX: (408) 453-1801

VICINITY MAP WITH GROUNDWATER TPHG CONCENTRATIONS (12/28/00)
German Autocraft
301 East 14th Street
San Leandro, California

Figure 4

Date: 3/00




ENVIRONMENTAL TESTING
1792 ROGERS AVENUE
SAN JOSE, CA 95112
(408)453-1800 FAX: (408) 453-1801

VICINITY MAP WITH GROUNDWATER
BENZENE CONCENTRATIONS (12/28/00)
German Autocraft
301 East 14th Street
San Leandro, California

Figure 5

Date: 3/00

## 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 drying. 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 or until the parameters of temperature, conductance, and pH stabilized.

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.

# Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

January 05, 2001

Tom Price
Environmental Testing
1792 Roger Avenue
San Jose, CA 95112

**Order:** 23813
**Project Name:**
**Project Number:** GA
**Project Notes:**

**Date Collected:** 12/28/00
**Date Received:** 1/2/01
**P.O. Number:**

On January 02, 2001, samples were received under documentented chain of custody. Results for the following analyses are attached:

| Matrix | Test | Method |
|---|---|---|
| Liquid | Gas/BTEX | EPA 8015 MOD. (Purgeable) |
| | | EPA 8020 |
| | Oxygenates by EPA 8260B | EPA 8260B |

Chemical analysis of these samples has been completed. Summaries of the data are contained on the following pages. USEPA protocols for sample storage and preservation were followed.

Entech Analytical Labs, Inc. is certified by the State of California (#2346). If you have any questions regarding procedures or results, please call me at 408-735-1550.

Sincerely,

Michelle L. Anderson
Lab Director

# Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

**Environmental Testing**
**1792 Roger Avenue**
**San Jose, CA 95112**
**Attn: Tom Price**

Date: 01/05/01
Date Received: 1/2/01
Project Name:
Project Number: GA
P.O. Number:
Sampled By: Client

## Certified Analytical Report

**Order ID:** 23813 **Lab Sample ID:** 23813-001 **Client Sample ID:** MW-2

**Sample Time:** **Sample Date:** 12/29/00 **Matrix:** Liquid

| Parameter | Result | Flag | DF | PQL | DLR | Units | Extraction Date | Analysis Date | QC Batch ID | Method |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 540 | | 50 | 0.5 | 25 | µg/L | N/A | 1/3/01 | WGC4010102 | EPA 8020 |
| Toluene | 30 | | 50 | 0.5 | 25 | µg/L | N/A | 1/3/01 | WGC4010102 | EPA 8020 |
| Ethyl Benzene | 420 | | 50 | 0.5 | 25 | µg/L | N/A | 1/3/01 | WGC4010102 | EPA 8020 |
| Xylenes, Total | 330 | | 50 | 0.5 | 25 | µg/L | N/A | 1/3/01 | WGC4010102 | EPA 8020 |

| Surrogate | Surrogate Recovery | Control Limits (%) |
|---|---|---|
| aaa-Trifluorotoluene | 97 | 65 - 135 |

| Parameter | Result | Flag | DF | PQL | DLR | Units | Extraction Date | Analysis Date | QC Batch ID | Method |
|---|---|---|---|---|---|---|---|---|---|---|
| TPH as Gasoline | 12000 | | 50 | 50 | 2500 | µg/L | N/A | 1/3/01 | WGC4010102 | EPA 8015 MOD. (Purgeable) |

| Surrogate | Surrogate Recovery | Control Limits (%) |
|---|---|---|
| aaa-Trifluorotoluene | 95 | 65 - 135 |

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

Michelle L. Anderson, Laboratory Director

*Environmental Analysis Since 1983*

# Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

**Environmental Testing**
**1792 Roger Avenue**
**San Jose, CA 95112**
**Attn: Tom Price**

Date: 01/05/01
Date Received: 1/2/01
Project Name:
Project Number: GA
P.O. Number:
Sampled By: Client

## Certified Analytical Report

**Order ID:** 23813 **Lab Sample ID:** 23813-002 **Client Sample ID:** MW-3

**Sample Time:** **Sample Date:** 12/29/00 **Matrix:** Liquid

| Parameter | Result | Flag | DF | PQL | DLR | Units | Extraction Date | Analysis Date | QC Batch ID | Method |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 4700 | | 100 | 0.5 | 50 | µg/L | N/A | 1/3/01 | WGC4010102 | EPA 8020 |
| Toluene | 450 | | 100 | 0.5 | 50 | µg/L | N/A | 1/3/01 | WGC4010102 | EPA 8020 |
| Ethyl Benzene | 2100 | | 100 | 0.5 | 50 | µg/L | N/A | 1/3/01 | WGC4010102 | EPA 8020 |
| Xylenes, Total | 6400 | | 100 | 0.5 | 50 | µg/L | N/A | 1/3/01 | WGC4010102 | EPA 8020 |

| Surrogate | Surrogate Recovery | Control Limits (%) |
|---|---|---|
| aaa-Trifluorotoluene | 99 | 65 - 135 |

| Parameter | Result | Flag | DF | PQL | DLR | Units | Extraction Date | Analysis Date | QC Batch ID | Method |
|---|---|---|---|---|---|---|---|---|---|---|
| TPH as Gasoline | 33000 | | 100 | 50 | 5000 | µg/L | N/A | 1/3/01 | WGC4010102 | EPA 8015 MOD. (Purgeable) |

| Surrogate | Surrogate Recovery | Control Limits (%) |
|---|---|---|
| aaa-Trifluorotoluene | 102 | 65 - 135 |

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

Michelle L. Anderson, Laboratory Director

*Environmental Analysis Since 1983*

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**Environmental Testing**
**1792 Roger Avenue**
**San Jose, CA 95112**
**Attn: Tom Price**

Date: 01/05/01
Date Received: 1/2/01
Project Name:
Project Number: GA
P.O. Number:
Sampled By: Client

## Certified Analytical Report

**Order ID:** 23813 **Lab Sample ID:** 23813-003 **Client Sample ID:** MW-8

**Sample Time:** **Sample Date:** 12/28/00 **Matrix:** Liquid

| Parameter | Result | Flag | DF | PQL | DLR | Units | Extraction Date | Analysis Date | QC Batch ID | Method |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 47 | | 1 | 0.5 | 0.5 | µg/L | N/A | 1/3/01 | WGC4010102 | EPA 8020 |
| Toluene | 3.7 | | 1 | 0.5 | 0.5 | µg/L | N/A | 1/3/01 | WGC4010102 | EPA 8020 |
| Ethyl Benzene | 17 | | 1 | 0.5 | 0.5 | µg/L | N/A | 1/3/01 | WGC4010102 | EPA 8020 |
| Xylenes, Total | 18 | | 1 | 0.5 | 0.5 | µg/L | N/A | 1/3/01 | WGC4010102 | EPA 8020 |

| Surrogate | Surrogate Recovery | Control Limits (%) |
|---|---|---|
| aaa-Trifluorotoluene | 69 | 65 - 135 |

| Parameter | Result | Flag | DF | PQL | DLR | Units | Extraction Date | Analysis Date | QC Batch ID | Method |
|---|---|---|---|---|---|---|---|---|---|---|
| TPH as Gasoline | 1200 | | 1 | 50 | 50 | µg/L | N/A | 1/3/01 | WGC4010102 | EPA 8015 MOD. (Purgeable) |

| Surrogate | Surrogate Recovery | Control Limits (%) |
|---|---|---|
| aaa-Trifluorotoluene | 50 | 65 - 135 |

**Comment:** Surrogate recovery out of control limits due to matrix interference.

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

Michelle L. Anderson, Laboratory Director

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**Environmental Testing**
**1792 Roger Avenue**
**San Jose, CA 95112**
**Attn: Tom Price**

Date: 01/05/01
Date Received: 1/2/01
Project Name:
Project Number: GA
P.O. Number:
Sampled By: Client

## Certified Analytical Report

**Order ID:** 23813 **Lab Sample ID:** 23813-004 **Client Sample ID:** MW-9

**Sample Time:** **Sample Date:** 12/28/00 **Matrix:** Liquid

| Parameter | Result | Flag | DF | PQL | DLR | Units | Extraction Date | Analysis Date | QC Batch ID | Method |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 100 | | 200 | 0.5 | 100 | µg/L | N/A | 1/3/01 | WGC4010102 | EPA 8020 |
| Toluene | ND | | 200 | 0.5 | 100 | µg/L | N/A | 1/3/01 | WGC4010102 | EPA 8020 |
| Ethyl Benzene | 610 | | 200 | 0.5 | 100 | µg/L | N/A | 1/3/01 | WGC4010102 | EPA 8020 |
| Xylenes, Total | 770 | | 200 | 0.5 | 100 | µg/L | N/A | 1/3/01 | WGC4010102 | EPA 8020 |

| Surrogate | Surrogate Recovery | Control Limits (%) |
|---|---|---|
| aaa-Trifluorotoluene | 101 | 65 - 135 |

| Parameter | Result | Flag | DF | PQL | DLR | Units | Extraction Date | Analysis Date | QC Batch ID | Method |
|---|---|---|---|---|---|---|---|---|---|---|
| TPH as Gasoline | 22000 | | 200 | 50 | 10000 | µg/L | N/A | 1/3/01 | WGC4010102 | EPA 8015 MOD. (Purgeable) |

| Surrogate | Surrogate Recovery | Control Limits (%) |
|---|---|---|
| aaa-Trifluorotoluene | 106 | 65 - 135 |

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

Michelle L. Anderson, Laboratory Director

*Environmental Analysis Since 1983*

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**Environmental Testing**
**1792 Roger Avenue**
**San Jose, CA 95112**
**Attn: Tom Price**

Date: 01/05/01
Date Received: 1/2/01
Project Name:
Project Number: GA
P.O. Number:
Sampled By: Client

## Certified Analytical Report

**Order ID:** 23813 **Lab Sample ID:** 23813-005 **Client Sample ID:** MW-10

**Sample Time:** **Sample Date:** 12/28/00 **Matrix:** Liquid

| Parameter | Result | Flag | DF | PQL | DLR | Units | Extraction Date | Analysis Date | QC Batch ID | Method |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 55 | | 10 | 0.5 | 5 | µg/L | N/A | 1/3/01 | WGC4010102 | EPA 8020 |
| Toluene | 13 | | 10 | 0.5 | 5 | µg/L | N/A | 1/3/01 | WGC4010102 | EPA 8020 |
| Ethyl Benzene | 98 | | 10 | 0.5 | 5 | µg/L | N/A | 1/3/01 | WGC4010102 | EPA 8020 |
| Xylenes, Total | 38 | | 10 | 0.5 | 5 | µg/L | N/A | 1/3/01 | WGC4010102 | EPA 8020 |

| Surrogate | Surrogate Recovery | Control Limits (%) |
|---|---|---|
| aaa-Trifluorotoluene | 87 | 65 - 135 |

| Parameter | Result | Flag | DF | PQL | DLR | Units | Extraction Date | Analysis Date | QC Batch ID | Method |
|---|---|---|---|---|---|---|---|---|---|---|
| TPH as Gasoline | 3900 | | 10 | 50 | 500 | µg/L | N/A | 1/3/01 | WGC4010102 | EPA 8015 MOD. (Purgeable) |

| Surrogate | Surrogate Recovery | Control Limits (%) |
|---|---|---|
| aaa-Trifluorotoluene | 71 | 65 - 135 |

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

Michelle L. Anderson, Laboratory Director

*Environmental Analysis Since 1983*

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**Environmental Testing**
**1792 Roger Avenue**
**San Jose, CA 95112**
**Attn: Tom Price**

Date: 01/05/01
Date Received: 1/2/01
Project Name:
Project Number: GA
P.O. Number:
Sampled By: Client

## Certified Analytical Report

**Order ID:** 23813 **Lab Sample ID:** 23813-006 **Client Sample ID:** 141 Farelly

**Sample Time:** **Sample Date:** 12/29/00 **Matrix:** Liquid

| Parameter | Result | Flag | DF | PQL | DLR | Units | Extraction Date | Analysis Date | QC Batch ID | Method |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | ND | | 1 | 0.5 | 0.5 | µg/L | N/A | 1/3/01 | WGC4010102 | EPA 8020 |
| Toluene | ND | | 1 | 0.5 | 0.5 | µg/L | N/A | 1/3/01 | WGC4010102 | EPA 8020 |
| Ethyl Benzene | ND | | 1 | 0.5 | 0.5 | µg/L | N/A | 1/3/01 | WGC4010102 | EPA 8020 |
| Xylenes, Total | ND | | 1 | 0.5 | 0.5 | µg/L | N/A | 1/3/01 | WGC4010102 | EPA 8020 |

| Surrogate | Surrogate Recovery | Control Limits (%) |
|---|---|---|
| aaa-Trifluorotoluene | 99 | 65 - 135 |

| Parameter | Result | Flag | DF | PQL | DLR | Units | Extraction Date | Analysis Date | QC Batch ID | Method |
|---|---|---|---|---|---|---|---|---|---|---|
| TPH as Gasoline | ND | | 1 | 50 | 50 | µg/L | N/A | 1/3/01 | WGC4010102 | EPA 8015 MOD. (Purgeable) |

| Surrogate | Surrogate Recovery | Control Limits (%) |
|---|---|---|
| aaa-Trifluorotoluene | 108 | 65 - 135 |

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

Michelle L. Anderson, Laboratory Director

*Environmental Analysis Since 1983*

# Entech Analytical Labs, Inc.

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**Environmental Testing**
**1792 Roger Avenue**
**San Jose, CA 95112**
**Attn: Tom Price**

Date: 01/05/01
Date Received: 1/2/01
Project Name:
Project Number: GA
P.O. Number:
Sampled By: Client

## Certified Analytical Report

**Order ID:** 23813 **Lab Sample ID:** 23813-006 **Client Sample ID:** 141 Farelly

**Sample Time:** **Sample Date:** 12/29/00 **Matrix:** Liquid

| Parameter | Result | Flag | DF | PQL | DLR | Units | Analysis Date | QC Batch ID | Method |
|---|---|---|---|---|---|---|---|---|---|
| Diisopropyl Ether | ND | | 1 | 5 | 5 | µg/L | 1/3/01 | WMS1001229 | EPA 8260B |
| Ethyl-t-butyl Ether | ND | | 1 | 5 | 5 | µg/L | 1/3/01 | WMS1001229 | EPA 8260B |
| Methyl-t-butyl Ether | ND | | 1 | 5 | 5 | µg/L | 1/3/01 | WMS1001229 | EPA 8260B |
| tert-Amyl Methyl Ether | ND | | 1 | 5 | 5 | µg/L | 1/3/01 | WMS1001229 | EPA 8260B |
| tert-Butanol | ND | | 1 | 20 | 20 | µg/L | 1/3/01 | WMS1001229 | EPA 8260B |

| Surrogate | Surrogate Recovery | Control Limits (%) |
|---|---|---|
| 4-Bromofluorobenzene | 95 | 65 - 135 |
| Dibromofluoromethane | 93 | 65 - 135 |
| Toluene-d8 | 96 | 65 - 135 |

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

Michelle L. Anderson, Laboratory Director

*Environmental Analysis Since 1983*

# Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

## Quality Control Results Summary

**QC Batch #:** WGC4010102 **Units:** µg/L

**Matrix:** Liquid **Date Analyzed:** 1/2/01

| Parameter | Method | Method Blank | Spike Sample ID | Spike Amount | Sample Result | Spike Result | QC Type | % Recovery | RPD | RPD Limits | Recovery Limits |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Test:** TPH as Gasoline | | | | | | | | | | | |
| TPH as Gasoline | EPA 8015 M | ND | | 469 | | 440.7 | LCS | 94.0 | | | 75.0 - 125.0 |
| | **Surrogate** | | **Surrogate Recovery** | | | **Control Limits (%)** | | | | | |
| | aaa-Trifluorotoluene | | 103 | | | 65 - 135 | | | | | |
| **Test:** BTEX | | | | | | | | | | | |
| Benzene | EPA 8020 | ND | | 5.2 | | 5.12 | LCS | 98.5 | | | 75.0 - 125.0 |
| Ethyl Benzene | EPA 8020 | ND | | 5.6 | | 5.17 | LCS | 92.3 | | | 75.0 - 125.0 |
| Toluene | EPA 8020 | ND | | 29 | | 27.2 | LCS | 93.8 | | | 75.0 - 125.0 |
| Xylenes, total | EPA 8020 | ND | | 32 | | 29.2 | LCS | 91.3 | | | 75.0 - 125.0 |
| | **Surrogate** | | **Surrogate Recovery** | | | **Control Limits (%)** | | | | | |
| | aaa-Trifluorotoluene | | 91 | | | 65 - 135 | | | | | |
| **Test:** MTBE by EPA 8020 | | | | | | | | | | | |
| Methyl-t-butyl Ether | EPA 8020 | ND | | 50 | | 39.2 | LCS | 78.4 | | | 65.0 - 135.0 |
| **Test:** TPH as Gasoline | | | | | | | | | | | |
| TPH as Gasoline | EPA 8015 M | ND | | 469 | | 433.7 | LCSD | 92.5 | 1.60 | 25.00 | 75.0 - 125.0 |
| | **Surrogate** | | **Surrogate Recovery** | | | **Control Limits (%)** | | | | | |
| | aaa-Trifluorotoluene | | 106 | | | 65 - 135 | | | | | |
| **Test:** BTEX | | | | | | | | | | | |
| Benzene | EPA 8020 | ND | | 5.2 | | 5.36 | LCSD | 103.1 | 4.58 | 25.00 | 75.0 - 125.0 |
| Ethyl Benzene | EPA 8020 | ND | | 5.6 | | 5.88 | LCSD | 105.0 | 12.85 | 25.00 | 75.0 - 125.0 |
| Toluene | EPA 8020 | ND | | 29 | | 28.5 | LCSD | 98.3 | 4.67 | 25.00 | 75.0 - 125.0 |
| Xylenes, total | EPA 8020 | ND | | 32 | | 31.4 | LCSD | 98.1 | 7.26 | 25.00 | 75.0 - 125.0 |
| | **Surrogate** | | **Surrogate Recovery** | | | **Control Limits (%)** | | | | | |
| | aaa-Trifluorotoluene | | 106 | | | 65 - 135 | | | | | |
| **Test:** MTBE by EPA 8020 | | | | | | | | | | | |
| Methyl-t-butyl Ether | EPA 8020 | ND | | 50 | | 32.9 | LCSD | 65.8 | 17.48 | 25.00 | 65.0 - 135.0 |

# Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

## Quality Control Results Summary

**QC Batch #:** WMS1001229 **Units:** µg/L
**Matrix:** Liquid **Date Analyzed:** 12/29/00

| Parameter | Method | Method Blank | Spike Sample ID | Spike Amount | Sample Result | Spike Result | QC Type | % Recovery | RPD | RPD Limits | Recovery Limits |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Test:** EPA 8010 by EPA 8260B | | | | | | | | | | | |
| 1,1-Dichloroethene | EPA 8260B | ND | | 40 | | 36.5 | LCS | 91.3 | | | 65.0 - 135.0 |
| Chlorobenzene | EPA 8260B | ND | | 40 | | 35.3 | LCS | 88.3 | | | 65.0 - 135.0 |
| Trichloroethene | EPA 8260B | ND | | 40 | | 35.8 | LCS | 89.5 | | | 65.0 - 135.0 |

| Surrogate | Surrogate Recovery | Control Limits (%) |
|---|---|---|
| 4-Bromofluorobenzene | 97 | 65 - 135 |
| Dibromofluoromethane | 103 | 65 - 135 |
| Toluene-d8 | 105 | 65 - 135 |

| Parameter | Method | Method Blank | Spike Sample ID | Spike Amount | Sample Result | Spike Result | QC Type | % Recovery | RPD | RPD Limits | Recovery Limits |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Test:** EPA 8010 by EPA 8260B | | | | | | | | | | | |
| 1,1-Dichloroethene | EPA 8260B | ND | | 40 | | 38.4 | LCSD | 96.0 | 5.07 | 25.00 | 65.0 - 135.0 |
| Chlorobenzene | EPA 8260B | ND | | 40 | | 35.8 | LCSD | 89.5 | 1.41 | 25.00 | 65.0 - 135.0 |
| Trichloroethene | EPA 8260B | ND | | 40 | | 37.1 | LCSD | 92.8 | 3.57 | 25.00 | 65.0 - 135.0 |

| Surrogate | Surrogate Recovery | Control Limits (%) |
|---|---|---|
| 4-Bromofluorobenzene | 98 | 65 - 135 |
| Dibromofluoromethane | 104 | 65 - 135 |
| Toluene-d8 | 105 | 65 - 135 |

# 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
Address: 1792 Rogers Ave
San Jose CA 95112
Contact: Tom Price
Telephone #: (408) 453-1800
Date Received:
Turn Around:

Project ID: GA
Purchase Order #:

| Sampler/Company: | Telephone #: |
|---|---|
| Special Instructions/Comments | |

**LAB USE ONLY**

Samples arrived chilled and intact:
Yes No
Notes:

01 JAN 2 15:27

23813

| Lab # | Sample ID | Grab/ Composite | Matrix | Date Collected | Time Collected | Pres. | Sample Container | Requested Analysis: TPHg/ BTEX | Requested Analysis: MTBE + oxygenates 8260 |
|---|---|---|---|---|---|---|---|---|---|
| 001 | MW-2 | G | W | 12/29/00 | — | $Na_2S_2O_3$ HCl | VOAs | ✓ | |
| 002 | MW-3 | ↓ | ↓ | 12/29/00 | — | ↓ | ↓ | ✓ | |
| 003 | MW-8 | | | 12/28/00 | — | | | ✓ | |
| 004 | MW-9 | | | 12/28/00 | — | | | ✓ | |
| 005 | MW-10 | | | 12/28/00 | — | | | ✓ | |
| 006 | 141 Farelly | ↓ | ↓ | 12/29/00 | — | ↓ | ↓ | ✓ | ✓ |

| | | | |
|---|---|---|---|
| Relinq. By: | Received By: | Date 12/01 | Time 15:27 |
| Relinq. By: | Received By: | Date | Time |
| Relinq/ By: | Received By: | Date | Time |

ENVIRONMENTAL TESTING
1792 ROGERS AVENUE
SAN JOSE, CALIFORNIA 95112
408.453.1800 FAX: 408.453.1801

Date: 12/28/00 Project Name: GA.

Project No.: _____ Well No./Description: MW-2

Depth of Well: 33.4 1 Well Volume: _____

Depth to Water: 25.62 4 Well Volumes: _____

Casing Diameter: X 2" __4" Actual Volume Purged: _____

Calculations:

2" - * 0.1632
4" - * 0.653

Purge Method: X Bailer ___Displacement Pump ___Impinger/Vacuum ___

Sample Method: X Bailer ___Other Specify:_____

Sheen: ___No X Yes, Describe heavy rainbow

Odor: ___No X Yes, Describe strong HC

Field Measurements:

| Time | Volume | pH | Temp. | E.C. | Color |
|---|---|---|---|---|---|
| 400 | 2 | 7.2 | 63 | 1.2E3 | gray |
| 405 | 4 | 6.8 | 62 | 0.9E3 | " |
| 410 | 6 | 7.0 | 61 | 0.9E3 | " |
| | | | | | |
| | | | | | |

Remarks: DO = 1.2 mg/L

Sampler: _____

ENVIRONMENTAL TESTING
1792 ROGERS AVENUE
SAN JOSE, CALIFORNIA 95112
408.453.1800 FAX: 408.453.1801

Date: 12/28/00 Project Name: GA

Project No.: _____ Well No./Description: MW-3

Depth of Well: 34.96 1 Well Volume: _____

Depth to Water: 24.87 4 Well Volumes: _____

Casing Diameter: X 2" __4" Actual Volume Purged: _____

Calculations:

2" - * 0.1632
4" - * 0.653

Purge Method: X Bailer ___Displacement Pump ___Impinger/Vacuum ___

Sample Method: X Bailer ___ Other Specify:_____

Sheen: X No ___ Yes, Describe _____

Odor: ___No X Yes, Describe HC

Field Measurements:

| Time | Volume | pH | Temp. | E.C. | Color |
|---|---|---|---|---|---|
| 415 | 2.0 | 6.8 | 55 | 0.7E3 | Gray |
| 420 | 4.0 | 6.8 | 57 | 0.8E3 | " |
| 425 | 6.0 | 6.8 | 58 | 0.9E3 | " |
| | | | | | |
| | | | | | |

Remarks: DO 1.9 mg/L

Sampler: _____

ENVIRONMENTAL TESTING
1792 ROGERS AVENUE
SAN JOSE, CALIFORNIA 95112
408.453.1800 FAX: 408.453.1801

Date: 12/28/00 Project Name: GA

Project No.: _____ Well No./Description: MW-8

Depth of Well: 29.55 1 Well Volume: _____

Depth to Water: 25.14 4 Well Volumes: _____

Casing Diameter: X 2" __4" Actual Volume Purged: _____

Calculations:

2" - * 0.1632
4" - * 0.653

Purge Method: X Bailer ___Displacement Pump ___Impinger/Vacuum ___

Sample Method: X Bailer ___ Other Specify: _____

Sheen: X No ___ Yes, Describe _____

Odor: ___No X Yes, Describe Hc mild.

Field Measurements:

| Time | Volume | pH | Temp. | E.C. | Color |
|---|---|---|---|---|---|
| 442 | 1.5 | 6.7 | 57 | 0.7E3 | gray. |
| 447 | 3.0 | 6.0 | 60 | 0.55E3 | " |
| 455 | 4.5 | 6.5 | 61 | 0.7E3 | " |
| | | | | | |
| | | | | | |

Remarks: DO = 1.3 mg/L

Sampler: _____

# ENVIRONMENTAL TESTING
1792 ROGERS AVENUE
SAN JOSE, CALIFORNIA 95112
408.453.1800 FAX: 408.453.1801


Date: 12/28/00 Project Name: GA.

Project No.: _____ Well No./Description: MW-9.

Depth of Well: 33.4 1 Well Volume: _____

Depth to Water: 24.48 4 Well Volumes: _____

Casing Diameter: X 2" __ 4" Actual Volume Purged: _____

Calculations:

2" - * 0.1632
4" - * 0.653

Purge Method: X Bailer ___Displacement Pump ___Impinger/Vacuum ___

Sample Method: X Bailer ___ Other Specify: _____

Sheen: ___ No X Yes, Describe heavy rainbow

Odor: ___ No X Yes, Describe Strong HC

Field Measurements:

| Time | Volume | pH | Temp. | E.C. | Color |
|---|---|---|---|---|---|
| 420 | 1.5 | 6.9 | 57 | 0.9E3 | dk gray |
| 425 | 3.0 | 6.7 | 60 | 0.9E3 | " |
| 430 | 4.5 | 6.9 | 60 | 0.9E3 | " |
| | | | | | |
| | | | | | |

Remarks: _____

Sampler: _____

ENVIRONMENTAL TESTING
1792 ROGERS AVENUE
SAN JOSE, CALIFORNIA 95112
408.453.1800 FAX: 408.453.1801

Date: 10/28/02 Project Name: GA.

Project No.: _____ Well No./Description: MW-10

Depth of Well: 38.38 1 Well Volume: _____

Depth to Water: 25.89. 4 Well Volumes: _____

Casing Diameter: X 2" __ 4" Actual Volume Purged: _____

Calculations:

2" - * 0.1632
4" - * 0.653

Purge Method: X Bailer ___Displacement Pump ___Impinger/Vacuum ___

Sample Method: X Bailer ___ Other Specify:_____

Sheen: ___ No ___ Yes, Describe _____

Odor: ___ No X Yes, Describe strong HC

Field Measurements:

| Time | Volume | pH | Temp. | E.C. | Color |
|---|---|---|---|---|---|
| 3:45 | 2.0 | 7.1 | 64 | 0.7E3 | gray |
| 4:10 | 5.0 | 6.7 | 60 | 0.7E3 | gray |
| | | | | | |
| | | | | | |
| | | | | | |

Remarks: DO = 2.2 mg/L
1.5 mg/L

Sampler: _____

## APPENDIX D: QUALITY ASSURANCE/QUALITY CONTROL PROGRAM

The quality assurance/quality control measures used for groundwater sampling conducted on 12/28/00 included the following:

- Groundwater samples were collected in duplicate 40 milliliter vials.

Service No. _____

# CITY OF SAN LEANDRO
## APPLICATION TO PERFORM WORK IN THE PUBLIC RIGHT-OF-WAY

00682
Permit Number

12-28-00
Date Approved

Work Site: W Broadmoor and W. Garcia

Applicant: Name Environmental Testing Address 1792 Rogers Ave San Jose CA Tel. (408) 453-1800

Owner: Name Mr. Lee Address 301 E 14th Street San Leandro Tel. (510) 638-5473

Purpose of Permit:

☐ Utility ☐ Street Excavation ☐ Curb, Gutter Sidewalk, Driveway ☑ Other Environmental

Detailed Description and Dimensions of Work: Open 4 well boxes for measurement of groundwater depth/collect samples.

Plan Submitted: Yes ✓ No _____ Profile Submitted Yes _____ No _____

Date Work to be Started: 12/28/00 Date Work to be Completed by: 1/15/00

Building Permit No. _____ State Encroachment Permit No. _____

Oro Loma Permit No. _____ Alameda County Flood Control Permit No. _____

RECEIVED
CITY OF SAN LEANDRO
DEC 28 2000
ENG & TRANS.

Compliance with State Labor Code: In accordance with Section 3800

☑ Applicant has on file, with the City of San Leandro, evidence that workman's compensation insurance is carried.

☑ Applicant will not employ anyone so as to become subject to the workman's compensation laws of California.

Statement of State Contractor's License: In accordance with Section 7031.5 of the State Business and Professions Code.

☑ Applicant has State License No. 711603, Class A in full force and effect.

☐ Applicant is exempt from the State Contractor's License Law for the following reason(s):

By the application and acceptance of this permit, the undersigned intending to be legally bound does hereby agree that all work performed will be in accordance with all applicable provisions of this permit and all regulations, provisions, and specifications as adopted by the City. Further, the undersigned agrees that this permit is to serve as a guaranty for payment of all permit and/or inspection charges as billed by the City. Any misrepresentation of information requested from the applicant on this form shall make this permit null and void.

Signature: _____ Date: 12/28/00

**PLEASE CALL 577-3308 FOR INSPECTIONS** Danny Guitterez

### SPECIAL PROVISIONS

Backfill Required PER CITY STD DETAILS
Pavement Section Required
Minimum Depth of Cover AND SPECS.

Police & Fire Dept. to be notified 24 hours prior to start: YES ____ NO X

*$500 - Deposit will return after the City Environmental Dept. receive the Report.

SEE REVERSE SIDE FOR GENERAL PROVISIONS APPLICABLE TO ALL PERMIT WORK

### PERMIT IS VALID WHEN SIGNED

Any omission on the part of the City to specify on this permit any rule, regulation, provision, or specification shall not excuse the permittee from complying with all requirements of law and appropriate ordinances and all applicable regulations, provisions, and specifications adopted by the City.

ISSUED FOR CITY ENGINEER

Jim Lo

### INSPECTION RECORD

| Date | Comments | Insp. | Hrs. Charged |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |

NOTE: 1 hr. Minimum charge per inspection stop

Hours forwarded from reverse side: _____

TOTAL HOURS CHARGED: _____

### FEES

PERMIT FEE: 100 — To Acct. #3306

RESTORE/ INSPECT DEPOSIT: 500 — To CN # ____

STREET CUT FEE: _____ TO ACCT #3304

TOTAL: 600 —

☐ All charges collected at permit insurance

☐ All charges to be billed to

CN # _____

REV. Date 3/98

## APPENDIX F: REPORT DISTRIBUTION LIST

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

Seung Lee
German Autocraft
301 E. 14th Street
San Leandro, California 94577

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

Mike Bakaldin
City of San Leandro Fire Department
835 E. 14th Street, Suite 200
San Leandro, California 94577