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ENVIRONMENTAL PROTECTION

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March 28, 2000

Alameda County Health Care Services Agency
Department of Environmental Health
Hazardous Materials Program
1131 Harbor Bay Parkway
Alameda, California 94502-6577

41-0236-01

ATTN: MR. DON HWANG

SITE: QUIK STOP MARKET NO. 56
3132 BEAUMONT AVENUE
OAKLAND, CALIFORNIA

SUBJECT: SITE ASSESSMENT REPORT

Dear Mr. Hwang

On behalf of Quik Stop Markets, Inc., TRC-Alton Geoscience submits this site assessment report for the above-referenced property. If you have any questions regarding this report, please call me at (925) 688-2463.

Sincerely,

C.B. D—

Christopher B. Dennis
Senior Geologist

Cc: Mr. Mike Karvelot, Quik Stop Markets, Inc.

Enclosure

P:/projects/quik stop/56/covletSAR.doc

5052 Commercial Circle • Concord, California 94520
Telephone 925-688-1200 • Fax 925-688-0388

*Customer-Focused Solutions*

# SITE ASSESSMENT REPORT

March 28, 2000

Quik Stop Market #56
3132 Beaumont Avenue
Oakland, California

Project No. 41-0236-01

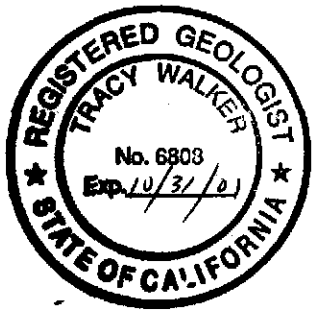
Prepared For:

QUIK STOP MARKETS, INC.
4567 Enterprise Street
Fremont, California

Prepared By:

Bella Bakrania
Senior Staff Engineer

Tracy L. Walker, RG
Associate, Northern California Operations




TRC-ALTON GEOSCIENCE, INC.
5052 Commercial Circle
Concord, California 94520

## TABLE OF CONTENTS

## 1.0 INTRODUCTION

This report presents the results of site assessment activities conducted at Quik Stop Market #56, located at 3132 Beaumont Avenue, Oakland, California (Property). Three groundwater monitoring wells were installed in accordance with Alameda County Health Care Services Agency, Department of Environmental Health (ACDEH) requirements and the ACDEH-approved Site Assessment Workplan dated November 29, 1999 (TRC-Alton Geoscience, 1999).

The objective of this investigation was to assess the impact of hydrocarbons in the soil and groundwater related to the underground storage tanks (USTs) removed from the Property in 1998, and determine a cost-effective remedial method if necessary. To accomplish this objective, the following was completed:

- Determination of the vertical and lateral extent of petroleum hydrocarbon-impacted soil;
- Determination of the extent of petroleum hydrocarbon-impacted groundwater; and
- Evaluation of the subsurface hydrogeology (i.e., soil characteristics, depth to groundwater, groundwater flow direction/gradient, etc.).

## 2.0 PROPERTY DESCRIPTION

**Property Use:** The Property is operated as a Quik Stop Market convenience store/gasoline service station (Figure 2). There are currently no known plans to change the existing use of or redevelop the Property.

**Adjacent Property:** The Property is triangular in shape, surrounded by three city streets, Beaumont Avenue, 14$^{th}$ Avenue, and East 32$^{nd}$ Street (Figure 2). The surrounding land use is residential, consisting of apartment and single-family buildings.

**Geography:** The site is located approximately 0.2-mile south of Interstate 580, at an elevation of approximately 15 feet above mean sea level. The topography generally slopes to the southwest.

**Regional and Local Geology:** The site is located in the East Bay Plain, and is underlain by Quaternary (Pleistocene) alluvium (ACFCD, 1993). The alluvium consists of coalescing alluvial fans, and estuarine and marine deposits characterized by heterogeneous inter-fingering layers of clayey gravel, sandy silty clay, and various clay-silt-sand mixtures. These alluvial deposits reach a maximum thickness of about 200 feet beneath the Property. The soils beneath the Property are silty and sandy clays to a depth of approximately 13 feet below grade (fbg), silty sand or clayey silt to approximately 25 fbg, and silty clay to approximately 33 fbg. A cross section location figure and representative geologic cross section of the site are presented in Figures 3 and 4.

**Regional and Local Hydrogeology:** The site is located in the East Bay Plain Groundwater Basin, Oakland Upland and Alluvial Plain Subarea (DWR, 1975; ACFCD, 1993). Regionally, shallow groundwater occurs in numerous small, discontinuous aquifers within the

unconsolidated Quaternary alluvium (Godfrey, 1995), and generally flows to the southwest towards the San Francisco Bay (ACPWA, 1999). During the groundwater well installation event described herein, local depth to shallow groundwater at the Property was first encountered at an average depth of 18 fbg, and stabilized at an average of 7 fbg. The shallow groundwater appears to be semi-confined, and generally flows to the southwest with a gradient of 0.075 foot/foot (Figure 5).

**Groundwater Quality and Usage:** Most water used in the area is imported and distributed by the East Bay Municipal Utilities District. According to the Department of Water Resources, private supply wells may exist in the area and may be used for irrigation and industrial purposes (DWR, 1975).

## 3.0 PREVIOUS WORK AND BACKGROUND PROPERTY CONDITIONS

During September 1998, two 10,000-gallon steel gasoline underground storage tanks (USTs) were excavated and removed from the Property (Garlow, 1998). These tanks were replaced with two 12,000-gallon double-walled, fiberglass USTs. During the upgrade activities, approximately 792 cubic yards of soil were excavated to remove potentially impacted soil and accommodate the new orientation of the USTs. All excavated soil was transported under manifest to Forward Landfill in Manteca, California for disposal.

Soil samples collected during the removal of the USTs were below laboratory reporting limits for total petroleum hydrocarbons as gasoline (TPH-g), benzene, toluene, ethylbenzene, and total xylenes (BTEX), and methyl tert-butyl ether (MtBE), except for 0.53 milligrams per kilogram (mg/kg) MtBE detected in one sample at the south corner of the USTs (SW-1). Approximately 240 mg/kg TPH-g, 0.85 mg/kg ethylbenzene, and 130 mg/kg total xylenes were detected in soil sample SW-2 (Table 1). Grab water samples were also collected and analyzed from the bottom of the excavation. However, the analytical results in these samples were likely exaggerated due to matrix interference in the sample (i.e., petroleum hydrocarbons sorbed to the soil particles present in the grab sample). Groundwater samples as presented herein were collected from the newly installed monitoring wells to confirm the presence (or absence) and concentration of petroleum hydrocarbons in the groundwater.

## 4.0 FIELD ACTIVITIES

### 4.1 PRE-FIELD WORK ACTIVITIES

Prior to commencing fieldwork, a well installation permit was obtained from the Alameda County Public Works Agency-Water Resources Section (ACPWA) (Appendix B). Underground Service Alert was notified prior to field activities. Just before drilling, pilot holes were hand-augured to approximately 5 fbg to verify the absence of buried utilities at each of the three drilling locations.

## 4.2 DRILLING AND SOIL SAMPLING

On February 16, 2000, three groundwater monitoring wells (MW-1, MW-2, and MW-3) were installed at the locations shown on Figure 2 according to general field procedures (Appendix A). Drilling was performed using a hollow-stem auger rig. Soil samples were collected at 5-foot depth intervals in each boring using a modified split-spoon sampler. Soil samples were collected for soil description, laboratory analysis, and field hydrocarbon vapor testing using a photo ionization detector (PID). All field PID measurements above the water table were below 35 parts per million. Each boring was logged according to the Unified Soil Classification System (USCS). Boring logs are presented in (Appendix B).

Soil samples collected during drilling were submitted to a California state-certified laboratory and analyzed for TPH-g, BTEX, and MtBE using EPA Methods 8015 (modified for gasoline) and 8260. Refer to Table 1 for a summary of soil analytical results. Copies of the official laboratory reports, quality assurance/quality control (QA/QC) reports, and chain-of-custody records are presented in Appendix C.

## 4.3 MONITORING WELL INSTALLATION, DEVELOPMENT AND SAMPLING

The wells were constructed of 2-inch diameter polyvinyl chloride (PVC) casing and screen (0.020-inch slot). The screen intervals extended from about 9 to 33 fbg. The annulus was filled with the appropriate filter pack and well sealing materials. Groundwater was first detected in soil at an average depth of 18 fbg, and stabilized at an average depth of 7 fbg. Well construction details and the monitoring well installation permit issued by ACPWA are presented in Appendix B.

After placement of the sand filter pack, the wells were developed by surging and bailing to improve hydraulic communication between the geologic formation and the filter pack. A hand-operated surge block was used to surge the groundwater through the annular filter pack and well screen. Immediately following surge block operation, approximately 5 to 10 gallons of water were bailed and 25 to 30 gallons of water were pumped from each well, at a pumping rate of 2.5 gallons per minute (gpm). Groundwater removed during well development was placed in Department of Transportation (DOT)-approved 55-gallon drums and stored onsite, pending transport and disposal activities.

On March 2, 2000, fluid levels were measured and groundwater samples were collected in monitoring wells MW-1, MW-2 and MW-3. Each well was purged prior to sampling. The presence and thickness of free product was also checked in each well. All groundwater samples were submitted to a California state-certified laboratory for TPH-g, BTEX, and MtBE analyses using EPA Methods 8015 and 8260. The results of fluid level measurements and laboratory analyses of water samples are summarized in Table 2. The dissolved-phase hydrocarbon concentrations in groundwater are presented on Figure 6. Copies of the official laboratory reports, QA/QC reports, and chain-of-custody records are presented in Appendix C.

On March 13, 2000, a reference point at the top of each new well casing was surveyed relative to the City of Oakland Benchmark #1425 by Virgil Chavez Land Surveying, a California-licensed land

surveyor (Table 2 and Appendix D). The well casing elevations were surveyed with 0.01-foot precision. The City benchmark, a cut square in the top of the curb, located on the nose of the median island on the south side of East 30th Street and 14th Avenue, has an elevation of 122.15 feet above mean sea level.

### 4.4 SOIL AND GROUNDWATER DISPOSAL

Five 55-gallon drums of soil and approximately 275 gallons (five 55-gallon drums) of non-hazardous well purge water and equipment rinsate were generated during the well completion activities and the monitoring and sampling event. The soil and wastewater were stored onsite in DOT-approved drums pending characterization and disposal. Appropriate disposal documentation will be forwarded to Quik Stop Markets, Inc. and the ACDEH upon completion of disposal activities.

## 5.0 FINDINGS

The findings of this investigation are summarized as follows:

- Soil types encountered during drilling generally consisted of silty and sandy clays from the surface to a depth of approximately 13 fbg, silty sand or clayey silt from approximately 13 fbg to 25 fbg, and silty clay from approximately 25 fbg to 33 fbg. Groundwater was first encountered during drilling at an average depth of approximately 18 fbg. Groundwater level monitoring results show the average depth to water to be 7 fbg. Therefore, the groundwater appears to be semi-confined.

- No evidence of liquid-phase hydrocarbons was found during this investigation.

- Minor TPH-g was detected in a soil sample collected from MW-1 at 6.5 fbg (2.9 mg/kg), but was not detected in all other soil samples collected. Minor MtBE concentrations were detected in soil samples from MW-1 at depths ranging from 6.5 to 21.5 fbg, and MW-3 at 6 and 11 fbg. Detected MtBE concentrations in soil ranged from 0.0083 to 0.66 mg/kg. The only benzene concentration detected was 0.038 mg/kg in one soil sample from MW-3 collected at 11 fbg. Toluene and ethylbenzene were not detected in any of the soil samples. Minor xylene concentrations were detected in MW-1 at 6.5 fbg (0.0097 mg/kg) and MW-3 at 11 fbg (0.019 mg/kg).

- BTEX compounds were not detected in any of the groundwater samples. Well MW-1 contained TPH-g (670 µg/L) and 2,200 µg/L MtBE. Well MW-3 contained a minor concentration of MtBE (0.96 µg/L) and no TPH-g above detection limits. No MtBE or TPH-g was detected in MW-2.

## 6.0 CONCLUSIONS

- No liquid-phase product was detected at the Property, and the extent of residual hydrocarbons in the soil has been adequately characterized. The source of the residual hydrocarbons (i.e., former USTs, dispensers, associated piping, and backfill) has been removed.

- The detected MtBE in well MW-1 appears to be residual dissolved-phase hydrocarbons associated with the former USTs. Because the USTs, dispensers, and piping have been removed and replaced, and 792 cubic yards of soil were excavated and removed from the UST area, the residual dissolved-phase hydrocarbons are likely subject to natural attenuation processes.

- The low permeability silty and sandy clays underlying the site do not allow for rapid migration of residual hydrocarbons in soil. The potential for increasing impact to the groundwater from the residual hydrocarbons is highly unlikely.

## 7.0 RECOMMENDATIONS

Quarterly monitoring and sampling is recommended to determine if natural attenuation of the residual dissolved-phase hydrocarbons beneath the Property is occurring, and is recommended as the most cost-effective remedial method. If quarterly groundwater monitoring and sampling demonstrates that natural attenuation processes are occurring, then this Property should receive regulatory closure.

## 8.0 REFERENCES

Alameda County Flood Control and Water Conservation District (ACFCD), 1993. Geology Framework of the East Bay Plain Groundwater Basin, Alameda County, California; August.

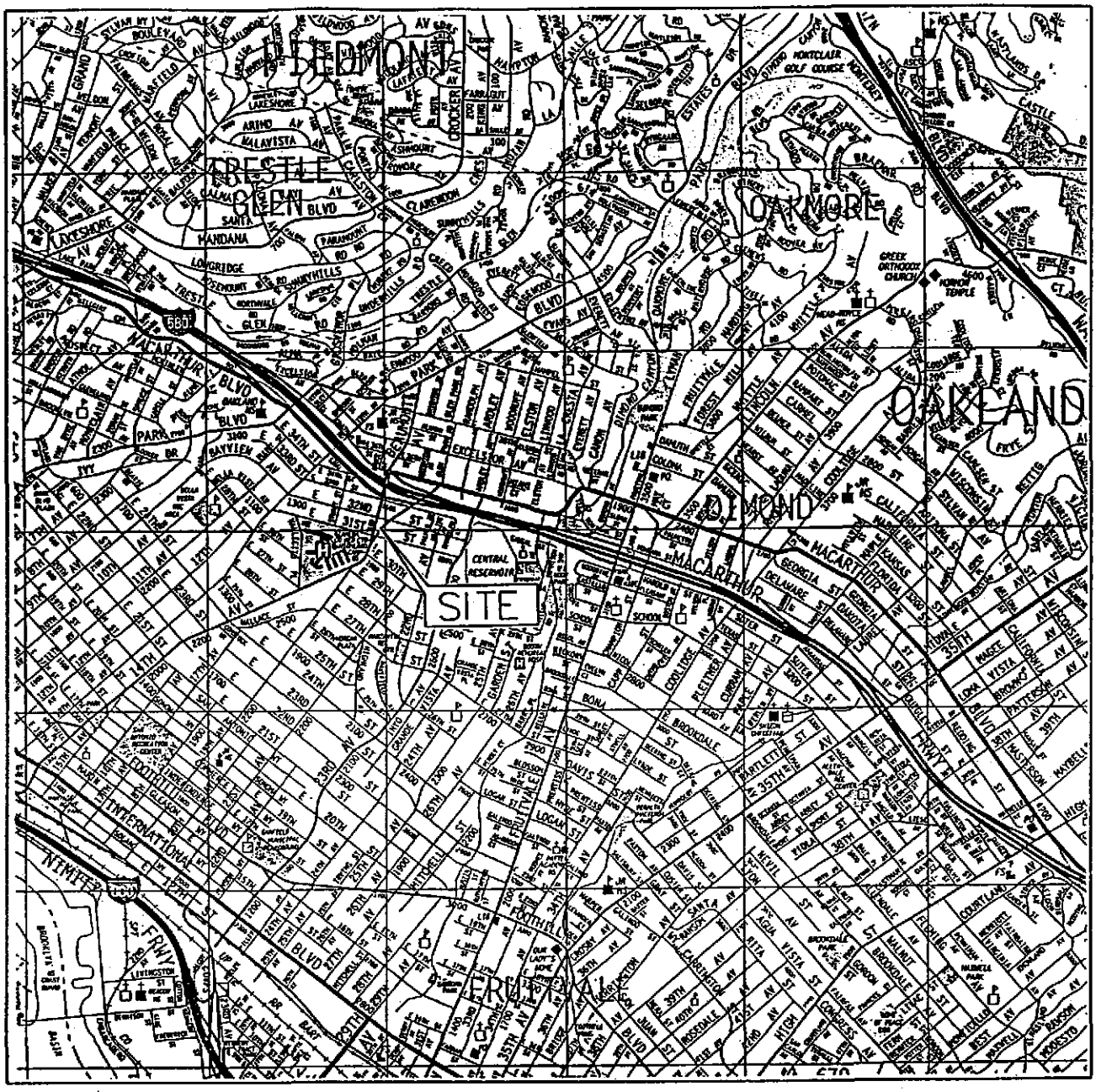
Alameda County Public Works Agency (ACPWA), 1999. Frank Codd, Personal Communication via Facsimile (map of groundwater levels in the City of Oakland area); November 16.

DWR, 1975. Sea-Water Intrusion in California, Inventory of Coastal Ground Water Basins; California Department of Water Resources, Bulletin No. 63-5; October.

Garlow, 1998. Underground Storage Tank Removal Report, Quik Stop Market #56, 3132 Beaumont Avenue, Oakland, California; Garlow Associates; November 25.

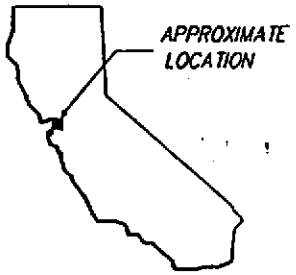
Godfrey, Andreas, 1995. ACPWA-Water Resources Section, Personal Communication; May 22.

TRC-Alton Geoscience, 1999. Site Assessment Workplan, Quik Stop Market #56, 3132 Beaumont Avenue, Oakland, California; November 29.




SOURCE:

1998 Thomas Guide
San Francisco, Alameda and
Contra Costa Counties




**VICINITY MAP**

Quik Stop No. 56
3132 Beaumont Avenue
Oakland, California

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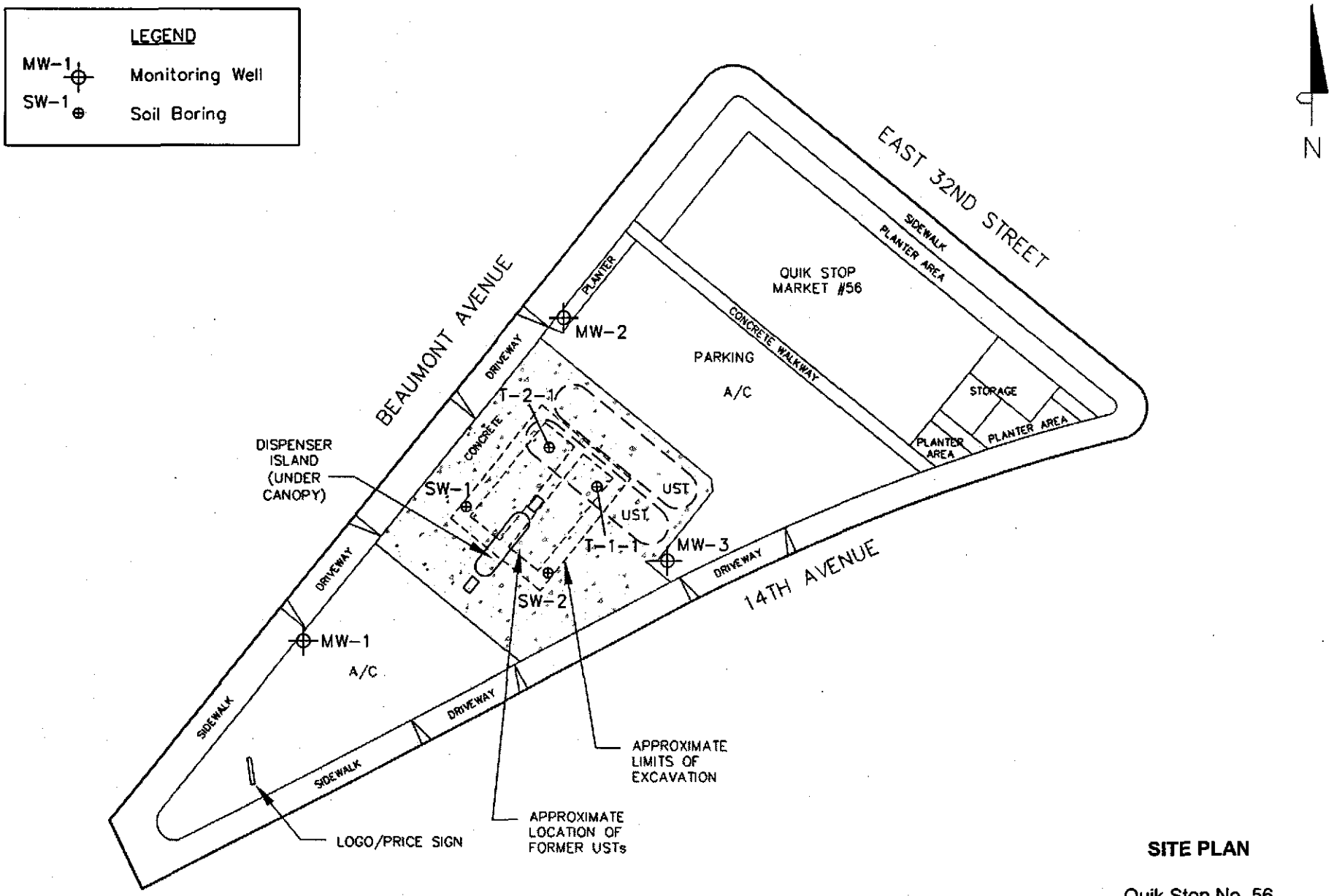
Northern California

# FIGURE 1



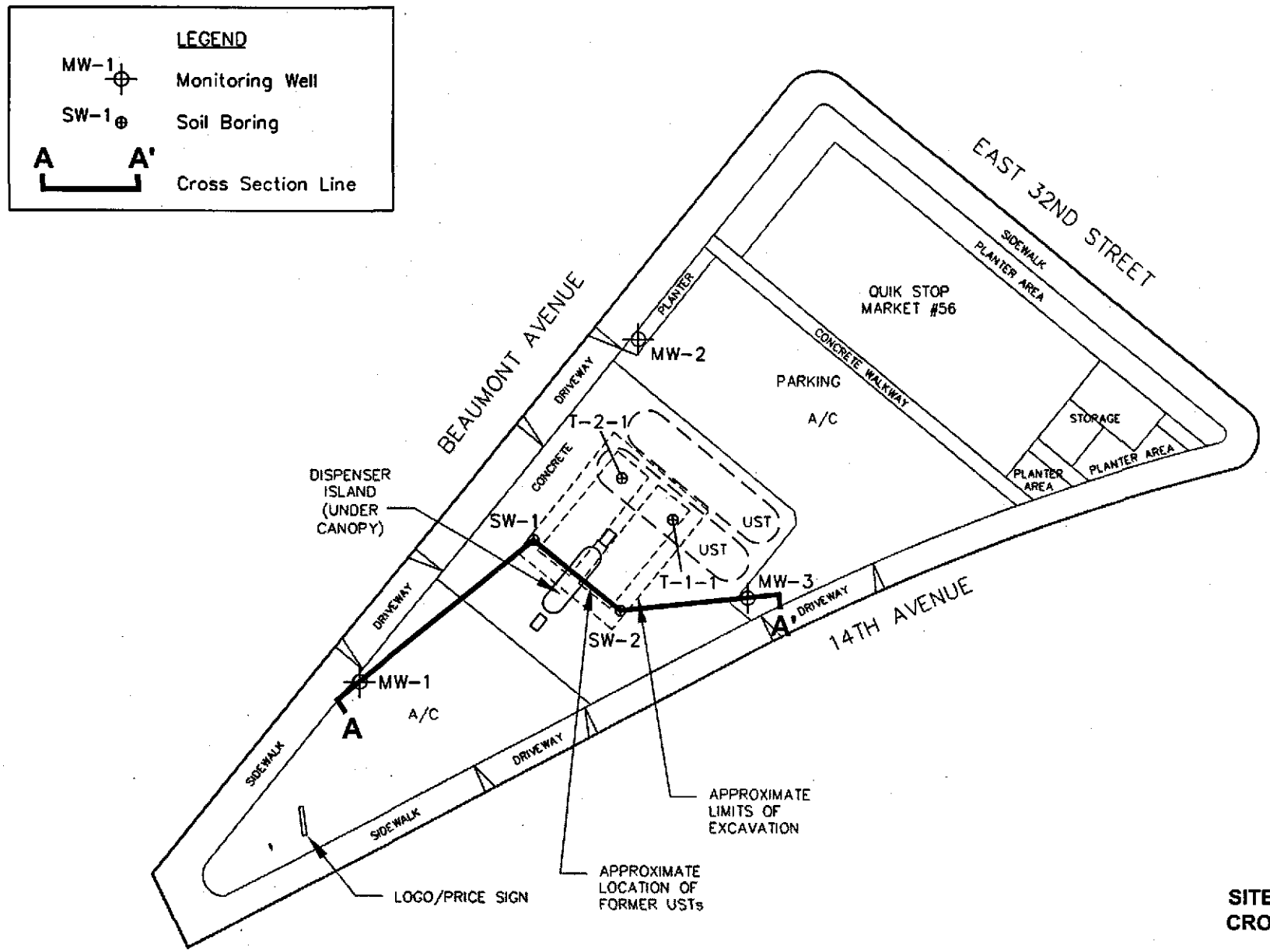

**SITE PLAN**

Quik Stop No. 56
3132 Beaumont Avenue
Oakland, California

**FIGURE 2**

ALTON GEOSCIENCE
Northern California

SOURCE: Client-provided drawings and Gorlow, 1998.



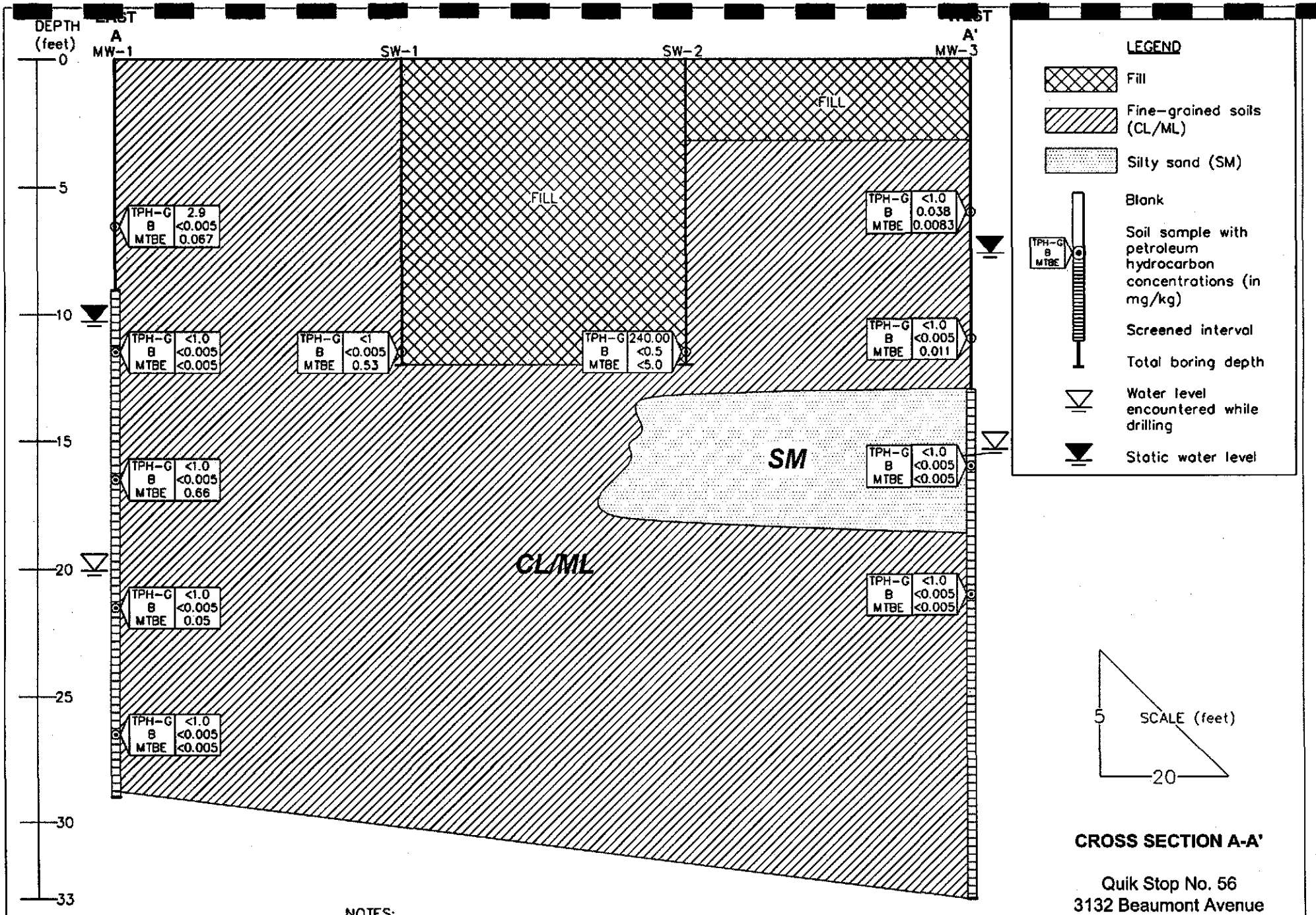

**SITE PLAN SHOWING CROSS SECTION A-A'**

Quik Stop No. 56
3132 Beaumont Avenue
Oakland, California

**FIGURE 3**

ALTON GEOSCIENCE
Northern California

SOURCE: Client-provided drawings and Gorlow, 1998.



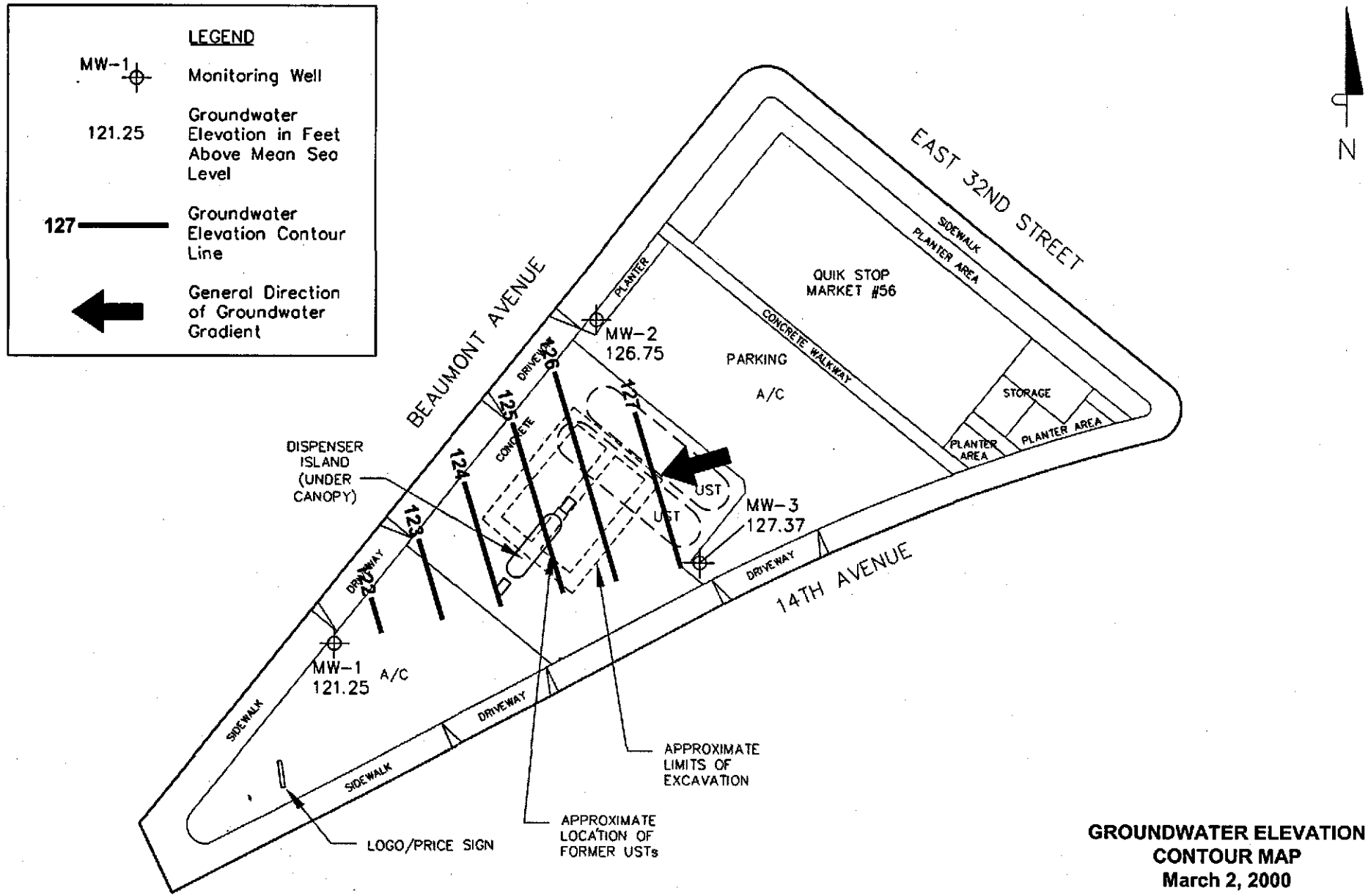

**CROSS SECTION A-A'**

Quik Stop No. 56
3132 Beaumont Avenue
Oakland, California

# FIGURE 4

NOTES:
Depths are in feet below grade. < = not detected at or above stated detection limit. TPH-G = total petroleum hydrocarbons as gasoline; B = benzene; MTBE = methyl tert butyl ether; mg/kg = milligrams per kilogram. See Figure 3 for location of cross section.

ALTON GEOSCIENCE
Northern California




NOTES:
Contour lines are interpretive based on fluid level measurements taken on March 2, 2000. Contour interval = 1.0 foot.

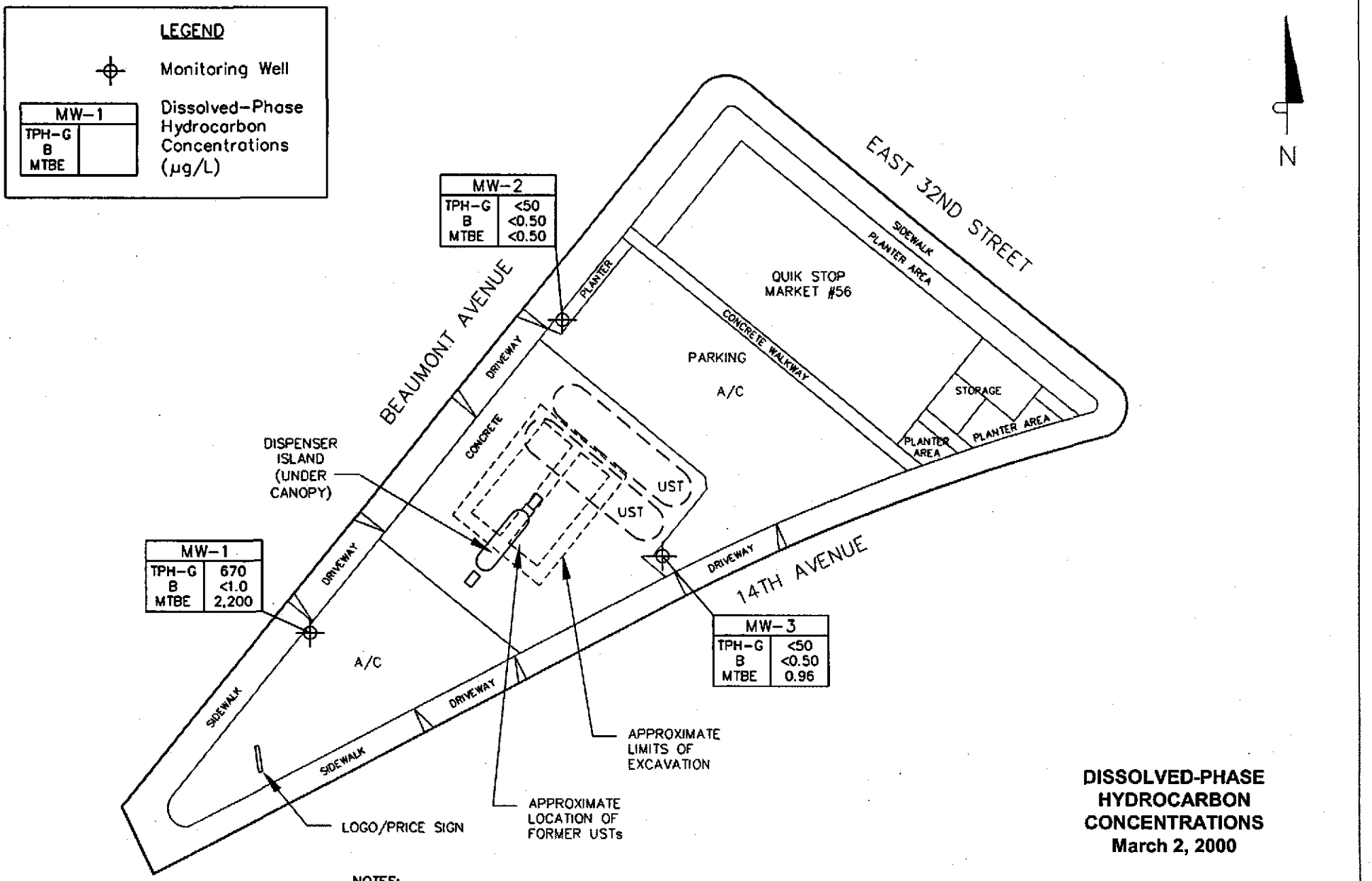
SOURCE: Client-provided drawings and Gorlow, 1998.

ALTON GEOSCIENCE
Northern California

**GROUNDWATER ELEVATION CONTOUR MAP**
**March 2, 2000**

Quik Stop No. 56
3132 Beaumont Avenue
Oakland, California

**FIGURE 5**




NOTES:
Results are based on laboratory analysis of groundwater samples collected on March 2, 2000. µg/L = micrograms per liter; TPH-G = total petroleum hydrocarbons as gasoline; B = benzene; MTBE = methyl tert butyl ether; < = not detected at or above the stated method detection limit.

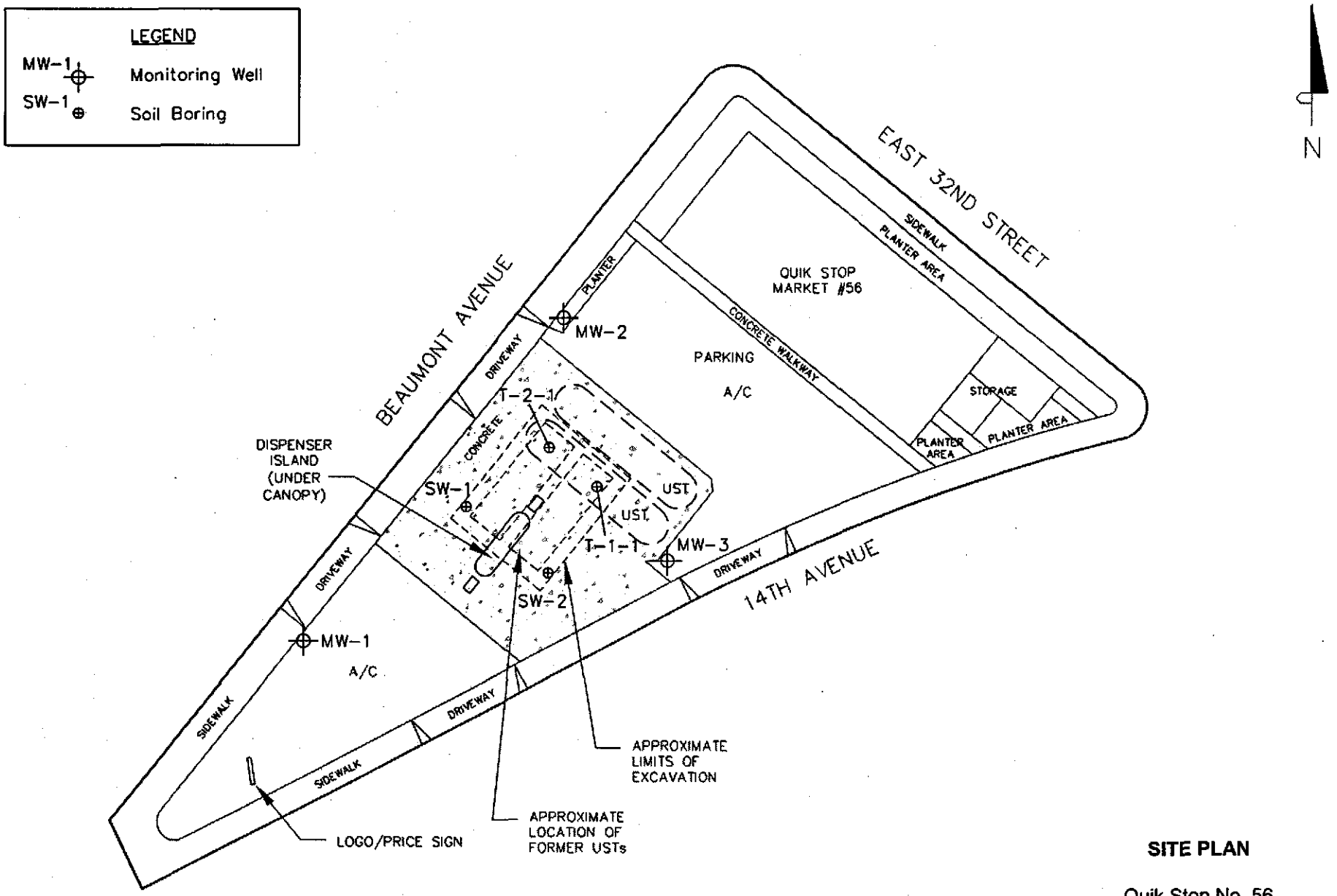
SOURCE: Client-provided drawings and Gorlow, 1998.

ALTON GEOSCIENCE
Northern California

**DISSOLVED-PHASE HYDROCARBON CONCENTRATIONS**
**March 2, 2000**

Quik Stop No. 56
3132 Beaumont Avenue
Oakland, California

**FIGURE 6**



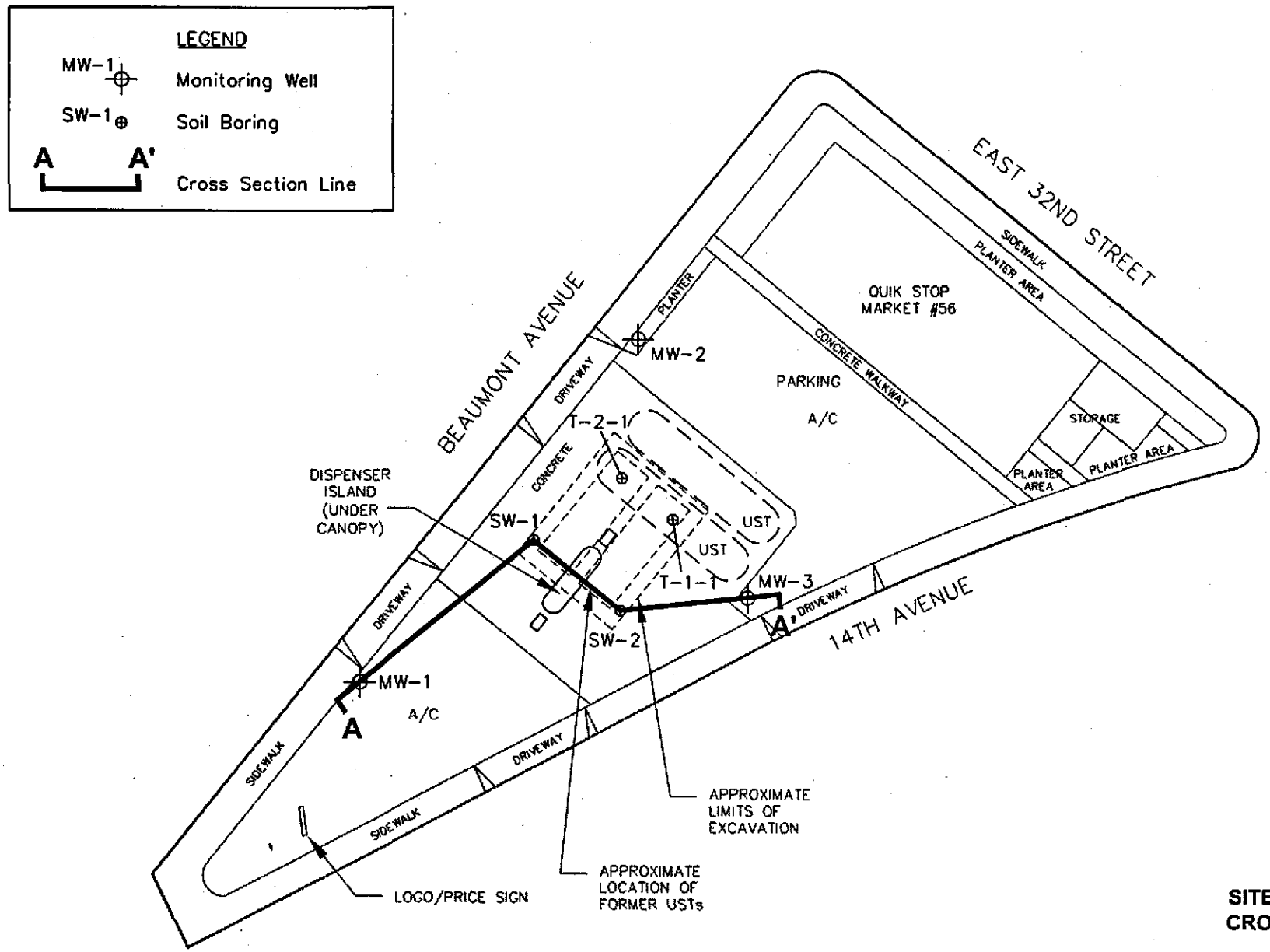

**SITE PLAN**

Quik Stop No. 56
3132 Beaumont Avenue
Oakland, California

**FIGURE 2**

ALTON GEOSCIENCE
Northern California

SOURCE: Client-provided drawings and Gorlow, 1998.



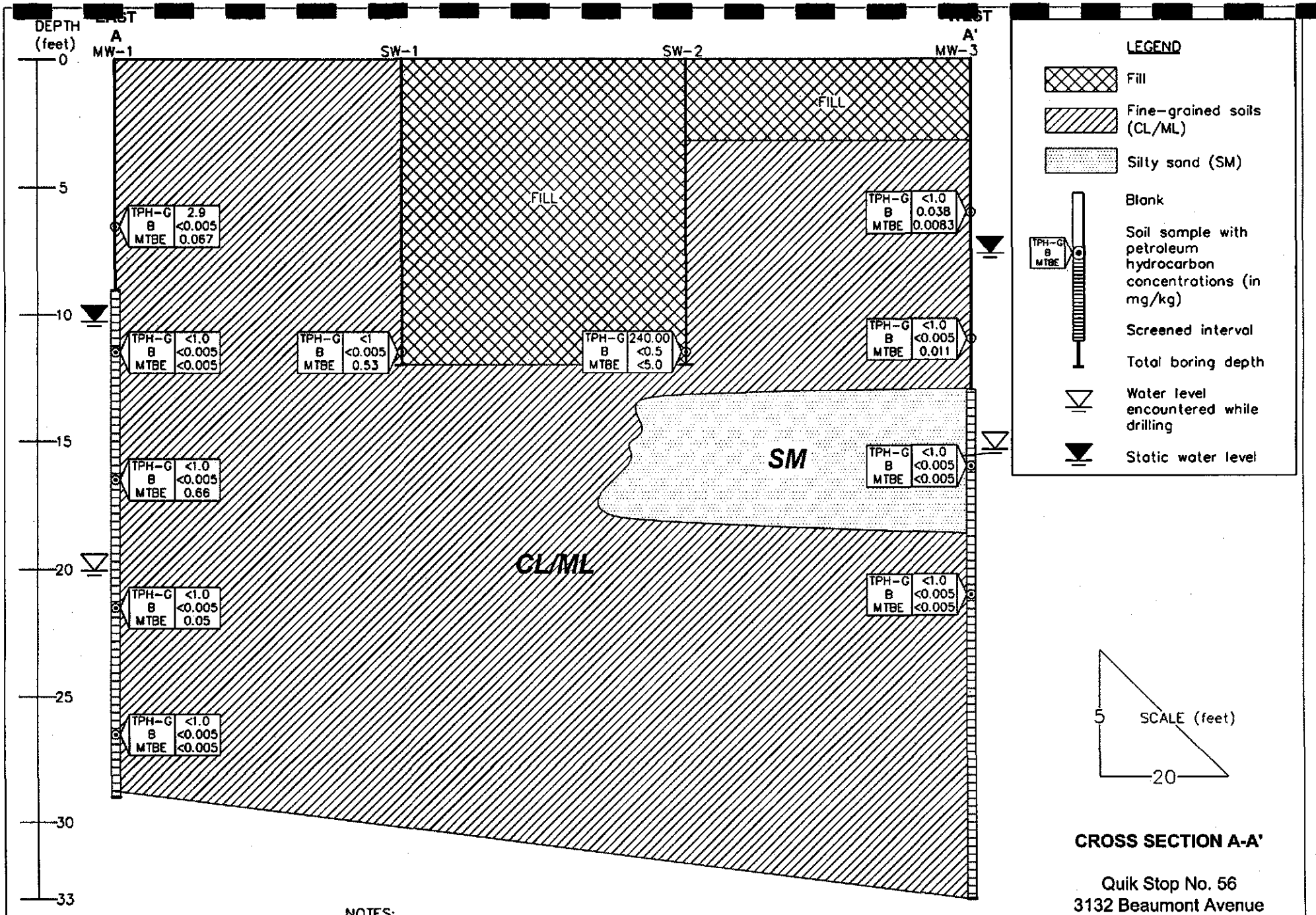

**SITE PLAN SHOWING CROSS SECTION A-A'**

Quik Stop No. 56
3132 Beaumont Avenue
Oakland, California

**FIGURE 3**

ALTON GEOSCIENCE
Northern California

SOURCE: Client-provided drawings and Gorlow, 1998.




**CROSS SECTION A-A'**

Quik Stop No. 56
3132 Beaumont Avenue
Oakland, California

# FIGURE 4

NOTES:
Depths are in feet below grade. < = not detected at or above stated detection limit. TPH-G = total petroleum hydrocarbons as gasoline; B = benzene; MTBE = methyl tert butyl ether; mg/kg = milligrams per kilogram. See Figure 3 for location of cross section.

ALTON GEOSCIENCE
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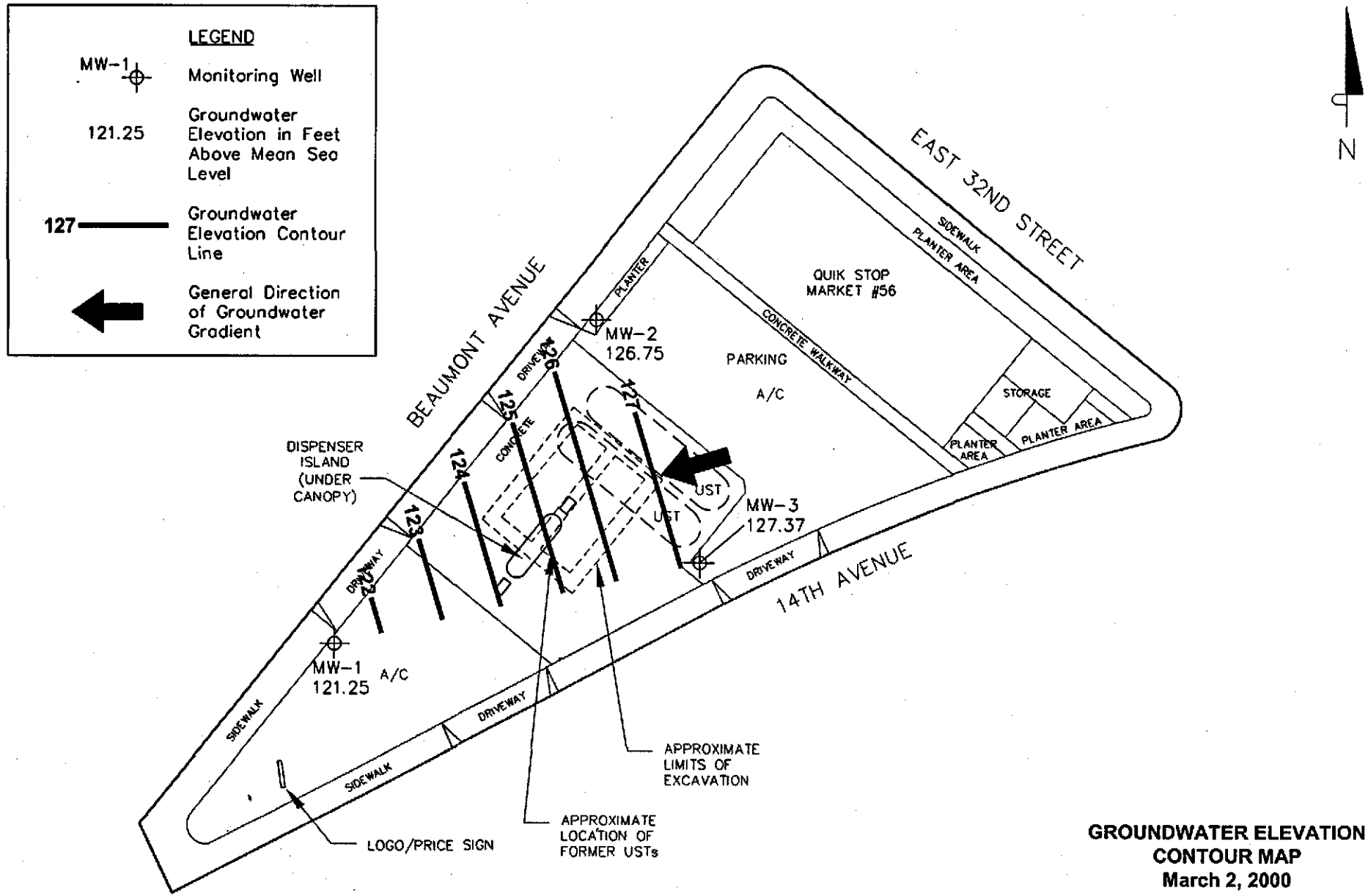



NOTES:
Contour lines are interpretive based on fluid level measurements taken on March 2, 2000. Contour interval = 1.0 foot.

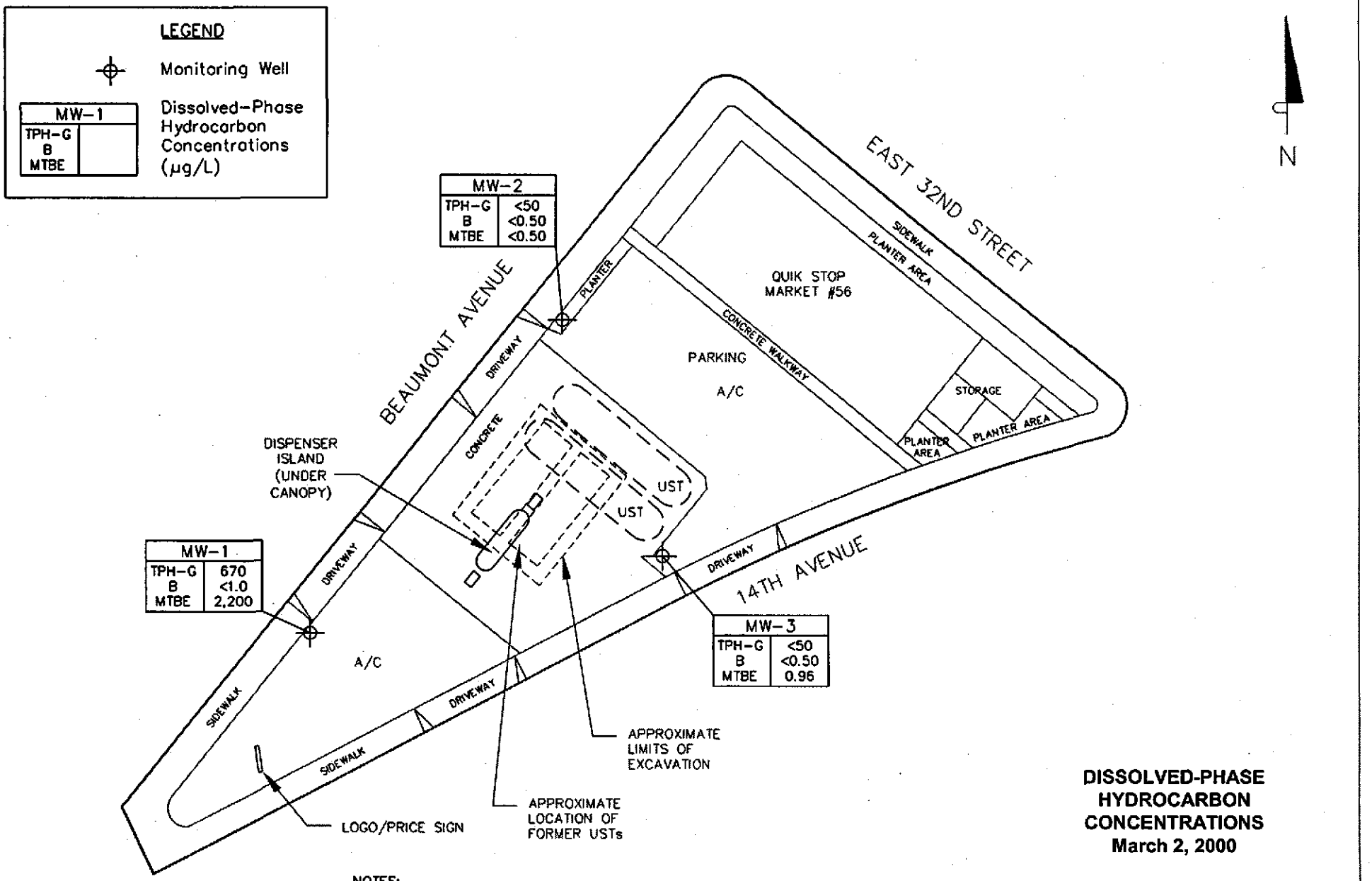
SOURCE: Client-provided drawings and Gorlow, 1998.

ALTON GEOSCIENCE
Northern California

**GROUNDWATER ELEVATION CONTOUR MAP**
**March 2, 2000**

Quik Stop No. 56
3132 Beaumont Avenue
Oakland, California

**FIGURE 5**




NOTES:
Results are based on laboratory analysis of groundwater samples collected on March 2, 2000. µg/L = micrograms per liter; TPH-G = total petroleum hydrocarbons as gasoline; B = benzene; MTBE = methyl tert butyl ether; < = not detected at or above the stated method detection limit.

SOURCE: Client-provided drawings and Gorlow, 1998.

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Northern California

**DISSOLVED-PHASE HYDROCARBON CONCENTRATIONS**
**March 2, 2000**

Quik Stop No. 56
3132 Beaumont Avenue
Oakland, California

**FIGURE 6**

# TABLES

# TABLES

**Table 1**

## Summary of Soil Sample Analysis

Quik Stop No. 56 - 3132 Beaumont Avenue, Oakland

| Sample ID | Date | Depth (feet) | TPH-G (mg/Kg) | Benzene (mg/Kg) | Toluene (mg/Kg) | Ethyl-benzene (mg/Kg) | Total Xylenes (mg/Kg) | MTBE 8260 (mg/Kg) |
|---|---|---|---|---|---|---|---|---|
| T-1-1 | 09/21/98 | 13.0-14.0 | <1 | <0.005 | <0.005 | <0.005 | <0.005 | <0.05 |
| T-2-1 | 09/21/98 | 13.0-14.0 | <1 | <0.005 | <0.005 | <0.005 | <0.005 | <0.05 |
| SW-1 | 09/28/98 | 11.0-12.0 | <1 | <0.005 | <0.005 | <0.005 | <0.005 | 0.53 |
| SW-2 | 09/28/98 | 11.0-12.0 | 240.00 | <0.5 | <0.5 | 0.85 | 1.30 | <5.0 |
| MW-1 | 02/16/00 | 6.5 | 2.9 | <0.005 | <0.005 | <0.005 | 0.0097 | 0.067 |
| MW-1 | 02/16/00 | 11.5 | <1.0 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 |
| MW-1 | 02/16/00 | 16.5 | <1.0 | <0.005 | <0.005 | <0.005 | <0.005 | 0.66 |
| MW-1 | 02/16/00 | 21.5 | <1.0 | <0.005 | <0.005 | <0.005 | <0.005 | 0.05 |
| MW-1 | 02/16/00 | 26.5 | <1.0 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 |
| MW-2 | 02/16/00 | 6.5 | <1.0 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 |
| MW-2 | 02/16/00 | 11.5 | <1.0 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 |
| MW-2 | 02/16/00 | 16.5 | <1.0 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 |
| MW-2 | 02/16/00 | 21.5 | <1.0 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 |
| MW-2 | 02/16/00 | 26.5 | <1.0 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 |
| MW-3 | 02/16/00 | 6.0 | <1.0 | 0.038 | <0.005 | <0.005 | 0.019 | 0.0083 |
| MW-3 | 02/16/00 | 11.0 | <1.0 | <0.005 | <0.005 | <0.005 | <0.005 | 0.011 |
| MW-3 | 02/16/00 | 16.0 | <1.0 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 |
| MW-3 | 02/16/00 | 21.0 | <1.0 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 |

NOTES:

mg/Kg = milligrams per kilogram

TPH-G = total petroleum hydrocarbons as gasoline

MTBE = methyl tert butyl ether

< = not detected at or above the stated detection limit

Table 2

## Summary of Groundwater Levels and Chemical Analysis

Quik Stop No. 56 - 3132 Beaumont Avenue, Oakland

| Sample ID | Date | Top of Casing Elevation (ft-MSL) | Depth to Water (feet) | Groundwater Elevation (feet) | TPH-G (µg/L) | Benzene (µg/L) | Toluene (µg/L) | Ethyl-benzene (µg/L) | Total Xylenes (µg/L) | MTBE 8260 (µg/L) | DO (mg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-1 | 03/02/00 | 131.58 | 10.33 | 121.25 | 670 | <1.0 | <1.0 | <1.0 | <1.0 | 2,200 | 0.62 |
| MW-2 | 03/02/00 | 132.63 | 5.88 | 126.75 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | 1.45 |
| MW-3 | 03/02/00 | 133.78 | 6.41 | 127.37 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | 0.96 | 0.90 |

NOTES:

ft-MSL = feet above mean sea level
µg/L = micrograms per liter
mg/L = milligrams per liter
TPH-G = total petroleum hydrocarbons as gasoline
MTBE = methyl tert butyl ether
DO = dissolved oxygen
< = not detected at or above the stated detection limit

# APPENDIX A

# GENERAL FIELD PROCEDURES

# GENERAL FIELD PROCEDURES

A description of the general field procedures used during site investigation and monitoring activities is presented below. For an overview of protocol, refer to the appropriate section(s).

## DRILLING AND SOIL SAMPLING

Soil borings are drilled using continuous-flight, hollow-stem augers. Borings that are not completed as monitoring wells are grouted to within 5 feet of the ground surface with a cement/bentonite slurry. The remaining 5 feet is filled with concrete.

Soil samples are obtained for soil description, field hydrocarbon vapor screening, and possible laboratory analysis. Soil samples are retrieved from the borings by one of two methods: 1) continuously, using a 5-foot-long, continuous-core barrel sampler advanced into the soil with the lead auger; sample tubes are driven into the core with a mallet, or 2) at 2.5- or 5-foot intervals, using a standard split-spoon sampler lined with four 1.5-inch-diameter stainless steel or brass sample inserts. The split-spoon sampler is driven approximately 18 inches beyond the lead auger with a 140-pound hammer dropped from a height of 30 inches.

For hand auger borings and hand-held, power-driven auger borings, soil samples are retrieved using a hand-driven slide hammer lined with a 1.5-inch-diameter stainless steel sample tube.

During drilling activities, soil adjacent to the laboratory sample is screened for hydrocarbon vapors using a portable flame ionization detector (FID) or equivalent field instrument. For each hydrocarbon vapor screening event, a 6-inch-long by 2.5-inch-diameter sample insert is filled approximately 1/3 full with the soil sample, capped at both ends, and placed in a warm area for approximately 10 minutes to allow hydrocarbons, if present, to volatilize. The instrument probe is then inserted through a small opening in the cap, and a reading is taken and recorded on the boring log. The remaining soil recovered is removed from the sample insert or sampler, and described in accordance with the Unified Soil Classification System. For each sampling interval, field estimates of soil type, density/consistency, moisture, color, and grading are recorded on the boring logs.

## EXCAVATION SOIL SAMPLING

Excavation soil samples are collected by either driving a stainless steel sample tube directly into freshly uncovered soil , or from the backhoe bucket by driving the sample tube into a relatively coherent and undisturbed portion of soil within the bucket. Excavated soil is temporarily stockpiled onsite. Stockpile samples are collected by shoveling below the surface of the pile and inserting a steel sample tube into the soil.

## SOIL SAMPLE HANDLING

Soil sample handling follows the same basic protocol for both drilling and excavation activities. Upon retrieval, soil samples are immediately removed from the sampler, sealed with Teflon sheeting and polyurethane caps. Each sample is labeled with the project number, boring/well number, sample depth, geologist's initials, and date of collection. After the samples have been labeled and documented in the chain of custody record, they are placed in a cooler with ice at approximately 4 degrees Celsius (°C) prior to and during transport to a state-certified laboratory for analysis. Samples not selected for immediate analysis may be transported in a cooler with ice and archived in a frostless refrigerator at approximately 4°C for possible future testing.

## MONITORING WELL INSTALLATION

Monitoring wells are constructed of 2-inch-diameter, flush-threaded Schedule 40 PVC blank and screened (0.020-inch slot size) casing. Where possible, the screened interval will extend at least 10 feet above, and 10 to 20 feet below, the top of the ground water table. The annular space surrounding the screened casing is backfilled with No. 3 Monterey sand (filter pack) to approximately 2 feet above the top of the screened section.

During well construction, the filter pack is completed by surging with a rig-mounted surge block. A 3-foot-thick bentonite annular seal is placed above the filter pack. The remaining annular space is grouted with Portland cement and/or bentonite grout to the surface. Utility access boxes are installed slightly above grade. Locking, watertight caps are installed to prevent unauthorized access to the well, and limit infiltration of surface fluids.

## FLUID LEVEL MONITORING

Fluid levels are monitored in the wells using an electronic interface probe with conductance sensors. The presence of liquid-phase hydrocarbons is verified using a hydrocarbon-reactive paste. The depth to liquid-phase hydrocarbons and water is measured relative to the well box top or top of casing. Well box or casing elevations are surveyed to within 0.02 foot relative to a county or city bench mark.

## GROUNDWATER PURGING AND SAMPLING

Groundwater monitoring wells are purged and sampled in accordance with standard regulatory protocol. Typically, monitoring wells that contain no liquid-phase hydrocarbons are purged of groundwater prior to sampling so that fluids sampled are representative of fluids within the formation. Temperature, pH, and specific conductance are typically measured after each well casing volume has been removed. Purging is considered complete when these parameters vary less than 10% from the previous readings, or when three casing volumes of fluid have been removed. Samples are collected without further purging if the well does not recharge within 2 hours to 80% of its volume before purging.

The purged water is either pumped directly into a licensed vacuum truck or temporarily stored in labeled drums prior to transport to an appropriate treatment or recycling facility. If an automatic

recovery system (ARS) is operating at the site, purged water may be pumped into the ARS for treatment.

Groundwater samples are collected by lowering a 1.5-inch diameter, bottom-fill, disposable polyethylene bailer just below the static water level in the well. The samples are carefully transferred from the check valve-equipped bailer to 1-liter and/or 40-milliliter glass containers (VOA containers) which contain a pre-measured volume of HCl preservative. The sample containers are filled to zero headspace and fitted with Teflon-sealed caps. Each sample is labeled with the project number, well number, sample date, and sampler's initials. Samples remain chilled at approximately 4°C prior to analysis by a state-certified laboratory.

## CHAIN OF CUSTODY PROTOCOL

Chain-of-custody protocol is followed for all soil and groundwater samples selected for laboratory analysis. The chain-of-custody form(s) accompanies the the samples from the sampling locality to the laboratory, providing a continuous record of possession prior to analysis.

## DECONTAMINATION

### Drilling and Soil Sampling

Drilling equipment is decontaminated by steam cleaning before being brought onsite. The augers are also steam cleaned before each new boring is commenced. Prior to use, the sampler and sampling tubes are brush-scrubbed in a Liqui-nox and potable water solution and rinsed twice in clean potable water. Sampling equipment and tubes are also decontaminated before each sampl is collected to avid cross-contamination between borings.

### Groundwater Sampling

Purging and sampling equipment that could contact well fluids is either dedicated to a particular well or cleaned prior to each use in a Liqui-nox solution followed by two tap water rinses.

# APPENDIX B

# BORING LOGS, WELL CONSTRUCTION DETAILS, AND WELL INSTALLATION PERMIT

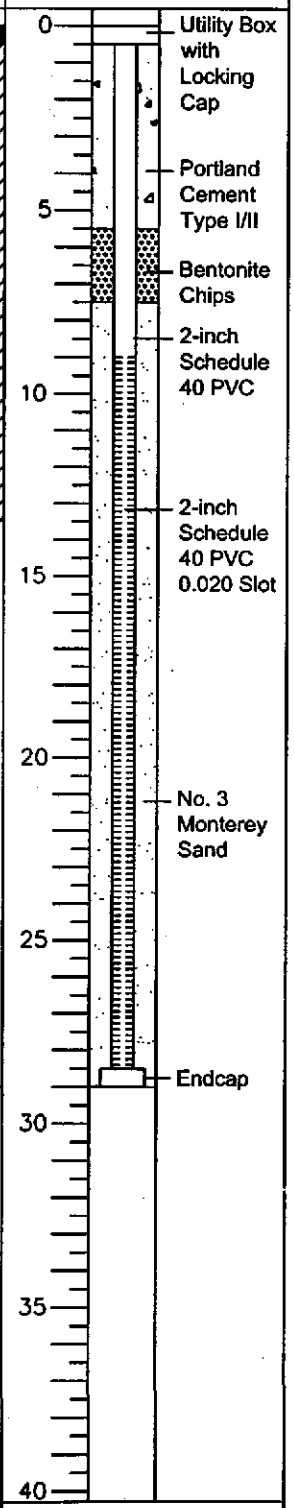
PROJECT NO.: 41-0236
LOCATION: Quik Stop No. 56
3132 Beaumont Avenue
Oakland, California

DATE DRILLED: 2/16/00
LOGGED BY: S. Pasek
APPROVED BY: T. Walker, RG
DRILLING CO.: V&W Drilling

DRILLING METHOD: 8-inch Diameter Hollow Stem Auger
SAMPLER TYPE:
TOTAL DEPTH: 29.0 feet
DEPTH TO WATER: 20.0 feet

| BLOWS PER 6 INCHES | FID (ppm) | TPH (ppm) | SAMPLE | DEPTH (feet below grade) | DESCRIPTION | USCS | LITHOLOGY |
|---|---|---|---|---|---|---|---|
| | | | | 0 | Asphalt and base rock. | | Asphalt |
| | | | | | SILTY CLAY WITH SAND: Very dark gray, 10 % fine to medium sand, slightly plastic, soft, dry. | | |
| | | | | | - @ 3': dark greenish gray, stiff. | | |
| | | | | 5 | SANDY CLAY: Very dark gray, 30 % fine to medium sand, nonplastic, very soft, dry. | | |
| | 7 | 2.9 | | | **- MW-1-6.5** | CL | |
| | | | | | SILTY CLAY WITH SAND: Light brown, 10 % fine to medium sand, plastic, stiff to medium stiff, some iron oxide staining, dry. | | |
| | 4.6 | <1.0 | | 10 | **- MW-1-11.5** | | |
| | | | | | SANDY SILT: Light brown, 30 % sand, 70% fines, nonplastic, medium stiff, some iron oxide staining, moist. | | |
| | 31 | <1.0 | | 15 | **- MW-1-16.5** | | |
| 11 13 16 | | <1.0 | | 20 | - @ 20': wet. **- MW-1-21.5** | ML | |
| | | | | | CLAYEY SILT WITH SAND: Light greenish gray, 10 % fine sand, 20% clay, stiff, moist. | | |
| 11 15 26 | | <1.0 | | 25 | **- MW-1-26.5** | | |
| | | | | 30 | | | |
| | | | | 35 | | | |
| | | | | 40 | | | |

WELL CONSTRUCTION DETAIL




ALTON GEOSCIENCE
Northern California

# LOG OF EXPLORATORY BORING

**MW-1**
PAGE 1 OF 1

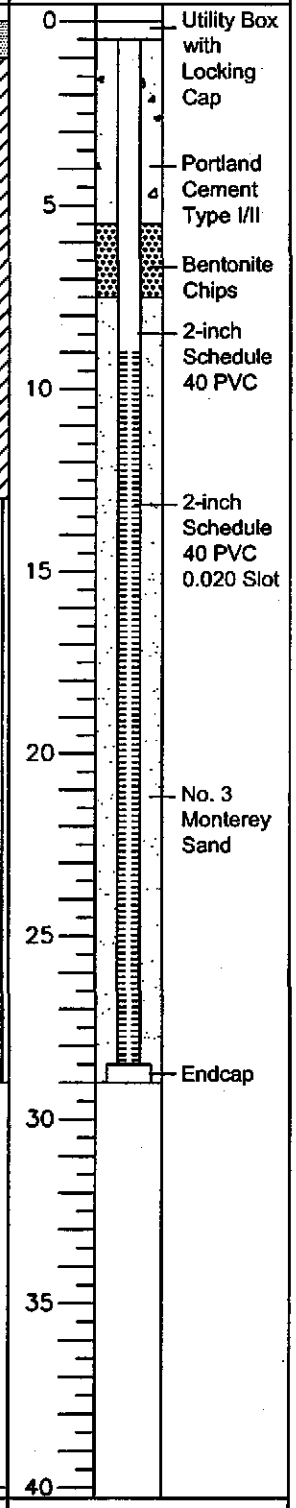
PROJECT NO.: 41-0236
LOCATION: Quik Stop No. 56
3132 Beaumont Avenue
Oakland, California

DATE DRILLED: 2/16/00
LOGGED BY: S. Pasek
APPROVED BY: T. Walker, RG
DRILLING CO.: V&W Drilling

DRILLING METHOD: 8-inch Diameter Hollow Stem Auger
SAMPLER TYPE:
TOTAL DEPTH: 29.0 feet
DEPTH TO WATER: 18.5 feet

| BLOWS PER 6 INCHES | FID (ppm) | TPH (ppm) | SAMPLE | DEPTH (feet below grade) | DESCRIPTION | USCS | LITHOLOGY |
|---|---|---|---|---|---|---|---|
| | | | | 0 | Sand and gravel. | SP | |
| | 2 | <1.0 | | 5 | SANDY CLAY: Dark brown with orange, 20-30 % fine to coarse sand, slightly plastic, medium stiff, dry. **- MW-2-6.5** | CL | |
| 7<br>7<br>8 | 5 | <1.0 | | 10 | SILTY CLAY WITH SAND: Dark grayish brown, 20 % fine to coarse sand, slightly plastic, stiff, moist. **- MW-2-11.5** | | |
| 10<br>11<br>20 | | <1.0 | | 15 | SANDY SILT: Light yellowish brown, 25-30 % fine sand, trace clay, slightly plastic, very stiff, moist. **- MW-2-16.5** - @ 16.5-20': becomes wet. | | |
| 16<br>18<br>20 | | <1.0 | | 20 | **- MW-2-21.5** | ML | |
| 10<br>16<br>31 | | <1.0 | | 25 | CLAYEY SILT WITH SOME SAND: Light greenish gray, 10 % fine sand, stiff, moist. **- MW-1-26.5** | | |
| | | | | 30 | | | |
| | | | | 35 | | | |
| | | | | 40 | | | |

WELL CONSTRUCTION DETAIL




ALTON GEOSCIENCE
Northern California

# LOG OF EXPLORATORY BORING

**MW-2**
PAGE 1 OF 1

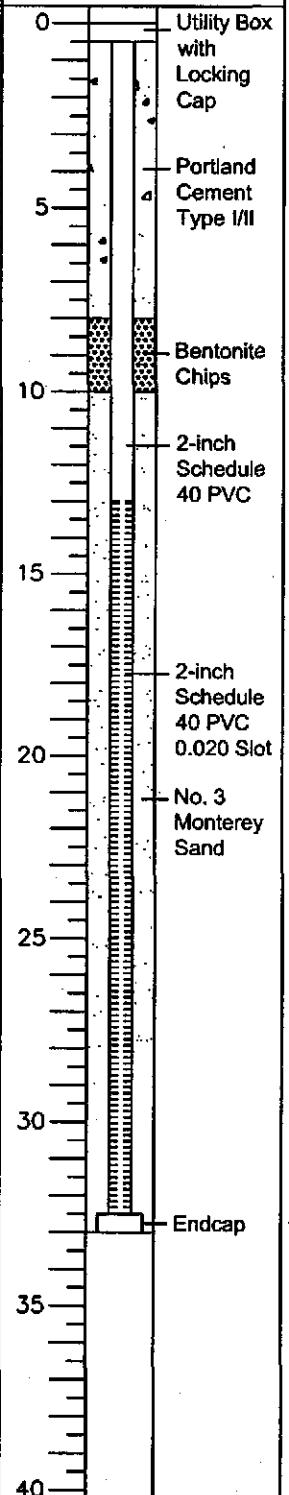
PROJECT NO.: 41-0236
LOCATION: Quik Stop No. 56
3132 Beaumont Avenue
Oakland, California

DATE DRILLED: 2/16/00
LOGGED BY: S. Pasek
APPROVED BY: T. Walker, RG
DRILLING CO.: V&W Drilling

DRILLING METHOD: 8-inch Diameter Hollow Stem Auger
SAMPLER TYPE:
TOTAL DEPTH: 33.0 feet
DEPTH TO WATER: 15.5 feet

| BLOWS PER 6 INCHES | FID (ppm) | TPH (ppm) | SAMPLE | DEPTH (feet below grade) | DESCRIPTION | USCS | LITHOLOGY |
|---|---|---|---|---|---|---|---|
| | | | | 0 | Asphalt and base rock.<br>Rubble. | Asphalt | |
| | | | | | | Fill | |
| | 17 | | | | SANDY CLAY: Dark greenish gray, 10 % fine sand, slightly plastic, medium stiff to stiff, dry. | | |
| 3<br>3<br>3 | 24 | <1.0 | | 5 | **- MW-3-6** | | |
| | | | | | - @ 8.5': trace coarse sand, very stiff, moist. | CL | |
| 10<br>7<br>11 | 1 | <1.0 | | 10 | **- MW-3-11** | | |
| | | | | | SILTY SAND: Light brown, 10 % fines, fine to coarse, loose, moist.<br>Well screened from base of clay layer to total well depth.<br>- @ 15.5': becomes wet.<br>**- MW-3-16** | SM | |
| 6<br>6<br>6 | 1 | <1.0 | | 15 | | | |
| | | | | | CLAYEY SILT WITH SAND: Light brown, 20 % fine to coarse sand, nonplastic, medium stiff, wet. | ML | |
| 5<br>8<br>10 | | <1.0 | | 20 | **- MW-3-21** | | |
| | | | | | SILTY CLAY: Dark gray, very stiff to hard, dry. | | |
| 15<br>30<br>50/5 | | | | 25 | | CL | |
| | | | | | - @ 29': becomes slightly plastic; silt content increases. | | |
| | | | | 30 | | | |
| | | | | 35 | | | |
| | | | | 40 | | | |

WELL CONSTRUCTION DETAIL




ALTON GEOSCIENCE
Northern California

# LOG OF EXPLORATORY BORING

**MW-3**
PAGE 1 OF 1

# ALAMEDA COUNTY PUBLIC WORKS AGENCY

**WATER RESOURCES SECTION**
951 TURNER COURT, SUITE 300, HAYWARD, CA 94545-2651
PHONE (510) 670-5248 MARLON MAGALLANES/CINDY HUTCHINSON
FAX ~~(510) 670-5262~~ 782-1939

## DRILLING PERMIT APPLICATION

**FOR APPLICANT TO COMPLETE**

LOCATION OF PROJECT
Quik Stop Market #56
3132 Beaumont Avenue
Oakland, CA 94602

CLIENT
Name Quik Stop Market, Inc
Address 4567 Enterprise St. Phone
City Fremont Zip 94538

APPLICANT
Name Shayne Pasek with
TRC/Alton Geoscience Fax 925-688-0388
Address 5052 Commerce Circle Phone 925-688-2479
City Concord Zip 94520

TYPE OF PROJECT

| Well Construction | | Geotechnical Investigation | |
|---|---|---|---|
| Cathodic Protection | ( ) | General | ( ) |
| Water Supply | ( ) | Contamination | (X) |
| Monitoring | (X) | Well Destruction | ( ) |

PROPOSED WATER SUPPLY WELL USE

| | | | |
|---|---|---|---|
| New Domestic | ( ) | Replacement Domestic | ( ) |
| Municipal | ( ) | Irrigation | ( ) |
| Industrial | ( ) | Other | ( ) |

DRILLING METHOD:

| | | | | | |
|---|---|---|---|---|---|
| Mud Rotary | ( ) | Air Rotary | ( ) | Auger | (X) |
| Cable | ( ) | Other | ( ) | | |

DRILLER'S LICENSE NO. C57-720904

WELL PROJECTS
Drill Hole Diameter 8 in. Maximum
Casing Diameter 2 in. Depth 25 ft.
Surface Seal Depth 5 ft. Number 3

GEOTECHNICAL PROJECTS
Number of Borings Maximum
Hole Diameter in. Depth ft.

ESTIMATED STARTING DATE 1-20-00
ESTIMATED COMPLETION DATE 1-20-00

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE Shayne L. Pasek DATE 1-6-00

**FOR OFFICE USE**

PERMIT NUMBER W00-017
WELL NUMBER
APN

**PERMIT CONDITIONS**
Circled Permit Requirements Apply

**A. GENERAL**
1. A permit application should be submitted so as to arrive at the ACPWA office five days prior to proposed starting date.
(2) Submit to ACPWA within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well projects, or drilling logs and location sketch for geotechnical projects.
(3) Permit is void if project not begun within 90 days of approval date.

**B. WATER SUPPLY WELLS**
1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.

**(C.) GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS**
(1.) Minimum surface seal thickness is two inches of cement grout placed by tremie.
(2.) Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

**D. GEOTECHNICAL**
Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, tremied cement grout shall be used in place of compacted cuttings.

**E. CATHODIC**
Fill hole above anode zone with concrete placed by tremie.

**F. WELL DESTRUCTION**
See attached.

**G. SPECIAL CONDITIONS**

APPROVED Frank L Coelho DATE 1/7/00

# APPENDIX C

# ANALYTICAL METHODS, OFFICIAL LABORATORY REPORTS, AND CHAIN-OF-CUSTODY RECORDS

Amended COC 4/24

Billing Information :

# CHAIN-OF-CUSTODY RECORD



**Alpha Analytical, Inc.**
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

**WorkOrder : ALT00022129**

**Report Due By : 5:00 PM On : 01-Mar-00**

EDD Required : No

Sampled by : S.V

**Client:**
Alton Geoscience
5052 Commercial Cir.

Concord, CA 94520

**Report Attention :** Tracy Walker

| Company Phone/Fax | Secondary Phone/Fax |
|---|---|
| TEL : (925) 688-2463 | TEL : |
| FAX : (925) 688-0388 | FAX : |

Job : 41-0236-01-Quick Stop #56

PO :

Client's COC # : none

Cooler Temp : 4 °C **24-Feb-00**

QC Level : 1 = Final Rpt Only

| Alpha Sample ID | Client Sample ID | Matrix | Collection Date | No. of Bottles ORG | SUB | TAT | PWS # | Requested Tests 200_8 | TPH/P_S | VOC_S |
|---|---|---|---|---|---|---|---|---|---|---|
| ALT00022129-01A | MW-1-6.5 | SO | 02/16/00 08:08 | 1 | 0 | 7 | | 200.8 | BTXE/GAS/ Mtbe | BTXE/GAS/ Mtbe |
| ALT00022129-02A | MW-1-11.5 | SO | 02/16/00 08:17 | 1 | 0 | 7 | | | BTXE/GAS/ Mtbe | BTXE/GAS/ Mtbe |
| ALT00022129-03A | MW-1-16.5 | SO | 02/16/00 08:20 | 1 | 0 | 7 | | | BTXE/GAS/ Mtbe | BTXE/GAS/ Mtbe |
| ALT00022129-04A | MW-1-21.5 | SO | 02/16/00 08:04 | 1 | 0 | 7 | | | BTXE/GAS/ Mtbe | BTXE/GAS/ Mtbe |
| ALT00022129-05A | MW-1-26.5 | SO | 02/16/00 09:20 | 1 | 0 | 7 | | | BTXE/GAS/ Mtbe | BTXE/GAS/ Mtbe |
| ALT00022129-06A | MW-2-6.5 | SO | 02/16/00 11:40 | 1 | 0 | 7 | | | BTXE/GAS/ Mtbe | BTXE/GAS/ Mtbe |
| ALT00022129-07A | MW-2-11.5 | SO | 02/16/00 11:55 | 1 | 0 | 7 | | | BTXE/GAS/ Mtbe | BTXE/GAS/ Mtbe |

**Sample Remarks**
Inorganic=Organic Lead added to this sample 2/24. This samples is the one with the highest detection of tph/p.

**Comments:** No Security seals,ice frozen in cooler. Samples received Sat.2/19, loged in on Mon. 2/21.Description on samples does not match some of the descriptions on COC, per Edana go with what samples state. RUN organic lead on sample with highest TPH/P. Rick aware

| | Signature | Print Name | Company | Date/Time |
|---|---|---|---|---|
| **Relinquished by:** | A Navarrete | A. Navarrete | Alpha | 2/24/00 1:40 |
| **Received by:** | | | | |
| **Relinquished by:** | | | | |
| **Received by:** | | | | |

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.

Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Billing Information :

# CHAIN-OF-CUSTODY RECORD

Amended 2/24



**Alpha Analytical, Inc.**
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

**WorkOrder : ALT00022129**

**Report Due By : 5:00 PM On : 01-Mar-00**

EDD Required : No

Sampled by : S.V

**Client:**
Alton Geoscience
5052 Commercial Cir.

Concord, CA 94520

**Report Attention :** Tracy Walker

| Company Phone/Fax | Secondary Phone/Fax |
|---|---|
| TEL : (925) 688-2463 | TEL : |
| FAX : (925) 688-0388 | FAX : |

Job : 41-0236-01-Quick Stop #56

PO :

Client's COC # : none

Cooler Temp : 4 °C **24-Feb-00**

QC Level : 1 = Final Rpt Only

| Alpha Sample ID | Client Sample ID | Matrix | Collection Date | No. of Bottles ORG | SUB | TAT | PWS # | Requested Tests 200_8 | TPH/P_S | VOC_S | | | | | Sample Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ALT00022129-08A | MW-2-16.5 | SO | 02/16/00 11:55 | 1 | 0 | 7 | | | BTXE/GAS/ Mtbe | BTXE/GAS/ Mtbe | | | | | |
| ALT00022129-09A | MW-2-21.5 | SO | 02/16/00 12:05 | 1 | 0 | 7 | | | BTXE/GAS/ Mtbe | BTXE/GAS/ Mtbe | | | | | |
| ALT00022129-10A | MW-2-26.5 | SO | 02/16/00 12:15 | 1 | 0 | 7 | | | BTXE/GAS/ Mtbe | BTXE/GAS/ Mtbe | | | | | |
| ALT00022129-11A | MW-3-6 | SO | 02/16/00 15:50 | 1 | 0 | 7 | | | BTXE/GAS/ Mtbe | BTXE/GAS/ Mtbe | | | | | |
| ALT00022129-12A | MW-3-11 | SO | 02/16/00 16:00 | 1 | 0 | 7 | | | BTXE/GAS/ Mtbe | BTXE/GAS/ Mtbe | | | | | |
| ALT00022129-13A | MW-3-16 | SO | 02/16/00 16:05 | 1 | 0 | 7 | | | BTXE/GAS/ Mtbe | BTXE/GAS/ Mtbe | | | | | |
| ALT00022129-14A | MW-3-21 | SO | 02/16/00 16:10 | 1 | 0 | 7 | | | BTXE/GAS/ Mtbe | BTXE/GAS/ Mtbe | | | | | |

**Comments:** No Security seals,ice frozen in cooler. Samples received Sat.2/19, loged in on Mon. 2/21.Description on samples does not match some of the descriptions on COC, per Edana go with what samples state. RUN organic lead on sample with highest TPH/P. Rick aware

| | Signature | Print Name | Company | Date/Time |
|---|---|---|---|---|
| **Relinquished by:** | A Navarrete | C. Navarrete | Alpha | 2/24/00 1:48 |
| **Received by:** | | | | |
| **Relinquished by:** | | | | |
| **Received by:** | | | | |

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.
Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

[redacted] TO [redacted]

# CHAIN OF CUSTODY RECORD

Ship To: Alpha Analytical
Attn: Sample Department
255 Glendale Ave. Suite 21
Sparks, NV 89431-5778

Page 1 of 1
Project Name: Quik Stop #56
Project No.: 41-0236-01
Site Location: 3132 Beaumont Ave.
Date: 2/17/09

CA 7 days

| | Boring/Well No. | Sample No. | Depth | Date | Time | Sample Type: Water | Solid | Other | Comp. | Grab. | Sample Containers: Vol. | No. | Type | Pres. | Analysis: TPH-G 8260 | BTEX 8260 | MTBE 8260 | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | mw-1 | 6 | | 2-16 | 0808 | | X | | | X | | 1 | | | X | X | X | bag on sample 6.5 |
| 2 | mw-1 | 11.5 | | | 0817 | | | | | | | | | | | | | |
| 3 | mw-1 | 16.5 | | | 0820 | | | | | | | | | | | | | |
| 4 | mw-1 | 21.5 | | | 0840 | | | | | | | | | | | | | |
| 5 | mw-1 | 26 | | | 0920 | | | | | | | | | | | | | 26.5 |
| 6 | mw-2 | 6.5 | | | 1140 | | | | | | | | | | | | | |
| 7 | mw-2 | 11 | | | 1155 | | | | | | | | | | | | | 11.5 |
| 8 | mw-2 | 16.5 | | | 1155 | | | | | | | | | | | | | |
| 9 | mw-2 | 21 | | | 1205 | | | | | | | | | | | | | 21.5 |
| 10 | mw-2 | 26 | | | 1215 | | | | | | | | | | | | | 26.5 |
| 11 | mw-3 | 6 | | | 1550 | | | | | | | | | | | | | |
| 12 | mw-3 | 11 | | | 1600 | | | | | | | | | | | | | |
| 13 | mw-3 | 16 | | | 1605 | | | | | | | | | | | | | |
| 14 | mw-3 | 21 | | | 1610 | | | | | | | | | | | | | |

Total Number of Samples Shipped: 14 Shipper's Signature: Shaya R Pour

| | Signature | Company | Date | Time |
|---|---|---|---|---|
| Relinquished by: | Ken Von Dohlen | TRC/Alton Geoscience | 2/18/09 | 11:00 AM |
| Received by: | [illegible] | Alpha | 2/21/09 | 11:50 |
| Relinquished by: | | | | |
| Received by: | | | | |
| Relinquished by: | | | | |
| Received by: | | | | |

Special Instructions / Shipment / Handling / Storage Requirements:
Run ~~total~~ organic Lead on sample with highest TPH-G

**The material(s) listed are received for analysis and/or treatability evaluation and remain the property of the client and not TRC. At the conclusion of the test work, all remaining material(s) will be returned to the client for eventual disposal at a licensed facility.**

☐ TRC
21 Technology Drive
Irvine, California 92618
(949) 727-9336

☒ TRC Attn: Chris Dennis
5052 Commercial Circle
Concord, California 94520
(925) 688-1200

A-Gen/Form (12/8/Mmm)

Alpha Analytical, Inc.
255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

# ANALYTICAL REPORT

Alton Geoscience
5052 Commercial Cir.
Concord, CA 94520

Job#: 41-0236-01-Quick Stop #56
Phone: (925) 688-2463
Attn: Tracy Walker

Total Petroleum Hydrocarbons - Purgeable (TPH-P) EPA Method 8015B/DHS LUFT Manual
Volatile Organic Compounds (VOCs) EPA Method 8260B

| | | Parameter | Concentration | Reporting Limit | Date Sampled | Date Analyzed |
|---|---|---|---|---|---|---|
| Client ID : | **MW-1-6.5** | | | | | |
| Lab ID : | ALT00022129-01A | TPH Purgeable | 2.9 | 1.0 mg/Kg | 02/16/00 | 02/23/00 |
| | | Methyl tert-butyl ether (MTBE) | 0.067 | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| | | Benzene | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| | | Toluene | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| | | Ethylbenzene | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| | | Xylenes, Total | 0.0097 | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| Client ID : | **MW-1-11.5** | | | | | |
| Lab ID : | ALT00022129-02A | TPH Purgeable | ND | 1.0 mg/Kg | 02/16/00 | 02/23/00 |
| | | Methyl tert-butyl ether (MTBE) | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| | | Benzene | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| | | Toluene | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| | | Ethylbenzene | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| | | Xylenes, Total | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| Client ID : | **MW-1-16.5** | | | | | |
| Lab ID : | ALT00022129-03A | TPH Purgeable | ND | 1.0 mg/Kg | 02/16/00 | 02/23/00 |
| | | Methyl tert-butyl ether (MTBE) | 0.66 | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| | | Benzene | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| | | Toluene | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| | | Ethylbenzene | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| | | Xylenes, Total | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| Client ID : | **MW-1-21.5** | | | | | |
| Lab ID : | ALT00022129-04A | TPH Purgeable | ND | 1.0 mg/Kg | 02/16/00 | 02/23/00 |
| | | Methyl tert-butyl ether (MTBE) | 0.050 | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| | | Benzene | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| | | Toluene | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| | | Ethylbenzene | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| | | Xylenes, Total | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| Client ID : | **MW-1-26.5** | | | | | |
| Lab ID : | ALT00022129-05A | TPH Purgeable | ND | 1.0 mg/Kg | 02/16/00 | 02/23/00 |
| | | Methyl tert-butyl ether (MTBE) | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| | | Benzene | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| | | Toluene | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| | | Ethylbenzene | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| | | Xylenes, Total | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |


Las Vegas, NV • (702) 498-3312 / Sacramento, CA • (916) 366-9089 / Wichita, KS • (316) 722-5800
info@alpha-analytical.com

Alpha Analytical, Inc.
255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

| | | | | | | |
|---|---|---|---|---|---|---|
| Client ID : | **MW-2-6.5** | | | | | |
| Lab ID : | ALT00022129-06A | TPH Purgeable | ND | 1.0 mg/Kg | 02/16/00 | 02/23/00 |
| | | Methyl tert-butyl ether (MTBE) | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| | | Benzene | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| | | Toluene | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| | | Ethylbenzene | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| | | Xylenes, Total | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| Client ID : | **MW-2-11.5** | | | | | |
| Lab ID : | ALT00022129-07A | TPH Purgeable | ND | 1.0 mg/Kg | 02/16/00 | 02/23/00 |
| | | Methyl tert-butyl ether (MTBE) | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| | | Benzene | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| | | Toluene | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| | | Ethylbenzene | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| | | Xylenes, Total | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| Client ID : | **MW-2-16.5** | | | | | |
| Lab ID : | ALT00022129-08A | TPH Purgeable | ND | 1.0 mg/Kg | 02/16/00 | 02/23/00 |
| | | Methyl tert-butyl ether (MTBE) | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| | | Benzene | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| | | Toluene | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| | | Ethylbenzene | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| | | Xylenes, Total | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| Client ID : | **MW-2-21.5** | | | | | |
| Lab ID : | ALT00022129-09A | TPH Purgeable | ND | 1.0 mg/Kg | 02/16/00 | 02/23/00 |
| | | Methyl tert-butyl ether (MTBE) | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| | | Benzene | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| | | Toluene | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| | | Ethylbenzene | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| | | Xylenes, Total | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| Client ID : | **MW-2-26.5** | | | | | |
| Lab ID : | ALT00022129-10A | TPH Purgeable | ND | 1.0 mg/Kg | 02/16/00 | 02/23/00 |
| | | Methyl tert-butyl ether (MTBE) | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| | | Benzene | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| | | Toluene | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| | | Ethylbenzene | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| | | Xylenes, Total | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| Client ID : | **MW-3-6** | | | | | |
| Lab ID : | ALT00022129-11A | TPH Purgeable | ND | 1.0 mg/Kg | 02/16/00 | 02/23/00 |
| | | Methyl tert-butyl ether (MTBE) | 0.0083 | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| | | Benzene | 0.038 | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| | | Toluene | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| | | Ethylbenzene | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| | | Xylenes, Total | 0.019 | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| Client ID : | **MW-3-11** | | | | | |
| Lab ID : | ALT00022129-12A | TPH Purgeable | ND | 1.0 mg/Kg | 02/16/00 | 02/23/00 |
| | | Methyl tert-butyl ether (MTBE) | 0.011 | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| | | Benzene | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| | | Toluene | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| | | Ethylbenzene | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| | | Xylenes, Total | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |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info@alpha-analytical.com

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| | | | | | | |
|---|---|---|---|---|---|---|
| Client ID : | **MW-3-16** | | | | | |
| Lab ID : | ALT00022129-13A | TPH Purgeable | ND | 1.0 mg/Kg | 02/16/00 | 02/23/00 |
| | | Methyl tert-butyl ether (MTBE) | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| | | Benzene | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| | | Toluene | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| | | Ethylbenzene | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| | | Xylenes, Total | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| Client ID : | **MW-3-21** | | | | | |
| Lab ID : | ALT00022129-14A | TPH Purgeable | ND | 1.0 mg/Kg | 02/16/00 | 02/23/00 |
| | | Methyl tert-butyl ether (MTBE) | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| | | Benzene | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| | | Toluene | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| | | Ethylbenzene | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |
| | | Xylenes, Total | ND | 0.0050 mg/Kg | 02/16/00 | 02/23/00 |

This report replaces the one signed 2/29/00, due to a change in the reporting limit units, per client request.

ND = Not Detected

Approved By: R Scholl Date: 3/3/00

Roger L. Scholl, Ph.D.
Laboratory Director


Las Vegas, NV • (702) 498-3312 / Sacramento, CA • (916) 366-9089 / Wichita, KS • (316) 722-5890
info@alpha-analytical.com

# Laboratory Analysis Report

Sierra Environmental Monitoring, Inc.

Alpha Analytical

255 Glendale Avenue Suite 21
Sparks, NV 89431

**Date:** 2/29/2000
**Client:** ALP-855
**Taken by:** Client
**Report:** 33897
**PO #:**

| mple ID: | Customer Sample ID | Date Sampled | Time Sampled | Date Received |
|---|---|---|---|---|
| 00002-0946 | ALT00022129-01 - MW-1-6.5 | 2/16/2000 | | 2/24/2000 |

| Parameter | Method | Result | Units Of Measure | Detection Limit | Analyst | Date Analyzed |
|---|---|---|---|---|---|---|
| rganic Lead | CA Title XXII | <3.0 | mg/Kg | 3.0 | Kobza | 2/28/2000 |

**Approved By:** _____ **Date:** 2-29-00

**Sierra Environmental Monitoring, Inc**

**This report is applicable only to the sample received by the laboratory. The liability of the laboratory is limited to the amount paid for this report. This report is for the exclusive use of the client to whom it is addressed and upon the condition that the client sumes all liability for the further distribution of the report or its contents.**



1135 Financial Blvd.
Reno, NV 89502-2348
Phone (775) 857-2400
FAX (775) 857-2404
sem@powernet.net

William F. Pillsbury
*President*

John Kobza, Ph.D.
*John C. Seher*
*Managers*

Billing Information :

# CHAIN-OF-CUSTODY RECORD



CA

**Alpha Analytical, Inc.**
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

**WorkOrder : ALT00022129**

**Report Due By : 5:00 PM On : 01-Mar-00**

EDD Required : No

Sampled by : S.V

**Client:**
Alton Geoscience
5052 Commercial Cir.

Concord, CA 94520

**Report Attention :** Tracy Walker

| Company Phone/Fax | Secondary Phone/Fax |
|---|---|
| TEL : (925) 688-2463 | TEL : |
| FAX : (925) 688-0388 | FAX : |

Job : 41-0236-01-Quick Stop #56

PO :

Client's COC # : none

Cooler Temp : 4 °C 21-Feb-00

QC Level : 1 = Final Rpt Only

| Alpha Sample ID | Client Sample ID | Matrix | Collection Date | No. of Bottles ORG | SUB | TAT | PWS # | Requested Tests TPH/P_S | VOC_S | | | | | | Sample Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ALT00022129-01A | MW-1-6.5 | SO | 07/16/00 08:08 | 1 | 0 | 7 | | BTXE/GAS/ Mtbe | BTXE/GAS/ Mtbe | | | | | | |
| ALT00022129-02A | MW-1-11.5 | SO | 07/16/00 08:17 | 1 | 0 | 7 | | BTXE/GAS/ Mtbe | BTXE/GAS/ Mtbe | | | | | | |
| ALT00022129-03A | MW-1-16.5 | SO | 07/16/00 08:20 | 1 | 0 | 7 | | BTXE/GAS/ Mtbe | BTXE/GAS/ Mtbe | | | | | | |
| ALT00022129-04A | MW-1-21.5 | SO | 07/16/00 08:04 | 1 | 0 | 7 | | BTXE/GAS/ Mtbe | BTXE/GAS/ Mtbe | | | | | | |
| ALT00022129-05A | MW-1-26.5 | SO | 07/16/00 09:20 | 1 | 0 | 7 | | BTXE/GAS/ Mtbe | BTXE/GAS/ Mtbe | | | | | | |
| ALT00022129-06A | MW-2-6.5 | SO | 07/16/00 11:40 | 1 | 0 | 7 | | BTXE/GAS/ Mtbe | BTXE/GAS/ Mtbe | | | | | | |
| ALT00022129-07A | MW-2-11.5 | SO | 07/16/00 11:55 | 1 | 0 | 7 | | BTXE/GAS/ Mtbe | BTXE/GAS/ Mtbe | | | | | | |
| ALT00022129-08A | MW-2-16.5 | SO | 07/16/00 11:55 | 1 | 0 | 7 | | BTXE/GAS/ Mtbe | BTXE/GAS/ Mtbe | | | | | | |

**Comments:** No Security seals,ice frozen in cooler. Samples received Sat.2/19, loged in on Mon. 2/21.Description on samples does not match some of the descriptions on COC, per Edana go with what samples state. RUN organic lead on sample with highest TPH/P. Rick aware

| | Signature | Print Name | Company | Date/Time |
|---|---|---|---|---|
| **Relinquished by:** | | | | |
| **Received by:** | Graciela Navarrete | G. Navarrete | Alpha | 2/21/00 11:50 |
| **Relinquished by:** | | | | |
| **Received by:** | | | | |

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.
Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Billing Information :

# CHAIN-OF-CUSTODY RECORD



**Alpha Analytical, Inc.**
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

**WorkOrder : ALT00022129**

CA

**Client:**
Alton Geoscience
5052 Commercial Cir.

Concord, CA 94520

**Report Attention :** Tracy Walker

| Company Phone/Fax | Secondary Phone/Fax |
|---|---|
| TEL : (925) 688-2463 | TEL : |
| FAX : (925) 688-0388 | FAX : |

Job : 41-0236-01-Quick Stop #56
PO :

**Report Due By : 5:00 PM On : 01-Mar-00**

EDD Required : No

Sampled by : S.V

Client's COC # : none

Cooler Temp : 4 °C **21-Feb-00**

QC Level : 1 = Final Rpt Only

| Alpha Sample ID | Client Sample ID | Matrix | Collection Date | No. of Bottles ORG | SUB | TAT | PWS # | Requested Tests TPH/P_S | VOC_S | | | | | | Sample Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ALT00022129-09A | MW-2-21.5 | SO | 07/16/00 12:05 | 1 | 0 | 7 | | BTXE/GAS/ Mtbe | BTXE/GAS/ Mtbe | | | | | | |
| ALT00022129-10A | MW-2-26.5 | SO | 07/16/00 12:15 | 1 | 0 | 7 | | BTXE/GAS/ Mtbe | BTXE/GAS/ Mtbe | | | | | | |
| ALT00022129-11A | MW-3-6 | SO | 07/16/00 15:50 | 1 | 0 | 7 | | BTXE/GAS/ Mtbe | BTXE/GAS/ Mtbe | | | | | | |
| ALT00022129-12A | MW-3-11 | SO | 07/16/00 16:00 | 1 | 0 | 7 | | BTXE/GAS/ Mtbe | BTXE/GAS/ Mtbe | | | | | | |
| ALT00022129-13A | MW-3-16 | SO | 07/16/00 16:05 | 1 | 0 | 7 | | BTXE/GAS/ Mtbe | BTXE/GAS/ Mtbe | | | | | | |
| ALT00022129-14A | MW-3-21 | SO | 07/16/00 16:10 | 1 | 0 | 7 | | BTXE/GAS/ Mtbe | BTXE/GAS/ Mtbe | | | | | | |

**Comments:** No Security seals,ice frozen in cooler. Samples received Sat.2/19, loged in on Mon. 2/21.Description on samples does not match some of the descriptions on COC, per Edana go with what samples state; RUN organic lead on sample with highest TPH/P. Rick aware

| | Signature | Print Name | Company | Date/Time |
|---|---|---|---|---|
| **Relinquished by:** | | | | |
| **Received by:** | Graciela Navarrete | G. Navarrete | Alpha | 2/21/00 11:50 |
| **Relinquished by:** | | | | |
| **Received by:** | | | | |

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.
Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

REPORT TO: TRACY WALKER

# CHAIN OF CUSTODY RECORD

Ship To: Alpha Analytical
Attn: Sample Department
255 Glendale Ave. Suite 21
Sparks, NV 89431-5778

Page 1 of 1
Project Name: Quik Stop #56
Project No.: 41-0236-01
Site Location: 3132 Beaumont Ave.
Date: 2/17/00

CA 7 days

| Boring/Well No. | Sample No. | Depth | Date | Time | Sample Type: Water | Solid | Other | Comp. | Grab. | Sample Containers: Vol. | No. | Type | Pres. | Analysis: TPH-G 8440 | BTEX 8260 | MTBE 8260 | | | | | | | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | MW-1-6 | | 2-16 | 0808 | | X | | | X | | 1 | | | X | X | X | | | | | | | bag on sample 6.5 |
| 2 | MW-1-11.5 | | | 0817 | | | | | | | | | | | | | | | | | | | |
| 3 | MW-1-16.5 | | | 0820 | | | | | | | | | | | | | | | | | | | |
| 4 | MW-1-21.5 | | | 0840 | | | | | | | | | | | | | | | | | | | |
| 5 | MW-1-26 | | | 0920 | | | | | | | | | | | | | | | | | | | 26.5 |
| 6 | MW-2-6.5 | | | 1140 | 1@4 | | | | | | | | | | | | | | | | | | |
| 7 | MW-2-11.5 | | | 1155 | | | | | | | | | | | | | | | | | | | 11.5 |
| 8 | MW-2-16.5 | | | 1155 | | | | | | | | | | | | | | | | | | | |
| 9 | MW-2-21 | | | 1205 | | | | | | | | | | | | | | | | | | | 21.5 |
| 10 | MW-2-26 | | | 1215 | | | | | | | | | | | | | | | | | | | 26.5 |
| 11 | MW-3-6 | | | 1550 | | | | | | | | | | | | | | | | | | | |
| 12 | MW-3-11 | | | 1600 | | | | | | | | | | | | | | | | | | | |
| 13 | MW-3-16 | | | 1605 | | | | | | | | | | | | | | | | | | | |
| 14 | MW-3-21 | | | 1610 | | | | | | | | | | | | | | | | | | | |

Total Number of Samples Shipped: 14 Shipper's Signature: Shayn R Pratt

| | Signature | Company | Date | Time |
|---|---|---|---|---|
| Relinquished by: | Ken Van Dorn | TRC/ACTON GEOSCIENCE | 2/18/00 | 11:00 AM |
| Received by: | [illegible] | Alpha | 2/21/00 | 1:50 |
| Relinquished by: | | | | |
| Received by: | | | | |
| Relinquished by: | | | | |
| Received by: | | | | |

Special Instructions / Shipment / Handling / Storage Requirements:
Run ~~total~~ organic lead on sample with highest TPH-G

**The material(s) listed are received for analysis and/or treatability evaluation and remain the property of the client and not TRC. At the conclusion of the test work, all remaining material(s) will be returned to the client for eventual disposal at a licensed facility.**

☐ TRC
21 Technology Drive
Irvine, California 92618
(949) 727-9336

☒ TRC Attn: Chris Dennis
5052 Commercial Circle
Concord, California 94520
(925) 688-1200

A-Gen/Form (12/8/98/rmm)

Alpha Analytical, Inc.
255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

# ANALYTICAL REPORT

TRC Environmental Solutions
5052 Commercial Cir.
Concord, CA 94520

Job#: Quik Stop #56/ 41-1236-01
Phone: (925) 688-1200
Attn: Bella Bakrania

Total Petroleum Hydrocarbons - Purgeable (TPH-P) EPA Method 8015B/DHS LUFT Manual
Volatile Organic Compounds (VOCs) EPA Method 8260B

| | | Parameter | Concentration | | Reporting Limit | Date Sampled | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Client ID : | **MW-3** | | | | | | |
| Lab ID : | TRC00030662-01A | TPH Purgeable | ND | | 50 ug/L | 03/02/00 | 03/07/00 |
| | | Methyl tert-butyl ether (MTBE) | 0.96 | | 0.50 µg/L | 03/02/00 | 03/07/00 |
| | | Benzene | ND | | 0.50 µg/L | 03/02/00 | 03/07/00 |
| | | Toluene | ND | | 0.50 µg/L | 03/02/00 | 03/07/00 |
| | | Ethylbenzene | ND | | 0.50 µg/L | 03/02/00 | 03/07/00 |
| | | m,p-Xylene | ND | | 0.50 µg/L | 03/02/00 | 03/07/00 |
| | | o-Xylene | ND | | 0.50 µg/L | 03/02/00 | 03/07/00 |
| Client ID : | **MW-2** | | | | | | |
| Lab ID : | TRC00030662-02A | TPH Purgeable | ND | | 50 ug/L | 03/02/00 | 03/07/00 |
| | | Methyl tert-butyl ether (MTBE) | ND | | 0.50 µg/L | 03/02/00 | 03/07/00 |
| | | Benzene | ND | | 0.50 µg/L | 03/02/00 | 03/07/00 |
| | | Toluene | ND | | 0.50 µg/L | 03/02/00 | 03/07/00 |
| | | Ethylbenzene | ND | | 0.50 µg/L | 03/02/00 | 03/07/00 |
| | | m,p-Xylene | ND | | 0.50 µg/L | 03/02/00 | 03/07/00 |
| | | o-Xylene | ND | | 0.50 µg/L | 03/02/00 | 03/07/00 |
| Client ID : | **MW-1** | | | | | | |
| Lab ID : | TRC00030662-03A | TPH Purgeable | 670 | | 250 ug/L | 03/02/00 | 03/07/00 |
| | | Methyl tert-butyl ether (MTBE) | 2,200 | | 1.0 µg/L | 03/02/00 | 03/07/00 |
| | | Benzene | ND | V | 1.0 µg/L | 03/02/00 | 03/07/00 |
| | | Toluene | ND | V | 1.0 µg/L | 03/02/00 | 03/07/00 |
| | | Ethylbenzene | ND | V | 1.0 µg/L | 03/02/00 | 03/07/00 |
| | | m,p-Xylene | ND | V | 1.0 µg/L | 03/02/00 | 03/07/00 |
| | | o-Xylene | ND | V | 1.0 µg/L | 03/02/00 | 03/07/00 |

This report replaces the one signed 3/13/00, due to a change in the reported units, per client request.

V = Detection Limits were raised due to high concentrations of target analytes.
ND = Not Detected

Approved By: R Scholl Date: 3/23/00

Roger L. Scholl, Ph.D.
Laboratory Director


Las Vegas, NV • (702) 498-3312 / Sacramento, CA • (916) 366-9089 / Wichita, KS • (316) 722-5890
info@alpha-analytical.com

Billing Information :

# CHAIN-OF-CUSTODY RECORD



**Alpha Analytical, Inc.**
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

**WorkOrder : TRC00030662**

**Report Due By : 5:00 PM On : 20-Mar-00**

EDD Required : No

Sampled by : Sean Van Goider

**Client:**
TRC Environmental Solutions
5052 Commercial Clr.

Concord, CA 94520

**Report Attention :** Bella Bakrania

| Company Phone/Fax | Secondary Phone/Fax |
|---|---|
| TEL : (925) 688-1200 | TEL : |
| FAX : (925) 688-0388 | FAX : |

Job : Quik Stop #56/ 41-1236-01
PO :
Client's COC # : none
Cooler Temp : 4 °C 06-Mar-00

QC Level : 1 = Final Rpt Only

| Alpha Sample ID | Client Sample ID | Matrix | Collection Date | No. of Bottles ORG | SUB | TAT | PWS # | Requested Tests TPH/P_W | VOC_W | | | | | | Sample Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TRC00030662-01A | MW-3 | AQ | 03/02/00 14:37 | 3 | 0 | 10 | | GAS-CAL | BTXE/M_C | | | | | | |
| TRC00030662-02A | MW-2 | AQ | 03/02/00 15:05 | 3 | 0 | 10 | | GAS-CAL | BTXE/M_C | | | | | | |
| TRC00030662-03A | MW-1 | AQ | 03/02/00 15:40 | 3 | 0 | 10 | | GAS-CAL | BTXE/M_C | | | | | | |

**Comments:** CA samples. Received on Saturday, real ice frozen. No security seals.

| | Signature | Print Name | Company | Date/Time |
|---|---|---|---|---|
| **Relinquished by:** | | | | |
| **Received by:** | K Murray | K Murray | A.A. | |
| **Relinquished by:** | | | | |
| **Received by:** | | | | |

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.
Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

REPORT TO: BELLA SAKRANIA

Ship To: ALPHA ANALYTICAL
Attn: SAMPLE DEPT.
255 GLENDALE AVE.
STE. 21
SPARKS, NV 89431-5718

Page 1 of 1
Project Name: QUIK STOP #56
Project No.: 41-1236-01
Site Location: 3132 BEAUMONT AVE.
Date: 3 / 3 / 00

# CHAIN OF CUSTODY RECORD

00030662

| Boring/Well No. | Sample No. | Depth | Date | Time | Sample Type: Water | Solid | Other | Comp. | Grab. | Sample Containers: Vol. | No. | Type | Pres. | Analysis: TPH-G | BTEX | EPA 8260 - MTBE | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-3 | MW-3 | | 3/2/00 | 2:37 | X | | | | X | | 3 | VOAs | HCL | X | X | X | -01 |
| MW-2 | MW-2 | | 3/2/00 | 3:05 | X | | | | X | | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | -02 |
| MW-1 | MW-1 | | 3/2/00 | 3:40 | X | | | | X | | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | -03 |

Total Number of Samples Shipped: 9 Shipper's Signature: Sean Van Sooten

| | Signature | Company | Date | Time |
|---|---|---|---|---|
| Relinquished by: | Sean Van Sooten | TRC / ALTON GEOSCIENCE | 3/3/00 | 11:00 |
| Received by: | K Murray | AAI | 3/6/00 | 1040 |
| Relinquished by: | | | | |
| Received by: | | | | |
| Relinquished by: | | | | |
| Received by: | | | | |

Special Instructions / Shipment / Handling/ Storage Requirements:

HOLD AT GREGG STREET STATION

**The material(s) listed are received for analysis and/or treatability evaluation and remain the property of the client and not TRC. At the conclusion of the test work, all remaining material(s) will be returned to the client for eventual disposal at a licensed facility.**

☐ TRC
21 Technology Drive
Irvine, California 92618
(949) 727-9336

☒ TRC
5052 Commercial Circle
Concord, California 94520
(925) 688-1200

A-Gen/Form (12/8/98/rmm)

# APPENDIX D

# WELL ELEVATION SURVEY DATA

**Virgil Chavez Land Surveying**
*312 Georgia Street, Suite 200*
*Vallejo, California 94590-5907*
*(707) 553-2476 • Fax (707) 553-8698*

March 13, 2000
Project No. 1675-08

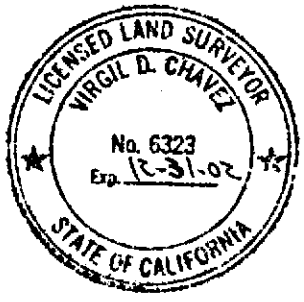
Chris Dennis
TRC/Alton Geoscience
5052 Commercial Circle
Concord, Ca. 94520

Subject: Monitoring Well Survey
3132 Beaumont Ave.
Oakland, Ca.

Dear Chris:

This is to confirm that we have proceeded at your direction to survey the monitoring wells at the above referenced site. The survey was performed on March 8, 2000. The benchmark for the survey was City of Oakland No. 1425, a cut square in the top of curb, on the nose of the median island on the south side of East 30th Street and 14th Ave. The station and offset data are relative to the building face, looking southeast. Measurement locations were marked, at the approximate north side of top of box.
Benchmark Elevation = 122.15 feet, MSL.

| Well No. | Rim Elevation | TOC Elevation | Station | Offset |
|---|---|---|---|---|
| MW - 1 | 131.92' | 131.58' | 0-03.37 | 112.51(Rt) |
| MW - 2 | 132.87' | 132.63' | 0-01.98 | 23.23(Rt) |
| MW - 3 | 134.07' | 133.78' | 0+46.21 | 52.47(Rt) |
| SW Bldg Cor. | | | 0+00 | 0.00 |
| SE Bldg Cor. | | | 0+70.35 | 0.00 |




Sincerely,

Virgil D. Chavez

Virgil D. Chavez, PLS 6323