

Ninyo & Moore**Transmittal**

675 Hegenberger Rd., Ste. 220, Oakland, CA 94621-1919 ♦ Phone 510/633-5640 ♦ Fax 510/633-5646 ♦ www.ninyoandmoore.com

To: Eva Chu**Date:** March 15, 2000**Firm:** County of Alameda**Fax No:** 510-337-9335**Address:****Telephone
No:****From:** Kris Larson**Total Pages:** 16**Subject:** Closure Report**Project No:**

<input type="checkbox"/> Urgent	<input type="checkbox"/> For Approval	<input type="checkbox"/> For Your Use	<input type="checkbox"/> Please Reply	<input type="checkbox"/> As Requested
Original Document:	<input type="checkbox"/> Will Not Follow	<input type="checkbox"/> Will Follow	<input type="checkbox"/> By U.S. Mail	<input type="checkbox"/> By Other

Eva,

Attached is the closure report for the Dale's bar site for your please review. Sorry about the Table of Contents, but I haven't formatted it yet.

Thank you

Kris Larson
Senior Staff Environmental Geologist

- send lab data
- show utility lines on site plan, also drainage ditches
- still need soil boring by UST pits - as previously approved by this office.
- send entire report for review.

- Geotechnical Engineering
- Engineering Geology
- Materials Testing and Inspection
- Construction Management
- Engineering Design
- Environmental Engineering
- Environmental Site Assessments
- Regulatory Compliance and Permitting
- Water Quality and Resource Evaluations
- Hazardous Waste Management
- Soil and Groundwater Remediation
- Asbestos and Lead-Based Paint Surveys
- Geophysical Studies
- Mineral Resource Evaluations
- Value Engineering
- Forensic Studies
- Expert Witness Testimony

**REQUEST FOR CLOSURE REPORT
2576 MAIN STREET
ALAMEDA, CALIFORNIA**

PREPARED FOR:
Alameda Public Works Department
Alameda Point, Building 1
950 West Mall Square, Room 110
Alameda, California 94501

PREPARED BY:
Ninyo & Moore Geotechnical and Environmental Sciences Consultants
675 Hegenberger Road, Suite 220
Oakland, California 94621-1919

March 14, 2000
Project No. 400301-02

March 14, 2000
Project No. 400301-01

Ms. Malika Ramachandran, P.E.
Senior Civil Engineer
Alameda Public Works Department
Alameda Point, Building 1
950 West Mall Square, Room 110
Alameda, California 94501

Subject: Request for Closure Report
2756 Main Street
Alameda, California

Dear Ms. Ramachandran:

Ninyo & Moore is pleased to present this report requesting closure of the site at 2756 Main Street, located in Alameda, California. The purpose of this report was to collect and report information that would satisfy Alameda County Environmental Health Services.

We appreciate this opportunity to be of service to The City of Alameda on this project. If you have any questions regarding this report, please contact the undersigned

Sincerely,
NINYO & MOORE

Kris M. Larson
Senior Staff Environmental Geologist

York R. Gorzolla, R.G., R.E.A.
Manager of Environmental Sciences

KML/YRG/jms

Distribution: (2) Addressee

City of Alameda Public Works Department

March 14, 2,000

1. DISCLAIMER.....	ERROR! BOOKMARK NOT DEFINED.
2. INTRODUCTION AND SCOPE OF SERVICES.....	1
3. SITE BACKGROUND.....	1
4. PHYSICAL SETTING.....	3
4.1. Geology.....	3
4.2. Hyrology.....	4
5. INVESTIGATION RESULTS.....	4
5.1 SENSITIVE RECEPTORS SURVEY.....	4
5.1.1 WATER WELL INVENTORY.....	5
5.1.1.1 CALAVREAS COUNTY ENVIRONMENTAL HEALTH DEPARTMENT.....	511
5.1.1.2 CITY OF ANGELS WATER AND WASTEWAEER DEPARTMENT.....	5
5.1.1.3 STATE OF CALIFORNIA DEPARTMENT OF WATER RESOURCES.....	5
5.2. PREVIOUS ENVIRONMENTAL REPORTS AND INVESTIGATIONS.....	5
6.0 SUMMARY AND CONCLUSIONS.....	11
7.0 LIMITATIONS.....	12
8.0 SELECTED REFERENCES.....	13

Tables

Table 1 -- 1988 UST Pit Soil Sample Analyses

Table 2 -- 1989 Preliminary Soil Assessment

Table 3 - 1998 Soil Boring Sample Analysis

Illustrations

Figure 1 -- Site Location Map

Figure 2 -- Site Plan

Figure 3 -- Site Contour Map

City of Alameda Public Works Department
Alameda, California
Figure 4 – 1989 Boring Location Map

March 14, 2000
Project No. 400301-02

Appendices

Appendix A – Water Well Drillers Reports

California Department of Transportation
Altaville Maintenance Station, Altaville, California

February 21, 2000
Project No. 103872-02

1. INTRODUCTION AND SCOPE OF SERVICES

This report summarizes the results of an investigation done to comply with the Alameda County Environmental Health Services Request for Closure requirements for the site at 2756 Main Street, in the City and County of Alameda, California. (Figure 1). Our scope of services included the following:

1. Determine the distance to production wells utilized for municipal, domestic, agriculture, industry and other purposes within 2,000 feet of the site.
2. Prepare site map, to scale, showing locations of former and existing tank systems, elevation contours, gradients, and nearby surface waters, buildings, streets, and subsurface utilities
3. Determine high and low ground water levels (below ground surface).
4. Prepare tabulated results of all sampling and analyses.
5. Prepare mass balance calculation of the substance treated versus substance remaining.
6. Discuss rationale why conditions remaining at the site will not adversely impact water quality, health, or other beneficial uses.

2. SITE BACKGROUND

The subject site is located near the northeast corner of Main Street and Singleton Avenue in the city and County of Alameda, California. The site was formerly occupied by a gas station, which reportedly contained up to seven UST's, and was most recently occupied by Dale's Bar.

Two 6,000-gallon gasoline USTs, one 550-gallon oil UST and a hydraulic lift were removed from the former Dale's Bar site in December 1999. Subsequent on site soil and groundwater sampling and analysis indicated detection's of total extractable petroleum

City of Alameda Public Works Department
Alameda, California

March 14, 2000
Project No. 400301-02

hydrocarbons as diesel (TEPH-D) and motor oil (TEPH-MO), total petroleum hydrocarbons as gas (TPH-G) and benzene, toluene, ethylbenzene and total xylenes (BTEX).

3. PHYSICAL SETTING

3.1 Site Geology

Fill and bay deposits were encountered during a subsurface evaluation completed by Ninyo & Moore in March 2000. The fill was encountered to depths of up to five feet bgs. The fill generally consisted of brown to orange, damp to saturated, sand and gravels, with scattered bricks and asphalt. The bay deposits generally consisted of loose to medium dense, fine to coarse sand with gravel, and gray and dark brown, moist to saturated, soft to stiff clay and fat clay, with little fine to medium sand and silt and scattered shells.

3.2 Hydrology

Based on the San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) Basin Plan, the site is located in the East Bay Plain Groundwater Basin. Existing beneficial uses for groundwater in the site vicinity include municipal and domestic water supply, agricultural supply, and industrial service and process supply.

The nearest primary surface water to the site is the Oakland Inner Harbor, approximately 2000 feet north of the site. Existing beneficial uses for surface water in the site vicinity include ocean, commercial, and sport fishing, estuarine habitat, industrial service supply, fish migration, navigation, preservation of rare and endangered species, contact and non-contact water recreation, shellfish harvesting, and wildlife habitat.

Based on the topography of the site vicinity, groundwater flows generally to the north and northwest. During our geoprobe activities at the site, the depth to groundwater was encountered from 3 inches to 1-foot bgs in five of the borings (B-6 through B-9 and P-3)

An SRS was performed to locate domestic, industrial or agricultural wells and surface waters within a 2,000-foot radius of the site.

City of Alameda Public Works Department
Alameda, California

March 14, 2000
Project No. 400301-02

4.0 SENSITIVE RECEPTORS SURVEY (SRS)

An SRS was performed to locate domestic, industrial or agricultural wells and surface waters within a 2,000-foot radius of the site.

4.1. Water Well Inventory

Ninyo & Moore conducted a water well inventory within a 2,000-foot radius of the site to identify potential water well users. The water well inventory consisted of a reconnaissance of the site vicinity, inquiries to the Alameda County Public Works, Water Resources Division (ACPW) and the State of California Department of Water Resources (DWR).

4.1.1. Site Reconnaissance

Ninyo & Moore personnel within the immediate site area performed a site reconnaissance. Two groundwater-monitoring wells were visually located along Main street, approximately 1,300 to 1,400 feet south of the site. Two other monitoring wells were located on the former Navy Exchange Fuel Station property, located approximately 1,500 feet southwest of the site. A drainage

4.1.2. Alameda County Public Works, Water Resources Division (ACPW)

ACPW was contacted regarding wells within a 2000-foot radius of the site. They had not responded prior to the distribution of this report.

4.1.3. State of California Department of Water Resources (DWR)

Ms. Anne Roth of the DWR was contacted regarding wells within the 2,000-foot site radius. According to Ms. Roth the DWR had records of up to 40 wells located within the designated area. Information of the wells had not arrived prior to the distribution of this report.

4.2. Surface water Inventory

The nearest surface water observed during our site reconnaissance was a drainage ditch located on the east border of Main Street, approximately 100 feet south of the site. A

City of Alameda Public Works Department
Alameda, California

March 14, 2000
Project No. 400301-02

second drainage ditch was located approximately 500 feet north of the site. The Oakland Inner Harbor waterway was located approximately 2,000 feet north of the site.

5.0. SUMMARY OF PREVIOUS ENVIRONMENTAL INVESTIGATIONS

Several environmental investigation reports were prepared for the site regarding the former USTs and their impact on site. A report summary is listed below.

ACC Environmental Consultants, Underground Storage Tank Removal Report for 2756 Main Street, Alameda, California, January 25, 2000

Two 6,000-gallon gasoline USTs and one 550-gallon oil UST were removed from the former Dale's Bar site in December 1999. Subsequent on site groundwater sampling and analysis indicated detection's of TEPH-D, TEPH-MO, TPH-G and BTEX. Groundwater samples collected indicated the highest concentrations of TPH-G at 100 milligrams per liter (mg/l) from a sample collected near the southwestern corner of the site and TPH-D at 240 mg/l collected from a sample in the northeast corner of the site. Toluene, ethylbenzene and total xylenes (1.7 mg/l, 0.83 mg/l, 2.0 mg/l, respectively) were also detected from samples taken in the northeast corner of the site. MTBE was not detected in groundwater samples collected.

Stockpiled soil from the former gasoline UST tank pit area was stored east of the former gasoline USTs and analyzed. Concentrations of TPH-G, TEPH-D, and TEPH-MO were detected in soil samples collected from the stockpile. The highest concentration of TPH-G, TEPH-D, and TEPH-MO were 580 mg/kg, 64 mg/kg and 240 mg/kg, respectively. Minor concentrations of toluene, ethylbenzene, and total xylenes were detected at 0.95 mg/kg, 0.63 mg/kg, and 1.6 mg/kg, respectively. MTBE was analyzed for and not detected.

This report concluded that TPH-G had localized impact on soil and groundwater in the vicinity of the former USTs. Indications were that the impact is localized due to the fine-grained nature of the subsurface soils, and that future use of the site would increase natural attenuation processes.

City of Alameda Public Works Department
Alameda, California

March 14, 2000
Project No. 400301-02

The report recommended that no further investigation was warranted in the vicinity of the two former gasoline USTs, that the residual concentrations of petroleum hydrocarbons naturally degrade, and that the site be evaluated for site closure in regards to the former USTs.

ACC Environmental Consultants, Underground Storage Location Oversight report – Supplement Dale's Bar, Main Street and Singleton Avenue, Alameda, California, August 19, 1999

One soil sample and five groundwater samples (SB-1 through SB-5) were collected from different locations on site on August 13, 1999. SB-1 and SB-2 were located south of the former USTs, while SB-3 and SB-5 were located east of the former USTs. SB-4 was located on the far east portion of the site, east of the former railroad tracks. The groundwater samples were analyzed for TPH-G, TEPH-D, TEPH MO and BTEX. TPH-G and TEPH-D were detected in SB-1 at 100 µg/l and 230 µg/l, respectively. TEPH-D was detected in SB-4 and SB-5 at 150 µg/l and 240 µg/l and toluene, ethylbenzene and total xylenes were detected at 1.7 µg/l, 0.83 µg/l and 2.0 µg/l in samples collected from SB-5

A soil pile was sampled near the site (there was no indication in this report where exactly the soil pile was) for Cam 17 Metals. According to the report the sample was well below the residential preliminary remediation goals (PRGs) for CAM 17 Metals set by the California EPA, Region IX.

Conclusions indicated that minor, residual impact to the soil and groundwater remained at the site and the primary constituent of concern was likely degraded motor oil as diesel range hydrocarbons which possess a low migration potential. They also concluded that the zone of impacted soil is restricted to a zone immediately adjacent to the former USTs

ACC Environmental Consultants, Underground Storage Tank Location Oversight Report, Dales Bar, Alameda, California, May 20, 1999

ACC Environmental performed excavation oversight and soil sampling May 5 to May 10, 1999. Trenches were dug adjacent to a concrete pad to determine the locations of

City of Alameda Public Works Department
Alameda, California

March 14, 2000
Project No. 400301-02

eight suspected USTs and one to two hydraulic lifts. Two USTs and a hydraulic lift were discovered during the excavations. A subsurface vault was discovered south of the concrete pad and identified as an abandoned sewer main or oil water separator. Soil samples were collected from approximately 5-foot bgs and analyzed for TPH-G, TEPH-D, TEPH-MO, BTEX, and CAM 17 Metals.

Soil samples analyzed indicated the highest concentrations [130 milligrams per kilogram (mg/kg), 610 mg/kg, and 2,800 mg/kg] of TPH-G, TEPH-D, and TEPH-MO, respectively, were detected from samples collected near the hydraulic lift. The highest concentrations of benzene and toluene (0.063 mg/kg and 0.089 mg/kg, respectively) were detected near the former gasoline USTs. The highest concentrations of ethylbenzene (2.0 mg/kg) and total xylenes (1.9 mg/kg) were also detected near the hydraulic lift.

This report concluded that two areas of impact were identified as moderate impact zones created from petroleum hydrocarbons believed to have originated from the former USTs.

6.0. HISTORICAL SUMMARY- SOIL REMEDIATION

According to the documents available for review from the City of Alameda, no soil or groundwater remediation has occurred on site.

7.0 SUBSURFACE EVALUATION

Representatives of our firm observed a subsurface evaluation of 2756 Main Street on February 25, 2000. The subsurface evaluation included the excavation, sampling, and logging of four geoprobe and one hand auger exploratory borings (Figure 2). The purpose of the borings was to evaluate the subsurface soil conditions and to obtain soil and groundwater samples for laboratory testing. The approximate locations of the test borings are indicated on the Boring Location Map (Figure 2)

Four borings (B6 through B8) were advanced to depths ranging from 4.0 to 10.0 feet bgs with a truck-mounted geoprobe using 1-1/4-inch diameter stainless steel rods. One boring (B9) was

City of Alameda Public Works Department
Alameda, California

March 14, 2000
Project No. 400301-02

hand augured to three feet bgs using a four -inch diameter stainless steel hand auger. Groundwater was encountered at depths ranging from 3-inches to 1-foot bgs. Relatively undisturbed soil samples were collected from the four-geoprobe borings at approximately 3 feet bgs in clear acetate liners, and capped with Teflon tape and plastic caps. A soil sample was collected from boring P9 by excavating the soil from a depth of two-foot bgs with the hand auger and placing the sample into a six-inch long and two-inch diameter brass tube. The tube was sealed with Teflon tape and plastic caps. Groundwater samples were collected using a 3/4-inch disposable bailer immediately subsequent to the collection of soil samples

Samples collected were designated according to the whether they were soil (S) or groundwater (W), the boring they were collected from (SB,WB6 through SB,WB9) and the depth they were collected from (ex. SB6-3 means the sample was collected at three-foot bgs). The samples collected for the Public Works Department were designated "B"(ex. SB6-3) and the samples for Telecom were designated "P" (ex. SP3-3) Subsequent to sampling, the borings were back-filled with grout and were completed to match the existing ground surface. Borings B6 through B9 were advanced per the request of the City of Alameda public works Department. Boring P3 was advanced per the request of Alameda Telecom.

8.0. SOIL AND GROUNDWATER ENVIRONMENTAL ASSESSMENT

Soil and groundwater samples were delivered to Associated Laboratories, a state-certified analytical laboratory. Selected soil and groundwater samples were analyzed for some or all of the following: TPH-D, TPH-MO and TPH-G by modified EPA test method 8015M (with silica gel cleanup), BTEX and MTBE using EPA Method 8020, Cam 17 metals using EPA Method 6010, and VOC's using EPA test method 8260B. Copies of the laboratory report, including quality assurance/quality control and chain-of custody documentation is presented in Appendix C

City of Alameda Public Works Department
Alameda, California

March 14, 2000
Project No. 400301-02

9.0 SOIL AND GROUNDWATER SAMPLE RESULTS

9.1. Soil Samples

TPH-G, TPH-D, TPH-MO, BTEX or MTBE was not detected in any of the soil samples collected on site. Additionally, VOCs were analyzed for in sample SB9-2 and not detected. Various concentrations of different metals were detected in most soil samples collected on site. Metals analyzed for included antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, molybdenum, mercury, nickel, selenium, silver, thallium, vanadium and zinc. None of the metals detected exceeded Title 22 Total Threshold Limit Concentrations (TTLC) which are used as a regulatory detection limit threshold.

2 samples exceed 10xSTLC

9.2 Groundwater Samples

TPH-D and TPH-G was detected in water sample WP-3, at 4,500 micrograms per liter ($\mu\text{g/l}$) and 5,100 $\mu\text{g/l}$, respectively. TPH-MO was not detected in any groundwater samples collected. Toluene, ethylbenzene and total xylenes were detected in sample WP-3 at 1 $\mu\text{g/l}$, 13 $\mu\text{g/l}$, and 2 $\mu\text{g/l}$, respectively.

Toluene, total xylenes and MTBE were detected in sample WB-09 at 1 $\mu\text{g/l}$, 2 $\mu\text{g/l}$, and 6 $\mu\text{g/l}$, respectively.

Metals analyzed for included antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, molybdenum, mercury, nickel, selenium, silver, thallium, vanadium and zinc. Various concentrations of different metals were detected in all water samples collected on site. Samples collected where metal concentrations exceeded Soluble Threshold Limit Concentrations (STLC) included lead detected in sample WP-3 (13.5 $\mu\text{g/l}$), WB-06 (13.0 $\mu\text{g/l}$), WB-08 (13.5 $\mu\text{g/l}$), and WB-09 (15.4 $\mu\text{g/l}$)

10.0 UTILITY TRENCHES *- show on site plan*

A study of utility trenches located in the site area was conducted. Sewer, storm-drain and water line maps from the Alameda County Public Works Department were reviewed. Subsurface water lines appear below Singleton Street and do not appear to be in contact to the site. According to city sewer maps, a stormdrain and sewer line runs through the east end of the site in a north south

City of Alameda Public Works Department
Alameda, California

March 14, 2000
Project No. 400301-02

direction. Our site reconnaissance indicated that gas pipes run under Singleton Street and do not contact the site. Markings adjacent to a telephone pole located on the northeast corner of Singleton and Main Streets indicated possible underground electrical piping located beneath the site.

11. SUMMARY AND CONCLUSIONS

- Soil samples collected from recent subsurface investigations at the site indicate that any impacted soil on the site is located in a zone adjacent to the former USTs. Soil samples collected by Ninyo & Moore around the perimeter of the site indicate non-detect concentrations of petroleum hydrocarbons, BTEX, MTBE, and VOC constituents
- Groundwater Analysis from sampling completed in December 1999 and February 2000 indicate minor concentrations of TPH-G, TPH-D, BTEX, and MTBE around the perimeter of the site. No other VOCs were detected from samples collected on site.
- Indications from other studies done on the site were that the impact is localized due to the fine-grained nature of the subsurface soils, and that future use of the site would increase natural attenuation processes.

12. RECOMMENDATIONS

The results of this investigation indicate that petroleum hydrocarbons and VOCs in the soil and groundwater have been adequately defined. Based on no detection's of petroleum hydrocarbons and VOCs in soil samples collected and the very minor amounts of petroleum hydrocarbons and VOCs detected in groundwater samples collected on site, it is suggested that continued natural attenuation of the constituents is likely. The possibility of the constituents impacting off site locations is also unlikely due to the fine-grained nature of the subsurface soils. Additionally, the lack of a MTBE plume designates the site as a "Low Risk Groundwater Site" and fulfills the "no further action" status as defined by the California State Water Board's Draft Policy for Cleanup of Petroleum Hydrocarbon Releases dated October 29, 1996 and the fine grained nature of the subsurface soils. Additional Site investigations do not appear to be warranted at this time and Ninyo & Moore recommends that the site be closed

City of Alameda Public Works Department
Alameda, California

March 14, 2000
Project No. 400301-02

13. LIMITATIONS

The environmental services described in this report have been conducted in general accordance with current regulatory guidelines and the standard-of-care exercised by environmental consultants performing similar work in the project area. No other warranty, expressed or implied, is made regarding the professional opinions presented in this report. Please note that this study did not include an evaluation of geotechnical conditions or potential geologic hazards.

Our conclusions, recommendations and opinions are based on an analysis of the observed site conditions and the referenced literature. It should be understood that the conditions of a site could change with time as a result of natural processes or the activities of man at the site or nearby sites. In addition, changes to the applicable laws, regulations, codes, and standards of practice may occur due to government action or the broadening of knowledge. The findings of this report may, therefore, be invalidated over time, in part or in whole, by changes over which Ninyo & Moore has no control.

This document is intended to be used only in its entirety. No portion of the document, by itself, is designed to completely represent any aspect of the project described herein. Ninyo & Moore should be contacted if the reader requires any additional information or has questions regarding the content, interpretations presented, or completeness of this document.

City of Alameda Public Works Department
Alameda, California

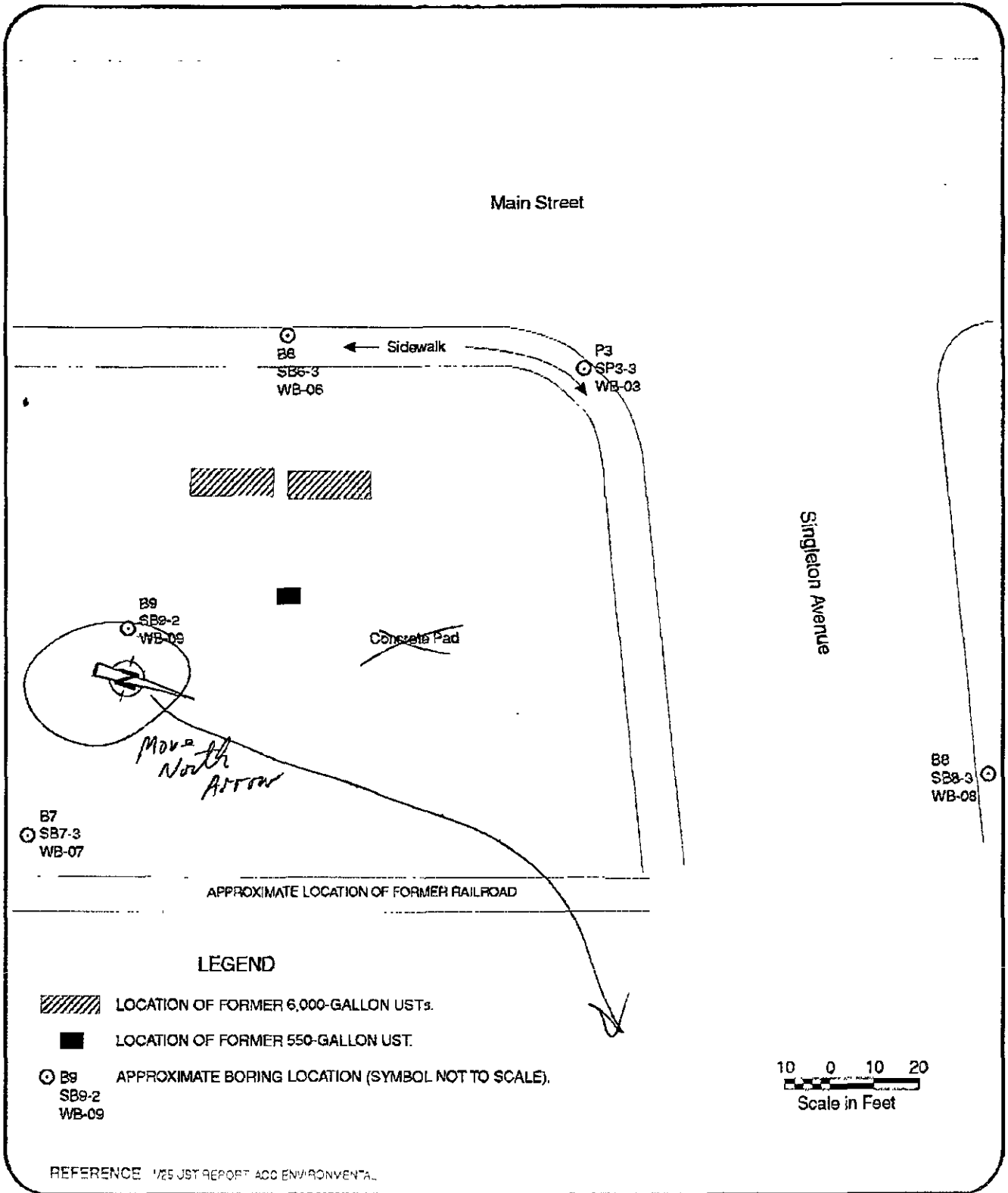
March 14, 2000
Project No. 400301-02

14. SELECTED REFERENCES

ACC Environmental Consultants, Underground Storage Tank Removal Report for 2756 Main Street, Alameda, California, January 25, 2000




ACC Environmental Consultants, Underground Storage Location Oversight report – Supplement Dale’s Bar, Main Street and Singleton Avenue, Alameda, California, August 19, 1999

ACC Environmental Consultants, Underground Storage Tank Location Oversight Report, Dales Bar, Alameda, California, May 20, 1999.



C:\DRAWINGS\15\150102\BORING

LEGEND

-  LOCATION OF FORMER 6,000-GALLON USTs.
-  LOCATION OF FORMER 550-GALLON UST.
-  B9 APPROXIMATE BORING LOCATION (SYMBOL NOT TO SCALE).
- SB9-2
- WB-09

REFERENCE: UST REPORT AND ENVIRONMENTAL

BORING LOCATION MAP

2756 MAIN ST.
ALAMEDA, CA

Ninyo & Moore

PROJECT NO.
400301-02

DATE
03/00

FIGURE
2

TABLE 1
SOIL SAMPLE ANALYTICAL DATA-PETROLEUM HYDROCARBONS AND VOLATILE ORGANIC COMPOUNDS (VOCs)
2756 MAIN STREET, ALAMEDA, CALIFORNIA

Boring	Date	TPH (mg/Kg)			BTEX (µg/l)				MTBE (mg/Kg)
		Gas	Diesel	Motor Oil	Benzene	Toluene	Ethylbenzene	Total Xylenes	
SP3-3*	2/25/00	ND	ND	ND	ND	ND	ND	ND	ND
SB6-3	2/25/00	ND	ND	ND	ND	ND	ND	ND	ND
SB7-3	2/25/00	ND	ND	ND	ND	ND	ND	ND	ND
SB8-3	2/25/00	ND	ND	ND	ND	ND	ND	ND	ND
SB9-2*	2/25/00	ND	ND	ND	ND	ND	ND	ND	ND

mg/Kg milligrams per Kilogram

TPH: Total Petroleum Hydrocarbons

BTEX: Benzene, Toluene, Ethylbenzene, Total Xylenes

MTBE: Methyl tertiary butyl ether

* Volatile organic compounds (VOCs) were analyzed for and not detected.

MAR-15-00 WED 03:00 PM NINYO&MOORE

FAX: 15106335646

PAGE 18

TABLE 2
SOIL SAMPLE ANALYTICAL DATA-METALS
2756 MAIN STREET, ALAMEDA, CALIFORNIA

BORING	DATE	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Molybdenum	Mercury	Nickel	Selenium	Silver	Thalium	Vanadium	Zinc
SP3-3	2/25/00	ND	7.43	433	ND	3.14	56.1	37.9	13.7	7.17	5.71	0.13	46.5	ND	ND	5.26	184	50.2
SB6-3	2/25/00	ND	7.41	79.4	ND	0.352	38.1	10.5	35.5	813	2.67	0.13	39.6	ND	ND	4.75	45	90.9
SB7-3	2/25/00	ND	6.87	77.5	ND	ND	65.5	5.9	52.5	22.9	2.8	0.47	43.8	0.874	ND	3.02	44.8	49.2
SB8-3	2/25/00	1.48	127	165	ND	2.06	23.7	11.1	90.3	68.1	1.99	0.36	39.7	1.56	ND	3.02	44.4	112
SB9-2	2/25/00	ND	3.89	62.5	ND	ND	31.7	5.21	18.1	23.9	1.79	0.33	28.1	0.531	ND	1.59	26	102

Notes
Soil sample units in milligrams per liter
ND non detect

? for soil samples?

u
>10xSTLC

TABLE 3
WATER SAMPLE ANALYTICAL DATA-TOTAL PETROLEUM HYDROCARBONS AND VOLATILE ORGANIC COMPOUNDS (VOCs)
2756 MAIN STREET, ALAMEDA, CALIFORNIA

Boring	Date	TPH (µg/l)			BTEX (µg/l)				MTBE (µg/l)
		Gas	Diesel	Motor Oil	Benzene	Toluene	Ethylbenzene	Total Xylenes	
WP-3*	2/25/00	5,110	4,500	ND	ND	1	13	2	ND
WB-06	2/25/00	ND	ND	ND	ND	ND	ND	ND	ND
WB-07	2/25/00	ND	ND	ND	ND	ND	ND	ND	ND
WB-08	2/25/00	ND	ND	ND	ND	ND	ND	ND	ND
WB-09	2/25/00	ND	ND	ND	ND	1	ND	2	6

TPH: Total petroleum hydrocarbons

BTEX: Benzene, Toluene, Ethylbenzene, Total Xylenes

MTBE: Methyl tertiary butyl ether

µg/l micrograms per liter

* VOCs analyzed for and detected included isopropylbenzene, naphthalene, n-butylbenzene, and sec-butylbenzene

TABLE 4
 WATER SAMPLE ANALYTICAL DATA-METALS
 2766 MAIN STREET, ALAMEDA, CALIFORNIA

BORING	Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Molybdenum	Mercury	Nickel	Selenium	Silver	Thalium	Vanadium	Zinc
WP-3	2/25/00	ND	3.88	18.8	ND	0.627	5.22	1.93	8.73	13.5	ND	0.039	7.44	ND	ND	0.483	5.65	16.3
WB-06	2/25/00	ND	0.735	7.64	ND	0.051	2.99	0.856	3.78	13	0.265	0.039	2.99	0.071	ND	0.149	3.32	12
WB-07	2/25/00	0.491	0.187	3.23	0.02	ND	0.883	0.276	1.51	1.68	0.156	0.01	1.42	ND	ND	ND	0.868	7.69
WB-08	2/25/00	0.417	1.15	2.56	ND	0.044	1.55	0.281	10.2	13.5	0.124	0.049	1.48	0.045	ND	0.073	1.02	12.7
WB-09	2/25/00	0.525	1.73	15.2	ND	0.399	2.78	0.718	8.89	15.4	0.201	0.02	3.16	0.091	ND	0.184	2.86	52.1

Notes

Soil samples units in milligrams per liter (mg/l)

ND non detect

?