ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

RO0000287

January 14, 2002

Mr. Wali Waziri
City of Alameda
950 West Mall Square, #110
Alameda, CA 94501-7552

Re: Fuel Leak Site Case Closure for 2756 Main Street, Alameda, CA

Dear Mr. Waziri:

This letter transmits the enclosed underground storage tank (UST) case closure letter in accordance with Chapter 6.75 (Article 4, Section 25299.37[h]). The State Water Resources Control Board adopted this letter on February 20, 1997. As of March 1, 1997, the Alameda County Environmental Protection Division is required to use this case closure letter for all UST leak sites. We are also transmitting to you the enclosed case closure summary. These documents confirm the completion of the investigation and cleanup of the reported release at the subject site. The subject fuel leak case is closed.

SITE INVESTIGATION AND CLEANUP SUMMARY

Please be advised that the following conditions exist at the site:

- up to 130ppm TPH as gasoline, and 570ppm TPH as diesel exists in soil beneath the site at 4 to 5 feet bgs;
- up to 5,100ppb TPHg, 5,100ppb TPHd, and 5.0pbb benzene exists in groundwater beneath the site; and,
- a site safety plan must be prepared in the event excavation/trenching is proposed in the vicinity of residual soil and groundwater contamination.

If you have any questions, please contact me at (510) 567-6762.

eva chu
Hazardous Materials Specialist

enlosures: 1. Case Closure Letter 2. Case Closure Summary

c: Vivian Day, Planning Department, 950 West Mall Square, Alameda, CA 94501
files (alameda-mainst-7)

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REMEDIAL ACTION COMPLETION CERTIFICATION

RO-287 - 2756 Main Street, Alameda, CA
(3 underground storage tanks removed on December 6, 1999)

January 14, 2002

Mr. Wali Waziri
City of Alameda
950 West Mall Square, #110
Alameda, CA 94501-7552

Dear Mr. Waziri:

This letter confirms the completion of site investigation and corrective action for the underground storage tanks formerly located at the above-described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground storage tanks are greatly appreciated.

Based on information in the above-referenced file and with the provision that the information provided to this agency was accurate and representative of site conditions, this agency finds that the site investigation and corrective action carried out at your underground storage tank site is in compliance with the requirements of subdivisions (a) and (b) of Section 25299.37 of the Health and Safety Code and with corrective action regulations adopted pursuant to Section 25299.77 of the Health and Safety Code and that no further action related to the petroleum release(s) at the site is required.

This notice is issued pursuant to subdivision (h) of Section 25299.37 of the Health and Safety Code. Please contact our office if you have any questions regarding this matter.

Sincerely,

Mee Ling Tung, Director

c: Chuck Headlee, RWQCB
Dave Deaner, SWRCB
email: Ken Rankin, Fire Prevention Bureau

files-ec (alameda-mainst-6)

RB# 01-2543

CALIFORNIA REGIONAL WATER

JAN 03 2002

QUALITY CONTROL BOARD

CASE CLOSURE SUMMARY
Leaking Underground Fuel Storage Tank Program

I. AGENCY INFORMATION

Date: December 28, 2001

Agency name: **Alameda County-HazMat**
City/State/Zip: **Alameda, CA 94502**
Responsible staff person: **Eva Chu**

Address: **1131 Harbor Bay Pkwy**
Phone: **(510) 567-6700**
Title: **Hazardous Materials Spec.**

JAN 14 2002

II. CASE INFORMATION

Site facility name: **City of Alameda**
Site facility address: **2756 Main Street, Alameda, CA 94501**
RB LUSTIS Case No: **N/A**
Local Case No./LOP Case No.: **RO0000287**
URF filing date: **6/12/2000**
SWEEPS No: **N/A**

Responsible Parties:	Addresses:	Phone Numbers:
City of Alameda c/o Wali Waziri	950 West Mall Square, #110 Alameda, CA 94501-7552	(510) 749-5853

Tank No:	Size in gal.:	Contents:	Closed in-place or removed?:	Date:
1	6,000	Gasoline	Removed	12/6/99
2	6,000	Gasoline	"	"
3	550	Waste Oil	"	"

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and type of release: **Unknown**
Site characterization complete? **YES**
Date approved by oversight agency: **5/25/00**
Monitoring Wells installed? **No**
Proper screened interval? **NA**
Highest GW depth below ground surface: **Groundwater encountered as shallow as 3 inches bgs in soil borings advanced at site.**
Flow direction: **Assumed N to NW**
Most sensitive current use: **Wetlands**
Are drinking water wells affected? **No** Aquifer name: **NA**
Is surface water affected? **No** Nearest affected SW name: **NA**
Off-site beneficial use impacts (addresses/locations): Unknown
Report(s) on file? **YES** Where is report(s) filed? Alameda County
1131 Harbor Bay Pkwy
Alameda, CA 94502

Treatment and Disposal of Affected Material:

Material	Amount (include units)	Action (Treatment or Disposal w/destination)	Date
Tank	3 USTs	Transported to Sims Metals in Richmond, CA	12/99
Soil		Re-used to backfill excavation	
Groundwater	1000 gallons	Disposed at Seaport Environmental in Redwood City, CA	12/99
	17,000 gal.	Sprayed across site for dust suppression	12/99

Maximum Documented Contaminant Concentrations - - Before and After Cleanup

Contaminant	Soil (ppm)		Water (ppb)	
	Before[1]	After[2]	Before[3]	After[4]
TPH (Gas)	130		11,000	5,100
TPH (Diesel)	570		29,000	4,500
Benzene	<0.62		310	5.0
Toluene	<0.62		760	5.0
Ethylbenzene	2.0		230	3.0
Xylenes	1.9		1,800	10
MTBE	ND		NA	6
Heavy Metals Pb	816		41,600	<5.0[5]
TOG/Motor Oil	2,800		62,000	ND
Other Naphthalene			4.1	
HVOCs			ND	
TDS				2,900ppm

NOTE: 1 Soil samples collected from soil borings advanced around USTs, 5/99.
2 no overexcavation of UST pits.
3 Grab water samples collected from w/in gasoline tanks prior to their removal, 12/99. TOG/MO from waste oil tank pit. Pb from exploratory borings advanced in 2/00 from an unfiltered sample.
4 Grab water from exploratory borings advanced in 2/00, except for Pb. Motor oil analysis only conducted on samples collected from perimeter of property, not adjacent to waste oil pit.
5 Pb results from hand-augered boring advanced in 2/01. Water was prefiltered in field. Other metal results from 2/00 include ND for Cd and Cr, 6 8ppb Ni, and 3.9ppb Zn.

IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? _____
Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? _____
Does corrective action protect public health for current land use? **YES**
Site management requirements: **A site health and safety plan must be prepared for construction workers in the event excavation/trenching is proposed in the vicinity of residual soil and groundwater contamination.**
Should corrective action be reviewed if land use changes? **YES**
Monitoring wells Decommissioned: **NA**
Number Decommissioned: **NA**
List enforcement actions taken: **ACHCS recommended administrative action (ACL) be taken by SF-RWQCB, 2/28/00**
List enforcement actions rescinded: **City of Alameda opted to develop a supplemental environmental enhancement project in lieu of payment of liability to the State's Cleanup and Abatement Account.**

V. LOCAL AGENCY REPRESENTATIVE DATA

Name: **Eva Chu** Title: **Haz Mat Specialist**

Signature: Eva Chu Date: 12/28/01

Reviewed by

Name: **Barney Chan** Title: **Haz Mat Specialist**

Signature: Barney Chan Date: 12/28/01

Name: **Scott Seery** Title: **Haz Mat Specialist**

Signature: Scott Seery Date: 12-28-01

VI. RWQCB NOTIFICATION

Date Submitted to RB: 1/4/02 RB Response: Concur

RWQCB Staff Name: **Chuck Headlee** Title: **AEG**

Signature: Chuck Headlee Date: 1/3/02

VII. ADDITIONAL COMMENTS, DATA, ETC.

The site was formerly a gas station and most recently occupied by Dale's Bar. All building structures have been demolished, including the concrete pad. The site is currently developed as a wetlands/park to accommodate and control tidal surge that historically floods this area.

In May 1999 exploratory trenching was performed in attempts to locate suspect USTs and hydraulic lifts that were formerly used at the site. Trenching operations identified two USTs located between the concrete pad and Main Street. Each tank had a capacity of approximately 6,000 gallons. Further trenching identified a hydraulic lift buried near the southwest corner of the concrete pad, and a sewer main or oil/water separator located south of the concrete pad. (See Fig 1, 2)

Soil samples (SS-1 through SS-13) were obtained from several points during excavation activities at depths of 4 to 5 feet bgs. Soils samples (SS-1, SS-2, and SS-6 through SS-10), located near the gasoline fuel tanks were analyzed for TPHg and BTEX. Select soil samples (SS1,2, SS-3, SS-4, SS-11 through SS-13, and Vault-1) were analyzed for TPHd, TPHmo, and CAM 17 Metals. Up to 130ppm TPHg, 610ppm TPHd, 2,800ppm TPHmo, and low levels of BTEX were identified in the soil samples. Samples SS1, SS2, SS10, SS12, and SS12 were composited prior to analysis for CAM metals. Metal concentrations were within geogenic levels. (See Table 1, 2)

In August 1999, five exploratory borings (SB-1 through SB-5) were advanced to collect soil (SB3-5) and grab groundwater (SB-1, SB-4 and SB-5) samples. First groundwater was encountered at 8 to 10 feet bgs. Groundwater samples contained up to 100ppb TPHg, and 240ppb TPHd. BTEX, MTBE, and TPHmo concentrations were low or below the laboratory detection limits. The soil sample SB3-5 did not contain detectable levels of TPHd or TPHmo. (See Fig 3, Table 3 and 4)

In December 1999, the two gasoline USTs were removed. The tanks were partially filled with sand, suggesting that the tanks were previously closed-in-place. A third tank (550-gallon waste oil) was discovered approximately 20 feet east of the gasoline tanks and was also removed. Before the gasoline tanks were removed, two grab water samples were collected from within each gasoline UST. These water samples contained up to 11,000ppb TPHg, 310ppb benzene, 2,900ppb TPHd and 2,900ppb TPHmo. Approximately 7,000 gallons of water was pumped from the fuel tanks and excavation into a 20,000 gallon holding tank. (See Fig 4, Table 5)

Groundwater from the waste oil tank pit contained 1,200ppb TPHg, 29,000ppb TPHd, 62,000ppb TPHmo and low to ND levels of BTEX. HVOCs and SVOCs were not detected, with the exception of 4.1ppb naphthalene. After the waste oil tank was removed, approximately 1,100 gallons of water was pumped from the waste oil tank excavation and hauled to Seaport Environmental in Redwood City, CA for disposal. (See Table 6)

After the tanks were removed, the excavations were backfilled with the stockpiled soil and soil imported from an adjacent site. The stockpiled soil contained up to 580ppm TPHg, 240ppm TEPHmo, 64ppm TEPHd, <3.1ppm benzene, 4.0ppm toluene, <3.1ppm ethylbenzene and xylenes. During backfilling activities, approximately 10,000 gallons of water were pumped from the gasoline UST excavation and sprayed across the site for dust suppression. In addition, the 7,000 gallons of water stored in the holding tank were also used for dust suppression. This activity (using contaminated groundwater for dust suppression) was not considered acceptable practice nor was it approved by this agency or the RWQCB. For this reason, this agency recommended that the RWQCB take administrative civil action against the City of Alameda and/or other responsible parties.

In February 2000, four geoprobes (B6 through B8) and four hand-augered borings (B9 through B12) were advanced at the site. Select soil and groundwater samples were analyzed for some or all of the following: TPHg, TPHmo, TPHd (with silica gel cleanup), BTEX, MTBE, CAM 17 metals, and VOCs (using Method 8260). Low or non-detect levels of TPH, BTEX and VOCs were detected in the soil samples. Lead concentrations were as high as 813ppm. Grab groundwater samples contained up to 4,500ppb TPHd, 5,100ppb TPHg, and low or non-detect levels of BTEX, MTBE, and VOCs. Unfiltered groundwater samples contained up to 41,600ppb lead. When the laboratory filtered and re-analyzed the water samples, up to 9,300 ppb dissolved lead was identified. (See Fig 5, Table 7, 8, 9 and 10) In February 2001, a hand-augered boring, WB-13, was advanced in the vicinity where elevated lead was detected in groundwater. The water sample was pre-filtered in the field. Dissolved lead was not detected above the laboratory detection limit of 5ppb. (See Fig 6, Table 11)

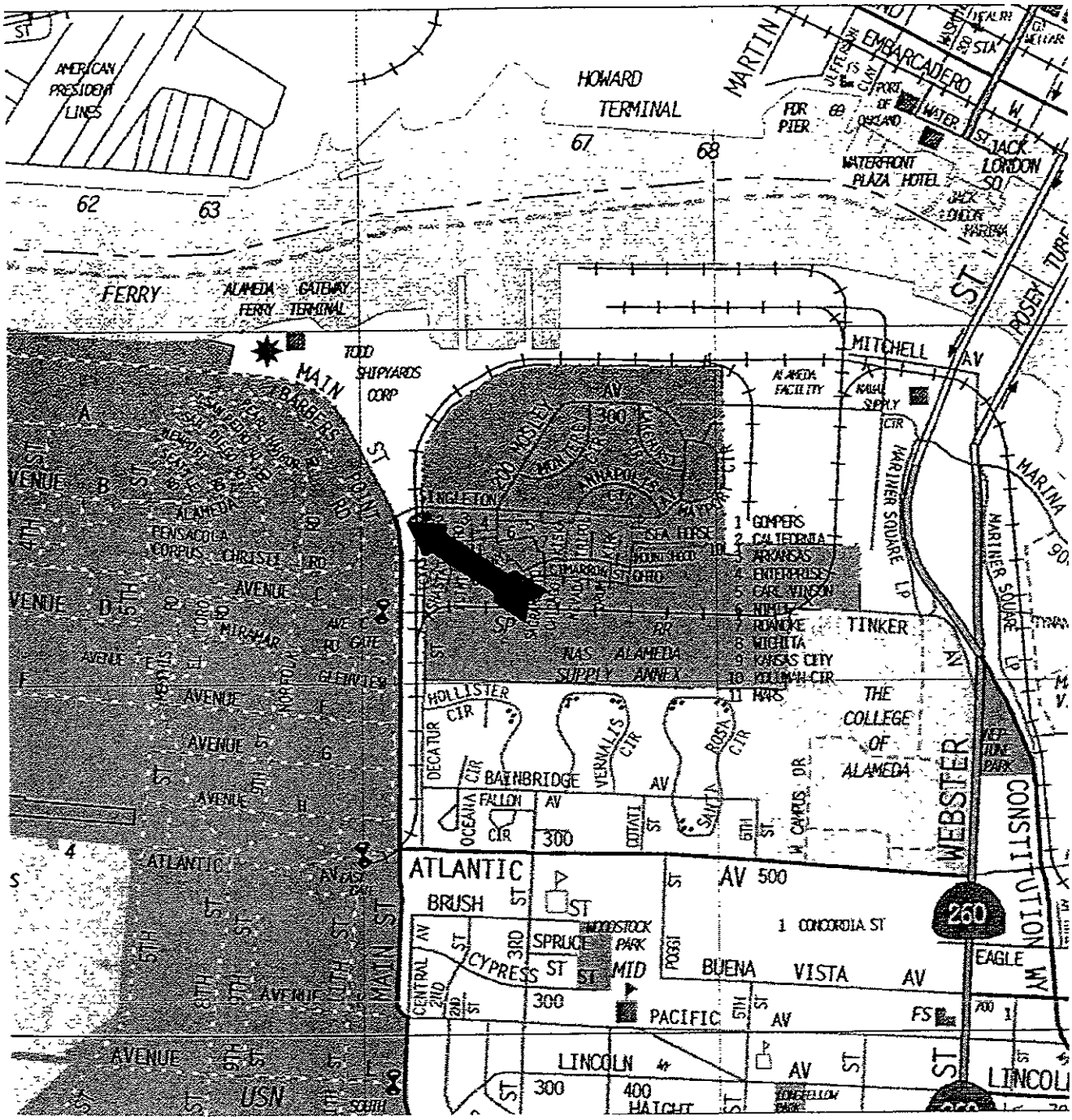
Elevated lead concentration in soil and groundwater was also noted offsite, in the City of Alameda's Greenway development project. Since lead appears to be a regional problem, and since the site is planned as a wetland project, oversight of the metals issue will be handled by the SF-RWQCB. The RWQCB contact person is Mr. Keith Lichten. (See Fig 6, Table 10)

The petroleum hydrocarbon release at the site does not appear to have significantly impacted groundwater quality at the site. Shallow groundwater at the site is not potable due to the high TDS levels. Residual hydrocarbons in soil and groundwater should naturally bioattenuate. Its potential to migrate in moderate to low permeability sediments and impact the Oakland Inner Harbor, approximately 1200 feet north of the site, is not likely.

The site is underlain with approximately 5 feet of fill material (sand, gravel, and debris). Bay deposits below the fill material consist 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 minor fine to medium sand and scattered shell. The nearest surface water is the Oakland Inner Harbor. Based on topography, groundwater flows generally to the north and northwest. No water supply wells were identified within a 2,000 feet radius of the site.

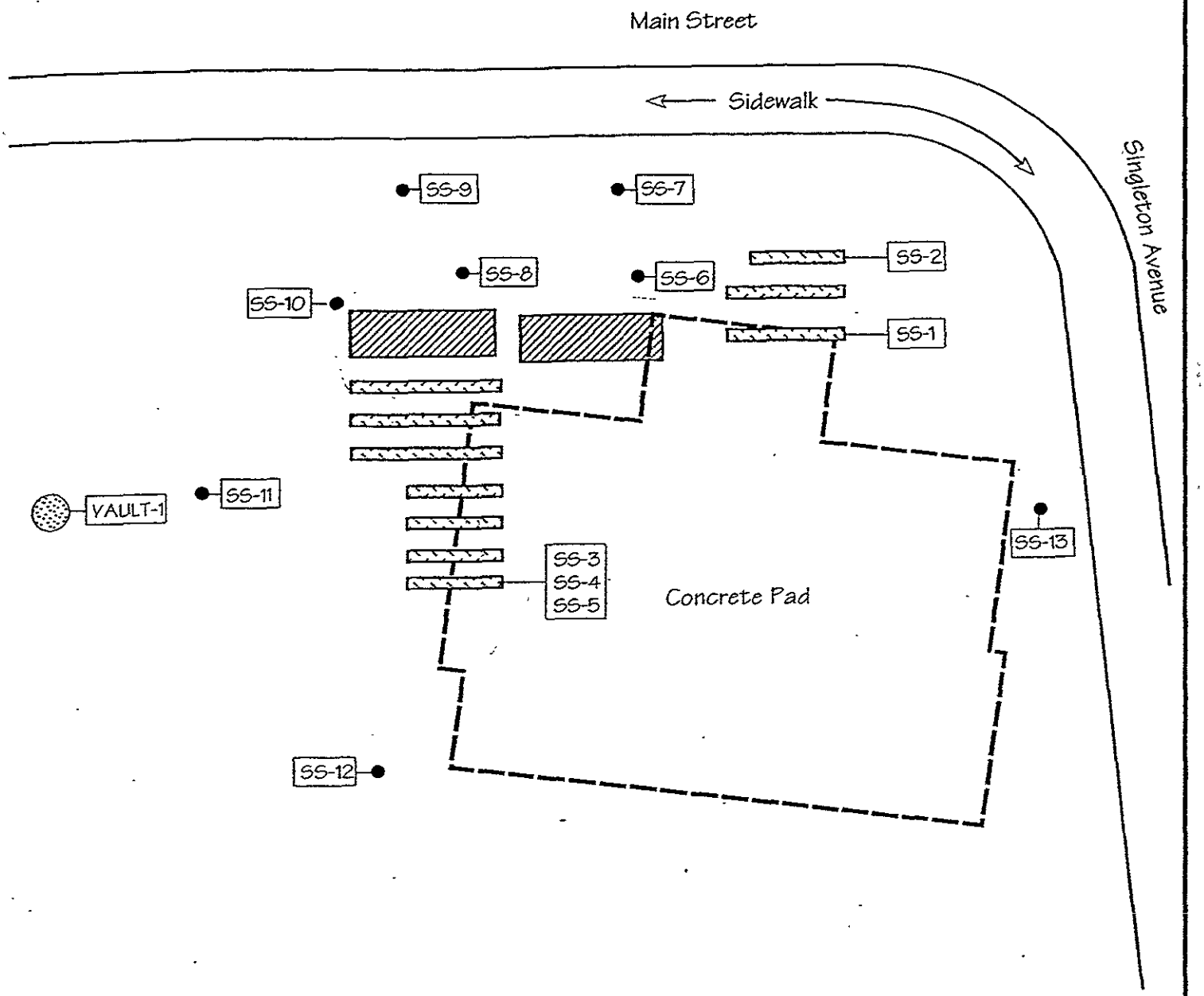
In summary, case closure is recommended because:

- the leak and ongoing sources have been removed;
- the site has been adequately characterized;
- the dissolved hydrocarbon plume is not migrating;
- no preferential pathways exist at the site;
- no water wells, deeper drinking water aquifers, surface water, or other sensitive receptors are likely to be impacted; and,
- the petroleum hydrocarbon release presents no significant risk to human health or the environment.
  Currently there are no established urban area ecotoxicity RBSLs for TPH in shallow soils (<3m bgs). TPH in groundwater exceeds RBSLs for the protection of aquatic life (640ppbb), however, the nearest surface water is 1200 feet downgradient of the site. The hydrocarbon plume appears to be limited to the site vicinity and is not expected to migrate offsite and impact the Oakland Harbor.



SOURCE Thomas Guide CD ROM, 1997

Title: Site Location Map Main Street and Singleton Avenue Alameda, California	
Figure Number: 1	Scale 1" = 1/4 Mile
Project Number 6209-014.01	Drawn By: NHD
A•C•C ENVIRONMENTAL CONSULTANTS 7977 Capwell Drive, Suite 100 Oakland California 94621 (510) 638-8400 Fax (510) 638-8404	Date: 8/18/99 N W E S



Legend

SS-1 - Soil Sample Location

- Trench Excavated During UST Location Activities (Soil Samples Obtained From Bottom of Trench)

- Location of 6,000-gallon USTs

Note: All Soil Samples Obtained From 4-5 Feet Below Ground Surface (bgs)

Title: **Soil Sample Locations** Main St. and Singleton Ave. Alameda, California	
Figure No 2	Date: 5/17/99
Drawn By: NHD	Scale: 1" = 20'
Project No 6209-014.00	

ACC Environmental Consultants
7977 Capwell Drive, Suite 100
Oakland, California 94621
(510)638-8400 Fax (510)638-8404

(PRGs) set by the California EPA, Region IX. Analytical results are summarized in Tables 1 and 2. Laboratory analytical results and chain of custody record are attached.

TABLE 1 - SOIL SAMPLE ANALYTICAL RESULTS

Sample ID	TPHg	Benzene	Toluene	Ethyl benzene	Total Xylenes	Diesel	Motor Oil	Total Lead
SS-1,2	<1.0	<0.005	<0.005	<0.005	<0.005	13	78	15
SS-3	20	<0.62	<0.62	<0.62	<0.62	610	2,800	<1.0
SS-4	3.9	<0.005	0.0098	0.014	0.064	—	—	—
SS-5	130	<0.62	<0.62	2.0	1.9	570	1,800	—
SS-6	18	0.063	0.089	0.083	0.44	—	—	—
SS-7	<1.0	<0.005	<0.005	<0.005	<0.005	—	—	—
SS-8	<1.0	<0.005	<0.005	<0.005	<0.005	—	—	—
SS-9	<1.0	<0.005	<0.005	<0.005	<0.005	—	—	—
SS-10	<1.0	<0.005	<0.005	<0.005	<0.005	—	—	—
SS-11	—	—	—	—	—	6.8	<50	—
SS-12	—	—	—	—	—	95	<500	—
SS-13	—	—	—	—	—	14	<50	—
VAULT -1	—	—	—	—	—	180	210	—

Notes: All results reported in milligrams per kilogram (mg/kg), approximately equal to parts per million (ppm)
--- Not analyzed
< Sample tested below the laboratory detection limit indicated

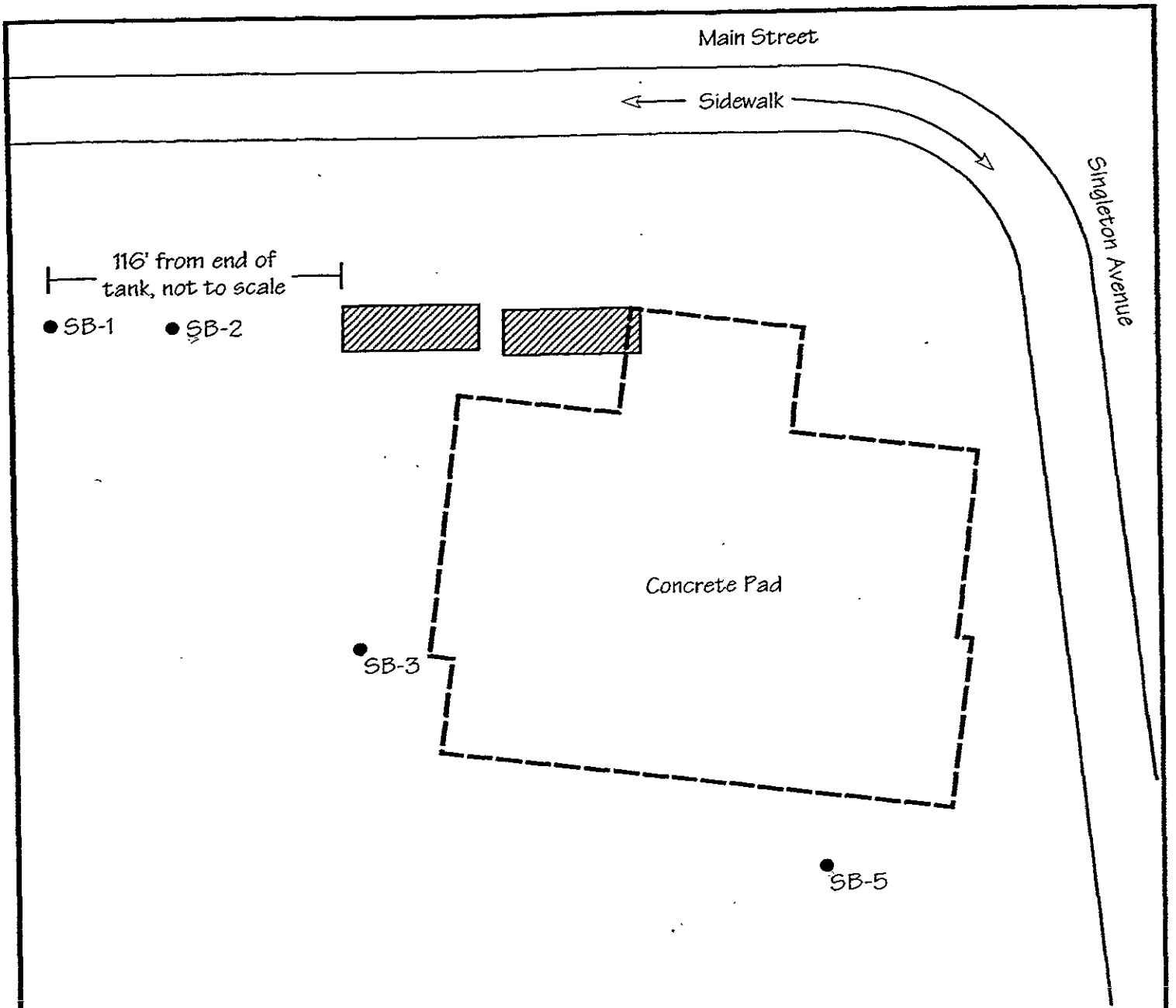
TABLE 2 - SUMMARY OF CAM 17 METALS

Constituent	SS 1,2,10,12,13	Residential PRG	Northbay Average**	TTLC (mg/kg)	STLC (µg/L)
Antimony	<2.0	30	1.3-101	500	15
Arsenic	6.0	21	16-65	500	5.0
Barium	34	5,200	500	10,000	100
Beryllium	<0.5	150	<1	75	0.75
Cadmium	<0.5	9.0*	—	100	1.0
Chromium	26	210	100-700	2,500	560
Cobalt	4.6	3,300	15-70	8,000	80
Copper	17	2,800	50-300	2,500	25

cont. Table 2

Constituent	SS 1,2,10,12,13	Residential PRG	Northbay Average**	TTLC (mg/kg)	STLC (µg/L)
Lead	26	130*	30-300	1,000	5.0
Mercury	0.053	22	0.082-0.13	20	0.2
Molybdenum	<1.0	370	<3	3,500	350
Nickel	26	150*	30-200	2,000	20
Selenium	<2.0	370	0.5	100	1.0
Silver	<1.0	370	—	500	5
Thallium	<1.0	6.0	—	700	7.0
Vanadium	20	520	150-500	2,400	24
Zinc	200	22,000	120-510	5,000	250

Notes: *All results are in milligrams per kilogram (mg/kg) approximately equal to parts per million (ppm)*
< Not detected above laboratory reporting limit indicated
** California Modified Preliminary Remediation Goal*
*** According to United States Geologic Survey Professional Paper 1270*



Approximate Location of Former Railroad

Legend

SB-5 - ACC Soil Boring and Sample Locaton

SB-4

- Location of 6,000-gallon USTs

Cinder Block Wall

Title: Site Plan and Sample Locations
Main St. and Singleton Ave.
Alameda, California

Figure No. # 3	Date: 8/18/99
Drawn By NHD	Scale: 1" = 20'
Project No 6209-014.01	

ACC Environmental Consultants
7977 Capwell Drive, Suite 100
Oakland California 94621
(510)638-8400 Fax (510)638-8404

W S N E

ANALYTICAL RESULTS

Analytical results indicated detectable levels of TPHg, BTEX constituents, and diesel-range hydrocarbons in grab groundwater samples and various CAM 17 metals in samples taken from the soil pile north of the subject site. TPHg concentrations in water ranged from nondetect to 100 parts per billion (ppb). BTEX concentrations were nondetect to 2 ppb total xylenes in sample SB-5. No benzene was reported in any of the grab groundwater samples. Concentrations of diesel-range hydrocarbons ranged from 150 ppb to 240 ppb. MTBE was not detected. Analytical results of grab groundwater samples are summarized in Table 1.

One soil sample was taken at the subject site (soil boring SB-5 at a depth of 5 feet bgs) and analyzed for TEPH as diesel and motor oil. Neither constituent was detected above the laboratory reporting limits of 1 ppm and 50 ppm, respectively.

Detectable concentrations of diesel, motor oil and several CAM 17 metals were reported in samples taken from the soil pile located north of the subject site. Motor oil was detected at a concentration of 2,000 ppm, and diesel fuel at a concentration of 330 ppm. CAM 17 and TEPH analytical results are summarized in Table 2. All laboratory analytical results and chain of custody records are attached.

TABLE 3 - GRAB GROUNDWATER SAMPLE ANALYTICAL RESULTS

Sample ID	TPHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Diesel	Motor Oil	MTBE
SB-1	100	<0.5	<0.5	<0.5	<0.5	230*	<640	<5.0
SB-2	<50	<0.5	<0.5	<0.5	<0.5	—	—	<5.0
SB-4	<50	<0.5	<0.5	<0.5	<0.5	150*	<630	<5.0
SB-5	<50	<0.5	1.7	0.83	2.0	240*	<610	<5.0

Notes: *All results reported in micrograms per liter (µg/L), approximately equal to parts per billion (ppb)*
— Not analyzed
< Sample tested below the laboratory detection limit indicated
** Hydrocarbon reported does not match the laboratory diesel standard*

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 1999-08-0204

To: **ACC Environmental Consultants**
Attn.: Dave DeMent

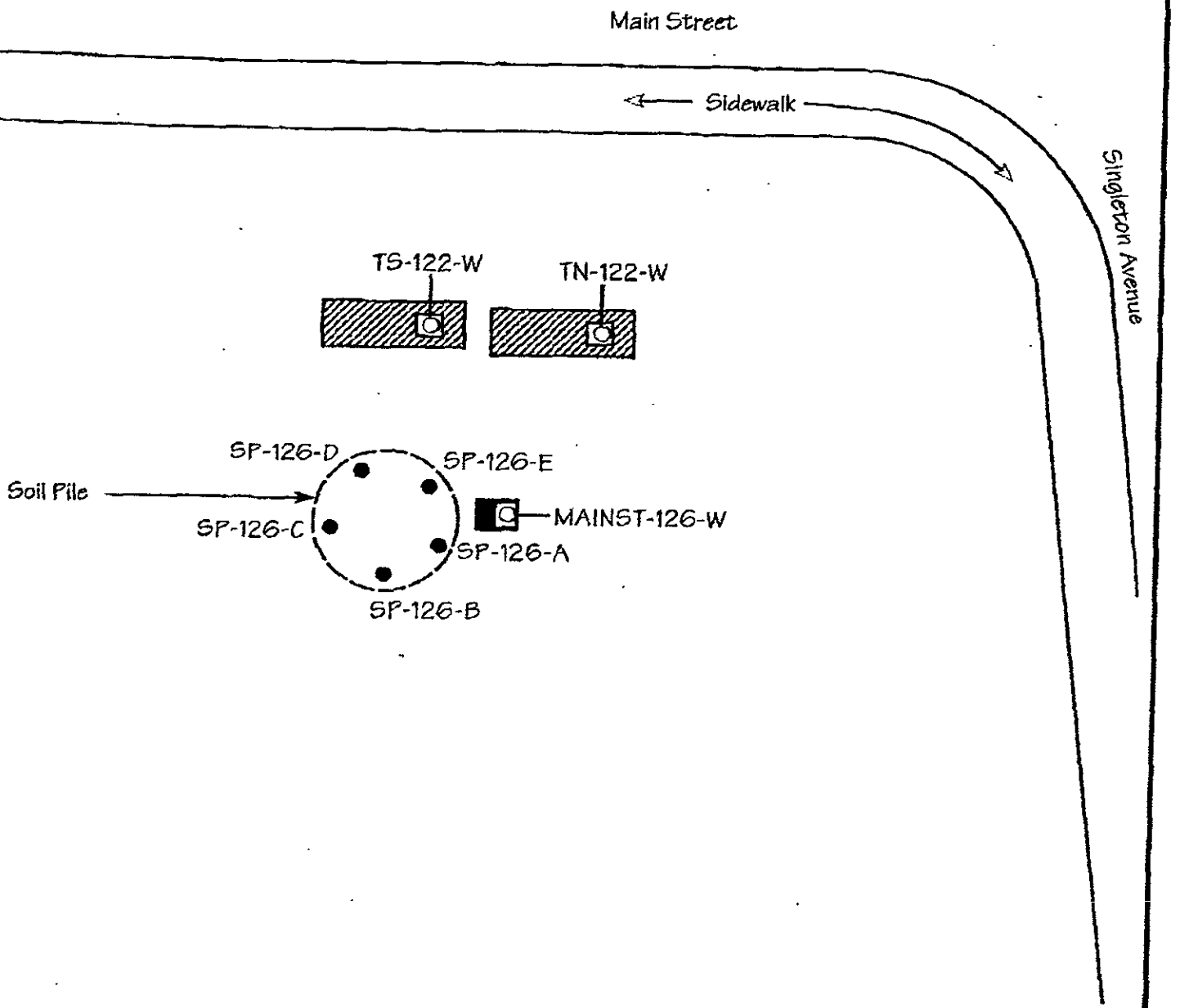
Test Method: 8015m
Prep Method: 3550/8015M
3510/8015M

Total Extractable Petroleum Hydrocarbons (TEPH)

Sample ID:	**SB3-5**	Lab Sample ID:	**1999-08-0204-002**
Project:	6209.014.01 Dale`s Bar	Received:	08/13/1999 17:53
		Extracted:	08/16/1999 09:11
Sampled:	08/13/1999 10:15	QC-Batch:	1999/08/16-01.10
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	ND	1.0	mg/Kg	1.00	08/17/1999 13:19	
Motor Oil	ND	50	mg/Kg	1.00	08/17/1999 13:19	
Surrogate(s)						
o-Terphenyl	66.1	60-130	%	1.00	08/17/1999 13:19	

Table 4



Legend

- ● SP-126-A - Soil Sample Location
- ○ TS-122-W - Water Sample Location
- ■ - Location of 550-gallon oil UST
- ▨ - Location of 6,000-gallon gasoline USTs

Title: Site Plan / Sample Locations 2756 Main Street Alameda, California	
Figure No. 4	Date 5/17/99
Drawn By: NHD	Scale: 1" = 20'
Project No. 6209-015.02	

ACC Environmental Consultants
7977 Capwell Drive, Suite 100
Oakland, California 94621
(510)638-8400 Fax (510)638-8404

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 1999-12-0033

To: **ACC Environmental Consultants**

Attn.: Dave DeMent

Test Method: 8015M
8020

Prep Method: 5030

Gas/BTEX

Sample ID:	**TS-122-W**	Lab Sample ID:	**1999-12-0033-001**
Project:	6209-015.02 2756 Main Street	Received:	12/02/1999 12:27
		Extracted:	12/06/1999 09:32
Sampled:	12/02/1999 09:30	QC-Batch:	1999/12/06-01.01
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	11000	5000	ug/L	100.00	12/06/1999 09:32	
Benzene	310	50	ug/L	100.00	12/06/1999 09:32	
Toluene	760	50	ug/L	100.00	12/06/1999 09:32	
Ethyl benzene	230	50	ug/L	100.00	12/06/1999 09:32	
Xylene(s)	1800	50	ug/L	100.00	12/06/1999 09:32	
Surrogate(s)						
Trifluorotoluene	105.6	58-124	%	1.00	12/06/1999 09:32	
4-Bromofluorobenzene-FID	85.4	50-150	%	1.00	12/06/1999 09:32	

from main fuel pit

Table 5

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 1999-12-0033

To: **ACC Environmental Consultants**

Attn.: Dave DeMent

Test Method: 8015M
8020

Prep Method: 5030

Gas/BTEX

Sample ID:	**TN-122-W**	Lab Sample ID:	**1999-12-0033-002**
Project:	6209-015.02 2756 Main Street	Received:	12/02/1999 12:27
		Extracted:	12/06/1999 10:00
Sampled:	12/02/1999 09:30	QC-Batch:	1999/12/06-01.01
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	460	50	ug/L	1.00	12/06/1999 10:00	
Benzene	8.3	0.50	ug/L	1.00	12/06/1999 10:00	
Toluene	4.9	0.50	ug/L	1.00	12/06/1999 10:00	
Ethyl benzene	11	0.50	ug/L	1.00	12/06/1999 10:00	
Xylene(s)	26	0.50	ug/L	1.00	12/06/1999 10:00	
Surrogate(s)						
Trifluorotoluene	106.3	58-124	%	1.00	12/06/1999 10:00	
4-Bromofluorobenzene-FID	107.5	50-150	%	1.00	12/06/1999 10:00	

From main fuel pit

cont. Table 5

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 1999-12-0033

To: **ACC Environmental Consultants**
Attn.: Dave DeMent

Test Method: 8015m
Prep Method: 3550/8015M
3510/8015M

Total Extractable Petroleum Hydrocarbons (TEPH)

Sample ID:	**TN-122-W**	Lab Sample ID:	**1999-12-0033-002**
Project:	6209-015.02 2756 Main Street	Received:	12/02/1999 12:27
		Extracted:	12/02/1999 09:00
Sampled:	12/02/1999 09:30	QC-Batch:	1999/12/02-01.10
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	2900	50	ug/L	1.00	12/04/1999 02:11	ndp
Motor Oil	960	500	ug/L	1.00	12/04/1999 02:11	
Surrogate(s)						
o-Terphenyl	96.4	60-130	%	1.00	12/04/1999 02:11	

from main fuel pit

cont. Table 5

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 1999-12-0033

To: **ACC Environmental Consultants**
Attn.: Dave DeMent

Test Method: 8015m
Prep Method: 3550/8015M
3510/8015M

Total Extractable Petroleum Hydrocarbons (TEPH)

Sample ID:	**TS-122-W**	Lab Sample ID:	**1999-12-0033-001**
Project:	6209-015.02 2756 Main Street	Received:	12/02/1999 12:27
		Extracted:	12/02/1999 09:00
Sampled:	12/02/1999 09:30	QC-Batch:	1999/12/02-01.10
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	1600	50	ug/L	1.00	12/04/1999 06:03	ndp
Motor Oil	2900	500	ug/L	1.00	12/04/1999 06:03	
Surrogate(s)						
o-Terphenyl	123.2	60-130	%	1.00	12/04/1999 06:03	

cont. Table 5

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 1999-12-0104

To: **ACC Environmental Consultants**
Attn.: Dave DeMent

Test Method: 8015m
Prep Method: 3510/8015M
3550/8015M

Total Extractable Petroleum Hydrocarbons (TEPH)

Sample ID:	**MAINST-126-W**	Lab Sample ID:	**1999-12-0104-006**
Project:	6209-015-2 Main & Singleton	Received:	12/06/1999 16:10
		Extracted:	12/06/1999 08:00
Sampled:	12/06/1999 12:30	QC-Batch:	1999/12/06-04.10
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	29000	1000	ug/L	20.00	12/09/1999 03:58	ndp
Motor Oil	62000	10000	ug/L	20.00	12/09/1999 03:58	
Surrogate(s)						
o-Terphenyl	106.0	60-130	%	20.00	12/09/1999 03:58	

waste oil from main Tool pit

Table 6

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 1999-12-0104

To: **ACC Environmental Consultants**

Attn.: Dave DeMent

Test Method: 8020
8015M

Prep Method: 5030

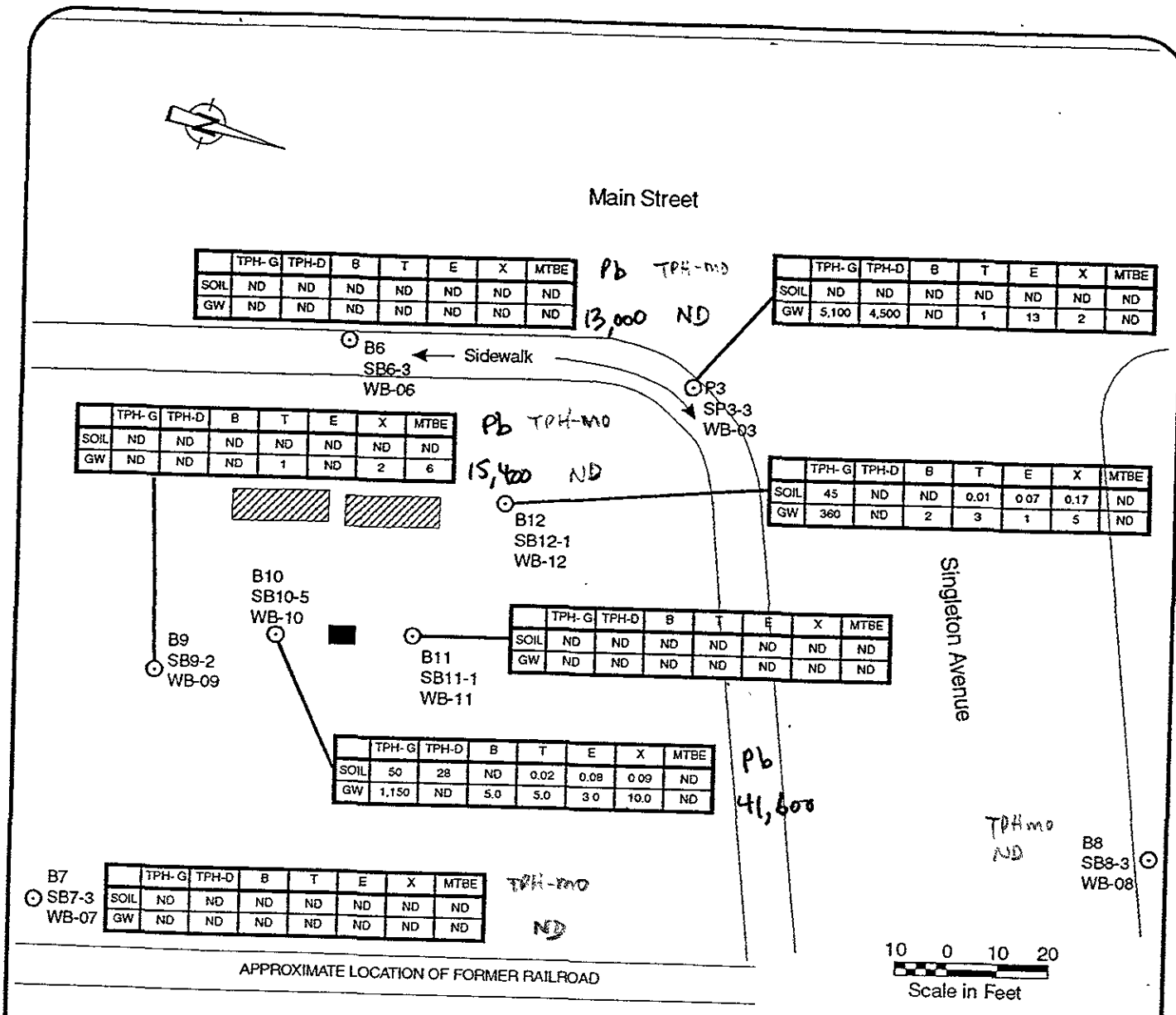
Gas/BTEX and MTBE

Sample ID:	**MAINST-126-W**	Lab Sample ID:	**1999-12-0104-006**
Project:	6209-015-2 Main & Singleton	Received:	12/06/1999 16:10
		Extracted:	12/07/1999 11:26
Sampled:	12/06/1999 12:30	QC-Batch:	1999/12/07-01.01
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	1200	50	ug/L	1.00	12/07/1999 11:26	g
Benzene	ND	0.50	ug/L	1.00	12/07/1999 11:26	
Toluene	2.0	0.50	ug/L	1.00	12/07/1999 11:26	
Ethyl benzene	2.1	0.50	ug/L	1.00	12/07/1999 11:26	
Xylene(s)	5.7	0.50	ug/L	1.00	12/07/1999 11:26	
MTBE	ND	5.0	ug/L	1.00	12/07/1999 11:26	
Surrogate(s)						
Trifluorotoluene	85.5	58-124	%	1.00	12/07/1999 11:26	
4-Bromofluorobenzene-FID	72.7	50-150	%	1.00	12/07/1999 11:26	

From Waste oil ~~Ret.~~ pit

cont. Table 6



	TPH-G	TPH-D	B	T	E	X	MTBE
SOIL	ND	ND	ND	ND	ND	ND	ND
GW	ND	ND	ND	ND	ND	ND	ND

Pb TPH-mo
13,000 ND

	TPH-G	TPH-D	B	T	E	X	MTBE
SOIL	ND	ND	ND	ND	ND	ND	ND
GW	5,100	4,500	ND	1	13	2	ND

	TPH-G	TPH-D	B	T	E	X	MTBE
SOIL	ND	ND	ND	ND	ND	ND	ND
GW	ND	ND	ND	1	ND	2	6

Pb TPH-mo
15,400 ND

	TPH-G	TPH-D	B	T	E	X	MTBE
SOIL	45	ND	ND	0.01	0.07	0.17	ND
GW	360	ND	2	3	1	5	ND

	TPH-G	TPH-D	B	T	E	X	MTBE
SOIL	ND	ND	ND	ND	ND	ND	ND
GW	ND	ND	ND	ND	ND	ND	ND

	TPH-G	TPH-D	B	T	E	X	MTBE
SOIL	50	28	ND	0.02	0.08	0.09	ND
GW	1,150	ND	5.0	5.0	3.0	10.0	ND

Pb
41,600

TPH-mo
ND

	TPH-G	TPH-D	B	T	E	X	MTBE
SOIL	ND	ND	ND	ND	ND	ND	ND
GW	ND	ND	ND	ND	ND	ND	ND

TPH-mo
ND

LEGEND

▨	LOCATION OF FORMER 6,000-GALLON USTs
■	LOCATION OF FORMER 550-GALLON UST
⊙ B9 SB9-2 WB-09	APPROXIMATE BORING LOCATION (SYMBOL NOT TO SCALE)
ND	NOT DETECTED
B	BENZENE
E	ETHYL BENZENE
T	TOLUENE
X	TOTAL XYLENES
MTBE	METHYL TERTIARY BUTYL ETHER
TPH-D	TOTAL PETROLEUM HYDROCARBON AS GAS
TPH-G	TOTAL PETROLEUM HYDROCARBON AS DIESEL

NOTES 1 - SOIL RESULTS ARE PRESENTED IN MILLIGRAMS / KILOGRAM
2 - GW RESULTS ARE PRESENTED IN MICROGRAMS / LITER

REFERENCE 1/25 UST REPORT, ACC ENVIRONMENTAL

G:\DRAWINGS\KML\400102BORING

Ninyo & Moore

SOIL AND GROUND WATER CONSTITUENT / BORING LOCATION MAP

2756 MAIN ST.
ALAMEDA, CA

PROJECT NO.	DATE	FIGURE
400301-02	03/00	5

TABLE 7

SOIL SAMPLE ANALYTICAL DATA-PETROLEUM HYDROCARBONS AND VOLATILE ORGANIC COMPOUNDS (VOCs)
CITY OF ALAMEDA MAIN STREET GREENWAY PROJECT

Boring	Date	TPH (mg/kg)			BTEX (mg/kg)				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
SB10-5	3/21/00	50	28	NA	ND	0.02	0.08	0.09	ND
SB11-1	3/21/00	ND	ND	NA	ND	ND	ND	ND	ND
SB12-1	3/21/00	45	ND	NA	ND	0.01	0.07	0.17	ND

mg/kg. millgrams 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.
[1] S = soil sample, P = Alameda Power & Telecom boring, 1 = boring location and -2 = depth of sample in feet
[2] S = soil sample, B = City of Alameda Public Works boring, 1 = boring location and -3.5 = depth of sample in feet
NA. Not analyzed
**Samples were collected outside of the Greenway Project Boundaries

TABLE 8

WATER SAMPLE ANALYTICAL DATA-TOTAL PETROLEUM HYDROCARBONS AND VOLATILE ORGANIC COMPOUNDS (VOCs)
CITY OF ALAMEDA MAIN STREET GREENWAY PROJECT

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
WB-10	3/21/00	1,150	ND	NA	5	5	3	10	ND
WB-11	3/21/00	ND	ND	NA	ND	ND	ND	ND	ND
WB-12	3/21/00	360	ND	NA	2	3	1	5	ND

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, napthalene, n-butylbenzene, and sec-butylbenzene
**VOCs were analyzed for and none were detected
***Samples collected outside the Greenway boundaries
[1] W = Water sample, P = Alameda Power & Telecom boring and 1 = boring location.
[2] W = Water sample, B = City of Alameda Public Works boring and 1 = boring location
NA: Not analyzed

TABLE 9
SOIL SAMPLE ANALYTICAL DATA-METALS
CITY OF ALAMEDA MAIN STREET GREENWAY PROJECT

BORING	DATE	Antimony	Arsenic	Barium	Berylium	Cadmium	Chromium	Cobalt	Copper	Lead	Molybdenum	Mercury	Nickel	Selenium	Silver	Thalium	Vanadium	Zinc
SP3-3	2/25/00	ND	2.43	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	1.58	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
SB10-5	3/21/00	3.66	9.19	183	ND	1.17	30.4	7.07	73.8	64.9	3.62	0.22	33.1	0.577	ND	1.67	27	297
SB11-1	3/21/00	5.97	5.07	61.1	ND	1.07	17.7	8.36	160	201	2.38	0.39	18.3	0.612	ND	2.09	42.8	188
SB12-1	3/21/00	3.91	8.6	428	ND	1.83	42.7	8.1	105	169	8.3	0.35	46.1	0.979	ND	1.95	22	534

Notes
Soil sample units in miligrams per liter. kilogram
ND:non detect
[1] S = soil sample, P = Alameda Power & Telecom boring, 1 = boring location and -2 = depth of sample in feet
[2] S = soil sample, B = City of Alameda Public Works boring, 1 = boring location and -3.5 = depth of sample in feet
**Samples collected outside Greenway boundaries
NA Not analyzed

TABLE 10

WATER SAMPLE ANALYTICAL DATA-METALS
CITY OF ALAMEDA MAIN STREET GREENWAY PROJECT

BORING	Date	Antimon	Arsenic	Barium	Beryllium	Cadmium	Chromiu	Cobalt	Copper	Lead	Molybdenum	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	Dissolved Lead	TDS	Total Hardness
WP-1*	2-25-00	0 45	0 703	9.43	ND	0.614	8.56	1	4 29	16.2	0 361	0.019	5.03	0 661	ND	0.232	3.8	17.7	NA	NA	NA
WP-2	2-25-00	0 416	0 52	3.73	ND	ND	1 99	0 356	1.41	0.514	0.13	0 007	2 23	ND	ND	0.092	1.52	1.53	0 007	NA	NA
WP-3	2-25-00	ND	3 88	18.8	ND	0 627	5.22	1.93	6 73	13.5	ND	0.039	7.44	ND	ND	0 483	5.65	16.3	0.019	NA	NA
WP-4**	2-25-00	ND	1 54	14	ND	ND	5.65	1 99	12	48 2	ND	0.028	6.48	ND	ND	0.648	8.51	16.3	NA	NA	NA
WP-5**	2-25-00	ND	1 76	46 7	ND	0 559	2 85	1.85	5.91	4.22	ND	0 024	3.59	ND	ND	0 353	4.9	18 3	NA	NA	NA
WP-6**	2-25-00	3 92	ND	17.5	ND	ND	4.53	3 85	32 5	13 5	ND	0.063	4.23	ND	ND	0.621	13 9	16 4	NA	NA	NA
WP-7**	2-25-00	ND	0 722	44.1	ND	ND	2 02	1 42	4.76	1.8	ND	0 27	2 49	0 472	ND	ND	3.62	10.2	NA	NA	NA
WB-01*	2-25-00	0 268	0 27	2.11	0.003	0.044	1 22	0.228	1.01	1.031	0 11	0 039	1.17	ND	ND	0 44	0.879	2	1.031	1200	480
WB-02**	2-25-00	0 341	0 466	10 9	ND	0.113	2.85	1 01	7 67	8 02	0.25	0 084	3.37	0.107	ND	0.183	4.12	16 4	NA	NA	NA
WB-03	2-25-00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WB-04	2-25-00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WB-05	2-25-00	0 418	3 36	6 68	ND	0.074	5.69	0.951	2 16	1 38	0 398	0.025	5.4	0 047	ND	0.204	3 58	3.88	NA	NA	NA
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	NA	NA	NA
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	0.077	NA	NA
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	NA	NA	NA
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	NA	NA	NA
WB-10	3-21-00	ND	3 71	63.3	0 003	0 692	7 95	2.14	36.1	41.6	0.7	0 079	10.8	0.402	ND	0.531	6.13	129	9.3	5,780	3,479
WB-11	3-21-00	0 037	0 03	0.402	ND	0 01	0.073	0.034	0.98	0.854	ND	0.035	0.082	0.01	ND	0.006	0.117	0 907	NA	NA	NA
WB-12	3-21-00	0 033	0 013	0.27	ND	ND	0.03	0.005	0.187	0.103	0.062	0.0008	0.024	ND	ND	ND	0.021	0.411	NA	NA	NA
MW7A-09	2-25-00	ND	0 003	0 03	ND	ND	0.011	ND	0 022	0.007	ND	ND	0.017	ND	ND	ND	ND	0.032	NA	NA	NA
WET-1	3-21-00	ND	0 011	0.201	ND	ND	0.022	0 008	0.032	0 022	ND	ND	0 016	ND	ND	ND	0 009	0.106	NA	NA	NA
WET-2	3-21-00	ND	0 044	0.196	ND	ND	0.03	0.009	0 073	0.094	ND	ND	0 033	ND	ND	0.004	0 019	0.151	NA	NA	NA
WET-3	3-21-00	0 033	0 017	0.15	ND	ND	0 068	0 015	0.078	0.109	ND	0 0004	0.099	ND	ND	ND	0 049	0.195	NA	NA	NA

Notes
Water sample units in milligrams per liter (**mg/l**)
ND non detect
W = Water sample, P = Alameda Power **& Telecom boring and 1 = boring location.**
W = Water sample B = City of Alameda **Public Works boring and 1 = boring location**
Total Hardness measured as $CaCO_3$
NA Not analyzed
**Samples were collected outside the Greenway boundaries
TOS = Total Dissolved Solids

unfiltered

filtered

for filtered surface water

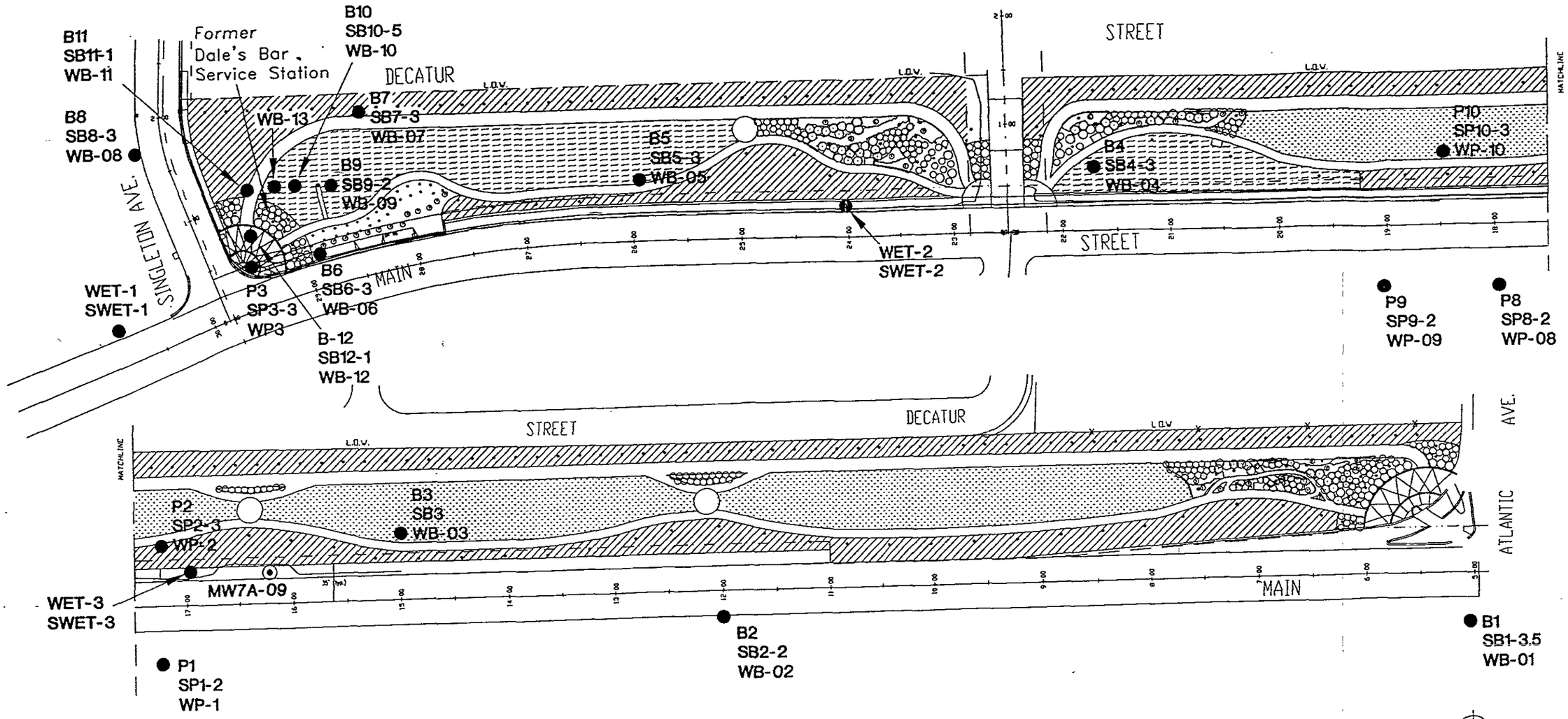
ACUTE: 189 ppb Pb

CHRONIC: 3.0 ppb Pb

for unfiltered surface water

ACUTE: 320 ppb Pb

Chronic: 5.14 ppb Pb



Former Navy
Exchange Fuel
Station

LEGEND

● B1	Approximate location of exploratory boring, city of Alameda Public Works Department
SB1-3.5	Soil sample location and depth
WB-01	Water sample location
● P1	Approximate location of exploratory boring, Alameda Power & Telecom
SP1-2	Soil sample location and depth
WP-1	Water sample location
● WET-1	Wetland samples – Water
SWET-1	Wetland samples – Soil
⊙ MW7A-09	Monitoring well

REFERENCE: TOM RICHMAN & ASSOCIATES, 1999, PLANTING PLAN, MAIN STREET GREENWAY, SHEET 3, DATED NOVEMBER

Ninyo & Moore

BORING LOCATION MAP

MAIN STREET GREENWAY
ALAMEDA, CALIFORNIA

PROJECT NO.	DATE	FIGURE
400301-02	3/00	2 b

Table 11

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
http://www.mccampbell.com E-mail: main@mccampbell.com

Ninyo & Moore 675 Hegenberger Road. Ste 220 Oakland, CA 94621-1919 Email: not available	Client Project ID: #400301-03; Alameda	Date Sampled: 02/27/01
		Date Received: 02/28/01
	Client Contact: Kris Larson	Date Extracted: 03/01/01
	Client P.O:	Date Analyzed: 03/01/01

Lead*

EPA analytical methods 6010/200.7, 239.2+

Lab ID	Client ID	Matrix	Extraction °	Lead*	% Recovery Surrogate
60977	WB-13	W	Dissolved	ND	N/A

Reporting Limit unless otherwise stated; ND means not detected above the reporting limit	S	TTLC	3.0 mg/kg
	W	Dissolved	0 005 mg/L
	---	STLC,TCLP	0.2 mg/L

* soil and sludge samples are reported in mg/kg, wipe samples in ug/wipe, and water samples and all STLC / SPLP / TCLP extracts in mg/L

+Lead is analysed using EPA method 6010 (ICP)for soils sludges, STLC & TCLP extracts and method 239 2 (AA Furnace) for water samples

' DISTLC extractions are performed using STLC methodology except that deionized water is substituted for citric acid buffer as the extraction fluid DISTLC results are not applicable to STLC regulatory limits

° EPA extraction methods 1311(TCLP), 3010 3020(water,TTLC) 3040(organic matrices TTLC) 3050(solids,TTLC), STLC - CA Title 22

surrogate diluted out of range N A means surrogate not applicable to this analysis

^ reporting lim t raised due matrix interference

@ liquid sample that contains greater than ~2 vol % sediment this sediment is extracted with the liquid in accordance with EPA methodologies and can significantly effect reported metal concentrations

DHS Certification No 1644

Edward Hamilton, Lab Director