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

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

REMEDIAL ACTION COMPLETION CERTIFICATION

StID 4607 - 1528 Webster Street, Alameda, CA

December 20, 1996

Mr. Rick Oliver
Bank of America
555 Anton Blvd, Suite 1025
Costa Mesa, CA 92626

Dear Mr. Oliver:

This letter confirms the completion of site investigation and remedial action for the former underground storage tank (1-750 gallon heating oil tank) removed from the above site on August 3, 1993. Enclosed is the Case Closure Summary for the referenced site for your records.

Based upon the available information, including the current land use, and with the provision that the information provided to this agency was accurate and representative of site conditions, no further action related to the underground tank release is required.

This notice is issued pursuant to a regulation contained in Title 23, Division 3, Chapter 16, Section 2721(e) of the California Code of Regulations. If changes in land use, structural configuration, or site activities are proposed such that more conservative exposure scenarios should be evaluated, the owner must promptly notify this agency.

Please contact Ms. Eva Chu at (510) 567-6700 if you have any questions regarding this matter.

Very truly yours,

Mee Ling Tung, Director

cc: Chief, Division of Environmental Protection
Kevin Graves, RWQCB
Lori Casias, SWRCB (with attachment)
Cheryl Gordon, UST Cleanup Fund
files (bofa.5)

01-1839

CASE CLOSURE SUMMARY
Leaking Underground Fuel Storage Tank Program

I. AGENCY INFORMATION Date: July 17, 1996

Agency name: **Alameda County-HazMat** Address: **1131 Harbor Bay Pkwy**
City/State/Zip: **Alameda, CA 94502** Phone: **(510) 567-6700**
Responsible staff person: **Eva Chu** Title: **Hazardous Materials Spec.**

II. CASE INFORMATION

Site facility name: **Bank of America**
Site facility address: **1528 Webster St, Alameda, CA 94501**
RB LUSTIS Case No: **N/A** Local Case No./LOP Case No.: **4607**
URF filing date: **8/19/93** SWEEPS No: **N/A**

Responsible Parties:	Addresses:	Phone Numbers:
Rick Oliver Bank of America	555 Anton Blvd, Suite 1025 Costa Mesa, CA 92626	714/433-6180

Tank No:	Size in gal.:	Contents:	Closed in-place or removed?:	Date:
1	750	Heating Oil	Removed	8/3/93

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and type of release: **Leaking UST**
Site characterization complete? **YES**
Date approved by oversight agency: **10/24/94**
Monitoring Wells installed? **Yes** Number: **5**
Proper screened interval? **Yes, 4' to 19' bgs in well MW-2**
Highest GW depth below ground surface: **4.52'** Lowest depth: **8.10' in MW-2**
Flow direction: **Southeasterly**
Most sensitive current use: **Commercial**
Are drinking water wells affected? **No** Aquifer name: **Merritt Sand**
Is surface water affected? **No** Nearest affected SW name: **NA**
Off-site beneficial use impacts (addresses/locations): **None**

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	1 UST	Scrapped by Schnitzer Steel	8/6/93
Piping			
Rinsate	765 gallon	PRC Patterson, in Patterson	8/3, 9/4/93
Soil	~50 tons	Port Costa Materials	9/14/93

Maximum Documented Contaminant Concentrations - - Before and After Cleanup

Contaminant	Soil (ppm) Before	Soil (ppm) After	Water (ppb) Before	Water (ppb) After
TPH (Gas)				
TPH (Diesel)	1,300	1,005	9,600	5,000
Benzene	0.020	<0.0005	<0.4	ND
Toluene	0.011	"	<0.3	ND
Ethylbenzene	0.061	"	<0.3	ND
Xylenes	0.053	"	<0.4	ND
Other PNAs			NA	ND

NOTE: 1 soil sample taken during UST removal
2 soil sample collected from sidewalls after overexcavation

Comments (Depth of Remediation, etc.):

See Section VII, Additional Comments, etc...

IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? **Undetermined**
Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? **Undetermined**
Does corrective action protect public health for current land use? **YES**
Site management requirements: **A site specific health and safety plan should be prepared for any excavation proposed in the sidewall or street addressing the possibility that diesel impacted soil and/or groundwater may be encountered.**

Should corrective action be reviewed if land use changes? **YES**
Monitoring wells Decommissioned: **None, pending site closure**
Number Decommissioned: **0** Number Retained: **5**
List enforcement actions taken: **None**

List enforcement actions rescinded: **NA**

V. LOCAL AGENCY REPRESENTATIVE DATA

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

Signature: Eva Chu Date: 8/23/96

Reviewed by

Name: **Dale Klettke** Title: **Haz Mat Specialist**

Signature: Dale Klettke Date: 7/23/96

Name: **Thomas Peacock** Title: **Supervisor**

Signature: Thomas Peacock Date: 6-24-96

VI. RWQCB NOTIFICATION

Date Submitted to RB: 8/28/96 RB Response: Approved

RWQCB Staff Name: **Kevin Graves** Title: **AWRCE**

Signature: Kevin Graves Date: 9/5/96

VII. ADDITIONAL COMMENTS, DATA, ETC.

A 750 gallon heating oil UST (which may have replaced a former 500 gallon UST) was removed from beneath the sidewalk in front of the referenced site on August 3, 1993. Initial soil samples identified up to 1,300ppm TPHd and low levels of BTEX. The pit was overexcavated in September 1993, removing approximately 50 tons of impacted soil. Excavation was limited due to the presence of utility lines and close proximity of the excavation to the bank building. Confirmatory soil samples collected from the sidewalls contained up to 1,005ppm TPHd but no detectable levels of BTEX. A small amount of water was observed in the final excavation, however, not in sufficient quantity to collect a "grab" groundwater sample. (See Figs 1, 2, and Tables 1, and 2)

In March 1994 three groundwater monitoring wells (MW-1 through MW-3) were installed to a depth of 20 feet. Soil samples were collected from 5.5' bgs from each boring. Very low levels of TPHd was identified (6ppm). TPHd concentrations in groundwater ranged from 110ppb in well MW-1 to 4,100ppb in well MW-2. (See Fig 3, Table 3)

In October 1994 two additional groundwater monitoring wells (MW-4 and MW-5) were installed to further delineate the contaminant plume.

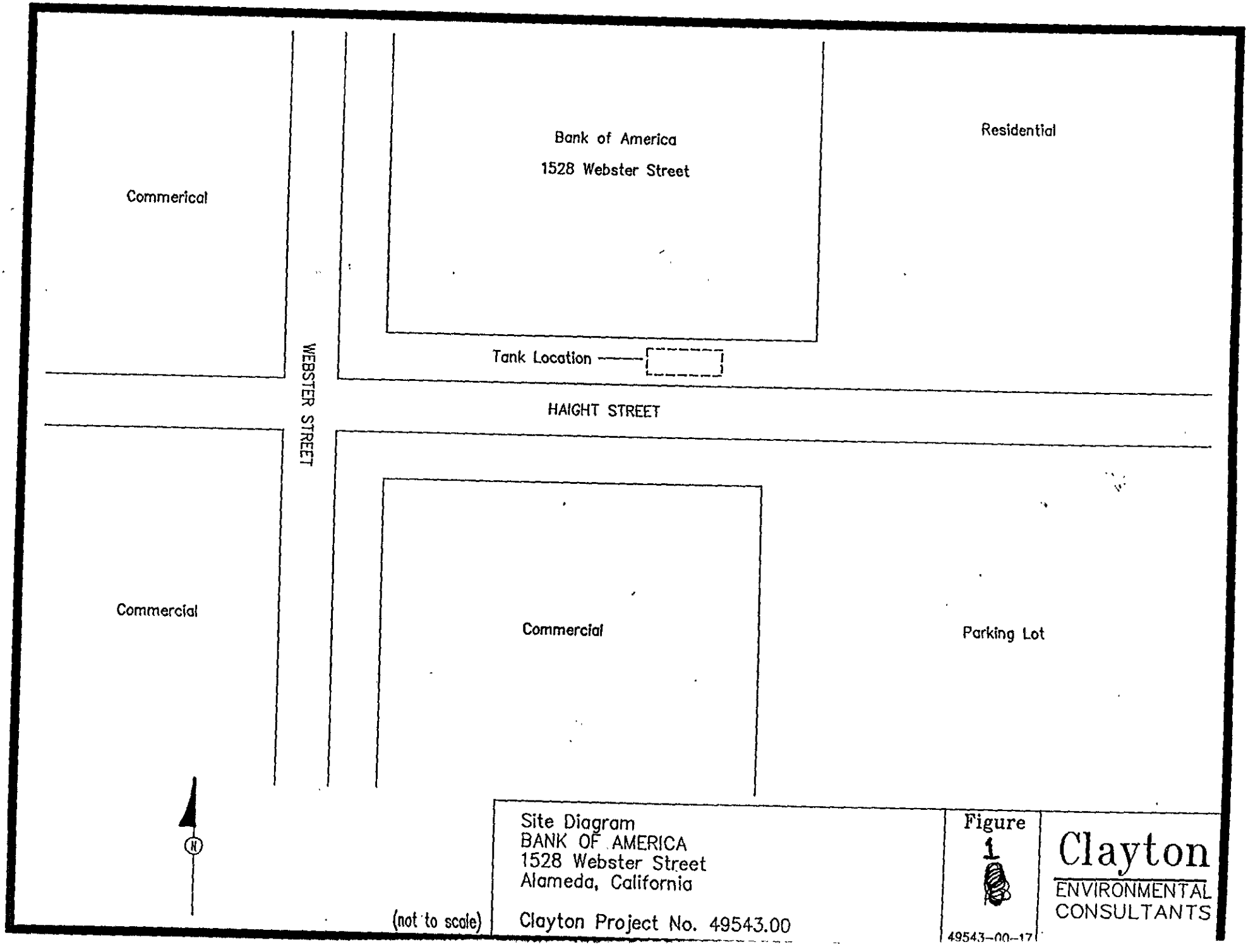
Groundwater has been sampled five times (from Oct 1994 to Mar 1996) and analyzed for TPHd and BTEX. PNAs analysis was performed in September 1995. Well MW-2 continues to contain elevated levels of TPHd at 5,000ppb. (See Table 3). BTEX and PNAs have not been detected. The contaminant plume

appears to be beneath Haight Street and limited in areal extent. Total dissolved solids have exceeded 3,000 ppm in wells MW-1 and MW-3. Shallow groundwater at this site is not a source of drinking water. Residual TPHd in groundwater does not pose a risk to human health or the environment. Continued monitoring is not warranted.

In summary, case closure is recommended because:

- the leak and ongoing sources have been removed;
- the site has been adequately characterized;
- the dissolved plume is not migrating;
- no water wells, surface water, or other sensitive receptors are likely to be impacted; and,
- the site presents no significant risk to human health or the environment.

Although residual TPHd is still in groundwater, the chemicals of concern, BTEX and PNAs, have not been detected.



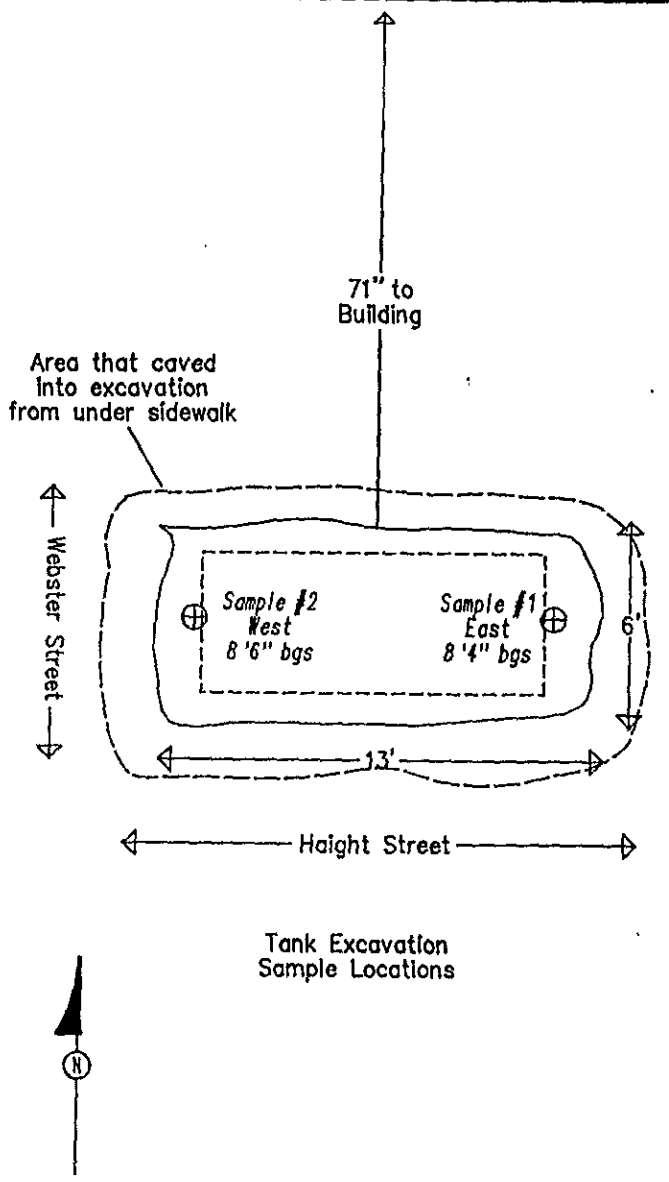
Site Diagram
BANK OF AMERICA
1528 Webster Street
Alameda, California

Clayton Project No. 49543.00

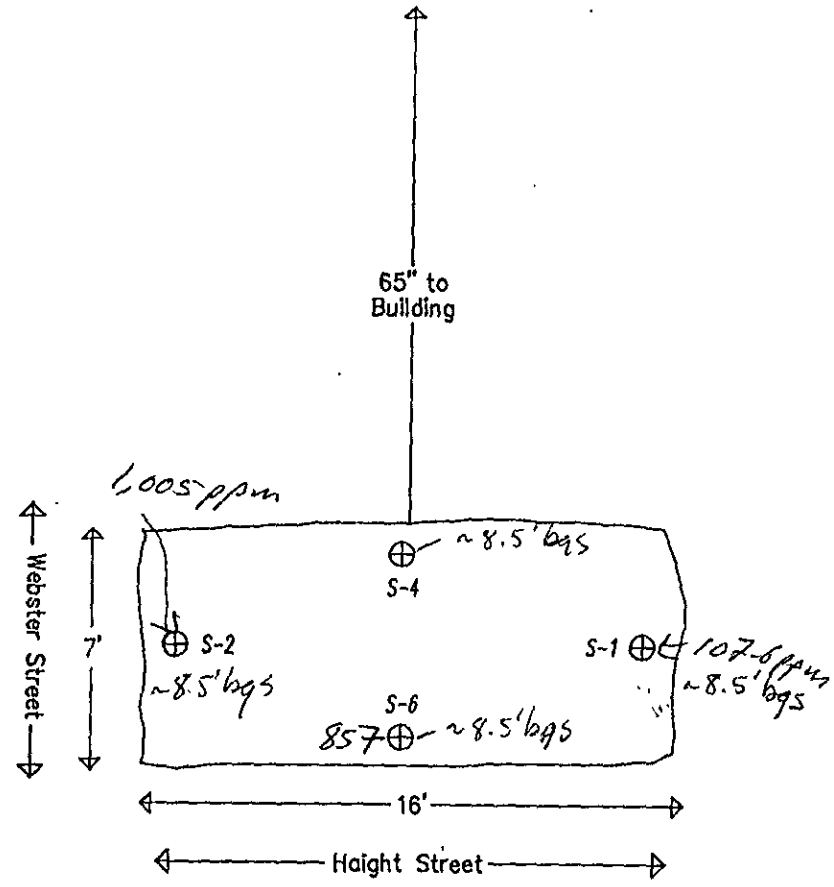
Figure 1

49543-00-17

Clayton
ENVIRONMENTAL
CONSULTANTS



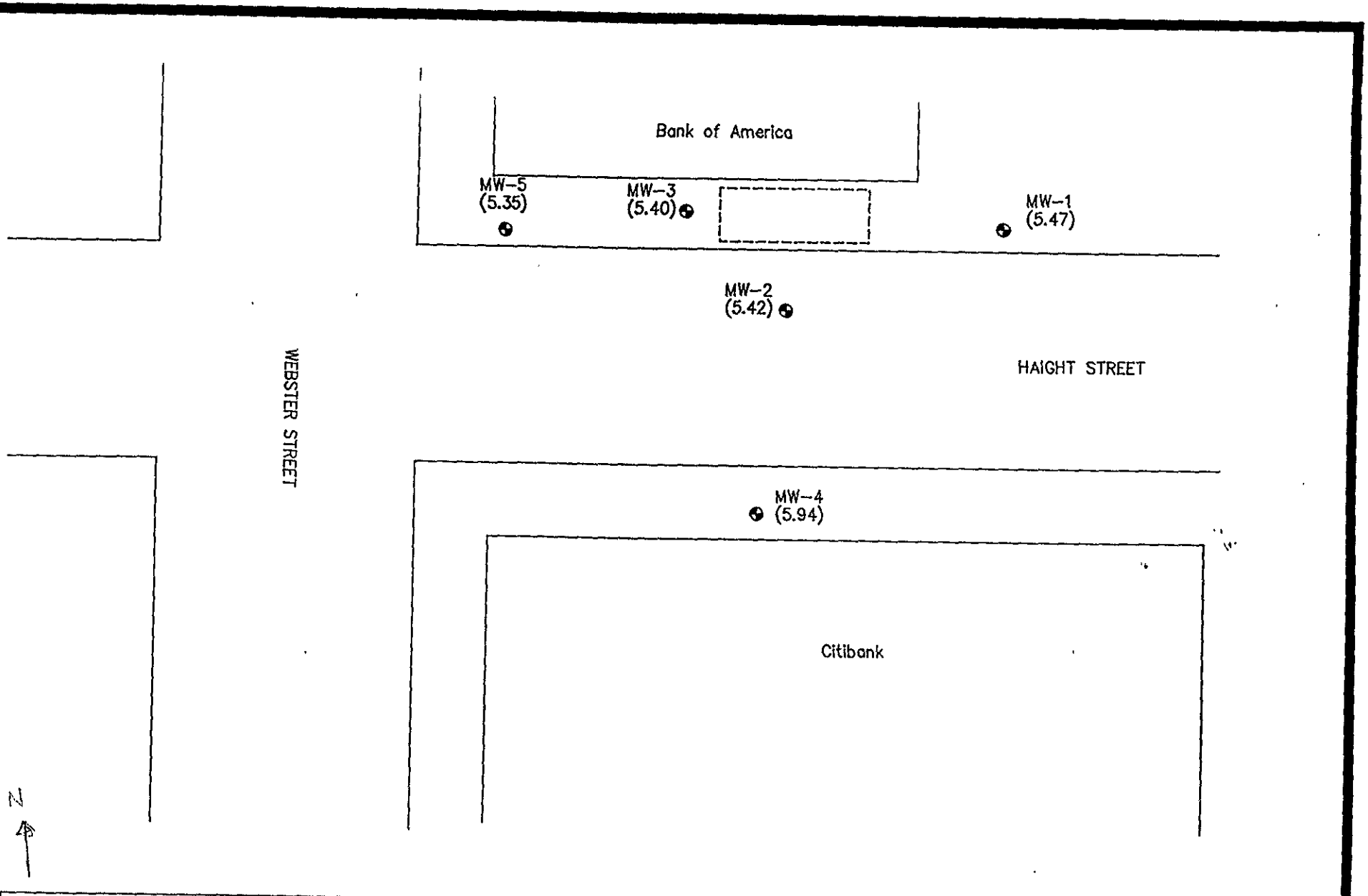
Tank Excavation
Sample Locations



Overexcavation
Sample Locations

TPHd

LEGEND	Sample Locations BANK OF AMERICA 1528 Webster Street Alameda, California	Figure 2	Clayton ENVIRONMENTAL CONSULTANTS
⊕ Sample Location (not to scale)	Clayton Project No. 49543.00		



LEGEND			
⊕ Monitoring Well	Groundwater Equipotential Surface (11/15/94) BANK OF AMERICA 1528 Webster Street Alameda, California	Figure 3	Clayton ENVIRONMENTAL CONSULTANTS
Approximate Scale: 1" = 18'	Clayton Project No. 57718.00	57718-01-17	

The samples were collected in 1-1/2- by 6-inch brass tubes and sealed. They were placed on ice in a cooler case and hand delivered to Clayton's state-certified laboratory in Pleasanton, California, for analysis.

The samples were analyzed by United States Environmental Protection Agency (USEPA) Method 8020 for benzene, toluene, ethylbenzene, and xylenes (BTEX) and USEPA Method 8015 for diesel fuel.

After sample collection was completed, the City of Alameda directed Clayton to return the soil to the excavation pit. The ACEHD directed us to line the pit with plastic sheeting prior to returning the soil. This was done because there was no place onsite to store the excavated soil pending analytical results, and the open excavation presented a potential safety hazard.

Sample analyses revealed elevated levels of diesel fuel in the stockpiled soil excavated from around the UST and in the tank excavation at both ends. Analytical results are summarized in Table 1. Laboratory reports with chain-of-custody documentation are included in Appendix D.

Table 1

Analytical Results
Concentrations Reported in Milligrams per Kilogram (mg/kg)

Sample #	Benzene	Toluene	Ethylbenzene	Xylenes	Diesel	Depth/ Location
1 East	ND	.013	ND	0.36	300	8.4 bgs
2 West	.020	.011	.061	.053	1,300	8.6 bgs
Composite	NA	NA	NA	NA	2,600	Soil pile

5.0 SOIL CONDITIONS

The backfill around the UST appeared to be sand. Not all the backfill was removed during the UST removal. The soil below the tank was sandy, blue-green clay to clayey sand. No water entered into the excavation at 8 feet 6 inches bgs. However, the soil and sand were damp to wet, indicating that the water table was at or about 8 feet bgs. The gradient is not known at this time, but the regional gradient is most likely toward the bay to the south-southwest.

6.0 OVEREXCAVATION

Because of the level of diesel fuel contamination remaining in the excavation, Clayton recommended overexcavation of the UST hole. This work was performed on September 14, 1993, and was observed by Mr. Dariush Dastmalchi, Clayton Geologist; Ms. DiRocco; and Ms. Shin.

The excavation was performed by Bay Area Tank Removal. Transportation of excavated soil was performed by FA Polt Trucking of 235 Rockwood Drive in South San Francisco, California. Approximately 25 tons of pre-excavated soil that had been returned to the UST hole after the UST removal, was loaded on the truck and transported to Port Costa Materials (PCM) for thermal remediation and recycling. An additional 25 tons of soil was overexcavated and also transported to PCM. Non-Hazardous Materials Hauling Manifest and Weight Certificates are included in Appendix E.

After overexcavation was completed, Mr. Dastmalchi collected eight samples from the east and west ends of the excavation and from the north and south sides. The samples submitted for analysis were field screened by Mr. Dastmalchi using a flame ionization detector (FID) and were numbered S1 (east end), S2 (west end), S4 (center north side), and S6 (center south side). Overexcavation sample locations are included in Figure 4. Sampling locations were approved by Ms. Shin.

All samples were collected from approximately 8.5 feet bgs. No water samples were collected, although from the damp appearance of the excavated soil and samples water may have, over time, collected or entered into the excavation.

The samples were turned over to Bay Area Tank Removal for delivery to Geochem Environmental Laboratories at 780 Montague Expressway, Suite 702 in San Jose, California. Laboratory analyses and chain-of-custody documentation are included in Appendix F. A summary of the analytical results are included in the following table.

Table 2

Overexcavation Soil Samples
Concentrations Reported in mg/kg

Sample #	Diesel	BTEX	Location
S-1	107.6	ND	East end of tank excavation
S-2	1,005	ND	West end of tank excavation
S-4	ND	ND	North side of tank excavation
S-6	857	ND	South side of tank excavation

All samples were collected at approximately 8.5 feet bgs, adjacent to the excavation sidewalls.

After sampling was completed, the excavation was backfilled using Class II base rock material. The backfill was compacted in 18-foot lifts using a vibratory plate compactor. This type of compaction usually results in 90% to 95% compaction. No engineering compaction report was provided by Bay Area Tank Removal.

TABLE 3

Summary of Groundwater Analytical Results
October 1994 through March 1996

Monitoring Well	Sample Date	TPH-D (ug/L)	BTEX (ug/L)	PNA (ug/L)	TDS (mg/L)
MW-1	24-Oct-94	ND	ND	NA	22,000
	30-Mar-95	280	ND	NA	280
	21-Jun-95	ND	ND	NA	700
	20-Sep-95	ND	ND	ND	250
MW-2	24-Oct-94	4,400	ND	NA	260
	30-Mar-95	ND	ND	ND	260
	21-Jun-95	9,600	ND	NA	380
	20-Sep-95	1,200	ND	ND	250
	20-Mar-96	5,000	ND	NA	360
MW-3	24-Oct-94	1,200	ND	NA	140
	30-Mar-95	ND	ND	NA	280
	21-Jun-95	460	ND	NA	110
	20-Sep-95	600	ND	ND	120
	20-Mar-96	240	ND	NA	100
MW-4	24-Oct-94	170	ND	NA	200
	30-Mar-95	ND	ND	NA	340
	21-Jun-95	ND	ND	NA	220
	20-Sep-95	120	ND	ND	590
	20-Mar-96	ND	ND	NA	280
MW-5	24-Oct-94	ND	ND	NA	180,000
	30-Mar-95	ND	ND	NA	170,000
	21-Jun-95	ND	ND	NA	110,000
	20-Sep-95	ND	ND	ND	120,000

TPH-D - Total Petroleum Hydrocarbons as Diesel
BTEX - Benzene, Toluene, Ethylbenzene, and Xylenes
PNA - Polynuclear aromatics
TDS - Total Dissolved Solids
ND - Not detected at or above laboratory reporting limits
NA - Not analyzed

Clayton
ENVIRONMENTAL CONSULTANTS

LOG OF EXPLORATORY BORING

Project No.: 53704.00 **Date:** 3/30/94
Client: Bank of America
Location: 1528 Webster Street, Alameda, CA
Logged By: D. Dastmalchi **Driller:** Great Sierra

BORING NO. MW-2
Sheet 1 of 1

Field Location of Boring:
Ground Elevation: **Datum:**

Drilling Method: Hollow-stem auger
Hole Diameter: 8"
Casing Installation Data: 15' screen (0.01); 4' solid; 16' sand; 1' bentonite; 4' grout

Water Level	6.5				
Time	0715				
Date	03/30/94				

Blow Count	PID — OVA (ppm)	DEPTH	SAMPLE	Soil Group Symbol (uscs)	Litho-graphic Symbol	DESCRIPTION
						Asphalt and packing
		1				Silty sand (fine), damp, dark reddish brown (5 YR, 3/3), well rounded, poorly graded with little to no clay
		2				
		3				
		4		SM		
		5	X			
		6			▼	Fine to medium sand, moist, light brown (7.5 YR, 6/4), free water, saturated
		7				Free water
		8				
		9				
		10				
		11		SP		Light brown, fine to medium sand, wet
		12				
		13				
		14				
		15				
		16				
		17				
		18				
						TD = 20'