

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



RAFAT A. SHAHID, DIRECTOR

April 3, 1996

DEPARTMENT OF ENVIRONMENTAL HEALTH

1131 Harbor Bay Parkway
Alameda, CA 94502-6577
(510) 567-6777

REMEDIAL ACTION COMPLETION CERTIFICATION

Mr. Bob Reagan
KTVU, Inc.
2 Jack London Square
Oakland, California 94623

RE: KTVU, Inc. - 2 Jack London Square, Oakland, CA 94623
STID# 930

Dear Mr. Reagan:

This letter confirms the completion of site investigation and remedial action for the two underground storage tanks (1 - 4,000 gallon diesel and 1 - 10,000 gallon gasoline) removed on August 5, 1993 at the above described location. 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 two underground storage tanks release is required.

This notice is issued pursuant to a regulation contained in Title 23, California Code of Regulations, Division 3, Chapter 16, Section 2721 (e). If a change in the present land use is proposed, the property owner must promptly notify this agency.

Please contact Susan L. Hugo at (510) 567-6780 if you have any questions regarding this matter.

Sincerely,

Jun Makishima, Interim Director

Enclosure

c: Gordon Coleman, Acting Chief, Environmental Protection - files
Kevin Graves, RWQCB
Mike Harper, SWRCB (with enclosure)

DEC 26 1995

CASE CLOSURE SUMMARY QUALITY CONTROL BOARD

Leaking Underground Fuel Storage Tank Program

I. AGENCY INFORMATION

Date: December 5, 1995

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

II. CASE INFORMATION

Site facility name: KTVU Television
 Site facility address: 2 Jack London Square, Oakland, CA 94623
 RB LUSTIS Case No: N/A Local Case No./LOP Case No.: 930
 URF filing date: 8/4/93 SWEEPS No: N/A

<u>Responsible Parties:</u>	<u>Addresses:</u>	<u>Phone Numbers:</u>
KTVU c/o	2 Jack London Square	
Mr. Bob Reagan	Oakland, CA 94623	

<u>Tank No:</u>	<u>Size in gal.:</u>	<u>Contents:</u>	<u>Closed in-place or removed?:</u>	<u>Date:</u>
1	10,000 gal	Gasoline	Removed	8/5/93
2	4,000 gal	Diesel	Removed	8/5/93

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and type of release: Unknown, probably from overfilling

Site characterization complete? YES

Date approved by oversight agency: 11/18/93

Monitoring Wells installed? YES Number: Three (3)

Proper screened interval? YES

Highest GW depth below ground surface: 2.36 feet Lowest depth: 4.24 feet

Flow direction: Predominantly northwest and strongly influenced by tidal fluctuations

Most sensitive current use: Commercial

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): NA

Report(s) on file? YES Where is report(s) filed? Alameda County
 1131 Harbor Bay Parkway
 Alameda, CA 94502-6577

Leaking Underground Fuel Storage Tank Program

Treatment and Disposal of Affected Material:

<u>Material</u>	<u>Amount</u> <u>(include units)</u>	<u>Action (Treatment</u> <u>of Disposal w/destination)</u>	<u>Date</u>
Tank	1 - 10,000 gal 1 - 4,000 gal	Disposed at Erickson, Inc. Richmond, CA	8/5/93
Soil	312 yards	Gibson Environmental Bakersfield, CA	8/13/93 to 9/7/93
Groundwater	42,300 gallons	Evergreen Env. Services Newark, CA	8/10/93 to 8/24/93

III. RELEASE AND SITE CHARACTERIZATION INFORMATION (Continued)

Maximum Documented Contaminant Concentrations - - Before and After Cleanup

Contaminant	Soil (ppm)		Water (ppb)	
	Before	After	Before	After
	TPH (Gas)	ND <1.0	-	* 1,600
TPH (Diesel)	4,600	94	** 100,000	ND <50
Benzene	ND <0.005	-	* 1.2	ND <0.5
Toluene	6.8	ND<0.005	* 1.4	ND <0.5
Xylene	28	8.1	* 5.9	ND <0.5
Ethylbenzene	9.3	ND<0.005	* 1.8	ND <0.5

* Grab groundwater sample from the gasoline tank's excavation.

** Grab groundwater sample from the diesel tank's excavation.

Comments (Depth of Remediation, etc.):

Two underground storage tanks (1-10,000 gallon gasoline and 1-4,000 gallon diesel) were removed from the subject site on August 5, 1993. Groundwater was present in both excavation pits. Floating product was also found in the diesel tank excavation. Soil and groundwater samples were subsequently collected from the two excavations. The analytical results of the soil samples collected from the gasoline pit showed low levels of xylene (9.4 ppm) and no detectable level of TPH gasoline, benzene, toluene and ethylbenzene. The soil samples collected from the diesel tank area at 5 feet depth found up to 4600 ppm TPH diesel, 6.8 ppm toluene, 9.3 ppm ethylbenzene, and 28 ppm xylenes. Benzene, however, was not detected in any of the soil samples.

The diesel contamination appeared to be very limited and confined in the soil under the building directly below the ruptured diesel product lines. Overexcavation was conducted where accessible and confirmation soil samples showed low levels of TPH diesel as mentioned above.

Leaking Underground Fuel Storage Tank Program

A total of 42,300 gallons of groundwater was pumped out from both excavations prior to backfilling with clean fill.

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: **NA**

Should corrective action be reviewed if land use changes? **YES**

Monitoring wells Decommissioned: **NO (will be decommissioned upon approval of case closure)**

Number Decommissioned: **NONE**

Number Retained: **Three (3)**

List enforcement actions taken: **NONE**

List enforcement actions rescinded: **NA**

V. LOCAL AGENCY REPRESENTATIVE DATA

Name: **Susan L. Hugo** Title: **Sr. Hazardous Materials Specialist**

Signature: *Susan L. Hugo* Date: *12/5/95*

Reviewed by

Name: **Dale Klettke** Title: **Hazardous Materials Specialist**

Signature: *Dale Klettke* Date: *12/7/95*

Name: **Thomas Peacock** Title: **Sup. Hazardous Materials Specialist**

Signature: *Thomas Peacock* Date: *12-14-95*

VI. RWQCB NOTIFICATION

Date Submitted to RB: *12/15/95*
RWQCB Staff Name: **Kevin Graves**

RB Response: *Approved*
Title: **Water Resources Control Engineer**
Date: *1/2/96*

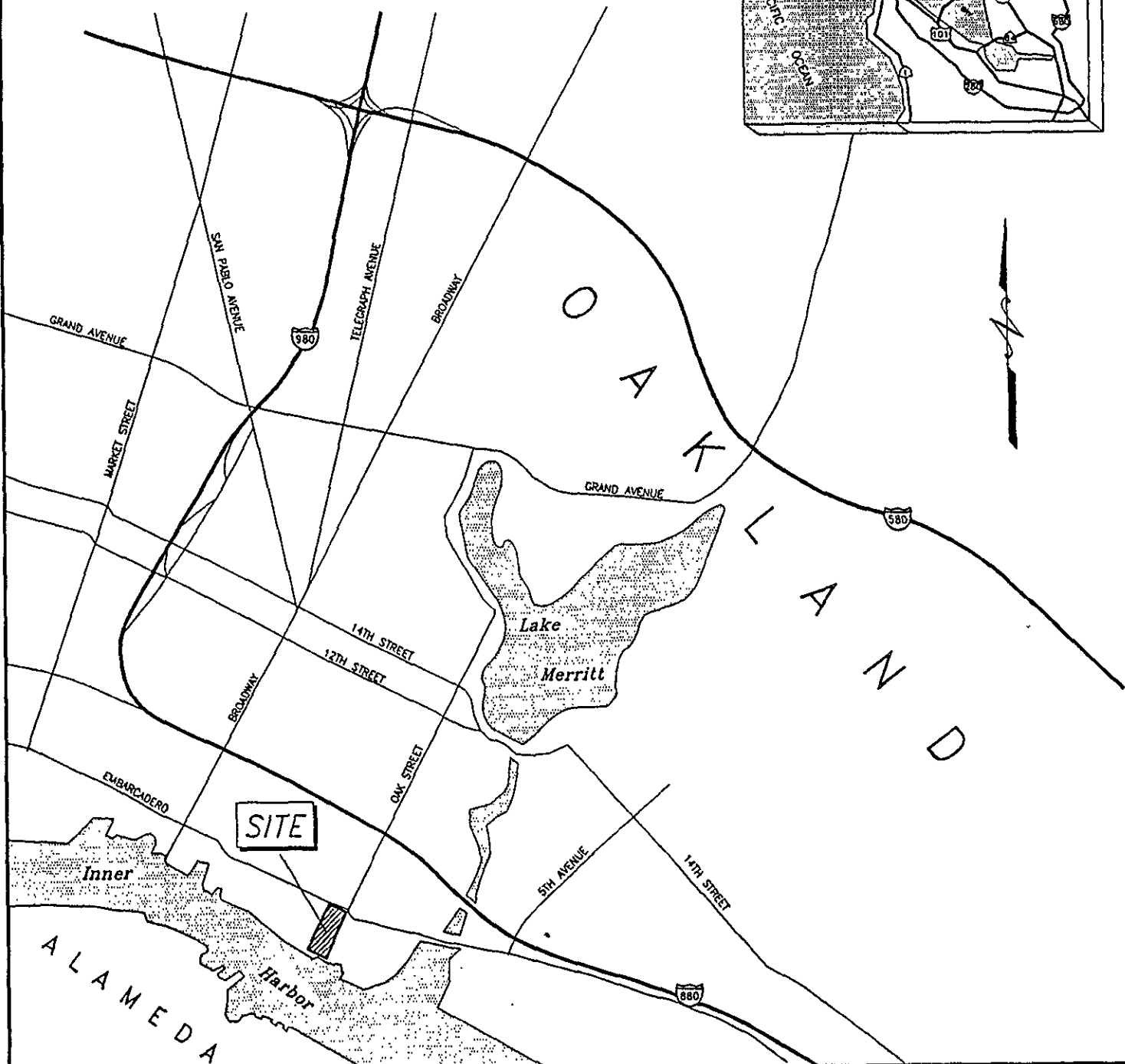
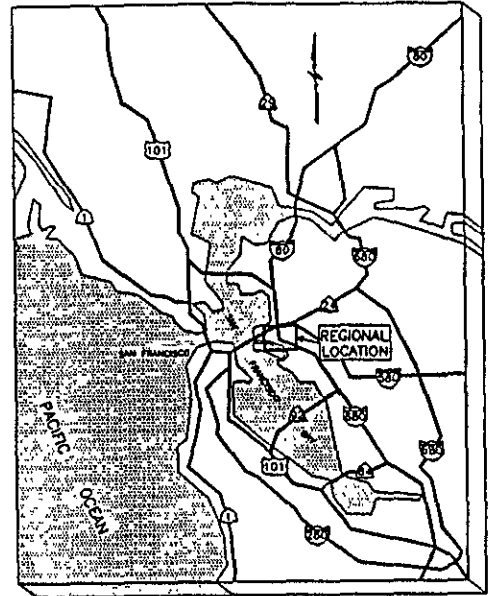
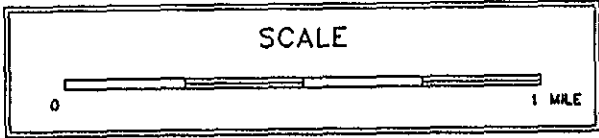
Kevin Graves

Leaking Underground Fuel Storage Tank Program

VII. ADDITIONAL COMMENTS, DATA, ETC.

On November 30, 1993, three soil borings were drilled and completed as shallow groundwater monitoring wells at the subject property. The soil samples collected during the installation of the wells did not show any petroleum hydrocarbon contamination. The three groundwater monitoring wells have been sampled five times (from 12/8/93 to 2/8/95). No TPH diesel, TPH gasoline, or BTEX were detected in the groundwater samples except for well MW-1 where low levels of xylene (0.5 to 2.7 ppb) were found during the first three quarters of sampling.

Based on the data submitted for the referenced site, the residual hydrocarbons have not adversely affected the groundwater at the site. Therefore, this agency recommends that no further work is required regarding the two underground storage tanks removed from the subject property.




CET Environmental Services, Inc.

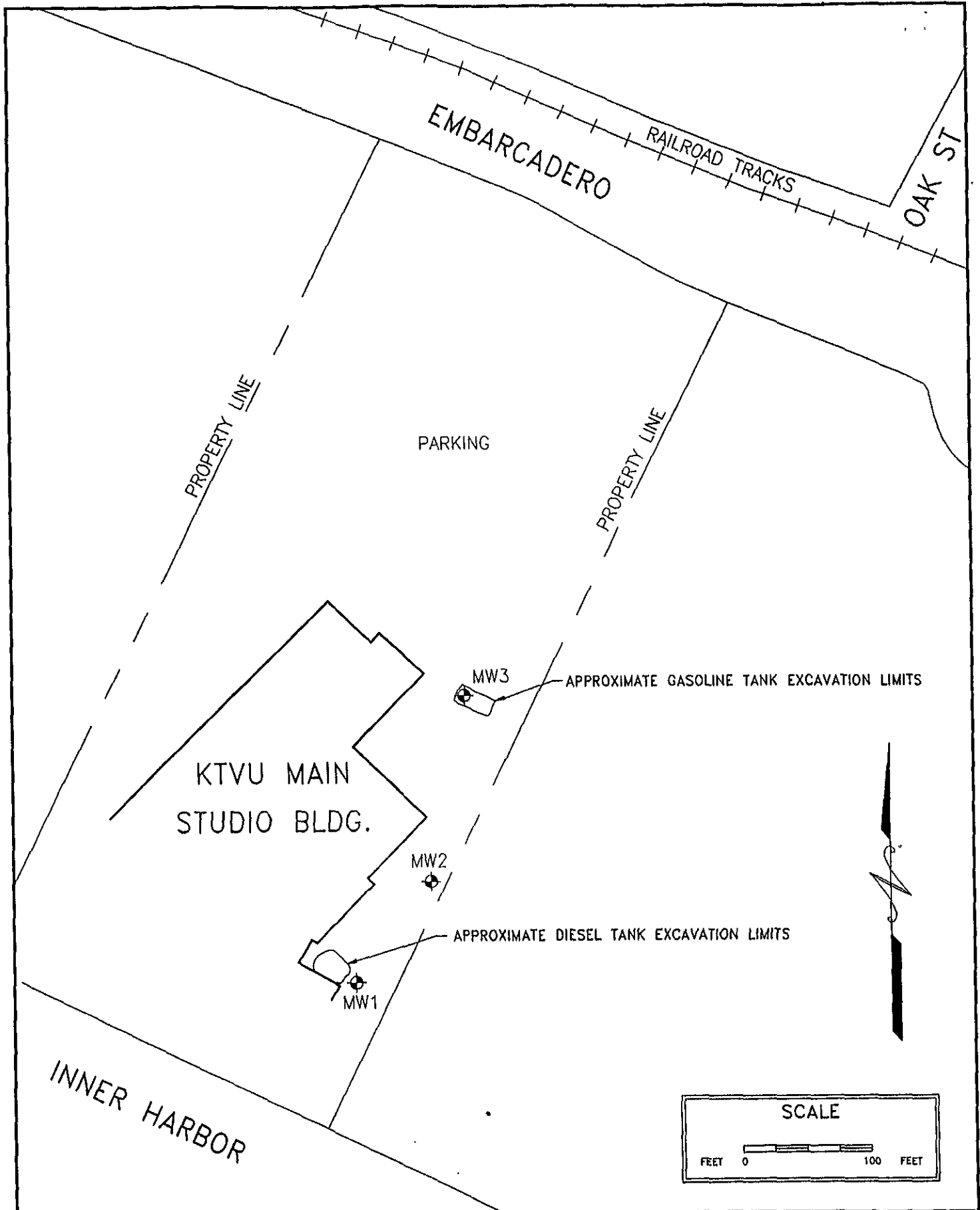
SITE LOCATION MAP

KTVU, INC.
2 JACK LONDON SQUARE
OAKLAND, CALIFORNIA

JOB NUMBER	DATE	DRAWING	BY	REVISED
3668	03/95	3668LOC	RASCHKE	03/23

PLATE

1



CET Environmental
Services, Inc.

SITE PLAN					PLATE 2
KTVU, INC. 2 JACK LONDON SQUARE OAKLAND, CALIFORNIA					
JOB NUMBER	DATE	DRAWING	BY	REVISED	
3668	03/95	3668PLAN	RASCHKE	03/21	

KTVU MAIN
STUDIO BLDG.

LEGEND

- APPROXIMATE FINAL LIMITS OF EXCAVATION
 - - - - - APPROXIMATE TANK LOCATION
 - ⊕ APPROXIMATE MONITORING WELL LOCATION
 - EXCAVATION SAMPLE LOCATION
- TPH-D: TOTAL PETROLEUM HYDROCARBONS AS DIESEL
 TPH-G: TOTAL PETROLEUM HYDROCARBONS AS GAS
- TPH CONCENTRATIONS ARE IN mg/Kg OR ppm
 BTEX CONCENTRATIONS ARE IN ug/Kg OR ppb
 ND: NOT DETECTED AT OR ABOVE THE TEST MDL

T1-A @ 5'

TPH-D	ND
BENZENE	ND
TOLUENE	ND
ETHYLBENZENE	ND
XYLENES	ND

T1-F @ 5'

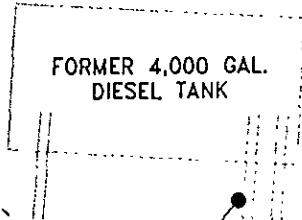
TPH-D	ND
BENZENE	ND
TOLUENE	ND
ETHYLBENZENE	ND
XYLENES	ND

T1-D @ 5'

TPH-D	75
BENZENE	ND
TOLUENE	6.8
ETHYLBENZENE	9.3
XYLENES	28

T1-B @ 5'

TPH-D	ND
BENZENE	ND
TOLUENE	ND
ETHYLBENZENE	ND
XYLENES	ND



MW1

SB-1-15A @ 15'

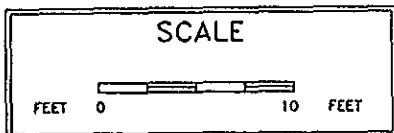
TPH-G	ND
TPH-D	ND
BENZENE	ND
TOLUENE	ND
ETHYLBENZENE	ND
XYLENES	ND

T1-C @ 5'

TPH-D	4600
BENZENE	ND
TOLUENE	ND
ETHYLBENZENE	ND
XYLENES	ND

T1-E

TPH-D	94
BENZENE	ND
TOLUENE	ND
ETHYLBENZENE	ND
XYLENES	8.1



PROPERTY LINE

NOTE: SOIL NEAR SAMPLE LOCATIONS T1-C AND T1-D WAS REMOVED DURING OVEREXCAVATION.



**CET Environmental
Services, Inc.**

**DIESEL TANK EXCAVATION
AND SOIL SAMPLE LOCATIONS**
KTVU, INC.
2 JACK LONDON SQUARE
OAKLAND, CALIFORNIA

JOB NUMBER	DATE	DRAWING	BY	REVISED
3668	03/95	3668DSEL	RASCHKE	03/23

PLATE

3

LEGEND

- APPROXIMATE FINAL LIMITS OF EXCAVATION
 - APPROXIMATE TANK LOCATION
 - ⊕ APPROXIMATE MONITORING WELL LOCATION
 - EXCAVATION SAMPLE LOCATION
- TPH-D: TOTAL PETROLEUM HYDROCARBONS AS DIESEL
 TPH-G: TOTAL PETROLEUM HYDROCARBONS AS GAS
- TPH CONCENTRATIONS ARE IN mg/Kg OR ppm
 BTEX CONCENTRATIONS ARE IN ug/Kg OR ppb
 ND: NOT DETECTED AT OR ABOVE THE TEST MDL



KTVU MAIN
STUDIO BLDG.

T2-A	
TPH-G	ND
BENZENE	ND
TOLUENE	ND
ETHYLBENZENE	ND
XYLENES	ND

T2-C	
TPH-G	ND
BENZENE	ND
TOLUENE	ND
ETHYLBENZENE	ND
XYLENES	ND

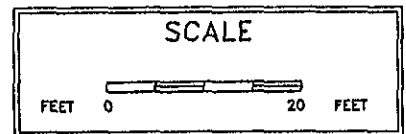
D-1	
TPH-G	ND
BENZENE	ND
TOLUENE	ND
ETHYLBENZENE	ND
XYLENES	ND

SB-3	⊕	5'	10'	15'
TPH-G		ND	ND	ND
TPH-D		ND	ND	ND
BENZENE		ND	ND	ND
TOLUENE		ND	ND	ND
ETHYLBENZENE		ND	ND	ND
XYLENES		ND	ND	ND

T2-D	
TPH-G	ND
BENZENE	ND
TOLUENE	ND
ETHYLBENZENE	ND
XYLENES	9.4

T2-B	
TPH-G	ND
BENZENE	ND
TOLUENE	ND
ETHYLBENZENE	ND
XYLENES	ND

SB-3	⊕	5'	10'
TPH-G		ND	ND
TPH-D		ND	ND
BENZENE		ND	ND
TOLUENE		ND	ND
ETHYLBENZENE		ND	ND
XYLENES		ND	ND



MW2

PROPERTY LINE



CET Environmental Services, Inc.

GASOLINE TANK EXCAVATION
AND SOIL SAMPLE LOCATIONS
KTVU, INC.
2 JACK LONDON SQUARE
OAKLAND, CALIFORNIA

PLATE

4

JOB NUMBER	DATE	DRAWING	BY	REVISED
3668	03/95	3668GAS	RASCHKE	03/23

LEGEND

- MW3
MONITORING WELL LOCATION AND GROUNDWATER ELEVATION
- LINE OF EQUAL GROUNDWATER ELEVATION [INTERVAL = 0.20 FT] ELEVATIONS RELATIVE TO MSL
- APPROX. DIRECTION OF GROUNDWATER FLOW GRADIENT = 0.0079 FT/FT N48°W

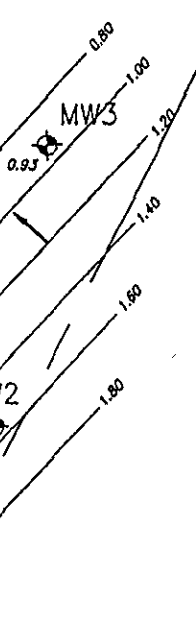
EMBARCADERO RAILROAD TRACKS
OAK ST

PROPERTY LINE

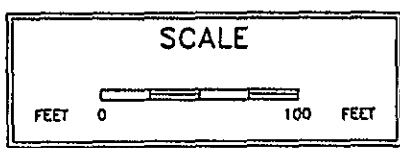
PARKING

PROPERTY LINE

KTVU MAIN STUDIO BLDG.



INNER HARBOR



CET Environmental Services, Inc.

GROUNDWATER ELEVATIONS AND CONTOURS

12/08/93
KTVU, INC.


2 JACK LONDON SQUARE
OAKLAND, CALIFORNIA


PLATE


5

JOB NUMBER	DATE	DRAWING	BY	REVISED
3668	03/95	GWL12-93	LONG	03/29

LEGEND

MW3
 MONITORING WELL LOCATION AND GROUNDWATER ELEVATION

1.20
 LINE OF EQUAL GROUNDWATER ELEVATION (INTERVAL = 0.20 FT) ELEVATIONS RELATIVE TO MSL

APPROX. DIRECTION OF GROUNDWATER FLOW
 GRADIENT = 0.0077 FT/FT N45°W


EMBARCADERO RAILROAD TRACKS

OAK ST

PROPERTY LINE

PARKING

PROPERTY LINE

KTVU MAIN STUDIO BLDG.

MW3
1.20

MW2
1.83

MW1
1.93

1.00

1.20

1.40

1.60

1.80

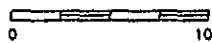
2.00

2.20



INNER HARBOR

SCALE



FEET 0 100 FEET



CET Environmental Services, Inc.

GROUNDWATER ELEVATIONS AND CONTOURS

03/02/94
 KTVU, INC.




2 JACK LONDON SQUARE
 OAKLAND, CALIFORNIA

PLATE

6

JOB NUMBER	DATE	DRAWING	BY	REVISED
3668	03/95	GWL03-94	LONG	03/29

LEGEND

-  MW3
MONITORING WELL LOCATION AND GROUNDWATER ELEVATION
-  LINE OF EQUAL GROUNDWATER ELEVATION (INTERVAL = 0.05 FT) ELEVATIONS RELATIVE TO MSL
-  APPROX. DIRECTION OF GROUNDWATER FLOW GRADIENT = 0.0011 FT/FT N73E

EMBARCADERO RAILROAD TRACKS
OAK ST

PROPERTY LINE

PARKING

PROPERTY LINE

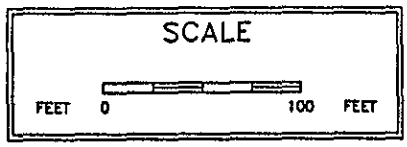
KTVU MAIN STUDIO BLDG.

MW3
0.62

MW2
0.69

MW1
0.77

INNER HARBOR



CET Environmental Services, Inc.


GROUNDWATER ELEVATIONS AND CONTOURS
06/29/94
KTVU, INC.
2 JACK LONDON SQUARE
OAKLAND, CALIFORNIA


PLATE


7

JOB NUMBER	DATE	DRAWING	BY	REVISED
3668	03/95	GWLO6-94	LONG	03/29

LEGEND

MW3
 MONITORING WELL LOCATION AND GROUNDWATER ELEVATION

0.62
 0.60
 LINE OF EQUAL GROUNDWATER ELEVATION [INTERVAL = 0.10 FT] ELEVATIONS RELATIVE TO MSL


 APPROX. DIRECTION OF GROUNDWATER FLOW GRADIENT = 0.0039 FT/FT S81°E

EMBARCADERO RAILROAD TRACKS
 OAK ST

PROPERTY LINE

PARKING

PROPERTY LINE

KTVU MAIN STUDIO BLDG.

MW3
0.32

MW2
0.34

MW1
0.32

0.70

0.60

0.50

0.40

0.30

0.20



SCALE

FEET 0 100 FEET

INNER HARBOR



CET Environmental Services, Inc.


GROUNDWATER ELEVATIONS AND CONTOURS
 09/27/94
 KTVU, INC.
 2 JACK LONDON SQUARE
 OAKLAND, CALIFORNIA


PLATE


8

JOB NUMBER	DATE	DRAWING	BY	REVISED
3668	03/95	GWL09-94	LONG	03/29

LEGEND

MW3
 MONITORING WELL LOCATION AND GROUNDWATER ELEVATION

0.95
 LINE OF EQUAL GROUNDWATER ELEVATION (INTERVAL = 0.10 FT) ELEVATIONS RELATIVE TO MSL

APPROX. DIRECTION OF GROUNDWATER FLOW
 GRADIENT = 0.0034 FT/FT N30°W

EMBARCADERO RAILROAD TRACKS

OAK ST

PROPERTY LINE

PARKING

PROPERTY LINE

KTVU MAIN STUDIO BLDG.

0.80

0.90

MW3
0.95

1.00

1.10

1.20

1.30

MW2
1.33

1.40

1.50

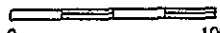
MW1
1.46

1.60



INNER HARBOR

SCALE



FEET 0 100 FEET



CET Environmental Services, Inc.

GROUNDWATER ELEVATIONS AND CONTOURS
 02/08/95
 KTVU, INC.
 2 JACK LONDON SQUARE
 OAKLAND, CALIFORNIA

PLATE

9

JOB NUMBER	DATE	DRAWING	BY	REVISED
3668	03/95	GWL02-95	LONG	03/29



**Table 2 - Analytical Results - Quarterly Groundwater Samples
Monitoring Wells MW-1, MW-2, and MW-3
2 Jack London Square - Oakland, California**

Sample ID	Sample Collection Date	Concentration/Analyte (µg/L) ¹					
		TPHg ²	TPHd ³	B ⁴	T ⁴	E ⁴	X ⁴
MW-1	12/8/93	<50	<50	<0.5	<0.5	<0.5	2.7
MW-2		<50	<50	<0.5	<0.5	<0.5	<0.5
MW-3		<50	<50	<0.5	<0.5	<0.5	<0.5
MW-1	3/2/94	<50	<50	<0.5	<0.5	<0.5	2
MW-2		<50	<50	<0.5	<0.5	<0.5	<0.5
MW-3		<50	<50	<0.5	<0.5	<0.5	<0.5
MW-1	6/29/94	<50	<50	<0.5	<0.5	<0.5	0.5
MW-2		<50	<50	<0.5	<0.5	<0.5	<0.5
MW-3		<50	<50	<0.5	<0.5	<0.5	<0.5
MW-1	9/27/94	<50	<50	<0.5	<0.5	<0.5	<0.5
MW-2		<50	<50	<0.5	<0.5	<0.5	<0.5
MW-3		<50	<50	<0.5	<0.5	<0.5	<0.5
MW-1	2/8/95	<50	<50	<0.5	<0.5	<0.5	<0.5
MW-2		<50	<50	<0.5	<0.5	<0.5	<0.5
MW-3		<50	<50	<0.5	<0.5	<0.5	<0.5

1. µg/L = micrograms per liter, equivalent to parts per billion (ppb)
2. TPHg = Total Petroleum Hydrocarbons as gasoline
3. TPHd = Total Petroleum Hydrocarbons as diesel
4. BTEX = benzene, toluene, ethyl benzene, total xylenes
5. NA = not analyzed

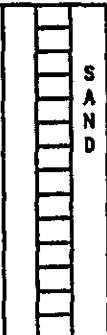
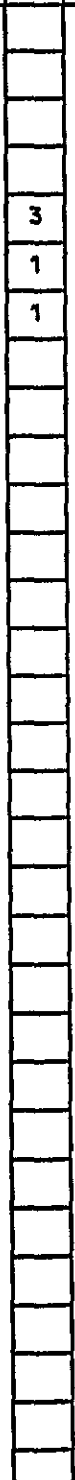


**Table 3 - Groundwater Elevation Data
Monitoring Wells MW-1, MW-2, and MW-3
2 Jack London Square - Oakland, California**

Sample ID	Top of Casing Elevation¹ (ft.)	Groundwater Measurement Date	Depth to Water (ft.)	Groundwater Elevation (ft.)
MW-1	4.76	12/8/93	3.15	1.61
		3/2/93	2.83	1.93
		6/29/94	3.99	0.77
		9/27/94	4.24	0.52
		2/8/95	3.3	1.46
MW-2	4.19	12/8/93	2.65	1.54
		3/2/93	2.36	1.83
		6/29/94	3.5	0.69
		9/27/94	3.85	0.34
		2/8/95	2.86	1.33
MW-3	4.35	12/8/93	3.42	0.93
		3/2/93	3.15	1.2
		6/29/94	3.73	0.62
		9/27/94	4.03	0.32
		2/8/95	3.4	0.95

1. Elevation was determined relative to mean seal level (msl), by a California licensed surveyor.

Project: KTVU Inc.	Applied Environmental Solutions				Page: 1 of 2		
Location: Oakland, CA	Well Construction Data:				Well Number: MW-1		
Driller: HEW Drilling Company, Inc.	Grout:	0.5 ft	to	3 ft	Date: November 30, 1993		
Method: Hollow Stem Auger	Seal Plug:	3 ft	to	4 ft.	Logged By: Mark L. Muest		
Sampling Method: Split Spoon	Sand Pack:	4 ft	to	15 ft	Weather: Clear		
Casing Type: PVC	Screen:	5 ft	to	15 ft	Boring Dia: 8 Inch		
Casing Dia.: 2 Inch	Grout Type: Portland I/II				Boring Depth: 15 Feet		
Screen Type: PVC	Seal Type: Bentonite				Completion Depth: 15 Feet		
Screen Slot: 0.010 Inch	Sand Type: #2-16				Depth to Groundwater: Approx. 5 Feet		
Lithology	S A M P #	D E P T H	Well Completion		B L O W S	M O I S T	Remarks
Asphalt w/ grading material		0					Backfill pea gravel was not sampled
Gravel, well sorted, 1/4 inch, light grey, backfill for diesel tank pit		1	G R O U T			D R Y	
		2					
		3	S E A L				
		4	S A N D				
		5					
		6				S A T U R A T E D	
		7					
		8					
		9					
		10					
	11						

Project: KTVU Inc.		Applied Environmental Solutions			Page: 2 of 2	
Location: Oakland, CA		Logged By: Mark L. Wuest			Well Number: MW-1	
Driller: HEW Drilling Company, Inc.		Weather: Clear			Date: November 30, 1993	
Lithology	S A M P #	D E P T H	Well Completion	B L O W S	M O I S T	Remarks
Gravel, well sorted, 1/4 inch, light grey, backfill for diesel tank pit	A B C	12			V E R Y M O I S T.	
Clay, grey		13				
Boring terminated at 15 feet bsg		14				
		15				
		16				
		17				
		18				
		19				
		20				
		21				
		22				
		23				
		24				
		25				
		26				

Project: KTVU Inc.	Applied Environmental Solutions	Page: 1 of 2
Location: Oakland, CA	Well Construction Data:	Well Number: MW-2
Driller: HEW Drilling Company, Inc.	Grout: 0.5 ft to 3 ft	Date: November 30, 1993
Method: Hollow Stem Auger	Seal Plug: 3 ft to 4 ft	Logged By: Mark L. Wuest
Sampling Method: Split Spoon	Sand Pack: 4 ft to 15 ft	Weather: Clear
Casing Type: PVC	Screen: 5 ft to 15 ft	Boring Dia: 8 Inch
Casing Dia.: 2 Inch	Grout Type: Portland I/II	Boring Depth: 15 Feet
Screen Type: PVC	Seal Type: Bentonite	Completion Depth: 15 Feet
Screen Slot: 0.010 Inch	Sand Type: #2-16	Depth to Groundwater: Approx. 4 Feet


Lithology	S A M P #	D E P T H	Well Completion	B L O W S	M O I S T	Remarks
Asphalt w/grading material		0				
Silt w/gravel, dark brown		1	G R O U T		M O I S T	
Clay w/fine sand, grey		2				
		3				
	C	4			2	
Sand w/clay, medium grained, grey	B	5	S A N D		2	
	A	6				
		7				
		8				
		9				
	C					
	B				0	
		10			0	
Clay, grey	A		S A N D		0	
		11				

Sample SB-2-5 disturbed, too wet

Project: KTVU Inc.		Applied Environmental Solutions			Page: 2 of 2	
Location: Oakland, CA		Logged By: Mark L. Wuest			Well Number: MW-2	
Driller: HEW Drilling Company, Inc.		Weather: Clear			Date: November 30, 1993	
Lithology	S A M P #	D E P T H	Well Completion	B L O W S	H O I S T	Remarks
Clay, grey		12	S A N D		V E R Y H O I S T	
		13				
Boring terminated at 15 feet bsg	A	14		O		
	B			O		
	C	15		O		
			16			
			17			
			18			
			19			
			20			
			21			
			22			
			23			
			24			
			25			
			26			

Project: KTVU Inc.	Applied Environmental Solutions	Page: 1 of 2
Location: Oakland, CA	Well Construction Data:	Well Number: MW-3
Driller: HEW Drilling Company, Inc.	Grout: 0.5 ft to 3 ft	Date: November 30, 1993
Method: Hollow Stem Auger	Seal Plug: 3 ft to 4 ft	Logged By: Mark L. Wuest
Sampling Method: Split Spoon	Sand Pack: 4 ft to 15 ft	Weather: Clear
Casing Type: PVC	Screen: 5 ft to 15 ft	Boring Dia: 8 Inch
Casing Dia.: 2 Inch	Grout Type: Portland I/II	Boring Depth: 15 Feet
Screen Type: PVC	Seal Type: Bentonite	Completion Depth: 15 Feet
Screen Slot: 0.010 Inch	Sand Type: #2-16	Depth to Groundwater: Approx. 5 Feet

Lithology	S A M P #	D E P T H	Well Completion	B L O W S	M O I S T	Remarks
Asphalt w/grading		0				
Silt w/gravel, dark brown		1	G R O U T			
		2				
		3	S E A L			
Sand, medium to coarse grained, yellow	C	4		2		
Clay, grey	B	5	S A N D	3		
Sand, medium grained, well sorted, light grey	A	6		1		
		7				
		8				
		9		0		
Clay, grey	C	10		0		
	B	11		2		
	A					

Project: KTVU Inc.		Applied Environmental Solutions			Page: 2 of 2		
Location: Oakland, CA		Logged By: Mark L. Wuest			Well Number: MW-3		
Driller: HEW Drilling Company, Inc.		Weather: Clear			Date: November 30, 1993		
Lithology	S A M P #	D E P T H	Well Completion	B L O W S	M O I S T	Remarks	
Clay, grey		12			V E R Y M O I S T		
		13					
	A	14				0	
	B	15				0	
	C	15				1	
Boring terminated at 15 feet bsg		16					
		17					
		18					
		19					
		20					
		21					
		22					
		23					
		24					
		25					
		26					