

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

January 7, 2004

Mr. Joe Sordi, Manager Forward Planning
Kaufman & Broad
2201 Walnut Avenue, Suite 150
Fremont, CA 94538

**Re: Case Closure, Marina Cove Subdivision (Former Weyerhaeuser Co), 1801 Hibbard Avenue,
Alameda, CA 94501; Case No. RO0002502**

Dear Mr. Sordi:

This letter confirms the completion of site investigation and remedial action for soil and groundwater contamination at the Park Parcel and at the Marina Cove Subdivision of the above referenced site. We are also transmitting to you the enclosed case closure summary. These documents confirm the completion of the investigation and cleanup of the reported releases at the subject site. The subject Spill, Leaks, Industrial Leak (SLIC) case is closed.

SITE INVESTIGATION AND CLEANUP SUMMARY

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

- Residual pollution of up to 550ppm TPHg, 260ppm TPHd, 320ppm TPHmo, and 0.56ppm benzene remain in soil beneath the site.
- Residual pollution of up to 1,700ppb TPHg, 1,290ppb TPHd, and 99.3ppb benzene remain in groundwater beneath the site.

If you have any questions, please call Ms. eva chu at (510) 567-6762. Thank you.

Sincerely,

Donna Drogos, P.E.
Toxics Program Manager

c: Betty Graham, RWQCB (w/att)

kbhome-transmittal

CASE CLOSURE SUMMARY - SLIC

I. AGENCY INFORMATION

Date: January 2, 2004

Agency Name: Alameda County Environmental Health	Address: 1131 Harbor Bay Parkway
City/State/Zip: Alameda, CA 94502-6577	Phone: (510) 567-6762
Responsible Staff Person: Eva Chu	Title: Hazardous Materials Specialist

II. CASE INFORMATION

Site Facility Name: Marina Cove Subdivision (Former Weyerhaeuser Paper Company)		
Site Facility Address: 1801 Hibbard Ave, Alameda, CA 94601		
RB Case No.: ---	Local Case No.: 587	LOP Case No.: RO0002502
URF Filing Date: ---	SWEEPS No.: ---	APN: 072-0384-30 through 116
Responsible Parties	Addresses	Phone Numbers
Mr. Joe Sordi Kaufman & Broad	2201 Walnut Ave, Suite 150 Fremont, CA 94538	510-383-2336

Tank I.D. No	Size in Gallons	Contents	Closed In Place/Removed?	Date
---	None	---	---	---
Piping			---	---

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and Type of Release: Surface release of sulfuric Acid from a damaged above ground tank. Unknown method of release of lead, total petroleum hydrocarbons, VOCs and SVOCs to surface soils.		
Site characterization complete? Yes	Date Approved By Oversight Agency: -----	
Monitoring wells installed? No	Number: N/A	Proper screened interval? N/A
Highest GW Depth Below Ground Surface: N/A	Lowest Depth: N/A	Flow Direction: N/A
Most Sensitive Current Use: Potential drinking water source.		
Summary of Production Wells in Vicinity: No water supply wells identified within 2000 feet of the site. Several irrigation wells are within 2000 feet of the site, but the wells are upgradient (south or southeast) of the site and not likely to be impacted by the site's plume.		
Are drinking water wells affected? No	Aquifer Name: East Bay Plain	
Is surface water affected? No	Nearest affected SW Name: NA	
Off-Site Beneficial Use Impacts (Addresses/Locations): None		
Reports on file? Yes	Where are reports filed? Alameda County Environmental Health	

TREATMENT AND DISPOSAL OF AFFECTED MATERIAL			
Material	Amount (Include Units)	Action (Treatment or Disposal w/Destination)	Date
Tank	None	---	---
Piping	None	---	---
Free Product	None	---	---
Soil	26 tons 2620 cy	Disposed by Decon Environmental Disposed by E&LC Company	July 2001 July 2001
Groundwater	None	---	---

MAXIMUM DOCUMENTED CONTAMINANT CONCENTRATIONS BEFORE AND AFTER CLEANUP AT THE PARK PARCEL (Please see Attachments for additional information on contaminant locations and concentrations)				
Contaminant	Soil (ppm)		Water (ppb)	
	Before	After	Before	After
TPH (Gas)	4	3.3	970	NA
TPH (Diesel)	1100	160	26000	190
TPH (motor oil)	320	320	---	---
Benzene	0.018	0.018	<.5	<.5
Toluene	0.15	0.15	3.3	<.5
Ethyl Benzene	0.15	0.15	3.7	<.5
Xylene	0.96	0.96	26	<.5
Heavy Metals	39 ¹	39	NA	NA
MTBE	ND	ND	6.3	6.3
VOCs (Method 8240)	ND	ND	NA	NA
SVOCs (Method 8270)	0.5 ²	0.5 ²	21 ³	21 ³

1. Maximum lead concentrations at 5 feet bgs. See Attachment 3 for result of other metal concentrations detected.
2. Maximum acetone concentration in soil. See Attachment 3 for results of other detected SVOCs.
3. Maximum acetone concentrations in groundwater. See Attachment 4 for other detected SVOCs.

**MAXIMUM DOCUMENTED CONTAMINANT CONCENTRATIONS BEFORE AND AFTER CLEANUP
AT THE MARINA COVE SUBDIVISION**

(Please see Attachments for additional information on contaminant locations and concentrations)

Contaminant	Soil (ppm)		Water (ppb)	
	Before ¹	After ²	Before ³	After ³
TPH (Gas)	3000	550	42000	1700
TPH (Diesel)	22	<1	6100	1290
TPH (motor oil)	2800	60	1800	<500
Benzene	21	.56	9900	99.3
Toluene	27	1	2900	3.8
Ethyl Benzene	27	1.5	1400	51.9
Xylene	43	8.5	3500	13.9
Heavy Metals (lead)	290	86	130	6
MTBE	<.05	<.05	360	<100
VOCs (8240)	ND	ND	150 ⁶	150
SVOCs (8270)	35 ⁵	35	430 ⁷	430

Notes:

1. Soil sample from UST removal, 2/1991. TPHmo and lead from railroad ballast, 8/1998
2. After overexcavation of tank pit, 4/1991. TPHmo and lead from railroad ballast after overexcavation, 4/2001
3. Maximum historic groundwater concentration
4. Groundwater concentration from well STMW-3, 1/1993, except benzene from well MW3B, 8/1998 and lead from soil boring MW-3.
5. Maximum concentrations of naphthalene in soil. See Attachment 3 for results of other detected SVOCs.
6. Maximum concentration of 1,2-DCE in groundwater. See Attachment 4 for results of other detected VOCs.
7. Maximum concentration of naphthalene in groundwater. See Attachment 4 for results of other detected SVOCs.

Site History and Description of Corrective Actions:

This site consists of several parcels, comprising approximately 19.4 acres. Two major areas, the Park Parcel (includes the former Encinal Terminal) and Marina Cove Subdivision, are discussed below. Underground storage tanks (USTs) were removed from the site and case closure granted by Alameda County Environmental Health (ACEH) for commercial land use on February 6, 1996 (Encinal Terminal) and November 15, 1999 (Marina Cove). When the site was redeveloped as single family residences, an updated human health risk evaluation was prepared for the site.

Park Parcel – Previous Investigations:

Between January 1988 and April 1994, three gasoline and two diesel USTs, and one above ground storage tank (AST) that stored waste oil were removed from the Encinal Terminals (with an address of 1521 Buena Vista Ave and in this document is referred to as the Park Parcel). Hydrocarbon-impacted soil was excavated. Residual soil contamination in the vicinity of the former USTs contained up to 160ppm TPHd and 0.018ppm benzene. Case closure was granted in February 1996 by ACEH.

Continued.....

Park Parcel – Recent Investigation:

In July 2001, six above ASTs that stored caustic acid soil and one AST that contained sulfuric acid were removed. Sulfuric acid was observed leaking from its container. It is estimated that approximately 300 to 400 gallons of sulfuric acid leaked from the tank. Absorbent material was used to remove excess acid in the saturated surficial soil. The acid-soaked absorbent material and soil was placed in drums for offsite disposal at Kettleman Hills, California. A total of approximately 126 tons of acid-affected soil was excavated.

Soil samples were collected from test pits at 4.5 and 9 feet bgs and analyzed for pH. In addition, two soil samples were collected from a trench, located approximately 100 feet south of the sulfuric acid excavation, where an acrid odor and discolored soil was noted. The two soil samples from the trench were analyzed for pH and VOCs using Method 8260. pH levels ranged from 6.41 to 7.34 in the acid excavation, and 5.18 to 6.63 from the trench. The only VOCs detected from the trench soil were acetone (0.13 to 0.16mg/kg), carbon disulfide (0.011 to 0.02mg/kg), methyl butyl ketone (ND to 0.016mg/kg), and methyl ethyl ketone (0.083 to 0.22 mg/kg). Grab groundwater samples were also collected between the sulfuric acid release and the trench. pH in groundwater ranged from 6.45 to 6.67 and total dissolved solids ranged from 1,300 to 2,100 mg/l. A maximum of 8.9 ug/l chloroform, 1.3 ug/l 1-1-DCA, 2.4 ug/l MEK, 2.4 ug/l carbon disulfide, 3.6 ug/l 1,2-DCA and 6.3 ug/l MtBE were identified in the water samples. The VOCs detected in soil and groundwater were below the RWQCB's RBSLs for residential land use.

Marina Cove Subdivision – Previous Investigations

In February 1991 and January 1994, a total of five USTs were removed. Hydrocarbon-impacted soil (approximately 850 cubic yards) was removed and 1500 gallon of water was removed from the tank excavation. A total of 13 groundwater wells were completed to evaluated water quality beneath the site. Air sparging was implemented to remediate groundwater contamination and operated between March 1996 and March 1998. Groundwater was monitored from December 1991 to August 1998. When contamination levels reached 4520ppb TPHg and 99ppb benzene, case closure was granted by ACEH on November 15, 1999..

Marina Cove Subdivision – Recent Investigation

In August 1998, soil samples were collected along the railroad tracks located along the southern perimeter and adjacent to the Pennzoil facility. Analytical results confirm that shallow soil contained elevated TPHmo (up to 2,800ppm) and lead (up to 290ppm) in the railroad ballast. Approximately 2,620 cubic yards of affected soil was removed. Confirmation soil samples were below action levels.

In August 2002, a risk evaluation update was prepared for the site. A more detailed Human Health Risk Assessment (HHRA) was completed by Soma Corporation in March 2003. Based on the HHRA, risk due to residual benzene in soil and groundwater posed a risk exceeding one in one million. Soil vapor soil samples were subsequently collected in the vicinity where residual petroleum hydrocarbons exist in soil and groundwater. Soil vapor samples were collected at 1.5 to 4 feet bgs. Benzene and other VOCs were not detected above the laboratory detection limit of 0.2ppbv and TPH was not detected at above 1ppmv.

IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? Yes No		
Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? Yes No		
Does corrective action protect public health for current land use? Alameda County Environmental Health staff does not make specific determinations concerning public health risk. However, based upon the information available in our files to date, it does not appear that the release would present a risk to human health based upon current land use and conditions.		
Site Management Requirements: If any excavation occurs or if extraction of impacted groundwater becomes necessary in the future, proper management and disposal of soil and groundwater must be discussed with this agency.		
Should corrective action be reviewed if land use changes? No		
Monitoring Wells Decommissioned: N/A	Number Decommissioned: N/A	Number Retained: N/A
List Enforcement Actions Taken: None		
List Enforcement Actions Rescinded: None		

V. ADDITIONAL COMMENTS, DATA, ETC.

Considerations and/or Variances:

Groundwater wells were not completed for the recent investigation. Groundwater data is from former wells that have been decommissioned.

Conclusion:


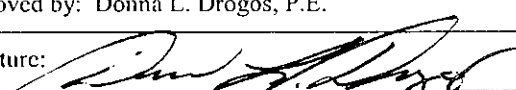
A risk assessment prepared by ICES, Inc., for the site determined that the site does not appear to pose a significant threat to the public under planned and current land uses. Land uses are specified as follows:

- The Park Parcel will be developed into a park (that is, no residential homes will be constructed here).
- The Marina Cove Subdivision has been developed into single family residences.

Alameda County Environmental Health staff believes that the levels of residual contamination do not pose a significant threat to water resources, public health and safety, and the environment. Based upon the available information available in our files to date, and with the provision that the information provided to this agency was accurate and representative of site conditions and provided that the site management requirements specified above are implemented ACEH staff recommends closure for this site.

ACEH staff reviewed the HHRA and concur that residual hydrocarbons in soil does not pose a significant risk to human health. However, during future excavation of hydrocarbon-impacted soil or extraction of groundwater will require proper management and disposal of contaminated media with ACEH approval.

VI. LOCAL AGENCY REPRESENTATIVE DATA

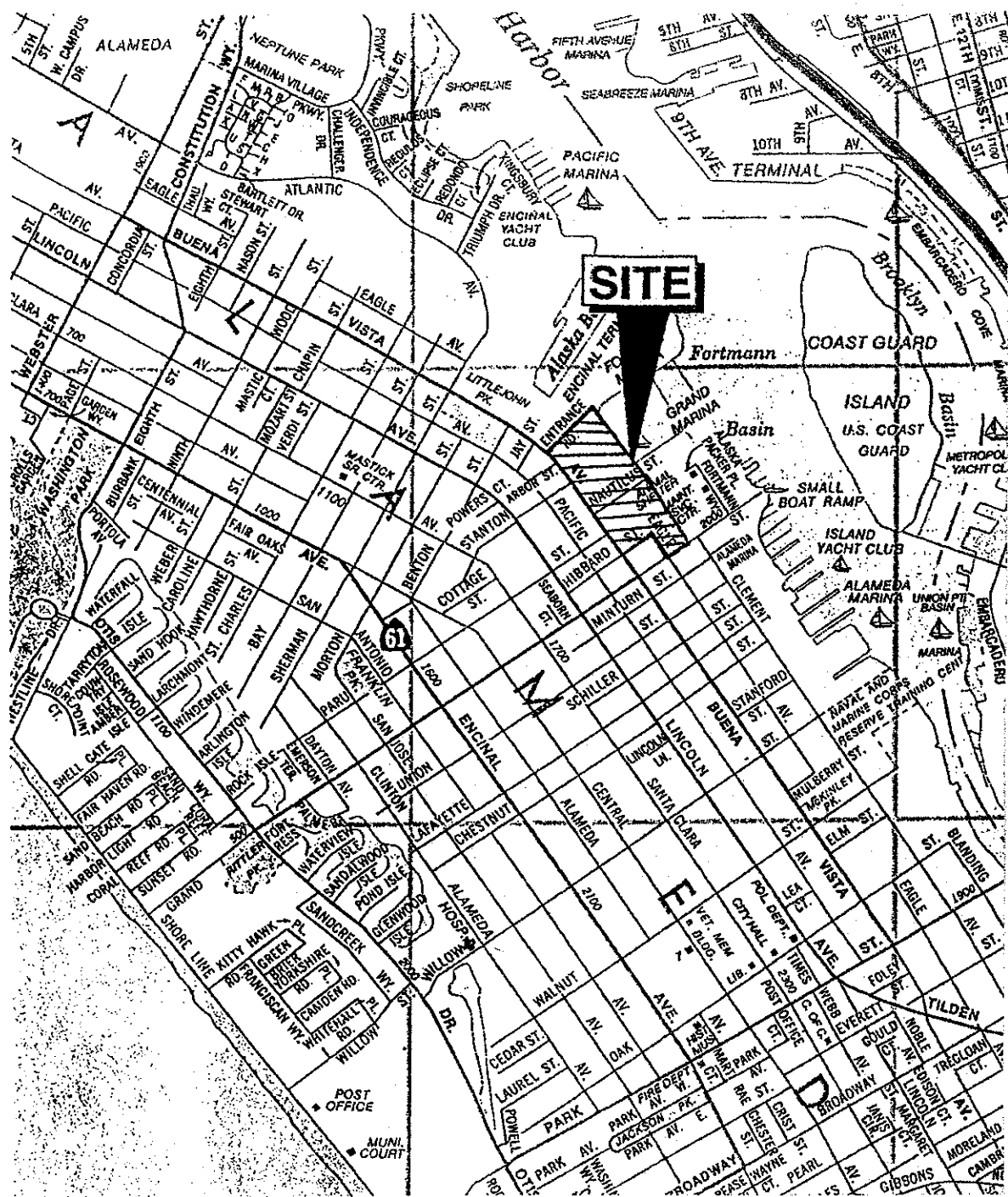
Prepared by: Eva Chu	Title: Hazardous Materials Specialist
Signature: 	Date: 01/06/04
Approved by: Donna L. Drogos, P.E.	Title: Supervising Hazardous Materials Specialist
Signature: 	Date: 01/05/04

This closure approval is based upon the available information and with the provision that the information provided to this agency was accurate and representative of site conditions.

Attachments:

1. Site Vicinity Map
2. Site Plan with Soil Sample Locations
3. Soil Analytical Data (12pp)
4. Groundwater Analytical Data (10pp)
5. Soil Vapor Sample Locations
6. Soil Vapor Analytical Data (2pp)
7. Isoconcentration maps (8pp)

This document and the related CASE CLOSURE LETTER, shall be retained by the lead agency as part of the official site file.



MAP SOURCE :
CSAA

Scale: 1" = ± 1320'

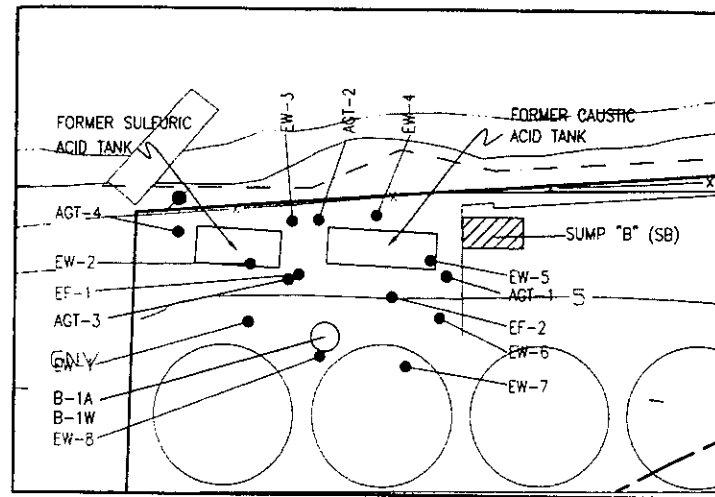
September 2002

SITE LOCATION

Alameda Subdivision, Alameda, California

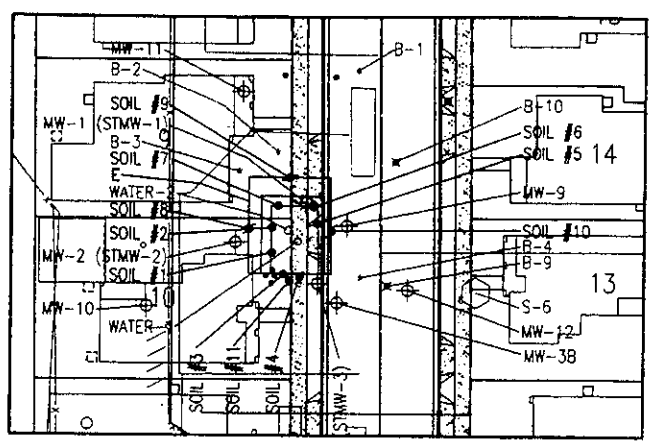
Figure 1

Project 2262



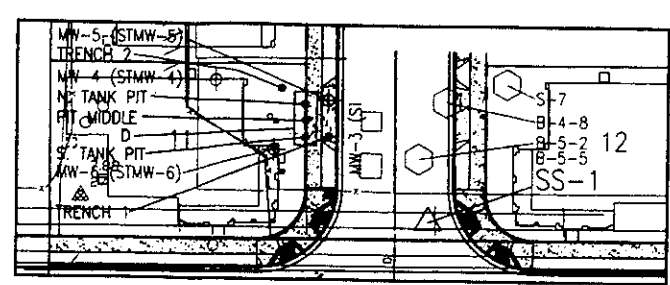
DETAIL A

SCALE: 1"=20'



DETAIL B

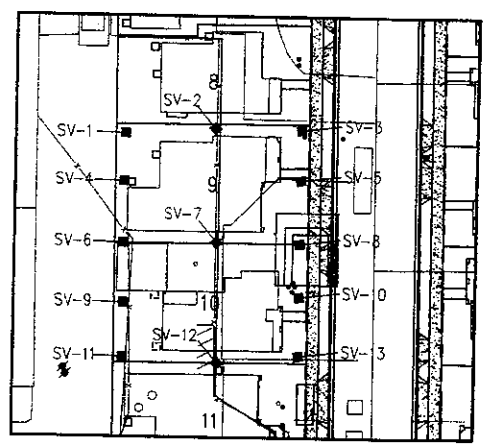
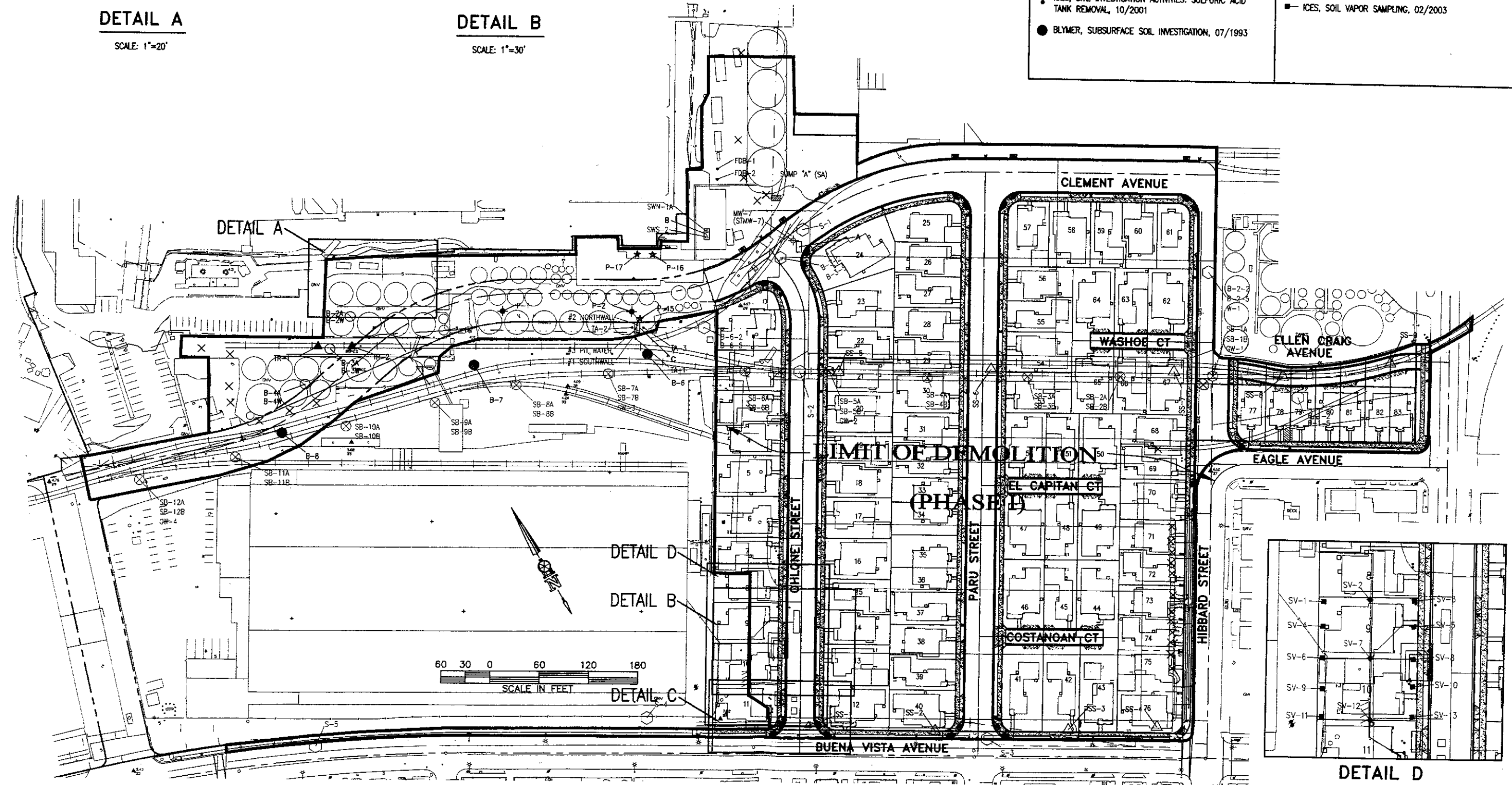
SCALE: 1"=30'



DETAIL C

SCALE: 1"=30'

- LEGEND**
- A FORMER 10,000-GALLON DIESEL UST
 - B FORMER 1,500-GALLON DIESEL UST
 - C FORMER 2,000-GALLON DIESEL UST
 - D FORMER 20,000-GALLON DIESEL UST
 - E FORMER GASOLINE UST CLUSTER
 - ICES, LIMITED SITE INVESTIGATION, AUGUST 1998
 - △ ICES, REMEDIAL ACTIVITIES: RAILROAD BALLAST, 04/2001
 - ⊗ ICES, LIMITED SITE INVESTIGATION-ABANDONED PENNZOIL PIPELINE, 03/1999
 - △ ICES, UST REMOVAL-1500 GALLON DIESEL UST, 10/2001
 - ICES, SOIL SAMPLING, 01/2002
 - ▲ ICES, SITE INVESTIGATION ACTIVITIES: TRENCH PARCEL, 10/2001
 - ICES, SUPPLEMENTARY SITE INVESTIGATION: TRENCH PARCEL, 07/2002
 - ICES, SITE INVESTIGATION ACTIVITIES: SULFURIC ACID TANK REMOVAL, 10/2001
 - BLYMER, SUBSURFACE SOIL INVESTIGATION, 07/1993
 - FUGRO, PHASE II SITE INVESTIGATION, 09/1993
 - ☆ GEOMATRIX, SOIL INVESTIGATION, 02/1995
 - SEMCO, UST REMOVAL-2000 GALLON DIESEL UST, 04/1994
 - ✕ WEST & ASSOCIATES, ADDITIONAL SITE CHARACTERIZATION, 07/1999
 - WEST & ASSOCIATES, SITE INVESTIGATION, 01/1994
 - WEST & ASSOCIATES, UST REMOVAL: 20,000 GALLON DIESEL UST, 01/1994
 - MINTER & FAHY, OVEREXCAVATION OF FORMER 3-1000 GALLON GASOLINE UST PIT, 02/1991
 - MINTER & FAHY, OVEREXCAVATION OF FORMER 3-1000 GALLON GASOLINE UST PIT, 04/1991
 - ⊕ SOIL TECH, 12/1991, 04/1992, 12/1992-01/1993; WEST & ASSOCIATES, 01/1994
 - ICES, SOIL VAPOR SAMPLING, 02/2003



DETAIL D

SUBDIVISION 7170 KB HOME MARINA COVE Z. SITE PLAN WITH SOIL SAMPLE LOCATIONS SAMPLE LOCATIONS/MONITORING WELLS

TABl 2
 SOIL MATRIX ANALYTICAL RESULTS – PETROLEUM CONSTITUENTS (mg/kg)
 PARK PARCEL
 1521 BUENA VISTA AVENUE, ALAMEDA, CALIFORNIA

Sample Date	Sample ID	Sample Depth (ft bgs)	TPH-gasoline	TPH-diesel	TPH-motor oil	Benzene	Toluene	Ethylbenzene	Xylenes	Methyl tert-butyl ether	TPH-kerosene*	Oil & Grease*	TRPH*	PNAs*
SOIL SAMPLING - SUBSURFACE SOIL INVESTIGATION (Blymyer, July 1993)														
7/8/93	B-6	1	<1.0	14	NA	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	260	NA
7/8/93	B-7	1	<1.0	130	NA	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	210	NA
7/8/93	B-8	1	<1.0	8.1	NA	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	18	NA
SOIL SAMPLING - PHASE II ENVIRONMENTAL SITE ASSESSMENT: 2,000-Gallon Diesel UST (Fugro, September 1993)														
9/30/93	TA-1@5.5	5.5	<1.0	<5.0	NA	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	NA
9/30/93	TA-2@5.5	5.5	4	300	NA	<0.005	0.01	0.005	0.046	NA	NA	NA	NA	NA
9/30/93	TA-3@5.0	5	<10.0	1,100	NA	<0.05	<0.05	<0.05	<0.05	NA	NA	NA	NA	NA
SOIL SAMPLING - UST REMOVAL: One 2,000-Gallon Diesel UST (SEMCO, April 1994)														
4/5/94	#1 SOUTH WALL	6	NA	38	NA	<0.005	0.011	<0.005	0.094	NA	NA	NA	NA	NA
4/5/94	#2 NORTH WALL	6	NA	160	NA	<0.005	<0.005	<0.005	0.018	NA	NA	NA	NA	NA
SOIL SAMPLING - SOIL INVESTIGATION (Geomatrix, February 1995)														
2/3/95	P-15	7.5	NA	20	NA	<0.02	<0.02	<0.02	<0.04	NA	NA	NA	NA	NA
2/3/95	P-16	4	NA	<10.0	NA	<0.02	<0.02	<0.02	<0.04	NA	NA	NA	NA	NA
2/3/95	P-17	7.5	NA	<10.0	NA	<0.02	<0.02	<0.02	<0.04	NA	NA	NA	NA	NA
SOIL SAMPLING - LIMITED SITE INVESTIGATION (ICES, August 1998)														
8/31/98	B-6-2	2	NA	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8/31/98	B-6-5	5	NA	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SOIL SAMPLING - LIMITED SITE INVESTIGATION -Abandoned Pennzoil Pipeline (ICES, March 1999)														
3/12/99	SB-6A	2	<0.5	<1.0	<10.0	<0.005	<0.005	<0.005	<0.010	<0.005	NA	NA	NA	NA
3/12/99	SB-6B	4.5	3.3	29	320	<0.005	<0.005	<0.005	0.014	<0.005	NA	NA	NA	NA
3/12/99	SB-7A	2	<0.5	<1.0	<10.0	<0.005	<0.005	<0.005	<0.010	<0.005	NA	NA	NA	NA
3/12/99	SB-7B	4.5	<0.5	<1.0	<10.0	<0.005	<0.005	<0.005	0.012	<0.005	NA	NA	NA	NA
3/12/99	SB-8A	2	1.1	<1.0	<10.0	<0.005	<0.005	<0.005	0.019	<0.005	NA	NA	NA	NA
3/12/99	SB-8B	4.5	<0.5	<1.0	<10.0	<0.005	<0.005	<0.005	<0.010	<0.005	NA	NA	NA	NA
3/12/99	SB-9A	2	<0.5	57	91	<0.005	<0.005	<0.005	<0.010	<0.005	NA	NA	NA	NA
3/12/99	SB-9B	4.5	<0.5	<1.0	<10.0	<0.005	<0.005	<0.005	<0.010	<0.005	NA	NA	NA	NA
3/12/99	SB-10A	2	<0.5	2	18	<0.005	<0.005	<0.005	<0.010	<0.005	NA	NA	NA	NA
3/12/99	SB-10B	4.5	<0.5	<1.0	<10.0	<0.005	<0.005	<0.005	<0.010	<0.005	NA	NA	NA	NA
3/12/99	SB-11A	2	<0.5	9	31	<0.005	<0.005	<0.005	<0.010	<0.005	NA	NA	NA	NA
3/12/99	SB-11B	4.5	<0.5	<1.0	<10.0	<0.005	<0.005	<0.005	<0.010	<0.005	NA	NA	NA	NA
3/12/99	SB-12A	2	<0.5	<1.0	<10.0	<0.005	<0.005	<0.005	<0.010	<0.005	NA	NA	NA	NA
3/12/99	SB-12B	4.5	<0.5	<1.0	<10.0	<0.005	<0.005	<0.005	<0.010	<0.005	NA	NA	NA	NA
SOIL SAMPLING - UST REMOVAL One 1,500-GALLON DIESEL UST (ICES, October 2001)														
10/15/01	SWN-1A	9.5	NA	150	NA	0.018	0.048	0.044	0.24	NA	NA	NA	NA	<0.5
10/15/01	SWS-2	9.5	NA	28	NA	0.015	0.15	0.15	0.96	NA	NA	NA	NA	NA

TABL 2
 SOIL MATRIX ANALYTICAL RESULTS -- PETROLEUM CONSTITUENTS (mg/kg)
 PARK PARCEL
 1521 BUENA VISTA AVENUE, ALAMEDA, CALIFORNIA

Sample Date	Sample ID	Sample Depth (ft bgs)	TPH-gasoline	TPH-diesel	TPH-motor oil	Benzene	Toluene	Ethylbenzene	Xylenes	Methyl tert-butyl ether	TPH-kerosene ^a	Oil & Grease ^a	TRPH ^a	PNAs ^a
SOIL SAMPLING (ICES, January 2002)														
1/24/02	P-1	1.5	<1.0	2.1	34	<0.005	<0.005	<0.005	<0.005	<0.05	NA	NA	NA	NA
1/24/02	P-2	1.5	<1.0	15	130	<0.005	<0.005	<0.005	<0.005	<0.05	NA	NA	NA	NA
		Minimum	<0.5	<1	<10	<0.005	<0.005	<0.005	<0.005	All NDs				
		Maximum	4	1100	320	0.018	0.15	0.15	0.96					
		Average	0.88	67.12	42.13	0.01	0.01	0.01	0.05					
		Standard Deviation	1.35	202.71	82.41	0.01	0.03	0.03	0.18					
		Count	22	31	16	29	29	29	29					
		Number of Detects	3	16	4	2	4	3	8					
		t-value	1.721	1.697	1.753	1.701	1.701	1.701	1.701					
		95% Normal UCL	1.38	128.90	78.24	0.01	0.02	0.02	0.11					

Notes:

bgs	Below ground surface	PNAs	Polynuclear aromatics
ft	Feet	RBSL	Risk-based screening level
mg/kg	Milligram per kilogram	TRPH	Total recoverable petroleum hydrocarbons
NA	Sample was not analyzed for this chemical	UCL	Upper confidence limit
ND	Not detected		

^a Analytical results for TPH-kerosene, oil & grease, TRPH, and PNAs are presented to complete the historical data summary. However, data for these chemicals were not used in statistical analysis nor the risk assessment.

TAF
 SOIL MATRIX SAMPLE ANALYTICAL RESULTS - METALS (mg/kg)
 PARK PARCEL
 1521 BUENA VISTA AVENUE, ALAMEDA, CALIFORNIA

Sample Date	Sample ID	Sample Depth (ft bgs)	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
SOIL SAMPLING - SUBSURFACE SOIL INVESTIGATION (Blymer, July 1993)																			
7/8/93	B-6	1	NA	<5.0	50	NA	<0.5	9.6	NA	NA	23	0.14	NA	NA	<5.0	<0.5	NA	NA	NA
7/8/93	B-7	1	NA	<5.0	81	NA	<0.5	49	NA	NA	25	0.15	NA	NA	<5.0	<0.5	NA	NA	NA
7/8/93	B-8	1	NA	<5.0	59	NA	<0.5	36	NA	NA	24	0.12	NA	NA	<5.0	<0.5	NA	NA	NA
SOIL SAMPLING - PHASE II ENVIRONMENTAL SITE INVESTIGATION: Samps A and B (Fugro, September 1993)																			
9/29/93	SA@5	5	<0.5	1.4	33	<0.5	<0.5	22	3	3.3	4	0.008	<3.0	9	<5.0	0.4	<5.0	16	8
9/29/93	SB@5	5	<1.0	1.3	69	<0.5	<0.5	25	2	4.3	5	0.008	<3.0	9	<5.0	0.3	<5.0	18	11
9/29/93	SB@10	10	<1.0	2.4	140	<0.5	<0.5	50	13	12	10	0.023	<3.0	66	<5.0	0.5	6	25	30
SOIL SAMPLING - PHASE II ENVIRONMENTAL SITE INVESTIGATION: Former Drum Storage Locations (Fugro, September 1993)																			
9/29/93	FDB-1@5	5	<0.5	7.7	46	<0.5	<0.5	39	10	36	140	<0.004	<3.0	72	<0.5	0.9	6	22	220
9/28/93	FDB-2@5	5	<0.5	8	55	<0.5	<0.5	36	7	68	260	<0.004	<3.0	56	<0.5	1.2	7	20	150
9/28/93	FDB-2@10	10	<0.5	3.7	17	<0.5	<0.5	40	6	12	11	<0.004	<3.0	43	<0.5	0.9	6	28	38
9/29/93	FDC-1@5	5	<0.5	1.7	20	<0.5	<0.5	55	5	22	14	0.05	<3.0	36	<0.5	0.9	6	34	46
9/29/93	FDC-2@5	5	<0.5	1.4	17	<0.5	<0.5	42	3	11	10	0.039	<3.0	28	<0.5	0.7	5	26	32
9/29/93	FDC-2@10	10	<0.5	1.2	59	<0.5	<0.5	29	3	5.2	5	0.016	<3.0	18	<0.5	0.4	<5.0	19	12
SOIL SAMPLING (ICES, January 2002)																			
1/24/02	P-1	1.5	2.5	2.8	80	<0.5	<0.5	51	7.8	18	39	0.091	<2.5	37	<2.5	<1.0	<2.5	31	62
1/24/02	P-2	1.5	<2.5	15	160	<0.5	<0.5	64	15	41	37	0.43	<2.5	35	<2.5	<1.0	<2.5	54	210
	Minimum		<0.5	1.2	17	<0.5	<0.5	9.6	2	3.3	4	<0.004	<2.5	9	<0.5	<0.5	<2.5	16	8
	Maximum		2.5	15	160	AllNDs	AllNDs	64	15	68	260	0.43	AllNDs	72	AllNDs	1.2	7	54	220
	Average		0.59	3.86	62.43			39.11	6.80	21.16	43.36	0.08		37.18		0.57	4.18	26.64	74.45
	Standard Deviation		0.70	3.88	42.58			14.47	4.33	19.87	71.30	0.11		21.16		0.30	2.18	10.67	79.80
	Count		11	14	14			14	11	11	14	14		11		14	11	11	11
	Number of Detects		1	11	14			14	11	11	14	11		11		9	6	11	11
	t-value		1.771	1.746	1.746			1.746	1.771	1.771	1.746	1.746		1.771		1.746	1.771	1.771	1.771
	95% Normal UCL		0.97	5.7	82.3			45.9	9.1	31.8	76.6	0.13		48.5		0.71	5.3	32.3	117.1

Notes:
 bgs Below ground surface
 ft Feet
 mg/kg Milligram per kilogram
 NA Sample was not analyzed for this chemical

ND Not detected
 RBSL Risk-based screening level
 UCL Upper confidence limit

TAB. -3
 SOIL MATRIX SAMPLE ANALYTICAL RESULTS – VOLATILE AND SEMIVOLATILE ORGANIC COMPOUNDS (mg/kg)
 PARK PARCEL
 1521 BUENA VISTA AVENUE, ALAMEDA, CALIFORNIA

Sample Date	Sample ID	Sample Depth (ft bgs)	Acetone	Benzene	2-Butanone	Carbon Disulfide	Ethylbenzene	Methyl butyl ketone	Toluene	Xylenes	VOCs*	SVOCs*
SOIL SAMPLING - SUBSURFACE SOIL INVESTIGATION (Blymyer, July 1993) *Note: VOCs analyzed using 8240.												
7/8/93	B-6	1	<0.5	<0.1	<0.5	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1-0.5	NA
7/8/93	B-7	1	<0.5	<0.1	<0.5	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1-0.5	NA
7/8/93	B-8	1	<0.5	<0.1	<0.5	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1-0.5	NA
SOIL SAMPLING - PHASE II ENVIRONMENTAL SITE INVESTIGATION: Former Drum Storage Locations (Fugro, September 1993)												
9/28/93	FDB-1@5.0	5	<0.1	<0.005	<0.05	<0.01	<0.005	NA	<0.005	<0.005	<0.005-0.05	<0.5-10.0
9/28/93	FDB-2@5.0	5	<0.1	<0.005	<0.05	<0.01	<0.005	<0.03	<0.005	<0.005	<0.005-0.05	<0.5-10.0
9/28/93	FDB-2@10	10	<0.1	<0.005	<0.05	<0.01	<0.005	<0.03	<0.005	<0.005	<0.005-0.05	<0.5-10.0
SOIL SAMPLING - PHASE II ENVIRONMENTAL SITE INVESTIGATION: Caustic Tank (Fugro, September 1993)												
9/29/93	AGT-1@1	1	0.5	<0.005	<0.05	<0.01	<0.005	<0.03	<0.005	<0.005	<0.005-0.05	NA
9/29/93	AGT-1@3	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9/29/93	AGT-2@1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9/29/93	AGT-2@3.5	3.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SOIL SAMPLING - PHASE II ENVIRONMENTAL SITE INVESTIGATION: Sulfuric Acid Tank (Fugro, September 1993)												
9/29/93	AGT-3@0.5	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9/29/93	AGT-3@3	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9/23/93	AGT-4@0.5	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9/23/93	AGT-4@4	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SOIL SAMPLING - PHASE II ENVIRONMENTAL SITE INVESTIGATION: Sumps A and B (Fugro, September 1993)												
9/29/93	SA@5	5	<0.1	<0.005	<0.05	<0.01	<0.005	<0.03	<0.005	<0.005	<0.005-0.05	<0.5-10.0
9/29/93	SB@5	5	<0.1	<0.005	<0.05	<0.01	<0.005	<0.03	<0.005	<0.005	<0.005-0.05	<0.5-10.0
9/29/93	SB@10	10	<0.1	<0.005	<0.05	<0.01	<0.005	<0.03	<0.005	<0.005	<0.005-0.05	<0.5-10.0
SOIL SAMPLING - SITE MITIGATION ACTIVITIES: Sulfuric Acid AST Removal (ICES, October 2001)												
10/15/02	EW-1	4.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10/15/02	EW-2	4.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10/15/02	EW-3	4.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10/15/02	EW-4	4.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10/15/02	EW-5	4.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10/15/02	EW-6	4.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10/15/02	EW-7	4.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10/15/02	EW-8	4.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10/15/02	EF-1	9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10/15/02	EF-2	9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SOIL SAMPLING - SITE MITIGATION ACTIVITIES: Trench Parcel (ICES, October 2001)												
10/15/01	TR-1	0.5	0.16	<0.005	0.083	0.02	<0.005	<0.005	<0.005	<0.005	<0.005-0.025	NA
10/15/01	TR-2	0.5	0.13	<0.005	0.22	0.011	<0.005	0.016	<0.005	<0.005	<0.005-0.025	NA

TAB 3
 SOIL MATRIX SAMPLE ANALYTICAL RESULTS - VOLATILE AND SEMIVOLATILE ORGANIC COMPOUNDS (mg/kg)
 PARK PARCEL
 1521 BUENA VISTA AVENUE, ALAMEDA, CALIFORNIA

Sample Date	Sample ID	Sample Depth (ft bgs)	Acetone	Benzene	2-Butanone	Carbon Disulfide	Ethyl-benzene	Methyl butyl ketone	Toluene	Xylenes	VOCs ^a	SVOCs ^a
SOIL SAMPLING (ICES, January 2002)												
1/24/02	P-1	1.5	<0.025	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005-0.025	<1.0-5.0
1/24/02	P-2	1.5	<0.025	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005-0.025	<4.0-20.0
SOIL SAMPLING - SUPPLEMENTARY SITE INVESTIGATION: Trench Parcel (ICES, July 2002)												
7/18/2002	B-1A	3	<0.080	<0.005	0.012	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005-0.050	NA
7/18/2002	B-2A	3	<0.080	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005-0.050	NA
7/18/2002	B-3A	3	<0.080	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005-0.050	NA
7/18/2002	B-4A	3	<0.080	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005-0.050	NA
Minimum			<0.025	All NDs	<0.025	<0.025	All NDs	<0.025	All NDs	All NDs		
Maximum			0.5		0.22	0.02		0.016				
Average			0.113		0.070	0.013		0.051				
Standard Deviation			0.127		0.097	0.018		0.095				
Count			18		18	18		17				
Number of Detects			3		3	2		1				
t-value			1.725		1.725	1.725		1.729				
95% Normal UCL			0.164		0.110	0.020		0.091				

Notes:

bgs	Below ground surface	ND	Not detected
ft	Feet	SVOC	Semivolatile organic compound
mg/kg	Milligram per kilogram	UCL	Upper confidence limit
NA	Sample was not analyzed for this chemical	VOC	Volatile organic compound

^a Analytical results for VOCs and SVOCs are presented to complete the historical data summary. However, data for these chemicals were not used in statistical analysis nor the risk assessment.

TABLE A-1
SOIL MATRIX SAMPLE ANALYTICAL RESULTS -- METALS (mg/kg)
MARINA COVE SUBDIVISION
1801 HIBBARD STREET, ALAMEDA, CALIFORNIA

Sample Date	Sample ID	Depth (ft bgs)	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
SOIL SAMPLING - Overexcavation of Former Three 1,000-Gallon Gasoline UST Pit (Minter & Fahy, February 1991)^a																			
1/13/94	B-4@5.5'	5.5	NA	NA	NA	NA	<0.5	23	NA	NA	8	NA	NA	28	NA	NA	NA	NA	17
1/13/94	N. END WALL		NA	NA	NA	NA	<0.5	21	NA	NA	6	NA	NA	22	NA	NA	NA	NA	16
1/13/94	MW-8@7'	7	NA	NA	NA	NA	<0.5	21	NA	NA	6	NA	NA	27	NA	NA	NA	NA	60
1/13/94	MW-9@5'	5	NA	NA	NA	NA	<0.5	24	NA	NA	4	NA	NA	16	NA	NA	NA	NA	25
1/13/94	MW-9@9'	9	NA	NA	NA	NA	<0.5	24	NA	NA	6	NA	NA	24	NA	NA	NA	NA	21
1/13/94	MW-10@5'	5	NA	NA	NA	NA	<0.5	19	NA	NA	8	NA	NA	10	NA	NA	NA	NA	21
1/13/94	MW-10@9'	9	NA	NA	NA	NA	<0.5	26	NA	NA	6	NA	NA	28	NA	NA	NA	NA	30
SOIL SAMPLING - Limited Site Investigation (ICES, August 1998)^a																			
8/31/98	S-1	1	NA	5.3	NA	NA	NA	32	NA	150	130	NA	NA	NA	NA	NA	NA	NA	NA
8/31/98	B-3-2	2	<2.0	<1.0	11	<0.5	<0.5	15	1.6	3.4	6.1	<0.05	<1.0	10	<2.0	<1.0	<1.0	11	9.2
8/31/98	B-3-5	5	<2.0	1.6	12	<0.5	<0.5	33	7.8	25	8.7	<0.05	1.5	36	<2.0	<1.0	<1.0	29	40
SOIL SAMPLING - Chipman Site (ICES, September 1998)^b																			
9/1/1998	S-4	1	2.5	7	85	<0.50	1.1	40	8.7	95	380	0.24	1.3	42	<2.0	<1.0	<1.0	28	240
9/1/1998	S-5	1	2.6	10	99	<0.50	1.1	37	10	100	450	0.19	1.7	50	<2.0	<1.0	<1.0	30	260
SOIL SAMPLING - Soil Remedial Activities: Railroad Ballast (ICES, April 2001)																			
4/13/01	SS-1	3	<2.5	6.7	120	<0.5	<0.5	22	10	29	25	0.11	<2.0	37	<2.5	<1.0	<1.8	36	81
4/13/01	SS-2	3	<2.5	2.9	98	<0.5	<0.5	11	7.2	27	60	0.22	<2.0	10	<2.5	<1.0	<1.8	27	110
4/13/01	SS-3	3	<2.5	6.2	46	<0.5	<0.5	4.1	8.6	25	23	0.14	<2.0	3.6	<2.5	<1.0	<1.8	69	130
4/13/01	SS-4	3	<2.5	<2.5	75	<0.5	<0.5	22	3.6	12	83	0.16	<2.0	12	<2.5	<1.0	<1.8	21	51
4/13/01	SS-5	3	<2.5	2.7	58	<0.5	<0.5	25	7.3	49	98	0.11	<2.0	28	<2.5	<1.0	<1.8	22	79

TABLE A-1
SOIL MATRIX SAMPLE ANALYTICAL RESULTS – METALS (mg/kg)
MARINA COVE SUBDIVISION
1801 HIBBARD STREET, ALAMEDA, CALIFORNIA

Sample Date	Sample ID	Depth (ft bgs)	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
SOIL SAMPLING - Soil Remedial Activities: Railroad Ballast (ICRS, April 2001) (cont'd)																			
4/13/01	SS-6	3	<2.5	<2.5	71	<0.5	<0.5	21	2.8	12	29	0.095	<2.0	15	<2.5	<1.0	<1.8	18	30
4/13/01	SS-7	3	<2.5	<2.5	76	<0.5	<0.5	21	4.1	14	86	0.13	<2.0	12	<2.5	<1.0	<1.8	20	52
4/13/01	SS-8	3	<2.5	<2.5	39	<0.5	<0.5	22	2.1	13	11	0.061	<2.0	10	<2.5	<1.0	<1.8	17	22
4/13/01	SS-9	3	<2.5	<2.5	38	<0.5	<0.5	26	3.9	15	20	<0.06	<2.0	11	<2.5	<1.0	<1.8	23	25
Minimum			All NDs	<1.0	11	All NDs	All NDs	4.1	1.6	3.4	4	<0.05	<1.0	3.6	All NDs	All NDs	All NDs	11	9.2
Maximum^c				6.7	120			33	10	150	130	0.22	1.5	37				69	130
Average				3.54	58.53			21.69	5.36	31.20	32.83	0.14	1.00	18.87				26.64	45.51
Standard Deviation				2.59	30.44			6.55	2.80	39.23	37.60	0.07	0.20	10.01				15.53	36.89
Count				10	11			19	11	12	19	11	11	18				11	18
Number of Detects				6	11			19	11	12	19	8	1	18				11	18
t-value				1.833	1.812			1.734	1.812	1.796	1.734	1.812	1.812	1.740				1.812	1.740
95% Normal UCL				5.04	75.18			24.30	6.89	51.54	47.79	0.18	1.11	22.97				35.12	60.64

Notes:

bgs Below ground surface
ft Feet
mg/kg Milligram per kilogram
NA Sample was not analyzed for this chemical
ND Not detected
RBSL Risk-based screening level
UCL Upper confidence limit

- ^a Shaded cells represent data from soil borings that have been excavated. These results are included to present a complete historical data summary. However, they were not used in the statistical analysis nor the risk assessment.
- ^b Data collected from the Chipman site in September 1998 are not on KB Homes property. These results are included at the request of Alameda County Environmental Health Department. However, they were not used in the statistical analysis nor the risk assessment.
- ^c Bolded cells represent maximum concentrations of detected chemicals that exceeded RBSLs. Chemicals with maximum concentrations exceeding soil or groundwater RBSLs were further evaluated quantitatively in the baseline risk assessment.

TABLE 2
 SOIL MATRIX ANALYTICAL RESULTS ROLEUM CONSTITUENTS (mg/kg)
 MARINA COVE SUBDIVISION
 1801 HIBBARD STREET, ALAMEDA, CALIFORNIA

Sample Date	Sample ID	Depth (ft bgs)	TPH-gasoline	TPH-diesel	TPH-motor oil	Benzene	Toluene	Ethyl-benzene	Xylenes	Methyl tert-butyl ether	TPH-kerosene ^a	Oil & Grease ^a	TRPH ^a	PNAs ^a
SOIL SAMPLING - UST Removal: One 10,000-Gallon Diesel UST; Three 1,000-Gallon Gasoline UST (Minter & Fahy, February 1991)^b														
SOIL SAMPLING - Overexcavation of Former Three 1,000-Gallon Gasoline UST Pit (Minter & Fahy, February 1991)^b														
SOIL SAMPLING - Overexcavation of Former Three 1,000-Gallon Gasoline UST Pit (Minter & Fahy, April 1991)														
4/3/1991	SOIL-8	4.7	1.1	NA	NA	0.038	0.016	<0.005	0.005	NA	NA	NA	NA	NA
4/3/1991	SOIL-9	4.4	<1.0	NA	NA	<0.005	0.021	<0.005	<0.005	NA	NA	NA	NA	NA
4/3/1991	SOIL-10	4.4	1.2	NA	NA	0.1	0.019	0.021	0.026	NA	NA	NA	NA	NA
4/3/1991	SOIL-11	4.5	<1.0	NA	NA	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	NA
SOIL SAMPLING - Preliminary Site Investigation @ Former Underground Gasoline Tank Area (Soil Tech, December 1991)														
12/3/1991	STMW-1-3	3	<1.0	<1.0	NA	<0.005	<0.005	<0.005	<0.005	NA	NA	<10.0	NA	NA
12/3/1991	STMW-1-7	7	<1.0	<1.0	NA	<0.005	<0.005	<0.005	<0.005	NA	NA	<10.0	NA	NA
12/3/1991	STMW-2-3	3	<1.0	<1.0	NA	<0.005	<0.005	<0.005	<0.005	NA	NA	<10.0	NA	NA
12/3/1991	STMW-2-7	7	370	<1.0	NA	0.56	1	1.5	6.7	NA	NA	<10.0	NA	NA
12/4/1991	STMW-3-3	3	74	<1.0	NA	0.16	0.0063	0.24	0.79	NA	NA	1,000	NA	NA
12/4/1991	STMW-3-7	7	550	<1.0	NA	0.44	1	1.3	8.5	NA	NA	<10.0	NA	NA
SOIL SAMPLING - Additional Subsurface Investigation @ Former Underground Gasoline Tank Area (Soil Tech, April 1992)														
4/10/1992	STMW-4-5	5	<1.0	<1.0	NA	<0.005	<0.005	<0.005	<0.005	NA	NA	<50.0	NA	NA
4/10/1992	STMW-5-5	5	<1.0	<1.0	NA	<0.005	<0.005	<0.005	<0.005	NA	NA	<50.0	NA	NA
4/10/1992	STMW-6-5	5	<1.0	<1.0	NA	<0.005	<0.005	<0.005	<0.005	NA	NA	<50.0	NA	NA
SOIL SAMPLING - Additional Subsurface Investigation @ Former Underground Diesel Tank Area (Soil Tech, December 1992/January 1993)														
12/22/92	STMW-7-3	3	NA	<1.0	NA	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	NA
12/22/92	STMW-7-5	5	NA	<1.0	NA	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	NA
SOIL SAMPLING - UST Removal: One 20,000-Gallon Diesel UST (West & Associates, January 1994) *Note: Samples analyzed by EPA 8260 Fuel Fingerprint.														
1/13/1994	Trench 1	?	<1.0	<1.0	NA	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	NA
1/13/1994	North Tank Pit	14	<1.0	<1.0	NA	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	NA
1/13/1994	Pit Middle	14	<1.0	<1.0	NA	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	NA
1/13/1994	South Tank Pit	14	<1.0	<1.0	NA	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	NA
1/13/1994	Dispenser	?	<1.0	<1.0	NA	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	NA
1/13/1994	Trench 2	?	<1.0	<1.0	NA	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	NA

TABI
SOIL MATRIX ANALYTICAL RESULTS - ROLEUM CONSTITUENTS (mg/kg)
MARINA COVE SUBDIVISION
1801 HIBBARD STREET, ALAMEDA, CALIFORNIA

Sample Date	Sample ID	Depth (ft bgs)	TPH-gasoline	TPH-diesel	TPH-motor oil	Benzene	Toluene	Ethyl-benzene	Xylenes	Methyl tert-butyl ether	TPH-kerosene*	Oil & Grease*	TRPH*	PNAs*
SOIL SAMPLING - Site Investigation (West & Associates, January 1994)														
1/13/1992	B-1@5'	5	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	<50.0	NA	NA
1/13/1992	B-1@10'	10	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	<50.0	NA	NA
1/13/1992	B-2@5'	5	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	<50.0	NA	NA
1/13/1992	B-2@10'	10	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	<50.0	NA	NA
1/13/1992	B-3@5'	5	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	<50.0	NA	NA
1/13/1992	B-3@11.5'	11.5	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	<50.0	NA	NA
1/13/1992	B-4@5.5'	5.5	<50.0	<50.0	NA	NA	NA	NA	NA	NA	NA	<50.0	NA	NA
1/13/1992	N. END WALL	7	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	50	NA	NA
1/13/1992	MW-8@7'	7	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	<50.0	3	NA
1/13/1992	MW-9@5'	5	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	<50.0	NA	NA
1/13/1992	MW-9@9'	9	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	<50.0	NA	NA
1/13/1992	MW-10@5'	5	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	<50.0	NA	NA
1/13/1992	MW-10@9'	9	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	<50.0	NA	NA
1/13/1992	MW-10b@7.5'	7.5	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	<50.0	NA	NA
1/13/1992	MW-10b@11.5'	11.5	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	<50.0	NA	NA
1/13/1992	MW-11@6'	6	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	50	NA	NA
1/13/1992	MW-11@11'	11	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	<50.0	NA	NA
SOIL SAMPLING - Limited Site Investigation (ICES, August 1998)														
8/31/1998	S-7	1	NA	<1.0	<50.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
8/31/1998	B-1-2	2	<1.0	7.3	86	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	NA
8/31/1998	B-1-5	5	<1.0	25	180	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	NA
8/31/1998	B-2-2	2	<1.0	58	310	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	NA
8/31/1998	B-2-5	5	<1.0	5.2	39	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	NA
8/31/1998	B-4-8	8	<1.0	NA	NA	<0.005	<0.005	<0.005	<0.005	<0.02	NA	NA	NA	NA
8/31/1998	B-5-2	2	NA	<1.0	NA	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	NA
8/31/1998	B-5-5	5	NA	<1.0	NA	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	NA
SOIL SAMPLING - Chipman Site (ICES, September 1998)														
9/1/1998	S-4	1	NA	<2.0	240	NA	NA	NA	NA	NA	NA	NA	NA	NA
9/1/1998	S-5	1	NA	<10	350	NA	NA	NA	NA	NA	NA	NA	NA	NA
SOIL SAMPLING - Limited Site Investigation - Abandoned Pennzoil Pipeline (ICES, March 1999)														
3/12/1999	SB-1A	2	<0.5	<1.0	<10.0	<0.005	<0.005	<0.005	<0.010	<0.005	NA	NA	NA	NA
3/12/1999	SB-1B	4.5	<0.5	<1.0	<10.0	<0.005	<0.005	<0.005	<0.010	<0.005	NA	NA	NA	NA
3/12/1999	SB-2A	2	<0.5	<1.0	<10.0	<0.005	<0.005	<0.005	0.021	<0.005	NA	NA	NA	NA
3/12/1999	SB-2B	4.5	<0.5	<1.0	<10.0	<0.005	<0.005	<0.005	<0.010	<0.005	NA	NA	NA	NA
3/12/1999	SB-3A	2	<0.5	<1.0	<10.0	<0.005	<0.005	<0.005	<0.010	<0.005	NA	NA	NA	NA
3/12/1999	SB-3B	4.5	2.2	<1.0	<10.0	<0.005	<0.005	<0.005	0.011	<0.005	NA	NA	NA	NA
3/12/1999	SB-4A	2	<0.5	<1.0	<10.0	<0.005	<0.005	<0.005	<0.010	<0.005	NA	NA	NA	NA
3/12/1999	SB-4B	4.5	<0.5	<1.0	<10.0	<0.005	<0.005	<0.005	<0.010	<0.005	NA	NA	NA	NA
3/12/1999	SB-5A	2	<0.5	<1.0	<10.0	<0.005	<0.005	<0.005	<0.010	<0.005	NA	NA	NA	NA
3/12/1999	SB-5B	4.5	<0.5	<1.0	<10.0	<0.005	<0.005	<0.005	<0.010	<0.005	NA	NA	NA	NA
3/12/1999	SB-6A	2	<0.5	<1.0	<10.0	<0.005	<0.005	<0.005	<0.010	<0.005	NA	NA	NA	NA
3/12/1999	SB-6B	4.5	3.3	29	320	<0.005	<0.005	<0.005	0.014	<0.005	NA	NA	NA	NA

TABI
SOIL MATRIX ANALYTICAL RESULTS **ROLEUM CONSTITUENTS (mg/kg)**
MARINA COVE SUBDIVISION
1801 HIBBARD STREET, ALAMEDA, CALIFORNIA

Sample Date	Sample ID	Depth (ft bgs)	TPH-gasoline	TPH-diesel	TPH-motor oil	Benzene	Toluene	Ethylbenzene	Xylenes	Methyl tert-butyl ether	TPH-kerosene ^a	Oil & Grease ^a	TRPH ^a	PNAs ^a
SOIL SAMPLING - Additional Site Characterization (West & Associates, July 1999)														
7/16/1999	B9-3	8	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/16/1999	B10-8	8	1.96	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SOIL SAMPLING - Soil Remedial Activities: Railroad Ballast (ICES, April 2001)														
4/13/2001	SS-1	3	<1.0	5	29	<0.005	<0.005	<0.005	<0.005	<0.05	NA	NA	NA	NA
4/13/2001	SS-2	3	<1.0	5.3	43	<0.005	<0.005	<0.005	<0.005	<0.05	NA	NA	NA	NA
4/13/2001	SS-3	3	<1.0	3.1	60	<0.005	<0.005	<0.005	<0.005	<0.05	NA	NA	NA	NA
4/13/2001	SS-4	3	<1.0	1.3	9	<0.005	<0.005	<0.005	<0.005	<0.05	NA	NA	NA	NA
4/13/2001	SS-5	3	<1.0	4	25	<0.005	<0.005	<0.005	<0.005	<0.05	NA	NA	NA	NA
4/13/2001	SS-6	3	<1.0	1.9	15	<0.005	<0.005	<0.005	<0.005	<0.05	NA	NA	NA	NA
4/13/2001	SS-7	3	<1.0	4.1	57	<0.005	<0.005	<0.005	<0.005	<0.05	NA	NA	NA	NA
4/13/2001	SS-8	3	<1.0	1.4	8	<0.005	<0.005	<0.005	<0.005	<0.05	NA	NA	NA	NA
4/13/2001	SS-9	3	<1.0	2.2	21	<0.005	<0.005	<0.005	<0.005	<0.05	NA	NA	NA	NA
Minimum			<0.5	<1.0	<10.0	<0.005	<0.005	<0.005	<0.005	All NDs				
Maximum^b			550	58	320	0.56	1	1.5	8.5					
Average			16.64	3.25	49.31	0.03	0.02	0.04	0.33					
Standard Deviation			82.42	9.05	86.83	0.10	0.14	0.22	1.53					
Count			64	62	26	49	48	48	49					
Number of Detects			9	14	14	5	6	4	8					
t-value			1.658	1.658	1.708	1.671	1.671	1.671	1.671					
95% Normal UCL			33.72	5.15	78.39	0.05	0.06	0.09	0.70					

Notes:

bgs	Below ground surface	ND	Not detected
ft	Feet	PNAs	Polynuclear aromatics
mg/kg	Milligram per kilogram	RBSL	Risk-based screening level
NA	Sample was not analyzed for this chemical	TRPH	Total recoverable petroleum hydrocarbons
NC	No criterion	UCL	Upper confidence limit

- ^a Analytical results for TPH-kerosene, oil & grease, TRPH, and PNAs are presented to complete the historical data summary. However, data for these chemicals were not used in statistical analysis nor the risk assessment.
- ^b Shaded cells represent data from soil borings that have been excavated. These results are included to present a complete historical data summary. However, they were not used in the statistical analysis nor the risk assessment.
- ^c Data collected from the Chipman site in September 1998 are not on KB Homes property. These results are included at the request of Alameda County Environmental Health Department. However, they were not used in the statistical analysis nor the risk assessment.
- ^d Bolded cells represent maximum concentrations of detected chemicals that exceeded RBSLs. Chemicals with maximum concentrations exceeding soil or groundwater RBSLs were further evaluated quantitatively in the baseline risk assessment. One exception includes TPH-gasoline, which was further evaluated qualitatively due to lack of toxicity data.

TABLE 3
 SOIL MATRIX SAMPLE ANALYTICAL RESULTS - VOLATILE AND SEMIVOLATILE ORGANIC COMPOUNDS (mg/kg)
 MARINA COVE SUBDIVISION
 1801 HIBBARD STREET, ALAMEDA, CALIFORNIA

Sample Date	Sample ID	Depth (ft bgs)	Benzene	Benzoic Acid	1,2-DCA	Ethylbenzene	Ethylene dibromide	Methyl-naphthalene	Naphthalene	Toluene	Xylenes	VOCs ^a	SVOCs ^a
SOIL SAMPLING - Overexcavation of Former Three 1,000-Gallon Gasoline UST Pit (Minter & Fahy, February 1991)^b													
												ND*	<0.5-2.5
												ND*	<0.5-2.5
												ND*	<0.5-2.5
												ND*	<0.5-2.5
												ND*	<0.5-2.5
												ND*	<0.5-2.5
SOIL SAMPLING - Site Investigation (West & Associates, January 1994)													
1/13/1994	B-1@5'	5	<0.005	NA	<0.005	<0.005	<0.005	NA	NA	0.011	<0.005	NA	NA
1/13/1994	B-1@10'	10	<0.005	NA	<0.005	<0.005	<0.005	NA	NA	<0.005	<0.005	NA	NA
1/13/1994	B-2@5'	5	<0.005	NA	<0.005	<0.005	<0.005	NA	NA	<0.005	<0.005	NA	NA
1/13/1994	B-2@10'	10	<0.005	NA	<0.005	<0.005	<0.005	NA	NA	0.009	<0.005	NA	NA
1/13/1994	B-3@5'	5	<0.005	NA	<0.005	<0.005	<0.005	NA	NA	<0.005	<0.005	NA	NA
1/13/1994	B-3@11.5'	11.5	<0.005	NA	<0.005	<0.005	<0.005	NA	NA	<0.005	<0.005	NA	NA
1/13/1994	B-4@5.5'	5.5	<0.2	NA	<0.3	<0.3	<0.3	10	35	<0.3	1.2	NA	<0.3-10.0
1/13/1994	N. End Wall		<0.005	NA	<0.005	<0.005	<0.005	<0.5	<0.5	<0.005	<0.005	NA	<0.3-10.0
1/13/1994	MW-8@7'	7	<0.005	NA	<0.005	<0.005	<0.005	<0.5	<0.5	<0.005	<0.005	NA	<0.3-10.0
1/13/1994	MW-9@5'	5	<0.005	NA	<0.005	<0.005	<0.005	<0.5	<0.5	<0.005	<0.005	NA	<0.3-10.0
1/13/1994	MW-9@9'	9	0.017	NA	<0.005	0.099	<0.005	<0.5	<0.5	<0.005	<0.005	NA	<0.3-10.0
1/13/1994	MW-10@5'	5	<0.005	NA	<0.005	<0.005	<0.005	<0.5	<0.5	<0.005	<0.005	NA	<0.3-10.0
1/13/1994	MW-10@9'	9	<0.005	NA	<0.005	<0.005	<0.005	<0.5	<0.5	<0.005	<0.005	NA	<0.3-10.0
1/13/1994	MW-10B@7.5'	7.5	<0.005	NA	<0.005	<0.005	<0.005	NA	NA	<0.005	<0.005	NA	NA
1/13/1994	MW-10B@11.5'	11.5	<0.005	NA	<0.005	<0.005	<0.005	NA	NA	<0.005	<0.005	NA	NA
1/13/1994	MW-11@6'	6	<0.005	NA	<0.005	<0.005	<0.005	NA	NA	<0.005	<0.005	NA	NA
1/13/1994	MW-11@11'	11	<0.005	NA	<0.005	<0.005	<0.005	NA	NA	<0.005	<0.005	NA	NA
SOIL SAMPLING - Limited Site Investigation (ICES, August 1998) *Note: Sample depth taken from former building floor surface; ~3.5-4.0 above existing ground surface elevation.^b													
8/31/1998	S-1		NA	<2.0	NA	NA	NA	<0.5	<0.5	NA	NA	NA	<1.2-10.0
8/31/1998	S-2		NA	<2.5	NA	NA	NA	<0.5	<0.5	NA	NA	NA	<0.25-10.0
9/1/1998	S-6	1*	NA	<0.5	NA	NA	NA	<0.1	<0.1	NA	NA	NA	<0.05-2.0
8/31/1998	B-3-2	2	NA	<0.5	NA	NA	NA	<0.1	<0.1	NA	NA	NA	<0.05-2.0
8/31/1998	B-3-5	5	NA	<0.5	NA	NA	NA	<0.1	<0.1	NA	NA	NA	<0.05-2.0
SOIL SAMPLING - Chipman Site (ICES, September 1998)^c													
9/1/1998	S-4	1	NA	<2.5	NA	NA	NA	<0.5	<0.5	NA	NA	NA	<0.5-10
9/1/1998	S-5	1	NA	<2.5	NA	NA	NA	<0.5	<0.5	NA	NA	NA	<0.5-10
SOIL SAMPLING - Additional Site Characterization (West & Associates, July 1999)													
7/16/1999	B9-8	8	0.005	NA	<0.005	0.071	NA	NA	NA	<0.005	0.009	<0.005-0.015	NA
7/16/1999	B10-8	8	<0.005	NA	<0.005	0.049	NA	NA	NA	<0.005	<0.005	<0.005-0.015	NA

TAB. 1-3
 SOIL MATRIX SAMPLE ANALYTICAL RESULTS -- VOLATILE AND SEMIVOLATILE ORGANIC COMPOUNDS (mg/kg)
 MARINA COVE SUBDIVISION
 1801 HIBBARD STREET, ALAMEDA, CALIFORNIA

Sample Date	Sample ID	Depth (ft bgs)	Benzene	Benzoic Acid	1,2-DCA	Ethyl-benzene	Ethylene dibromide	Methyl-naphthalene	Naphthalene	Toluene	Xylenes	VOCs ^a	SVOCs ^a
SOIL SAMPLING - Soil Remedial Activities: Railroad Ballast (ICES, April 2001)													
4/13/2001	SS-1	3	NA	<10.0	NA	NA	NA	<2.0	<2.0	NA	NA	NA	<2.0-10.0
4/13/2001	SS-2	3	NA	<40.0	NA	NA	NA	<8.0	<8.0	NA	NA	NA	<8.0-40.0
4/13/2001	SS-3	3	NA	<10.0	NA	NA	NA	<2.0	<2.0	NA	NA	NA	<2.0-10.0
4/13/2001	SS-4	3	NA	<10.0	NA	NA	NA	<2.0	<2.0	NA	NA	NA	<2.0-10.0
4/13/2001	SS-5	3	NA	<10.0	NA	NA	NA	<2.0	<2.0	NA	NA	NA	<2.0-10.0
4/13/2001	SS-6	3	NA	<1.6	NA	NA	NA	<0.33	<0.33	NA	NA	NA	<0.33-1.6
4/13/2001	SS-7	3	NA	<10.0	NA	NA	NA	<2.0	<2.0	NA	NA	NA	<2.0-10.0
4/13/2001	SS-8	3	NA	<10.0	NA	NA	NA	<2.0	<2.0	NA	NA	NA	<2.0-10.0
4/13/2001	SS-9	3	NA	<5.0	NA	NA	NA	<1.0	<1.0	NA	NA	NA	<1.0-5.0
Minimum			<0.005	All NDs	All NDs	<0.005	All NDs	<0.5	<0.33	<0.005	<0.005		
Maximum^b			0.02			0.10		10	35	0.01	1.2		
Average			0.01			0.02		1.17	2.49	0.01	0.07		
Standard Deviation			0.02			0.04		2.31	7.92	0.03	0.27		
Count			19			19		19	19	19	19		
Number of Detects			2			3		1	1	2	2		
t-value			1.734			1.734		1.734	1.734	1.734	1.734		
95% Normal UCL			0.02			0.04		2.10	5.64	0.02	0.18		

Notes:

bgs	Below ground surface	ND	Not detected
DCA	Dichloroethane	ND*	Not detected; detection limit unknown
ft	Feet	RBSL	Risk-based screening level
mg/kg	Milligram per kilogram	SVOC	Semivolatile organic compound
NA	Sample was not analyzed for this chemical	UCL	Upper confidence limit
NC	No criterion	VOC	Volatile organic compound

- ^a Analytical results for VOCs and SVOCs are presented to complete the historical data summary. However, data for these chemicals were not used in statistical analysis nor the risk assessment.
- ^b Shaded cells represent data from soil borings that have been excavated. These results are included to present a complete historical data summary. However, they were not used in the statistical analysis nor the risk assessment.
- ^c Data collected from the Chipman site in September 1998 are not on KB Homes property. These results are included at the request of Alameda County Environmental Health Department. However, they were not used in the statistical analysis nor the risk assessment.
- ^d Bolded cells represent maximum concentrations of detected chemicals that exceeded RBSLs. Chemicals with maximum concentrations exceeding soil or groundwater RBSLs were further evaluated quantitatively in the baseline risk assessment. One exception includes methylnaphthalene, which was further evaluated qualitatively due to lack of toxicity data.

TABLE A-4
GROUNDWATER MATRIX SAMPLE ANALYTICAL RESULTS - METALS (µg/L)
MARINA COVE SUBDIVISION
1801 HIBBARD STREET, ALAMEDA, CALIFORNIA

Sample Date	Sample ID	Depth (ft bgs)	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	
2/28/91	WATER-1	8.3	NA	NA	NA	NA	<5	160	NA	NA	130	NA	NA	200	NA	NA	NA	NA	NA	240
2/3/94	MW-1	5.82	<5	<5	170	<50	<1	<50	<50	<50	<5	<0.2	<50	<50	<5	<5	<100	<50	<100	<100
2/3/94	MW-2	5.67	<5	<5	90	<50	<1	<50	<50	<50	<5	<0.2	<50	<50	<5	<5	<100	<50	<100	<100
2/3/94	MW-3	6.31	<5	18	150	<50	<1	<50	<50	<50	6	<0.2	<50	<50	<5	<5	<100	<50	<100	<100
2/3/94	MW-4	6	<5	<5	110	<50	<1	<50	<50	<50	<5	<0.2	<50	<50	<5	<5	<100	<50	<100	<100
2/3/94	MW-5	7.11	<5	<5	140	<50	<1	<50	<50	<50	<5	<0.2	<50	<50	<5	<5	<100	<50	<100	<100
2/3/94	MW-6	7.93	<5	<5	90	<50	<1	<50	<50	<50	<5	<0.2	<50	<50	<5	<5	<100	<50	<100	<100
2/3/94	MW-7	3.06	<5	5	140	<50	<1	<50	<50	<50	<5	<0.2	<50	<50	<5	<5	<100	<50	<100	<100
2/3/94	MW-9	6.39	<5	<5	80	<50	<1	<50	<50	<50	<5	<0.2	<50	<50	<5	<5	<100	<50	<100	<100
2/3/94	MW-10	6.19	<5	<5	<50	<50	<1	<50	<50	<50	<5	<0.2	<50	<50	<5	<5	<100	<50	<100	<100
2/3/94	MW-11	5.4	<5	<5	70	<50	<1	<50	<50	<50	<5	<0.2	<50	<50	<5	<5	<100	<50	<100	<100
Minimum			All NDs	<5	<50	All NDs	All NDs	<50	All NDs	All NDs	<5	All NDs	All NDs	<50	All NDs	All NDs	All NDs	All NDs	All NDs	<100
Maximum^a				18	170			160			130			200						240
Average				4.3	106.5			37.3			14.4			40.9						67.3
Standard Deviation				4.88	43.97			40.70			38.35			52.76						57.29
Count				10	10			11			11			11						11
Number of Detects				2	9			1			2			1						1
t-value				1.83	1.83			1.81			1.83			1.83						1.83
95% Normal UCL				7.127	131.989			59.511			35.605			70.070						98.934

Notes:

bgs Below ground surface
ft Feet
µg/L Microgram per liter
NA Sample was not analyzed for this chemical

ND Not detected
RBSL Risk-based screening level
UCL Upper confidence limit

^a Bolded cells represent maximum concentrations of detected chemicals that exceeded RBSLs. Chemicals with maximum concentrations exceeding soil or groundwater RBSLs were further evaluated quantitatively in the baseline risk assessment.

TABLE A-5
GROUNDWATER MATRIX SAMPLE ANALYTICAL RESULTS -- PETROLEUM CONSTITUENTS (mg/L)
MARINA COVE SUBDIVISION
1801 HIBBARD STREET, ALAMEDA, CALIFORNIA

Sample Date	Sample ID	Depth (ft bgs)	TPH-gasoline	TPH-diesel	TPH-motor oil	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	TPH-kerosene*	Oil & Grease*	TRPH*
7/16/1999	B-10	12	4.52	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/16/1999	B-9	12	0.392	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3/12/1999	GW-1	5.5	<0.05	<0.05	<0.5	<0.0005	<0.0005	<0.0005	<0.0010	<0.0005	NA	NA	NA
3/12/1999	GW-2	5.5	<0.05	<0.05	<0.5	<0.0005	<0.0005	<0.0005	<0.0010	<0.0005	NA	NA	NA
2/3/94	MW-1	5.82	<0.050	<0.050	NA	NA	NA	NA	NA	NA	NA	<5.0	NA
6/8/94	MW-1	5.61	0.05	<0.050	NA	NA	NA	NA	NA	NA	NA	NA	NA
12/7/94	MW-1	5.35	0.093	NA	NA	<0.0005	<0.0005	<0.0005	<0.001	NA	NA	NA	NA
3/7/95	MW-1	4.88	<0.050	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
5/17/95	MW-1	5.05	<0.050	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9/26/95	MW-1	5.58	<0.050	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2/3/94	MW-10	6.19	<0.050	<0.050	NA	NA	NA	NA	NA	NA	NA	<5.0	NA
6/8/94	MW-10	6.07	<0.050	<0.050	NA	NA	NA	NA	NA	NA	NA	NA	NA
12/7/94	MW-10	4.59	<0.050	NA	NA	<0.0005	<0.0005	<0.0005	<0.001	NA	NA	NA	NA
3/7/95	MW-10	5.38	<0.050	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
5/17/95	MW-10	6.25	<0.050	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9/26/95	MW-10	6.26	<0.050	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2/7/96	MW-10	4.89	0.078	NA	NA	<0.0005	<0.0005	<0.0005	<0.001	<0.005	NA	NA	NA
6/5/96	MW-10	5.52	<0.020	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA	NA	NA
9/4/96	MW-10	6.18	<0.020	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	<0.025	NA	NA	NA
11/21/96	MW-10	5.7	<0.020	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA	NA	NA
2/13/97	MW-10	5.2	<0.020	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA	NA	NA
6/6/97	MW-10	5.96	<0.050	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	<0.005	NA	NA	NA
9/5/97	MW-10	6.22	<0.050	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	<0.005	NA	NA	NA
12/3/97	MW-10	5.47	<0.050	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA	NA	NA
2/20/98	MW-10	4.73	<0.050	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA	NA	NA
5/15/98	MW-10	5.45	<0.050	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA	NA	NA
8/13/98	MW-10	6.03	<0.050	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA	NA	NA
2/3/94	MW-11	5.4	<0.050	<0.050	NA	NA	NA	NA	NA	NA	NA	<5.0	NA
6/8/94	MW-11	5.37	<0.050	<0.050	NA	NA	NA	NA	NA	NA	NA	NA	NA
12/7/94	MW-11	4.91	<0.050	NA	NA	<0.0005	<0.0005	<0.0005	<0.001	NA	NA	NA	NA
3/7/95	MW-11	4.11	<0.050	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
5/17/95	MW-11	6.03	<0.050	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9/26/95	MW-11	5.42	<0.050	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2/7/96	MW-11	4.39	<0.050	NA	NA	<0.0005	<0.0005	<0.0005	<0.001	<0.005	NA	NA	NA
6/5/96	MW-11	4.56	<0.020	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA	NA	NA
9/4/96	MW-11	5.21	<0.020	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	<0.025	NA	NA	NA
11/21/96	MW-11	4.99	<0.020	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA	NA	NA
2/13/97	MW-11	4.45	<0.020	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA	NA	NA
6/6/97	MW-11	5.03	<0.050	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	<0.005	NA	NA	NA
9/5/97	MW-11	5.26	<0.050	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	<0.005	NA	NA	NA
12/3/97	MW-11	4.71	<0.050	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA	NA	NA
2/20/98	MW-11	3.7	<0.050	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA	NA	NA

TABLE A-5
GROUNDWATER MATRIX SAMPLE ANALYTICAL RESULTS -- PETROLEUM CONSTITUENTS (mg/L)
MARINA COVE SUBDIVISION
1801 HIBBARD STREET, ALAMEDA, CALIFORNIA

Sample Date	Sample ID	Depth (ft bgs)	TPH-gasoline	TPH-diesel	TPH-motor oil	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	TPH-kerosene*	Oil & Grease*	TRPH*
5/15/98	MW-11	4.29	<0.050	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA	NA	NA
8/13/98	MW-11	4.92	<0.050	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA	NA	NA
12/7/94	MW-12	8.32	<0.050	NA	NA	<0.0005	<0.0005	<0.0005	<0.001	NA	NA	NA	NA
3/7/95	MW-12	7.77	<0.050	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
5/17/95	MW-12	6.01	<0.050	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9/26/95	MW-12	8.9	<0.050	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2/7/96	MW-12	6.7	<0.050	NA	NA	0.00086	0.00098	<0.0005	<0.001	<0.005	NA	NA	NA
6/5/96	MW-12	7.9	<0.020	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA	NA	NA
9/4/96	MW-12	8.85	<0.020	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	<0.025	NA	NA	NA
11/21/96	MW-12	8.1	0.024	NA	NA	0.00055	<0.0005	<0.0005	<0.0005	NA	NA	NA	NA
2/13/97	MW-12	7.63	<0.020	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA	NA	NA
6/6/97	MW-12	8.52	<0.050	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	<0.005	NA	NA	NA
9/5/97	MW-12	8.85	<0.050	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	<0.005	NA	NA	NA
12/3/97	MW-12	7.88	<0.050	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA	NA	NA
2/20/98	MW-12	6.49	<0.050	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA	NA	NA
5/15/98	MW-12	7.11	<0.050	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA	NA	NA
8/13/98	MW-12	8.15	<0.050	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA	NA	NA
2/3/94	MW-2	5.67	0.2	<0.1	NA	NA	NA	NA	NA	NA	NA	<5.0	NA
6/8/94	MW-2	5.42	1.3	<0.300	NA	NA	NA	NA	NA	NA	NA	NA	NA
12/7/94	MW-2	4.7	3.4	NA	NA	1.1	0.086	0.028	0.19	NA	NA	NA	NA
3/7/95	MW-2	4.55	6.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
5/17/95	MW-2	4.85	1.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9/26/95	MW-2	5.3	0.44	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2/3/94	MW-3	6.31	5.4	<0.9	NA	NA	NA	NA	NA	NA	NA	<5.0	NA
6/8/94	MW-3	6.21	23	<2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
12/7/94	MW-3	5.3	41	NA	NA	9.9	2.9	1.4	3.5	NA	NA	NA	NA
3/7/95	MW-3	5.65	42	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
5/17/95	MW-3	4.85	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9/26/95	MW-3	5.38	24	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2/7/96	MW-3B	4.9	19	NA	NA	2.1	0.38	0.48	1.2	0.36	NA	NA	NA
6/5/96	MW-3B	5.66	11	NA	NA	1.3	0.25	0.37	0.86	NA	NA	NA	NA
9/4/96	MW-3B	6.44	6	NA	NA	0.84	0.098	0.14	0.41	<1.0	NA	NA	NA
11/21/96	MW-3B	5.86	5.5	NA	NA	0.44	0.031	0.05	0.14	NA	NA	NA	NA
2/13/97	MW-3B	5.56	12	NA	NA	1	0.21	0.12	0.69	NA	NA	NA	NA
6/6/97	MW-3B	6.16	2.03	NA	NA	0.293	0.014	0.023	0.033	<0.100	NA	NA	NA
9/5/97	MW-3B	6.44	2.14	NA	NA	0.0337	0.0316	0.0281	0.108	<0.100	NA	NA	NA
12/3/97	MW-3B	5.78	1.2	NA	NA	0.095	<0.005	<0.005	0.006	NA	NA	NA	NA
2/20/98	MW-3B	4.21	2.37	NA	NA	0.176	0.0109	0.0225	0.0209	NA	NA	NA	NA
5/15/98	MW-3B	5.12	3.16	NA	NA	0.17	<0.020	0.0654	0.0342	NA	NA	NA	NA
8/13/98	MW-3B	6.01	1.7	NA	NA	0.132	0.0095	0.0438	0.018	NA	NA	NA	NA
2/3/94	MW-4	6	1	<0.050	NA	NA	NA	NA	NA	NA	NA	<5.0	NA
6/8/94	MW-4	5.77	0.46	<0.050	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE A-5
GROUNDWATER MATRIX SAMPLE ANALYTICAL RESULTS -- PETROLEUM CONSTITUENTS (mg/L)
MARINA COVE SUBDIVISION
1801 HIBBARD STREET, ALAMEDA, CALIFORNIA

Sample Date	Sample ID	Depth (ft bgs)	TPH-gasoline	TPH-diesel	TPH-motor oil	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	TPH-kerosene*	Oil & Grease*	TRPH*
12/7/94	MW-4	4.8	2.4	NA	NA	0.2	0.0075	0.0075	0.028	NA	NA	NA	NA
3/7/95	MW-4	4.68	3.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
5/17/95	MW-4	4.23	3.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9/26/95	MW-4	6.26	2.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2/7/96	MW-4B	5.03	0.52	NA	NA	0.003	0.0024	0.0016	0.001	0.0083	NA	NA	NA
6/5/96	MW-4B	6.09	0.35	NA	NA	<0.0005	<0.0005	0.0016	<0.0005	NA	NA	NA	NA
9/4/96	MW-4B	6.85	0.071	NA	NA	0.0033	<0.0005	0.0018	0.0007	<0.025	NA	NA	NA
11/21/96	MW-4B	6.22	0.17	NA	NA	0.0015	<0.0005	0.001	<0.0005	NA	NA	NA	NA
2/13/97	MW-4B	5.63	0.22	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA	NA	NA
6/6/97	MW-4B	6.54	0.177	NA	NA	0.0035	0.0043	0.001	0.0067	0.0112	NA	NA	NA
9/5/97	MW-4B	6.8	0.156	NA	NA	0.0021	<0.0005	<0.0005	0.0009	0.0112	NA	NA	NA
12/3/97	MW-4B	6.35	<0.050	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA	NA	NA
2/20/98	MW-4B	4.26	0.0775	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA	NA	NA
5/15/98	MW-4B	5.67	<0.050	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA	NA	NA
8/13/98	MW-4B	6.44	0.065	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA	NA	NA
2/3/94	MW-5	7.11	<0.050	<0.050	NA	NA	NA	NA	NA	NA	NA	<5.0	NA
6/8/94	MW-5	6.6	<0.050	<0.050	NA	NA	NA	NA	NA	NA	NA	NA	NA
12/7/94	MW-5	5.6	0.093	NA	NA	0.003	0.0009	0.0008	0.003	NA	NA	NA	NA
3/7/95	MW-5	5.4	0.079	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
5/17/95	MW-5	5.32	0.051	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9/26/95	MW-5	6.88	0.067	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2/7/96	MW-5	4.64	0.12	NA	NA	0.007	<0.0005	<0.0005	<0.001	0.0069	NA	NA	NA
6/5/96	MW-5	5.76	0.1	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA	NA	NA
9/4/96	MW-5	6.76	<0.020	NA	NA	0.0024	<0.0005	<0.0005	<0.0005	<0.025	NA	NA	NA
11/21/96	MW-5	6.22	0.062	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA	NA	NA
2/13/97	MW-5	5.14	0.026	NA	NA	0.00058	<0.0005	<0.0005	<0.0005	NA	NA	NA	NA
6/6/97	MW-5	6.45	<0.050	NA	NA	0.0007	<0.0005	<0.0005	0.0005	<0.005	NA	NA	NA
9/5/97	MW-5	6.71	<0.050	NA	NA	0.0012	<0.0005	<0.0005	<0.0005	<0.005	NA	NA	NA
12/3/97	MW-5	5.66	<0.050	NA	NA	0.0009	<0.0005	<0.0005	<0.0005	NA	NA	NA	NA
2/20/98	MW-5	3.47	<0.050	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA	NA	NA
5/15/98	MW-5	5.02	<0.050	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA	NA	NA
8/13/98	MW-5	6.1	<0.050	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA	NA	NA
2/3/94	MW-6	7.93	<0.050	<0.050	NA	NA	NA	NA	NA	NA	NA	<5.0	NA
6/8/94	MW-6	7.47	<0.050	<0.050	NA	NA	NA	NA	NA	NA	NA	NA	NA
12/7/94	MW-6	6.5	<0.050	NA	NA	0.0013	<0.0005	<0.0005	<0.001	NA	NA	NA	NA
3/7/95	MW-6	6.47	0.072	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
5/17/95	MW-6	6.35	0.059	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9/26/95	MW-6	7.59	<0.050	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2/7/96	MW-6	5.38	0.06	NA	NA	0.00084	<0.0005	<0.0005	<0.001	<0.005	NA	NA	NA
6/5/96	MW-6	6.59	0.045	NA	NA	0.0012	<0.0005	<0.0005	<0.0005	NA	NA	NA	NA
9/4/96	MW-6	7.49	0.04	NA	NA	0.0008	<0.0005	<0.0005	<0.0005	<0.025	NA	NA	NA
11/21/96	MW-6	7.03	<0.020	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA	NA	NA

TABLE A-5
GROUNDWATER MATRIX SAMPLE ANALYTICAL RESULTS – PETROLEUM CONSTITUENTS (mg/L)
MARINA COVE SUBDIVISION
1801 HIBBARD STREET, ALAMEDA, CALIFORNIA

Sample Date	Sample ID	Depth (ft bgs)	TPH-gasoline	TPH-diesel	TPH-motor oil	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	TPH-kerosene ^a	Oil & Grease ^a	TRPH ^a
2/13/97	MW-6	6.05	0.025	NA	NA	0.00054	<0.0005	<0.0005	<0.0005	NA	NA	NA	NA
6/6/97	MW-6	7.18	<0.050	NA	NA	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA	NA
9/5/97	MW-6	7.41	<0.050	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA	NA
12/3/97	MW-6	6.33	<0.050	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA	NA	NA
2/20/98	MW-6	4.29	<0.050	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA	NA	NA
5/15/98	MW-6	6.09	<0.050	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA	NA	NA
8/13/98	MW-6	6.99	<0.050	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA	NA	NA
2/3/94	MW-7	3.06	<0.050	<0.050	NA	NA	NA	NA	NA	NA	NA	<5.0	NA
6/8/94	MW-7	2.81	<0.050	<0.050	NA	NA	NA	NA	NA	NA	NA	NA	NA
12/7/94	MW-7	3.09	<0.050	NA	NA	<0.0005	<0.0005	<0.0005	<0.001	NA	NA	NA	NA
3/7/95	MW-7	3.65	NA	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
5/17/95	MW-7	3.5	NA	6.1	NA	NA	NA	NA	NA	NA	NA	NA	NA
9/26/95	MW-7	3.51	NA	1.1	NA	NA	NA	NA	NA	NA	NA	NA	NA
2/7/96	MW-7	2.48	NA	1.2	NA	NA	NA	NA	NA	NA	NA	NA	NA
6/5/96	MW-7	3.55	NA	1.1	<1.0	NA	NA	NA	NA	NA	NA	NA	NA
9/4/96	MW-7	3.13	NA	<0.050	NA	NA	NA	NA	NA	NA	NA	NA	NA
11/21/96	MW-7	2.59	NA	2.2	<0.50	NA	NA	NA	NA	NA	NA	NA	NA
2/13/97	MW-7	2.6	NA	3.8	<0.50	NA	NA	NA	NA	NA	NA	NA	NA
6/6/97	MW-7	3.58	NA	0.318	NA	NA	NA	NA	NA	NA	NA	NA	NA
9/5/97	MW-7	3.25	NA	0.412	NA	NA	NA	NA	NA	NA	NA	NA	NA
12/3/97	MW-7	2.15	NA	0.382	NA	NA	NA	NA	NA	NA	NA	NA	NA
2/20/98	MW-7	1.76	NA	0.65	NA	NA	NA	NA	NA	NA	NA	NA	NA
5/15/98	MW-7	2.51	NA	1.29	NA	NA	NA	NA	NA	NA	NA	NA	NA
8/13/98	MW-7	2.93	NA	0.195	NA	NA	NA	NA	NA	NA	NA	NA	NA
2/3/94	MW-9	6.39	1.9	<0.050	NA	NA	NA	NA	NA	NA	NA	<5.0	NA
6/8/94	MW-9	6.34	5.3	<0.300	NA	NA	NA	NA	NA	NA	NA	NA	NA
12/7/94	MW-9	5.99	12	NA	NA	0.6	0.02	0.12	0.055	NA	NA	NA	NA
3/7/95	MW-9	5.31	9.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
5/17/95	MW-9	4.85	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9/26/95	MW-9	5.67	5.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
12/23/91	STMW-1	6.77	<0.05	<0.05	NA	<0.0005	<0.0005	<0.0005	<0.0010	NA	NA	NA	NA
4/27/92	STMW-1	5.72	0.15	<0.05	NA	0.0015	0.0012	0.0018	0.0027	NA	NA	<0.0005	NA
1/8/93	STMW-1	5.27	0.14	<0.05	NA	0.0006	0.0012	0.0006	0.0022	NA	NA	0.8	NA
12/23/91	STMW-2	6.6	2.3	0.08	NA	0.72	0.066	0.0015	0.24	NA	NA	NA	NA
4/27/92	STMW-2	5.52	1.1	<0.05	NA	0.0094	0.0053	0.002	0.024	NA	NA	<0.0005	NA
1/8/93	STMW-2	5.05	0.07	<0.05	NA	<0.0005	<0.0005	0.0005	0.0014	NA	NA	0.9	NA
12/23/91	STMW-3	7.38	14	1.7	NA	3	0.54	0.37	1.2	NA	NA	NA	NA
4/27/92	STMW-3	6.2	9.4	2	NA	0.057	0.05	0.046	0.22	NA	NA	<0.0005	NA
1/8/93	STMW-3	5.4	15	<0.05	NA	0.038	0.04	0.064	0.14	NA	NA	19	NA
4/27/92	STMW-4	5.66	0.79	<0.05	NA	0.0077	0.0026	0.0023	0.011	NA	NA	<0.0005	NA
1/8/93	STMW-4	4.99	0.86	<0.05	NA	0.0015	0.0045	0.0096	0.017	NA	NA	1.4	NA
4/27/92	STMW-5	6.84	<0.05	<0.05	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA	<0.0005	NA

TABLE A-5
GROUNDWATER MATRIX SAMPLE ANALYTICAL RESULTS - PETROLEUM CONSTITUENTS (mg/L)
MARINA COVE SUBDIVISION
1801 HIBBARD STREET, ALAMEDA, CALIFORNIA

Sample Date	Sample ID	Depth (ft bgs)	TPH-gasoline	TPH-diesel	TPH-motor oil	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	TPH-kerosene ^a	Oil & Grease ^a	TRPH ^a
1/8/93	STMW-5	5.6	<0.05	<0.05	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA	<0.5	NA
4/27/92	STMW-6	7.84	<0.05	<0.05	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA	<0.0005	NA
1/8/93	STMW-6	6.78	<0.05	<0.05	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA	<0.5	NA
1/8/93	STMW-7	2.12	NA	<0.05	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA	NA	NA
8/31/1998	W-1	5.5	<0.05	1.2	1.8	<0.0005	<0.0005	<0.0005	<0.0005	<0.002	NA	NA	5,480
2/28/91	WATER-1	8.3	22	0.19	NA	0.19	0.57	0.13	0.14	NA	<0.05	5.1	NA
4/3/91	WATER-2	4.8	13	NA	NA	0.58	0.13	0.029	0.4	NA	NA	NA	NA
Minimum			<0.02	<0.05	<0.5	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005			
Maximum ^b			42	6.1	1.8	9.9	2.9	1.4	3.5	0.36			
Average			2.388	0.342	0.550	0.211	0.050	0.033	0.089	0.036			
Standard Deviation			6.486	0.692	0.620	1.022	0.289	0.150	0.385	0.107			
Count			159	50	6	109	109	109	109	31			
Number of Detects			33	2	0	11	2	3	2	0			
t-value			1.645	1.671	2.015	1.658	1.658	1.658	1.658	1.697			
95% Normal UCL			3.235	0.505	1.060	0.374	0.096	0.057	0.150	0.069			

Notes:

bgs	Below ground surface	ND	Not detected
ft	Feet	RBSL	Risk-based screening level
mg/L	Milligram per liter	TRPH	Total recoverable petroleum hydrocarbons
NA	Sample was not analyzed for this chemical	UCL	Upper confidence limit
NC	No criterion		

^a TPH-kerosene, oil & grease, and TRPH are presented to complete the historical data summary. However, data for these chemicals were not used in statistical analysis nor the risk assessment.

^b Bolded cells represent maximum concentrations of detected chemicals that exceeded RBSLs. Chemicals with maximum concentrations exceeding soil or groundwater RBSLs were further evaluated quantitatively in the baseline risk assessment. Exceptions include TPH-gasoline, TPH-diesel, and TPH-motor oil, which were further evaluated qualitatively due to lack of toxicity data.

TABLE A-4
GROUNDWATER MATRIX ANALYTICAL RESULTS -- VOLATILE AND SEMIVOLATILE ORGANIC COMPOUNDS (mg/L)
MARINA COVE SUBDIVISION
1881 HIBBARD STREET, ALAMEDA, CALIFORNIA

Sample Date	Sample ID	Depth (ft bgs)	Benzene	Carbon Disulfide	Chloroethane	1,1-DCA	1,2-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	Ethylbenzene	Ethylene dibromide	Methyl-naphthalene	Naphthalene	PCE	TCE	1,1,2-TCA	Toluene	Vinyl chloride	Xylenes	m+p-Xylene ^a	o-Xylene ^a	VOCs ^a	SVOCs ^a	
7/16/99	B-10	12	0.0137	<0.0005	<0.0005	0.0061	<0.0005	<0.0005	NA	<0.0005	0.0223	NA	NA	NA	<0.0005	<0.0005	<0.0005	0.0038	<0.0005	NA	0.003	<0.0005	<0.0005-0.005	NA	
8/13/98	MW-5	6.1	<0.0005	<0.0005	<0.0005	0.0076	0.0005	<0.0005	NA	<0.0005	<0.0005	NA	NA	NA	<0.0005	<0.0005	<0.0005	<0.002	<0.0005	NA	<0.0005	<0.0005	<0.0005-0.016	NA	
2/3/94	MW-6	7.93	0.0026	<0.002	<0.001	0.0026	0.0011	<0.001	0.0021	<0.001	<0.001	NA	<0.005	<0.005	0.0013	<0.001	<0.001	<0.001	<0.001	<0.001	NA	NA	<0.001-0.020	<0.005-0.200	
6/8/94	MW-6	7.47	0.0022	NA	NA	NA	0.0042	NA	NA	NA	<0.0005	<0.0005	NA	NA	NA	NA	NA	<0.0005	NA	<0.0005	NA	NA	NA	NA	
3/7/95	MW-6	6.47	<0.0005	*	*	0.094	*	*	*	*	<0.005	*	*	*	*	*	*	<0.005	*	<0.005	NA	NA	NA	NA	
5/17/95	MW-6	6.35	0.0025	NA	<0.005	0.01	<0.005	<0.005	NA	<0.005	<0.005	NA	NA	NA	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	
9/26/95	MW-6	7.59	<0.005	<0.005	<0.010	0.012	<0.005	<0.005	NA	<0.005	<0.005	NA	NA	NA	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005	NA	NA	<0.005-0.0069	NA	
2/7/96	MW-6	5.38	<0.005	NA	<0.005	0.0076	<0.005	<0.005	NA	<0.005	<0.0072	NA	NA	NA	<0.005	<0.005	<0.005	<0.006	<0.005	NA	NA	NA	<0.005-0.100	NA	
9/4/96	MW-6	7.49	0.0014	NA	<0.001	0.016	0.0054	<0.0004	NA	<0.001	<0.001	NA	NA	NA	0.0015	0.002	<0.001	<0.001	<0.002	<0.001	NA	NA	<0.001-0.002	NA	
2/13/97	MW-6	6.05	<0.001	NA	<0.001	0.016	0.0041	<0.001	NA	<0.001	<0.001	NA	NA	NA	0.0016	0.0017	<0.001	<0.001	<0.002	<0.001	NA	NA	<0.001-0.002	NA	
9/5/97	MW-6	7.41	<0.0005	<0.0005	<0.0005	0.0109	0.0027	<0.0005	NA	<0.0005	<0.0005	NA	NA	NA	0.0007	0.0009	<0.0005	<0.0005	<0.0005	NA	<0.0005	<0.0005	<0.0005-0.005	NA	
2/20/98	MW-6	4.29	<0.0005	<0.0005	<0.0005	0.0068	0.001	<0.0005	NA	<0.0005	<0.0005	NA	NA	NA	0.001	<0.0005	<0.0005	<0.0005	<0.0005	NA	<0.0005	<0.0005	<0.0005-0.015	NA	
8/13/98	MW-6	6.99	<0.0005	<0.0005	<0.0005	0.0041	0.0066	<0.0005	NA	<0.0005	<0.0005	NA	NA	NA	<0.0005	<0.0005	<0.0005	<0.002	<0.0005	NA	<0.0005	<0.0005	<0.0005-0.012	NA	
2/3/94	MW-7	3.06	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	NA	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	NA	NA	<0.001-0.020	<0.005-0.200	
6/8/94	MW-7	2.81	<0.0005	NA	NA	NA	<0.0005	NA	NA	NA	<0.0005	<0.0005	NA	NA	NA	NA	NA	<0.0005	NA	<0.0005	NA	NA	NA	NA	
3/7/95	MW-7	3.65	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5/17/95	MW-7	3.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
9/26/95	MW-7	3.51	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2/7/96	MW-7	2.48	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
9/4/96	MW-7	3.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2/13/97	MW-7	2.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
6/12/97	MW-7		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	NA	<0.0005	<0.0005	NA	<0.010	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	NA	<0.0005	<0.0005	<0.0005-0.010	<0.010-0.020	
9/5/97	MW-7	3.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2/20/98	MW-7	1.76	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
8/13/98	MW-7	2.93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2/3/94	MW-9	6.39	0.063	<0.002	0.0016	0.018	0.01	<0.001	0.0079	<0.001	0.022	NA	<0.005	<0.005	<0.001	0.002	<0.001	0.0043	<0.001	0.014	NA	NA	<0.001-0.020	<0.005-0.200	
6/8/94	MW-9	6.34	0.15	NA	NA	NA	<0.003	NA	NA	NA	0.38	<0.003	NA	NA	NA	NA	NA	0.02	NA	0.11	NA	NA	NA	NA	
3/7/95	MW-9	5.31	0.34	*	*	0.012	*	*	0.014	*	0.053	*	*	*	*	*	*	<0.005	*	*	*	*	*	*	
5/17/95	MW-9	4.85	0.82	NA	<0.005	0.0063	<0.005	<0.005	NA	<0.005	0.23	NA	NA	NA	<0.005	<0.005	<0.005	0.022	<0.005	0.078	NA	NA	<0.005-0.0069	NA	
9/26/95	MW-9	5.67	0.34	<0.005	<0.010	0.0087	<0.005	<0.005	NA	<0.005	0.053	NA	NA	NA	<0.005	<0.005	<0.005	<0.010	0.02	NA	NA	NA	<0.005-0.100	NA	
2/28/91	WATER-1	8.3	1.1	NA	<0.001	<0.001	<0.0005	<0.001	NA	NA	0.13	NA	0.16	0.43	<0.001	<0.001	<0.001	<0.001	0.53	<0.001	0.5	NA	NA	<0.005-0.100	NA
Minimum			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.0005	All NDs	<0.005	<0.005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	NA	NA	ND*	<0.01-0.05	
Maximum			9.9	0.12	0.0019	0.13	0.033	0.0011	0.15	0.018	1.6	0.16	0.43	0.43	0.0043	0.0029	0.06	3	0.081	4.1	NA	NA	NA	NA	
Average			0.461	0.005	0.004	0.015	0.005	0.003	0.024	0.004	0.080	0.019	0.073	0.004	0.004	0.004	0.004	0.101	0.005	0.251	NA	NA	NA	NA	
Standard Deviation			1.578	0.018	0.011	0.025	0.010	0.046	0.010	0.046	0.271	0.046	0.118	0.010	0.010	0.012	0.397	0.014	0.786	NA	NA	NA	NA	NA	
Count			95	43	75	81	85	75	13	74	95	12	23	75	75	75	95	75	65	NA	NA	NA	NA	NA	
Number of Detects			17	1	0	23	8	0	0	0	8	0	1	5	3	0	4	0	4	NA	NA	NA	NA	NA	
t-value			1.66	1.684	1.67	1.66	1.66	1.67	1.782	1.67	1.66	1.796	1.717	1.67	1.67	1.67	1.66	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67
95% Normal UCL			0.73	0.009	0.006	0.02	0.006	0.005	0.046	0.006	0.126	0.043	0.115	0.005	0.005	0.005	0.006	0.169	0.008	0.414	NA	NA	NA	NA	NA

Notes:
bgs Below ground surface
ft Feet
mg/L Milligram per liter
NA Sample was not analyzed for this chemical

NC No criterion
ND Not detected
RBSL Risk-based screening level
UCL Upper confidence limit

M+p-xylene, o-xylene, VOCs, and SVOCs are presented to complete the historical data summary. However, data for these chemicals (or groups of chemicals) were not used in statistical analysis nor the risk assessment.

Bolded cells represent maximum concentrations of detected chemicals that exceeded RBSLs. Chemicals with maximum concentrations exceeding soil or groundwater RBSLs were further evaluated quantitatively in the baseline risk assessment. One exception includes methylnaphthalene, which was further evaluated qualitatively due to lack of toxicity data.

TABl 4
GROUNDWATER MATRIX SAMPLE ANALYTICAL RESULTS -- PETROLEUM CONSTITUENTS (µg/L)
PARK PARCEL
1521 BUENA VISTA AVENUE, ALAMEDA, CALIFORNIA

Sample Date	Sample ID	Sample Depth (ft bgs)	TPH-gasoline	TPH-diesel	TPH-motor oil	Benzene	Toluene	Ethyl-benzene	Xylenes	Methyl tert-butyl ether
9/29/93	SA-1	5	<50	NA	NA	<0.5	<0.5	<0.5	<0.5	NA
9/29/93	SB-1	5	<50	NA	NA	<0.5	<0.5	<0.5	<0.5	NA
9/30/93	TA-2	5	970	15000	NA	<0.5	3.3	3.7	26	NA
4/5/1994	#3 Pit Water	6	NA	26000	NA	<0.5	3	0.6	3	NA
2/7/1995	P-15	3.97	NA	100	NA	<0.5	<0.5	<0.5	<0.5	NA
2/7/1995	P-16	5.56	NA	190	NA	<0.5	<0.5	<0.5	<0.5	NA
2/7/1995	P-17	5.43	NA	<50	NA	<0.5	<0.5	<0.5	<0.5	NA
3/12/1999	GW-3	5.5	<50	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5
3/12/1999	GW-4	5.5	<50	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5
Minimum			<50	<50			<0.5	<0.5	<0.5	
Maximum			970	26000			3.3	3.7	26	
Average			214	5909			1	1	3	
Standard Deviation			423	10461			1	1	8	
Count			5000	7000			9000	9000	9000	
Number of Detects			1000	4000			2000	2000	2000	
t-value			2132	1943			1860	1860	1860	
95% Normal UCL			617	13592			2	1	9	

Notes:
bgs Below ground surface
ft Feet
µg/L Microgram per liter
NA Sample was not analyzed for this chemical
UCL Upper confidence limit

TABL -5
GROUNDWATER MATRIX ANALYTICAL RESULTS -- VOLATILE AND SEMIVOLATILE ORGANIC COMPOUNDS (µg/L)
PARK PARCEL
1521 BUENA VISTA AVENUE, ALAMEDA, CALIFORNIA

Sample Date	Sample ID	Sample Depth (ft bgs)	Acetone	2-Butanone	Carbon Disulfide	Chloroform	1,1-DCA	1,2-DCA	Methyl tert-butyl ether	VOCs ^a
10/1/1993	AGT-2	3	NA	NA	NA	NA	NA	NA	NA	NA
10/1/1993	AGT-4	3	NA	NA	NA	NA	NA	NA	NA	NA
9/28/1993	FDB-2	10	21	<10	3	<1	<1	<1	NA	<1-<5
7/18/2002	B-1W	6.5	<5	2	<0.5	8.9	<0.5	<0.5	<0.5	<0.5-<5
7/18/2002	B-2W	6.5	<5	1.3	2.4	<0.5	<0.5	3.6	<0.5	<0.5-<5
7/18/2002	B-3W	6.5	<5	1.7	0.86	7.7	1.3	<0.5	6.3	<0.5-<5
7/18/2002	B-4W	6.5	<5	2.4	0.55	5.4	<0.5	<0.5	<0.5	<0.5-<5
Minimum			<5	<10	<0.5	<0.5	<0.5	<0.5	<0.5	
Maximum			21	2.4	3	8.9	1.3	3.6	6.3	
Average			6.2	2	1	5	1	1	2	
Standard Deviation			8	1	1	4	0.455	1	3	
Count			5000	5000	5000	5000	5000	5000	4000	
Number of Detects			1000	4000	4000	3000	1000	1000	1000	
t-value			2015	2015	2015	2015	2015	2015	2353	
95% Normal UCL			14	4	3	8	1	2	5	

Notes:

bgs Below ground surface
DCA Dichloroethane
ft Feet
µg/L Microgram per liter
NA Sample was not analyzed for this chemical
UCL Upper confidence limit
VOCs Volatile organic compounds

^a Results for the remaining VOCs are presented to complete the historical data summary. However, this grouped data was not used in statistical analysis nor the risk assessment.

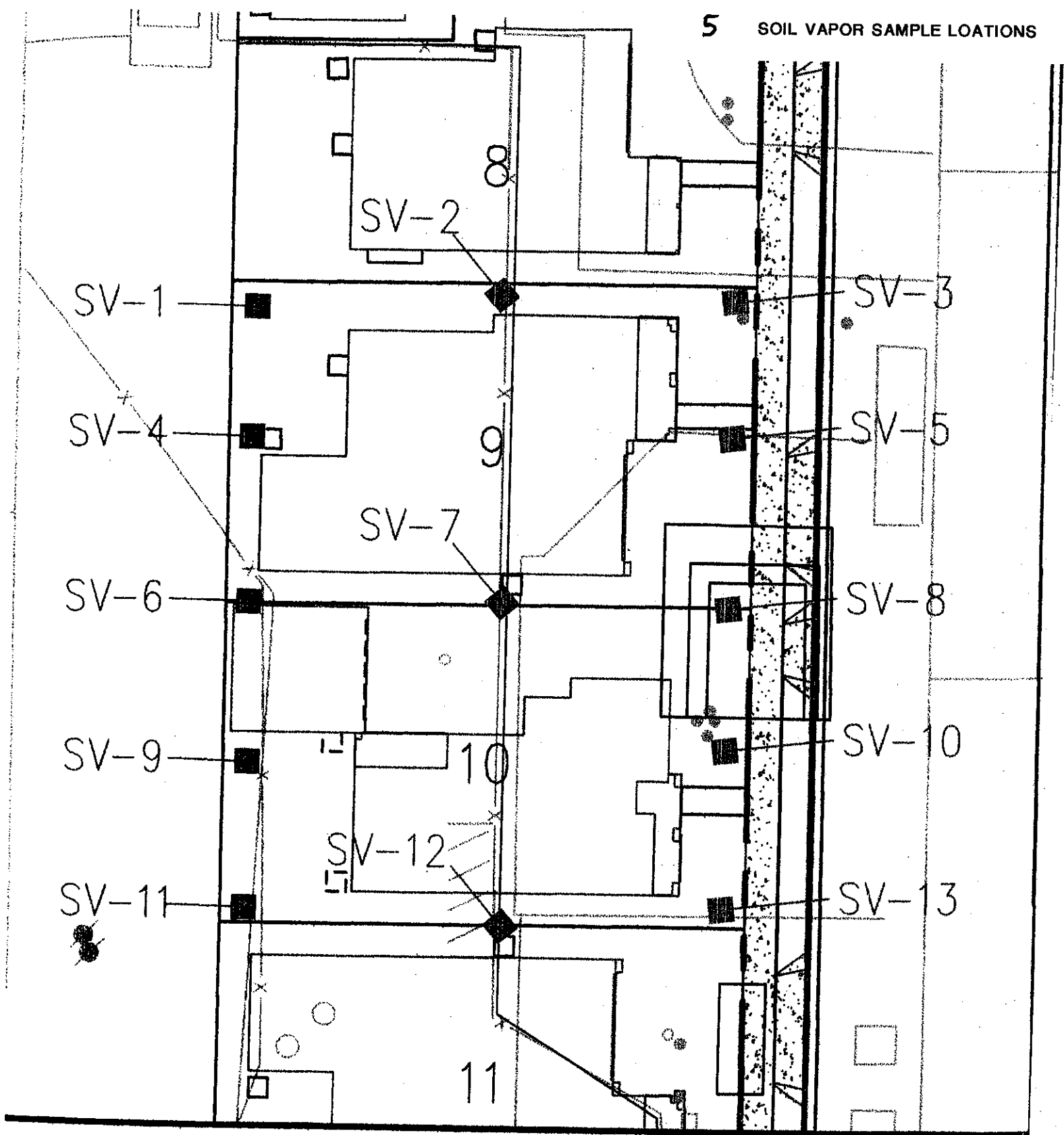


FIGURE 9 - SOIL GAS SAMPLING RESULTS (Marina Cove Subdivision)

DETAIL D

* VOCs were ND < 0.2 mg/L of vapor at all sampling locations

* TPH was ND < 1 ppmV at all sampling locations

SCALE: 1" = 30'

TEG Project #30226E

ICES Project # 2262

Marina Cove Subdivision, Alameda California



EPA METHOD 8260B ANALYSES OF SOIL VAPOR in ug/L of Vapor & TPH (EPA 8015mod)

SAMPLE NUMBER:	Blank	SV-1 @4'	SV-2 @4'	SV-3 @4'	SV-4 @1.5'	SV-5 @4'	SV-6 @4'
COLLECTION DATE:	2/26/03	2/26/03	2/26/03	2/26/03	2/26/03	2/26/03	2/26/03
COLLECTION TIME:	08:06	14:34	13:36	13:16	14:12	12:55	12:06
DILUTION FACTOR:	1	1	1	1	1	1	1
Dichlorodifluoromethane	nd	nd	nd	nd	nd	nd	nd
Chloromethane	nd	nd	nd	nd	nd	nd	nd
Vinyl Chloride	nd	nd	nd	nd	nd	nd	nd
Bromomethane	nd	nd	nd	nd	nd	nd	nd
Chloroethane	nd	nd	nd	nd	nd	nd	nd
Trichlorofluoromethane	nd	nd	nd	nd	nd	nd	nd
1,1-Dichloroethene	nd	nd	nd	nd	nd	nd	nd
Methylene Chloride	nd	nd	nd	nd	nd	nd	nd
trans-1,2-Dichloroethene	nd	nd	nd	nd	nd	nd	nd
1,1-Dichloroethane	nd	nd	nd	nd	nd	nd	nd
2,2-Dichloropropane	nd	nd	nd	nd	nd	nd	nd
cis-1,2-Dichloroethene	nd	nd	nd	nd	nd	nd	nd
Chloroform	nd	nd	nd	nd	nd	nd	nd
Bromochloromethane	nd	nd	nd	nd	nd	nd	nd
1,1,1-Trichloroethane	nd	nd	nd	nd	nd	nd	nd
1,1-Dichloropropene	nd	nd	nd	nd	nd	nd	nd
Carbon Tetrachloride	nd	nd	nd	nd	nd	nd	nd
1,2-Dichloroethane	nd	nd	nd	nd	nd	nd	nd
Benzene	nd	nd	nd	nd	nd	nd	nd
Trichloroethene	nd	nd	nd	nd	nd	nd	nd
1,2-Dichloropropane	nd	nd	nd	nd	nd	nd	nd
Bromodichloromethane	nd	nd	nd	nd	nd	nd	nd
Dibromomethane	nd	nd	nd	nd	nd	nd	nd
trans-1,3-Dichloropropene	nd	nd	nd	nd	nd	nd	nd
Toluene	nd	nd	nd	nd	nd	nd	nd
cis-1,3-Dichloropropene	nd	nd	nd	nd	nd	nd	nd
1,1,2-Trichloroethane	nd	nd	nd	nd	nd	nd	nd
1,2-Dibromoethane	nd	nd	nd	nd	nd	nd	nd
1,3-Dichloropropane	nd	nd	nd	nd	nd	nd	nd
Tetrachloroethene	nd	nd	nd	nd	nd	nd	nd
Dibromochloromethane	nd	nd	nd	nd	nd	nd	nd
Chlorobenzene	nd	nd	nd	nd	nd	nd	nd
Ethylbenzene	nd	nd	nd	nd	nd	nd	nd
1,1,1,2-Tetrachloroethane	nd	nd	nd	nd	nd	nd	nd
m,p-Xylene	nd	nd	nd	nd	nd	nd	nd
o-Xylene	nd	nd	nd	nd	nd	nd	nd
Styrene	nd	nd	nd	nd	nd	nd	nd
Bromoform	nd	nd	nd	nd	nd	nd	nd
Isopropylbenzene	nd	nd	nd	nd	nd	nd	nd
1,1,2,2-Tetrachloroethane	nd	nd	nd	nd	nd	nd	nd
1,2,3-Trichloropropane	nd	nd	nd	nd	nd	nd	nd
n-propylbenzene	nd	nd	nd	nd	nd	nd	nd
Bromobenzene	nd	nd	nd	nd	nd	nd	nd
1,3,5-Trimethylbenzene	nd	nd	nd	nd	nd	nd	nd
2-Chlorotoluene	nd	nd	nd	nd	nd	nd	nd
4-Chlorotoluene	nd	nd	nd	nd	nd	nd	nd
tert-Butylbenzene	nd	nd	nd	nd	nd	nd	nd
1,2,4-Trimethylbenzene	nd	nd	nd	nd	nd	nd	nd
sec-Butylbenzene	nd	nd	nd	nd	nd	nd	nd
p-Isopropyltoluene	nd	nd	nd	nd	nd	nd	nd
1,3-Dichlorobenzene	nd	nd	nd	nd	nd	nd	nd
1,4-Dichlorobenzene	nd	nd	nd	nd	nd	nd	nd
n-Butylbenzene	nd	nd	nd	nd	nd	nd	nd
1,2-Dichlorobenzene	nd	nd	nd	nd	nd	nd	nd
1,2-Dibromo-3-chloropropane	nd	nd	nd	nd	nd	nd	nd
1,2,4-Trichlorobenzene	nd	nd	nd	nd	nd	nd	nd
Hexachlorobutadiene	nd	nd	nd	nd	nd	nd	nd
Naphthalene	nd	nd	nd	nd	nd	nd	nd
1,2,3-Trichlorobenzene	nd	nd	nd	nd	nd	nd	nd
TPH	nd	nd	nd	nd	nd	nd	nd
Surrogate Recovery (DBFM)	105%	104%	107%	103%	103%	105%	109%
Surrogate Recovery (1,2-DCA-d4)	104%	97%	102%	99%	100%	99%	102%
Surrogate Recovery (Toluene-d8)	104%	106%	107%	105%	107%	107%	108%

REPORTING LIMITS FOR ABOVE COMPOUNDS = 0.2 ug/L of Vapor; TPH = 1ppmV

'nd' NOT DETECTED AT LISTED REPORTING LIMITS

ANALYSES PERFORMED by: Mr. Leif Jonsson

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EPA METHOD 8260B ANALYSES OF SOIL VAPOR in ug/L of Vapor & TPH (EPA 8015mod)

SAMPLE NUMBER:	SV-7 @4'	SV-8 @4'	SV-9 @3'	SV-10 @4'	SV-11 @4'	SV-12 @6'	SV-13 @4'
COLLECTION DATE:	2/26/03	2/26/03	2/26/03	2/26/03	2/26/03	2/26/03	2/26/03
COLLECTION TIME:	11:20	10:58	12:30	10:37	09:42	09:09	08:49
DILUTION FACTOR:	1	1	1	1	1	1	1
Dichlorodifluoromethane	nd	nd	nd	nd	nd	nd	nd
Chloromethane	nd	nd	nd	nd	nd	nd	nd
Vinyl Chloride	nd	nd	nd	nd	nd	nd	nd
Bromomethane	nd	nd	nd	nd	nd	nd	nd
Chloroethane	nd	nd	nd	nd	nd	nd	nd
Trichlorofluoromethane	nd	nd	nd	nd	nd	nd	nd
1,1-Dichloroethene	nd	nd	nd	nd	nd	nd	nd
Methylene Chloride	nd	nd	nd	nd	nd	nd	nd
trans-1,2-Dichloroethene	nd	nd	nd	nd	nd	nd	nd
1,1-Dichloroethane	nd	nd	nd	nd	nd	nd	nd
2,2-Dichloropropane	nd	nd	nd	nd	nd	nd	nd
cis-1,2-Dichloroethene	nd	nd	nd	nd	nd	nd	nd
Chloroform	nd	nd	nd	nd	nd	nd	nd
Bromochloromethane	nd	nd	nd	nd	nd	nd	nd
1,1,1-Trichloroethane	nd	nd	nd	nd	nd	nd	nd
1,1-Dichloropropene	nd	nd	nd	nd	nd	nd	nd
Carbon Tetrachloride	nd	nd	nd	nd	nd	nd	nd
1,2-Dichloroethane	nd	nd	nd	nd	nd	nd	nd
Benzene	nd	nd	nd	nd	nd	nd	nd
Trichloroethene	nd	nd	nd	nd	nd	nd	nd
1,2-Dichloropropane	nd	nd	nd	nd	nd	nd	nd
Bromodichloromethane	nd	nd	nd	nd	nd	nd	nd
Dibromomethane	nd	nd	nd	nd	nd	nd	nd
trans-1,3-Dichloropropene	nd	nd	nd	nd	nd	nd	nd
Toluene	nd	nd	nd	nd	nd	nd	nd
cis-1,3-Dichloropropene	nd	nd	nd	nd	nd	nd	nd
1,1,2-Trichloroethane	nd	nd	nd	nd	nd	nd	nd
1,2-Dibromoethane	nd	nd	nd	nd	nd	nd	nd
1,3-Dichloropropane	nd	nd	nd	nd	nd	nd	nd
Tetrachloroethene	nd	nd	nd	nd	nd	nd	nd
Dibromochloromethane	nd	nd	nd	nd	nd	nd	nd
Chlorobenzene	nd	nd	nd	nd	nd	nd	nd
Ethylbenzene	nd	nd	nd	nd	nd	nd	nd
1,1,1,2-Tetrachloroethane	nd	nd	nd	nd	nd	nd	nd
m,p-Xylene	nd	nd	nd	nd	nd	nd	nd
o-Xylene	nd	nd	nd	nd	nd	nd	nd
Styrene	nd	nd	nd	nd	nd	nd	nd
Bromoform	nd	nd	nd	nd	nd	nd	nd
Isopropylbenzene	nd	nd	nd	nd	nd	nd	nd
1,1,2,2-Tetrachloroethane	nd	nd	nd	nd	nd	nd	nd
1,2,3-Trichloropropane	nd	nd	nd	nd	nd	nd	nd
n-propylbenzene	nd	nd	nd	nd	nd	nd	nd
Bromobenzene	nd	nd	nd	nd	nd	nd	nd
1,3,5-Trimethylbenzene	nd	nd	nd	nd	nd	nd	nd
2-Chlorotoluene	nd	nd	nd	nd	nd	nd	nd
4-Chlorotoluene	nd	nd	nd	nd	nd	nd	nd
tert-Butylbenzene	nd	nd	nd	nd	nd	nd	nd
1,2,4-Trimethylbenzene	nd	nd	nd	nd	nd	nd	nd
sec-Butylbenzene	nd	nd	nd	nd	nd	nd	nd
p-Isopropyltoluene	nd	nd	nd	nd	nd	nd	nd
1,3-Dichlorobenzene	nd	nd	nd	nd	nd	nd	nd
1,4-Dichlorobenzene	nd	nd	nd	nd	nd	nd	nd
n-Butylbenzene	nd	nd	nd	nd	nd	nd	nd
1,2-Dichlorobenzene	nd	nd	nd	nd	nd	nd	nd
1,2-Dibromo-3-chloropropane	nd	nd	nd	nd	nd	nd	nd
1,2,4-Trichlorobenzene	nd	nd	nd	nd	nd	nd	nd
Hexachlorobutadiene	nd	nd	nd	nd	nd	nd	nd
Naphthalene	nd	nd	nd	nd	nd	nd	nd
1,2,3-Trichlorobenzene	nd	nd	nd	nd	nd	nd	nd
TPH	nd	nd	nd	nd	nd	nd	nd
Surrogate Recovery (DBFM)	112%	111%	110%	110%	108%	106%	109%
Surrogate Recovery (1,2-DCA-d4)	104%	98%	102%	106%	99%	106%	103%
Surrogate Recovery (Toluene-d8)	106%	108%	107%	109%	106%	109%	107%

REPORTING LIMITS FOR ABOVE COMPOUNDS = 0.2 ug/L of Vapor; TPH = 1ppmV

'nd' NOT DETECTED AT LISTED REPORTING LIMITS

ANALYSES PERFORMED by: Mr. Leif Jonsson

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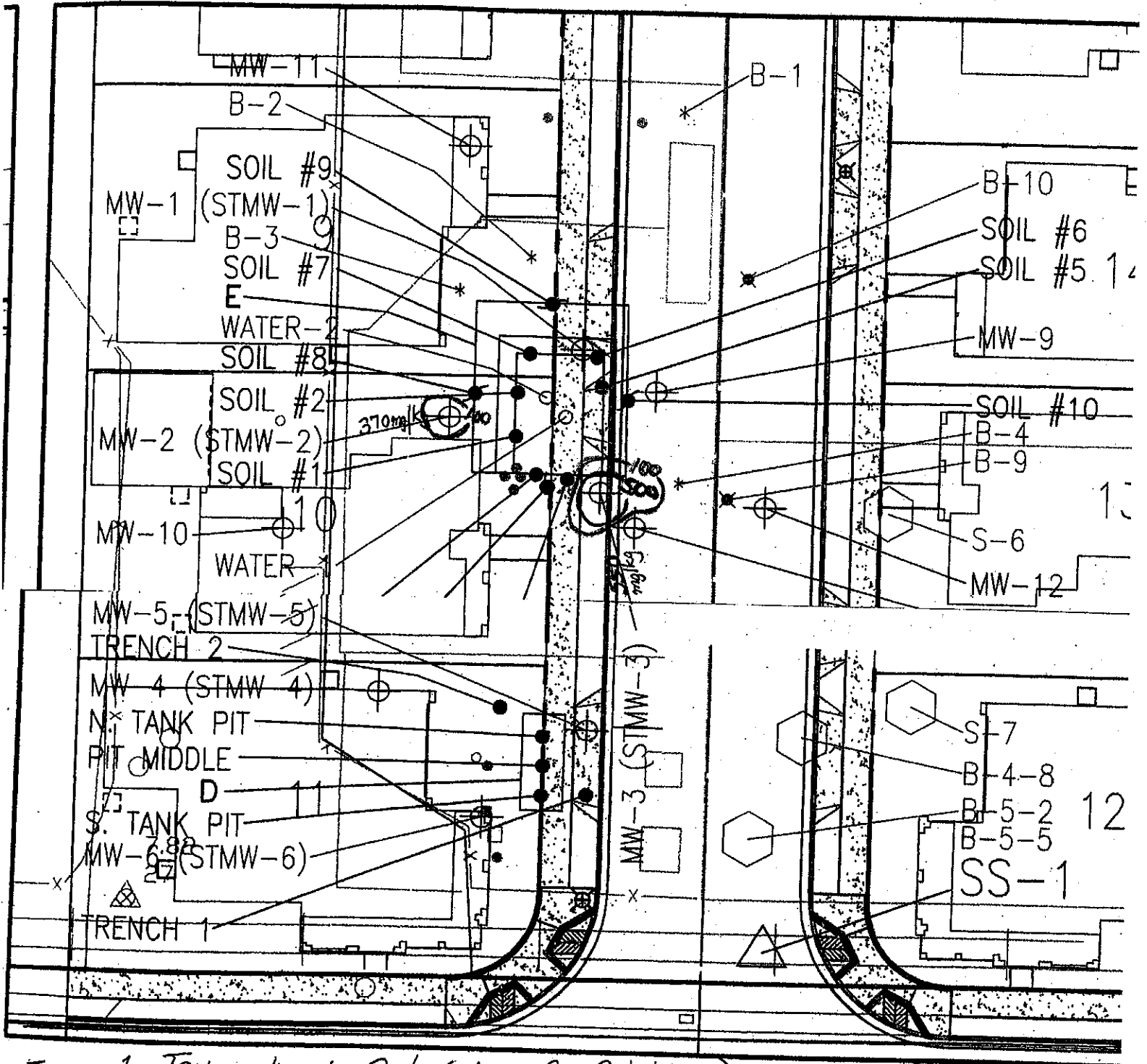


FIGURE 1a-TPH-gasoline in Soil (Maina Cove Subdivision)

Notes:

1. Only concentrations > 100mg/kg are shown
2. Contours drawn for concentrations of 100mg/kg, 500mg/kg, and 1,000mg/kg.

DETAIL C

SCALE: 1"=30'

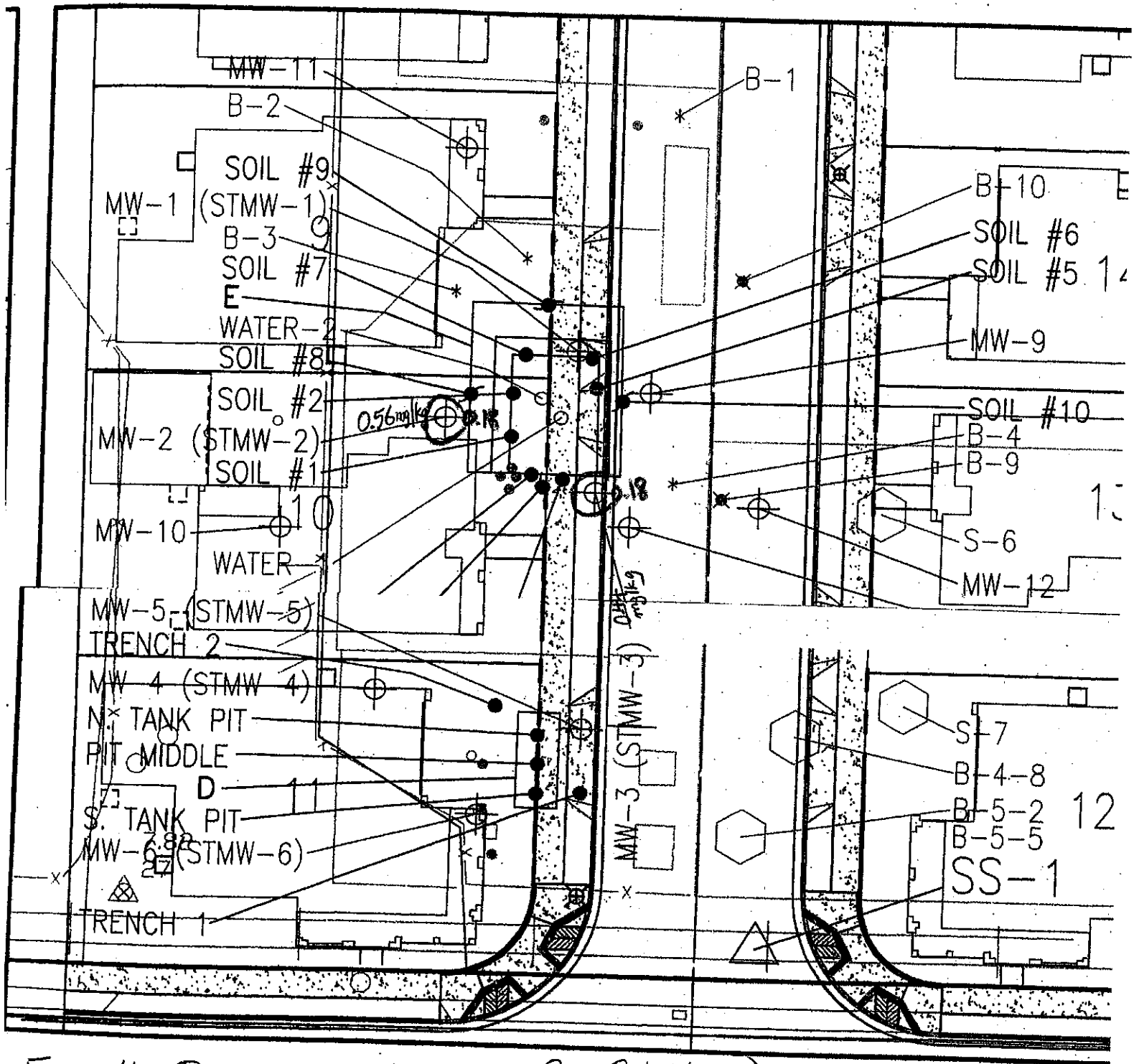


FIGURE 4a-Benzene in Soil (Maina Cove Subdivision)

Notes:

1. Only concentrations $> 0.18 \text{ mg/kg}$ are shown.
2. Contours drawn for concentration of 0.18 mg/kg .

DETAIL C

SCALE: 1"=30'

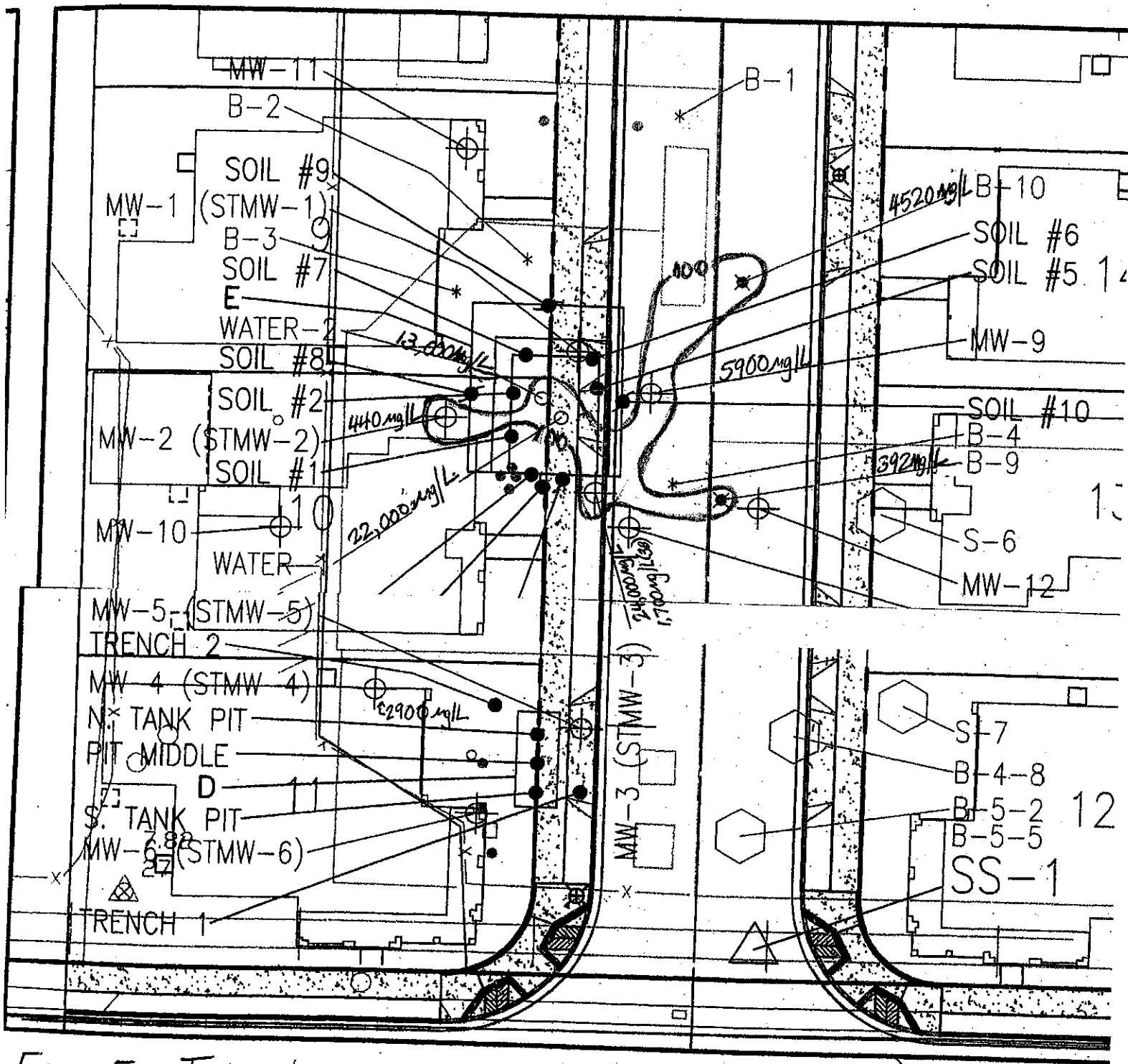


FIGURE 5a - TPH-gasoline in Groundwater (Maina Cove Subdivision)

Notes:

1. Only concentrations > 100 mg/L are shown
2. Contour drawn for concentration of 100 mg/L

DETAIL C

SCALE: 1"=30'

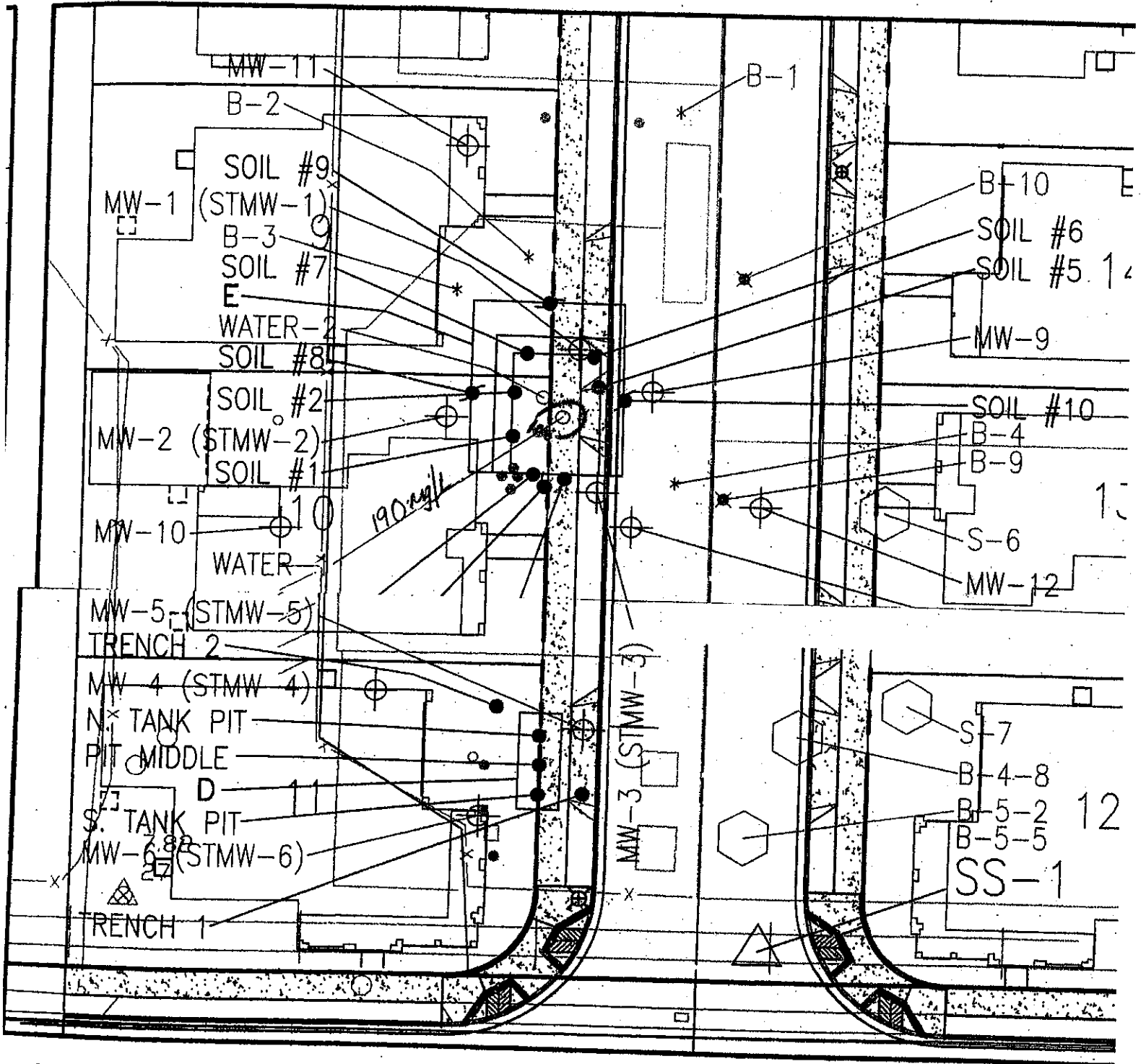


FIGURE 7a - TPH-diesel in Groundwater (Marina Cove Subdivision)

Notes:

1. Only concentrations > 100 mg/L are shown.
2. Contour drawn for concentration of 100 mg/L

DETAIL C

SCALE: 1"=30'

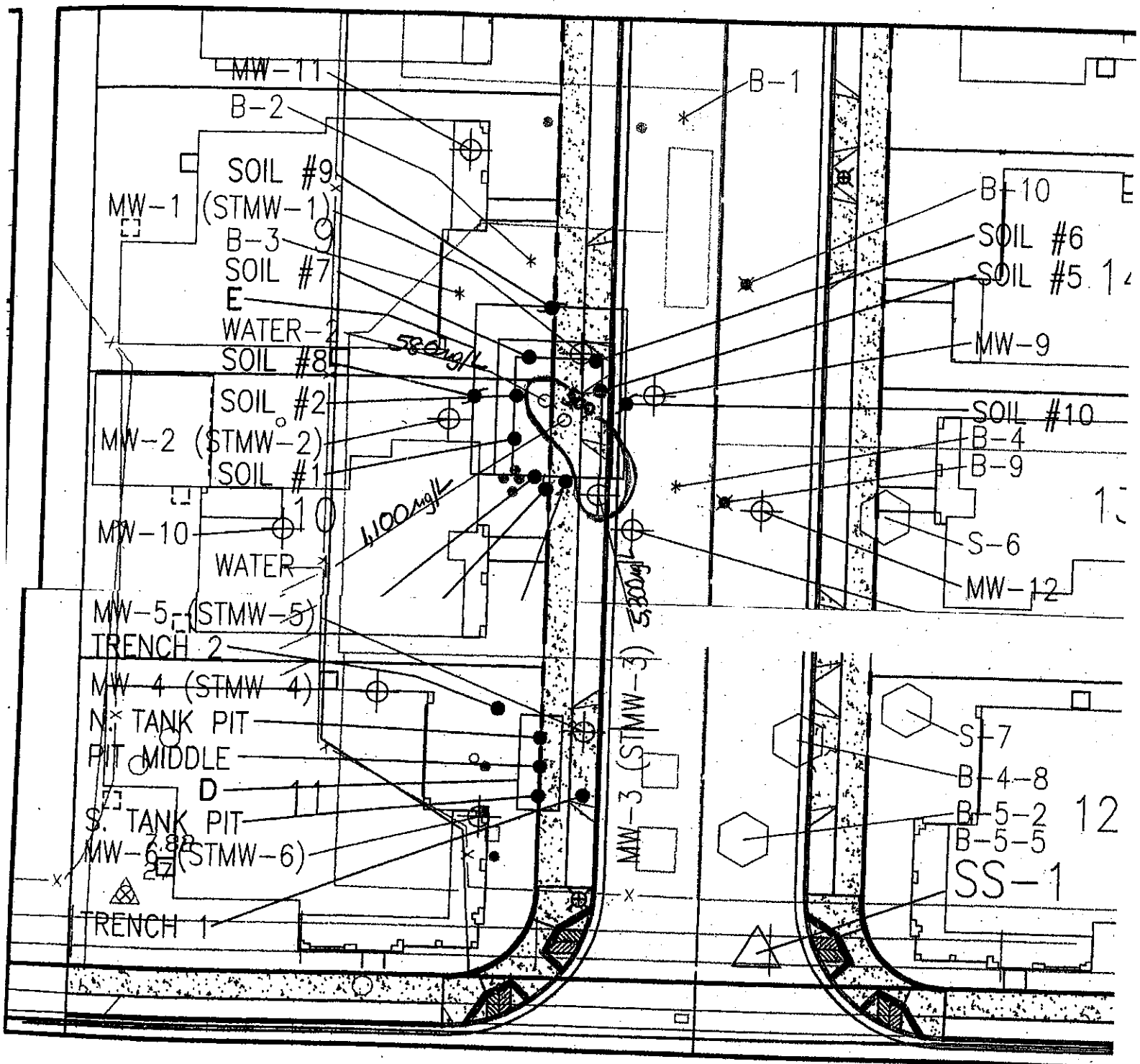


FIGURE 8a - Benzene in Groundwater (Maina Cove Subdivision)

Notes:

1. Only concentrations > 500 ng/L are shown.
2. Contours drawn for concentration of 500 ng/L

DETAIL C

SCALE: 1"=30'

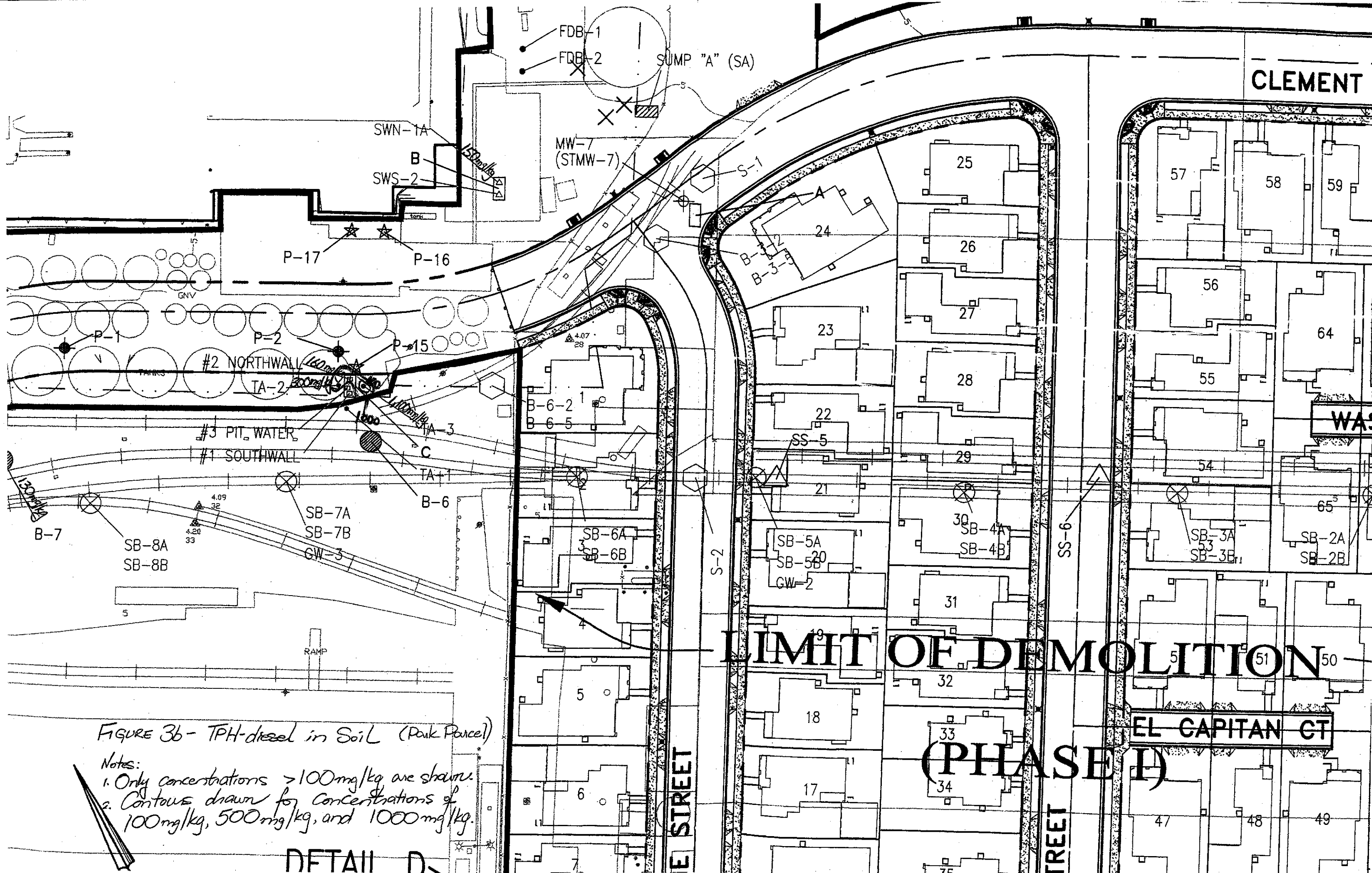


FIGURE 3b - TPH-diesel in Soil (Park Parcel)

- Notes:
1. Only concentrations > 100mg/kg are shown.
 2. Contours drawn for concentrations of 100mg/kg, 500mg/kg, and 1000mg/kg.

DETAIL D

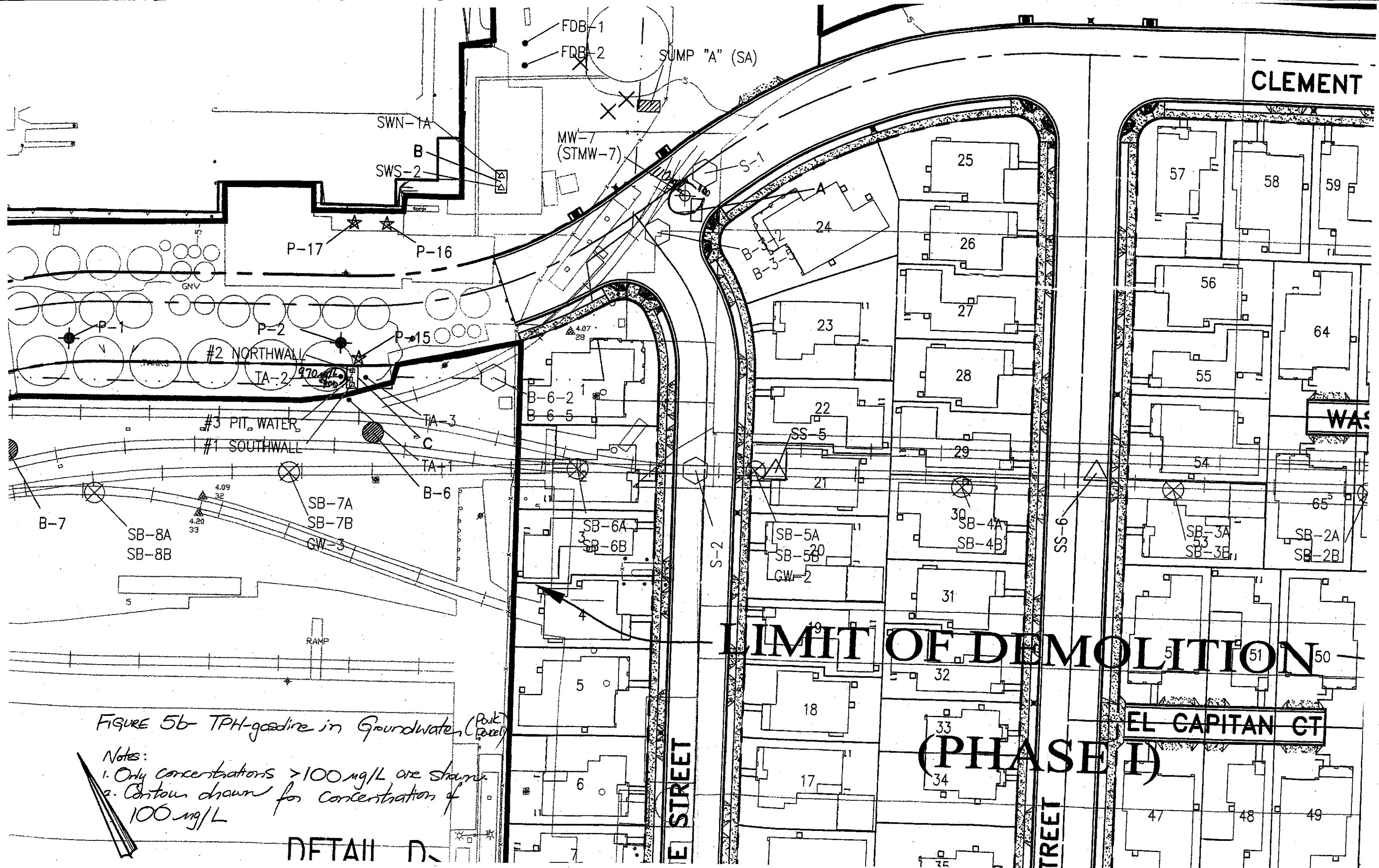


FIGURE 5b- TPH-gasoline in Groundwater (Peak Level)

- Notes:
1. Only concentrations > 100 mg/L are shown.
 2. Contour drawn for concentration of 100 mg/L

DETAIL D-

CLEMENT

WAS

LIMIT OF DEMOLITION

(PHASE D)

EL CAPITAN CT

E STREET

TREE STREET

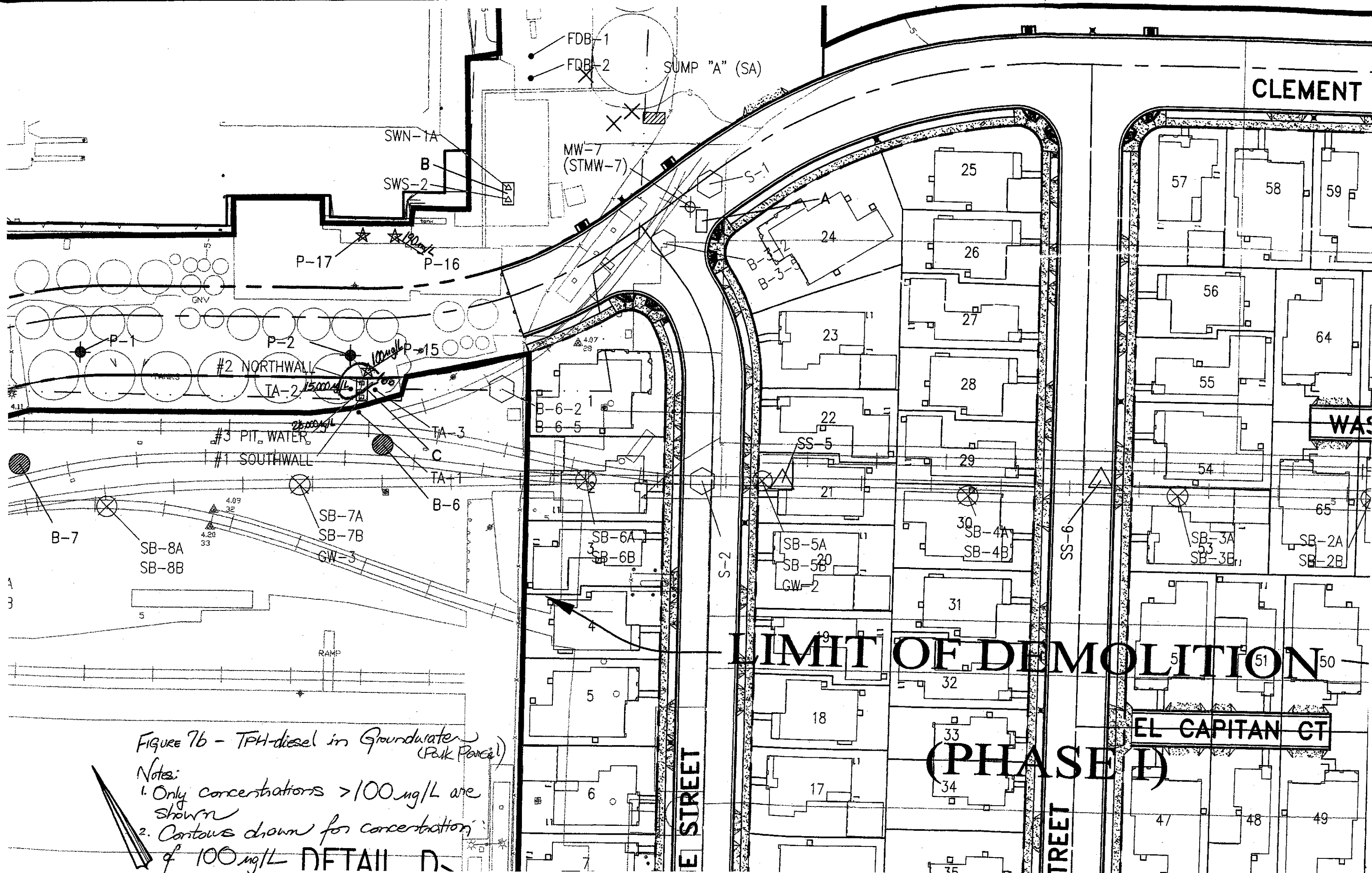


Figure 7b - TPH-diesel in Groundwater (Park Police)

- Notes:
1. Only concentrations > 100 ng/L are shown
 2. Contours drawn for concentration of 100 ng/L
- DETAIL D-