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

Alameda County CC4580
Environmental Health Services
1131 Harbor Bay Pkwy., #250
Alameda CA 94502-6577
(510)567-6700 FAX(510)337-9335

REMEDIAL ACTION COMPLETION CERTIFICATION

StID 3715 - 2204 Mariner Square, Alameda, CA

May 9, 1996

Mr. John Berry
2236 Mariner Sq Dr
Alameda, CA 94501

Mr. Scott Smithers
Paragon Assoc.
3 Lagoon Dr, Suite 220
Redwood City, CA 94065

Dear Messrs. Berry and Smithers:

This letter confirms the completion of site investigation and remedial action for the three former underground storage tanks (3-10,000 gallon gasoline/diesel tanks) removed from the above site on November 14, 1988. Enclosed is the Case Closure Summary for the referenced site for your records.

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

This notice is issued pursuant to a regulation contained in Title 23, Division 3, Chapter 16, Section 2721(e) of the California Code of Regulations. Please contact Ms. Eva Chu at (510) 567-6700 if you have any questions regarding this matter.

Very truly yours,

Mee Ling Tung, Director

cc: Chief, Division of Environmental Protection
Kevin Graves, RWQCB
Lori Casias, SWRCB (with attachment)
Ira Grossman, Heitman Properties, 9601 Wilshire Blvd, #200, Beverly Hills, CA 90210-5205
files (mrmrsq.4)

01-1760

CASE CLOSURE SUMMARY
Leaking Underground Fuel Storage Tank Program

I. AGENCY INFORMATION Date: February 7, 1996

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

II. CASE INFORMATION

Site facility name: **Mariner Square Ltd**
Site facility address: ~~2204~~ **2420 Mariner Sw, Alameda 94501**
RB LUSTIS Case No: **N/A** Local Case No./LOP Case No.: **3715**
URF filing date: **8/11/89** SWEEPS No: **N/A**

Responsible Parties:	Addresses:	Phone Numbers:
John Berry	2236 Mariner Sq Dr, Alameda 94501	521-2726
Scott Smithers Paragon Assoc	3 Lagoon Dr, #220, Redwood City 94065	

Tank No:	Size in gal.:	Contents:	Closed in-place or removed?:	Date:
1	10,000	Diesel	Removed	11/14/88
2	10,000	Diesel	Removed	11/14/88
3	10,000	Gasoline	Removed	11/14/88

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and type of release: **Unknown**
Site characterization complete? **YES**
Date approved by oversight agency: **11/17/94**
Monitoring Wells installed? **Yes** Number: **5**
Proper screened interval? **Yes, 5 to 10' bgs**
Highest GW depth below ground surface: **4.91'** Lowest depth: **5.60' in MW-3**
Flow direction: **North**
Most sensitive current use: **Oakland-Alameda Estuary**
Are drinking water wells affected? **No** Aquifer name: **Unknown**
Is surface water affected? **No** Nearest affected SW name: **NA**
Off-site beneficial use impacts (addresses/locations): **None**

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

Treatment and Disposal of Affected Material:

Material	Amount (include units)	Action (Treatment or Disposal w/destination)	Date
Tank	3 USTs	Disposed by H & H	11/14/88
Piping			
Free Product			
Soil	9,050	Bioremediated and reused as fill	after 6/90
	50 cy	Re-use for onsite landscaping	1996
Groundwater	1,575 gallon	Waste Oil Recovery	11/17/88
Barrels			

Maximum Documented Contaminant Concentrations - - Before and After Cleanup

Contaminant	Soil (ppm) Before	Soil (ppm) After	Water (ppb) Before[1]	Water (ppb) After[2]
TPH (Gas)	ND		440	NA
TEH (Diesel)	7800	106	2,000	1000
Benzene	ND	ND	9	ND
Toluene	ND	ND	83	ND
Ethylbenzene	ND	ND	9	ND
Xylenes	ND	ND	120	ND
Oil & Grease	4000	120	27,000	ND
Heavy metals				
Other PNAs	3.2	1.4		ND

[1]Grab GW sample after purging excavations
[2]Downgradient from tank pit

Comments (Depth of Remediation, etc.):

Three areas identified as having petroleum hydrocarbon contamination were excavated to depths of 3 to 10' to remove contaminated soil to the extent possible.

IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? **YES**
Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? **YES**
Does corrective action protect public health for current land use? **YES**
Site management requirements: **None**

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

V. LOCAL AGENCY REPRESENTATIVE DATA

Name: Eva Chu Title: Haz Mat Specialist

Signature: [signature] Date: 2/14/96

Reviewed by

Name: Juliet Shin Title: Sr. Haz Mat Specialist

Signature: [signature] Date: 2/14/96

Name: Madhulla Logan Title: Haz Mat Specialist

Signature: [signature] Date: 2/14/96

VI. RWQCB NOTIFICATION

Date Submitted to RB: 2/15/96 RB Response: Approved

RWQCB Staff Name: Kevin Graves Title: AWRCE

Signature: [signature] Date: 2/23/96

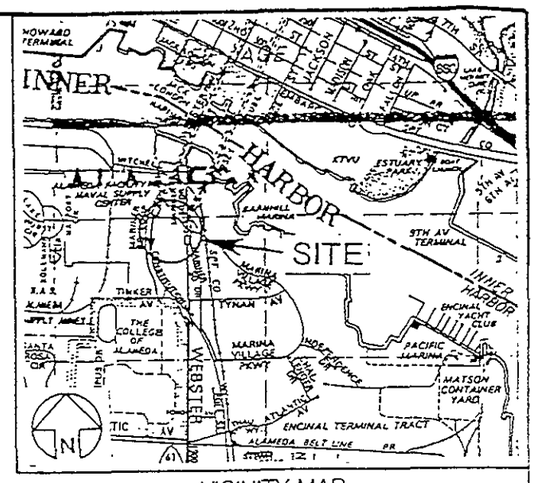
VII. ADDITIONAL COMMENTS, DATA, ETC.

One 10K gallon gasoline UST in one pit and two 10K gallon diesel USTs in another pit were removed in November 14, 1988. A fourth tank used for kerosine was searched for, but it appears to have been removed some time in the past, or never existed. Soil samples collected from sidewalls did not detect elevated levels of petroleum hydrocarbons. However, "grab" groundwater samples collected, after approximately 1,575 gallon of groundwater was pumped out, exhibited up to 440 ppb TPH-G, 2,000 ppb TPH-D, 27,000 ppb TOG, and 9, 83, 9, and 120 ppb BTEX, respectively. (See Fig 1)

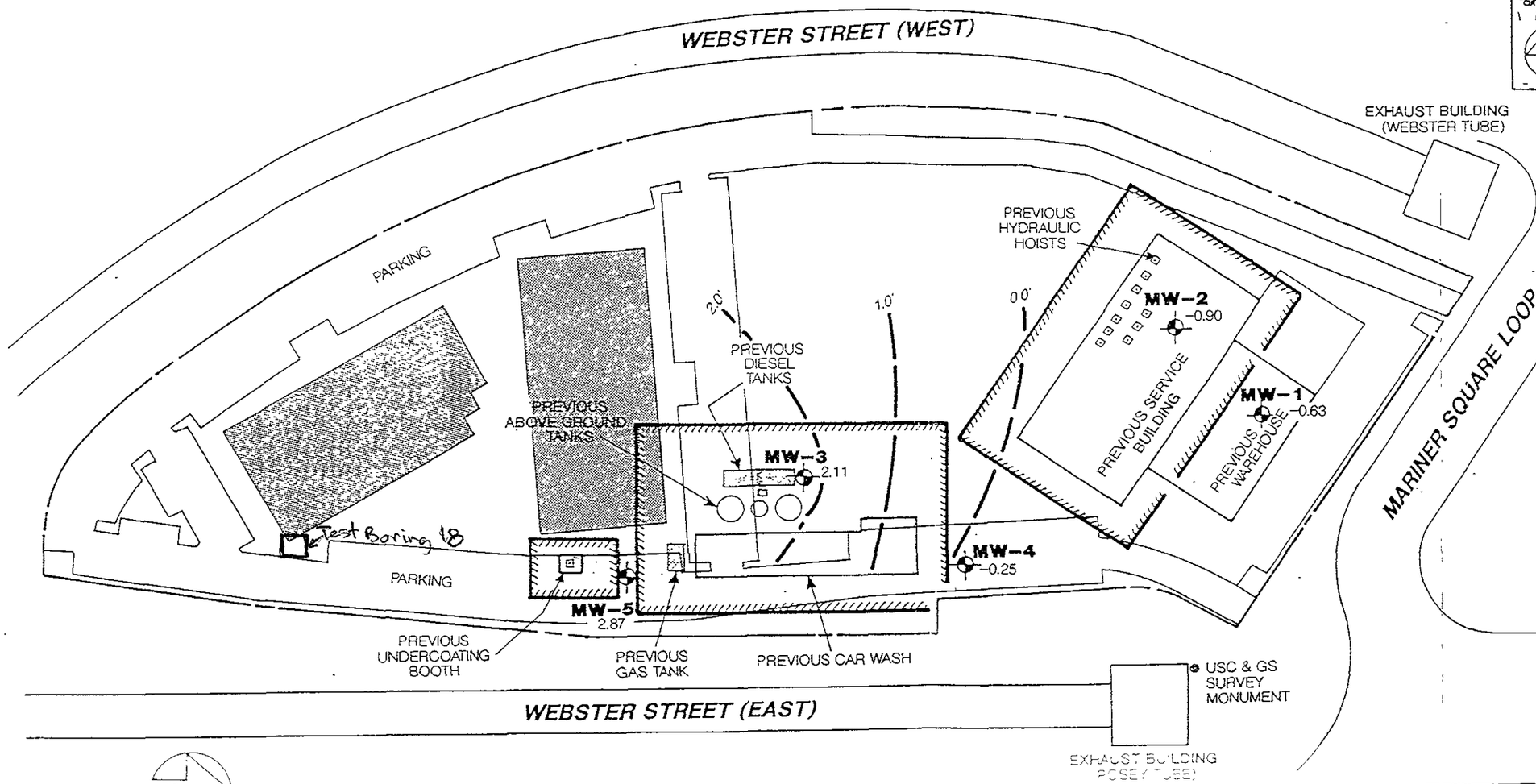
An environmental assessment of the entire property identified petroleum hydrocarbon contaminated soil in three areas: the Service Warehouse (contaminated with hydraulic oil where hydraulic lifts were located); Car Wash Facility (where USTs were located revealed kerosine and diesel); the Undercoating Booth (contaminated with hydraulic oil); and Test Boring 18 (contaminated with PNAs). Approximately 9,100 cy of soil were excavated (and later bioremediated onsite) from these areas. Final average concentrations of petroleum hydrocarbons left in place as ppm TEH/TOG were 41/72, 56/NT, and 42/75 in the Service Warehouse, Car Wash, and Undercoating Booth areas, respectively. (See Figs 2 through 4). PNAs, at low concentrations, were only detected along the west wall of the excavation in the vicinity of Test Boring 28 (at 1.4 ppm total PNAs; See Fig 5, Table 1). The source of the PNAs may be from an old tarmac pavement surface. Various types of oils, some of which likely contained PNAs, were commonly used to oil down roadways and runways, creating tarmac surfaces.

Approximately 9,050 cy of the excavated soil were bioremediated, and with the approval in June 1990 from the RWQCB and this Agency, have been used as engineer fill onsite. The remaining 50 cy soil was sampled in February 1995. Up to 150 ppm TOG and non-detectable levels of TPH as kerosene and diesel was found. This soil was used for onsite landscaping.

Five monitoring wells were installed in September 1992. Groundwater has been sampled for four non-consecutive quarters (9/92, 11/92, 3/93, and 7/94). Low levels of TEH have been detected in the wells, ranging from ND to 1,000 ppb. However, TPH-G, BTEX, and PNAs have not been detected in any of the wells. It appears the petroleum hydrocarbon release has impacted groundwater, but not to a significant degree which would pose a risk to human health. (See Fig 1, Table 2.)



VICINITY MAP



GROUNDWATER CONTOURS 7/25/94

Subsurface Consultants

MARINER WAREHOUSE – ALAMEDA, CA

JOB NUMBER	DATE	APPROVED	PLATE
554.006	8/15/94		1

W-1 — Sample Number

7(ND,47)

- Total Extractable Hydrocarbon Concentration (ppm)
- Total Oil and Grease Concentration (ppm)
- Depth (feet)

ND = None Detected

W-15B
4(60,ND)

W-15
5.5(890,2000)

W-16
5.5(110,ND)

W-17
6.5(ND,ND)

W-14B
5.5(ND,ND)

W-14
5.5(270,2000)

W-6
7(130,34)
7(2500,7800)
10(98,ND)

W-7
7(ND,34)

W-8
7(90,36)

W-9
7(50,35)

W-10
7(61,48)

W-18
5.5(63,ND)

W-13B
4.5(ND,ND)

W-13
5.5(260,ND)

W-12B
4.5(82,ND)

W-12
5.5(210,ND)

W-1
7(ND,47)

W-2
7(62,39)

W-3
7(270,210)
7(ND,ND)
10(4000,1600)
12(61,46)

W-4
7(ND,ND)

W-5
7(ND,ND)

W-11B
4.5(ND,ND)

W-11
5.5(150,ND)

W-19
4(ND,ND)

W-23
4(57,ND)

W-22
4(190,ND)

W-21
4(610,ND)

W-20
4(130,ND)

W-20C
3.5(ND,ND)

W-22C
3(ND,ND)

W21-B
3(ND,ND)

N

APPROXIMATE SCALE (feet)

0 20 40

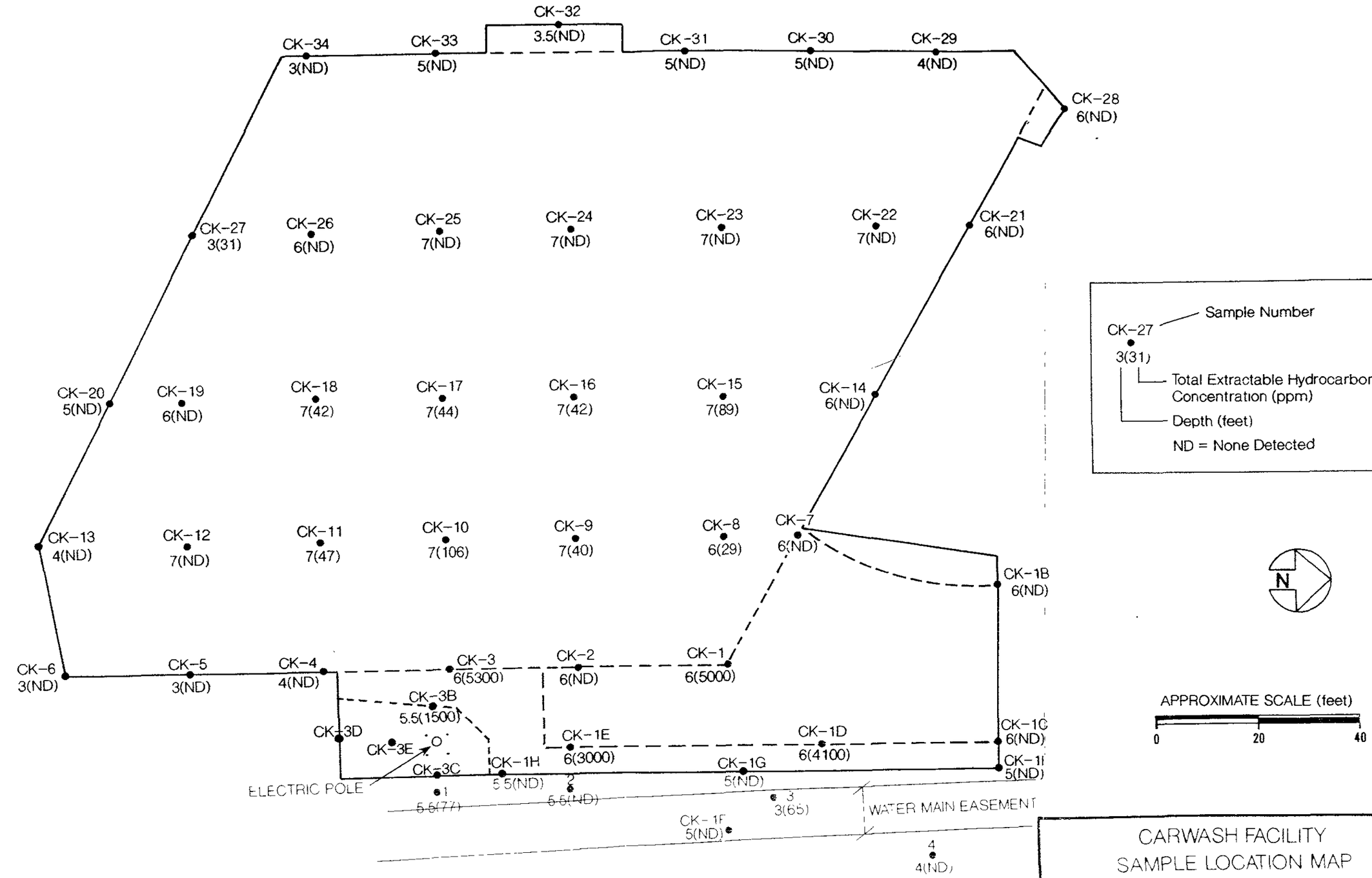
Subsurface Consultants

SERVICE BUILDING
SAMPLE LOCATION MAP

MARINER PROPERTY - ALAMEDA, CA

JOB NUMBER	DATE	APPROVED
554 001	2/12/90	

PLATE 2

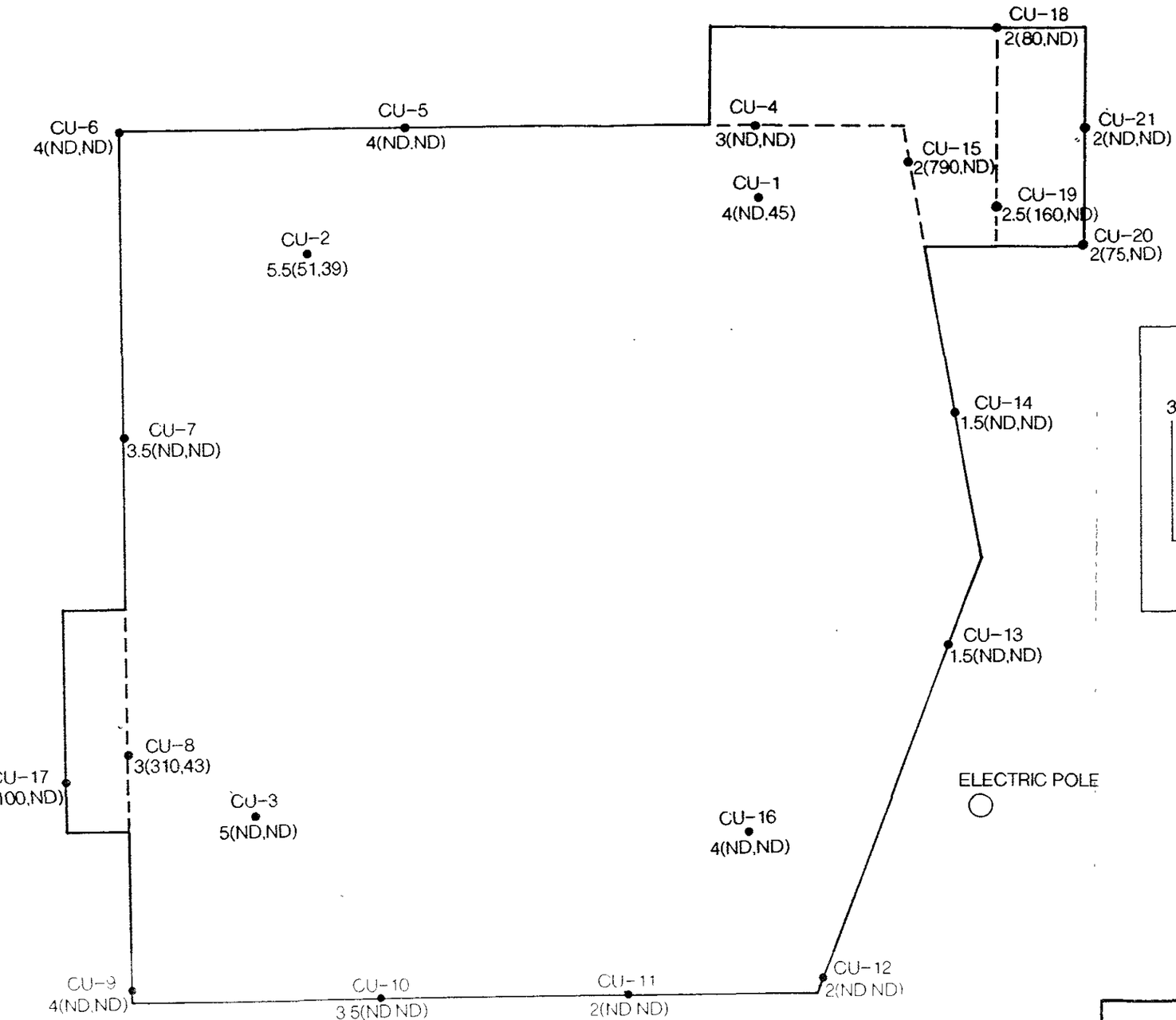


CARWASH FACILITY
SAMPLE LOCATION MAP

MARINER PROPERTY - ALAMEDA, CA

Subsurface Consultants

JOB NUMBER	DATE	APPROVED	PLATE
554.001	11/17/89		3



CU-8 — Sample Number
3(310,43)
- Total Extractable Hydrocarbon Concentration (ppm)
- Total Oil and Grease Concentration (ppm)
- Depth (feet)

ND = None Detected

N

APPROXIMATE SCALE (feet)
0 10 20

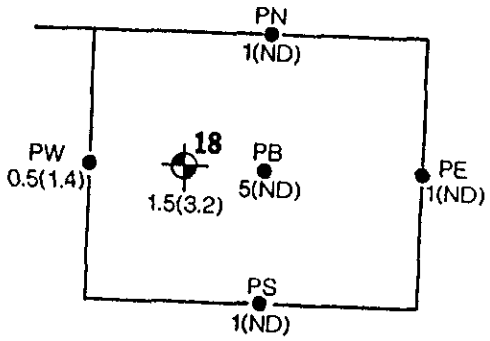
UNDERCOATING BOOTH SAMPLE LOCATION MAP

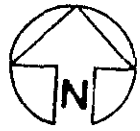
Subsurface Consultants

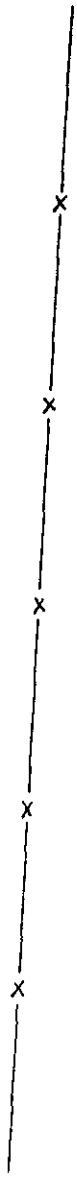
MARINER PROPERTY - ALAMEDA CA

JOB NUMBER	DATE	APPROVED
554 001	2/12/90	

PLATE 4







ELECTRIC POLE ○

PW SAMPLE NUMBER
0.5(1.4)
TOTAL PNA CONCENTRATION (ppm)
DEPTH (feet)
ND = NONE DETECTED

APPROXIMATE SCALE (feet)
0 10 20

TEST BORING 18
SAMPLE LOCATION MAP

Subsurface Consultants

MARINER PROPERTY – ALAMEDA, CA

JOB NUMBER	DATE	APPROVED	PLATE
554.001	2/28/90		5

TABLE 1

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 19604.8
CLIENT: SUBSURFACE CONSULTANTS
JOB #: 554.001
SAMPLE ID: PW @ .5'

DATE RECEIVED: 02/15/90
DATE ANALYZED: 02/17/90
DATE REPORTED: 02/22/90
PAGE 7 OF 7

EPA Method 8100: Polynuclear Aromatic Hydrocarbons in Soils & Wastes
Extraction Method: EPA 3550

COMPOUND	RESULT ug/Kg	DETECTION LIMIT ug/Kg
Naphthalene	ND	330
Acenaphthylene	ND	330
Acenaphthene	ND	330
Fluorene	ND	330
Phenanthrene	ND	330
Anthracene	ND	330
Fluoranthene	ND	330
Pyrene	TRACE(210)	330
Benzo(a)anthracene	ND	330
Chrysene	ND	330
Benzo(b)fluoranthene	420	330
Benzo(k)fluoranthene	ND	330
Benzo(a)pyrene	TRACE(210)	330
Indeno(1,2,3-cd)pyrene	TRACE(260)	330
Dibenzo(a,h)anthracene	ND	330
Benzo(g,h,i)perylene	TRACE(320)	330

ND = None Detected.

QA/QC SURROGATE RECOVERY	
Nitrobenzene-d5	90%
2-Fluorobiphenyl	130%
Terphenyl-d14	80%

Table 2
Contaminant Concentrations in Groundwater

Well	Date	TEH ug/l	TOG mg/l	TVH ug/l	Benzene ug/l	Toluene ug/l	Ethyl-Benzene ug/l	Total Xylenes ug/l	Polynuclear Aromatics ug/l
MW-1	09/02/92	260	--	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(5)
	11/20/92	270	ND(5)	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	--
	03/03/93	ND(50)	ND(5)	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	--
	07/25/94	440	--	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	--
MW-2	09/02/92	ND(50)	--	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(5)
	11/20/92	370	ND(7)	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	--
	03/03/93	ND(50)	ND(5)	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	--
	07/25/94	1000	--	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	--
MW-3	09/02/92	300	--	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(5)
	11/20/92	190	ND(5)	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	--
	03/03/93	ND(50)	ND(5)	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	--
	07/25/94	820	--	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	--
MW-4	09/02/92	ND(50)	--	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(5)
	11/20/92	80	ND(5)	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	--
	03/03/93	ND(50)	ND(5)	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	--
	07/25/94	ND(50)	--	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	--
MW-5	09/02/92	200	--	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(5)
	11/20/92	80	ND(5)	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	--
	03/03/93	ND(50)	ND(5)	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	--
	07/25/94	250	--	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	--

TEH = Total extractable hydrocarbons, EPA 8015 mod./3550
TOG = Total oil and grease, SMWW 17:5520B&F
TVH = Total volatile hydrocarbons, EPA 8015 mod./5030
mg/l = milligrams per liter or parts per million (ppm)
ug/l = micrograms per liter or parts per billion (ppb)
ND = None detected above reporting limits indicated in parentheses