



Environmental Science & Engineering, Inc.

Concord, California Office

DATE: 7/17/91

TIME: _____ a.m. p.m.

TO: (NAME) Paul Smith

(COMPANY) A.C. Env. Health

(FAX #) 568-3706

(PROJECT # OR ACCOUNTABLE) _____

FROM: (NAME) _____

NUMBER OF PAGES (INCLUDING COVER): 8

SPECIAL INSTRUCTIONS: Excerpts from 4th

Chemical Monitoring Report

IF YOU DO NOT RECEIVE ALL PAGES, PLEASE PHONE (415) 685-4053.

FOURTH QUARTER
REPORT OF FINDINGS
MAY 1991

ALAMEDA COUNTY ALCOPARK FACILITY
165 13TH STREET
OAKLAND, CALIFORNIA

Prepared For:

Mr. Jim De Vos
Alameda County General Services Agency
4400 MacArthur Boulevard
Oakland, California 94619

Prepared By:

Environmental Science & Engineering, Inc.
4090 Nelson Avenue, Suite J
Concord, California 94520

Project No. 6-90-5042

May 22, 1991



13th STREET

SIDEWALK

PLANTERS

2-10,000 GALLON TANKS

MW-1

JACKSON STREET

SIDEWALK

MW-5

MW-3

MW-2

AP-4

AP-1

AP-2

MW-4

PUMP ISLAND

AP-3

PARKING STRUCTURE

SCALE



LEGEND



SOIL BORING



GROUND-WATER MONITORING WELL



VADOSE MONITORING WELL



UNDERGROUND PIPING



Environmental Science & Engineering, Inc.

ALAMEDA COUNTY
ALCOPARK
OAKLAND, CA

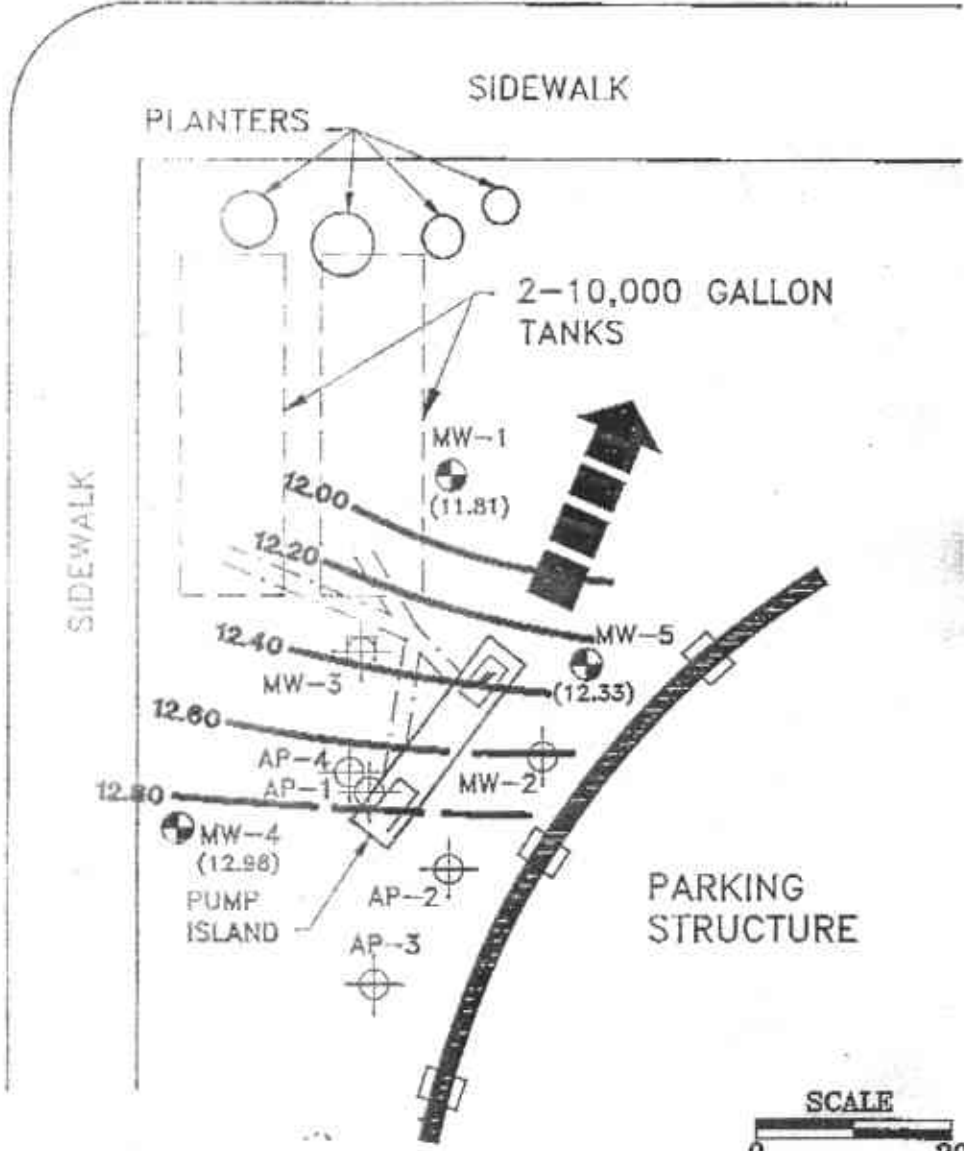
FIGURE 2
SITE PLAN

DRAWN BY DWR	APPROVED BY	REVISED CVS 5/91
DATE 11/90	FILE NAME F2SP10	PROJ. NO. 8-90-5042



13th STREET

JACKSON STREET



LEGEND

- SOIL BORING
- GROUND-WATER MONITORING WELL
- VADOSE MONITORING WELL
- UNDERGROUND PIPING
- (11.81) DEPTH TO GROUND WATER (ft)
- 12.40 GROUND-WATER CONTOUR (ft)
- APPROXIMATE GROUND-WATER FLOW DIRECTION



WATER MEASUREMENTS TAKEN ON 4/25/91

		Environmental Science & Engineering, Inc.
ALAMEDA COUNTY ALCOPARK OAKLAND, CA		
FIGURE 5 RELATIVE GROUND-WATER ELEVATIONS APRIL 1991		
DRAWN BY DWR	APPROVED BY	REVISED CVS 5/91
DATE 5/91	FILE NAME F3GWE10	PROJ. NO. E-90-5042



13th STREET

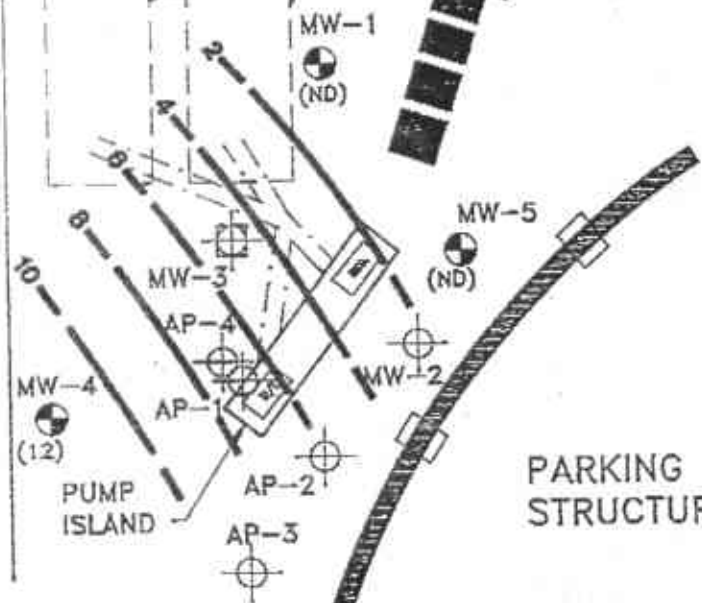
JACKSON STREET

SIDEWALK

PLANTERS

SIDEWALK

2-10,000 GALLON TANKS



LEGEND

- SOIL BORING
- GROUND-WATER MONITORING WELL
- VADOSE MONITORING WELL
- UNDERGROUND PIPING
- (12) BENZENE CONCENTRATION IN GROUND WATER (ug/L)
- INFERRED BENZENE CONCENTRATION CONTOUR (ug/L)
- APPROXIMATE GROUND-WATER FLOW DIRECTION

ND = NOT DETECTED (0.5 ug/L DETECTION LIMIT)



		Environmental Science & Engineering, Inc.
ALAMEDA COUNTY ALCOPARK OAKLAND, CA		
FIGURE 4 BENZENE CONCENTRATIONS IN GROUND WATER APRIL 1991		
DRAWN BY DWR	APPROVED BY	REVISED CVS 5/91
DATE 11/90	FILE NAME F48C10	PROJ. NO. 6-90-5042

TABLE 2

ANALYTICAL RESULTS
for
ALAMEDA COUNTY, ALCOPARK - PROJECT NO. 6-90-5042

APRIL 1991

Sample Number	TPH (TVH/TEH) (ug/L) ^a	Benzene (ug/L)	Ethyl Benzene (ug/L)	Toluene (ug/L)	Total Xylenes (ug/L)
MW-1-41	230/--	ND	ND	ND	ND
MW-4-41	170/130	12	ND	ND	23
MW-5-41	ND/--	ND	ND	ND	ND
MW-5-42	ND/--	ND	ND	ND	ND
Trip Blank	--/--	ND	ND	ND	ND

Notes:

BETX Benzene, Ethyl Benzene, Toluene and Total Xylenes

TPH Total Petroleum Hydrocarbons

ug/L Micrograms per liter, or parts per billion

ND Below detection limit (TPH = 0.5 ug/L, BETX = 0.5 ug/L)

-- Not analyzed for the constituent shown

- TPH analyzed as gasoline (GC FID/5030 or TVH) for MW-1, MW-4 and MW-5, and as diesel (GC FID/3510 or TEH) for MW-4.
- Duplicate sample.

Samples collected by Environmental Science & Engineering, Inc., on April 25, 1991, and analyzed by Curtis & Tompkins, Ltd, Laboratories. Laboratory reports and chain of custody documents are included in Appendix B.

TABLE 3
GROUND-WATER TRENDS
for
ALAMEDA COUNTY, ALCOPARK - PROJECT NO. 6-90-5042
APRIL 1991

	Well MW-1				
	March 1989*	July 1990	October 1990	January 1991	April 1991
Relative Ground-water Elevation (ft)	12.2	12.3	12.1	11.9	11.8
TPH (ug/L) (TVH/TEH)	ND/--	1500/--	1200/--	270/--	230/--
Benzene (ug/L)	21	200	ND	23	ND
E-benzene ^b (ug/L)	0.4	ND	2.2	ND	ND
Toluene (ug/L)	3.9	45	7.3	1.5	ND
Xylenes ^c (ug/L)	4.5	53...	46	3.1	ND

TABLE 3
(Continued)

Well MW-4

	March 1989 ^a	July 1990	October 1990	January 1991	April 1991
Relative Ground-water Elevation (ft)	12.4	12.5	12.2	12.0	13.0
TPH (ug/L) (TVH/TEH)	-/ND	-/ND	-/ND	-/ND	170/130
Benzene (ug/L)	13	0.8	120	230	12
E-benzene ^b (ug/L)	1.0	ND	1.1	1.2	ND
Toluene (ug/L)	1.4	ND	1.2	2.8	ND
Xylenes ^c (ug/L)	ND	ND	0.9	2.0	2.3

Well MW-5

	March 1989 ^a	July 1990	October 1990	January 1991	April 1991
Relative Ground-water Elevation (ft)	12.2	12.4	12.1	11.9	12.3
TPH (ug/L) (TVH/TEH)	ND/-	670/-	120/-	120/-	ND/-
Benzene (ug/L)	ND	0.8	13	3.2	ND
E-benzene ^b (ug/L)	ND	ND	ND	ND	ND
Toluene (ug/L)	ND	ND	ND	ND	ND
Xylenes ^c (ug/L)	ND	ND	ND	ND	ND