ALAMEDA COUNTY

HEALTH CARE SERVICES







STID 4236

November 25, 1996

Mr. Sam Cohen Friedkin-Becker 300 Grand Avenue Oakland, CA 94610 **ENVIRONMENTAL HEALTH SERVICES** ENVIRONMENTAL PROTECTION (LOP) 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577 (510) 567-6700 FAX (510) 337-9335

REMEDIAL ACTION COMPLETION CERTIFICATION

RE: PARKSIDE COMMONS APARTMENTS, 900 143RD AVE., SAN LEANDRO, CA

Dear Mr. Cohen:

This letter confirms the completion of site investigation and remedial action for the one 10,000gallon bunker oil, one 2,840-gallon waste oil, and the three (one 4,000-gallon, one 550-gallon and one 500-gallon) gasoline underground storage tanks (USTs) at the above described location. Enclosed is the Case Closure Summary for the referenced site for your records.

Based upon the available information and with 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 the regulation contained in Title 23, Division 3, Chapter 16, Section 2721 (e) of the California Code of Regulations. If a change in land use is proposed, the owner must promptly notify this agency.

Please contact Dale Klettke at (510) 567-6880 if you have any questions regarding this matter.

Sincerely,

Mee Ling Tung

Director, Department of Environmental Health

enclosure

Thomas Peacock, LOP Manager--files C:

Lori Casias, SWRCB, w/enclosure

Mike Bakaldin, San Leandro Hazardous Materials Program, w/enclosure Brad Wright, McLaren/Hart, 1135 Atlantic Avenue, Alameda, CA 94501

Daniel Hernandez, c/o First Nationwide Bank, 33 Montgomery, 7th Floor, SF 94105

San Leandro Advisors, 300 Grand Avenue, Oakland, CA 94610

4236racc.dkt

CASE CLOSURE SUMMARY Leaking Underground Fuel Storage Tank Program

I. AGENCY INFORMATION Date: July 22, 1996

Agency name: Alameda County-HazMat Address: 1131 Harbor Bay Pkwy City/State/Zip: Alameda, CA 94502 Phone: (510) 567-6700

Responsible staff person: D. Klettke Title: Hazardous Materials Spec.

II. CASE INFORMATION

Site facility name: Parkside Commons Apartments

Site facility address: 900 143rd Avenue, San Leandro, CA 94578

RB LUSTIS Case No: N/A Local Case No./LOP Case No.: 4236

SWEEPS No: N/A URF filing date: 12/15/92

Phone Numbers: Responsible Parties: <u>Addresses:</u>

San Leandro Advisors, A California Limited Partnership, 300 Grand Avenue, Oakland, CA 94610

Daniel Hernandez c/o First Nationwide Bank, 33 Montgomery, 7th Floor San Francisco, CA 94105 (415) 904-4793

Tank No:	Size in gal.:	Contents:	<u>Closed in-place</u> or removed?:	<u>Date:</u>
1	10,000	bunker oil	removed	10/18/85
2	2,840	waste oil	removed	10/26/85
3	4,000	gasoline	removed	6/19/85
4	550	gasoline	removed	6/19/85
5	500	gasoline	removed	10/18/95

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and type of release: Unknown

Site characterization complete? YES

Date approved by oversight agency: 12/30/92

Monitoring Wells installed? YES Number: eight (8)

Proper screened interval? YES, all wells screened from 15' to 25' bgs

except MW-5A (20' to 25' bgs)

Highest GW depth below ground surface: 11.50' on 4/30/93 (MW-7A)

Lowest depth: 19.55' on 8/19/91 (MW-1A)

Flow direction: predominantly west to southwest

Most sensitive current use: residential

Aquifer name: San Leandro Cone Are drinking water wells affected? UNK

Is surface water affected? NO Nearest affected SW name: N/A

Off-site beneficial use impacts (addresses/locations): undetermined Report(s) on file? YES Where is report(s) filed? Alameda County 11 dis 58

94502:0510Pd Alameda, CA TVIMELEDELATE

Treatment and Disposal of Affected Material:

Pesticides6

<u>Material</u>	<u>Amount</u> (include units)	Action (Treatment or Disposal w/destination)	<u>Date</u>
Tanks	1 4000-gallon; 1 10,000-gallon	6/19/85 10/18/85	
Piping	1 2840-gallon;		10/26/85
Soil Groundwater	unknown		

Maximum Documented Contaminant Concentrations - - Before and After Cleanup Soil (ppm) Water Before After Before Contaminant Water (ppb) After4 20,000 210 1700 220 TPH (Gas) <320 < 50 TPH (Diesel) AИ 700 3.33 4.17 300 Benzene NA 0.65 < 0.3 NA 0.84 < 0.3 Toluene 3.1 4.8 Ethyl benzene NA 99.7 < 0.3 NΑ 15 Xylenes Oil & Grease 5300 Heavy metals⁵

NA - Not analyzed. Original soil samples collected during UST closures in 1985 were apparently not analyzed for BTEX fractions.

[&]quot;Before" TPHg concentration represents the interface sample at a depth of 7' bg, collected on 10/18/85, from beneath the 150-gallon gasoline tank. O & G concentration represents the soil sample at a depth of 20' below grade (bg), collected on 10/26/85, from the west end of the 2840-gallon waste oil UST excavation.

²"After" TPHg, ethyl benzene and xylene concentrations represents sample location 5-6 at a depth of 17.5' bg. Benzene concentrations represent sample location 5-2 at a depth of 22' bg. Toluene concentrations represents sample location 4-3 at a depth of 22' bg (Area 5 - See Figures 6 & 7). "After" TPHd concentration represents sample location 3-3 at a depth of 16' bg, collected approximately 10 feet south of the presumed former Bunker C UST location (Area 3 - See Figures 4 & 5).

³"Before" groundwater concentrations were detected in monitoring well MW-1A for the 6/21/91 groundwater sampling event (See Table 1).

⁴After" groundwater concentrations were detected in monitoring well MW-1A for the 4/5/96 groundwater sampling event (See Table 2).

⁵Apparent geogenic concentrations of the metals arsenic, cadmium, chromium, mercury, nickel and zinc were detected at maximum concentrations of 5.5 ppm, 2 ppm, 50 ppm, 0.08 ppm, 52 ppm, and 77 ppm, respectively. Lead was detected at a maximum concentration of 140 ppm.

⁶Maximum concentrations of the pesticides DDD, DDE, DDT, chlordane and dieldrin were detected in soils at 6.8 ppm, 0.54 ppm, 3.1 ppm, 0.64 ppm and 5.8 ppm, respectively. Additional pesticides detected in soils include lindane, endrin, heptachlor, methoxychlor, and endosulfan sulfate. No pesticides were detected in groundwater samples collected from wells MW-1A through MW-5A on 6/21/91, and from wells MW-1A, MW-4A, MW-7A and MW-81 on 3/26/96. Dieldrin was detected at a concentration of 0.17 ppb in the groundwater sample collected from MW-2A on 3/26/96.

Comments (Depth of Remediation, etc.):

The Parkside Commons Apartments were constructed in 1985 and 1986. For an estimated 35 to 45 years ending in 1985, a plant nursery was operated at the site. According to Alameda County Agricultural Commissioner's Office, the only pesticide definitely known to be used was Temik* (aldicarb). However, the inspector questioned (Gregory Gee) suggested that in its earlier years the nursery may have used organochlorine pesticides, including DDT, chlordane, lindane and heptachlor.

This site previously had four (4) septic tank systems and five (5) underground storage tanks (USTs) of which previous held gasoline, bunker fuel and waste oil (See Figure 2A).

This closure summary covers the investigations related to the petroleum hydrocarbon releases associated with the former gasoline, bunker oil and waste oil USTs. Health risks associated with soil pesticide residues were reviewed and evaluated by Dr. Ravi Arulanantham of this office. A copy of Dr. Arulanantham's letter is enclosed.

On 6/19/85 Blaine Tech Services removed one (1) 550-gallon and one (1) 4000-gallon gasoline USTs (See Figure 2B). Soil sample #1, collected at 14 feet bg near the fill end of the 4000-gallon UST, revealed 600 ppm-total volatile hydrocarbons as gasoline (TVHg). Soil sample #2, collected at 11 feet bg near the fill end of the 550-gallon UST, revealed 3100 ppm-TVHg. Analysis for BTEX was not performed.

On 10/18/85 Blaine Tech Services removed one (1) 150-gallon gasoline and one 10,000-gallon bunker oil underground storage tanks (USTs), and on 10/26/85 removed one 2840-gallon waste oil UST (See Figure 2C). A soil sample collected from the 150-gallon gasoline UST, at an approximate depth of 7' bgs, exhibited TPHg at a concentration of 20,000 ppm. Over-excavation to 12' bgs removed contaminated soil and a soil sample collected from 12' bgs did not contain TPHg. Again, analysis for BTEX was not performed. However, vapor analyses of soil collected at a depth of 12' bgs from the 150-gallon gasoline UST excavation showed PID readings of up to 1500 ppm on a volumetric basis.

One soil sample was collected at a depth of 13' bgs from the bunker oil tank excavation. This sample was found to contain non-detectable concentrations of bunker oil constituents. However, vapor analyses of soils collected at depths of between 12' and 13' bgs from the bunker oil excavation showed PID readings of up to 175 ppm on a volumetric basis.

Two (2) soil samples collected from the west end of the 2840-gallon waste oil tank excavation identified up to 2,500 ppm and 5,300 ppm of waste oil constituents, at depths of 13' and 20' bgs, respectively (See Figure 2D). One soil sample collected at a depth of 12' bgs from the east end of the excavation was analyzed and found to contain non-detectable concentrations of waste oil constituents.

See Section VII, Additional Comments, etc...

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: NO

Number Decommissioned: N/A Number Retained: eight (8), pending closure

List enforcement actions taken: None
List enforcement actions rescinded: N/A

V. LOCAL AGENCY REPRESENTATIVE DATA

Name: Dale Klettke

Title: Hazardous Materials Specialist

Date:

Reviewed by

Name: Eva Chu Title: Hazardous Materials Specialist

Signature: Wall Date: 420/96

Name: Thomas Peacock Title: Supervising HazMat Specialist

Signature: homes deachd Date: 5-96

VI. RWOCB NOTIFICATION

Date Submitted to RB:

RWQCB Staff Name: Kevin Graves

Signature:

RB Response:

Title: AWRCE

Date:

VII. ADDITIONAL COMMENTS, DATA, ETC.

An exhaustive environmental investigation was conducted by Russell Resources, Inc. (RRI) during 1991 to evaluate the potential for residual contamination from the approximately 40 year operation of a plant nursery on this site. The RRI investigation consisted of the sampling and analysis of soil and groundwater samples for residual contamination from VOCs, pesticides, metals and petroleum hydrocarbons. A total of six (6) area were defined (Areas 1 through 6), with sampling locations being selected near the former underground tanks and septic systems. A property-wide grid of shallow soil sample locations for pesticide analyis was also selected. After collection and analysis of the initial soil samples (March 1991), additional locations were sampled in May and June 1991, to better define the extent of contamination in these areas.

Four (4) groundwater monitoring wells (MW-1A through MW-4A) were installed on June 18 and 19, 1991. A fifth groundwater monitoring well (MW-5A) was installed on July 22, 1991. Initial groundwater sampling analyses are summarized in Table 1.

Two additional groundwater monitoring wells (MW-6A and MW-7A) were installed at the site on October 6, 1992. Initial groundwater sampling of these two wells were found to contain non-detectable concentrations of TPHg, BTEX and lead at detection limits of <50 ppb, <0.5 ppb and <3 ppb, respectively.

One additional groundwater monitoring well (MW-8A) was installed at the site on February 1, 1993. Initial groundwater sampling of well MW-8A detected concentrations of TPHg, TPHd, benzene, toluene, ethyl benzene and total xylenes at concentrations of <50 ppb, 220 ppb, 1 ppb, <1 ppb, and <1 ppb, respectively.

Case closure is warranted for this site as a "Low-Risk Groundwater Case" for the following reasons.

a) The source has been sufficiently removed or has been remediated.

Laboratory analysis of soil samples collected from the former gasoline UST excavations indicate that the majority of soil containing elevated levels of TPHg were removed. However, TPHg, TPHd and BTEX were detected at maximum concentrations of 210, 700, 0.65, 0.84, 3.1 and 15 ppm, respectively, from soil samples collected from exploratory borings advanced during the Russell Resources 1991 investigation (Area 5).

b) The site has been adequately characterized.

Laboratory analysis of soil and groundwater samples collected during site investigations document that the previous release is small in extent and gasoline contamination appears to be limited to soils remaining in place in the vicinity of Area 5, as documented by soil samples 5-2, 5-6, 5-10, 4-4 and 4-3. In addition, waste oil and Bunker C contamination appears to be limited to soils remaining in place in the vicinity of Area 3, in close proximity to the Bunker C and waste oil USTs, as documented by samples 3-3, 3-4, and 3-7.

c) The dissolved hydrocarbon plume appears to be stable and is not migrating.

TPHg and BTEX have consistently been detected in groundwater samples collected from monitoring well MW-1A, located up gradient from the former gasoline USTs located in Area 5. However, since initial groundwater sampling events began in 1991, maximum concentrations of TPHg and BTEX detected in well MW-1A are 12.0, 0.150, 0.0042, 1.5 and 0.84 ppm, respectively. Groundwater samples collected from well MW-1A on 4/5/96 revealed TPHg and BTEX concentrations at 0.220, <0.0003, <0.0003, 0.0048 and <0.0003 mg/L, respectively.

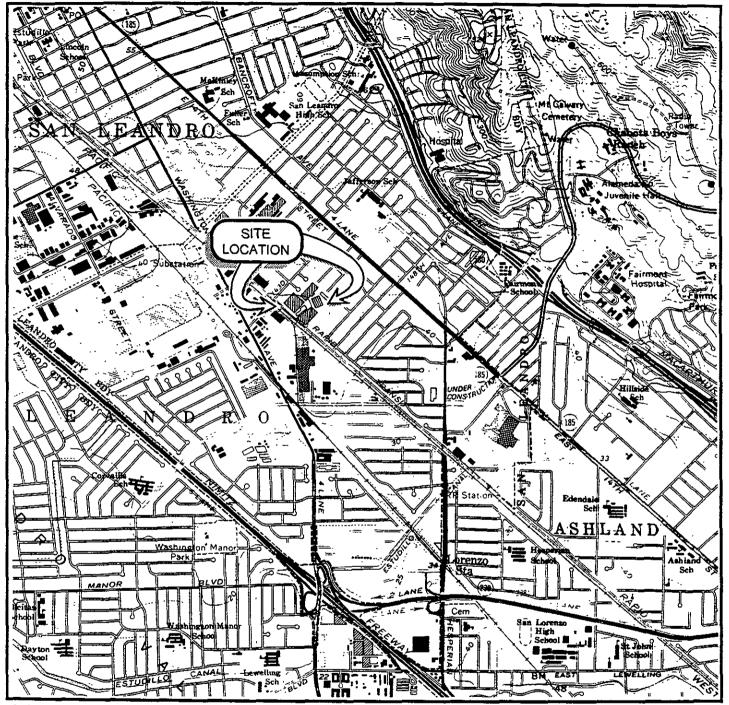
d) No water wells, deeper drinking water wells, surface water or other sensitive receptors are likely to be impacted.

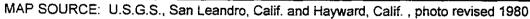
The petroleum hydrocarbon groundwater contamination appears to be localized in the vicinity of the former gasoline UST excavations (Area 5). The concentrations historically detected in these areas should not impact the quality of groundwater down gradient of the site.

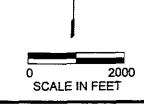
e) The site presents no significant risk to human health or the environment.

Benzene concentrations detected in soil samples collected from exploratory soil borings during the extensive 1991 site investigation, are in exceedance of the ASTM RBCA CA-modified Tier 1 RSBL value (0.160 ppm) for a 1E-04 (1 in 10,000 excess cancer risk) for soil-vapor intrusion from soil to buildings, for a residential receptor scenario. However, all current apartment buildings are built on concrete slabs with the majority of the surface area of the apartment complex being capped (paved parking). In addition, since September 1, 1994, benzene concentrations detected in groundwater samples collected from the five on-site monitoring wells have been at or below the primary drinking water MCLs for benzene of 1 ug/L.

FIGURE 1 SITE LOCATION PARKSIDE COMMONS APARTMENTS SAN LEANDRO,CA









 $\overline{\circ}$ Septic tank north of Building 23 AREA 1 Bunker oil tank and tank for waste oil between Buildings 15, 17, and 18 AREA 3 Septic tank between Buildings 14, 15, and the Recreation Center AREA 4 Septic tank and gasoline tank east of Building 1 and north of Building 3 143rd Avenue Two gasoline tanks near the Recreation AREA 2 Center AREA 5 AREA 6 0 Septic tank between Buildings 8 and 9.

North



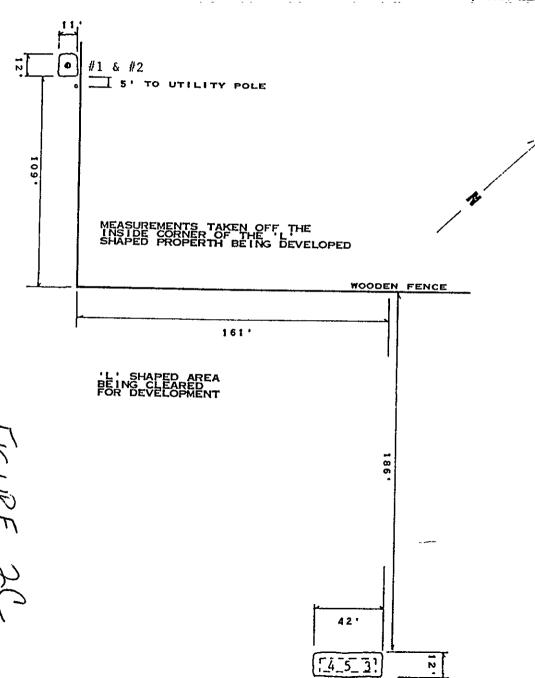
Figure Site Areas

2A

550 GALLON & 4,000 GALLON GASSOLINE

#1 @ 14' below grade; near fill pipe (F). IT Stoner Laboratories lab no. 29515 600 #2 @ 11' below grade; near the fill pipe (F). 3,100 FINAL lab no. 29516 SCALE: 1/10" = 6" Map ref: Thomas Bros. 7,5 Alameda Co. p. 27 D1 Richard C. Blaine 12' 10' wooden bldg. shown in documentation photos ref. permit sketch and/or closure plan for proper identification 21 •#1 14.5

FIGURE 2B



MAP REF: THOMAS BROS. ALAMEDA COUNTY P. 27 D-1

150 GALLON GAS TANK

- INTERFACE SAMPLE
 SOIL FROM 7'
 100% LEL/+10,000 PPM-VAPOR
 ANALYSIS FOR VOLATILE
 HYDROCARBONS DUE TO GASOLINE
 AT ENVIRONMENTAL RESEARCH
 GROUP INC.
 ERG LAB NO. 6547-1
 20,000 PPM
- SOIL FROM 12' (DEPTH OF ADDITIONAL EXCAVATION) 1,500 PPM-VAPOR ANALYSIS FOR GASOLINE ERG LAB NO 6547-2 NONE DETECTED

10,000 BUNKER OIL TANK

- INTERFACE SOIL FROM 12' 40 PPM-12 ANALYSIS FOR BUNKER OIL PLACED ON 'HOLD' AT LAB
- INTERFACE SOIL FROM 13' 175 PPM-V ANALYSIS FOR BUNKER OIL PLACED ON 'HOLD' AT LAB
- INTERFACE SOIL FROM 13 150 PPM V ANALYSIS FOR BUNKER OIL ERG LAB NO 6542-1 NONE DETECTED

THOUGH THE SOIL APPEARED CLEAN AT THE INTERFACE DEPTH SOIL ABOVE AND BESIDE THE TANK WAS NOTICEABLY STAINED. THE CONTRACTOR PLANNED FURTHER EXCAVATION TO REMOVE ALL THIS SOIL. NOTE:

: &

MEASUREMENTS TAKEN OFF THE INSIDE CORNER OF THE LINE SHAPED PROPERTY BEING DEVELOPED

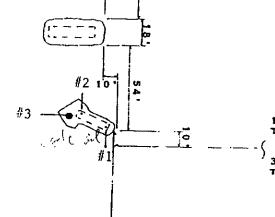
WOODEN FENCE AT NORTH PROPERTY LINE

OLD PLATE AND RIVET 2.840 GALLON OIL TANK
KEEL AT 10 BELOW GRADE
FILL PIPE (F) AT THE WEST END
SOIL CONTAMINATION SPREADING FROM THE FILL
PIPE DOWN TO FIRST WATER AT 20 ALL
OBVIOUSLY CONTAMINATED SOIL WAS REMOVED
ALL SAMPLES ANALYZED FOR WASTE OIL

- #1 INTERFACE SOIL SAMPLE AT 12:
- #2 INTERFACE SOIL FROM 13' AT FILL PIPE END OF TANK 400 PPM VAPOR ERG LAB NO. 6595-2 2,500 PPM
- #3 SOIL FROM 20' AT THE LEVEL OF FIRST WATER, FOLLOWING EXCAVATION OF CONTAMINATED SOIL 180 PPM VAPOR ERG LAB NO. 6595-3
 5,300 PPM

MAP REF: THOMAS BROS. ALAMEDA COUNTY P. 27 D-1

FE: ADDITIONAL WORK COMPLETED SINCE 10/18/85 TANK REMOVAL. PIT HAD BEEN ENLARGED BY THE REMOVAL OF OIL SATURATED SOIL FROM THE SIDE WALLS.



174' TO AGRICULTURAL WELL

332'
TO EAST PROPERTY LINE

RICHARD C. BLAINE

SURF 22

293

BLAINE

m

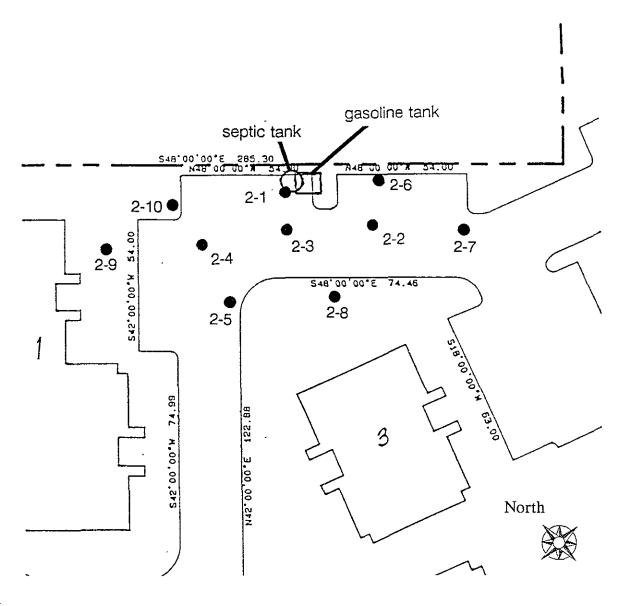


Figure Area 2 -- West Septic Tank and Gasoline Tank -- Sample Locations

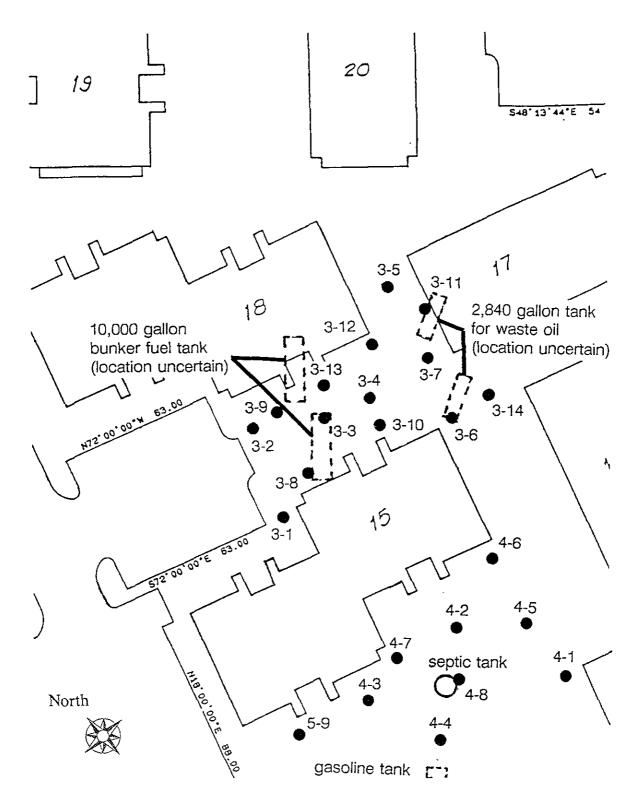
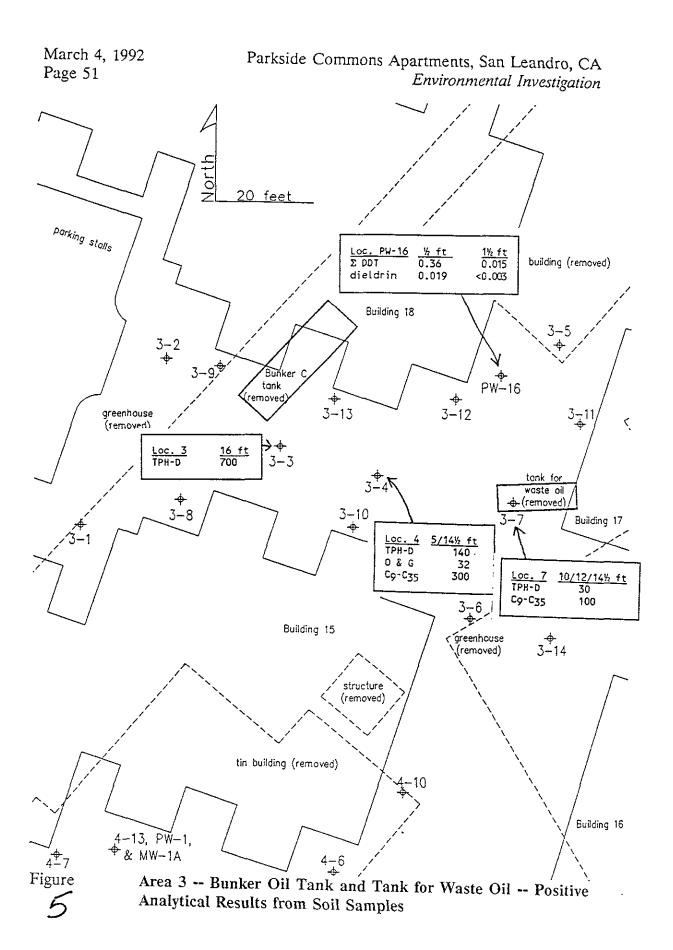


Figure Area 3 -- Bunker Tank and Tank for Waste Oil -- Sample Locations



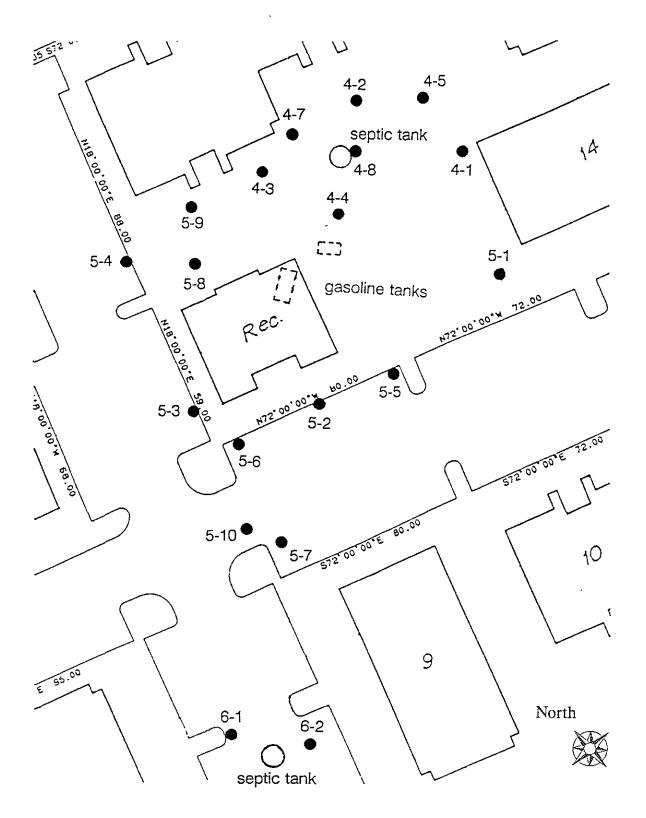


Figure Area 5 -- Gasoline Tanks near Pool -- Sample Locations

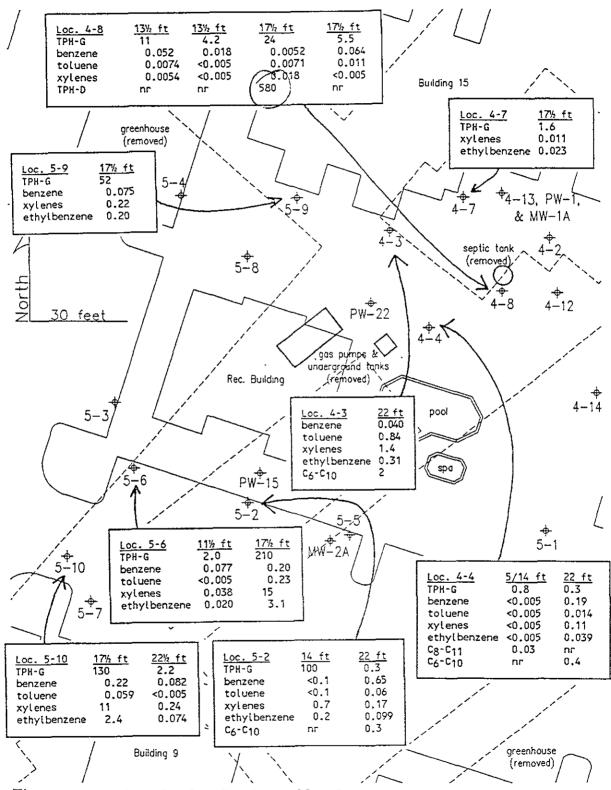


Figure 7

Area 5 -- Gasoline Tanks Near Pool -- Positive Analytical Results for Fuel-Related Compounds from Soil Samples (IN PPM)

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Parkside Commons Apartments, San Leandro, CA

Environmental Investigation

Table 1 Groundwater Non-Pesticide Organic Compounds (ppb)

	benzene	ethylbenzene	toluene	xylenes	gasoline	diesel
MW-1A Area 4						
21 June 91 ^b	3.33	300	4.17	99.7	1,700	< 320
MW-2A Area 5						
21 June 91	< 0.5	< 0.5	0.787	< 1	< 100	< 320
MW-3A Area 6						
21 June 91 21 June 91	< 0.5 < 0.5	< 0.5 < 0.5	< 0.5 < 0.5	< 1 < 1	< 100 < 100	< 340 < 320
MW-4A						
21 June 91	< 0.5	< 0.5	< 0.5	< 1	< 100	< 330
MW-5A						
26 July 91	< 0.5	< 0.5	< 0.5	< 1	< 100	< 300

INITIAL GW SAMPLING RESULTS

a. Benzene, toluene, xylenes, and ethylbenzene, ("BTX&E") were analyzed by EPA Method 602. Total volatile hydrocarbons ("gasoline") were analyzed by modified EPA Method 8015 with an EPA Method 5030 extraction. Total extractable hydrocarbon ("diesel") analyses were by modified EPA Method 8015 with an EPA Method 3520 extraction.

b. The BTX&E analysis for this sample showed high surrogate recovery, indicating possible matrix interferences.

TABLE 2
GROUNDWATER ANALYTICAL RESULTS (ppm)

WELL LD.	DATE	BENZENE	E-BENZENE	TOLUENE	XYLENES	TPH-G	TPH-D	LEAD
MW-1A	6/21/91	0.00333	0.300	0.00417	0.0997	1.700	<0.320	NA
	5/4/92	<0.0125	0.612	< 0.0125	0.0147	< 0.100	NA	
	5/4/92	< 0.0125	0.627	< 0.0125	0.0221	< 0.100	NA	< 0.050
	10/13/92	0.150	1.500	<0.050	0.840	12.000	NA	< 0.003
	11/9/92	0.080	1.200	0.003	0.440	7.2	NA	NA
	11/9/92	0.080	1.200	0.003	0.400	6.7	NA	NA
	2/8/93	0.011	0.200	<0.0005	0.031	2.400	NA	NA
	2/8/93	0.011	0.210	< 0.0005	0.033	2.500	NA	NA
	5/18/93	0.021	0.430	0.001	0.110	2.6	0.2	NA
	5/18/93	0.021	0.450	0.001	0.110	2.8	0.2	NA
	3/3/94ª	< 0.003	0.110	< 0.003	0.016	0.810	< 0.50	NA
	6/7/94 °	0.0034	0.240	< 0.0003	< 0.0003	1.500	<0.50	NA
	9/1/94	0.00094	0.028	< 0.0003	0.0015	0.150	<0.05	NA
	12/13/94*	< 0.003	0.150	< 0.003	0.011	0.720	<0.05	NA
	10/20/95° 4/5/96	<0.003 <0.0003	0.030 0.0048	< 0.003	<0.003 <0.003	0.940 0.220	NA NA	NA NA
MW-2A	6/21/91	< 0.0005	<0.0005	0.000787	< 0.001	< 0.100	< 0.320	NA
	5/4/92	<0.0005	< 0.0005	< 0.0005	<0.0005	< 0.100	NA	<0.050
	10/13/92	0.0013	< 0.0005	< 0.0005	< 0.0005	0.110	NA	<0.003
	11/9/92	< 0.0003	< 0.0003	< 0.0003	< 0.001	0.08	NA	NA
	2/8/93	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.076	NA	NA
	5/18/93	< 0.0005	< 0.0005	< 0.0005	< 0.002	0.07	0.09	ŇA
	3/3/94	< 0.0003	< 0.0003	< 0.0003	< 0.0003	< 0.05	< 0.50	NA
	6/6/94	<0.0003	< 0.0003	< 0.0003	< 0.0003	<0.05	<0.50	NA
	9/1/94a	< 0.0003	< 0.0003	< 0.0003	< 0.0003	< 0.05	< 0.05	NA
	12/13/94	<0.0003	<0.0003	<0.0003	<0.0003	<0.05	<0.05	NA
MW-3A	6/21/91	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.340	NA
	6/21/91	<0.0005	<0.0005	< 0.0005	< 0.001	<0.001	< 0.320	NA
	5/4/92	<0.0005	< 0.0005	< 0.0005	<0.0005	< 0.001	NA	<0.050
	5/18/93	< 0.0005	<0.0005	< 0.0005	<0.002	<0.05	< 0.05	NA
	6/6/94ª	<0.0003	<0.0003	< 0.0003	< 0.0003	<0.05	<0.50	NA
	12/13/94	<0.0003	<0.0003	<0.0003	<0.0003	<0.05	<0.05	NA
MW-4A	6/21/91	<0.0005	<0.0005	<0.0005	<0.001	<0.100	<0.330	NA
	5/18/93	<0.0005	<0.0005	<0.0005	< 0.002	<0.05	<0.05	NA
	6/6/94 °	<0.0003	<0.0003	< 0.0003	<0.0003	<0.05	<0.50	NA
	12/12/94ª	<0.0003	<0.0003	<0.0003	<0.0003	<0.05	<0.05	NA
MW-5A	7/26/91	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.300	NA
	11/9/92	<0.0003	<0.0003	<0.0003	< 0.001	< 0.05	NA	NA
•	5/18/93	< 0.0005	<0.0005	<0.0005	<0.002	<0.05	<0.05	NA
	6/6/94ª	<0.0003	<0.0003	<0.0003	<0.0003	<0.05	<0.50	NA
	12/13/94ª	<0.0003	<0.0003	< 0.0003	< 0.0003	<0.05	<0.05	NA

TABLE 2
GROUNDWATER ANALYTICAL RESULTS (ppm)

WELL LD.	DATE	BENZENE	E-BENZENE	TOLUENE	XYLENES	TPH-G	TPH-D	LEAD
						•		
MW-6A	10/13/92	<0.0005	<0.0005	<0.0005	<0.0005	0.050	NA	<0.003
	2/8/93	NA	NA	NA	NA	NA	0.090	NA
	5/18/93	< 0.0005	< 0.0005	< 0.0005	< 0.002	< 0.05	< 0.05	NA
	3/3/94	< 0.0003	< 0.0003	< 0.0003	<0.0003	< 0.05	< 0.50	NA
	6/6/94ª	< 0.0003	< 0.0003	< 0.0003	< 0.0003	< 0.05	< 0.50	NA
	9/1/94ª	<0.0003	< 0.0003	< 0.0003	< 0.0003	< 0.05	< 0.50	NA
	12/13/94	<0.0003	<0.0003	<0.0003	<0.0003	<0.05	< 0.05	NA
MW-7A	10/13/92	<0.0005	<0.0005	<0.0005	<0.0005	<0.050	NA	<0.003
	10/13/92	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.050	NA	NA
	5/18/93	<0.0005	<0.0005	<0.0005	<0.002	<0.05	<0.05	NA
MW-8A	2/8/93	0.001	<0.001	<0.001	<0.001	<0.050	0.220	NA
	5/18/93	< 0.0005	< 0.0005	< 0.0005	< 0.002	< 0.05	< 0.05	NA
	3/3/94ª	<0.0003	< 0.0003	< 0.0003	< 0.0003	< 0.05	<0.50	NA
	6/6/94ª	< 0.0003	< 0.0003	< 0.0003	< 0.0003	< 0.05	<0.50	NA
	9/1/94ª	<0.0003	< 0.0003	< 0.0003	< 0.0003	<0.05	<0.50	NA
	12/12/94	< 0.0003	<0.0003	<0.0003	<0.0003	<0.05	<0.05	NA

ppm - parts per million

NA - Not Analyzed.

a - Groundwater samples collected by McLaren/Hart.

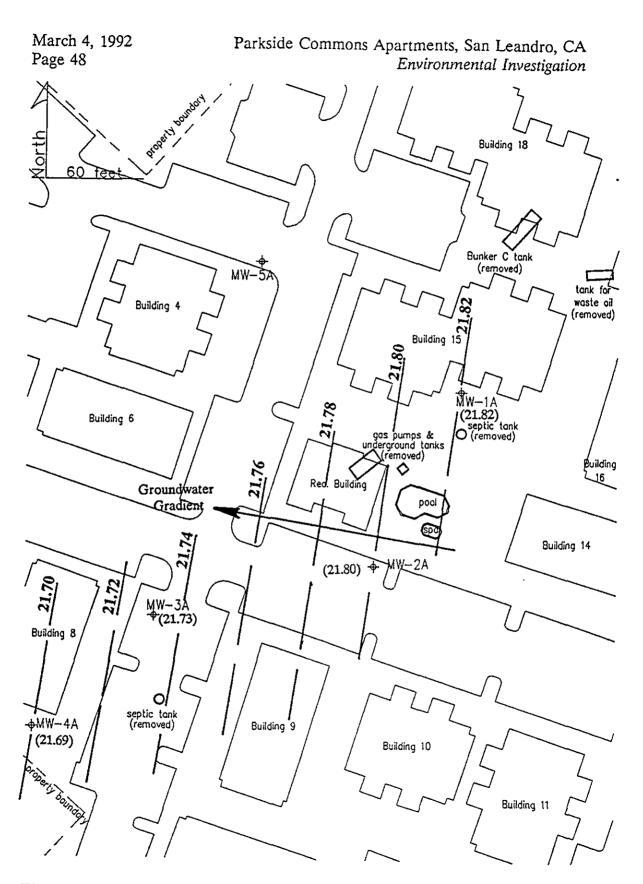


Figure 14. Water Table Elevation Contours -- July 11, 1991

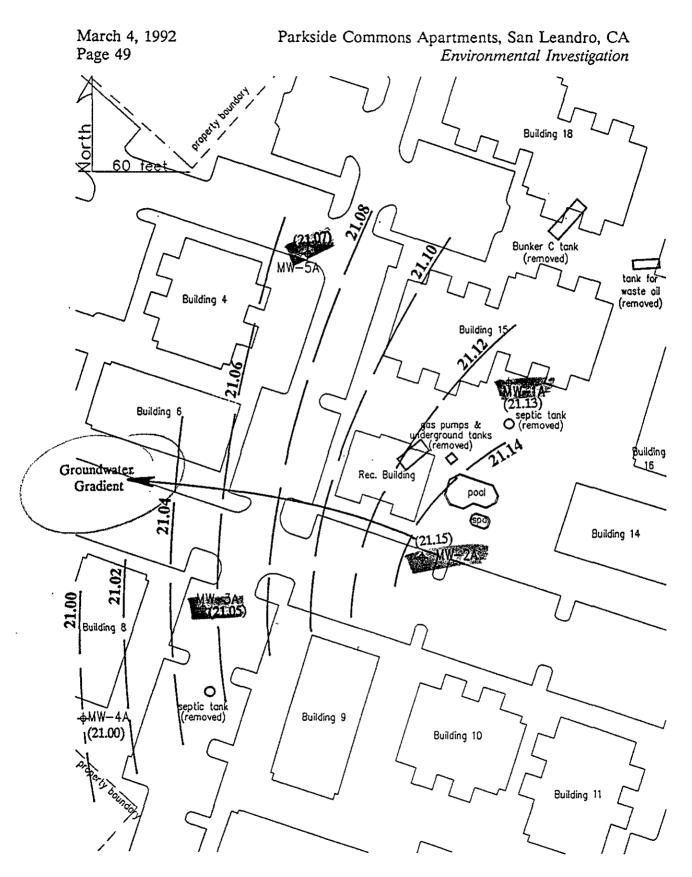


Figure 15. Water Table Elevation Contours -- August 19, 1991

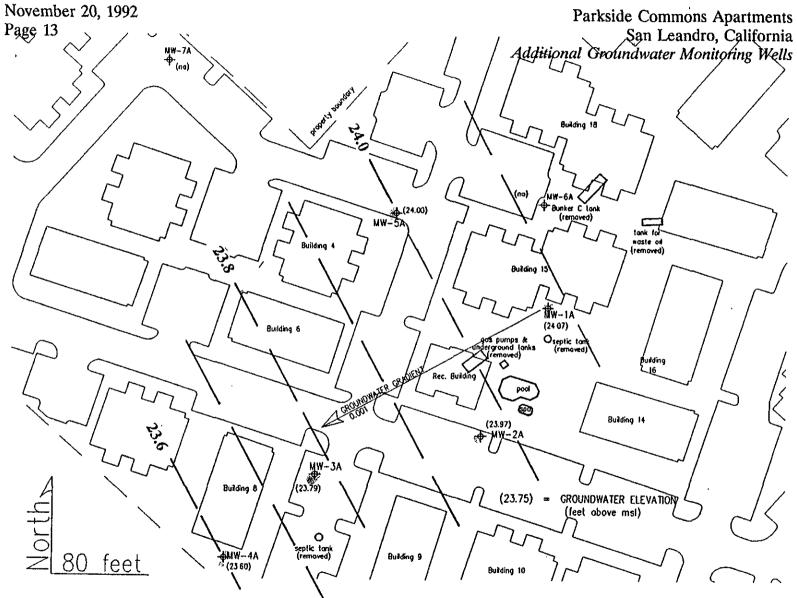
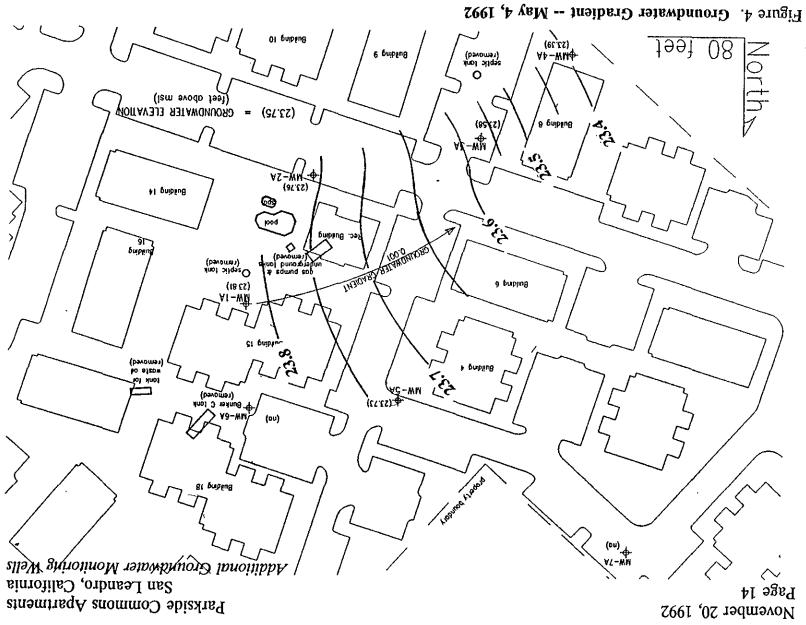


Figure 3. Groundwater Gradient -- April 10, 1992



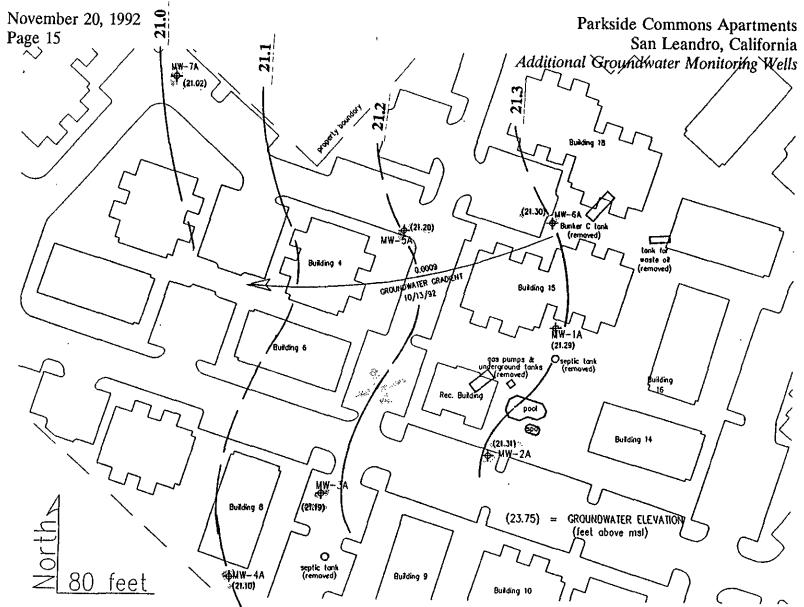
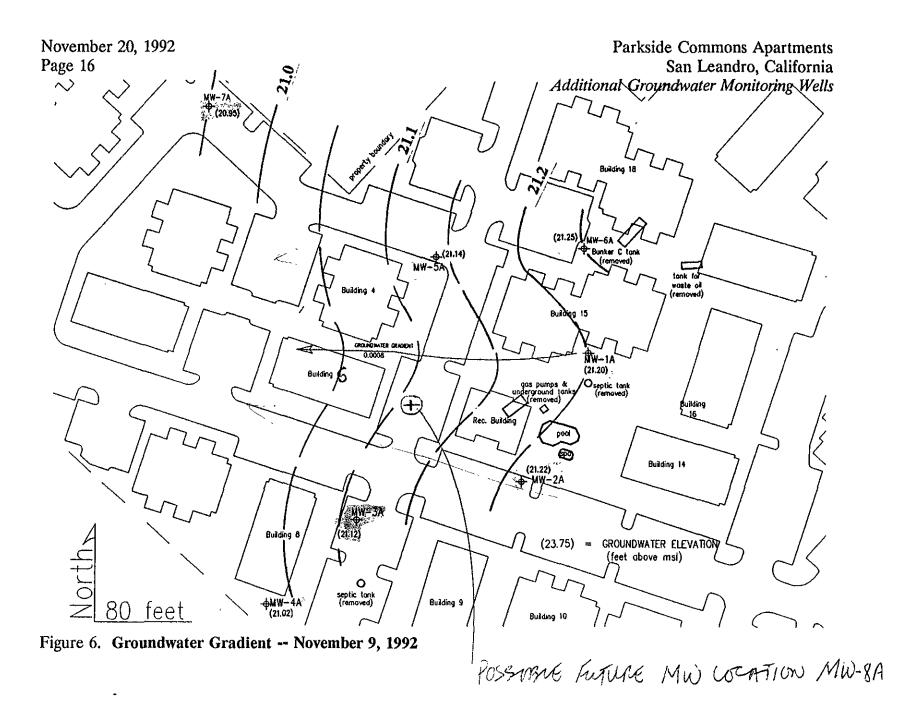


Figure 5. Groundwater Gradient -- October 13, 1992



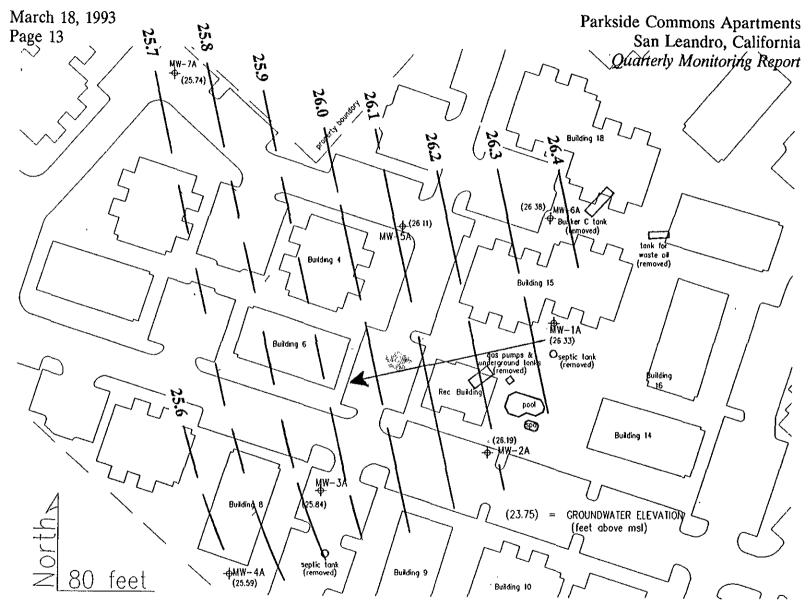


Figure 3. Groundwater Piezometric Surface Contours -- January 29, 1993

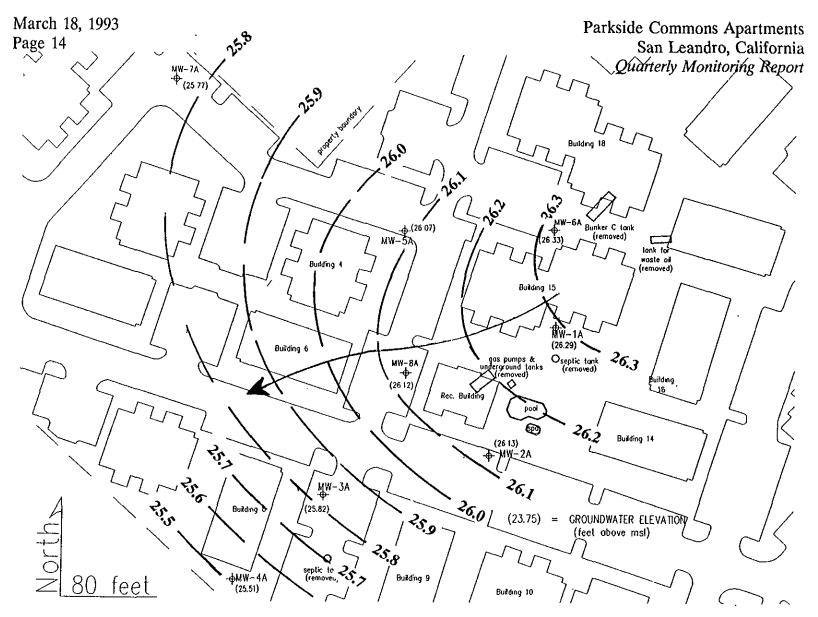


Figure 4. Groundwater Piezometric Surface Contours -- February 8, 1993

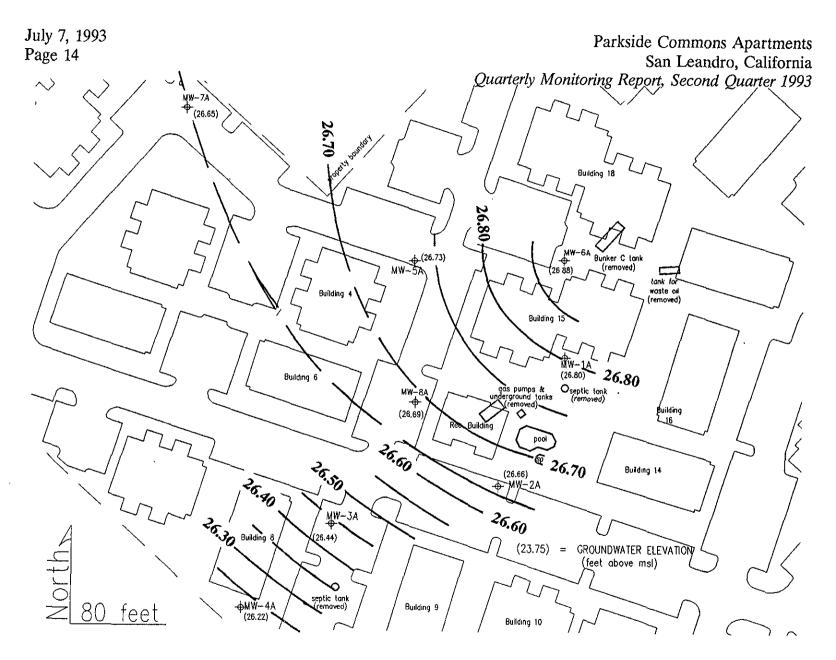


Figure 3. Groundwater Piezometric Surface Contours -- April 30,1993

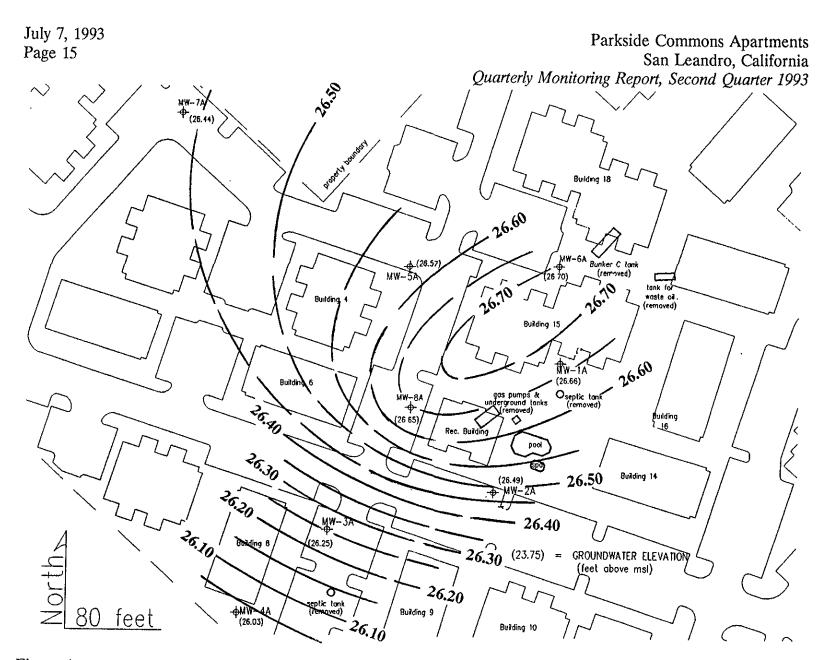


Figure 4. Groundwater Piezometric Surface Contours -- May 18, 1993

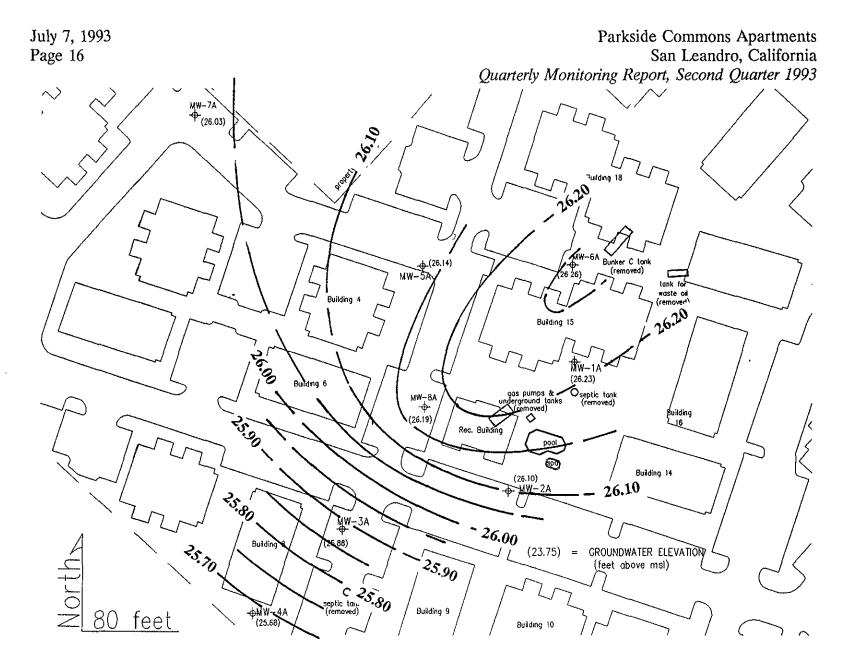
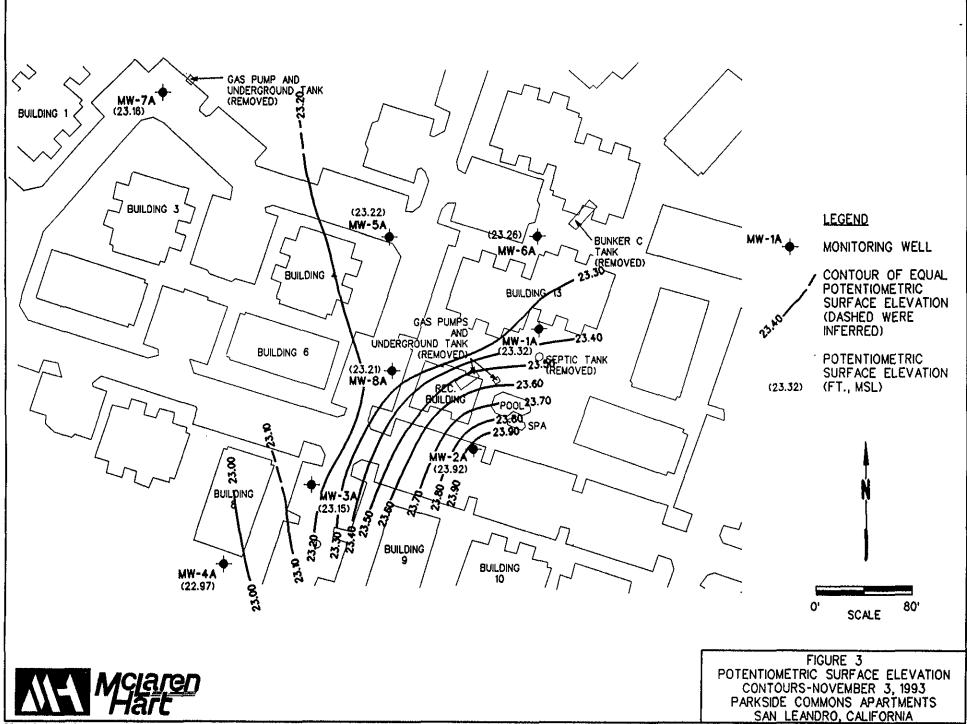
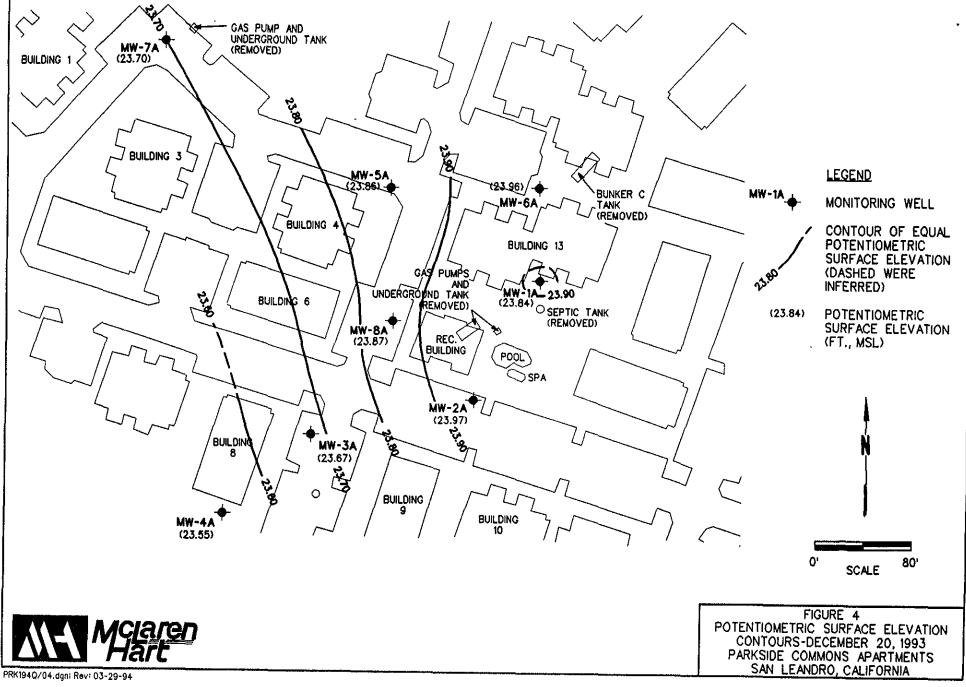
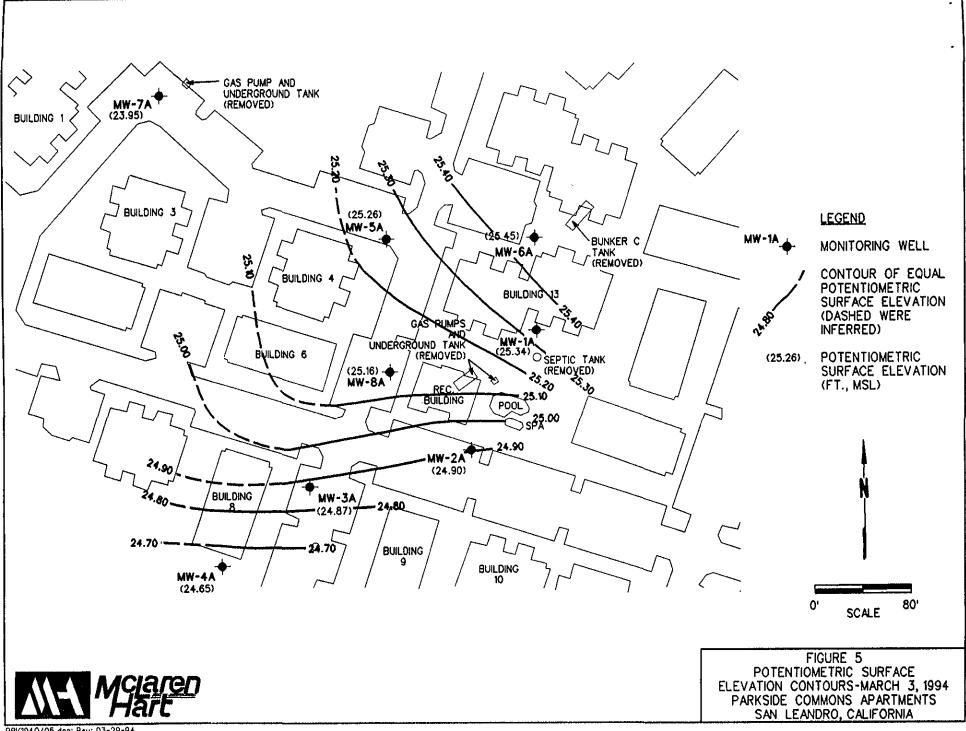
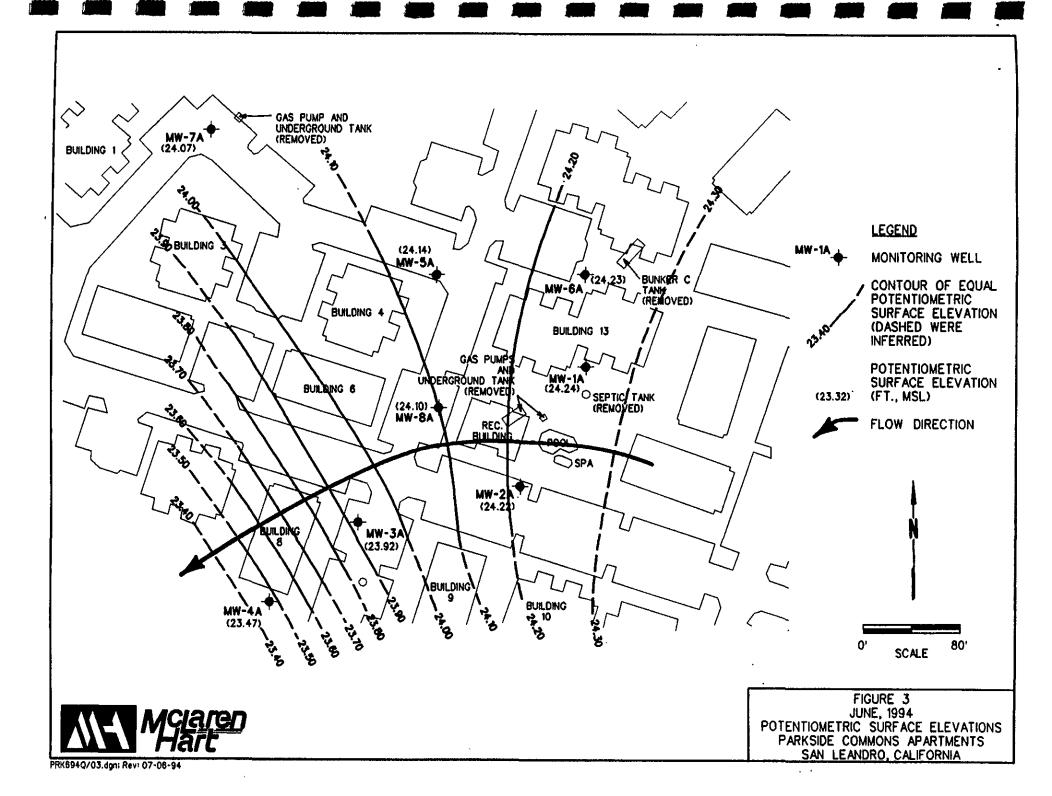


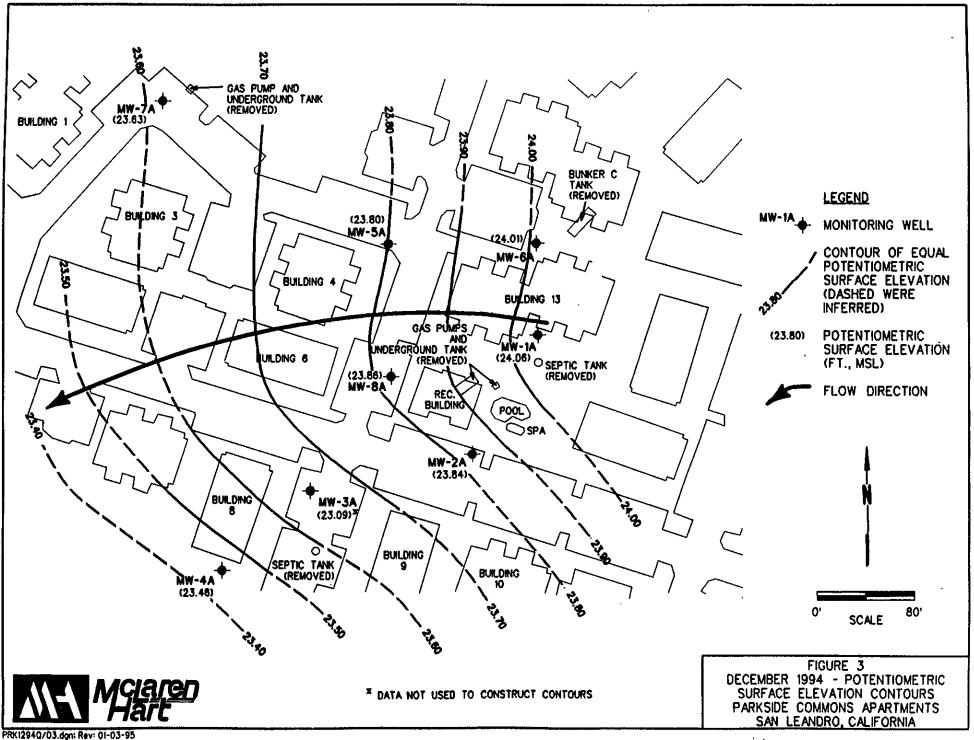
Figure 5. Groundwater Piezometric Surface Contours -- June 16, 1993

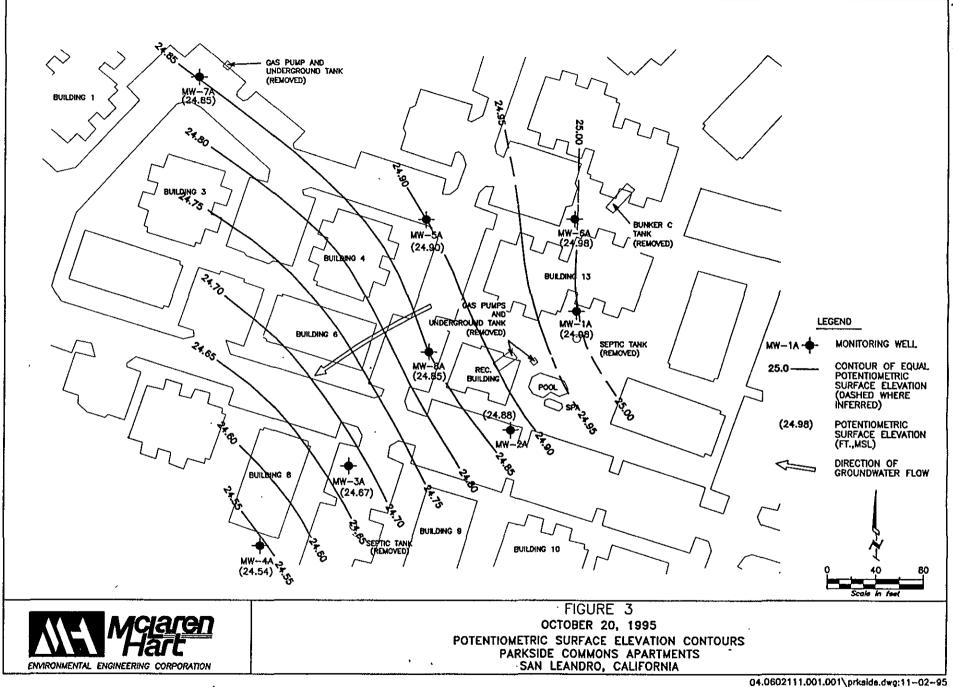


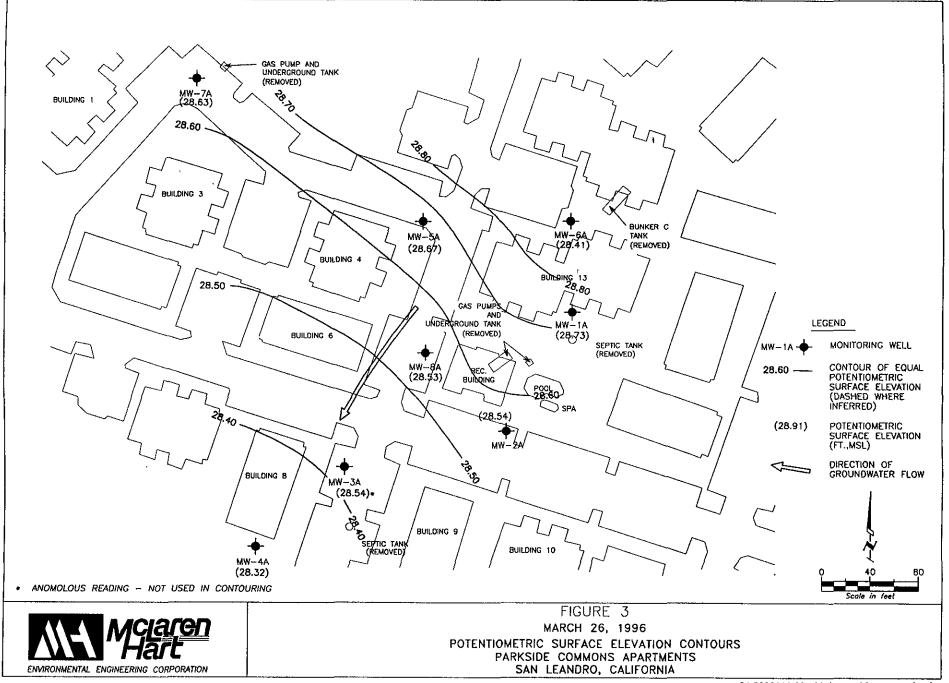












Project Parkside Commons Apartments Owner First Nationwide Bank Drilling Log Location 900 143 Ave., San Leandro, CA Well Completion Sample ID Blow Count Per 6" Class Graphic Log Depth (feet) P10 (ppm) Description (Color, Texture, Structure) Soil 18 α Brown fine to medium SAND (loose, wet) (occasional pebbles to 1/2" diameter) (thin lenses of more clay rich fine sand) 20 Encountered water 6/18/91, 1330 hours 0 12 22 SP 24 Brown fine to medium SAND (loose, wet) 0 26 Fine GRAVEL and coarse SAND (loose, wet) (generally 1/8" or less, occasional pebbles to 1/2") 28 (Sand heaved into augers approximately 1-foot) SP End of boring, constructed monitoring well. 30 0 Brown fine SAND (loose, wet) α Tan-brown CLAY (medium stiff, moist) 32 (some black mottling and trace coarse sand) 34 36 38 40

OT/C9/1991 FNB/PCA/FIELD3

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(contains black root traces and black mottling)

Owner First Nationwide Bank Project Parkside Commons Apartments **Drilling Log** Location 900 143 Ave., San Leandro, CA Sample 1D Blow Count Per 6" Completion Class Graphic Log Depth (feet) Description (Color, Texture, Structure) PID (ppm) Soil (18 Brown fine to medium SAND (loose, wet), generally well sorted, with occasional coarse sand and fine gravel clasts, minor clay. 20 Encountered water 6/18/91, 0930 hours 0 (Core Sample contained thin lenses (4-6°) of clay rich sand and thin lenses of coarse sand) 22 SP 24 End of boring, constructed monitoring well. (No recovery in core sampler) 0 Driller noted that sand had heaved into augers 26 up to 23 feet. When augers were pulled, casing was pulled down to total depth. 28 30 32 34 36 38 40

Monitoring Well MW-3A

Project Parkside Commons Apartments Owner First Nationwide Bank Drilling Log Location 900 143 Ave., San Leandro, CA See Site Map Diameter <u>800 in</u> Date Oritled _6/19/91 Total Depth of Hole 25.0 ft. For Boring Location _ 24-hour <u>16.96</u> ft Surface Elevation 38.79 ft. Water Level Initial 20.5 ft. X-Coord: _516.88 ft. Screen: Dia 2 in Length 10 ft. Slot Size .020 in NOTES: Type Sch.40 PVC Y-Coord: 75374 ft __ Casing: Dia <u>_2 in.</u> Length <u>_15 ft.</u> ___Filter Pack Material <u>Lapis Lustre No.</u> 3 Coord. System: feet relative _ Drilling Method _ Hollow Stem Auger Drilling Company HEW Drilling Co. Inc. Log by Allen B. Storm Driller Mike Douglas Geologist/Engineer Allen B. Storm License No RG 4394 Sample ID Blow Count Per 6" Completion Class Graphic Log Depth (feet) PIO (ppm) Description (Color, Texture, Structure) Soil (0 Asphalt over base course. Black CLAY (stiff, slightly moist) 06:993 Brown silty CLAY (stiff, slightly moist) 0 8 (grades to medium stiff, damp) 10 Brown coarse Sand, grading to fine GRAVEL, poorly sorted, with angular, coarse to fine sand (loose, damp), GW 10 Brown silty CLAY (soft, damp) 12 14 Brown sandy GRAVEL (moderately loose, damp) (thin lense) GH Brown silty CLAY (medium stiff, moist) 0 16 (grades less stiff, more moist at bottom of sample) 07/09/1991 FNB/PCA/FIELO3

07/09/1991

FN8/PCA/FIELD3

Owner First Nationwide Bank Project Parkside Commons Apartments Drilling Log Location 900 143 Ave., San Leandro, CA Well Completion Sample ID Blow Count Per 6" Soil Class Graphic Log Depth (feet) PID (mgd) Description (Color, Texture, Structure) 18 20 Greenish Brown silty CLAY (soft, moist), with some fine sand. Encountered water 6/19/91, 1030 hours 0 Greenish brown fine SAND (moderately dense, moist to wet), with some silt and clay matrix, occasional angular 22 pebbles to 1/4". 24 Tan Brown CLAY (stiff, damp), slightly silty, with grey mottling. End of boring, constructed monitoring well. α Heaving sands required re-drilling to bottom 0 26 before setting casing. Medium to coarse grained loose sand on auger plug, with some pebbles to 3/8° diameter. Sand rose to 24-feet around screen. 28 - 30 32 - 34 36 38 40

Monitoring Well MW-4A RESOURCES, INC. Project Parkside Commons Apartments Owner First Nationwide Bank **Drilling Log** Location 900 143 Ave., San Leandro, CA See Site Map _ Diameter <u>8.00 in</u> Date Orilled _6/19/91 ____ Total Depth of Hole <u>25.0 ft</u> For Boring Location Surface Elevation 39.29 ft. Water Level Initial 19.0 ft. X-Coord: 44257 ft. Screen: Dia 2 in Length 12 ft. Slot Size .020 in NOTES: Y-Coord: 684.35 ft Casing: Dia 2 in Length 13 ft Type Sch.40 PVC Coord. System: <u>feet relative</u> _____Filter Pack Material _Lapis Lustre No. 3 Drilling Company HEW Drilling Co. Inc. Orilling Method Hollow Stem Auger Driller Mike Douglas ____ Log by _Allen B. Storm License No RG 4394 Geologist/Engineer _Allen B. Storm Sample ID Blow Count Per 6" Well Completion Class Graphic Løg Depth (feet) Description (Color, Texture, Structure) PID (ppm) Soil Grass over Black and Brown mottled silty CLAY (stiff, dry) (fragments of red clay pipe in core sample. 061994 bottom 2* of sample in black clay) Dark brown CLAY (stiff, damp) α 10 Tan brown silty clay (medium stiff, moist), with two thin lenses of loose, dry, coarse sand and fine gravel. 12 14 Tan-brown silty CLAY (medium soft, wet), with thin lense of coarse sand (2" thick) at top of core sample.

07/09/1991 FNB/PCA/FIELD3

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Project Parkside Commons Apartments Owner First Nationwide Bank **Drilling Log** Location 900 143 Ave., San Leandro, CA Sample ID Blow Count Per 6* Completion Soil Class Graphic Log Depth (feet) PID (mdd) Description (Color, Texture, Structure) 18 Encountered water 6/19/91, 1430 hours a Greenish Brown silty CLAY (medium stiff, moist), 20 with scattered coarse, angular, sand grains and thin lenses of fine gravel. 0 -Greenish brown fine clayey SAND (medium soft, wet) (well sorted fine sand with clay matrix) 22 24 (evidence of cleaner sand - loose pebble at top of core and uniform loose fine sand on side of core sampler) End of boring, constructed monitoring well. Brown CLAY (medium stiff, wet) with dark grey mottling. 0 26 (grades to dark grey brown CLAY, stiff, damp) α 28 30 -32 34 36 38 40

Monitoring Well MW-5A RESOURCES, INC. Project Parkside Commons Apartments Owner First Nationwide Bank Drilling Log Location 900 143 Ave., San Leandro, CA See Site Map Date Orilled 7/24/91 Total Depth of Hole 25.0 ft __ Diameter <u>800 in</u> For Boring Location Surface Elevation _____ Water Level Initial _215 ft_ _ 24-hour _ __ Screen: Dia _2 in _Length _5 ft. __ Slot Size _.020 in X-Coord: _____ NOTES: Casing: Dia 2 in Length 20 ft Type Sch.40 PVC Y-Coord: _____ Coord. System: <u>feet relative</u> Filter Pack Material Lapis Lustre No. 3 Drilling Company HEW Drilling Co. Inc. Drilling Method Hollow Stem Auger Driller Tony Weitz Log by Allen B. Storm Geologist/Engineer Allen B. Storm License No RG 4394 We∥ Completion Sample 1D Blow Count Per 6* Class Graphic Log Depth (feet) PID (ppm) Description (Color, Texture, Structure) Soil 0 Asphalt over base course. Black CLAY (stiff, dry) Brown silty CLAY (hard, dry) (Thin lense (3") of moist, clayey Gravel) Brown silty CLAY (stiff, damp) (Trace pebbles) 10 Brown silty CLAY (stiff, damp) (Pebbles common, black and red cherty rock fragments) Thin lense (2") of angular gravel, dry. -Brown silty CLAY with fine sand (medium stiff, damp) 12

Brown silty CLAY (stiff, damp)

(grades to medium soft, moist at 15.5 ft.)

(trace pebbles, less fine sand)

07/25/1991 FNB/PCA/FIELD3

16

Monitoring Well MW-5A

Owner First Nationwide Bank Project Parkside Commons Apartments Drilling Log Location 900 143 Ave., San Leandro, CA Well Completion Sample ID Blow Count Per 6" Soil Class Graphic Log Description (Color, Texture, Structure) PID (ppm) 18 20 Brown silty CLAY (soft, wet) (one cobble, 2" dia.) Brown clayey fine SAND (soft, wet) 22 -Encountered water 7/22/91, 0930 hours Brown gravelly SAND (saturated, loose), medium to coarse grained sand with common pebbles to 3/8" dia. 24 End of boring, constructed monitoring well. Grey brown CLAY (stiff, damp) 26 28 30 32 34 36 38 40

Location _ Date Orille Surface E X—Coord: Y—Coord: Coord. Sy:	Parkside C 900 143 / d 10/6/9 levation _ 705.83 f 974.99 f stem: 1ee pany We out Northa	ommons . Ave., Sar 22 40.63 ft t. et relativ est Hazm art	Apartments Leandro, C Total De Water Le Screen: Casing: Ce eat Drilling Co	pth of Hol evel Initial Dia 2 in. Dia 2 in. Fil	e <u>2</u> 18.5 Le Le Iter F	First Nationwide Bank 5.0 ft. Diameter 8.00 in. 1 ft. 24-hour 19.26 ft. ength 10 ft. Slot Size .020 in. ength 15 ft. Type Sch.40 PVC lack Material Lonestar No. 2/12 Method Hollow Stem Auger Allen B. Storm License No. RG 4394	See Site Map For Boring Location NOTES:
Depth (feet)	Well Completion	₹ PID (ppm)÷	Sample ID Blow Count Per 6*	Graphic Log	Soil Class	De (Color, Te	scription exture, Structure)
- 0 - - 2 -	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\					Grass Dark Brown and Black mottled s (minor fine to medium sa	ilty CLAY (stiff, dry) and)
- 4 -	` <,\<,\<,\<,\<,\<,\<,\<,\<,\<,\<,\<,\<,\<	0	6 11 14		a	Dark Brown silty CLAY (medium (minor very fine sand)	stiff, damp)
- 10 - - 12 -	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	0	5 10 17		d	Medium Brown fine sandy CLAY (increased fine sand co	(medium stiff, moist), ontent)
- 14 - - 16 - - 18 -		O	7 9 9 Si006002		SW	Medium Brown silty CLAY (mediu	um soft, moist)

RUSSELL RESOURCES, INC.

Monitoring Well MW-6A

Project	Parkside C	ommons .	Apartments Leandro, C	Ov	vner	First Nationwide Bank Drilling Log
Depth (feet)	Well Completion	PIO (ppm)	Sample ID Blow Count Per 6"	Graphic Log	Soil Class	Description . (Calor, Texture, Structure)
- 18 - - 20 - - 22 -		0	9 19 21		₩.	Encountered water 10/6/92, 1020 hours Medium Brown fine to medium SAND (soft, wet) (minor clay content)
- 24 - - 26 -		0	7 7 79		ъ 8	Medium Brown fine to medium SAND (soft, saturated) Medium Brown fine to medium clayey SAND (soft, saturated) Medium Brown CLAY (medium soft, moist) End of boring, constructed monitoring well.
- 28 -						
- 30 - - 32 -						
- 34 - - 36 -				_		
- 38 - - 40 -						

Monitoring Well MW-7A RESOURCES INC. ___ Owner _First Nationwide Bank Project Parkside Commons Apartments **Drilling Loa** Location 900 143 Ave., San Leandro, CA See Site Map Date Onlied 10/6/92 Total Depth of Hole 25.0 ft. Diameter <u>8.00 in.</u> For Boring Location Surface Elevation 38.15 ft Water Level Initial 17 ft __ 24-hour __17.01 ft. x-Coord: <u>398.62 ft.</u> ___ Screen: Dia _2 in __ Length _10 ft_ __ Slot Size _.020 in_ Y-Coord: 1098.22 ft. __ Casing: Dia _____ Length _____ Type _____ Sch.40 PVC Coord. System: <u>feet relative</u> ____Filter Pack Material Lonestar No. 2/12 Drilling Company West Hazmat Drilling Corp. Drilling Method Hollow Stem Auger Driller <u>Scott Northart</u> ____ Log by __Allen B. Storm Geologist/Engineer Allen B. Storm License No _RG 4394 Sample ID Blow Count Per 6* Class Graphic Log Depth (feet) PID (ppm) Description (Color, Texture, Structure) Soil 0 3" Asphalt over Base Course Black silty CLAY (stiff, dry) Black silty CLAY (stiff, dry) (olive green mottling and occasional pebbles) (fragments of Brick and Plant Stems) 10 (lower one foot of sample fell out) 14 Medium Brown sandy, silty GRAVEL (medium dense, damp) (pebbles up to 3 cm. - common angular chert grains) 0 \$5 \$1006003 16

Fincountered water 10/6/92, 1515 hours

RUSSELL RESOURCES, INC.

Monitoring Well MW-7A

Project	Parkside C 900 143 /	ommons Ave., Sar	Apartments n Leandro, C	<u></u> 0	wer	First Nationwide Bank Drilling Log
Depth (feet)	Well	PID (mdd)	Sample ID Blow Count Per 6"	Graphic Log	Soil Class	Description (Color, Texture, Structure)
- 18 - - 20 -		0	5 11 23			Medium Brown sandy, silty GRAVEL (loose, saturated) (angular grains and pebbles up to 2 cm.)
- 22 - 24 -		0	5 11	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	GM	Medium Brown sandy, silty GRAVEL (loose, saturated)
- 26 -						End of boring, constructed monitoring well.
<u> </u>						
- 28 -						
				-		
- 30 -						
				<u> </u>		
32						
<u> </u>				_		
- 34 -						
-				_		
- 36 -				<u> </u>		
 				_		
- 38 -				-		
 				_		
- 40 -						

RUSSELL RESOURCES, INC.

02/10/1993

FNB/PCA/FIELD3

Monitoring Well MW-8A

Page 2 of 2

Project Location	900 143 <i>9</i>	ommons Ave., Sai	Apartments Leandro, C	Ov	wner	First Nationwide Bank Drilling Log
Depth (feet)	Well	PID (mod)	Sample ID Blow Count Per 6*	Graphic Log	Soil Class	Description (Calar, Texture, Structure)
- 18 -					а	Light Brown CLAY (soft, saturated), interbedded with
20		0	6 7 8		හ <u>.</u> ආ	Fine to Medium grained Brown SAND (medium dense, saturated) Light Brown CLAY (soft, sat.)
						Fine to Medium Brown Sand (medium dense, saturated) clayey, with occasional pebbles to 1/4".
- 22 -					SH	
- 24 -		o	5 5			Fine to Coarse Brown Sand (medium dense, saturated) Medium Brown CLAY (soft, saturated)
- - 26 -			13		a.	Clay becomes medium stiff, damp. End of boring, constructed monitoring well.
-						
- 28 -						
70				_		
- 30 -						·
- 32 -				_		
- 34 -						
-						
36 -						
- 38 -				 		
				_		
- 40 -			AND COMPANY OF THE PARTY OF THE			

HEALTH CARE SERVICES

AGENCY DAVID J. KEARS, Agency Director



RAFAT A. SHAHID, Assistant Agency Director

April 13, 1992

Daniel W. Hernandez, MPH, CIH First Nationwide Bank 33 New Montgomery Street, 7th Floor San Francisco, CA 94105 DEPARTMENT OF ENVIRONMENTAL HEALTH Hazardous Materials Division 80 Swan Way, Rm. 200 Oakland, CA 94621 (510) 271-4320

RE: HEALTH RISK ASSESSMENT REPORT (HRAR) FOR PARKSIDE COMMONS APARTMENTS, 900 143rd AVENUE, SAN LEANDRO, CALIFORNIA

Dear Mr. Hernandez:

This office has reviewed the HRAR you submitted on March 11, 1992. In this report you have evaluated the probability and the magnitude of adverse health effects to humans from potential exposure to pesticide residues found in soils at this site. Parkside Commons is a fully developed 13 acre site with 300 residential apartment units. Prior to the construction of this complex in 1986, this site was occupied by a wholesale plant nursery.

No surface pesticide contamination was found on this property. Most of the pesticide residues were found at the native soil horizon, at a depth between 1.5 and 2.5 feet. Most of the soil on this property is covered by asphalt parking lots, concrete sidewalks and buildings. Due to the chemical properties of the pesticide residues, the chances for these pesticides to eventually leach in to the shallow ground water are remote.

This office is very impressed with the accuracy and technical finesse of the HRAR. We concur with the findings of your HRAR that the chances for pesticide exposure are negligible at this site. Unless future construction activities disturb the native soil, this site dose not pose a significant health threat to residents.

However, please be aware that this letter is limited only to the health risks associated with pesticide residues found in the soils. Further action may be required if information received subsequent to this letter indicates a need for it. If you have any questions concerning this matter, please feel free to call me at (510) 271-4320.

Sincerely,

Ravi Arulanantham, Ph.D., CHMM

Senior Hazardous Materials Specialist

c: Robert Weston, ACHCS Lester Feldman, SFBR-RWQCB files