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 2055 - 1411 E. 31st Street, Oakland, CA

June 4, 1996

Mr. Jim DeVos
County of Alameda-GSA
1401 Lakeside Dr, Suite 1113
Oakland, CA 94612

Dear Mr. DeVos:

This letter confirms the completion of site investigation and remedial action for the two former underground storage tanks (1-12,000 and 1-7,500 gallon diesel tanks) removed from the above site on August 29, 1995 and February 2, 1996. 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)
files (highland.2)

*01-2145;

CALIFORNIA REGIONAL WATER
MAY 17 1996
QUALITY CONTROL BOARD

CASE CLOSURE SUMMARY
Leaking Underground Fuel Storage Tank Program

I. AGENCY INFORMATION **Date: May 3, 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: **Highland General Hospital**
Site facility address: **1411 E. 31st Street, Oakland, CA 94602**
RB LUSTIS Case No: **N/A** Local Case No./LOP Case No.: **2055**
URF filing date: **6/15/95** SWEEPS No: **N/A**

Responsible Parties:	Addresses:	Phone Numbers:
County of Alameda **Attn. Jim DeVos**	**1401 Lakeside Dr, #1113** **Oakland, CA 94612**	

96 MAY 31 PM 1:32
ENVIRONMENTAL PROTECTION

Tank No:	Size in gal.:	Contents:	Closed in-place or removed?:	Date:
1	12,000	Diesel	Removed	8/29/95
2	7,500	Diesel	Closed in-place	2/2/96

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and type of release: **Leaking pipe connection**
Site characterization complete? **YES**
Date approved by oversight agency: **4/30/96**
Monitoring Wells installed? **No** Number: **NA**
Proper screened interval? **NA**
Highest GW depth below ground surface: **Unknown**
Flow direction: **Inferred to the south, based on local topography**
Most sensitive current use: **Hospital**
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): **NA**

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 & Piping	1 UST	Erickson, in Richmond	8/29/95
Free Product	560 gallon	Reused by VCI, San Leandro	2/2/96
Groundwater	2550 gallon	PRC Patterson, in Patterson	7/12, 8/30/95
Soil	250 cy	Reused at Highland Hospital and Santa Rita	
	30 cy	Vasco Rd, L.F. in Livermore	7/13-14/95
Rinseate	200 gallon	Evergreen Oil, in Newark	2/7/96

Maximum Documented Contaminant Concentrations - - Before and After Cleanup

Contaminant		Soil (ppm) Before[1]	Soil (ppm) After	Water (ppb) Before	Water (ppb) After
TPH (Diesel)		1,500	6	680	NA
Benzene		ND	ND	ND	NA
Toluene		ND	ND	ND	NA
Ethylbenzene		ND	ND	ND	NA
Xylenes		0.036	ND	ND	NA
Other	PNAs	<0.33		<10	NA

NOTE 1 from product line excavation to 8' bgs

Comments (Depth of Remediation, etc.):

See Section VII, Additional Comments, etc...

IV. CLOSURE

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

Should corrective action be reviewed if land use changes? **YES**
Monitoring wells Decommissioned: **NA**
Number Decommissioned: **NA** Number Retained: **NA**
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: 5/13/96

Reviewed by

Name: **Madhulla Logan** Title: **Haz Mat Specialist**

Signature: [signature] Date: 5/8/96

Name: **Thomas Peacock** Title: **Supervisor**

Signature: [signature] Date: 5-13-96

VI. RWQCB NOTIFICATION

Date Submitted to RB: 5/14/96 RB Response: Approved

RWQCB Staff Name: **Kevin Graves** Title: **AWRCE**

Signature: [signature] Date: 5/29/96

VII. ADDITIONAL COMMENTS, DATA, ETC.

When the product lines from a 12K diesel UST was uncovered in June 1995 for replacement with double-walled fiberglass piping, diesel-impacted soil was observed beneath a leaking pipe connection. Approximately 30 cy of contaminated soil were removed. Confirmatory soil samples were collected at 7 to 8' bgs from the sidewalls and from the bottom of the excavation. Only soil sample S1-7 contained elevated levels of TPH-D (up to 1,500 ppm). Additional soil was removed from this area and a confirmatory sample (S8-6.5) collected did not contain TPH-D, BTEX, or PNAs. (See Figs 1 and 2, Table 1)

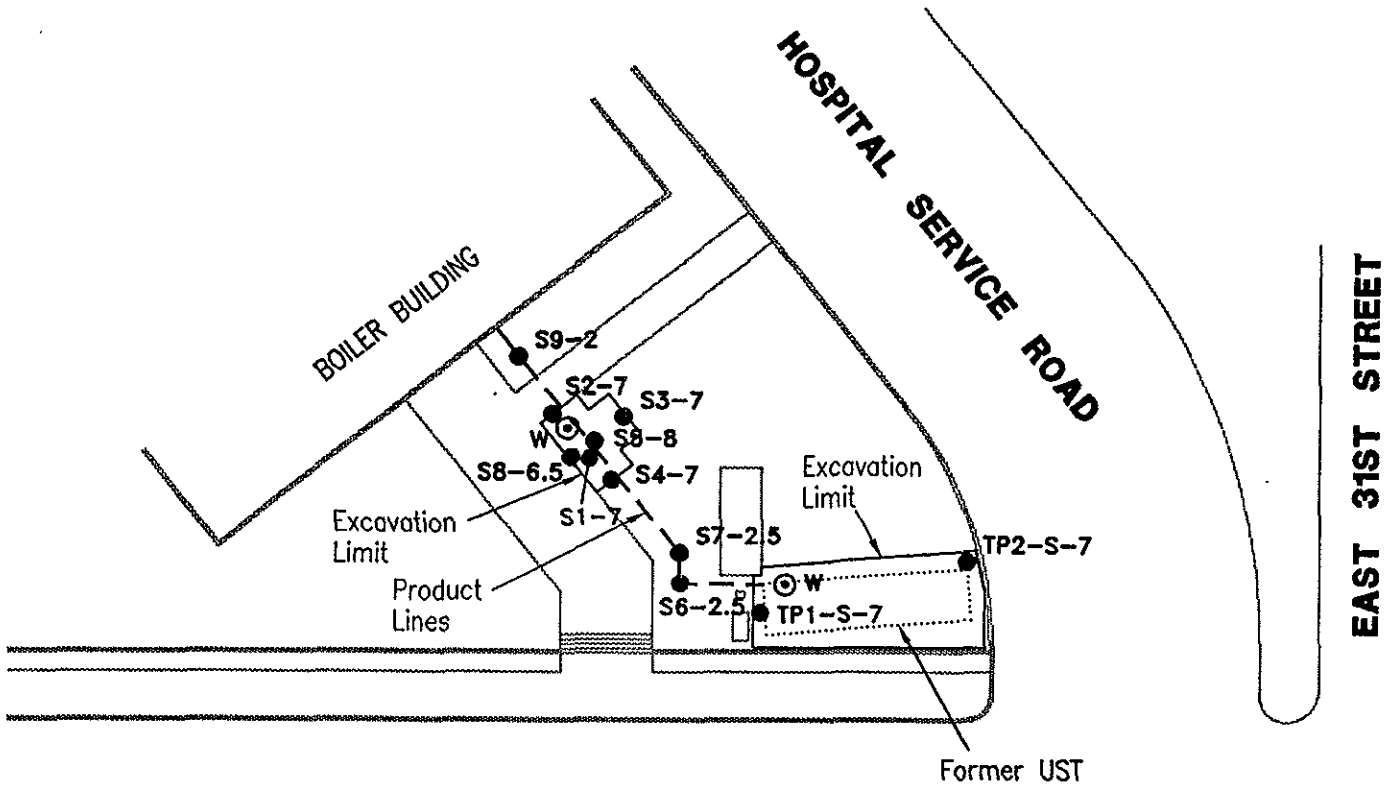
Groundwater in the pit (at 7' bgs) was purged with a vacuum truck prior to the collection of a recharged "grab" groundwater sample. Up to 690 ppb TPH-D was identified. BTEX and PNAs were not detected in this sample. (See Table 2)

On August 29, 1995 the 12K single-walled steel diesel tank was removed (and replaced with a double-walled F/G UST). Soil and a "grab" groundwater sample collected from the UST excavation did not identify elevated levels of TPH-D, BTEX, or PNAs. Approximately 250 cy of backfill soil was determined to be clean and was reused as backfill material for the new UST and at another County facility at Santa Rita. (See Fig 2, Table 1)

A 7,500 gallon diesel UST was closed in-place in February 1996. Two Geoprobe borings were advanced approximately 10' south of the UST to a depth of 35' (in the inferred groundwater flow direction, based on local topography). Soil samples were collected from 15, 20, 25, and 35' bgs and analyzed for TPH-D and BTEX. Petroleum hydrocarbons were not identified in the soil samples. Groundwater was not encountered to a depth of 35'. Approximately 35 cubic yards of concrete slurry was used to fill the UST. (See Figs 3 and 4, Table 3, and Boring Logs)

It appears the overexcavation removed most of the diesel-impacted soil in the vicinity of the former 12K UST. The fuel release from the pipe connection does not appear to have significantly impacted groundwater quality (possible perched water) at the site. Other potential fuel releases from the 12,000 or 7,500 gallon USTs were not identified. Permanent groundwater monitoring wells are not warranted at this site.

highland.1



EXPLANATION

- ● Soil sample location
- ⊙ Groundwater sample location

N

0 30

Scale in Feet

GeoStrategies

SITE PLAN
HIGHLAND HOSPITAL
1411 East 31st Street
Oakland, California

FIGURE
2

JOB NUMBER
1124.01

REVIEWED BY

DATE
October, 1995

REVISED DATE

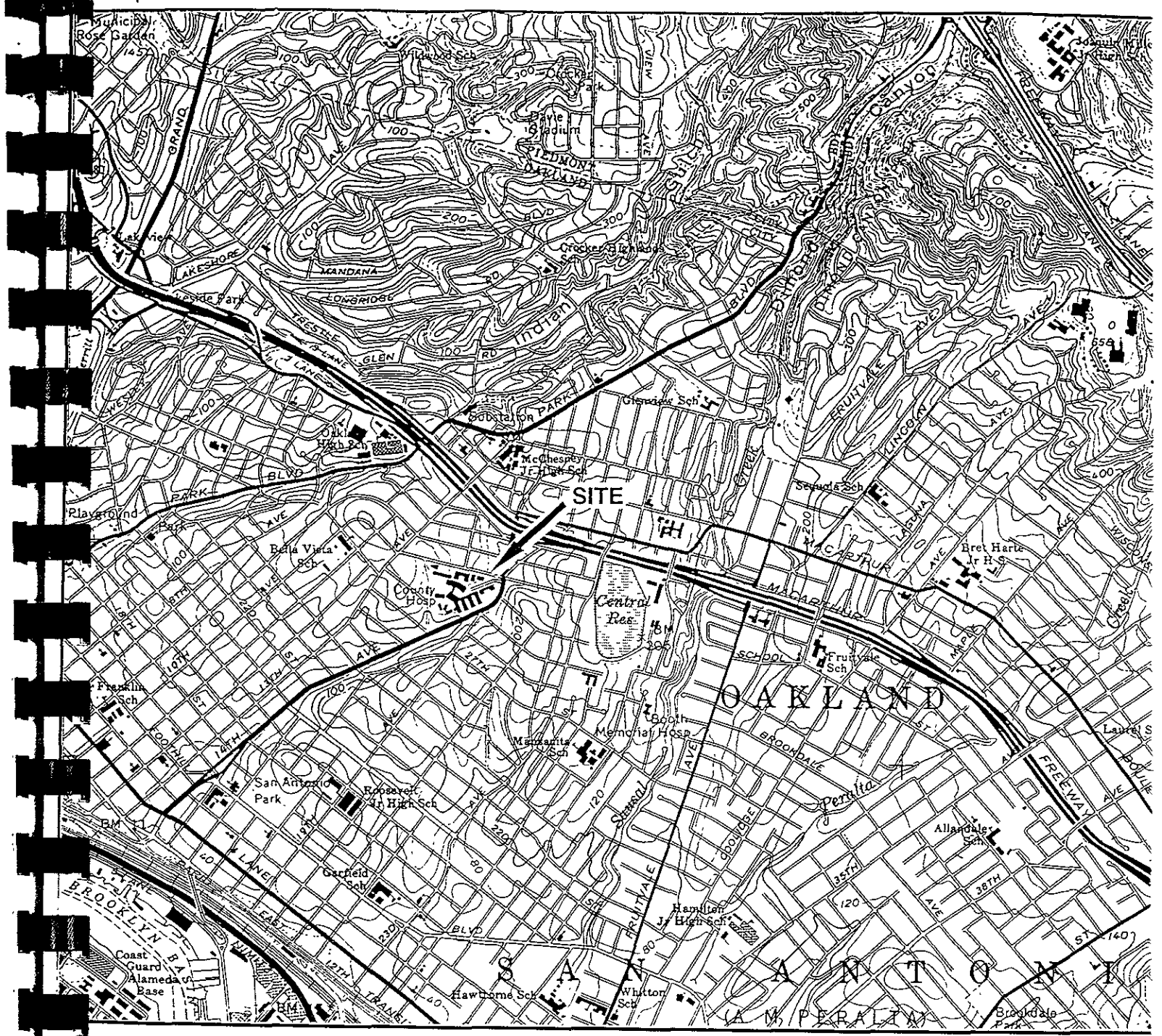
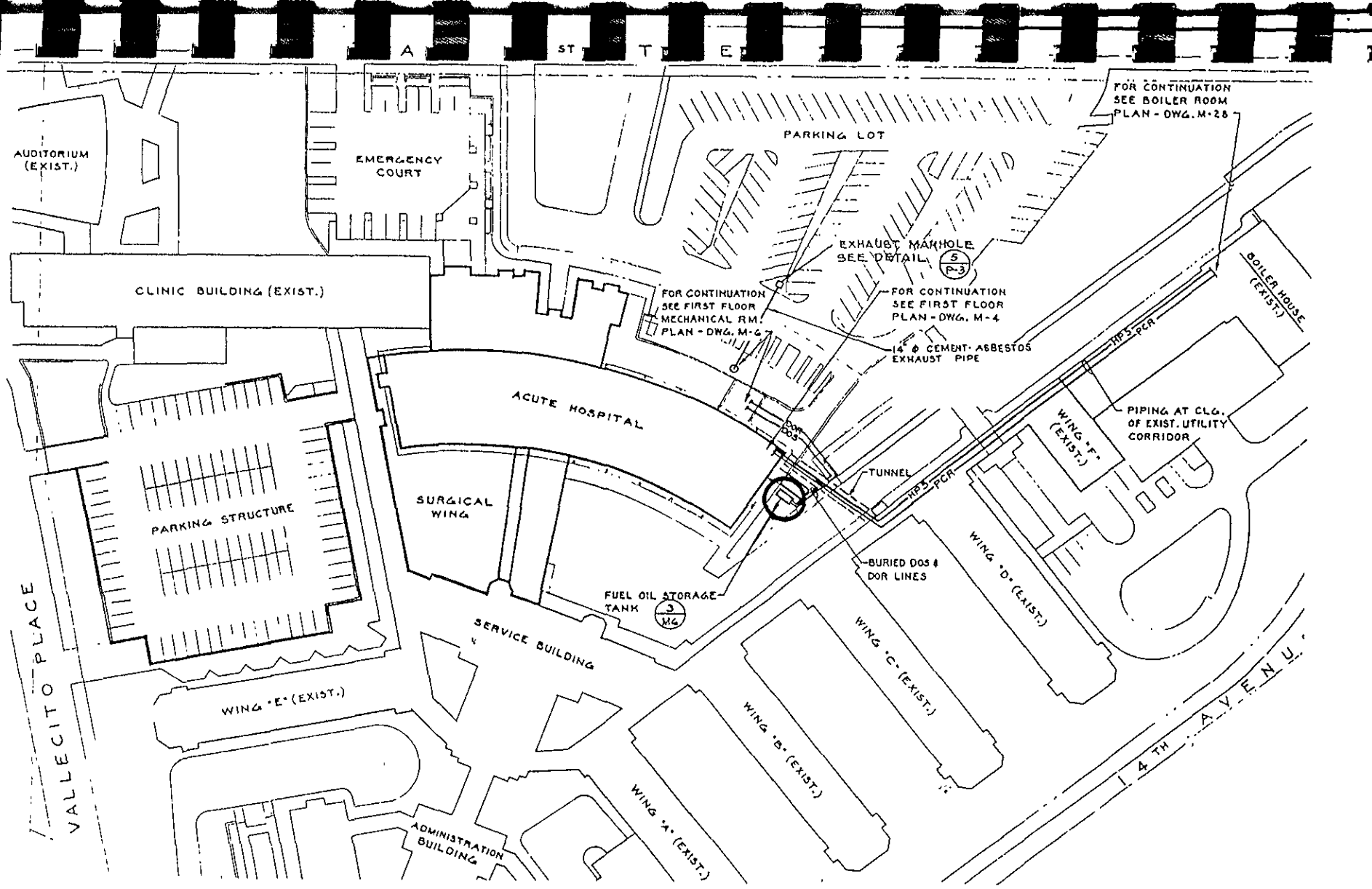


FIG 1

PSI

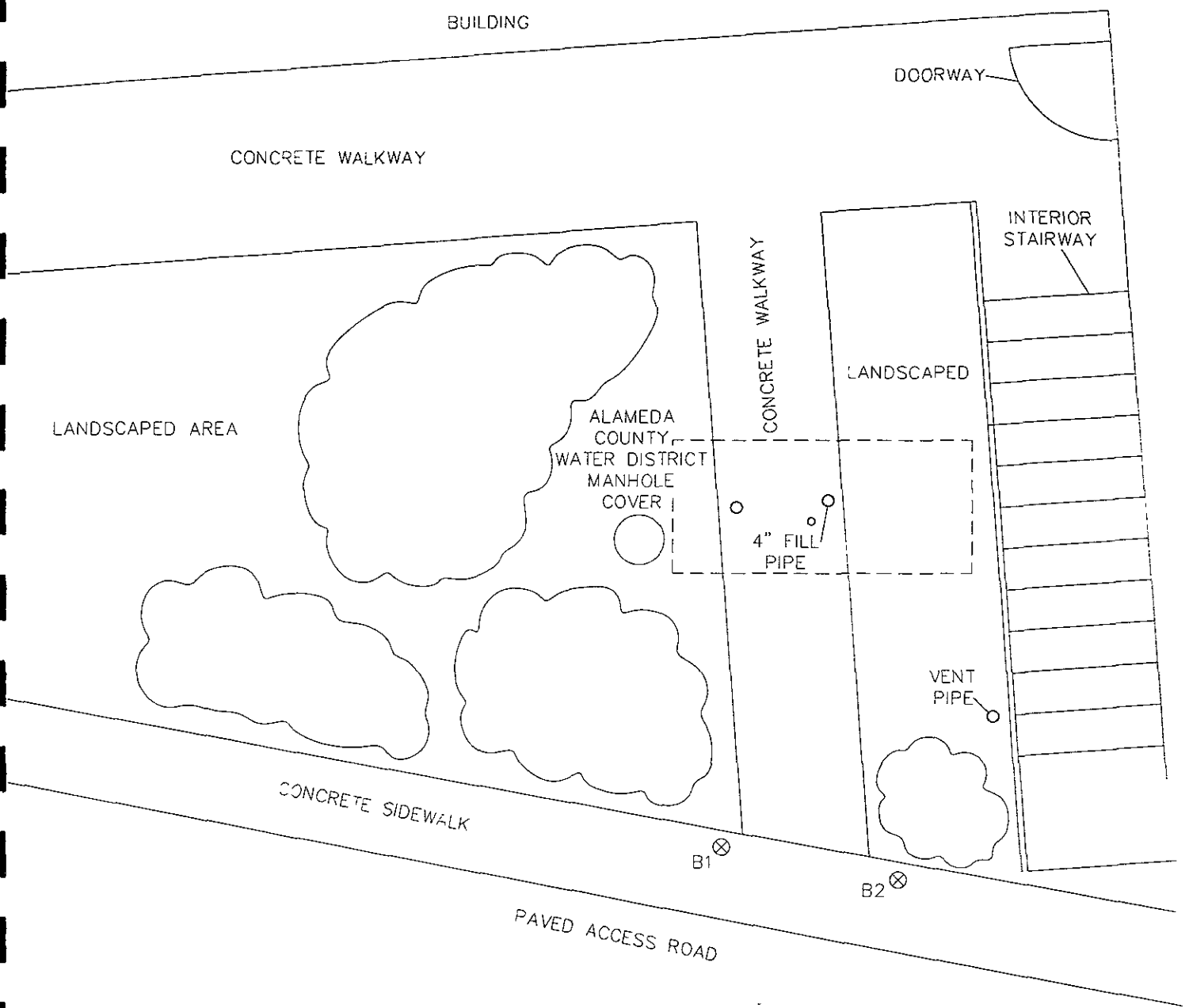
SITE LOCATION MAP
PROJECT NUMBER 6754049
DATE 10/6/95
DRAWN BY
FIGURE NO.



GeoResearch Division

PROPERTY MAP
HIGHLAND HOSPITAL
1411 EAST 31ST STREET
OAKLAND, CALIFORNIA
PROJECT NUMBER: 575-5H049

DATE 3/01/96	CKD BY:	FIGURE NO.: 3	
FILE NO: FIG2		DRAWN BY: S BOWERS	



LEGEND

B1 ⊗ SOIL BORING LOCATION AND DESIGNATION

SHRUBS

APPROXIMATE LOCATION OF ABANDONED UST

NORTH

0 2.5 5 10

SCALE IN FEET

PSI GeoResearch Division

SITE PLAN
HIGHLAND HOSPITAL
1411 EAST 31ST STREET
OAKLAND, CALIFORNIA
PROJECT NUMBER: 575-5H049

DATE	03/04/96	CKD BY:	FIGURE NO.: 4
FILE NO	5H049		DRAWN BY: L.KOCHIAN

GeoResearch

FIELD LOG OF BORING

BORING/WELL I.D. B1
SHEET 1 OF 2

PROJECT NAME	PROJECT NUMBER	ELEVATION AND DATUM	REFERENCE
HIGHLAND HOSPITAL	575-5H049	Approx. 700 feet msl	USGS, Oakland East, 1959

DRILLING COMPANY	DRILLER	DATE & TIME STARTED	DATE & TIME COMPLETED
Vironex	Chuck Coerrish	1/30/96 1150	1/30/96 1245

DRILLING EQUIPMENT METHOD	DIRECTION OF BORING	TOTAL DEPTH OF BORING
Geoprobe GH40	[x] VERTICAL [ ] SLANT _____ DEG. FROM VERT	35 feet bgs

SIZE AND TYPE OF BIT	TOTAL NO. OF SAMPLES	BULK	SS	OTHER
1" O.D. Push Probe	7		7	

DRILLING FLUID	WATER LEVEL	FIRST	AFTER HOURS
None	None encountered		

SAMPLER 1" Wide Bore Sampler	HYDROGEOLOGIST/DATE	CHECKED BY/DATE
TYPE Drive DRIVING WT. DROP	John P. Neville 1/30/96	David M. Bean

DEPTH (FEET)	WELL CONST CSG	WELL CONST FILL	OVA (PPM)	SAMPLES NO.	SAMPLES TYPE	SAMPLES BLOWS /6"	GRAPH. LOG	SOIL CLASS (USCS)	DESCRIPTION OF MATERIALS	REMARKS
								SW	SAND; grey, very moist, fine to medium, loose.	no HC odor
5			2.6	B1-5					Same as above.	no HC odor
10			1.3	B1-10					GRAVELLY SAND; yellowish brown, very moist, mostly coarse sand, some fine to coarse gravel, loose.	no HC odor
15			6.7	B1-15					Same as above.	
20			2.5	B1-20				CL	SILTY CLAY; yellowish brown, moist, mostly clay, some silt, mod. stiff, low plasticity.	no HC odor
25			0	B1-25					Same as above.	

GeoResearch

FIELD LOG OF BORING

BORING/WELL I.D. B1
SHEET 2 OF 2

PROJECT NAME	PROJECT NUMBER	HYDROGEOLOGIST	CHECKED BY/DATE
HIGHLAND HOSPITAL	575-5H049	John P. Neville 1/30/96	David M. Bean

DEPTH (FEET)	WELL CONST CSG	WELL CONST FILL	OVA (PPM)	SAMPLES NO.	SAMPLES TYPE	SAMPLES BLOWS /6"	GRAPH. LOG	SOIL CLASS (USCS)	DESCRIPTION OF MATERIALS	REMARKS
								CL		
30			1.1	B1-30					SILTY CLAY; yellowish brown, moist, mostly clay, some silt, mod. stiff, low plasticity.	no HC odor
35			0	B1-35					Same as above. Boring terminated at 35 feet bgs. Backfilled with Portland cement.	

GeoResearch

FIELD LOG OF BORING

BORING/WELL I.D. B2
SHEET 1 OF 2

PROJECT NAME	PROJECT NUMBER	ELEVATION AND DATUM	REFERENCE
HIGHLAND HOSPITAL	575-5H049	Approx 700 feet msl	USGS, Oakland East, 1959

DRILLING COMPANY	DRILLER	DATE & TIME STARTED	DATE & TIME COMPLETED
Vironex	Chuck Coerrish	1/30/96 0900	1/30/96 1/31/96 1100

DRILLING EQUIPMENT METHOD	DIRECTION OF BORING	TOTAL DEPTH
Geoprobe ~~CH40~~	[x] VERTICAL [ ] SLANT _____ DEG. FROM VERT	OF BORING 35 feet bgs

SIZE AND TYPE OF BIT	TOTAL NO. OF SAMPLES	BULK	SS	OTHER
1" Push Point	7		7	

DRILLING FLUID	WATER LEVEL	FIRST	AFTER HOURS
None	None encountered		

SAMPLER	HYDROGEOLOGIST/DATE	CHECKED BY/DATE
1" wide bore sampler TYPE Drive DRIVING WT. DROP	John P. Neville 1/30/96	David M. Bean

DEPTH (FEET)	WELL CONST CSG	WELL CONST FILL	OVA (PPM)	SAMPLES NO.	SAMPLES TYPE	SAMPLES BLOWS /6"	GRAPH. LOG	SOIL CLASS (USCS)	DESCRIPTION OF MATERIALS	REMARKS
								SW	GRAVELLY SAND w/ CLAY; yellowish brown, moist to very moist, mostly fine to coarse sand, some medium gravel, occasional clay stringers.	no HC odor
5			0.5	B2-5				CL	SANDY CLAY; greyish brown, moist, mostly clay, some fine sand, stiff, mod. plasticity.	No HC odor
10			2.4	B2-10				SW	SAND; greyish brown, moist, med to coarse, loose.	No HC odor
15			7.5	B2-15					Same as above.	No HC odor
20			4.6	B2-20				SC	CLAYEY SAND w/ GRAVEL; greyish brown, moist, mostly fine to coarse sand, clay stringers, moderate plasticity.	No HC odor
25			0	B2-25					Same as above.	No HC odor

GeoResearch

FIELD LOG OF BORING

BORING/WELL I.D. B2
SHEET 2 OF 2

PROJECT NAME	PROJECT NUMBER	HYDROGEOLOGIST	CHECKED BY/DATE
HIGHLAND HOSPITAL	575-5H049	John P. Neville 1/30/96	David M. Bean

DEPTH (FEET)	WELL CONST CSG	WELL CONST FILL	OVA (PPM)	SAMPLES NO.	SAMPLES TYPE	SAMPLES BLOWS /6"	GRAPH. LOG	SOIL CLASS (USCS)	DESCRIPTION OF MATERIALS	REMARKS
30			0	B2-30				ML	SILTY CLAY; greyish brown, moist, mostly clay, some silt, mod. stiff, low plasticity, no HC odor.	no HC odor
35			0	B2-35				CL	CLAY; greyish brown, moist, low plastiicty. Boring terminated at 35 feet bgs. Backfilled with Portland cement.	no HC odor

TABLE 1
SOIL ANALYTICAL DATA
Highland Hospital
1411 East 31st Street
Oakland, California

SAMPLE I.D.	SAMPLE DEPTH (FT)	SAMPLE DATE	TPHd (PPM)	BENZENE (PPM)	TOLUENE (PPM)	ETHYL BENZENE (PPM)	XYLENES (PPM)	PNAs (PPM)
Product Line Samples								
S1-7	7	23-Jun-95	1,500	<0.005	<0.005	<0.005	0.036	NA
S2-7	7	23-Jun-95	11	<0.005	<0.005	<0.005	<0.005	NA
S3-7	7	23-Jun-95	3	<0.005	<0.005	<0.005	<0.005	NA
S4-7	7	23-Jun-95	5	<0.005	<0.005	<0.005	<0.005	NA
S5-8	8	23-Jun-95	<1	<0.005	<0.005	<0.005	<0.005	NA
S6-2.5	2.5	13-Jul-95	<1	<0.005	<0.005	<0.005	<0.005	NA
S7-2.5	2.5	13-Jul-95	<1	<0.005	<0.005	<0.005	<0.005	NA
S8-6.5	6.5	13-Jul-95	<1	<0.005	<0.005	<0.005	<0.005	<0.330
S9-2	2	13-Jul-95	6	<0.005	<0.005	<0.005	<0.005	NA
Tank Pit Samples								
TP1-S-7	7	29-Aug-95	2.4	<0.005	<0.005	<0.005	<0.005	<0.05
TP2-S-7	7	29-Aug-95	<1	<0.005	<0.005	<0.005	<0.005	<0.05
Stockpile Samples								
SP-A,SP-B,SP-C,SP-D	---	23-Jun-95	400	0.007	0.045	0.041	0.210	NA
SPP-A,B,C,D	---	30-Aug-95	6.7	<0.005	<0.005	<0.005	<0.005	NA
SPP-E,F,G,H	---	30-Aug-95	6.0	<0.005	<0.005	<0.005	<0.005	NA
SPP-I,J,K,L	---	30-Aug-95	5.1	<0.005	<0.005	<0.005	<0.005	NA
SPP-M,N,O,P	---	30-Aug-95	1.3	<0.005	<0.005	<0.005	<0.005	NA
SPP-Q,R,S,T	---	30-Aug-95	6.0	<0.005	<0.005	<0.005	<0.005	NA

TPHd = Total petroleum hydrocarbons calculated as diesel.
PNAs = Polynuclear aromatic hydrocarbons.
FT = Feet.
PPM = Parts Per Million.
NA = Not analyzed.

Notes:
1. All data shown as <x are reported as ND (none detected).
2. Laboratory values are reported in units of mg/kg which are generally synonymous with parts per million (ppm).
3. Sample SP-A,SP-B,SP-C,SP-D was analyzed in addition for reactivity (sulfide, cyanide and reaction with water were not detected), corrosivity (pH 7.3), and ignitability in solid (negative).

TABLE 2
GROUNDWATER ANALYTICAL DATA
Highland Hospital
1411 East 31st Street
Oakland, California

SAMPLE I.D.	SAMPLE DATE	TPHd (PPB)	BENZENE (PPB)	TOLUENE (PPB)	ETHYL BENZENE (PPB)	XYLENES (PPB)	PNAs (PPB)
W (from leaking product line excavation)	13-Jul-95	690	<0.5	<0.5	<0.5	<0.5	<10
W (from UST excavation)	30-Aug-95	180	<0.5	<0.5	<0.5	<0.5	<2.0
W (from UST excavation)	06-Sept-95	NA	NA	NA	NA	NA	<2.0

TPHd = Total petroleum hydrocarbons calculated as diesel.
PNAs = Polynuclear aromatic hydrocarbons.
PPB = Parts Per Billion.
NA = Not analyzed.

Notes:
1. All data shown as <x are reported as ND (none detected).
2. Laboratory values are reported in units of ug/kg which are generally synonymous with parts per billion (ppm).

TABLE # 3
ANALYTICAL RESULTS FOR SOIL
HIGHLAND HOSPITAL
1411 EAST 31st STREET
OAKLAND, CALIFORNIA

Sample ID	TPH-D mg/kg	Benzene mg/kg	Toluene mg/kg	Ethylbenzene mg/kg	Total Xylenes mg/kg
B1-15	ND	ND	ND	ND	ND
B1-20	ND	ND	ND	ND	ND
B1-25	ND	ND	ND	ND	ND
B1-35	ND	ND	ND	ND	ND
B2-15	ND	ND	ND	ND	ND
B2-20	ND	ND	ND	ND	ND
B2-25	ND	ND	ND	ND	ND
B2-35	ND	ND	ND	ND	ND
Detection Limits	0.5	0.005	0.005	0.005	0.015

NOTES:

mg/kg = milligrams per kilogram

ND = Not detected above laboratory detection limits

TPH-D = Total Petroleum Hydrocarbons as Diesel