



HydroSolutions of California, Inc.

HYDRO SOLUTIONS
POLLUTION
05 MAY 11 PM 3:41

P.O. Box 922 • 13975 Wings of Morning
Nevada City, California 95959
(530) 478-1260 • FAX (530) 478-1264

*5/25/00
forwarded to Steve Baker
re: status of site.*

May 5, 2000

*SHC case closed
SH*

Susan Hugo
Alameda County Health Care Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

**SUBJECT: CONTAMINATED SEDIMENT REMOVAL
4800 SAN PABLO AVENUE (SUBJECT PROPERTY)
EMERYVILLE, CALIFORNIA (STID # 4987)**

RRSP: 00286-53

Dear Susan:

The City of Oakland and Emeryville have, in recent years, been completing the redevelopment of the subject property and adjoining parcel to the north. A pollution management plan has been maintained throughout site development as a part of satisfying conditions of the low risk closure authorized by Alameda County Environmental Health. Pollution management tasks include; 1) monitoring organic vapor during the installation of selected piers and 2) monitoring of subsurface conditions present during sewer and water trenching activities.

PIER INSTALLATION

HydroSolutions of California, Inc. (HSCI) was present during the installation of selected piers in July 1999. An Hnu meter was used to measure organic vapor in the area surrounding the face plate of the pier. No conditions suggesting the presence of organic vapors or residual petroleum were noted.

UTILITY TRENCHES

HSCI was requested to be present, once again, beginning March 31, 2000. Installation of water, sewer and electrical trenches were to be completed between the east and west buildings. Trenches were located along a north-south orientation and directly in line with abandoned boreholes, B-6 and WB-14 locations. Ultimately, HSCI was present during excavation on March 31, 2000 and April 4 through 7, 2000.

The excavation activities monitored by HSCI began at the centerline of 48th Street and continued north for approximately

Page 2 of 4
HydroSolutions of California, Inc.
RRSP: 00286-53

70 feet (March 31, 2000). Sewer and water lines which were exposed beneath the street were surrounded by sediment which was brown (normal appearance) and 0 ppm organic vapors.

As the trench was advanced into the subject property, fine sands, buried concrete blocks and a bentonite plug from one of the wells were encountered. Total depth of the trench was five feet. The first day of trench construction ended at approximately 25 feet into subject property with no visible presence of petroleum.

HSCI was contacted by Bob Hansen (Fitzmaurice, Inc.) the week of April 3, 2000. Trenching activities encountered contaminated sediment just north of the sand filled area surrounding WB-14 locale. Beginning April 4, contaminated sediment was removed from the ground surface. Contamination was first encountered at the four foot depth, approximately, and continued to approximately ten feet below present grade.

Contaminated sediment is described as a blue-grey silty sand, clay, and silty, sandy clay with gasoline-like odors. Six confirmation sediment samples were collected from excavation walls and floor. Figure 1 illustrates the dimensions of the excavation and sample locations. Bob Hansen (Fitzmaurice) stated that the eastern building was more stable than the western building (based on number of pilings) therefore excavation along the east side of the trench was terminated at approximately two feet from the building (vertical wall). The west side of the trench was tiered and also ended within two feet of the building.

Ultimately, the excavation was 28 feet by 22 feet laterally and penetrated the 4.5 foot, 7.5 foot and 10 foot depths. A sanitary sewer line and electrical conduit are to be constructed through the excavated area. Based on the depth of each utility line, remaining contaminated sediment will be present between 1.5 feet and four feet below the bottom of each utility.

Contaminated sediment was stockpiled in the middle of the property. Plastic was placed below and over the stockpile. A four-point composite sediment sample was collected from the stockpile and submitted to a California certified laboratory for analysis of TPH-gasoline, diesel, benzene, toluene, xylene, ethylbenzene and total lead. Presently, the sediment is being profiled by the Redwood landfill and will be transported, tentatively, late next week.

TABLE 1

Sample ID	TPH-G	Benzene	BTXE	Comment
GS-1	2.56	ND	0.006	Wall, 8 ft depth
GS-2	928	0.92	7.840	Floor, 10 ft depth
GS-3	701	ND	5.120	Floor, 7.5 ft depth
GS-4	ND	ND	ND	Wall, 4.5 ft depth
GS-5	ND	ND	ND	Floor, 6 ft depth
GS-6	2550	ND	27.74	Floor, 6 ft depth
Stockpile	ND	ND	ND	4-pt. composite sample
	Lead content of sample is 11.3 mg/kg			

Concentrations reported in mg/kg. Analyses by EPA Methods 8015 and 8020. ND denotes not detectable (see attached laboratory results for specific detectable limits).

Diesel was reported as ND up to 1.5 mg/kg however sample chromatogram did not match standard diesel chromatogram.

Subsequent to contaminated sediment removal, clean engineered fill was used to backfill the trench.

CONCLUSIONS

Based on the depth and configuration of contaminated sediment removed to date, it is likely that the historic underground storage tank system operated by the on-site service station was discovered. Qualitatively, the ratio of volatile organics and TPH-gasoline concentrations suggests that the gasoline leak is likely to have occurred many years ago.

Although, approximately 80 cubic yards of contaminated sediment was removed, contamination remains beneath each building and below the sanitary sewer, electrical and water utility lines. Excavation activities were limited by available space and proximity to buildings. Detectable TPH-gasoline ranges from 2.56 mg/kg to 2550 mg/kg. Nondetectable to low levels of benzene and 0.006 mg/kg to 27 mg/kg BTXE are also present. Based on past site assessment work and confirmation samples collected in April 2000; 1) the native silty sandy clays act as a low permeability barrier to vapor migration, 2) minimal to no benzene is present and 3) minimal BTXE is present in subsurface.

Page 4 of 4
HydroSolutions of California, Inc.
RRSP: 00286-53

It has been recommended that; 1) either a vapor trap be installed at the electrical conduit and just prior to building penetration or 2) a liner be placed around electrical utilities lines that are located over known contaminated sediment. Sediment contamination is present between 1.5 feet and four feet beneath the utility bottoms, approximately. This precautionary effort will further minimize the possible migration of vapor into the building structure.

If you have further questions regarding the recent remedial response, please contact me. A copy of the manifest will be submitted to your office upon receipt by HSCI.

Respectfully submitted,



Stephen J. Baker
Project Manager

Attachment: Figure 1. Confirmation Sample Location Map
Laboratory reports and chain-of-custody forms

ms:

cc: Ty Robertson, Gateway Hsg. Corp.

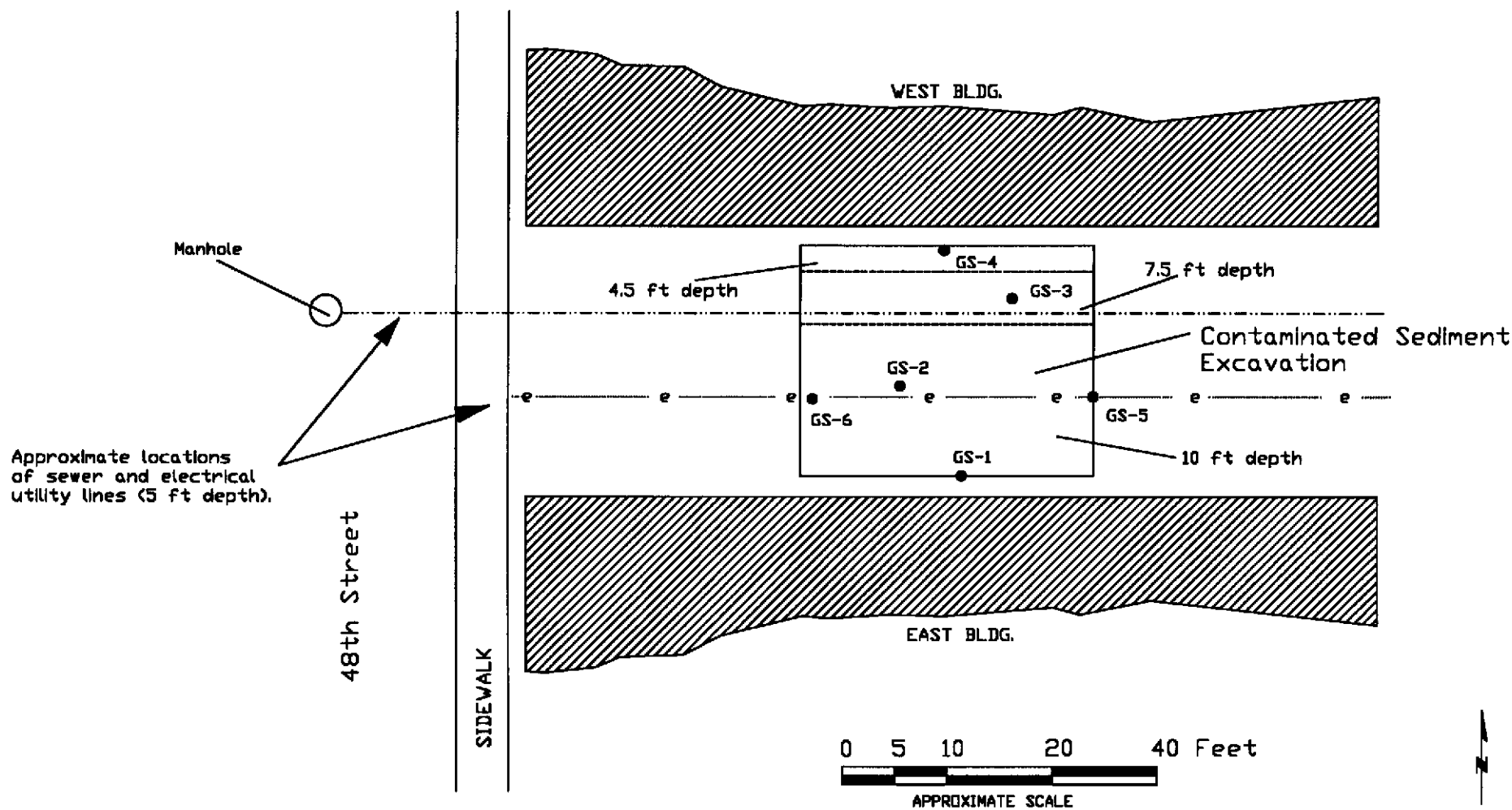
↳ 405 14th St. Suite 400 Oakland 94612

(510) 763-7676 X 20

1) copies manifest & ryd truck load

2)

SAN PABLO AVENUE



Approximate locations of sewer and electrical utility lines (5 ft depth).


48th Street

SIDEWALK

EAST BLDG.

0 5 10 20 40 Feet

APPROXIMATE SCALE



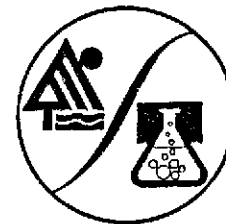
HydroSolutions of California, Inc.
 P.O. Box 922, Nevada City, California 95959
 (916)478-1280, fax (916)478-1284

Title	CONFIRMATION SAMPLE LOCATION MAP
Site	4800 SAN PABLO AVENUE EMERYVILLE, CALIFORNIA

Project Number	00286
Date	05-04-00
Scale	AS SHOWN

FIGURE
1

**EXCELICHEM
ENVIRONMENTAL LABS**



500 Giuseppe Court, Suite 9
Roseville, CA 95678

Phone#: (916) 773-3664 Fax#: (916) 773-4784

ANALYSIS REPORT

Attention: Steve Baker
Hydrosolutions
P.O. Box 922
Nevada City, CA 95959
Project: Pablo/4800 San Pablo Ave, Emeryville
Method: EPA 8015m/8020

Date Sampled: 04/07/00
Date Received: 04/07/00
BTEX/TPHg Analyzed: 04/07/00
Matrix: Soil
Units: mg/kg

Client Sample I.D.	Stockpile	
LAB. NO.	S0400156	
ANALYTE	R/L	Results
Benzene	0.005	ND
Toluene	0.005	ND
Ethylbenzene	0.005	ND
Total Xylenes	0.005	ND
TPH as Gasoline	1.00	ND

QA/QC %RECOVERY		
	LCS	LCSD
Benzene	98	103
Toluene	98	104
Ethylbenzene	100	104
Total Xylenes	100	106

QA/QC Analyzed: 04/08/00

ND = Not detected. Compound(s) may be present at concentrations below the reporting limit.

R/L = Reporting Limit

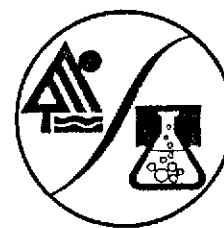


Laboratory Representative

04/12/00
Date Reported

**EXCELCHEM
ENVIRONMENTAL LABS**

500 Giuseppe Court, Suite 9
Roseville, CA 95678
Phone#: (916) 773-3664 Fax#: (916) 773-4784



ANALYSIS REPORT

Attention: Steve Baker
Hydrosolutions
P.O. Box 922
Nevada City, CA 95959
Project: Pablo/4800 San Pablo Ave, Emeryville
Method: EPA 7420

Date Sampled: 04/07/00
Date Received: 04/07/00
Date Analyzed: 04/10/00
Matrix: Soil
Units: mg/kg

Client Sample I.D.	Stockpile	
LAB. NO.	S0400156	
ANALYTE	R/L	Results
Lead	2.0	11.3

QA/QC % RECOVERY		
	LCS	LCSD
Lead	93	97

QA/QC Analyzed: 04/10/00

ND = Not detected. Compound(s) may be present at concentrations below the reporting limit.

R/L = Reporting Limit



Laboratory Representative

04/12/00
Date Reported

EXCELCHEM ENVIRONMENTAL LABS



500 Giuseppe Court, Suite 9
Roseville, CA 95678
Phone#: (916) 773-3664 Fax#: (916) 773-4784

ANALYSIS REPORT

Attention: Steve Baker
Hydrosolutions
P.O. Box 922
Nevada City, CA 95959
Project: Pablo/00337
Method: EPA 8020/8015m

Date Sampled: 04/05,06/00
Date Received: 04/06/00
BTEX/TPHg Analyzed: 04/11,12/00
TPHd Analyzed: 04/13/00
Matrix: Soil
Units: mg/kg

Client Sample I.D.	GS-1		GS-2		GS-3		GS-4		GS-5	
LAB. NO.	S0400122		S0400123		S0400124		S0400125		S0400126	
ANALYTE	R/L	Results	R/L	Results	R/L	Results	R/L	Results	R/L	Results
Benzene	0.005	ND	0.51	0.92	0.52	ND	0.005	ND	0.005	ND
Toluene	0.005	ND	0.51	1.11	0.52	0.70	0.005	ND	0.005	ND
Ethylbenzene	0.005	ND	0.51	2.91	0.52	2.27	0.005	ND	0.005	ND
Total Xylenes ¹	0.005	0.006	0.51	2.90	0.52	2.15	0.005	ND	0.005	ND
TPH as Gasoline	1.00	2.56	51.0	928	51.2	701	1.00	ND	1.00	ND
TPH as Diesel	1.0	ND	1.0	1.5*	1.0	1.2*	1.0	ND	1.0	ND

QA/QC %RECOVERY		
	LCS	LCSD
Benzene	101	106
Toluene	102	107
Ethylbenzene	104	108
Total Xylenes	105	110
TPH as Diesel	74	74

QA/QC Analyzed: 04/10,13/00

*The sample chromatogram does not match our standard diesel chromatogram. All peaks were integrated within the diesel range. The result is an estimated value.

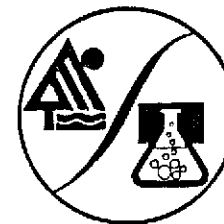
ND = Not detected. Compound(s) may be present at concentrations below the reporting limit.

R/L = Reporting Limit


Laboratory Representative

04/17/00
Date Reported

**EXCELICHEM
ENVIRONMENTAL LABS**



500 Giuseppe Court, Suite 9
Roseville, CA 95678
Phone#: (916) 773-3664 Fax#: (916) 773-4784

ANALYSIS REPORT

Attention: Steve Baker
Hydrosolutions
P.O. Box 922
Nevada City, CA 95959
Project: Pablo/4800 San Pablo Ave, Emeryville
Method: EPA 8020/8015m

Date Sampled: 04/07/00
Date Received: 04/07/00
BTEX/TPHg Analyzed: 04/12/00
TPHd Analyzed: 04/08/00
Matrix: Soil
Units: mg/kg

Client Sample I.D.	GS-6	
LAB. NO.	S0400155	
ANALYTE	R/L	Results
Benzene	1.31	ND
Toluene	1.31	2.84
Ethylbenzene	1.31	13.5
Total Xylenes	1.31	11.4
TPH as Gasoline	131	2550
TPH as Diesel	5.0	ND

QA/QC %RECOVERY		
	LCS	LCSD
Benzene	98	102
Toluene	100	104
Ethylbenzene	101	105
Total Xylenes	102	107
TPH as Diesel	95	90

QA/QC Analyzed: 04/08,12/00

ND = Not detected. Compound(s) may be present at concentrations below the reporting limit.

R/L = Reporting Limit



Laboratory Representative

04/13/00
Date Reported

Excelchem
Environmental Labs

500 Giuseppe Court, Suite 9
Roseville, CA 95678
(916) 773-3664

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager:

S. Baker

Phone #:

530-478-1260

ANALYSIS REQUEST

TAT

Company/Address:

HSCI

FAX #:

530 - 478 - 1264

Project Number:

00337

P.O.#:

Project Name:

PALO

Project Location:

4800 SAN PABLO AVE, EMERYVILLE

Sampler Signature:

[Signature]

Sample ID	Sampling		Container				Method Preserved				Matrix		BTEX (502/8020)	BTEX/TPH as Gasoline (602/8020/8015)	TPH as Diesel (8015)	TPH as Oil (8015)	Total Oil & Grease (5520 B/E, F)	Total Oil & Grease IR (5520 B/E, F, C)	96 - Hour Fish Bioassay	EPA 601/8010	EPA 602/8020	EPA 615/8150	EPA 608/8080 - Pesticides	EPA 608/8080-PCBs	EPA 624/8240	EPA 625/8270	ORGANIC LEAD	Reactivity, Corrosivity, Ignitibility	WEI (✓)		RUSH SERVICE (12 hr) or (24 hr)	EXPEDITED SERVICE (48 hr) or (1 wk)	STANDARD SERVICE (2WK)		
	DATE	TIME	VOA	SLEEVE	1L GLASS	1L PLASTIC	HCl	HNO ₃	ICE	NONE	WATER	SOIL																	TOTAL (✓)						
<i>65-1</i>	<i>4-5-00</i>												<i>S</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>04</i>	<i>00</i>	<i>01</i>	<i>22</i>															
<i>65-2</i>	<i>↓</i>												<i>S</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>04</i>	<i>00</i>	<i>01</i>	<i>23</i>															
<i>65-3</i>	<i>↓</i>												<i>S</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>04</i>	<i>00</i>	<i>01</i>	<i>24</i>															
<i>65-4</i>	<i>↓</i>												<i>S</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>04</i>	<i>00</i>	<i>01</i>	<i>25</i>															
<i>65-5</i>	<i>4-6-00</i>												<i>S</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>04</i>	<i>00</i>	<i>01</i>	<i>26</i>															

Relinquished by: *[Signature]*

Date Time

4/6/00 1:15

Received by:

Excelchem
[Signature]

Remarks:

Please fax results

Relinquished by:

Date Time

Received by:

Relinquished by:

Date Time

Received by Laboratory:

Bill To:

HSCI

