

April 13, 2010

Mr. Markus Niebanck
City of Emeryville
Economic Development and Housing Department
1333 Park Avenue
Emeryville, CA 94608

**Subject: Phase II Preliminary Subsurface Investigation
3706 San Pablo Avenue and 1066-1072 37th Street, Emeryville, California and
1025 W. MacArthur Boulevard, Oakland, California**

Dear Mr. Niebanck:

This Phase II Preliminary Subsurface Investigation (Phase II) was completed in accordance with the December 18, 2009 letter proposal from The Source Group, Inc. (SGI) to the City of Emeryville titled *Proposal for Preliminary Subsurface Investigation*. The Phase II work was requested subsequent to the November 20, 2009 publication of SGI's *Phase I Environmental Site Assessment* for the subject properties, prepared for the City of Emeryville. The original scope of work for the Phase II included the installation of two borings in each of the three warehouse style buildings on the subject properties (Figure 1). Soil and groundwater samples would be collected and analyzed for select constituents in order to provide screening level data to evaluate potential issues related to subsurface contamination.

Prior to the start of Phase II boring installation activities, it was learned that access to two of the three warehouse style buildings on the subject properties, specifically Buildings 2 and 3, were not available as a result of ongoing legal issues related to ownership. Based on your verbal authorization, we proceeded with the Phase II investigation of Building 1 that occurred on January 28, 2010. Following the February 17, 2010 submittal of the *Phase II Preliminary Subsurface Investigation* letter which summarized the results of the January 28 investigation, it was learned that access issues related to Building 2 had been resolved. Again following verbal authorization from you to proceed, the investigation of Building 2 was carried out on March 31, 2010. This letter presents the combined soil and groundwater results from the two borings installed within Building 1 and three borings installed within Building 2.

Work Scope

Prior to the start of drilling activities, underground service alert (USA) was contacted to mark utilities leading to the building being investigated. A permit to install the borings was obtained from the Alameda County Water District (ACWD) for each field event (Attached as Appendix A). A site-specific HASP was prepared that complies with Federal Occupational Safety and Health Administration (OSHA) regulations (29 CFR, Section 1910.120). All SGI personnel and subcontractors associated with the project were required to be familiar and comply with all provisions of the site-specific HASP.

Building 1 Investigation

Two borings were installed within Building 1 on January 28, 2010 (Figure 1). According to the work scope, each boring was to be advanced to 15-feet below ground surface, or to groundwater, whichever was reached first. The first boring (SB-1) was installed near the middle of Building 1, in the third bay from the south end of the building. Historical data show that this bay was used at one time as a machine shop, and then later as an automobile repair shop. The second boring (SB-2) was installed in a small basement located at the northeast corner of the building. The boring was installed just to the west of a water filled sump located along the east wall of the basement. Coring equipment was used to penetrate the concrete building slab at both boring locations.

Boring SB-1 was advanced to a total depth of 15-feet bgs using a man portable ('badger') direct push drill rig. Soil was continuously sampled from surface to maximum boring depth. Groundwater was not encountered in this boring. Visual inspection and head space measurements for VOCs using a photo ionization detector (PID) revealed no indication of contamination in any of the recovered soil. A soil sample from maximum depth (SB-1@15') was collected for laboratory analysis. Boring SB-2 was continuously cored using a hand auger to a total depth of 7-feet bgs, the depth at which groundwater was encountered. The hand tool was used for drilling as the portable drill rig could not be brought down to the basement area. Note that the slab grade elevation difference between SB-1 and SB-2 was approximately 10-feet. Visual inspection and head space measurements for VOCs using a PID revealed no indication of contamination in any of the recovered soil. A soil sample was collected at 5-feet (SB-2@5') and a groundwater sample (SB-2 water) was collected for laboratory analysis. Following the collection of soil and groundwater samples, both borings were abandoned according to ACWD guidelines. Copies of the soil boring logs for SB-1 and SB-2 are attached as Appendix B.

Building 2 Investigation

Three borings were installed within Building 2 on March 31, 2010 (Figure 1). Based on knowledge obtained during the Building 1 investigation, each boring was to be advanced to 25-feet below ground surface, or to groundwater, whichever was reached first. Boring SB-3 was installed at the north end of Building 2, just west of what was likely a footing for a piece of machinery. Boring SB-4 was installed at the south end of the building adjacent to a floor drainage grate. Boring SB-5 was installed near the center of Building 2, midway between SB-3 and SB-4.

All three borings were installed using a Geoprobe 6600 series direct push drilling rig. Soil was continuously sampled from surface to maximum boring depth. A soil sample was collected for laboratory analysis from a depth of 3-feet bgs in each of the three borings (SB-3@3', SB-4@3', and SB-5@3'). Visual inspection and head space measurements for VOCs using a PID revealed no indication of contamination in any of the recovered soil. Groundwater was encountered in all three borings at a depth of approximately 17-feet bgs. A groundwater sample was collected from all three borings (SB-3 water, SB-4 water, and SB-5 water) and submitted for laboratory analysis. Following the collection of soil and groundwater samples, all three borings were abandoned according to ACWD guidelines. Copies of the soil boring logs for SB-3 through SB-5 are attached as Appendix B.

Soil and Groundwater Sample Analysis

All five soil samples and four groundwater samples were submitted to Curtis and Tompkins, Ltd. (C&T), a State of California certified laboratory, located in Berkeley, California. The soil and groundwater samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg) and as diesel (TPHd) by United States Environmental Protection Agency (EPA) method 8015B, volatile organic compounds (VOCs) by EPA method 8260, and Title 22 metals (metals) by EPA methods 6010B and 7471A. Note, due to the limited amount of sample recovered, groundwater from boring SB-4 was only analyzed for TPHg and VOCs.

Results

TPHd were detected in soil samples from all borings with the exception of SB-1@15', with the maximum detected concentration of 87 milligrams per kilogram (mg/kg) found in sample SB-3@3'. TPHg were not detected in any soil samples. No VOCs were found in any soil sample with the exception of a 0.029 mg/kg concentration of trichloroethene (TCE) found in SB-4@3'. Concentrations of metals in all borings were below California Environmental Protection Agency (CalEPA) California Human Health Screening Levels (CHHSLs) under the residential scenario with the exception of arsenic. However, it is likely that the arsenic concentrations are naturally derived background levels as the concentrations were within reasonable background ranges. Soil results are summarized on Table 1.

Groundwater constituents found in concentrations above method detection limits include TPHd, TPHg, cis-1,2-dichloroethene (cis-1,2-DCE), trichloroethene (TCE), toluene, ethylbenzene, xylenes, chlorobenzene, vinyl chloride (VC), 1,2-dichloroethane (1,2-DCA) and 1,2,4-trimethylbenzene. The detected compounds were compared to groundwater screening levels published by the California Regional Water Quality Control Board (CRWQCB). TPHg, TPHd, cis-1,2-DCE, TCE, VC and 1,2-DCA concentrations all exceeded CRWQCB screening levels in one or more groundwater samples. In general, the highest concentrations of detected compounds were found in the sample from boring SB-4. Concentrations of metals were below CRWQCB drinking water screening levels with the exception of barium, thallium and vanadium. Exceedances of barium and vanadium were found in all tested samples, while an exceedance of thallium was only found in the sample from boring SB-2. Groundwater results are summarized on Table 2.

Conclusions

At the two boring locations within Building 1, tested concentrations of all constituents in soil were below screening levels with the exception of arsenic. However, it is likely that concentrations of arsenic were naturally occurring and reflect background levels in soil as opposed to anthropomorphic derived waste. The elevated TCE concentration in groundwater suggests the presence of a local plume. The lack of TCE in soil suggests that the source of the plume is likely from upgradient of Building 1.

At the three boring locations within Building 2, tested concentrations of all constituents in soil were below levels of concern with the exception of TCE and arsenic. As stated above, the concentrations of arsenic are likely reflective of background concentrations. However, the TCE in soil could be the result of a historical release. TPHd was found in borings SB-3 and SB-5

(SB-4 was not tested) at concentrations above the CRWQCB screening level. These concentrations correspond with low concentrations of TPHd in shallow soil and could be reflective of either wide spread use of a petroleum hydrocarbon product in a former manufacturing process (e.g. cutting fluid) or could be the result of naturally occurring hydrocarbons. TPHg, cis-1,2-DCE, TCE, VC and 1,2-DCA were all found in boring SB-4 at concentrations exceeding their respective CRWQCB screening levels, suggesting the presence of a local chlorinated solvent plume. Note that TCE was also found in the soil from this boring which indicates that former activities within Building 2 near the SB-4 location contributed to the plume.

Concentrations of barium and vanadium were found in all tested groundwater samples in excess of CRWQCB screening levels. It is likely that they are associated with naturally occurring concentrations of those metals found in soil.

In general, groundwater flows from east to west, toward San Francisco Bay, thus there is the potential for additional sources of contaminants somewhere to the east, such as toward Building 3. It is recommended that, when practical, the installation of borings in Building 3 for the collection of soil and groundwater samples be completed.

If you have any questions regarding the information in this report, please do not hesitate to contact me at 925-944-2856 x316.

Sincerely,

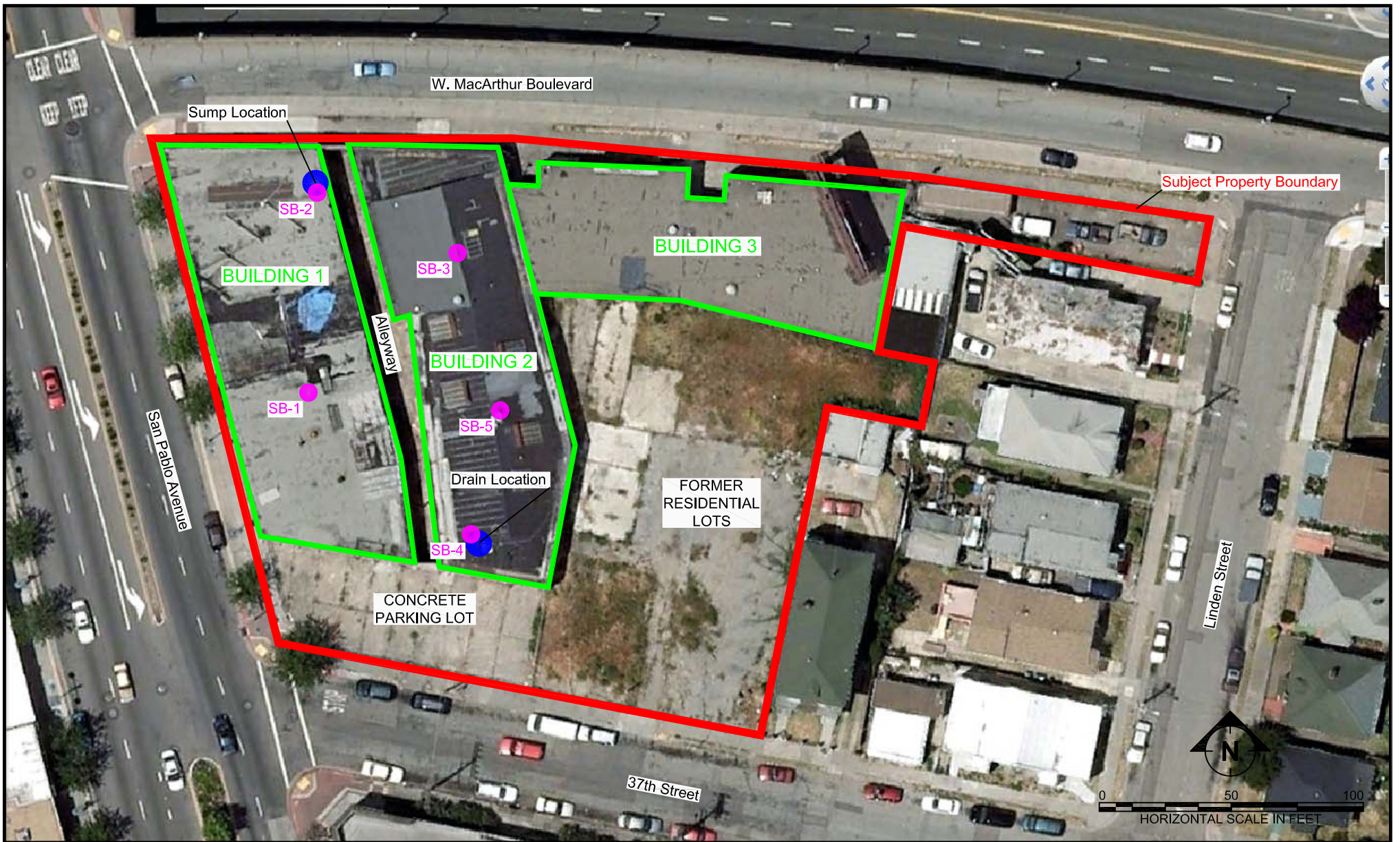
The Source Group, Inc.

A handwritten signature in black ink, appearing to read "Jon R. Philipp". The signature is written in a cursive, flowing style.

Jon R. Philipp, P.G., C.Hg.
Senior Hydrogeologist

Attachments: Figure 1
Table 1
Table 2
Appendix A
Appendix B

FIGURE



SGI environmental **THE SOURCE GROUP, INC.**

3451-C VINCENT ROAD
PLEASANT HILL, CA 94523

EMERYVILLE REDEVELOPMENT
PROJECT AREA
EMERYVILLE, CALIFORNIA

PROJECT NO.
01-EMER-001

DATE
11/12/09

DR. BY:
JP

APP. BY:
AZ

SUBJECT PROPERTY FEATURES MAP

FIGURE

1

TABLES

Table 2
Groundwater Results
3706 San Pablo Avenue
Emeryville, California

Sample	SB-2 Water	SB-3 Water	SB-4 Water	SB-5 Water	Groundwater Screening Value - 1
TPHg	76Z	ND	130	ND	100
TPHd	65Y	120Y	NS	190Y	100
cis-1,2-Dichloroethene	4.8	ND	320	0.8	6
Trichloroethene (TCE)	30	ND	440	3.5	5
Toluene	5.7	ND	ND	ND	40
Ethylbenzene	0.9	ND	ND	ND	30
m,p-Xylenes	5.1	ND	ND	ND	20
o-Xylene	1.3	ND	ND	ND	20
Chlorobenzene	ND	ND	2.6	ND	25
Vinyl Chloride	ND	ND	2.8	ND	0.5
1,2-Dichloroethane	ND	ND	15	ND	5
1,2,4-Trimethylbenzene	0.8	ND	ND	ND	5
Antimony	ND	ND	NS	ND	6
Arsenic	11	9.2	NS	ND	50
Barium	1,200	4,500	NS	3,100	1,000
Beryllium	ND	6	NS	5.9	4
Cadmium	ND	ND	NS	ND	5
Chromium	7.5	15	NS	99	50
Cobalt	6.7	99	NS	300	140
Copper	31	95	NS	130	1,000
Lead	ND	27	NS	19	15
Mercury	1.9	ND	NS	ND	2
Molybdenum	ND	ND	NS	5.4	35
Nickel	30	160	NS	720	100
Selenium	ND	ND	NS	ND	50
Silver	ND	ND	NS	ND	35
Thallium	12	ND	NS	ND	2
Vanadium	65	130	NS	130	15
Zinc	53	200	NS	160	5,000

Notes:

All Results in micrograms per liter (µg/L)

Exceedances in **BOLD**

Y - sample exhibits chromatographic pattern which does not resemble standard

Z - sample exhibits unknown single peak or peaks

1 - groundwater screening levels for taste/odor and drinking water toxicity, not for aquatic habitat goals.

NS - constituent not sampled

ND - not detected above method detection limits

Source: Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, California Regional Water Quality Control Board, San Francisco Bay Region, Interim Final - November 2007, Revised May 2008.

Table 1
Soil Results
3706 San Pablo Avenue
Emeryville, California

Sample	SB-1@15'	SB-2@5'	SB-3@3'	SB-4@3'	SB-5@3'	Soil Screening Value	Notes
TPHg	ND	ND	ND	ND	ND	100	
TPHd	ND	1.4Y	87Y	10Y	23Y	100	
TCE	ND	ND	ND	0.029	ND	NA	1
Other VOCs	ND	ND	ND	ND	ND	NA	1
Antimony	ND	ND	ND	ND	1.3	30	
Arsenic	6	2.7	2.5	3.1	4.5	0.07	2
Barium	87	84	93	93	220	5,200	
Beryllium	0.45	0.31	0.43	0.47	0.45	150	
Cadmium	0.68	0.37	ND	ND	ND	1.7	
Chromium	22	27	20	22	27	100,000	
Cobalt	8.1	4.7	4.3	7.5	6.5	660	
Copper	11	11	8.1	7.1	17	3,000	
Lead	5.8	5.2	6.5	4.8	140	150	
Mercury	0.034	0.05	0.14	0.031	0.07	18	
Molybdenum	1.8	ND	ND	0.32	0.45	380	
Nickel	46	30	22	30	34	1,600	
Selenium	1.9	ND	ND	1	ND	380	
Silver	ND	ND	ND	ND	ND	380	
Thallium	ND	ND	ND	ND	ND	5	
Vanadium	26	22	16	16	26	530	
Zinc	47	42	35	30	120	2,300	

Notes:

All Results in milligrams per kilogram (mg/kg)

Exceedances in **BOLD**

Y - sample exhibits chromatographic pattern which does not resemble standard

1 - no screening number or constituent not detected

2 - the screening number is for contamination resulting from human activity. Concentrations of naturally occurring arsenic may be far above the screening number. Based on a study of soils in California, background could be as high as 11 mg/kg.

ND - not detected above method detection limits

Source: Human-Exposure-Based Screening Numbers; Developed to Aid Estimation of Cleanup Costs for Contaminated Soil, Integrated Risk Assessment Section, Office of Environmental Health Hazard Assessment, California Environmental Protection Agency, November 2004, January 2005 Revision.

APPENDIX A

Alameda County Public Works Agency

Water Resources Well Permit

Alameda County Public Works Agency - Water Resources Well Permit



399 Elmhurst Street
Hayward, CA 94544-1395
Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 01/20/2010 By jamesy

Permit Numbers: W2010-0053
Permits Valid from 01/27/2010 to 01/29/2010

Application Id: 1263945934387
Site Location: 3706 San Pablo Avenue
Project Start Date: 01/26/2010
Assigned Inspector: Contact Vicky Hamlin at (510) 670-5443 or vickyh@acpwa.org
Extension Start Date: 01/27/2010
Extension Count: 1

City of Project Site: Emeryville
Completion Date: 01/26/2010
Extension End Date: 01/29/2010
Extended By: vickyh1

Applicant: The Source Group, Inc - Kristene Tidwell
3451-C Vincent Road, Pleasant Hill, CA 94523
Property Owner: First Citizens Bank
27780 Jefferson Avenue, Suite 101, Temecula, CA 92590
Client: Economic Development & Housing Department
City of Emeryville
1333 Park Avenue, Emeryville, CA 94608

Phone: 925-944-2856 x336

Phone: --

Phone: --

Receipt Number: WR2010-0022 Total Due: \$265.00
Payer Name : Kristene Tidwell Total Amount Paid: \$265.00
Paid By: VISA PAID IN FULL

Works Requesting Permits:

Borehole(s) for Geo Probes-Sampling 24 to 72 hours only - 2 Boreholes
Driller: Vironex - Lic #: 705927 - Method: DP

Work Total: \$265.00

Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2010-0053	01/20/2010	04/26/2010	2	2.00 in.	15.00 ft

Specific Work Permit Conditions

1. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site. The containers shall be clearly labeled to the ownership of the container and labeled hazardous or non-hazardous.
2. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.
3. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.
4. Applicant shall contact Vicky Hamlin for an inspection time at 510-670-5443 or email to vickyh@acpwa.org at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.
5. Permittee, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters

Alameda County Public Works Agency - Water Resources Well Permit

generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.

6. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of \$500.00.

7. Prior to any drilling activities onto any public right-of-ways, it shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits required for that City or to the County and follow all City or County Ordinances. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County a Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

8. Permit is valid only for the purpose specified herein. No changes in construction procedures, as described on this permit application. Boreholes shall not be converted to monitoring wells, without a permit application process.

Alameda County Public Works Agency - Water Resources Well Permit



399 Elmhurst Street
Hayward, CA 94544-1395
Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 03/25/2010 By jamesy

Permit Numbers: W2010-0167
Permits Valid from 03/31/2010 to 03/31/2010

Application Id: 1269532100641
Site Location: 3706 San Pablo
Project Start Date: 03/31/2010
Assigned Inspector: Contact Ron Smalley at (510) 670-5407 or ronaldws@acpwa.org

City of Project Site: Emeryville
Completion Date: 03/31/2010

Applicant: The Source Group - Kristene Tidwell
3451-C Vincent Rd, Pleasant Hill, CA 94534
Property Owner: First Citizens Bank
27780 Jefferson Avenue, Suite 101, Temecula, CA 92590
Client: Economic Development and Housing
Department City of Emeryville
1333 Park Avenue, Emeryville, CA 94608

Phone: 925-944-2856 x336
Phone: --
Phone: --

Receipt Number: WR2010-0078 Total Due: \$265.00
Payer Name : Kristene Tidwell Total Amount Paid: \$265.00
Paid By: VISA PAID IN FULL

Works Requesting Permits:

Borehole(s) for Investigation-Contamination Study - 2 Boreholes
Driller: Vironex - Lic #: 705927 - Method: DP

Work Total: \$265.00

Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2010-0167	03/25/2010	06/29/2010	2	2.00 in.	15.00 ft

Specific Work Permit Conditions

1. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site. The containers shall be clearly labeled to the ownership of the container and labeled hazardous or non-hazardous.
2. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.
3. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.
4. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County an Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

Alameda County Public Works Agency - Water Resources Well Permit

5. Applicant shall contact Ron Smalley for an inspection time at 510-670-5407 or email to ronaldws@acpwa.org at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.
 6. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of \$500.00.
 7. Permit is valid only for the purpose specified herein. No changes in construction procedures, as described on this permit application. Boreholes shall not be converted to monitoring wells, without a permit application process.
-

APPENDIX B

Boring Logs



PROJECT NAME AND ADDRESS:	3706 San Pablo Avenue, Emeryville, California	Project No.	01-EMER-001
BORING LOCATION (AT SITE):	Building along San Pablo Ave., 3rd Bay from South Side	Logged By:	J Philipp
CONTRACTOR AND EQUIPMENT:	Vironex, Direct Push ('Badger' rig)		
SAMPLING METHOD:	Direct Push Macrocore	MONITORING DEVICE:	PID
START DATE/ (TIME):	1/28/2010 9:00	FINISH DATE/ TIME	1/28/2010 10:10
FIRST WATER (BGS):	Water Not Encountered	STABILIZED WATER LEVEL:	Water Not Encountered
SURFACE ELEVATION:		CASING TOP ELEVATION:	Well Not Installed
TOTAL BORING DEPTH(S):	15-feet	BORING DIAMETER/DEPTH:	2"/15'

Date/Time	Sample Interval	PID (ppm)	Recovery (%)	Stratigraphy	Depth (feet)	Water-level	LITHOLOGIC DESCRIPTION (classification, color, moisture, density, grain size/plasticity, other) ALL PERCENTAGES ARE APPROXIMATE UNLESS OTHERWISE STATED	Well construction details
					0			
					1		3" Concrete	
					2		Sandy clayey SILT (5,40,55), med-dk brown (light tan nodules of fine sand), dry, loose, no odor.	
					3		Silty CLAY (25,75), dk brown, dry, stiff, no odor.	
					4			
		<1			5		Grades: Medium olive brown	
					6		↓	
					7			
					8		Sandy CLAY (20,80) with pebbles, med brown and tan, dry, stiff, no odor. Pebbles are angular.	
					9		↓	
9:50					10			
		<1			11		Silty CLAY (25,75), mottled olive green and light brown, moist, plastic, no odor.	
					12		↓	
					13			
					14		↓	
10:00		<1			15		END OF BORING at 15-feet below ground surface	
					16			
					17		Collected soil sample at 10-feet and 15-feet. No water at 15-feet. Only 15-foot sample submitted for analysis (SB-1@15').	
					18			
					19			
					20			



PROJECT NAME AND ADDRESS:	3706 San Pablo Avenue, Emeryville, California	Project No.	01-EMER-001
BORING LOCATION (AT SITE):	Building along San Pablo Avenue, Basement at NE Corner	Logged By:	J Philipp
CONTRACTOR AND EQUIPMENT:	Vironex, Hand Auger		
SAMPLING METHOD:	Hand Auger	MONITORING DEVICE:	PID
START DATE/ (TIME):	1/28/2010 11:45	FINISH DATE/ TIME	1/28/2010 13:15
FIRST WATER (BGS):	~7-feet	STABILIZED WATER LEVEL:	~6-feet
SURFACE ELEVATION:		CASING TOP ELEVATION:	Well Not Installed
TOTAL BORING DEPTH(S):	7-feet	BORING DIAMETER/DEPTH:	3"/6'

Date/Time	Sample Interval	PID (ppm)	Recovery (%)	Stratigraphy	Depth (feet)	Water-level	LITHOLOGIC DESCRIPTION (classification, color, moisture, density, grain size/plasticity, other) ALL PERCENTAGES ARE APPROXIMATE UNLESS OTHERWISE STATED	Well construction details
					0			
					1		4" Concrete	
					2			
					3			
					4			
12:30		<1			5			Silty fine SAND (25,75), medium brown, wet, loose, no odor.
					6		Clayey GRAVEL (40,60), medium brown, wet, loose, no odor.	
					7		END OF BORING at 7-feet below ground surface	
					8			
					9		Collected soil sample at 5-feet (SB-2@5'), Collected water sample (SB-2 water)	
					10			
					11			
					12			
					13			
					14			
					15			
					16			
					17			
					18			
					19			
					20			



PROJECT NAME AND ADDRESS:	3706 San Pablo Avenue, Emeryville, California	Project No.	01-EMER-001
BORING LOCATION (AT SITE):	Building #2, along MacArthur, North end of building	Logged By:	J Philipp
CONTRACTOR AND EQUIPMENT:	Vironex, Geoprobe 6600 Direct Push		
SAMPLING METHOD:	Macro-core	MONITORING DEVICE:	PID
START DATE/ (TIME):	3/31/2010 8:30	FINISH DATE/ TIME	3/31/2010 9:15
FIRST WATER (BGS):	~17-feet	STABILIZED WATER LEVEL:	NS
SURFACE ELEVATION:		CASING TOP ELEVATION:	Well Not Installed
TOTAL BORING DEPTH(S):	17-feet	BORING DIAMETER/DEPTH:	3"/17'

Date/Time	Sample Interval	PID (ppm)	Recovery (%)	Stratigraphy	Depth (feet)	Water-level	LITHOLOGIC DESCRIPTION (classification, color, moisture, density, grain size/plasticity, other) ALL PERCENTAGES ARE APPROXIMATE UNLESS OTHERWISE STATED	Well construction details
					0			
					1		4" Concrete	
					2		↓ Clayey, fine sandy SILT (20,20,60) with pebbles, grey-brown, dry, loose, no odor	
				3				
				4		Silty CLAY (25,75), dark brown, dry, plastic, no odor.		
					5		↓ Silty CLAY (50,50) with angular pebbles, mottled medium brown and olive green, dry, very stiff, no odor or staining.	
				6				
				7				
				8				
				9				
					10		↓ Silty CLAY (50,50), mottled medium brown and olive green, moist, slightly stiff, no odor.	
				11				
				12				
				13				
				14				
					15		Clayey fine sandy SILT (25,25,50), mottled medium brown and olive green, moist, slightly stiff, no odor or staining.	
				16				
					17			
					18		END OF BORING at 17-feet below ground surface	
					19		Collected soil sample at 3-feet (SB-3@3'), Collected water sample (SB-3 water)	
					20			



PROJECT NAME AND ADDRESS:	3706 San Pablo Avenue, Emeryville, California	Project No.	01-EMER-001
BORING LOCATION (AT SITE):	Building #2, along MacArthur, South end of building	Logged By:	J Philipp
CONTRACTOR AND EQUIPMENT:	Vironex, Geoprobe 6600 Direct Push		
SAMPLING METHOD:	Macro-core	MONITORING DEVICE:	PID
START DATE/ (TIME):	3/31/2010 9:30	FINISH DATE/ TIME	3/31/2010 10:15
FIRST WATER (BGS):	~16-feet	STABILIZED WATER LEVEL:	NS
SURFACE ELEVATION:		CASING TOP ELEVATION:	Well Not Installed
TOTAL BORING DEPTH(S):	20-feet	BORING DIAMETER/DEPTH:	3"/20'

Date/Time	Sample Interval	PID (ppm)	Recovery (%)	Stratigraphy	Depth (feet)	Water-level	LITHOLOGIC DESCRIPTION (classification, color, moisture, density, grain size/plasticity, other) ALL PERCENTAGES ARE APPROXIMATE UNLESS OTHERWISE STATED	Well construction details
					0			
					1		4" Concrete	
					2		Silty CLAY (25,75) dark brown, dry, plastic, no staining or odor.	
					3			
					4			
					5			
					6			
					7		Silty CLAY (20,80), medium olive green, dry, plastic, no odor.	
					8			
					9		Silty CLAY (50,50), mottled medium brown and olive green, dry, very stiff, no odor.	
					10			
					11			
					12		Silty CLAY (50,50) with gravel, mottled medium brown and olive green, dry, crumbly, angular gravel fragments, no staining or odors.	
					13			
					14			
					15		Silty, clayey, fine to medium grained SAND (15,15,70), medium brown, moist, loose.	
					16		Clayey SILT (25,75), grey green, moist to wet, plastic, no odor or staining.	
					17		Silty coarse SAND (25,75), medium brown, moist, loose, no odor.	
					18			
					19			
					20			
							END OF BORING at 20-feet below ground surface. Collected soil sample at 3-feet (SB-4@3'), Collected water sample (SB-4 water)	



PROJECT NAME AND ADDRESS:	3706 San Pablo Avenue, Emeryville, California	Project No.	01-EMER-001
BORING LOCATION (AT SITE):	Building #2, along MacArthur, middle of building	Logged By:	J Philipp
CONTRACTOR AND EQUIPMENT:	Vironex, Geoprobe 6600 Direct Push		
SAMPLING METHOD:	Macro-core	MONITORING DEVICE:	PID
START DATE/ (TIME):	3/31/2010 10:30	FINISH DATE/ TIME	3/31/2010 11:15
FIRST WATER (BGS):	~17-feet	STABILIZED WATER LEVEL:	NS
SURFACE ELEVATION:		CASING TOP ELEVATION:	Well Not Installed
TOTAL BORING DEPTH(S):	20-feet	BORING DIAMETER/DEPTH:	3"/20'

Date/Time	Sample Interval	PID (ppm)	Recovery (%)	Stratigraphy	Depth (feet)	Water-level	LITHOLOGIC DESCRIPTION (classification, color, moisture, density, grain size/plasticity, other) ALL PERCENTAGES ARE APPROXIMATE UNLESS OTHERWISE STATED	Well construction details
					0			
					1		4" Concrete	
					2		Silty CLAY (25,75), dark brown, dry, plastic, no odor.	
					3			
					4			
					5		GRADES: non-plastic, very stiff	
					6			
					7		Silty CLAY (40,60) with occasional angular rock shards, olive green, dry, very stiff, no staining or odor.	
					8			
					9		GRADES: mottled medium brown and olive green.	
					10			
					11			
					12			
					13			
					14			
					15		Clayey SILT (25,75), mottled medium brown and olive green, moist to wet, soft, no odor or staining.	
					16			
					17			
					18			
					19			
					20			
							END OF BORING at 20-feet below ground surface. Collected soil sample at 3-feet (SB-3@3'), Collected water sample (SB-5 water)	