



CONSULTANTS, INC.

G E O T E C H N I C A L ■ E N V I R O N M E N T A L ■ M A T E R I A L S

RECEIVED

By Alameda County Environmental Health at 9:32 am, Aug 26, 2014



Project No. E8448-06-01
May 7, 2008

Ms. Holly Moore
DGC Associates
3942 Valley Avenue, Suite J
Pleasanton, California 94566

Read & Received

By: Tracey S. Campbell

Date: 5-22-08

Subject: LIMITED SOIL AND GRAB GROUNDWATER SAMPLING REPORT
PLUCKY'S LIQUORS / FORMER GASOLINE STATION
6415 INTERNATIONAL BOULEVARD
OAKLAND, CALIFORNIA

Dear Ms. Moore:

On April 22, 2008, Geocon collected soil and groundwater samples at the above-referenced site (see Figure 1).

Borings were advanced to assess soil and shallow groundwater quality conditions that may have been impacted by the past gasoline station operations at the property from 1935 to 1975.

MOBILIZATION

Prior to conducting the soil and groundwater investigation, Geocon obtained a drilling permit from the Alameda County Public Works Agency. A copy of the permit is attached.

Underground Services Alert was notified regarding the drilling activities and Cruz Brothers Locators (Cruz Brothers), a private utility locating service, was contracted to conduct a geophysical survey and utility clearance prior to determining the soil boring locations and conducting the field sampling.

Cruz Brothers did not detect the presence of underground storage tanks (USTs) during the geophysical survey, however they did identify the presence of one excavation area along the northwest side of the site building where boring SB-5 was advanced (see Figure2).

SOIL AND GRAB GROUNDWATER SAMPLING

Geocon advanced six soil borings at the site (SB-1 through SB-6). The boring locations are shown on Figure 2. The locations were selected based on the site layout, information obtained from informed individuals, the presumed westward groundwater flow direction, and the geophysical survey.

SB-1 was placed near the southwest property border for two reasons: 1) to assess soil and groundwater quality conditions along the backside of the property building where waste oil USTs are sometimes



G E O T E C H N I C A L ■ E N V I R O N M E N T A L ■ M A T E R I A L S



Project No. E8448-06-01
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DGC Associates
3942 Valley Avenue, Suite J
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Read & Received
By: Jaleesa Hazzard
Date: 5/21/08

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6415 INTERNATIONAL BOULEVARD
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SB-1 was placed near the southwest property border for two reasons: 1) to assess soil and groundwater quality conditions along the backside of the property building where waste oil USTs are sometimes

located; and 2) to assess the potential that contaminants in groundwater (should they exist) have migrated offsite.

SB-2, SB-3, SB-5, and SB-6 were placed in areas where former USTs were suspected to have been located, and SB-4 was placed to assess soil conditions beneath one of the two known former fuel dispenser islands (the other dispenser island was located along the southeast side of the site building near SB-2).

One soil sample was collected from SB-1 at a depth of 15 feet where a slight petroleum odor was noticed. Two soil samples were collected from SB-2 at depths 16 and 20 feet. The 16-foot soil sample was collected where the strongest petroleum odors were present, and the 20-foot sample was collected to assess the vertical definition of impacted soil at this location. Two soil samples were collected at SB-3 at depths of 13 and 20 feet for the same reason as those collected from SB-2.

One soil sample was collected from SB-4 at a depth of 8 feet to assess potential impacts to soil beneath the former fuel dispenser island, and one soil sample was collected from SB-5 at a depth of 16 feet immediately below first encountered groundwater. Groundwater was not encountered in SB-6 so one soil sample was collected at a depth of 14 feet where a slight petroleum odor was noticed, and two more samples (20 feet below ground surface [bgs] and 31 feet bgs) were collected to assess the vertical definition of potential impacts to soil in this area.

Soil samples were collected from the six borings using a Geoprobe direct-push sample rig operated by En Prob personnel. The boreholes at each sample location were continuously logged from ground surface to total depth by hydraulically advancing a four-foot-long core barrel sampler lined with an acetate sample tube. Soil samples from selected depth intervals were cut from the acetate sample tube, the ends capped with Teflon tape and rubber end caps, and placed in a chest for storage and delivery to the analytical laboratory.

Grab-groundwater samples were collected from each borehole by installing a temporary 3/4-inch-diameter PVC well casing into the open boreholes once it was established that groundwater was present. Groundwater samples were extracted from each boring using 3/4-inch-diameter polyethylene tubing fitted with a check valve. Groundwater was forced through the tubing towards ground surface as the tubing was manually moved up and down inside the temporary well casings. Groundwater samples were collected in 40 milliliter (ml) glass vials preserved with hydrochloric acid and one liter amber glass containers for transport to the analytical laboratory.

All soil sampling equipment was cleaned between sample locations using a non-phosphate detergent and deionized water rinse. The rinsate fluids and soil cuttings generated during the field sampling were containerized, and transported back to the Geocon warehouse in Livermore for temporary storage and disposal.

SUBSURFACE SOIL AND GROUNDWATER CONDITIONS

Soils encountered during this investigation consisted of primarily of sandy and silty clay from near ground surface to the total depth of 31 feet at SB-6. Clayey gravel was encountered in borings SB-1 through SB-3 and SB-6 at depths ranging from 6 to 12 feet. It was also logged in borings SB-1 and SB-2 at depths of 14 to 15 feet, where petroleum odors were first observed at these two locations.

Some gravelly sand was also observed in boring SB-3 from 12 to 16 feet bgs, in boring SB-4 from 5 to

8 feet bgs, in boring SB-5 from 14 to 16 feet bgs, and in boring SB-6 from 7.5 to 9 feet bgs.

Petroleum odors were observed in soil and/or groundwater in all borings, except SB-4.

A slight petroleum odor was observed in soil from 14 to 15 feet bgs in SB-1; however it was not noticeable in soil below this depth, and the grab groundwater sample collected from SB-1 did not have a noticeable petroleum odor. Groundwater was first encountered in SB-1 at a depth of approximately 21 feet, and it rose to a depth of approximately 9 feet after two hours.

Petroleum odors in SB-2 were observed in soil located from 14 feet bgs to 24 feet bgs, and groundwater initially encountered at 21 feet bgs also had a noticeable petroleum odor. Groundwater rose to approximately nine feet bgs within one half hour after collecting a groundwater sample.

A noticeable petroleum odor was encountered in soils located from 12 to 16 feet bgs in SB-3; however the odor was not apparent in soils located from 16 feet bgs to the total depth of the borehole (28 feet bgs). Groundwater was initially encountered at 26 feet bgs and it had a petroleum odor. Groundwater rose to within nine feet of ground surface soon after the soil sampling equipment was removed from the borehole.

Soil retrieved from SB-5 between ground surface and 16 feet bgs did not have noticeable petroleum odors; however the groundwater sample did have a slight petroleum odor. Groundwater was first encountered in SB-5 below the bottom of the excavation fill soils at a depth of approximately 14 feet bgs. It appeared to stabilize near nine feet bgs

SB-6 was advanced to a depth of 31 feet bgs. The only petroleum odor noticed during the advancement of SB-6 was in soils located between 14 and 15 feet bgs. The odors were faint and dissipated below 15 feet bgs. Groundwater was not encountered in SB-6.

Copies of the soil boring logs for SB-1 through SB-6 are attached.

SAMPLE ANALYSIS AND RESULTS

The soil and grab groundwater samples submitted for laboratory analysis were analyzed for total petroleum hydrocarbon compounds as gasoline (TPHg), diesel fuel (TPHd), and motor oil (TPHmo) following EPA Test Method 8015B, and benzene, toluene, ethylbenzene, and xylenes (BTEX) following EPA Test Method 8021B.

BTEX compounds were reported as non-detect in all soil and grab groundwater samples collected during this investigation, except SB-5, where the grab groundwater sample collected from SB-5 was reported to contain toluene at a concentration of 1.4 micrograms per liter (ug/l).

TPHd and TPHmo were reported in all but one soil sample (SB-3 20') submitted for laboratory analysis. The detected TPHd concentrations ranged from 1.5 milligrams per kilogram (mg/kg) in the 20-foot soil sample collected at SB-6 to 20 mg/kg in the 20-foot soil sample collected at SB-2. TPHmo concentrations in soil ranged from 1.6 mg/kg in the 20-foot soil sample collected at SB-3 to 6.3 mg/kg in the 16-foot soil sample collected from SB-5.

TPHg was detected above the reporting limit concentration of 1.0 mg/kg in three of the ten soil samples submitted for laboratory analysis. TPHg was reported at a concentration of 7.3 mg/kg in the 15-foot

soil sample collected from SB-1, 21 mg/kg in the 15-foot soil sample collected from SB-2, and 95 mg/kg in the 14-foot soil sample collected from SB-6.

TPHg, TPHd, and TPHmo were reported above the reporting limit concentrations in the grab groundwater samples collected from SB-1, SB-2, SB-3, and SB-5.

TPHg was reported at concentrations ranging from 0.080 milligrams per liter (mg/l) at SB-1 to 8.1 mg/l at SB-3. TPHd concentrations ranged from 0.076 mg/l at SB-1 to 7.2 mg/l at SB-3. TPHmo concentrations ranged from 0.11 mg/l at SB-1 to 0.18 at SB-5.

Soil and groundwater sample results are tabulated in Tables 1 and 2, and copies of the analytical laboratory data sheets are attached.

CONCLUSIONS AND RECOMMENDATIONS

Based on the results of this investigation it appears the former USTs have been removed from the site, and soil and groundwater have been impacted by petroleum hydrocarbon compounds.

Groundwater was encountered under confined conditions in borings SB-1, SB-2, SB-3, and SB-5. Groundwater was not encountered in SB-4 and SB-6 that were advanced to depths of 8- and 31-feet bgs, respectively.

Although TPHg, TPHd, and TPHmo were reported in most soil and grab groundwater samples the absence of BTEX compounds indicates the fuel is aged and degraded, and contaminant concentrations reported during this investigation may not require active remediation by the Alameda County Environmental Health Department (ACEHD), however this should be confirmed with that agency.

We recommend the results of this investigation be submitted to the ACEHD for their review. We feel this site is a candidate for no further action as a low risk soil and groundwater site.

LIMITATIONS

This report has been prepared exclusively for the client. The information contained herein is only valid as of the date of the report, and will require an update to reflect additional information obtained.

The client should recognize that this report is not a comprehensive site characterization and the client should not construe it as such. This report presents findings of the results of the limited sampling and laboratory testing performed. In addition, it is not the intention of the information obtained to address potential impacts related to sources other than those specified herein.

Therefore, the report is only conclusive with respect to the information obtained. No guarantee of the results of the study is implied within the intent of this report. The services performed were conducted in accordance with the local standard of care in the geographic region at the time the services were rendered.

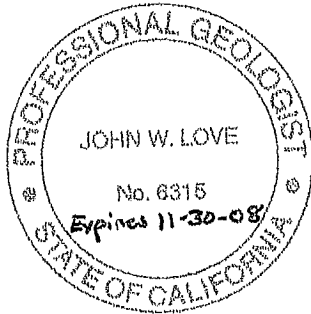
If you have any questions regarding this report please contact John Love at (925) 371-5900.

Sincerely,

GEOCON CONSULTANTS, INC.



John Love, PG
Senior Project Geologist

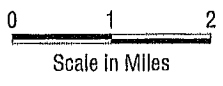
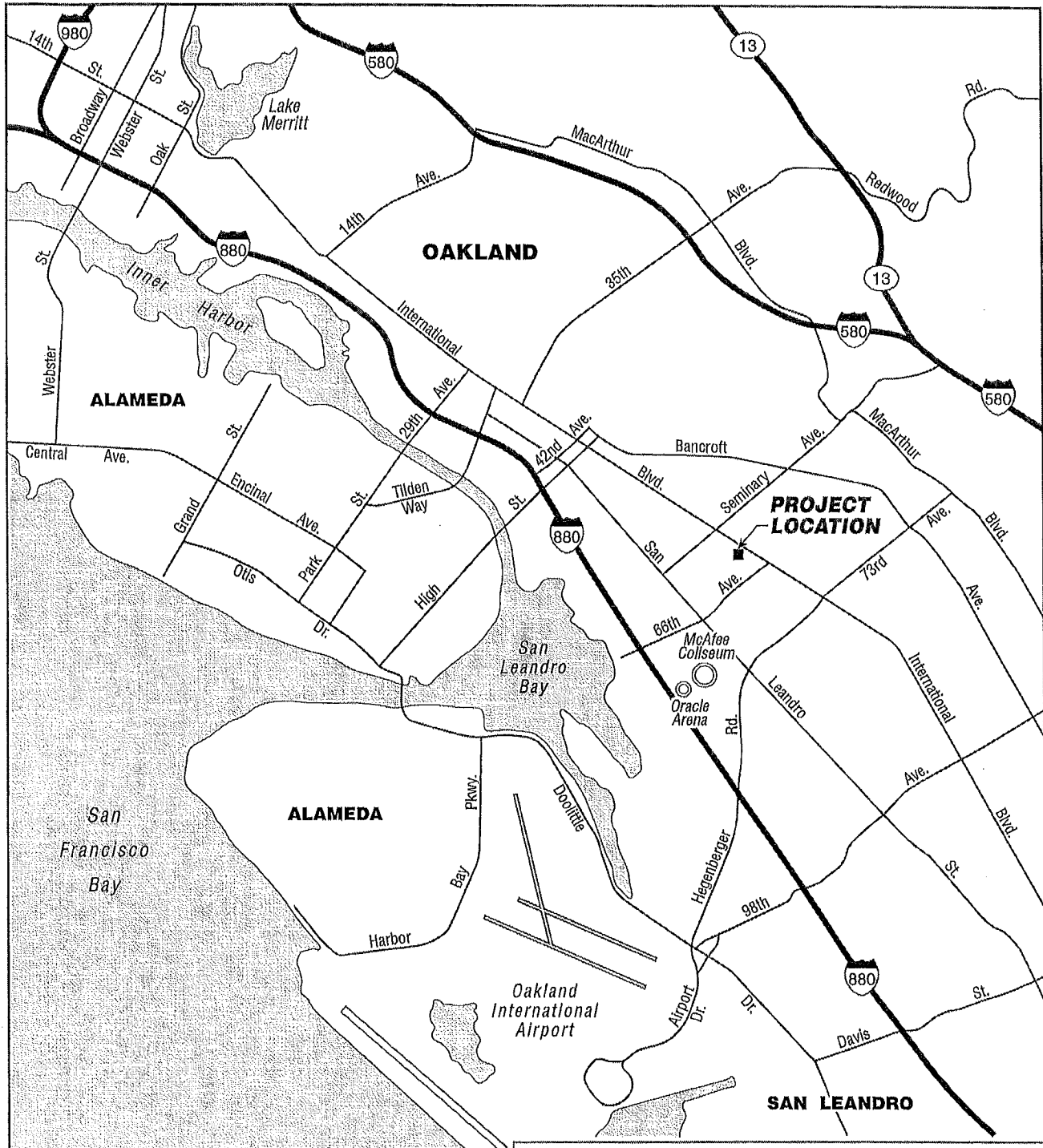


Richard Day, CEG, CHG
Vice President

JL:RWD:ls

(3) Addressee

Attachments: Figure 1 – Vicinity Map
Figure 2 – Site Plan
Table 1 – Summary of Soil Sample Results
Table 2 – Summary of Soil Sample Results
DEH Soil Boring Permit
Soil Boring Logs
Analytical Laboratory Data Sheets



GEOCON

CONSULTANTS, INC.

6871 BRISAST. - LIVERMORE, CA. 94660
 PHONE 926 371-6900 - FAX 926 371-6916



Former Gasoline Station - Plucky's Liquor Store

6415 International Boulevard
 Oakland, California

VICINITY MAP

E8448-06-01

May 2008

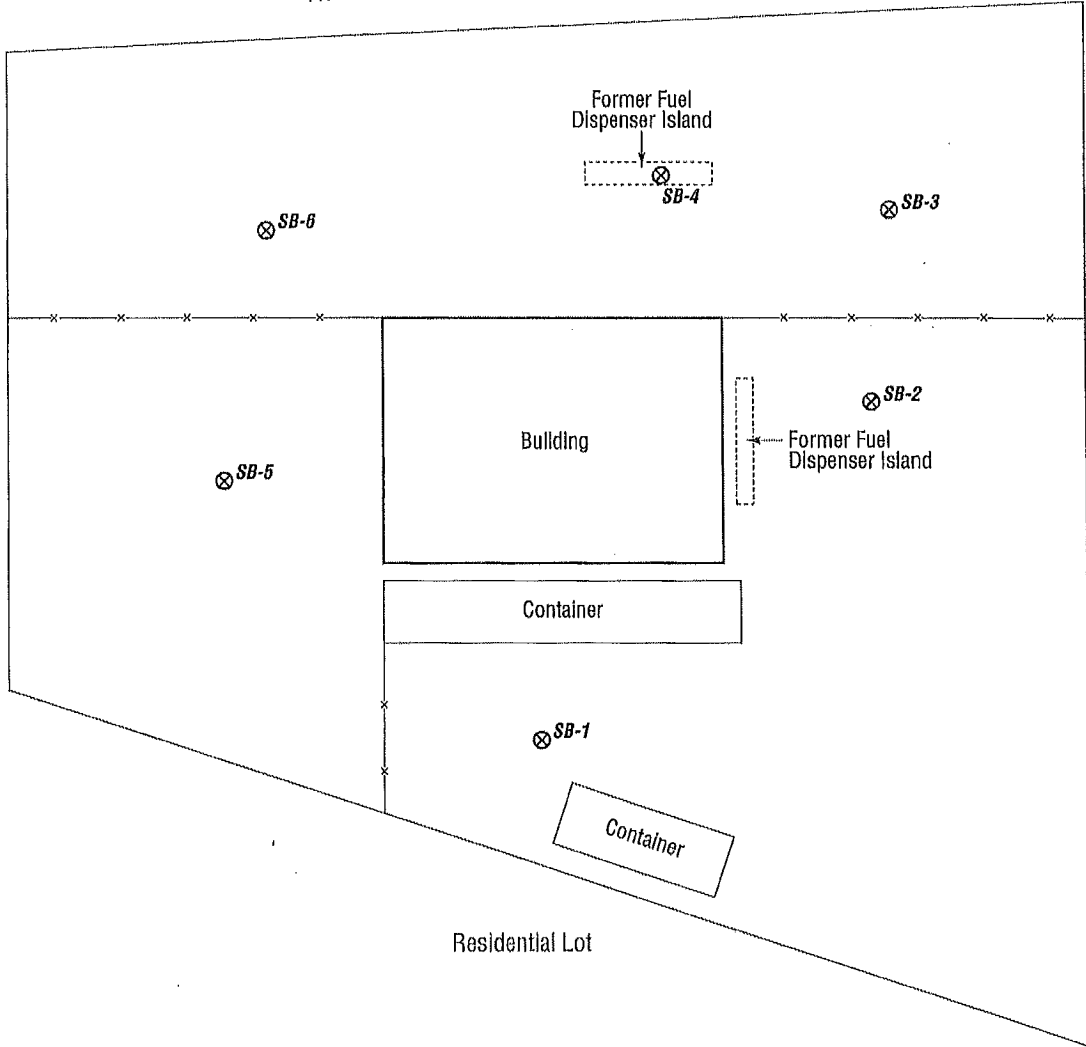
Figure 1



INTERNATIONAL BOULEVARD

65TH AVENUE

Grocery Store



0 20
Scale In Feet

LEGEND:

SB-1 ⊗ Approximate Boring Location

—x—x— Fence

GEOCON

CONSULTANTS, INC.

8671 BRISBART - LIVERMORE, CA. 94560
PHONE 926 371-5900 - FAX 926 371-5015



Former Gasoline Station - Plucky's Liquor Store

6415 International Boulevard
Oakland, California

SITE PLAN

E8448-06-01

May 2008

Figure 2

Table 1
Summary of Soil Sample Results
Plucky's Liquors / Former Gasoline Station
6415 International Blvd.
Oakland, California

Borehole Location	Collection Date	Depth (feet bgs)	TPHg (mg/kg)	TPHd (mg/kg)	TPHmo (mg/kg)	Benzene (ug/kg)	Toluene (ug/kg)	Ethylbenzene (ug/kg)	Total Xylenes (ug/kg)
SB-1	4/22/2008	15	7.3	6.3	5.5	<5.0	<5.0	<5.0	<15
SB-2	4/22/2008	16	21	2.6	3.5	<5.0	<5.0	<5.0	<15
SB-2	4/22/2008	20	<1.0	20	51	<5.0	<5.0	<5.0	<15
SB-3	4/22/2008	13	<1.0	5.8	5.8	<5.0	<5.0	<5.0	<15
SB-3	4/22/2008	20	<1.0	<1.0	1.6	<5.0	<5.0	<5.0	<15
SB-4	4/22/2008	8	<1.0	4.6	6.2	<5.0	<5.0	<5.0	<15
SB-5	4/22/2008	16	<1.0	7.6	6.3	<5.0	<5.0	<5.0	<15
SB-6	4/22/2008	14	95	7.8	4.4	<25	<25	<25	<75
SB-6	4/22/2008	20	<1.0	1.5	4.0	<5.0	<5.0	<5.0	<15
SB-6	4/22/2008	31	<1.0	3.2	2.7	<5.0	<5.0	<5.0	<15

Table 2
Summary of Grab Groundwater Sample Results
Plucky's Liquors / Former Gasoline Station
6415 International Blvd.
Oakland, California

Borehole Location	Collection Date	Depth (feet bgs)	TPHg (mg/l)	TPHd (mg/l)	TPHmo (mg/l)	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Total Xylenes (ug/l)
SB-1	4/22/2008	21	0.080	0.076	0.11	<0.50	<0.50	<0.50	<1.5
SB-2	4/22/2008	21	1.5	0.71	0.13	<0.50	<0.50	<0.50	<1.5
SB-3	4/22/2008	26	8.1	7.2	0.15	<5.0	<5.0	<5.0	<15
SB-5	4/22/2008	14	0.14	0.11	0.18	<0.50	<0.50	<0.50	<1.5

NOTES:

- TPHg- Total Petroleum Hydrocarbons as Gasoline
- TPHd - Total Petroleum Hydrocarbons as Diesel
- TPHmo - Total Petroleum Hydrocarbons as Motor Oil
- mg/kg- Milligrams per kilogram
- ug/kg- Micrograms per kilogram
- mg/l - Milligrams per liter
- ug/l - Micrograms per liter

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: 04/04/2008 By jamesy

Permit Numbers: W2008-0166
Permits Valid from 04/22/2008 to 04/22/2008

Application Id: 1207327540879
Site Location: Former Gas Station / Plucky's Liquors
6415 International Blvd.

City of Project Site:Oakland

Project Start Date: 04/22/2008
Requested Inspection:04/22/2008
Scheduled Inspection:04/22/2008 at 2:00 PM (Contact your inspector, Vicky Hamlin at (510) 670-5443, to confirm.)

Completion Date:04/22/2008

Applicant: Geocon Consultants, Inc. - John Love
6671 Brisa Street, Livermore, CA 94550
Property Owner: Jaleesa Hazard
6415 International Blvd, Oakland, CA 94621
Client: Holly Moore
3942 Valley Avenue, Suite, Pleasanton, CA 94566
Contact: John Love

Phone: 925-371-5900

Phone: --

Phone: --

Phone: 925-371-5900
Cell: 925-525-4142

	Total Due:	\$200.00
Receipt Number: WR2008-0103	Total Amount Paid:	\$200.00
Payer Name : John W. Love	Paid By: VISA	PAID IN FULL

Works Requesting Permits:

Borehole(s) for Geo Probes-Sampling 24 to 72 hours only - 5 Boreholes
Driller: En Prob - Lic #: 777007 - Method: DP

Work Total: \$200.00

Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2008-0166	04/04/2008	07/21/2008	5	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.

PROJECT NO. E8448-06-01

DEPTH IN FEET	PENETRAT. RESIST. BLOWS/FT.	SAMPLE NO.	LITHOLOGY	BORING NO. SB-1		SOIL (USCS)	HEADSPACE (PPM)	
				DATE DRILLED 4/22/08	WATER LEVEL (ATD)			
				EQUIPMENT	GEOPROBE DRILLER En Prob			
SOIL DESCRIPTION								
1			ASPHALT AND BASE ROCK					
2			Stiff, moist, black, fine Sandy CLAY, low to medium plasticity, no odor			CL		
3								
4								
5								
6			Stiff, moist, olive, medium Sandy CLAY, low plasticity, no odor			CL		
7								
8								
9			Dense, moist to very moist, olive, Clayey coarse angular GRAVEL, no odor			GC		
10								
11			Stiff, moist, yellowish red with light green, Sandy CLAY, low to medium plasticity, no odor			CL		
12								
13								
14			Dense, moist, pale green, Clayey GRAVEL, with coarse angular sand, slight plasticity, slight odor			GC		
15								
16			Firm to soft, moist, brown, Silty CLAY, low to medium plasticity, no odor			CL		
17								
18								
19								
20								
21			Soft, very moist, brown, Silty CLAY, with interbedded clayey fine sand, low to medium plasticity, no odor			CL		
22								
23								
24								
BORING TERMINATED AT 24 FEET								

Figure 1, Log of Boring SB-1, page 1 of 1

ENV_NO_WELL, PLUCKYS BORINGS, GPJ 05/06/08

BORING ELEVATION:	ENGINEER/GEOLOGIST: JOHN LOVE
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NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES. ALL BLOW COUNTS HAVE BEEN CONVERTED TO EQUIVALENT STANDARD PENETRATION TEST (SPT) BLOW COUNTS.

PROJECT NO. E8448-06-01

DEPTH IN FEET	PENETRAT. RESIST. BLOWS/FT.	SAMPLE NO.	LITHOLOGY	BORING NO. SB-2		SOIL (USCS)	HEADSPACE (PPM)	
				DATE DRILLED 4/22/08	WATER LEVEL (ATD)			
				EQUIPMENT	GEOPROBE	DRILLER	En Prob	
SOIL DESCRIPTION								
1			ASPHALT					
2			Stiff, moist, black, fine Sandy CLAY, low to medium plasticity, no odor			CL		
3								
4								
5								
6			Stiff, moist, olive, medium Sandy CLAY, low plasticity, no odor			CL		
7								
8								
9			Dense, moist to very moist, olive, Clayey coarse angular GRAVEL, no odor			GC		
10								
11			Stiff, moist, yellowish red with light green, Sandy CLAY, low to medium plasticity, no odor			CL		
12								
13								
14			Dense, moist, pale green, Clayey GRAVEL with coarse angular sand, slight plasticity, petroleum odor			GC		
15							CL	
16			Firm to soft, moist, brown, Silty CLAY, low to medium plasticity, petroleum odor					
17								
18								
19								
20								
21								
22							CL	
23								
24								
BORING TERMINATED AT 24 FEET								

Figure 2, Log of Boring SB-2, page 1 of 1

ENV_NO_WELL PLUCKYS BORINGS.GPJ 05/06/08

BORING ELEVATION:

ENGINEER/GEOLOGIST: **JOHN LOVE**

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PROJECT NO. E8448-06-01

DEPTH IN FEET	PENETRAT. RESIST. BLOWS/FT.	SAMPLE NO.	LITHOLOGY	BORING NO. SB-3		SOIL (USCS)	HEADSPACE (PPM)
				DATE DRILLED 4/22/08	WATER LEVEL (ATD)		
				EQUIPMENT	DRILLER		
				GEOPROBE		En Prob	
SOIL DESCRIPTION							
1			ASPHALT				
2			Stiff, moist, black to brown, Sandy CLAY, low plasticity, no odor			CL	
3							
4							
5			Dense, moist, brown, Clayey GRAVEL with angular sand and gravel, no odor			GC	
6							
7			Firm, moist, reddish yellow, Sandy CLAY, low to medium plasticity, no odor			CL	
8							
9							
10			Stiff, moist, pale green, Sandy CLAY, medium plasticity, no odor			CL	
11							
12			Moist, Gravelly SAND with some clay and interbedded brick fragments, petroleum odor			SW	
13							
14							
15			Stiff, moist, brown, Silty CLAY, medium plasticity, no odor			CL	
16							
17							
18							
19							
20							
21							
22							
23							
24							

Figure 3, Log of Boring SB-3, page 1 of 2

ENV_NO_WELL PLUCKYS BORINGS.GPJ 05/06/08

BORING ELEVATION:

ENGINEER/GEOLOGIST: JOHN LOVE

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PROJECT NO. E8448-06-01

DEPTH IN FEET	PENETRAT. RESIST. BLOWS/FT.	SAMPLE NO.	LITHOLOGY	BORING NO. SB-3		SOIL (USCS)	HEADSPACE (PPM)
				DATE DRILLED 4/22/08	WATER LEVEL (ATD)		
				EQUIPMENT	GEOPROBE	DRILLER	En Prob
SOIL DESCRIPTION							
26			▼	Strong petroleum odor in groundwater			
27							
28			BORING TERMINATED AT 28 FEET				

Figure 4, Log of Boring SB-3, page 2 of 2

ENV_NO_WELL PLUCKYS BORINGS.GPJ 05/06/08

BORING ELEVATION:	ENGINEER/GEOLOGIST: JOHN LOVE
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PROJECT NO. E8448-06-01

DEPTH IN FEET	PENETRAT. RESIST. BLOWS/FT.	SAMPLE NO.	LITHOLOGY	BORING NO. SB-4		SOIL (USCS)	HEADSPACE (PPM)
				DATE DRILLED 4/22/08	WATER LEVEL (ATD)		
				EQUIPMENT	GEOPROBE	DRILLER	En Prob
SOIL DESCRIPTION							
1			ASPHALT AND BASE				
2			Stiff, moist, black, Sandy CLAY, medium plasticity, no odor			CL	
3							
4			Dense, slightly moist, fine Gravelly SAND, variegated, no odor			SW	
5							
6							
7							
8				BORING TERMINATED AT 8 FEET			

Figure 4, Log of Boring SB-4, page 1 of 1

ENV_NO_WELL PLUCKYS BORINGS.GPJ 05/06/08

BORING ELEVATION:	ENGINEER/GEOLOGIST: JOHN LOVE
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NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES. ALL BLOW COUNTS HAVE BEEN CONVERTED TO EQUIVALENT STANDARD PENETRATION TEST (SPT) BLOW COUNTS.

PROJECT NO. E8448-06-01

DEPTH IN FEET	PENETRAT. RESIST. BLOWS/FT.	SAMPLE NO.	LITHOLOGY	BORING NO. SB-5		SOIL (USCS)	HEADSPACE (PPM)
				DATE DRILLED 4/22/08	WATER LEVEL (ATD)		
				EQUIPMENT	GEOPROBE DRILLER En Prob		
SOIL DESCRIPTION							
1			ASPHALT AND FILL				
2							
3							
4							
5							
6							
7							
8							
9			▽				
10							
11			Soft to stiff, saturated, brown to light green, Silty and Sandy CLAY, low plasticity, slight odor in water, no odor in soil			CL	
12							
13							
14			▽				
15			Dense, moist, variegated Gravelly SAND, fine gravel, well graded sand, no odor			SW	
16							
BORING TERMINATED AT 16 FEET							

Figure 5, Log of Boring SB-5, page 1 of 1

ENV_NO_WELL PLUCKYS BORINGS.GPJ 05/06/08

BORING ELEVATION:	ENGINEER/GEOLOGIST: JOHN LOVE
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NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES. ALL BLOW COUNTS HAVE BEEN CONVERTED TO EQUIVALENT STANDARD PENETRATION TEST (SPT) BLOW COUNTS.

PROJECT NO. E8448-06-01

DEPTH IN FEET	PENETRAT. RESIST. BLOWS/FT.	SAMPLE NO.	LITHOLOGY	BORING NO. SB-6		SOIL (USCS)	HEADSPACE (PPM)
				DATE DRILLED 4/22/08	WATER LEVEL (ATD)		
				EQUIPMENT	GEOPROBE	DRILLER	En Prob
SOIL DESCRIPTION							
1			ASPHALT AND BASE				
2			Very stiff, moist, black, Sandy CLAY, low to medium plasticity, no odor			CL	
3							
4			Dense, moist, brown, Clayey GRAVEL with angular sand, low plasticity, no odor			GC	
5							
6			Dense, moist, brown, angular Gravelly SAND, no odor			SW	
7							
8			Stiff, moist, brown with olive, Sandy CLAY, medium plasticity, no odor			CL	
9							
10			Soft Slight petroleum odor Pale green				
11							
12							
13							
14			Stiff to very stiff, moist, brown, Silty CLAY, medium plasticity, no odor			CL	
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							

Figure 6, Log of Boring SB-6, page 1 of 2

ENV_NO_WELL_PLUCKYS BORINGS.GPJ 05/06/08

BORING ELEVATION:	ENGINEER/GEOLOGIST: JOHN LOVE
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NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES. ALL BLOW COUNTS HAVE BEEN CONVERTED TO EQUIVALENT STANDARD PENETRATION TEST (SPT) BLOW COUNTS.

DEPTH IN FEET	PENETRA RESIS BLOWS	SAMPLE NO.	LITHOLOG	DATE DRILLED <u>4/22/08</u>	WATER LEVEL (ATD) _____	SOIL (USCS)	HEADSPACE (PPM)	
				EQUIPMENT _____	GEOPROBE _____			DRILLER <u>En Prob</u>
				SOIL DESCRIPTION				
26			[Hatched Pattern]	BORING TERMINATED AT 31 FEET				
27								
28								
29								
30								
31								

Figure 7, Log of Boring SB-6, page 2 of 2

ENV_NO_WELL PLUCKYS BORINGS.GPJ 05/06/08

BORING ELEVATION:

ENGINEER/GEOLOGIST: **JOHN LOVE**

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES. ALL BLOW COUNTS HAVE BEEN CONVERTED TO EQUIVALENT STANDARD PENETRATION TEST (SPT) BLOW COUNTS.