ALAMEDA COUNTY
**HEALTH CARE SERVICES**
AGENCY
DAVID J. KEARS, Agency Director

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

December 21, 2004

Mr. Mike Kim
Pulte Home Corporation
7031 Koll Center Parkway, Suite 150
Pleasanton, CA 94566

Dear Mr. Kim:

Subject: Toxics Case No. RO0002521, Case Closure, Fabco Automotive Corp.,1249 67th St., Emeryville, CA 94608;

This letter confirms the completion of the site investigation and remedial action for the soil and groundwater investigation at the above referenced site in regards to the former underground tanks and motor oil, diesel, volatile organic compounds (VOCs) and poly aromatic hydrocarbon (PAH) releases. No further action is required at your site. We are transmitting the enclosed case closure summary. These documents confirm the completion of the investigation and cleanup of the reported releases at the subject site. This closure approval is based upon the available information and with the provision that the information provided to this agency was accurate and representative of site conditions. The subject Toxics case is closed.

**SITE INVESTIGATION AND CLEANUP SUMMARY**

Please be advised that the following conditions exist at the site:

- Total petroleum hydrocarbons as diesel (TPHd) up to 305 parts per million (ppm), total petroleum hydrocarbons as motor oil (TPHmo) up to 380 ppm and benzo (a) pyrene up to 0.19 ppm remain in soil at this site

- Methyl tertiary Butyl Ether (MTBE) up to 7 parts per billion (ppb), acetone up to 130 ppb, cis-1,2 dichloro ethene (DCE) up to 8.9 ppb, tetrachloroethylene (PCE) up to 4 ppb, trichloroethene (TCE) up to 62 ppb, and trans-1,2 DCE up to 2.9 ppb remain in shallow groundwater at the site.

If you have any questions, please call Barney Chan at (510) 567-6765. Thank you.

Sincerely,

Donna L. Drogos, P.E.
LOP and Toxics Program Manager

Enclosures:
1. Case Closure Summary

cc:

Ms. Betty Graham (w/enc)
SF- Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94612

Mr. Leroy Griffin
City of Oakland Fire Department
1605 MLK Jr. Drive
Oakland, CA 94612

Mr. Ignacio Dayrit
City of Emeryville
1333 Park Ave.
Emeryville, CA 94608

[redacted] (w/orig enc), D. Drogos (w/enc), R. Garcia (w/enc)

*Alameda County Environmental Health*

**CASE CLOSURE SUMMARY**
**TOXICS PROGRAM**

## I. AGENCY INFORMATION

Date: 12/14/04

| | |
|---|---|
| Agency Name: Alameda County Environmental Health | Address: 1131 Harbor Bay Parkway |
| City/State/Zip: Alameda, CA 94502-6577 | Phone: (510) 567-6765 |
| Responsible Staff Person: Barney Chan | Title: Hazardous Materials Specialist |

## II. CASE INFORMATION

| | | |
|---|---|---|
| Site Facility Name: Former Fabco Manufacturing Facility | | |
| Site Facility Address: 1249 67th St., Emeryville, CA 94608 | | |
| RB Case No.: --- | Local Case No.: --- | Toxics Case No.: RO0002521 |
| URF Filing Date: --- | SWEEPS No.: --- | APN: 049-1507-004-00 |

| Responsible Parties | Addresses | Phone Numbers |
|---|---|---|
| Mr. Mike Kim<br>Pulte Home Corporation | 7031 Koll Center Parkway, Suite 150,<br>Pleasanton, CA 94566 | 925-249-3200 |

| Tank I.D. No | Size in Gallons | Contents | Closed In Place/Removed? | Date |
|---|---|---|---|---|
| 1 | 1000 | Gasoline | Removed | 2/25/88 |
| 2 | 750 | Unknown | Removed | 3/4/04 |
| Piping | | | None Encountered | ----- |

## III. RELEASE AND SITE CHARACTERIZATION INFORMATION

| | | |
|---|---|---|
| Cause and Type of Release: unknown | | |
| Site characterization complete? Yes | Date Approved By Oversight Agency: ---- | |
| Monitoring wells installed? no | Number: NA | Proper screen interval? NA |
| Highest GW Depth Below Ground Surface: 12' | Lowest Depth: 24.5' | Flow Direction: estimated to be southwest from monitoring data from adjacent property at 1266 66th St., Emeryville (Liquid Sugars, Inc.) |
| Most Sensitive Current Use: site will be used for residential, groundwater is located within Zone B, according to the East Bay Plain Beneficial Use Study, where groundwater is unlikely to be used as a drinking water source. | | |

| Summary of Production Wells in Vicinity:<br>No water supply wells were identified within ¼-mile of the subject site. | |
|---|---|
| Are drinking water wells affected? No | Aquifer Name: East Bay Plain |
| Is surface water affected? No | Nearest SW Name: SF Bay ~4000' to the west |
| Off-Site Beneficial Use Impacts (Addresses/Locations): none identified | |
| Reports on file? Yes | Where are reports filed? Alameda County Environmental Health |

| TREATMENT AND DISPOSAL OF AFFECTED MATERIAL | | | |
|---|---|---|---|
| Material | Amount (Include Units) | Action (Treatment or Disposal w/Destination) | Date |
| Tank | 1-1000gallon<br>1-750 gallon | Disposed at H&H Ship Service, SF, CA<br>Disposed @ ECI, 255 Parr Blvd., Richmond, CA | 2/25/88<br>3/3/04 |
| Piping | none encountered | ----- | ---- |
| Free Product-Oil and Water from waste oil vault | 2000 gallon | Disposed at Romic Chemical, E. Palo Alto, CA | 2/19/88 |
| Soil and concrete<br>Soil<br>Soil | 44 tons<br>70 cy<br>350 tons | Disposed at Buttonwillow landfill<br>Disposed at Buttonwillow<br>W. Contra Costa County Landfill | 3/24/88<br>3/24/88<br>3/3/04 |
| Sump sludge | 12 yd | Disposed at Casmalia Disposal site | 2/29/88 |
| Groundwater-Oily water | 1400 gallon | Riverbank Oil Transfer, Riverbank, CA | 2/27/04 |

| MAXIMUM DOCUMENTED CONTAMINANT CONCENTRATIONS BEFORE AND AFTER CLEANUP<br>(Please see Attachments for additional information on contaminant locations and concentrations) | | | | |
|---|---|---|---|---|
| Contaminant | Soil (ppm) | | Water (ppb) | |
| | Before | After | Before | After |
| **Area 1 - 1988 Oil contaminated area** | | | | |
| TPH(gas) | NA (1) | --- | NA (1) | --- |
| TPH(diesel) | NA (1) | --- | NA (1) | --- |
| Oil and Grease | 1500(1) | 540(1) | NA (1) | --- |
| TPH(MO) | 20,000(1) | 100(1) | NA (1) | --- |
| **Area 2 - 1988 Waste oil vault and 1K gas UST removal** | | | | |
| TPH(gas) | ND (2) | ND (2) | NA (2) | --- |
| TPH(diesel) | ND (2) | ND (2) | NA (2) | --- |
| Oil and Grease | 20 (2) | 20 (2) | NA (2) | --- |
| TPH(MO) | 20 (2) | 20 (2) | NA (2) | --- |
| Benzene | ND (2) | ND (2) | NA (2) | --- |
| Toluene | ND (2) | ND (2) | NA (2) | --- |
| Ethyl Benzene | ND (2) | ND (2) | NA (2) | --- |
| Xylene | ND (2) | ND (2) | NA (2) | --- |
| MTBE | NA (2) | NA (2) | NA (2) | --- |
| Other (8240) – VOCs | ND (2) | ND (2) | NA (2) | --- |

| MAXIMUM DOCUMENTED CONTAMINANT CONCENTRATIONS BEFORE AND AFTER CLEANUP (Please see Attachments for additional information on contaminant locations and concentrations) | | | | |
|---|---|---|---|---|
| Contaminant | Soil (ppm) | | Water (ppb) | |
| | Before | After | Before | After |
| **Area 3 – 11/02 Investigation GMX01- GMX15** | | | | |
| TPH(gas) | NA (3) | --- | NA (3) | --- |
| TPH(diesel) | 200 (3) | 200 (3) | NA (3) | --- |
| Oil and Grease | NA (3) | --- | NA (3) | --- |
| TPH(MO) | 350 (3) | 350 (3) | NA (3) | --- |
| Benzene | NA (3) | ---- | ND | ND |
| Toluene | NA (3) | --- | ND | ND |
| Ethyl Benzene | NA (3) | --- | ND | ND |
| Xylene | NA (3) | --- | ND | ND |
| MTBE | NA (3) | --- | 7 | 7 |
| Other (8260)- VOCs | NA (3) | --- | * (3) | * (3) |
| Other (8270)-PAHs | ** (3) | ** (3) | NA (3) | --- |
| Metals | *** (3) | *** (3) | NA (3) | --- |
| **Area 4 - 11/03 Borings B-1 through B-13** | | | | |
| TPH(gas) | NA (4) | --- | NA (4) | --- |
| TPH(diesel) | 240 (4) | 240 (4) | NA (4) | --- |
| Oil and Grease | NA (4) | --- | NA (4) | --- |
| TPH(MO) | 350 (4) | 350 (4) | NA (4) | --- |
| Benzene | ND (4) | ND (4) | NA (4) | --- |
| Toluene | ND (4) | ND (4) | NA (4) | --- |
| Ethyl Benzene | ND (4) | ND (4) | NA (4) | --- |
| Xylene | ND (4) | ND (4) | NA (4) | --- |
| MTBE | ND (4) | ND (4) | 1.4 | 1.4 |
| Other (8260)- VOCs | ND (4) | ND (4) | *(4) | *(4) |
| Other (8270)-PAHs | **(4) | **(4) | NA (4) | --- |
| Other (8081 A) Organochlorine Pesticides | ND (4) | ND (4) | NA (4) | --- |
| Metals | ***(4) | *** (4) | NA (4) | --- |
| **Area 5- 3/04 Debris excavation and 750 gallon UST removal** | | | | |
| TPH(gas) | <1 (5) | <1 (5) | #560 (5) | --- |
| TPH(diesel) | 305 (5) | 305 (5) | #12,000 (5) | --- |
| Oil and Grease | NA (5) | --- | NA (5) | --- |
| TPH(MO) | 380 (5) | 380 (5) | #16,000 (5) | --- |
| Benzene | ND (5) | ND (5) | ND (5) | ND (5) |
| Toluene | ND (5) | ND (5) | ND (5) | ND (5) |
| Ethyl Benzene | ND (5) | ND (5) | ND (5) | ND (5) |
| Xylene | ND (5) | ND (5) | #0.7 (5) | --- |
| MTBE | ND (5) | ND (5) | NA (5) | --- |
| Other (8260)- VOCs | * (5) | * (5) | ND (5) | --- |
| Other (8270)-PAHs | ** (5) | ** (5) | NA (5) | --- |
| Metals | *** (5) | *** (5) | NA (5) | --- |

| MAXIMUM DOCUMENTED CONTAMINANT CONCENTRATIONS BEFORE AND AFTER CLEANUP (Please see Attachments for additional information on contaminant locations and concentrations) | | | | |
|---|---|---|---|---|
| Contaminant | Soil (ppm) | | Water (ppb) | |
| | Before | After | Before | After |
| PCBs | ND (5) | ND (5) | NA (5) | --- |
| **Area 6 - 3/04 Shallow borings (S-1 through S-4) and Deep borings (CPT-1 through CPT-3)** | | | | |
| TPH(gas) | NA (6) | --- | NA (6) | --- |
| TPH(diesel) | NA (6) | --- | <50 | <50 |
| Oil and Grease | NA (6) | --- | NA (6) | --- |
| TPH(MO) | NA (6) | --- | <300 | <300 |
| Benzene | NA (6) | --- | <0.5 (6) | <0.5 (6) |
| Toluene | NA (6) | --- | <0.5 (6) | <0.5 (6) |
| Ethyl Benzene | NA (6) | --- | <0.5 (6) | <0.5 (6) |
| Xylene | NA (6) | --- | <0.5 (6) | <0.5 (6) |
| MTBE | NA (6) | --- | <0.5 (6) | <0.5 (6) |
| Other (8260)- VOCs | NA (6) | --- | *(6) | ND |
| Other (8270)-PAHs | NA (6) | --- | NA (6) | --- |
| Metals | NA (6) | --- | NA (6) | --- |

(1) 1988 Oil Contaminated area, Oil and Grease and TPH (MO) only analytes tested, groundwater not tested at that time.

(2) 1988 Waste Oil Vault and 1000 gallon gasoline tank removals, TPHg, TPHd, TPH (MO), Oil and Grease and BTEX & VOCs only analytes tested. Groundwater not tested at that time.

(3) 11/02 Investigation (GMX-01 through GMX-10) and 12/02 Investigation (GMX-11 through GMX-15),
* The following VOCs were detected in grab groundwater samples from borings GMX-01 through GMX-15 : 7 ppb MTBE, 7.7 ppb cis-1,2 DCE, 2.9 ppb trans-1,2 DCE, 62 ppb TCE
** PAHs detected at concentrations ranging from <5 ppb to 470 ppb. The only PAH of risk based concern is benzo (a) pyrene @ 190 ppb in GMX-01@2'
*** Metals : As 11, Cd 4, Cr 31, Pb 180, Ni 56, Zn 360 ppm

(4) 11/03 Borings B-1 through B-13
* The following VOCs were detected in grab groundwater samples from B-1 through B-13: 2.5 ppb chloroform, 0.6 ppb cis 1,2 DCE, 5.4 ppb TCE, 1.4 ppb MTBE
** PAHs detected at concentrations ranging from <5ppb to 130 ppb. The only PAH of risk based concern is benzo (a) pyrene @ 39 ppb in B-3.
*** Metals : As 6.8, Cd 0.5, Cr 36, Pb 83, Ni 38, Zn 100 ppm

(5) 3/04 Debris excavation and 750 gallon UST removal
* The following VOCs were detected in soil samples from debris excavation and 750 gallon UST removal: 0.14 ppm acetone, 0.042 ppm methylene chloride, 0.035 ppm MEK
** PAHs detected from <0.005 to 0.24 ppm. The only PAH of risk based concern was 0.11 ppm benzo (a) pyrene in SW-N-30304. This area was over-excavated, re-sampled and detected <0.005 ppm benzo (a) pyrene.
*** Metals : Cd 3.6, Cr 42, Pb 350, Ni 41, Zn 810 ppm, after over-excavation and re-sampling Pb = 5 ppm.
# The compounds reported in groundwater were in a perched water sample from the waste debris pit, once vacuumed out, no water recharged, therefore, believed to be surface water from recent rains.

(6) 3/04 Shallow borings (S-1 through S-4) and Deep borings (CPT-1 through CPT-3). No soil samples collected from these borings.
* Shallow grab groundwater samples from S-1 through S-4 detected 130 ppb acetone, 8.9 ppb cis-1,2 DCE, 4 ppb PCE, 26 ppb TCE and 2 ppb trans-1,2 DCE. Deep grab groundwater samples from CPT-1 through CPT-3 were ND for all VOCs.

Site History and Description of Corrective Actions:

January 1988 oily contaminated area within the parking lot was identified and remediated. The source of the contamination was leakage from a storage bin use to store machine shop cutting oil contaminated scrap metal. The impacted area was approximately 55'x 33' in area. Four to six inches of oil sludge from the top of the asphalt, two to three inches of deteriorated asphalt and three to four inches of baserock was removed from the affected areas. Seventy cubic yards of contaminated soil was disposed as California regulated waste. A four point composite of the contaminated soil was analyzed for disposal purposes. This sample reported 20,000 ppm TPHmo, ND for VOCs and semi-volatile compounds, pesticides and PCBs. Six shallow soil samples were collected after this soil removal, samples P1 through P6. Three composite samples were analyzed for TPHmo. The composites reported 50, 110 and 250 ppm TPHmo and 60, 100 and 1500 ppm oil and grease. It is noted that any deteriorated asphalt would be detected in the oil and grease analysis but not in the TPHmo analysis. The composite which reported 1500 ppm O & G was re-sampled discretely and reported 70ppm and 100 ppm TPHmo and 170ppm and 540 ppm O&G. The area was then resurfaced. See Attachment 2, sample collection log and analytical results.

February 24, 1988, two USTs were removed from the site, 1- 7,000 gallon waste oil vault and 1-1000 gallon unleaded underground tank. The waste oil vault top was cut off and its contents removed prior to being demolished and the excavated. The vault and solidified sludge was disposed to Casmalia Disposal site. Soil was over-excavated and a total of 43.91 tons of contaminated soil was disposed at IT. Soil samples S1 and N2 were collected from beneath the vault at a depth of ~10'. Samples were ND for TPHd, TPHmo, aromatic volatile organics (BTEX et al) and halogenated VOCs. Oil and grease was reported at 10ppm and 20 ppm for the samples.

The 1000 gallon UST was inspected and found to have minor corrosion but otherwise in sound condition. The tank was disposed at H&H Ship Services. Two soil samples, N-3 and S-4 were collected from beneath this tank at depths of 9' bgs. These samples reported ND for TPHg and BTEX. No further investigation was done for these UST removals. See Attachment 3 and Analytical Results.

A Phase I environmental site assessment (ESA) was performed for Pulte Homes to determine if any additional environmental investigation would be needed prior to their proposed residential development. The site is approximately 3 acres and located in a mixed industrial/commercial and residential area in Emeryville. The property is bounded by San Pablo Ave. to the east, 66$^{th}$ St. to the south, the Union Pacific RR tracks and Hollis St. to the west and 67$^{th}$ St. to the north. The site is located approximately ¼ mile east of the San Francisco Bay and the topography slopes gently towards the bay. See Attachment 1.

Fabco, which designed and manufactured automotive components, occupied the site since 1918. The manufacturing process includes machining, welding and assembly. Synthetic oils, compressed gases and waterborne paints were among the hazardous materials used at the site. Gasoline and waste oil were also stored as previously reported. Areas of potential environmental concern identified through the Phase I were the following:

- Manufacturing area in the main building where oil staining was observed near an interior floor drain on the concrete floor
- Synthetic Oil Mixing station located within the main building, where water and synthetic oil are mixed for use throughout the manufacturing area.
- Waste Drying area, where metal shavings covered with synthetic oil are placed into metal containers to allow to drip dry
- Paint Spray booth located in the south end of the manufacturing facility, however, only waterborne paints have traditionally been used
- Historical aerial photos indicate the potential of ASTs and possible staining/discoloration near them and the previously noted areas of the former USTs and oily storage bin areas.

A Phase II soil and groundwater sampling investigation was performed in November 2002. The investigation attempted to collect grab groundwater samples from 10 borings (GMX-01 through GMX-10) and soil samples from six targeted borings (GMX-01,-03,-05,-06,-08 and –09). The borings were either located near potential source areas identified in the Phase I, located onsite, up and down-gradient of these areas or in areas to spatially provide information in previously unknown areas. Soil samples were collected at depths of 2 and 4.5', with the exception at 8.5' in boring GMX-4 due to observed PID readings. Groundwater was collected from a 1 inch diameter PVC casing, slotted from 5-10'. Due to the fine grained soils, only 3 groundwater samples were collected out of the original 10 borings. Soil samples were analyzed for TEPH as diesel and as motor oil, the metals arsenic, cadmium, chromium, lead, nickel and zinc, and PNAs. The grab groundwater samples were analyzed for VOCs by EPA Method 8260. Soil results reported TPHd from ND to 200 ppm, TPHmo from ND to 310 ppm, metals < either the ESL for shallow soils/residential exposure or the 95% UCL background

level from the LBNL 1995 report with the exception of cadmium in GMX-09 @4.5' which reported 4 ppm and the background level is 2.7 ppm, and PAHs all less the ESL for shallow/residential exposure, except GMX-01@2 , which reported 190 ppb benzo(a) pyrene vs. the ESL of 38ppb. Grab groundwater samples were collected from GMX-04, -08 and –09 and analyzed for VOCs. Results reported low levels of the HVOCs, cis-1,2 DCE, trans-1,2 DCE and TCE. The water sample from GMX-09 reported 62 ppb TCE and all others were < Californian MCLs. MTBE was <5 ppb in these samples.

Based upon these results an additional groundwater investigation was performed in 12/02 where five additional grab groundwater samples were collected, GMX-11 through GMX-15. The results of the additional sampling indicated the presence of the same HVOCs in the northeast corner of the site near the former Southern Pacific RR tracks. The highest sample was GMX-12, which reported 49 ppb TCE.

To supplement this information and provide enough data to perform a risk assessment, an additional soil and groundwater investigation was proposed. Based upon the preliminary plans for the proposed housing development, some of the homes would overlie areas of contaminated groundwater. Groundwater samples were proposed in these areas, in addition, soil samples were proposed in areas where the development proposed yards or common areas. On 11/03 this additional investigation was performed. It consisted of collection and analysis of grab groundwater samples from six borings (B-5 and B-9 through B-13) and soil samples from nine targeted locations (B-1 through B-9). Soil samples were collected from two depths, approximately 1.5' to 2' and from 4.5 to 5.5' bgs. The shallow soil sample from B-2 could not be collected due to the thickness of the concrete and poor recovery so only a 4-5' bgs sample was collected. Soil samples were analyzed for TPH as diesel and as motor oil, arsenic and the five LUFT metals, PAHs and organo chlorine pesticides (OCPs). The deeper soil samples and groundwater samples were analyzed for VOCs by EPA Method 8260. The stratigraphy observed in the borings was fine grained mixtures of sandy clay, clay with sand, lean clay and clayey sand with variable amounts of gravel. Depth to water varied from 12-24' bgs in the borings. Soil sample results detected TPHd from 1.1 to 240 ppm, TPHmo from 11 to 350 ppm, LUFT metals below residential ESLs except arsenic, which was below the 95% UTL presented in the LBNL 1995 report and PAHs, which detected concentrations above residential ESLs only in boring B-3 at 2.5'. Chloroform, cis-1,2-DCE, MTBE and TCE were detected in the groundwater samples, however, all were detected at concentrations below the residential ESL where groundwater is not a current or potential drinking water source. This is a reasonable ESL since groundwater in this area is within Zone B, according to the East Bay Plain Beneficial Use Study, where groundwater is unlikely to be used as a drinking water source.

Based upon the PAH results, five additional step-out borings were advanced in the vicinity of borings GMX-1 and B-3. Soil sample results indicated that benzo(a)pyrene concentrations exceeding the respective residential ESL is limited in lateral and vertical extent. The average concentration of the step-out samples and the contaminated samples, located within an approximately 500 square foot area, is equal to the residential ESL of 0.038 ppm. In addition, Pulte design plans indicate that this area will be covered by either asphalt or housing units. Therefore, this area was not remediated. Since B-3 reported 0.039 ppm benzo (a) pyrene, only one sample really exists which exceeds the residential ESL. It is therefore reasonable to not require a deed restriction based on only one "hot spot".

Out of the 15 groundwater samples analyzed, TCE was detected in concentrations ranging from 1.3-62 ppb. These concentrations and that of all other detected VOCs are below their respective residential ESL where groundwater is not a current or potential drinking water resource. In addition, no VOCs were detected in the deeper groundwater samples, more representative of where water would be extracted should production wells ever be considered at the site.

During site preparation activities in February 2004, a UST was encountered. No dispensers or piping was associated with the UST. The contents of the tank was oily water. On March 3, 2004 the tank was removed. The UST was approximately 8' long and 4' in diameter and estimated to be 750 gallons in capacity. No holes, leaks or damage was observed in the UST. Water with a sheen was observed in the pit after the tank was removed. The pit was pumped out and over-excavated. No water recharged, indicating that water present may have been the result of recent precipitation. Sample UST-B-6.0 was collected from approximately 6' at the bottom of the pit. The soil sample was analyzed for TPHg, TPHd and TPHmo, VOCs, LUFT metals, PCBs, PAHs and CAM metals (stockpile sample only). TPHg was <1ppm, TPHd was 2.6 ppm, TPHmo was 47 ppm. Low levels of the common solvents acetone (0.14ppm), methylene chloride (0.042 ppm) and methyl ethyl ketone (0.035 ppm) were also detected. Metals and PAHs were all less than their respective ESLs. On July 28, 2004 the City of Oakland issued a closure letter for this underground tank and did not require further investigation of the release.

At the same time the tank was being removed, a variety of debris including containers, bottles and drums was discovered just southwest of the UST location. Water within the excavation appeared to have a sheen. The water was pumped out and did not recharge. The excavation soil was stockpiled for characterization and disposal. Soil samples SS-5.0-21104, SW-N-30304, and SW-S-30404 were collected from the bottom, north and south sides of the excavation, respectively.

The samples were analyzed for TPHg, TPHd, TPHmo, VOCs, PCBs, PAHs and LUFT metals as was the water sample. Results for all soil samples were less than their respective ESLs with the exception of SW-N-30304, which detected concentrations of PAHs and lead at 0.11 ppm and 350 ppm, respectively. The northern side of the excavation was then over-excavated and re-sampled with sample SW-N-2-4.0. This sample reported <0.005 ppm for all PAHs and 5 ppm for lead. The pit water detected 560 ppb TPHg, 12,000 ppb TPHd, 16,000 ppb TPHmo, 48 ppb acetone, 12 ppb MEK, 0.7 ppb xylenes and 0.7 ppb 1, 2,4-TMB. After vacuuming out this water no groundwater recharged, therefore the water is believed to be the result of recent rain water mixing with contaminated soil.

To examine potential impact to groundwater from the UST and debris pit, four shallow borings (S-1 through S-4) were advanced on March 11, 2004 in the assumed down-gradient location from these areas. Borings were advanced to a depth of 16' in borings S-1 and S-4 and advanced to 18' in borings S-2 and S-3. On March 25, 2004 three deep borings (CPT-1 through CPT-3) were advanced to depths of 47-50'. Based upon the CPT readings that indicated coarser grained materials, selected deeper intervals were sampled for grab groundwater. These depths ranged from 38-48' bgs representing a "deeper" aquifer. Acetone, 48 ppb, cis and trans-1,2-DCE, 8.9, 2.0 ppb, respectively, ethyl benzene, 1.1 ppb, PCE, 4 ppb, xylenes, 4.4 ppb and TCE, 26 ppb were detected in the shallow groundwater samples, however, no analytes exceeding their detection limits were detected in the deeper groundwater samples.

Based upon the presence of residual soil and groundwater contamination, Pulte Homes applied a vapor membrane (Liquid Boot) over the subgrade beneath the building slabs in the vicinity of the low VOC detections in the groundwater along the western perimeter of the property. In areas of landscaping, 0.5-2.0' of imported topsoil will be used as cover to prevent dermal exposure, although the only known area of contamination exceeding the residential ESL is at GMX-1 and as stately previously, this area is slated for either a building or asphalt surfacing.

Geomatrix's evaluation of the risk posed by residual soil and groundwater contamination remaining in place at this site determined that the site does not pose an unacceptable human health risk to future residents, under the conditions evaluated.

See Attachment 4 for Sampling and Excavation Locations, Attachment 5 for Proposed Development and Sampling Location Map, Attachment 6 for Cumulative Analytical results and Attachment 7 for Boring Logs and Attachment 8 for map indicating residual PAH concentrations.

## IV. CLOSURE

| | | |
|---|---|---|
| Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? Yes No | | |
| Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? Yes No | | |
| Does corrective action protect public health for current land use? Alameda County Environmental Health staff does not make specific determinations concerning public health risk. However, based upon the information available in our files to date, and no further action is required to protect human health based upon current land use and conditions. | | |
| Site Management Requirements: none | | |
| Should corrective action be reviewed if land use changes? no | | |
| Monitoring Wells Decommissioned: NA | Number Decommissioned: NA | Number Retained: NA |
| List Enforcement Actions Taken: None | | |
| List Enforcement Actions Rescinded: None | | |

## V. ADDITIONAL COMMENTS, DATA, ETC.

Considerations and/or Variances:

1. No groundwater investigation was done for the oily material contaminated area remediated in 1988, however, the oil was cutting oil and did not contain any volatiles or any other "waste oil" typical analytes. Seventy cubic yards of impacted soil was disposed and the residual soil concentration ranged from 70-100 ppm TPH mo. Grab groundwater samples down-gradient of this area were < 300ppb, for TPHmo.

2. The "waste oil" vault and the 1000 gallon gasoline tank removed in 1988 did not perform a groundwater investigation, though contaminated soil was removed from vault area after its removal. MTBE, the 6 oxygenates and lead scavengers were not initially tested at the gasoline tank removal. However, the "waste oil" vault was most likely a waste cutting oil vault and the gasoline tank was used and removed prior to the prevalent use of oxygenates in gasoline. Recent grab groundwater samples throughout the site including locations down-gradient of the former tank and vault have detected < 300ppb TPHmo and up to 7 ppb MTBE.

3. No monitoring wells were installed, therefore, site specific gradient was not determined. The gradient is inferred from wells at the former Liquid Sugars site at 1266 65$^{th}$ street immediately to the west of this site currently being overseen by the SFRWQCB.

4. Sources of the HVOCs detected in groundwater have not been determined, however, the highest concentration detected (62 ppb TCE) is lower than the RWQCB ESL of 360 ppb (aquatic impact) where groundwater is not a current or potential source of drinking water or 530 ppb, for the evaluation of indoor air impacts. This is a safe assumption since the site is partially in Emeryville where groundwater is located within Zone B, according to the East Bay Plain Beneficial Use Study, where groundwater is unlikely to be used as a drinking water source. In addition, in the western portion of the site where the HVOCs were detected in groundwater, Liquid Boot vapor barrier membrane was laid beneath the building foundations.

5. A localized area in the northern portion of the site remains where 2 samples exceed the corresponding RWQCB ESL for benzo (a) pyrene, however, additional sampling near these locations indicate that the contamination is localized laterally and vertically. The average concentration of benzo (a) pyrene within a 500 square foot area including these two samples is 0.038 ppm, the ESL for this compound. In addition, this area is scheduled for either asphalt covering or housing units, therefore, the dermal exposure pathway will be eliminated.

Conclusion:

Alameda County Environmental Health staff believe that the levels of residual contamination do not appear to pose a significant threat to water resources, public health and safety, and the environment under the proposed residential land use based upon the information available in our files to date. Remaining residual contamination exceeding residential cleanup levels will be covered by asphalt or buildings, therefore, eliminating exposure. ACEH staff recommends closure for this site.

## VI. LOCAL AGENCY REPRESENTATIVE DATA

| | |
|---|---|
| Prepared by: Barney Chan | Title: Hazardous Materials Specialist |
| Signature: Barney Chan | Date: 12/20/04 |
| Approved by: Donna L. Drogos, P.E. | Title: Supervising Hazardous Materials Specialist |
| Signature: Donna L. Drogos | Date: 12/20/04 |

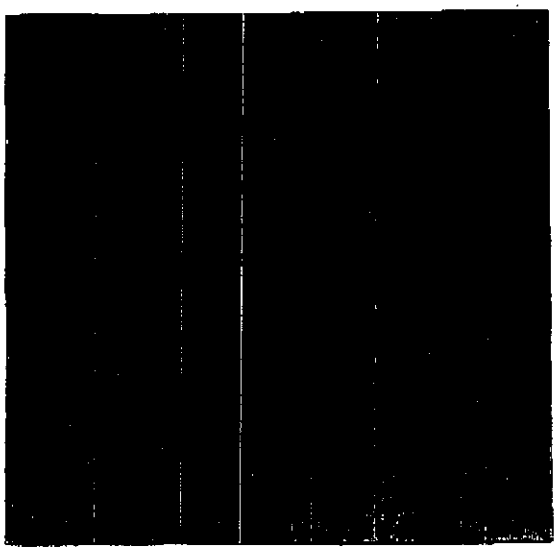
This closure approval is based upon the available information and with the provision that the information provided to this agency was accurate and representative of site conditions.

## VII. REGIONAL BOARD NOTIFICATION

| | |
|---|---|
| Regional Board Staff Name: Betty Graham | Title: Associate Water Resources Control Engineer |
| Signature: Betty Graham | Date Submitted to RB: 12/21/04 |

Attachments:
1. Site Location Map
2. Soil Contamination Map, Sampling Log and Analytical Results
3. Sample Location Map and Analytical Results
4. Sampling and Excavation Location Map
5. Proposed Development and Sampling Location Map
6. Cumulative Soil and Groundwater Analytical Results
7. Boring Logs

This document and the related CASE CLOSURE LETTER, shall be retained by the lead agency as part of the official site file.




Base map from the U.S. Geological Survey, Oakland West Quadrangle, 7.5 minute series (topographic), 1959 (photo revised 1980).

0 2000 Feet

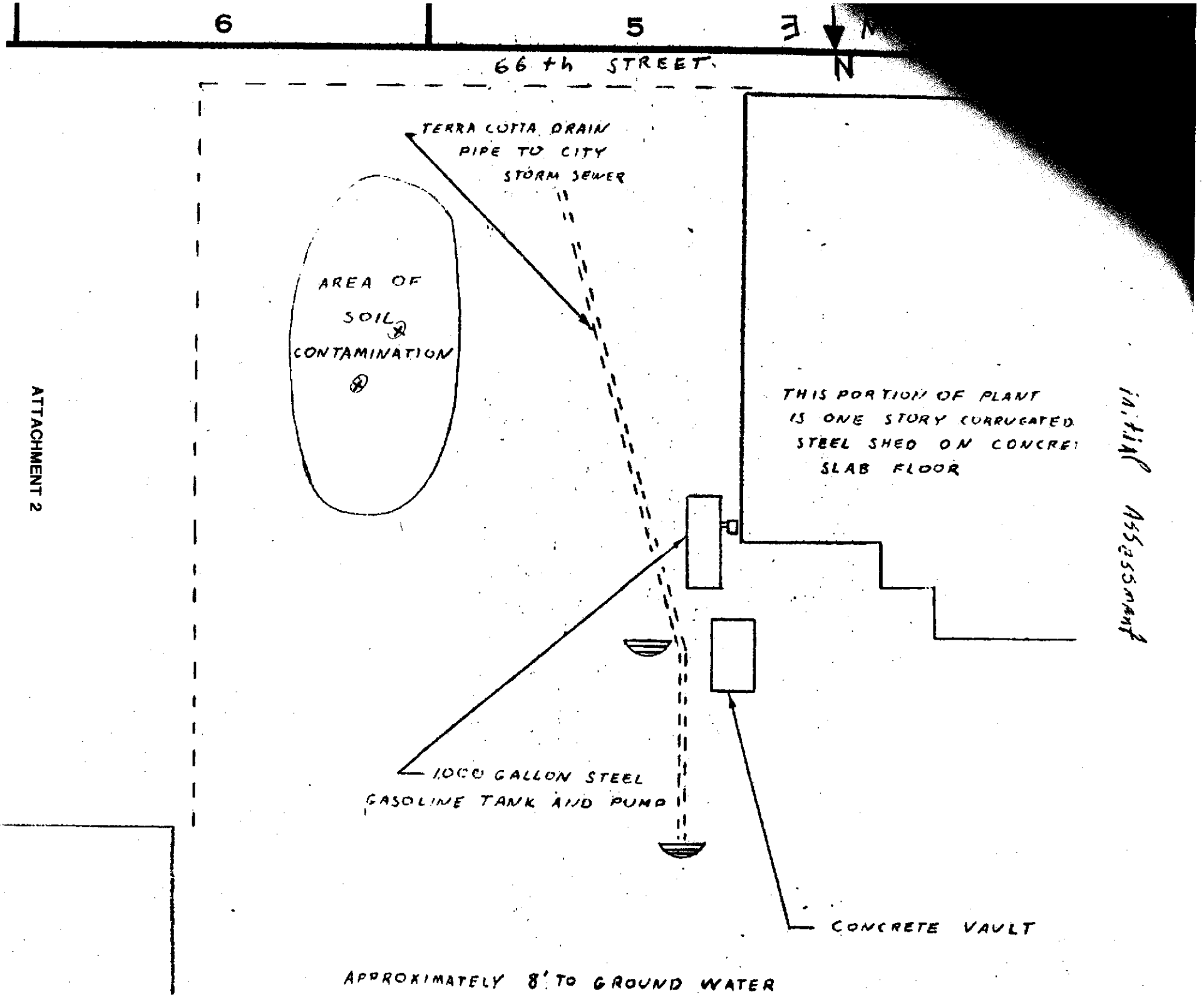
S:\8300\8367\8367.001\task_4\04_0602_csct_fig_01(01).ai

GEOMATRIX

SITE LOCATION MAP
Former Fabco Manufacturing Facility
1249 67th Street
Emeryville, California

Project No.
8367.001

**ATTACHMENT 1**


6
5
3
N
66th STREET
TERRA COTTA DRAIN PIPE TO CITY STORM SEWER
AREA OF SOIL CONTAMINATION
THIS PORTION OF PLANT IS ONE STORY CORRUGATED STEEL SHED ON CONCRETE SLAB FLOOR
1000 GALLON STEEL GASOLINE TANK AND PUMP
CONCRETE VAULT
APPROXIMATELY 8' TO GROUND WATER
ATTACHMENT 2
Initial Assessment

INTERNATIONAL TECHNOLOGY CORPORATION

| | | | | | | |
|---|---|---|---|---|---|---|
| DATE | 0 | 2 | 0 | 8 | 8 | 3 |
| TIME | 1. | 40 | | | | |
| PAGE 1 OF 1 | | | | | | |
| PAGE | 0 | 0 | 0 | 0 | 1 | |
| PROJECT NO. 190348 | | | | | | |

## SAMPLE COLLECTION LOG

PROJECT NAME FABIO

SAMPLE NO. N1 – N2 N3 – N4

SAMPLE LOCATION Bin AREA Soil

SAMPLE TYPE Soil

COMPOSITE ✓ YES ___ NO AT LAB

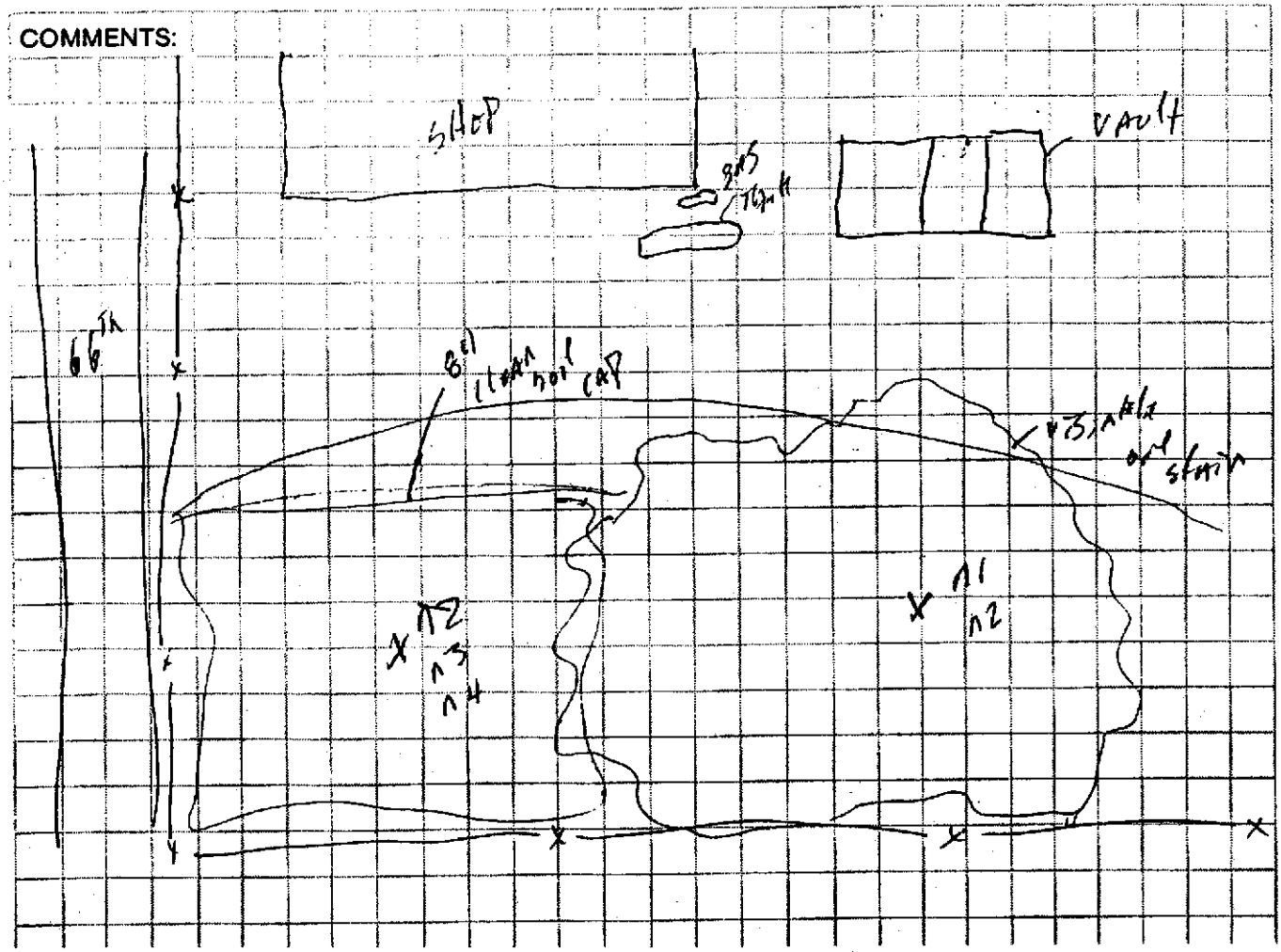
COMPOSITE TYPE Soil

DEPTH OF SAMPLE 0 – 12 Inches

WEATHER CLEAR – WARM

| CONTAINERS USED | AMOUNT COLLECTED |
|---|---|
| BRASS TUBES | 2 - 6" TUBES |
| | |
| | |

COMMENTS:



INTERNATIONAL TECHNOLOGY CORPORATION

For RS+R6 - 5-12-88

| | | | | | | |
|---|---|---|---|---|---|---|
| DATE | 0 | 3 | 2 | 8 | 8 | |
| TIME | 1 | 0 | 0 | 0 | | |
| PAGE 1 OF 1 | | | | | | |
| PAGE | 0 | 0 | 0 | 0 | 2 | |
| PROJECT NO. 110348 | | | | | | |

# SAMPLE COLLECTION LOG

PROJECT NAME Fabco

SAMPLE NO. P1 - P6 / R5 - R6

SAMPLE LOCATION Parking Area

SAMPLE TYPE

COMPOSITE ✓ YES ___ NO

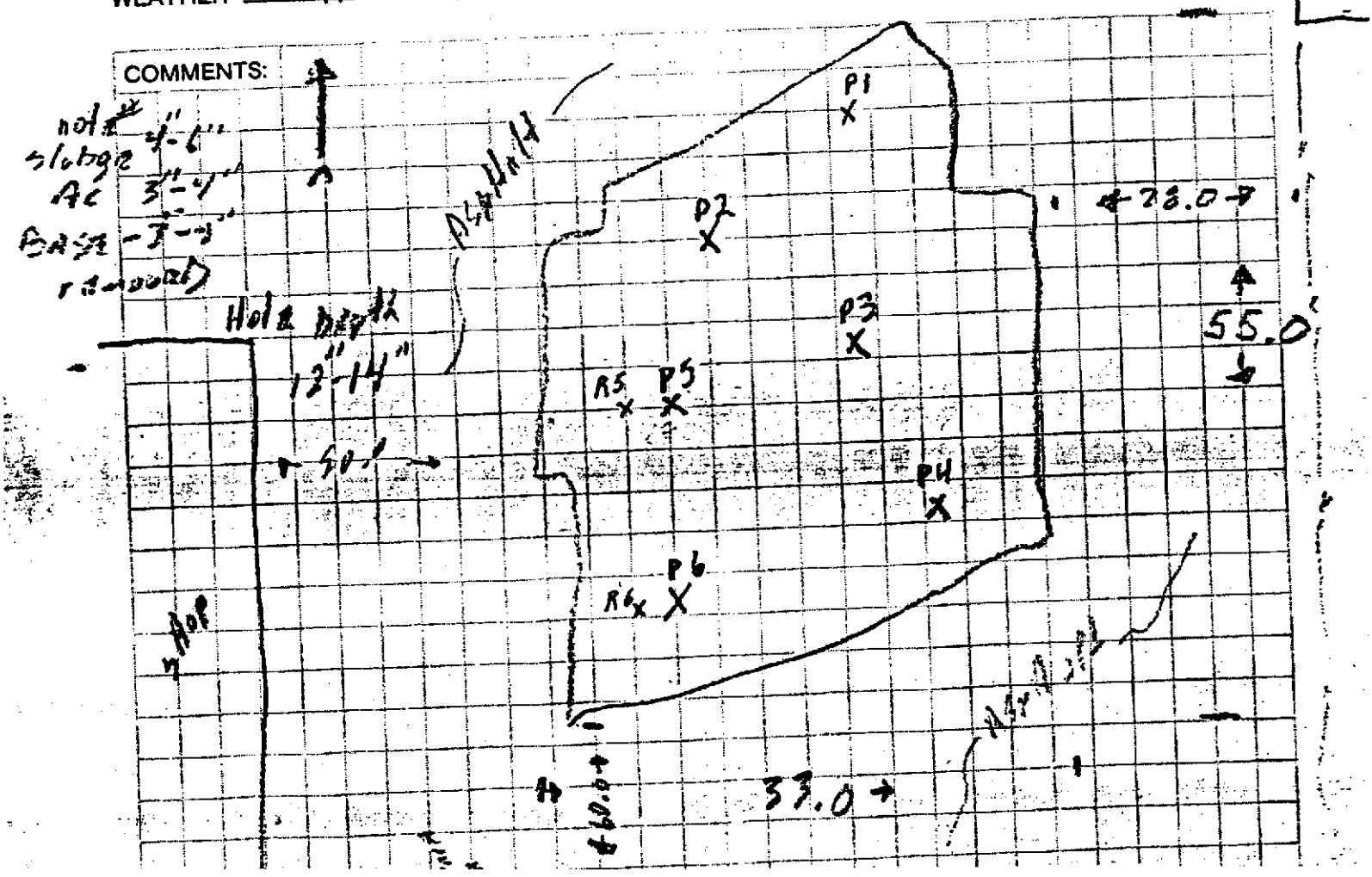
COMPOSITE TYPE 2-1 (AT 1AB)

DEPTH OF SAMPLE 12" - 18"

WEATHER clear warm

| CONTAINERS USED | AMOUNT COLLECTED |
|---|---|
| 2"x6" B TUBES | 6 TUBES |
| 2"x6" B TUBES | 2 TUBES |
| | |

COMMENTS:



IT/Santa Clara to IT/Martinez
ATTN: Dan Friberg

May 17, 1988


Project: 190348, Fabco

Results

| Lab Number | Sample Identification | Parts per Million - dry soil basis: High Boiling Hydrocarbons (calculated as oil) | Parts per Million - dry soil basis: Oil and Grease |
|---|---|---|---|
| | 190348, Fabco | | |
| S8-05-132-01 | R5 Parking Lot | 70. | 170. |
| Detection Limit | | 30. | 10. |
| S8-05-132-02 | R6 Parking Lot | 100. | 540. |
| Detection Limit | | 70. | 10. |

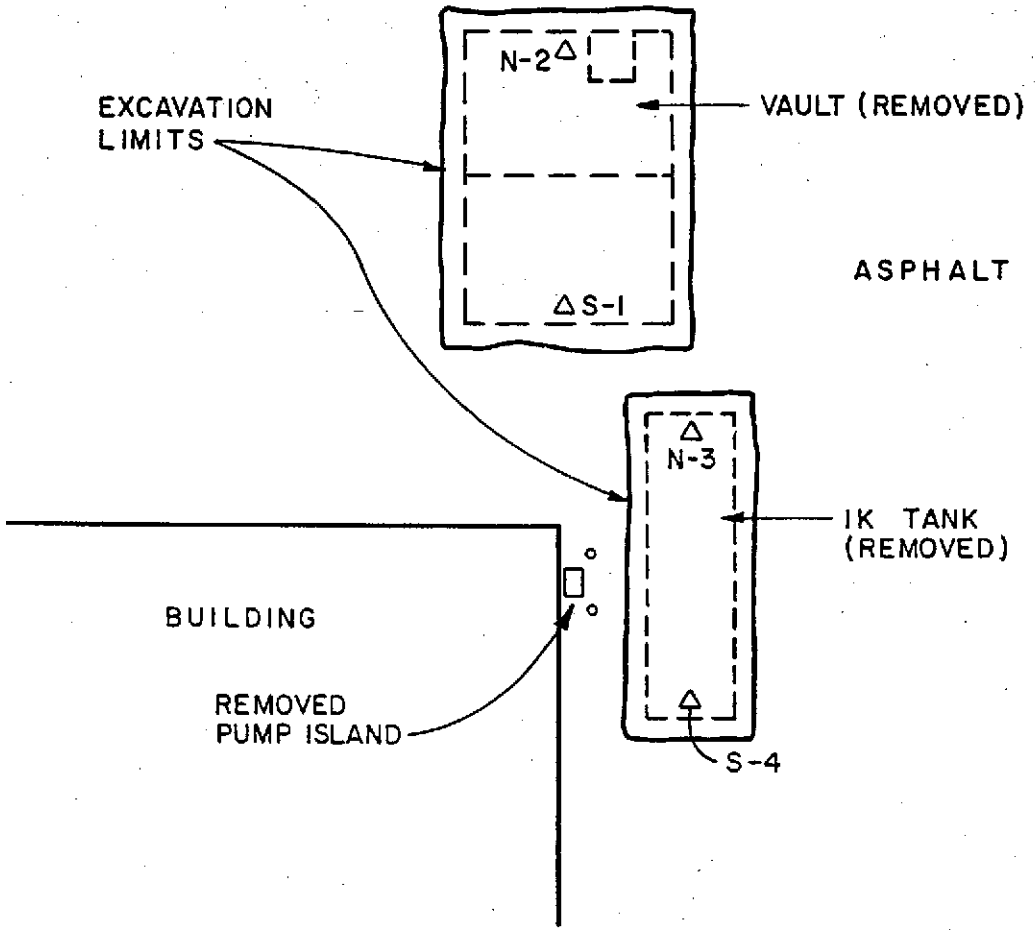
IT/Santa Clara to IT/Martinez
ATTN: Dan Friberg

May 5, 1988


Project: 190348, Fabco

Results

| Lab Number | Sample Identification | Parts per Million- dry soil basis: High Boiling Hydrocarbons (calculated as oil) | Parts per Million- dry soil basis: Oil & Grease |
|---|---|---|---|
| S8-04-001-01, S8-04-001-02 (composite) | P1 P2 (composite) | 50. | 60. |
| Detection Limit | | 30. | 10. |
| S8-04-001-03, S8-04-001-04 (composite) | P3 P4 (composite) | 110. | 100. |
| Detection Limit | | 80. | 10. |
| S8-04-001-05, S8-04-001-06 (composite) | P5 P6 (composite) | 250. | 1,500. |
| Detection Limit | | 80. | 10. |




**ATTACHMENT 3**

SAMPLE LOCATION MAP

PREPARED FOR

FABCO AUTOMOTIVE CORP.

DRAWN BY SJZ 6-23-88
CHECKED BY
APPROVED BY
DRAWING NUMBER



IT ... Creating a Safer Tomorrow

126076

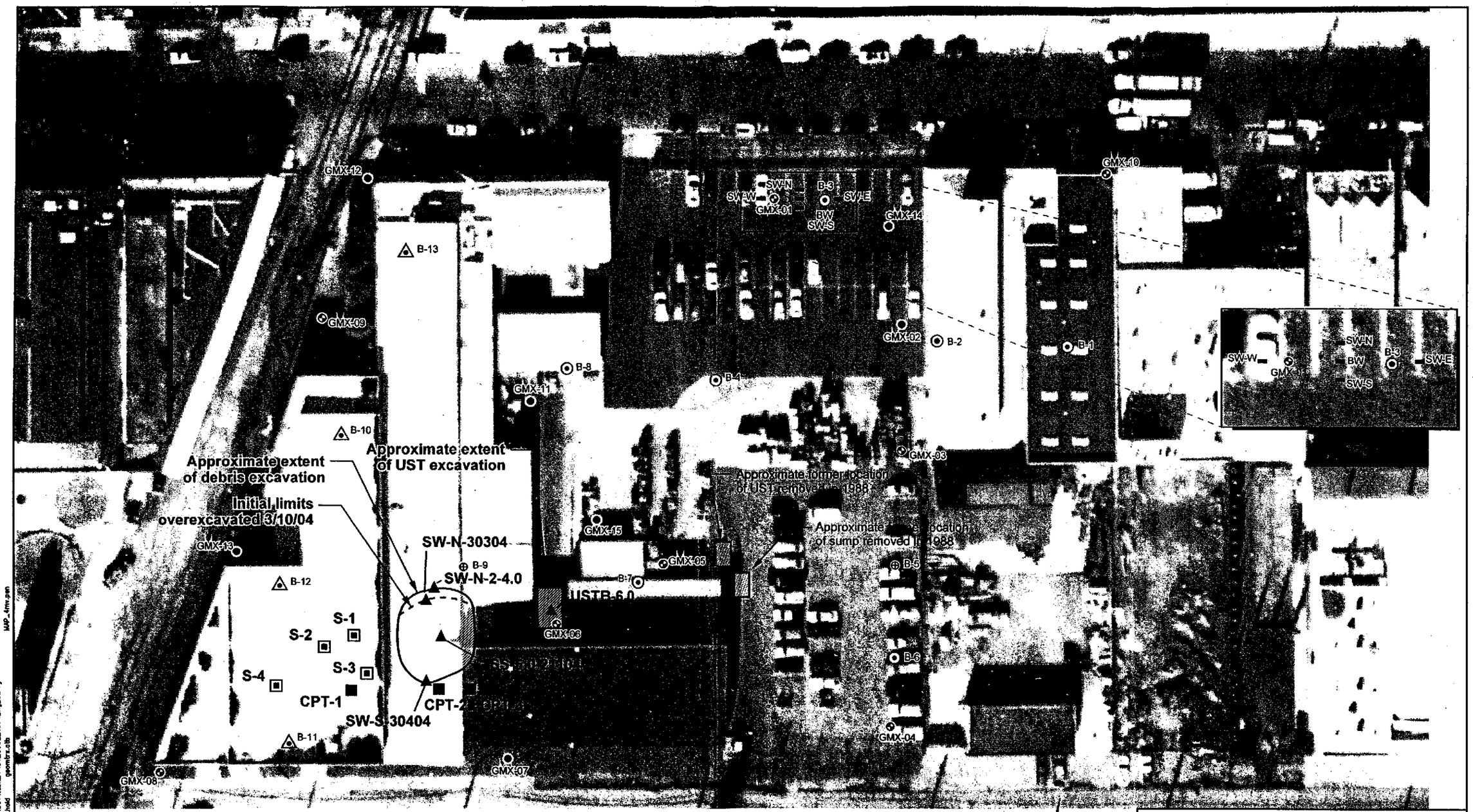
TABLE 2
SUMMARY OF UST SOIL SAMPLE ANALYTICAL RESULTS*

| UST Identification | Sample Number | Analysis; description | Detected (ppm)[1] | Detection limit (ppm)[1] |
|---|---|---|---|---|
| Spent oil | S1 | 8010; halocarbons | ND[2] | .05 |
| Spent oil | S1 | 8020; volatile aeromatics | ND | .05 |
| Spent oil | S1 | High boiling hydrocarbons; diesel | ND | 10 |
| Spent oil | S1 | High boiling hydrocarbons; oil | ND | 10 |
| Spent oil | S1 | Standard Method 503-E; Total oil and grease | 10 | - |
| Spent oil | N2 | 8010; halocarbons | ND | .05 |
| Spent oil | N2 | 8020; volatile aromatics | ND | .05 |
| Spent oil | N2 | High Boiling Hydrocarbons; diesel | ND | 10 |
| Spent oil | N2 | High Boiling Hydrocarbons; oil | ND | 10 |
| Spent oil | N2 | Standard Method 503-E; Total oil and grease | 20 | - |
| Gasoline | N3 | Low Boiling Hydrocarbon; gasoline | ND | 5 |
| Gasoline | N3 | Low Boiling Hydrocarbon; benzene | ND | .05 |
| Gasoline | N3 | Low Boiling Hydrocarbon; toluene | ND | .1 |
| Gasoline | N3 | Low Boiling Hydrocarbon; xylenes | ND | .4 |
| Gasoline | N3 | Low Boiling Hydrocarbon; ethyl benzene | ND | .4 |
| Gasoline | N4 | Low Boiling Hydrocarbon; gasoline | ND | 5 |

TABLE 2 (continued)
SUMMARY OF UST SOIL SAMPLE ANALYTICAL RESULTS*

| UST Identification | Sample Number | Analysis; description | Detected (ppm)[1] | Detection limit (ppm)[1] |
|---|---|---|---|---|
| Gasoline | S4 | Low Boiling Hydro-carbon; benzene | ND | .05 |
| Gasoline | S4 | Low Boiling Hydro-carbon; toluene | ND | .1 |
| Gasoline | S4 | Low Boiling Hydro-carbon; xylenes | ND | .4 |
| Gasoline | S4 | Low Boiling Hydro-carbon; ethyl benzene | ND | .4 |

*Reference Appendix D
[1]Parts per million (ppm)
[2]None detected (ND)




Note:
Aerial photograph from Pacific Aerial Surveys.

EXPLANATION

- Soil and groundwater boring location (November 2002)
- Boring location (November 2002)
- Soil and groundwater boring location (November 2003)
- Soil boring location (November 2003)
- Groundwater location (November 2003)
- Groundwater boring location (March 2004)
- CPT location (March 2004)

0 50
SCALE IN FEET

SAMPLING AND EXCAVATION LOCATION MAP
1249 67th Street
Emeryville, California

GEOMATRIX

| Project No. | Figure |
|---|---|
| 8367.001 | 2 |


Note:
Aerial photograph from Pacific Aerial Surveys.

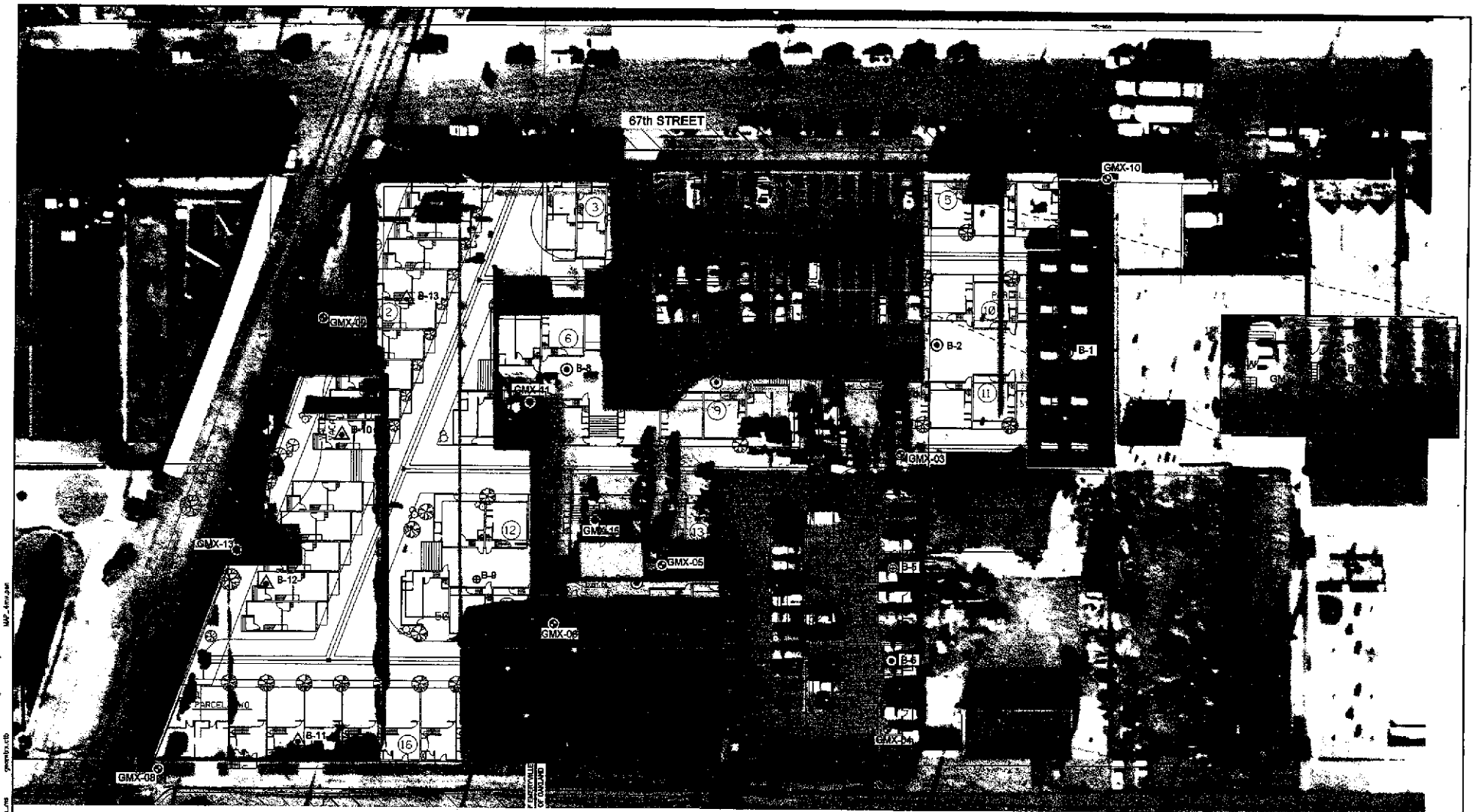
EXPLANATION

- Soil and groundwater boring location (November 2002)
- Boring location (November 2002)
- Soil and groundwater boring location (November 2003)
- Soil boring location (November 2003)
- Groundwater location (November 2003)
- Groundwater boring location (March 2004)
- CPT location (March 2004)

0 50
SCALE IN FEET

SAMPLING AND EXCAVATION LOCATION MAP
1249 67th Street
Emeryville, California

**ATTACHMENT 4**


67th STREET
GMX-10
GMX-09
GMX-05
GMX-15
GMX-08
GMX-14
GMX-04
B-1
B-2
B-5
B-6
B-8
B-9
B-10
B-11
B-12
B-13
PARCEL TWO
EXPLANATION
Previous soil and groundwater sampling location
Previous soil sampling location
Step-out boring location
Soil and groundwater sampling location
Soil sampling location
Groundwater sampling location
0
50
SCALE IN FEET
Note:
Aerial photograph from Pacific Aerial Surveys; proposed development plans from Pulte Home Corporation.
SITE LAYOUT AND SOIL AND GROUNDWATER SAMPLING LOCATIONS MAP
1249 67th Street
Emeryville, California
ATTACHMENT 5

ATTACHMENT 6

**TABLE 1**

**PREVIOUS SOIL SAMPLE ANALYTICAL RESULTS**
**TPH, METALS, AND PESTICIDES**
1249 67th Street
Emeryville, California

Concentrations reported in milligrams per kilogram (mg/kg)

| Sample Location | Sample Depth (feet bgs) | TPHd | TPHmo | Arsenic | Cadmium | Chromium | Lead | Nickel | Zinc | Pesticides |
|---|---|---|---|---|---|---|---|---|---|---|
| **Phase II Sampling**[1] | | | | | | | | | | |
| GMX-01 | 2 | 31 | 310 | 8 | 2.3 | 24 | 180 | 35 | 360 | -- |
| GMX-01 | 4.5 | <1 | <50 | <1 | 1 | 16 | 3.3 | 9.8 | 18 | -- |
| GMX-03 | 2 | <1 | <50 | 1.8 | 1.1 | 16 | 11 | 15 | 20 | -- |
| GMX-03 | 4.5 | 1.2 | <50 | 1.5 | 1.2 | 17 | 6.8 | 15 | 16 | -- |
| GMX-04 | 8.5 | 200 | 350 | <1 | 1.8 | 28 | 5.3 | 24 | 27 | -- |
| GMX-05 | 2 | 2.1 | <50 | 1.8 | 1.6 | 16 | 7.7 | 15 | 35 | -- |
| GMX-05 | 4.5 | <1 | <50 | <1 | 1.2 | 17 | 4.3 | 26 | 20 | -- |
| GMX-06 | 2 | 5.8 | 66 | 2.4 | 1.6 | 19 | 11 | 22 | 36 | -- |
| GMX-06 | 4.5 | <1 | <50 | 2.7 | 0.97 | 13 | 12 | 14 | 29 | -- |
| GMX-08 | 2 | 52 | 160 | 16 | 2.4 | 18 | 32 | 28 | 69 | -- |
| GMX-08 | 4.5 | <1 | <50 | <1 | 2.1 | 29 | 5.9 | 56 | 28 | -- |
| GMX-09 | 2 | <1 | <50 | 3.3 | 2.1 | 30 | 7.1 | 17 | 24 | -- |
| GMX-09 | 4.5 | <1 | <50 | 11 | 4 | 31 | 12 | 35 | 41 | -- |
| **Phase III Sampling**[2] | | | | | | | | | | |
| B-1 | 4.5 | 240 | 350 | 2.5 | <0.27 | 25 | 4.9 | 15 | 20 | ND |
| B-2[3] | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| B-3 | 2.5 | 6.2 | 55 | 13 | 0.5 | 27 | 83 | 25 | 100 | ND |
| B-4 | 4.5 | 10 | 110 | 3.1 | <0.24 | 23 | 8.4 | 16 | 31 | ND |
| B-5 | 2.0 | 61 | 350 | 4 | <0.25 | 25 | 18 | 24 | 33 | ND |
| B-6 | 2.0 | 5.0 | 38 | 4.4 | <0.23 | 24 | 6.4 | 17 | 23 | ND |
| B-7 | 2.0 | 5.5 | 54 | 6.8 | <0.24 | 29 | 24 | 27 | 100 | ND |
| B-8 | 4.5 | 10 | 83 | 4.3 | 0.27 | 36 | 14 | 37 | 47 | ND |
| B-9 | 1.5 | 1.1 | 11 | 6.3 | 0.34 | 32 | 5.7 | 38 | 52 | ND |
| **Step-Out Borings**[4] | | | | | | | | | | |
| SW-S-2.5 | 2.5 | 4.9 | 58 | -- | -- | -- | -- | -- | -- | -- |
| SW-N-2.5 | 2.5 | 2.9 | 56 | -- | -- | -- | -- | -- | -- | -- |
| SW-E-2.5 | 2.5 | <1 | <50 | -- | -- | -- | -- | -- | -- | -- |
| SW-W-2.5 | 2.5 | 10 | 160 | -- | -- | -- | -- | -- | -- | -- |
| BW-3.0 | 3.0 | <1 | <50 | -- | -- | -- | -- | -- | -- | -- |
| RWQCB ESLs[5] | | 500 | 500 | 5.5 | 1.7 | 58 | 200 | 150 | 600 | Various |
| Background[6] | | NA | NA | 19.1 | 2.7 | 99.6 | 16.1 | 120 | 106 | NA |

## TABLE 1

## PREVIOUS SOIL SAMPLE ANALYTICAL RESULTS
## TPH, METALS, AND PESTICIDES

1249 67th Street
Emeryville, California

Notes:

[f] Samples collected by Geomatrix Consultants, Inc. (Geomatrix), and analyzed by STL San Francisco (STL) of Pleasanton, California, for total extractable petroleum hydrocarbons using U.S. Environmental Protection Agency (EPA) Method 8015M, and for arsenic and leaking underground fuel tank (LUFT) metals using EPA Method 6010B.

[2] Samples collected by Geomatrix and analyzed by Curtis and Tompkins, Inc. of Berkeley, California, for TPHd and TPHmo using EPA Method 8015M, for arsenic and LUFT metals using EPA Method 6010B and for organochlorine pesticides (OCPs) using EPA Method 8081A.

[3] Surface soil samples could not be collected because of the thickness of the concrete (more than 12 inches) and poor recovery

[4] Samples collected by Geomatrix and analyzed by STL for TPHd and TPHmo using EPA Method 8015M

[5] Regional Water Quality Control Board, San Francisco Bay Area (RWQCB), Environmental Screening Levels (ESLs), July 2003. Residential surface soil ESLs where groundwater is NOT a current or potential source of drinking water.

[6] Lawrence Berkeley National Laboratory Environmental Restoration Program, 1995. 500 samples were taken from 71 locations representing 5 geologic units at LBNL: Colluvian & Fill, Great Valley group, Moraga formation, Orinda formation, and San Pablo group. Concentrations listed are Upper 95% Tolerance Limits of data from 71 locations.

Abbreviations:
feet bgs = feet below ground surface
"<" = indicates constituent was not detected above the laboratory reporting limit indicated
TPHd = Total petroleum hydrocarbons quantified as diese
TPHmo = Total petroleum hydrocarbons quantified as motor oil
– = Not analyzed
NA = Not applicable
NS = Not sampled
ND = Not detected

**TABLE 2**

**PREVIOUS SOIL SAMPLE ANALYTICAL RESULTS**
**POLYNUCLEAR AROMATIC HYDROCARBONS**
1249 67th Street
Emeryville, California

Concentrations reported in micrograms per kilogram (µg/kg)

| Sample Location | Sample Depth (feet bgs) | Acenaph-thene | Acenaph-thylene | Anthra-cene | Dibenzo (a,h) anthracene | Benzo(a) anthracene | Benzo(b) fluor-anthene | Benzo(k) fluor-anthene | Benzo (g,h,i) perylene | Benzo(a) pyrene | Chrysene | Fluor-anthene | Fluorene | Indeno (1,2,3) pyrene | Naph-thalene | Phenan-threne | Pyrene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Phase II Sampling[1]** | | | | | | | | | | | | | | | | | |
| GMX-01 | 2 | <50 | <50 | 53 | <50 | 200 | 190 | 140 | 160 | 190 | 200 | 470 | <50 | 130 | <50 | 330 | 360 |
| GMX-01 | 4.5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| GMX-03 | 2 | 6.8 | <5 | 26 | <5 | 55 | 27 | 24 | 15 | 33 | 53 | 89 | 10 | 12 | <5 | 110 | 110 |
| GMX-03 | 4.5 | <10 | <10 | 24 | <10 | 46 | 25 | 20 | 16 | 33 | 51 | 69 | <10 | 13 | <10 | 100 | 90 |
| GMX-04 | 8.5 | 35 | 11 | 73 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | 160 | <5 | <5 | 12 | <5 |
| GMX-05 | 2 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| GMX-05 | 4.5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| GMX-06 | 2 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| GMX-06 | 4.5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| GMX-08 | 2 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 |
| GMX-08 | 4.5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| GMX-09 | 2 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| GMX-09 | 4.5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| **Phase III Sampling[2]** | | | | | | | | | | | | | | | | | |
| B-1 | 4.5 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | <25 | 34 | <25 | <25 | 34 | <25 | 62 | 55 | <25 |
| B-2[3] | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| B-3 | 2.5 | <5.0 | 6.8 | 8.5 | 29 | 39 | 35 | 30 | 23 | ~~38~~ 39 | 5.9 | 59 | <5.0 | 18 | <5.0 | 43 | 67 |
| B-4 | 4.5 | <5.0 | <5.0 | <5.0 | <5.0 | 5.1 | <5.0 | 5.2 | <5.0 | 5.5 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | 7.7 |
| B-5 | 2.0 | 68 | 11 | 7.1 | 17 | 27 | 41 | 22 | 17 | 34 | 5.0 | 44 | 130 | 14 | 37 | 59 | 46 |
| B-6 | 2.0 | <4.9 | <4.9 | <4.9 | <4.9 | <4.9 | <4.9 | <4.9 | <4.9 | <4.9 | <4.9 | <4.9 | <4.9 | <4.9 | <4.9 | <4.9 | <4.9 |
| B-7 | 2.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | 5.6 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 |
| B-8 | 4.5 | <4.9 | <4.9 | <4.9 | 5.7 | 12 | 11 | 10 | 7.4 | 12 | <4.9 | 13 | <4.9 | 5.4 | <4.9 | 9.8 | 16 |
| B-9 | 1.5 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 |
| **Step-Out Borings[1]** | | | | | | | | | | | | | | | | | |
| SW-S-2.5 | 2.5 | <5 | <5 | <5 | 11 | 15 | 17 | 8.1 | 20 | 16 | <5 | 28 | <5 | 13 | 7.4 | 17 | 34 |
| SW-N-2.5 | 2.5 | <5 | <5 | <5 | <5 | 5.3 | 5.1 | <5 | 9.4 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| SW-E-2.5 | 2.5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| SW-W-2.5 | 2.5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | 38 | <5 | <5 | <5 | 31 | 49 |
| BW-3.0 | 3.0 | <5 | <5 | <5 | 7.6 | 11 | 14 | <5 | 15 | 12 | <5 | 18 | <5 | 9.1 | <5 | 12 | 23 |
| RWQCB ESLs[4] | | 19,000 | 13,000 | 2,800 | 380 | 38 | 380 | 380 | 27,000 | 3,800 | 110 | 40,000 | 8,900 | 380 | 4,500 | 11,000 | 85,000 |

SB 380

SB 38

SB 3800

i:\project\8000s\8367.00 Reclosure request\closure report\prev analytical tables.xls

**TABLE 2**

**PREVIOUS SOIL SAMPLE ANALYTICAL RESULTS**
**POLYNUCLEAR AROMATIC HYDROCARBONS**
1249 67th Street
Emeryville, California

Notes:

[1] Samples collected by Geomatrix Consultants, Inc., and analyzed by STL San Francisco of Pleasanton, California, for polynuclear aromatic hydrocarbons (PAHs) using EPA Method 8270C with selected ion monitoring (SIM).

[2] Samples collected by Geomatrix Consultants, Inc. and analyzed by Curtis & Thompkins, Inc. of Berkeley, California, for PAHs using EPA Method 8270C SIM.

[3] Surface soil samples could not be collected because of the thickness of the concrete (more than 12 inches) and poor recovery.

[4] Regional Water Quality Control Board, San Francisco Bay Area (RWQCB), Environmental Screening Levels (ESLs), July 2003. Residential surface soil ESLs where groundwater is NOT a current or potential source of drinking water source of drinking water.

Abbreviations:

feet bgs = feet below ground surface
"<" = indicates constituent was not detected above the laboratory reporting limit indicated
-- = Not analyzed
NA = Not available
NS = Not sampled

# TABLE 3

## PREVIOUS SOIL SAMPLE ANALYTICAL RESULTS
## VOLATILE ORGANIC COMPOUNDS[1]

1249 67th Street
Emeryville, California

Concentrations reported in milligrams per kilogram (mg/kg)

| Sample Location | Sample Depth (feet bgs) | VOCs |
|---|---|---|
| B-1 | 5.5 | All ND |
| B-2 | 5.0 | All ND |
| B-3 | 5.5 | All ND |
| B-4 | 5.5 | All ND |
| B-5 | 5.5 | All ND |
| B-6 | 5.5 | All ND |
| B-7 | 5.5 | All ND |
| B-8 | 5.5 | All ND |
| B-9 | 5.5 | All ND |
| RWQCB ESLs[2] | | Various |

Notes:

[1] Samples collected by Geomatrix Consultants, Inc. and analyzed by Curtis and Tompkins, Inc.of Berkeley, California, for VOCs using U.S. Environmental Protection Agency (EPA) Method 8260B. Only those analytes detected are shown.

[2] Regional Water Quality Control Board, San Francisco Bay Area (RWQCB), Environmental Screening Levels (ESLs), July 2003. Residential surface soil ESLs where groundwater is NOT a current or potential source of drinking water.

Abbreviations:
feet bgs = feet below ground surface
ND = Not detected
VOCs = Volatile organic compounds

## TABLE 4

## PREVIOUS GRAB GROUNDWATER SAMPLE ANALYTICAL RESULTS
## VOLATILE ORGANIC COMPOUNDS
1249 67th Street
Emeryville, California

Concentrations reported in micrograms per liter (µg/l)

| Boring/ Sample ID | 1,2-Dichloro-benzene | MTBE | cis-1,2-Dichloro-ethene | trans-1,2-Dichloro-ethene | Chloroform | Trichloro-ethene |
|---|---|---|---|---|---|---|
| **Phase II Sampling**[1] | | | | | | |
| GMX-01 | <0.5 | <5 | NS[2] | NS | NS | NS |
| GMX-02 | NS | NS | NS | NS | NS | NS |
| GMX-03 | NS | NS | NS | NS | NS | NS |
| GMX-04 | <0.5 | <5 | 0.7 | <0.5 | <1.0 | 3.1 |
| GMX-04 Dup[3] | <0.5 | <5 | 0.69 | <0.5 | <1.0 | 3.4 |
| GMX-05 | NS | NS | NS | NS | NS | NS |
| GMX-06 | NS | NS | NS | NS | NS | NS |
| GMX-07 | NS | NS | NS | NS | NS | NS |
| GMX-08 | <0.5 | <5 | 0.5 | <0.5 | <1.0 | 1.3 |
| GMX-09 | <0.5 | <5 | 2.6 | 2.9 | <1.0 | 62 |
| GMX-10 | NS | NS | NS | NS | NS | NS |
| GMX-11 | <0.5 | <5 | <0.5 | <0.5 | <1.0 | <0.5 |
| GMX-12 | 0.52 | <5 | 7.7 | 2 | <1.0 | 49 |
| GMX-13 | <0.5 | 7 | <0.5 | <0.5 | <1.0 | <0.5 |
| GMX-14 | <0.5 | <5 | <0.5 | <0.5 | <1.0 | <0.5 |
| GMX-15 | <0.5 | <5 | <0.5 | <0.5 | <1.0 | <0.5 |
| **Phase III Sampling**[4] | | | | | | |
| B-5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| B-9 | <0.5 | <0.5 | 0.6 | <0.5 | <0.5 | 5.4 |
| B-10 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| B-11 | <0.5 | <0.5 | <0.5 | <0.5 | 2.5 | <0.5 |
| B-12 | <0.5 | 1.4 | <0.5 | <0.5 | <0.5 | <0.5 |
| B-13 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| RWQCB ESL[5] | 14 | 1,800 | 590 | 590 | 340 | 360 |

Notes:

[1] Samples collected by Geomatrix Consultants, Inc., and analyzed by STL San Francisco of Pleasanton, California, for volatile organic compounds (VOCs) using U.S. Environmental Protection Agency (EPA) Method 8260B. Only those analytes detected are shown.

[2] NS = Not sampled; insufficient water in the temporary well point.

[3] Field duplicate of GMX-04.

[4] Samples collected by Geomatrix Consultants, Inc., and analyzed by Curtis and Tompkins, Inc. of Berkeley, California, for volatile organic compounds (VOCs) using EPA Method 8260B. Only those analytes detected are shown.

[5] Regional Water Quality Control Board, San Francisco Bay Area (RWQCB), Environmental Screening Levels (ESLs), July 2003. Residential ESLs where groundwater is NOT a current or potential source of drinking water.

"<" indicates constituent was not detected at or above laboratory testing limit indicated.

Abbreviations:
MTBE = methyl tertiary butyl ether
VOCs = volatile organic compounds
"<" = indicates the constituent was not detected above the laboratory reporting limit indicated.

# TABLE 5

## SOIL SAMPLE ANALYTICAL RESULTS - TPH, VOCs, PCBs[1]

Former Fabco Manufacturing Facility
1249 67th Street
Oakland, California

Concentrations in milligrams per kilogram (mg/kg)

| Sample ID | Sample Location | Sample Date | Sample Depth (ft bgs) | Constituents Detected | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | TPHg | TPHd | TPHmo | Acetone | Methylene Chloride | 2-Butanone | Other VOCs | PCBs |
| **Underground Storage Tank (UST) Excavation** | | | | | | | | | | | |
| UST-B-6.0 | Bottom of UST excavation | 3/3/04 | 6 | <1[2] | 2.6[3] | 47 | 0.14 | 0.042 | 0.035 | ND | NA |
| SP-30304 | Soil stockpile | 3/3/04 | --[4] | 4.9[3] | 1700 | 170[5] | 0.1 | <0.020 | 0.017 | ND | ND |
| **Debris Pit Excavation** | | | | | | | | | | | |
| SW-N-30304 | Northern sidewall of debris excavation | 3/3/04 | 3 | NA | 305 | 110 | <0.019 | <0.019 | <0.0093 | ND | ND |
| SS-5.0-21104 | Bottom of debris excavation | 2/11/04 | 5 | NA | 38 | 190 | <0.019 | <0.019 | <0.0096 | ND | ND |
| SW-S-30404 | Southern sidewall of debris excavation | 3/4/04 | 3 | NA | 58[3] | 380 | <0.019 | 0.041 | <0.0094 | ND | ND |
| IDW-21104 | Waste disposal characterizaiton sample | 2/11/04 | --[4] | <1 | 75[3] | 190 | <0.018 | <0.020 | <0.0091 | ND | ND |
| **RWQCB ESL[6]** | | | | 100 | 500 | 500 | 0.5 | 0.52 | 13 | Various | 0.22 |

Notes:

[1] Samples collected by Geomatrix Consultants, Inc., and analyzed by Curtis & Tompkins, Ltd., of Berkeley, California, for TPHg, TPHd, and TPHmo using U.S. Environmental Protection Agency (EPA) Method 8015M; VOCs using EPA Method 8260B; and PCBs using EPA Method 8082. A silica gel preparation (EPA Method 3630C) was performed on soil samples prior to analysis of TPHd and TPHmo.

[2] "<" indicates analyte not detected at or above laboratory reporting limit shown.

[3] Laboratory indicated that heavier hydrocarbons contributed to quantitation and the chromatographic pattern did not match the laboratory standard. The result is considered estimated (J flagged) and may be biased high.

[4] "--" = not applicable or not available.

[5] Laboratory indicated that lighter hydrocarbons contributed to quantitation and the chromatographic pattern did not match the laboratory standard. The result is consdered estimated (J flagged) and may be biased high.

[6] Regional Water Quality Control Board, San Francisco Bay Region (RWQCB), 2003, Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, Interim Final, July. Shallow soil screening level where groundwaer is not a current or potential drinking water resource, Table B-1.

Abbreviations:

TPHg = total petroleum hydrocarbons quantified as gasoline
TPHd = total petroleum hydrocarbons quantified as diesel
TPHmo = total petroleum hydrocarbons quantified as motor oil
VOCs = volatile organic compounds
PCBs = polychlorinated biphenyls
ft bgs = feet below ground surface
ND = not detected at or above laboratory reporting limit(s)
NA = not analyzed
ESL = environmental screening level

# TABLE 6

## SOIL SAMPLE ANALYTICAL RESULTS - METALS[1]

Former Fabco Manufacturing Facility
1249 67th Street
Oakland, California

Concentrations in milligrams per kilogram (mg/kg)

| Sample ID | Sample Location | Sample Date | Sample Depth (ft bgs) | Constituents Detected | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | As | Ba | Be | Cd | Cr | Co | Cu | Pb | Hg | Mo | Ni | Sb | Se | Ag | Tl | V | Zn |
| **Underground Storage Tank (UST) Excavation** | | | | | | | | | | | | | | | | | | | | |
| UST-B-6.0 | Bottom of UST excavation | 3/3/04 | 6 | NA | NA | NA | 0.27 | 26 | NA | NA | 10 | NA | NA | 21 | NA | NA | NA | NA | NA | 31 |
| SP-30304 | Soil stockpile | 3/3/04 | --[2] | 3 | 130 | 0.33 | 0.5 | 33 | 8.3 | 27 | 13 | 0.047 | <0.85[3] | 29 | NA | 1.6 | <0.21 | <0.21 | 32 | 74 |
| **Debris Pit Excavation** | | | | | | | | | | | | | | | | | | | | |
| SW-N-30304 | Northern sidewall of debris excavation | 3/3/04 | 3 | NA | NA | NA | 3.6 | 42 | NA | NA | 350 | NA | NA | 41 | NA | NA | NA | NA | NA | 810 |
| SW-N-2-4.0 | Northern sidewall of debris excavation (after overexcavation of SW-N-30304 location) | 3/10/04 | 4 | NA | NA | NA | NA | NA | NA | NA | 5 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SS-5.0-21104 | Bottom of debris excavation | 2/11/04 | 5 | NA | NA | NA | <0.24 | 28 | NA | NA | 29 | NA | NA | 22 | NA | NA | NA | NA | NA | 50 |
| SW-S-30404 | Southern sidewall of debris excavation | 3/4/04 | 3 | NA | NA | NA | 0.6 | 30 | NA | NA | 71 | NA | NA | 32 | NA | NA | NA | NA | NA | 250 |
| IDW-21104 | Waste disposal characterizaiton sample | 2/11/04 | --[2] | 3.9 | 420 | 0.38 | 0.85 | 22 | 66 | 32 | 80 | 0.21 | 1.1 | 40 | <2.5 | 1.1 | <0.21 | 1.4 | 23 | 120 |
| **RWQCB ESL[4]** | | | | 5.5 | 1000 | 31 | 7.8 | 58 | 94 | 630 | 255 | 2.5 | 78 | 310 | 6.3 | 78 | 78 | 1 | 110 | 1000 |

Notes:

[1] Samples collected by Geomatrix Consultants, Inc., and analyzed by Curtis & Tompkins, Ltd., of Berkeley, California, for metals using U.S. Environmental Protection Agency (EPA) Methods 6000/7000 series.

[2] "--" = not applicable.

[3] "<" indicates analyte not detected at or above laboratory reporting limit shown.

[4] Regional Water Quality Control Board, San Francisco Bay Region (RWQCB), 2003, Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, Interim Final, July. Shallow soil screening level where groundwater is not a current or potential drinking water resource, Table B-1. Urban ecotoxicty criteria were excluded because the pathway is incomplete.

Abbreviations:

ft bgs = feet below ground surface
NA = not analyzed
ESL = environmental screening level
As = Arsenic
Ba = Barium
Be = Beryllium
Cd = Cadmium
Cr = Chromium
Co = Cobalt
Cu = Copper
Pb = Lead
Hg = Mercury
Mo = Molybdenum
Ni = Nickel
Sb = Antimony
Se = Selenium
Ag = Silver
Tl = Thallium
V = Vanadium
Zn = Zinc

**TABLE 7**

**SOIL SAMPLE ANALYTICAL RESULTS - PAHs[1]**

Former Fabco Manufacturing Facility
1249 67th Street
Oakland, California

Concentrations in milligrams per kilogram (mg/kg)

| Sample ID | Sample Location | Sample Date | Sample Depth (ft bgs) | Constituents Detected | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 2-Methylnaphthalene | Naphthalene | Acenaphthylene | Acenaphthene | Fluorene | Phenanthrene | Anthracene | Fluoranthene | Pyrene | Benzo(a) anthracene | Chrysene | Benzo(b) fluoranthene | Benzo(k) flouranthene | Benzo(a) pyrene | Indeno(1,2,3-cd)pyrene | Dibenz(a,h)anthracene | Benzo(g,h,i) perylene |
| **Underground Storage Tank (UST) Excavation** | | | | | | | | | | | | | | | | | | | | |
| UST-B-6.0 | Bottom of UST excavation | 3/3/04 | 6 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SP-30304 | Soil stockpile | 3/3/04 | -- | **0.076** | <0.066[2] | <0.066 | <0.066 | **0.19** | <0.066 | <0.066 | <0.066 | <0.066 | <0.066 | <0.066 | **0.098** | <0.066 | <0.066 | <0.066 | <0.066 | <0.066 |
| **Debris Pit Excavation** | | | | | | | | | | | | | | | | | | | | |
| SW-N-30304 | Northern sidewall of debris excavation | 3/3/04 | 3 | NA | **0.015** | **0.021** | <0.005 | **0.0071** | **0.13** | **0.023** | **0.2** | **0.24** | **0.074** | **0.099** | **0.072** | **0.057** | **0.11** | **0.084** | **0.018** | **0.11** |
| SW-N-2-4.0 | Northern sidewall of debris excavation (after overexcavation of SW-N-30304 location) | 3/10/04 | 4 | NA | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 |
| SS-5.0-21104 | Bottom of debris excavation | 2/11/04 | 5 | NA | **0.0086** | <0.005 | <0.005 | <0.005 | **0.017** | <0.005 | **0.017** | **0.018** | **0.0056** | **0.0072** | **0.0057** | <0.005 | **0.0075** | <0.005 | <0.005 | **0.0054** |
| SW-S-30404 | Southern sidewall of debris excavation | 3/4/04 | 3 | NA | <0.005 | <0.005 | <0.005 | <0.005 | **0.014** | <0.005 | **0.016** | **0.022** | **0.011** | **0.016** | **0.016** | **0.01** | **0.012** | **0.011** | <0.005 | **0.014** |
| IDW-21104[3] | Waste disposal characterizaiton sample | 2/11/04 | -- | <0.067 | <0.067 | <0.067 | <0.067 | <0.067 | <0.067 | <0.067 | **0.074** | **0.1** | <0.067 | <0.067 | <0.067 | <0.067 | <0.067 | **0.092** | <0.067 | <0.067 |
| RWQCB ESL[4] | | | | 0.25 | 4.5 | 13.0 | 19.0 | 8.9 | 11.0 | 2.8 | 40.0 | 85.0 | 0.38 | 3.8 | 0.38 | 0.38 | 0.038 | 0.38 | 0.11 | 27.0 |

Notes:

[1] Samples collected by Geomatrix Consultants, Inc., and analyzed by Curtis & Tompkins, Ltd., of Berkeley, California, for PAHs using U.S. Environmental Protection Agency (EPA) Method 8270 with selective ion monitoring (SIM), except for soil stockpile sample, which was analyzed using EPA Method 8270C.

[2] "<" indicates analyte was not detected at or above laboratory reporting limit shown.

[3] Sample IDW-21104 was analyzed for semivolatile orgainc compounds using EPA Method 8270C. SVOCs not shown on this table were not detected above laboratory reporting limits.

[4] Regional Water Quality Control Board, San Francisco Bay Region (RWQCB), 2003, Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, Interim Final, July. Shallow soil screening level where groundwater is not a current or potential drinking water resource, Table B-1.

Abbreviations:

PAHs = polynuclear aromatic hydrocarbons

ft bgs = feet below ground surface

NA = not analyzed

ESL = environmental screening level

# TABLE 8

## GRAB GROUNDWATER SAMPLE ANALYTICAL RESULTS[1]

Former Fabco Manufacturing Facility
129 67th Street
Oakland, California

Concentrations in micrograms per liter (µg/L)

| Sample ID | Sample Date | Constituents Detected | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | TPHg | TPHd | TPHmo | Acetone | 2-Buta-none | cis-1,2-DCE | Ethyl-benzene | PCE | Total Xylenes | 1,2,4-TMB | TCE | trans-1,2-DCE | Other VOCs |
| **Debris Pit Excavation** | | | | | | | | | | | | | | |
| Pitwater-30304 | 3/3/04 | 560[2] | 12,000[2] | 16,000[3] | 48 | 12 | <0.5[4] | <0.5 | <0.5 | 0.7 | 0.7 | <0.5 | <0.5 | ND |
| **Downgradient of Debris Pit Excavation - Shallow Groundwater** | | | | | | | | | | | | | | |
| S-1 | 3/12/04 | NA | <50 | <300 | 130 | <10 | <0.5 | 1.1 | <0.5 | 4.4 | <0.5 | <0.5 | <0.5 | ND |
| S-2 | 3/12/04 | NA | <50 | <300 | 67 | <10 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 0.6 | <0.5 | ND |
| S-3 | 3/12/04 | NA | <50 | <300 | <10 | <10 | 8.9 | <0.5 | 4.0 | <0.5 | <0.5 | 26.0 | 2.0 | ND |
| S-4 | 3/12/04 | NA | <50 | <300 | <10 | <10 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | ND |
| **Downgradient of Debris Pit Excavation - Deeper Groundwater** | | | | | | | | | | | | | | |
| CPT-1-44 | 3/25/04 | NA | <50 | <300 | <10 | <10 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | ND |
| CPT-2-42 | 3/26/04 | NA | <50 | NA | <10 | <10 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | ND |
| CPT-3-48 | 3/26/04 | NA | NA | NA | <10 | <10 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | ND |
| **RWQCB ESL[5]** | | *500* | *640* | *640* | *1,500* | *14,000* | *590* | *290* | *120* | *13.0* | -- | *360* | *590* | *Various* |

Notes:

[1] Samples collected by Geomatrix Consultants, Inc., and analyzed by Curtis & Tompkins, Ltd., of Berkeley, California, for TPHg, TPHd, and TPHmo using EPA Method 8015M and VOCs using EPA Method 8260B. A silica gel preparation (EPA Method 3630C) was performed on water samples prior to analysis of TPHd and TPHmo.

[2] Laboratory indicated that heavier hydrocarbons contributed to quantitation and the chromatographic pattern did not match the laboratory standard.

[3] Laboratory indicated that lighter hydrocarbons contributed to quantitation and the chromatographic pattern did not match the laboratory standard.

[4] "<" indicates analyte not detected at or above laboratory reporting limit shown.

[5] Regional Water Quality Control Board, San Francisco Bay Region (RWQCB), 2003, Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, Interim Final, July. Groundwater screening levels, where groundwater is not a current or potential srinking water resource, Table F-1b.

Abbreviations:

TPHg = total petroleum hydrocarbons quantified as gasoline
TPHd = total petroleum hydrocarbons quantified as diesel
TPHmo = total petroleum hydrocarbons quantified as motor oil
DCE = dichloroethene
PCE = tetrachloroethene
TMB = trimethylbenzene
TCE = trichloroethene
VOCs = volatile organic compounds
ND = not detected at or above laboratory reporting limit(s)
NA = not analyzed
ESL = environmental screening level

| | |
|---|---|
| PROJECT: 1249 67TH STREET<br>Emeryville, California | **Log of Boring No. GMX-01** |
| BORING LOCATION: North parking lot along 67th Street | ELEVATION AND DATUM: Not surveyed: datum is ground surface |
| DRILLING CONTRACTOR: Precision Sampling Incorporated | DATE STARTED: 11/8/02 / DATE FINISHED: 11/8/02 |
| DRILLING METHOD: Direct push | TOTAL DEPTH (ft.): 16.0 / MEASURING POINT: Ground surface |
| DRILLING EQUIPMENT: XD-1 | DEPTH TO WATER (ft.) FIRST: 10.25 / COMPL.: NA |
| SAMPLING METHOD: Enviro-core sampling system [3' x 2.6"] | LOGGED BY: M. Goerz |
| HAMMER WEIGHT: NA / DROP: NA | RESPONSIBLE PROFESSIONAL: E. Wells / REG. NO.: C47968 |

| DEPTH (feet) | SAMPLES: Sample No. | SAMPLES: Sample | SAMPLES: Blows/ Foot | OVM READING (ppm) | DESCRIPTION<br>NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.<br>Surface Elevation: Not surveyed | REMARKS |
|---|---|---|---|---|---|---|
| 0 | | | | | ASPHALTIC CONCRETE | |
| 1 | GMX-01-2.0 | | | 21 | CLAYEY SAND with GRAVEL (SC): black (7.5YR 2.5/1), moist, 50% fine to coarse sand, 35% medium plasticity fines, 15% fine to coarse gravel | OVM = Thermo Environmental Instruments 580B PID calibrated with 100 ppm isobutylene standard. |
| 2 | | | | 25 | SANDY LEAN CLAY (CL): black (7.5YR 2.5/1), moist, 60% fines, 40% fine sand, medium plasticity, soft | |
| 3 | | | | | | |
| 4 | GMX-01-4.5 | | | | | |
| 5 | | | | 0 | CLAYEY SAND (SC): light olive brown (2.5Y 5/3), moist, 60% fine sand, 40% medium plasticity fines | |
| 6 | | | | 0<br>0 | SANDY LEAN CLAY (CL): grayish brown (2.5Y 5/2), moist, 60% fines, 40% fine sand | |
| 7 | | | | 0 | CLAYEY SAND (SC): light olive brown (2.5Y 5/3), moist, 60% fine sand, 35% medium plasticity fines, 5% fine gravel | |
| 8 | | | | 0 | 60% fine to coarse sand, 30% medium plasticity fines, 10% fine to coarse gravel | Attempt to collect grab groundwater sample GW-01 through 5 feet of 1-inch OD Sch. 40 PVC screen (0.01-inch slot size) placed in borehole from 11 to 16 feet bgs. Enviro-core drive casing retracted from bottom of boring to 7 feet bgs to maintain surface seal. No groundwater recovered. |
| 9 | | | | | | |
| 10 | | | | 0<br>0 | wet, 70% fine to coarse sand, 25% medium plasticity fines, 5% fine gravel | |
| 11 | | | | 0 | moist | |
| 12 | | | | | dark yellowish brown (10YR 4/6) | |
| 13 | | | | 0<br>0 | 65% fine to coarse sand, 25% medium plasticity fines, 10% fine to coarse gravel | |
| 14 | | | | 0 | | |
| 15 | | | | | | |

PROJECT: 1249 67TH STREET
Emeryville, California

# Log of Boring No. GMX-01 (cont'd)

| DEPTH (feet) | SAMPLES: Sample No. | SAMPLES: Sample | SAMPLES: Blows/ Foot | OVM READING (ppm) | DESCRIPTION<br>NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. | REMARKS |
|---|---|---|---|---|---|---|
| 16 | | | | 0<br>0 | CLAYEY SAND (SC): cont'd | |
| | | | | | Bottom of boring at 16.0 feet | Borehole destroyed using Type I-II neat cement grout placed from total depth to ground surface with a tremie pipe. |
| 17 | | | | | | |
| 18 | | | | | | |
| 19 | | | | | | |
| 20 | | | | | | |
| 21 | | | | | | |
| 22 | | | | | | |
| 23 | | | | | | |
| 24 | | | | | | |
| 25 | | | | | | |
| 26 | | | | | | |
| 27 | | | | | | |
| 28 | | | | | | |
| 29 | | | | | | |
| 30 | | | | | | |
| 31 | | | | | | |
| 32 | | | | | | |
| 33 | | | | | | |

| | |
|---|---|
| PROJECT: 1249 67TH STREET<br>Emeryville, California | **Log of Boring No. GMX-02** |
| BORING LOCATION: E side of north parking lot near warehouse bay doors | ELEVATION AND DATUM: Not surveyed: datum is ground surface |
| DRILLING CONTRACTOR: Precision Sampling Incorporated | DATE STARTED: 11/8/02 / DATE FINISHED: 11/8/02 |
| DRILLING METHOD: Direct push | TOTAL DEPTH (ft.): 13.0 / MEASURING POINT: Ground surface |
| DRILLING EQUIPMENT: XD-1 | DEPTH TO WATER (ft.) FIRST: 10.25 / COMPL.: NA |
| SAMPLING METHOD: Enviro-core sampling system [3' x 2.6"] | LOGGED BY: M. Goerz |
| HAMMER WEIGHT: NA / DROP: NA | RESPONSIBLE PROFESSIONAL: E. Wells / REG. NO.: C47968 |

| DEPTH (feet) | SAMPLES: Sample No. | SAMPLES: Sample | SAMPLES: Blows/Foot | OVM READING (ppm) | DESCRIPTION<br>NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.<br>Surface Elevation: Not surveyed | REMARKS |
|---|---|---|---|---|---|---|
| 0 | | | | | ASPHALTIC CONCRETE | |
| 1 | | | | 0 | SANDY LEAN CLAY (CL): black (7.5YR 2.5/1), moist, 60% fines, 35% fine sand, 5% fine gravel, low plasticity, soft | OVM = Thermo Environmental Instruments 580B PID calibrated with 100 ppm isobutylene standard. |
| 2 | | | | 0 | 70% fines, 30% fine sand | |
| 3 | | | | | | |
| 4 | | | | 0 | grayish brown (10YR 5/2) | |
| 5 | | | | 0 | black (2.5Y 2.5/1) | |
| 6 | | | | 0 | 60% fines, 35% fine sand, 5% fine gravel | |
| 7 | | | | 0 | CLAYEY SAND with GRAVEL (SC): brown (10YR 5/3) mottled with yellowish brown (10YR 5/6) and dark gray (10YR 4/1), moist, 50% fine to coarse sand, 30% medium plasticity fines, 20% fine to coarse gravel, trace reddish brown brick fragments | |
| 8 | | | | 0 | | Attempt to collect grab groundwater sample GW-02 through 5 feet of 1-inch OD Sch. 40 PVC screen (0.01-inch slot size) placed in borehole from 8 to 13 feet bgs. Enviro-core drive casing retracted from bottom of boring to 7 feet bgs to maintain surface seal. No groundwater recovered. |
| 9 | | | | | | |
| 10 | | | | 0 | brown (10YR 5/3) mottled with yellowish brown (10YR 5/6) | |
| 11 | | | | 0 | wet | |
| 12 | | | | 0 | moist, 60% fine to coarse sand, 30% medium plasticity fines, 10% fine gravel | |
| 13 | | | | 0 | wet | |
| 14 | | | | | 50% fine to coarse sand, 30% medium plasticity fines, 20% fine to coarse gravel | Borehole destroyed using Type I-II neat cement grout placed from total depth to ground surface with a tremie pipe. |
| 15 | | | | | Bottom of boring at 13.0 feet | |

| | |
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| PROJECT: 1249 67TH STREET<br>Emeryville, California | **Log of Boring No. GMX-03** |
| BORING LOCATION: East side of central parking lot | ELEVATION AND DATUM: Not surveyed: datum is ground surface |
| DRILLING CONTRACTOR: Precision Sampling Incorporated | DATE STARTED: 11/8/02 / DATE FINISHED: 11/8/02 |
| DRILLING METHOD: Direct push | TOTAL DEPTH (ft.): 16.0 / MEASURING POINT: Ground surface |
| DRILLING EQUIPMENT: XD-1 | DEPTH TO WATER (ft.) FIRST: 14.0 / COMPL.: NA |
| SAMPLING METHOD: Enviro-core sampling system [3' x 2.6"] | LOGGED BY: M. Goerz |
| HAMMER WEIGHT: NA / DROP: NA | RESPONSIBLE PROFESSIONAL: E. Wells / REG. NO.: C47968 |

| DEPTH (feet) | SAMPLES: Sample No. | SAMPLES: Sample | SAMPLES: Blows/ Foot | OVM READING (ppm) | DESCRIPTION<br>NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.<br>Surface Elevation: Not surveyed | REMARKS |
|---|---|---|---|---|---|---|
| 0 | | | | | ASPHALTIC CONCRETE | |
| 1 | GMX-03-2.0 | | | 0 | CLAYEY SAND with GRAVEL (SC): olive brown (2.5Y 4/3), moist, 60% fine to coarse sand, 20% fine to coarse gravel, 20% low plasticity fines | |
| 2 | | | | 0 | SANDY LEAN CLAY (CL): black (N 2.5/0), moist, 70% fines, 30% fine sand, medium plasticity, soft | OVM = Thermo Environmental Instruments 580B PID calibrated with 100 ppm isobutylene standard. |
| 3 | | | | | | |
| 4 | GMX-03-4.5 | | | 0 | dark greenish gray (5G 4/1), firm | |
| 5 | | | | 0 | | |
| 6 | | | | | 60% fines, 30% fine sand, 10% fine gravel | |
| 7 | | | | 0 | CLAYEY SAND with GRAVEL (SC): light olive brown (2.5Y 5/3), moist, 60% fine to coarse sand, 20% fine to coarse gravel, 20% medium plasticity fines | |
| 8 | | | | 0 | 60% fine sand, 40% medium plasticity fines | |
| 9 | | | | 0 | SANDY LEAN CLAY (CL): light olive brown (2.5Y 5/3), moist, 60% fines, 40% fine sand, medium plasticity, firm | Attempt to colect grab groundwater sample GW-03 through 5 feet of 1-inch OD Sch. 40 PVC screen (0.01-inch slot size) placed in borehole from 11 to 16 feet bgs. Enviro-core drive casing retracted from bottom of boring to 7 feet bgs to maintain surface seal. No groundwater recovered. |
| 10 | | | | 0 | 60% fines, 35% fine sand, 5% fine gravel | |
| 11 | | | | 0 | CLAYEY SAND with GRAVEL (SC): grayish brown (2.5Y 5/3) mottled with light olive brown (2.5Y 5/6), moist, 50% fine to coarse sand, 30% medium plasticity fines, 20% fine to coarse sand | |
| 12 | | | | | | |
| 13 | | | | 0 | | |
| 14 | | | | 0 | wet | |
| 15 | | | | | | |

PROJECT: 1249 67TH STREET
Emeryville, California

# Log of Boring No. GMX-03 (cont'd)

| DEPTH (feet) | SAMPLES: Sample No. | SAMPLES: Sample | SAMPLES: Blows/ Foot | OVM READING (ppm) | DESCRIPTION<br>NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. | REMARKS |
|---|---|---|---|---|---|---|
| 16 | | | | 0 | CLAYEY SAND with GRAVEL (SC): cont'd<br>wet | |
| | | | | | Bottom of boring at 16.0 feet | Borehole destroyed using Type I-II neat cement grout placed from total depth to ground surface with a tremie pipe. |
| 17 | | | | | | |
| 18 | | | | | | |
| 19 | | | | | | |
| 20 | | | | | | |
| 21 | | | | | | |
| 22 | | | | | | |
| 23 | | | | | | |
| 24 | | | | | | |
| 25 | | | | | | |
| 26 | | | | | | |
| 27 | | | | | | |
| 28 | | | | | | |
| 29 | | | | | | |
| 30 | | | | | | |
| 31 | | | | | | |
| 32 | | | | | | |
| 33 | | | | | | |

| | |
|---|---|
| PROJECT: 1249 67TH STREET<br>Emeryville, California | **Log of Boring No. GMX-04** |
| BORING LOCATION: Southeast corner of south parking lot | ELEVATION AND DATUM: Not surveyed: datum is ground surface |
| DRILLING CONTRACTOR: Precision Sampling Incorporated | DATE STARTED: 11/8/02 / DATE FINISHED: 11/8/02 |
| DRILLING METHOD: Direct push | TOTAL DEPTH (ft.): 16.0 / MEASURING POINT: Ground surface |
| DRILLING EQUIPMENT: XD-1 | DEPTH TO WATER (ft.) FIRST: 13.0 / COMPL.: 10.6 |
| SAMPLING METHOD: Enviro-core sampling system [3' x 2.6"] | LOGGED BY: M. Goerz |
| HAMMER WEIGHT: NA / DROP: NA | RESPONSIBLE PROFESSIONAL: E. Wells / REG. NO.: C47968 |

| DEPTH (feet) | SAMPLES: Sample No. | SAMPLES: Sample | SAMPLES: Blows/Foot | OVM READING (ppm) | DESCRIPTION<br>NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.<br>Surface Elevation: Not surveyed | REMARKS |
|---|---|---|---|---|---|---|
| 0 | | | | | ASPHALTIC CONCRETE | |
| 1 | | | | 0 | CLAYEY SAND with GRAVEL (SC): dark grayish brown (10YR 4/2), moist, 50% fine to coarse sand, 25% medium plasticity fines, 25% fine to coarse gravel | |
| 2 | | | | 0 | SANDY LEAN CLAY (CL): black (N 2.5/0), moist, 70% fines, 30% fine sand, medium plasticity, soft | OVM = Thermo Environmental Instruments 580B PID calibrated with 100 ppm isobutylene standard. |
| 3 | | | | | | |
| 4 | | | | 0 | light olive brown (2.5Y 5/3) mottled with dark yellowish brown (10YR 4/6), 60% fines, 30% fine to coarse sand, 10% fine to coarse gravel, firm | |
| 5 | | | | 0 | 60% fines, 35% fine to coarse sand, 5% fine gravel | Grab groundwater sample GMX-04 collected through 5 feet of 1-inch OD Sch. 40 PVC screen (0.01-inch slot size) placed in borehole from 11 to 16 feet bgs. Enviro-core drive casing retracted from bottom of boring to 10 feet bgs to maintain surface seal. |
| 6 | | | | | grayish brown (2.5Y 5/2), 60% fines, 40% fine sand | |
| 7 | | | | 0 | | |
| 8 | GMX-04-8.5 | | | 25 | grayish brown (2.5Y 5/2) mottled with black (N 2.5/0), odor<br>dark greenish gray (10GY 4/1) | |
| 9 | | | | 27<br>25<br>0 | brown (7.5YR 4/3) mottled with dark greenish gray (10GY 4/1) | |
| 10 | | | | 0<br>0 | no odor<br>CLAYEY SAND (SC): strong brown (7.5YR 4/6) mottled with dark greenish gray (10GY 4/1), moist, 60% fine sand, 40% medium plasticity fines, trace fine gravel | |
| 11 | | | | 0 | | |
| 12 | | | | | | |
| 13 | | | | 0 | CLAYEY SAND with GRAVEL (SC): dark yellowish brown (10YR 4/6), wet, 50% fine to coarse sand, 30% fine to coarse gravel, 20% medium plasticity fines | |
| 14 | | | | 0 | | |
| 15 | | | | | | |

PROJECT: 1249 67TH STREET
Emeryville, California

# Log of Boring No. GMX-04 (cont'd)

| DEPTH (feet) | SAMPLES: Sample No. | SAMPLES: Sample | SAMPLES: Blows/Foot | OVM READING (ppm) | DESCRIPTION<br>NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. | REMARKS |
|---|---|---|---|---|---|---|
| 16 | | X | | | CLAYEY SAND with GRAVEL (SC): cont'd | |
| | | | | | Bottom of boring at 16.0 feet | Borehole destroyed using Type I-II neat cement grout placed from total depth to ground surface with a tremie pipe. |
| 17 | | | | | | |
| 18 | | | | | | |
| 19 | | | | | | |
| 20 | | | | | | |
| 21 | | | | | | |
| 22 | | | | | | |
| 23 | | | | | | |
| 24 | | | | | | |
| 25 | | | | | | |
| 26 | | | | | | |
| 27 | | | | | | |
| 28 | | | | | | |
| 29 | | | | | | |
| 30 | | | | | | |
| 31 | | | | | | |
| 32 | | | | | | |
| 33 | | | | | | |

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|---|---|
| PROJECT: 1249 67TH STREET<br>Emeryville, California | **Log of Boring No. GMX-05** |
| BORING LOCATION: South parking lot near engineering test area | ELEVATION AND DATUM: Not surveyed: datum is ground surface |
| DRILLING CONTRACTOR: Precision Sampling Incorporated | DATE STARTED: 11/8/02 / DATE FINISHED: 11/8/02 |
| DRILLING METHOD: Direct push | TOTAL DEPTH (ft.): 13.0 / MEASURING POINT: Ground surface |
| DRILLING EQUIPMENT: XD-1 | DEPTH TO WATER (ft.) FIRST: 11.0 / COMPL.: NA |
| SAMPLING METHOD: Enviro-core sampling system [3' x 2.6"] | LOGGED BY: M. Goerz |
| HAMMER WEIGHT: NA / DROP: NA | RESPONSIBLE PROFESSIONAL: E. Wells / REG. NO.: C47968 |

| DEPTH (feet) | SAMPLES: Sample No. | SAMPLES: Sample | SAMPLES: Blows/ Foot | OVM READING (ppm) | DESCRIPTION<br>NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.<br>Surface Elevation: Not surveyed | REMARKS |
|---|---|---|---|---|---|---|
| 0 | | | | | ASPHALTIC CONCRETE | |
| 1 | GMX-05-2.0 | | | 0 | LEAN CLAY with SAND (CL): very dark gray (N 3/0) mottled with greenish gray (5G 5/1), moist, 80% fines, 20% fine sand, medium plasticity, soft | OVM = Thermo Environmental Instruments 580B PID calibrated with 100 ppm isobutylene standard. |
| 2 | | | | 0 | | |
| 3 | | | | 0 | very dark gray (N 3/0) | |
| 4 | GMX-05-4.5 | | | | | |
| 5 | | | | 0 | SANDY LEAN CLAY with GRAVEL (CL): dark greenish gray (10Y 4/1) mottled with dark greenish gray (5G 4/1), moist, 50% fines, 30% fine to coarse sand, 20% fine to coarse gravel, nonplastic, firm | |
| 6 | | | | 0 | SANDY LEAN CLAY (CL): dark greenish gray (10GY 4/1), moist, 70% fines, 30% fine sand, medium plasticity, firm | |
| 7 | | | | 0 | | |
| 8 | | | | 0 | 60% fines, 30% fine to coarse sand, 10% fine to coarse gravel | Attempt to collect grab groundwater sample GW-05 through 5 feet of 1-inch OD Sch. 40 PVC screen (0.01-inch slot size) placed in borehole from 8 to 13 feet bgs. Enviro-core drive casing retracted from bottom of boring to 7 feet bgs to maintain surface seal. No groundwater recovered. |
| 9 | | | | | grayish brown (2.5Y 5/2) mottled with greenish gray (5G 5/1), 60% fines, 35% fine to coarse sand, 5% fine gravel | |
| 10 | | | | 0 | | |
| 11 | | | | 0 | CLAYEY SAND with GRAVEL (SC): light olive brown (2.5Y 5/3) mottled with dark yellowish brown (10YR 4/6) and greenish gray (10Y 5/1), moist, 50% fine to coarse sand, 30% medium plasticity fines, 20% fine to coarse gravel | |
| 12 | | | | | wet, 60% fine to coarse sand, 25% medium plasticity fines, 15% fine gravel<br>moist, 50% fine to coarse sand, 30% medium plasticity fines, 20% fine to coarse gravel | |
| 13 | | | | 0 | Bottom of boring at 13.0 feet | Borehole destroyed using Type I-II neat cement grout placed from total depth to ground surface with a tremie pipe. |
| 14 | | | | | | |
| 15 | | | | | | |

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| PROJECT: 1249 67TH STREET<br>Emeryville, California | **Log of Boring No. GMX-06** |
| BORING LOCATION: SW area of parking lot near entrance to S warehouse | ELEVATION AND DATUM: Not surveyed: datum is ground surface |
| DRILLING CONTRACTOR: Precision Sampling Incorporated | DATE STARTED: 11/8/02 / DATE FINISHED: 11/8/02 |
| DRILLING METHOD: Direct push | TOTAL DEPTH (ft.): 13.0 / MEASURING POINT: Ground surface |
| DRILLING EQUIPMENT: XD-1 | DEPTH TO WATER (ft.) FIRST: 9.5 / COMPL.: NA |
| SAMPLING METHOD: Enviro-core sampling system [3' x 2.6"] | LOGGED BY: M. Goerz |
| HAMMER WEIGHT: NA / DROP: NA | RESPONSIBLE PROFESSIONAL: E. Wells / REG. NO.: C47968 |

| DEPTH (feet) | SAMPLES: Sample No. | SAMPLES: Sample | SAMPLES: Blows/Foot | OVM READING (ppm) | DESCRIPTION<br>NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.<br>Surface Elevation: Not surveyed | REMARKS |
|---|---|---|---|---|---|---|
| 0 | | | | | CONCRETE | |
| 1 | GMX-06-2.0 | | | 0 | CLAYEY SAND with GRAVEL (SC): greenish black (10Y 2.5 /1), moist, 60% fine to coarse sand, 20% fine to coarse gravel, 20% medium plasticity fines, trace wood fragments | OVM = Thermo Environmental Instruments 580B PID calibrated with 100 ppm isobutylene standard. |
| 2 | | | | 0 | SANDY LEAN CLAY (CL): black (N 2.5/0), moist, 70% fines, 30% fine sand, medium plasticity, soft | |
| 3 | | | | 0 | POORLY GRADED SAND with CLAY (SP-SC): greenish gray (10GY 5/1) | |
| 4 | GMX-06-4.5 | | | | | |
| 5 | | | | 0 | | |
| 6 | | | | 0 | dark greenish gray (5G 4/1), firm, odor | |
| 7 | | | | 0 | dark greenish gray (5GY 4/1), 60% fines, 40% fine sand, trace fine gravel, odor | Attempt to collect grab groundwater sample GW-06 through 5 feet of 1-inch OD Sch. 40 PVC screen (0.01-inch slot size) placed in borehole from 8 to 13 feet bgs. Enviro-core drive casing retracted from bottom of boring to 7 feet bgs to maintain surface seal. No groundwater recovered. |
| 8 | | | | 0 | | |
| 9 | | | | | CLAYEY SAND with GRAVEL (SC): olive brown (2.5Y 4/3) mottled with dark yellowish brown (10YR 4/6), moist, 50% fine to coarse sand, 30% medium plasticity fines, 20% fine to coarse gravel | |
| 10 | | | | 0 | wet | |
| 11 | | | | 0 | moist, 60% fine to coarse gravel, 35% medium plasticity fines, 15% fine gravel | |
| 12 | | | | 0 | 50% fine to coarse sand, 35% medium plasticity fines, 15% fine to coarse gravel | |
| 13 | | | | 0 | Bottom of boring at 13.0 feet | Borehole destroyed using Type I-II neat cement grout placed from total depth to ground surface with a tremie pipe. |
| 14 | | | | | | |
| 15 | | | | | | |

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| PROJECT: 1249 67TH STREET<br>Emeryville, California | **Log of Boring No. GMX-07** |
| BORING LOCATION: South side of site along 66th Street | ELEVATION AND DATUM: Not surveyed: datum is ground surface |
| DRILLING CONTRACTOR: Precision Sampling Incorporated | DATE STARTED: 11/12/02 / DATE FINISHED: 11/12/02 |
| DRILLING METHOD: Direct push | TOTAL DEPTH (ft.): 15.0 / MEASURING POINT: Ground surface |
| DRILLING EQUIPMENT: XD-1 | DEPTH TO WATER (ft.) FIRST: NA / COMPL.: NA |
| SAMPLING METHOD: Enviro-core sampling system [3' x 2.6"] | LOGGED BY: B. Mulholland |
| HAMMER WEIGHT: NA / DROP: NA | RESPONSIBLE PROFESSIONAL: E. Wells / REG. NO.: C47968 |

| DEPTH (feet) | SAMPLES: Sample No. | SAMPLES: Sample | SAMPLES: Blows/ Foot | OVM READING (ppm) | DESCRIPTION<br>NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.<br>Surface Elevation: Not surveyed | REMARKS |
|---|---|---|---|---|---|---|
| 0 | | | | | SANDY LEAN CLAY with GRAVEL (CL): dark greenish gray (10G 3/1), moist, 50% fines, 30% fine to coarse sand, 20% fine to coarse gravel | |
| 1 | | | | | | |
| 2 | | | | 0 | | OVM = Thermo Environmental Instruments 580B PID calibrated with 100 ppm isobutylene standard. |
| 3 | | | | | | |
| 4 | | | | | SANDY LEAN CLAY (CL): reddish brown (5YR 4/3), moist, 70% fines, 30% fine sand, medium plasticity, firm | |
| 5 | | | | | | |
| 6 | | | | | | |
| 7 | | | | 0 | | Attempt to collect grab groundwater sample GW-07 through 5 feet of 1-inch OD Sch. 40 PVC screen (0.01-inch slot size) placed in borehole from 10 to 15 feet bgs. Enviro-core drive casing retracted from bottom of boring to 7 feet bgs to maintain surface seal. No groundwater recovered. |
| 8 | | | | | SANDY LEAN CLAY with GRAVEL (CL): reddish brown (5YR 4/3), moist, 50% fines, 30% fine to coarse sand, 20% fine to coarse gravel | |
| 9 | | | | | | |
| 10 | | | | | | |
| 11 | | | | | | |
| 12 | | | | 0 | | |
| 13 | | | | | SANDY LEAN CLAY (CL): reddish brown (5YR 4/3), moist, 70% fines, 30% fine sand, medium plasticity, firm | Borehole destroyed using Type I-II neat cement grout placed from total depth to ground surface with a tremie pipe. |
| 14 | | | | | | |
| 15 | | | | 0 | Bottom of boring at 15.0 feet | |

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| PROJECT: 1249 67TH STREET<br>Emeryville, California | **Log of Boring No. GMX-08** |
| BORING LOCATION: Southwest coner of site along 66th Street | ELEVATION AND DATUM: Not surveyed: datum is ground surface |
| DRILLING CONTRACTOR: Precision Sampling Incorporated | DATE STARTED: 11/12/02 / DATE FINISHED: 11/12/02 |
| DRILLING METHOD: Direct push | TOTAL DEPTH (ft.): 15.0 / MEASURING POINT: Ground surface |
| DRILLING EQUIPMENT: XD-1 | DEPTH TO WATER (ft.) FIRST: 13.0 / COMPL.: 5.5 |
| SAMPLING METHOD: Enviro-core sampling system [3' x 2.6"] | LOGGED BY: B. Mulholland |
| HAMMER WEIGHT: NA / DROP: NA | RESPONSIBLE PROFESSIONAL: E. Wells / REG. NO.: C47968 |

| DEPTH (feet) | SAMPLES: Sample No. | SAMPLES: Sample | SAMPLES: Blows/ Foot | OVM READING (ppm) | DESCRIPTION<br>NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.<br>Surface Elevation: Not surveyed | REMARKS |
|---|---|---|---|---|---|---|
| 1 | | | | | CLAYEY SAND with GRAVEL (SC): dark greenish gray (10G 3/1), moist, 50% fine to coarse sand, 35% medium plasticity fines, 15% fine to coarse gravel | |
| 2 | GMX-08-2.0 | | | 0 | | OVM = Thermo Environmental Instruments 580B PID calibrated with 100 ppm isobutylene standard. |
| 3 | | | | | SANDY LEAN CLAY with GRAVEL (CL): dark greenish gray (10G 3/1), moist, 50% fines, 30% fine to coarse sand, 20% fine to coarse gravel, nonplastic, firm | |
| 4 | GMX-08-4.5 | | | | | |
| 5 | | | | | | |
| 6 | | | | 0 | | Grab groundwater sample GMX-08 collected through 5 feet of 1-inch OD Sch. 40 PVC screen (0.01-inch slot size) placed in borehole from 10 to 15 feet bgs. Enviro-core drive casing retracted from bottom of boring to 7 feet bgs to maintain surface seal. |
| 7 | | | | 0 | | |
| 8 | | | | | | |
| 9 | | | | | | |
| 10 | | | | | SANDY LEAN CLAY (CL): reddish brown (5YR 4/3), moist, 70% fines, 30% fine sand, medium plasticity, firm | |
| 11 | | | | | | |
| 12 | | | | 0 | | Borehole destroyed using Type I-II neat cement grout placed from total depth to ground surface with a tremie pipe. |
| 13 | | | | | wet | |
| 14 | | | | | | |
| 15 | | | | | Bottom of boring at 15.0 feet | |

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|---|---|
| PROJECT: 1249 67TH STREET<br>Emeryville, California | **Log of Boring No. GMX-09** |
| BORING LOCATION: Northwest side of site near railroad tracks | ELEVATION AND DATUM: Not surveyed: datum is ground surface |
| DRILLING CONTRACTOR: Precision Sampling Incorporated | DATE STARTED: 11/12/02 / DATE FINISHED: 11/12/02 |
| DRILLING METHOD: Direct push | TOTAL DEPTH (ft.): 15.0 / MEASURING POINT: Ground surface |
| DRILLING EQUIPMENT: XD-1 | DEPTH TO WATER (ft.) FIRST: 14.0 / COMPL.: 6.25 |
| SAMPLING METHOD: Enviro-core sampling system [3' x 2.6"] | LOGGED BY: B. Mulholland |
| HAMMER WEIGHT: NA / DROP: NA | RESPONSIBLE PROFESSIONAL: E. Wells / REG. NO.: C47968 |

| DEPTH (feet) | SAMPLES: Sample No. | SAMPLES: Sample | SAMPLES: Blows/Foot | OVM READING (ppm) | DESCRIPTION<br>NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. | REMARKS |
|---|---|---|---|---|---|---|
| | | | | | Surface Elevation: Not surveyed | |
| 0 | | | | 0 | CLAYEY SAND with GRAVEL (SC): dark greenish gray (10G 3/1), moist, 50% fine to coarse sand, 35% medium plasticity fines, 15% fine to coarse gravel | |
| 1 | GMX-09-2.0 | | | | | OVM = Thermo Environmental Instruments 580B PID calibrated with 100 ppm isobutylene standard. |
| 2 | | | | | | |
| 3 | | | | | reddish brown (5YR 4/3) | |
| 4 | GMX-09-4.5 | | | | | |
| 5 | | | | 0 | SANDY LEAN CLAY with GRAVEL (CL): reddish brown (5YR 4/3), moist, 50% fines, 30% fine to coarse sand, 20% fine to coarse gravel, nonplastic, firm | Grab groundwater sample GMX-09 collected through 5 feet of 1-inch OD Sch. 40 PVC screen (0.01-inch slot size) placed in borehole from 10 to 15 feet bgs. Enviro-core drive casing retracted from bottom of boring to 7 feet bgs to maintain surface seal. |
| 6 | | | | | | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | | | | | |
| 10 | | | | 0 | SANDY LEAN CLAY (CL): reddish brown (5YR 4/3), moist, 70% fines, 30% fine sand, medium plasticity, firm | |
| 11 | | | | | | Borehole destroyed using Type I-II neat cement grout placed from total depth to ground surface with a tremie pipe. |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | 0 | wet | |
| 15 | | | | | Bottom of boring at 15.0 feet | |

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| PROJECT: 1249 67TH STREET<br>Emeryville, California | **Log of Boring No. GMX-10** |
| BORING LOCATION: Northeast of site along 67th Street | ELEVATION AND DATUM: Not surveyed: datum is ground surface |
| DRILLING CONTRACTOR: Precision Sampling Incorporated | DATE STARTED: 11/12/02 / DATE FINISHED: 11/12/02 |
| DRILLING METHOD: Direct push | TOTAL DEPTH (ft.): 15.0 / MEASURING POINT: Ground surface |
| DRILLING EQUIPMENT: XD-1 | DEPTH TO WATER (ft.) FIRST: NA / COMPL.: NA |
| SAMPLING METHOD: Enviro-core sampling system [3' x 2.6"] | LOGGED BY: B. Mulholland |
| HAMMER WEIGHT: NA / DROP: NA | RESPONSIBLE PROFESSIONAL: E. Wells / REG. NO.: C47968 |

| DEPTH (feet) | SAMPLES: Sample No. | SAMPLES: Sample | SAMPLES: Blows/ Foot | OVM READING (ppm) | DESCRIPTION<br>NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.<br>Surface Elevation: Not surveyed | REMARKS |
|---|---|---|---|---|---|---|
| 0 | | | | | CONCRETE | |
| 1 | | | | | SANDY LEAN CLAY (CL): brown (7.5YR 4/3), moist, 70% fines, 30% fine sand, medium plasticity, firm | OVM = Thermo Environmental Instruments 580B PID calibrated with 100 ppm isobutylene standard. |
| 2 | | | | 0 | | |
| 3 | | | | | | |
| 4 | | | | | SANDY LEAN CLAY with GRAVEL (CL): dark reddish brown (5YR 3/2), moist, 50% fines, 30% fine sand, 20% fine gravel | |
| 5 | | | | | | |
| 6 | | | | 0 | | |
| 7 | | | | | | Attempt to collect grab groundwater sample GW-10 through 5 feet of 1-inch OD Sch. 40 PVC screen (0.01-inch slot size) placed in borehole from 10 to 15 feet bgs. Enviro-core drive casing retracted from bottom of boring to 7 feet bgs to maintain surface seal. No groundwater recovered. |
| 8 | | | | | | |
| 9 | | | | | SANDY LEAN CLAY (CL): reddish brown (5YR 4/3), moist, 70% fines, 30% fine sand, medium plasticity, firm | |
| 10 | | | | | | |
| 11 | | | | 0 | | |
| 12 | | | | | 60% fines, 40% fine sand, medium plasticity, soft | |
| 13 | | | | | | Borehole destroyed using Type I-II neat cement grout placed from total depth to ground surface with a tremie pipe. |
| 14 | | | | | | |
| 15 | | | | 0 | Bottom of boring at 15.0 feet | |

| PROJECT: FABCO AUTOMOTIVE CORPORATION<br>Emeryville, California | Log of Boring No. GMX-11 | |
|---|---|---|
| BORING LOCATION: | ELEVATION AND DATUM: Not surveyed; datum is ground surface | |
| DRILLING CONTRACTOR: Precision Sampling, Inc. | DATE STARTED: 12/3/02 | DATE FINISHED: |
| DRILLING METHOD: Direct push | TOTAL DEPTH: 19.0 | MEASURING POINT: Ground surface |
| DRILLING EQUIPMENT: XD-1 | DEPTH TO WATER: FIRST 12.0 | COMPL NA |
| SAMPLING METHOD: Enviro-core sampling system [3' x ~~2.6"~~] 1 5/8" | LOGGED BY: S. Mearon | |
| HAMMER WEIGHT: NA DROP: NA | RESPONSIBLE PROFESSIONAL: | REG. NO. |

| DEPTH (feet) | SAMPLES: Sample No. | SAMPLES: Sample | SAMPLES: Blows/ Foot | OVM Reading (ppm) | DESCRIPTION<br>NAME (USCS Symbol): color, moist. % by weight, plast., consistency, structure, cementation, react. W/HCl, geo. inter. | REMARKS |
|---|---|---|---|---|---|---|
| | | | | | Surface Elevation: Not surveyed | |
| | | | | | ASPHALTIC CONCRETE (6 inches) | OVM = Thermo Environmental Instruments 580B PID calibrated with 100 ppm isobutylene standard. |
| 1 | | | | 0.0 | CLAYEY SAND (SC): olive brown (2.5Y 4/3), moist. 60% fine to coarse sand, 35% low plasticity fines, 5% fine gravel | |
| 2 | | | | 0.0 | LEAN CLAY (CL): black (7.5YR 2.5/1) mottled with grayish green (5G 5/2), moist, 90% fines, 10% fine sand, medium plasticity, firm, trace wood fragments | |
| 3 | | | | 0.0 | ↓ black (7.5YR 2.5/1) | |
| 4 | | | | 0.0 | | |
| 5 | | | | 0.0 | LEAN CLAY WITH SAND (CL): dark gray (5Y 4/1) mottled with dark yellowish brown (10YR 4/4), moist, 85% fines, 15% fine to coarse sand, medium plasticity, soft | |
| 6 | | | | | | |
| 7 | | | | | ↓ olive brown (2.5Y 4/3), 80% fines, 20% fine to coarse sand. | |
| 8 | | | | 0.0 | | |
| 9 | | | | 0.0 | SANDY LEAN CLAY (CL): olive brown (2.5Y 4/3), moist, 60% fines, 40% fine to coarse sand, medium plasticity, firm | |
| 10 | | | | 0.0 | CLAYEY SAND (SC): olive brown (2.5Y 4/3), moist, 70% fine to coarse sand, 25% medium plasticity fines, 5% fine gravel<br>→ 80% fine to coarse sand, 15% fines, 5% fine gravel | |
| 11 | | | | 0.0 | | |
| 12 | | | | 0.0 | → wet | |
| 13 | | | | | | |
| 14 | | | | 0.0 | SANDY LEAN CLAY (CL): dark gray (2.5Y 4/1), moist, 65% fines, 35% fine to coarse sand, medium plasticity, firm<br>trace fine gravel | |
| 15 | | | | 0.0 | LEAN CLAY WITH SAND (CL): dark gray (2.5Y 4/1), moist, 85% fines, 15% fine to coarse sand, trace fine gravel, medium plasticity, firm | |

| Project No. 8367.001 | Geomatrix Consultants | Figure |
|---|---|---|

PROJECT: FABCO AUTOMOTIVE CORPORATION Emeryville, California

# Log of Boring No. GMX-11

| DEPTH (feet) | SAMPLES: Sample No. | SAMPLES: Sample | SAMPLES: Blows/Foot | OVM Reading (ppm) | DESCRIPTION: NAME (USCS Symbol): color, moist. % by weight, plast., consistency, structure, cementation, react. W/HCl, geo. inter. | REMARKS |
|---|---|---|---|---|---|---|
| 16 | | | | 0.0 | LEAN CLAY (CL): dark gray (2.5Y 4/1), moist, 90% fines, 10% fine to coarse sand, trace fine gravel, medium plasticity, firm | |
| 17 | | | | 0.0 | | |
| 18 | | | | 0.0 | | |
| 19 | | | | 0.0 | | |
| | | | | | Bottom of boring at 19.0 feet | |
| 20 | | | | | | |
| 21 | | | | | | Borehole destroyed using Type I-II neat cement grout placed from total depth to ground surface with a tremie pipe. |
| 22 | | | | | | |

Project No. 8367-001 | Geomatrix Consultants | Figure

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|---|---|
| PROJECT: FABCO AUTOMOTIVE CORPORATION<br>Emeryville, California | **Log of Boring No. GMX-12** |
| BORING LOCATION: | ELEVATION AND DATUM: Not surveyed; datum is ground surface |
| DRILLING CONTRACTOR: Precision Sampling, Inc. | DATE STARTED: 12/3/02 / DATE FINISHED: |
| DRILLING METHOD: Direct push | TOTAL DEPTH: 16.0 / MEASURING POINT: Ground surface |
| DRILLING EQUIPMENT: XD-1 | DEPTH TO WATER: FIRST 8.5 COMPL NA |
| SAMPLING METHOD: Enviro-core sampling system [3' x 2.6"] | LOGGED BY: S. Mearon |
| HAMMER WEIGHT: NA DROP: NA | RESPONSIBLE PROFESSIONAL: REG. NO. |

| DEPTH (feet) | SAMPLES: Sample No. | SAMPLES: Sample | SAMPLES: Blows/ Foot | OVM Reading (ppm) | DESCRIPTION<br>NAME (USCS Symbol): color, moist. % by weight, plast., consistency, structure, cementation, react. W/HCl, geo. inter. | REMARKS |
|---|---|---|---|---|---|---|
| | | | | | Surface Elevation: Not surveyed | |
| 0 | | | | 0.0 | LEAN CLAY WITH SAND (CL): black (2.5 Y 2.5/1), moist, 85% fines, 15% fine to coarse sand, medium plasticity, soft, organic odor [SOP] | OVM = Thermo Environmental Instruments 580B PID calibrated with 100 ppm isobutylene standard. |
| 1 | | | | 0.0 | LEAN CLAY (CL): olive gray (5Y 4/2), moist, 90% fines, 10% fine to coarse sand, medium plasticity, firm | |
| 2 | | | | 0.0 | | |
| 3 | | | | 0.0 | ↓ olive (5Y 5/3) | |
| 4 | | | | 0.0 | | |
| 5 | | | | 0.0 | LEAN CLAY WITH SAND (CL): olive (5Y 5/3), moist, 80% fines, 20% fine to coarse sand, medium plasticity, firm | |
| 6 | | | | 0.0 | LEAN CLAY (CL): light olive brown (2.5Y 5/3), moist, 90% fines, 10% fine to coarse sand, medium plasticity, firm | |
| 7 | | | | 0.0 | | |
| 8 | | | | 0.0 | CLAYEY SAND (SC): light olive brown (2.5Y 5/3), moist, 85% fine to coarse sand, 15% low plasticity fines | |
| 9 | | | | 0.0 | ↓ wet | |
| 10 | | | | 0.0 | | |
| 11 | | | | 0.0 | LEAN CLAY (CL): dark yellowish brown (10YR 3/4), moist, 90% fines, 10% fine to coarse sand, medium plasticity, very firm | |
| 12 | | | | | | |
| 13 | | | | 0.0 | | |
| 14 | | | | | | |
| 15 | | | | 0.0 | | |

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| Project No. 8367.001 | **Geomatrix Consultants** | Figure |

PROJECT: FABCO AUTOMOTIVE CORPORATION Emeryville, California

# Log of Boring No. GMX-12

| DEPTH (feet) | SAMPLES: Sample No. | SAMPLES: Sample | SAMPLES: Blows/ Foot | OVM Reading (ppm) | DESCRIPTION: NAME (USCS Symbol): color, moist. % by weight, plast., consistency, structure, cementation, react. W/HCl, geo. inter. | REMARKS |
|---|---|---|---|---|---|---|
| 16 | | X | | | LEAN CLAY (CL): (Cont.) | Sampling refusal at 16.0 feet. |
| | | | | | Drilling refusal at 16.0 feet | |
| 17 | | | | | | |
| 18 | | | | | | |
| 19 | | | | | | |
| 20 | | | | | | |
| 21 | | | | | | Borehole destroyed using Type I-II neat cement grout placed from total depth to ground surface with a tremie pipe. |
| 22 | | | | | | |

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|---|---|
| PROJECT: FABCO AUTOMOTIVE CORPORATION<br>Emeryville, California | Log of Boring No. GMX-13 |
| BORING LOCATION: | ELEVATION AND DATUM: Not surveyed; datum is ground surface |
| DRILLING CONTRACTOR: Precision Sampling, Inc. | DATE STARTED: 12/3/02 / DATE FINISHED: |
| DRILLING METHOD: Direct push | TOTAL DEPTH: 19.0 / MEASURING POINT: Ground surface |
| DRILLING EQUIPMENT: XD-1 | DEPTH TO WATER: FIRST 16.0 COMPL NA |
| SAMPLING METHOD: Enviro-core sampling system [3' x ~~2.6~~"] 1 5/8" | LOGGED BY: S. Mearon |
| HAMMER WEIGHT: NA DROP: NA | RESPONSIBLE PROFESSIONAL: REG. NO. |

| DEPTH (feet) | SAMPLES: Sample No. | SAMPLES: Sample | SAMPLES: Blows/ Foot | OVM Reading (ppm) | DESCRIPTION<br>NAME (USCS Symbol): color, moist, % by weight, plast., consistency, structure, cementation, react. W/HCl, geo. inter. | REMARKS |
|---|---|---|---|---|---|---|
| | | | | | Surface Elevation: Not surveyed | |
| 1 | | | | 0.0 | CLAYEY SAND WITH GRAVEL (SC): black (7.5 YR 2.5/1), moist, 50% fine to coarse sand, 35% medium plasticity fines, 15% fine to coarse gravel | OVM = Thermo Environmental Instruments 580B PID calibrated with 100 ppm isobutylene standard. |
| 2 | | | | | SANDY LEAN CLAY (CL): light olive brown (2.5Y 5/3), moist, 70% fines, 30% fine to coarse sand, medium plasticity, firm | |
| 3 | | | | | | |
| 4 | | | | 0.0 | | |
| 5 | | | | | | |
| 6 | | | | 0.0 | CLAYEY SAND (SC): light olive brown (2.5Y 5/3), moist, 70% fine to coarse sand, 30% medium plasticity fines | Driller comment: hard drilling. |
| 7 | | | | 0.0 | ↓ dark gray (2.5Y 4/1) | |
| 8 | | | | 0.0 | ↓ 65% fine to coarse sand, 35% fines | |
| 9 | | | | 0.0 | | |
| 10 | | | | | ↓ 85% fine to coarse sand, 15% fines | |
| 11 | | | | 0.0 | LEAN CLAY (CL): brown (10YR 4/3), moist, 90% fines, 10% fine to coarse sand, medium plasticity, firm | |
| 12 | | | | 0.0 | | |
| 13 | | | | 0.0 | SANDY LEAN CLAY (CL): brown (10YR 4/3), moist, 65% fines, 35% fine to coarse sand, trace gravel, medium plasticity, firm | |
| 14 | | | | 0.0 | LEAN CLAY WITH SAND (CL): brown (10YR 4/3), moist, 85% fines, 15% fine to coarse sand, medium plasticity, firm | |
| 15 | | | | 0.0 | | |

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|---|---|---|
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PROJECT: FABCO AUTOMOTIVE CORPORATION Emeryville, California

# Log of Boring No. GMX-13

| DEPTH (feet) | SAMPLES: Sample No. | SAMPLES: Sample | SAMPLES: Blows/ Foot | OVM Reading (ppm) | DESCRIPTION: NAME (USCS Symbol): color, moist. % by weight, plast., consistency, structure, cementation, react. W/HCl, geo. inter. | REMARKS |
|---|---|---|---|---|---|---|
| 16 | | | | 0.0 | ↓ 75% fines, 25% fine to coarse sand | |
| | | | | | SANDY LEAN CLAY (CL): olive brown (2.5Y 4/3), wet, 65% fines, 35% fine to coarse sand, medium plasticity, firm | |
| 17 | | | | 0.0 | | |
| 18 | | | | 0.0 | | |
| | | | | | CLAYEY SAND (SC): olive brown (2.5Y 4/3), wet, 70% fine to coarse sand, 30% medium plasticity fines | |
| 19 | | | | 0.0 | | |
| | | | | | Bottom of boring at 19.0 feet | |
| 20 | | | | | | |
| 21 | | | | | | Borehole destroyed using Type I-II neat cement grout placed from total depth to ground surface with a tremie pipe. |
| 22 | | | | | | |

Project No. 8367.001 | Geomatrix Consultants | Figure

| | |
|---|---|
| PROJECT: FABCO AUTOMOTIVE CORPORATION<br>Emeryville, California | **Log of Boring No. GMX-14** |
| BORING LOCATION: 14' south of northern fence, 14' west of warehouse | ELEVATION AND DATUM: Not surveyed; datum is ground surface |
| DRILLING CONTRACTOR: Precision Sampling, Inc. | DATE STARTED: 12/3/02 / DATE FINISHED: |
| DRILLING METHOD: Direct push | TOTAL DEPTH: 19.0 / MEASURING POINT: Ground surface |
| DRILLING EQUIPMENT: XD-1 | DEPTH TO WATER: FIRST 10.5 COMPL NA |
| SAMPLING METHOD: Enviro-core sampling system [3' ~~x2.6"~~] \| 5/8" | LOGGED BY: S. Mearon |
| HAMMER WEIGHT: NA DROP: NA | RESPONSIBLE PROFESSIONAL: REG. NO. |

| DEPTH (feet) | SAMPLES: Sample No. | SAMPLES: Sample | SAMPLES: Blows/ Foot | OVM Reading (ppm) | DESCRIPTION<br>NAME (USCS Symbol): color, moist. % by weight, plast., consistency, structure, cementation, react. W/HCl, geo. inter. | REMARKS |
|---|---|---|---|---|---|---|
| | | | | | Surface Elevation: Not surveyed | |
| 1 | | | | 0.0 | CLAYEY SAND (SC): very dark grayish brown (10YR 3/2), moist, 75% fine to coarse sand, 25% medium plasticity fines | OVM = Thermo Environmental Instruments 580B PID calibrated with 100 ppm isobutylene standard. |
| 2 | | | | 0.0 | LEAN CLAY (CL): black (7.5 YR 2.5/1), moist, 90% fines, 10% fine to coarse sand, medium plasticity, firm | |
| 3 | | | | | | |
| 4 | | | | | | |
| 5 | | | | 0.0 | LEAN CLAY WITH SAND (CL): dark gray (2.5Y 4/1), moist, 85% fines, 15% fine to coarse sand, medium plasticity, firm | |
| 6 | | | | 0.0 | ↓ dark gray (5Y 4/1) | |
| 7 | | | | 0.0 | | |
| 8 | | | | 0.0 | ↓ olive gray (5Y 5/2) | |
| 9 | | | | 0.0 | | |
| 10 | | | | 0.0 | | |
| 11 | | | | 0.0 | ↓ wet<br>↓ pale olive (5Y 6/3) mottled with strong brown (7.5 YR 5/8), 80% fines, 20% fine to coarse sand, moist | |
| 12 | | | | 0.0 | | |
| 13 | | | | 0.0 | SANDY LEAN CLAY (CL): dark yellowish brown (10 YR 4/6), moist, 60% fines, 40% fine to coarse sand, medium plasticity, firm | |
| 14 | | | | 0.0 | | |
| 15 | | | | 0.0 | | |

| | | |
|---|---|---|
| Project No. 8367.001 | **Geomatrix Consultants** | Figure |

PROJECT: FABCO AUTOMOTIVE CORPORATION
Emeryville, California

# Log of Boring No. GMX-15

BORING LOCATION:

ELEVATION AND DATUM: Not surveyed; datum is ground surface

DRILLING CONTRACTOR: Precision Sampling, Inc.

DATE STARTED: 12/3/02 | DATE FINISHED:

DRILLING METHOD: Direct push

TOTAL DEPTH: 19.0 | MEASURING POINT: Ground surface

DRILLING EQUIPMENT: XD-1

DEPTH TO WATER: FIRST NA COMPL NA

SAMPLING METHOD: Enviro-core sampling system [3' x ~~2.6"~~] 1 5/8"

LOGGED BY: S. Mearon

HAMMER WEIGHT: NA DROP: NA

RESPONSIBLE PROFESSIONAL: REG. NO.

| DEPTH (feet) | SAMPLES: Sample No. | SAMPLES: Sample | SAMPLES: Blows/Foot | OVM Reading (ppm) | DESCRIPTION: NAME (USCS Symbol): color, moist. % by weight, plast., consistency, structure, cementation, react. W/HCl, geo. inter. | REMARKS |
|---|---|---|---|---|---|---|
| | | | | | Surface Elevation: Not surveyed | |
| | | | | | ASPHALTIC CONCRETE (6 inches) | OVM = Thermo Environmental Instruments 580B PID calibrated with 100 ppm isobutylene standard. |
| 1 | | | | | CLAYEY SAND (SC): very dark grayish brown (10YR 3/2), moist, 70% fine to coarse sand, 25% medium plasticity fines, 5% fine gravel | |
| 2 | | | | 0.0 | LEAN CLAY (CL): black (10YR 2.5/1), moist, 90% fines, 10% fine to coarse sand, trace gravel, medium plasticity, firm | |
| 3 | | | | 0.0 | ↓ dark greenish gray (5GY 4/1) | |
| 4 | | | | | | |
| 5 | | | | 0.0 | ↓ black (10YR 2.5/1), 95% fines, 5% fine to coarse sand | |
| 6 | | | | 0.0 | ↓ dark greenish gray (5GY 4/1) | |
| 7 | | | | 0.0 | | |
| 8 | | | | 0.0 | SANDY LEAN CLAY (CL): dark greenish gray (5GY 4/1), moist, 65% fines, 35% fine to coarse sand, trace fine gravel, medium plasticity, firm | |
| 9 | | | | 0.0 | ↓ light olive brown (2.5Y 5/3) | |
| 10 | | | | 0.0 | LEAN CLAY (CL): light olive brown (2.5Y 5/3), moist, 95% fines, 5% fine sand, medium plasticity, firm | |
| 11 | | | | | | |
| 12 | | | | 0.0 | SANDY LEAN CLAY (CL): light olive brown (2.5Y 5/3), moist, 60% fines, 40% fine to coarse sand, trace fine gravel, medium plasticity, firm | |
| 13 | | | | | | |
| 14 | | | | 0.0 | LEAN CLAY (CL): pale olive (5Y 6/3) mottled with strong brown (7.5YR 5/8), moist, 95% fines, 5% fine sand, medium plasticity, firm | |
| 15 | | | | 0.0 | | |

Project No. 8367.001 | Geomatrix Consultants | Figure

PROJECT: FABCO AUTOMOTIVE CORPORATION Emeryville, California

# Log of Boring No. GMX-15

| DEPTH (feet) | SAMPLES: Sample No. | SAMPLES: Sample | SAMPLES: Blows/ Foot | OVM Reading (ppm) | DESCRIPTION: NAME (USCS Symbol): color, moist. % by weight, plast., consistency, structure, cementation, react. W/HCl, geo. inter. | REMARKS |
|---|---|---|---|---|---|---|
| 16 | | | | 0.0 | LEAN CLAY (CL): (Cont.) | |
| 17 | | | | 0.0 | LEAN CLAY WITH SAND (CL): pale olive (5Y6/3) mottled with strong brown (7.5YR 5/8), moist; 85% fines, 15% fine to coarse sand, medium plasticity, firm | |
| 18 | | | | 0.0 | ↓ 75% fines, 25% fine to coarse sand | |
| 19 | | | | | Bottom of boring at 19.0 feet | |
| 20 | | | | | | |
| 21 | | | | | | Borehole destroyed using Type I-II neat cement grout placed from total depth to ground surface with a tremie pipe. |
| 22 | | | | | | |

Project No. 8367.001 | Geomatrix Consultants | Figure

GEOMATRIX

| | |
|---|---|
| 1249 67th Street<br>Emeryville, CA | **Log of Boring No. S-1** |
| **BORING LOCATION:**<br>~ 10 feet South west of excavation | **DATE STARTED:** 3/11/2004 **DATE FINISHED:** 3/12/2004 |
| **DRILLING CONTRACTOR:**<br>Resonant Sonic International | **ELEVATION AND DATUM (FMSL)**<br>Ground Surface |
| **DRILLING METHOD:** Direct Push **SIZE:** | **BORING TOTAL DEPTH:** 16 feet **FINAL STATUS:** Borehole Destroyed |
| **DRILLING EQUIPMENT:** Geoprobe 5400 **BIT TYPE:** | **DEPTH TO WATER** **FIRST** **COMPL.** 7.3 **24 HR.** |
| **SAMPLING METHOD:**<br>Continuous Core | **LOGGED BY:**<br>T Kingsley |
| **SAMPLER TYPE:**<br>Geoprobe Macro-Core Sampler (4' x 1.5") | **RESPONSIBLE PROFESSIONAL:** J. Patterson **REG. NO.:** C59161 |

| DEPTH (feet) | Sample | Sample No. | Blows/ foot | OVM (ppm) | USCS | DESCRIPTION<br>NAME: color, moisture, % by weight, plasticity, consistency, structure, cementation, reaction w/HCl, geologic interpretation | REMARKS |
|---|---|---|---|---|---|---|---|
| 0 | | | | | CL | LEAN CLAY with SAND: black (2.5Y 2.5/1), moist, ~85% fines, ~15% fine sand, medium plasticity, firm. | OVM = Thermo Environmental Instruments 580B PID calibrated with 100 ppm isobutylene standard. |
| 2 | | | | | CL | LEAN CLAY: dark olive gray (5Y 3/2), moist, ~90% fines, ~10% fine sand, medium plasticity, soft. | |
| 3 | | | | | | black (2.5Y 2.5/1). | |
| 4 | | | | 0.0 | | black (2.5Y 2.5/1), ~85% fines, ~15% angular fine to coarse sand. | |
| 7 | | | | | SC | CLAYEY SAND: very dark gray (10YR 3/1), moist, ~85% fine to coarse sand, ~15% low plasticity fines. | |
| 8 | | | | 0.0 | | increase coarse sand fraction. | |
| 10 | | | | | | dark greenish gray (GLEY1 10Y 3/1), moist, ~75% angular fine to coarse sand, ~20% low plasticity fines, ~5% angular gravel. | |
| 11 | | | | | | brownish yellow (10YR 6/8), moist, ~75% angular fine to coarse sand, ~20% low plasticity fines, ~5% angular gravel. | Grab groundwater sample S-1 collected through 5 feet of 3/4-inch OD Sch. 40 PVC screen (0.020-inch slot size) placed in the borehole from 2 to 7 ft bgs. Enviro-core drive casing retracted from bottom of the boring to 3 ft bgs to maintain surface seal. |
| 12 | | | | 0.0 | CL | LEAN CLAY with SAND: yellowish brown (10YR 5/6), moist, ~85% fines, ~15% angular fine to coarse sand, contains fine gravel, medium plasticity, firm. | |
| 16 | | | | 0.0 | | Bottom of Boring @ 16 feet. | Borehole destroyed using Type I-II neat cement grout placed from total depth to ground surface with a tremie pipe. |

GEOMATRIX

| | |
|---|---|
| 1249 67th Street<br>Emeryville, CA | **Log of Boring No. S-2** |
| **BORING LOCATION:**<br>~ 20 feet South west of excavation | **DATE STARTED:** 3/11/2004 **DATE FINISHED:** 3/12/2004 |
| **DRILLING CONTRACTOR:**<br>Resonant Sonic International | **ELEVATION AND DATUM (FMSL)**<br>Ground Surface |
| **DRILLING METHOD:** Direct Push **SIZE:** | **BORING TOTAL DEPTH:** 18 feet **FINAL STATUS:** Borehole Destroyed |
| **DRILLING EQUIPMENT:** Geoprobe 5400 **BIT TYPE:** | **DEPTH TO WATER** FIRST 10.5 COMPL. 9.36 24 HR. |
| **SAMPLING METHOD:**<br>Continuous Core | **LOGGED BY:**<br>T Kinglsey |
| **SAMPLER TYPE:**<br>Geoprobe Macro-Core Sampler (4' x 1.5") | **RESPONSIBLE PROFESSIONAL:** J. Patterson **REG. NO.:** C59161 |

| DEPTH (feet) | Sample | Sample No. | Blows/ foot | OVM (ppm) | USCS | DESCRIPTION<br>NAME: color, moisture, % by weight, plasticity, consistency, structure, cementation, reaction w/HCl, geologic interpretation | REMARKS |
|---|---|---|---|---|---|---|---|
| 0–1 | | | | | SC | CLAYEY SAND: dark yellowish brown (10YR 4/6), moist, ~75% fine to medium sand, ~25% low plasticity fines. | OVM = Thermo Environmental instruments 580B PID calibrated with 100 ppm isobutylene standard. |
| 3–4 | X | | | 0.0 | CL | LEAN CLAY with SAND: light olive brown (2.5Y 5/4), moist, ~80% fines, ~20% fine sand, trace coarse sand, low plasticity, soft, high dry strength. | |
| 7–8 | X | | | 0.0 | SC | CLAYEY SAND: dark olive brown (2.5Y 3/3), moist, ~80% fine to coarse sand, 20% low plasticity fines, trace angular fine gravels.<br><br>greenish black (GLEY1 5GY 2.5/1), moist, ~60% fine to coarse sand, ~40% low plasticity fines, trace angular fine gravels. | |
| 11–12 | X | | | 0.0 | | light olive brown (2.5Y 5/4), wet, ~70% fine to coarse sand, ~30% low plasticity fines, trace angular fine gravels, iron oxide mottling. | Grab groundwater sample S-2 collected through 5 feet of 3/4-inch OD Sch. 40 PVC screen (0.020-inch slot size) placed in the borehole from 2 to 7 ft bgs. Enviro-core drive casing retracted from bottom of the boring to 3 ft bgs to maintain surface seal. |
| 15–16 | | | | 0.0 | | light olive brown (2.5Y 5/4), moist, ~75% fine sand, ~25% low plasticity fines, trace angular fine gravel. | |
| 18 | | | | 0.0 | | Bottom of Boring @ 18 feet. | Borehole destroyed using Type I-II neat cement grout placed from total depth to ground surface with a tremie pipe. |

GEOMATRIX

| | |
|---|---|
| 1249 67th Street<br>Emeryville, CA | **Log of Boring No. S-3** |
| **BORING LOCATION:**<br>~ 15 feet South west of excavation | **DATE STARTED:** 3/11/2004 **DATE FINISHED:** 3/12/2004 |
| **DRILLING CONTRACTOR:**<br>Resonant Sonic International | **ELEVATION AND DATUM (FMSL)**<br>Ground Surface |
| **DRILLING METHOD:** Direct Push **SIZE:** | **BORING TOTAL DEPTH:** 18 feet **FINAL STATUS:** Borehole Destroyed |
| **DRILLING EQUIPMENT:** Geoprobe 5400 **BIT TYPE:** | **DEPTH TO WATER** FIRST 8.25 COMPL. 15.95 24 HR. |
| **SAMPLING METHOD:**<br>Continuous Core | **LOGGED BY:**<br>T Kinglsey |
| **SAMPLER TYPE:**<br>Geoprobe Macro-Core Sampler (4' x 1.5") | **RESPONSIBLE PROFESSIONAL:** J. Patterson **REG. NO.:** C59161 |

| DEPTH (feet) | Sample | Sample No. | Blows/ foot | OVM (ppm) | USCS | DESCRIPTION<br>NAME: color, moisture, % by weight, plasticity, consistency, structure, cementation, reaction w/HCl, geologic interpretation | REMARKS |
|---|---|---|---|---|---|---|---|
| 0–1 | | | | | CL | LEAN CLAY with SAND: black (2.5Y 2.5/1), moist, ~80% fines, ~20% fine sand, trace angular gravel, medium plasticity, firm. | OVM = Thermo Environmental Instruments 580B PID calibrated with 100 ppm isobutylene standard. |
| 1–3 | | | | | | dark olive gray (5Y 3/2), moist, ~90% fines, ~10% fine to coarse sand, trace gravel, medium plasticity, soft, high dry strength. | |
| 3–4 | | | | 0.0 | | | |
| 4–8 | | | | | | | |
| 8 | | | | 0.0 | SC | CLAYEY SAND: brown (10YR 4/3), wet, ~80% fine to coarse sand, ~20% low plasticity fines, trace gravel, iron oxide mottling. | |
| 9–10 | | | | | | olive (5Y 5/4), moist, ~80% fine sand, ~20% medium plasticity fines, trace medium to coarse sand. | |
| 11–12 | | | | 0.0 | SP-SC | POORLY GRADED SAND with CLAY: light olive brown (2.5Y 5/4), wet, ~90% fine to coarse sand, ~10% medium plasticity fines, trace angular fine gravels, iron oxide mottling. | Grab groundwater sample S-3 collected through 5 feet of 3/4-inch OD Sch. 40 PVC screen (0.020-inch slot size) placed in the borehole from 2 to 7 ft bgs. Enviro-core drive casing retracted from bottom of the boring to 3 ft bgs to maintain surface seal. |
| 13–14 | | | | | | increase coarse sand fraction. | |
| 15–16 | | | | 0.0 | | light olive brown (2.5Y 5/4), wet, ~75% fine to coarse sand, ~15% fine angular gravel,~10% low plasticity fines, iron oxide mottling. | |
| 17 | | | | 0.0 | SC | CLAYEY SAND: brown (10YR 4/3), wet, ~60% fine sand, ~ 40% medium plasticity fines, trace gravels. | Borehole destroyed using Type I-II neat cement grout placed from total depth to ground surface with a tremie pipe. |
| 18 | | | | | | Bottom of Boring @ 18 feet. | |
| 19 | | | | | | | |

GEOMATRIX

| | |
|---|---|
| 1249 67th Street<br>Emeryville, CA | **Log of Boring No. S-4** |
| **BORING LOCATION:**<br>~ 40 feet South west of excavation | **DATE STARTED:** 3/11/2004 **DATE FINISHED:** 3/12/2004 |
| **DRILLING CONTRACTOR:**<br>Resonant Sonic International | **ELEVATION AND DATUM (FMSL)**<br>Ground Surface |
| **DRILLING METHOD:** Direct Push **SIZE:** | **BORING TOTAL DEPTH:** 16 feet **FINAL STATUS:** Borehole Destroyed |
| **DRILLING EQUIPMENT:** Geoprobe 5400 **BIT TYPE:** | **DEPTH TO WATER** FIRST 8.0 COMPL. 7.26 24 HR. |
| **SAMPLING METHOD:**<br>Continuous Core | **LOGGED BY:**<br>T Kingsley |
| **SAMPLER TYPE:**<br>Geoprobe Macro-Core Sampler (4' x 1.5") | **RESPONSIBLE PROFESSIONAL:** J. Patterson **REG. NO.:** C59161 |

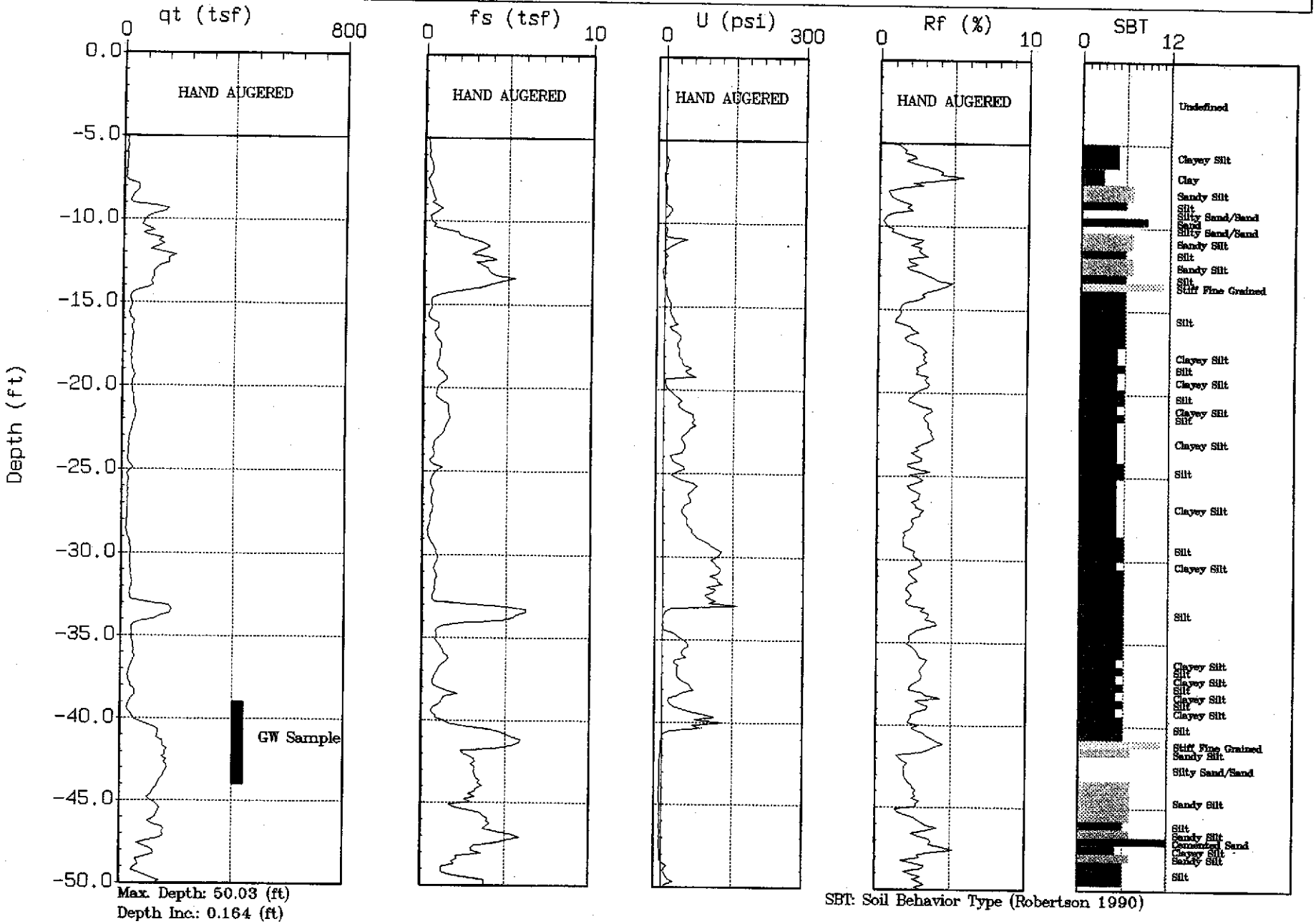
| DEPTH (feet) | Sample | Sample No. | Blows/ foot | OVM (ppm) | USCS | DESCRIPTION<br>NAME: color, moisture, % by weight, plasticity, consistency, structure, cementation, reaction w/HCl, geologic interpretation | REMARKS |
|---|---|---|---|---|---|---|---|
| 0 | | | | | CL | LEAN CLAY with SAND: black (2.5Y 2.5/1), moist, ~80% fines, ~20% fine sand, trace angular gravel, medium plasticity, firm. | OVM = Thermo Environmental Instruments 580B PID calibrated with 100 ppm isobutylene standard. |
| 4 | | | | 0.0 | | black (2.5Y 2.5/1), moist, ~75% fines, ~25% fine sand, low plasticity, soft. | |
| 7 | | | | | SC | CLAYEY SAND: very dark grayish brown (2.5Y 3/2), moist, ~60% fine with trace coarse sand, ~40% low plasticity fines, trace angular fine gravel. | |
| 8 | | | | 0.0 | | very dark grayish brown (2.5Y 3/2), wet | |
| 10 | | | | | | black (2.5Y 2.5/1), moist | |
| 11 | | | | | | dark yellowish brown (10YR 4/6), ~70% fine to coarse sand, ~30% low plasticity fines, trace angular fine gravel, iron oxide mottling. | Grab groundwater sample S-4 collected through 5 feet of 3/4-inch OD Sch. 40 PVC screen (0.020-inch slot size) placed in the borehole from 2 to 7 ft bgs. Enviro-core drive casing retracted from bottom of the boring to 3 feet bgs to maintain surface seal. |
| 12 | | | | 0.0 | | | |
| 13 | | | | | | yellowish brown (10YR 5/6), ~80% sand, ~20% low plasticity fines, trace angular fine gravels. | |
| 15 | | | | | | dark yellowish brown (10YR 4/4), ~80% fine with trace coarse sand, ~20% low plasticity fines, trace angular fine gravel. | |
| 16 | | | | 0.0 | | Bottom of Boring @ 16 feet. | Borehole destroyed using Type I-II neat cement grout placed from total depth to ground surface with a tremie pipe. |
| 19 | | | | | | | |

GREGG

# GEOMATRIX

Site: FABCO
Location: CPT-01

Geologist: S. MEARON
Date: 03:25:04 08:46




Max. Depth: 50.03 (ft)
Depth Inc.: 0.164 (ft)

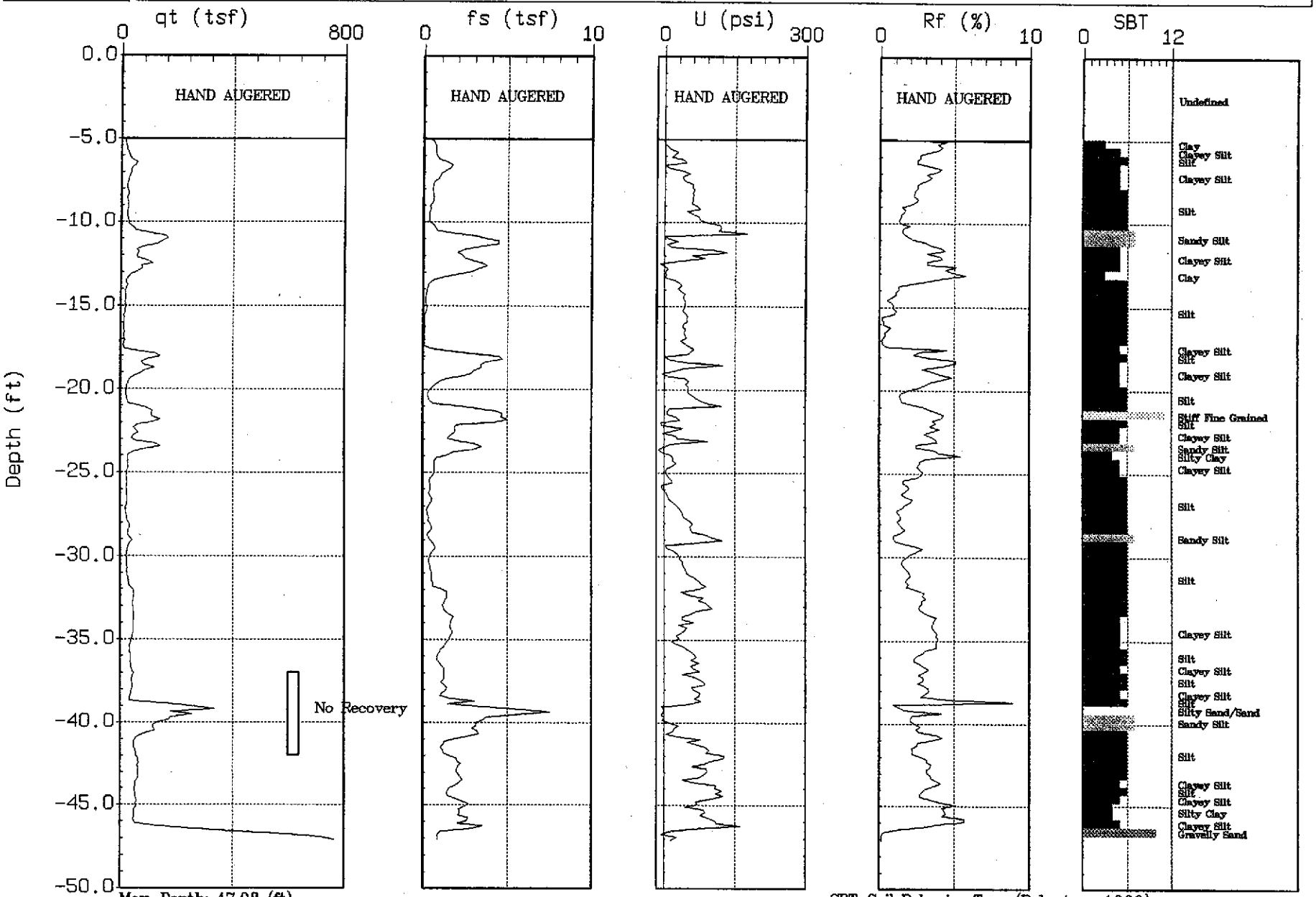
SBT: Soil Behavior Type (Robertson 1990)

GREGG

# GEOMATRIX

Site: FABCO
Location: CPT-02

Geologist: S. MEARON
Date: 03:25:04 10:22




Max. Depth: 47.08 (ft)
Depth Inc.: 0.164 (ft)

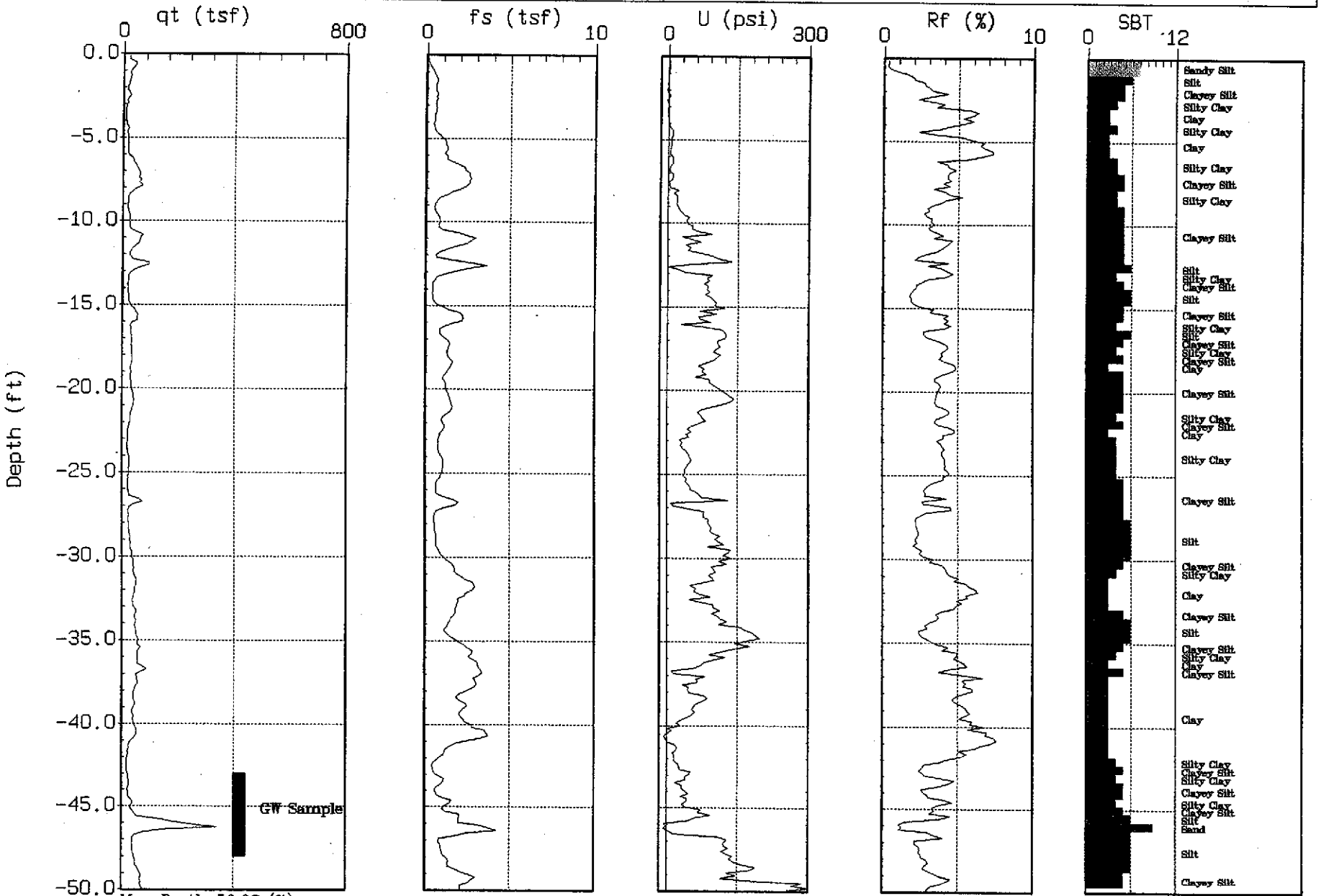
SBT: Soil Behavior Type (Robertson 1990)

GREGG

# GEOMATRIX

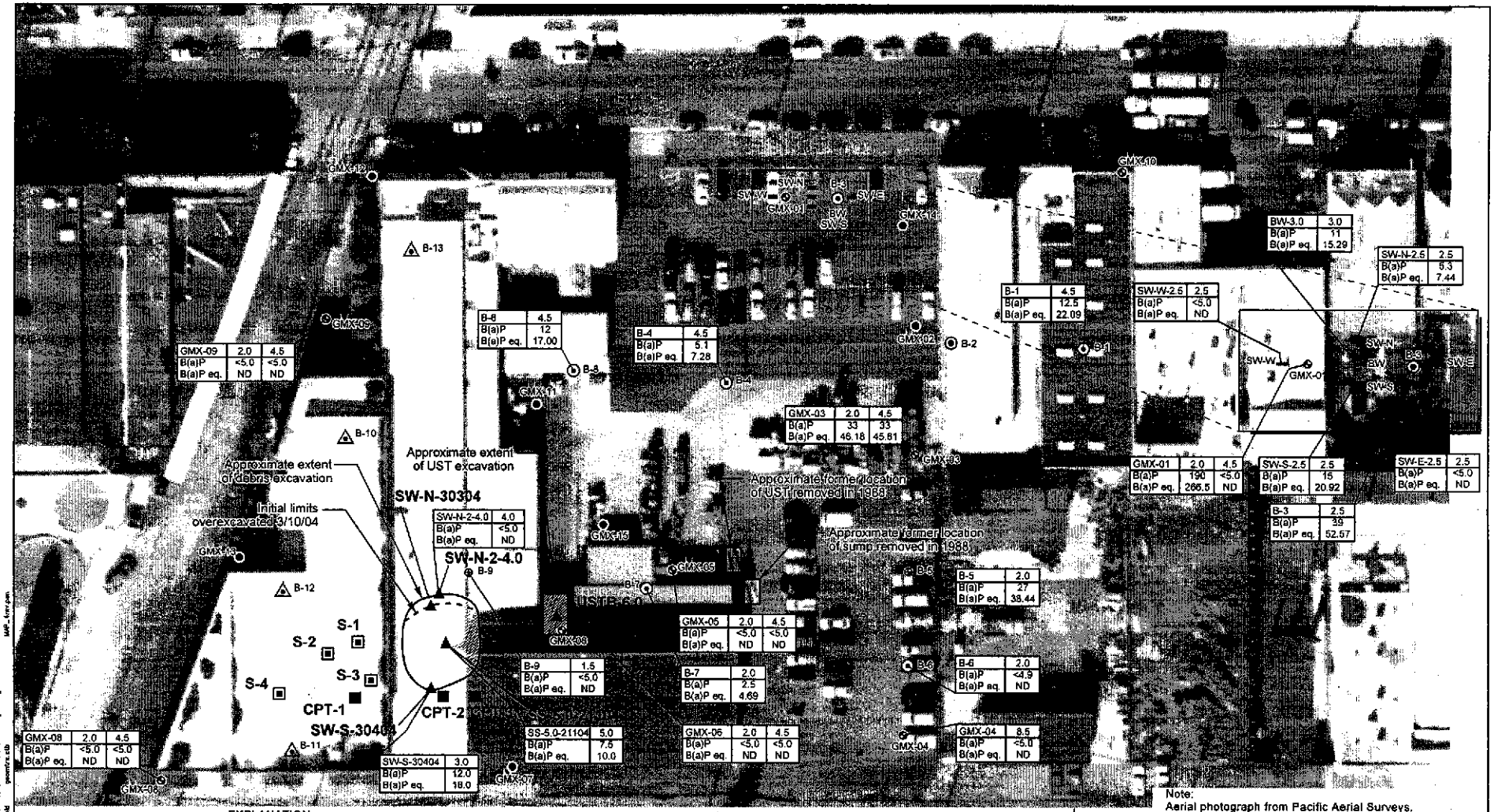
Site: FABCO
Location: CPT-03

Geologist: S. MEARON
Date: 03:25:04 12:04




Max. Depth: 50.03 (ft)
Depth Inc.: 0.164 (ft)

SBT: Soil Behavior Type (Robertson 1990)




Note:
Aerial photograph from Pacific Aerial Surveys.

EXPLANATION

- Soil and groundwater boring location (November 2002)
- Boring location (November 2002)
- Soil and groundwater boring location (November 2003)
- Soil boring location (November 2003)
- Groundwater location (November 2003)
- Groundwater boring location (March 2004)
- CPT location (March 2004)

SS-5.0-21104 | 5.0 — Sample location
B(a)P | 7.5 — Sample depth
B(a)P eq. | 10.0 — Concentration (µg/kg)
Constituent

B(a)P eq. = Benzo(a)pyrene equivalent
B(a)P = Benzo(a)pyrene
ND = Non-detect
< = Analyte was not detected above the detection limit indicated

N

0 50
SCALE IN FEET

DISTRIBUTION OF B(a)P AND B(a)P EQUIVALENT IN SOIL
1249 67th Street
Emeryville, California

GEOMATRIX | Project No. 8367.001 | Figure A

ATTACHMENT 8