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Alameda County
Environmental Health

February 20, 2009

Mr. Jerry Wickham
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
By e-mail to: jerry.wickham@acgov.org

Re: Transmittal of Workplan for Subsurface Investigation
For former Superior Castings, 4800 Coliseum Way, Oakland, California
Alameda County SLIC Case RO0002661
Geotracker Global ID T06019788277

Dear Mr. Wickham,

Included with this letter is the above referenced Workplan for Subsurface Investigation prepared by our consultant, ERAS Environmental, Inc. The workplan was prepared to present **new** historical information as well as a summary of analytical information to indicate the source of petroleum hydrocarbons contamination and solvents in soil and groundwater at the subject site. The workplan also provided recommendations to further investigate the source and extent of contaminants in soil gas, soil and groundwater on and near the subject site in response to the letter from Alameda County Environmental Health Services (ACEH) dated November 20, 2008.

New historical information was obtained that was not known or previously provided by previous consultants who performed work on the subject site or the adjacent SLIC sites. Based on the historical information and the analytical data presented, we believe that the hydrocarbon and solvent contamination detected at the subject site are the result of operations at the adjacent up-gradient AAA/Learner sites. Responsibility for investigation and cleanup, if required, are typically borne by the owners of the sites from which the contamination emanated. Therefore we request that you designate the owner(s) of the former AAA/Learner sites as the responsible party(ies) to complete the work proposed in this work plan. The work proposed in the workplan is designed to provide additional data to further verify this hypothesis.

I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge.

Please contact Bob Nichols at (510) 436-5702 or John Miller at (650) 917-1514 if you

have any questions or require additional information.

Sincerely,
Robert Nichols

John Miller

Mr. Jerry Wickham
4800 Coliseum Way
February 20, 2009
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ERAS

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WORK PLAN FOR SUBSURFACE INVESTIGATION

For

FORMER SUPERIOR PLASTER CASTINGS
4800 COLISEUM WAY
OAKLAND, CA

Prepared for

Mr. Robert Nichols
P.O. Box 6715
Oakland CA 94603

February 20, 2009

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CERTIFICATION

This **Work Plan for Subsurface Investigation** for 4800 Coliseum Way in Oakland, California, has been prepared by ERAS Environmental, Inc. (ERAS) under the professional supervision of the Registered Geologist whose signature appears hereon.

This work plan was prepared in general accordance with the accepted standard of practice that exists in Northern California at the time the investigation was performed. Judgments leading to conclusions and recommendations are generally made with an incomplete knowledge of the conditions present. More extensive studies, including additional environmental investigations, can tend to reduce the inherent uncertainties associated with such studies.

Our firm has prepared this work plan for the Client's exclusive use for this particular project and in accordance with generally accepted professional practices within the area at the time of our investigation. No other representations, expressed or implied, and no warranty or guarantee is included or intended.

This work plan may be used only by the client and only for the purposes stated within a reasonable time from its issuance. Land use, site conditions (both on-site and off-site) or other factors may change over time, and additional work may be required with the passage of time. Any party other than the client who wishes to use this report shall notify ERAS of such intended use. Based on the intended use of report, ERAS may require that additional work be performed and that an updated report be issued. Non-compliance with any of these requirements by the client or anyone else will release ERAS from any liability resulting from the use of this report by any unauthorized party.

Respectfully submitted,

Gail M. Jones
California Professional Geologist 5725

February 20, 2009

1.0 BACKGROUND

This work plan presents a site conceptual model and proposed investigation for the former Superior Plaster Castings (SPC site) at 4800 Coliseum Way in Oakland. This work plan is prepared in response to the letter from Alameda County Environmental Health Services (ACEH) dated November 20, 2008 included in **Appendix A**. This letter reiterated the work plan request, along with additional data objectives, that was originally made in a letter dated September 26, 2007, also included in **Appendix A**. Taken together these letters request 1) additional data to address site wide contamination by total petroleum hydrocarbons and chlorobenzenes, 2) data to support the conclusion previously reached by ERAS that dichlorobenzenes detected at 3 feet in soil are not the local source of dichlorobenzenes found in groundwater onsite, and 3) data to evaluate potential vapor intrusion to indoor air of the existing site building.

1.1 PROPERTY DESCRIPTION

The SPC site consists of a rectangular shaped area of approximately 75,000 square feet (1.72 acres). The northeast portion of the site is developed with an almost rectangular-shaped single-story, concrete tilt-up building with an inside area of approximately 35,000 square feet which is raised about three feet above grade. The site plan in **Appendix B** shows the development features of the Property.

The building is bounded on the northwest and southwest by asphalt paved parking areas. The area along the northwest side also serves as a driveway providing access to the main loading door near the northern corner of the building. Two large metal containers stored near this area were used to store large sacks of plaster used in the operation.

Along the northeastern side of the Property was an unpaved area that contained remnants of a railroad spur. The remnants of the rail spur were covered with a thin layer of soil that has collected by soil collecting in the flat area of the spur that has washed down from the slightly higher area comprising the adjacent site to the northeast. A raised concrete ring and traffic box surrounding a groundwater monitoring well casing and evidence of sealed exploratory soil borings were observed in this area. Parallel to the fence line was a layer of hardened and weathered tar at the surface that appears to extend from the adjacent property line slightly downhill toward the rail spur and building on the Property.

A Phase I Environmental Site Assessment was performed by ERAS in 2000. No evidence of underground storage tanks (UST), aboveground tanks, sumps or pits was observed on the Property. No evidence of leakage, spillage or dumping of hazardous materials was observed on or near the Property.

The SPC site is currently occupied by Exotic Hardwood & Veneers. The building is occupied by offices and a showroom in the front (southwest section), with large racks of product storage in the central portion, and large cutting machinery in the back (northeast portion) of the building.

1.2 HISTORY OF INDUSTRIAL USES OF PROPERTY AND ADJACENT SITE

The northeastern boundary of the SPC site at 4800 Coliseum Way is bounded on the northeast by the former AAA Equipment (AAA site) at 745 50th Avenue and the former Learner site at 768 46th Avenue. Historical information indicates these two sites may have been operated as one site, specifically during the heavy construction and manufacturing operations discussed further below.

According to historical information summarized by LFR (2007), the AAA and Learner sites contained Independent Construction Company (ICC) since at least 1939. By 1950, ICC was operating an asphalt batch plant which included the use of two underground storage tanks (UST) with steel sides, concrete bottoms and no tops. The vessels were used to store petroleum product that was used in the manufacture of asphalt. Product appeared to have been shipped by rail car on rail tracks and transferred to the USTs by underground pipelines. Two sumps were located on or near the rail line to facilitate loading and unloading of rail cars.

ERAS reviewed several Sanborn Fire Insurance (Sanborn) maps and aerial photographs; pertinent portions of these are included as **Appendix C.**

A 1957 Sanborn map illustrated the improvements on the ICC site including a rotary dryer and boiler that were not being used at that time and also indicated the location of "oil tanks in ground", located approximately 45 feet east of the SPC site. These do not appear to be the same USTs as described above which were located to the northeast of the SPC site. A rail line located on the ICC property along the southwestern boundary was served by two loading platforms attached to storage buildings and appears to be the rail line to which the vessels and pipeline delivered asphalt. The Property at 4800 Coliseum Way is shown to be undeveloped at that time.

An aerial photograph dated in 1957 confirms the presence of the rail line along the southwest boundary of the AAA/Learner sites and that the SPC site was undeveloped. Darker areas along that Property line and on SPC site appear to indicate the presence of asphalt paving, tar or staining that "spilled over" from ICC operations.

The 1961 Sanborn map indicated that some of the buildings at the ICC site were no longer present. The rail line along the edge of the ICC property was still present but only one of the loading platform/storage structures was visible. "Pipe painting in open" was indicated as being performed along the southwestern side of the site near the 4800 Coliseum fence line. The SPC site was still undeveloped.

The 1966 Sanborn map indicated few changes to the AAA/Learner site except that a hydraulic press was shown approximately 75 feet to the northeast of the SPC site Property line. Pipe painting was still being conducted in the same area of that site. The SPC site contained the current building and was indicated to be used for a sporting goods warehouse. A rail spur was present located close to the building at the SPC site; about 20 feet southwest of the rail spur at the AAA/Learner sites, still visible on the map.

The aerial photographs and Sanborn maps show that there was about 27 years of industrial activities at the AAA/Learner sites prior to development of 4800 Coliseum Way. **The aerial photographs show dark areas in the northeast portion of the Property that appear to most likely be staining and spillage associated with petroleum product shipped by rail car on the rail line at the AAA/Learner sites that ran just north of the boundary shared with the SPC site.** Between 1961 and 1969 operations at the AAA/Learner sites included storage, sand blasting and pipe painting.

On the 1968 aerial photograph, the current building and rail spur at 4800 Coliseum are visible. A dark area that may be asphalt, tar or oil was located on the SPC site in the area of a rectangular object at the fence line on the AAA/Learner side of the fence. This area coincides with the position of a former sump shown on the LFR maps as connected to one of the underground oil vessels. Rows of very large pipes, estimated to be approximately 8-10 feet in diameter, were stored at AAA/Learner along the fence line with the SPC site. Large piles of materials, perhaps metal debris, were visible in a large area starting at the location of the hydraulic press and extending northeastward toward the main rail lines along the northeast side of the AAA/Learner sites.

According to the LFR investigation report (6 June 2008), the AAA Equipment Company occupied 745 50th Avenue by 1967. AAA operated the site as a "junkyard" and acquired automobiles and other machinery for resale of the parts. Several 55-gallon drums that held used machinery parts were observed as located throughout the AAA site in 2002.

Westside purchased the AAA site in 2002 and redeveloped the site, covering the entire property with concrete or asphalt, and built two new buildings. 745 50th Avenue is currently operating as a building materials supply yard.

A 1988 aerial photograph shows a clear property line between AAA to the southeast and the adjacent Learner site to the northwest. The AAA site was densely filled with buildings and stored items while the Learner side was mostly vacant. A cluster of buildings, one with a large smokestack, was located about 100 feet to the northeast of the SPC site. To the southeast of the smokestack building was a large debris pile with dark areas located at the base of the soil pile. The dark areas, roughly 25 to 40 feet across, were oily ponds that may have been associated with leakage and spillage from the former hydraulic press. The ponds, oil-soaked soil pile and smokestack building can

be recognized on the photographs taken in 1988 in that area by a City of Oakland inspector.

Another dark area, approximately 25 by 50 feet, that may also have been an oil pond or area of severe oily staining, extended along the southwestern property line between the Learner and SPC sites. A circular dark area connected to the eastern corner of the elongated dark area was located approximately 15 feet away from the property line of the SPC site. A large amount of lighter colored items, some rectangular, were along the fence line and in the area previously containing the large pipes.

Aerial photographs were reviewed by Aqua Terra Technologies (ATT) as part of the 1991 Phase I ESA performed for 4800 Coliseum Way. ATT indicated that the Property was undeveloped and unpaved from 1947 through 1959. An aerial photograph from 1957 (**Appendix C**) shows the Property undeveloped except for the remains of a possible rail spur from the main line apparently to the neighboring property to the southeast (4930 Coliseum Way, the PG&E site). ATT reported the 1963 aerial photograph indicated the property was generally in its current state of development. The 1968 aerial photograph included in **Appendix C** shows the northeast portion of the Property with the current building. The rail spur splits from the main line on the parcel to the west and crosses just northeast of the building. No evidence of unusual activities or the presence of storage tanks on the Property were indicated on the aerial photographs.

John Miller owned the Property from approximately 1983 to 2000 and leased the Property to be operated as an aluminum foundry by Superior Plaster Castings, which was later renamed Metalcast Engineering. The earliest information on file with the local fire department was a hazardous materials management plan (HMMP), dated November 16, 1988 that indicated the only hazardous material stored was nitrogen gas. A letter from Cynthia Chapman of the ACEHD to the City of Oakland, dated April 2, 1991, indicated "I have reviewed the files for 4800 Coliseum Way... The file contained an HMMP.... There is no record of any unauthorized spills or releases." An inspection report dated August 2, 1994 indicated all hazardous wastes treated are generated on-site. Resin is used to coat plaster casts for metal molds, no excess is generated. Aluminum slag is recycled off-site. Other aluminum was melted down and recycled on-site. An inspection report dated March 3, 1995 indicated there were no interior drains. No work is done on the outside and no vehicle washing is performed.

ERAS conducted a site inspection of the SPC Site during the 2000 Phase I ESA. Drums containing cleaning chemicals (isopropanol) were stored adjacent to the northern corner of the building. Approximately 20 open drums containing aluminum slag were stored in this area. Also stored in this area were piles of empty plastic 5-gallon buckets, wooden pallets and un-used metal equipment.

The inside of the building included an office area adjacent to the Coliseum Way side. A lunchroom and a tool shop were located adjacent to the offices. Two yellow flammable

liquid cabinets used to store small containers of lacquer, paints and woodworking chemicals were stored in the tool shop. A small windowless room adjacent to the tool shop contained approximately 100 gallons of urethane stored in one gallon metal cans. Most of the building was used for a metal foundry work and storage area. Closest to the office/work rooms were plaster and wooden forms stored on metal shelving units. Beyond this area was the foundry work area that included two furnaces, nine ovens and a metal pouring area at the rear (eastern corner) of the building. Adjacent to the pouring area near the northern corner of the building was a waste plaster storage area. This material is loaded into large metal dumpsters at the loading dock for disposal.

1.3 PREVIOUS INVESTIGATIONS AT 4800 COLISEUM WAY

A list of reports of previous investigations conducted at 4800 Coliseum Way from 1991 to 2000 is included as **Appendix D**. Maps showing the sample locations in each of the six subsurface investigations and tables of analytical results are included in **Appendix E**. Available boring logs are included in **Appendix F**.

Simon Environmental Engineering, 1991

Simon Environmental Engineering (Simon) drilled four soil borings (SB-1 through SB-4) in April 1991. These borings were drilled in widely spaced areas at the Property. Soil samples were analyzed for total petroleum hydrocarbons as gasoline (TPH-g), as diesel (TPH-d), and for benzene, toluene, ethylbenzene and total xylenes (BTEX). The soil sample collected from SB-3 was found to contain 690 mg/Kg TPH-d. The TPH-d analysis did not appear to include silica gel clean-up which is now generally run in area where clay soils, particularly Bay Mud is expected to screen out non-petroleum organic oils. Groundwater samples were analyzed for BTEX and metals. Concentrations of arsenic, barium, chromium, lead, and mercury were detected at concentrations below the current ESLs for non-drinking water, but above the ESLs for the protection of potential drinking water. These samples were not filtered as is the current generally accepted standard field practice to avoid extraction of metals from sample sediments into the water by the acid preservative.

In June 1991, 15 additional soil borings (SB-5 through SB-19) were drilled in the area of the rail spur line along the northeast end of the Property to delineate petroleum hydrocarbons in soil detected near the eastern corner of the Property. Soil boring logs report tarry material from 1.5 feet to 3 feet at the base of the fill overlying natural clay. Four soil samples collected adjacent to the northeast boundary at 4.5 feet bgs were analyzed for TPH-g and TPH-d. All four samples contained TPH-d from 94mg/Kg to 530 mg/Kg. The western-most sample did not contain detectable TPH-g; the other three samples contained TPH-g from 46 mg/Kg to 490 mg/Kg. Five soil samples collected at 5 or 5.5 feet bgs from borings along the northeast wall of the building, and one near the eastern corner were analyzed or total oil and grease by method 418.1, but the silica gel clean-up did not appear to be run. Three samples did not contain detectable oil and grease, while the others were found to contain concentrations from 2,500 mg/Kg to

6,200 mg/Kg.

Earth Metrics

In April 1992 Earth Metrics collected soil samples from four hand-augered borings (TS3-1 through TS3-4). The borings were spaced along the northeastern end of the Property and the samples were collected. The soil sample from TS3-4 contained oil and grease at a concentration of 29,000 mg/Kg. However, this sample was collected at 2.5 -3 feet bgs, where Simon reported tarry material at the base of the fill, and so may have included some of the tar. The sample from TS3-2 contained ethylbenzene and xylenes at 5.4 and 120 µg/Kg, respectively. Arsenic was detected at concentrations of 11 to 16 mg/Kg and lead at 78 to 140 mg/Kg. Earth Metrics concluded that the metals did not appear to be elevated above ambient levels in soil, except perhaps lead which did not exceed the TTLC. Furthermore Earth Metrics concluded that the metals results for groundwater collected by Simon in 1991 were not representative based on the reported sampling procedures.

Woodward Clyde

Four soil borings (WCC-1A, WCC-1B, WCC-2B, and WCC-3B) were drilled at widely scattered locations at the Property in 1993. One boring, WCC-1A was drilled near the northeastern side of the Property and was converted to a groundwater monitoring well. A soil sample collected at from this boring contained concentrations of 1,3-dichlorobenzene (1,3-DCB) 0.002 mg/Kg and 1,4-dicholorobezne (1,4-DCB) of0.0048 mg/Kg. No BTEX was found in any of the other soil samples for which these analyses were requested. No DCBs or other halogenated volatile organic compounds (HVOC) were detected in the soil samples. Concentrations of metals detected in the soil samples appeared to be normal “background” levels.

A groundwater sample collected from the monitoring well was found to contain chlorobenzene (CB) at a concentration of 270 µg/L, and 1,3-DCB, 1,4-DCB and 1,2-DCB at concentrations of 1,400, 1,500 and 290 µg/L, respectively. Woodward Clyde concluded the CB and DCB in groundwater were from an off-site source because of the following:

- CB and DCB are not normally associated with fuels or motor oil
- The only solvents used at Superior Castings were lacquer thinner, acetone and isopropyl alcohol
- Off-site sources of contamination are expected in these types of industrially developed areas

ATC Associates

Nine soil borings (ATC-1 to ATC-9) were drilled along the northeastern side of the Property in October 1998. Soil samples collected from these borings contained concentrations of TPH-g of up to 1,000 mg/Kg. Elevated concentrations of TPH-d and TPH as motor oil (TPH-mo) were also detected. However, these samples were not subjected to a silica gel cleanup to remove non-petroleum natural oils and fats. Only low

concentrations of BTEX (maximum of 780 µg/Kg xylenes in ATC-6) were detected in the soil samples. CB and DCB were detected in two of the borings (ATC-3 and ATC-2). Concentrations of metals appeared to be in the range of background concentrations except for the concentration of barium in ATC-3.

Groundwater samples collected from the borings contained elevated concentrations of TPH-g (maximum 3,000 µg/L), TPH-d (maximum of 15,000 µg/L) and TPH-mo (maximum of 65,000 µg/L). However, these samples did not undergo silica gel cleanup. The concentrations of BTEX were low (maximum of 11 µg/L of xylenes in ATC-8). Most of the groundwater samples from the borings contained CB (maximum of 370 µg/L in ATC-1), 1,2-DCB (maximum of 190 µg/L in ATC-9), 1,3-DCB (maximum of 900 µg/L in WELL-1), and 1,4-DCB (maximum of 1,500 µg/L in WELL-1).

Logs for several of the borings (see **Appendix F**) describe "tarry globules" and "free product" well below the three feet of fill, to depths of about 8 feet where the soil became saturated.

ERAS Environmental

ERAS conducted a Phase I ESA in 2000 when the Property was still operated as an aluminum foundry. ERAS found that the operation used hazardous materials that included compressed gases during normal business operations. These appeared to be properly used and stored. No hazardous waste or materials is generated for off-site disposal. No evidence of underground storage tanks (UST), aboveground tanks, sumps or pits or was observed on the Property. No evidence of leakage, spillage or dumping of hazardous materials was observed on or near the Property.

ERAS recommended excavation of what was believed to most likely be a limited spill of DCB in the shallow soil around boring ATC-3.

In 2000 ERAS excavated soil in the area of ATC-3 and collected sidewall and bottom confirmation samples. The excavation was about 23 feet long along the fence and 3 to 6 feet wide. The excavation was begun in the vicinity of ATC-9. The sediments encountered consisted of sandy coarse gravel (presumably fill material) to a depth of approximately 3 feet. A thin layer of tar was observed at about three feet. A 1 foot thick layer of black silt was present below the fill and then a stiff green silty clay.

As excavation was continued to the northwest it was noted that soil conditions were generally consistent throughout the area of excavation. A tar layer, generally soft, was observed at a consistent depth of approximately 2 or 3 feet along the northeast sidewall. Small areas of bluish green soil were observed in the sidewall areas; these appeared to be limited in extent both laterally and vertically and appeared to be associated with areas containing a greater thickness or amount of tarry material. Tar was actively oozing in from the northeast sidewall, appearing to be flowing under the fence of the AAA/Learner site to the northeast. The tar appeared to be oozing from

under the property boundary with the former asphalt plant at the AAA site. Therefore, ERAS concluded that if the tar was a source of contamination to groundwater beneath the site, it was migrating onto the site from the former AAA site and there was no point in continuing to attempt to excavate the toe of a migrating tar "plume". Therefore excavation was stopped and sidewall and a bottom sample were collected for analysis of HVOCs. Concentrations of CB and DCB in the confirmation samples were all below the current RWQCB ESLs.

1.4 PREVIOUS INVESTIGATIONS AT ADJACENT SITES

1.4.1 745 50th STREET, FORMER AAA EQUIPMENT

Harding ESE, 2002
Soil and groundwater grab-samples were collected from twelve borings B-12 through B-12. The soil boring locations and analytical results are included in **Appendix G**.

LFR, 2003
In September and October of 2003 LFR removed objects described in the report as USTs, overexcavated the area around the tank pits and collected confirmation soil samples, and collected groundwater grab samples from the open UST pits. However, the permit application to the Oakland Fire Department described these objects as **"underground bins with no top".** The sample locations and analytical results are included in **Appendix G**.

As part of this investigation, a large area adjacent to 4800 Coliseum Way was excavated to depths of 2 to 3 feet to remove "**a buried railroad spur (ties and roadbed) located along the western property line, as well as buried asphalt paving"**. **It appears that some or all of the "buried asphalt" correlates to the soft to hard tar described at the base of the fill (1.5 to 3 feet bgs) in boring logs for SPC site and the oozing tar observed in the 2000 excavation at the SPC site. Remnants of this tar was also visually observed on the ground surface near the northeast Property line of 4800 Coliseum in the area of one of the former sumps.**

Also the area between the former USTs was excavated to 5 feet bgs to "remove additional free product" up to the property boundary with the SPC site. **Thus it appears TPH associated with the former USTs removed from the AAA site may have impacted the SPC site**.

LFR, 2008
In April 2008 LFR advanced six borings, DCB-P1 to DCB-P6, for the collection of soil and groundwater samples. The soil boring locations and analytical results are included in **Appendix G**.

1.4.2 4930 COLISEUM WAY, PG&E SITE

The following is a partial history of environmental investigations at 4930 Coliseum Way.

March and April 1988

Groundwater monitoring wells OW-1 through OW-4 were installed to assess dissolved petroleum hydrocarbon concentrations. Groundwater flow direction was found to be toward the south-southwest.

April 1991

Groundwater monitoring well OW-5 was installed along the northeast property line adjacent to 745 50th Avenue (AAA site). Petroleum hydrocarbons and VOCs were detected.

November and December 1991

About 2,000 cubic yards were excavated to total depths of 4 to 9 feet in the vicinity of the former waste oil UST cluster. Groundwater monitoring wells OW-6 and OW-7 were installed and well OW-3 was destroyed.

July 1994 to present

Semiannual groundwater monitoring has been conducted at the PG&E site. Groundwater flow has been found to be consistently in a southerly direction.

January through March 2008

Nine soil borings, SB-23 through SB-31, were advanced to collect soil sand groundwater samples. The soil boring locations and results are shown in Appendix G. Boring SB-31 was advanced to 8 feet bgs in the north corner of the PG&E site adjacent to the subject Property and the AAA site and a groundwater grab-sample was collected from the 6 to 8 foot depth interval. The groundwater grab-sample collected in January 24, 2008, was found to contain TPH-mo at 320µg/L. No detectable levels of VOCs including chlorobenzenes were detected in the groundwater sample from SB-31. However, the monitoring well OW-7 located directly down gradient of SB-31 and screened from 7.5 to 17.5 feet bgs was found to contain dissolved chlorobenzenes (see map and cross section B-B' in **Appendix G**). **Therefore it appears that the dissolved VOC plume impacting the PG&E site from upgradient may occur deeper than 8 feet bgs.**

2.0 SITE CONCEPTUAL MODEL

2.1 CONTAMINANTS OF CONCERN

The letter from ACEH identifies the contaminant of concern as total petroleum hydrocarbons and the solvents chlorobenzene, dichlorobenzenes and trichlorobenzenes. One use of chlorobenzene (CB) was as a solvent in the manufacture of paints and dyes (USEPA 749-F-95-007, January 1995, OPPT Chemical Fact Sheets, Chlorobenzene). One use of 1,2-dichlorobenzene (1,2-DCB) is as a solvent for oils and asphalts (CalEPA, OEHHA, December 1997, Public Health Goal for 1,2-Dichlorobenzene in Drinking Water).

2.2 HYDROGEOLOGY

Groundwater monitoring at the PG&E site from 2002 to 2007 has shown consistent southerly groundwater flow direction at a gradient of about 0.002 to 0.004 foot/foot. The fourth quarter 2008 groundwater elevation map is included in **Appendix G**. Depth to water in well OW-7, located near the northeast corner of the Property at 4800 varied from 3.99 feet in May 2008 to 7.05 in November 2008. Groundwater may be affected by tidal variation. During the 2003 UST removal at the former AAA site, groundwater elevation in the open UST pits was observed to vary by about 1 foot during the day. The groundwater was described by LFR as brackish and not considered potential drinking water.

Based on the boring logs from the 1991 through 1998 by Simon, WCC and ATC the subsurface is comprised of gravel and sand fill to a depth of about 3 feet by the northeast property line, and to a depth of about 1.5 feet nest to the north side of the building. In most borings a tar layer was logged in the fill or at the base of the fill. The fill is underlain by stiff clay to a depth varying from 7 to 11 feet bgs. First groundwater was encountered from 4 to 7 feet bgs within the clay. The clay is underlain by various mixtures of silty or clayey sand or clayey gravel.

2.3 EXTENT OF CONTAMINATION

The analytical results for soil and groundwater samples are summarized in **Table 1** and **Table 2**, respectively.

2.3.1 SHALLOW TAR

A shallow layer of tar has been logged across the area from the northeast boundary to the north side of the building and presumably extends under the building. Based on the logs by ATC , soft to hard tar was from several inches to several feet thick at the base of the shallow sandy gravelly fill, with tar globules visible in the clay of several borings as deep as 8 feet bgs. The building at 4800 Coliseum Way and the rail spur onsite that

serviced the sporting goods warehouse were developed after the asphalt plant at the former AAA property. **Thus the building and later rail spur on the SPC site were built on top of the tar that was associated with on or off loading of tar from rail cars on the AAA site.**

During the 2003 UST removal at the AAA site, the area between the USTs and the common boundary with the SPC site was excavated to 5 feet to "remove additional free product". The logs for several borings advanced at the SPC site note "tarry globules" and "free products" below the fill to as deep as 8 feet bgs. **Therefore it appears that TPH associated with the former USTs at the AAA site has impacted the subsurface at the SPC site.**

2.3.2 TOTAL PETROLEUM HYDROCARBONS

Soil

Total petroleum hydrocarbons as gasoline, diesel and motor oil have been detected in the shallow soil and groundwater in the area between the building and the northeast property line, with the highest concentrations along the fence line. The highest concentration of TPH-diesel and TPH-motor oil were detected in the boring ATC-3 in the 1998 soil sample collected at 3 feet. This sample was collected in silt just below the fill described as containing visible oil/tar globules and a soft layer of tar at 1.5 feet. The high TPH-d and TPH-mo appears to be associated with the overlying tar.

TPH-d and TPH-mo were also detected in soil samples collected in borings DCB-P1 through DCB-P5 collected in 2008 by LFR at the AAA site in the area adjacent to the Property in an area where the shallow tar had been excavated in 2003 during the UST removal project. The highest concentrations were detected in the soil sample collected at 3 feet in DCB-P4 located near the fence line. (Note: it is not certain based on the map in the LFR report if the borings DCB-P3 and DCB-P4 were located within the area of shallow excavation. However, because the logs for those borings do note the tar at the expected level between 1.5 to 3 feet, and since the tar was apparently ubiquitous on both sides of the fence in that area, ERAS assumes that those borings were probably advanced within the area of shallow excavation).

It is important to note that the 2008 soil samples from the AAA site were subjected to silica gel cleanup prior to analysis for TPH-d and TPH-mo to remove naturally occurring fats and oils that can result in false positives for TPH. However, there is no indication soil samples collected from the SPC site in 1991 and 1998 underwent silica gel clean-up. Therefore the results for the SPC site samples may show higher concentrations than were representative of the true petroleum hydrocarbon concentrations at that time.

Groundwater

Groundwater samples collected onsite in 1998 from borings ATC-1, ATC-3, ATC-5, ATC-8 and ATC-9 were found to contain concentrations of TPH-d and TPH-mo above the ESL of 2,500 µg/L for groundwater that is not potential drinking water. Again the groundwater samples analyzed for TPH-d and TPH-mo did not undergo silica gel cleanup so the reported results may be higher than representative of TPH because they included non-petroleum natural fats and oils.

Groundwater samples collected at the AAA site in 2003 from the UST pits and in 2008 from borings DCB-P3 through DCB-P5 also contained TPH-d and TPH-mo above the ESL for non-potential drinking water. TPH-g was not analyzed.

Figure 4 shows the estimated distribution of TPH-d in groundwater under the northeastern portion of the SPC site and the immediately adjacent portion of the AAA site. Although the SPC site samples were not treated with the silica gel cleanup prior to analysis, the concentrations onsite are lower than those detected on the AAA site in borings DCB-P3 and DCB-P4. This together with the upgradient concentrations detected in samples from borings DCB-P1, DCB-P2 and the UST pit sample GGW1 indicted that the bulk of the source of TPH-d contamination is likely centered on the AAA property. The figure also indicates increased TPH-d concentrations in the areas around ATC-1 and ATC-5. These borings noted visible tar globules down to about 7 feet bgs in ATC-1 and 10 feet bgs (ATC-5) which are in the saturated zone. These borings may represent areas impacted by TPH associated with the USTs at the AAA site, or where the tar associated with rail loading operations at the AAA/Learner sites may have penetrated more deeply.

2.3.3 CHLORINATED SOLVENTS

Soil

Chlorinated solvents CB, 1,2-DCB, 1,3-DCB, and 1,4-DCB have been detected in shallow soil samples collected by ATC in 1998 and ERAS in 2000. Only 1,4-DCB was detected above the ESL of 1.2 mg/Kg for shallow soil overlying groundwater that is not potential drinking water or the ESL of 13 mg/Kg to protect leaching to groundwater that is not potential drinking water. The elevated 1,4-DCB concentration of 33 mg/Kg was detected in soil collected from boring ATC-3 located near the fence line at a depth 3 feet just below the tar at the fill/clay interface. Therefore the solvent concentrations in the soil appear to be associated with the shallow tar from the operation of the rail line associated with the asphalt plant at the former AAA site. None of the deeper samples collected from 4 feet bgs by ATC in 1998 or the 6 foot sample from the boring for well WCC -1A collected in 1992 were found to contain 1,4-DCB or other solvents above the ESL for the protection of leaching to potential drinking water of 0.59 mg/Kg.

Deeper soil samples E-1 through E-7 collected from 4.5 feet bgs in the excavation in the vicinity of ATC-3 by ERAS in 2000 were found to contain 1,4-DCB up to 0.230 mg/Kg. All concentrations were well below the ESL of leaching to non-potential drinking water of

13 mg/kg as well as below the ESL for leaching to potential drinking water of 0.59 mg/Kg. These results indicate that the shallow soil below the tar layer in the area of former boring ATC-3 is not the source of the HVOC detected in the underlying groundwater for the following reasons.

- The presence of about 4 feet of stiff natural clay between the tar layer in the vicinity of ATC-3 and the top of groundwater.
- The demonstrated rapid attenuation with depth of HVOC concentrations in soil.
- The lack of any concentrations detected above the ESLs for leaching to groundwater (both potential drinking water and non-potential drinking water) in soil collected between 3.5 feet bgs and 6 feet bgs.

The soil sample collected at 4 feet from DCB-P4 near the fence line on the AAA site was found to contain 150 mg/Kg CB and 21 mg/Kg 1,4-DCB. These concentrations are above the final ESL for residential land use soil overlying non-potential drinking water, as well as above the ESL for leaching to non-drinking water of 30 mg/Kg CB and 13 mg/Kg 1,4-DCB.

Groundwater

Chlorobenzenes (CB 1,2-DCB 1,3-DCB and 1,4-DCB) were detected in groundwater samples from the well WCC-1A in 1992 and 1998, and in all the groundwater grab-samples collected by ATC in 1998. Concentrations in excess of the ESLs for non-potential drinking water for 1,2-DCB and/or 1,4-DCB were detected in groundwater samples ATC-1 through ATC-3, ATC-7, ATC-9 and WWC-1A.

The solvents CB, 1,2-DCB, 13-DCB and 1,4-DCB were also detected in the groundwater grab samples DCB-P2 through DCB-P5 collected at the AAA site in 2008. Additionally, solvents 123-TCB, 124-TCB and 1,2,4-TMB were also detected in some or all of these samples. These solvents were not included in the analysis of groundwater at the SPC site.

Figure 5 shows the estimated distribution of 1,4-DCB in groundwater under the northeast portion of the SPC site and the immediately adjacent portion of the AAA site. The highest concentration appears to be centered in the vicinity of the sump on the AAA site. It also appears that there may be another, lesser source to the north or northwest of the sump; either associated with the former rail line along the southwest boundary of the AAA site; or perhaps in the former open paint area between boring DCB-P2 and the rail line.

2.4 VALIDATION OF SITE CONCEPTUAL MODEL

2.4.1 POTENTIAL SOURCES OF CONTAMINATION

Potential sources of contamination include the following.

1. The former rail line located on the AAA property adjacent to the property line shared with 4800 Coliseum Way appears to have been used to transport asphalt or components during the operation of the former asphalt plant. This appears to be the most likely source of the tar in the surface fill and at the interface of the fill and the underlying natural clay.
2. TPH associated with the former USTs at the AAA site. The Oakland Fire Department described these USTs as having no top. The area between the former USTs and the common boundary with the SPC site was excavated to 5 feet in 2003 to "remove additional free product".
3. The sump located on the AAA property adjacent to the former rail and the boundary shared with the SPC site.
4. The open paint area noted in the Sanborn map located northeast of the Property. This area may have been a source of chlorobenzenes or other solvents. Also solvents migrating through the tar in the fill could mobilize petroleum hydrocarbons.
5. The old leaking drums stored on the AAA property reported by ATC in the 1998 soil and groundwater investigation report for 4800. A worker on the former AAA property reported the various drums had been there and leaking for the past 20 years or so. These drums may have acted as a source of petroleum hydrocarbons and/or solvents.

2.4.2 TPH IN SOIL AND GROUNDWATER

TPH-g, TPH-d and TPH-mo in excess of the current ESLs for non-potential drinking water have been detected in soil and groundwater samples collected at the SPC site. Furthermore, the reported concentrations of TPH-d and TPH-mo in soil collected in 1998 from 4800 Coliseum Way were significantly higher than those detected in soil collected from the AAA site in 2008. However, the soil and groundwater samples from the AAA site were subjected to silica gel cleanup prior to analysis, whereas the samples collected at 4800 Coliseum Way were not. Thus the reported concentrations of TPH-d and TPH-mo for the samples collected from the Property may include non-petroleum related natural fats and oils. **Therefore ERAS recommends that TPH data for onsite soil and groundwater be recollected and analyzed for TPH-d and TPH-mo using silica gel cleanup to remove naturally occurring fats and oils.**

The estimated distribution of TPH-d in groundwater shown in **Figure 5** indicates that the most concentrated portion of the plume is under the former AAA site based on the higher concentrations in borings DCB-P3 and DCB-P4 compared to the concentrations found in samples from onsite borings ATC-3, ATC-8 and ATC-9, and the concentrations in upgradient samples DCB-P1, DCB-P2, GGW1 and GGW2. **Therefore ERAS recommends collection of soil and groundwater samples located between the locations of DCB-P1 and –P2, and DCB-P3 and –P4.**

2.4.3 SOLVENTS IN SOIL AND GROUNDWATER

The highest concentrations of chlorobenzenes in soil at the SPC site and the only concentration of a solvent (1,4-DCB) in excess of the ESL was detected in the sample collected at 3 feet from boring ATC-3. This sample was collected just below the tar layer at the base of the fill. Therefore it appears that the chlorobenezenes detected in soil onsite are associated with the tar associated with operation of the rail line at the AAA site as part of the asphalt plant operations. Groundwater samples collected from borings widely distributed in the area northeast of the building, from the onsite well WCC-1A and borings ATC-1 through ATC-3, ATC-7, and ATC-9 were found to contain 1,2-DCB and/or 1,4-DCB in excess of the ESLs for non-potential drinking water.

Deeper soil samples collected from the natural clay in 1998 by ATC and from the walls of the excavation in the vicinity of ATC-3 collected by ERAS in 2000 were all well below the ESLs for leaching to potential drinking water. Therefore ERAS concluded that the natural clay was acting as a barrier for contamination and the chlorobenzene found in the shallow soil was not likely to be the source of the bulk of chlorobenzene concentrations found in the groundwater beneath the site.

In the 2008 investigation at the PG&E site, Geomatrix collect groundwater grab-sample from 6 to 8 feet bgs in boring SB-31 located adjacent to the east corner of the Property (north corner of the PG&E site). This groundwater grab-sample was not found to contain detectable concentrations of chlorobenzenes. However, the sample from well OW-7 screened to a depth of 17.5 feet bgs and located down gradient of S-31 was found to contain detectable chlorobenzenes. This indicates that the dissolved HVOC plume impacting that site from upgradient is not at the top of the water-bearing zone but is dominantly below 8 feet bgs.

Therefore, to ascertain if the tar at the base of the fill on site is significantly impacting the groundwater ERAS recommends collecting groundwater grab-samples from the top 2 feet of the groundwater table above 8 feet bgs.

The estimated distribution of 1,4-DCB shown in Figure 5 indicates that potential offsite sources of chlorobenzenes may include the sump on the AAA site near the common boundary, and the area between the fence line and borings DCB-P1 and DCB-P2.

Therefore ERAS recommends collection of soil and groundwater samples from these areas for analysis of volatile organic compounds.

Trichlorobenzenes have been detected in samples collected at the AAA site which were analyzed for VOCs by EPA Method 8260 (full list). However, the samples collected from the SPC site were analyzed for HVOCs by EPA Method 8010 which doesn't include trichlorobenzenes. **Therefore, ERAS recommends that the soil and groundwater samples proposed in this work plan should be analyzed by EPA Method 8260 (full list) to include trichlorobenzenes.**

3.0 WORK PLAN

3.1 SCOPE OF PROPOSED INVESTIGATION

ERAS proposes a scope of work for this task as follows.

- Negotiate an access agreement with the owner of the AAA site.
- Obtain the necessary drilling permits from the Alameda County Public Works Department.
- Contract a utility locator to clear all boring locations with respect to underground utilities.
- Core the concrete foundation in one location within the building and collect a sub-slab soil vapor sample for chemical analysis.
- Advance twelve borings (six on the Property and six on the adjacent site) using a direct push sample rig to a depth of approximately 8 feet bgs. Collect a soil sample from the vadose zone and a groundwater sample for chemical analysis.
- Collect a soil vapor sample from one of the six borings on the Property for chemical analysis.
- Analyze the soil and groundwater samples for the presence of TPH-d and TPH-mo by EPA method 8015C with silica gel clean-up, and for TPH-g and VOCs (full list) both by EPA Method 8260.
- Analyze the soil vapor samples for TPH-g and VOCs (full list) by TO-15.
- Prepare a report detailing the field procedures and results of the investigation.

3.2 FIELD WORK COORDINATION

ERAS will procure a drilling permit from the Alameda County Public Works Department and an access agreement from 745 50th Avenue.

The boring locations will be painted and Underground Service Alert notified at least 48 hours in advance to give owners of underground utilities an opportunity to mark their

lines. Prior to drilling, each boring location will be cleared using a private underground utility locator.

Each boring will be hand dug to four feet bgs to avoid damage to undetected utility lines.

3.3 SOIL BORING, SOIL, GROUNDWATER, and SOIL VAPOR SAMPLING

Twelve borings will be advanced to a depth of 8 feet bgs using a direct push sample rig (six onsite and six offsite). One boring will be used for the collection of a soil vapor sample for chemical analysis from approximately 3.5-4 feet bgs by the procedures described below. The Standard Operating Procedures for soil vapor sampling are included as **Appendix H**. All 12 borings will be continuously cored for descriptive logging and the soil cores will be screened with an organic vapor monitor (OVM). One soil sample will be collected just below the tar (approximately 3-3.5 feet bgs) from each boring for chemical analysis.

To collect groundwater samples, a temporary pre packed 0.75-inch temporary well with 5 feet of screened interval will be inserted to the base of the boring or to a depth placing the top of screen at the top of the water column. The temporary wells will be purged of at least one casing volume prior to sample collection in an attempt to collect as little silt as possible along with the groundwater sample. Due to the fine-grained nature of the formation, the temporary wells may need to recover overnight to accumulate sufficient water for samples. The groundwater sample will be withdrawn using a disposable bailer or peristaltic pump with new tubing. The groundwater samples will be decanted from the tubing or the base of the bailers using a VOC tip into appropriate containers and stored in a cooler with ice. The Standard Operating Procedures for collection of soil and groundwater samples using a direct-push rig are included in **Appendix H**.

The sub-slab vapor sample port will be installed by cutting a hole in the concrete building pad and sealing a vapor point under the slab. The vapor sample tubing and tip will be sealed in the foundation using hydrated bentonite. The soil vapor sample collected from a boring will be collected using a direct-push sample rig from the 3.5 to 4 foot depth interval. The soil vapor samples will be collected into summa canisters fitted with a 30-minute flow meter.

The standard operating procedures for collection of soil-gas samples from direct push borings and collection of sub slab soil vapor samples and a schematic of the soil vapor sample train are included in **Appendix H.**

3.4 SAMPLE ANALYSIS

All soil and groundwater samples will be kept refrigerated until transport under chain-of-custody procedures to a California certified environmental analytical laboratory.

All soil and groundwater samples will be analyzed for TPH-d/mo by EPA method 8015 with silica gel cleanup, TPH-g and VOCs (full list) by EPA method 8260.

The soil vapor sample and sub slab soil vapor sample will be analyzed by TO-15 for the presence of TPH-g and VOCs (full list), and for oxygen, carbon dioxide and methane by Method D1945.

FIGURES

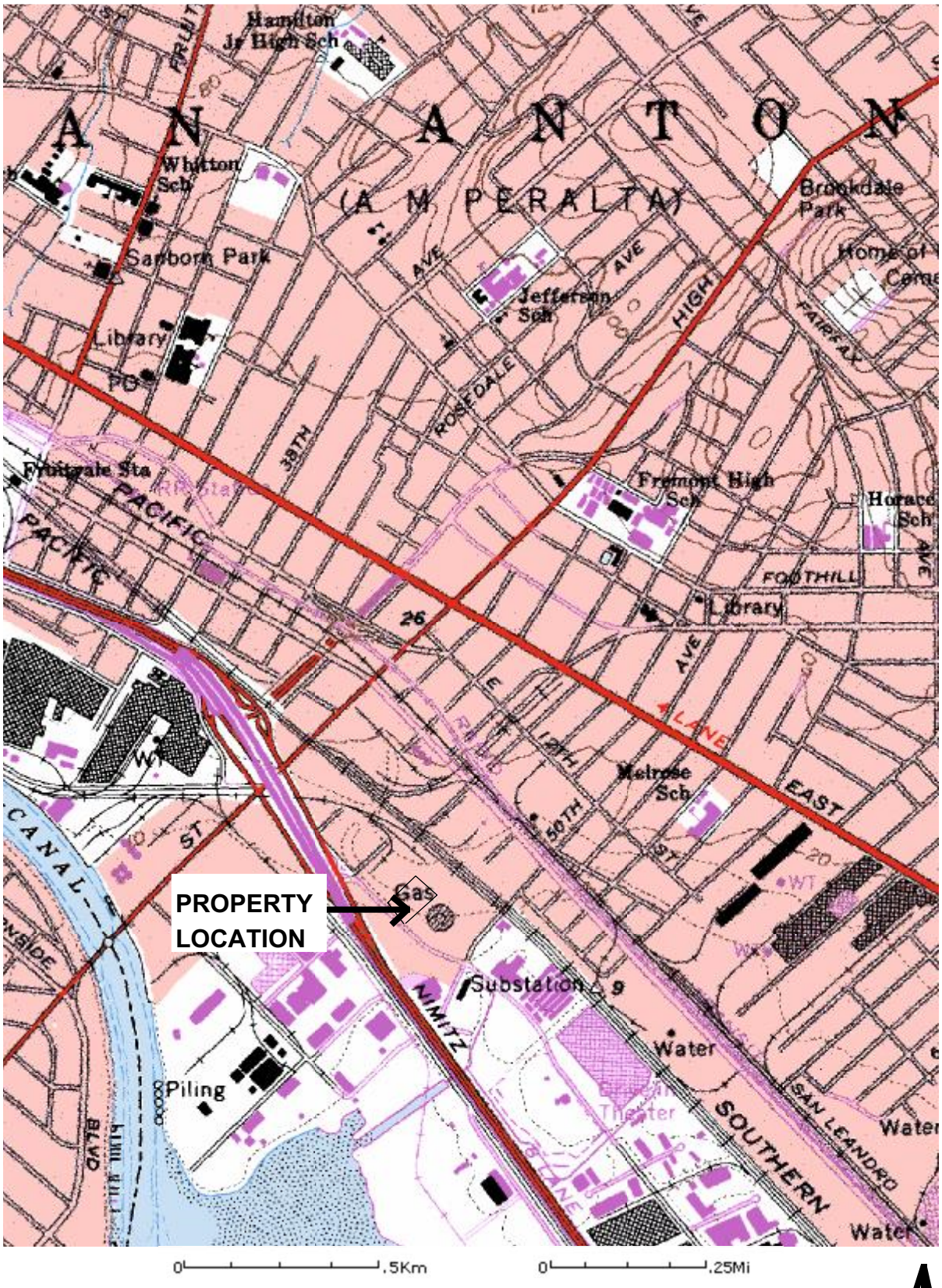
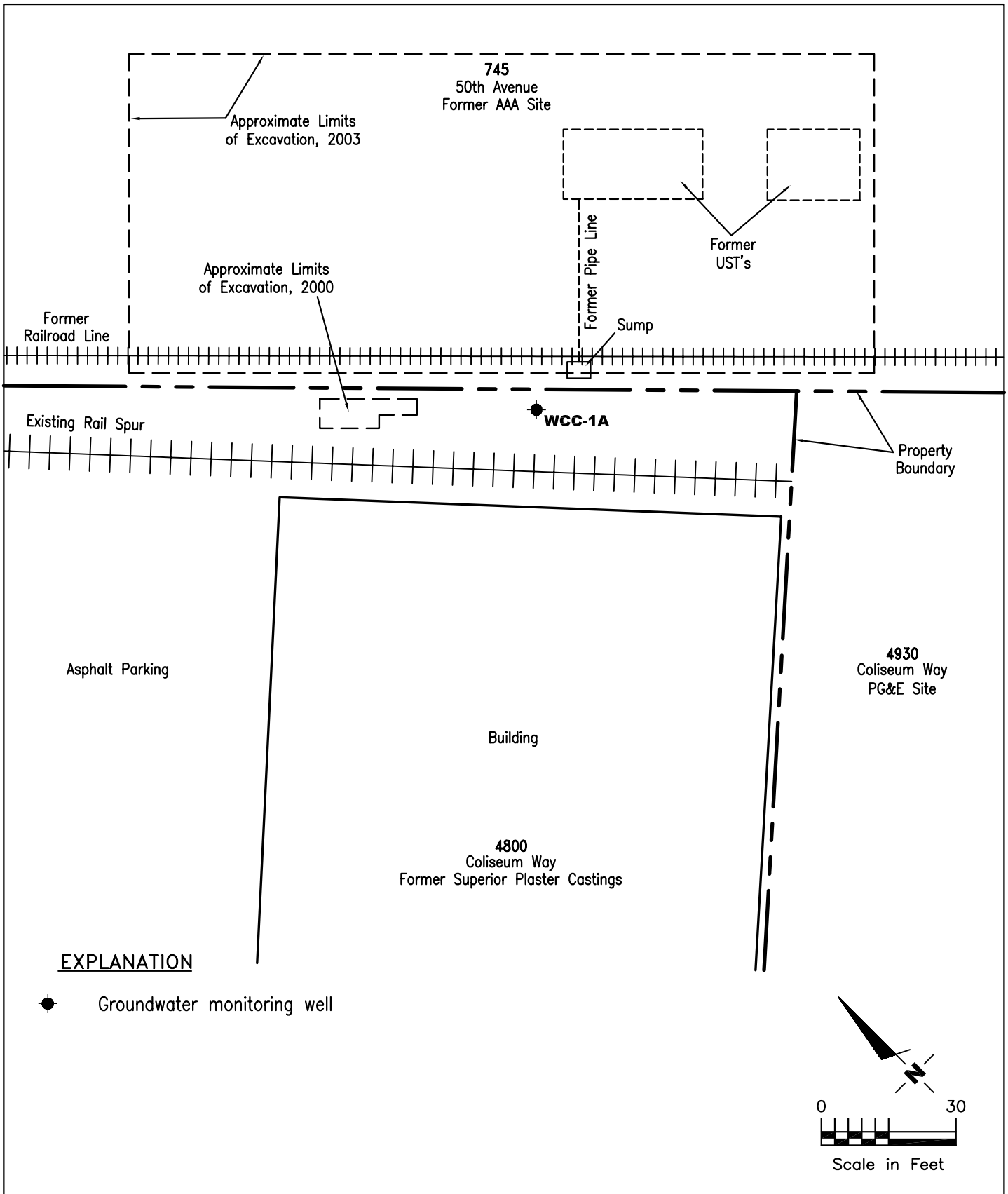


FIGURE 1
SITE LOCATION MAP
4800 Coliseum Avenue
Oakland, CA

ERAS Environmental, Inc.

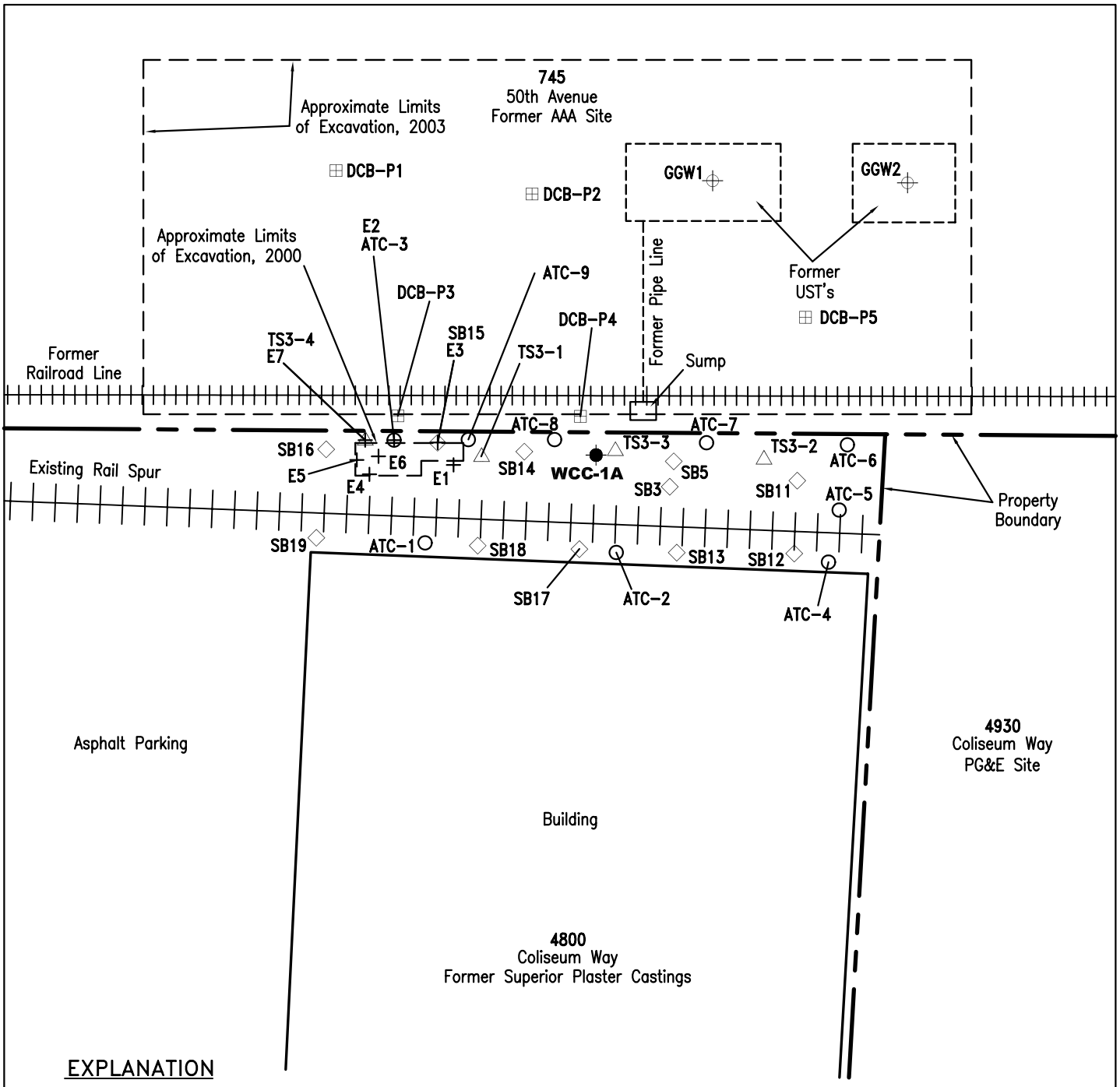


SITE MAP

DATE 02/09 REVIEWED BY GJ	Former Superior Plaster Castings 4800 Coliseum Way Oakland, California	JOB NUMBER 09-001-02 FIGURE 2

ERAS Environmental Inc.

ERAS 02-10-09 Site Map 02-09.dwg



EXPLANATION

- Groundwater monitoring well
- DCB-P1 through DCB-5, LFR 2007
- GGW1 through GGW2, LFR 2003
- SB3 through SB19, Simon 1991
- **TS3-1 through TS3-4, Earth Metrics, 1992**
- ATC-1 through ATC-9, ATC 1998
- E1 through E7, ERAS, 2000

N

0 30

Scale in Feet

PREVIOUS SAMPLE LOCATIONS

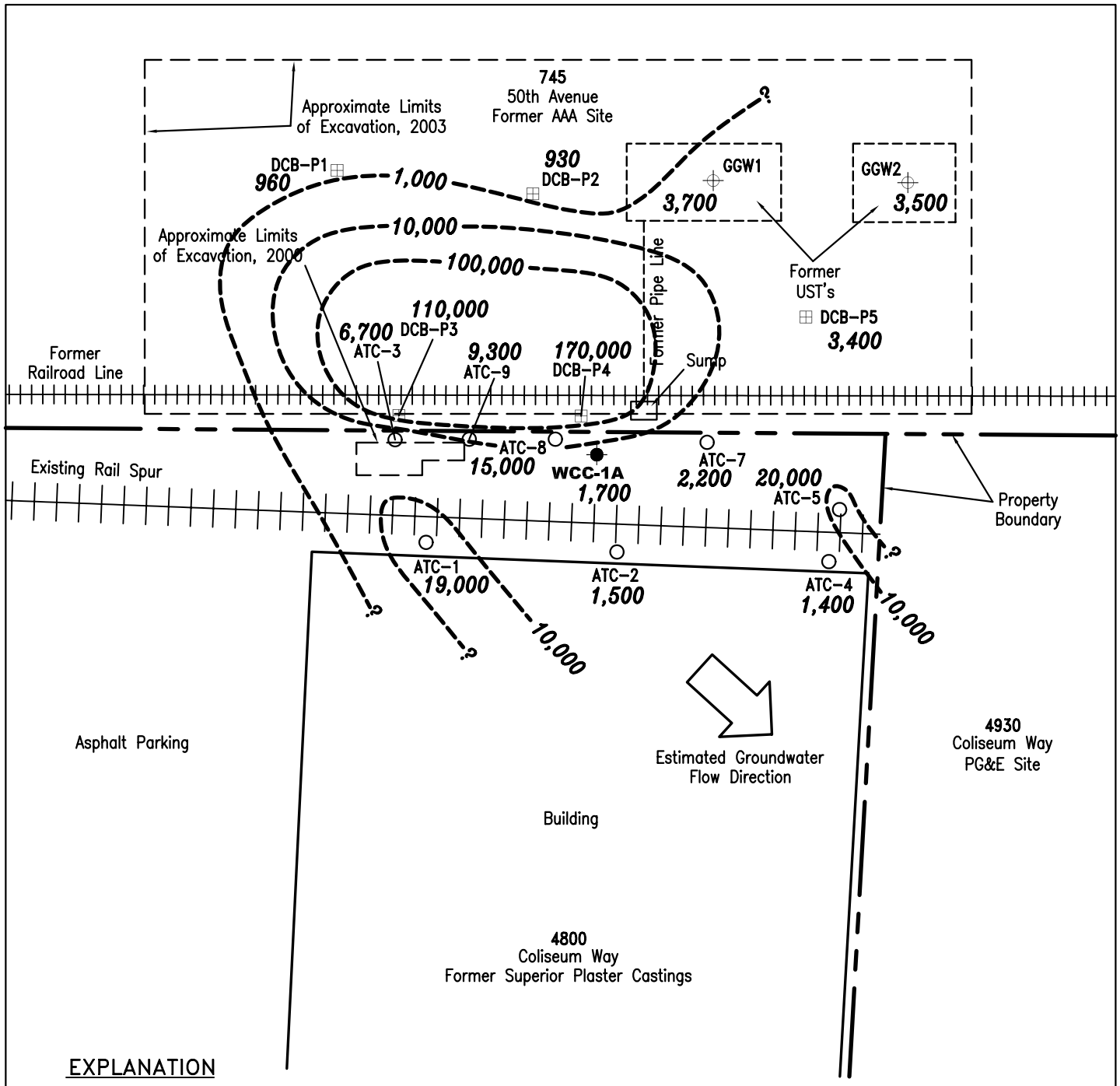
DATE
02/09
REVIEWED BY
GJ

Former Superior Plaster Castings
4800 Coliseum Way
Oakland, California

JOB NUMBER
09-001-02
FIGURE
3

ERAS Environmental Inc.

ERAS 02-10-09 Previous Samples.dwg

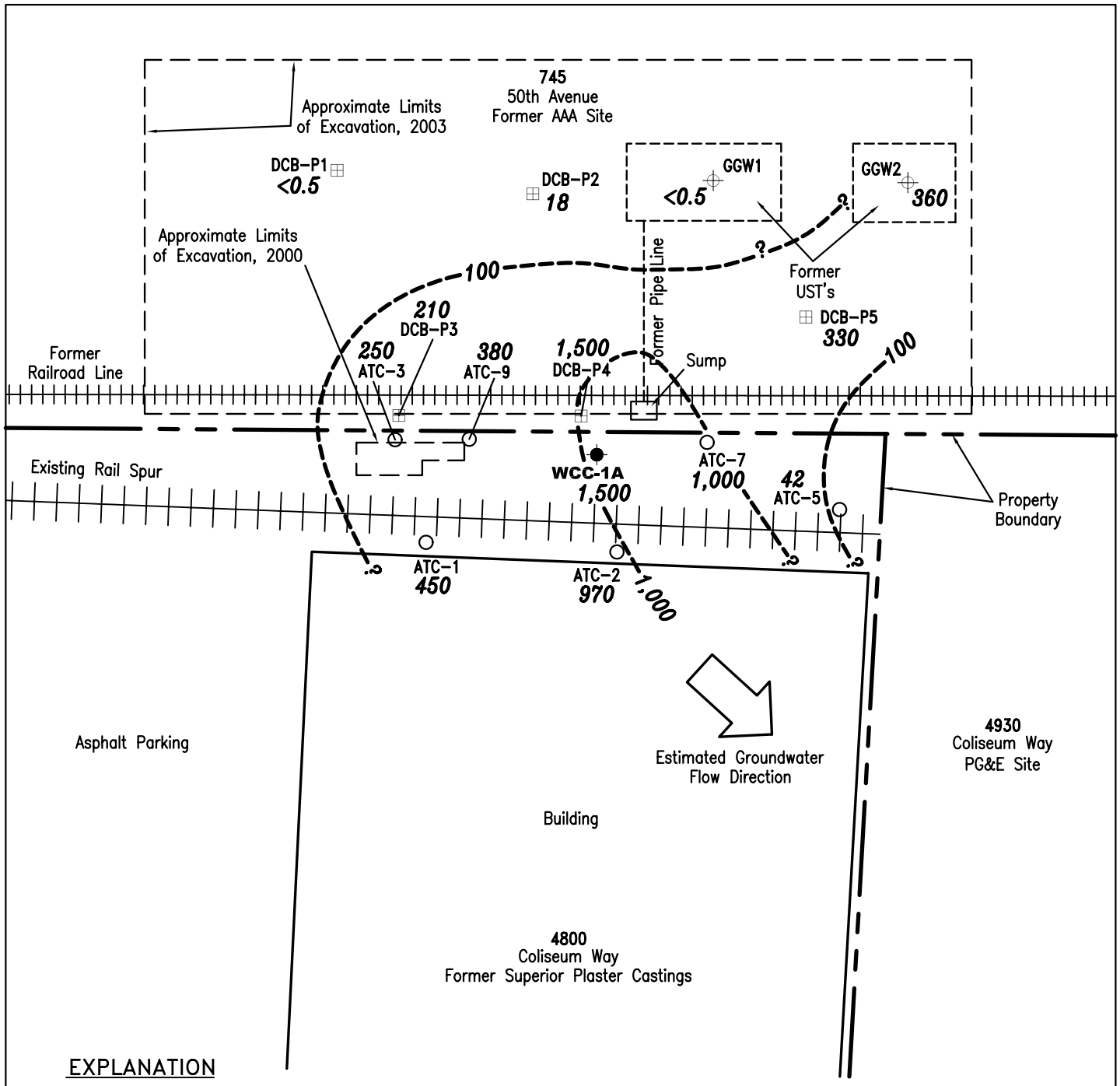


ESTIMATED DISTRIBUTION of TPH-D in GROUNDWATER

DATE		JOB NUMBER
02/09	Former Superior Plaster Castings 4800 Coliseum Way Oakland, California	09-001-02
REVIEWED BY		FIGURE
GJ		4

ERAS Environmental Inc.

ERAS 02-10-09 TPHd GW.dwg

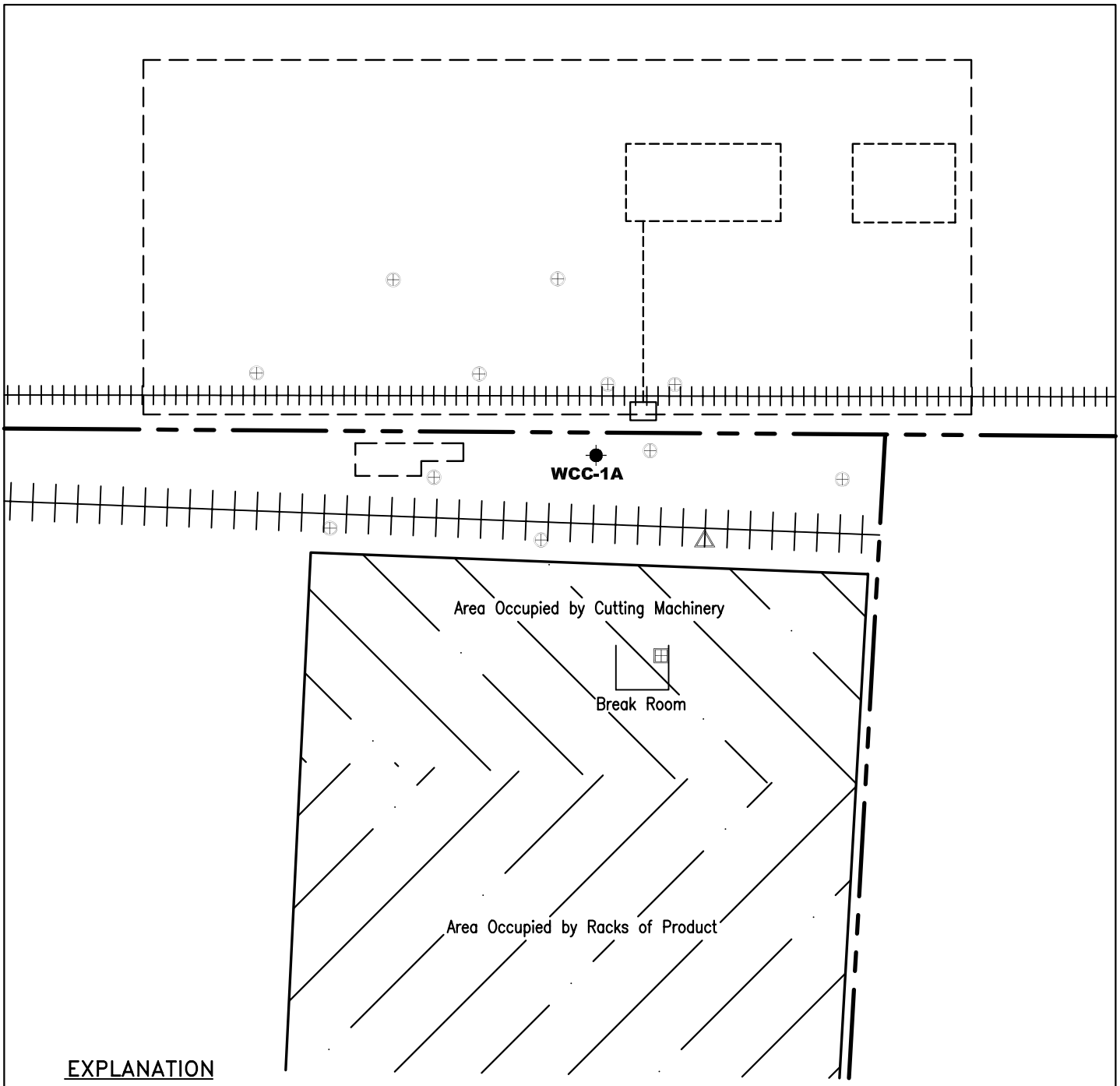


ESTIMATED DISTRIBUTION of 1,4-DCB in GROUNDWATER

DATE		JOB NUMBER
02/09	Former Superior Plaster Castings 4800 Coliseum Way Oakland, California	09-001-02
REVIEWED BY		FIGURE
GJ		5

ERAS Environmental Inc.

ERAS 02-10-09 TPHd GW.dwg



EXPLANATION

- Groundwater monitoring well
- Proposed soil and groundwater grab–sample
- Proposed soil–gas, soil and groundwater sample
- Proposed sub–slab vapor sample

N

0 30

Scale in Feet

PROPOSED SAMPLE LOCATIONS

DATE
02/09
REVIEWED BY
GJ

Former Superior Plaster Castings
4800 Coliseum Way
Oakland, California

JOB NUMBER
09–001–02
FIGURE
6

ERAS Environmental Inc.

ERAS 02-10-09 Proposed Samples.dwg

TABLES

TABLE 1. SUMMARY OF ANALYTICAL RESULTS FOR SOIL

4800 Coliseum Way, Oakland CA

BORING ID	DATE	DEPTH Feet	TPH-G 8015	TPH-D 8015(no silica cleanup)	TPH-MO	CB 8010	1,2-DCB 8010	1,3-DCB 8010	1,4-DCB 8010
			all results in milligrams per kilogram (mg/Kg)						
4800 COLISEUM Way (former Superior Plater Castings)									
SB-1	22-Apr-91	2.5	<1	<10	NA	NA	NA	NA	NA
SB-2	22-Apr-91	4.5	<1	<10	NA	NA	NA	NA	NA
SB-3	22-Apr-91	3.5	3	**690**	NA	NA	NA	NA	NA
SB-3	22-Apr-91	8.5	1	<10	NA	NA	NA	NA	NA
SB-4	22-Apr-91	3.5	<1	<10	NA	NA	NA	NA	NA
SB-6	June-91	4.5	56	**220**	NA	NA	NA	NA	NA
SB-11	June-91	5.5	NA	NA	**6200***	NA	NA	NA	NA
SB-12	June-91	5.5	NA	NA	**2800***	NA	NA	NA	NA
SB-13	June-91	5.5	NA	NA	<50*	NA	NA	NA	NA
SB-14	June-91	4.5	**490**	**530**	NA	NA	NA	NA	NA
SB-15	June-91	4.5	220	**370**	NA	NA	NA	NA	NA
SB-16	June-91	4.5	<10	94	NA	NA	NA	NA	NA
SB-17	June-91	5.0	NA	NA	<50*	NA	NA	NA	NA
SB-18	June-91	5.5	NA	NA	2500*	NA	NA	NA	NA
SB-19	June-91	5.5	NA	NA	<50*	NA	NA	NA	NA
WCC1A	8-Dec-92	6	<0.5	<10	40*	ND	ND	0.0020	0.0048
WCC1A	8-Dec-92	10.5	<0.5	<10	47*	NA	NA	NA	NA
WCC-1B	7-Dec-92	6	<0.5	<10	NA	NA	NA	NA	NA
ATC-1	8-Oct-98	4	**1,000**	**3,800**	**5,700**	<0.005	<0.005	<0.005	<0.005
ATC-2	8-Oct-98	4	2	11	45	0.027	<0.005	0.05	0.13
ATC-3	8-Oct-98	3	160	**13,000**	**29,000**	3.8	<0.005	19	**33**
ATC-4	8-Oct-98	4	170	**1,700**	**3,100**	NA	NA	NA	NA
ATC-5	8-Oct-98	3.5	<1.0	**200**	**2,700**	<0.005	<0.005	<0.005	<0.005
ATC-6	8-Oct-98	1	120	**6,700**	**17,000**	<0.005	<0.005	<0.005	<0.005
ATC-7	8-Oct-98	4	**700**	**11,000**	**23,000**	<0.005	<0.005	<0.005	<0.005
ATC-8	8-Oct-98	4	250	**490**	630	NA	NA	NA	NA
ACT-9	8-Oct-98	4	**1,000**	**7,200**	**8,600**	<0.005	<0.005	<0.005	<0.005
E-1	14-Jun-00	4.5	NA	NA	NA	<0.005	<0.005	0.012	0.010
E-2	14-Jun-00	4.5	NA	NA	NA	<0.005	0.027	0.16	0.075
E-3	14-Jun-00	4.5	NA	NA	NA	<0.005	<0.005	<0.005	<0.005
E-4	14-Jun-00	4.5	NA	NA	NA	<0.005	<0.005	<0.005	0.0086
E-5	14-Jun-00	4.5	NA	NA	NA	<0.005	<0.005	0.080	0.078
E-6	14-Jun-00	4.5-5	NA	NA	NA	<0.005	0.014	0.130	0.230
E-7	14-Jun-00	4.5	NA	NA	NA	<0.005	<0.005	<0.005	<0.005
ESL final	Ind/Com		**450**	150	2500	**30**	11	30	2.6
ESL sh	Leach to NDW		4,200	**2,100**	---	**30**	11	5700	**13**

BORING ID	DATE	DEPTH Feet	TPH-G 8015	TPH-D 8015(with silica cleanup)	TPH-MO	CB 8260	1,2-DCB 8260	1,3-DCB 8260	1,4-DCB 8260	1,2,3-TCB 8260	1,2,4-TCB 8260
			all results in milligrams per kilogram (mg/Kg)								
745 50th Ave (Former AAA Site)											
DCB-P1	7-Apr-08	4	<1.0	**170y**	**670**	NA	NA	NA	NA	NA	NA
DCB-P1	2-Apr-08	4	NA	NA	NA	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
DCB-P2	7-Apr-08	4	<0.95	**290y**	**890**	NA	NA	NA	NA	NA	NA
DCB-P2	2-Apr-08	4	NA	NA	NA	<0.0044	<0.0044	<0.005	<0.005	<0.0044	<0.0044
DCB-P3	7-Apr-08	4	<0.92	**110y**	360	NA	NA	NA	NA	NA	NA
DCB-P3	2-Apr-08	4	NA	NA	NA	<0.005	<0.005	<0.005	<0.005	0.0067	<0.005
DCB-P4	7-Apr-08	3	51yz	**5,000**	**4,600**	NA	NA	NA	NA	NA	NA
DCB-P4	2-Apr-08	4	NA	NA	NA	**150**	<13	<13	**21**	<13	<13
DCB-P4	7-Apr-08	8	15yz	**4,800**	**4,300**	NA	NA	NA	NA	NA	NA
DCB-P5	2-Apr-08	3	<0.97	**190y**	**930**	NA	NA	NA	NA	NA	NA
DCB-P5	2-Apr-08	4	NA	NA	NA	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063
ESL final	Ind/Com		**450**	150	2500	**30**	11	30	2.6	---	27
ESL	Leach to NDW		4,200	**2,100**	---	**30**	11	5700	**13**	---	770

TABLE 1. SUMMARY OF ANALYTICAL RESULTS FOR SOIL

4800 Coliseum Way, Oakland CA

NOTES

TPH-G	Total petroleum hydrocarbons quantitated as gasoline
TPH-D	Total petroleum hydrocarbons quantitated as diesel
TPH-MO	Total petroleum hydrocarbons quantitated as motor oil
*	Analyzed for Total Oil and Grease by method 418.1 with not silica gel cleanup.
CB	Chlorobenzene
1,2-DCB	1,2-dichlorobenzene
1,3-DCB	1,3-dichlorobenzene
1,4-DCB	1,4-dichlorobenzene
1,2,3-TCB	1,2,3-trichlorobenzene
1,2.4-TCB	1,2,4-trichlorobenzene
<1.0	Not detected above concentration indicated
ND	Not detected above reporting limit
NA	Not analyzed
ESL	Environemental Screening Level (SFRWQCB, 2007)
Ind/Comm	Final ESL for Industrial or commercial land use

Leach to NDW. ESL for shallow soil for the protection of leaching to groundwater that is not potential drinking water.

TABLE 2. SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER

4800 Coliseum Way, Oakland CA

SAMPLE ID	DATE	TPH-G	TPH-D	TPH-MO	CB	1,2-DCB	1,3-DCB	1,4-DCB
		8015	8015 (no silica cleanup)		8010			
		all results in micrograms per liter (ug/L)						
4800 COLISEUM Way (former Superior Plater Castings)								
ATC-1	8-Oct-98	1,400	**19,000**	**18,000**	370	32	370	**450**
ATC-2	8-Oct-98	980	1,500	2,300	92	32	590	**970**
ATC-3	8-Oct-98	440	**6,700**	**16,000**	<50	<50	120	**250**
ATC-4	8-Oct-98	950	1,400	1,200	NA	NA	NA	NA
ATC-5	8-Oct-98	270	**20,000**	*65,000*	16	3.3	27	42
ATC-7	8-Oct-98	1,900	2,200	<2,000	210	54	730	**1,000**
ATC-8	8-Oct-98	360	**15,000**	**14,000**	NA	NA	NA	NA
ATC-9	8-Oct-98	3,000	**9,300**	**15,000**	33	**190**	440	**380**
WWC-1A	17-Dec-92	4,000	**7,300**	**12,000 (O&G)**	270	**290**	1,400	**1,500**
WWC-1A (Dup)	17-Dec-92	NA	NA	NA	260	**270**	1,300	**1,400**
WWC-1A	8-Oct-98	2,300	1,700	1,600	220	**56**	900	**1,500**
ESL	NDW	5000	2500	2500	500	100	50,000	110

SAMPLE ID	DATE	TPH-G	TPH-D	TPH-MO	CB	12-DCB	1,3-DCB	1,4-DCB	1,2,3-TCB	1,2,4-TCB
		8015	8015 (with silica cleanup)		8010					
		all results in micrograms per liter (ug/L)								
745 50th Ave (Former AAA Site)										
DCB-P1	2-Apr-08	NA	960	**3,000**	<0.5	<0.5	<0.5	<0.5	0.7	2.6
DCB-P2	2-Apr-08	NA	930	2,300	<0.5	0.9	4.0	18	<0.5	0.5j
DCB-P3	2-Apr-08	NA	**110,000**	**24,000**	<50	**110**	66	**210**	1,600	**7,100**
DCB-P4	2-Apr-08	NA	**170,000**	**57,000**	**1,000**	**200**	1,600	**1,500**	280	**3,800**
DCB-P5	2-Apr-08	NA	**3,400**	**3,100**	71	45	390	**330**	42	1,500
GGW1-1	24-Sep-03	NA	**3,700**	**2,700**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
GGW2-1	24-Sep-03	NA	**3,500**	2,200	74	24	210	360	6.9	260
ESL	NDW	5000	2500	2500	500	100	50,000	110	---	2,500

TABLE 2. SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER

4800 Coliseum Way, Oakland CA

NOTES

TPH-G	Total petroleum hydrocarbons quantitated as gasoline
TPH-D	Total petroleum hydrocarbons quantitated as diesel
TPH-MO	Total petroleum hydrocarbons quantitated as motor oil
*	Analyzed for Total Oil and Grease by method 418.1 with not silica gel cleanup.
CB	Chlorobenzene
1,2-DCB	1,2-dichlorobenzene
1,3-DCB	1,3-dichlorobenzene
1,4-DCB	1,4-dichlorobenzene
1,2,3-TCB	1,2,3-trichlorobenzene
1,2.4-TCB	1,2,4-trichlorobenzene
<1.0	Not detected above concentration indicated
NA	Not analyzed
ESL	Environemental Screening Level (SFRWQCB, 2007)
NDW	Groundwater that is not potential drinking water

APPENDIX A

LETTERS FROM ACEH

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

September 26, 2007

Mr. Robert Nichols
P.O. Box 6716
Oakland, CA 94603

Mr. John Miller
250 Cambridge Avenue
Palo Alto, CA 94306

Subject: SLIC Case RO0002661 and Geotracker Global ID T06019788277, Superior Plaster Castings, 4800 Coliseum Way, Oakland, CA 94601

Dear Mr. Nichols and Mr. Miller:

Alameda County Environmental Health (ACEH) previously requested in correspondence in 2006 and 2007 that you provide funds for regulatory oversight of a Spills, Leaks, Investigations, and Cleanups (SLIC) case for the above referenced site. To date we have not received funds for regulatory oversight. The SLIC case for 4800 Coliseum Way in Oakland remains open due to the confirmed presence of soil and groundwater contamination beneath your property.

Although you have not submitted funds for regulatory oversight, we are issuing this directive letter specifying the required actions for this site. Further delays in investigation, late reports, or enforcement actions may result in referral of your case to the Water Board or other appropriate agency for possible enforcement actions.

Previous investigations conducted at the site to date have identified petroleum hydrocarbons in soil and groundwater beneath the northeastern portion of the property adjacent to a former railroad spur. Elevated concentrations of Total Petroleum Hydrocarbons (TPH) as gasoline, diesel, and motor oil have been detected in shallow soil at your site at concentrations up to 1,000, 13,000, and 29,000 milligrams per kilogram (mg/kg), respectively. In addition, chlorinated solvents have also been detected in shallow soil beneath your site at concentrations up to 33 mg/kg (1,4-dichlorobenzene). A tar-like material was observed at depths of 1 to 3 feet bgs across much of the northeastern portion of the site. Similar materials have been encountered during site investigations conducted on contiguous properties to the north and east. Elevated concentrations of petroleum hydrocarbons and chlorinated solvents have been detected in soil and groundwater samples collected at three adjacent properties (AAA Equipment at 745 50th Avenue owned by Alta Properties LLC [Case RO0002746], Learner Investment Company at 768 46th Avenue [Case RO0002661], and PG&E GC Gas Service at 4930 Coliseum Way [case RO0000099]). The petroleum hydrocarbons and chlorinated solvents appear to be from a common source of historic releases that occurred on each of the four properties (Superior Plaster Casing, PG&E, Learner Property, and AAA Equipment), resulting in a commingled plume. Therefore, all parties are considered responsible for the release. We encourage all parties to cooperate in terms of sharing data and generating compatible and comprehensive Corrective Action Plans for their sites. Whether you choose to investigate this source of contamination on your property individually or in conjunction with the other three responsible parties, we request that you submit plans for investigation of this area of your site **no later than October 30, 2007**.

REQUEST FOR INFORMATION

We request that you submit copies of the following reports, which are referenced in existing site investigation reports but are not in the ACEH case file:

- Aqua Terra Technologies. Phase I Environmental Site Assessment, April 1991.
- ERAS Environmental, Inc. Phase I Environmental Site Assessment, May 31, 2000.

TECHNICAL COMMENTS

1. **Limited Soil Excavation in June 2000.** Approximately 25 cubic yards of soil was excavated and removed from the northeastern portion of the site on June 14, 2000. Soil excavation was apparently limited to the immediate area of boring ATC-3. However, the documented extent of soil and groundwater contamination at the site extends over a significantly larger area than the excavation. Additional work is required to address site-wide contamination issues.

2. **Conclusions in Soil Remediation Report.** Results from the excavation and removal of approximately 25 cubic yards of soil are presented in a report entitled, "Soil Remediation," dated June 26, 2000, which was prepared by ERAS Environmental. The report describes the results from excavation activities including laboratory analytical results, and presents conclusions based on previous investigation results and the excavation. We do not concur with the conclusions stated in the June 26, 2000 report. In particular, the second conclusion on page 5, which states, "The fill identified as containing solvents was successfully removed and analytical data indicated the solvents did not impact underlying groundwater," appears to be speculative and unsupported by site data. There appears to be no basis for assuming that elevated concentrations of 1,3-dichlorobenzene (19 mg/kg) and 1,4-dichlorobenzene (33 mg/kg) in shallow soil (3 feet bgs) are not related to detections of 1,3-dichlorobenzene and 1,4-dichlorobenzene in the underlying groundwater, which is encountered at depths of 3 to 5 feet bgs in this area. Moreover, 1,2-dichlorobenzene, 1,3-dichlorobenzene, and 1,4-dichlorobenzene were detected in soil samples collected from the bottom of the ATC-3 excavation at 4.5 feet bgs. These same chemicals were detected in groundwater from boring ATC-3. Future work plans and reports must include more rigorous, technically defensible, and comprehensive evaluations of results.

TECHNICAL REPORT REQUEST

Please submit technical reports to Alameda County Environmental Health (Attention: Jerry Wickham), according to the following schedule:

- **October 30, 2007** – Work Plan

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

ELECTRONIC SUBMITTAL OF REPORTS

The Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of all reports in electronic form to the county's ftp site. Paper copies of reports will no longer be accepted. The electronic copy replaces the paper copy and will be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program ftp site are provided on the attached "Electronic Report Upload (ftp) Instructions." Please do not submit reports as attachments to electronic mail.

Submission of reports to the Alameda County ftp site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) Geotracker website. Submission of reports to the Geotracker website does not fulfill the requirement to submit documents to the Alameda County ftp site. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitor wells, and other data to the Geotracker database over the Internet. Beginning July 1, 2005, electronic submittal of a complete copy of all necessary reports was required in Geotracker (in PDF format). Please visit the SWRCB website for more information on these requirements (http://www.swrcb.ca.gov/ust/cleanup/electronic_reporting).

PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

AGENCY OVERSIGHT

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to $10,000 per day for each day of violation.

If you have any questions, please call me at (510) 567-6791.

Sincerely,

Jerry Wickham
Hazardous Materials Specialist

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Mr. Robert Saur, PG&E, 3400 Crow Canyon Road, San Ramon, CA 94583

Mr. Jack Krause, Alta Properties, LLC, P.O. Box 2399, Oakland, CA 94614

Ms. Marcella Harrison, GVA Kidder Mathews, 505 Sansome Street, Suite 300, San Francisco, CA 94111

Mr. Robert Schultz, Geomatrix, 2101 Webster Street #12, Oakland, CA 94612

Mr. Tom Chandler, LFR, 3150 Bristol Street, Suite 250, Costa Mesa, CA 92626-7324

Donna Drogos, ACEH
Jerry Wickham, ACEH
File

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) 337-93

November 20, 2008

Mr. Robert Nichols
P.O. Box 6716
Oakland, CA 94603

Mr. John Miller
P.O. Box 61103
Palo Alto, CA 94306

Subject: SLIC Case RO0002661 and Geotracker Global ID T06019788277, Superior Plaster Castings, 4800 Coliseum Way, Oakland, CA 94601

Dear Mr. Nichols and Mr. Miller:

Alameda County Environmental Health (ACEH) staff has reviewed the Spills, Leaks, Investigations, and Cleanups (SLIC) case file for the above referenced site including reports submitted for three adjacent sites. In correspondence dated September 26, 2007, ACEH requested that you submit a Work Plan to evaluate the extent of soil and groundwater contamination beneath your property. The September 26, 2007 correspondence discussed similarities in site investigation results from contiguous properties to the north and east of 4800 Coliseum Way. Elevated concentrations of petroleum hydrocarbons and chlorinated solvents with similar characteristics have been detected in soil and groundwater samples collected at four contiguous properties (Former Superior Plaster Castings at 4800 Coliseum Way [Case RO0002661], AAA Equipment at 745 50th Avenue owned by Alta Properties LLC [Case RO0002746], Learner Investment Company at 768 46th Avenue [Case RO0002478], and PG&E GC Gas Service at 4930 Coliseum Way [case RO0000099]). On October 10, 2007, a meeting was held with representatives from each of the four contiguous properties to discuss approaches for investigating petroleum hydrocarbons and chlorinated solvents that appear to be from a common source of historic releases that occurred on each of the four properties. After the meeting, ACEH received correspondence dated October 24, 2007 from ERAS Environmental, Inc. addressed to Mr. Robert Nichols that reviewed historical information and presented speculative conclusions regarding possible sources of contamination.

ACEH again requested that you submit a Work Plan for site assessment in correspondence dated November 30, 2007. On March 6, 2008, Mr. Jerry Wickham and Ms. Donna Drogos of ACEH met with Mr. Robert Nichols, Mr. John Miller, Mr. Raymond Sherman (attorney for Mr. Nichols), and Mr. David Siegel (consultant for Mr. Nichols). During the meeting, Mr. Nichols and Mr. Sherman indicated that the property owners at 4800 Coliseum Way do not plan to move forward with investigation or cleanup of 4800 Coliseum Way.

Subsequent to your refusal to move forward with preparation of a Work Plan for 4800 Coliseum Way, the site owners for the three adjacent properties have submitted work plans and conducted site investigations. Groundwater sampling on the PG&E property east of 4800 Coliseum Way indicates that the highest concentrations of chlorobenzenes in groundwater are along the property boundary with 4800 Coliseum Way. Soil and groundwater sampling conducted on the two properties to the north, the Former Learner property and Former AA property, also found the highest concentrations of chlorobenzene, 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, 1,2,3-trichlorobenzene, and 1,2,4-trichlorobenzene along the property boundary with 4800 Coliseum Way. These results appear to confirm

that the chlorinated solvents in groundwater originate from a source that includes the 4800 Coliseum Way property and may be common to the four adjacent sites, resulting in a commingled plume.

Based on the above results, we reiterate our request that you prepare a Work Plan for investigating your site at 4800 Coliseum Way. The Work Plan must include a review of the data collected during the recent site investigations in the surrounding areas and soil vapor sampling to evaluate potential vapor intrusion to indoor air for the existing building and the northeastern portion of the 4800 Coliseum Way site. We encourage all parties to work cooperatively to address the source of chlorinated solvents in soil and groundwater beneath the four adjacent sites. Therefore, we recommend that you schedule a meeting with the responsible parties for the adjacent properties and their consultants to help develop the scope of work for your Work Plan.

TECHNICAL REPORT REQUEST

Please submit technical reports to Alameda County Environmental Health (Attention: Jerry Wickham), according to the following schedule:

- **February 6, 2009** – Work Plan

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

ELECTRONIC SUBMITTAL OF REPORTS

ACEH's Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of reports in electronic form. The electronic copy replaces paper copies and is expected to be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program FTP site are provided on the attached "Electronic Report Upload Instructions." Submission of reports to the Alameda County FTP site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) Geotracker website. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for all groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitoring wells, and other data to the Geotracker database over the Internet. Beginning July 1, 2005, these same reporting requirements were added to Spills, Leaks, Investigations, and Cleanup (SLIC) sites. Beginning July 1, 2005, electronic submittal of a complete copy of all reports for all sites is required in Geotracker (in PDF format). Please visit the SWRCB website for more information on these requirements (http://www.swrcb.ca.gov/ust/cleanup/electronic_reporting).

PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

AGENCY OVERSIGHT

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to $10,000 per day for each day of violation.

If you have any questions, please call me at (510) 567-6791 or send me an electronic mail message at jerry.wickham@acgov.org.

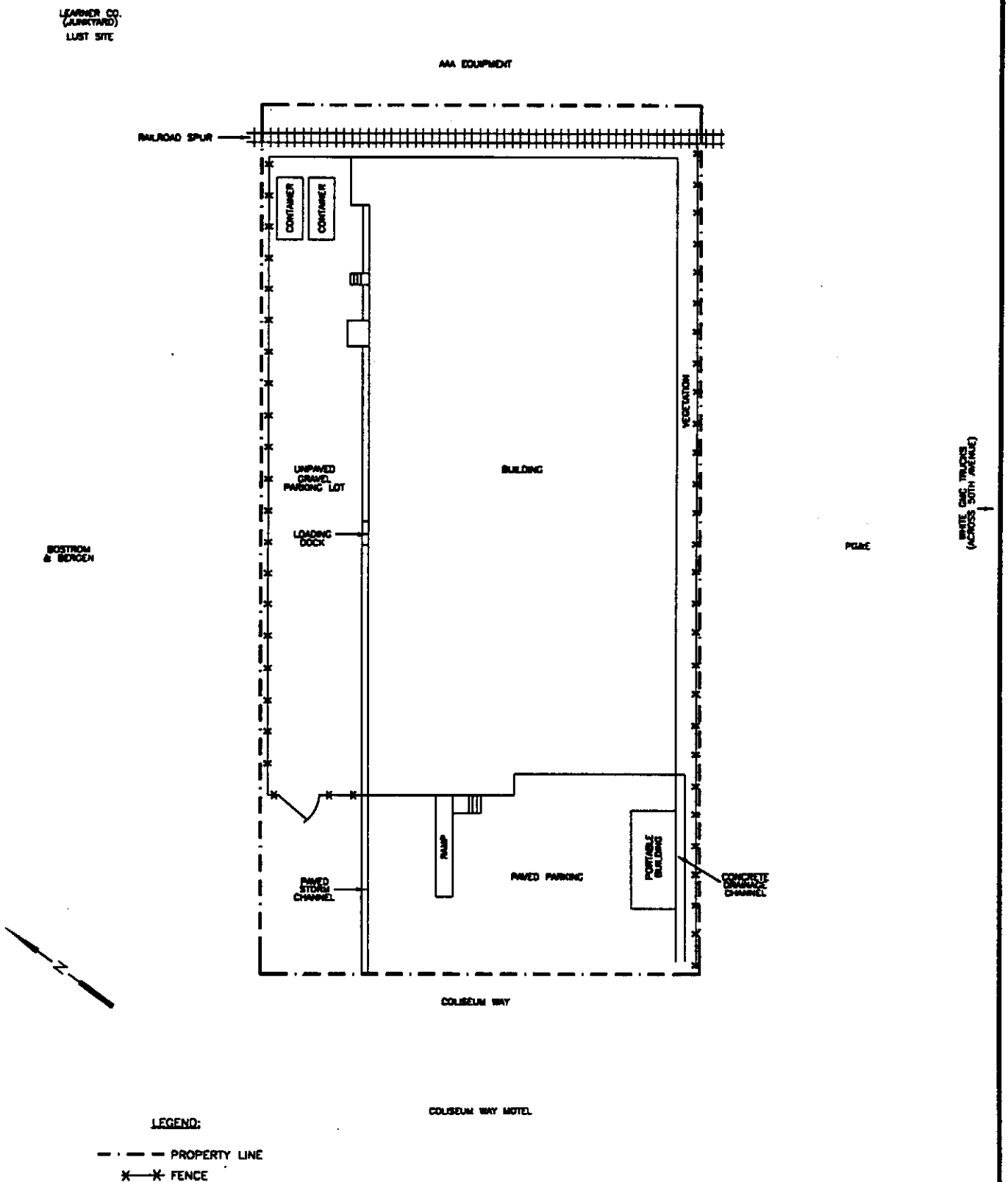
Sincerely,

Jerry Wickham, California PG 3766, CEG 1177, and CHG 297
Senior Hazardous Materials Specialist

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

APPENDIX B

SITE PLAN



NOT TO SCALE

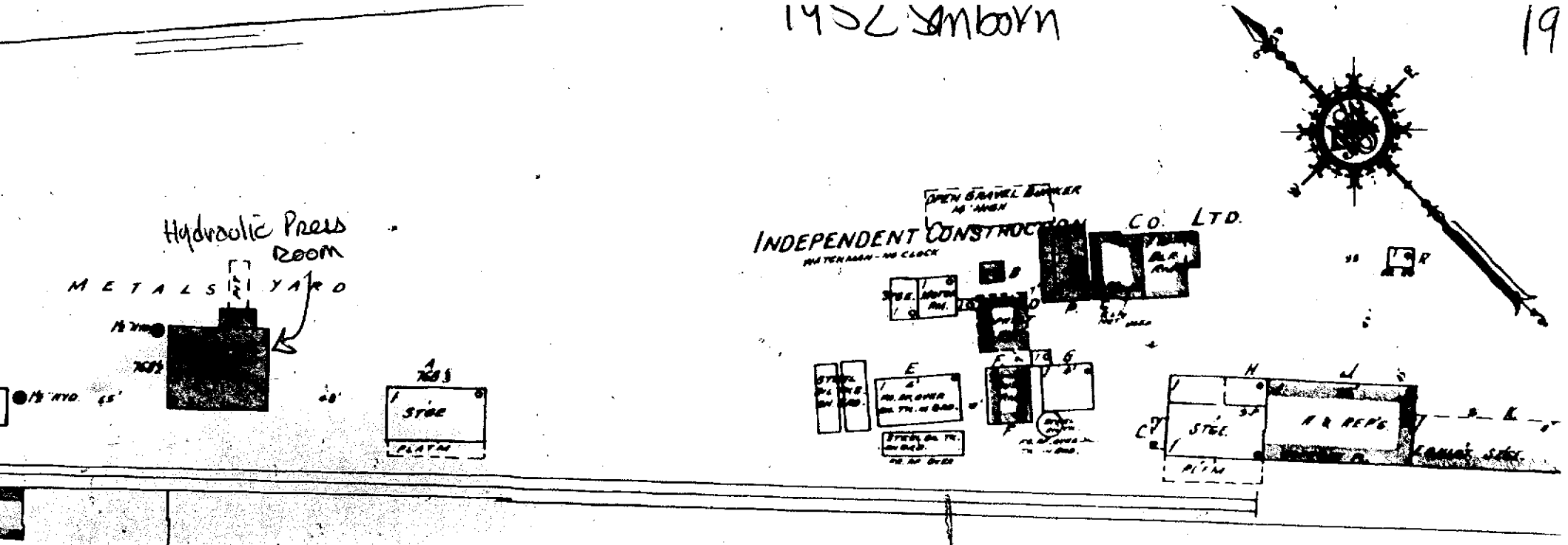
ATC	METALCAST ENGINEERING 4800 COLISEUM WAY OAKLAND, CALIFORNIA	SITE AND ADJACENT PROPERTIES MAP PROJECT #: 89775.0030 SEPTEMBER 1998	FIGURE: 2

APPENDIX C

SANBORN MAPS AND PHOTOGRAPHS

1952 Sanborn

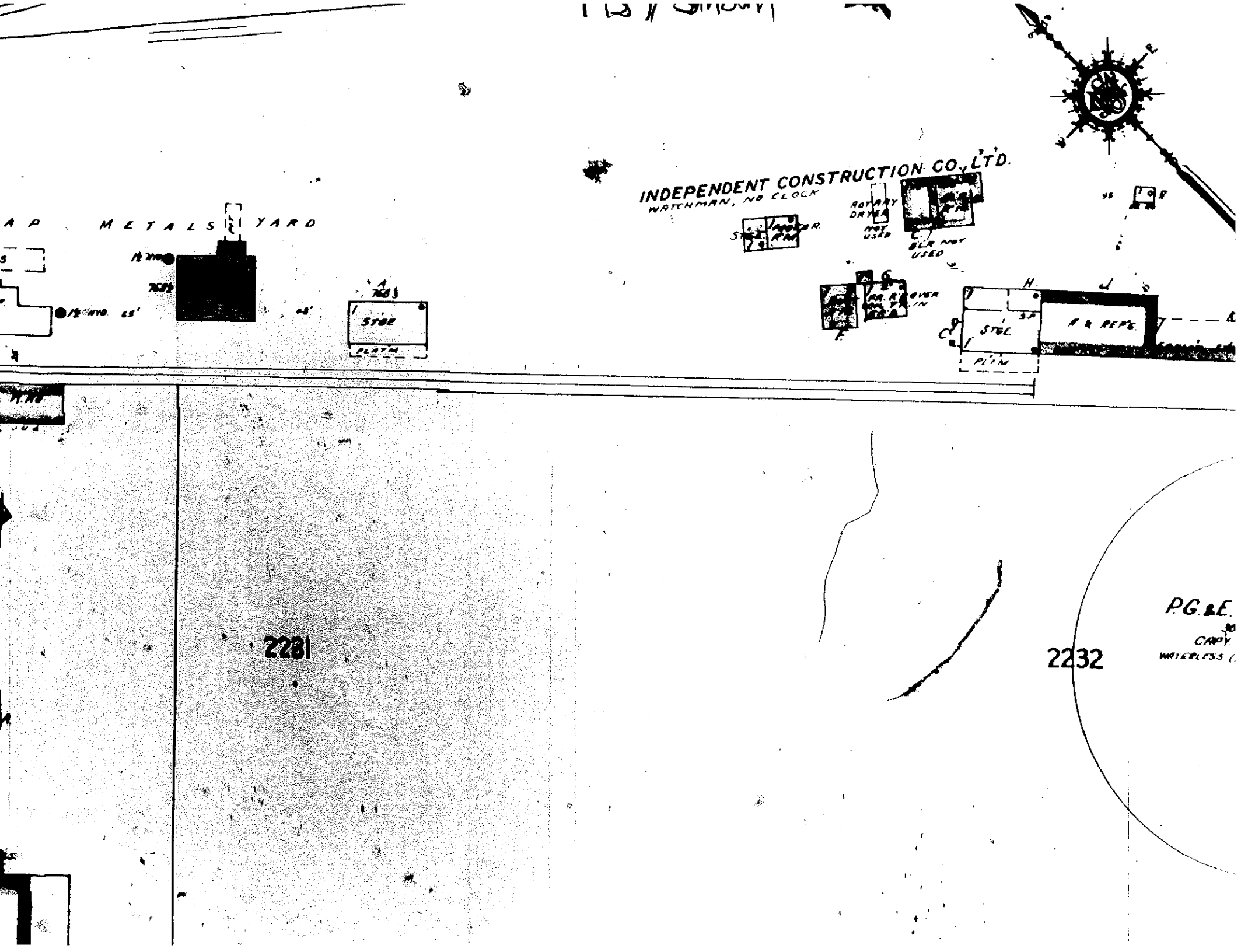
19



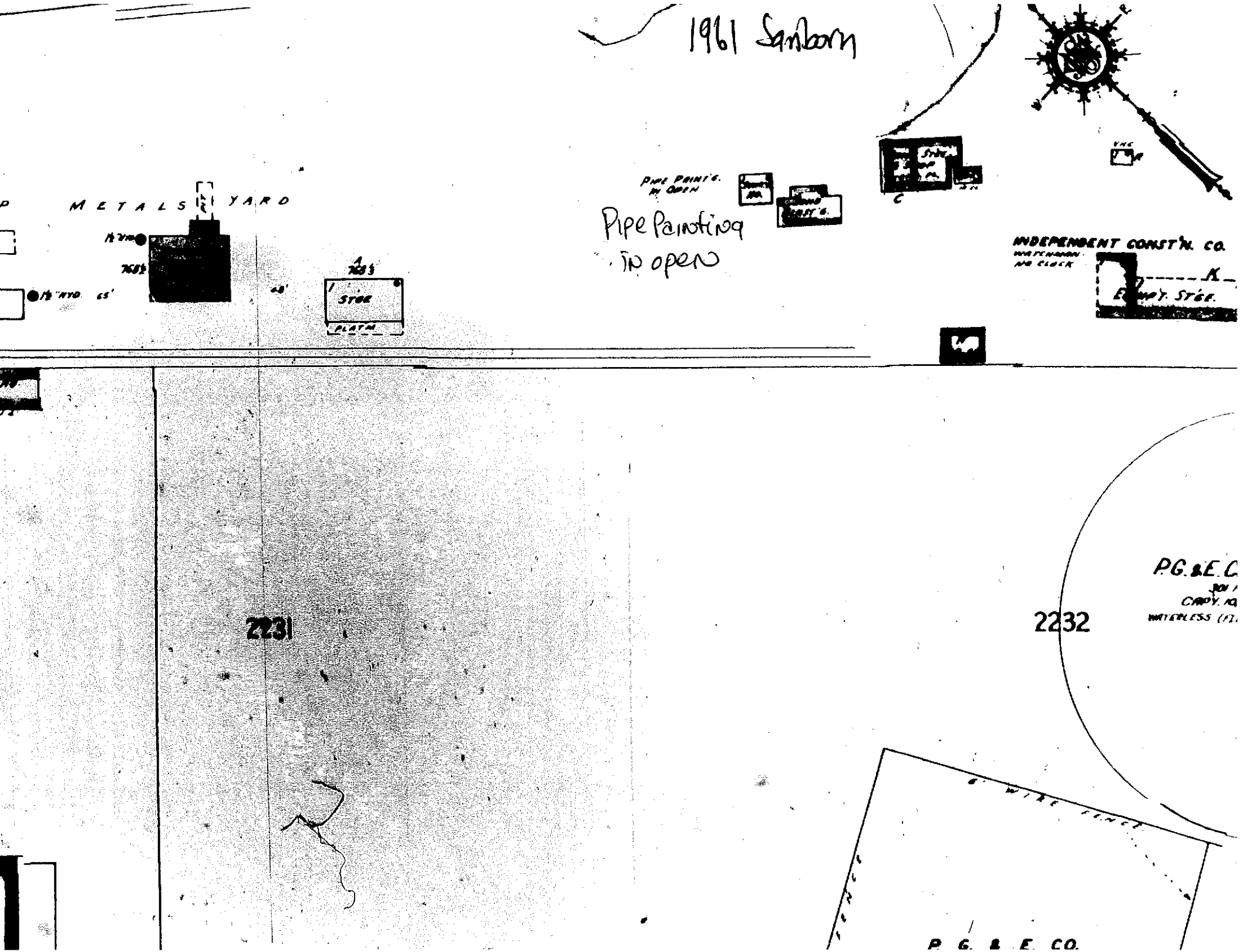
2231

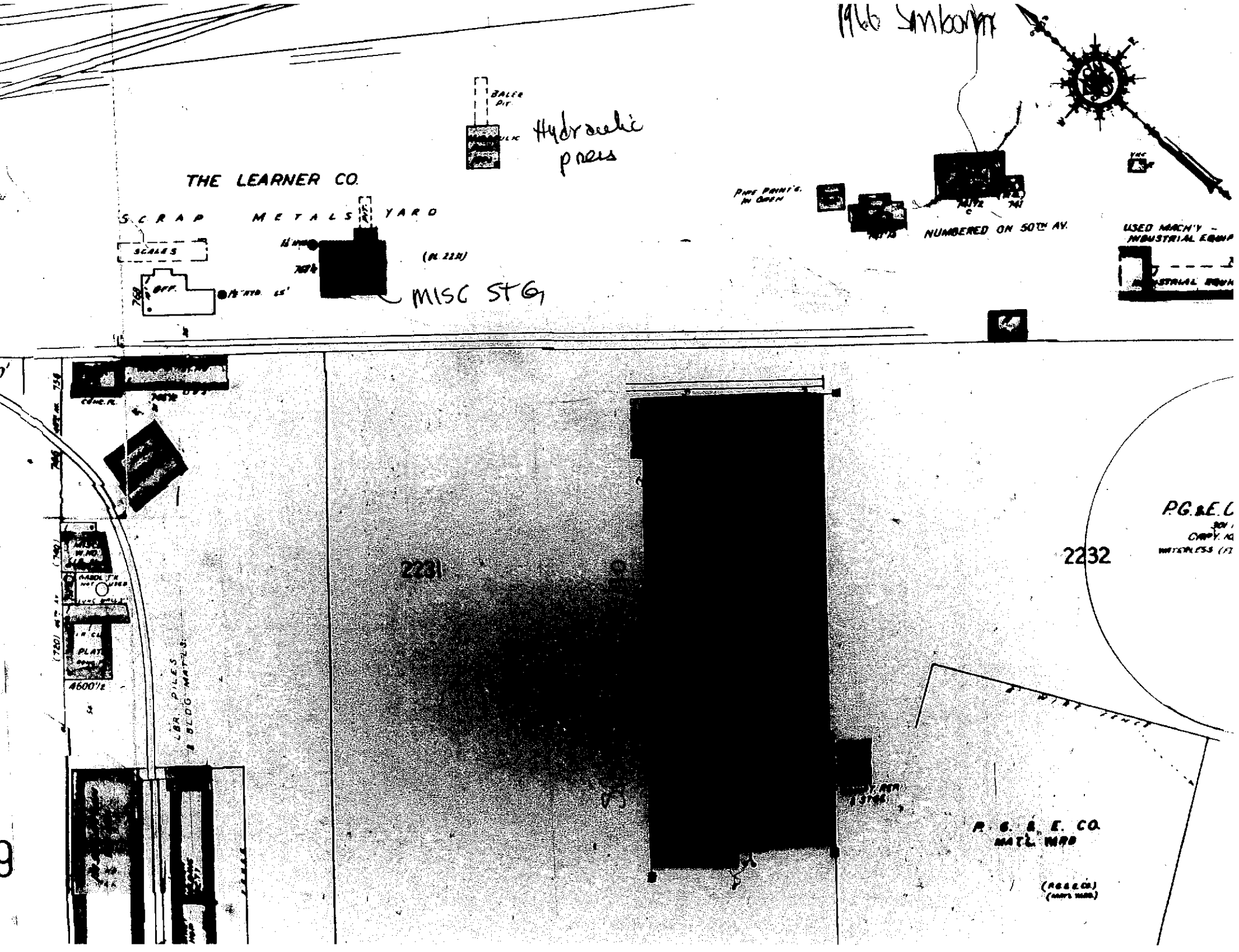
2232

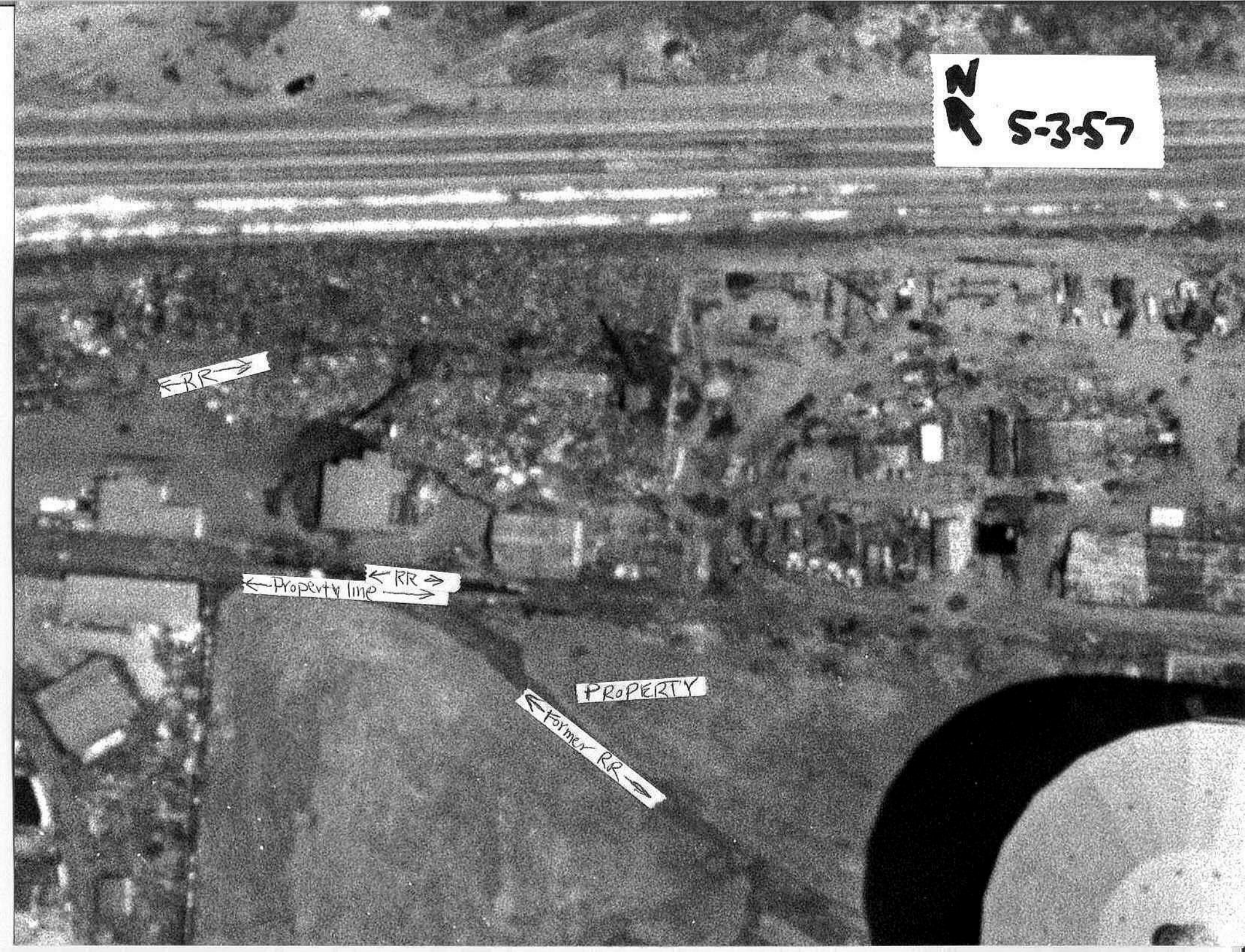
P.G.&E. CO'S

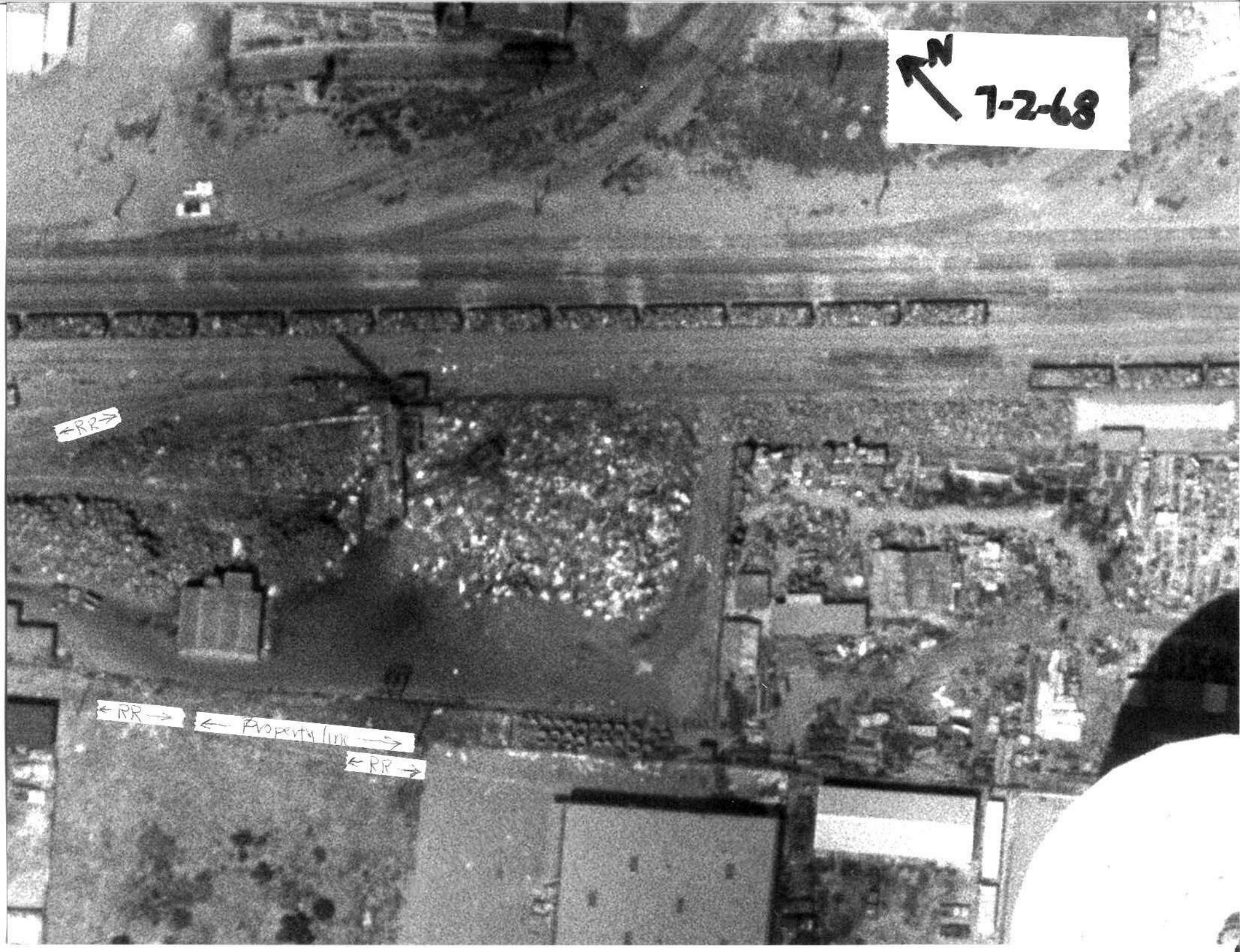

INDEPENDENT CONSTRUCTION CO., LT'D.
WATCHMAN, NO CLOCK
METALS YARD
STOR
PLATFM
STEL
PLTFM
2281
2232
P.G. & E.

1961 Sanborn




1966 symbols
Hydraulic press
THE LEARNER CO.
SCRAP METALS YARD
SCALES
OFF.
MISC STG
NUMBERED ON 50TH AV.
2231
2232
P.G. & E. CO.
MATL. MAP


NR 5-3-57
RR
Property line
RR
PROPERTY
Former RR


N
7-2-68
RR
RR
Property line
RR


N
3-30-88
← Property line →

APPENDIX D

LIST OF REPORTS OF INVESTIGATIONS AT 4800 COLISEUM WAY

Aqua Terra Technologies, Preliminary (Phase 1) Environmental Site Assessment for the Property at 4800 Coliseum Way, Oakland, California, April 8, 1991

ATC Associates, Inc., Phase II Environmental Site Investigation Report, Metalcast Engineering Facility, 4800 Coliseum Way, Oakland, California, November 25, 1998.

Earth Metrics, Inc., Limited Subsurface Soil Chemistry Analysis for 4800 Coliseum Way, Oakland, California, May 8, 1992.

ERAS Environmental, Inc., Phase I Environmental Site Assessment, 4800 Coliseum Way, Oakland, California, May 31, 2000.

ERAS Environmental, Inc., Soil Remediation, 4800 Coliseum Way, Oakland, California, June 26, 2000.

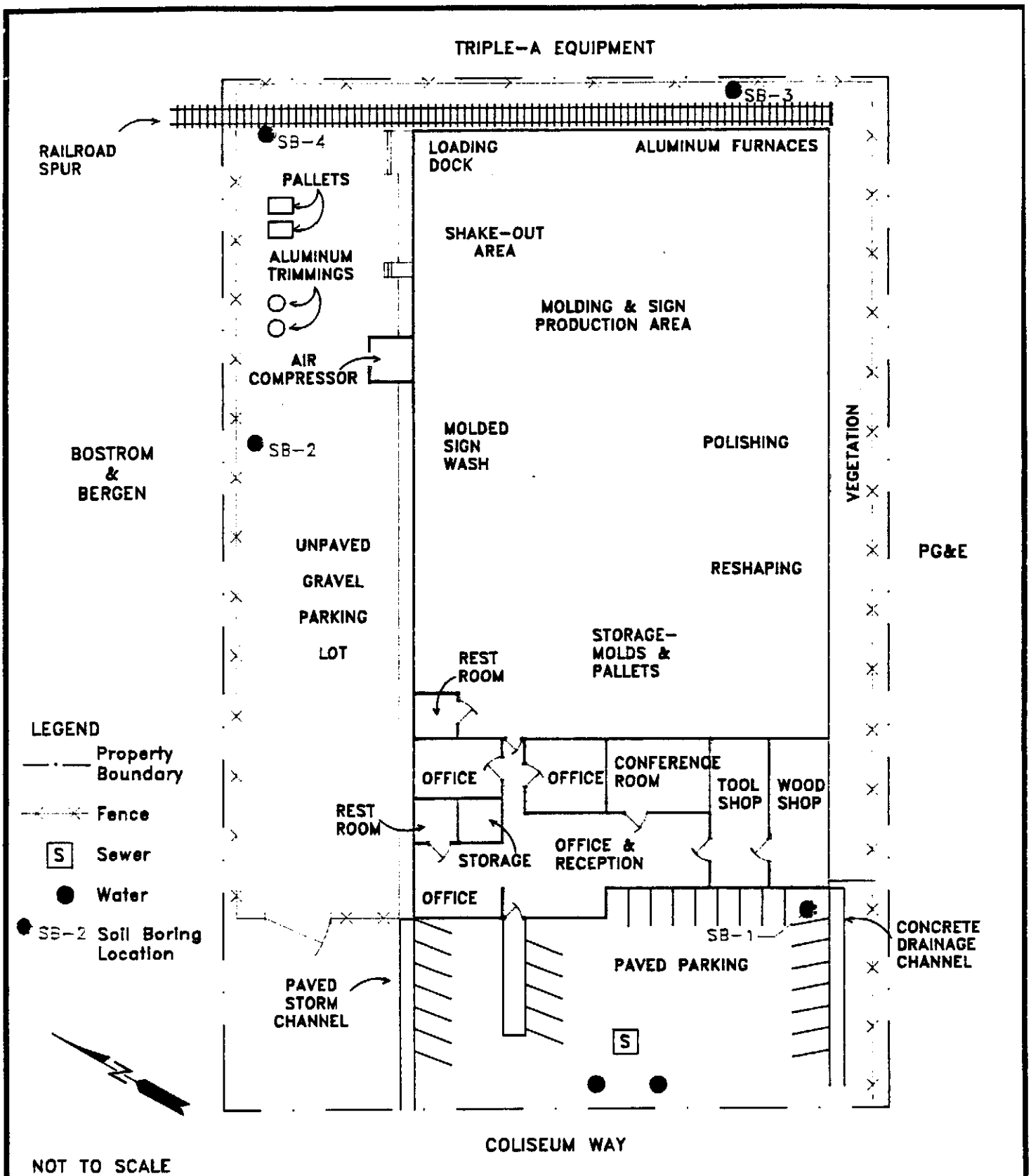
Simon Environmental Engineering, Report on Supplemental Phase II Assessment, Superior Plaster Castings, 4800 Coliseum Way, Oakland, California, July 2, 1991.

Simon Environmental Engineering, Report on Phase II Assessment, Superior Plaster Castings, 4800 Coliseum Way, Oakland, California, May 16, 1991.

Woodward-Clyde Consultants, Limited Phase II Site Assessment, 4800 Coliseum Way, Oakland, California, March 24, 1993.

APPENDIX E

MAPS AND TABLES FROM PREVIOUS INVESTIGATIONS AT 4800 COLISEUM WAY



SOIL BORING LOCATION MAP
SUPERIOR PLASTER CASTINGS, INC.
OAKLAND, CALIFORNIA

SIMON-EEI Inc.

PROJECT NO:	FIGURE:
513-779.00.	2
DATE: MAY, 1991	

TABLE 1

ANALYTICAL RESULTS FOR SOIL AND GROUNDWATER SAMPLES(a)

Sample No.	Benzene	Toluene	Xylene	Ethylbenzene	TPH(b) (gasoline)	TPH (diesel)
	ppb				ppm	ppm
Soil Samples						
Soil Boring No. 1 SB1-1-2.5	ND<3(c)	5	1.3 ~~ND<3~~	ND<3	ND<1	ND<10
Soil Boring No. 2 SB2-2-4.5	ND<3	ND<3	ND<3	ND<3	ND<1	ND<10
Soil Boring No. 3 SB3-3-3.5 SB3-4-8.5	11 ND<3	4 ND<3	5 ND<3	13 ND<3	3 1	690 ND<10
Soil Boring No. 4 SB4-5-3.5	ND<3	5	0.7 ~~ND<3~~	ND<3	ND<1	ND<10
Groundwater Samples						
Soil Boring No. 1 SB1-1-W	ND<0.3	ND<0.3	ND<0.3	ND<0.3	NA(d)	NA
Soil Boring No. 2 SB2-3-W	ND<0.3	ND<0.3	ND<0.3	0.3	NA	NA
Soil Boring No. 3 SB3-5-W	ND<0.3	ND<0.3	ND<0.3	5	NA	NA
Soil Boring No. 4 SB4-7-W	ND<0.3	ND<0.3	ND<0.3	ND<0.3	NA	NA

(a) Measured in parts per billion (ppb)
(b) TPH = Total Petroleum Hydrocarbons (TPH results are measured in parts per million [ppm])
(c) ND = Not Detected at Level Shown
(d) NA = No Analysis Taken

Shaikh US Lab TPHs 5/17/00

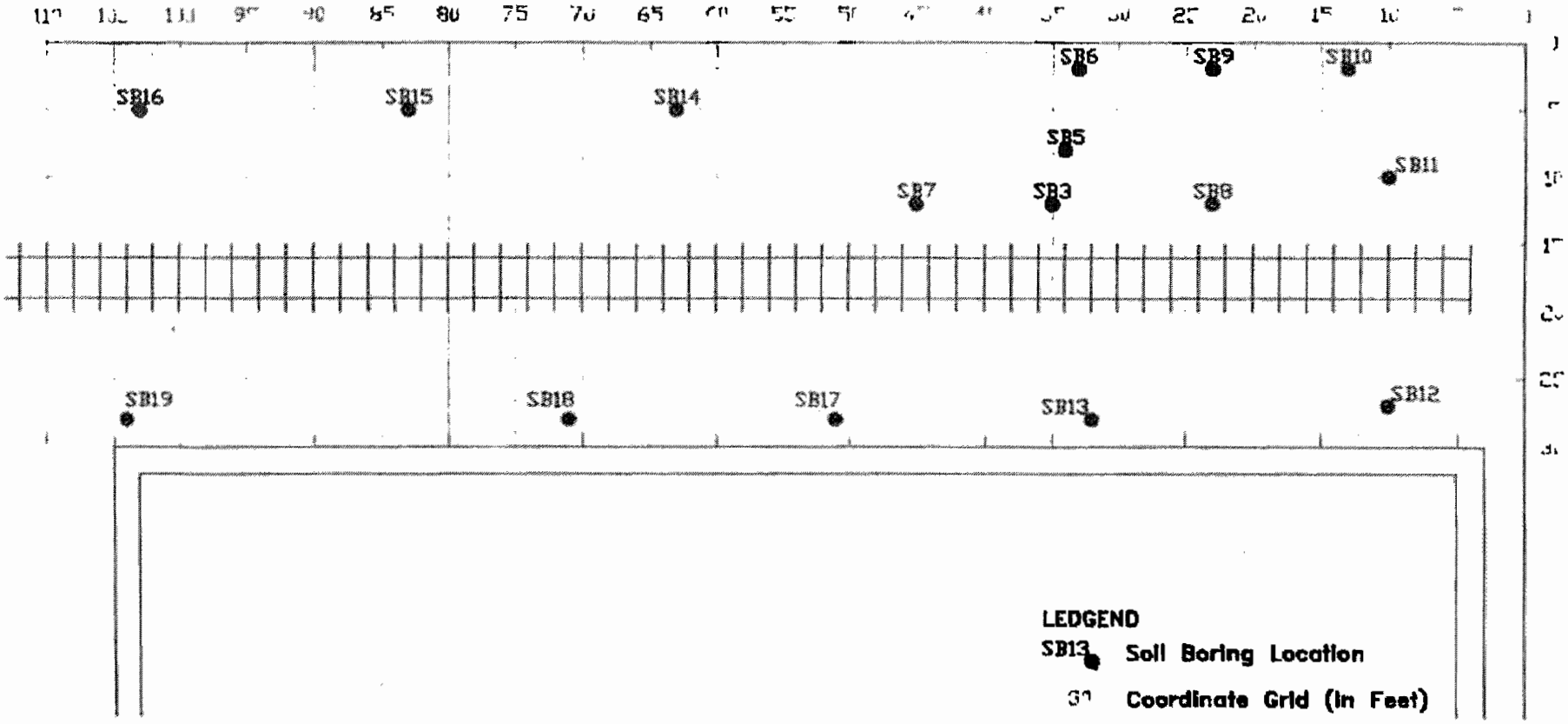
No lab TPH included for GW samples

TABLE 2

ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES(a)

Parameter	Sample Number				MCL
	SB1-2-W	SB2-4-W	SB3-6-W	SB4-8-W	(a)
Arsenic	0.035	0.054	0.027	0.073	0.050
Barium	1.4	1.6	1.2	3.1	5.000
Cadmium	<0.002(c)	<0.002	<0.002	<0.002	0.005
Chromium	0.49	0.65	0.31	0.88	0.100(b)
Lead	0.042	0.055	0.073	0.15	0.005(b)
Mercury	0.0024	0.0032	0.0020	0.0059	0.002(b)
Selenium	<0.003	<0.003	<0.003	<0.003	0.050(b)
Silver	<0.01	<0.01	<0.01	<0.01	0.050(b)

(a) MCL = Maximum Contaminant Level
(b) PMCL= Proposed Maximum Contaminant Level
(c) Not detected at level shown.



NOT TO SCALE

SOIL BORING LOCATION MAP
SUPERIOR PLASTER CASTINGS, INC.
OAKLAND, CALIFORNIA

SIMON-EEI Inc.

PROJECT NO:	513-779.01	FIGURE:
DATE:	JUNE, 1991	3

TABLE 1A

ANALYTICAL LABORATORY REPORT FOR SOIL SAMPLES

Sample Number	EPA Method 8015(a) Gasoline	Diesel
SB6-1-4.5	56	220
SB14-2-4.5	490	530
SB15-3-4.5	220	370
SB16-4-4.5	ND<10(b)	94

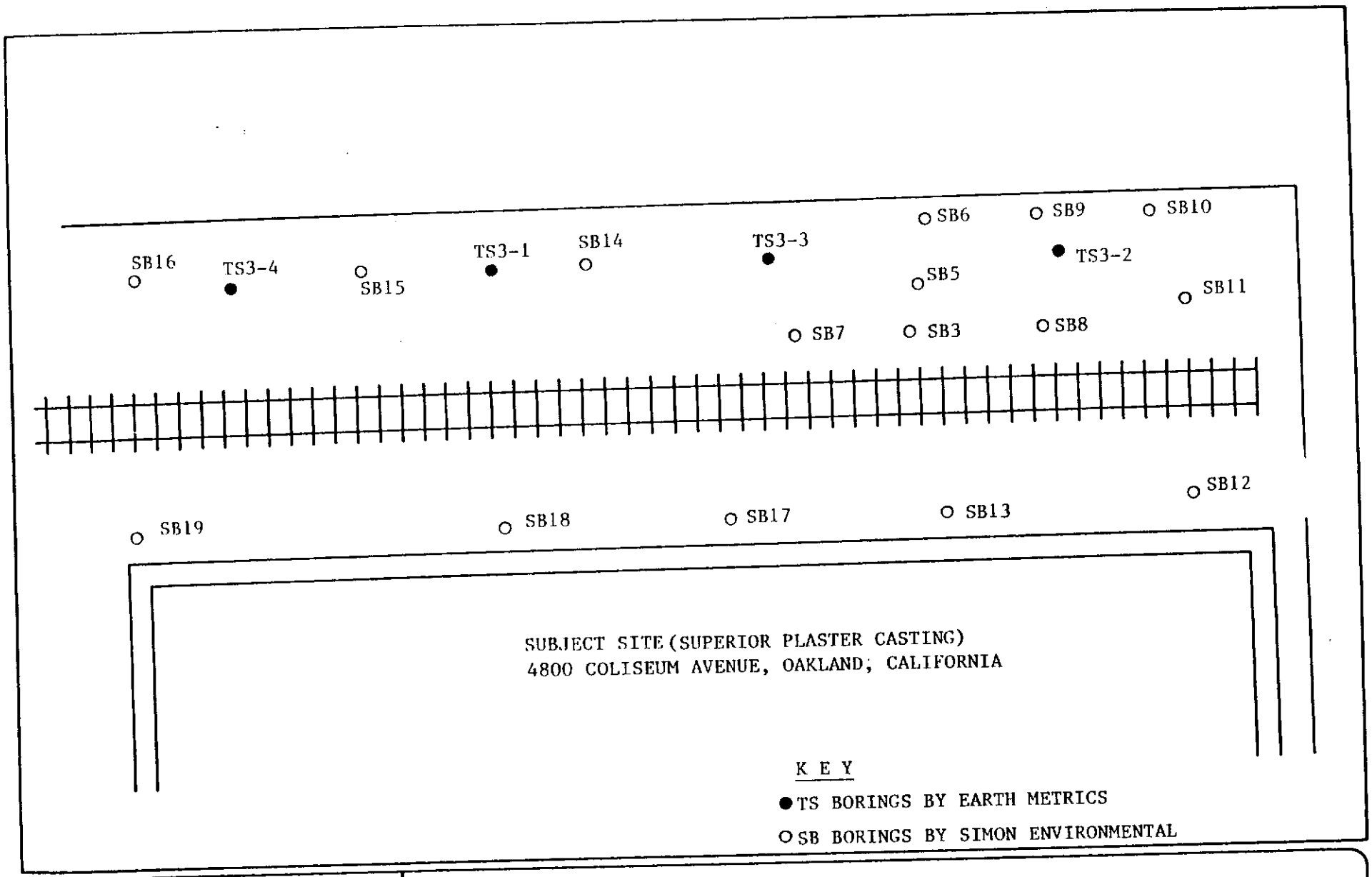
(a) Measured in parts per million (ppm)
(b) ND = Not Detected @ level shown

TABLE 1B

ANALYTICAL LABORATORY REPORT FOR SOIL SAMPLES

Sample Number	EPA 418.1(a) Total Petroleum Hydrocarbons
SB11-5-5.5	6200
SB12-6-5.5	2800
SB13-7-5.5	ND<50(b)
SB17-8-5.0	ND<50
SB18-9-5.5	2500
SB19-10-5.5	ND<50

(a) Measured in parts per million (ppm)
(b) ND = Not Detected @ level shown



earth metrics

N

SCALE
NOT TO SCALE

FIGURE 1. SOIL BORING LOCATION MAP

integrity. All soil samples were collected in six-inch long brass liners and capped with aluminum, plastic caps, and tape. Immediately after sample collection, the soil samples were placed in a refrigerated ice chest. The chain of custody and the laboratory results are presented in Appendix A.

Test Results. Soil samples were analyzed by Sequoia Analytical using EPA-approved methods. Figure 1 shows the locations at which the samples were collected, while Table 1 presents the laboratory results. Samples TS3-1, TS3-2, and TS3-3 were all tested for the presence of lead and arsenic, as these heavy metals were reported in the previous Phase II assessment (Simon Environmental Engineering, 1991). The maximum detected concentration of lead in Earth Metrics three soil samples was 210 ppm in Sample TS3-2. The maximum concentration of arsenic detected in the three samples tested was 16 ppm. In comparison the California Total Threshold Limit Concentrations (TTLCs) are 1,000 ppm for lead and 500 ppm for arsenic.

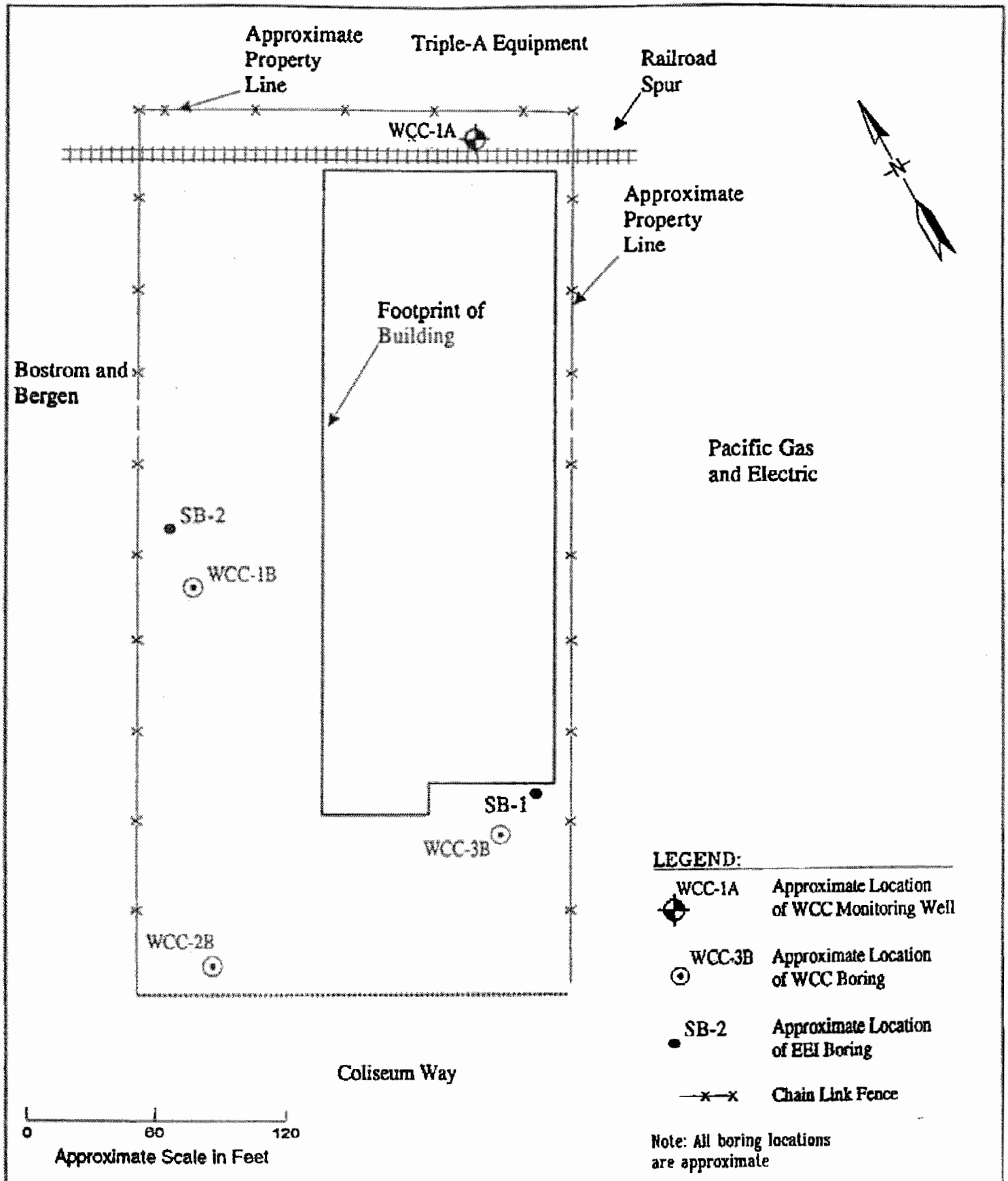
Soil sample TS3-2 was also tested for the presence of BTEX. Ethylbenzene was found at a concentration of 0.05 ppm and xylene was detected at a

TABLE 1. LABORATORY RESULTS OF SOIL SAMPLES COLLECTED AT 4800 COLISEUM AVENUE, OAKLAND

SAMPLE	TS3-1	TS3-2	TS3-3	TS3-4
Arsenic (ppm)	16	14	11	--
Lead (ppm)	140	210	78	--
low-med BP (ppm)		29		
Total Petroleum Oil and Grease (ppm) EPA 5520 E&F	--	--	--	29,000
Benzene (ppm) EPA 8020	--	ND (0.015)	--	--
Toluene (ppm) EPA 8020	--	ND (0.015)	--	--
Ethylbenzene (ppm) EPA 8020	--	0.05	--	--
Xylene (ppm) EPA 8020	--	0.12	--	--

ND: results below detection limit stated in parentheses.
--: sample not tested for this parameter
ppm: parts per million

Source: Earth Metrics, Sequoia Analytical, 1992.



Project No. 92C-0480R 02/25/93	Superior Plaster Castings, Inc. 4800 Coliseum Way Oakland, California	SITE AND BORING LOCATION PLAN	Figure 2

Woodward-Clyde Consultants

Table 1
Summary Soil Analytical Results
TPH as Gasoline, BTEX, Diesel, Oil and Grease, and HVOC

Sample ID	Approx. Depth, ft	TPH-g (a) EPA Method 8015, mg/kg (e)	BTEX (b) EPA Method 8020, mg/kg	TPH-d (c) EPA Method 8015, mg/kg	Oil and Grease EPA Method 5520EF, mg/kg	HVOC (d) EPA Method 8010, ug/kg (f)
WCC-1A	6	<0.5	Benzene <0.005 Toluene <0.005 Ethylbenzene <0.005 Xylenes <0.005	<10	40	1,3-Dichlorobenzene (2.0) 1,4-Dichlorobenzene(4.8)
	10.5	<0.5	Benzene <0.005 Toluene <0.005 Ethylbenzene <0.005 Xylenes 0.007	<10	47	None detected
WCC-1B	5	<0.5	Benzene <0.005 Toluene <0.005 Ethylbenzene <0.005 Xylenes <0.005	<10	Not Analyzed	None detected

(a) Total Petroleum Hydrocarbons as Gasoline
(b) Benzene, Toluene, Ethylbenzene, and Total Xylenes
(c) Total Petroleum Hydrocarbons as Diesel
(d) Halogenated Volatile Organic Compounds
(e) Concentrations in milligrams per kilogram (mg/kg)
(f) Concentrations in micrograms per kilogram (ug/kg)

Table 2
Summary Soil Analytical Results
RCRA Metals - Total Concentrations

		Metals, EPA 6000 & 7000, milligrams per kilogram (mg/kg)							
Sample ID	Depth, ft.	Silver (Ag)	Arsenic (As)	Barium (Ba)	Cadmium (Cd)	Total Chromium (Cr)	Mercury (Hg)	Lead (Pb)	Selenium (Se)
WCC-1A	6	<1.2	<5.0	160	<0.62	47.2	0.34	6.5	<2.5
	10.5	<1.2	6.3	176	<0.62	72.2	0.14	6.3	<2.5
WCC-1B	5	<1.2	6.2	221	<0.62	44.5	0.10	15.5	<2.5
WCC-2B	6.5	<1.2	4.3	62.5	<0.62	45.1	0.15	<5.0	<2.5
WCC-3B	5.5	<1.2	2.2	167	<0.62	31.8	<0.10	<5.0	<2.5
TTLC (a)		500	500	10,000	100	2,500 (Cr III [b])	20	1,000	100

(a) Total Threshold Limit Concentration

(b) Chromium III (most common isotope)

Table 3

Summary Water Analytical Results

TPH as Gasoline, BTEX, Diesel, Oil and Grease, HVOC, and RCRA Metals

Sample ID	TPH-g (a) EPA Method 8015, ug/L (e)	BTEX (b) EPA Method 8020, ug/L	TPH-d (c) EPA Method 8015, ug/L	Oil and Grease EPA Method 5520 , mg/L (f)	HVOC (d) EPA Method 601, ug/l	RCRA Metals EPA 6000 & 7000, ug/L
WCC-1A	4000 (g)	Xylenes (11)	7,300 (h)	12	Chlorobenzene (270) 1, 3-DCB (1,400; AL=130)(i) 1, 4-DCB (1,500; MCL=5)(j) 1, 2-DCB (290; AL=130)	Arsenic (24.1; MCL=50) Barium (226; MCL=1,000)
WCC-1A D	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Chlorobenzene (260) 1, 3-Dichlorobenzene (1,300) 1, 4-Dichlorobenzene (1,400) 1, 2-Dichlorobenzene (270)	Not Analyzed

(a) Total Petroleum Hydrocarbons as Gasoline

(b) Benzene, Toluene, Ethylbenzene, and Total Xylenes

(c) Total Petroleum Hydrocarbons as Diesel

(d) Halogenated Volatile Organic Compounds

(e) Concentrations reported in micrograms per liter (ug/L)

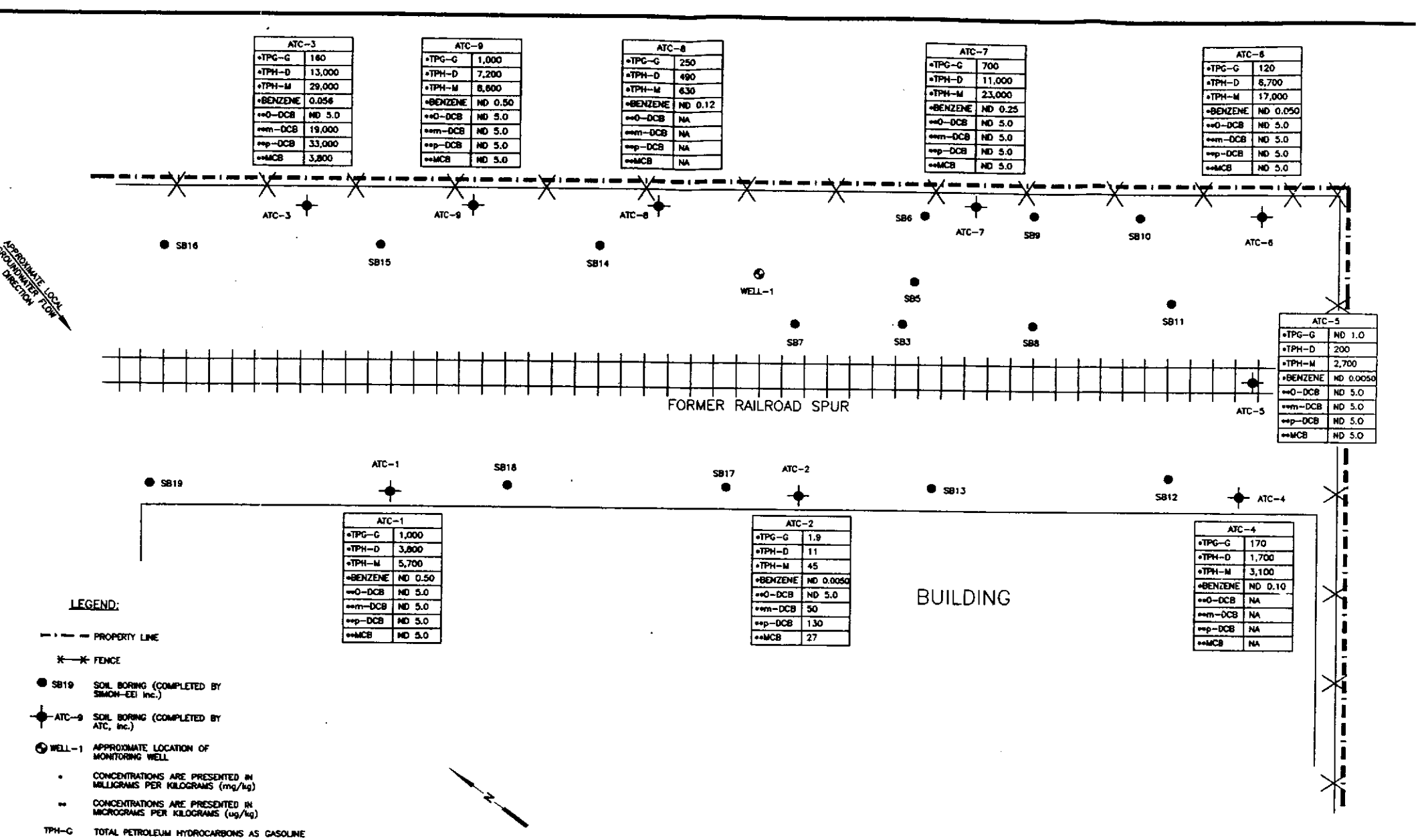
(f) Concentrations reported in milligrams per liter (mg/L)

(g) Laboratory reported that peaks reported as gasoline were primarily unidentified dichlorobenzene isomers. Laboratory could not identify specific isomers, because their instrument was not properly calibrated.

(h) Laboratory reported that peaks identified as diesel fuel were primarily a heavier petroleum prioduct, probably hydraulic or motor oil.

(i) AL indicates California Action Level

(j) MCL indicates California Maximum Contaminant Level



LEGEND:

- PROPERTY LINE
- FENCE
- SB19 — SOIL BORING (COMPLETED BY SIMON-EEI Inc.)
- ATC-9 — SOIL BORING (COMPLETED BY ATC, Inc.)
- WELL-1 — APPROXIMATE LOCATION OF MONITORING WELL
- • — CONCENTRATIONS ARE PRESENTED IN MILLIGRAMS PER KILOGRAMS (mg/kg)
- •• — CONCENTRATIONS ARE PRESENTED IN MICROGRAMS PER KILOGRAMS (ug/kg)

TPH-G	TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
TPH-D	TOTAL PETROLEUM HYDROCARBONS AS DIESEL
TPH-M	TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL
O-DCB	1,2-DICHLOROBENZENE
m-DCB	1,3-DICHLOROBENZENE
p-DCB	1,4-DICHLOROBENZENE
MCB	CHLOROBENZENE
NA	CONSTITUENT NOT ANALYZED

NOT TO SCALE

METALCAST ENGINEERING
4800 COLISEUM WAY
OAKLAND, CALIFORNIA

SITE PLAN SHOWING
SELECTED ANALYTES IN SOIL
(OCTOBER 8, 1998)

PROJECT #: 89775.0030

NOVEMBER 1998

FIGURE 4

TABLE 1

SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS FOR ORGANIC CONSTITUENTS METALCAST OAKLAND, CALIFORNIA

Sample ID	Sample Date	TPH-G (mg/kg	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	MTBE (mg/kg)	Detected HVOCs (EPA 8010)				TPH-M (mg/kg)	TPH-D (mg/kg)
								MCB (ug/kg)	o-DCB (ug/kg)	m-DCB (ug/kg)	p-DCB (ug/kg)		
ATC-1-4ft	10/08/98	1,000	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 2.5	ND 5.0	ND 5.0	ND 5.0	ND 5.0	5,700	3,800
ATC-2-4ft	10/08/98	1.9	ND 0.0050	ND 0.0050	ND 0.0050	0.0082	ND 0.025	27	ND 5.0	50	130	45	11
ATC-3-3ft	10/08/98	160	0.056	ND 0.050	ND 0.050	0.12	ND 0.25	3,800	ND 5.0	19,000	33,000	29,000	13,000
ATC-4-4ft	10/08/98	170	ND 0.10	ND 0.10	ND 0.10	ND 0.10	ND 0.50	NA	NA	NA	NA	3,100	1,700
ATC-5-3.5ft	10/08/98	ND 1.0	ND 0.0050	ND 0.0050	ND 0.0050	ND 0.0050	ND 0.025	ND 5.0	ND 5.0	ND 5.0	ND 5.0	2,700	200
ATC-6-1ft	10/08/98	120	ND 0.050	0.22	0.18	0.78	ND 0.25	ND 5.0	ND 5.0	ND 5.0	ND 5.0	17,000	6,700
ATC-7-4ft	10/08/98	700	ND 0.25	ND 0.25	ND 0.25	ND 0.25	ND 1.2	ND 5.0	ND 5.0	ND 5.0	ND 5.0	23,000	11,000
ATC-8-4ft	10/08/98	250	ND 0.12	ND 0.12	ND 0.12	ND 0.12	ND 0.62	NA	NA	NA	NA	630	490
ATC-9-4ft	10/08/98	1,000	ND 0.50	ND 0.50	ND 0.50	ND 0.50	ND 2.5	ND 5.0	ND 5.0	ND 5.0	ND 5.0	8,600	7,200

Notes:

TPH-G denotes total petroleum hydrocarbons as gasoline
TPH-D denotes total petroleum hydrocarbons as diesel
TPH-M denotes total petroleum hydrocarbons as motor oil
MCB denotes chlorobenzene
o-DCB denotes 1,2-dichlorobenzene
m-DCB denotes 1,3-dichlorobenzene
p-DCB denotes 1,4-dichlorobenzene
MTBE denotes methyl tert-butyl ether
ug/kg denotes micrograms per kilogram
mg/kg denotes milligrams per kilogram
ND denotes not detected above listed detection limit
NA denotes not analyzed
1,1-Dichlorethane (2,400 ug/kg) was detected in soil sample ATC-3-3ft.

TABLE 2

SUMMARY OF SOIL SAMPLE ANAYLTICAL RESULTS FOR INORGANIC CONSTITUENTS METALCAST OAKLAND, CALIFORNIA

Sample ID	Sample Date	As (mg/kg)	Ag (mg/kg)	Ba (mg/kg)	Cd (mg/kg)	Cr (mg/kg)	Hg (mg/kg)	Pb (mg/kg)	Se (mg/kg)
TTLC		500	500	10,000	100	500	20	1000	100
ATC-1-4ft	10/08/98	6.6	ND 0.50	320	ND 0.50	50	0.073	13	ND 5.0
ATC-2-4ft	10/08/98	14	ND 0.50	270	0.68	36	0.12	150	ND 5.0
ATC-3-3ft	10/08/98	12	ND 0.50	1,000	0.65	30	0.16	250	ND 5.0
ATC-5-3.5ft	10/08/98	ND 5.0	ND 0.50	35	ND 0.50	15	ND 0.050	ND 5.0	ND 5.0
ATC-6-1ft	10/08/98	ND 5.0	ND 0.50	61	0.86	11	ND 0.050	13	ND 5.0
ATC-7-4ft	10/08/98	ND 5.0	ND 0.50	120	ND 0.50	22	0.055	35	ND 5.0
ATC-9-4ft	10/08/98	ND 5.0	ND 0.50	160	ND 0.50	35	0.054	7.4	ND 5.0

Notes:

TTLC denotes Total Threshold Limit Concentration

Metals symbols taken from the Periodic Table of Elements:

As = Arsenic, Ag = Silver, Ba = Barium, Cd = Cadmium, Cr = Chromium,

Hg = Mercury, Pb = Lead, Se = Selenium

mg/kg denotes milligrams per kilogram

ND denotes not detected above listed detection limit

TABLE 3

SUMMARY OF GROUNDWATER SAMPLE ANALYTICAL RESULTS FOR ORGANIC CONSTITUENTS METALCAST OAKLAND, CALIFORNIA

Sample ID	Sample Date	TPH-G (ug/l)	TPH-D (ug/l)	TPH-M (ug/l)	Benzene (ug/l)	Toluene (ug/l)	Ethyl-benzene (ug/l)	Total Xylenes (ug/l)	MTBE (ug/l)	Detected HVOCs (EPA 8010)			
										MCB (ug/l)	o-DCB (ug/l)	m-DCB (ug/l)	p-DCB (ug/l)
Primary MCLs		-	-	-	1	1000	680	1750	-	70	600	130*	5
ATC-1	10/08/98	1,400	19,000	18,000	5.3	ND 5.0	7.5	ND 5.0	ND 25	370	32	370	450
ATC-2	10/08/98	980	1,500	2,300	2.3	ND 2.5	1.4	1.4	ND 12	92	32	590	970
ATC-3	10/08/98	440	6,700	16,000	ND 2.5	ND 2.5	ND 2.5	ND 2.5	ND 12	ND 50	ND 50	120	250
ATC-4	10/08/98	950	1,400	1,200	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 25	NA	NA	NA	NA
ATC-5	10/08/98	270	20,000	65,000	1.8	9.4	1.7	7.0	ND 25	16	3.3	27	42
ATC-7	10/08/98	1,900	2,200	ND 2,000	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 25	210	54	730	1,000
ATC-8	10/08/98	360	15,000	14,000	ND 2.5	ND 2.5	3.5	11	ND 12	NA	NA	NA	NA
ATC-9	10/08/98	3,000	9,300	15,000	ND 10	ND 10	ND 10	ND 10	ND 50	33	190	440	380
WELL-1	10/08/98	2,300	1,700	1,600	4.3	ND 5.0	1.3	2.4	ND 25	220	56	900	1,500

Notes:
Primary MCLs (Maximum Contaminant Levels) from California Dept.of Health Services; if none exist, USEPA levels are listed
TPH-G denotes total petroleum hydrocarbons as gasoline
TPH-D denotes total petroleum hydrocarbons as diesel
TPH-M denotes total petroleum hydrocarbons as motor oil
MTBE denotes methyl tert-butyl ether
MCB denotes chlorobenzene
o-DCB denotes 1,2-dichlorobenzene
m-DCB denotes 1,3-dichlorobenzene
p-DCB denotes 1,4-dichlorobenzene
ug/l denotes micrograms per liter
NA denotes not analyzed
ND denotes not detected above listed detection limit
* State action level for m-DCB is 130 ug/l

TABLE 4

SUMMARY OF GROUNDWATER SAMPLE ANAYLTICAL RESULTS FOR INORGANIC CONSTITUENTS METALCAST OAKLAND, CALIFORNIA

Sample ID	Sample Date	As (mg/l)	Ag (mg/l)	Ba (mg/l)	Cd (mg/l)	Cr (mg/l)	Hg (mg/l)	Pb (mg/l)	Se (mg/l)
Primary MCL		0.050	0.050	1.000	0.010	0.050	0.002	0.050	0.010
ATC-1	10/08/98	ND 0.10	ND 0.010	0.23	ND 0.010	ND 0.010	ND 0.00020	ND 0.10	ND 0.10
ATC-2	10/08/98	ND 0.10	ND 0.010	0.23	ND 0.010	0.014	ND 0.00020	ND 0.10	ND 0.10
ATC-3	10/08/98	ND 0.10	ND 0.010	0.26	ND 0.010	0.010	ND 0.00020	ND 0.10	ND 0.10
ATC-5	10/08/98	ND 0.10	ND 0.010	0.25	ND 0.010	0.033	0.00041	ND 0.10	ND 0.10
ATC-7	10/08/98	ND 0.10	ND 0.010	0.19	ND 0.010	0.013	ND 0.00020	ND 0.10	ND 0.10
ATC-9	10/08/98	ND 0.10	ND 0.010	0.39	ND 0.010	ND 0.010	ND 0.00020	ND 0.10	ND 0.10
WELL-1	10/08/98	ND 0.10	ND 0.010	0.20	ND 0.010	ND 0.010	ND 0.00020	ND 0.10	ND 0.10

Notes:

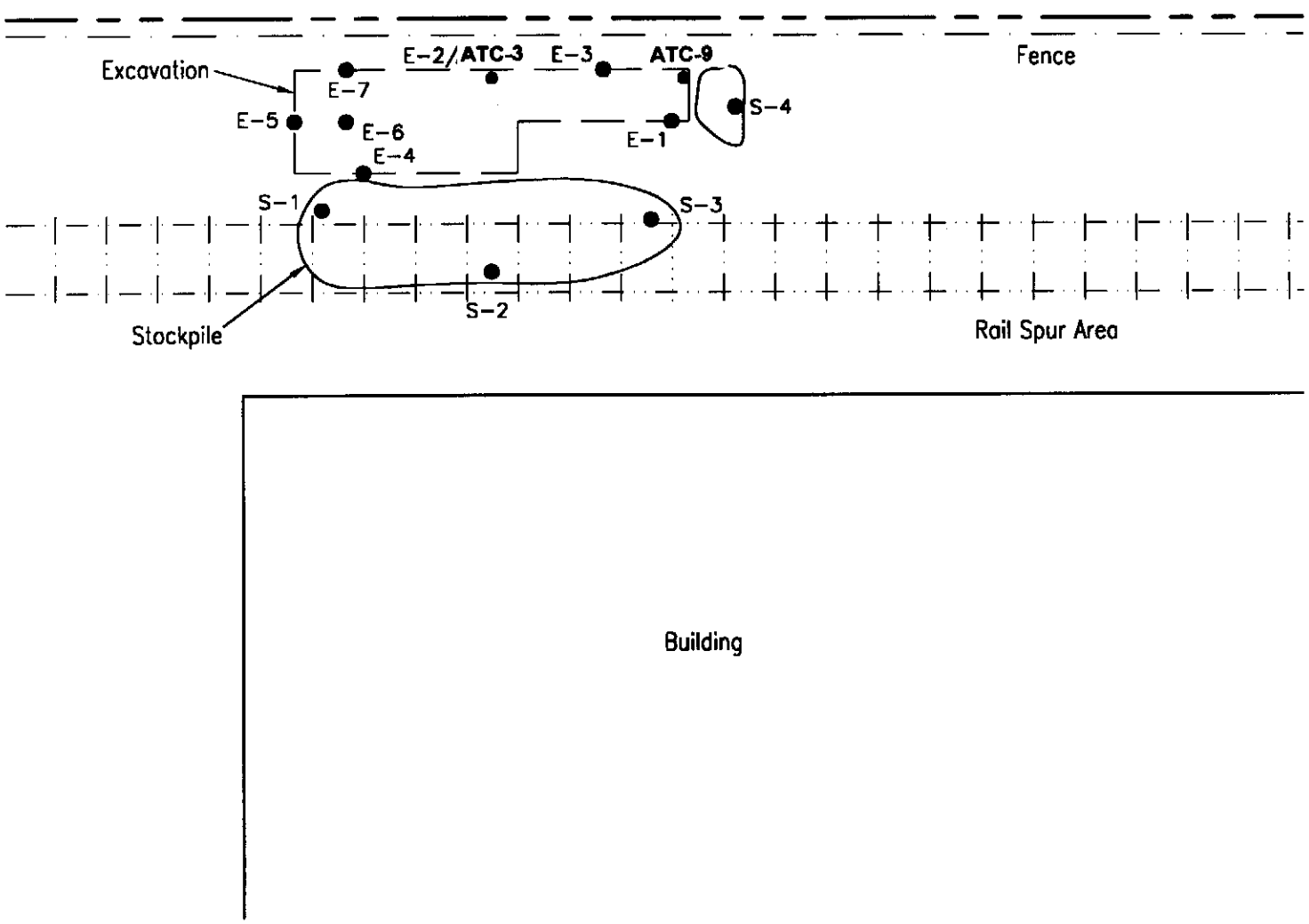
Primary MCLs (Maximum Contaminant Levels) from California Dept.of Health Services; if none exist, USEPA levels are listed

Metals symbols taken from the Periodic Table of Elements:

As = Arsenic, Ag = Silver, Ba = Barium, Cd = Cadmium, Cr = Chromium, Hg = Mercury, Ni = Nickel, Pb = Lead, Se = Selenium

mg/l denotes milligrams per liter

ND denotes not detected above listed detection limit



EXPLANATION

E-1 ● **Soil sample** (ERAS Env.)

ATC-3 ● **Soil boring** (ATC)

E Excavation sample

S Stockpile sample

0 10

Scale in Feet

SAMPLE LOCATION MAP **FIGURE 3**

Project No. 00047A
4800 Coliseum Way
Oakland, California

June, 2000
Not to Scale

ERAS Environmental

APPENDIX F

BORINGS LOGS FOR 4800 COLISEUM WAY

BORING: SB-5			FILE NAME: SB5
PROJECT NAME: Superior Plaster Casting			PROJECT NO.513-779.01
LOCATION/COORDINATES:			RIG TYPE:Portable Aug
SCHEDULE		WATER LEVEL	SAMPLING METHOD:
INITIATED: 6-03-91		DEPTH: 5.0'	DRILLING CO: Simon-EEI
COMPLETED: 6-03-91		DATE: 6-03-91	DRILLED BY: Dahlstedt
BACKFILLED: 6-03-91		TIME: 5:00 pm	LOGGED BY: J. Whitney
GROUND ELEVATION: NA		BORING DEPTH: 9.0'	SHEET 1 OF 1

DEPTH IN FEET	SAMPLE NUMBER	DEPTH	TYPE	BLOWS	OVM ppm	USCS	SYMBOL	SOIL DESCRIPTION	REMARKS
0	No Samples Taken				1.0	SM		SILTY SAND/FILL: Dark brown-gray; little to some silt; little fine to coarse gravel; trace rubble; trace metal fragments; moist; slight odor	
					6.7				
					7.1	CL		CLAY: Dark gray; trace silt; trace tarry material @ interface w/ silty sand fill; moist; slight odor	
					3.2				
5					2.5				
					1.1			@5' slight hydrocarbon odor	
								@6' medium gray; trace fine to medium sand; very moist to wet; slight hydrocarbon odor	
					0.5				
10									
15									
20									

SIMON-EEI Inc.

BORING: SB-6	**FILE NAME:** SB6
PROJECT NAME: Superior Plaster Casting	**PROJECT NO.** 513-779.01
LOCATION/COORDINATES:	**RIG TYPE:** Portable Aug
SCHEDULE	**WATER LEVEL**
INITIATED: 6-04-91	**DEPTH:** NA
COMPLETED: 6-04-91	**DATE:** NA
BACKFILLED: 6-04-91	**TIME:** NA
GROUND ELEVATION: NA	**BORING DEPTH:** 4.5′
SAMPLING METHOD:	
DRILLING CO: Simon-EEI	
DRILLED BY: Dahlstedt	
LOGGED BY: J. Whitney	
SHEET 1 **OF** 1	

DEPTH IN FEET	SAMPLE NUMBER	DEPTH	TYPE	BLOWS	OVM ppm	USCS	SYMBOL	SOIL DESCRIPTION	REMARKS
0						SM		SILTY SAND/FILL: Medium brown; very fine to medium; trace coarse sand to fine subangular gravel; little to some silt; trace tarry fragments	
					1.9			@2′ dark gray-brown; trace clay; little tarry material interspersed; dry to slightly moist; no to slight hydrocarbon odor	
					15.1			@2.5′ some tarry material; moderate hydrocarbon odor	
					6.0	CL		CLAY: Dark gray; trace fine sand; slight hydrocarbon odor; moist	
	SB6-1-4.5				4.7			@3.5′ very moist to wet	
5								@4.0′ wet	
10									
15									
20									

SIMON-EEI Inc.

BORING: SB-7	**FILE NAME:** SB7
PROJECT NAME: Superior Plaster Casting	**PROJECT NO.** 513-779.01
LOCATION/COORDINATES:	**RIG TYPE:** Portable Aug
SCHEDULE	**WATER LEVEL**
INITIATED: 6-04-91	**DEPTH:** 1.0'
COMPLETED: 6-04-91	**DATE:** 6-04-91
BACKFILLED: 6-04-91	**TIME:** NA
GROUND ELEVATION: NA	**BORING DEPTH:** 1.5'
SAMPLING METHOD:	
DRILLING CO: Simon-EEI	
DRILLED BY: Dahlstedt	
LOGGED BY: J. Whitney	
SHEET 1 **OF** 1	

DEPTH IN FEET	SAMPLE NUMBER	DEPTH	TYPE	BLOWS	OVM ppm	USCS	SYMBOL	SOIL DESCRIPTION	REMARKS
0	No Samples Taken				0	GP		SANDY GRAVEL/FILL: Medium brown to dark gray downward; coarse to fine; little coarse to fine sand; sub-angular; water @1.0'	Unable to penetrate below 1.5'
5									
10									
15									
20									

SIMON-EEI Inc.

BORING: SB-8	**FILE NAME:** SB8
PROJECT NAME: Superior Plaster Casting	**PROJECT NO.** 513-779.01
LOCATION/COORDINATES:	**RIG TYPE:** Portable Aug
SCHEDULE	**WATER LEVEL**
INITIATED: 6-04-91	**DEPTH:** NA
COMPLETED: 6-04-91	**DATE:** NA
BACKFILLED: 6-04-91	**TIME:** NA
GROUND ELEVATION: NA	**BORING DEPTH:** 2.5′
SAMPLING METHOD:	
DRILLING CO: Simon-EEI	
DRILLED BY: Dahlstedt	
LOGGED BY: J. Whitney	
SHEET 1 **OF** 1	

DEPTH IN FEET	SAMPLE DATA: SAMPLE NUMBER	SAMPLE DATA: DEPTH	SAMPLE DATA: TYPE	SAMPLE DATA: BLOWS	SAMPLE DATA: OVM ppm	SOIL TYPE: USCS	SOIL TYPE: SYMBOL	SOIL DESCRIPTION	REMARKS
0	No Samples Taken				0	SP		GRAVELLY SAND/FILL: Medium brown to dark gray-brown; fine to coarse; little subangular, fine gravel; trace silt; dry to moist	Unable to penetrate below 2.5′
					0	SM		SILTY SAND: Dark gray; little silt; trace fine gravel; slight to moderate hydrocarbon odor; very moist @1.5′ asphaltic layer; soft @2.0′ moderate hydrocarbon odor @2.5′ resistant layer	
5									
10									
15									
20									

SIMON-EEI Inc.

BORING: SB-9			**FILE NAME:** SB9
PROJECT NAME: Superior Plaster Casting			**PROJECT NO.**513-779.01
LOCATION/COORDINATES:			**RIG TYPE:**Portable Aug
SCHEDULE	**WATER LEVEL**		**SAMPLING METHOD:**
INITIATED: 6-04-91	**DEPTH:** NA		**DRILLING CO:** Simon-EEI
COMPLETED: 6-04-91	**DATE:** NA		**DRILLED BY:** Dahlstedt
BACKFILLED: 6-04-91	**TIME:** NA		**LOGGED BY:** J. Whitney
GROUND ELEVATION: NA	**BORING DEPTH:** 2.0'		**SHEET** 1 **OF** 1

DEPTH IN FEET	SAMPLE NUMBER	DEPTH	TYPE	BLOWS	OVM ppm	USCS	SYMBOL	SOIL DESCRIPTION	REMARKS
0	No Samples Taken				0	SM		ASPHALTIC LAYER SILTY SAND/FILL: Dark brown; fine to medium; little silt; trace fine to coarse gravel; slightly moist	Unable to penetrate below 2.0'
5									
10									
15									
20									

SIMON-EEI Inc.

BORING: SB-10	**FILE NAME:** SB10
PROJECT NAME: Superior Plaster Casting	**PROJECT NO.** 513-779.01
LOCATION/COORDINATES:	**RIG TYPE:** Portable Aug
SCHEDULE	**WATER LEVEL**
INITIATED: 6-04-91	**DEPTH:** NA
COMPLETED: 6-04-91	**DATE:** NA
BACKFILLED: 6-04-91	**TIME:** NA
GROUND ELEVATION: NA	**BORING DEPTH:** 1.5′
SAMPLING METHOD:	
DRILLING CO: Simon-EEI	
DRILLED BY: Dahlstedt	
LOGGED BY: J. Whitney	
SHEET 1 **OF** 1	

DEPTH IN FEET	SAMPLE DATA: SAMPLE NUMBER	DEPTH	TYPE	BLOWS	OVM ppm	SOIL TYPE: USCS	SYMBOL	SOIL DESCRIPTION	REMARKS
0	No Samples Taken					SM		SILTY SAND/FILL: Dark brown; fine to coarse; little silt; trace gravel; slightly moist	Unable to penetrate below 1.5′
5									
10									
15									
20									

SIMON-EEI Inc.

BORING: SB-11	**FILE NAME:** SB11
PROJECT NAME: Superior Plaster Casting	**PROJECT NO.** 513-779.01
LOCATION/COORDINATES:	**RIG TYPE:** Mobile B-53
SCHEDULE	**WATER LEVEL**	**SAMPLING METHOD:** CS
INITIATED: 6-14-91	**DEPTH:** NA	**DRILLING CO:** Kvilhaug Drilling
COMPLETED: 6-14-91	**DATE:** NA	**DRILLED BY:** Crocker
BACKFILLED: 6-14-91	**TIME:** NA	**LOGGED BY:** J. Whitney
GROUND ELEVATION: NA	**BORING DEPTH:** 5.5'	**SHEET** 1 OF 1

DEPTH IN FEET	SAMPLE NUMBER	DEPTH	TYPE	BLOWS	OVM ppm	USCS	SYMBOL	SOIL DESCRIPTION	REMARKS
0					7.1	GP		GRAVEL/FILL: Medium gray; fine to coarse; moist to wet	Perched water @ 1.0'
						SP		GRAVELLY SAND/FILL: Dark gray; fine to coarse; little fine gravel; slight hydrocarbon odor; wet to moist	
					70.0	CL		CLAY: Dark gray-brown; moderate hydrocarbon odor	
5	SB11-5-5.5			20	128.0			@5.5' medium green-gray; and sand; moderate light hydrocarbon odor; possible free hydrocarbon on fracture planes; very moist	
10									
15									
20									

SIMON-EEI Inc.

BORING: SB-12	**FILE NAME:** SB12
PROJECT NAME: Superior Plaster Casting	**PROJECT NO.** 513-779.01
LOCATION/COORDINATES:	**RIG TYPE:** Mobile B-53
SCHEDULE	**WATER LEVEL**
INITIATED: 6-14-91	**DEPTH:** NA
COMPLETED: 6-14-91	**DATE:** NA
BACKFILLED: 6-14-91	**TIME:** NA
GROUND ELEVATION: NA	**BORING DEPTH:** 5.5'
SAMPLING METHOD: CS	
DRILLING CO: Kvilhaug Drilling	
DRILLED BY: Crocker	
LOGGED BY: J. Whitney	
SHEET 1 **OF** 1	

DEPTH IN FEET	SAMPLE NUMBER	SAMPLE DEPTH	SAMPLE TYPE	BLOWS	OVM ppm	USCS	SYMBOL	SOIL DESCRIPTION	REMARKS
0					4.7	GP		SANDY GRAVEL/FILL: Medium gray; little fine to coarse sand; moist	
					12.0	CL		CLAY: Medium to dark gray; slight hydrocarbon odor; moist	
5	SB12-6-5.5			18	17.1	SC		CLAYEY SAND: Dark gray to medium gray mottled; very moist	
10									
15									
20									

SIMON-EEI Inc.

BORING: SB-13	**FILE NAME:** SB13
PROJECT NAME: Superior Plaster Casting	**PROJECT NO.** 513-779.01
LOCATION/COORDINATES:	**RIG TYPE:** Mobile B-53
SCHEDULE	**WATER LEVEL**
INITIATED: 6-14-91	**DEPTH:** NA
COMPLETED: 6-14-91	**DATE:** NA
BACKFILLED: 6-14-91	**TIME:** NA
GROUND ELEVATION: NA	**BORING DEPTH:** 5.5′
SAMPLING METHOD: CS	
DRILLING CO: Kvilhaug Drilling	
DRILLED BY: Crocker	
LOGGED BY: J. Whitney	
SHEET 1 **OF** 1	

DEPTH IN FEET	SAMPLE NUMBER	DEPTH	TYPE	BLOWS	OVM ppm	USCS	SYMBOL	SOIL DESCRIPTION	REMARKS
0					19.7	GP		SANDY GRAVEL/FILL: Medium brown; fine; subrounded to subangular; fine to coarse sand; trace free hydrocarbon; moist to wet	Perched water @ 1.5′
					10.0	CL		SANDY CLAY: Dark gray; little fine to coarse sand; trace free product droplets on wet outer surfaces of clay; moist to very moist	
5	SB13-7-5.5			20	3.8			@5.5′ medium-gray to green-gray mottled; no odor; no free hydrocarbon; very moist to wet	
10									
15									
20									

SIMON-EEI Inc.

BORING: SB-14	**FILE NAME:** SB14
PROJECT NAME: Superior Plaster Casting	**PROJECT NO.** 513-779.01
LOCATION/COORDINATES:	**RIG TYPE:** Portable Aug
SCHEDULE	**WATER LEVEL**	**SAMPLING METHOD:**
INITIATED: 6-04-91	**DEPTH:** NA	**DRILLING CO:** Simon-EEI
COMPLETED: 6-04-91	**DATE:** NA	**DRILLED BY:** Dahlstedt
BACKFILLED: 6-04-91	**TIME:** NA	**LOGGED BY:** J. Whitney
GROUND ELEVATION: NA	**BORING DEPTH:** 4.5'	**SHEET** 1 **OF** 1

DEPTH IN FEET	SAMPLE DATA: SAMPLE NUMBER	DEPTH	TYPE	BLOWS	OVM ppm	SOIL TYPE: USCS	SYMBOL	SOIL DESCRIPTION	REMARKS
0						SM		SILTY SAND/FILL: Medium brown; fine to medium; little to some silt; trace fine gravel; slightly moist	
					4.8			@1.0' dark gray-brown; fine to coarse; slight to heavy hydrocarbon odor	
					15.7	CL		CLAY: Dark gray; trace little silt; trace fine sand; moderate hydrocarbon odor; moist	
	SB14-2-4.5				36.0			@4.0' medium to dark mottled; moderate hydrocarbon odor	
5									
10									
15									
20									

SIMON-EEI Inc.

BORING: SB-15	**FILE NAME:** SB15
PROJECT NAME: Superior Plaster Casting	**PROJECT NO.** 513-779.01
LOCATION/COORDINATES:	**RIG TYPE:** Portable Aug
SCHEDULE	**WATER LEVEL**
INITIATED: 6-04-91	**DEPTH:** NA
COMPLETED: 6-04-91	**DATE:** NA
BACKFILLED: 6-04-91	**TIME:** NA
GROUND ELEVATION: NA	**BORING DEPTH:** 4.5′
SAMPLING METHOD:	
DRILLING CO: Simon-EEI	
DRILLED BY: Dahlstedt	
LOGGED BY: J. Whitney	
SHEET 1 **OF** 1	

DEPTH IN FEET	SAMPLE NUMBER	DEPTH	TYPE	BLOWS	OVM ppm	USCS	SYMBOL	SOIL DESCRIPTION	REMARKS
0						SM		SILTY SAND/FILL: Medium brown to drk brown; fine to medium; little to some silt; trace coarse sand to fine gravel; slight hydro-carbon odor; trace tarry fragments; slightly moist to moist	
					5.7				
					23.0				
	SB15-3-4.5				38.0	CL		SILTY CLAY: Dark gray w/trace medium gray mottling; little silt; moderate hydrocarbon odor; moist to very moist	
5									
10									
15									
20									

SIMON-EEI Inc.

BORING: SB-16	**FILE NAME:** SB16
PROJECT NAME: Superior Plaster Casting	**PROJECT NO.** 513-779.01
LOCATION/COORDINATES:	**RIG TYPE:** Portable Aug
SCHEDULE	**WATER LEVEL**
INITIATED: 6-04-91	**DEPTH:** NA
COMPLETED: 6-04-91	**DATE:** NA
BACKFILLED: 6-04-91	**TIME:** NA
GROUND ELEVATION: NA	**BORING DEPTH:** 4.5′
SAMPLING METHOD:	
DRILLING CO: Simon-EEI	
DRILLED BY: Dahlstedt	
LOGGED BY: J. Whitney	
SHEET 1 **OF** 1	

DEPTH IN FEET	SAMPLE NUMBER	DEPTH	TYPE	BLOWS	OVM ppm	USCS	SYMBOL	SOIL DESCRIPTION	REMARKS
0						SM		SILTY SAND/FILL: Medium brown to dark brown; fine to medium; little silt; trace fine gravel; moist	
					6.2				
					3.2	CL		SILTY CLAY: Dark gray; trace to little silt; slight hydrocarbon odor; moist to wet	
	SB16-4-4.5								
5									
10									
15									
20									

SIMON-EEI Inc.

BORING: SB-17	**FILE NAME:** SB17
PROJECT NAME: Superior Plaster Casting	**PROJECT NO.** 513-779.01
LOCATION/COORDINATES:	**RIG TYPE:** Mobile B-53
SCHEDULE	**WATER LEVEL**
INITIATED: 6-14-91	**DEPTH:** NA
COMPLETED: 6-14-91	**DATE:** NA
BACKFILLED: 6-14-91	**TIME:** NA
GROUND ELEVATION: NA	**BORING DEPTH:** 6.5'
SAMPLING METHOD: CS	
DRILLING CO: Kvilhaug Drilling	
DRILLED BY: Crocker	
LOGGED BY: J. Whitney	
SHEET 1 **OF** 1	

DEPTH IN FEET	SAMPLE NUMBER	DEPTH	TYPE	BLOWS	OVM ppm	USCS	SYMBOL	SOIL DESCRIPTION	REMARKS
0					16.7	SM		SILTY SAND/FILL: Medium brown to yellow-brown; fine to coarse, little silt; trace gravel; slightly moist	
					3.8	CL		SANDY CLAY: Dark gray; little sand; moist; no odor	
5	SB17-8-5.0			16	1.9			@5.0' medium gray to gray-green mottled; no odor; trace fine gravel; wet	
10									
15									
20									

SIMON-EEI Inc.

BORING: SB-18	**FILE NAME:** SB18
PROJECT NAME: Superior Plaster Casting	**PROJECT NO.** 513-779.01
LOCATION/COORDINATES:	**RIG TYPE:** Mobile B-53
SCHEDULE	**WATER LEVEL**
INITIATED: 6-14-91	**DEPTH:** NA
COMPLETED: 6-14-91	**DATE:** NA
BACKFILLED: 6-14-91	**TIME:** NA
GROUND ELEVATION: NA	**BORING DEPTH:** 5.5′
SAMPLING METHOD: CS	
DRILLING CO: Kvilhaug Drilling	
DRILLED BY: Crocker	
LOGGED BY: J. Whitney	
SHEET 1 OF 1	

DEPTH IN FEET	SAMPLE NUMBER	DEPTH	TYPE	BLOWS	OVM ppm	USCS	SYMBOL	SOIL DESCRIPTION	REMARKS
0					168.0	GP		SANDY GRAVEL/FILL: Medium brown; fine to coarse; fine to coarse sand; slightly moist to moist	
						CL		SANDY CLAY: Medium gray to dark gray; trace to little fine to coarse sand; slight hydrocarbon odor; moist to very moist	
5	SB18-9-5.5			17	19.0				
10									
15									
20									

SIMON-EEI Inc.

BORING: SB-19	**FILE NAME:** SB19
PROJECT NAME: Superior Plaster Casting	**PROJECT NO.** 513-779.01
LOCATION/COORDINATES:	**RIG TYPE:** Mobile B-53
SCHEDULE	**WATER LEVEL**
INITIATED: 6-14-91	**DEPTH:** NA
COMPLETED: 6-14-91	**DATE:** NA
BACKFILLED: 6-14-91	**TIME:** NA
GROUND ELEVATION: NA	**BORING DEPTH:** 5.5′
SAMPLING METHOD: CS	
DRILLING CO: Kvilhaug Drilling	
DRILLED BY: Crocker	
LOGGED BY: J. Whitney	
SHEET 1 **OF** 1	

DEPTH IN FEET	SAMPLE NUMBER	DEPTH	TYPE	BLOWS	OVM ppm	USCS	SYMBOL	SOIL DESCRIPTION	REMARKS
0						GP		GRAVEL/FILL: Dark brown; coarse; trace sand; moist	
					9.0				
						CL		SANDY CLAY: Medium gray to green-gray downward; little to some fine to coarse sand; trace fine to coarse gravel; moist to very moist	
					4.7				
5	SB19-10 -5.5			21	3.8				
10									
15									
20									

SIMON-EEI Inc.

3/86/83 JWLOGA 20480

Superior Plaster Castings Oakland, California

BORING LOCATION	East end of plant near railroad spur.		GROUND SURFACE ELEVATION: TOP OF WELL CASING ELEVATION: NA
DRILLING AGENCY	West Hazmat Drilling	DRILLER B. McCully	DATE STARTED: 12/8/92 DATE FINISHED: 12/8/92
DRILLING EQUIPMENT	Soilmaster		COMPLETION DEPTH (ft) 19.0
DRILLING METHOD	Hollow Stem Auger	DRILL BIT 8"	HAMMER
SIZE AND TYPE OF CASING	2" PVC		NUMBER OF SAMPLES BULK.: DRIVE.: 4
TYPE OF PERFORATION	0.010" Slotted	FROM 4 TO 19	WATER DEPTH FIRST: 7.1 COMPL.: 6.3 24 hrs.:
SIZE AND TYPE OF PACK	#2/12 Lonestar Sand	FROM 4 TO 19	LOGGED BY W. Dittman CHECKED BY C. Conway

TYPE OF SEAL	TYPE	FR	TO	TYPE	FR	TO
	No. 1: Neat Cement	0	3	No. 3:		
	No. 2: Bentonite Pellets	3	4	No. 4:		

LOG OF WELL WCC-1A

DEPTH (feet)	LITHOLOGIC DESCRIPTION	SOIL GRAPHIC	WELL GRAPHIC	Hnu, ppm	OVA, ppm	WATER LEVEL	DEPTH (feet)	SAMPLES NUMBER	SAMPLES TYPE	SAMPLES POCKET PEN, tsf	SAMPLES BLOWS/foot	INDEX PROPERTIES MOISTURE CONTENT (%)	INDEX PROPERTIES DRY DENSITY (pcf)	INDEX PROPERTIES UNCONFINED COMPRESSIVE STRENGTH (psf)	OTHER TESTS
0	1" AC over 4' of fill consisting of gravel, sand, and tar														No sample taken at 2' due to fill
5	SILTY CLAY (CL) Dark grayish brown (2.5Y 4/2), some fine to medium sand, low plasticity, stiff, damp						5	1			22				ND (FID)
10	CLAYEY SILT (ML) Yellowish brown (10YR 5/4), slight plasticity, very soft, moist						10	2			17				ND
	CLAYEY SAND (SW/GW) Yellowish brown (10YR 5/6), trace clays, medium dense, wet														
15	SILTY CLAY (CL) Yellowish brown (10YR 5/6), low plasticity, firm, moist						15	3			7				ND
	soft							4			3				ND
20	BOTTOM OF BORING AT 19 FEET						20								
25							25								
30							30								
35							35								
40															

Woodward-Clyde Consultants

PROJECT NO. 92C-0480-R FIGURE:

3/15/93 JGLOG 20480

Project: Superior Plaster Castings
Oakland, California

Log of Boring No. WCC-1B

Date Drilled: 12/7/92
Type of Boring:
Hammer: 140 lb.

Remarks:

Surface Elevation: feet

Depth, Feet	Samples	Blows/Ft	Graphic Log	MATERIAL DESCRIPTION	Moisture Content, %	Dry Density, pcf	Unconfined Compressive Strength, psf	Other Tests
				2" AC over 10" base sand				
				SILTY CLAY (CL) Dark gray brown (10YR 4/2), trace fine to medium sand, low plasticity, very stiff, moist, iron-oxide staining				
	1	16						FID = 400ppm
5				CLAYEY SAND (SC) Very dark gray (10YR 3/1), little clay, fine to coarse sand, moist to wet in places, trace organics				
				BOTTOM OF BORING AT 5 FEET				
10								
15								
20								
25								

Project: Superior Plaster Castings
Oakland, California

Log of Boring No. WCC-2B

Date Drilled: 12/7/92
Type of Boring:
Hammer: 140 lb.

Remarks:

Surface Elevation: feet

Depth, Feet	Samples	Blows/Ft	Graphic Log	MATERIAL DESCRIPTION	Moisture Content, %	Dry Density, pcf	Unconfined Compressive Strength, psf	Other Tests
				2" AC over 2" gravelly sand base				
				SILTY CLAY (CL) Very dark brown (10YR 3/2), low plasticity, stiff, moist				
	1	10						
5	2	16		CLAYEY SAND (SC) Dark brown (10YR 3/3), fine to medium sand, little clay, loose, moist				FID = 5ppm
				SILTY CLAY (CL) Dark grayish brown (10YR 3/3), medium plasticity, very stiff, damp				
				BOTTOM OF BORING AT 6 1/2 FEET				
10								
15								
20								
25								

3/15/93 JGLOG 20480

Project: Superior Plaster Castings
Oakland, California

Log of Boring No. WCC-3B

Date Drilled: 12/7/92
Type of Boring:
Hammer: 140 lb.

Remarks:

Surface Elevation: feet

Depth, Feet	Samples	Blows/Ft	Graphic Log	MATERIAL DESCRIPTION	Moisture Content, %	Dry Density, pcf	Unconfined Compressive Strength, psf	Other Tests
				3" AC over 10" fine sand base				
				SILTY CLAY (CL) Grayish green (5Y 4/1), medium plasticity, stiff, moist				
5	1	10		dark yellowish brown (10YR 4/4), wet				FID = 1 ppm Deepened borehole to 8' to verify water level. Dry to 8' ATD.
10				CLAYEY SAND (SC) Yellowish brown (10YR 5/6), fine to medium sand, little clay, saturated				Dry to 7' (caved) at approx. 11:00 am.
	2	NA		BOTTOM OF BORING AT 12 FEET				Redrilled to 12' to find water level. At 12:55 pm water level at 6.3' At 1:05 pm water level at 5.2' Groundwater appears to be confined.
15								
20								
25								

ATC Environmental, Inc.

BORING LOG

BORING NO: ATC-1
PROJECT NO: 89775.0030

PROJECT NAME: MetalCoat
CLIENT: Comerica Bank
PROJECT LOCATION: 4800 Coliseum Way, Oakland
DRILLING CONTRACTOR: Vironex
DRILLING MTHD: Geoprobe
SAMPLE MTHD: Geoprobe
DATE STARTED: Oct 8, 1998
DATE FINISHED: Oct 8, 1998
DRILLER: Scott/Brian
INSPECTOR: None

SURFACE ELEVATION: NA

DEPTH (FT)	SAMPLE	SPT BLOWS PER 18"	REC (%)	PID (ppm)	PROFILE	LITHOLOGIC DESCRIPTION	REMARKS
0.0							
	1		80			Clayey Gravel, GC, orange-brown, slightly moist, dense, no odor	
						Gravelly Clay, CL, black, slightly moist, slightly stiff, very plastic, med plasticity, tar at 3.3ft, strong petroleum odor	
5.0						Clay, CL, black, slightly moist, slightly stiff, med. plasticity, petroleum odor	Soil sample ATC-1-4FT collected at 15:30
	2		90			Gravelly Clay, CL, green, very moist to 6.5ft, wet from 6.5ft, stiff, high plasticity, some sand at 7ft, strong petroleum odor, oil/tar globules visible	Soil sample ATC-1-6FT collected at 16:05 & archived at lab
						Clay, CL, green/dark grey, wet, slightly stiff, high plasticity, strong odor	
10.0	3		100			Gravel, GC, grey-green, saturated, loose, slight sour odor	
						Clay, CL, light brown, very wet, stiff, high plasticity, orange discolorations, no odor	Water sample ATC-1 collected at 15:50
						Clayey/Sandy Gravel, GC, orange-brown, saturated, dense, no odor	
15.0							
20.0							
25.0							Geologist: Bahram Zanganeh-Azar
30.0							

BOTTOM OF TEST BORING: 12.00'

SPT = STANDARD PENETRATION TEST
REC = SAMPLE RECOVERY
ND = NON-DETECTABLE
FID = FLAME IONIZATION DETECTOR
PID = PHOTO-IONIZATION DETECTOR

ATC Environmental, Inc.

BORING LOG

BORING NO: ATC-2
PROJECT NO: 89775.0030

PROJECT NAME: MetalCoat
CLIENT: Comerica Bank
PROJECT LOCATION: 1800 Coliseum Way, Oakland
DRILLING CONTRACTOR: Vironex
DRILLING MTHD: Geoprobe
SAMPLE MTHD: Geoprobe
DATE STARTED: Oct 8, 1998 DATE FINISHED: Oct 8, 1998 DRILLER: Scott/Brian INSPECTOR: None

SURFACE ELEVATION: NA

DEPTH (FT)	SAMPLE	SPT BLOWS PER 18"	REC (%)	PID (ppm)	PROFILE	LITHOLOGIC DESCRIPTION	REMARKS
0.0	1		40			Backfill Gravel, GP, light grey, dry, loose. 3ft: 2" lens of clayey gravel, dark brown, moist, very stiff, cemented by thick hard tar	
						Silt, ML, black, moist, soft, no odor	
5.0	2		50			Clayey/Gravelly Sand, SC, green, very moist, loose, slight sour odor	Soil sample ATC-2-4FT collected at 15:30
						Clayey Gravel, GC, green, very moist, very stiff/dense. 8ft-10ft: saturated	Soil sample ATC-2-7FT collected at 15:45 & archived at lab
10.0	3		100			Gravelly Clay, CL, green, very wet, very stiff, abundant gravel&sand. 11.5ft: orange-brown	Difficulty in obtaining complete samples due to surface gravels caving into borehole; 2" metal casings were delivered by Vironex support team to the site from their Hayward location. 2" casing kept hole open for the 1" temporary pvc casing & screen to be installed
15.0							
							Water sample ATC-2 collected at 15:30
20.0							
25.0							Geologist: Bahram Zanganeh-Azam
30.0							

BOTTOM OF TEST BORING: 12.00'

SPT = STANDARD PENETRATION TEST
REC = SAMPLE RECOVERY
ND = NON-DETECTABLE
FID = FLAME IONIZATION DETECTOR
PID = PHOTO-IONIZATION DETECTOR

ATC Environmental, Inc.

BORING LOG

BORING NO: ATC-3

PROJECT NO: 89775.0030

PROJECT NAME: MetalCoat — CLIENT: Comerica Bank

PROJECT LOCATION: 4800 Coliseum Way, Oakland — DRILLING CONTRACTOR: Vironex

DRILLING MTHD: Geoprobe — SAMPLE MTHD: Geoprobe

DATE STARTED: Oct 8, 1998 — DATE FINISHED: Oct 8, 1998 — DRILLER: Scott/Brian — INSPECTOR: None

SURFACE ELEVATION: NA

DEPTH (FT)	SAMPLE	SPT BLOWS PER 18"	REC (%)	PID (ppm)	PROFILE	LITHOLOGIC DESCRIPTION	REMARKS
0.0							
	1		50			Clayey Gravel, GC, light brown, dry, loose, dense at 1Ft, oil/tar globules visible, 2" layer of soft tar at 1.5Ft	
						Clayey Silt, ML, black, very moist, wet at 3.5Ft, soft, slight petroleum odor	Soil sample ATC-3-3FT collected at 15:00
5.0	2		100			Clay, CL, green, moist, very stiff, high plasticity, some brown discoloration, some gravels, slight sour odor	Soil sample ATC-3-4FT collected at 15:05 & archived at lab
						Gravelly Clay, CL, green with large orange-brown discoloration, very moist, slightly stiff, slight sour odor	
10.0	3		100			Clayey/Sandy Gravel, GC, green, very moist, slightly loose, very slight sour odor. Brown at 11ft;8ft-12ft: saturated, no odor	
							Water sample ATC-3 collected at 15:10
15.0							
20.0							
25.0							Geologist: Bahram Zonoush-Azar
30.0							

BOTTOM OF TEST BORING: 12.00'

SPT = STANDARD PENETRATION TEST
REC = SAMPLE RECOVERY
ND = NON-DETECTABLE
FID = FLAME IONIZATION DETECTOR
PID = PHOTO-IONIZATION DETECTOR

ATC Environmental, Inc.

BORING LOG

BORING NO: ATC-4

PROJECT NO: 89775.0030

PROJECT NAME: MetalCast — CLIENT: Comerica Bank

PROJECT LOCATION: 4800 Coliseum Way Oakland — DRILLING CONTRACTOR: Vironex

DRILLING MTHD: Geoprobe — SAMPLE MTHD: Geoprobe

DATE STARTED: Oct 8, 1998 — DATE FINISHED: Oct 8, 1998 — DRILLER: Scott/Brian — INSPECTOR: None

SURFACE ELEVATION: NA

DEPTH (FT)	SAMPLE	SPT BLOWS PER 6"	REC (%)	PID (ppm)	PROFILE	LITHOLOGIC DESCRIPTION	REMARKS
0.0	1		90	>2500		Clayey Gravel, GC, red.-brown, dry to 2Ft, moist 2-3Ft, very moist 3-4Ft, med. dense, black from 3.5Ft, some sand, very strong petroleum odor	
5.0	2		100			Clay, CL, black, very moist, slightly stiff, high plasticity, some gravels, strong petroleum odor	Pid @ 4Ft >2500 ppm: PID maxed out at 2500 ppm & would not clear
10.0	3		100			Gravelly Clay, CL, green-grey, very moist, slightly stiff, med. to high plasticity, strong odor, globules of black oil/tar visible, amount of globules increases at 8Ft. Saturated at 8Ft 8-10Ft: greenish-brown, some sand, sheen, free product. 10Ft: green, saturated, no more globules of free product	Soil sample ATC-4-4FT collected at 07:48 Water sample ATC-4 collected at 08:10
15.0							
20.0							
25.0							
30.0							

BOTTOM OF TEST BORING: 12.00'

SPT = STANDARD PENETRATION TEST
REC = SAMPLE RECOVERY
ND = NON-DETECTABLE
FID = FLAME IONIZATION DETECTOR
PID = PHOTO-IONIZATION DETECTOR

Geologist: Bahram Zanganeh-Azar

ATC Environmental, Inc.

BORING LOG

BORING NO: ATC-5
PROJECT NO: 89775.0030

PROJECT NAME: MetalCoat
CLIENT: Comerica Bank
PROJECT LOCATION: 4800 Coliseum Way, Oakland
DRILLING CONTRACTOR: Vironex
DRILLING MTHD: Geoprobe
SAMPLE MTHD: Geoprobe
DATE STARTED: Oct 8, 1998 DATE FINISHED: Oct 8, 1998 DRILLER: Scott/Brian INSPECTOR: None

SURFACE ELEVATION: NA

DEPTH (FT)	SAMPLE	SPT BLOWS PER 6"	REC (%)	PID (ppm)	PROFILE	LITHOLOGIC DESCRIPTION	REMARKS
0.0	1		60			Clayey/Sandy Gravel, GC, red-brown, dry, very loose, black at 2.5ft, strong petroleum odor	
5.0	2		80			Gravelly Clay, CL, black, moist, slightly stiff, med. plasticity, wet at 4ft, strong petroeum odor 4ft-8ft: grey-green, some sand, wet at 7ft, globules of black oil/tar visible, strong odor 8ft-9.5ft: saturated, amount of sand and clay increases; slight petroleum odor from 8ft	Soil sample ATC-5-3.5FT collected at 08:25 Initial water level: 6ft bgs
	3		100				
10.0	4		100			Clayey/Sandy Gravel, GC, green-grey, saturated, slightly loose, some oil globules, slight odor. 10ft-12ft: no odor, more sand, green-brown, very wet, dense	Water sample ATC-5 collected at 08:50
15.0							
20.0							
25.0							Geologist: Bahram Zanganeh-Azam
30.0							

BOTTOM OF TEST BORING: 12.00'

SPT = STANDARD PENETRATION TEST
REC = SAMPLE RECOVERT
ND = NON-DETECTABLE
FID = FLAME IONIZATION DETECTOR
PID = PHOTO-IONIZATION DETECTOR

ATC Environmental, Inc.

BORING LOG

BORING NO: ATC-6

PROJECT NO: 89775.0030

PROJECT NAME: MetalCoat CLIENT: Comerica Bank

PROJECT LOCATION: 4800 Coliseum Way, Oakland DRILLING CONTRACTOR: Vironex

DRILLING MTHD: Geoprobe SAMPLE MTHD: Geoprobe

DATE STARTED: Oct 8, 1998 DATE FINISHED: Oct 8, 1998 DRILLER: Scott/Brian INSPECTOR: None

DEPTH (FT)	SAMPLE #	SPT BLOWS PER 6"	REC (%)	PID (ppm)	ATTN. LEV.	SURFACE ELEVATION: NA LITHOLOGIC DESCRIPTION	REMARKS
0.0	1		0			Gravelly Tar/Asphalt with scrap metals, very hard, could not penetrate with Geoprobe; used the Geoprobe rotating asphalt/concrete corer: generated heat and some smoke; very slow progress. Attempted 3 adjacent locations before moving on to next borehole	Tar sample ATC-6-1FT collected at 10:27
5.0							
10.0							
15.0							
20.0							
25.0							Geologist: Bahram Zanganeh-Azar
30.0							

BOTTOM OF TEST BORING: 2.00'

SPT = STANDARD PENETRATION TEST
REC = SAMPLE RECOVERY
ND = NON-DETECTABLE
FID = FLAME IONIZATION DETECTOR
PID = PHOTO-IONIZATION DETECTOR

ATC Environmental, Inc.

BORING LOG

BORING NO: ATC-7
PROJECT NO: 89775.0030

PROJECT NAME: MetalCast
CLIENT: Comerica Bank
PROJECT LOCATION: 4800 Coliseum Way, Oakland
DRILLING CONTRACTOR: Vironex
DRILLING MTHD: Geoprobe
SAMPLE MTHD: Geoprobe
DATE STARTED: Oct 8, 1998
DATE FINISHED: Oct 8, 1998
DRILLER: Scott/Brian
INSPECTOR: None

SURFACE ELEVATION: NA

DEPTH (FT)	SCALE	SPT BLOWS PER 48"	REC (%)	PID (ppm)	PROFILE	LITHOLOGIC DESCRIPTION	REMARKS
0.0	1		50			Backfill/gravels 0Ft-1Ft. Sandy/Gravelly Tar, black, slightly soft to hard, very high plasticity, highly elastic, very strong petroleum odor, broken glass	
						Clayey Silt, ML, black, very moist/wet, soft, strong petroleum odor	
5.0	2		100			Clay, CL, green, very moist/wet, stiff, high plasticity, some sand, very elastic, some gravels at 6ft	Soil sample ATC-7-4FT collected at 11:05 Soil sample ATC-7-4.5FT collected at 11:10 & archived at lab Soil sample ATC-7-5.5FT collected at 11:15 & archived at lab
						Gravelly/Sandy Clay, CL, green, very moist, stiff, high plasticity, no odor	
10.0	3		100			Clayey/Sandy Gravel, GC, green, saturated, dense, orange at 12Ft	
							Water sample ATC-7 collected at 11:40
15.0							
20.0							
25.0							
30.0							Geologist: Bahram Zanganeh-Azar

BOTTOM OF TEST BORING: 12.00'

SPT = STANDARD PENETRATION TEST
REC = SAMPLE RECOVERY
ND = NON-DETECTABLE
FID = FLAME IONIZATION DETECTOR
PID = PHOTO-IONIZATION DETECTOR

ATC Environmental, Inc.

BORING LOG

BORING NO: ATC-8

PROJECT NO: 69775.0030

PROJECT NAME: MetalCast — CLIENT: Comerica Bank

PROJECT LOCATION: 4800 Coliseum Way, Oakland — DRILLING CONTRACTOR: Vironex

DRILLING MTHD: Geoprobe — SAMPLE MTHD: Geoprobe

DATE STARTED: Oct 8, 1998 — DATE FINISHED: Oct 8, 1998 — DRILLER: Scott/Brian — INSPECTOR: None

SURFACE ELEVATION: NA

DEPTH (FT)	SAMPLE	SPT BLOWS PER 18"	REC (%)	PID (ppm)	PROFILE	LITHOLOGIC DESCRIPTION
0.0						Gravelly Clay, CL, dark brown/black, dry, stiff, high plasticity, petroleum odor
	1		80			Gravelly Tar, black, slightly stiff, very sticky, very elastic
						Clayey/Gravelly Silt, ML, black, wet, soft, elastic, strong petroleum odor, globules of oil/ tar visible
5.0	2		100			Clay, CL, grey-green, very moist, stiff, high plasticity, very elastic, petroleum odor, oil/tar globules visible
						Gravelly Clay, CL, green, moist, slightly stiff, med. plasticity, strong petroleum odor, globules of oil/tar visible
10.0	3		100			Clayey Gravel, GC, green, saturated, slightly dense, orange-brown at 10.5ft
						Clayey/Sandy Silt, ML, very wet, soft. Brown discolorations 11.3ft-11.5ft
						Clayey Gravel, GC, brown, saturated, slightly loose, no odor
15.0						
20.0						
25.0						
30.0						

BOTTOM OF TEST BORING: 12.00'

SPT = STANDARD PENETRATION TEST
REC = SAMPLE RECOVERY
ND = NON-DETECTABLE
FID = FLAME IONIZATION DETECTOR
PID = PHOTO-IONIZATION DETECTOR

REMARKS

Soil sample ATC-8-2FT collected at 11:55 & archived at lab
Soil sample ATC-8-3FT collected at 12:00 & archived at lab
Soil sample ATC-8-4FT collected at 12:10

Soil sample ATC-8-8FT collected at 12:30& archived at lab
Soil sample ATC-8-9FT collected at 121:50& archived at lab
When retrieving the 4-8Ft sample, the Geoprobe rods from 2-4Ft were covered with oozing soft tar

8-12Ft sample: recovered approximately 1.5Ft of the soft oozing tar which apparently dripped down from the 2-4Ft interval
Water sample ATC-8 collected at 12:50. Initially has odor, sheen, floating product. 4th VOA has very slight to no odor and no sheen

Geologist: Bahram Zangeneh-Azar

ATC Environmental, Inc.

BORING LOG

BORING NO: ATC-9

PROJECT NO: 89775.0030

PROJECT NAME: MetalCoat — CLIENT: Comerica Bank

PROJECT LOCATION: 4800 Coliseum Way Oakland — DRILLING CONTRACTOR: Vironex

DRILLING MTHD: Geoprobe — SAMPLE MTHD: Geoprobe

DATE STARTED: Oct 8, 1998 — DATE FINISHED: Oct 8 1998 — DRILLER: Scott/Brian — INSPECTOR: None

SURFACE ELEVATION: NA

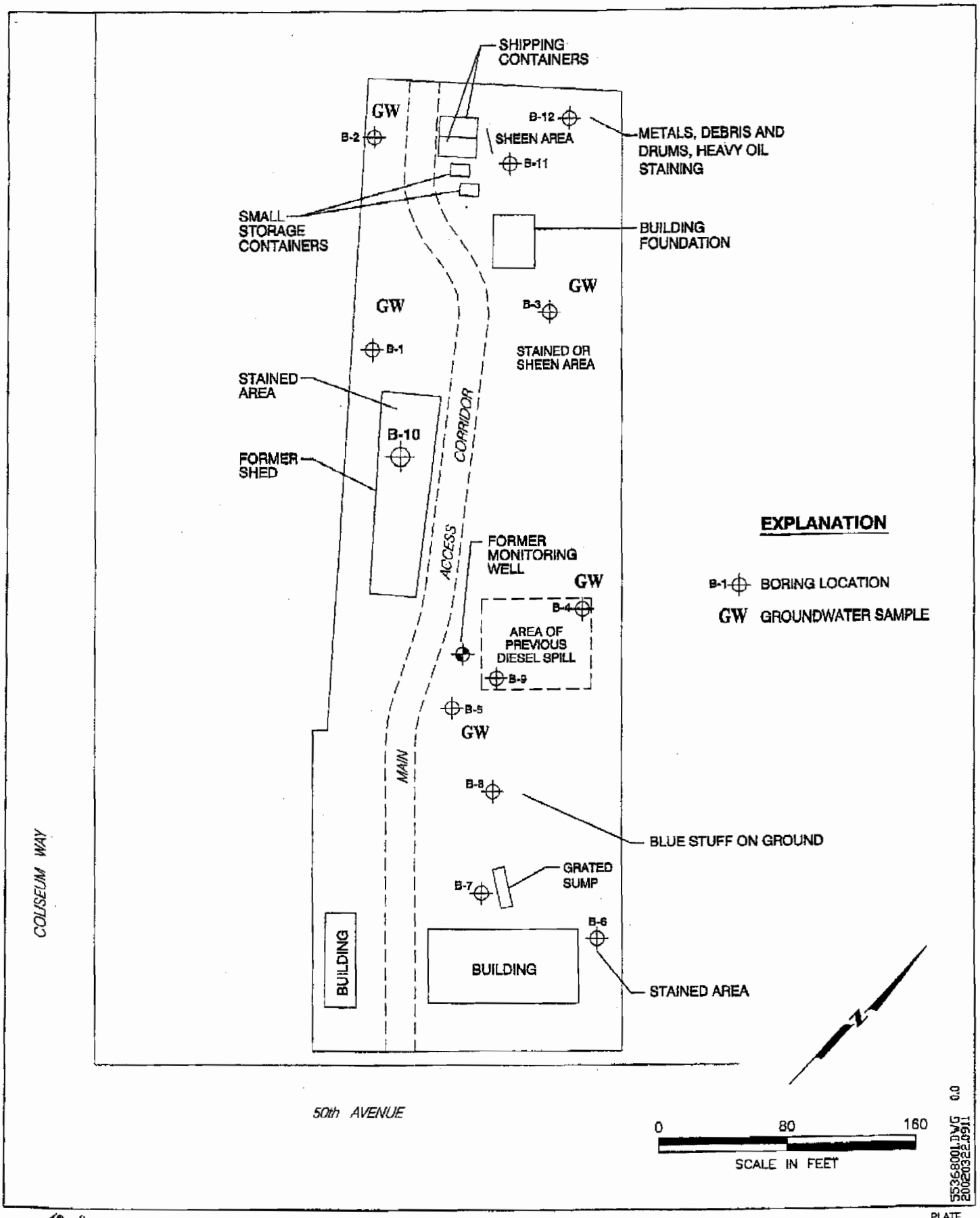
DEPTH (FT)	SAMPLE	SPT BLOWS PER 6"	REC (%)	PID (ppm)	PROFILE	LITHOLOGIC DESCRIPTION	REMARKS
0.0	1		90			Gravelly Clay, CL, black, moist, stiff, very elastic, high plasticity, broken glass at 2Ft, strong petroleum odor, oil/tar globules visible	
						Silty Clay, CL, black, very moist, slightly stiff, strong petroleum odor, oil/tar globules visible	Soil sample ATC-9-3FT collected at 13:55 & archived at lab
5.0	2		100			Clay, CL, grey-green, very moist, very stiff, high plasticity, some gravels, strong petroleum odor, oil/tar globules visible	Soil sample ATC-9-4FT collected at 14:00 & archived at lab
						Gravelly Clay, CL, green, wet, stiff, med plasticity, strong petroleum odor, oil/ tar globules visible	
10.0	3		100			Clayey Gravel, GC, green, very wet, saturated at 7.5Ft, loose, strong petroleum odor	
						Clayey/Sandy Gravel, GC, orange-brown, saturated, med. dense, sour odor, some 2" lenses of clay; 11.5Ft: 3" lens of coarse clayey sand	Water sample ATC-9 collected at 14:15
15.0							
20.0							
25.0							
30.0							Geologist: Bahram Zanganeh-Azar

BOTTOM OF TEST BORING: 12.00'

SPT = STANDARD PENETRATION TEST
REC = SAMPLE RECOVERY
ND = NON-DETECTABLE
FID = FLAME IONIZATION DETECTOR
PID = PHOTO-IONIZATION DETECTOR

APPENDIX G

MAPS AND TABLES FROM PREVIOUS INVESTIGATIONS AT ADJACENT SITES



Harding ESE
A MACTEC COMPANY

Site Location Map
740 50th Avenue
Oakland, California

PLATE
1

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED DATE
CN	55368 1		3/02	

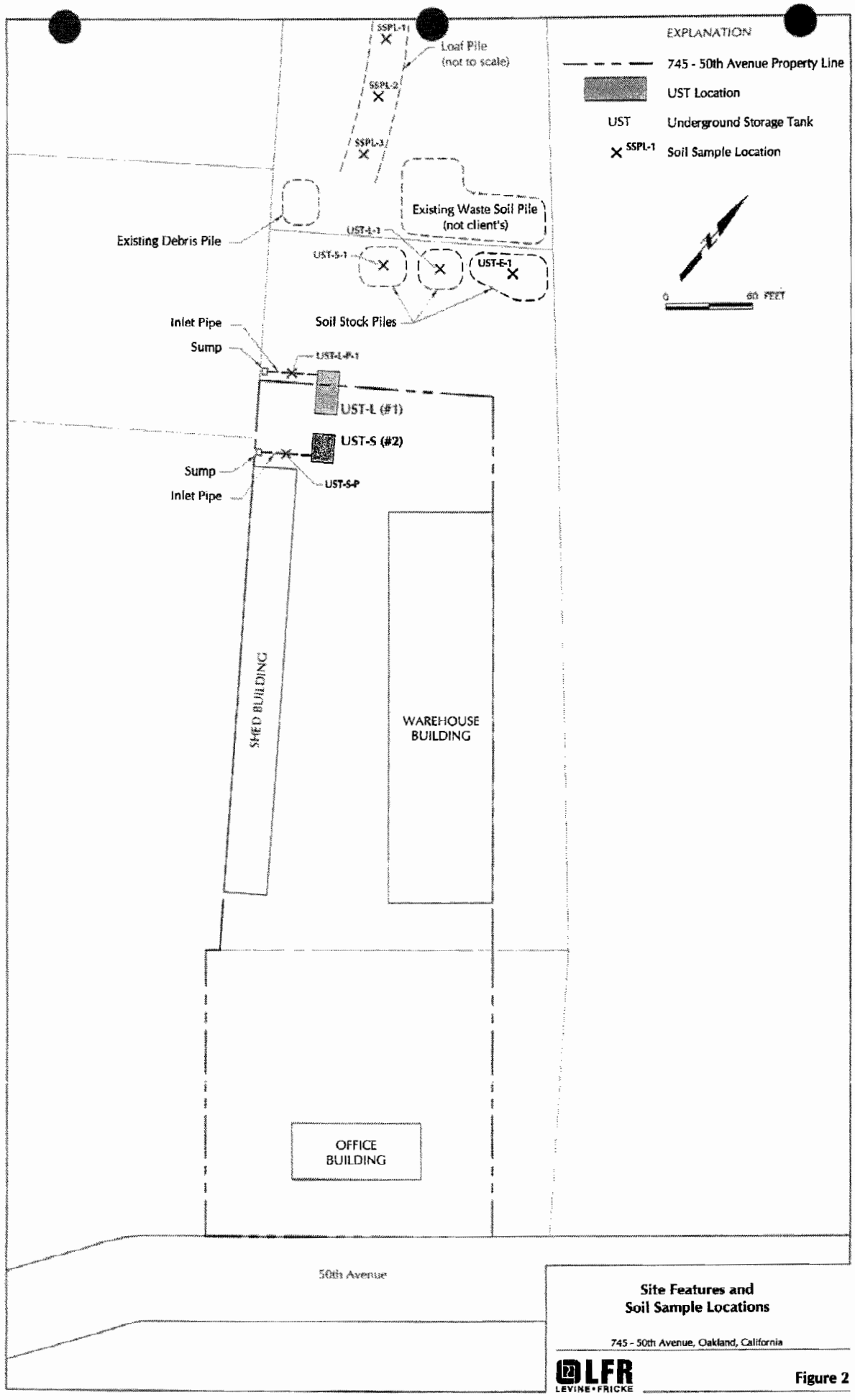
Table 1

Westside Building Materials
Oakland Facility Sampling Results
Sample date February 27, 2002

Boring & Depth	PID Reading ppm	TPHd 8015m mg/kg	TPH Oil 8015m mg/kg	PCE 8260B ug/kg	TCE 8260B ug/kg	Other 8260B ug/kg
B-1 @ 1'	8.0	31	74	ND	ND	ND
B-1 @ 5'	26.4	30	78	ND	ND	ND
B-2 @ 1'	21.2	520	730	ND	ND	ND
B-2 @ 5'	30.3	1,200	780	ND	ND	n-Butylbenzene 13, sec-Butylbenzene 7.8,2Hexanone 10, Isopropylbenzene 6.0, nPropylbenzene 9.5
B-3 @ 1'	5.0	740	680	ND	ND	ND
B-3 @ 4.5'	4.0	6	12	ND	ND	ND
B-4 @ 1'	3.5	12,000	18,000	ND	ND	Acetone 700, 2-Butanone 83, p-Isopropyltoluene 22, 4-Methyl-2-pentanone 21, Naphthalene 11, 1,3,5-Trimethylbenzene 5.9, 1,2,4-Trimethylbenzene
B-4 @ 6'	26.0	23	67	ND	ND	ND
B-5 @ 1'	6.0	700	1,600	ND	6	1,2,4-Trimethylbenzene 9.4, m,p-Xylene 7.2, o-Xylene 22
B-5 @ 5.5'	116	43	13	ND	ND	ND
B-6 @ 1'	16.0	2,400	8,200	ND	ND	ND
B-6 @ 4'	NA	14	26	ND	ND	ND
B-7 @ 1'	6.0	480	790	ND	ND	Acetone 400, n-Butylbenzene 21, Ethylbenzene 11, 2-Hexanone 21, Isopropylbenzene 5.2, p-Isopropyltoluene 12, 4-Methyl-2-pentanone 12, Naphthalene 30, Toluene 19, 1,3,5-Trimethylbenzene 150, 1,2,4-Trimethylbenzene 320, m,p-Xylene 150, o-Xylene 120
B-7 @ 4'	NA	6	12	ND	ND	ND
B-8 @ 1'	10.0	630	1,000	ND	ND	n-Butylbenzene 9.3, sec-Butylbenzene 20, 2-Chlorotoluene 5.5, 4-Chlorotoluene 7.8, Ethylbenzene 8.8, 2-Hexanone 23, Isopropylbenzene 20, p-Isopropyltoluene 21, Naphthalene 12, n-Propylbenzene 19, 1,1,2,2-Tetrachloroethane 11, 1,1,2-Trichloroethane 13, 1,3,5-Trimethylbenzene 72, 1,2,4-Trimethylbenzene 160, m,p-Xylene 17, o-Xylene 14
B-8 @ 4'	NA	ND	10	ND	ND	Acetone 75, 2-Butanone 20
B-9 @ 1'	11.0	190	420	ND	ND	ND
B-9 @ 4'	NA	390	680	ND	ND	ND
B-10 @ 1'	5.0	ND	ND	ND	ND	ND
B-10 @ 4'	NA	6	ND	ND	ND	ND
B-11 @ 1'	19.0	14,000	7,700	ND	ND	ND
B-11 @ 4'	NA	1,900	1,500	ND	ND	ND
B-12 @ 1'	24.0	6,800	3,100	ND	ND	ND for 8260, 820 mg/kg Mercury
B-12 @ 4'	NA	44	58	ND	ND	ND
		ug/l	ug/l	ug/l	ug/l	ug/l
B-1-GW		1.3	0.5	ND	ND	Benzene 3.1, Isopropylbenzene 1.3, 1,3,5-Trimethylbenzene 4.2, 1,2,4-Trimethylbenzene 8.5, m,p-Xylene 1.6, Naphthalene 140
B-2-GW		15.0	13.0	ND	ND	Chlorobenzene 1.2, 1,3-Dichlorobenzene 3.7, 1,4-Dichlorobenzene 8.6, Naphthalene 1.8
B-3-GW		3.6	1.7	ND	ND	Acetone 240, Naphthalene 5.6
B-4-GW		2.7	3.8	ND	ND	Acetone 14
B-5-GW		3.1	1.6	ND	ND	Acetone 12, Isopropylbenzene 1.2

TABLE 2

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-7@1' (P203063-13) Soil Sampled: 02/27/02 14:15 Received: 03/01/02 12:21									
Mercury	**0.38**	0.018	mg/kg	1	2030108	03/07/02	03/07/02	EPA 7471A	
Antimony	ND	5.8	"	"	2030109	03/07/02	03/08/02	EPA 6010B	
Arsenic	ND	9.6	"	"	"	"	"	"	
Barium	**200**	0.96	"	"	"	"	"	"	
Beryllium	**0.11**	0.096	"	"	"	"	"	"	
Cadmium	**1.8**	0.96	"	"	"	"	"	"	
Chromium	**27**	0.96	"	"	"	"	"	"	
Cobalt	**6.0**	0.67	"	"	"	"	"	"	
Copper	**26**	0.96	"	"	"	"	"	"	
Lead	**65**	7.2	"	"	"	"	"	"	
Molybdenum	**2.2**	1.9	"	"	"	"	"	"	
Nickel	**37**	2.9	"	"	"	"	"	"	
Selenium	ND	9.6	"	"	"	"	"	"	
Silver	ND	0.67	"	"	"	"	"	"	
Thallium	ND	9.6	"	"	"	"	"	"	
Vanadium	**16**	0.96	"	"	"	"	"	"	
Zinc	**120**	1.9	"	"	"	"	"	"	
B-8@1' (P203063-15) Soil Sampled: 02/27/02 14:45 Received: 03/01/02 12:21									
Mercury	**0.096**	0.019	mg/kg	1	2030108	03/07/02	03/07/02	EPA 7471A	
Antimony	ND	5.9	"	"	2030109	03/07/02	03/08/02	EPA 6010B	
Arsenic	ND	9.8	"	"	"	"	"	"	
Barium	**330**	0.98	"	"	"	"	"	"	
Beryllium	**0.32**	0.098	"	"	"	"	"	"	
Cadmium	ND	0.98	"	"	"	"	"	"	
Chromium	**48**	0.98	"	"	"	"	"	"	
Cobalt	**8.1**	0.69	"	"	"	"	"	"	
Copper	**18**	0.98	"	"	"	"	"	"	
Lead	**51**	7.4	"	"	"	"	"	"	
Molybdenum	ND	2.0	"	"	"	"	"	"	
Nickel	**52**	2.9	"	"	"	"	"	"	
Selenium	ND	9.8	"	"	"	"	"	"	
Silver	ND	0.69	"	"	"	"	"	"	
Thallium	ND	9.8	"	"	"	"	"	"	
Vanadium	**31**	0.98	"	"	"	"	"	"	
Zinc	**110**	2.0	"	"	"	"	"	"	
B-12@1' (P203063-23) Soil Sampled: 02/28/02 09:10 Received: 03/01/02 12:21									
Mercury	**820**	0.039	mg/kg	2	2030108	03/07/02	03/07/02	EPA 7471A	
Antimony	ND	5.5	"	1	2030109	03/07/02	03/08/02	EPA 6010B	
Arsenic	ND	9.1	"	"	"	"	"	"	
Barium	**48**	0.91	"	"	"	"	"	"	
Beryllium	ND	0.091	"	"	"	"	"	"	
Cadmium	**3.9**	0.91	"	"	"	"	"	"	
Chromium	**81**	0.91	"	"	"	"	"	"	
Cobalt	**21**	0.64	"	"	"	"	"	"	
Copper	**120**	0.91	"	"	"	"	"	"	
Lead	**140**	6.8	"	"	"	"	"	"	
Molybdenum	ND	1.8	"	"	"	"	"	"	
Nickel	**54**	2.7	"	"	"	"	"	"	
Selenium	ND	9.1	"	"	"	"	"	"	
Silver	ND	0.64	"	"	"	"	"	"	
Thallium	ND	9.1	"	"	"	"	"	"	
Vanadium	**26**	0.91	"	"	"	"	"	"	
Zinc	**290**	1.8	"	"	"	"	"	"	



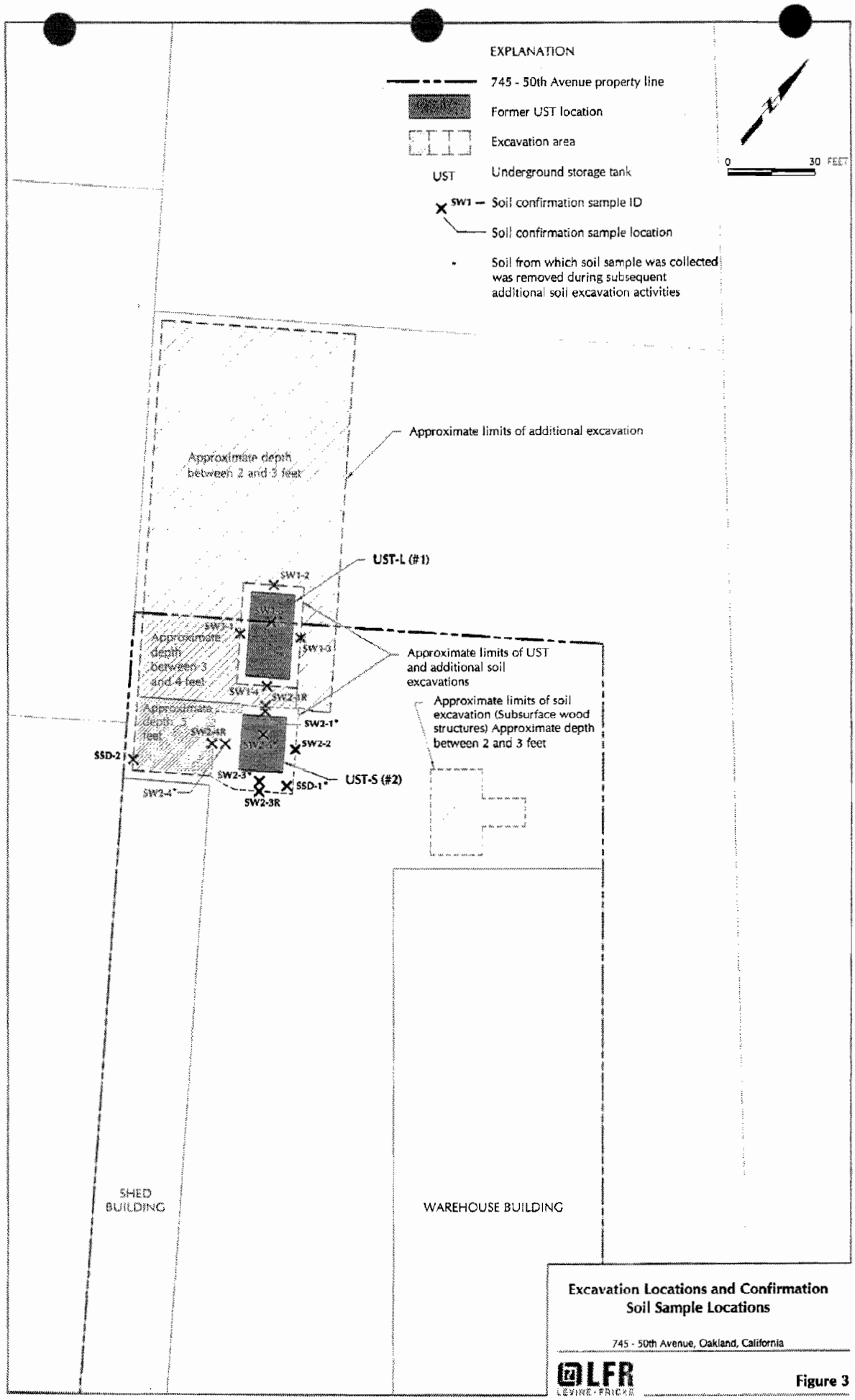
Site Features and Soil Sample Locations

745 - 50th Avenue, Oakland, California

LFR LEVINE•FRICKE

Figure 2

I:\Design\001\09173\00\dwg\09173 SiteFeatures-B3.dwg, Site Features, 04/19/2004 10:16:12 AM



Excavation Locations and Confirmation Soil Sample Locations

745 - 50th Avenue, Oakland, California

LFR LEVINE · FRICKE

Figure 3

I:\Design\0091\009173\00\dwg\009173 Excavation Locations-rev2.dwg, Excavations and Soil Samps, 6/30/2004 11:58:01 AM

Table 1

Detected TPHd, TPHmo, TPHg, BTEX, and MTBE in Soil

Westside/Alta Building Materials Site

(Former AAA Equipment Company Site)

745 50th Avenue, Oakland, California

Expressed in milligrams per kilogram (mg/kg) unless otherwise noted

Field ID	Date Sampled	TPHd	TPHmo	TPHg	B	T	E	X	MTBE
Soil Within UST									
UST-S-1*	4-Sep-03	19,000 H Y	19,000 L	---	< 0.0049	0.0062	0.0065	0.039	< 0.0049
UST-L-1*	4-Sep-03	480 H Y	2,900	---	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Soil Beneath UST Fill Pipe									
UST-S-P*	4-Sep-03	14,000 H Y	11,000 L	---	< 0.023	< 0.023	< 0.023	< 0.023	< 0.023
UST-L-P-1*	5-Sep-03	260 H Y	1,000 H	---	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.0046
Excavated Soils									
UST-E-1*	4-Sep-03	2,400 H Y	3,000 L	---	< 0.0048	< 0.0048	< 0.0048	< 0.0048	< 0.0048
ESLs Table B		***5,800***		***400***	***0.38***	***9.3***	***13***	***1.5***	***5.6***
Soil Confirmation									
SW2-1*	16-Sep-03	4,800 H	3,400 L	---	< 0.0049	< 0.0049	< 0.0049	< 0.0049	< 0.0049
SW2-2	16-Sep-03	980 H	750 L	---	< 0.0049	< 0.0049	< 0.0049	< 0.0049	< 0.0049
SW2-3*	16-Sep-03	820 H	740 L	---	< 0.023	< 0.023	< 0.023	< 0.023	< 0.023
SW2-4*	16-Sep-03	520 H	430 L	---	< 0.0049	< 0.0049	< 0.0049	< 0.0049	< 0.0049
SW2-5	16-Sep-03	730 H	600 L	---	< 0.0049	< 0.0049	< 0.0049	< 0.0049	< 0.0049
SW1-1	16-Sep-03	520 H	510 L	---	< 0.0049	< 0.0049	< 0.0049	< 0.0049	< 0.0049
SW1-2	16-Sep-03	19 H	19 L	---	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.0046
SW1-3	16-Sep-03	< 1.0	< 5.0	---	< 0.0049	< 0.0049	< 0.0049	< 0.0049	0.03
SW1-4	16-Sep-03	230 H	230 L	---	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.0046
SW1-5	16-Sep-03	78 H Y	370	---	< 0.0048	< 0.0048	< 0.0048	< 0.0048	< 0.0048
SW2-3R	19-Sep-03	210 H Y	230 H L	---	< 0.0049	< 0.0049	< 0.0049	< 0.0049	< 0.0049
SW2-4R	19-Sep-03	120 H Y	130 H L	---	< 0.0048	< 0.0048	< 0.0048	< 0.0048	< 0.0048
SW2-1R	23-Sep-03	990 H	750 L	---	< 0.0048	< 0.0048	< 0.0048	< 0.0048	< 0.0048
Loaf Stockpile/Backfill Material									
SSPL-1	2-Sep-03	430 H Y	1,300	< 1.0	< 0.005	< 0.005	< 0.005	< 0.005	< 0.02
SSPL-2	2-Sep-03	3,500 H Y	2,900 L	< 1.0	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
SSPL-3	2-Sep-03	340 H Y	950	1.2 H Y	< 0.0052	< 0.0052	< 0.0052	< 0.0052	< 0.02
Soil Samples									
SSD-1*	18-Sep-03	4,000 H	3,200 L	---	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
SSD-2	29-Sep-03	11,000 H	9,600 L	---	< 0.0048	< 0.0048	< 0.0048	< 0.0048	< 0.0048

Data entered by VCH. Proofed by LPL. QA/QC by JBP.

Notes:

Values in bold detected above laboratory analytical detection limits.

TPHd = Total petroleum hydrocarbons as diesel; samples analyzed using EPA Method 8015B
TPHmo = Total petroleum hydrocarbons as motor oil; samples analyzed using EPA Method 8015B
TPHg = Total petroleum hydrocarbons as gasoline; samples analyzed using EPA Method 8015B
B = Benzene; samples analyzed using EPA Method 8021B
T = Toluene; samples analyzed using EPA Method 8021B
E = Ethylbenzene; samples analyzed using EPA Method 8021B
X = Total xylenes; samples analyzed using EPA Method 8021B
MTBE = Methyl tertiary-butyl ether; samples analyzed using EPA Method 8021B
ESLs = Environmental Screening Levels

< = Not detected above laboratory analytical detection limits
--- = Not analyzed
* = Soils subsequently removed
** = TPHd/TPHmo as residual fuels, Table B-2

UST = Underground storage tank
UST-S = Southern/smaller underground storage tank
UST-L = Northern/larger underground storage tank

H = Heavier hydrocarbons contributed to the quantitation
Y = Sample exhibits chromatographic pattern which does not resemble standard
L = Lighter hydrocarbons contributed to the quantitation

Table 4

Detected VOCs in Soil[1]

Westside/Alta Building Materials Site

(Former AAA Equipment Company Site)

745 50th Avenue, Oakland, California

Expressed in milligrams per kilogram (mg/kg) unless otherwise noted

Field ID	Date Sampled	Acetone	Methylene Chloride	2-Butanone	Chloro-benzene	Iso-propyl-benzene	Propyl-benzene	1,3,5-Tri-methyl-benzene	1,2,4-Tri-methyl-benzene	sec-Butyl-benzene	para-Iso-propyl Toluene	1,3-Dichloro-benzene	1,4-Dichloro-benzene	n-Butyl-benzene	1,2-Dichloro-benzene
Soil Within UST															
UST-S-1*	09/04/03	0.063	0.023	0.02	< 0.0049	< 0.0049	0.0051	0.013	0.055	< 0.0049	0.01	< 0.0049	< 0.0049	0.012	< 0.0049
UST-L-1*	09/04/03	< 0.02	0.025	< 0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Soil Beneath UST Fill Pipe															
UST-S-P*	09/04/03	< 0.091	< 0.091	< 0.045	< 0.023	< 0.023	0.026	< 0.023	< 0.023	< 0.023	0.025	< 0.023	< 0.023	0.04	< 0.023
UST-L-P-1*	09/05/03	< 0.019	< 0.019	< 0.0093	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.0046
Excavated Soils															
UST-E-1*	09/04/03	< 0.019	0.024	< 0.0096	< 0.0048	< 0.0048	< 0.0048	< 0.0048	< 0.0048	< 0.0048	< 0.0048	< 0.0048	< 0.0048	< 0.0048	< 0.0048
ESLs Table B		*0.50*	*1.5*	*NV*	*1.5*	*NV*	*NV*	*NV*	*NV*	*NV*	*NV*	*7.4*	*0.13*	*NV*	*1.6*
Soil Confirmation															
SW2-1*	09/16/03	0.03	< 0.02	< 0.0098	< 0.0049	< 0.0049	< 0.0049	< 0.0049	< 0.0049	< 0.0049	< 0.0049	< 0.0049	< 0.0049	< 0.0049	< 0.0049
SW2-2	09/16/03	< 0.02	< 0.02	< 0.0098	< 0.0049	< 0.0049	< 0.0049	< 0.0049	< 0.0049	< 0.0049	< 0.0049	< 0.0049	< 0.0049	< 0.0049	< 0.0049
SW2-3*	09/16/03	< 0.091	< 0.091	< 0.045	< 0.023	< 0.023	< 0.023	< 0.023	< 0.023	< 0.023	< 0.023	< 0.023	< 0.023	< 0.023	< 0.023
SW2-4*	09/16/03	0.029	< 0.02	< 0.0098	< 0.0049	< 0.0049	< 0.0049	< 0.0049	< 0.0049	< 0.0049	< 0.0049	< 0.0049	0.0069	< 0.0049	< 0.0049
SW2-5	09/16/03	0.022	< 0.02	< 0.0098	< 0.0049	< 0.0049	< 0.0049	< 0.0049	< 0.0049	< 0.0049	< 0.0049	< 0.0049	< 0.0049	< 0.0049	< 0.0049
SW1-1	09/16/03	< 0.02	< 0.02	< 0.0098	< 0.0049	< 0.0049	< 0.0049	< 0.0049	< 0.0049	< 0.0049	< 0.0049	< 0.0049	< 0.0049	< 0.0049	< 0.0049
SW1-2	09/16/03	< 0.019	< 0.019	< 0.0093	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.0046
SW1-3	09/16/03	< 0.02	< 0.02	< 0.0098	< 0.0049	< 0.0049	< 0.0049	< 0.0049	< 0.0049	< 0.0049	< 0.0049	< 0.0049	< 0.0049	< 0.0049	< 0.0049
SW1-4	09/16/03	0.021	< 0.019	< 0.0093	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.0046	< 0.0046
SW1-5	09/16/03	< 0.019	< 0.019	< 0.0096	< 0.0048	< 0.0048	< 0.0048	< 0.0048	< 0.0048	< 0.0048	< 0.0048	< 0.0048	< 0.0048	< 0.0048	< 0.0048
SW2-3R	09/19/03	< 0.02	< 0.02	< 0.0098	< 0.0049	< 0.0049	< 0.0049	< 0.0049	< 0.0049	< 0.0049	< 0.0049	0.0059	0.016	< 0.0049	< 0.0049
SW2-4R	09/19/03	< 0.019	< 0.019	< 0.0096	0.0084	< 0.0048	< 0.0048	< 0.0048	< 0.0048	< 0.0048	< 0.0048	0.029	0.072	< 0.0048	0.0058
SW2-1R	09/23/03	< 0.019	< 0.019	< 0.0096	< 0.0048	< 0.0048	< 0.0048	< 0.0048	< 0.0048	< 0.0048	< 0.0048	< 0.0048	< 0.0048	< 0.0048	< 0.0048
Loaf Stockpile/Backfill Material															
SSPL-1	09/02/03	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SSPL-2	09/02/03	< 0.02	< 0.02	< 0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
SSPL-3	09/02/03	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Table 4
Detected VOCs in Soil[1]
Westside/Alta Building Materials Site
(Former AAA Equipment Company Site)
745 50th Avenue, Oakland, California
Expressed in milligrams per kilogram (mg/kg) unless otherwise noted

Field ID	Date Sampled	Acetone	Methylene Chloride	2-Butanone	Chloro-benzene	Iso-propyl-benzene	Propyl-benzene	1,3,5-Tri-methyl-benzene	1,2,4-Tri-methyl-benzene	sec-Butyl-benzene	para-Iso-propyl Toluene	1,3-Dichloro-benzene	1,4-Dichloro-benzene	n-Butyl-benzene	1,2-Dichloro-benzene
ESLs Table B		*0.50*	*1.5*	*NV*	*1.5*	*NV*	*NV*	*NV*	*NV*	*NV*	*NV*	*7.4*	*0.13*	*NV*	*1.6*
Soil Samples															
SSD-1*	09/18/03	< 0.02	< 0.02	< 0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.024	< 0.005	< 0.005	< 0.005	0.0068	< 0.005
SSD-2	09/29/03	< 0.019	< 0.019	< 0.0096	< 0.0048	0.0065	0.012	< 0.0048	< 0.0048	0.0058	< 0.0048	< 0.0048	< 0.0048	0.017	< 0.0048
No. 3**	07/18/03	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Data entered by VCH. Proofed by LPL. QA/QC by JBP.

Notes:

(1) = See Laboratory Data Sheets Appendix for full list of analytes included in these analyses.

Values in **bold** detected above laboratory analytical detection limits.

VOCs = Volatile organic compounds; samples analyzed using EPA Method 8260B
UST = Underground storage tank
ESLs = Environmental Screening Levels

--- = Not analyzed
< = Not detected above laboratory analytical detection limits
NV = No ESL value for this compound

* = Soils subsequently removed
** = Sample collected by Bluewater Environmental Services

UST-S = Southern/smaller underground storage tank
UST-L = Northern/larger underground storage tank

Table 5

Detected Chemicals and Metals in Groundwater [1]

Westside/Alta Building Materials Site

(Former AAA Equipment Company Site)

745 50th Avenue, Oakland, California

Expressed in milligrams per liter (mg/l)

Field ID	Date Sampled	Total Volatile Hydrocarbons	Total Extractable Hydrocarbons*,**		PNAs	VOCs											PCBs		Metals									
		Gasoline	Diesel	Motor Oil	Naphthalene	Acetone	1,1-DCE	MTBE	1,1-DCA	Benzene	Chloroform	1,2-DCB	1,4-DCB	1,2-DCE	1,2,4-TCB	1,2,3-TCB	Aroclor-1254	Aroclor-1260	Arsenic	Barium	Cadmium	Chromium	Copper	Lead	Molybdenum	Nickel	Thallium	Vanadium	Zinc
ESLs Table B		*0.5*	*0.64*		***0.024***	***1.5***	***0.025***	***1.8***	***0.047***	***0.046***	***0.025***	***0.065***	***0.015***	***0.014***	***0.025***	*NV*	***0.014***	***0.014***	***0.036***	***1.0***	***0.0022***	***0.186***	***0.0031***	***0.0025***	***0.24***	***0.0082***	***0.02***	***0.019***	***0.081***
Grab Groundwater Samples																												
GGW1-1*	24-Sep-03	---	**3.7 H Y**	**2.7 L Y**	< 0.0094	< 0.010	< 0.0005	0.0086	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00047	< 0.00047	---	---	< 0.003	< 0.010	---	**0.0041**	---	< 0.020	---	---	**0.045**
GGW2-1**	24-Sep-03	---	**3.5 H Y**	**2.2 L Y**	**0.0096**	< 0.010	**0.0006**	< 0.0005	**0.0015**	**0.0013**	**0.074**	**0.21**	**0.36**	**0.024**	**0.26**	**0.0069**	< 0.00047	< 0.00047	---	---	< 0.005	< 0.010	---	< 0.003	---	< 0.020	---	---	< 0.020
Waste Water Characterization																												
TP-GGW-1*	10-Sep-03	< 0.05	**3.7 Y**	**1.7 L Y**	< 0.0094	< 0.010	< 0.0005	**0.020**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00047	**0.0005**	**0.0073**	**0.26**	< 0.005	< 0.010	**0.018**	**0.170**	**0.020**	< 0.020	< 0.005	**0.014**	**0.069**
TP-GGW-2**	10-Sep-03	**0.15 H Y**	**9.6 Y**	**2.8 L Y**	< 0.0094	**0.010**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00047	< 0.00047	< 0.0050	**0.48**	< 0.005	< 0.010	< 0.010	**0.038**	< 0.020	< 0.020	**0.0069**	**0.013**	< 0.020

Data entered by VCH. Proofed by LPL. QA/QC by JBP

Notes:

(1) = See Laboratory Data Sheets Appendix for full list of analytes included in these analyses

Values in bold detected above laboratory analytical detection limits

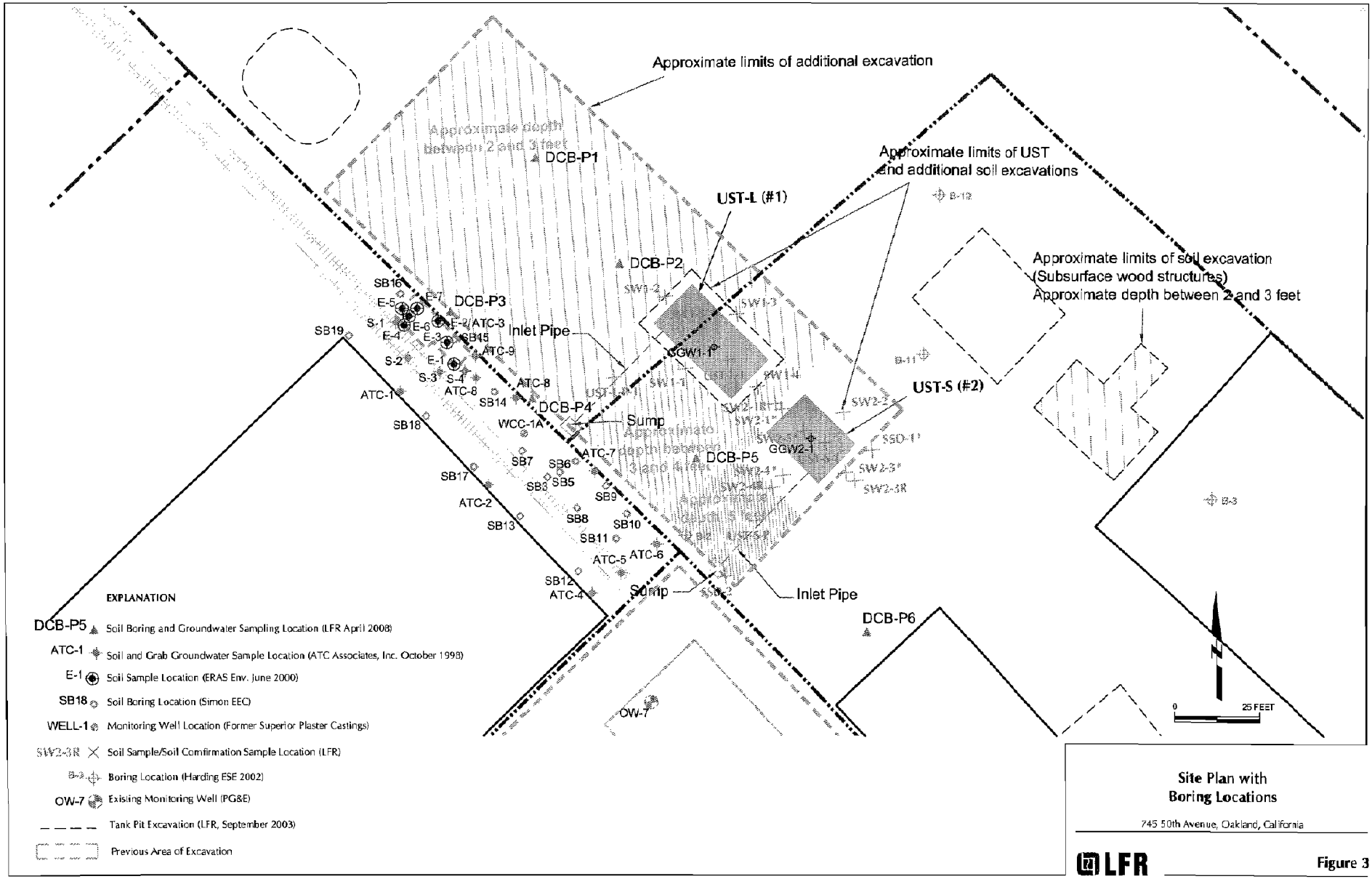
PNAs = Polynuclear aromatic hydrocarbons
VOCs = Volatile organic compounds
PCBs = Polychlorinated biphenyls
ESLs = Environmental Screening Levels

DCE = Dichloroethene
MTBE = Methyl tertiary-butyl ether
DCA = Dichloroethane
DCB = Dichlorobenzene
TCB = Trichlorobenzene

Total volatile hydrocarbons as gasoline analyzed using EPA Method 8015B
Total extractable hydrocarbons as diesel and motor oil analyzed using EPA Method 8015B
PNAs analyzed using EPA Method 8310/8270C
VOCs analyzed using EPA Method 8260B
PCBs analyzed using EPA Method 8082
California Title 22 metals analyzed using EPA Method 6010B/7000 and California LUFT metals analyzed using EPA Method 6010B

< = Not detected above laboratory analytical detection limits
--- = Not analyzed
* = Northern (larger) underground storage tank (UST) pit
** = Southern (smaller) UST pit
*** = TPH-DTT[illegible] as residual fuel
NV = No ESL value for this compound

H = Heavier hydrocarbons contributed to the quantitation
L = Lighter hydrocarbons contributed to the quantitation
Y = Sample exhibits chromatographic pattern which does not resemble standard



Site Plan with Boring Locations

745 50th Avenue, Oakland, California

LFR

Figure 3

Table 1
Total Petroleum Hydrocarbons and Benzene, Toluene, Ethylbenzene, and Xylenes
in Soil Samples Collected at Westside Building Materials
745 50th Avenue, Oakland, California

Concentrations in micrograms per kilogram (unless otherwise noted)

Sample ID	Date	TPHd (mg/kg)	TPHg (mg/kg)	TPHmo (mg/kg)	Benzene	Toluene	Ethylbenzene	o-Xylene	m,p-Xylenes
DCB-P1-4.0	04/07/2008	170Y	<1.0	670	NA	NA	NA	NA	NA
DCB-P1-4FT	04/02/2008	NA	NA	NA	<4.0	<4.0	<4.0	<4.0	<4.0
DCB-P2-4.0	04/07/2008	290Y	<0.95	890	NA	NA	NA	NA	NA
DCB-P2-4FT	04/02/2008	NA	NA	NA	<4.4	<4.4	<4.4	<4.4	<4.4
DCB-P3-4.0	04/07/2008	110Y	<0.92	360	NA	NA	NA	NA	NA
DCB-P3-4FT	04/02/2008	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	<5.0
DCB-P4-3.0	04/07/2008	5,000	51YZ	4,600	NA	NA	NA	NA	NA
DCB-P4-4FT	04/02/2008	NA	NA	NA	<13,000	<13,000	<13,000	<13,000	<13,000
DCB-P4-8.0	04/07/2008	4,800	15YZ	4,300	NA	NA	NA	NA	NA
DCB-P5-3.0	04/07/2008	190Y	<0.97	930	NA	NA	NA	NA	NA
DCB-P5-4FT	04/02/2008	NA	NA	NA	<4.2	<4.2	<4.2	<4.2	<4.2
DCB-P6-4.5	04/07/2008	350Y	<0.92	1,100	NA	NA	NA	NA	NA
DCB-P6-5FT	04/02/2008	NA	NA	NA	<6.3	<6.3	<6.3	<6.3	<6.3
REGULATORY CONCENTRATIONS (RWQCB ESLs)									
Shallow soil where groundwater is not considered a source of drinking water - commercial land use		150	450	2,500	260	29,000	33,000	100,000	100,000

Notes:

(Y) the chromatographic pattern for TPHd and TPHg analyses did not resemble the laboratory standard for either TPHd or TPHg.
(Z) sample exhibits unknown single peak or peaks
TPHd = total petroleum hydrocarbons as diesel
TPHg = total petroleum hydrocarbons as gasoline
TPHmo = total petroleum hydrocarbons as motor oil
NA = parameter not analyzed
mg/kg = milligrams per kilogram
Samples analyzed by: Curtis & Tompkins, Ltd.
ESLs = Environmental Screening Levels by San Francisco Bay Regional Water Quality Control Board (RWQCB), November 2007.

Table 2
Volatile Organic Compounds in Soil Samples
Collected at Westside Building Materials
745 50th Avenue, Oakland, Californiaa

Concentrations in micrograms per kilogram (unless otherwise noted)

Sample ID	Date	1,2,3-Trichlorobenzene	1,4-Dichlorobenzene	Acetone	Chlorobenzene
DCB-P1-4FT	04/02/2008	< 4.0	< 4.0	< 16	< 4.0
DCB-P2-4FT	04/02/2008	< 4.4	< 4.4	< 18	< 4.4
DCB-P3-4FT	04/02/2008	6.7	< 5.0	< 20	< 5.0
DCB-P4-4FT	04/02/2008	< 13,000	21,000	< 50,000	150,000
DCB-P5-4FT	04/02/2008	< 4.2	< 4.2	25	< 4.2
DCB-P6-5FT	04/02/2008	< 6.3	< 6.3	< 25	< 6.3
REGULATORY CONCENTRATIONS (RWQCB ESLs)					
Shallow soil where groundwater is not considered a source of drinking water - commercial land use		NE	2,600	1,700	30,000

Notes:

NE = none established
Samples analyzed by: Curtis & Tompkins, Ltd.
Volatile organic compounds not reported in this summary table were not detected above the analytical reporting limits.
ESLs = Environmental Screening Levels by San Francisco Bay Regional Water Quality Control Board (RWQCB), November 2007.

Table 4
Total Petroleum Hydrocarbons and Benzene, Toluene, Ethylbenzene, and Xylenes
in Groundwater Samples Collected at Westside Building Materials
745 50th Avenue, Oakland, California

Concentrations in micrograms per liter (unless otherwise noted)

Sample ID	Date	TPHd (mg/kg)	TPHg (mg/kg)	TPHmo (mg/kg)	Benzene	Toluene	Ethylbenzene	o-Xylene	m,p-Xylenes
DCB-P1	04/02/2008	960Y	NA	3,000	<0.5	<0.5	<0.5	<0.5	<0.5
DCB-P2	04/02/2008	930Y	NA	2,300	<0.5	<0.5	<0.5	<0.5	<0.5
DCB-P3	04/02/2008	110,000Y	NA	24,000	<50	<50	<50	<50	<50
DCB-P4	04/02/2008	170,000Y	NA	57,000	19J	<31	<31	<31	<31
DCB-P5	04/02/2008	3,400Y	NA	3,100	28	<10	<10	5.5J	15
DCB-P6	04/02/2008	29,000	NA	12,000	2.9	0.9J	<1.0	3.3	0.8J
REGULATORY CONCENTRATIONS (RWQCB ESLs)									
Where groundwater is not considered a source of drinking water - commercial land use		2,500	5,000	2,500	540	400	300	5,300	5,300

Notes:

(Y) the chromatographic pattern for TPHd and TPHg analyses did not resemble the laboratory standard for either TPHd or TPHg.
TPHd = total petroleum hydrocarbons as diesel
TPHg = total petroleum hydrocarbons as gasoline
TPHmo = total petroleum hydrocarbons as motor oil
NA = parameter not analyzed
mg/kg = milligrams per kilogram
Samples analyzed by: Curtis & Tompkins, Ltd.
ESLs = Environmental Screening Levels by San Francisco Bay Regional Water Quality Control Board (RWQCB), November 2007.

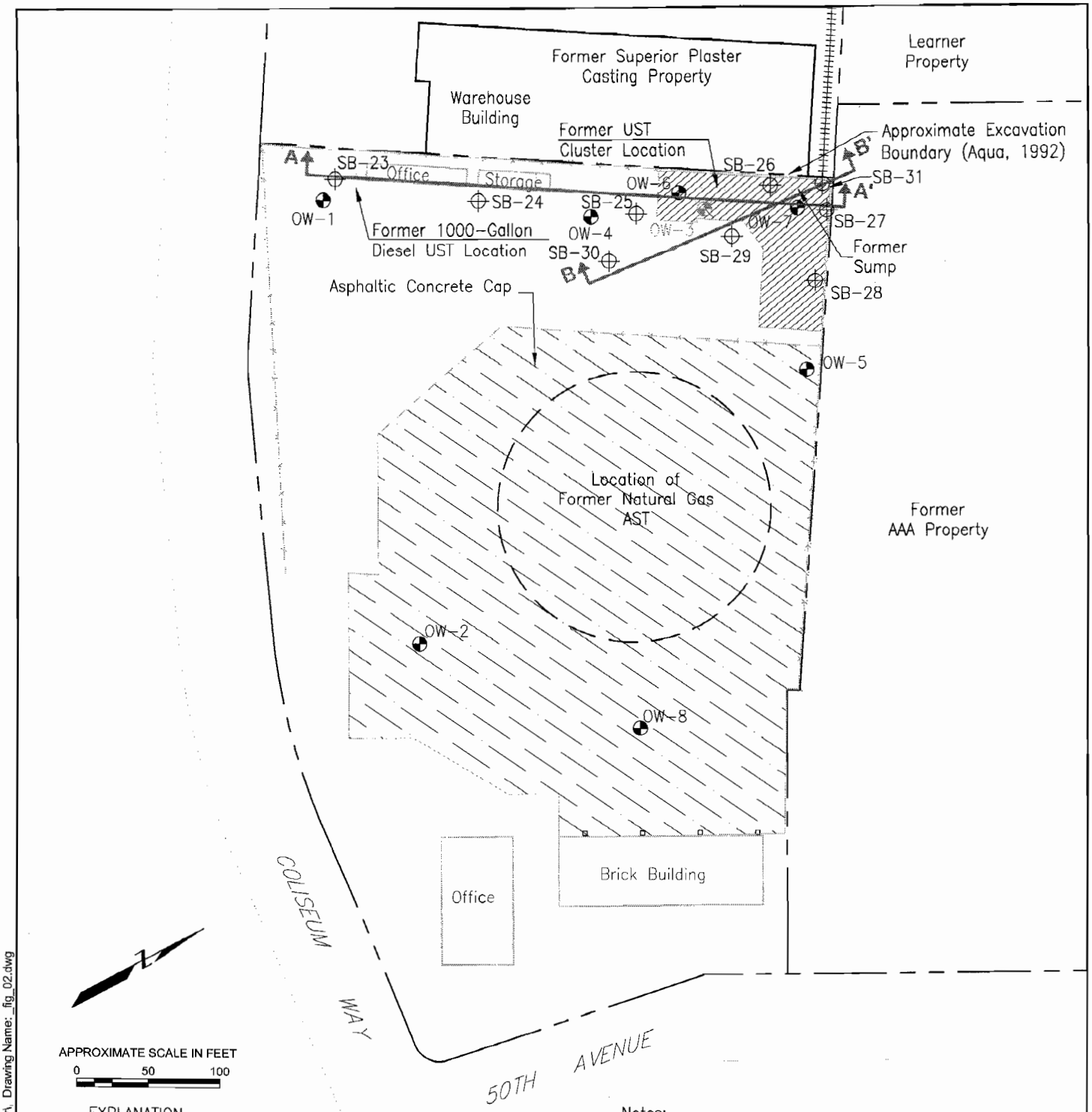
Table 5
Volatile Organic Compounds in Groundwater Samples
Collected at Westside Building Materials
745 50th Avenue, Oakland, California

Concentrations in micrograms per liter (unless otherwise noted)

Sample ID	Date	1,2,3-TCB	1,2,4-TCB	1,2,4-TMB	1,2-DCB	1,3,5-TMB	1,3-DCB	1,4-DCB	CB	IPB	n-Butylbenzene	Naphthalene	Para- Isopropyl Toluene	Propylbenzene	sec-Butylbenzene	TCE	Vinyl Chloride
DCB-P1	04/02/2008	0.7	2.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
DCB-P2	04/02/2008	<0.5	0.5J	<0.5	0.9	<0.5	4.0	18	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
DCB-P3	04/02/2008	1,600	7,100	<50	110	<50	66	210	<50	<50	<50	<200	<50	<50	<50	<50	<50
DCB-P4	04/02/2008	280	3,800	<31	200	<31	1,600	1,500	1,000	<31	<31	<130	<31	<31	<31	<31	<31
DCB-P5	04/02/2008	42	1,500	8.5J	45	<10	390	330	71	<10	<10	<40	<10	<10	<10	<10	<10
DCB-P6	04/02/2008	<1.0	32	6.3	7.8	5.8	64	110	39	3.8	3.7	49	1.8	2.7	1.6	5.2	2.5
REGULATORY CONCENTRATIONS (RWQCB ESLs)																	
Where groundwater is not considered a source of drinking water - commercial land use		NE	NE	NE	NE	NE	50,000	110	500	NE	NE	210	NE	NE	NE	530	3.8

Notes:

NE = none established
(J) estimated value
1,2,3-TCB = 1,2,3-Trichlorobenzene
1,2,4-TCB = 1,2,4-Trichlorobenzene
1,2,4-TMB = 1,2,4-Trimethylbenzene
1,3,5-TMB = 1,3,5-Trimethylbenzene
1,2-DCB = 1,2-Dichlorobenzene
1,3-DCB = 1,3-Dichlorobenzene
1,4-DCB = 1,4-Dichlorobenzene
CB = Chlorobenzene
IPB = Isopropylbenzene
TCE = Trichloroethene
Samples analyzed by: Curtis & Tompkins, Ltd.
Volatile organic compounds not reported in this summary table were not detected above the analytical reporting limits.
ESLs = Environmental Screening Levels by San Francisco Bay Regional Water Quality Control Board (RWQCB), November 2007.



EXPLANATION

- Groundwater Monitoring Wel
- Destoryed Groundwater Monitoring Well
- Sampling Locations
- Approximate Property Boundary
- Railroad Spur
- A A' Lines of cross section

ABBREVIATIONS

AST	Aboveground Storage Tank
UST	Underground Storage Tank

Notes:

1. Well locations are approximate.
2. Basemap from CCS Environmental Services, Inc., 2005, Groundwater Monitoring Report, PG&E Oakland General Construction Yard, Oakland, California.

SITE PLAN WITH SAMPLING LOCATIONS AND CROSS SECTION LOCATIONS
Pacific Gas & Electric Company
Oakland General Construction Yard
4930 Coliseum Way, Oakland, CA

By: MDW	Date: 04/18/08	Project No. 13045.007.A
Geomatrix		Figure 2

Plot Date: 04/18/08 - 3:46pm, Plotted by: amoglibery
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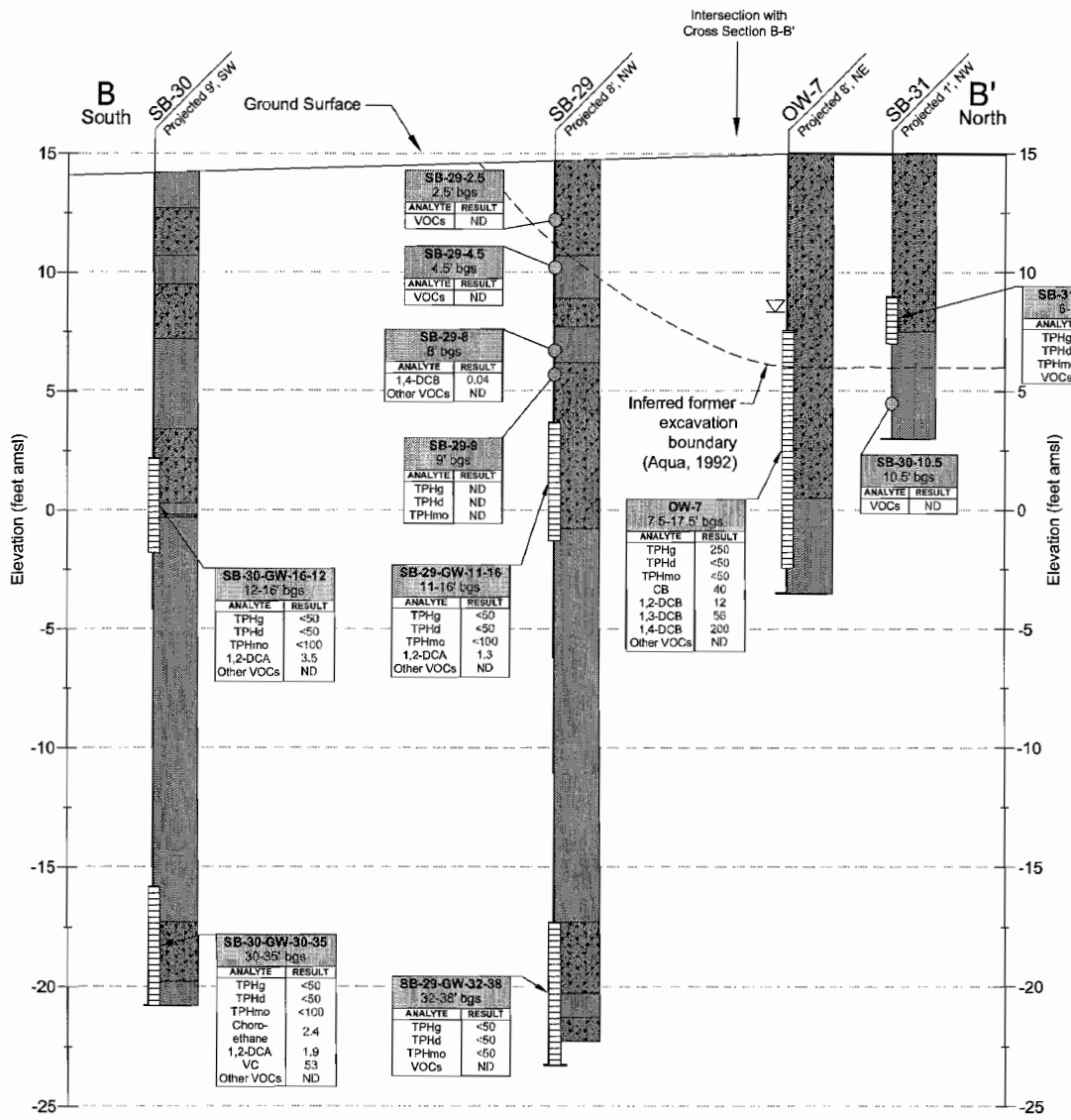


Explanation

- Soil boring or monitoring well
- Screened/groundwater sampling interval
- Total boring depth
- Groundwater observed in well (ITSI, 2007)
- Predominantly coarse-grained soil
- Predominantly fine-grained soil

Groundwater Sample Name Interval	
ANALYTE	RESULT
TPHd	µg/L
TPHmo	µg/L
TPHg	µg/L
VOCs	µg/L

Soil Sample Name Depth	
ANALYTE	RESULT
TPHd	mg/kg
TPHmo	mg/kg
TPHg	mg/kg
VOCs	mg/kg

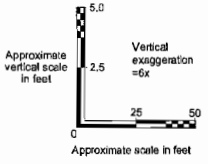
- Soil sample with analytical results

Abbreviations

amsl	above mean sea level
bgs	below ground surface
CB	Chlorobenzene
1,2-DCA	1,2-Dichloroethane
1,2-DCB	1,2-Dichlorobenzene
1,3-DCB	1,3-Dichlorobenzene
1,4-DCB	1,4-Dichlorobenzene
mg/kg	milligrams per kilogram
ND	Not detected above the detection limit (See Appendix D for specific detection limits)
TPHg	Total petroleum hydrocarbons quantified as gasoline
TPHd	Total petroleum hydrocarbons quantified as diesel
TPHmo	Total petroleum hydrocarbons quantified as motor oil
VC	Vinyl Chloride
VOCs	Volatile organic compounds

Notes:

1. See Figure 2 for locations of cross sections.
2. Ground surface elevation estimated from top of casing elevations of the monitoring wells.



CROSS SECTION B-B'
TPH AND VOCs IN SOIL AND GROUNDWATER
NOVEMBER 2007 - MARCH 2008
Pacific Gas & Electric Company
Oakland General Construction Yard
4930 Coliseum Way, Oakland, California

By: MDW	Date: 04/08/08	Project No. 13045.007.A
Geomatrix		Figure 4

APPENDIX H

STANDARD OPERATING PROCEDURES

STANDARD OPERATING PROCEDURE – DIRECT PUSH BORINGS

SOIL CORING AND SAMPLING PROCEDURES

Prior to drilling, all boreholes will be hand dug to a depth of 4-5 feet below ground surface (bgs) to check for underground utility lines.

Soil and groundwater samples are collected for lithologic and chemical analyses using a direct driven soil coring system. A hydraulic hammer drives sampling rods into the ground to collect continuous soil cores. As the rods are advanced, soil is driven into an approximately 2.5-inch-diamter sample barrel that is attached to the end of the rods. Soil samples are collected in sleeves inside the sample barrel as the rods are advanced. After being driven 4 to 5 feet into the ground, the rods are removed from the borehole. The sleeve containing the soil core is removed from the sample barrel, and can then be preserved for chemical analyses, or used for lithologic description. This process is repeated until the desired depth is reached.

A soil core interval selected for analyses is cut from the sleeve using a hacksaw. The ends of the tube are covered with aluminum foil or Teflon liner and sealed with plastic caps. The soil-filled liner is labeled with the bore number, sample depth, site location, date, and time. The samples are placed in bags and stored in a cooler containing ice. Soil from the core adjacent to the interval selected for analyses is placed in a plastic zip-top bag. The soil is allowed to volatilize for a period of time, depending on the ambient temperature. The soil is scanned with a flame-ionization detector (FID) or photo-ionization detector (PID).

All sample barrels, rods, and tools are cleaned with Alconox or equivalent detergent and de-ionized water. All rinsate from the cleaning is contained in 55-gallon drums at the project site.

GROUNDWATER SAMPLING FROM DIRECT PUSH BORINGS

After the targeted water-bearing zone has been penetrated, the soil-sample barrel is removed from the borehole. Small-diameter well casing with 0.010-inch slotted well screen may be installed in the borehole to facilitate the collection of groundwater samples. Threaded sections of PVC are lowered into the borehole. Groundwater samples may then be collected with a bailer, peristaltic pump, or WaTerra pump until adequate sample volume is obtained.

Groundwater samples are preserved, stored in an ice-filled cooler, and are delivered, under chain-of-custody, to a laboratory certified by the California Department of Health Services (DHS) for hazardous materials analysis.

BOREHOLE GROUTING FOR DIRECT PUSH BORINGS

Upon completion of soil and water sampling, boreholes will be abandoned with neat cement grout to the surface. If the borehole was advanced into groundwater, the grout is pumped through a grouting tube positioned at the bottom of the borehole.

STANDARD OPERATING PROCEDURE – HAND BORINGS

SOIL CORING AND SAMPLING PROCEDURES

Prior to drilling, the surface is either cored if concrete or hammered through using a pick, if asphalt.

A hand operated coring device equipped with a 3-inch diameter auger bit is advanced into the soil until full. The auger is removed and emptied and this process is repeated until the desired depth is reached. The hand auger is removed and a slide hammer core sampling device, equipped with two 3-inch long, 2-inch diameter brass liners is advanced six inches into the undisturbed soil at the bottom of the borehole.

One of the 3-inch liners is selected and the ends of the tube are covered with Teflon liner and sealed with plastic caps. The soil-filled liner is labeled with the borehole number, sample depth, site location, date, and time. The samples are placed in bags and stored in a cooler containing ice. Soil from the core adjacent to the interval selected for analyses is placed in a plastic zip-top bag. The soil is allowed to volatilize for a period of time, depending on the ambient temperature. The soil is scanned with a flame-ionization detector (FID) or photo-ionization detector (PID).

All sample barrels, rods, and tools are cleaned with Alconox or equivalent detergent and de-ionized water. All rinsate from the cleaning is contained in covered 5-gallon plastic buckets or 55-gallon drums at the project site.

BOREHOLE GROUTING FOR HAND BORINGS

Upon completion of soil and water sampling, boreholes will be abandoned with neat cement grout. If the borehole was advanced into groundwater, the grout is pumped through a grouting tube positioned at the bottom of the borehole.

STANDARD OPERATING PROCEDURE - GEOPORBE SOIL-GAS SAMPLING

A soil-gas sample will not be collected within seven days following a measurable precipitation event.

Sample rods are driven to the desired depth. A soil-gas sampling tubing system is inserted into the rods and connected to an expendable point holder. The rods are retracted a desired 6-inch interval and the expendable drive point on the bottom of the rods is released. Hydrated bentonite is placed around where the drill rod exits the ground to prevent surface air migrating down the outer portion of the rods. The bentonite will be allowed to hydrate and expand prior to purging the sample line.

The soil sample is then collected into a Summa canister. A summa canister is a stainless steel vessel which has had the internal surfaces specially passivated using a "Summa" process. The Summa canister arrives pre-cleaned from the laboratory and with an internal vacuum between 25" Hg and 20" Hg. Prior to use, the pressure in the summa canister is checked with a pressure gauge to ensure a vacuum of at least 25" Hg for quality control purposes.

As a check for air leaks a paper towel or rag wetted with isopropyl alcohol will be placed on all sample line fittings and the top of the inside of the drill rod. Analysis of the sample for isopropyl alcohol will indicate if ambient air entered the sample.

A vacuum is applied to the tubing to purge the ambient air from the sample tubing. Once the tubing has been purged of ambient air, it is connected to a summa canister. A particulate filter is used in-line to filter out particles and liquids.

In areas of fine-grained soils, a flow controller is placed in line between the filter and the canister to maintain a low purge rate.

The valve on the summa canister is opened, and the soil-gas sample is drawn into the canister. The sample tubing will be checked for condensation. If observed, the sample will be discarded. The flow controller will stop drawing in air after a pre-set time interval. The remaining canister vacuum should be about 5-inches Hg. The vacuum left inside the canister is recorded on the chain-of-custody. The soil-gas samples will be transferred under chain-of-custody procedures to a state certified laboratory for analyses. Upon receipt, the laboratory will check the pressure in the canister and compare it to the pressure recorded on the chain-of-custody for quality control purposes.

STANDARD OPERATING PROCEDURE – SUBSLAB SOILGAS SAMPLING

A sub slab soil-gas sample will not be collected within seven days following a measurable precipitation event.

A core will be removed from the building slab. Dirt and base rock will be removed to approximately 1 foot bellow the base of the slab. A particulate filter will be installed on the bottom of sample tubing and place in the hole. A 2/12 Sand pack is placed around the vapor tip to approximately 6 inches below the surface of the slab. Hydrated bentonite is placed around the sample tub to the surface or the slab to prevent surface air migrating under the slab. The bentonite will be allowed to hydrate and expand prior to purging the sample line.

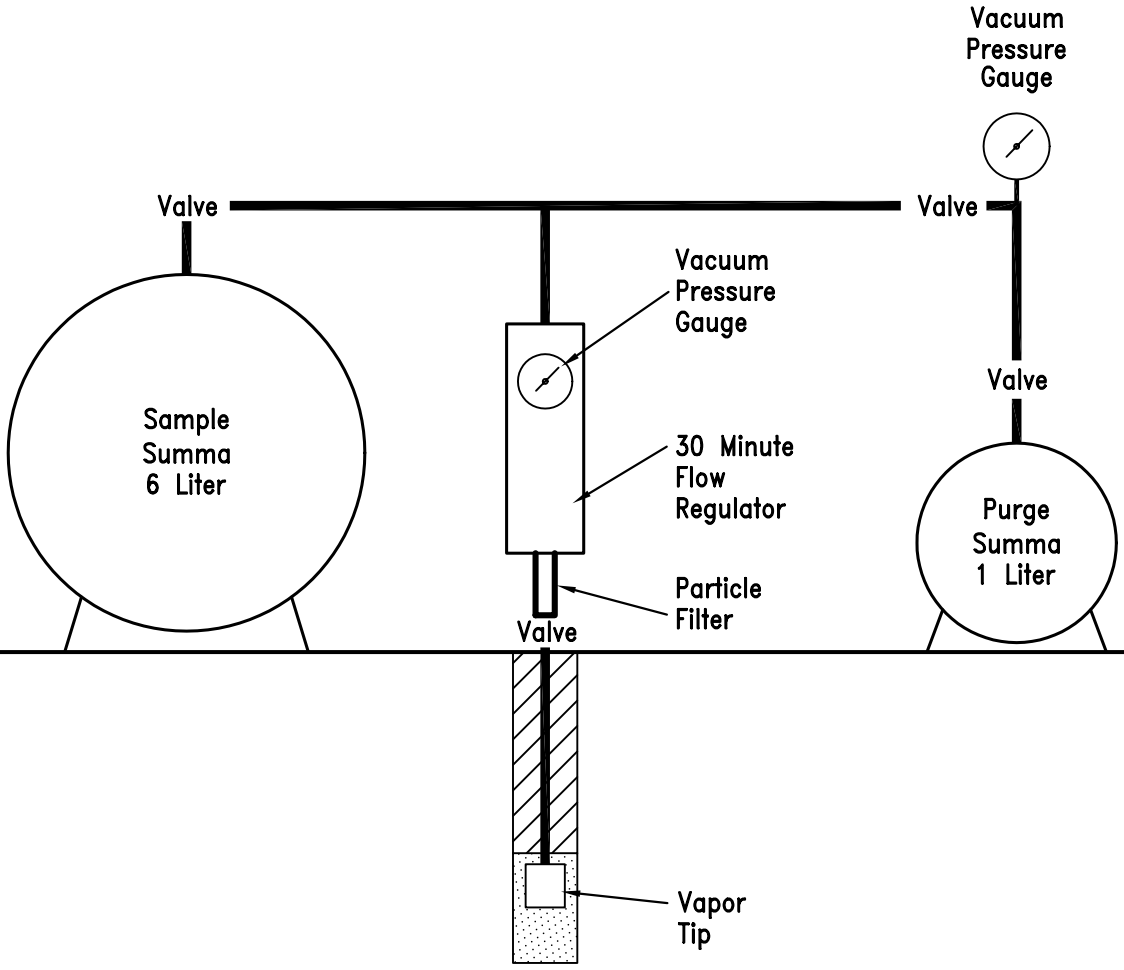
The sub slab sample is then collected into a Summa canister. A summa canister is a stainless steel vessel which has had the internal surfaces specially passivated using a "Summa" process. The Summa canister arrives pre-cleaned from the laboratory and with an internal vacuum between 25" Hg and 20" Hg. Prior to use, the pressure in the summa canister is checked with a pressure gauge to ensure a vacuum of at least 25" Hg for quality control purposes.

As a check for air leaks a paper towel or rag wetted with isopropyl alcohol will be placed on all sample line fittings and the top of the inside of the bentonite sealed slab. Analysis of the sample for isopropyl alcohol will indicate if ambient air entered the sample.

A vacuum is applied to the tubing to purge the ambient air from the sample tubing. Once the tubing has been purged of ambient air, it is connected to a summa canister. A particulate filter is used in-line to filter out particles and liquids.

In areas of fine-grained soils, a flow controller is placed in line between the filter and the canister to maintain a low purge rate.

The valve on the summa canister is opened, and the sub slab soil-gas sample is drawn into the canister. The sample tubing will be checked for condensation. If observed, the sample will be discarded. The flow controller will stop drawing in air after a pre-set time interval. The remaining canister vacuum should be about 5-inches Hg. The vacuum left inside the canister is recorded on the chain-of-custody. The sub slab soil-gas samples will be transferred under chain-of-custody procedures to a state certified laboratory for analyses. Upon receipt, the laboratory will check the pressure in the canister and compare it to the pressure recorded on the chain-of-custody for quality control purposes.



NOTE: All fittings swagelok

SOIL VAPOR SAMPLE TRAIN

ERAS Environmental Inc.

ERAS 03-12-08 Soil Vapor Sample Train.dwg