November 18, 2008

Paresh Khatri
Hazardous Materials Specialist
Alameda County Department of Environmental Health
1131 Harbor Bay Parkway
Alameda, California 94502-6577

Dear Mr. Khatri:

Subject: **Groundwater-Monitoring Well Installation Plan**

Reference: **Earthgrains Baking Companies, Inc.**
955 Kennedy Street
Oakland, California 94606
RO #0002569

On behalf of Earthgrains Baking Companies, Inc., PSC Industrial Outsourcing, LP is submitting a *Groundwater-Monitoring Well Installation Plan* for the above-referenced site. This document presents a work plan for the installation of groundwater-monitoring wells at the site, summarizes a sensitive receptor survey for the site, and provides an updated Site Conceptual Model.

If you have any questions concerning this document, then please contact me at (618) 281-1546.

Respectfully,

PSC INDUSTRIAL OUTSOURCING, LP

Scott Jander
Project Manager

cc: Melvin Siegel - Earthgrains Baking Companies, Inc.

GROUNDWATER-MONITORING WELL INSTALLATION PLAN

EARTHGRAINS BAKING COMPANIES, INC.
955 Kennedy Street
Oakland, California 94606

RO #0002569

November 18, 2008

Prepared By:

PSC INDUSTRIAL OUTSOURCING, LP
210 West Sand Bank Road
Columbia, Illinois 62236

Project 62402797

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955 Kennedy Street
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November 18, 2008

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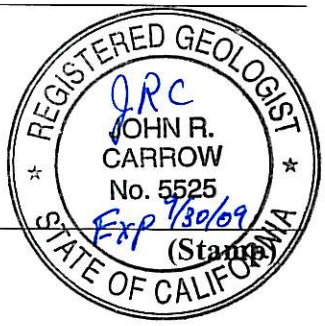

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GENERAL PROJECT INFORMATION

Site Location

Earthgrains Baking Companies, Inc.
955 Kennedy Street
Oakland, California 94606

Alameda County
Township 2 South, Range 3 West, Section 7 of the Mount Diablo Baseline and Meridian

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1.0 INTRODUCTION AND SITE BACKGROUND

On behalf of Earthgrains Baking Companies, Inc. (Earthgrains), PSC Industrial Outsourcing, LP (PSC) has prepared a *Groundwater-Monitoring Well Installation Plan* for corrective action work on an unauthorized diesel release from a former underground storage tank (UST) system at the Earthgrains plant located at 955 Kennedy Street in Oakland, California (Site). This document presents a plan for the groundwater-monitoring activities and summarizes a Sensitive Receptor Survey (SRS) conducted for the Site. The plan also includes background information on the Site and the diesel UST system release, chronology of investigation and corrective-action activities, a summary of the subsurface investigation data, and an updated Site Conceptual Model (SCM).

1.1 Description of Site and Vicinity

The Site occupies approximately five acres of property in Oakland, California (Figure 1). Earthgrains (*formerly* Kilpatrick's Bakeries, Inc.) owns and operates a 105,000 square-foot plant consisting of a bakery, product distribution center, and thrift store at the Site (Figure 2). An asphalt-paved parking area and driveway border the eastern and western sides of the Site and six truck-loading docks are situated in the northwestern portion of the Site. A stand-alone truck wash building is located west of the plant and a former truck maintenance garage was located in the northwestern corner of the Site.

The Site is bounded by Dennison Street to the north, Frederick Street to the south, Kennedy Street to the east, and King Street to the west. Surrounding properties to the north, south, and west of the Site are industrial and commercial businesses. Interstate 880 is located due east of Kennedy Street.

1.2 UST System History and Corrective Action Chronology

Earthgrains operated eight former UST systems at the Site from 1967 to 2005. The UST systems are shown on Figure 2 and include:

- One 350-gallon waste (used) oil, 10,000-gallon gasoline, and 10,000-gallon diesel UST systems were installed in 1967 adjacent to the former truck maintenance garage. The gasoline and diesel UST systems were removed for permanent closure in 1990 and the waste oil UST system was removed for permanent closure in 1991.

- Four 10,000-gallon diesel UST systems were installed in a shared excavation in 1977 due south of the truck wash building as a back-up fuel supply for the bakery ovens. The four diesel UST systems were removed for permanent closure in 1989.

- One 10,000-gallon diesel UST system was installed in 1991 to replace the diesel UST system removed south of the truck maintenance garage. This last 10,000-gallon diesel UST system was removed for permanent closure in 2005.

The permanent closure and corrective action performed on the first seven UST systems at the Site are discussed in Section 1.2.1. and on the last (eighth) UST system in Section 1.2.2.

1.2.1 Corrective Action for 1990 Diesel Release

The following table summarizes the closure of the first seven UST systems at the Site and corrective actions performed in response to the 1990 unauthorized diesel release at the Site:

October - November 1989	Removal of four 10,000-gallon diesel UST systems south of the truck wash building. Permanent closure documentation submitted to the ACDEH in December 1989.
December 1990	Removal of one 10,000-gallon gasoline and one 10,000-gallon diesel UST systems located south of the former truck maintenance garage. One new 10,000-gallon diesel UST was installed in the excavation of the former gasoline and diesel tanks. One groundwater-monitoring well was installed in the former UST excavation.
January - June 1991	Removal of one 350-gallon waste oil UST system located south of the truck maintenance garage. John Mathes & Associates, Inc. (Mathes) submitted an *Underground Storage Tank Closure and Installation Report* that documented the closure activities performed during December 1990 and January 1991.
December 1991	Mathes submitted an *Additional UST Closure and Installation Information Report* to the ACDEH.
August 1992	Burlington Environmental, Inc. (Burlington) drilled borehole B-1 and installed groundwater-monitoring wells MW-1 through MW-5.
January 1993	Burlington submitted a *Soil and Groundwater Investigation Report* to the ACDEH that summarized the corrective-action work performed in late 1992.
March 1993 - January 1995	Quarterly groundwater monitoring was performed on MW-1 through MW-5. Samples were analyzed for: total petroleum hydrocarbons (TPH) as gasoline, diesel, and motor oil; benzene, toluene, ethylbenzene and total xylenes (BTEX); volatile organic compounds (VOCs); and polynuclear aromatic hydrocarbons (PAHs).
May 1995	ACDEH requested that Burlington prepare a risk assessment in order to assist their case closure review.
July 1995	Philip Environmental Services Corporation (PSC) prepared and submitted the *Tier I Risk Assessment* to the ACDEH.
April 1996	ACDEH issued a *Remedial Action Completion Certification* that included a *Case Closure Summary* and *No Further Action* notification. PSC abandoned MW-1 through MW-5 and submitted a *Notification of Well Abandonment* to the ACDEH.

Groundwater samples from MW-4 and MW-5 contained concentrations of chlorinated and non-chlorinated VOCs. PSC concluded in a *Tier 1 Risk Assessment* submitted in 1995 that the source of the VOC concentrations in groundwater was located off-site and the ACDEH agreed with the findings (Burlington, 1995). The ACDEH closed the first environmental case in March 1996 and requested that the groundwater-monitoring wells be abandoned at the Site.

The monitoring wells were abandoned in April 1996 and PSC submitted a *Notification of Well Abandonment* dated April 4, 1996.

1.2.2 Summary of Corrective Action for 2005 Unauthorized Diesel Release

One 10,000-gallon diesel UST system was installed in 1991 in the former excavation of the 10,000-gallon gasoline and diesel tanks (Figure 2). The UST system consisted of a STI-P3® tank constructed of dual-wall steel and protected with a fiberglass-reinforced plastic coating (John Mathes, 1991).

The following table summarizes the permanent closure of the eighth and final UST system at the Site and corrective actions performed in response to the 2005 unauthorized diesel release at the Site:

1995	Earthgrains installed a new pump island southeast of the truck wash building approximately 110 feet south of the diesel UST location.
April - May 2003	PSC drilled soil borings Probe Hole-1 and Probe Hole-2 to depths of 4.5 and 3.5 feet respectively, during an equipment upgrade to the diesel pump island. TPH concentrations were detected at 3,330 milligrams-per-kilogram (mg/kg). PSC reported this data in a "*Pump Island Modification And Testing Report"* dated May 21, 2003.
March 2005	The 10,000-gallon diesel UST system was removed for permanent closure.
April 2005	PSC submitted the UST Unauthorized Release (Leak) / Contamination Site Report to the Oakland Fire Department.
September 2006	PSC's subcontractor, ETIC Engineering, Inc. (ETIC), drilled 40 soil borings and collected 131 soil samples and 38 groundwater samples. PSC and ETIC submitted the data in a *"Soil and Groundwater Quality Investigation Report"* dated August 25, 2006.
March 2007	ETIC drilled 12 additional soil borings and collected 38 soil samples and 11 groundwater samples. PSC and ETIC submitted the investigation data in a *"Remedial Investigation Report and Source Removal Work Plan"* dated May 15, 2007.

The historical soil sampling locations are indicated on Figure 3. The soil and groundwater analytical data from grab samples collected during the 2006 and 2007 site investigations are provided in Tables 1, 2, and 3. Based upon discussions with the ACDEH, PSC postponed the proposed source removal to allow for a feasibility study and remedial evaluation to assess the effectiveness of the planned excavation of contaminated soil.

1.3 Local Geology and Hydrogeology

The Site is located in the East Bay Plain Sub-basin of the Santa Clara Valley Groundwater Basin. The East Bay Plain Sub-basin is a northwest trending alluvial plain bounded on the north by San Pablo Bay, on the east by the contact with Franciscan Basement rock, and on the south by the Niles Cone Groundwater Basin. The East Bay Plain Sub-basin extends beneath San Francisco Bay to the west. Numerous creeks including San Pablo Creek, Wildcat Creek,

San Leandro Creek, and San Lorenzo Creek flow from the western slope of the Coast Ranges westward across the plain and into the San Francisco Bay.

The East Bay Plain Sub-basin aquifer system consists of unconsolidated deposits from the Quaternary age. Deposits include the early Pleistocene Santa Clara Formation, the late Pleistocene Alameda Formation, the early Holocene Temescal Formation, and artificial fill. The cumulative thickness of the unconsolidated deposits is about 1,000 feet (Department of Water Resources [DWR] 2003).

Artificial fill is found in the sub-basin mostly along the bay front and wetlands areas and is derived primarily from dredging as well as quarrying, construction, demolition debris, and municipal waste. The fill ranges in thickness from 1 to 50 feet with the thickest deposits found closer to San Francisco Bay (DWR 2003).

Historical boring logs indicate that varying amounts of clay, silt, sand, and gravel underlies the Site. The predominant soil types beneath the Site consist primarily of clay and silty clay. Drilling activities performed at the Site during the 1990s indicate that groundwater was first encountered within a sand and gravel layer located at depths of 18 to 26 feet below-ground-surface (bgs). A small amount of perched groundwater was encountered in a thin sandy and silty lens located between 10 and 12 feet bgs in some of the borings. In September 2006, groundwater was first encountered in the soil borings at depths ranging from approximately 9.5 to 24 feet bgs and subsequently measured at approximately 9 to 19 feet bgs. Historical monitoring data indicate that groundwater flows generally towards the west-southwest with a hydraulic gradient ranging from approximately 0.005 to 0.01 foot-per-linear foot (ft/ft).

1.4 Topography and Surface Water

The land surface slopes towards the west-southwest in the vicinity of the Site at a gradient of approximately 0.5 foot per 100 feet. The elevation of the Site is approximately 15 feet above mean sea level.

Brooklyn Basin, an estuary of San Francisco Bay that lies between Oakland to the east and Coast Guard Island to the west, is located approximately 800 feet west-southwest of the Site. An unnamed creek flows into Brooklyn Basin approximately 1,800 feet northwest of the Site near the intersection of 12th Street and 19th Avenue (Sowers 2000). Sausal Creek flows generally to the south within approximately 2,800 feet east of the Site, and empties into San Francisco Bay approximately 4,400 feet southeast of the Site. Sausal Creek appears to be contained in an underground culvert for approximately the final 1.3 miles of its course.

1.5 Current Site Activities

Earthgrains proposes to proceed with the contamination source removal with pre-approval from the California UST Clean-up Fund. Based upon discussions with the ACDEH, the pre-approval will require a Feasibility Study/Remedial Evaluation (FS/RE) in order to evaluate the effectiveness of the source removal. PSC has reviewed the preliminary scope-of-work presented in both the "*Remedial Investigation Report and Source Removal Work Plan*" and

the addendum report that outlines the verification sampling procedures. The requirements for designing a dewatering system for the source removal excavations are unknown at this time.

The ACDEH has previously indicated that regardless of the extent of the contamination source removal, groundwater monitoring will be required for the current unauthorized release at the Site. PSC proposes this groundwater-monitoring installation plan with the objective of assessing the impact from the release on groundwater at the Site and obtaining necessary data for designing a dewatering system for the source removal excavations. The groundwater data obtained from the pumping test on the new monitoring wells installed at the Site will be used to complete a FS/RE and remedial action plan (RAP).

2.0 SUMMARY OF CONDUIT EVALUATION/ SENSITIVE RECEPTOR SURVEY

ETIC conducted a utility conduit evaluation and a survey of sensitive receptors for the Site. PSC submitted the SRS to the ACDEH on June 20, 2008 and the report is summarized by the following information:

2.1 Conduit Evaluation

Subsurface utilities in the vicinity of the Site were identified using maps provided by the East Bay Municipal Utility District (EBMUD) and the City of Oakland. Subsurface utilities in the Site vicinity include municipal water, storm water and sanitary sewer. The maps are included in Appendix A of the SRS.

A utility map provided by the EBMUD shows municipal water lines constructed of cast mortar and cast iron located beneath King Street, Frederick Street, and Dennison Street. The water line located beneath King Street travels approximately 90 feet west of the source area of the unauthorized release. Service lines appear to enter the Site from King Street, north of the truck wash building. The depths to municipal water mains were not indicated on the EBMUD utility map and telephone calls made by PSC on February 19, March 18, and April 4, 2008 requesting that information were not answered by the EBMUD.

A utility map provided by the City of Oakland Building Services Department shows storm water pipelines in the vicinity of the Site. Concrete storm water pipelines are located beneath King Street and Dennison Street. The storm water pipeline beneath King Street is located approximately 50 feet west of the primary source area at the Site. The storm water pipeline is connected to catch basins located north, east and south of the primary contamination source area at the Site. The depths to storm water sewers were not indicated on the utility maps and are currently unknown.

A utility map provided by the City of Oakland Building Services Department shows sanitary sewer pipelines in the Site vicinity. A 15-inch diameter sanitary sewer pipeline is located beneath Frederick Street, King Street and Dennison Street. The pipeline beneath King Street is located approximately 70 feet west of the primary source area. A sanitary sewer lateral pipeline extends southwestward from the plant through an oil/water separator system in the truck wash building to the main sanitary sewer pipeline beneath King Street. The pipeline travels approximately 30 feet north of the primary contamination source area. Depths to the sanitary sewers were not indicated on the utility maps and are currently unknown.

Utility service providers Pacific Gas and Electric Company (PG&E) and American Telephone & Telegraph (AT&T) did not provide PSC the requested information about locations of their utilities. However, overhead electrical lines, possible power drops, and possible telephone lines are evident on utility poles located along King Street. A natural gas pipeline traveling parallel to King Street is located beneath the western edge of the Site approximately 35 feet west of the primary source area. The depth of the natural gas pipeline is currently unknown.

2.2 Sensitive Receptor Survey

The SRS includes a review of the public water supply in Oakland, a survey of water wells, identification of surface water, and a survey of residential buildings, public-use areas, utility vaults, and other potential sensitive receptors in the Site vicinity.

2.2.1 City of Oakland Public Water Supply

The Site is located within the incorporated areas of City of Oakland and the EBMUD is the municipal water provider in the area. The EBMUD uses a combination of treated surface water (90 percent) from the Mokelumne River watershed and rainfall (10 percent) from the East Bay watershed to supply water to its customers (EBMUD, 2006). Water pipelines transport Sierra Nevada snowmelt from the Pardee Reservoir in the Sierra foothills to the EBMUD water treatment facilities in Walnut Creek, Lafayette, and Orinda. Water from the San Pablo Reservoir is piped to the Sobrante and San Pablo treatment facilities and from the Upper San Leandro Reservoir to the Upper San Leandro treatment facility. A 2006 EBMUD Annual Water Quality Report is provided in Appendix B of the SRS.

2.2.2 Well Survey

A survey of wells located within 2,000 feet of the Site was performed during August 2006 and March 2008. The Alameda County Public Works Agency (PWA) and Environmental Data Resources (EDR) were contacted to identify public-water supply wells in the Site vicinity. Where possible, well locations were confirmed during the site reconnaissance performed on March 26, 2008. The well survey data are shown on Figure 4, Appendix C, and Appendix D of SRS and presented in Table 1, but groundwater-monitoring, extraction, and abandoned wells were not included.

The Alameda County PWA provided records for two water supply wells (PRW1 and PRW2) located within 2,000 feet of the contamination source area at the Site. PRW1 was installed at 1091 Calcot Street in Oakland, approximately 700 feet north-northeast and up-gradient of the Site. Records indicate that the well was drilled in January 2006 to a depth of 345 feet bgs, and its present status is abandoned. PRW2 was installed at 2619 East 12th Street in Oakland, approximately 1,400 feet east-northeast and up-gradient of the Site. Records indicate that the well was drilled to a depth of 166 feet bgs, and its present status is abandoned. Additional industrial and irrigation wells were found outside the search radius, but EDR records did not indicate any water supply wells located within the search radius.

2.2.3 Surface Water

The EDR report and historical topographic maps dated 1915, 1948, 1949, 1959, 1968, 1973, and 1980 were evaluated for the presence of any surface water bodies and potential wetlands located within 2,000 feet of the Site. For the purpose of evaluating any sensitive receptors, potable water contained within aqueducts is considered to be a surface water body. Surface water bodies and wetlands identified in the Site vicinity are listed in Table 2, and EDR figures and historical topographic maps are included in Appendix E of the SRS.

The closest surface water body to the Site is Brooklyn Basin, within the Oakland Estuary, located approximately 800 feet west-southwest and down-gradient of the Site. An unnamed creek flows into Brooklyn Basin approximately 1,800 feet northwest of the Site. Wetlands are identified on the EDR figures within 2,000 feet of the Site and generally correspond to the margins of the estuary.

2.2.4 Residential Buildings

On March 26, 2008, four residential buildings were identified within 330 feet of the Site. These residential buildings are shown on Figure 5 of the SRS and include:

- A 17-unit, two-story apartment building located approximately 270 feet northwest and cross-gradient of the Site at 2020 Dennison Street;
- A three-unit, two-story apartment building located approximately 140 feet south and cross-gradient of the Site at 837 Kennedy Street; and
- Two single-family, two-story residences located approximately 180 feet south of the Site at 825 Kennedy Street and 220 feet south of the Site at 821 Kennedy Street.

2.2.5 Public-Use Areas

Public-use areas located within 2,000 feet of the Site were noted during the reconnaissance of the Site. The public-use areas include non-residential buildings such as hospitals, schools, churches, day-care facilities, and open-public spaces such as city parks. The public-use areas identified within the search radius are shown on Figures 4 and 5 and listed in Table 3 of the SRS. One public-use area identified within 2,000 feet of the Site was the Beacon Middle School located at 2000 Dennison Street, approximately 320 feet northwest and cross-gradient of the Site.

2.2.6 Utility Vaults

Twenty-three sub-grade utility vaults were identified in the March 2008 site reconnaissance. Fifteen of the 23 vaults (UV1 - UV15) are located on or near the western portion of the Site. Utility vaults UV1 - UV15 are shown on Figures 2 and 3 and are listed in Table 4 of the SRS.

2.2.7 Other Potential Sensitive Receptors

No buildings with basements or sub-grade structures were identified during the March 2008 site reconnaissance activities.

2.3 Conduit Evaluations and SRS Summary

A city utility department map review, database search, and survey for the Site indicated the following potential conduits and sensitive receptors:

- Subsurface utilities traveling beneath King Street include storm water pipelines, sanitary sewer pipelines, water lines, and a natural gas line. These utilities are located from 25 to 90 feet west of the primary contamination source area;

- Depths of subsurface utilities were not indicated on any utility maps. Groundwater was encountered in soil borings and wells at the Site at depths less then 10 feet bgs. Certain utilities such as storm water and sanitary sewer pipelines may be located below this shallow groundwater;

- The well survey identified two abandoned water supply wells located within 2,000 feet of the contamination source area at the Site;

- The closest surface water body, Brooklyn Basin, is located within the Oakland Estuary approximately 800 feet west-southwest and down-gradient of the Site;

- Four residential buildings and a public-use area were identified within approximately 330 feet of the Site. Residential buildings included multi-storied apartment complexes and single-family residences. Residential buildings are either up-gradient or cross-gradient of the contamination source area at the Site. The public-use area is a middle school located approximately 320 feet northwest and cross-gradient of the Site; and

- Fifteen utility vaults, including storm water catch basins, a trench drain, a sanitary sewer clean-out, a municipal water meter, an oil/water separator, and a PG&E utility vault are located on and/or in the vicinity of the western portion of the Site.

3.0 UPDATED SITE CONCEPTUAL MODEL

PSC has prepared an updated SCM for the Site based upon historical data and information obtained from the SRS. The objective of a SCM is to provide an opinion on the following:

- Primary and secondary sources of contamination;
- Current vertical and lateral extent of contamination;
- Fate and transport of contaminants in the effected media;
- Potential exposure pathways and receptors;
- Anticipated effectiveness of corrective action; and
- Contaminants ultimate environmental fate.

The components of a SCM may include maps, cross sections, tables and charts, boring logs, and a narrative on the current extent of contamination. The following sections discuss the information available to fulfill the objective of the SCM. In addition, the information lacking is presented in Section 3.8 "Data Gap Summary".

3.1 Sources of Contamination

As discussed in Section 1.0, eight former UST systems have operated at the Site. The primary source area for the current unauthorized diesel release at the Site is the former pump island located southeast of the truck wash building. Also, petroleum-hydrocarbon concentrations remain in the former excavation of the 350-gallon waste oil UST system removed near the southwest corner of the former truck maintenance garage and soil impacted in the vicinity is a secondary source of contamination. The contamination source areas are shown on Figure 2.

3.2 Chemical-of-Concern and Affected Media

Soil and groundwater analytical data from previous investigations indicate that the subsurface is impacted by petroleum hydrocarbons from diesel releases. The chemical-of-concern at the Site is TPH-diesel (TPH-d) in both saturated and unsaturated soil. Perched water at a depth of approximately 10 feet bgs and shallow groundwater at a depth of approximately 18 feet bgs has been impacted by TPH-d.

3.3 Extent of Petroleum Hydrocarbons

Subsurface investigations performed during 2006 and 2007 included drilling 52 soil borings and collecting 192 soil samples and 49 groundwater samples. Soil and groundwater samples were analyzed for all appropriate fuel contaminants of concern and the soil boring locations are shown on Figure 3. The lateral and vertical extent of residual petroleum hydrocarbons in soil and groundwater at the Site is presented in the next section.

3.3.1 Lateral Extent of Petroleum Hydrocarbons in Soil

Elevated concentrations of petroleum hydrocarbons were detected in soil samples collected from the former diesel UST excavation, piping chase, and pump island areas. Based upon laboratory analytical data from the 2006 and 2007 subsurface investigations, impacted soil in the primary source area is located between the building and King Street, although samples collected beneath King Street also indicate elevated concentrations of TPH-d. In addition, an area near the southwest corner of the former truck maintenance garage is impacted by residual diesel contamination.

Based upon the extrapolation of TPH-d concentrations in soil from the soil borings, the extent of soil with concentrations exceeding 500 mg/kg is approximately a 600 - 800 ft^2 area near the primary contamination source area, a 500 ft^2 area near the former truck maintenance garage, and a 200 ft^2 area along a line beneath King Street.

3.3.2 Vertical Extent of Petroleum Hydrocarbons in Soil

Groundwater was first encountered at approximately 24 feet bgs in areas where granular backfill prevented a perched water table. Unsaturated soil impact in this area is limited to a depth of approximately 16 feet bgs. Saturated soil impact is minor and limited in areal extent based upon samples collected beneath 20 feet bgs.

3.3.3 Lateral Extent of Petroleum Hydrocarbons in Groundwater

Based upon groundwater samples collected, TPH-d impact is limited to an area just below and southeast of the primary source area and just west of the former truck maintenance garage. Groundwater samples collected from open boreholes are not representative of groundwater conditions and may have residual petroleum hydrocarbons in saturated or unsaturated soil from the boreholes. The extent of impact to groundwater should be assessed using samples from properly constructed and developed groundwater-monitoring wells. The lateral extent of TPH-d impact in groundwater is currently considered a data gap.

3.3.4 Vertical Extent of Petroleum Hydrocarbons in Groundwater

Grab samples were collected from the perched water in areas backfilled with granular material and from shallow groundwater encountered at a depth approximately 24 feet bgs. The extent of TPH-d impact to groundwater should be assessed using samples from properly constructed and developed groundwater-monitoring wells placed in shallow groundwater. The vertical extent of TPH-d impact in groundwater is currently considered a data gap.

3.4 Transport Mechanisms

In 2006 and 2007, the residual TPH-d impact was primarily detected in soil samples collected between 2 and 16 feet bgs and in groundwater samples collected from the shallow aquifer. Residual petroleum-hydrocarbon constituents remain in the vadose zone in the vicinity of the former diesel pump island and piping chase. These constituents can leach into groundwater or

volatilize into soil vapor. The primary transport mechanisms for residual contamination in the shallow groundwater aquifer are advection, adsorption, desorption, and volatilization. Residual petroleum-hydrocarbon contamination in the vicinity of the former diesel pump island and truck maintenance garage can be transported with groundwater through advection. Elevated concentrations of TPH-d in groundwater at borings E47 and E50 are likely due to the preferential movement of diesel through the permeable backfill present in the former shared excavation of the four 10,000-gallon diesel tanks.

The soil and groundwater data indicate that both media are affected in the shallow aquifer, and consequently adsorption and desorption between the two phases could be occurring. Petroleum hydrocarbon constituents may volatilize from soil and/or groundwater into soil vapor. Volatilization of petroleum-hydrocarbon constituents from soil and groundwater into vapor may result in subsequent migration to the ground surface.

3.5 Potential Exposure Pathways and Receptors

Potential exposure pathways and receptors at the Site and nearby properties were evaluated based on current and potential future use. A schematic diagram of the Site Conceptual Model is presented in Figure 5. The Site is an active commercial and industrial property with nearby land used for commercial, industrial, and residential purposes. The plant and retail thrift store occupy approximately 90 percent of the Site and both have concrete floors. The remaining surfaces at the Site are paved with either asphalt or concrete.

Potentially complete exposure pathways and receptors have been identified for the Site, with the following criteria:

- A source and mechanism of chemical release;
- One or more retention or transport media (soil, groundwater, soil vapor, air, or surface water);
- A point of potential contact with the impacted medium (referred to as the exposure point); and
- An exposure route at the point of contact (inhalation, ingestion, or dermal contact).

Figure 6 provides an exposure pathway flowchart. The site-specific, potentially-complete exposure pathways and potential receptors are depicted on attached figures and summarized as follows:

- Inhalation of chemicals volatilizing from soil or groundwater to indoor or outdoor air (on-site or off-site residential, commercial, or industrial receptors);
- Inhalation of volatiles, dermal contact, or incidental ingestion of contaminated soil or groundwater through excavation (on-site or off-site construction workers);

- Ingestion of or dermal contact with contaminated groundwater from a potential current or future water supply well (on-site or off-site residential, commercial, or industrial receptors); and

- Dermal contact with or incidental ingestion of contaminated surface water (off-site residential, commercial, or industrial receptors or construction workers).

Based upon the presence of paved surfaces, occupants will not be subject to direct exposure (ingestion or dermal contact) with residual petroleum-hydrocarbon constituents in near surface or subsurface soil for current land use at the Site. However, construction workers could have direct exposure to residual contamination in near surface and subsurface soil, if excavation occurs in the future.

Potential exposure by ingestion or dermal contact with impacted groundwater at the Site is not very probable considering the Site is serviced by the EBMUD. Installation of shallow water-producing wells within the contaminant plume could create a direct and complete exposure pathway, however the likelihood of water well installed in an industrial area this close to the Brooklyn Basin is very minimal. Construction workers may also have direct exposure to the residual contamination in groundwater, if excavation and/or dewatering activities occur in the future at the Site.

The well survey identified two wells within 2,000 feet of the Site. One public well is located approximately 700 feet north-northeast, and the other water well is approximately 1,400 feet east-northeast of the Site. Both of these water wells are hydraulically up-gradient of the Site. While there is still an exposure potential since the lateral extent of groundwater impact is unknown, completion of this exposure pathway is highly unlikely.

The vapor-intrusion pathway from impacted soil and/or groundwater to outdoor or indoor air is potentially complete. However, most diesel contaminants are not very volatile or have a very low Henry's Constant, which is defined as the ratio of aqueous phase concentrations to its equilibrium partial pressure in a vapor phase. Depending upon the analytical data from groundwater investigations and source removal activities, a soil-vapor investigation and intrusion study may be required to evaluate the potential health risks associated with indirect exposure via inhalation of volatiles from the subsurface.

If contaminated groundwater discharge to surface water occurs, then there would be a potentially complete exposure pathway for off-site receptors and/or construction workers. Based upon the SRS findings, the closest surface water body to the Site is the Brooklyn Basin, within the Oakland Estuary, located approximately 800 feet southwest and down-gradient of the Site. An unnamed creek flows into the Brooklyn Basin approximately 1,800 feet northwest of the Site. Wetlands were identified on the EDR figures within 2,000 feet of the Site and generally correspond to the margins of the estuary. Therefore, a potential exposure pathway exists, since the lateral extent of groundwater impact is currently unknown.

3.6 Corrective Action Feasibility and Effectiveness

Soil and groundwater beneath the Site is impacted by diesel from former UST system releases at the Site. Based upon the extensive subsurface investigations performed at the Site in 2006 and 2007, the diesel contamination in soil and groundwater appears to be concentrated in the areas of the former pump island and UST excavations. The areas impacted at concentrations over 500 mg/kg is approximately 600 - 800 ft^2 area near the primary source area, a 500 ft^2 area near the former truck maintenance garage and a 200 ft^2 area along a line in King Street. Removal and disposal of diesel-impacted soil by excavation will be effective in reducing concentrations that exceed 500 mg/kg.

The impact to groundwater beneath the Site appears to be controlled by permeable granular material used to backfill the former diesel pump island and UST excavations. The water in the excavations appears to be perched and removal of the impacted soil in the primary source area will be effective in reducing diesel impact to this perched groundwater. The hydraulic connection of perched water to the lower permeable zones is considered a data gap. The data gaps are summarized in the following section.

3.7 Data Gap Summary

The following data gaps have been identified for the Site:

- Hydraulic connection between shallow perched water and deeper permeable zones;
- Current groundwater flow direction and gradient beneath the Site;
- Hydraulic conductivity of the water-bearing zones beneath the Site; and
- Lateral and vertical extent of groundwater contamination beneath King Street.

The plan for installation of groundwater-monitoring wells and aquifer testing to address these data gaps is presented in Section 4.

The objective of the proposed scope-of-services is to assess groundwater quality beneath the Site and provide data for limited source removal activities at the Site.

4.0 GROUNDWATER INVESTIGATION

The objective of the proposed scope-of-services is to assess groundwater quality beneath the Site and provide data for limited source removal activities at the Site.

4.1 Groundwater Monitoring Well Installation

Four 2-inch diameter groundwater-monitoring wells will be installed at the Site in order to assess groundwater quality around the former diesel pump island and UST excavations. Based upon the groundwater monitoring performed from the previous unauthorized release, groundwater at the Site flows in a west-southwest direction. PSC proposes to place one monitoring well northeast of the former pump island in a hydraulically up-gradient location and the remaining three monitoring wells northwest and west of the former excavation of the four diesel tanks and south of the former pump island. One 6-inch diameter dewatering well will be installed in the granular backfill material of the former shared excavation of the four diesel tanks. The proposed groundwater monitoring and dewatering well locations are shown on Figure 7.

Prior to commencement of the field activities, PSC will obtain the appropriate work permits from Alameda County and the City of Oakland for drilling and monitoring well installations. A health and safety plan will be prepared and implemented during all Site activities.

The proposed drilling locations will be marked and checked for the presence of buried utilities by Underground Service Alert. In addition, a private utility-locating contractor will be hired to identify the presence of underground utilities. Each soil boring at the Site will be cleared for the presence of subsurface utilities to a minimum depth of four feet bgs using a hand auger and/or an air-knife and vacuum system, prior to starting the drilling activities.

4.1.1 Drilling

Drilling will be performed by a C57-licensed contractor using a hollow-stem auger drilling rig equipped with both 8- and 12-inch hollow-stem augers. All drilling and sampling equipment will be decontaminated prior to commencement of the field activities. Reusable sampling equipment will be washed with detergent solution, rinsed with tap water, and then rinsed with distilled water prior to each use. A PSC geologist will supervise the drilling and sampling activities at the Site. Soil samples will be examined for lithologic identification and visible signs of contamination in accordance with the Unified Soil Classification System and the Standard Practice for Description and Identification of Soils (Visual-Manual Procedure), ASTM Designation D2488 (ASTM 2000). The observations will be recorded on boring logs and a California Professional Geologist will provide technical guidance for the Site activities.

A photo-ionization detector will be used to monitor for organic vapors during the drilling. Measurements of headspace vapors from soil samples will be measured and recorded on the boring logs. If any unusual stains or odors are observed in the soil, additional samples will be collected for laboratory analyses.

Soil samples will be collected at five-foot intervals using a split-spoon sampler. Additional samples will be collected if a change in lithology, chemical impact, or the soil/groundwater interface is observed. The soil samplers will be fitted with six-inch stainless steel liners. Samples for laboratory analyses will be sealed with Teflon tape and vinyl-end caps, labeled, stored on ice in a thermally-insulated cooler, and then transported under chain-of-custody protocol to a state-certified laboratory. The soil samples will be analyzed for TPH-d and BTEX by EPA Method 8260B.

The four soil borings used for the two-inch diameter groundwater-monitoring wells will be drilled into the permeable zone previously encountered at the Site between 18 and 25 feet bgs. The total depth of each soil boring will be approximately 25 to 30 feet bgs. The soil boring for the dewatering well will be drilled to approximately 15 feet bgs, which corresponds to the depth of the former shared diesel tank excavation.

4.1.2 Monitoring Well Installation

During the 2006 and 2007 subsurface investigations, groundwater was first encountered in a well-graded gravelly sand and silty sand at a depth of approximately 18 to 25 feet bgs. Groundwater was encountered at shallower depths in the area of the former UST excavations. The four groundwater-monitoring wells will be installed with screens set to intercept this one to five-foot thick sandy interval. The bottom of the screened interval in the monitoring wells will be approximately 28 feet bgs.

The monitoring wells will be constructed with two-inch diameter Schedule 40 PVC casing with 0.010 inch slotted PVC screen installed for the bottom 10 feet. The screen interval will have an appropriate-sized sand pack placed in the annular space of the well from the bottom to one to two feet above the top of the screen interval. A one to two-foot bentonite seal will be placed above the sand pack and hydrated. The monitoring wells will be completed to near surface with cement/bentonite grout. The wells will be protected at the surface with a traffic-rated, flush-mounted well vault set in a six-inch thick concrete pad.

The six-inch diameter dewatering well will be installed in the backfill material of the former shared diesel tank excavation south of the former pump island. The dewatering well will be constructed of six-inch diameter Schedule 40 PVC casing with 0.020 inch slotted PVC screen installed for the bottom five feet. Since the well will be installed in a gravel-filled excavation and be used temporarily for dewatering the former excavation, the well will be sand packed to surface. The dewatering well will be protected at the surface with a traffic-rated well vault set in a six-inch thick concrete pad.

4.2 Pump Test

PSC will perform a modified pump test on the dewatering well to determine the efforts that will be required to dewater the excavation during the source removal activities. In addition, water levels in the newly installed monitoring wells will be measured during the pump test to assess the hydraulic connection between the perched water in the former excavation and the permeable zone encountered at approximately 20 feet bgs.

Based upon soil borings drilled in 2006 and 2007, approximately six to seven feet of the former shared diesel UST excavation is saturated. Calculating approximately 25 to 35 percent effective porosity for sand and gravel mixtures, PSC estimates that the former diesel UST excavation contains between 15,000 to 30,000 gallons of water. Water will be pump from the dewatering well at a rate of at least 20 gallons-per-minute into 5,600-gallon capacity tanker trucks and transported off-site for proper disposal. The pump test will be stopped after each tanker is filled and the dewatering well will be checked for water recovery. PSC anticipates that approximately six tanker trucks will be required to provide the necessary pumping data for planning the dewatering of the primary source removal area.

4.3 Schedule of Activities

PSC has tentatively scheduled the monitoring well installation activities during the week of January 19, 2009. Well development and pump testing will be completed the following week. Laboratory analytical data will be available within 15 working days following completion of the Site activities. PSC will evaluate the field data from the monitoring well installations and pump test for insertion in the FS/RE and RAP. A Gantt chart showing the tentative schedule of activities is provided in Figure 8.

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TABLES

TABLE 1

Soil Sample Analytical Data
Petroleum Hydrocarbons and MTBE
Earthgrains Baking Companies, Inc.
955 Kennedy Street
Oakland, California 94606

			Concentration (mg/kg)							
Sample ID	Date	Depth (feet)	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	TPH-g	TPH-d	TPH-mo
PROBE HOLE-1	04/09/03	4.5	<0.62	<0.62	<0.62	<0.62	NA	NA	**3,300***	NA
PROBE HOLE-2	04/09/03	3.5	NA	NA	NA	NA	NA	NA	NA	<50
TRENCH-1	03/08/05	4	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<1.0	<1.0	NA
TRENCH-2	03/08/05	4	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<1.0	<1.0	NA
TRENCH-3	03/08/05	4	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<1.0	<1.0	NA
TRENCH-4	03/08/05	4	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<1.0	<1.0	NA
TRENCH-5	03/08/05	4	<0.050	<0.050	<0.050	<0.050	<0.010	**48†**	**1,700**	NA
EXCAVATION-1	03/09/05	--	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<1.0	<1.0	NA
EXCAVATION-2	03/09/05	--	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<1.0	<1.0	NA
E1	09/15/06	4.5	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	**4.0**	**17#**	NA
E1	09/15/06	8	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<1.0	NA
E1	09/15/06	11.5	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	**3.5**	**710**	NA
E1	09/15/06	16	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	**5.8**	NA
E1	09/15/06	20	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	**5.2**	NA
E2	09/15/06	8	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<1.0	NA
E2	09/15/06	12	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	**8.0**	**860**	NA
E2	09/15/06	16	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	**1.7**	NA
E3	09/22/06	4	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	**1.8‡**	NA
E3	09/22/06	8	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	**1.0‡**	NA
E3	09/22/06	12	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<1.0	NA
E3	09/22/06	16	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<1.0	NA
E3	09/22/06	20	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<1.0	NA
E4	09/12/06	10	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	**5.6‡**	NA
E5	09/12/06	5	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	**1.7‡**	NA
E5	09/12/06	10	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<1.0	NA
E5	09/12/06	15	<0.0050	<0.0050	<0.0050	<0.0050	**0.017**	<1.0	<1.0	NA
E5	09/12/06	20	<0.0050	<0.0050	<0.0050	<0.0050	**0.020**	<1.0	<1.0	NA
E6	09/12/06	5	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	**1.7‡**	NA
E6	09/12/06	9	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	**32‡**	NA
E6	09/12/06	10	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	**4.1‡**	NA
E7	09/12/06	2.5	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	**2.6**	**73****	NA
E7	09/15/06	3.5	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	**1.6‡**	NA
E7	09/15/06	8	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	**1.4‡**	NA
E7	09/15/06	12	NA	NA	NA	NA	NA	NA	<1.0	NA
E7	09/15/06	16	NA	NA	NA	NA	NA	NA	<1.0	NA
E8	09/12/06	5.5	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	**1.3‡**	NA
E8	09/12/06	10	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<1.0	NA
E8	09/12/06	15	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<1.0	NA
E8	09/12/06	20	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<1.0	NA
E9	09/21/06	20	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	**1.3‡**	NA
E9	09/21/06	24	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<1.0	NA
E9	09/21/06	28	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<1.0	NA

TABLE 1

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Petroleum Hydrocarbons and MTBE
Earthgrains Baking Companies, Inc.
955 Kennedy Street
Oakland, California 94606

			Concentration (mg/kg)							
Sample ID	Date	Depth (feet)	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	TPH-g	TPH-d	TPH-mo
E10	09/21/06	16	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<1.0	NA
E10	09/21/06	20	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<1.0	NA
E10	09/21/06	24	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<1.0	NA
E10	09/21/06	27.5	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<1.0	NA
E10	09/21/06	32	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<1.0	NA
E11	09/12/06	5	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<1.0	NA
E11	09/12/06	10.5	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<1.0	NA
E11	09/12/06	15	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<1.0	NA
E11	09/12/06	20	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<1.0	NA
E12	09/12/06	10	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	**1.5‡**	NA
E13	09/15/06	5	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	**1.1‡**	NA
E13	09/15/06	8	NA	NA	NA	NA	NA	NA	<1.0	NA
E13	09/15/06	12	NA	NA	NA	NA	NA	NA	<1.0	NA
E13	09/15/06	18.5	NA	NA	NA	NA	NA	NA	<1.0	NA
E14	09/15/06	4.5	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	**1.3‡**	NA
E14	09/15/06	8	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<1.0	NA
E14	09/15/06	15	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<1.0	NA
E15	09/21/06	4	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<1.0	NA
E15	09/21/06	8.5	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<1.0	NA
E15	09/21/06	12	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<1.0	NA
E15	09/21/06	19	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<1.0	NA
E16	09/12/06	10.5	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<1.0	NA
E17	09/21/06	8	NA	NA	NA	NA	NA	NA	**1.6‡**	NA
E17	09/21/06	12	NA	NA	NA	NA	NA	NA	<1.0	NA
E17	09/21/06	19	NA	NA	NA	NA	NA	NA	**1.5‡**	NA
E19	09/15/06	14.5	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<1.0	NA
E23	09/22/06	8	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	**3.6‡**	NA
E23	09/22/06	12	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	**1.1‡**	NA
E23	09/22/06	16	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<1.0	NA
E24	09/22/06	4	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	**1.5‡**	NA
E24	09/22/06	8.5	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	**1.1‡**	NA
E24	09/22/06	15	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	**1.6‡**	NA
E25	09/13/06	10	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	**23‡**	NA
E26	09/21/06	4	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	**4.1‡**	<10
E26	09/21/06	11	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	**1.2**	**470**	**22††**
E26	09/21/06	13	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	**5.2**	**260**	**28††**
E26	09/21/06	19	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	**1.2**	<10
E27	09/13/06	5	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	**1.2‡**	NA
E27	09/13/06	8.5	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	**1.2‡**	NA
E28	09/11/06	4.5	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	**76‡**	NA
E28	09/11/06	10	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	**58‡**	NA
E28	09/11/06	15	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	**5.8‡**	NA

TABLE 1

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Petroleum Hydrocarbons and MTBE
Earthgrains Baking Companies, Inc.
955 Kennedy Street
Oakland, California 94606

			Concentration (mg/kg)							
Sample ID	Date	Depth (feet)	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	TPH-g	TPH-d	TPH-mo
E29	09/13/06	2	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	**8,300**	NA
E29	09/21/06	4	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	**31**	**3,100**	<20
E29	09/21/06	8	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	**140**	**3,800**	<20
E29	09/21/06	12	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	**4.7**	**590**	**17††**
E29	09/21/06	14	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	**6.9**	**200**	<10
E29	09/21/06	16	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	**1.5**	<10
E30	09/11/06	4	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	**3.8‡**	NA
E30	09/11/06	8	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	<1.0	NA
E30	09/11/06	12	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	<1.0	NA
E30	09/11/06	15	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	<1.0	NA
E31	09/11/06	6.5	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	**44‡**	NA
E31	09/11/06	10.5	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	**300**	NA
E31	09/11/06	14.5	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	**8.0**	NA
E31	09/11/06	16	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	**5.0**	NA
E32	09/13/06	4	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	**1.3‡**	NA
E32	09/13/06	8.5	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	<1.0	NA
E33	09/11/06	4.5	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	**520**	NA
E33	09/11/06	8	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	**30**	NA
E33	09/11/06	12	<0.025	<0.025	<0.025	<0.025	<0.025	NA	**7,500**	NA
E33	09/11/06	16	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	**6.9**	NA
E34	09/13/06	4	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	**1.1‡**	NA
E34	09/13/06	8	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	<1.0	NA
E34	09/13/06	12	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	**19**	NA
E34	09/13/06	19	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	<1.0	NA
E35	09/11/06	6	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	<1.0	NA
E35	09/11/06	10	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	**570**	NA
E35	09/11/06	14	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	**2.3**	NA
E35	09/11/06	18	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	**35**	NA
E35	09/11/06	21	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	**1.2‡**	NA
E36	09/11/06	4	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	**1.6†**	NA
E36	09/11/06	8.5	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	**1.3‡**	NA
E36	09/11/06	10	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	**5,100**	NA
E36	09/11/06	15	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	**1.9**	NA
E37	09/13/06	4	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	**1.4‡**	NA
E37	09/13/06	9.5	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	**1.5‡**	NA
E37	09/13/06	12.5	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	**410**	NA
E37	09/13/06	15	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	**2.4‡**	NA
E38	09/13/06	4	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	<1.0	NA
E38	09/13/06	8	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	<1.0	NA
E38	09/13/06	11	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	**420**	NA
E38	09/13/06	12	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	**140**	NA
E38	09/13/06	16	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	**1.0**	NA

TABLE 1

Soil Sample Analytical Data
Petroleum Hydrocarbons and MTBE
Earthgrains Baking Companies, Inc.
955 Kennedy Street
Oakland, California 94606

			Concentration (mg/kg)							
Sample ID	Date	Depth (feet)	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	TPH-g	TPH-d	TPH-mo
E38	09/13/06	19	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	<1.0	NA
E39	09/13/06	4	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	**1.3‡**	NA
E39	09/13/06	9.5	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	**3.5**	NA
E39	09/13/06	12.5	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	**37**	NA
E39	09/13/06	17.5	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	<1.0	NA
E40	09/13/06	4.5	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	<1.0	NA
E40	09/13/06	8	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	**2.8‡**	NA
E40	09/13/06	10	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	**190**	NA
E40	09/13/06	12	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	**18**	NA
E40	09/13/06	16	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NA	<1.0	NA
E41	03/28/07	5	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	**4.5‡**	**19**
E41	03/28/07	10	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	**33‡**	**180**
E41	03/28/07	15	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	**1.7‡**	< 10
E41	03/28/07	20	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	< 1.0	< 10
E41	03/28/07	25	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	< 1.0	< 10
E42	03/29/07	5	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	**1.6‡**	< 10
E42	03/29/07	10	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	**17**	**15**
E42	03/29/07	15	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	**1.3**	< 10
E42	03/29/07	20	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	< 1.0	< 10
E42	03/29/07	25	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	**1.2***	< 10
E43	03/29/07	5	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	**8.8‡**	**29**
E43	03/29/07	10	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	**7.2‡**	**23**
E43	03/29/07	15	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	**2.5‡**	< 10
E43	03/29/07	20	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	< 1.0	< 10
E43	03/29/07	25	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	< 1.0	< 10
E44	03/28/07	5	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	**5.6‡**	**20**
E44	03/28/07	10	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	< 1.0	< 10
E44	03/28/07	15	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	< 1.0	< 10
E44	03/28/07	20	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	< 1.0	< 10
E44	03/28/07	24	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	< 1.0	< 10
E45	03/29/07	5	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	**19‡**	**92**
E45	03/29/07	10	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	**1.4**	**350**	< 10
E45	03/29/07	15	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	**1.8**	< 10
E45	03/29/07	20	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	< 1.0	< 10
E45	03/29/07	25	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	< 1.0	< 10
E45	03/29/07	28	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	< 1.0	< 10
E46	03/29/07	5	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	**1.7**	< 10
E46	03/29/07	10	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	**29**	**1,800**	< 10
E46	03/29/07	12	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	**21**	**180**	< 10
E46	03/29/07	15	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	**1.2**	< 10
E46	03/29/07	20	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	< 1.0	< 10
E46	03/29/07	25	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	< 1.0	< 10

TABLE 1

Soil Sample Analytical Data
Petroleum Hydrocarbons and MTBE
Earthgrains Baking Companies, Inc.
955 Kennedy Street
Oakland, California 94606

			Concentration (mg/kg)							
Sample ID	Date	Depth (feet)	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	TPH-g	TPH-d	TPH-mo
E46	03/29/07	28	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	< 1.0	< 10
E47	03/28/07	5	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	**80‡**	NA
E47	03/28/07	10	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	**27‡**	NA
E47	03/28/07	15	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	**10**	NA
E48	03/28/07	4	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	**2.5‡**	NA
E48	03/28/07	9	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	**2.4**	NA
E48	03/28/07	12.5	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	**2.1**	**320**	NA
E48	03/28/07	15	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	**1.0**	**130**	NA
E48	03/28/07	20	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	< 1.0	NA
E48	03/28/07	25	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	< 1.0	NA
E49	03/29/07	5	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	**26‡**	NA
E49	03/29/07	8.5	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	**560**	NA
E49	03/29/07	10	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	**100**	NA
E49	03/29/07	15	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	**14‡**	NA
E49	03/29/07	20	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	< 1.0	NA
E49	03/29/07	25	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	< 1.0	NA
E49	03/29/07	28	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	< 1.0	NA
E50	03/28/07	5	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	**65‡**	NA
E50	03/28/07	10	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	**100‡**	NA
E50	03/28/07	15	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	**3.0**	NA
E51	03/28/07	5	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	**24‡**	NA
E51	03/28/07	10	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	**390**	NA
E51	03/28/07	15	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	< 1.0	NA
E51	03/28/07	20	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	< 1.0	NA
E52	03/28/07	5.5	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	**1.4‡**	NA
E52	03/28/07	10	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	**3.4***	NA
E52	03/28/07	12.5	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	**220**	NA
E52	03/28/07	15.5	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	**180**	NA
E52	03/28/07	20	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	< 1.0	NA

TPH-mo	Total Petroleum Hydrocarbons quantified as motor oil.
NA	Not Analyzed.
*	The pattern exhibited by the hydrocarbons detected did not match the laboratory's diesel standard.
†	The laboratory indicated a "non-gasoline pattern; appears to be diesel."
#	The hydrocarbons reported as TPH-d do not exhibit a typical diesel chromatographic pattern. These hydrocarbons are lower boiling than typical diesel fuel.
‡	The hydrocarbons reported as TPH-d do not exhibit a typical diesel chromatographic pattern. These hydrocarbons are higher boiling than typical diesel fuel.
**	Some of the hydrocarbons detected are higher boiling and some are lower boiling than typical diesel fuel.
††	The hydrocarbons reported as TPH-mo do not exhibit a typical motor oil chromatographic pattern. These hydrocarbons are lower boiling than typical motor oil.
‡‡	DRUM1,2,3,4 was a 4-point composite sample of investigation-derived soil waste. Lead was also detected in DRUM1,2,3,4 at 9.95 mg/kg.

TABLE 2

Soil Sample Analytical Data
Physical Parameters
Earthgrains Baking Companies, Inc.
955 Kennedy Street
Oakland, California 94606

Sample ID	Date	Depth (feet)	Bulk Density (g/cm^3)	Porosity (Volume %)	Air-Filled Void Space (Volume %)	Moisture (Dry Weight %)	Total Organic Carbon (mg/kg)
E8	09/12/06	4	1.9	43	3.3	21	14,000
		7	2.0	36	3.2	16	3,400
E36	09/11/06	6.5	1.9	41	3.3	20	2,400
		9.5	1.9	33	18	8.0	4,500

g/cm^3	Grams per cubic centimeter.
%	Percentage.
mg/kg	Milligrams per kilogram.

Notes: Bulk Density and Porosity are determined using SSSA#5.
Air-Filled Void Space is determined using API 40RP.
Moisture determined by ASTM 2216-92.
Total Organic Carbon determined using Method SM5310B.

TABLE 3

Groundwater Sample Analytical Data
Earthgrains Baking Companies, Inc.
955 Kennedy Street
Oakland, California 94606

		Concentration (µg/L)							
Sample ID	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	TPH-g	TPH-d	TPH-mo
Excavation Water	3/8/05	<0.50	<0.50	<0.50	<0.50	**2.7†**	**130***	**6,100**	NA
E1	9/15/06	<0.50	<0.50	<0.50	<0.50	<0.50	**560**	**360,000**	NA
E2	9/15/06	<0.50	<0.50	<0.50	<0.50	<0.50	<50	**1,200**	NA
E3	9/22/06	<0.50	<0.50	<0.50	<0.50	**6.1**	<50	<50	NA
E7	9/15/06	<0.50	<0.50	<0.50	<0.50	<0.50	**62‡**	<50	NA
E8	9/12/06	<0.50	<0.50	<0.50	<0.50	**2.0**	<50	<50	NA
E09-10-W	9/21/06	<0.50	<0.50	<0.50	<0.50	**7.5**	<50	<50	NA
E09-28-W	9/21/06	<0.50	<0.50	<0.50	<0.50	<0.50	**94‡**	<50	NA
E10-32-W	9/21/06	<0.50	<0.50	<0.50	<0.50	<0.50	**94‡**	<50	NA
E11	9/12/06	<0.50	<0.50	<0.50	<0.50	<0.50	<50	<50	NA
E12	9/12/06	<0.50	<0.50	<0.50	<0.50	<0.50	<50	**260****	NA
E13	9/15/06	<0.50	<0.50	<0.50	<0.50	<0.50	<50	<50	NA
E14	9/15/06	<0.50	<0.50	<0.50	<0.50	**3.2**	<50	<50	NA
E15	9/21/06	<0.50	<0.50	<0.50	<0.50	**15**	<50	<50	NA
E16	9/12/06	<0.50	<0.50	<0.50	<0.50	<0.50	<50	<50	NA
E17	9/21/06	<0.50	<0.50	<0.50	<0.50	<0.50	<50	**120****	NA
E18	9/22/06	<0.50	<0.50	<0.50	<0.50	**3.3**	<50	<50	NA
E19	9/15/06	<0.50	<0.50	<0.50	<0.50	**2.8**	<50	<50	NA
E20	9/22/06	<0.50	<0.50	<0.50	<0.50	<0.50	<50	<50	NA
E21	9/22/06	<0.50	<0.50	<0.50	<0.50	<0.50	<50	<50	NA
E22	9/21/06	<0.50	<0.50	<0.50	<0.50	**7.1**	<50	<50	NA
E23	9/22/06	<0.50	<0.50	<0.50	<0.50	<0.50	<50	<50	NA
E24	9/22/06	<0.50	<0.50	<0.50	<0.50	**0.69**	<50	<50	NA
E25	9/13/06	<0.50	<0.50	<0.50	<0.50	**0.92**	<50	<50	NA
E26	9/21/06	<0.50	<0.50	<0.50	<0.50	<0.50	<50	**1,900**	NA
E27	9/13/06	<0.50	<0.50	<0.50	<0.50	<0.50	<50	<50	NA
E28	9/11/06	<0.50	<0.50	<0.50	<0.50	<0.50	NA	**68,000**	NA
E29	9/21/06	<0.50	<0.50	<0.50	**1.4**	<0.50	**290**	**3,500,000**	NA
E30	9/11/06	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<50	NA
E31	9/11/06	<0.50	<0.50	<0.50	<0.50	<0.50	NA	**880,000**	NA
E32	9/13/06	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<50	NA
E33	9/11/06	<0.50	<0.50	<0.50	<0.50	**22**	NA	**4,200**	NA
E34	9/13/06	<0.50	<0.50	<0.50	<0.50	<0.50	NA	**3,900**	NA
E35	9/11/06	<0.50	<0.50	<0.50	<0.50	**4.2**	NA	**3,500**	NA

TABLE 3

Groundwater Sample Analytical Data
Earthgrains Baking Companies, Inc.
955 Kennedy Street
Oakland, California 94606

		Concentration (µg/L)							
Sample ID	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	TPH-g	TPH-d	TPH-mo
E36	9/11/06	<0.50	<0.50	<0.50	<0.50	**0.61**	NA	**1,700,000**	NA
E37	9/13/06	<0.50	<0.50	<0.50	<0.50	<0.50	NA	**70,000**	NA
E38	9/13/06	<0.50	<0.50	<0.50	<0.50	<0.50	NA	**3,400**	NA
E39	9/13/06	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<50	NA
E40	9/13/06	<0.50	<0.50	<0.50	<0.50	<0.50	NA	**3,100**	NA
E41	3/28/07	<0.50	<0.50	<0.50	<0.50	**0.62**	**59‡**	<50	**180*** **
E42	3/29/07	<0.50	<0.50	<0.50	<0.50	<0.50	<50	**840**	**240**
E43	3/29/07	<0.50	**0.51**	<0.50	<0.50	<0.50	**53‡**	<50	<100
E44	3/28/07	<0.50	<0.50	<0.50	<0.50	<0.50	<50	<50	<100
E45	3/29/07	<0.50	<0.50	<0.50	<0.50	<0.50	<50	<50	<100
E46	3/29/07	<0.50	**0.84**	<0.50	<0.50	**2.4**	<50	**250****	**750*** **
E47	3/28/07	<0.50	<0.50	<0.50	<0.50	<0.50	<50	**22,000**	NA
E48	3/28/07	<0.50	<0.50	<0.50	<0.50	<0.50	<50	<50	NA
E50	3/28/07	<0.50	<0.50	<0.50	<0.50	<0.50	<50	**7,300**	NA
E51	3/28/07	<0.50	<0.50	<0.50	<0.50	<0.50	<50	**3,200**	NA
E52	3/28/07	<0.50	<0.50	<0.50	<0.50	<0.50	<50	**200**	NA
DW††	9/22/06	<0.50	<0.50	<0.50	<0.50	<0.50	<50	**2,600**	<100

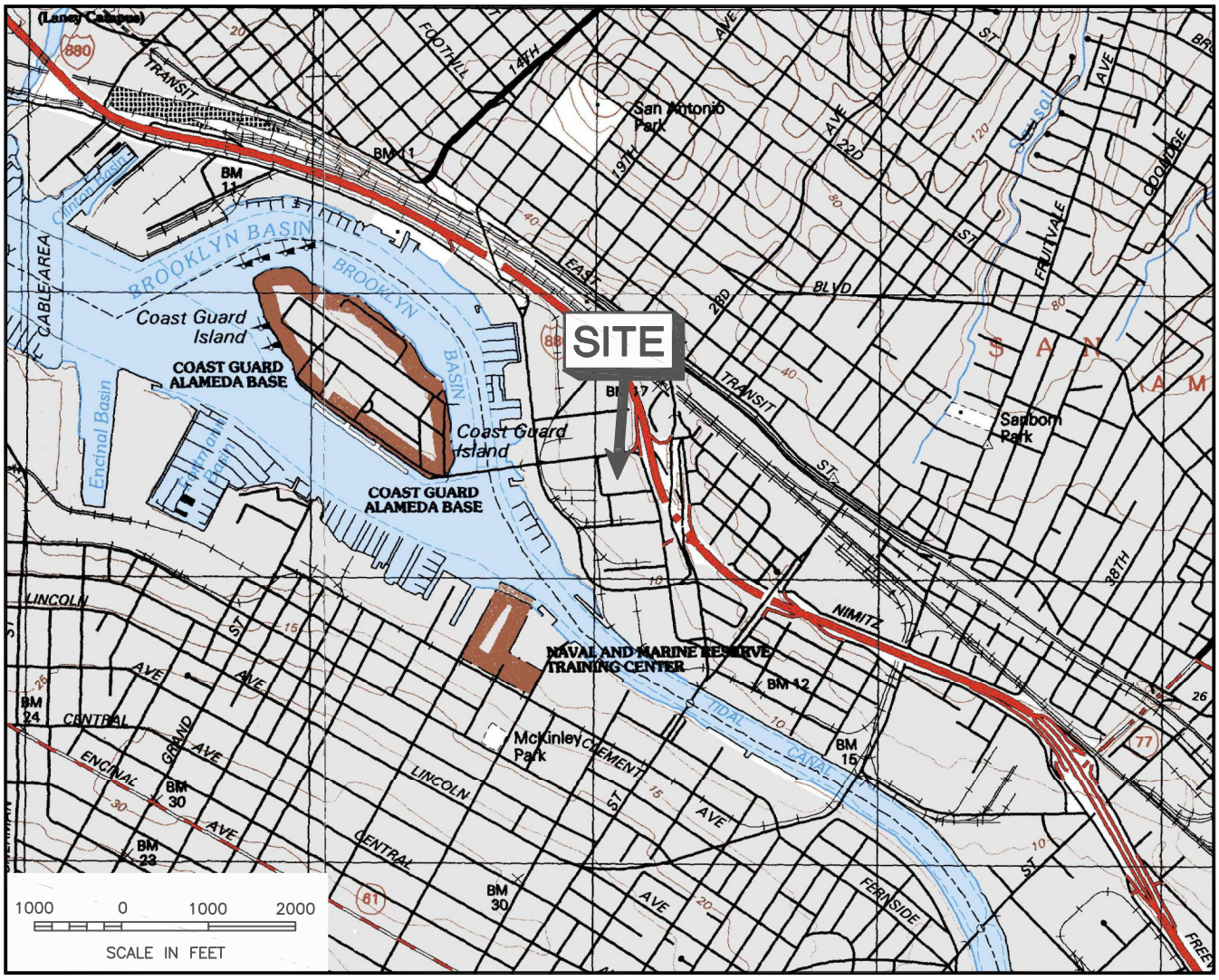
µg/L	Micrograms per liter.
MTBE	Methyl Tertiary Butyl Ether.
TPH-g	Total Petroleum Hydrocarbons quantified as gasoline.
TPH-d	Total Petroleum Hydrocarbons quantified as diesel.
TPH-mo	Total Petroleum Hydrocarbons quantified as motor oil.
NA	Not Analyzed.
*	The laboratory indicated a "non-gasoline pattern; appears to be diesel."
†	The concentration of MTBE in the sample was 2.7 µg/L when analyzed by EPA Method 8020 and 1.9 µg/L when analyzed by EPA Method 8260.
‡	The hydrocarbons reported as TPH-g do not exhibit a typical gasoline chomatographic pattern.
**	The hydrocarbons reported as TPH-d do not exhibit a typical diesel chromatographic pattern. These hydrocarbons are higher boiling than typical diesel fuel.
***	The hydrocarbons reported as TPH-mo do not exhibit a typical motor oil chromatographic pattern. There are discrete peaks which may or may not be petroleum related.
††	DW was a sample of investigation-derived water waste. Lead was not detected in sample DW.

FIGURES

CALIFORNIA

ALAMEDA COUNTY

AREA IN DETAIL

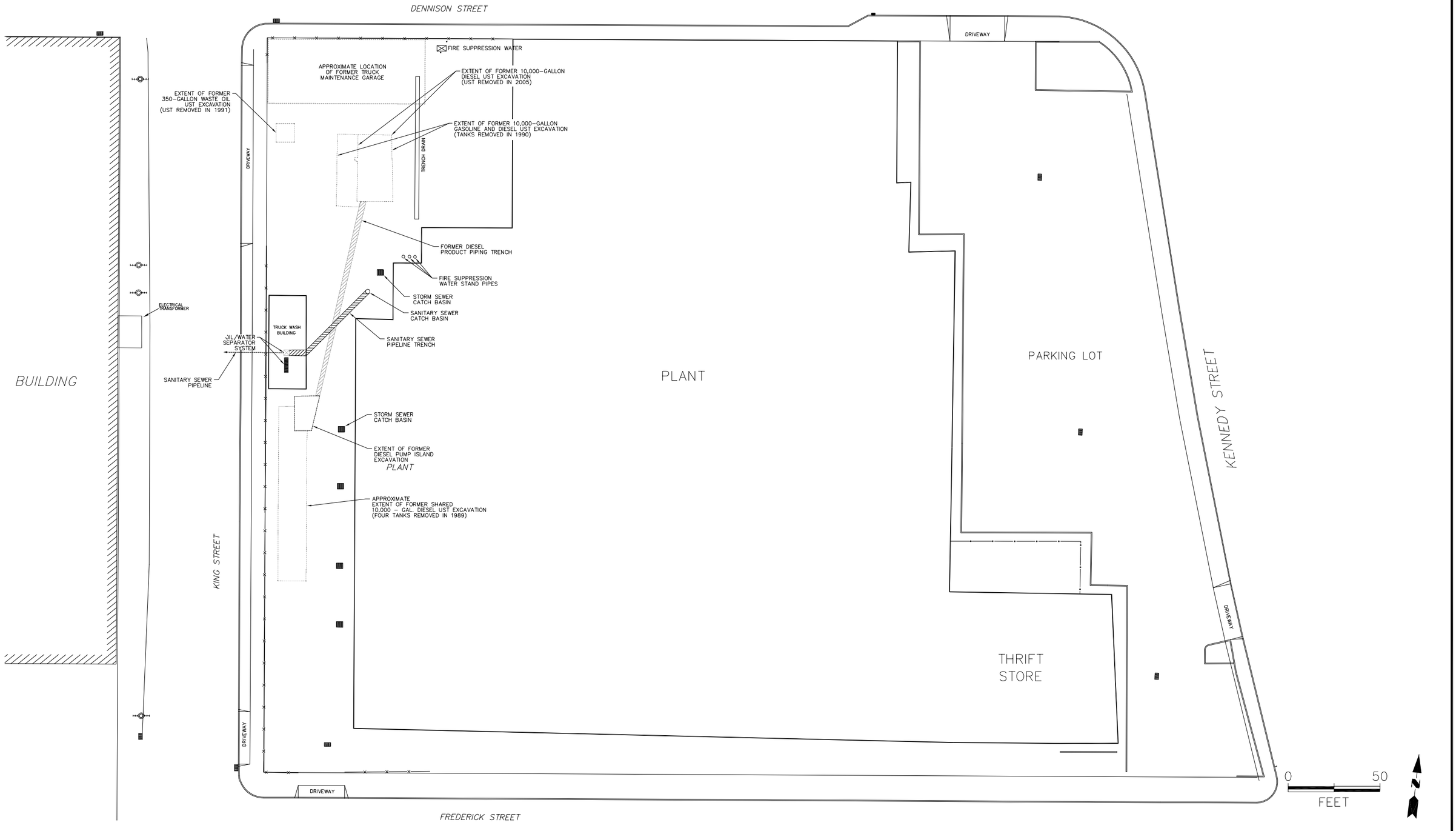


Modified from U.S. Geological Survey, Oakland East & West, California, quadrangle, Photorevised 1997 & 1993.

SCALE IS VARIABLE

624\02797C-002
COL

PSC	TITLE: SITE LOCATION MAP 955 KENNEDY STREET OAKLAND, CALIFORNIA 94606	DWN: TMM / DES.: JRC CHKD: / APPD: DATE: 11/18/08 / REV.: 0	PROJECT NO.: 62402797 EARTHGRAINS OAKLAND, CALIFORNIA FIGURE 1



COL. 624\02797B-004

PSC

TITLE:

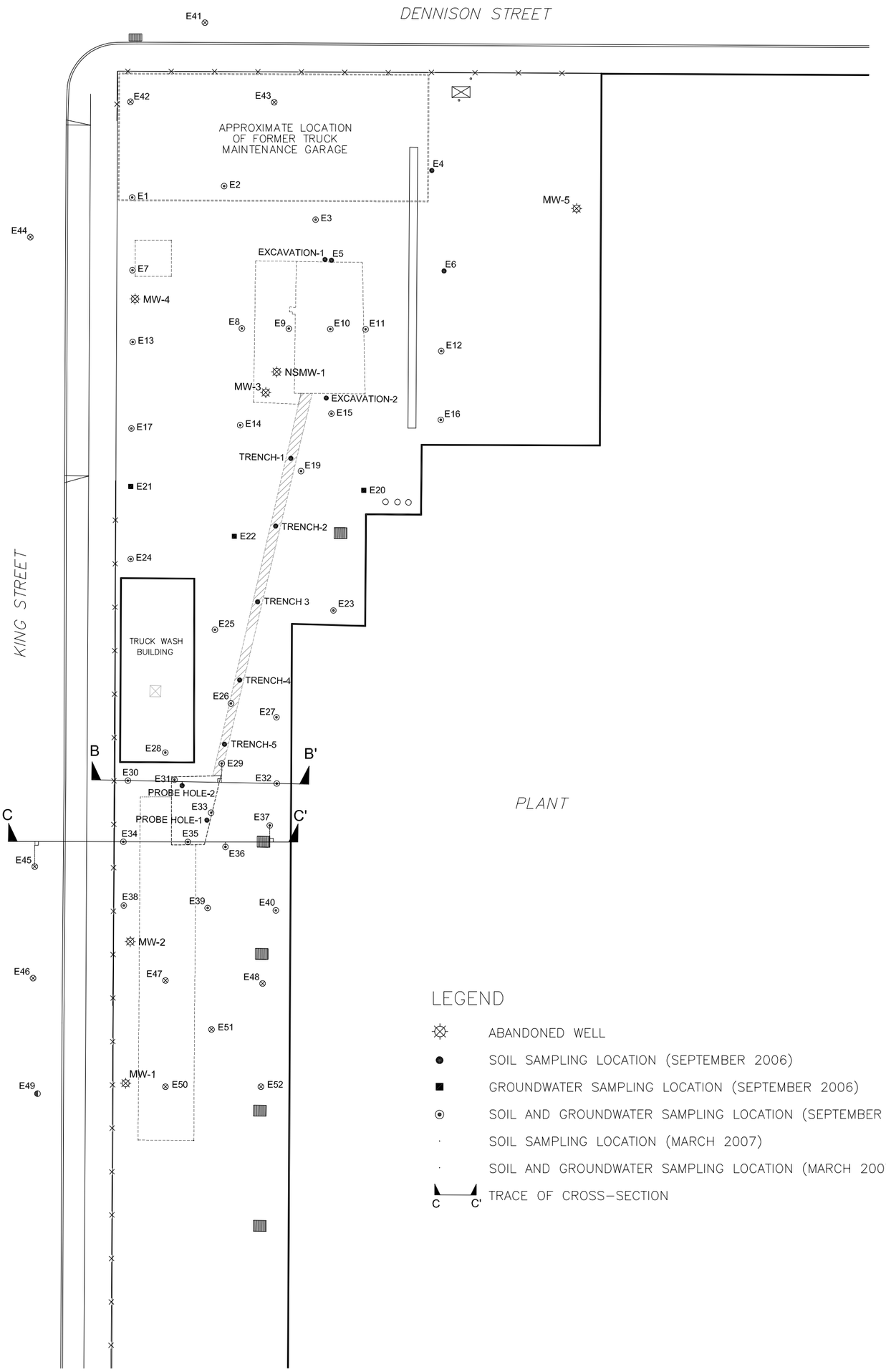
FORMER UST SYSTEM AND SOURCE AREA LOCATION MAP
955 KENNEDY STREET
OAKLAND, CALIFORNIA 94606

DWN: TMM	DES: JRC
CHKD:	APPD:
DATE: 11/18/08	REV: 0

PROJECT NO: 62402797
EARTHGRAINS
OAKLAND, CALIFORNIA

FIGURE 2

COL. 624\02797B-001



LEGEND

- ABANDONED WELL
- SOIL SAMPLING LOCATION (SEPTEMBER 2006)
- GROUNDWATER SAMPLING LOCATION (SEPTEMBER 2006)
- SOIL AND GROUNDWATER SAMPLING LOCATION (SEPTEMBER 2006)
- SOIL SAMPLING LOCATION (MARCH 2007)
- SOIL AND GROUNDWATER SAMPLING LOCATION (MARCH 2007)
- C C' TRACE OF CROSS-SECTION

0 30
FEET

N

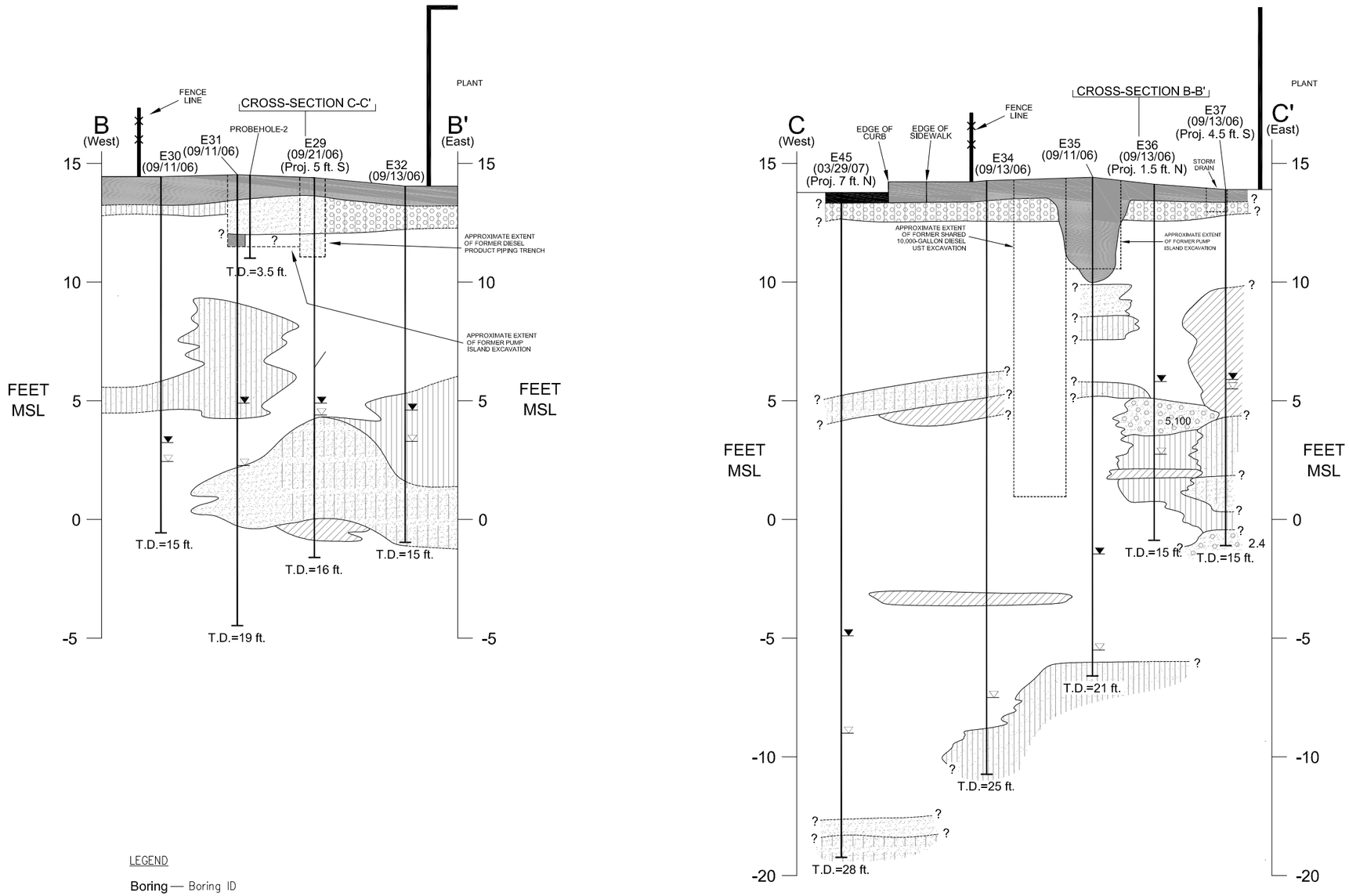
PSC

TITLE:
HISTORICAL SAMPLE LOCATION MAP
955 KENNEDY STREET
OAKLAND, CALIFORNIA 94606

DWN:	DES.:
TMM	JRC
CHKD:	APPD:
DATE: 11/18/08	REV.: 0

PROJECT NO.: 62402797
EARTHGRAINS
OAKLAND, CALIFORNIA

FIGURE 3



LEGEND

Boring — Boring ID

Static Groundwater Level

First Encountered Groundwater (during drilling)

Bottom of Boring

- Concrete
- Silty Gravel
- Clay and Silty Clay
- Clayey Silt
- Sandy Silt
- Predominantly Silt
- Silty Sand
- Gravelly Sand
- Predominantly Sand
- Sandy Clay

HORIZONTAL SCALE IN FEET
0 20
VERTICAL SCALE IN FEET
0 5

COL. 624\02797B-002

PSC

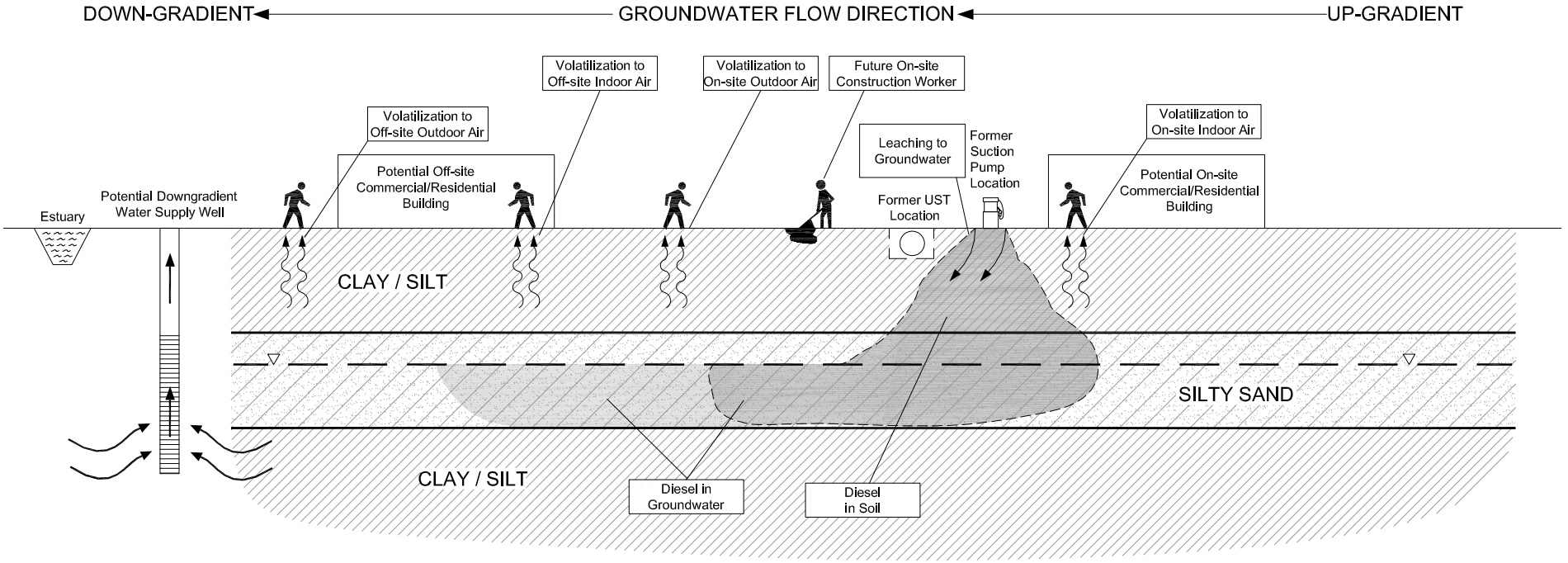
TITLE:

GEOLOGIC CROSS SECTIONS : B–B' AND C–C'
955 KENNEDY STREET
OAKLAND, CALIFORNIA 94606

DWN: TMM	DES: JRC
CHKD:	APPD:
DATE: 11/18/08	REV: 0

PROJECT NO: 62402797
EARTHGRAINS
OAKLAND, CALIFORNIA

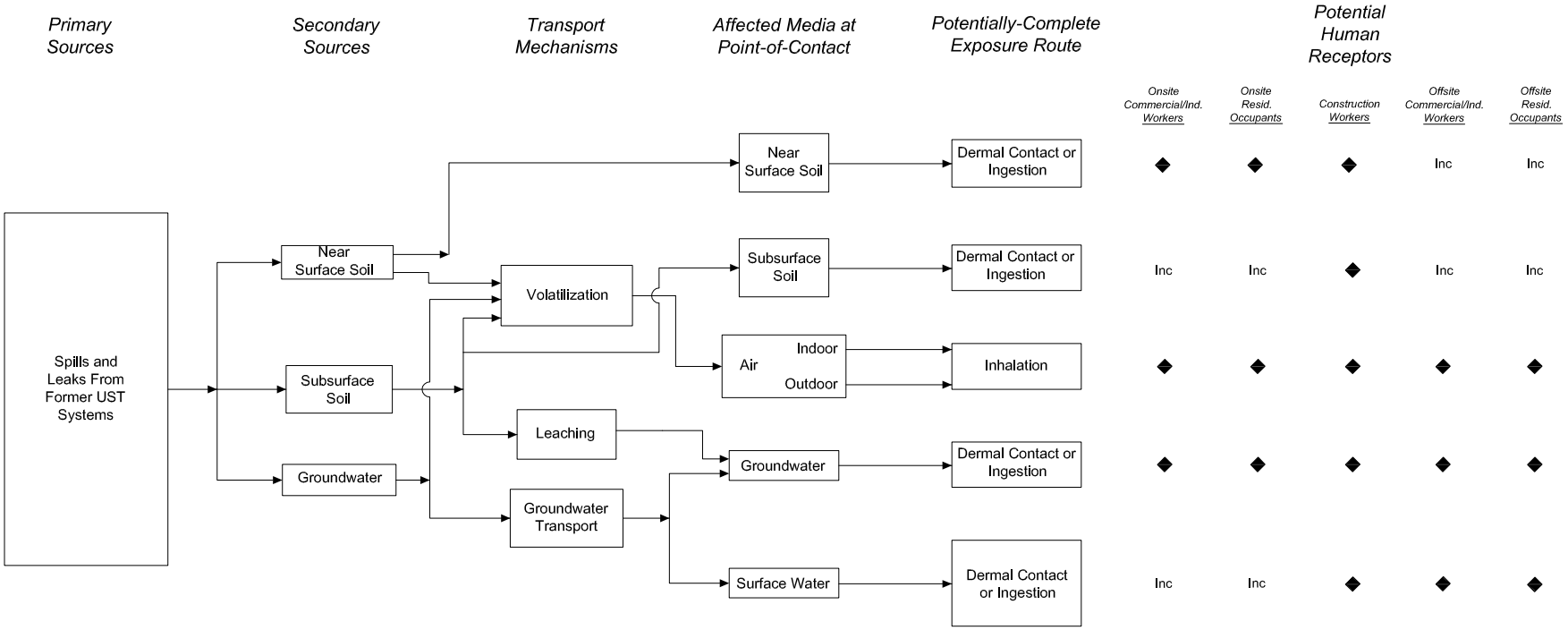
FIGURE 4



NOT TO SCALE

PSC	TITLE: SITE CONCEPTUAL MODEL SCHEMATIC DIAGRAM 955 KENNEDY STREET OAKLAND, CALIFORNIA 94606	DWN: TMM	DES.: JRC	PROJECT NO.: 62402797 EARTHGRAINS OAKLAND, CALIFORNIA
		CHKD:	APPD:	FIGURE 5
		DATE: 11/18/08	REV.: 0	

COL. 624\02797C-001



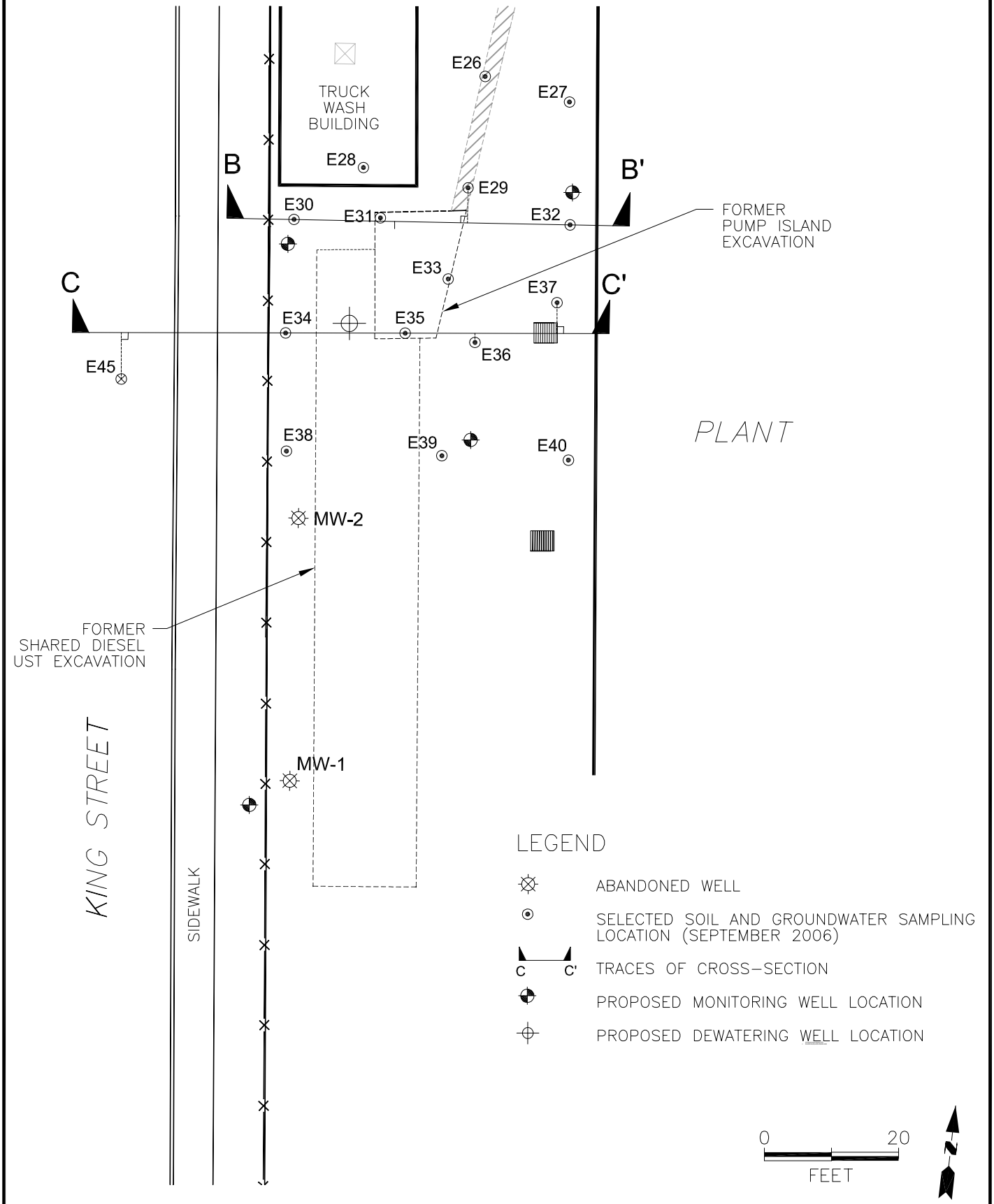
LEGEND

◆ Potentially–Complete Exposure Pathway

Inc Incomplete Exposure Pathway

TITLE: EXPOSURE PATHWAY FLOW CHART 955 KENNEDY STREET OAKLAND, CALIFORNIA 94606	DWN: TMM	DES.: JRC	PROJECT NO.: 62402797 EARTHGRAINS OAKLAND, CALIFORNIA
	CHKD:	APPD:	
	DATE: 11/18/08	REV.: 0	FIGURE 6

COL. 624\02797D-001



624\02797B-003
COL

PSC

TITLE:

PROPOSED WELL LOCATIONS
955 KENNEDY STREET
OAKLAND, CALIFORNIA 94606

DWN:	DES.:
TMM	JRC
CHKD:	APPD:
DATE: 11/18/08	REV.: 0

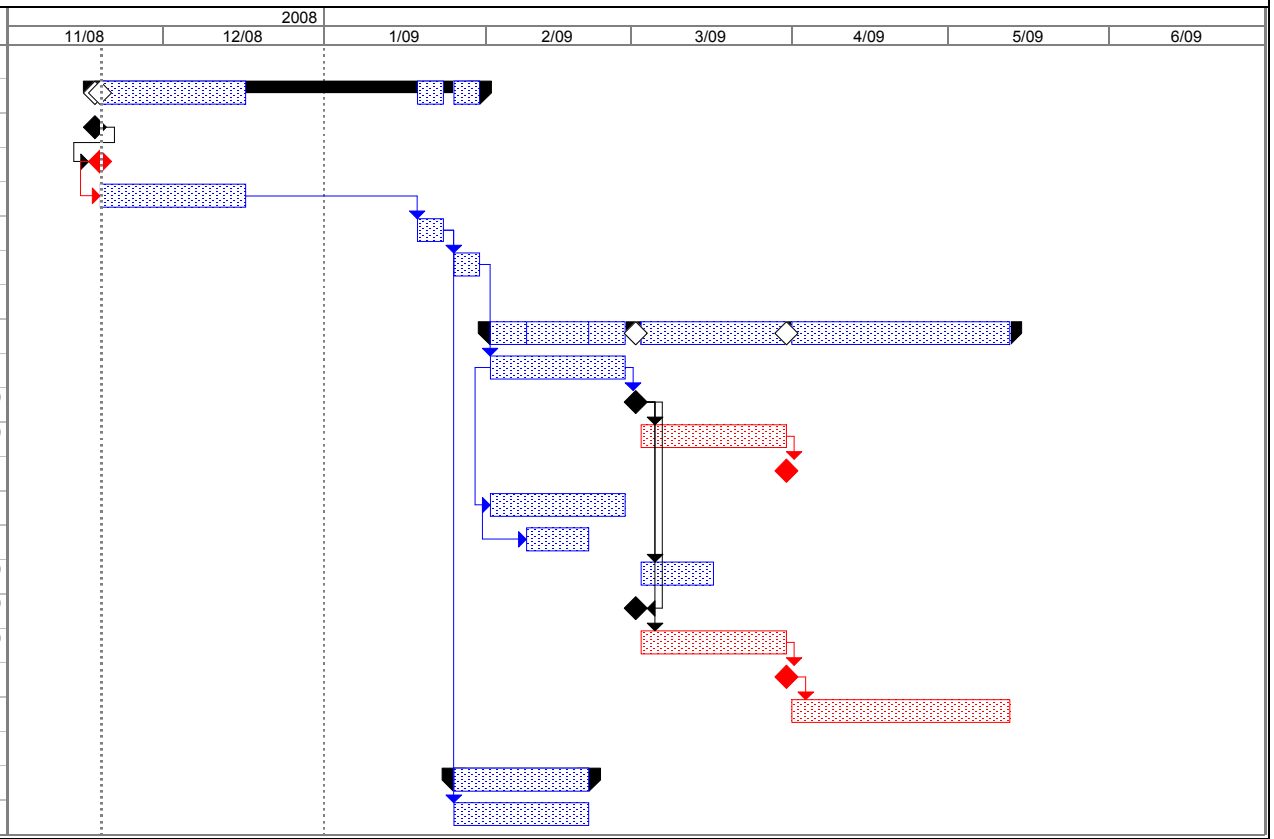
PROJECT NO.: 62402797
EARTHGRAINS
OAKLAND, CALIFORNIA

FIGURE 7

Figure 8

Schedule of Activities
Monitoring Well Installation and Feasibility Study/Remedial Evaluation Study
Earthgrains Baking Companies, Inc.
955 Kennedy Street
Oakland CA 94606
RO #0002569

Task Name	Start	Finish
Groundwater Montioring Well Installation	**Tue 11/18/08**	**Fri 1/30/09**
Plan Submittal	Tue 11/18/08	Tue 11/18/08
Regulatory Review and Approval	Wed 11/19/08	Tue 12/16/08
Permiting	Wed 11/19/08	Tue 12/16/08
Well Installation	Mon 1/19/09	Fri 1/23/09
Dewatering Pumping Test	Mon 1/26/09	Fri 1/30/09
Source Removal Feasibility	**Mon 2/2/09**	**Tue 5/12/09**
Source Removal Feasibility	Mon 2/2/09	Fri 2/27/09
Feasibility Study Sub	Mon 3/2/09	Mon 3/2/09
Regulatory Review	Tue 3/3/09	Mon 3/30/09
Regulatory Approval	Tue 3/31/09	Tue 3/31/09
Implementation Plan	Mon 2/2/09	Fri 2/27/09
SubContractor Bid Specification	Mon 2/9/09	Fri 2/20/09
SubContractor Selection	Tue 3/3/09	Mon 3/16/09
Implementation Plan Submittal	Mon 3/2/09	Mon 3/2/09
Regulatory Review	Tue 3/3/09	Mon 3/30/09
Regulatory Approval	Tue 3/31/09	Tue 3/31/09
USTCF Fund Preapproval	Wed 4/1/09	Tue 5/12/09
Groundwater Monitoring	**Mon 1/26/09**	**Fri 2/20/09**
First Event	Mon 1/26/09	Fri 2/20/09



November 18, 2008

Figure 8 MW Install and FS_RE Schedule.mpp

APPENDIX A

FIELD FORMS

PSC

BORING/WELL CONSTRUCTION LOG

Project: *SL-Oakland (Well Installation)*		**Boring No.:**	**Page(s):** of
Client: *Sara Lee Bakery Group, Inc.*		**Project #:**	**Date:**
Location: *955 Kennedy Street, Oakland, CA 94606*	**Coordinates:** N E		**Elevation (datum):**
Drilling Company:	**Driller:**	**Logger:**	

Depth (ft)	SAMPLE TYPE	SAMPLE NUMBER	1ST 6"	2ND 6"	3RD 6"	4TH 6"	SAMPLE RECOVERY	PID (ppm)	Description
	CORE SIZE	RUN NUMBER	RUN LENGTH	RUN RECOVERY	ROD RECOVERY	PERCENT RECOVERY	RQD		Modifier and Main Soil; color; impact; consistency/density/; odor; moisture; USCS
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									

WELL CONSTRUCTION SUMMARY

Depth (ft)	Casing	Depth (ft)	Annulus	Surface Completion
___ to ___		___ to ___		
___ to ___		___ to ___		
___ to ___		___ to ___		
___ to		___ to		

Notes:

Well Number:_____

Serial No. WDPD-_____

☒Development
☐ Purging

WELL DEVELOPMENT AND PURGING DATA

Page _____ of ___

Project Name_____ Project Manager_____ Project No._____

Client Company_____ Cost Code_____

Site Name_____ Site Address_____

Development Criteria

☐ 3 to 5 Casing Volumes of Water Removal
☐ Stabilization of Indicator Parameters
☐ Other _____

Methods of Development

Pump	Bailer
☐ Centrifugal	☐ Bottom Valve
☐ Submersible	☐ Double Check Valve
☒ Peristaltic	☐ Stainless-steel Kemmerer

☐ Whale ☐ Grundfos ☐ Bladder ☐ _____

Water Volume Calculation (2"=0.1632, 4"=0.6528)

Initial Depth of Well (feet) _____
Initial Depth to Water (feet) _____
Height of Water Column in Well (feet) _____
Diameter (inches): Well _____" Gravel Pack_____

Item	Water Volume in Well		Gallons to be Removed
	Cubic Feet	Gallons	
Well Casing			
Gravel Pack			
Drilling Fluids			
Tota			

gallon to liter conversion (x3.8) = _____ Liters

Instruments

Serial No. (If applicable)

☐ Temperature Meter _____
☐Conductivity Meter _____
☐DO Meter _____
☐pH Meter _____
☐ORP Meter _____
☐Turbidity Meter _____

Water Disposal: _____

Water Removal Data

Date	Time	Development Method		Removal Rate (Liter/min)	Intake Depth (feet)	Ending Water Depth (feet)	Water Volume Removed (Liters)		Product Volume Removed (gallons)		Temp (°C)	Conductivity (mS/cm) (ppm)	Dissolved Oxygen (mg/L)	pH	ORP (mVolts)	Turbidity (<10 NTUs)	Comments
		Pump	Bailer				Increment	Cumulative	Increment	Cumulative							
		x				-	-	0			-	-	-	-	-	-	Start purging
					-						-	-	-	-	-		Collect Sample

Circle the date and time that the development criteria are met.

Comments:_____

Developer's Signature(s):_____ Date:__/____/___ Reviewer:_____ Date:_____

Field Report

Date:_____

Project Name: _____ Project #: _____

Project Manager: _____ Cost Code: _____

Client Company: _____ Personnel (print): _____

Site Name: _____ Role on Project: _____

TIME OBSERVATION Page _____ of _____

_____ **Weather:** *Temperature:* _____*°F; Barometric Pressure:*_____*mbars; Conditions:* _____

_____ **Instrument Calibration:** (Hydrolab / Quanta-G): *pH-7:* _____*; pH-10:* _____*; pH-4:* _____

Sp. *Conductance (@1.413ms):* _____*; ORP: Liquid temp =* _____*°C = adjusted to*_____*mVs*

DO% (@ 100% saturation): BP@ _____*mbars = adjusted to*_____*mmHg, DO now =*_____*mg/L*

Signature: _____ Reviewed by: _____ Date: _____