July 20, 2010

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

Dear Mr. Khatri:

Subject: **Feasibility Study/Corrective Action 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 *Feasibility Study/Corrective Action Plan* for the above-referenced site. This document presents a summary of site history, Site Conceptual Model, a Feasibility Study and Corrective Action Plan for the Site. I declare under penalty of perjury that the information and/or recommendations contained in the attached document is true and correct to the best of my knowledge.

If you have any questions concerning this document, please contact me at (618) 792-2468.

Respectfully,

PSC INDUSTRIAL OUTSOURCING, LP

John R. Carrow

John R. Carrow, PG
Senior Project Manager

cc: Gary McKinney - Earthgrains Baking Companies, Inc.

FEASIBILITY STUDY/
CORRECTIVE ACTION PLAN

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

RO #0002569

July 16, 2010

Prepared By:

PSC INDUSTRIAL OUTSOURCING, LP

210 West Sand Bank Road
Columbia, Illinois 62236-1044

Project 624-0908-0043

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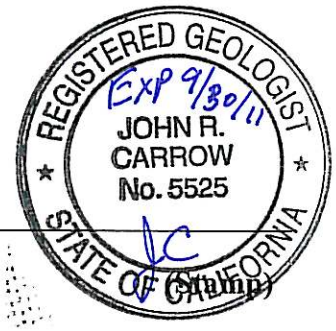
John R. Carrow 7/16/10

John R. Carrow, P.G. #5525 **Date**
Senior Geologist



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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

Responsible Party

Earthgrains Baking Companies, Inc.
955 Kennedy Street
Oakland, California 94606
Gary McKinney
Plant Manager
(510) 436-5350
gary.mckinney@saralee.com

Environmental Consultant

PSC Industrial Outsourcing, LP
210 West Sand Bank Road
Columbia, Illinois 62236
John Carrow, P.G. #5525
Senior Geologist
(618) 281-1450
jcarrow@pscnow.com

Regulatory Agency

Alameda County Department of Environmental Health (ACDEH)
Local Oversight Program
1131 Harbor Bay Parkway
Alameda, California 94502-6577
Paresh Khatri
Hazardous Materials Specialist
(510) 337-9335
paresh.khatri@acgov.org

1.0 INTRODUCTION AND SITE BACKGROUND

On behalf of Earthgrains Baking Companies, Inc. (Earthgrains), PSC Industrial Outsourcing, LP (PSC) has prepared this *Feasibility Study/Corrective Action Plan (FS/CAP)* for the Earthgrains project site located at 955 Kennedy Street in Oakland, California (Site). This report has been prepared in response to a directive from the Alameda County Environmental Health (ACEH) Staff documented in a letter to Earthgrains Baking Company on May 20, 2010. In addition to the FS/CAP, this report summarizes the Site history, geology, hydrogeology, soil and groundwater quality, and Conceptual Site Model (CSM).

1.1 Description of Site and Vicinity

The Site occupies approximately five acres of commercial property in Oakland, California. Earthgrains owns and operates a 105,000 square-foot plant consisting of a bakery, product distribution center, and thrift store at the Site. The entire site is covered with building structures, asphalt, or concrete pavement. An asphalt-paved parking area and driveway border the eastern and western sides of the Site and truck-loading docks are located in the northwestern side of the plant. 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 mainly industrial and commercial businesses. Interstate 880 is located east of Kennedy Street. The Site Location Map is shown on Figure 1.

The Site is located within an incorporated area of the City of Oakland and the municipal water provider is the East Bay Municipal Utility District (EBMUD). Treated surface water from the Mokelumne River watershed and rainfall from the East Bay watershed is combined to supply water to EBMUD customers. A sanitary sewer lateral travels southwestward from the plant through an oil/water separator located inside the truck wash building and connects to the main sanitary sewer beneath King Street. A natural gas pipeline travels parallel to King Street beneath the western boundary of the Site. The subsurface utilities at the Site are shown on Figure 2.

1.2 Site History and Current Conditions

The Earthgrains facility (formerly Kilpatrick's Bakeries, Inc.) was constructed in the late 1960s and has operated as a bakery and product distribution center. Earthgrains installed and operated eight UST systems at the Site from 1967 to 2005 for fleet operations and back-up oven fuel storage. Subsurface investigations and groundwater monitoring were performed at the Site from 1989 through 1996 for a previous unauthorized diesel UST system release. Earthgrains received environmental case closure in 1996 following submittal of a Tier 1 Risk Assessment report to the Alameda County Department of Environmental Health (ACDEH). Residual petroleum hydrocarbons were left in soil at the Site when closure was granted.

Earthgrains reported an additional unauthorized diesel UST system release at the Site in 2003 following the discovery of petroleum hydrocarbons during product piping modifications at a

diesel pump island. Since the Tier 1 Risk Assessment report indicated that residual petroleum hydrocarbons remained in soil near the 2003 diesel UST system release area, the exact source of the petroleum hydrocarbons was undetermined. Investigation and corrective action since 2005 was conducted under RO#0002569.

1.3 UST System Closures and Corrective Action

Earthgrains operated eight UST systems at the Site from 1967 to 2005. The locations of the UST systems are shown on Figure 2. Earthgrains performed the following UST activities:

- Four 10,000-gallon diesel UST systems were installed in a shared tank excavation in 1977, south of the truck wash building as a back-up fuel supply system for the ovens in the plant. The four diesel UST systems were removed for permanent closure on October 11, 1989. During the UST closure activities, 384 tons of diesel-impacted soil were excavated and removed for off-site disposal and the former UST excavation was backfilled with clean, imported pea gravel.
- One 10,000-gallon gasoline, one 10,000-gallon diesel, and one 350-gallon waste oil UST system was installed south of the former truck maintenance garage during 1967. The gasoline and diesel tanks shared a common excavation and were removed for permanent closure on December 12, 1990. The waste oil UST system was removed for permanent closure on January 28, 1991 and approximately 25 cubic-yards of petroleum-impacted material was excavated and removed for off-site disposal. The UST excavations were then backfilled with clean, imported granular material.
- One 10,000-gallon diesel UST system was installed in January 1991 to replace the former diesel UST system removed southeast of the truck maintenance garage in December 1990. Earthgrains removed the original pump island on the 10,000-gallon diesel UST system and installed a new diesel dispensing system south of the truck wash building in 1995.
- Earthgrains upgraded the product dispensing system in April 2003 in order to comply with new under-dispenser containment requirements. Additional diesel fuel-contaminated soil was discovered at that time and the diesel UST system was removed for permanent closure on March 9, 2005. Based upon the UST closure assessment data, Earthgrains submitted an unauthorized UST release (leak) report for the Site to the Oakland Fire Department on April 15, 2005. This was the last UST system operated by Earthgrains at the Site.

1.4 Historic Environmental Investigations

A historical unauthorized release of diesel fuel was reported in 1989 following UST system closure. Historic subsurface investigation and corrective action were performed from 1989 through 1996 for this release. These historical environmental investigations assessed soil and groundwater quality. The location of historic soil borings and groundwater-monitoring wells are shown on Figure 4. Soil and groundwater samples were analyzed for total petroleum hydrocarbons (TPH) as gasoline (g), diesel (d), and motor oil (mo); benzene, toluene, ethylbenzene, and total xylenes (BTEX); volatile organic compounds (VOC); and poly-cyclic

aromatic hydrocarbons (PAHs). Historical soil sample analytical data are summarized on Tables 1A (<3 meters), 1B (>3 meters) and 1C (Saturated). Historical groundwater analytical data for grab samples is provided in Table 4 and monitoring well samples in Table 5. The historic environmental investigation activities at the Site are summarized below:

1992 Site Investigation

Burlington Environmental, Inc. (Burlington) performed a Site investigation in August 1992 to assess the lateral and vertical extent of petroleum hydrocarbons in soil and groundwater from the 1989 diesel UST system release. Burlington installed five groundwater-monitoring wells (MW-1 through MW-5) at the Site and performed quarterly groundwater monitoring from August 1992 to December 1994.

1995 Tier 1 Risk Assessment

Groundwater samples collected and analyzed from the quarterly monitoring events performed between 1992 and 1994 detected concentrations of chlorinated and non-chlorinated solvents. PSC submitted a Tier 1 Risk Assessment report for the Site in July 1995 prepared in accordance with the American Society of Testing and Materials (ASTM) Risk Based Corrective Action procedures and Emergency Standard Guide for Risk-Based Corrective Action Applied at Petroleum Release Sites ES 38-94. The report presented evidence that solvent concentrations in groundwater found in the investigation were derived from an off-site source. The ACEH agreed with the assessment report findings and closed the environmental case in March 1996. PSC abandoned the five groundwater-monitoring wells at the Site in March 1996 and Earthgrains received environmental case closure on April 17, 1996.

2003 Unauthorized Release

Earthgrains reported an additional unauthorized diesel UST system release at the Site in 2003 following the discovery of petroleum hydrocarbons during product piping modifications at a diesel pump island. Since the Tier 1 Risk Assessment report indicated that residual petroleum hydrocarbons remained in soil near the 2003 diesel UST system release area, the exact source of the petroleum hydrocarbons was undetermined.

Detailed investigations performed in 2006 and 2007 indicate that subsurface soils at the Site consist of silt and clay to a depth of approximately 20 feet bgs, where a sand and gravel layer is first encountered. Groundwater in this permeable layer is under semi-confined conditions. Perched water is encountered in the gravel backfill material of the former shared diesel UST excavation and shallow silty-sand layers above 20 feet bgs at the Site.

2006 Soil and Groundwater Quality Investigation

ETIC Engineering, Inc. (ETIC) performed a soil and groundwater quality investigation at the Site in September 2006 to further evaluate residual petroleum hydrocarbons remaining in the subsurface following the unauthorized diesel UST system release in April 2005. ETIC

drilled 40 borings and submitted 131 soil and 38 groundwater grab samples for laboratory analyses. The historical soil sampling locations at the Site are shown on Figure 3

Diesel was the primary chemical detected in soil and groundwater grab samples collected and analyzed during this Site investigation. The highest concentrations of TPH-d detected in soil were from samples collected in the vicinity of the former diesel pump island located south of the truck wash building and along the southern end of the former diesel product piping trench. The highest concentrations of TPH-d detected in soil samples were collected at depths of less than 16 feet below-ground-surface (bgs). Concentrations of TPH-d were also detected in soil samples collected south of the former truck maintenance garage in the northwest corner of the Site.

2007 Remedial Investigation

ETIC performed a remedial investigation at the Site in March 2007 to further evaluate the lateral and vertical extent of subsurface diesel contamination in preparation for remediation. ETIC drilled an additional 12 soil borings and collected 61 soil and 11 groundwater grab samples for laboratory analyses. The highest TPH-d concentrations detected in soil samples were collected at depths from 8.5 to 15.5 feet bgs. Concentrations of BTEX were not detected in any of the soil samples collected during this remedial investigation.

2009 Groundwater Investigation

PSC submitted a *Groundwater-Monitoring Well Installation Plan* dated November 18, 2008 and a *Groundwater-Monitoring Well Installation Plan Addendum* dated January 9, 2009 to the ACDEH. The purpose for performing a groundwater investigation at the Site was to provide additional soil and groundwater data for a feasibility study/remedial evaluation (FS/RE) to evaluate source removal by excavation. Information from the 2009 groundwater investigation is presented in Section 2 of this report. The well installation plan and addendum were approved by the ACDEH in January 2009.

Soils encountered in the boreholes consisted of a few feet of fill material overlying silty and sandy clay. Sand, gravelly sand, and clayey gravel were encountered in the soil borings for MW-102, MW-103, and MW-104. Saturated soil was typically encountered at approximately 20 feet bgs. Layers of saturated soil were encountered at shallower depths in MW-103 and MW-104. Selected soil samples were submitted for laboratory analysis of total petroleum hydrocarbons as diesel fuel (TPH-d), and BTEX.

Four two-inch diameter groundwater-monitoring wells (MW-101 through MW-104) and one six-inch diameter dewatering well (DW-1) were installed at the Site. MW-103 was installed northeast of the former diesel pump island in a hydraulically up-gradient location and the remaining three monitoring wells were installed west, southwest, and southeast of the former diesel pump island. DW-1 was installed in granular backfill material at the northern end of the former shared excavation for the back-up oven fuel tanks. This six-inch diameter well was constructed with Schedule 40 PVC casing and 10 feet of 0.020-inch slotted PVC well screen to a total depth of 15 feet bgs. The well locations are shown on Figure 3 and well

construction data are provided in Table 2. PSC collected groundwater samples from MW-101, MW-102, MW-103, MW-104, and DW-1 on January 26, 2009.

The analytical reports for soil samples indicate that TPH-d concentrations exceeded the ESL for leaching to groundwater in soil samples from MW-104 (8.5-10) and DW-1 (8.5-10) and the groundwater ESL in the groundwater sample collected from DW-1. ACEH indicated that soil concentrations in well DW-1 might be indicative of light non-aqueous liquids (LNAPLs). However, PSC has routinely check well all monitoring wells including DW-1 and have found no LNAPLs or free phase petroleum product.

Groundwater sample results from January indicated concentrations of TPH-d in MW-102, MW-103, and MW-104. These concentrations did not exceed the groundwater ESL of 210 µg/L. The sample from DW-1 had a TPH-d concentration of 1,200 µg/L. Laboratory analytical data indicate that BTEX concentrations were not detected in any of the soil or groundwater samples collected. Results of soil bulk density ranged from 1.5 to 1.9 g/cm^3, which is typical of a silty clay. Total organic carbon numbers were ranged from 1,050 to 2,900 mg/kg.

PSC performed a modified pump test on DW-1 to determine the volume of water and the rate of removal required to dewater the area around the former diesel pump island. Gregg installed a submersible pump in DW-1 and pumped the dewatering well at the highest sustainable flow rate. Gregg was only able to maintain a pumping rate of less than one gallon-per-minute in the dewatering well for a period of seven hours. PSC measured a water-level drawdown of approximately two feet in DW-1 during the seven-hour pump test event.

In order to assess the hydraulic connection between perched water in the former shared diesel UST excavation with the permeable zone screened in the monitoring wells, PSC placed pressure transducers near the bottom of each monitoring well. The pressure transducer measured the change in water pressure and calculated the water column height during the test. The transducers were connected to a Hermit 3000 Data Logger and the electronic components interfaced with a laptop computer using Win-Situ software. PSC measured a water-level drawdown of approximately one foot in MW-102 during the test. MW-102 is located about 15 feet northwest of DW-1. PSC observed minimal changes to the water levels in MW-101, MW-103, and MW-104 during the pump test, but these fluctuations could be attributed to changes in barometric pressure. This pump test indicated that there is a limited hydraulic connection between the groundwater in the former excavation and the groundwater encountered in the monitoring wells.

After completion of well development and pump test, PSC conducted slug testing on the monitoring wells to assess hydraulic conductivity of the shallow aquifer. Pressure transducers were placed near the bottom in each well and connected to the Hermit 3000 data logger. Rising and falling water level data were recorded on a laptop computer. A 1-inch diameter by 3-foot long solid slug was lowered into the water column. The rise and fall of the water level were measured until it had stabilized. The slug was removed and the fall and rise of the rebounding water table were measured.

Data from the slug test were analyzed using AQTESOLV™, commercially available solution software for hydraulic conductivity and pump test. Water level and time data are plotted using the software. A Bouwer-Rice solution for confined aquifers was used to match a tangent line to the slope of the data. The results of the solution are presented as hydraulic conductivity in cm/sec. Not all of the slug test data were usable. Five results of slug in/slug out data provided useful curves that could be matched to the selected solution. Results of the slug test are discussed in Section 2 of this report.

1.5 Historic Groundwater Monitoring

Groundwater monitoring was performed at the Site from August 1992 to December 1994 and groundwater samples were collected for laboratory analyses from historic wells MW-1 through MW-5. Concentrations of TPH-g and TPH-mo were detected in groundwater samples collected from MW-2 and MW-4. Chlorinated and non-chlorinated solvent compounds were also detected in groundwater samples from MW-4, but a risk assessment determined that the concentrations were derived from an off-site source. Earthgrains received environmental case closure from the ACDEH in April 1996. These wells have been closed and abandoned.

No free-phase petroleum hydrocarbons were detected in the wells during the historic groundwater-monitoring events at the Site. Water level measurements obtained from the monitoring events indicated that groundwater flowed beneath the Site in a west-southwest direction at a hydraulic gradient of approximately 0.005 to 0.01 foot-per-linear foot (ft/ft). Historical groundwater level and elevation data and groundwater analytical data are provided in Tables 3 and 5, respectively.

PSC subcontracted Blaine Tech Services, Inc. (BTS) to perform April and July 2009 and January 2010 quarterly groundwater-monitoring events at the Site. BTS collected groundwater samples from the five active wells (MW-101 through MW-104 and DW-1) on April 15 and July 22, 2009 and January 28, 2010. Samples were submitted to Kiff for analyses of TPH-d, BTEX, and Poly-nuclear Aromatic Hydrocarbons (PAHs). The analytical data for the historical groundwater monitoring events are summarized on Table 4 and 4A.

Kiff analytical data indicates that TPH-d concentrations exceeded the ESL for groundwater in samples collected from DW-1. However, this well is screened in water perched in the former UST excavation. TPH-d concentrations in well MW-102 ranged from 160 to 120 µg/L from January to July 2009. TPH-d concentrations in well MW-104 ranged from 100 to 97 µg/L from January to July 2009. TPH-d concentrations were 80 µg/L in well MW-103 after the installation, but were not detected in the last two sampling events. BTEX concentrations were not detected in any of the groundwater samples collected during the two quarterly monitoring events. PAHs were not detected in the July sampling event.

1.6 Current Activities Historic Groundwater Monitoring

PSC conducted a Tier 1 Risk Assessment in accordance with "Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, Interim Final, November 2007, (Revised May 2008)" (SFBRWQCB ESL Guidance Document). PSC submitted their "Tier 1 Risk Assessment and No Further Action Request Report, on September 17, 2009. As the title indicates, based on the minimal risk to human health, safety and the environment, PSC requested that ACEH close the case. ACEH disagreed that the site was ready for case closure. ACEH based its decision on elevated concentrations of TPH-d in shallow soil and groundwater in the source area. The ACEH letter is presented in Appendix A. The following is a summary list of the ACEH comments and required actions presented in the letter.

- *Based on the analytical data and reported groundwater flow direction, the extent of dissolved phase hydrocarbons in the deeper water-bearing unit appears adequately characterized at this time.*
- *The shallow water-bearing unit, referred by PSC as "perched water," appears significantly impacted with TPH-d and was omitted from any risk evaluation. Concentrations*
- *Concentrations of TPH-d have been detected as high as 8,300 mg/kg in soil and as high as 3,500,000 µg/L in groundwater.*
- *Although naphthalene was not detected in the most recent groundwater sample event, it is not clear whether naphthalene analysis was conducted during previous site characterizations since naphthalene analysis is not included in the historical analytical data tables.*
- *Based on the analytical data, significant residual source area appears to exist in shallow soil and groundwater and corrective action is warranted.*

ACEH required the submittal of this FS/CAP prepared in accordance with Title 23, California Code of Regulations, Section 2725. Additional requirements of the FS/CAP were documented in the letter. The following Conceptual Site Model, Feasibility Study and Corrective Action Plan have been prepared to fulfill ACEH requirements.

2.0 CONCEPTUAL SITE MODEL

PSC has presented a conceptual model of the site in previous documents that was based on USEPA guidance and un-documented guidance from regional water quality control boards. Based on discussion regarding the update of the California LUFT Manual, PSC has revised this conceptual model to prepare a Conceptual Site Model (CSM). The objective of the CSM is to provide an opinion on the following:

- Provide an evaluation of the risk to human health, safety and the environment posed by a LUFT Site;
- Covey an understanding of the origin, nature, and lateral and vertical extent of contamination;
- Identify potential contaminant fate and transport processes and pathways;
- Identify potential human and environmental receptors that may be impacted by contamination associated with the site; and
- Identify additional data needed to draw reasonable conclusions regarding the source(s), pathways, and receptors.

The components of an effective CSM include maps, cross-sections, tables, charts, and boring logs. These components are included in this and previous reports and work plans prepared for the Site. The narrative discussion on the environmental fate and current extent of contamination is presented in the following sections of this report to fulfill the objective of the CSM.

2.1 Land Use and Environmental Setting

The Site has been a commercial/industrial property since the late 1960s. The current use of the Site is a bakery and bakery product distribution center. The Site is covered by either pavement or structures. Based on its close proximity to Interstate 880 and San Francisco Bay, the Site will likely remain a commercial/industrial property for the near future.

Land surface near the Site slopes towards the west-southwest at a gradient of approximately 0.5 foot per 100 feet. The elevation of the Site is approximately 15 feet above mean sea level (MSL). Surface water or storm water from the western side of the Site flows to a storm sewer located about 20-feet west of and parallel to the bakery building. Water in this storm sewer flows south where it empties into a concrete storm-water sewer beneath and parallel to King Street, located approximately 25 feet west of the Site. The storm-water sewer along King Street flows north and intersects a second storm-water sewer that travels beneath and parallel to Dennison Street, approximately 60 feet northwest of the property. This storm water sewer flows west to Embarcadero Street and Brooklyn Basin.

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 the Brooklyn Basin approximately 1,800 feet northwest of the Site near the intersection of 12th Street and 19th Avenue. Sausal Creek is approximately 2,800 feet east of the Site and empties into San Francisco Bay approximately 4,400 feet southeast of the Site.

2.2 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. These 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 approximately 1,000 feet.

Artificial fill has been encountered in the sub-basin along the bay front and wetlands areas and is derived primarily from dredging, quarrying, construction, demolition debris, and municipal waste. The artificial fill ranges in thickness from approximately 1 to 50 feet with the thickest deposits found near San Francisco Bay.

Historical soil boring logs indicate that the predominant soil types beneath the Site consist primarily of clay and silty clay. The soil encountered during the January 2009 installation of four groundwater-monitoring wells is consistent with soil types encountered during previous subsurface investigations at the Site. Soil consisted predominately of silty clays with some sand and gravels for the full depth of the soil borings. Geologic cross sections of the site are presented on Figure 5 and Figure 6.

Historical drilling activities performed at the Site indicate that groundwater was encountered within a sand and gravel layer located at depths of 18 to 26 feet bgs. Groundwater appears to be in a semi-confined condition and groundwater levels stabilize at approximately 9 feet bgs. Groundwater was encountered in a sandy and silty lens between 10 and 12 feet bgs in some historical soil borings and a large area of perched water exists near the former shared diesel UST excavation south of the truck wash building. Groundwater flow direction at the Site is generally toward the west-southwest with a hydraulic gradient ranging from approximately 0.005 to 0.01 ft/ft.

An average hydraulic conductivity of 5.02×10^{-4} cm/sec was obtained from the results of slug testing. Using this hydraulic conductivity, a hydraulic gradient of 0.005 ft/ft and a porosity of 35, the linear velocity of groundwater is estimated to be 7.6 ft/year. This estimate is

conservative and the distance traveled by a particle of groundwater should be much less than 7.6 feet a year. The distance a contaminated groundwater plume will travel in a year requires additional parameters for the contaminant like solubility and natural attenuation parameters for the soil. Only TPH-d, which is a mixture and has no specific chemical properties like solubility, has been detected in groundwater. Therefore fate and transport modeling has not been completed.

2.3 Sources of Contamination

The primary source area for the current unauthorized diesel release at the Site is the former diesel pump island located south of the truck wash building. An additional source of contamination is the former USTs located adjacent to the former Truck Repair Building located north of the Truck Wash Building. Source areas are shown on Figure 7.

Storm water infiltration through the pavement in this area has filled former UST system excavations. Petroleum hydrocarbons have spread laterally across the Site through granular fill material and impacted shallow groundwater. It is PSC's opinion that this infiltrating storm water can be regarded as a secondary source of contamination

2.4 Chemical-of-Concern and Affected Media

Soil and groundwater analytical data from investigations and corrective actions at the Site indicate that the chemical-of-concern is TPH-d. No BTEX or PAH concentrations were detected in groundwater samples collected in July 2009. Contamination is encountered in saturated and unsaturated soil. Groundwater at a depth of approximately 10 feet bgs and shallow groundwater at a depth of approximately 18 feet bgs is impacted by TPH-d. There is a potential for surface water impact in the granular backfill installed in the trenches of the storm water and sanitary sewer utilities.

2.5 Extent of Petroleum Hydrocarbons

Subsurface investigations performed in 2006, 2007, and 2009 included: drilling 57 soil borings and collecting 192 soil samples; 49 groundwater grab samples; and 15 groundwater well samples. The soil and groundwater samples were analyzed for TPH-d and other appropriate contaminants-of-concern. The following sections present a summary of those investigations and a comparison to SFBRWQCB ESL Guidance Document.

2.5.1 Selection of Appropriate ESLs

The Site has been a bakery and product distribution center since the late 1960s and will likely remain a commercial/industrial property in the future. Although some properties in the Site vicinity have been converted to residential buildings and public use areas, the plant is not suitable for this use without major renovations or demolition. Therefore, PSC believes that the ESL selections for commercial/industrial properties were appropriate for the Site. Residual hydrocarbons in soil and groundwater at the Site could require an environmental covenant or deed restriction on the property. PSC compared TPH-d concentration in shallow soil (<3 meters) and unsaturated deeper soil (>3 meters) at the Site to both the residential and commercial/industrial ESL to assess the need for environmental land-use restrictions on the

property. PSC used the residential ESL for estimating the mass of residual hydrocarbons in soil.

PSC also compared TPH-d concentrations in shallow soil to the ESL for direct exposure of industrial workers. Because the Site is completely covered by asphalt or concrete pavement or structures, PSC believes that a less stringent direct exposure ESL for construction workers in trenches would be more appropriate for the Site.

Groundwater in the vicinity of the Site is listed as suitable for beneficial use on the SFBRWQCB Basin Plan. However, in PSC's opinion, groundwater beneath the Site and vicinity is not suitable for drinking water due to the yield of the shallow aquifer. Deeper aquifers beneath the Site are not suitable for drinking water due to the close proximity of San Francisco Bay and a potential for salt-water intrusion. Therefore, PSC selected the appropriate ESL for sites where groundwater is not a current or potential drinking water resource for comparison to the soil and groundwater concentrations at the Site.

Analytical data for TPH include chromatograms that are characterized as gasoline, diesel fuel, or motor oil based on the elution time and the pattern of peaks. Concentrations characterized by a laboratory analyst as either motor oil or gasoline could be from diesel contamination. TPH-d was the most frequently detected contaminant in soil or groundwater at the Site. The groundwater ESL of 210 µg/L for TPH-d was selected for comparison to groundwater concentrations at the Site.

2.5.2 Comparison of Results to ESLs

PSC compared soil sample data collected from 1989 through 2009 to the appropriate ESL selections listed in Section 2.5.1. The comparison of shallow soil data is summarized in Table 7A and unsaturated deep soil in Table 7B. Sample locations where TPH-d concentrations exceeded the ESL are shown on Figure 7.

Based on soil analytical data from 275 soil samples (83 prior to 2006 and 192 after 2006) collected at the Site, only one sample (16TP-1) collected in 1990 exceeded the final ESL for benzene at a concentration of 0.15 mg/kg. Two soil samples collected in 1990 (16TP-1 and 15NTW) exceeded the final ESL for TPH-mo at 1,300 mg/kg and 2,700 mg/kg, respectively. Only one soil sample (E-29) exceeded the final residential ESL for TPH-g at 140 mg/kg.

Nine shallow and 20 deep soil samples exceeded the final ESL for residential for residential properties where groundwater is not a current or potential drinking water resource. The final ESLs presented for TPH-d in the ESL Document were based on contaminants in soil leaching to groundwater. PSC believes that pavement or structures provide a barrier at the Site that currently inhibits soil leaching to groundwater. Minimal groundwater contamination has been detected in the recent quarterly monitoring events. Soil sample locations near these groundwater-monitoring wells have exceeded the ESL for soil leaching to groundwater. This indicates that contaminants have not leached to groundwater in concentrations that result in groundwater contamination exceeding the groundwater ESLs.

The extent of TPH-d in soil was delineated and the results were compared with the residential and commercial ESLs of 100 and 180 mg/kg, respectively for non-drinking water sites. Historical soil sample analytical data are summarized on Tables 1A (<3 meters), 1B (>3 meters), and 1C (Saturated). Historical groundwater analytical data for grab samples are provided in Table 4 and well samples in Table 5. TPH-d concentrations in historic soil samples and groundwater well samples from July 22, 2009 are shown on geologic cross-sections in Figures 5 and 6.

2.6 Contaminant Fate and Transport

TPH-d contamination in soil exists in the source areas at depths between 2 and 16 feet bgs. The soil in this depth interval at the Site is typically silt and clay. TPH-d concentrations in soil are a secondary source of contamination of groundwater at the Site. As previously discussed storm water infiltrating the granular backfill of utility trenches is also regarded as a secondary source. These secondary sources have facilitated the transport of contamination.

PSC's CSM conceptual model is based on the opinion that storm water infiltrating the pavement has been impacted by diesel fuel in the source areas. During the wet seasons this contaminated storm water has migrated through granular material in the sub base of the pavement and the backfill of the sanitary sewer. An oil/water separator is located approximately 15 feet from the source area. This oil/water separator has a bottom approximately 8 to 10 feet bgs. Contaminated storm water in the backfill of this oil/water sanitary sewer has apparently migrated along the sewer line and contaminated soil beneath King Street.

The storm water sewers located along the western side of the plant and beneath King Street could be a conduit for contaminant migration. However, depth of these utilities near the source areas is only 3-4 feet deep. Based on shallow soil samples near the on-site storm sewers, there is less of a potential for these to be a migration pathway.

Groundwater beneath the Site is encountered in semi-confined conditions. Shallow groundwater was encountered at approximately 10 feet bgs in some boreholes and in the former UST system excavations. The primary transport mechanisms for residual contamination in the shallow aquifer are advection, adsorption, desorption, and volatilization. Laboratory analytical data from historic subsurface investigations indicate that both saturated soil and groundwater are affected in the shallow aquifer and adsorption and desorption between the two phases could be occurring. Residual petroleum-hydrocarbon contamination around the former diesel pump island and waste oil UST excavation may have migrated with groundwater through advection. It may also be possible that TPH-d contamination has migrated from the former diesel pump island source area through the shallow groundwater in the shared excavation of the former oven fuel tanks. Minor groundwater contamination in wells MW-101 through MW-104 is likely the result of this contaminant transport.

Volatilization of petroleum-hydrocarbon constituents from soil and groundwater into vapor can result in migration to the ground surface or into buildings. However, based on the low

volatility of diesel and the clay nature of the soil, contaminant transport through this migration pathway has less of a potential to be complete.

2.7 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. The Site is currently an active commercial and industrial property with nearby land used for commercial, industrial, and residential purposes. The plant and retail 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 were identified for the Site using the following criteria:

- A point of potential contact with impacted medium (referred to as the exposure point); and
- An exposure route at the point of contact (inhalation, ingestion, or dermal contact).

Site-specific, potentially complete exposure pathways and potential receptors are summarized below:

- Inhalation of chemicals volatilizing from soil or groundwater to indoor or outdoor air (residential, commercial, or industrial receptors);
- Inhalation of volatiles, dermal contact, or incidental ingestion of contaminated soil or groundwater through excavation (industrial or construction workers);
- Ingestion of or dermal contact with contaminated groundwater from a potential current or future water supply well (residential, commercial, or industrial receptors); and
- Dermal contact with or incidental ingestion of contaminated surface water (residential, commercial, or industrial receptors or construction workers).

The vapor-intrusion pathway from impacted soil and/or groundwater to outdoor or indoor air is potentially complete. However, diesel contamination is not very volatile and the soil beneath the site is silty clay. In addition, the bakery building and buildings near the Site have elevated slabs. The nearest receptors are the bakery plant, which has an elevated floor slab on the west side of the building. Soil vapor intrusion into this building is not likely to occur. The completion of this potential exposure pathway is not very likely. Based upon analytical data from historical subsurface investigations and soil vapor intrusion surveys from similar sites, PSC believes that a soil-vapor intrusion study is unnecessary to evaluate the potential health risks associated with exposure via inhalation of volatiles from the subsurface.

Based on the presence of paved surfaces at the Site, industrial workers and occupants will not be subjected to direct exposure (ingestion and/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 and/or dermal contact with impacted groundwater at the Site is minimal considering the Site is serviced by the EBMUD. Two abandoned public water supply wells (PRW1 and PRW2) are located northeast of the Site within 2,000 feet. One of the wells is located approximately 700 feet north-northeast and the other water well is approximately 1,400 feet east-northeast of the Site. Both abandoned water supply wells are hydraulically up gradient of the Site. Environmental Data Resources (EDR) records do not indicate any active water supply or irrigation wells within the search radius. The future installation of shallow water-producing wells within the contaminant plume could create a direct and complete exposure pathway. However, the probability of a water supply well installed in an industrial area this close to the Brooklyn Basin is very low.

If contaminated groundwater discharge to surface water occurs, then a potentially complete exposure pathway for off-site receptors and/or construction workers could exist. Based upon a sensitive receptor survey, 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 about 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. There is a potential for surface water impact from storm water sewers, however based on sample results near the sewer (E-45 and E-46) concentrations exceeding ESLs are limited to a small area. Discharge of contaminated groundwater to surface water at levels that exceed the ESL for marine habitats is unlikely.

Construction workers may have direct exposure to residual contamination in groundwater, if excavation and/or dewatering activities occur at the Site in the future. There is also a potential construction-worker exposure risk for excavation work on utilities beneath King Street. Source removal should significantly reduce the potential exposure.

2.8 Residual Petroleum Hydrocarbons in Soil

PSC compared historic shallow and deep soil sample analytical data to the ESL for gross contamination of commercial/industrial properties where groundwater is not a current or potential drinking water resource. Samples that exceeded the ESL were generally in the primary source area of former diesel pump island with the exception of E-49 in King Street. PSC also compared analytical data with the ESL for shallow and deep soil for residential and commercial/industrial properties where groundwater is not a current or potential drinking water resource. Summaries of these comparisons are presented in the Tier 1 Risk Assessment and Request for Closure.

Based on extrapolation of TPH-d concentrations in soil at the Site, areas with concentrations exceeding the gross contamination ESL include approximately 600-700 ft^2 at the former diesel pump island and approximately 100-150 ft^2 located near E-49 in King Street. In addition to the primary source area, residual petroleum-hydrocarbon concentrations above

the final ESL are encountered in a 8,200 ft^2 area that includes the former diesel pump island, shared diesel UST excavation, and former 350-gallon waste oil UST excavation.

PSC estimated the extent of residual petroleum hydrocarbons in soil above ESLs to be an area of approximately 7,600 ft^2 near the former diesel pump island and shared diesel UST excavation. This area extends west into King Street. PSC estimated a second area of approximately 600 ft^2 near the former 350-gallon waste oil UST excavation located near the southwest corner of the former truck maintenance garage.

PSC estimated a primary source area of approximately 600-700 ft^2 near the former diesel pump island and shared diesel UST excavation. The source area was delineated by samples with TPH-d concentrations exceeding the gross contamination ESL for soil and is limited to an area of 800 ft^2 around the former diesel pump island. PSC estimated a second area, approximately 100-150 ft^2 near the storm sewer beneath King Street with concentrations exceeding the gross contamination ESL for TPH-d.

The area of residual hydrocarbons near the former Truck Maintenance Garage is relatively small and does not exceed the gross contamination ESL. Based on the 1995 groundwater-monitoring data, the residual hydrocarbons in soil in this area have not significantly impacted groundwater.

Based upon soil boring logs and geological cross-sections, the thickness of residual petroleum hydrocarbons at the Site is approximately seven feet in shallow soil and 10 feet in deeper soil. Groundwater is encountered at a depth of approximately 20 feet bgs in most areas of the Site and unsaturated soil impact is limited to a depth of approximately 12 feet bgs beneath the Site. Using an average concentration of samples exceeding the ESL, PSC estimates that 5,782 kg of residual TPH-d remain in unsaturated soil beneath the Site. PSC believes that this estimate is conservative and the actual contaminant mass at the Site is much less, because contaminant migration in the silt and clay soil has occurred in a heterogeneous manner along preferential pathways.

2.9 Residual Petroleum Hydrocarbons in Groundwater

Groundwater grab samples collected from open boreholes during historic Site investigations are not representative of groundwater quality and could have residual petroleum hydrocarbons in suspended sediments. Based on this opinion, concentrations of TPH-d in groundwater grab samples summarized in Table 4 were not included in the ESL comparisons. Groundwater is encountered in semi-confined conditions at a depth of approximately 20 feet bgs over most of the Site. The rise in water levels after encountering the permeable zone at the Site indicates an upward vertical gradient on groundwater.

Laboratory analytical data from the July 2009 groundwater-monitoring event indicates that concentrations of TPH-d were detected in DW-1 at 1,000 µg/L. PSC believes that the water in DW-1 is perched in the granular backfill of the former shared excavation for the back-up oven fuel tanks. PSC anticipated significant TPH-d concentrations in DW-1, however free-phase petroleum product has not been observed in the dewatering well.

Groundwater samples collected following the installation of the four groundwater-monitoring wells detected the highest TPH-d concentrations in MW-102 at 160 µg/L. The groundwater analytical data from the July 2009 monitoring event indicates that TPH-d concentrations in groundwater samples from the monitoring wells were below the ESL of 210 µg/L for sites where groundwater is not a current or potential drinking water resource. Concentrations of PAHs were not detected in any groundwater samples analyzed from the July 2009 quarterly groundwater-monitoring event.

2.10 Tier 1 Risk Assessment Conclusions

Soil contaminated with residual petroleum hydrocarbons beneath the Site is primarily located around the former diesel pump island and shared excavation for the former back-up oven fuel tanks. Concentrations of TPH-d in soil exceeding the gross contamination ceiling levels for commercial/industrial sites where groundwater is not a current or potential drinking water resource are located in an approximate 600-700 ft^2 area at the former diesel pump island and an approximate 150-ft2 area beneath King Street. Concentrations of TPH-d in soil that exceed the final ESL for both residential and commercial/industrial sites where groundwater is not a current or potential drinking water resource are located in an approximate 8,200 ft^2 area around the former diesel pump island, shared excavation for former back-up oven fuel tanks, and former 350-gallon waste oil UST excavation.

Concentrations of TPH-d in groundwater encountered in the active monitoring wells is limited and does not exceed the groundwater ESL for commercial/industrial sites where groundwater is not a current or potential drinking water resource. Based on the length of time that soil and perched water have been impacted by residual petroleum hydrocarbons at the Site, migration through the shallow aquifer is considered minimal. PSC believes that this is due to the limited hydraulic connection between the perched water in the former UST excavations and the semi-confined nature of the shallow aquifer.

2.11 Data Gaps

Historical soil and groundwater sampling has not adequately addressed potential contamination beneath the Truck Wash Building. If the oil/water separator in this building is a potential conduit for contaminant migration, assessment and corrective action for this impact should be addressed. PSC proposes to assess the impact and perform corrective action, if required, during the proposed source removal activities.

3.0 FEASIBILITY STUDY

PSC previously evaluated two remedial alternatives for residual petroleum hydrocarbons at the Site. These included excavation and disposal and groundwater monitoring or Monitored Natural Attenuation (MNA). Based on the results of the Tier 1 Risk Assessment, PSC regarded source removal as not cost effective based on the results of the Tier 1 Risk Assessment. As previously mentioned ACEH disagreed with this conclusion and required the FS/CAP for source removal. ACEH also required the evaluation of three alternatives in the feasibility portion of the FS/CAP. PSC does not believe that MNA will fulfill the objective of source removal and based on the length of time since the release, MNA will take years to reduce concentrations to levels below water quality objectives for the San Francisco Regional Water Quality Control Board Basin Plan. PSC proposed to evaluate two remedial alternatives in the FS/CAP during subsequent conversations with ACEH. ACEH verbally approved evaluation of the two remedies described below.

The primary source area near the former diesel pump island is approximately 600-700 ft^2 and was defined as the area impacted by TPH-d concentrations over gross contamination ESLs. An additional 100-150-ft^2 area near the storm sewer beneath King Street also exceeds gross contamination ESLs. Excavation and disposal of soil beneath King Street is not considered feasible due to the presence of numerous subsurface utilities and the approvals required by the City of Oakland. Soil samples with concentrations exceeding the gross contamination ESL are limited to 12 feet bgs. Therefore, the FS/CAP is prepared with the objective of removal of the dispenser island source and the nearby oil/water separator. The following FS will evaluate the two methods of source removal:

- Pumping and treating shallow groundwater; and
- Dewatering and excavating unsaturated and saturated soil.

The remedies were evaluated using the following selection criteria.

- Implementation – can the remedy be applied with potential physical and regulatory constraints?
- Reduction of toxicity, mobility, or volume of waste – will the remedy complete these objectives for the contaminants of concern?
- Short-term effectiveness – how effective will the remedy be within the first year?
- Long-term reliability and effectiveness – will the remedy continue to work in the future to reduce contaminant concentrations with reasonable operation and maintenance efforts?
- Implementation costs – what are the short-term and long-term costs?

3.1 Pump and Treat

PSC has based its CSM on the opinion that storm water infiltrating the concrete is contaminated by petroleum hydrocarbons in the source area. This contaminated storm water, regarded by ACEH as shallow groundwater, flows through granular sub-base fill material and granular material placed beneath and around the sanitary sewer lines potentially transporting petroleum hydrocarbons off site. This impacted shallow water also appears to be hydraulically connected to groundwater encountered at deeper depths, at least in monitoring well MW-102. One source removal alternative is to pump this shallow water out of the dewatering well to tanks for subsequent treatment or disposal. Since this alternative would require pumping this water for an extended period, the alternative evaluated here includes an on-site treatment system.

As previously discussed in Section 1.4, PSC performed a modified pump test on DW-1 to determine the volume of water and the rate of removal required to dewater the area around the former diesel pump island. PSC installed a submersible pump in DW-1 and pumped the dewatering well at the highest sustainable flow rate. PSC was only able to maintain a pumping rate of less than one gallon-per-minute in the dewatering well for a period of seven hours. PSC measured a water-level drawdown of approximately two feet in DW-1 during the seven-hour pump test event. PSC measured a water-level drawdown of approximately one foot in MW-102 during the test. MW-102 is located about 15 feet northwest of DW-1. PSC observed minimal changes to the water levels in MW-101, MW-103, and MW-104 during the pump test, but these fluctuations could be attributed to changes in barometric pressure. This pump test indicated that there is a limited hydraulic connection between the groundwater in the former excavation and the groundwater encountered in the monitoring wells.

Based on the low sustainable pumping rate observed during the pump test, PSC has chosen a dewatering sump pump for this remedy alternative. The pump would include a level controller to shut the pump off when the water level drops below the intake level. This will allow for intermittent pumping on the well without the pump running dry requiring an attendant to restart the pump. The pump would be installed near the bottom of DW-1 at a depth of 15-foot bgs. A level sensor will be placed in the well above the pump.

The pump would be connected to 2-inch discharge piping. Since the pumping will be intermittent, the discharge piping will be connected to a temporary tank in the Truck Wash Building. The tank will be equipped with an additional level sensor to keep from overfilling. The tank will be connected to a portable oil/water separator followed by an aqueous phase activated carbon vessel. The treated water will be discharged to the sanitary sewer in accordance with EBMUD and City of Oakland discharge requirements.

PSC estimates that the granular material filling the former UST excavation contains approximately 36,000 gallons of water. This is based on an approximate area of 120 feet long by 20 feet wide with approximately 6 to 8 feet of saturated gravel and sand. A specific yield (the amount of water drained from aquifer material) of 25% was used for the granular

material. Depending on how well the granular material in the excavation drains, PSC estimates that 500 to 1,000 gallons of water may be pumped from the excavation per day.

For pumping alone to be used as an effective remedy, the influence of the pumping would have to extend beyond the former excavation to the groundwater encountered in the lower permeable zones. Since there appears to be a hydraulic connection to groundwater encountered in permeable zones greater than 20 feet bgs in nearby MW-102 and the water in DW-1 (as observed during the pump test), and there is an upward vertical flow in the semi-confined aquifer, additional water should accumulate in the excavation during longer term pumping operations. PSC used an operational period of one year to pump groundwater from the source area. This would result in removal of 182,500 to 365,000 gallons of water.

Based on these Site-specific factors, PSC estimates the following cost range for pump and treat operated over a one-year period as follows:

	Short Term Cost	Long Term Cost	Total Cost
Planning & Permitting	**$25,000 - $35,000**		
System Installation	**$40,000 - $50,000**		
Operation and Maintenance (includes equipment rental, and field oversight)		**$60,000 - $120,000**	
Effluent Sampling, Analysis, and Discharge Fees		**$25,000 - $50,000**	
Waste Disposal and Restoration (includes well abandonment, equipment decontamination and surface restoration)	**$35,000 - $50,000**		
Project Management and Closure Reports (includes periodic reporting for discharge, groundwater monitoring)	**$10,000-$15,000**	**$30,000-$40,000**	
Total Cost Range:	**$110,000 - $150,000**	**$115.000 - $210,000**	**$225,000 - $360,000**

These costs are approximate. Additional long-term cost of up to 80% per year may apply if the system operation beyond one year may apply.

The evaluation of this remedy using the above stated criteria along with an opinion of the ability to meet the objective (poor, fair, good, excellent) is summarized in the following sections.

Implementation – Pumping and treating contaminated groundwater at the Site could be implemented with minimal constraints. Permitting and discharging the treated water to the sanitary sewer is a regulatory constraint that will require additional planning and project management time. The extended disruption to plant activities and truck traffic is a logistics constraint for business operations. This constraint may cause problems beyond the scope of the corrective action. The ability to implement this remedy is considered **good**.

Reduction of toxicity, mobility, or volume of waste – Removal and treatment of contaminated groundwater meets the objective for each of these criteria. However, contamination adsorbed to soil and granular material will not be removed and will continue to contaminate infiltrating storm water. This water will subsequently leach to groundwater. Therefore, the ability of this remedy to reduce toxicity, mobility, and volume of waste is considered **fair**.

Short-term effectiveness – The removal of contaminated water in the granular material will have a **fair** short-term effect on contaminant concentrations in surrounding groundwater-monitoring wells.

Long-term reliability and effectiveness – Intermittent pumping and treating groundwater over an extended period will require additional maintenance, sampling and analysis, reporting and management. The reliability of mechanical systems to operate efficiently over the one-year period selected for the FS is dependent on the effort applied to the operation and maintenance. Typically, reliability of the system to meet the objective diminishes over time. Future impact to infiltrating storm water leaching through contaminated soil should result in episodes of more contaminated groundwater. Groundwater with TPH-d concentrations exceeding the ESLs may be detected after pump and treat has been stopped. The long-term reliability and effectiveness of this remedy is considered **poor**.

Implementation costs – The short-term costs for implementing this remedy are relatively low. However, the long-term costs for operating a pump and treat system for one year and beyond reduce the cost effectiveness of this remedy considerably. The overall cost effectiveness of implementing this remedy is considered **fair**.

3.2 Dewatering, Excavation and Disposal

The second alternative evaluated consists of dewatering the granular material in the former shared diesel fuel excavation and around the source area and excavating contaminated soil for subsequent disposal. Since the objective of corrective action is removal of source material, soil impacted above gross contamination levels as defined by the ESL Guidance as 500 mg/kg for soil less than 3 meters bgs and 5,000 mg/kg for soils greater than 3 meters bgs. Since data gaps include contamination levels beneath the oil/water separator, this area should also be excavated and removed to sever the pathway for potential contamination leaving the

property. The area near the former shared excavation for the former diesel fuel USTs would require sheet piling to keep the granular backfill in the excavation from sloughing into the source removal excavation.

Source removal by excavation and disposal would require dewatering the former diesel pump island area and shared UST excavation prior to earthwork operations. PSC installed DW-1 at the north end of the shared diesel UST excavation for dewatering the primary source area, if source removal is performed.

The dewatering portion of this alternative will use much of the same equipment proposed for the pump and treat alternative. However, due the relatively short duration for dewatering, water stored in the baker tanks would be hauled away for proper disposal at a licensed disposal facility and a treatment system would not be included. PSC estimates that the dewatering system would need to be operated for 4 to five weeks to effectively dewater the excavation. The dewatering well would remain in place to provide additional dewatering through the subsequent excavation activities. Excavation of source area material should be conducted in phases to minimize disruption to plant activities and to allow continued dewatering of the excavation. PSC would remove the dewatering well during the final phases of the excavation.

PSC previously thought that due to the close proximity of the plant, engineering controls such as sheet piling, speed shoring, or trench boxes may be required to stabilize the excavation. Excavation subcontractors that worked on previous UST removals at the site were consulted on the proposed source removal. They indicated that removal of the Truck Wash Building will eliminate the need for shoring if the eastern limit of the excavation does not extend farther east than the storm water drain. The only sheet piling required would include approximately 18 feet placed on the southern limit of the excavation to keep the granular backfill of the former shared UST excavation from sloughing into the source area excavation.

Disposal of contaminated material generated during the source removal would be determined by waste characterization and/or profiling and acceptance of the material by the disposal facility. The primary source area at the Site is beneath concrete pavement and located in a high traffic area of the plant. Site restoration costs would include the placement of granular backfill from the bottom of the excavation to approximately 8 feet bgs, granular aggregate base course to within 8 inches of finished grade and high-early concrete in high-traffic areas to accelerate the curing time and minimize disruption to plant operations. Based on these Site-specific factors, PSC estimates the following cost range for source removal by excavation and disposal as follows:

Planning & Permitting:	**$10,000 - $20,000**
Excavation Dewatering:	**$40,000 - $60,000**
Building Dismantling and oil/water separator removal	**$25,000 - $50,000**
Soil Excavation and disposal:	**$25,000 - $50,000**
Waste Disposal:	**$50,000 - $75,000**
Site Restoration:	**$35,000 - $50,000**
Project Management and Closure Reports	**$20,000 - $40,000**
Total Cost Range:	**$205,000 - $355,000**

These costs are approximate and the high costs in the range provide a worst-case scenario.

The evaluation of this remedy using the above stated criteria along with an opinion of the ability to meet the objective (poor, fair, good, excellent) is summarized in the following sections.

Implementation – Dewatering, excavation and disposal of source area material could be implemented with minimal constraints. The disruption to plant activities and truck traffic is a logistics constraint for business operations. However, the duration of this disruption is a shorter period and can be managed with cooperation of plant management. The ability to implement this remedy is considered **good**.

Reduction of toxicity, mobility, or volume of waste – Removal and treatment of contaminated groundwater during dewatering meets the objective for each of these criteria. Gross contamination adsorbed to soil and granular material in the source area will be removed. Removal of the secondary source will minimize the contamination of infiltrating storm water. This water, subsequently leaching to groundwater will be less impacted. Therefore, the ability of this remedy to reduce toxicity, mobility, and volume of waste is considered **good**.

Short-term effectiveness – The removal of contaminated water in the granular material will have a short-term effect on contaminant concentrations in surrounding groundwater-monitoring wells. However, the removal of gross contaminated soil along with dewatering will have a **good** short-term effectiveness.

Long-term reliability and effectiveness – This remedy will remove contaminant mass immediately from the subsurface with no long-term reliability issues. Future impact to infiltrating storm water leaching through contaminated soil will be minimized. Groundwater with TPH-d concentrations should diminish in the future to below ESLs. The long-term reliability and effectiveness of this remedy is considered **good**.

Implementation costs – The short-term costs for implementing this remedy are higher than pumping and treating groundwater. However, long-term costs for this remedy are minimal. The overall cost effectiveness of implementing this remedy is considered **fair**.

3.3 Feasibility Study Conclusions

The comparison of the two remedies using the criteria stated above is summarized in the following table:

Criteria	Pump and Treat	Dewatering, Excavation and Disposal
Implementation	**Good**	**Good**
Reduction of toxicity, mobility, or volume of waste	**Fair**	**Good**
Short-term effectiveness	**Fair**	**Good**
Long-term reliability and effectiveness	**Poor**	**Good**
Implementation costs	**Fair**	**Fair**

Source removal by dewatering and excavation is a feasible remedial option at the Site. Based on the review of PSC's Tier 1 Risk Assessment and Closure, ACEH required removal of source area concentrations encountered in the dewatering well and historical soil samples collected in the source area. Dewatering, excavation and disposal of the primary source area would remove a significant mass of residual petroleum hydrocarbons in the soil. TPH-d concentrations above groundwater ESLs should diminish over a short period after removal of contaminated soil. TPH-d concentrations above Residential ESL will remain in soil at the Site. However, based on conclusions of the Tier 1 Risk Assessment and Request for Closure, these concentrations will pose a minimal risk to human health and the environment. Therefore, in order to fulfill the requirement of ACEH, it is the opinion of PSC that source removal is the most cost-effective corrective action for the source removal objective. The planned implementation of this remedy is discussed in the Corrective Action Plan (CAP) presented in the following Section of this report.

4.0 CORRECTIVE ACTION PLAN

ACEH required the submittal of a CAP prepared in accordance with Title 23, California Code of Regulations, Section 2725. Additional requirements of the FS/CAP were to reduce concentrations in order to achieve water quality objectives. The following Corrective Action Plan has been prepared to fulfill ACEH requirements.

4.1 Applicable Media Cleanup Standards

Groundwater in the Santa Clara Valley Groundwater Basin, unless specifically designated by the SFBRWQCB, is regarded as suitable beneficial use. ACEH has documented that groundwater in the vicinity of the Site is listed as suitable for beneficial use. The cleanup standards that apply to groundwater with this designation are the California maximum contaminant level (MCL). The cleanup goals for the Site are ultimately to reach California maximum contaminant levels (MCLs) for the beneficial use of groundwater. These goals should be reached within a reasonable timeframe.

The San Francisco Bay Regional Water Quality Control Board (SFBRWQCB), currently has the ESL guidance document previously discussed in this report. This risk based corrective action (RBCA) guidance provides lookup tables for screening contaminated soil and groundwater depending on the site-specific exposure scenario. Concentrations of contaminants of concern in soil and groundwater samples collected at the site compared to the appropriate screening levels were discussed in Section 2.5.2.

PSC used ESLs for commercial/industrial properties for the Tier 1 Risk Assessment of the Site. However, PSC used the residential ESL for estimating the mass of residual hydrocarbons in soil. PSC also compared TPH-d concentrations in shallow soil to the ESL for direct exposure of industrial workers. Because the Site is completely covered by asphalt or concrete pavement or structures, the less stringent direct exposure ESL for construction workers in trenches would be more appropriate for the Site.

Groundwater in the vicinity of the Site is listed as suitable for beneficial use on the SFBRWQCB Basin Plan. However, as previously stated, groundwater beneath the Site and vicinity is not suitable for drinking water due to the yield of the shallow aquifer. Deeper aquifers beneath the Site are not suitable for drinking water due to the close proximity of Brooklyn Basin of San Francisco Bay and a potential for salt-water intrusion. Therefore, PSC used ESLs for sites where groundwater is not a current or potential drinking water resource for comparison to the soil and groundwater concentrations at the Site. The groundwater ESL of 210 µg/L for TPH-d was selected for comparison to groundwater concentrations at the Site.

4.1.1 Selection of Remediation Goals

The objective of the corrective action is source removal. Therefore, gross contamination levels as defined by the ESL Guidance as 500 mg/kg for soil less than 3 meters bgs and 5,000 mg/kg for soils greater than 3 meters bgs are proposed for the corrective action. The

estimated time to reach MCLs for groundwater will reduce significantly by source removal. The estimates for this timeframe and the estimates of residual mass remaining after corrective action will be presented in the completion report prepared for this corrective action.

4.2 Limit of Excavation

Based upon comparisons of 275 soil samples collected since 1989, an area of approximately 800 ft^2 exceeds the gross contamination ESL and defines the primary source area. PSC believes potential contamination beneath the oil/water separator may add to that footprint of gross contamination. In addition, estimates of gross contamination were based on borehole samples collected from boreholes drilled in accessible areas. To account for this additional soil potentially exceeding gross contamination, PSC proposes an area of 1,300 ft^2 for potential excavation and disposal. The actual area and volume of soil removed will be based on field observations and soil samples collected during excavation activities. In order to access the source area and the oil/water separator, approximately 1,000 ft^2 of concrete will be removed in the Truck Wash Building and 1,300 ft^2 of concrete will be removed outside the Truck Wash Building.

The depth limit of the excavation will be approximately 12 feet bgs. This depth is above the depth where groundwater is first encountered in nearby boreholes. The static water level in wells installed in these boreholes, eventually rises to approximately 8 feet bgs. Dewatering during excavation activities should effectively drain the 8 to 12 foot bgs soil interval. PSC does not anticipate excavating below 12 feet bgs until the dewatering well, which was installed to a total depth of 15 feet bgs. The final depth of the excavation will be based on field observations and soil samples collected during excavation.

4.3 Proposed Dewatering and Excavation Activities

PSC proposes to complete the source removal corrective action in phases over a 10-week period. The proposed excavation and equipment staging areas for the source removal are shown on the attached Figure 8. The following sections describe each phase of the source removal activities.

4.3.1 Permitting

PSC anticipates that Alameda County will require a dewatering permit. The City of Oakland will require a demolition permit for the building, a sewer permit for the oil/water separator removal and a general construction/excavation permit. An obstruction permit may be required for equipment staged along King Street. PSC will prepare a construction Storm Water Pollution Prevention Plan.

4.3.2 Dewatering

PSC proposes to dewater the excavation for 4 to 5 weeks prior beginning concrete removal. As previously mentioned, based on the low sustainable pumping rate observed during the pump test, PSC has chosen a dewatering sump pump to be installed in DW-1. The pump will include a level controller to shut the pump off when the water level drops below the intake

level. This will allow for intermittent pumping on the well without the pump running dry requiring an attendant to restart the pump. The pump will be installed near the bottom of DW-1 at a depth of 15-foot bgs. A level sensor will be placed in the well above the pump. The pump would be connected to 2-inch discharge piping. Since the pumping will be intermittent, the discharge piping will be connected to a 21,000-gallon frac situated south of the proposed excavation. The tank will be equipped with an additional level sensor to keep from overfilling.

PSC estimates that the granular material filling the former UST excavation contains approximately 36,000 gallons of water. This is based on an approximate area of 120 feet long by 20 feet wide with approximately 6 to 8 feet of saturated gravel and sand. A specific yield (the amount of water drained from aquifer material) of 25% was used for the granular material. Depending on how well the granular material in the excavation drains, PSC estimates that 500 to 1,000 gallons of water may be pumped from the excavation per day. The water will be periodically removed from the frac tank by tanker truck and hauled to Evergreen Environmental Services, Inc. for proper disposal.

PSC estimates that the dewatering system will need to be operated for 4 to five weeks to effectively dewater the excavation. The dewatering well will remain in place to provide additional dewatering through the subsequent excavation activities. Excavation of source area material will be conducted in phases to minimize disruption to plant activities and to allow continued dewatering of the excavation. PSC will remove the dewatering well during the final phases of the excavation.

4.3.3 Phase I – Building Dismantling, Oil/Water Separator Removal and Excavation

Phase I of the excavation will include the area beneath the Truck Wash Building. The oil water separator located in the Truck Wash Building will be removed and soil beneath it will be excavated during this phase of excavation. In order to complete this task with adequate excavation equipment, PSC is proposing to remove the steel frame and metal shell Truck Wash Building. The concrete stem wall of the building will also be removed. After removal of the building the concrete slab will be cut and removed.

The oil water separator will be removed in pieces. Contaminated soil potentially beneath and around the oil water separator will be removed. The sanitary sewer line will permanently abandoned on both the inlet pipe and outlet pipe on the eastern edge of the excavation and where the sewer pipe exits the Truck Wash Building. This sanitary sewer line is connected to closed floor drains located inside the plant. The entire line will be grouted closed after excavation activities are complete in accordance with city of Oakland and EBMUD requirements.

Depending on the observations made during the oil/water separator removal, PSC estimates a 450-ft2 area will be excavated to a depth of approximately 12 feet bgs. The final vertical and horizontal limit of this excavation will depend on the amount of contamination observed. Soil samples will be collected during excavation activities to determine the limits of excavation. PSC estimates between 100 and 200 yards of unsaturated and dewatered saturated soil will be

removed. Soil will be staged on and and covered with plastic while waste characterization analysis is completed and submitted to the closest approved disposal facility. Upon approval, soil will be loaded and transported to the approved facility for proper disposal. Soil Final verification samples will be collected every 10 feet around the perimeter of the excavation at the depth interval that displayed the highest impact. Samples will be submitted for TPH-d, BTEX, and naphthalene analysis.

4.3.4 Phase II – Source Area Outside the Truck Wash Building

Phase II will include the area outside the Truck Wash Building. The concrete slab will be removed outside the Truck Wash Building in an L shaped area approximately 1,300 ft^2. After concrete removal, sheet piling or shoring will be installed on the south side of the area to keep gravel from the former shared UST excavation from sloughing into the source area excavation. Unsaturated and dewatered saturated material will be excavated in an approximately 925-ft2 area to a depth of approximately 12 feet bgs. Soil samples will be collected during excavation activities to determine the limits of excavation. PSC estimates that between 250 and 400 yd^3 of contaminated soil will be removed during the Phase II excavation. Soil will be staged on and covered with plastic while waste characterization analysis is completed and submitted to the closest approved disposal facility. Upon approval, soil will be loaded and transported to the approved facility for proper disposal. Soil Final verification samples will be collected every 10 feet around the perimeter of the excavation at the depth interval that displayed the highest impact. Samples will be submitted for TPH-d, BTEX, and naphthalene analysis.

4.3.5 Excavation Backfill and Surface Restoration

Once the dewatering well is removed, PSC anticipates that groundwater will slowly rise in the excavation. In order to provide a stable substrate for backfill PSC will use crushed stone from the bottom of the excavation to approximately 8 feet bgs. The crushed stone will be compacted using the excavation equipment. An aggregate base course will be placed from the 8 foot depth to 8 inches below the final pavement surface. Compaction test will be performed on the final lifts of aggregate base course to meet bakery and City of Oakland requirements. A high early concrete with a 3,500 pound per square inch compressive strength design will be placed as the finished pavement.

4.4 Estimated Cost

PSC feels that the estimated cost used in the FS is a reasonable range of cost for the CAP. These costs are presented again in the following table.

Planning & Permitting:	**$10,000 - $20,000**
Excavation Dewatering:	**$40,000 - $60,000**
Building Dismantling and oil/water separator removal	**$25,000 - $50,000**
Soil Excavation and disposal:	**$25,000 - $50,000**
Waste Disposal:	**$50,000 - $75,000**
Site Restoration:	**$35,000 - $50,000**
Project Management and Closure Reports	**$20,000 - $40,000**
Total Cost Range:	**$205,000 - $355,000**

PSC is in the process of obtaining additional subcontractor cost for the corrective action.

4.5 Schedule

PSC and Earthgrains propose to begin this work as soon as possible to take advantage of seasonal weather. Dewatering activities are tentatively planned to begin in late August 2010. Phase I excavation activities are tentatively scheduled to begin in late September. Final restoration should be completed by mid October. A Gantt chart of the tentative schedule is presented as the attached Figure 9.

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TABLES

Table 1A
Historical Analytical Data
Shallow (<3 meters) Soil Samples

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

Environmental Screening Levels (mg/kg) Commercial/Industrial Land Use			Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	TPH-g	TPH-d	TPH-mo
Leaching to Groundwater ESL			2.0	9.3	4.7	11	8.4	180	180	-
Gross Contamination Ceiling ESL			870	650	400	420	500	500	500	2,500
Direct Exposure (Industrial Worker) ESL			0.27	210	5.0	100	65	450	450	3,700
Final ESL for Soil			0.27	9.3	4.7	11	8.4	180	180	2,500
Sample Identification	**Collection Date**	**Depth (feet bgs)**	**Sample Concentration (mg/kg)**							
AA-1603 (Tank 1N)	10/12/1989	8 - 10	<0.05	<0.1	<0.1	<0.3	NA	NA	<10	<20
OAK-14BT	12/28/1990	3	<0.005	<0.005	<0.005	<0.005	NA	<1.0	**8.9**	<50
OAK-15NTW	12/28/1990	2 - 3	**0.02**	<0.005	**0.007**	**0.01**	NA	<1.0	**71**	**1,300**
OAK-16TP1	12/28/1990	2 - 3	**0.15**	**0.01**	**0.54**	**0.66**	NA	**15**	**40**	**2,700**
OAK-17IE	01/05/1991	4	<0.005	<0.005	<0.005	<0.005	NA	<1.0	<5.0	<50
OAK-18IE	01/05/1991	4	<0.005	<0.005	<0.005	<0.005	NA	<1.0	<5.0	<50
OAK-19IE	01/05/1991	4	<0.005	<0.005	<0.005	<0.005	NA	<1.0	<5.0	<50
OAK-20IE	01/05/1991	4	<0.005	<0.005	<0.005	<0.005	NA	<1.0	<5.0	<50
OAK-30SSI	01/05/1991	6	<0.005	<0.005	<0.005	<0.005	NA	<1.0	<5.0	<50
OAK-WOT1	01/28/1991	8	<0.005	<0.005	<0.005	<0.005	NA	<1.0	<5.0	<50
MW-2	08/27/1992	5	<0.005	<0.005	<0.005	<0.005	NA	<0.5	NA	NA
Probe Hole-1	04/09/2003	4.5	<0.62	<0.62	<0.62	<0.62	NA	NA	**3,300**	NA
Probe Hole-2	04/09/2003	3.5	NA	NA	NA	NA	NA	NA	NA	<50
Trench-1	03/08/2005	4	<0.005	<0.005	<0.005	<0.005	<0.010	<1.0	<1.0	NA
Trench-2	03/08/2005	4	<0.005	<0.005	<0.005	<0.005	<0.010	<1.0	<1.0	NA
Trench-3	03/08/2005	4	<0.005	<0.005	<0.005	<0.005	<0.010	<1.0	<1.0	NA
Trench-4	03/08/2005	4	<0.005	<0.005	<0.005	<0.005	<0.010	<1.0	<1.0	NA
Trench-5	03/08/2005	4	<0.005	<0.005	<0.005	<0.005	<0.010	**48**	**1,700**	NA
Excavation-1	03/09/2005	--	<0.005	<0.005	<0.005	<0.005	<0.010	<1.0	<1.0	NA
Excavation-2	03/09/2005	--	<0.005	<0.005	<0.005	<0.005	<0.010	<1.0	<1.0	NA

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Final ESL for Soil			0.27	9.3	4.7	11	8.4	180	180	2,500
Sample Identification	**Collection Date**	**Depth (feet bgs)**	**Sample Concentration (mg/kg)**							
E1	09/15/2006	4.5	<0.005	<0.005	<0.005	<0.005	<0.005	**4.0**	**17**	NA
E1	09/15/2006	8	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	<1.0	NA
E2	09/15/2006	8	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	<1.0	NA
E3	09/22/2006	4	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	**1.8**	NA
E3	09/22/2006	8	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	**1.0**	NA
E5	09/12/2006	5	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	**1.7**	NA
E6	09/12/2006	5	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	**1.7**	NA
E6	09/12/2006	9	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	**32**	NA
E7	09/12/2006	2.5	<0.005	<0.005	<0.005	<0.005	<0.005	**2.6**	**73**	NA
E7	09/15/2006	3.5	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	**1.6**	NA
E7	09/15/2006	8	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	**1.4**	NA
E8	09/12/2006	5.5	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	**1.3**	NA
E11	09/12/2006	5	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	<1.0	NA
E13	09/15/2006	5	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	**1.1**	NA
E13	09/15/2006	8	NA	NA	NA	NA	NA	NA	<1.0	NA
E14	09/15/2006	4.5	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	**1.3**	NA
E14	09/15/2006	8	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	<1.0	NA
E15	09/21/2006	4	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	<1.0	NA
E15	09/21/2006	8.5	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	<1.0	NA
E17	09/21/2006	8	NA	NA	NA	NA	NA	NA	**1.6**	NA

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Final ESL for Soil			0.27	9.3	4.7	11	8.4	180	180	2,500
Sample Identification	**Collection Date**	**Depth (feet bgs)**	**Sample Concentration (mg/kg)**							
E23	09/22/2006	8	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	**3.6**	NA
E24	09/22/2006	4	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	**1.5**	NA
E24	09/22/2006	8.5	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	**1.1**	NA
E26	09/21/2006	4	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	**4.1**	<10
E27	09/13/2006	5	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**1.2**	NA
E27	09/13/2006	8.5	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**1.2**	NA
E28	09/11/2006	4.5	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**76**	NA
E29	09/13/2006	2	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**8,300**	NA
E29	09/21/2006	4	<0.005	<0.005	<0.005	<0.005	<0.005	**31**	**3,100**	<20
E29	09/21/2006	8	<0.005	<0.005	<0.005	<0.005	<0.005	**140**	**3,800**	<20
E30	09/11/2006	4	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**3.8**	NA
E30	09/11/2006	8	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<1.0	NA
E31	09/11/2006	6.5	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**44**	NA
E32	09/13/2006	4	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**1.3**	NA
E32	09/13/2006	8.5	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<1.0	NA
E33	09/11/2006	4.5	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**520**	NA
E33	09/11/2006	8	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**30**	NA
E34	09/13/2006	4	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**1.1**	NA
E34	09/13/2006	8	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<1.0	NA
E35	09/11/2006	6	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<1.0	NA

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Final ESL for Soil			0.27	9.3	4.7	11	8.4	180	180	2,500
Sample Identification	**Collection Date**	**Depth (feet bgs)**	**Sample Concentration (mg/kg)**							
E36	09/11/2006	4	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**1.6**	NA
E36	09/11/2006	8.5	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**1.3**	NA
E37	09/13/2006	4	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**1.4**	NA
E37	09/13/2006	9.5	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**1.5**	NA
E38	09/13/2006	4	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<1.0	NA
E38	09/13/2006	8	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<1.0	NA
E39	09/13/2006	4	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**1.3**	NA
E39	09/13/2006	9.5	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**3.5**	NA
E40	09/13/2006	4.5	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<1.0	NA
E40	09/13/2006	8	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**2.8**	NA
E41	03/28/2007	5	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	**4.5**	**19**
E42	03/29/2007	5	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	**1.6**	< 10
E43	03/29/2007	5	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	**8.8**	**29**
E44	03/28/2007	5	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	**5.6**	**20**
E45	03/29/2007	5	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	**19**	**92**
E46	03/29/2007	5	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	**1.7**	< 10
E47	03/28/2007	5	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	**80**	NA
E48	03/28/2007	4	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	**2.5**	NA
E48	03/28/2007	9	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	**2.4**	NA
E49	03/29/2007	5	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	**26**	NA

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Final ESL for Soil			0.27	9.3	4.7	11	8.4	180	180	2,500
Sample Identification	**Collection Date**	**Depth (feet bgs)**	**Sample Concentration (mg/kg)**							
E49	03/29/2007	8.5	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	**560**	NA
E50	03/28/2007	5	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	**65**	NA
E51	03/28/2007	5	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	**24**	NA
E52	03/28/2007	5.5	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	**1.4**	NA
MW-101 (5-6.5)	01/19/2009	5 - 6.5	< 0.005	< 0.005	< 0.005	< 0.005	NA	NA	< 1.0	NA
MW-101 (8.5-10)	01/19/2009	8.5 - 10	< 0.005	< 0.005	< 0.005	< 0.005	NA	NA	< 1.0	NA
MW-102 (5-6.5)	01/20/2009	5 - 6.5	< 0.005	< 0.005	< 0.005	< 0.005	NA	NA	< 1.0	NA
MW-102 (8.5-10)	01/20/2009	8.5 - 10	< 0.005	< 0.005	< 0.005	< 0.005	NA	NA	< 1.0	NA
MW-103 (5-6.5)	01/19/2009	5 - 6.5	< 0.005	< 0.005	< 0.005	< 0.005	NA	NA	< 1.0	NA
MW-103 (8.5-10)	01/19/2009	8.5 - 10	< 0.005	< 0.005	< 0.005	< 0.005	NA	NA	< 1.0	NA
MW-104 (5-6.5)	01/20/2009	5 - 6.5	< 0.005	< 0.005	< 0.005	< 0.005	NA	NA	< 1.0	NA
MW-104 (8.5-10)	01/20/2009	8.5 - 10	< 0.005	< 0.005	< 0.005	< 0.005	NA	NA	**370**	NA
DW-1 (5-6.5)	01/20/2009	5 - 6.5	< 0.005	< 0.005	< 0.005	< 0.005	NA	NA	**53**	NA
DW-1 (8.5-10)	01/20/2009	8.5 - 10	< 0.005	< 0.005	< 0.005	< 0.005	NA	NA	**1,700**	NA

Notes:

mg/kg - Milligrams-per-kilogram
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.
ESL - SFBRWQCB Environmental Screening Levels, Table B-2 (May 2008)
Reported value exceeds associated ESL.

Table 1B
Historical Analytical Data
Unsaturated Deep (>3 meters) Soil Samples

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

Environmental Screening Levels (mg/kg) Commercial/Industrial Land Use			Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	TPH-g	TPH-d	TPH-mo
Leaching to Groundwater ESL			2.0	9.3	4.7	11	8.4	180	180	-
Gross Contamination Ceiling ESL			870	650	400	420	1,000	5,000	5,000	5,000
Direct Exposure (Const. Worker Trench) ESL			12	650	210	420	2,800	4,200	4,200	12,000
Final ESL for Soil			2.0	9.3	4.7	11	8.4	180	180	5,000
Sample Identification	**Collection Date**	**Depth (feet bgs)**	**Sample Concentration (mg/kg)**							
AA-1602 (Tank 2N)	10/12/1989	14 - 16	<0.05	<0.1	<0.1	<0.3	NA	NA	<10	NA
AA-1601 (Tank 2S)	10/12/1989	14 - 16	<0.05	<0.1	<0.1	<0.3	NA	NA	<10	NA
AA-1599 (Tank 3S)	10/12/1989	14 - 16	<0.05	<0.1	<0.1	<0.3	NA	NA	<10	NA
AA-1597 (Tank 4S)	10/12/1989	14 - 16	<0.05	<0.1	<0.1	<0.3	NA	NA	<10	NA
OAK-1ND	12/12/1990	10	<0.005	<0.005	<0.005	<0.005	NA	<1.0	<5.0	NA
OAK-2SD	12/12/1990	10	<0.005	<0.005	**0.006**	**0.017**	NA	**1.5**	**320**	NA
OAK-3SG	12/12/1990	10	<0.005	<0.005	<0.005	<0.005	NA	<1.0	NA	NA
OAK-4NG	12/12/1990	10	<0.005	<0.005	<0.005	<0.005	NA	<1.0	NA	NA
OAK-9SD	12/14/1990	12	<0.005	<0.005	<0.005	<0.005	NA	<1.0	<5.0	NA
OAK-11WG	12/14/1990	12	<0.005	<0.005	<0.005	<0.005	NA	<1.0	<5.0	NA
OAK-10ED	12/14/1990	12	<0.005	<0.005	<0.005	<0.005	NA	<1.0	<5.0	NA
MW-1	08/27/1992	10	<0.005	<0.005	<0.005	<0.005	NA	NA	**560**	<10
MW-1	08/27/1992	15	<0.005	<0.005	<0.005	<0.005	NA	NA	<10	<10
MW-2	08/27/1992	10	<0.005	<0.005	<0.005	<0.005	NA	NA	**83**	<10
MW-2	08/27/1992	12	<0.005	<0.005	<0.005	<0.005	NA	<0.5	NA	NA
MW-2	08/27/1992	15	<0.005	<0.005	<0.005	<0.005	NA	NA	<10	<10
MW-2	08/27/1992	17	<0.005	<0.005	<0.005	<0.005	NA	**1.3***	NA	NA
MW-2	08/27/1992	20	<0.005	<0.005	<0.005	<0.005	NA	<0.5	NA	NA
MW-3	08/26/1992	20	<0.005	<0.005	<0.005	<0.005	NA	**4.0***	<10	<10
MW-5	08/26/1992	20	<0.005	<0.005	<0.005	<0.005	NA	<0.5	<10	<10
E1	09/15/2006	11.5	<0.005	<0.005	<0.005	<0.005	<0.005	**3.5**	**710**	NA

Table 1B
Historical Analytical Data
Unsaturated Deep (>3 meters) Soil Samples

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

Environmental Screening Levels (mg/kg) Commercial/Industrial Land Use			Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	TPH-g	TPH-d	TPH-mo
Leaching to Groundwater ESL			2.0	9.3	4.7	11	8.4	180	180	-
Gross Contamination Ceiling ESL			870	650	400	420	1,000	5,000	5,000	5,000
Direct Exposure (Const. Worker Trench) ESL			12	650	210	420	2,800	4,200	4,200	12,000
Final ESL for Soil			2.0	9.3	4.7	11	8.4	180	180	5,000
Sample Identification	**Collection Date**	**Depth (feet bgs)**	**Sample Concentration (mg/kg)**							
E1	09/15/2006	16	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	**5.8**	NA
E1	09/15/2006	20	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	**5.2**	NA
E2	09/15/2006	12	<0.005	<0.005	<0.005	<0.005	<0.005	**8.0**	**860**	NA
E2	09/15/2006	16	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	**1.7**	NA
E3	09/22/2006	12	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	<1.0	NA
E3	09/22/2006	16	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	<1.0	NA
E3	09/22/2006	20	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	<1.0	NA
E4	09/12/2006	10	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	**5.6**	NA
E5	09/12/2006	10	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	<1.0	NA
E5	09/12/2006	15	<0.005	<0.005	<0.005	<0.005	**0.017**	<1.0	<1.0	NA
E5	09/12/2006	20	<0.005	<0.005	<0.005	<0.005	**0.020**	<1.0	<1.0	NA
E6	09/12/2006	10	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	**4.1**	NA
E7	09/15/2006	12	NA	NA	NA	NA	NA	NA	<1.0	NA
E7	09/15/2006	16	NA	NA	NA	NA	NA	NA	<1.0	NA

Table 1B
Historical Analytical Data
Unsaturated Deep (>3 meters) Soil Samples

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

Environmental Screening Levels (mg/kg) Commercial/Industrial Land Use			Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	TPH-g	TPH-d	TPH-mo
Leaching to Groundwater ESL			2.0	9.3	4.7	11	8.4	180	180	-
Gross Contamination Ceiling ESL			870	650	400	420	1,000	5,000	5,000	5,000
Direct Exposure (Const. Worker Trench) ESL			12	650	210	420	2,800	4,200	4,200	12,000
Final ESL for Soil			2.0	9.3	4.7	11	8.4	180	180	5,000
Sample Identification	**Collection Date**	**Depth (feet bgs)**	**Sample Concentration (mg/kg)**							
E8	09/12/2006	10	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	<1.0	NA
E8	09/12/2006	15	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	<1.0	NA
E8	09/12/2006	20	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	<1.0	NA
E9	09/21/2006	20	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	**1.3**	NA
E10	09/21/2006	16	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	<1.0	NA
E10	09/21/2006	20	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	<1.0	NA
E11	09/12/2006	10.5	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	<1.0	NA
E11	09/12/2006	15	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	<1.0	NA
E11	09/12/2006	20	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	<1.0	NA
E12	09/12/2006	10	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	**1.5**	NA
E13	09/15/2006	12	NA	NA	NA	NA	NA	NA	<1.0	NA
E13	09/15/2006	18.5	NA	NA	NA	NA	NA	NA	<1.0	NA
E14	09/15/2006	15	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	<1.0	NA
E15	09/21/2006	12	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	<1.0	NA
E15	09/21/2006	19	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	<1.0	NA
E16	09/12/2006	10.5	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	<1.0	NA
E17	09/21/2006	12	NA	NA	NA	NA	NA	NA	<1.0	NA
E17	09/21/2006	19	NA	NA	NA	NA	NA	NA	**1.5**	NA
E19	09/15/2006	14.5	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	<1.0	NA
E23	09/22/2006	12	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	**1.1**	NA
E23	09/22/2006	16	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	<1.0	NA

Table 1B
Historical Analytical Data
Unsaturated Deep (>3 meters) Soil Samples

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

Environmental Screening Levels (mg/kg) Commercial/Industrial Land Use			Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	TPH-g	TPH-d	TPH-mo
Leaching to Groundwater ESL			2.0	9.3	4.7	11	8.4	180	180	-
Gross Contamination Ceiling ESL			870	650	400	420	1,000	5,000	5,000	5,000
Direct Exposure (Const. Worker Trench) ESL			12	650	210	420	2,800	4,200	4,200	12,000
Final ESL for Soil			2.0	9.3	4.7	11	8.4	180	180	5,000
Sample Identification	**Collection Date**	**Depth (feet bgs)**	**Sample Concentration (mg/kg)**							
E24	09/22/2006	15	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	**1.6**	NA
E25	09/13/2006	10	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	**23**	NA
E26	09/21/2006	11	<0.005	<0.005	<0.005	<0.005	<0.005	**1.2**	**470**	**22**
E26	09/21/2006	13	<0.005	<0.005	<0.005	<0.005	<0.005	**5.2**	**260**	**28**
E26	09/21/2006	19	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	**1.2**	<10
E28	09/11/2006	10	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**58**	NA
E28	09/11/2006	15	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**5.8**	NA
E29	09/21/2006	12	<0.005	<0.005	<0.005	<0.005	<0.005	**4.7**	**590**	**17**
E29	09/21/2006	14	<0.005	<0.005	<0.005	<0.005	<0.005	**6.9**	**200**	<10
E29	09/21/2006	16	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	**1.5**	<10
E30	09/11/2006	12	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<1.0	NA
E30	09/11/2006	15	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<1.0	NA
E31	09/11/2006	10.5	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**300**	NA
E31	09/11/2006	14.5	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**8.0**	NA
E31	09/11/2006	16	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**5.0**	NA
E33	09/11/2006	12	<0.025	<0.025	<0.025	<0.025	<0.025	NA	**7,500**	NA
E33	09/11/2006	16	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**6.9**	NA
E34	09/13/2006	12	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**19**	NA
E34	09/13/2006	19	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<1.0	NA
E35	09/11/2006	10	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**570**	NA
E35	09/11/2006	14	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**2.3**	NA

Table 1B
Historical Analytical Data
Unsaturated Deep (>3 meters) Soil Samples

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

Environmental Screening Levels (mg/kg) Commercial/Industrial Land Use			Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	TPH-g	TPH-d	TPH-mo
Leaching to Groundwater ESL			2.0	9.3	4.7	11	8.4	180	180	-
Gross Contamination Ceiling ESL			870	650	400	420	1,000	5,000	5,000	5,000
Direct Exposure (Const. Worker Trench) ESL			12	650	210	420	2,800	4,200	4,200	12,000
Final ESL for Soil			2.0	9.3	4.7	11	8.4	180	180	5,000
Sample Identification	**Collection Date**	**Depth (feet bgs)**	**Sample Concentration (mg/kg)**							
E35	09/11/2006	18	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**35**	NA
E35	09/11/2006	21	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**1.2**	NA
E36	09/11/2006	10	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**5,100**	NA
E36	09/11/2006	15	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**1.9**	NA
E37	09/13/2006	12.5	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**410**	NA
E37	09/13/2006	15	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**2.4**	NA
E38	09/13/2006	11	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**420**	NA
E38	09/13/2006	12	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**140**	NA
E38	09/13/2006	16	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**1.0**	NA
E38	09/13/2006	19	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<1.0	NA
E39	09/13/2006	12.5	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**37**	NA
E39	09/13/2006	17.5	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<1.0	NA

Table 1B
Historical Analytical Data
Unsaturated Deep (>3 meters) Soil Samples

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

Environmental Screening Levels (mg/kg) Commercial/Industrial Land Use			Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	TPH-g	TPH-d	TPH-mo
Leaching to Groundwater ESL			2.0	9.3	4.7	11	8.4	180	180	-
Gross Contamination Ceiling ESL			870	650	400	420	1,000	5,000	5,000	5,000
Direct Exposure (Const. Worker Trench) ESL			12	650	210	420	2,800	4,200	4,200	12,000
Final ESL for Soil			2.0	9.3	4.7	11	8.4	180	180	5,000
Sample Identification	**Collection Date**	**Depth (feet bgs)**	**Sample Concentration (mg/kg)**							
E40	09/13/2006	10	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**190**	NA
E40	09/13/2006	12	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**18**	NA
E40	09/13/2006	16	<0.005	<0.005	<0.005	<0.005	<0.005	NA	<1.0	NA
E41	03/28/2007	10	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	**33**	**180**
E41	03/28/2007	15	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	**1.7**	< 10
E41	03/28/2007	20	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	< 1.0	< 10
E42	03/29/2007	10	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	**17**	**15**
E42	03/29/2007	15	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	**1.3**	< 10
E42	03/29/2007	20	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	< 1.0	< 10
E43	03/29/2007	10	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	**7.2**	**23**
E43	03/29/2007	15	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	**2.5**	< 10
E43	03/29/2007	20	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	< 1.0	< 10
E44	03/28/2007	10	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	< 1.0	< 10
E44	03/28/2007	15	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	< 1.0	< 10
E44	03/28/2007	20	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	< 1.0	< 10
E45	03/29/2007	10	<0.005	<0.005	<0.005	<0.005	<0.005	**1.4**	**350**	< 10
E45	03/29/2007	15	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	**1.8**	< 10
E45	03/29/2007	20	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	< 1.0	< 10

Table 1B
Historical Analytical Data
Unsaturated Deep (>3 meters) Soil Samples

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

Environmental Screening Levels (mg/kg) Commercial/Industrial Land Use			Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	TPH-g	TPH-d	TPH-mo
Leaching to Groundwater ESL			2.0	9.3	4.7	11	8.4	180	180	-
Gross Contamination Ceiling ESL			870	650	400	420	1,000	5,000	5,000	5,000
Direct Exposure (Const. Worker Trench) ESL			12	650	210	420	2,800	4,200	4,200	12,000
Final ESL for Soil			2.0	9.3	4.7	11	8.4	180	180	5,000
Sample Identification	**Collection Date**	**Depth (feet bgs)**	**Sample Concentration (mg/kg)**							
E46	03/29/2007	10	<0.005	<0.005	<0.005	<0.005	<0.005	**29**	**1,800**	< 10
E46	03/29/2007	12	<0.005	<0.005	<0.005	<0.005	<0.005	**21**	**180**	< 10
E46	03/29/2007	15	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	**1.2**	< 10
E46	03/29/2007	20	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	< 1.0	< 10
E47	03/28/2007	10	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	**27**	NA
E47	03/28/2007	15	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	**10**	NA
E48	03/28/2007	12.5	<0.005	<0.005	<0.005	<0.005	<0.005	**2.1**	**320**	NA
E48	03/28/2007	15	<0.005	<0.005	<0.005	<0.005	<0.005	**1.0**	**130**	NA
E48	03/28/2007	20	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	< 1.0	NA
E49	03/29/2007	10	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	**100**	NA
E49	03/29/2007	15	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	**14**	NA
E49	03/29/2007	20	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	< 1.0	NA
E50	03/28/2007	10	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	**100**	NA
E50	03/28/2007	15	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	**3.0**	NA
E51	03/28/2007	10	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	**390**	NA
E51	03/28/2007	15	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	< 1.0	NA
E51	03/28/2007	20	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	< 1.0	NA

Table 1B
Historical Analytical Data
Unsaturated Deep (>3 meters) Soil Samples

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

Environmental Screening Levels (mg/kg) Commercial/Industrial Land Use			Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	TPH-g	TPH-d	TPH-mo
Leaching to Groundwater ESL			2.0	9.3	4.7	11	8.4	180	180	-
Gross Contamination Ceiling ESL			870	650	400	420	1,000	5,000	5,000	5,000
Direct Exposure (Const. Worker Trench) ESL			12	650	210	420	2,800	4,200	4,200	12,000
Final ESL for Soil			2.0	9.3	4.7	11	8.4	180	180	5,000
Sample Identification	**Collection Date**	**Depth (feet bgs)**	**Sample Concentration (mg/kg)**							
E52	03/28/2007	10	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	**3.4**	NA
E52	03/28/2007	12.5	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	**220**	NA
E52	03/28/2007	15.5	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	**180**	NA
E52	03/28/2007	20	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	< 1.0	NA
MW-101 (13.5-15')	01/19/2009	13.5 - 15	<0.005	<0.005	<0.005	<0.005	NA	NA	< 1.0	NA
MW-101 (18.5-20')	01/19/2009	18.5 - 20	<0.005	<0.005	<0.005	<0.005	NA	NA	< 1.0	NA
MW-102 (13.5-15')	01/20/2009	13.5 - 15	<0.005	<0.005	<0.005	<0.005	NA	NA	< 1.0	NA
MW-102 (18.5-20')	01/20/2009	18.5 - 20	<0.005	<0.005	<0.005	<0.005	NA	NA	< 1.0	NA
MW-103 (18.5-20')	01/19/2009	18.5 - 20	<0.005	<0.005	<0.005	<0.005	NA	NA	< 1.0	NA
MW-104 (13.5-15')	01/20/2009	13.5 - 15	<0.005	<0.005	<0.005	<0.005	NA	NA	< 1.0	NA
MW-104 (18.5-20')	01/20/2009	18.5 - 20	<0.005	<0.005	<0.005	<0.005	NA	NA	< 1.0	NA
DW-1 (10-11.5')	01/20/2009	10 - 11.5	<0.005	<0.005	<0.005	<0.005	NA	NA	**16**	NA
DW-1 (11.5-13')	01/20/2009	11.5 - 13	<0.005	<0.005	<0.005	<0.005	NA	NA	**8.4**	NA
DW-1 (13.5-15')	01/20/2009	13.5 - 15	<0.005	<0.005	<0.005	<0.005	NA	NA	**2.0**	NA

Notes:

mg/kg - Milligrams-per-kilogram
MTBE - Methyl Tertiary Butyl Ether.
TPH-g - Total Petroleum Hydrocarbons quantified as gasoline.
TPH-g * - Laboratory statement that result is not typical of gasoline chromatograph, but possibly light-end diesel fraction.
TPH-d - Total Petroleum Hydrocarbons quantified as diesel.
TPH-mo - Total Petroleum Hydrocarbons quantified as motor oil.
NA - Not Analyzed.
ESL - SFBRWQCB Environmental Screening Levels, Table D-2 (May 2008)
Reported value exceeds associated ESL.

Table 1C
Historical Analytical Data
Saturated Deep (>3 meters) Soil Samples

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

Environmental Screening Levels (mg/kg) Commercial/Industrial Land Use			Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	TPH-g	TPH-d	TPH-mo
Leaching to Groundwater ESL			2.0	9.3	4.7	11	8.4	180	180	-
Gross Contamination Ceiling ESL			870	650	400	420	1,000	5,000	5,000	5,000
Direct Exposure (Const. Worker Trench) ESL			12	650	210	420	2,800	4,200	4,200	12,000
Final ESL for Soil			2.0	9.3	4.7	11	8.4	180	180	5,000
Sample Identification	**Collection Date**	**Depth (feet bgs)**	**Sample Concentration (mg/kg)**							
MW-2	08/27/1992	25	<0.005	<0.005	<0.005	<0.005	NA	<0.5	NA	NA
MW-2	08/27/1992	28	<0.005	<0.005	<0.005	<0.005	NA	<0.5	NA	NA
MW-4	08/27/1992	21	<0.005	<0.005	<0.005	<0.005	NA	<0.5	<10	<10
E9	09/21/2006	24	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	<1.0	NA
E9	09/21/2006	28	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	<1.0	NA
E10	09/21/2006	24	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	<1.0	NA
E10	09/21/2006	27.5	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	<1.0	NA
E10	09/21/2006	32	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	<1.0	NA
E35	09/11/2006	21	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**1.2**	NA
E41	03/28/2007	25	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	< 1.0	< 10
E42	03/29/2007	25	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	**1.2**	< 10
E43	03/29/2007	25	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	< 1.0	< 10
E44	03/28/2007	24	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	< 1.0	< 10
E45	03/29/2007	25	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	< 1.0	< 10
E45	03/29/2007	28	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	< 1.0	< 10
E46	03/29/2007	25	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	< 1.0	< 10
E46	03/29/2007	28	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	< 1.0	< 10
E48	03/28/2007	25	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	< 1.0	NA
E49	03/29/2007	25	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	< 1.0	NA
E49	03/29/2007	28	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	< 1.0	NA

Table 1C
Historical Analytical Data
Saturated Deep (>3 meters) Soil Samples

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

Environmental Screening Levels (mg/kg) Commercial/Industrial Land Use			Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	TPH-g	TPH-d	TPH-mo
Leaching to Groundwater ESL			2.0	9.3	4.7	11	8.4	180	180	-
Gross Contamination Ceiling ESL			870	650	400	420	1,000	5,000	5,000	5,000
Direct Exposure (Const. Worker Trench) ESL			12	650	210	420	2,800	4,200	4,200	12,000
Final ESL for Soil			2.0	9.3	4.7	11	8.4	180	180	5,000
Sample Identification	**Collection Date**	**Depth (feet bgs)**	**Sample Concentration (mg/kg)**							
MW-101 (23.5-25')	01/19/2009	23.5 - 25	<0.005	<0.005	<0.005	<0.005	NA	NA	< 1.0	NA
MW-101 (26.5-28')	01/19/2009	26.5 - 28	<0.005	<0.005	<0.005	<0.005	NA	NA	< 1.0	NA
MW-102 (23.5-25')	01/20/2009	23.5 - 25	<0.005	<0.005	<0.005	<0.005	NA	NA	< 1.0	NA
MW-102 (26.5-28')	01/20/2009	26.5 - 28	<0.005	<0.005	<0.005	<0.005	NA	NA	< 1.0	NA
MW-103 (23.5-25')	01/19/2009	23.5 - 25	<0.005	<0.005	<0.005	<0.005	NA	NA	< 1.0	NA

Notes:

mg/kg - Milligrams-per-kilogram
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.
ESL - SFBRWQCB Environmental Screening Levels, Table D-2 (May 2008)
Reported value exceeds associated ESL.

Table 2
Historical Monitoring Well Construction Data

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

Monitoring Well	Date Installed	Casing Elevation[1] (feet MSL)	Casing Material	Boring Depth (feet bgs)	Well Depth (feet bgs)	Boring Diameter (inches)	Casing Diameter (inches)	Slot Size (inches)	Screened Interval (feet bgs)	Filter Pack Interval (feet bgs)	Filter Pack Sand
MW-1	8/27/1992	10.64[1]	PVC	31.0	25	8	2	0.010	18.0-25.0	15.5-25.0	#2/12
MW-2	8/27/1992	11.20[1]	PVC	29.5	29.5	8	2	0.010	18.0-29.5	16.0-29.5	#2/12
MW-3	8/26/1992	10.92[1]	PVC	27.0	27.0	8	2	0.010	7.0-27.0	6.5-27.0	#2/12
MW-4	8/27/1992	12.04[1]	PVC	34.0	34.0	8	2	0.010	19.0-34.0	16.0-34.0	#2/12
MW-5	8/26/1992	14.39[1]	PVC	34.0	34.0	8	2	0.010	24.0-34.0	22.0-34.0	#2/12
MW-101	1/19/2009	13.90[2]	PVC	28.10	28.05	8	2	0.010	18-28	16-28	#2/12
MW-102	1/20/2009	14.19[2]	PVC	28.40	28.35	8	2	0.010	18-28	16-28	#2/12
MW-103	1/19/2009	13.75[2]	PVC	25.00	24.92	8	2	0.010	10-25	8-25	#2/12
MW-104	1/20/2009	13.65[2]	PVC	25.15	25.10	8	2	0.010	10-25	8-25	#2/12
DW-1	1/20/2009	14.05[2]	PVC	14.65	14.60	12	6	0.020	5-15	3-15	#2/12

Notes:

MW-1 through MW-5 were properly abandoned in 1996

bgs - below ground surface

DW - dewatering well

MSL - mean sea level

PVC - poly-vinyl chloride (Schedule 40)

1 - Well casing elevations surveyed on January 26, 1994.

2 - Well casing elevations surveyed on January 28, 2009 by PLS Surveys, Inc. according to NAVD88 datum

Table 3
Historical Groundwater Elevation Data

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

Well ID	Gauging Date	Top of Casing Elevation (feet MSL)	Depth to Water (feet bgs)	Groundwater Elevation (feet MSL)
MW-1[1]	08/27/1992	10.64	NM	NM
MW-1	08/31/1992	10.64	8.76	1.88
MW-1	09/02/1992	10.64	8.84	1.80
MW-1	09/17/1992	10.64	9.06	1.58
MW-1	03/24/1993	10.64	8.63	2.01
MW-1	05/19/1993	10.64	9.28	1.36
MW-1	08/23/1993	10.64	9.39	1.25
MW-1	10/14/1993	10.64	9.30	1.34
MW-1	11/23/1993	10.64	9.38	1.26
MW-1	02/16/1994	10.64	8.70	1.94
MW-1	05/19/1994	10.64	8.62	2.02
MW-1	08/23/1994	10.64	9.03	1.61
MW-1	12/06/1994	10.64	7.88	2.76
Well Abandoned in 1996				
MW-2[1]	08/27/1992	11.20	13.49	-2.29
MW-2	08/31/1992	11.20	9.78	1.42
MW-2	09/02/1992	11.20	9.87	1.33
MW-2	09/17/1992	11.20	10.19	1.01
MW-2	03/24/1993	11.20	12.42	-1.22
MW-2	05/19/1993	11.20	9.87	1.33
MW-2	08/23/1993	11.20	10.01	1.19
MW-2	10/14/1993	11.20	9.91	1.29
MW-2	11/23/1993	11.20	10.02	1.18
MW-2	02/16/1994	11.20	9.50	1.70
MW-2	05/19/1994	11.20	9.39	1.81
MW-2	08/23/1994	11.20	9.73	1.47
MW-2	12/06/1994	11.20	8.87	2.33
Well Abandoned in 1996				
MW-3[1]	08/27/1992	10.92	8.41	2.51
MW-3	08/31/1992	10.92	9.22	1.70
MW-3	09/02/1992	10.92	NM	NM
MW-3	09/16/1992	10.92	9.11	1.81
MW-3	03/24/1993	10.92	8.63	2.29

Table 3
Historical Groundwater Elevation Data

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

Well ID	Gauging Date	Top of Casing Elevation (feet MSL)	Depth to Water (feet bgs)	Groundwater Elevation (feet MSL)
MW-3	05/19/1993	10.92	9.28	1.64
MW-3	08/23/1993	10.92	9.30	1.62
MW-3	10/14/1993	10.92	NM	NM
MW-3	11/23/1993	10.92	9.13	1.79
MW-3	02/16/1994	10.92	8.98	1.94
MW-3	05/19/1994	10.92	8.73	2.19
MW-3	08/23/1994	10.92	9.45	1.47
MW-3	12/06/1994	10.92	9.40	1.52
Well Abandoned in 1996				
MW-4[1]	08/27/1992	12.04	NM	NM
MW-4	08/31/1992	12.04	10.27	1.77
MW-4	09/02/1992	12.04	10.24	1.80
MW-4	09/17/1992	12.04	10.43	1.61
MW-4	03/24/1993	12.04	9.85	2.19
MW-4	05/19/1993	12.04	10.35	1.69
MW-4	08/23/1993	12.04	10.42	1.62
MW-4	10/14/1993	12.04	10.13	1.91
MW-4	11/23/1993	12.04	10.12	1.92
MW-4	02/16/1994	12.04	10.10	1.94
MW-4	05/19/1994	12.04	9.84	2.20
MW-4	08/23/1994	12.04	10.70	1.34
MW-4	12/06/1994	12.04	9.54	2.50
Well Abandoned in 1996				
MW-5[1]	08/27/1992	14.39	12.80	1.59
MW-5	08/31/1992	14.39	12.61	1.78
MW-5	09/02/1992	14.39	12.51	1.88
MW-5	09/16/1992	14.39	12.38	2.01
MW-5	03/24/1993	14.39	11.93	2.46
MW-5	05/19/1993	14.39	12.58	1.81
MW-5	08/23/1993	14.39	12.68	1.71
MW-5	10/14/1993	14.39	12.52	1.87
MW-5	11/23/1993	14.39	12.51	1.88
MW-5	02/16/1994	14.39	12.28	2.11

Table 3
Historical Groundwater Elevation Data

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

Well ID	Gauging Date	Top of Casing Elevation (feet MSL)	Depth to Water (feet bgs)	Groundwater Elevation (feet MSL)
MW-5	05/19/1994	14.39	12.13	2.26
MW-5	08/23/1994	14.39	12.80	1.59
MW-5	12/06/1994	14.39	11.75	2.64
Well Abandoned in 1996				
MW-101[2]	01/26/2009	13.90	8.92	4.98
MW-101	04/15/2009	13.90	9.43	4.47
MW-101	07/22/2009	13.90	9.62	4.28
MW-101	01/28/2010	13.90	7.68	6.22
MW-102[2]	01/26/2009	14.19	9.15	5.04
MW-102	04/15/2009	14.19	9.55	4.64
MW-102	07/22/2009	14.19	10.02	4.17
MW-102	01/28/2010	14.19	9.70	4.49
MW-103[2]	01/26/2009	13.75	8.69	5.06
MW-103	04/15/2009	13.75	8.91	4.84
MW-103	07/22/2009	13.75	9.18	4.57
MW-103	01/28/2010	13.75	7.75	6.00
MW-104[2]	01/26/2009	13.65	8.65	5.00
MW-104	04/15/2009	13.65	8.87	4.78
MW-104	07/22/2009	13.65	9.27	4.38
MW-104	01/28/2010	13.65	8.02	5.63
DW-1[2]	01/26/2009	14.05	9.10	4.95
DW-1	04/15/2009	14.05	9.23	4.82
DW-1	07/22/2009	14.05	9.50	4.55
DW-1	01/28/2010	14.05	7.84	6.21

Table 3
Historical Groundwater Elevation Data

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

Well ID	Gauging Date	Top of Casing Elevation (feet MSL)	Depth to Water (feet bgs)	Groundwater Elevation (feet MSL)

Notes:

MSL - mean sea level

bgs - below ground surface, measured from top of well casing

NM - Not measured

DW - dewatering well

1 - Well casing elevations surveyed on January 26, 1994.

2 - Well casing elevations surveyed on January 28, 2009 by PLS Surveys, Inc. according to NAVD88 datum

Table 4
Historical Analytical Data
Groundwater Grab Samples

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

Sample Identification	Collection Date	Concentration							
		Benzene (46)	Toluene (130)	Ethylbenzene (43)	Total Xylenes (100)	MTBE (1,800)	TPH-g (210)	TPH-d (210)	TPH-mo (210)
AA1604	10/12/1989	<50	<100	<100	<300	NA	**15**	**49**	NA
TP-W1	12/16/1990	**40**	**170**	**87**	**470**	NA	**2,200**	NA	NA
Oak-GW2	12/19/1990	<0.50	**0.7**	**2.6**	**2.3**	NA	<50	<50	NA
Excavation Water	03/08/2005	<0.50	<0.50	<0.50	<0.50	**2.7**	**130**	**6,100**	NA
E1	09/15/2006	<0.50	<0.50	<0.50	<0.50	<0.50	**560**	**360,000**	NA
E2	09/15/2006	<0.50	<0.50	<0.50	<0.50	<0.50	<50	**1,200**	NA
E3	09/22/2006	<0.50	<0.50	<0.50	<0.50	**6.1**	<50	<50	NA
E7	09/15/2006	<0.50	<0.50	<0.50	<0.50	<0.50	**62**	<50	NA
E8	09/12/2006	<0.50	<0.50	<0.50	<0.50	**2.0**	<50	<50	NA
E09-10-W	09/21/2006	<0.50	<0.50	<0.50	<0.50	**7.5**	<50	<50	NA
E09-28-W	09/21/2006	<0.50	<0.50	<0.50	<0.50	<0.50	**94**	<50	NA
E10-32-W	09/21/2006	<0.50	<0.50	<0.50	<0.50	<0.50	**94**	<50	NA
E11	09/12/2006	<0.50	<0.50	<0.50	<0.50	<0.50	<50	<50	NA
E12	09/12/2006	<0.50	<0.50	<0.50	<0.50	<0.50	<50	**260**	NA
E13	09/15/2006	<0.50	<0.50	<0.50	<0.50	<0.50	<50	<50	NA
E14	09/15/2006	<0.50	<0.50	<0.50	<0.50	**3.2**	<50	<50	NA
E15	09/21/2006	<0.50	<0.50	<0.50	<0.50	**15**	<50	<50	NA
E16	09/12/2006	<0.50	<0.50	<0.50	<0.50	<0.50	<50	<50	NA
E17	09/21/2006	<0.50	<0.50	<0.50	<0.50	<0.50	<50	**120**	NA
E18	09/22/2006	<0.50	<0.50	<0.50	<0.50	**3.3**	<50	<50	NA
E19	09/15/2006	<0.50	<0.50	<0.50	<0.50	**2.8**	<50	<50	NA

Table 4
Historical Analytical Data
Groundwater Grab Samples

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

Sample Identification	Collection Date	Concentration							
		Benzene (46)	Toluene (130)	Ethylbenzene (43)	Total Xylenes (100)	MTBE (1,800)	TPH-g (210)	TPH-d (210)	TPH-mo (210)
E20	09/22/2006	<0.50	<0.50	<0.50	<0.50	<0.50	<50	<50	NA
E21	09/22/2006	<0.50	<0.50	<0.50	<0.50	<0.50	<50	<50	NA
E22	09/21/2006	<0.50	<0.50	<0.50	<0.50	**7.1**	<50	<50	NA
E23	09/22/2006	<0.50	<0.50	<0.50	<0.50	<0.50	<50	<50	NA
E24	09/22/2006	<0.50	<0.50	<0.50	<0.50	**0.69**	<50	<50	NA
E25	09/13/2006	<0.50	<0.50	<0.50	<0.50	**0.92**	<50	<50	NA
E26	09/21/2006	<0.50	<0.50	<0.50	<0.50	<0.50	<50	**1,900**	NA
E27	09/13/2006	<0.50	<0.50	<0.50	<0.50	<0.50	<50	<50	NA
E28	09/11/2006	<0.50	<0.50	<0.50	<0.50	<0.50	NA	**68,000**	NA
E29	09/21/2006	<0.50	<0.50	<0.50	**1.4**	<0.50	**290**	**3,500,000**	NA
E30	09/11/2006	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<50	NA
E31	09/11/2006	<0.50	<0.50	<0.50	<0.50	<0.50	NA	**880,000**	NA
E32	09/13/2006	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<50	NA
E33	09/11/2006	<0.50	<0.50	<0.50	<0.50	**22**	NA	**4,200**	NA
E34	09/13/2006	<0.50	<0.50	<0.50	<0.50	<0.50	NA	**3,900**	NA
E35	09/11/2006	<0.50	<0.50	<0.50	<0.50	**4.2**	NA	**3,500**	NA
E36	09/11/2006	<0.50	<0.50	<0.50	<0.50	**0.61**	NA	**1,700,000**	NA
E37	09/13/2006	<0.50	<0.50	<0.50	<0.50	<0.50	NA	**70,000**	NA
E38	09/13/2006	<0.50	<0.50	<0.50	<0.50	<0.50	NA	**3,400**	NA
E39	09/13/2006	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<50	NA
E40	09/13/2006	<0.50	<0.50	<0.50	<0.50	<0.50	NA	**3,100**	NA

Table 4
Historical Analytical Data
Groundwater Grab Samples

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

Sample Identification	Collection Date	Concentration							
		Benzene (46)	Toluene (130)	Ethylbenzene (43)	Total Xylenes (100)	MTBE (1,800)	TPH-g (210)	TPH-d (210)	TPH-mo (210)
E41	03/28/2007	<0.50	<0.50	<0.50	<0.50	**0.62**	**59**	<50	**180**
E42	03/29/2007	<0.50	<0.50	<0.50	<0.50	<0.50	<50	**840**	**240**
E43	03/29/2007	<0.50	**0.51**	<0.50	<0.50	<0.50	**53**	<50	<100
E44	03/28/2007	<0.50	<0.50	<0.50	<0.50	<0.50	<50	<50	<100
E45	03/29/2007	<0.50	<0.50	<0.50	<0.50	<0.50	<50	<50	<100
E46	03/29/2007	<0.50	**0.84**	<0.50	<0.50	**2.4**	<50	**250**	**750**
E47	03/28/2007	<0.50	<0.50	<0.50	<0.50	<0.50	<50	**22,000**	NA
E48	03/28/2007	<0.50	<0.50	<0.50	<0.50	<0.50	<50	<50	NA
E50	03/28/2007	<0.50	<0.50	<0.50	<0.50	<0.50	<50	**7,300**	NA
E51	03/28/2007	<0.50	<0.50	<0.50	<0.50	<0.50	<50	**3,200**	NA
E52	03/28/2007	<0.50	<0.50	<0.50	<0.50	<0.50	<50	**200**	NA

Notes:

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.
ESL - SFBRWQCB Environmental Screening Levels, Table F-1b (May 2008)
Reported value exceeds associated ESL.

Table 4A
Groundwater Analytical Data
Poly-Nuclear Aromatic Hydrocarbons
Earthgrains Baking Companies, Inc.
955 Kennedy Street
Oakland, California 94606

Well ID	Sample Collection Date	Parameter Concentration (µg/L)							
		Naphthalene ESL = 24	Acenaphthylene ESL = 30	Acenaphthene ESL = 23	Fluorene ESL = 39	Phenanthrene ESL = 4.6	Anthracene ESL = 0.73	Fluoranthene ESL = 8.0	Pyrene ESL = 2.0
MW-101	7/22/09	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1/28/10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MW-102	7/22/09	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1/28/10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MW-103	7/22/09	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1/28/10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MW-104	7/22/09	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1/28/10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
DW-1	7/22/09	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1/28/10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
DUP	7/22/09	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1/28/10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

Well ID	Sample Collection Date	Parameter Concentration (µg/L)							
		Benzo (a) Anthracene ESL = 0.027	Chrysene ESL = 0.35	Benzo (b) Fluoranthene ESL = 0.029	Benzo (k) Fluoranthene ESL = 0.40	Benzo (a) Pyrene ESL = 0.014	Dibenz (a,h) Anthracene ESL = 0.25	Benzo (g,h,i) Perylene ESL = 0.10	c,d) Pyrene ESL = 0.048
MW-101	7/22/09	<1.0	<1.0	<1.0	<1.0	<0.20	<1.0	<1.0	<1.0
	1/28/10	<1.0	<1.0	<1.0	<1.0	<0.20	<1.0	<1.0	<1.0
MW-102	7/22/09	<1.0	<1.0	<1.0	<1.0	<0.20	<1.0	<1.0	<1.0
	1/28/10	<1.0	<1.0	<1.0	<1.0	<0.20	<1.0	<1.0	<1.0
MW-103	7/22/09	<1.0	<1.0	<1.0	<1.0	<0.20	<1.0	<1.0	<1.0
	1/28/10	<1.0	<1.0	<1.0	<1.0	<0.20	<1.0	<1.0	<1.0
MW-104	7/22/09	<1.0	<1.0	<1.0	<1.0	<0.20	<1.0	<1.0	<1.0
	1/28/10	<1.0	<1.0	<1.0	<1.0	<0.20	<1.0	<1.0	<1.0
DW-1	7/22/09	<1.0	<1.0	<1.0	<1.0	<0.20	<1.0	<1.0	<1.0
	1/28/10	<1.0	<1.0	<1.0	<1.0	<0.20	<1.0	<1.0	<1.0
DUP	7/22/2009**	<1.0	<1.0	<1.0	<1.0	<0.20	<1.0	<1.0	<1.0
	1/28/2010**	<1.0	<1.0	<1.0	<1.0	<0.20	<1.0	<1.0	<1.0

Notes:
*DUP = duplicate sample for DW-1
**DUP = duplicate sample for MW-102
DW = de-watering well
ESL = environmental screening level according to ESL Document Table F-1b
µg/L = micrograms-per-liter

Table 5
Historical Analytical Data
Groundwater Well Samples

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

Monitoring Well	Collection Date	Concentration and Associated ESLs (µg/L)							
		Benzene (46)	Toluene (130)	Ethylbenzene (43)	Total Xylenes (100)	MTBE (1,800)	TPH-g (210)	TPH-d (210)	TPH-mo (210)
MW-1	09/18/1992	<0.50	<0.50	<0.50	<0.50	NA	<50	<50	<50
MW-1	03/24/1993	<0.30	<0.30	<0.30	<0.50	NA	NA	**78**	<50
MW-1	05/19/1993	<0.30	**0.35**	<0.30	<0.50	NA	NA	**130**	<50
MW-1	08/23/1993	<0.50	<0.50	<0.50	<0.50	NA	NA	**460**	<100
MW-1	10/14/1993	NA	NA	NA	NA	NA	NA	**160**	<100
MW-1	11/23/1993	<0.30	<0.30	<0.30	<0.50	NA	NA	**340**	<100
MW-1	02/16/1994	<0.30	<0.30	<0.30	<0.50	NA	NA	**160**	**170**
MW-1	05/19/1994	<0.30	<0.30	<0.30	<0.50	NA	NA	<50	**470**
MW-1	08/23/1994	<0.30	<0.30	<0.30	<0.50	NA	NA	<50	<100
MW-1	12/06/1994	<0.30	<0.30	<0.30	<0.50	NA	NA	<50	<100
Well Abandoned in 1996									
MW-2	09/18/1992	<0.50	<0.50	<0.50	<0.50	NA	<50	<50	**77**
MW-2	11/04/1992	<0.50	<0.50	<0.50	<0.50	NA	<50	<50	<50
MW-2	03/24/1993	<0.30	<0.30	<0.30	<0.50	NA	NA	<50	<50
MW-2	05/19/1993	<0.30	<0.30	<0.30	<0.50	NA	NA	<50	<50
MW-2	08/23/1993	<0.50	<0.50	<0.50	<0.50	NA	NA	**720**	<100
MW-2	10/14/1993	NA	NA	NA	NA	NA	NA	<50	<100
MW-2	11/23/1993	NA	NA	NA	NA	NA	NA	<50	<100
MW-2	02/16/1994	<0.30	<0.30	<0.30	<0.50	NA	NA	<50	**480**
MW-2	05/19/1994	<0.30	<0.30	<0.30	<0.50	NA	NA	<50	**710**

Table 5
Historical Analytical Data
Groundwater Well Samples

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

Monitoring Well	Collection Date	Concentration and Associated ESLs (µg/L)							
		Benzene (46)	Toluene (130)	Ethylbenzene (43)	Total Xylenes (100)	MTBE (1,800)	TPH-g (210)	TPH-d (210)	TPH-mo (210)
MW-2	08/23/1994	<0.30	<0.30	<0.30	<0.50	NA	NA	<50	<100
MW-2	12/06/1994	<0.30	<0.30	<0.30	<0.50	NA	NA	<50	<100
Well Abandoned in 1996									
MW-3	09/17/1992	<0.50	<0.50	<0.50	<0.50	NA	<50	<50	<50
MW-3	03/24/1993	<0.30	<0.30	<0.30	<0.50	NA	<50	<50	**52**
MW-3	05/19/1993	<0.30	<0.30	<0.30	<0.50	NA	<50	<50	<50
MW-3	08/23/1993	<0.50	<0.50	<0.50	<0.50	NA	<50	<50	<100
MW-3	11/23/1993	<0.30	<0.30	<0.30	<0.50	NA	<50	<50	<100
MW-3	02/16/1994	<0.30	<0.30	<0.30	<0.50	NA	<50	<50	<100
MW-3	05/19/1994	<0.30	<0.30	<0.30	<0.50	NA	<50	<50	**290**
MW-3	08/23/1994	<0.30	<0.30	<0.30	<0.50	NA	<50	<50	<100
MW-3	12/06/1994	<0.30	<0.30	<0.30	<0.50	NA	<50	<50	<100
Well Abandoned in 1996									
MW-4	09/18/1992	<0.50	<0.50	<0.50	<0.50	NA	**54**	<50	<50
MW-4	11/04/1992	<0.50	<0.50	<0.50	<0.50	NA	<50	<50	**58**
MW-4	03/24/1993	<0.30	<0.30	<0.30	<0.50	NA	<50	<50	<50
MW-4	05/19/1993	<0.30	<0.30	<0.30	<0.50	NA	<50	<50	<50
MW-4	08/23/1993	<0.50	<0.50	<0.50	<0.50	NA	<50	**100**	<100
MW-4	10/14/1993	NA	NA	NA	NA	NA	NA	<50	<100
MW-4	11/23/1993	<0.30	<0.30	<0.30	<0.50	NA	<50	<50	<100

Table 5
Historical Analytical Data
Groundwater Well Samples

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

Monitoring Well	Collection Date	Concentration and Associated ESLs (µg/L)							
		Benzene (46)	Toluene (130)	Ethylbenzene (43)	Total Xylenes (100)	MTBE (1,800)	TPH-g (210)	TPH-d (210)	TPH-mo (210)
MW-4	02/16/1994	<0.30	<0.30	<0.30	<0.50	NA	<50	<50	**120**
MW-4	05/19/1994	<0.30	<0.30	<0.30	<0.50	NA	<50	<50	**690**
MW-4	08/23/1994	<0.30	<0.30	<0.30	<0.50	NA	<50	<50	<100
MW-4	12/06/1994	<0.30	<0.30	<0.30	<0.50	NA	<50	<50	<100
Well Abandoned in 1996									
MW-5	09/17/1992	<0.50	<0.50	<0.50	<0.50	NA	<50	<50	<50
MW-5	11/04/1992	NA	NA	NA	NA	NA	NA	NA	NA
MW-5	03/24/1993	**0.39**	**0.39**	<0.30	**0.56**	NA	<50	<50	<50
MW-5	05/19/1993	<0.30	<0.30	<0.30	<0.50	NA	**51**	<50	<50
MW-5	08/23/1993	<0.50	<0.50	<0.50	<0.50	NA	<50	**80**	<100
MW-5	10/14/1993	NA	NA	NA	NA	NA	NA	<50	<100
MW-5	11/23/1993	<0.30	<0.30	<0.30	<0.50	NA	<50	<50	<100
MW-5	02/16/1994	<0.30	<0.30	<0.30	<0.50	NA	<50	<50	**410**
MW-5	05/19/1994	<0.30	<0.30	<0.30	<0.50	NA	<50	<50	**1,800**
MW-5	08/23/1994	<0.30	<0.30	<0.30	<0.50	NA	<50	<50	<100
MW-5	12/06/1994	<0.30	<0.30	<0.30	<0.50	NA	<50	<50	<100
Well Abandoned in 1996									
MW-101	01/26/2009	<0.50	<0.50	<0.50	<0.50	NA	NA	<50	NA
MW-101	04/15/2009	<0.50	<0.50	<0.50	<0.50	NA	NA	<50	NA

Table 5
Historical Analytical Data
Groundwater Well Samples

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

Monitoring Well	Collection Date	Concentration and Associated ESLs (µg/L)							
		Benzene (46)	Toluene (130)	Ethylbenzene (43)	Total Xylenes (100)	MTBE (1,800)	TPH-g (210)	TPH-d (210)	TPH-mo (210)
MW-101	07/22/2009	<0.50	<0.50	<0.50	<0.50	NA	NA	<50	NA
MW-101	01/28/2010	<0.50	<0.50	<0.50	<0.50	NA	NA	**64**	NA
MW-102	01/26/2009	<0.50	<0.50	<0.50	<0.50	NA	NA	**160**	NA
MW-102	04/15/2009	<0.50	<0.50	<0.50	<0.50	NA	NA	**140**	NA
MW-102	07/22/2009	<0.50	<0.50	<0.50	<0.50	NA	NA	**120**	NA
MW-102	01/28/2010	<0.50	<0.50	<0.50	<0.50	NA	NA	**54**	NA
MW-103	01/26/2009	<0.50	<0.50	<0.50	<0.50	NA	NA	**80**	NA
MW-103	04/15/2009	<0.50	<0.50	<0.50	<0.50	NA	NA	<50	NA
MW-103	07/22/2009	<0.50	<0.50	<0.50	<0.50	NA	NA	<50	NA
MW-103	01/28/2010	<0.50	<0.50	<0.50	<0.50	NA	NA	**63**	NA
MW-104	01/26/2009	<0.50	<0.50	<0.50	<0.50	NA	NA	**100**	NA
MW-104	04/15/2009	<0.50	<0.50	<0.50	<0.50	NA	NA	**79**	NA
MW-104	07/22/2009	<0.50	<0.50	<0.50	<0.50	NA	NA	**97**	NA
MW-104	01/28/2010	<0.50	<0.50	<0.50	<0.50	NA	NA	**68**	NA
DW-1	01/26/2009	<0.50	<0.50	<0.50	<0.50	NA	NA	**1,200**	NA
DW-1	04/15/2009	<0.50	<0.50	<0.50	<0.50	NA	NA	**830**	NA

Table 5
Historical Analytical Data
Groundwater Well Samples

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

Monitoring Well	Collection Date	Concentration and Associated ESLs (µg/L)							
		Benzene (46)	Toluene (130)	Ethylbenzene (43)	Total Xylenes (100)	MTBE (1,800)	TPH-g (210)	TPH-d (210)	TPH-mo (210)
DW-1	07/22/2009	<0.50	<0.50	<0.50	<0.50	NA	NA	**1,000**	NA
DW-1	01/28/2010	NS	NS	NS	NS	NS	NS	NS	NS

Notes:

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.
ESL - SFBRWQCB Environmental Screening Levels, Table F-1b (May 2008)
Reported value exceeds associated ESL.

Table 6
Aquifer Testing Data

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

Monitoring Well	Test Date	Test Type	Analysis Method[1]	Hydraulic Conductivity (cm/sec)	Hydraulic Conductivity (cm/year)
MW-101	1/22/2009	Rising Head (Slug In)	Bouwer & Rice	1.05E-03	3.31E+04
MW-101	1/22/2009	Rising Head (Slug Out)	Bouwer & Rice	7.70E-04	2.43E+04
MW-102	1/22/2009	Rising Head (Slug Out)	Bouwer & Rice	6.19E-05	1.95E+03
MW-104	1/22/2009	Rising Head (Slug In)	Bouwer & Rice	5.97E-04	1.88E+04
MW-104	1/22/2009	Rising Head (Slug Out)	Bouwer & Rice	3.547E-03	1.12E+05
Average Hydraulic Conductivity For Shallow Aquifer				**5.023E-04**	**1.584E+04**

Notes:

1 - Analysis methods are:
Hvorslev for confined aquifers (1951).
Bouwer & Rice for confined aquifers (1976).

cm/sec - Centimeters per second.

Table 7A
Detectable Concentrations of Petroleum Hydrocarbons
Shallow (<3 meters) Soil Samples
Comparison to Appropriate ESL

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

Environmental Screening Levels (mg/kg) Non drinking water			Benzene	Toluene	Ethylbenzene	Total Xylenes	TPH-g	TPH-d	TPH-mo
Commercial Leaching to Groundwater ESL			2.0	9.3	4.7	11	180	180	-
Commercial Gross Contamination Ceiling ESL			870	650	400	420	500	500	2,500
Commercial Direct Exposure (Industrial Worker) ESL			0.27	210	5.0	100	450	450	3,700
Final Commercial ESL for Soil			0.27	9.3	4.7	11	180	180	2,500
Final Residential ESL for Soil			0.12	9.3	2.3	11	100	100	370
Sample Identification	**Collection Date**	**Depth (feet bgs)**	**Sample Concentration (mg/kg)**						
E29	09/13/2006	2	<0.005	<0.005	<0.005	<0.005	NA	**8,300**	NA
E29	09/21/2006	8	<0.005	<0.005	<0.005	<0.005	**140**	**3,800**	<20
Probe Hole-1	04/09/2003	4.5	<0.62	<0.62	<0.62	<0.62	NA	**3,300**	NA
E29	09/21/2006	4	<0.005	<0.005	<0.005	<0.005	**31**	**3,100**	<20
Trench-5	03/08/2005	4	<0.005	<0.005	<0.005	<0.005	**48**	**1,700**	NA
DW-1 (8.5-10)	01/20/2009	8.5 - 10	< 0.005	< 0.005	< 0.005	< 0.005	NA	**1,700**	NA
E49	03/29/2007	8.5	<0.005	<0.005	<0.005	<0.005	< 1.0	**560**	NA
E33	09/11/2006	4.5	<0.005	<0.005	<0.005	<0.005	NA	**520**	NA
MW-104 (8.5-10)	01/20/2009	8.5 - 10	< 0.005	< 0.005	< 0.005	< 0.005	NA	**370**	NA
E47	03/28/2007	5	<0.005	<0.005	<0.005	<0.005	< 1.0	**80**	NA
E28	09/11/2006	4.5	<0.005	<0.005	<0.005	<0.005	NA	**76**	NA
E7	09/12/2006	2.5	<0.005	<0.005	<0.005	<0.005	**2.6**	**73**	NA
OAK-15NTW	12/28/1990	2 - 3	**0.02**	<0.005	**0.007**	**0.01**	<1.0	**71**	**1,300**
E50	03/28/2007	5	<0.005	<0.005	<0.005	<0.005	< 1.0	**65**	NA
DW-1 (5-6.5)	01/20/2009	5 - 6.5	< 0.005	< 0.005	< 0.005	< 0.005	NA	**53**	NA
E31	09/11/2006	6.5	<0.005	<0.005	<0.005	<0.005	NA	**44**	NA
OAK-16TP1	12/28/1990	2 - 3	**0.15**	**0.01**	**0.54**	**0.66**	**15**	**40**	**2,700**
E6	09/12/2006	9	<0.005	<0.005	<0.005	<0.005	<1.0	**32**	NA
E33	09/11/2006	8	<0.005	<0.005	<0.005	<0.005	NA	**30**	NA
E49	03/29/2007	5	<0.005	<0.005	<0.005	<0.005	< 1.0	**26**	NA
E51	03/28/2007	5	<0.005	<0.005	<0.005	<0.005	< 1.0	**24**	NA
E45	03/29/2007	5	<0.005	<0.005	<0.005	<0.005	< 1.0	**19**	**92**
E1	09/15/2006	4.5	<0.005	<0.005	<0.005	<0.005	**4.0**	**17**	NA
OAK-14BT	12/28/1990	3	<0.005	<0.005	<0.005	<0.005	<1.0	**8.9**	<50
E43	03/29/2007	5	<0.005	<0.005	<0.005	<0.005	< 1.0	**8.8**	**29**
E44	03/28/2007	5	<0.005	<0.005	<0.005	<0.005	< 1.0	**5.6**	**20**
E41	03/28/2007	5	<0.005	<0.005	<0.005	<0.005	< 1.0	**4.5**	**19**
E26	09/21/2006	4	<0.005	<0.005	<0.005	<0.005	<1.0	**4.1**	<10
E30	09/11/2006	4	<0.005	<0.005	<0.005	<0.005	NA	**3.8**	NA
E23	09/22/2006	8	<0.005	<0.005	<0.005	<0.005	<1.0	**3.6**	NA
E39	09/13/2006	9.5	<0.005	<0.005	<0.005	<0.005	NA	**3.5**	NA
E40	09/13/2006	8	<0.005	<0.005	<0.005	<0.005	NA	**2.8**	NA
E48	03/28/2007	4	<0.005	<0.005	<0.005	<0.005	< 1.0	**2.5**	NA
E48	03/28/2007	9	<0.005	<0.005	<0.005	<0.005	< 1.0	**2.4**	NA
E3	09/22/2006	4	<0.005	<0.005	<0.005	<0.005	<1.0	**1.8**	NA
E5	09/12/2006	5	<0.005	<0.005	<0.005	<0.005	<1.0	**1.7**	NA
E6	09/12/2006	5	<0.005	<0.005	<0.005	<0.005	<1.0	**1.7**	NA
E46	03/29/2007	5	<0.005	<0.005	<0.005	<0.005	< 1.0	**1.7**	< 10
E7	09/15/2006	3.5	<0.005	<0.005	<0.005	<0.005	<1.0	**1.6**	NA
E17	09/21/2006	8	NA	NA	NA	NA	NA	**1.6**	NA
E36	09/11/2006	4	<0.005	<0.005	<0.005	<0.005	NA	**1.6**	NA
E42	03/29/2007	5	<0.005	<0.005	<0.005	<0.005	< 1.0	**1.6**	< 10
E24	09/22/2006	4	<0.005	<0.005	<0.005	<0.005	<1.0	**1.5**	NA
E37	09/13/2006	9.5	<0.005	<0.005	<0.005	<0.005	NA	**1.5**	NA
E7	09/15/2006	8	<0.005	<0.005	<0.005	<0.005	<1.0	**1.4**	NA
E37	09/13/2006	4	<0.005	<0.005	<0.005	<0.005	NA	**1.4**	NA
E52	03/28/2007	5.5	<0.005	<0.005	<0.005	<0.005	< 1.0	**1.4**	NA
E8	09/12/2006	5.5	<0.005	<0.005	<0.005	<0.005	<1.0	**1.3**	NA
E14	09/15/2006	4.5	<0.005	<0.005	<0.005	<0.005	<1.0	**1.3**	NA
E32	09/13/2006	4	<0.005	<0.005	<0.005	<0.005	NA	**1.3**	NA
E36	09/11/2006	8.5	<0.005	<0.005	<0.005	<0.005	NA	**1.3**	NA
E39	09/13/2006	4	<0.005	<0.005	<0.005	<0.005	NA	**1.3**	NA
E27	09/13/2006	5	<0.005	<0.005	<0.005	<0.005	NA	**1.2**	NA
E27	09/13/2006	8.5	<0.005	<0.005	<0.005	<0.005	NA	**1.2**	NA
E13	09/15/2006	5	<0.005	<0.005	<0.005	<0.005	<1.0	**1.1**	NA
E24	09/22/2006	8.5	<0.005	<0.005	<0.005	<0.005	<1.0	**1.1**	NA
E34	09/13/2006	4	<0.005	<0.005	<0.005	<0.005	NA	**1.1**	NA
E3	09/22/2006	8	<0.005	<0.005	<0.005	<0.005	<1.0	**1.0**	NA

Notes:

mg/kg - Milligrams-per-kilogram
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.
ESL - SFBRWQCB Environmental Screening Levels, Table B-2 (May 2008)

Reported value exceeds associated ESL.

Table 7B
Detectable Concentrations of Petroleum Hydrocarbons
Deep (>3 meters) Soil Samples
Comparison to Appropriate ESL

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

Environmental Screening Levels (mg/kg) Commercial/Industrial Land Use			Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	TPH-g	TPH-d	TPH-mo
Leaching to Groundwater ESL			2.0	9.3	4.7	11	8.4	180	180	-
Gross Contamination Ceiling ESL			870	650	400	420	1,000	5,000	5,000	5,000
Direct Exposure (Const. Worker Trench) ESL			12	650	210	420	2,800	4,200	4,200	12,000
Final Commercial ESL for Soil			2.0	9.3	4.7	11	8.4	180	180	5,000
Final Residential ESL for Soil			2.0	9.3	4.7	11	8.4	180	180	5,000
Sample Identification	**Collection Date**	**Depth (feet bgs)**	**Sample Concentration (mg/kg)**							
E33	09/11/2006	12	<0.025	<0.025	<0.025	<0.025	<0.025	NA	**7,500**	NA
E36	09/11/2006	10	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**5,100**	NA
E46	03/29/2007	10	<0.005	<0.005	<0.005	<0.005	<0.005	**29**	**1,800**	< 10
E2	09/15/2006	12	<0.005	<0.005	<0.005	<0.005	<0.005	**8.0**	**860**	NA
E1	09/15/2006	11.5	<0.005	<0.005	<0.005	<0.005	<0.005	**3.5**	**710**	NA
E29	09/21/2006	12	<0.005	<0.005	<0.005	<0.005	<0.005	**4.7**	**590**	**17**
E35	09/11/2006	10	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**570**	NA
MW-1	08/27/1992	10	<0.005	<0.005	<0.005	<0.005	NA	NA	**560**	<10
E26	09/21/2006	11	<0.005	<0.005	<0.005	<0.005	<0.005	**1.2**	**470**	**22**
E38	09/13/2006	11	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**420**	NA
E37	09/13/2006	12.5	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**410**	NA
E51	03/28/2007	10	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	**390**	NA
E45	03/29/2007	10	<0.005	<0.005	<0.005	<0.005	<0.005	**1.4**	**350**	< 10
E48	03/28/2007	12.5	<0.005	<0.005	<0.005	<0.005	<0.005	**2.1**	**320**	NA
OAK-2SD	12/12/1990	10	<0.005	<0.005	**0.006**	**0.017**	NA	**1.5**	**320**	NA
E31	09/11/2006	10.5	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**300**	NA
E26	09/21/2006	13	<0.005	<0.005	<0.005	<0.005	<0.005	**5.2**	**260**	**28**
E52	03/28/2007	12.5	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	**220**	NA
E29	09/21/2006	14	<0.005	<0.005	<0.005	<0.005	<0.005	**6.9**	**200**	<10
E40	09/13/2006	10	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**190**	NA
E46	03/29/2007	12	<0.005	<0.005	<0.005	<0.005	<0.005	**21**	**180**	< 10
E52	03/28/2007	15.5	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	**180**	NA
E38	09/13/2006	12	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**140**	NA
E48	03/28/2007	15	<0.005	<0.005	<0.005	<0.005	<0.005	**1.0**	**130**	NA
E49	03/29/2007	10	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	**100**	NA
E50	03/28/2007	10	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	**100**	NA
MW-2	08/27/1992	10	<0.005	<0.005	<0.005	<0.005	NA	NA	**83**	<10
E28	09/11/2006	10	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**58**	NA
E39	09/13/2006	12.5	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**37**	NA
E35	09/11/2006	18	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**35**	NA
E41	03/28/2007	10	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	**33**	**180**
E47	03/28/2007	10	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	**27**	NA
E25	09/13/2006	10	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	**23**	NA
E34	09/13/2006	12	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**19**	NA
E40	09/13/2006	12	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**18**	NA
E42	03/29/2007	10	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	**17**	**15**
DW-1 (10-11.5')	01/20/2009	10 - 11.5	<0.005	<0.005	<0.005	<0.005	NA	NA	**16**	NA
E49	03/29/2007	15	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	**14**	NA
E47	03/28/2007	15	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	**10**	NA
DW-1 (11.5-13')	01/20/2009	11.5 - 13	<0.005	<0.005	<0.005	<0.005	NA	NA	**8.4**	NA
E31	09/11/2006	14.5	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**8.0**	NA
E43	03/29/2007	10	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	**7.2**	**23**
E33	09/11/2006	16	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**6.9**	NA
E1	09/15/2006	16	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	**5.8**	NA
E28	09/11/2006	15	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**5.8**	NA
E4	09/12/2006	10	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	**5.6**	NA
E1	09/15/2006	20	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	**5.2**	NA
E31	09/11/2006	16	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**5.0**	NA
E6	09/12/2006	10	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	**4.1**	NA
E52	03/28/2007	10	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	**3.4**	NA
E50	03/28/2007	15	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	**3.0**	NA
E43	03/29/2007	15	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	**2.5**	< 10
E37	09/13/2006	15	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**2.4**	NA
E35	09/11/2006	14	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**2.3**	NA
DW-1 (13.5-15')	01/20/2009	13.5 - 15	<0.005	<0.005	<0.005	<0.005	NA	NA	**2.0**	NA
E36	09/11/2006	15	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**1.9**	NA
E45	03/29/2007	15	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	**1.8**	< 10
E2	09/15/2006	16	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	**1.7**	NA
E41	03/28/2007	15	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	**1.7**	< 10
E24	09/22/2006	15	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	**1.6**	NA
E12	09/12/2006	10	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	**1.5**	NA
E17	09/21/2006	19	NA	NA	NA	NA	NA	NA	**1.5**	NA
E29	09/21/2006	16	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	**1.5**	<10
E9	09/21/2006	20	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	**1.3**	NA
E42	03/29/2007	15	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	**1.3**	< 10
E26	09/21/2006	19	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	**1.2**	<10
E35	09/11/2006	21	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**1.2**	NA
E42	03/29/2007	25	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	**1.2**	< 10
E46	03/29/2007	15	<0.005	<0.005	<0.005	<0.005	<0.005	< 1.0	**1.2**	< 10
E23	09/22/2006	12	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0	**1.1**	NA
E38	09/13/2006	16	<0.005	<0.005	<0.005	<0.005	<0.005	NA	**1.0**	NA

Notes:

mg/kg - Milligrams-per-kilogram
MTBE - Methyl Tertiary Butyl Ether.
TPH-g - Total Petroleum Hydrocarbons quantified as gasoline.
TPH-g * - Laboratory statement that result is not typical of gasoline chromatograph, but possibly light-end diesel fraction.
TPH-d - Total Petroleum Hydrocarbons quantified as diesel.
TPH-mo - Total Petroleum Hydrocarbons quantified as motor oil.
NA - Not Analyzed.
ESL - SFBRWQCB Environmental Screening Levels, Table D-2 (May 2008)

Reported value exceeds associated ESL.

Table 8
Estimate of Residual TPH as Diesel in Soil
(1989 - 2009 Soil Samples)

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

Total Petroleum Hydrocarbons - Diesel in Shallow Soil (<3m)		
Concentration Range	**100 to 500 range**	**Greater than 500**
Area (sq.ft.)	100	950
Unit Weight if Soil (lb/ft^3)	110	110
Impact Thickness (ft.)	7	7
kg/lb Conversion	0.453	0.453
L/Gal Conversion	1	1
Avg. TPH-g Conc. (mg/kg)	370	2,873
Mass Conversion (mg/kg)	0.000001	0.000001
TPH Mass (Kg)	12.91	952.02
Total TPH-g Mass (Kg) in Shallow Soil		**964.93**

Total Petroleum Hydrocarbons - Diesel in Deep Unsaturated Soil (>3m)		
Concentration Range	**180 to 5000 range**	**Greater than 5000**
Area (sq.ft.)	7,425	950
Unit Weight if Soil (lb/ft^3)	110	110
Impact Thickness (ft.)	10	10
kg/lb Conversion	0.453	0.453
L/Gal Conversion	1	1
Avg. TPH-g Conc. (mg/kg)	496	6,300
Mass Conversion (mg/kg)	0.000001	0.000001
TPH Mass (Kg)	1,835.14	2,982.33
Total TPH-g Mass (Kg) in Deep Unsaturated Soil		**4,817.46**

Total TPH-g Mass (Kg) in Unsaturated Soil	**5,782.40**
Total TPH-g Mass (pounds) in Unsaturated Soil	**12,721.27**

Benzene Mass = Area x porosity x g.w. thickness x 7.5 gal/c.f. x 3.785 L/gal x avg. conc. (ug/kg) x 1 E-9 kg/ug

TPH Mass = Area x porosity x g.w. thickness x 7.5 gal/c.f. x 3.785 L/gal x avg. conc. (ug/kg) x 1 E-9 kg/ug

Table 9
Estimate of Residual TPH as Diesel in Groundwater
(July 2009 Groundwater Well Samples)

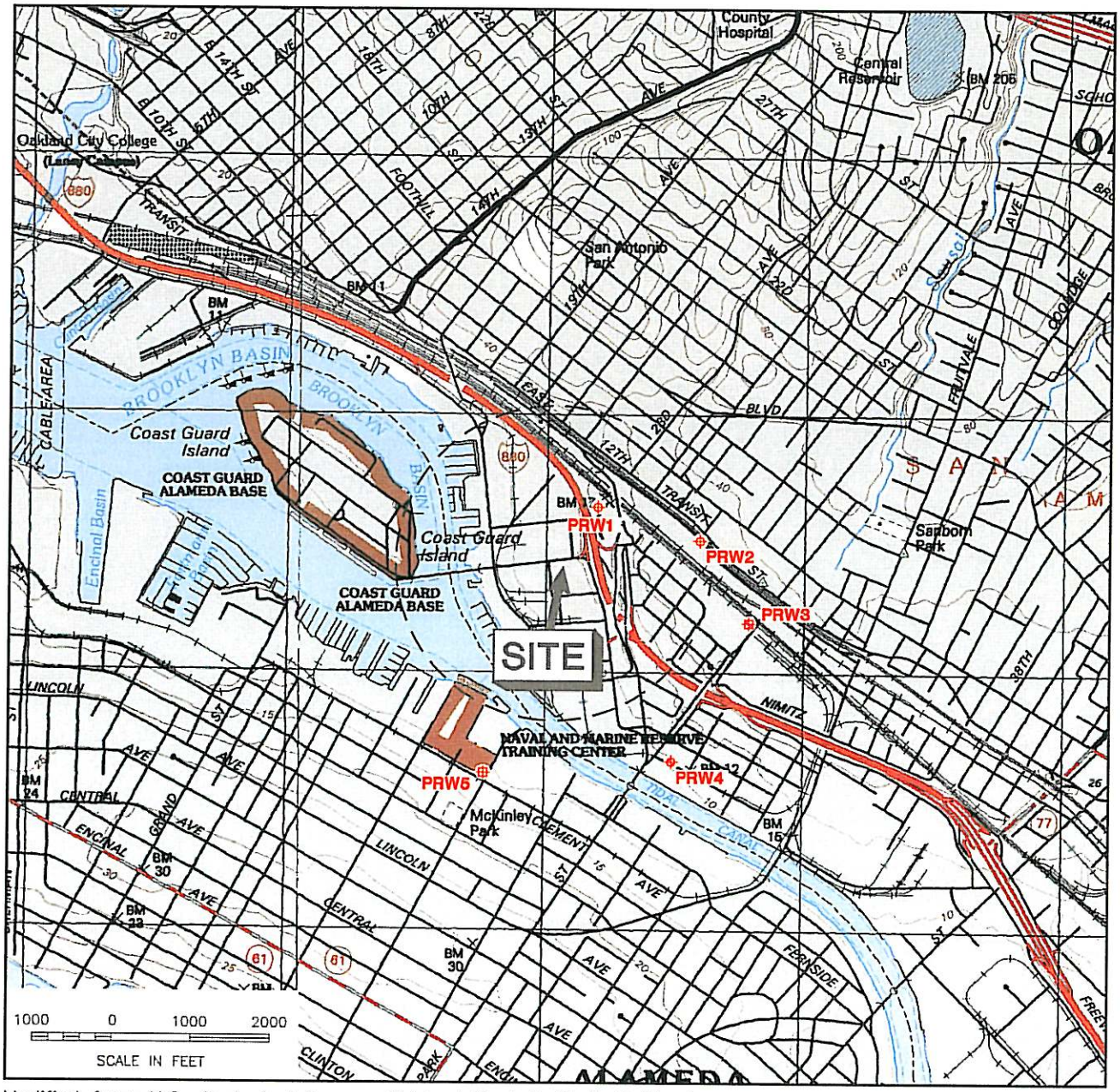
Earthgrains Baking Companies, Inc.
955 Kennedy Street
Oakland, California 94606

Total Petroleum Hydrocarbons - Diesel in Groundwater		
Concentration Range	**1 to 100**	**Greater than 100**
Area (sq.ft.)	2,400	200
Porosity	0.38	0.25
Groundwater Thickness (ft.)	10	20
Gal/c.f. Conversion	7.5	7.5
L/Gal Conversion	3.785	3.785
Avg. TPH Conc. (ug/L)	50	200
Mass Conversion	0.000000001	0.000000001
TPH Mass (Kg)	0.0129	0.0057
Total TPH-g Mass (Kg)		**0.0186**
Total TPH-g Mass (lbs.)		**0.0410**

Benzene Mass = Area x porosity x g.w. thickness x 7.5 gal/c.f. x 3.785 L/gal x avg. conc. (ug/kg) x 1 E-9 kg/ug

TPH Mass = Area x porosity x g.w. thickness x 7.5 gal/c.f. x 3.785 L/gal x avg. conc. (ug/kg) x 1 E-9 kg/ug

FIGURES



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

LEGEND

- PRW4 IRRIGATION WELL – STATUS UNKNOWN
- PRW3 INDUSTRIAL WELL – STATUS UNKNOWN
- PRW5 WELL OF UNKNOWN USE – STATUS UNKNOWN
- PRW1 WELL OF UNKNOWN USE – ABANDONED

N

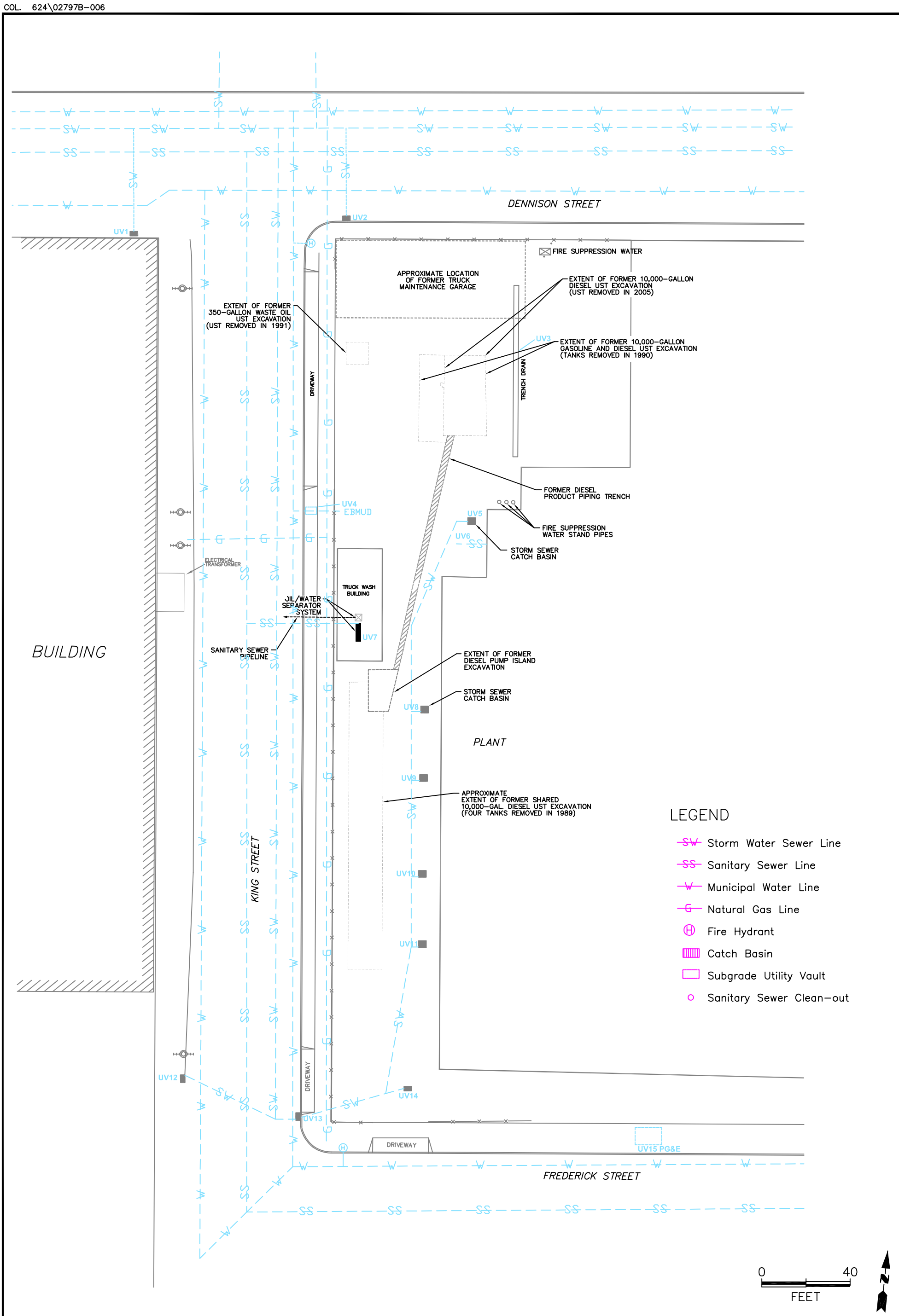
PSC

TITLE:
SITE LOCATION AND WELL SURVEY MAP

DWN:	DES.:	PROJECT NO.: 62402797
TMM	JRC	EARTHGRAINS OAKLAND, CALIFORNIA
CHKD:	APPD:	
DATE: 9/17/09	REV.: 0	FIGURE 1

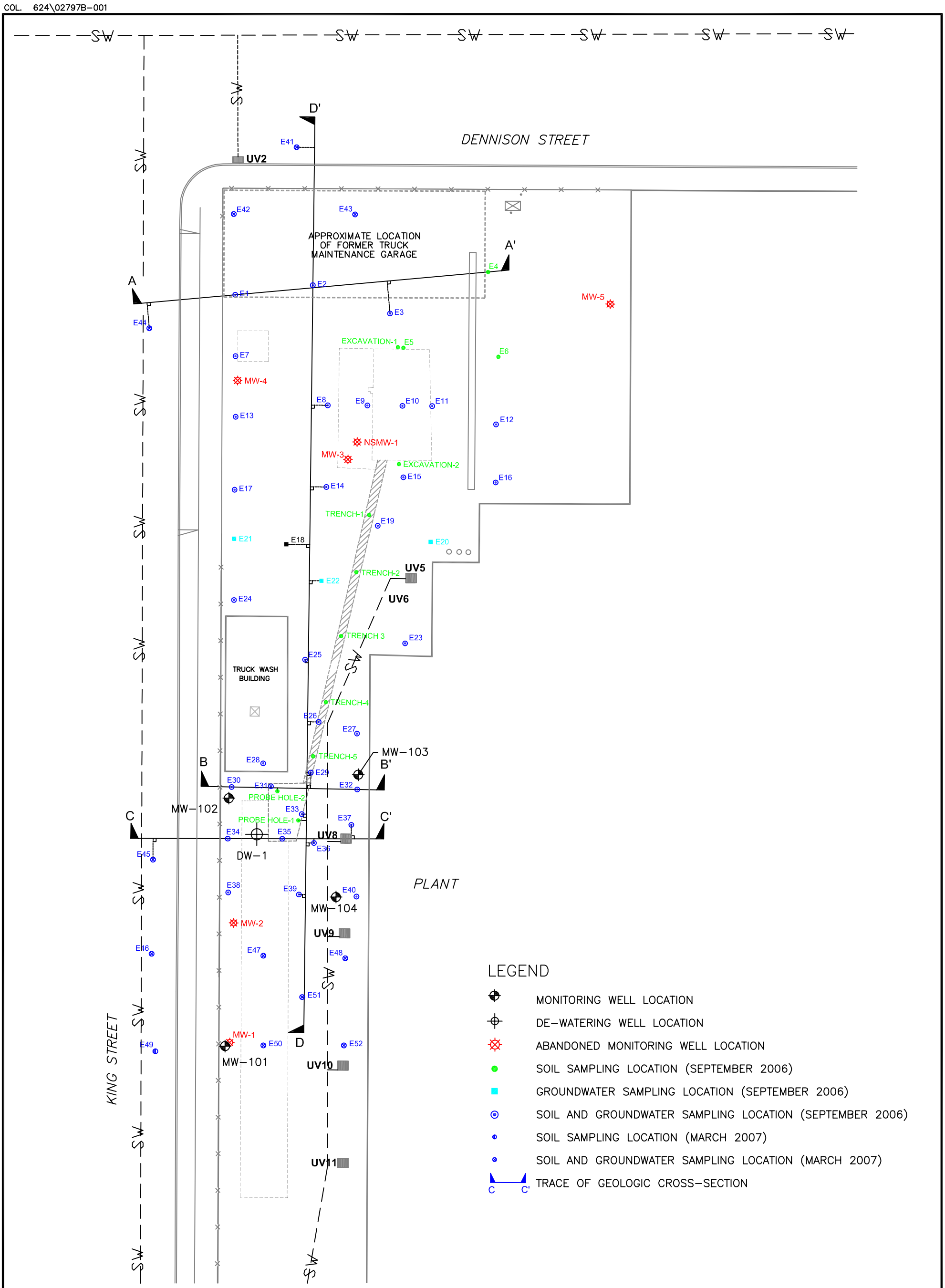
COL 624\02797C-004

COL. 624\02797B-006



PSC	TITLE: SITE MAP SHOWING SUBSURFACE UTILITIES	DWN: TMM	DES.: JRC	PROJECT NO.: 62402797 EARTHGRAINS OAKLAND, CALIFORNIA
		CHKD:	APPD:	
		DATE: 9/17/09	REV.: 0	FIGURE 2

COL. 624\02797B-001



LEGEND

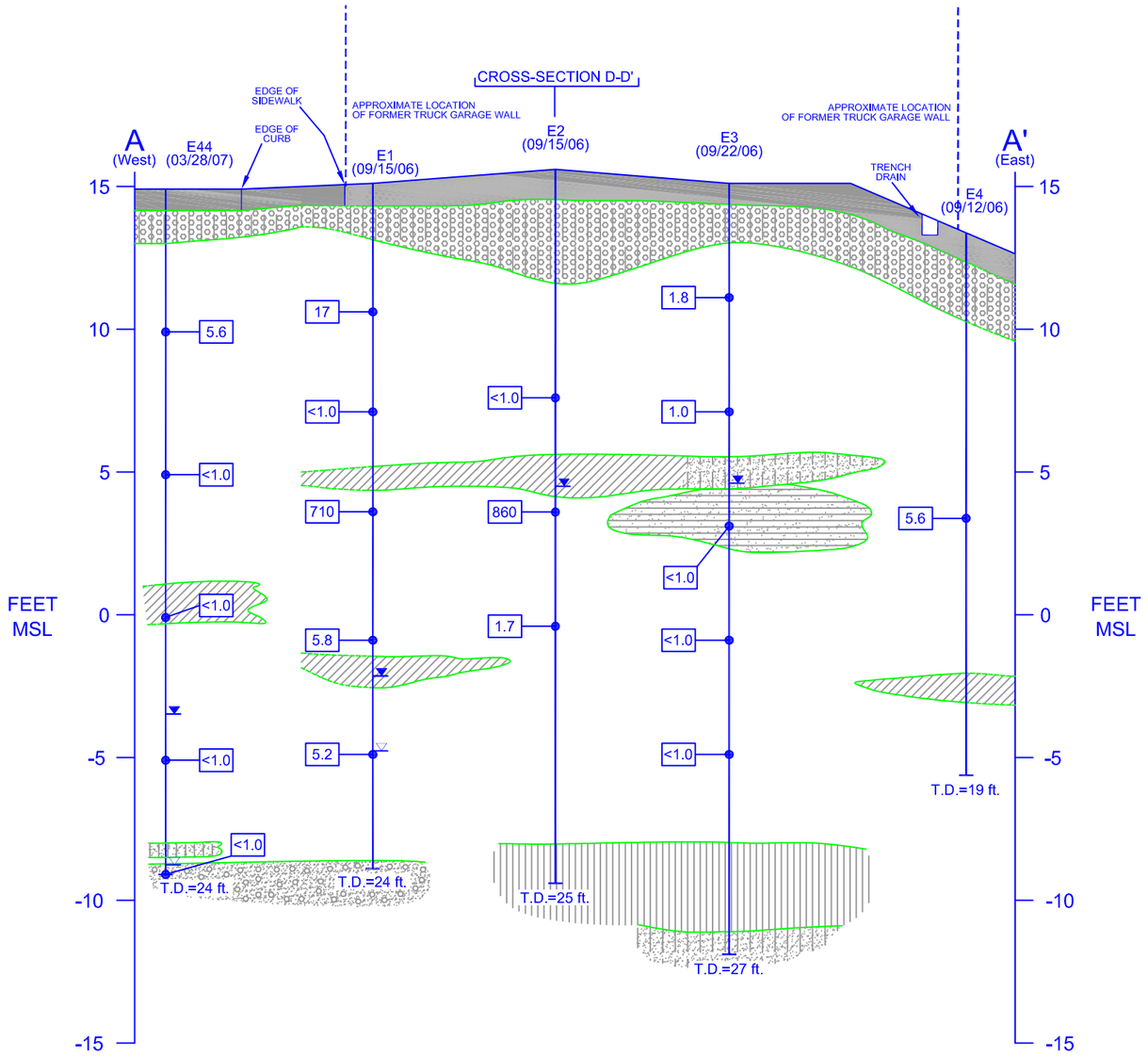
- MONITORING WELL LOCATION
- DE-WATERING WELL LOCATION
- ABANDONED MONITORING WELL LOCATION
- SOIL SAMPLING LOCATION (SEPTEMBER 2006)
- GROUNDWATER SAMPLING LOCATION (SEPTEMBER 2006)
- SOIL AND GROUNDWATER SAMPLING LOCATION (SEPTEMBER 2006)
- SOIL SAMPLING LOCATION (MARCH 2007)
- SOIL AND GROUNDWATER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

0 30
FEET

PSC

TITLE:
HISTORICAL SAMPLING LOCATION MAP

DWN:	DES.:	PROJECT NO.: 62402797
TMM	JRC	EARTHGRAINS OAKLAND, CALIFORNIA
CHKD:	APPD:	
DATE: 9/17/09	REV.: 0	FIGURE 3



LEGEND

Boring — Boring ID

Soil Sample — TPH-d — Analytical Data for Soil

Static Groundwater Level

First Encountered Groundwater (during drilling) — TPH-d — Analytical Data for Groundwater Monitoring Well

Bottom of Boring

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

TPH-d	Total Petroleum Hydrocarbons quantified as diesel
NA	Not Analyzed
T.D.	Total Depth of Boring
MSL	Mean Sea Level

Notes:
Soil analytical data in milligrams per kilogram (mg/kg).
Groundwater analytical data in micrograms per liter (ug/L).
Elevations are relative to North American Vertical Datum of 1988.

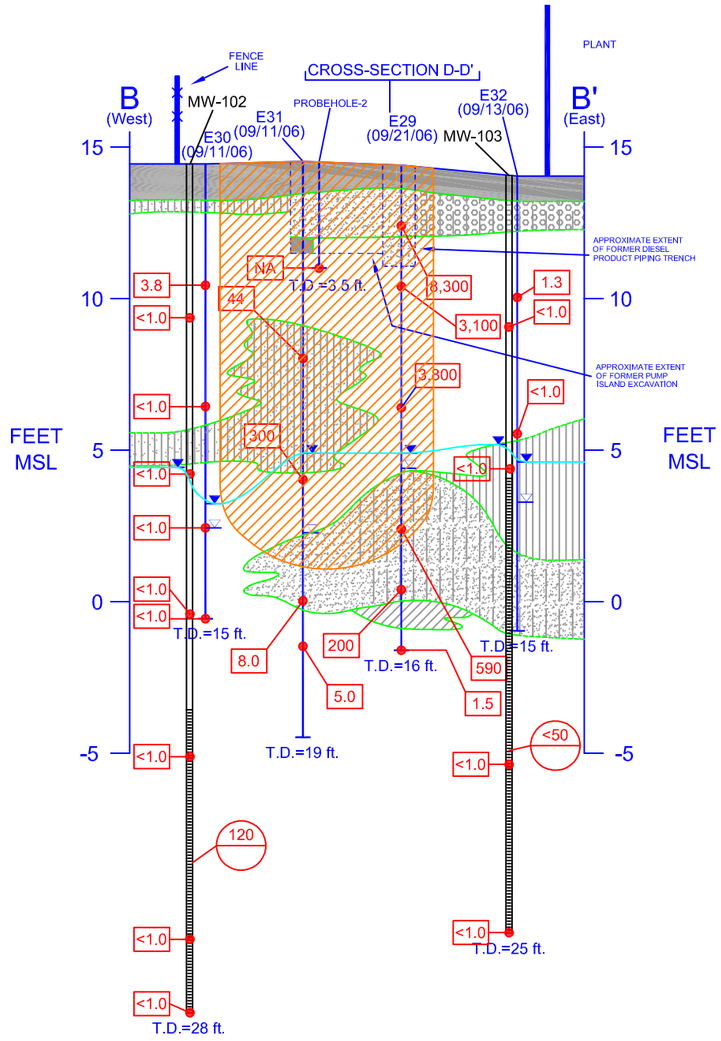
HORIZONTAL SCALE IN FEET
0 20
0 5
VERTICAL SCALE IN FEET

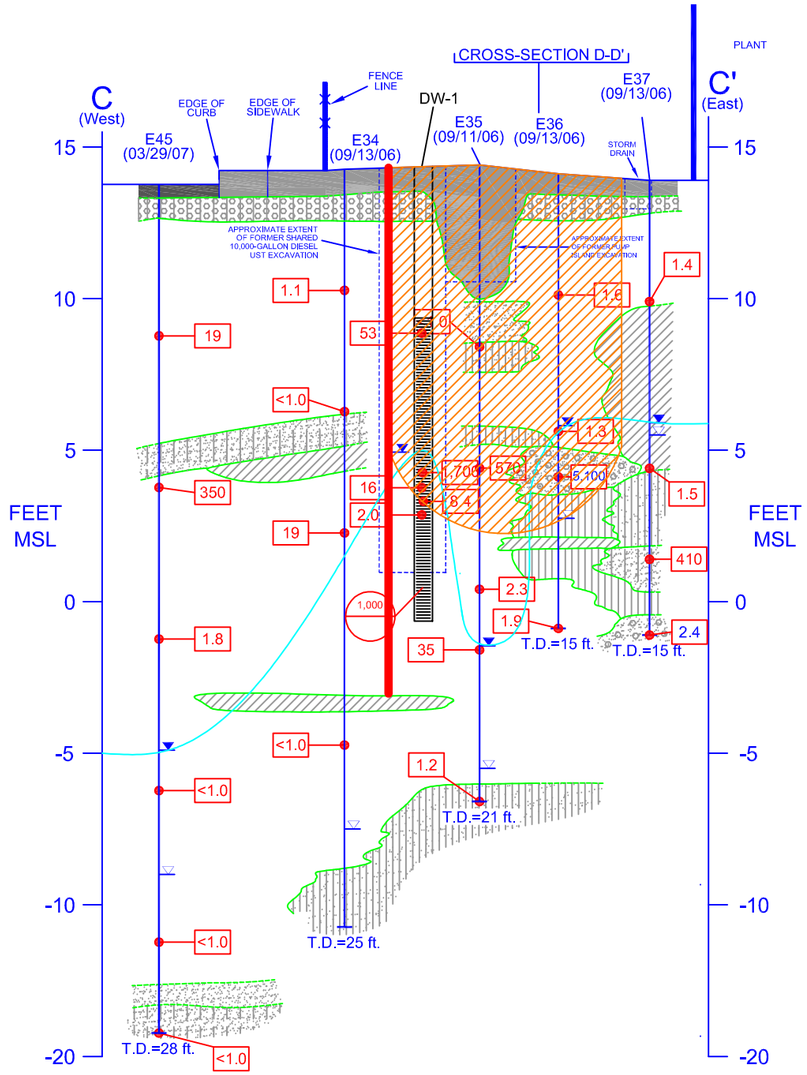
COL. 624\02797B-007

PSC

TITLE:
GEOLOGIC CROSS-SECTION A-A'

DWN: TMM	DES: JRC	PROJECT NO: 62402797 EARTHGRAINS OAKLAND, CALIFORNIA	
CHKD:	APPD:		
DATE: 9/17/09	REV: 0	FIGURE 4	





LEGEND

Boring — Boring ID

Soil Sample — TPH-d — Analytical Data for Soil

Static Groundwater Level

First Encountered Groundwater (during drilling) — TPH-d — Analytical Data for Groundwater Monitoring Well

Bottom of Boring

Concrete	Predominantly Silt	TPH-d	Total Petroleum Hydrocarbons quantified as diesel
Silty Gravel	Silty Sand	NA	Not Analyzed
Clay and Silty Clay	Gravelly Sand	T.D.	Total Depth of Boring
Clayey Silt	Predominantly Sand	MSL	Mean Sea Level
Sandy Silt	Sandy Clay		Sheet Pile Wall
			Potentiometric Surface
			Phase II Proposed Excavation Area

Notes:
Soil analytical data in milligrams per kilogram (mg/kg).
Groundwater analytical data in micrograms per liter (ug/L).
Elevations are relative to North American Vertical Datum of 1988.

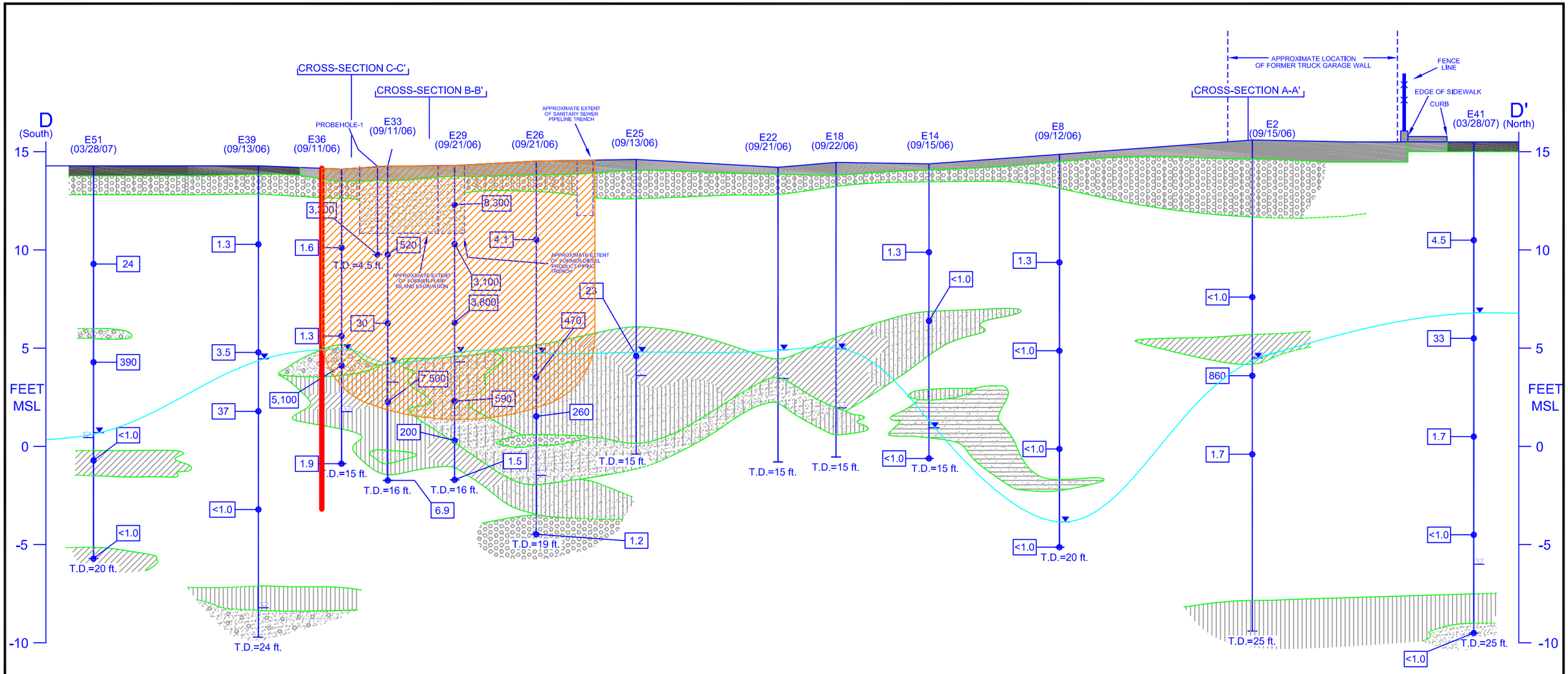
HORIZONTAL SCALE IN FEET
0 20
0 5
VERTICAL SCALE IN FEET

COL. 624\02797B-002

PSC

TITLE:
GEOLOGIC CROSS-SECTIONS B-B' AND C-C'
PROPOSED EXCAVATION AREA

DWN: TMM	DES: JRC	PROJECT NO: 62402797	
CHKD:	APPD:	EARTHGRAINS OAKLAND, CALIFORNIA	
DATE: 9/17/09	REV: 0	FIGURE 5	



LEGEND

Boring — Boring ID

Soil Sample

Static Groundwater Level

First Encountered Groundwater (during drilling)

Bottom of Boring

TPH-d Analytical Data for Soil

TPH-d Analytical Data for Groundwater Monitoring Well

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

TPH-d	Total Petroleum Hydrocarbons quantified as diesel
NA	Not Analyzed
T.D.	Total Depth of Boring
MSL	Mean Sea Level

Sheet Pile Wall

Potentiometric Surface

Phase II Proposed Excavation Area

Notes:
Soil analytical data in milligrams per kilogram (mg/kg).
Groundwater analytical data in micrograms per liter (ug/L).
Elevations are relative to North American Vertical Datum of 1988.

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

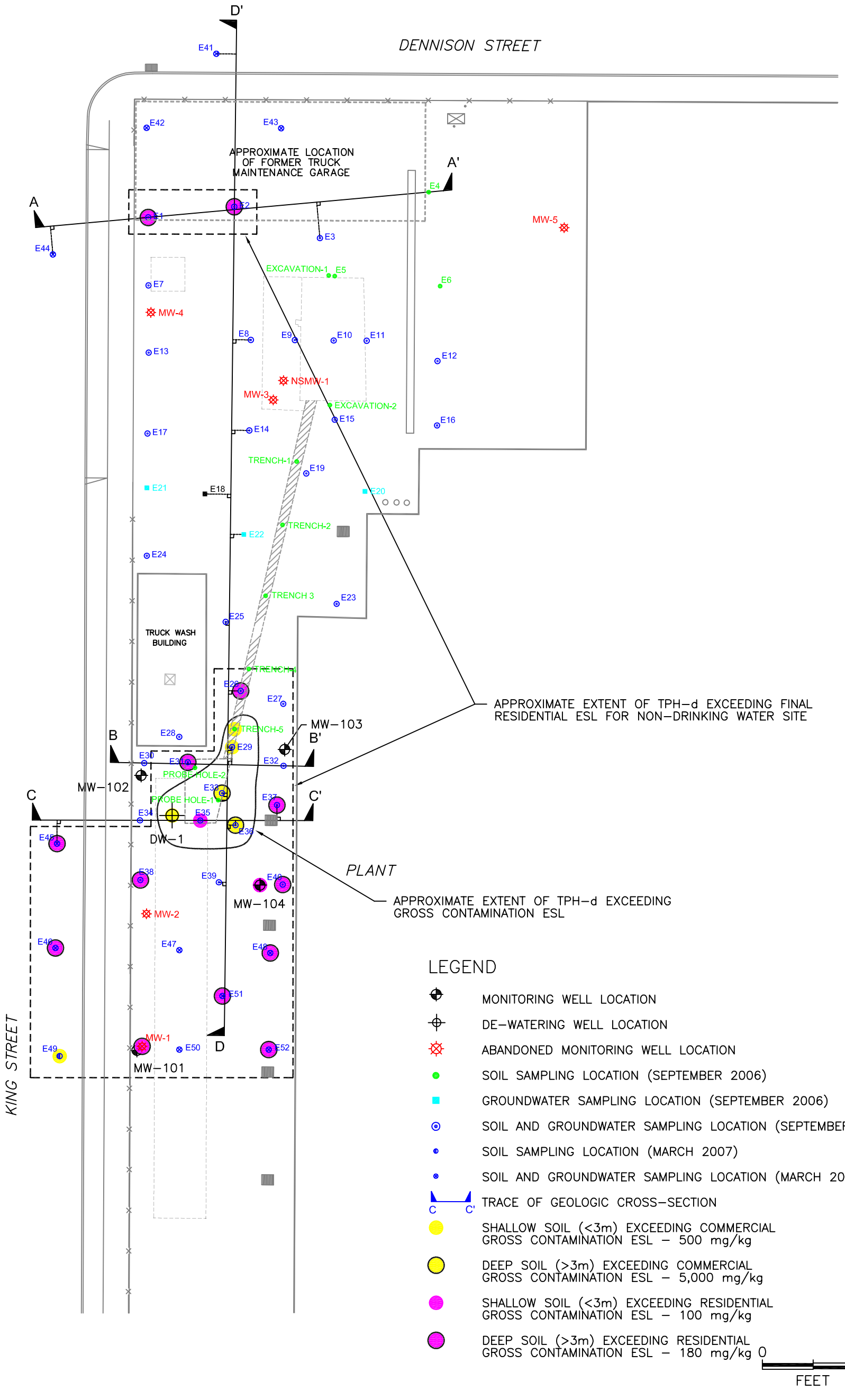
COL. 624\02797B-008

PSC

TITLE:
GEOLOGIC CROSS-SECTION D-D'
PROPOSED EXCAVATION AREA

DWN: TMM	DES: JRC	PROJECT NO: 62402797	
CHKD:	APPD:	EARTHGRAINS OAKLAND, CALIFORNIA	
DATE: 9/17/09	REV: 0	FIGURE 6	

COL. 624\02797B-011



PSC

TITLE:

RESIDUAL PETROLEUM HYDROCARBONS IN SOIL

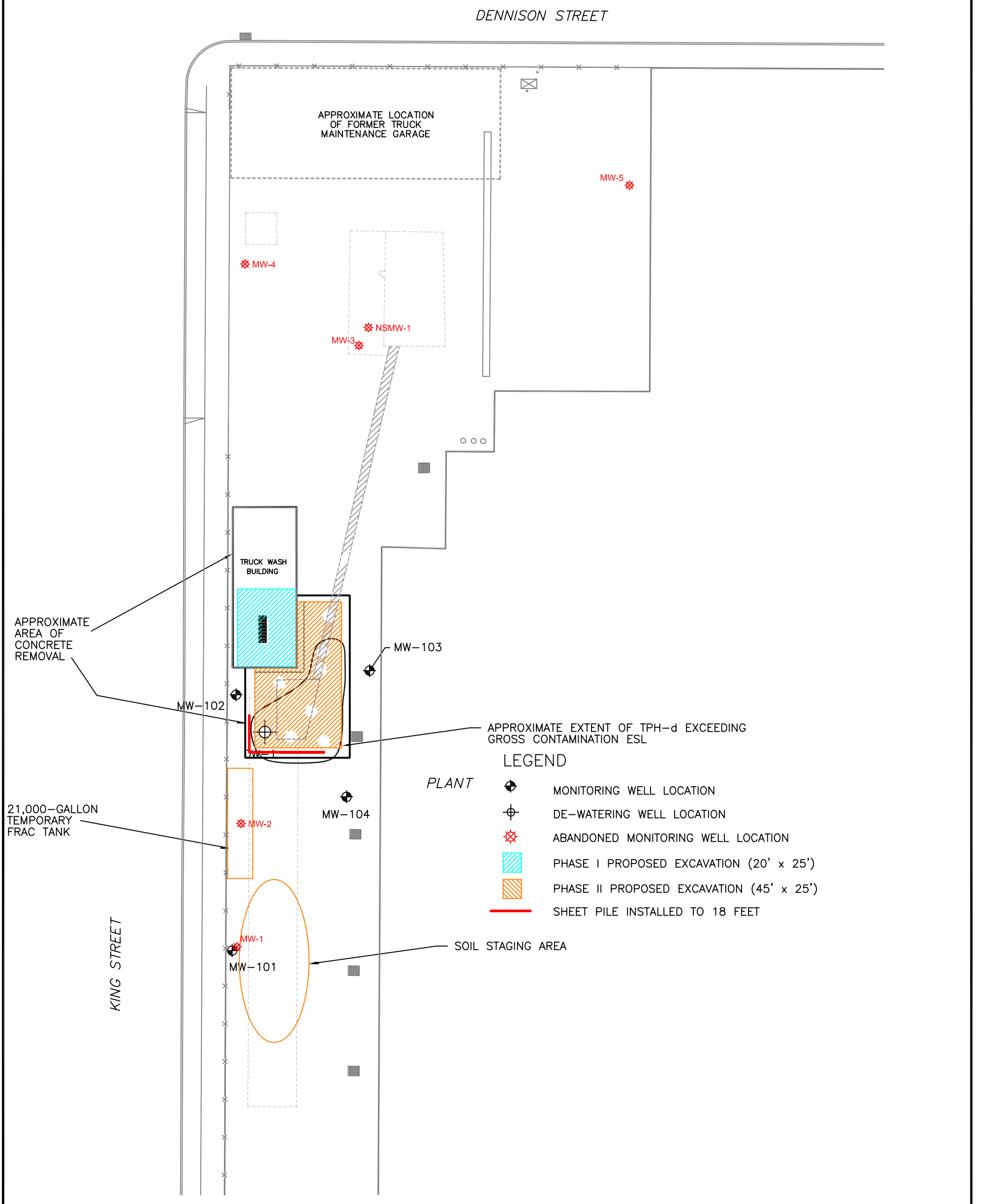
DWN:	DES.:
TMM	JRC
CHKD:	APPD:
DATE: 9/17/09	REV.: 0

PROJECT NO.: 62402797

EARTHGRAINS
OAKLAND, CALIFORNIA

FIGURE 7

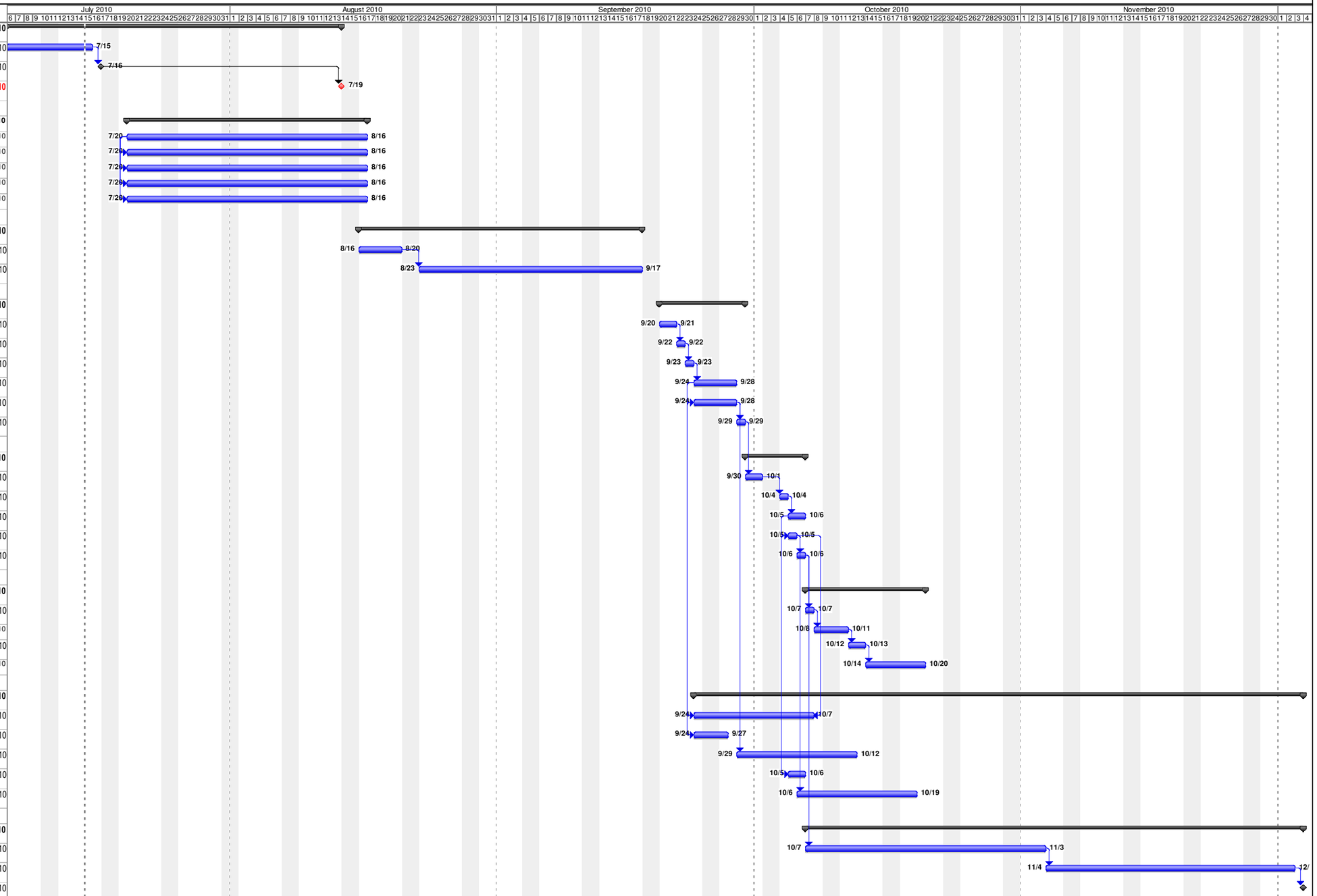
COL. 624\02797B-014



PSC	TITLE: PROPOSED EXCAVATION AREA AND EQUIPMENT LAYOUT	DWN: TMM / DES.: JRC CHKD: / APPD: DATE: 9/17/09 / REV.: 0	PROJECT NO.: 62402797 EARTHGRAINS OAKLAND, CALIFORNIA	FIGURE 8

Figure 9
Source Removal Corrective Action Schedule

ID	Task Name	Duration	Start
1	**Feasability Study/Corrective Action Plan**	**29 days**	**Tue 7/6/10**
2	Draft plan preparation	8 days	Tue 7/6/10
3	FS/CAP submitted to ACEH	1 day	Fri 7/16/10
4	**ACEH Approval of CAP**	**20 days**	**Mon 7/19/10**
5			
6	**Permitting**	**20 days**	**Tue 7/20/10**
7	Dewatering Permit	20 days	Tue 7/20/10
8	Construction/Demolition Permit	20 days	Tue 7/20/10
9	Sewer Permit	20 days	Tue 7/20/10
10	Excavation Permit	20 days	Tue 7/20/10
11	Obstruction Permit	20 days	Tue 7/20/10
12			
13	**Dewatering**	**25 days**	**Mon 8/16/10**
14	Pump and Tank Install	5 days	Mon 8/16/10
15	Pumping	20 days	Mon 8/23/10
16			
17	**Excavation Phase I**	**8 days**	**Mon 9/20/10**
18	Building demolition	2 days	Mon 9/20/10
19	Stem Wall cut and remove	1 day	Wed 9/22/10
20	Truck Wash Building Floor Slab Removal	1 day	Thu 9/23/10
21	Excavate contaminated soil	3 days	Fri 9/24/10
22	Confirmational Sampling	3 days	Fri 9/24/10
23	Backfill and compaction	1 day	Wed 9/29/10
24			
25	**Excavation Phase II**	**5 days**	**Thu 9/30/10**
26	Concrete Removal	2 days	Thu 9/30/10
27	Shoring or sheet piling South of DW-1	1 day	Mon 10/4/10
28	Excavate contaminated soil	2 days	Tue 10/5/10
29	Confirmational Sampling	1 day	Tue 10/5/10
30	Backfill and compaction	1 day	Wed 10/6/10
31			
32	**Surface Restoration**	**10 days**	**Thu 10/7/10**
33	Finish compaction of subbase fill	1 day	Thu 10/7/10
34	dowling and steel mat	2 days	Fri 10/8/10
35	Concrete Replacement	2 days	Tue 10/12/10
36	Concrete Cure	5 days	Thu 10/14/10
37			
38	**Confirmation Sampling and Analysis**	**51 days**	**Fri 9/24/10**
39	Sample submittal	10 days	Fri 9/24/10
40	Phase I Rush Sample Analysis	2 days	Fri 9/24/10
41	Phase I Final Sample Analysis	10 days	Wed 9/29/10
42	Phase II Rush Sample Analysis	2 days	Tue 10/5/10
43	Phase II Final Sample Analysis	10 days	Wed 10/6/10
44			
45	**Report Preparation**	**42 days**	**Thu 10/7/10**
46	Draft	20 days	Thu 10/7/10
47	Final	21 days	Thu 11/4/10
48	Report Submittal	1 day	Fri 12/3/10



Project: CAP Schedule
Date: Thu 7/15/10

Task | Milestone | Rolled Up Task | Rolled Up Progress | External Tasks | Group By Summary
Progress | Summary | Rolled Up Milestone | Split | Project Summary | Deadline

APPENDIX A

REGULATORY CORRESPONDENCE

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
ALEX BRISCOE, Agency Director

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

May 20, 2010

Mr. Melvin Siegel (*Sent via E-mail to: melvin.siegel@saralee.com*)
Environmental Manager
Earthgrains Baking Companies, Inc.
955 Kennedy Street
Oakland, CA 94606

Subject: Feasibility Study / Corrective Action Plan For Fuel Leak Case No. RO0002569 and GeoTracker Global ID T0600177342, Earthgrains Baking Company, Inc., 955 Kennedy Street, Oakland, California, 94606

Dear Mr. Siegel:

Thank you for the recently submitted document entitled, "Tier 1 Risk Assessment and No Further Action Request Report," dated September 17, 2009, which was prepared PSC Industrial Outsourcing, LP (PSC) for the subject site. Alameda County Environmental Health (ACEH) staff has reviewed the case file including the above-mentioned report for the above-referenced site. PSC oversaw the installation of four groundwater monitoring wells and one dewatering well, conducted aquifer testing to determine hydraulic conductivity, and performed groundwater monitoring at the site. PSC also conducted a Tier 1 Risk evaluation and has stated "that no further corrective action is necessary for the unauthorized release of petroleum hydrocarbons at the Site."

ACEH respectfully disagrees that the site is ready for case closure consideration since significantly elevated concentrations of petroleum hydrocarbons, indicative of "free product," remain in shallow soil and groundwater at the site and a risk evaluation for this shallow contamination was not conducted. Therefore, case closure evaluation cannot be considered at this time. ACEH requests that you address the following technical comments and send us the technical reports described below

Please note that this decision is subject to appeal to the State Water Resources Control Board (SWRCB), pursuant to Section 25299.39.2(b) of the Health and Safety Code (Thompson-Richter Underground Storage Tank Reform Act - Senate Bill 562). Please contact the SWRCB Underground Storage Tank Program at (916) 341-5851 for information regarding the appeal process.

TECHNICAL COMMENTS

1. **Feasibility Study/Corrective Action Plan** – Four two-inch diameter groundwater-monitoring wells (MW-101 through MW-104) and one six-inch diameter dewatering well (DW-1) were installed at the Site in January 2009. The monitoring wells MW-101 and MW-102 have screened intervals from 18 to 28 feet bgs, monitoring wells MW-103 and 104 have screened intervals from 10 to 25 feet bgs, and the dewatering well has a screened interval from 5 to 15

feet bgs. Most recent groundwater sample analytical results collected on January 28, 2010 from the newly installed monitoring wells detected TPH-d at a maximum of 68 µg/L. Based on the analytical data and reported groundwater flow direction, the extent of dissolved phase hydrocarbons in the deeper water-bearing unit appears adequately characterized at this time.

However, the shallow water-bearing unit, referred by PSC as "perched water," appears significantly impacted with TPH-d and was omitted from any risk evaluation. Concentrations of TPH-d have been detected as high as 8,300 mg/kg in soil and as high as 3,500,000 µg/L in groundwater. Although naphthalene was not detected in the most recent groundwater sample event, it is not clear whether naphthalene analysis was conducted during previous site characterizations since naphthalene analysis is not included in the historical analytical data tables. Based on the analytical data, significant residual source area appears to exist in shallow soil and groundwater and corrective action is warranted.

To that end, please submit a Feasibility Study/Corrective Action Plan (FS/CAP) prepared in accordance with Title 23, California Code of Regulations, Section 2725. The FS/CAP must include a concise background of soil and groundwater investigations performed in connection with this case and an assessment of the residual impacts of the chemicals of concern (COCs) for the site and the surrounding area where the unauthorized release has migrated or may migrate. The FS/CAP should also include, but not limited to, a detailed description of site lithology, including soil permeability, and most importantly, contamination cleanup levels and cleanup goals. Please note that soil cleanup levels should ultimately (within a reasonable timeframe) achieve water quality objectives (cleanup goals) for groundwater in accordance with San Francisco Regional Water Quality Control Board Basin Plan. Currently, groundwater in the vicinity of the site is designated as potential beneficial use. Please propose appropriate cleanup levels and cleanup goals, including the time frame necessary to achieve both cleanup levels and cleanup goals, in accordance with 23 CCR Section 2725, 2726, and 2727 in the FS/CAP.

The FS/CAP must evaluate at least three viable alternatives for remedying or mitigating the actual or potential adverse effects of the unauthorized release(s) in addition to the 'no action' and 'monitored natural attenuation' remedial alternatives. Each alternative shall be evaluated for cost-effectiveness and the Responsible Party must propose the most cost-effective corrective action. Please submit the FS/CAP by the date specified below.

NOTIFICATION OF FIELDWORK ACTIVITIES

Please schedule and complete the fieldwork activities by the date specified below and provide ACEH with at least three (3) business days notification prior to conducting the fieldwork, including routine groundwater sampling.

TECHNICAL REPORT REQUEST

Please submit technical reports to ACEH (Attention: Paresh Khatri), according to the following schedule:

- **July 19, 2010** – Feasibility Study/Corrective Action Plan

- **Due within 30 Days of Sampling** – Semi-annual Monitoring Report (4th Quarter 2010)
- **Due within 30 Days of Sampling** – Semi-annual Monitoring Report (1st Quarter 2011)

Thank you for your cooperation. Should you have any questions or concerns regarding this correspondence or your case, please call me at (510) 777-2478 or send me an electronic mail message at paresh.khatri@acgov.org.

Sincerely,

Digitally signed by Paresh Khatri
DN: cn=Paresh Khatri, o=Alameda County Environmental Health, ou=Local Oversight Program, email=Paresh.Khatri@acgov.org, c=US
Date: 2010.05.20 16:34:06 -07'00'

Paresh C. Khatri
Hazardous Materials Specialist

Enclosure: Responsible Party(ies) Legal Requirements/Obligations
ACEH Electronic Report Upload (ftp) Instructions

cc: John Carrow, PSC Environmental Services, 210 West Sand Bank Road, Columbia ,Illinois, 62236 (*Sent via E-mail to: JCarrow@pscnow.com*)
Scott Jander, PSC Environmental Services, 210 West Sand Bank Road, Columbia, Illinois, 62236 (*Sent via E-mail to: SJander@pscnow.com*)
Leroy Griffin, Oakland Fire Department, 250 Frank H. Ogawa Plaza, Ste. 3341, Oakland, CA 94612-2032 (*Sent via E-mail to: lgriffin@oaklandnet.com*)
Donna Drogos, ACEH (*Sent via E-mail to: donna.drogos@acgov.org*)
Paresh Khatri, ACEH (*Sent via E-mail to: paresh.khatri@acgov.org*)
GeoTracker
File

Responsible Party(ies) Legal Requirements/Obligations

REPORT REQUESTS

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/electronic_submittal/report_rqmts.shtml.

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.

UNDERGROUND STORAGE TANK CLEANUP FUND

Please note that delays in investigation, later reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

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.

Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC)	**ISSUE DATE:** July 5, 2005
	REVISION DATE: March 27, 2009
	PREVIOUS REVISIONS: December 16, 2005, October 31, 2005
SECTION: Miscellaneous Administrative Topics & Procedures	**SUBJECT:** Electronic Report Upload (ftp) Instructions

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.

REQUIREMENTS

- Entire report including cover letter must be submitted to the ftp site as **a single portable document format (PDF) with no password protection**. (Please do not submit reports as attachments to electronic mail.)
- It is **preferable** that reports be converted to PDF format from their original format, (e.g., Microsoft Word) rather than scanned.
- Signature pages and perjury statements **must** be included and have either original or electronic signature.
- **Do not password protect the document**. Once indexed and inserted into the correct electronic case file, the document will be secured in compliance with the County's current security standards and a password. **Documents with password protection will not be accepted.**
- Each page in the PDF document should be rotated in the direction that will make it easiest to read on a computer monitor.
- Reports must be named and saved using the following naming convention:
  RO#_Report Name_Year-Month-Date (e.g., RO#5555_WorkPlan_2005-06-14)

Additional Recommendations

- A separate copy of the tables in the document should be submitted by e-mail to your Caseworker in **Excel** format. These are for use by assigned Caseworker only.

Submission Instructions

1) Obtain User Name and Password:
   a) Contact the Alameda County Environmental Health Department to obtain a User Name and Password to upload files to the ftp site.
      i) Send an e-mail to dehloptoxic@acgov.org
         Or
      ii) Send a fax on company letterhead to (510) 337-9335, to the attention of My Le Huynh.
   b) In the subject line of your request, be sure to include **"ftp PASSWORD REQUEST"** and in the body of your request, include the **Contact Information, Site Addresses**, and the **Case Numbers (RO# available in Geotracker) you will be posting for.**

2) Upload Files to the ftp Site
   a) Using Internet Explorer (IE4+), go to ftp://alcoftp1.acgov.org
      (i) Note: Netscape and Firefox browsers will not open the FTP site.
   b) Click on File, then on Login As.
   c) Enter your User Name and Password. (Note: Both are Case Sensitive.)
   d) Open "My Computer" on your computer and navigate to the file(s) you wish to upload to the ftp site.
   e) With both "My Computer" and the ftp site open in separate windows, drag and drop the file(s) from "My Computer" to the ftp window.

3) Send E-mail Notifications to the Environmental Cleanup Oversight Programs
   a) Send email to dehloptoxic@acgov.org notify us that you have placed a report on our ftp site.
   b) Copy your Caseworker on the e-mail. Your Caseworker's e-mail address is the entire first name then a period and entire last name @acgov.org. (e.g., firstname.lastname@acgov.org)
   c) The subject line of the e-mail must start with the RO# followed by **Report Upload**. (e.g., Subject: RO1234 Report Upload) If site is a new case without an RO# use the street address instead.
   d) If your document meets the above requirements and you follow the submission instructions, you will receive a notification by email indicating that your document was successfully uploaded to the ftp site.