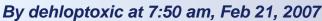
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February 9, 2007

Don Hwang Hazardous Materials Specialist Alameda County Health Care Services Agency 1131 Harbor Bay Parkway Alameda, California 94502-6577

Dear Mr. Hwang:

Subject:

Remedial Investigation Work Plan

Reference:

Earthgrains Baking Companies, Inc.

955 Kennedy Street

Oakland, California 94606

RO #0002569

On behalf of the Earthgrains Baking Companies, Inc., PSC Environmental Services (PSC) is pleased to submit the enclosed *Remedial Investigation Work Plan* for the above-referenced facility. PSC subcontracted ETIC Engineering, Inc. (ETIC) to prepare this work plan in response to the technical report request in correspondence from the Alameda County Health Care Services Agency dated August 25, 2006.

If you have any questions concerning this work plan, then please contact Thomas Neely of ETIC at (925) 602-4710 (x 17).

Respectfully,

PSC Environmental Services

Scott Jander

Project Manager

cc: Melvin Siegel - Earthgrains Baking Companies, Inc.

Thomas Neely - ETIC Engineering, Inc.



Remedial Investigation Work Plan

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

RO #0002569

February 2007

Prepared For:

PSC Environmental Services 210 West Sand Bank Road Columbia, Illinois 62236

Prepared By:

ETIC Engineering, Inc. 2285 Morello Avenue Pleasant Hill, California 94523



Remedial Investigation Work Plan

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

RO #0002569

February 2007

Prepared For:

PSC Environmental Services 210 West Sand Bank Road Columbia, Illinois 62236

Prepared By:

ETIC Engineering, Inc. 2285 Morello Avenue Pleasant Hill, California 94523

David R. Pew Staff Geologist

Date

Thomas E. Neely, PG, CHG, REA II

Program Manager

THOMAS E. NEELY OF No. 7652

February 8, 2007

EEKWARY

Date

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GENERAL INFORMATION

Site Location

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

Alameda County

Township 2 South, Range 3 West, Section 7 of the Mt. Diablo Baseline and Meridian

Responsible Party

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

Melvin Siegel Environmental Manager (510) 436-5350 melvin.siegel@saralee.com

Owner's Representative

PSC Environmental Services 210 West Sand Bank Road Columbia, Illinois 62236

Scott Jander Project Manager (618) 281-1546 sjander@pscnow.com

Environmental Consultant

ETIC Engineering, Inc. 2285 Morello Avenue Pleasant Hill, California 94523

Thomas Neely Program Manager (925) 602-4710 tneely@eticeng.com

Regulatory Agency

Alameda County Health Care Services Agency 1131 Harbor Bay Parkway Alameda, California 94502-6577

Don Hwang Hazardous Materials Specialist (510) 567-6746 don.hwang@acgov.org

1.0 INTRODUCTION

On behalf of PSC Environmental Services (PSC), ETIC Engineering, Inc. (ETIC) has prepared this *Remedial Investigation Work Plan* for the Earthgrains Baking Companies, Inc. (Earthgrains) facility located at 955 Kennedy Street in Oakland, California (Figure 1). The objective of this subsurface investigation is to further evaluate the lateral extent of petroleum hydrocarbons in soil and groundwater at the site (Site) in preparation for remediation. To achieve this objective, ETIC will perform the following activities:

- Drill soil borings in the vicinity of the former truck maintenance garage that was located in the northwestern corner of the Site;
- Drill soil borings in the vicinity of the former diesel pump island that was removed in 2005;
- Collect soil and groundwater samples for laboratory analyses;
- Compile and evaluate the hydrogeologic and laboratory analytical data; and
- Prepare a written remedial investigation report for PSC.

PSC is submitting this work plan to the Alameda County Health Care Services Agency (ACHCSA) for concurrence and approval. The scope of services presented in this work plan were developed based upon data obtained from the soil and groundwater quality investigation performed in September 2006 (ETIC 2006d).

2.0 SITE BACKGROUND

2.1 DESCRIPTION OF THE SITE AND VICINITY

The Site occupies approximately five acres of land in Oakland, California (Figure 1). Earthgrains (formerly Kilpatrick's Bakeries, Inc.) currently owns and operates a 105,000 square-foot plant consisting of a bakery, product distribution center, and retail outlet store at the Site (Figure 2). An asphalt-paved parking area and driveway border the eastern and western sides of the Site and six truck loading docks are situated in the northwestern portion of the facility. A stand-alone truck wash building is located west of the plant and a truck maintenance garage was formerly located in the northwestern corner of the Site (Figure 3). The Site is bounded by Dennison Street to the north, Frederick Street to the south, Kennedy Street to the east, and King Street to the west. Surrounding properties to the north, south, and west of the Site are industrial and commercial businesses. Interstate 880 is located due east of Kennedy Street.

2.2 REGIONAL GEOLOGY AND HYDROGEOLOGY

The Site is located in the East Bay Plain Subbasin of the Santa Clara Valley Groundwater Basin. The East Bay Plain Subbasin 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 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 Subbasin aquifer system consists of unconsolidated deposits of Quaternary age. Deposits include the early Pleistocene Santa Clara Formation, the late Pleistocene Alameda Formation, the early Holocene Temescal Formation, and Artificial Fill. The cumulative thickness of the unconsolidated deposits is about 1,000 feet (Department of Water Resources (DWR) 2003).

Early Pleistocene Santa Clara Formation

The Santa Clara Formation consists of alluvial fan deposits inter-fingered with lake, swamp, river channel, and flood plain deposits. The formation ranges from 300 to 600 feet thick (DWR 2003).

Late Pleistocene Alameda Formation

The Alameda Formation includes a sequence of alluvial fan deposits. The formation was deposited primarily in an estuarine environment and ranges from 26 to 245 feet thick (DWR 2003).

Early Holocene Temescal Formation

The Temescal Formation is an alluvial deposit consisting primarily of silt and clay with some gravel layers. The formation ranges from 1 to 50 feet thick (DWR 2003).

Artificial Fill

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

2.3 LOCAL GEOLOGY AND HYDROGEOLOGY

Historical boring logs indicate that the Site is underlain by varying amounts of clay, silt, sand, and gravel. The predominant soil types beneath the Site consist primarily of clay and silty clay. During drilling activities performed at the Site in the 1990's, groundwater was first encountered within a sand and gravel layer located at depths of 18 to 26 feet below-ground-surface (BGS). Reportedly, in some borings, a small amount of perched groundwater was encountered in a thin sandy and silty lens located between 10 and 12 feet BGS. In September 2006, groundwater was first encountered in the soil borings at depths ranging from approximately 9.5 to 24 feet BGS. Groundwater in some of the borings was subsequently measured at approximately 9 to 19 feet BGS. Figure 3 shows the traces of three geologic cross-sections prepared from the logs of borings drilled at the Site. Figures 4 and 5 illustrate the three cross-sections. Historical monitoring data indicate that groundwater flows generally toward the southwest with a hydraulic gradient ranging from approximately 0.005 to 0.01 feet-per-linear foot (ft/ft).

2.4 TOPOGRAPHY AND SURFACE WATER

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

Brooklyn Basin, an estuary of San Francisco Bay that lies between Oakland (to the east) and Coast Guard Island (to the west), is located approximately 1,000 feet southwest of the Site. Sausal Creek flows generally to the south, and empties into San Francisco Bay approximately 4,400 feet southeast of the Site. Sausal Creek appears to be contained in an underground culvert for approximately the final 1.3 miles of its course. An unnamed creek flows into the Brooklyn Basin approximately 1,800 feet to the northwest of the Site near the intersection of 12th Street and 19th Avenue (Sowers 2000).

3.0 UST HISTORY

Earthgrains operated eight underground storage tank (UST) systems at the Site from 1967 to 2005. A UST system includes the storage tank, associated vent and product piping, dispenser, dispensing island, and ancillary equipment. Earthgrains installed one 10,000-gallon gasoline, one 10,000-gallon diesel, and one 350-gallon waste oil UST systems adjacent to the former truck maintenance garage in 1967. Earthgrains installed four 10,000-gallon diesel UST systems in a common excavation along the western boundary of the Site in 1977 (Figure 2). The four diesel tanks provided a back-up fuel system for the bakery ovens in the plant. Earthgrains removed the seven UST systems for permanent closure from 1989 to 1991 and

installed one replacement 10,000-gallon diesel UST system (the eighth UST system) in 1991. The diesel tank was installed in the former excavation of the 10,000-gallon gasoline and diesel tanks (Figures 2 and 3). The new STI-P₃® tank was constructed of dual-wall steel and protected with a fiberglass-reinforced plastic (FRP) coating on the secondary tank (John Mathes & Associates, Inc. 1991). Earthgrains removed the 10,000-gallon diesel UST system (Tank #8) for permanent closure in 2005. The Alameda County Department of Environmental Health (ACDEH) closed the first environmental case for the Site in 1996.

3.1 HISTORICAL ENVIRONMENTAL CASE FOR THE SITE

Removal of Four 10,000-Gallon Diesel UST Systems

Earthgrains removed four 10,000-gallon diesel tanks for permanent closure on October 11, 1989. The approximate location of the former tanks is shown on Figure 2. The diesel tanks provided a back-up fuel system for the bakery ovens in the plant. During the UST removal activities, diesel-impacted soil was excavated and removed from the common tank excavation for offsite disposal. Following excavation activities, soil samples were collected from the floor and sidewalls of the common tank excavation and submitted for laboratory analysis. Laboratory analytical data indicate that total petroleum hydrocarbons quantified as diesel (TPH-d) and benzene, toluene, ethylbenzene, and total xylenes (BTEX) were not detected in the confirmation soil samples (John Mathes & Associates, Inc. 1990). One water sample collected from the northern portion of the common tank excavation at a depth of approximately 18 feet BGS contained TPH-d at 49 milligrams-per-liter, but did not contain detectable concentrations of BTEX (John Mathes & Associates, Inc. 1990). Earthgrains submitted UST closure documentation to the ACDEH in December 1989.

Removal of 10,000-Gallon Gasoline and Diesel UST Systems

Earthgrains removed one 10,000-gallon gasoline and one 10,000-gallon diesel UST systems for permanent closure on December 12, 1990. The gasoline and diesel tanks shared a common excavation south of the former truck maintenance garage (Figure 3). During the closure activities, petroleum-hydrocarbon impacted soil was excavated and removed for offsite disposal. Soil samples were collected from the common excavation and submitted for laboratory analysis. Laboratory analytical data indicate that total petroleum hydrocarbons quantified as gasoline (TPH-g), TPH-d, and BTEX were not detected in the confirmation soil samples. One groundwater sample collected from the common tank excavation at a depth of approximately 17 to 18 feet BGS contained toluene at 0.7 micrograms-per-liter (μg/L), ethylbenzene at 2.6 μg/L, and total xylenes at 2.3 μg/L. TPH-g, TPH-d, and benzene were not detected in the groundwater sample (John Mathes & Associates, Inc. 1991). Following excavation and sampling, a 6-inch diameter well of unknown construction (designated NSMW-1) was installed (Burlington Environmental, Inc. 1993). At this time, one new 10,000-gallon diesel tank was installed in the excavation, replacing the two previous 10,000-gallon tanks.

The new 10,000-gallon STI-P₃® tank was installed between December 1990 and January 1991 (John Mathes & Associates, Inc. 1991).

Removal of 350-Gallon Waste Oil UST System

Earthgrains removed one 350-gallon waste oil UST system for permanent closure on January 28, 1991. The waste oil tank was located south of the former truck maintenance garage near King Street (Figure 3). Approximately 25 cubic yards of impacted soil were excavated and removed for offsite disposal. One soil sample was collected from the excavation at 8 feet BGS and submitted for laboratory analysis. Laboratory analytical data indicate that TPH-g, TPH-d, total oil and grease, BTEX, polychlorinated biphenyls, creosote, volatile organic compounds, and semi-volatile organic compounds were not detected in the confirmation soil sample (John Mathes & Associates, Inc. 1991).

Soil and Groundwater Investigations

In August 1992, Burlington Environmental, Inc. (Burlington) installed groundwater monitoring wells MW-1, MW-2, MW-3, MW-4, and MW-5 to assess the extent of petroleum hydrocarbons in the shallow soil and groundwater beneath the Site (Figure 3).

Groundwater monitoring wells MW-1 and MW-2 were installed downgradient of the four former diesel tanks, along the western property line. Monitoring well MW-3 was installed downgradient of the former gasoline and diesel tanks near the former truck maintenance garage. Monitoring well MW-4 was located downgradient of the former waste oil tank near the western property line. Monitoring well MW-5 was situated upgradient of the former gasoline and diesel tanks in the northern portion of the Site.

From September 1992 to December 1994, groundwater samples were collected from the five wells on nearly a quarterly basis. TPH-d was detected sporadically at concentrations up to 460 μ g/L in MW-1, 720 μ g/L in MW-2, 100 μ g/L in MW-4, and 100 μ g/L in MW-5.

Total petroleum hydrocarbons quantified as motor oil (TPH-mo) was detected sporadically at concentrations up to 470 μ g/L in MW-1, 710 μ g/L in MW-2, 290 μ g/L in MW-3, 690 μ g/L in MW-4, and 1,800 μ g/L in MW-5.

TPH-g was detected occasionally at concentrations up to 54 μ g/L in MW-5.

One groundwater sample collected from MW-1 contained toluene at 0.35 μ g/L. One groundwater sample collected from MW-5 contained benzene at 0.39 μ g/L, toluene at 0.39 μ g/L, and total xylenes at 0.56 μ g/L. The BTEX compounds were not detected in the other samples. By the December 1994 sampling event, petroleum hydrocarbons were no longer detected in the groundwater samples.

Groundwater samples collected from MW-4 and MW-5 also contained trichloroethene (TCE) up to 39 μ g/L, cis-1,2 dichloroethene (cis-1,2-DCE) up to 65 μ g/L, vinyl chloride up to 1.2 μ g/L, carbon disulfide up to 6.4 μ g/L, chloroform up to 1.3 μ g/L, and carbon tetrachloride up to 1.6 μ g/L.

In a report dated January 19, 1995, Burlington noted that ACDEH agreed that the source of TCE and cis-1,2-DCE was offsite (Burlington Environmental, Inc. 1995).

Tier 1 Risk Assessment and Case Closure

In July 1995, PSC submitted a Tier 1 Risk Assessment to address TCE and cis-1,2-DCE contamination in groundwater and to support closure of the environmental case (Philip Environmental Services Corporation 1995b).

By correspondence dated March 4, 1996, ACDEH closed the environmental case for the Site and requested that the monitoring wells be decommissioned. The wells were decommissioned in April 1996, as documented in the "Notification of Well Abandonment," dated April 4, 1996 (Philip Environmental Services Corporation 1996).

3.2 CURRENT ENVIRONMENTAL CASE FOR THE SITE

Diesel Pump Island Modification

The original pump island associated with the 10,000-gallon diesel UST system was installed northeast of the tank location. Earthgrains removed the diesel pump island and installed a new pump island, island canopy, and approximately 110 feet of dual-wall FRP product piping south of the truck wash building in 1995 (Figure 2). Earthgrains upgraded the diesel dispensing system during March 2003 in order to comply with under-dispenser containment requirements. PSC submitted a *Pump Island Modification and Testing Report* dated May 21, 2003 to the Oakland Fire Department summarizing the pump island modifications and secondary-containment testing performed on the dispensing system.

Two soil borings (Probe Hole-1 and Probe Hole-2) were drilled adjacent to the pump island on April 9, 2003 to assess potential petroleum-hydrocarbon impact from the diesel dispenser and the underground motor oil product piping. Soil sample Probe Hole-1 was collected adjacent to the diesel product piping at a depth of approximately 4.5 feet BGS and sample Probe Hole-2 was collected adjacent to the new motor oil underground product piping at a depth of approximately 3.5 feet BGS. At the direction of the Oakland Fire Department, PSC collected one soil sample from each soil boring for laboratory analysis (Philip Environmental Services Corporation 2005).

Soil samples were collected inside six-inch long brass sample cylinders and submitted to Severn Trent Laboratories, Inc. (STL) for analysis. The BTEX compounds were not detected in the sample collected from Probe Hole-1. Total extractable petroleum hydrocarbons (TEPH) quantified as diesel were detected at 3,300 milligrams-per-kilogram (mg/kg) in the sample collected from Probe Hole-1. TEPH quantified as motor oil was not detected in the sample collected from Probe Hole-2 (Philip Environmental Services Corporation 2005). The analytical data for the soil samples are presented in Table 1.

Removal of 10,000-Gallon Diesel UST System

The City of Oakland Fire Prevention Bureau issued Tank Permit Number T05-0002 on January 19, 2005, authorizing removal of the 10,000-gallon diesel UST system for permanent closure. Earthgrains contracted West Star Environmental, Inc. (West Star) to perform the removal activities and PSC to perform the closure assessment work. PSC subcontracted Castle Analytical Laboratory (Castle) to perform the analytical testing services.

On March 8, 2005, West Star excavated and removed the diesel product piping. Following removal of the diesel product piping, PSC collected one soil sample every 20 feet along the piping trench floor at a depth of approximately 4 feet below pavement surface. The trench soil samples were collected inside six-inch long brass sample cylinders using a backhoe bucket. Following collection, the brass cylinder ends were covered with Teflon tape and polyethylene caps. Soil samples were submitted to Castle for laboratory analysis. The BTEX compounds, fuel oxygenates [di-isopropyl ether (DIPE), ethyl tertiary butyl ether (ETBE), methyl tertiary butyl ether (MTBE), tertiary amyl methyl ether (TAME), and tertiary butyl alcohol (TBA)), and fuel additives (ethylene dibromide (EDB) and ethylene dichloride (EDC)] were not detected in the trench soil samples. Sample Trench-5 contained TPH-g at 48 mg/kg and TPH-d at 1,700 mg/kg. However, Castle noted that the hydrocarbons detected in the gasoline range appeared to be diesel. TPH-g and TPH-d were not detected in the other trench samples. The analytical data for the soil samples are presented in Table 1.

On March 9, 2005, West Star excavated and removed the diesel tank. Soil samples (Excavation-1 and Excavation-2) were collected from the northern and southern endwalls of the tank excavation at the soil-groundwater interface. Soil samples were collected inside clean six-inch long brass sample cylinders using a backhoe bucket. The samples were analyzed by Castle. TPH-g, TPH-d, BTEX, and the five fuel oxygenates were not detected in either soil sample.

One groundwater sample (Excavation Water) was collected from the excavation. The sample was analyzed by Castle. The groundwater sample contained TPH-g at 130 μ g/L, TPH-d at 6,100 μ g/L, and MTBE at 2.7 μ g/L. However, the laboratory noted that the hydrocarbons detected in the gasoline range appeared to be diesel. The BTEX compounds, DIPE, ETBE,

TAME, TBA, EDB, and EDC were not detected in the groundwater sample. The analytical data for the excavation water sample are presented in Table 3.

On April 15, 2005, PSC submitted the *Underground Storage Tank Unauthorized Release* (Leak) / Contamination Site Report to the Oakland Fire Department.

Soil and Groundwater Quality Investigation

In September 2006, ETIC performed a soil and groundwater quality investigation at the Site (ETIC 2006d). ETIC directed the field activities associated with drilling 40 soil borings and collecting 131 soil samples and 38 groundwater samples from the borings for laboratory analyses. Historical soil sampling locations are shown on Figure 3.

Diesel was the primary chemical detected in soil and groundwater samples collected during this investigation. TPH-d was detected in the soil samples at concentrations up to 8,300 mg/kg. For soil, the highest concentrations of TPH-d were detected in the samples collected in the vicinity of the former diesel pump island and southern portion of the former diesel product piping trench. In general, the highest concentrations of TPH-d were detected in soil at depths of less than 16 feet. Elevated levels of TPH-d were also detected in the soil samples collected from borings E1 and E2 drilled near the former truck maintenance garage at depths of 11.5 and 12 feet, respectively. The depths of the elevated concentrations in soil in borings E1 and E2 coincided with the depth to groundwater and diesel impact detected in groundwater. The analytical data for the soil samples are provided in Table 1. TPH-d concentrations in soil are shown on Figure 6.

Four soil samples were analyzed for physical parameters. The analytical data for physical parameters are provided in Table 2.

TPH-d was detected in the groundwater samples at concentrations up to 3,500,000 μ g/L. The highest concentrations of TPH-d in groundwater were detected in the samples collected in the vicinity of the former diesel pump island and southern portion of the former diesel product piping trench. Elevated levels of TPH-d were also detected in the groundwater samples collected from borings E1 and E2. The analytical data for groundwater samples are provided in Table 3. TPH-d concentrations in groundwater are shown on Figure 7. MTBE concentrations in groundwater are shown on Figure 8.

4.0 PROPOSED SCOPE OF SERVICES

Prior to beginning the field program, the proposed boring locations will be marked and checked for the presence of underground utilities by Underground Service Alert. A private utility-locating contractor will be hired to identify the presence of underground utilities. Drilling permits will be obtained from Alameda County Public Works Agency (ACPWA). If required, an encroachment permit for borings located in the street right-of-way will be obtained from the City of Oakland Public Works Agency (OPWA). A health and safety plan will be prepared and implemented during drilling and sampling activities. Each soil boring on the Site will be hand augured to a minimum depth of 4 feet BGS and borings located in the right-of-way will be hand augured to a minimum depth of 8 feet BGS to identify utilities prior to drilling.

4.1 DRILLING AND SOIL SAMPLING

Based upon hydrogeologic information obtained from the Site and other sites in the vicinity, shallow groundwater was determined to flow to the southwest, toward the San Francisco Bay. The results of the previous soil and groundwater quality investigation indicate that additional characterization of the extent of contamination is needed north and west of borings E1 and E2, and south and southwest of the former diesel pump island. The proposed boring locations are shown on Figure 9. Soil and groundwater samples will be collected from all 11 borings. The soil and groundwater samples will be analyzed to assess the extent of petroleum hydrocarbons.

Drilling will be performed by a C57-licensed contractor, using a direct-push drilling rig. All drilling equipment and sampling tools will be decontaminated prior to beginning the field program. Reusable sampling equipment will be thoroughly washed with a Liqui-Nox solution, rinsed with tap water, and then rinsed with distilled water prior to each use. An ETIC geologist will supervise all drilling and sampling activities. Soil samples will be examined for lithologic identification and visible signs of contamination in accordance with the Unified Soil Classification System and the Standard Practice for Description and Identification of Soils (Visual-Manual Procedure), American Society for Testing and Materials (ASTM) Designation D2488 (ASTM 2000), and the observations will be recorded in the field logs. Technical guidance for the program will be provided by a California Professional Geologist.

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

Soil samples will be collected from the 11 borings at approximate 5-foot intervals, at changes in lithology, at the soil-water interface, and where contamination is evident. The samples will

be submitted for laboratory analyses. Additional soil samples may be collected and held for subsequent analysis, pending the results of the initial sample analyses.

The samples will be cut directly from the acetate Geoprobe liners. The liners will be sealed with Teflon tape and vinyl end caps, labeled, stored on ice in a cooler, and transported under chain-of-custody protocol to a state-certified analytical laboratory.

4.2 GROUNDWATER SAMPLING

Each of the soil borings will be drilled into the first aquifer for the collection of groundwater samples. A groundwater sample will be collected from each boring using a new disposable bailer. The samples will be collected in clean 40-milliliter, hydrochloric-acid-preserved, volatile organic analysis (VOA) vials supplied by the analytical laboratory. The sample containers will be sealed, labeled, stored on ice in a thermally-insulated cooler, and then transported under chain-of-custody protocol to a state-certified analytical laboratory.

All reusable groundwater sampling equipment will be thoroughly washed with a Liqui-Nox solution, rinsed with tap water, and then rinsed with distilled water prior to each use. The completed borings will be filled and sealed with a grout mixture consisting of neat cement, in accordance with ACPWA and DWR requirements, under the supervision of an ACPWA grout inspector.

4.3 LABORATORY ANALYSES

The soil and groundwater samples will be analyzed for TPH-d by EPA Method 8015M with a silica gel cleanup and for TPH-g, BTEX, and MTBE by EPA Method 8260B.

4.4 DATA EVALUATION AND REPORTING

ETIC will prepare a written report describing the results of the remedial investigation. The sampling locations will be illustrated on a map of the Site. Field procedures and laboratory methods will be described in the report, and technical data collected during the testing program will be tabulated and evaluated. The report will include a narrative summary of field and analytical data. The analytical data will be compared to regulatory standards. ETIC will present in the report conclusions regarding soil and groundwater quality at the Site. The results of the investigation will be used to complete a remedial action plan for the petroleum hydrocarbon contamination.

4.5 DISPOSAL OF INVESTIGATIVE-DERIVED WASTE

Soil and water derived from the subsurface investigation will be contained in Department of Transportation (DOT)-approved drums stored temporarily at the Site. A soil sample and a water sample will be collected and submitted for laboratory analyses. The samples will be analyzed for TPH-g by EPA Method 8260B, TPH-d and TPH-mo by EPA Method 8015M with a silica gel cleanup, BTEX and MTBE by EPA Method 8260B, and total lead by EPA Method 6010. The waste will be profiled and delivered to an approved disposal facility.

5.0 SCHEDULE

ETIC and PSC would like to perform remediation at the Site in the summer of 2007, during favorable weather conditions and to accommodate the bakery's production and delivery schedule. To meet this schedule, ETIC and PSC wish to perform the remedial investigation in March 2007, and subsequently complete a remedial action plan by May 2007. Drilling and sampling have been tentatively scheduled to be performed during the week of March 12, 2007. The drilling permit has been submitted to ACPWA and if required, the encroachment permit will be submitted to the OPWA. Analytical data will be available five to ten working days after the samples are submitted to the laboratory. The written report will be completed within six weeks following the receipt of analytical data.

6.0 REFERENCES

- American Society for Testing and Materials (ASTM), 2000. Standard Practice for Description and Identification of Soils (Visual-Manual Procedure), ASTM, West Conshohocken, Pennsylvania.
- Alameda County Health Care Services Agency, 2003. Notice of Responsibility, Record ID RO0002569, Sara Lee Bakery, 955 Kennedy Street, Oakland, CA 94606, August 19, 2003.
- Alameda County Health Care Services Agency, 2006. Approval Letter for Work Plan Addendum for Soil and Groundwater Quality Investigation, Record ID RO0002569, Earthgrains Baking Companies, Inc., 955 Kennedy Street, Oakland, CA 94606, August 25, 2006.
- Burlington Environmental Inc., 1993. Soil and Groundwater Investigation Report, 955 Kennedy Street, Oakland, California, Burlington Environmental Project No. CTI106/412, January 5, 1993.
- Burlington Environmental Inc., 1995. Fourth Quarter 1994 Groundwater Monitoring Report and Request for UST Case Closure, 955 Kennedy Street, Oakland, California, Burlington Environmental Project No. 121382/125971, January 19, 1995.
- Department of Water Resources (DWR), 2003. California's Groundwater, Bulletin 118, Update 2003, San Francisco Bay Hydrologic Region, Santa Clara Valley Groundwater Basin, East Bay Plain Subbasin, DWR, Sacramento, California.
- ETIC Engineering Inc., 2006a. Work Plan for Soil and Groundwater Quality Investigation, Earthgrains Baking Companies, Inc., 955 Kennedy Street, Oakland, California 94606, RO# 0002569, April 14, 2006.
- ETIC Engineering Inc., 2006b. Work Plan Addendum for Soil and Groundwater Quality Investigation, Earthgrains Baking Companies, Inc., 955 Kennedy Street, Oakland, California 94606, RO# 0002569, August 11, 2006.
- ETIC Engineering Inc., 2006c. Electronic mail correspondence, ETIC to Mr. Don Hwang of ACHCSA, Regarding Earthgrains Baking Companies, Inc., 955 Kennedy Street, Oakland, California 94606, RO# 0002569, August 25, 2006.

- ETIC Engineering Inc., 2006d. Soil and Groundwater Quality Investigation Report, Earthgrains Baking Companies, Inc., 955 Kennedy Street, Oakland, California 94606, RO# 0002569, December 21, 2006.
- John Mathes & Associates, Inc., 1990. Draft Site Assessment Work Plan, 955 Kennedy Street, Oakland, California, John Mathes & Associates Project No. 121382/4002, February 1990.
- John Mathes & Associates, Inc., 1991. Underground Storage Tank Closure and Installation Report, 955 Kennedy Street, Oakland, California, John Mathes & Associates Project No. 121382/5810, June 7, 1991.
- Philip Environmental Services Corporation, 1995a. Well Destruction Report, 955 Kennedy Street, Oakland, California, PSC Project No. CTI106/125971, July 7, 1995.
- Philip Environmental Services Corporation, 1995b. Tier 1 Risk Assessment, 955 Kennedy Street, Oakland, California, PSC Project No. 121382/125971, July 25, 1995.
- Philip Environmental Services Corporation, 1996. Notification of Well Abandonment, 955 Kennedy Street, Oakland, California, PSC Project No. CTI106/125971.7052, April 4, 1996.
- Philip Environmental Services Corporation, 2005. UST System Closure Report for Earthgrains Baking Companies, Inc., 955 Kennedy Street, Oakland, California, PSC Project No. 62402797, April 15, 2005.
- Sowers, Janet M., 2000. Creek and Watershed Map of Oakland and Berkeley. The Oakland Museum of California.

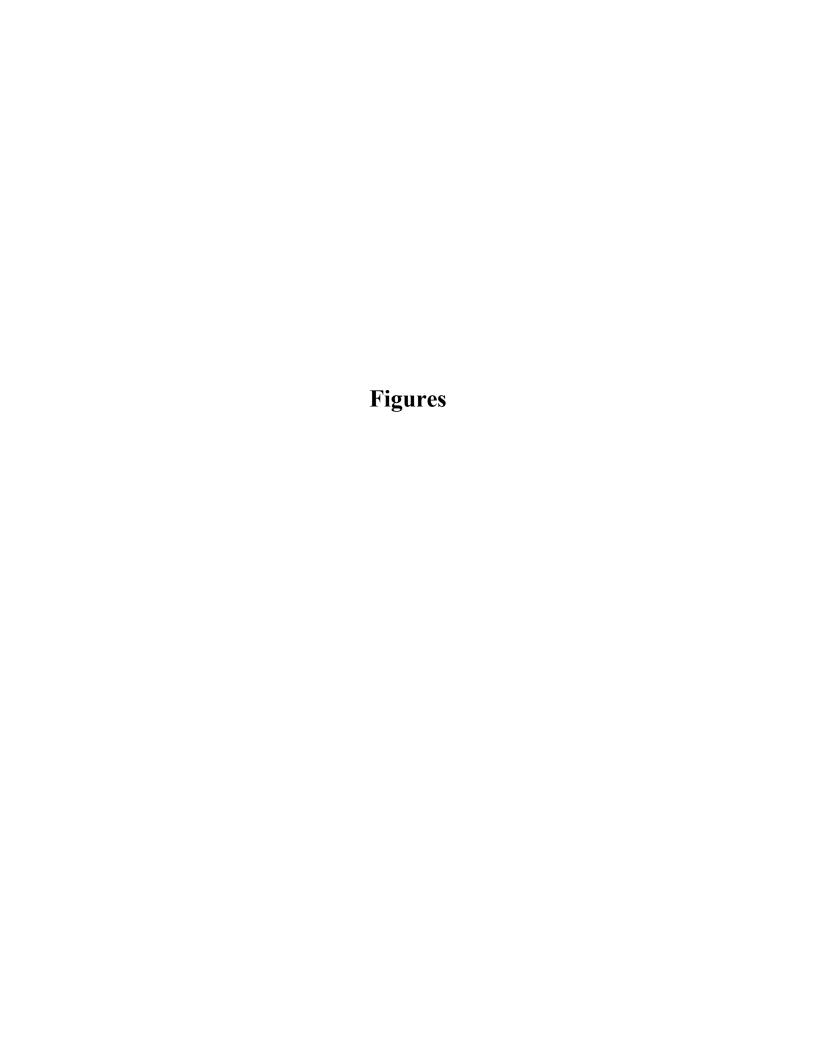




TABLE 1. SOIL SAMPLE ANALYTICAL DATA PETROLEUM HYDROCARBONS AND MTBE
Earthgrains Baking Companies, Inc.
955 Kennedy Street
Oakland, California 94606

						Concentrat	ion (mg/kg)			
		Depth			Ethyl-	Total	(0 0)			
Sample ID	Date	(feet)	Benzene	Toluene	benzene	Xylenes	MTBE	TPH-g	TPH-d	TPH-mo
PROBE HOLE-1	04/09/03	4.5	< 0.62	< 0.62	< 0.62	< 0.62	NA	NA	3,300*	NA
PROBE HOLE-2	04/09/03	3.5	NA	NA	NA	NA	NA	NA	NA	< 50
TRENCH-1	03/08/05	4	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.010	<1.0	<1.0	NA
TRENCH-2	03/08/05	4	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.010	<1.0	<1.0	NA
TRENCH-3	03/08/05	4	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.010	<1.0	<1.0	NA
TRENCH-4	03/08/05	4	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.010	<1.0	<1.0	NA
TRENCH-5	03/08/05	4	< 0.050	< 0.050	< 0.050	< 0.050	< 0.010	48†	1,700	NA
EXCAVATION-1	03/09/05		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.010	<1.0	<1.0	NA
EXCAVATION-2	03/09/05		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.010	<1.0	<1.0	NA
E1	09/15/06	4.5	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	4.0	17#	NA
E1	09/15/06	8	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	<1.0	<1.0	NA
E1	09/15/06	11.5	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	3.5	710	NA
E1	09/15/06	16	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	<1.0	5.8	NA
E1	09/15/06	20	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	<1.0	5.2	NA
E2	09/15/06	8	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	<1.0	<1.0	NA
E2	09/15/06	12	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	8.0	860	NA
E2	09/15/06	16	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	<1.0	1.7	NA
E3	09/22/06	4	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	<1.0	1.8‡	NA
E3	09/22/06	8	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	<1.0	1.0#	NA
E3	09/22/06	12	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	<1.0	<1.0	NA
E3	09/22/06	16	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	<1.0	<1.0	NA
E3	09/22/06	20	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	<1.0	<1.0	NA
E4	09/12/06	10	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	<1.0	5.6‡	NA
E5	09/12/06	5	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	<1.0	1.7‡	NA
E5	09/12/06	10	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	<1.0	<1.0	NA
E5	09/12/06	15	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.017	<1.0	<1.0	NA
E5	09/12/06	20	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.020	<1.0	<1.0	NA
E6	09/12/06	5	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	<1.0	1.7‡	NA
E6	09/12/06	9	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	<1.0	32‡	NA
E6	09/12/06	10	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	<1.0	4.1‡	NA
E7	09/12/06	2.5	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	2.6	73**	NA
E7	09/15/06	3.5	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	<1.0	1.6‡	NA
E7	09/15/06	8	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	<1.0	1.4‡	NA
E7	09/15/06	12	NA	NA	NA	NA	NA	NA	<1.0	NA
E7	09/15/06	16	NA	NA	NA	NA	NA	NA	<1.0	NA
E8	09/12/06	5.5	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	<1.0	1.3‡	NA
E8	09/12/06	10	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	<1.0	<1.0	NA
E8	09/12/06	15	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	<1.0	<1.0	NA
<u>E8</u>	09/12/06	20	< 0.0050	< 0.0050	<0.0050	<0.0050	< 0.0050	<1.0	<1.0	NA
E9	09/21/06	20	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	<1.0	1.3‡	NA
E9	09/21/06	24	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	<1.0	<1.0	NA
E9	09/21/06	28	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	<1.0	<1.0	NA

TABLE 1. SOIL SAMPLE ANALYTICAL DATA PETROLEUM HYDROCARBONS AND MTBE
Earthgrains Baking Companies, Inc.
955 Kennedy Street
Oakland, California 94606

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

TABLE 1. SOIL SAMPLE ANALYTICAL DATA PETROLEUM HYDROCARBONS AND MTBE
Earthgrains Baking Companies, Inc.
955 Kennedy Street
Oakland, California 94606

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

TABLE 1. SOIL SAMPLE ANALYTICAL DATA - PETROLEUM HYDROCARBONS AND MTBE

Earthgrains Baking Companies, Inc.

955 Kennedy Street

Oakland, California 94606

						Concentrati	on (mg/kg)			
		Depth			Ethyl-	Total				
Sample ID	Date	(feet)	Benzene	Toluene	benzene	Xylenes	MTBE	TPH-g	TPH-d	TPH-mo
E38	09/13/06	19	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	NA	<1.0	NA
E39	09/13/06	4	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	NA	1.3‡	NA
E39	09/13/06	9.5	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	NA	3.5	NA
E39	09/13/06	12.5	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	NA	37	NA
E39	09/13/06	17.5	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	NA	<1.0	NA
E40	09/13/06	4.5	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	NA	<1.0	NA
E40	09/13/06	8	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	NA	2.8‡	NA
E40	09/13/06	10	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	NA	190	NA
E40	09/13/06	12	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	NA	18	NA
E40	09/13/06	16	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	NA	<1.0	NA
DRUM1,2,3,4 ‡ ‡	09/22/06		< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	<1.0	8.9‡	26

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.

* The pattern exhibited by the hydrocarbons detected did not match the laboratory's diesel standard.

† The laboratory indicated a "non-gasoline pattern; appears to be diesel."

The hydrocarbons reported as TPH-d do not exhibit a typical diesel chromatographic pattern. These hydrocarbons are

lower boiling than typical diesel fuel.

‡ The hydrocarbons reported as TPH-d do not exhibit a typical diesel chromatographic pattern. These hydrocarbons are

higher boiling than typical diesel fuel.

** Some of the hydrocarbons detected are higher boiling and some are lower boiling than typical diesel fuel.

†† The hydrocarbons reported as TPH-mo do not exhibit a typical motor oil chromatographic pattern. These hydrocarbons are

lower boiling than typical motor oil.

‡‡ DRUM1,2,3,4 was a 4-point composite sample of investigation-derived soil waste. Lead was also detected in DRUM1,2,3,4

at 9.95 mg/kg.

TABLE 2. SOIL SAMPLE ANALYTICAL DATA -

PHYSICAL PARAMETERS

Earthgrains Baking Companies, Inc.

955 Kennedy Street

Oakland, California 94606

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

g/cm³ Grams per cubic centimeter.

% Percentage.

mg/kg Milligrams per kilogram.

Notes: Bulk Density and Porosity are determined using SSSA#5.

Air-Filled Void Space is determined using API 40RP.

Moisture determined by ASTM 2216-92.

Total Organic Carbon determined using Method SM5310B.

TABLE 3. GROUNDWATER SAMPLE ANALYTICAL DATA Earthgrains Baking Companies, Inc. 955 Kennedy Street Oakland, California 94606

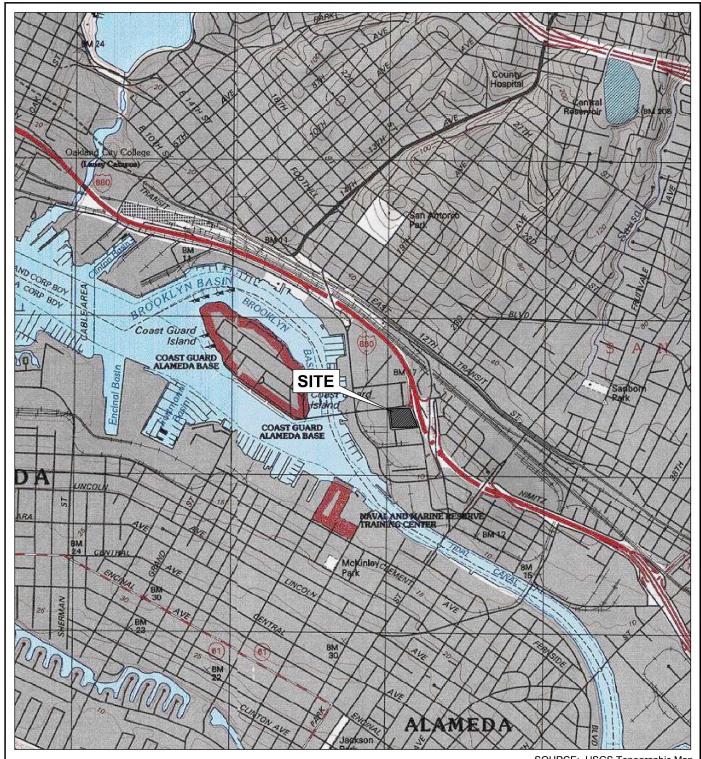
					Concentra	tion (µg/L)		
				Ethyl-	Total				
Sample ID	Date	Benzene	Toluene	benzene	Xylenes	MTBE	TPH-g	TPH-d	TPH-mo
Excavation Water	3/8/05	< 0.50	< 0.50	< 0.50	< 0.50	2.7†	130*	6,100	NA
E1	9/15/06	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	560	360,000	NA
E2	9/15/06	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 50	1,200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

TABLE 3. GROUNDWATER SAMPLE ANALYTICAL DATA Earthgrains Baking Companies, Inc. 955 Kennedy Street Oakland, California 94606

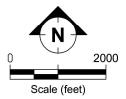
			Concentration (μg/L)							
				Ethyl-	Total					
Sample ID	Date	Benzene	Toluene	benzene	Xylenes	MTBE	TPH-g	TPH-d	TPH-mo	
E36	9/11/06	< 0.50	< 0.50	< 0.50	< 0.50	0.61	NA	1,700,000	NA	
E37	9/13/06	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA	70,000	NA	
E38	9/13/06	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA	3,400	NA	
E39	9/13/06	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA	< 50	NA	
E40	9/13/06	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA	3,100	NA	
DW††	9/22/06	<0.50	<0.50	<0.50	<0.50	<0.50	<50	2,600	<100	
µg/L	Microgram	-	E4							
MTBE TPH-g	-	rtiary Butyl oleum Hydr		uantified as	gasoline.					

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

Figures

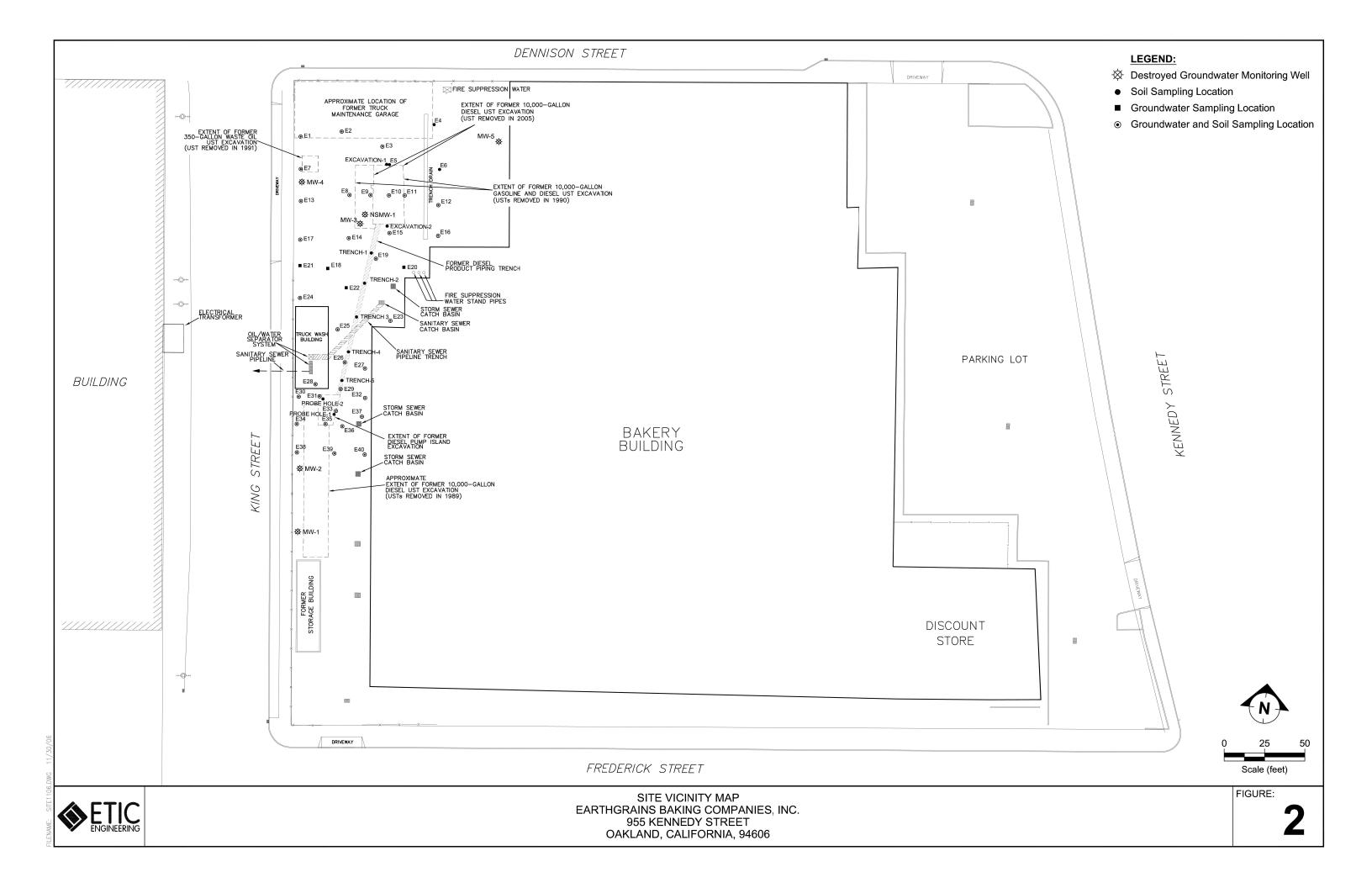


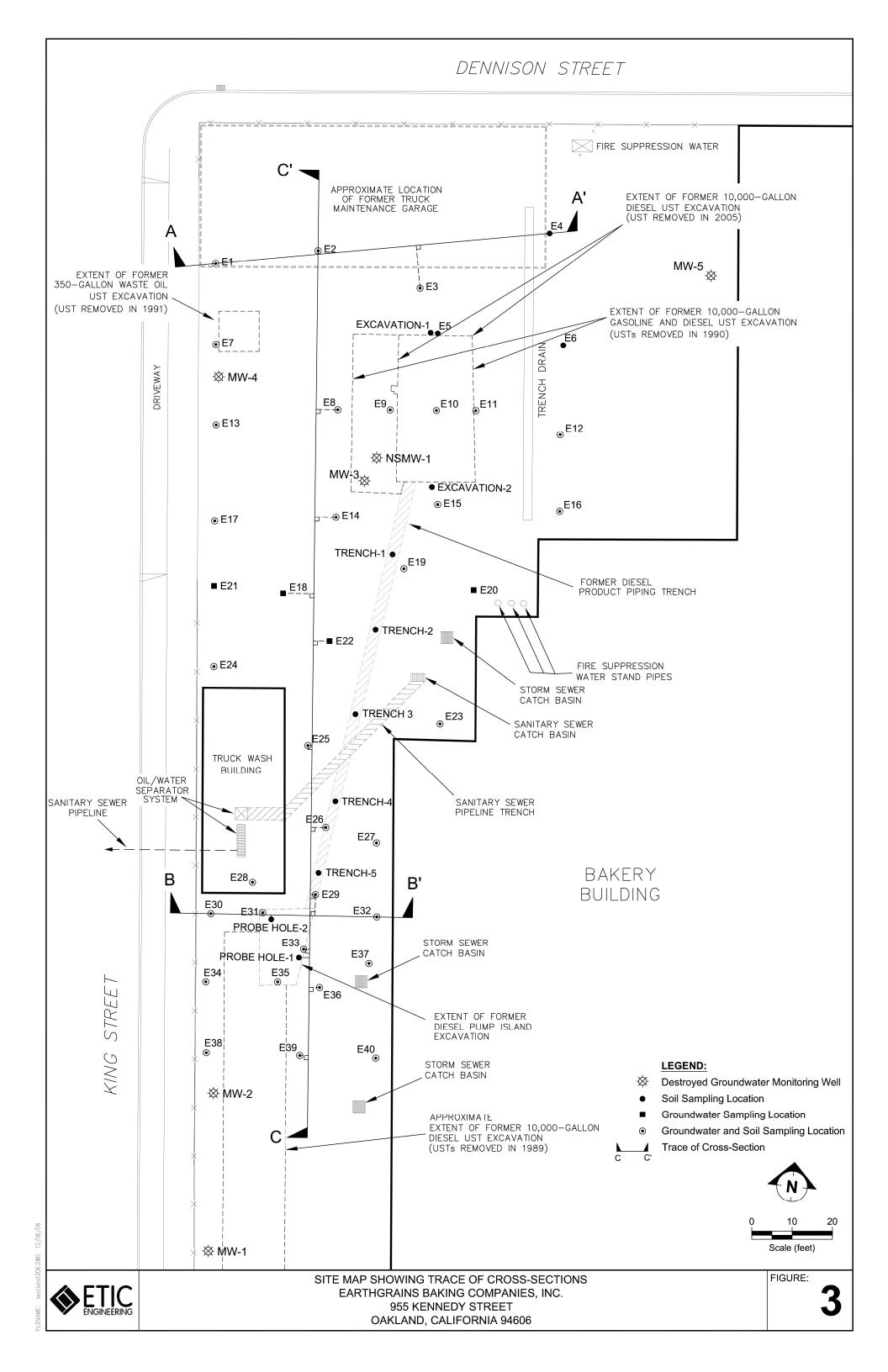
SOURCE: USGS Topographic Map

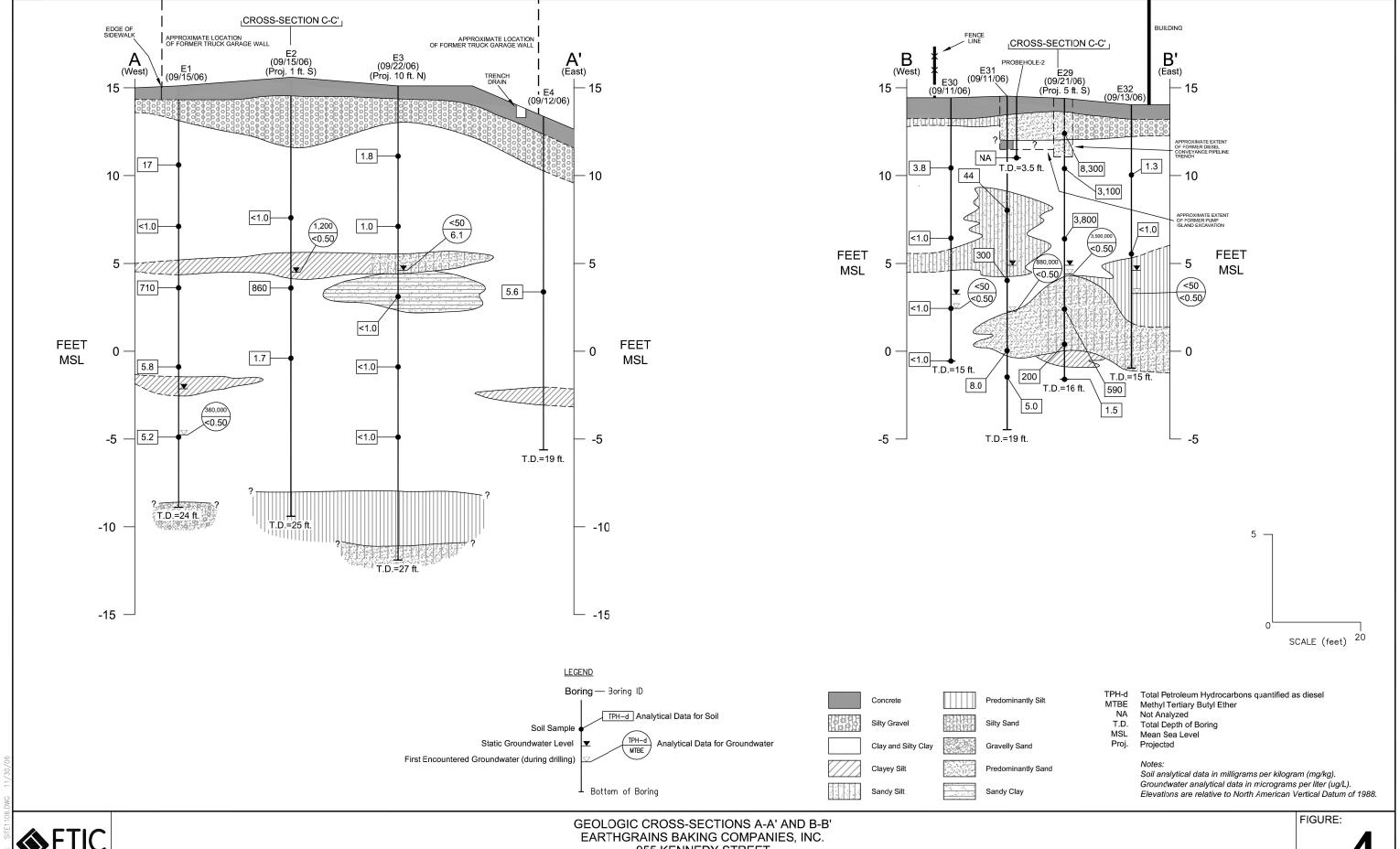


ETIC ENGINEERING

SITE LOCATION AND TOPOGRAPHIC MAP EARTHGRAINS BAKING COMPANIES, INC. 955 KENNEDY STREET OAKLAND, CALIFORNIA 94606 FIGURE:







955 KENNEDY STREET OAKLAND, CALIFORNIA 94606

Figures (5 - 9)

