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Alameda County
Environmental Health

March 13, 2012

Mr. Jerry Wickham, PG
Senior Hazardous Materials Specialist
Alameda County Health Care Services Agency
Environmental Health Services
Environmental Protection
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

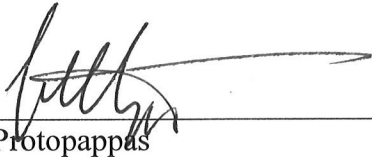
Re: Two Reports:

- 1) Sub-Slab Soil Vapor Sampling Report**
 - 2) Soil and Groundwater Investigation Results**
- P&D 23rd Avenue Associates, LLC
1125 Miller Avenue, Oakland, CA
Clearwater Project No. CB018H
ACEH Fuel Case Leak No. RO0000294

Dear Mr. Wickham,

As the legally authorized representative of the above-referenced project location I have reviewed the attached report prepared by my consultant of record, Clearwater Group. I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document are true and correct to the best of my knowledge.

Sincerely,



John Protopappas
For P&D 23rd Avenue Associates, LLC



February 29, 2012

Mr. Jerry Wickham, PG, CEG, CHG
Hazardous Materials Specialist
Alameda County Health Care Services Agency
Environmental Health Services
Environmental Protection
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502

Re: Soil and Groundwater Investigation Results

P & D 23rd Avenue Associates, LLC
1125 Miller Avenue, Oakland, California
Clearwater Project No. CB018H
Fuel Case Leak No. RO0000294

Dear Mr. Wickham,

Clearwater Group (Clearwater) on behalf of P & D 23rd Avenue Associates, LLC, is pleased to present the results and findings from the November 28, 2011, Subsurface Investigation for the site (*site*) located at 1125 Miller Avenue, Oakland, Alameda County, California (**Figure 1**). A Site Plan is included as **Figure 2**, which presents the *site* features and soil boring locations S1 through S14. This work was approved by Alameda County Environmental Health (ACEH) in a letter dated February 1, 2011 (**Attachment A**). A soil boring and encroachment permit for this work was issued on November 23, 2011 (**Attachment B**). The field event was performed on November 28, 2011.

INTRODUCTION

Diesel characterized as total petroleum hydrocarbons as diesel (TPH-d) is the main contaminant of concern (COC) at the *site*. Since 1998, several evaluations have been made to determine the extent and magnitude of diesel; gasoline (TPH-g); and benzene, toluene, ethylbenzene, and xylenes (BTEX) in the *site*'s soil, groundwater, and soil vapor. On November 28, 2011, three soil borings, S12 through S14 were advanced for the collection of soil and grab groundwater samples. Soil and groundwater sample analytical results and other findings collected during the November 28, 2011, subsurface investigation are the subject of this report.

SITE DESCRIPTION

The *site* was a triangular parcel (now joined as one parcel with the street and property to the north) comprising approximately 5,500 square feet. One building, zoned for mixed-use is situated in the center of the lot. The current uses are primarily residential, commercial, and light-industrial. Several tenants currently reside in this building. A T-shirt silk-screening facility is



located in the building. Historical uses of the *site* include blacksmith/forgings, incinerator, auto garage, soda bottle works, venetian blind factory, a printing press, a US Department of Agriculture (USDA) meat inspection facility, repair of diesel truck parts, a private truck refueling station, and a work-live (silk-screen) T-shirt production facility.

PREVIOUS INVESTIGATIONS

Between 1998 and 2011, four soil boring investigations were performed (2000, 2005, 2006, and 2011) at the *site*. Grab groundwater samples were collected during three of the four investigations. Between 2006 and 2011, five soil vapor sampling events were conducted, the most recent of which took place in December 2011. Recent results and a history of the soil vapor sampling are discussed under separate cover. A complete summary of pertinent *site* environmental investigation activities to date is included in **Attachment C**.

Cumulative Soil Sample Analytical Results are included in **Table 1**. Grab groundwater sample results are provided in **Table 2**, Cumulative Groundwater Sample Analytical Results. Soil vapor results are provided in **Table 3**, Soil Vapor Sample Analytical Results.

PURPOSE OF INVESTIGATION

The purpose of the November 28, 2011, subsurface investigation and drilling of three soil borings (S12 through S14) was to evaluate the lateral and vertical extent of the petroleum hydrocarbon release beneath the *site* and off-site in the cross-groundwater (cross-gradient) flow direction and down-groundwater (down-gradient) flow direction from two former 5,000-gallon underground fuel storage tanks (USTs) and associated delivery/venting improvements. The former UST area and the former dispenser are the known points of release for diesel fuel.

In addition to the diesel at the *site*, TPH-g and BTEX were also evaluated after TPH-g and BTEX were detected in sub-slab soil vapor samples collected between June 2010 and December 2011 during separate soil vapor sampling events. Petroleum hydrocarbon concentrations for soil samples collected during the November 28, 2011 soil and groundwater investigation are shown on **Figure 3**, Soil Sample Analytical Results November 28, 2011. Petroleum hydrocarbon concentrations for grab groundwater samples that were collected during this investigation are provided in **Figure 4**, Grab Groundwater Sample Analytical Results November 28, 2011.

No groundwater monitoring wells are located on *site*. Boring S12 was located in the presumed downgradient direction from the former fuel release (to the west). Boring S13 is in the former tank pit area, and boring S14 is in the presumed upgradient direction from the fuel release as well as near the area where concentrations of petroleum hydrocarbons have been elevated in soil vapor (TPH-g). Soil and groundwater sample analytical results indicate that petroleum hydrocarbons are distributed from the fuel release at the dispenser and tank pit to the west. The groundwater flow direction reported for the Eandi Metal Works, Inc. property at 2440 East 11th Street, one block east of the *site*, is a generally southwesterly direction. At least one potentiometric groundwater elevation survey event using at least three surveyed temporary or permanent monitoring wells would provide a site-specific groundwater flow direction. Additional soil and groundwater data collected south and southwest of the known release area



would also provide information regarding the direction of the release away from the former dispenser and former USTs.

SOIL AND GROUNDWATER INVESTIGATION

Details regarding the November 28, 2011, soil and groundwater investigation are included below:

Workplan

Clearwater submitted a workplan on December 20, 2010, recommending a soil and groundwater investigation and a step out soil vapor survey. A meeting took place on January 19, 2011, with the *site* participants, including one of the owners of P & D 23rd Avenue Associates, LLC, ACEH staff, and Clearwater staff. After this meeting, ACEH staff requested an addendum (clarification) to the December 20, 2010, workplan. Clearwater submitted a January 24, 2011, Revised Workplan, which addressed the recommendations made in the January 19, 2011 letter from ACEH. In their letter dated February 1, 2011, ACEH concurred with the January 24, 2011 Revised Workplan. In general, the Revised Workplan was followed during the work on November 28, 2011. Clearwater's Standard Operating Procedures (SOPs) are provided in **Attachment D**.

Utility Locate

Underground Service Alert North (USA) was notified per USA requirements. The proposed boring locations were marked in white marking paint by Clearwater field personnel. Clearwater personnel contacted USA on November 15, 2011, to request that all subsurface utilities leading to the *site* be marked. USA issued ticket number 387626 to Clearwater on November 21, 2011.

Permits

Prior to conducting field activities, Clearwater obtained a drilling permit from the Alameda County Department of Public Works (ACDPW) on November 23, 2011 (**Attachment B**).

Soil Borings

Soil borings, S12, S13, and S14, were advanced on November 28, 2011, at on-site and off-site locations. Under the supervision of Clearwater staff, Fast-Tek Engineering Support Services of Point Richmond, California (C-57 License No. 6224461) advanced each soil boring using a Geoprobe® 5400 Rig outfitted with a Direct Push Technology Macro-Core® Soil Sampler, which is a single rod system used for soil sampling. The target depth for the three soil borings was 20 feet below ground surface (bgs). One additional 4 foot push to 24 feet bgs was performed at each boring in order to insure that the temporary polyvinyl chloride (PVC) well screen sampling casing could be set within the groundwater-bearing zone. Boring S12 was placed in Calcot Place, approximately 4 feet from the western curb of Calcot Place, and about 65 feet west of S13. Boring S13 was placed in the center of the former UST pit. Boring S14 was placed approximately 12 inches west of the western side of the building, adjacent to the property line. Soil samples were collected at each soil boring at the following depths:



<u>Soil Boring</u>	<u>Sample Depth (feet bgs)</u>
S12	18
S13	11, 14, 19, 23.5
S14	19

Soil Sample Collection

Soil cores were logged continuously for classification in accordance with the Unified Soil Classification System (USCS) and the American Society for Testing and Materials (ASTM) Method D2488. Soil cores were screened with a photo-ionization detector (PID) approximately every foot. For each boring, soil samples with elevated PID readings and/or samples that vertically defined the lithology were retained. All the soil samples identified for laboratory analysis were collected by cutting an approximately 6-inch section from the Macro-Core® Soil Sampler sleeve, sealing each end of the sleeve with Teflon® tape, and capping the sleeve using flexible plastic caps. The samples were labeled, documented on a chain-of-custody form, and preserved in a cooler at approximately 40 degrees Fahrenheit for transport to Kiff Analytical LLC, a California Department of Health Services certified laboratory located in Davis, California. The soil samples were analyzed for TPH-d by EPA method 8015 and for TPH-g and BTEX by EPA method 8260B.

Naming of Soil Samples

The soil borings have an “S” prefix; however the soil samples are named with a “B” prefix followed by the boring number, then a hyphen and the sample depth in feet bgs. The sample depth is measured from the top of the soil sample.

Photoionization Detector Readings on Soil Cores in Parts Per Million

Depth	Boring Number		
	S12	S13	S14
5 feet bgs	0	0	3.0
10 feet bgs	0	0	0
15 feet bgs	0	125	0
20 feet bgs	0	25	0
25 feet bgs	0	0	0

Grab Groundwater Sample Collection

Grab groundwater samples were collected from borings S12, S13, and S14, using 5/16" OD by 1/4" ID polyethylene tubing with a check valve attached to the lower end of the tubing to retrieve the water sample through a 1" PVC temporary well screen placed at the 20- to 24-foot bgs interval. At least one casing volume was purged prior to sample collection. The groundwater samples were labeled, documented on a chain-of-custody form, and placed on ice in a cooler for transport to the laboratory. After the groundwater samples were collected from the borings, each borehole was filled with neat cement grout to the asphalt road, concrete driveway, or sidewalk surface.



Naming of Grab Groundwater Samples

The grab groundwater samples are named according to the boring number.

Lithology

The uppermost soil at the *site* consists of clayey sand to a depth of approximately 5 feet bgs (most likely fill). Below is complexly inter-bedded sandy lean clay, silty sand to sandy silt, and gravel layers to at least 24 feet bgs, the deepest depth explored. The top of the wet soil was encountered between 10 and 12 feet bgs. Soil boring logs S12, S13, and S14 are provided in **Attachment E**. Photographs from the soil and groundwater investigation are provided in **Attachment F**.

Waste Disposal

Approximately 10 gallons of soil cuttings and 5 gallons of water (investigation-derived waste [IDW]) were collected during this investigation. The waste was temporarily stored off-site in a locked steel cage at Clearwater's yard, awaiting disposal. Integrated Waste Management, Inc. collected the soil on January 27, 2012 and a Certificate of Disposal was provided. The IDW water was collected and transported to the InStrat Waste Acceptance Facility on January 18, 2012. The manifests for the transport and disposal of soil and water non-hazardous waste are provided in **Attachment G**.

Soil Sample Results

Soil samples were collected from borings S12, S13, and S14 at differing depth intervals. The depth intervals from which the soil samples were submitted to the analytical laboratory were chosen based on PID results, visual and olfactory observations, proximity to the zone of release (i.e. the bottom of the former UST), and for determining the vertical distribution of COCs.

RESULTS

Soil Sample Analytical Results

The greatest concentration of TPH-d was detected at boring S13 at a depth of 14 feet bgs (1,900 mg/kg). The location of S13 is within the center of the former UST. A minor concentration of TPH-g (65 mg/kg) was also reported in this sample. No BTEX was reported above the detection limits in soil samples from S13. Minor concentrations of TPH-d were detected from samples B12-18 (8.6 mg/kg) and B14-10 (1.0 mg/kg). TPH-g and BTEX were not detected above method detection limits in samples from either S12 or S14.

Grab Groundwater Sample Analytical Results

Grab groundwater samples were collected from borings S12, S13, and S14. The concentrations of TPH-d (36,000 µg/L) and TPH-g (200 µg/L) were greatest at S13. At S12, the TPH-d concentration diminished but was still present, at 1,300 µg/L. A lesser concentration of TPH-d was detected at S14 (290 µg/L).

TPH-g was only detected in the groundwater sample from S13 (at 200 µg/L), but BTEX concentrations were reported below their detection limits in groundwater samples S-12, S-13, and S-14. Cumulative groundwater sample analytical results are provided in **Figure 5**, Cumulative Groundwater Sample Monitoring Data.



The analytical reports for all samples collected during this investigation are provided in **Attachment H**.

DISCUSSION

Source of COCs

Soil and grab groundwater sample data collected during the November 28, 2011, soil boring event indicate that a contaminant source (secondary source) is present in soil under the former tank pit area. The primary source of the diesel is believed to be leaks from the former 5,000-gallon diesel tanks and fuel dispenser. The secondary (soil) source is likely contributing diesel to groundwater. On the basis of soil sample analytical data and field observations (odor, PID, and color), the soil most impacted by diesel is located under the former USTs between approximately 11 and 17 feet bgs, and under the former dispenser, beginning at approximately 3 feet bgs and continuing to an unknown depth.

Gasoline impacts to soil reported as TPH-g in sample B13-14 were detected under the former UST pit between approximately 11 and 14 feet bgs. Historically, gasoline-derived impacts have not been tested for in the fuel dispenser area.

Additional soil borings will be needed to vertically and laterally define the soil mass impacted with diesel, gasoline, and benzene, and to determine the source of the gasoline and benzene impacts noted during the November 28, 2011, investigation and in previous soil vapor samples.

Soil

During the November 28, 2011, investigation, the maximum TPH-d concentration in soil (1,900 mg/kg) was detected in sample B13-14. This concentration is 23 times greater than the San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels (SFBRWQCB ESLs) of 83 mg/kg. The TPH-d concentration in soil at S13 at approximately 19 feet bgs (sample B13-19) was 4.4 mg/kg. At 23.5 feet bgs (B13-23.5) the reported concentration of TPH-d was less than the method reporting limit of <1.0 mg/kg.

The greatest TPH-g concentration (65 mg/kg) was detected in S13 at 14 feet bgs. BTEX components were not detected above the method reporting limit. It is of note that for the October 24, 2000 soil sample collected at nearby boring TW2-16.5; benzene was reported at a depth of 16.5 feet bgs at a concentration of 1.4 mg/kg. This concentration is almost 30 times greater than the ESL for benzene. Boring TW2 was located approximately 5 feet southwest of the southwestern corner of the former UST excavation area, and approximately 15 feet southwest of S13. Collection of confirmation soil samples in this area would be needed to determine the current concentration of the benzene in soil.

The vertical definition of TPH-d and TPH-g in soil is complete for the source area in the former UST pit. The deepest TPH-d detection was at 19 feet bgs (4.4 mg/kg in sample B13-19). At 23.5 feet bgs (S13 at 23.5 feet bgs [B13-23.5]), TPH-d was not detected above the method reporting limit of 1.0 mg/kg in soil. The greatest concentration of TPH-g was detected at S13 at 14 feet bgs



(B13-14) at 65 mg/kg. Below this depth TPH-g was reported to be below the method reporting limits.

Lateral definition of diesel in soil is generally incomplete in all directions (north, northwest, west, and south). In the northeast, former borings S3 and S4 were only advanced to 9 feet bgs and did not encounter the deeper impacted zone observed in S13. Generally, TPH-d concentrations appear to decrease from the east towards the west. However, more data are needed to determine the distribution of the diesel release. It is unlikely that collection of soil data will be possible further west of boring S12 because the 23rd Avenue overpass is a physical barrier to sample collection. According to the apparent distribution pattern of TPH-d, the greatest concentrations are at approximately 4 feet bgs in soil below the former location of the fuel dispenser. The area of soil impacted by diesel appears to extend to the west from the location of the former fuel dispenser, towards the former USTs and beyond. During this investigation the only location TPH-g was detected was boring S13. Additional borings would be needed to the north, east, and south for delineation of TPH-g.

A plan-view map that shows the distribution of TPH-d in soil from data collected over the last 13 years is included in **Figure 6**, Soil Sample TPH-d Iso-Concentration Contour Map. It should be noted that because this map is based on cumulative data over a 13-year period, soil concentrations may have changed and the actual distribution of diesel in soil may be different at this time.

Groundwater

The groundwater samples collected to date indicate that concentrations of TPH-d are greatest in the vicinity of the former tank pit. No grab groundwater samples in the presumed upgradient direction of the UST system have been collected. The concentration of TPH-d in groundwater appears highest, with a concentration at S13 of 36,000 µg/L, in the center of the former UST pit, and from there decreases, away from the former USTs towards the west. The lateral definition is incomplete to the northwest, west, and southwest for diesel-impacted groundwater. A map showing the cumulative grab groundwater TPH-d iso-concentration contours is included on **Figure 7**. Because the groundwater sample data shown on **Figure 7** were collected over an 11-year period, TPH-d concentrations may have changed over this time. More groundwater data are needed to complete definition of the petroleum hydrocarbon release. However, a step-out groundwater sample collection point further to the west will be located north of the 23rd Avenue railroad overpass.

TPH-g was detected in the grab groundwater sample collected at S13, at a concentration of 200 µg/L. In October 2000, a grab groundwater sample with a benzene concentration of 65 µg/L was collected at temporary well TW2.

CONCLUSIONS

Detected concentrations of TPH-d are reported to be present in soil and groundwater at concentrations greater than the TPH-d ESL in the former dispenser location and the former UST area. Diesel sorbed to secondary source soil is likely contributing diesel to the groundwater, although the *site* is completely capped so migration (via precipitation) is minimal. Vertical definition of diesel in soil is complete for the area of the former USTs. However, vertical definition of TPH-d in soil is not complete to the north, south, west, and east of the former USTs. Lateral definition of TPH-d is incomplete to the southwest, west, east, northwest, and north. Collection of more soil and groundwater data in these directions will be needed for vertical and lateral definition of the diesel-impacted zone.

The source of the gasoline detected in soil and groundwater samples near the tank pit is presumed to source from the tank system. The gasoline impacts detected in soil and groundwater are not defined laterally in the southern, northern and eastern directions. Sorbed phase TPH-g was vertically defined in boring S13.

RECOMMENDATIONS

1. Ten additional borings are recommended in the eastern, southern, southwestern, northern, and northwestern directions for lateral and vertical definition of the diesel impacts. Proposed boring locations S15 through S24 are shown on **Figure 8**, Proposed Soil Boring Locations.
2. In addition to analyzing the soil and groundwater samples for TPH-d, continued analysis for TPH-g and BTEX is recommended because of previous detections of these COCs in previous soil and groundwater samples.
3. It is recommended that at least two soil samples and one grab groundwater sample be collected from each boring, as follows:
 - One sample collected from the zone where impacts are expected (approximately 11-17 feet bgs east, west, north, and south of the former USTs, as well as 3-7 feet bgs east of the former fuel dispenser).
 - A second sample to be collected from below the expected impacted zone, for vertical delineation of the depth of contamination.
 - A grab groundwater sample is recommended to be collected from each boring from the first encountered groundwater.
4. Data collected from the proposed and previous borings, as well as data collected from the *site* should be incorporated to update the Site Conceptual Model (SCM).

GEOTRACKER

This report, upon its completion and certification, will be scanned into PDF format and uploaded to the GeoTracker website per the January 1, 2005, GEO_REPORT requirement. GeoTracker documentation is included in **Attachment I**, GeoTracker Upload.

REPORT LIMITATION

All work performed under this contract was directed by a licensed professional. The work was performed in accordance with generally accepted practices at the time the work was performed and completed in accordance with generally acceptable standards. It should be noted that during the course of normal business practices, Clearwater may purchase or use equipment, services, or products in which Clearwater has a professional or financial interest.

This report was prepared under the supervision of a State of California Professional Geologist, Engineer, or other licensed professional. Statements, conclusions, and recommendations made in this report are based on information provided to Clearwater, observations of existing *site* conditions, our general knowledge of the *site*, limited testing of selected soil and groundwater samples, and interpretations of a limited set of data. Clearwater cannot be held responsible for the accuracy of the analytical work performed by others.

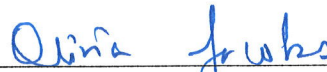
Information and interpretation presented herein are for the use of the client. Third parties should rely upon the information and interpretation contained in this document at their own risk. No other warranties, certifications, or representations, either expressed or implied, are made about the information supplied in this report. The service performed by Clearwater has been conducted in a manner consistent with the level of care and skill ordinarily exercised by members of our profession currently practicing under similar conditions in the area of the *site*.

If you have any questions, please call James Jacobs, at 415-381-5195.

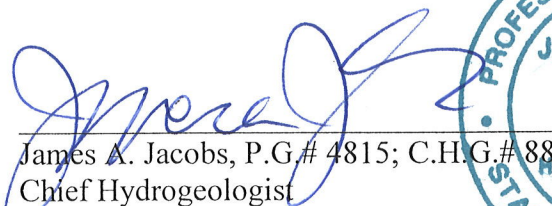
Sincerely,
Clearwater Group



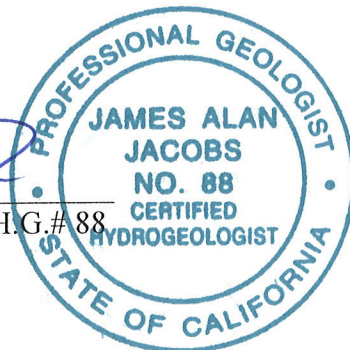
Erik Lervaag
Project Manager



Olivia Jacobs, REA I #3219, CEM #1465
Chief Executive Officer



James A. Jacobs, P.G.# 4815; C.H.G.# 88
Chief Hydrogeologist





FIGURES:

- Figure 1: Site Vicinity Map
- Figure 2: Site Plan
- Figure 3: Soil Sample Analytical Results 11/28/11
- Figure 4: Grab Groundwater Sample Analytical Results 11/28/11
- Figure 5: Cumulative Groundwater Sample Analytical Data
- Figure 6: Soil Sample TPH-d Iso-Concentration Contour Map
- Figure 7: Grab Groundwater Sample TPH-d Iso-Concentration Contour Map
- Figure 8: Proposed Soil Boring Locations

TABLES:

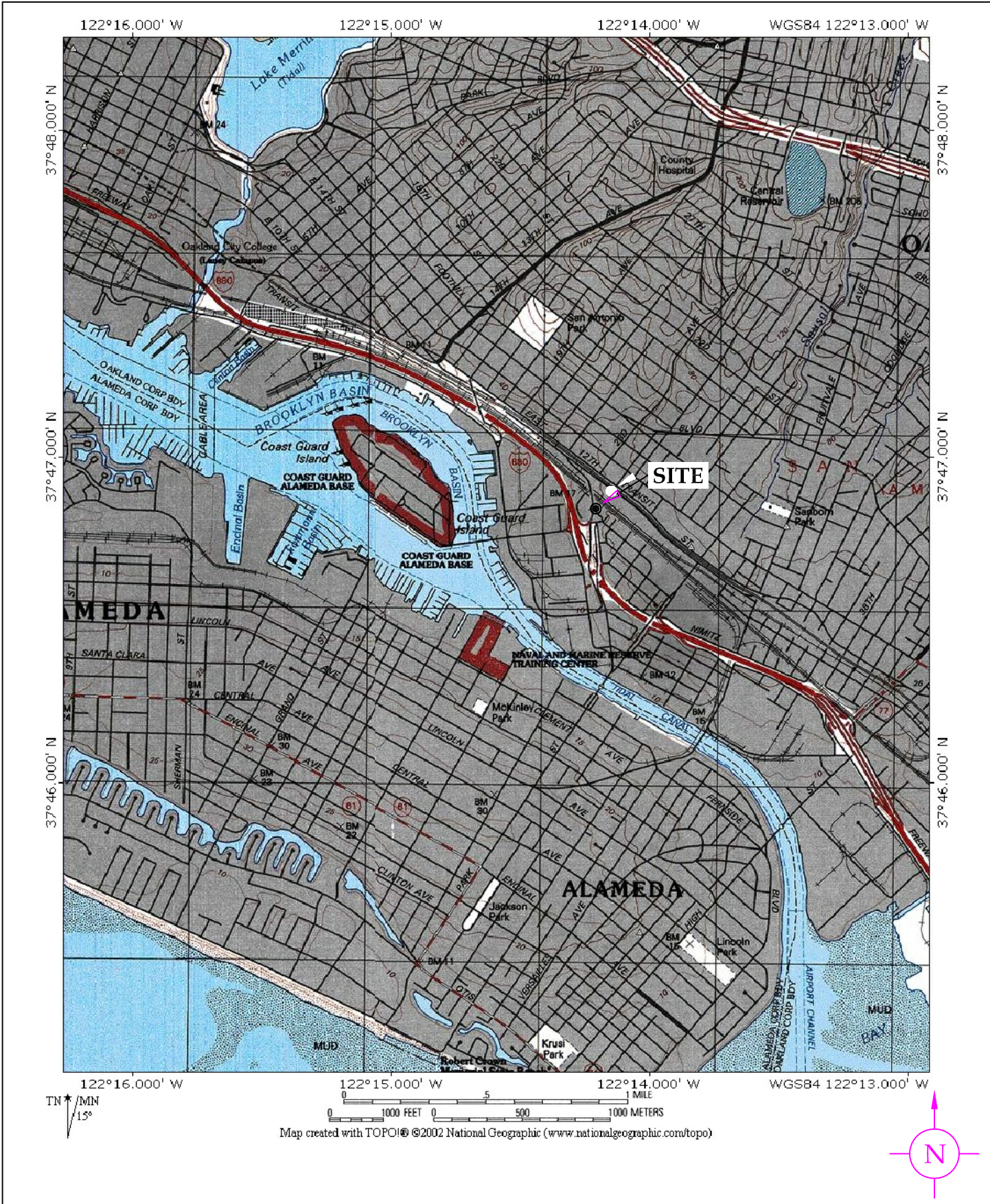
- Table 1: Cumulative Soil Sample Analytical Results
- Table 2: Cumulative Groundwater Sample Analytical Results
- Table 3: Soil Vapor Sample Analytical Results

ATTACHMENTS:

- Attachment A: Regulatory Correspondence
- Attachment B: Permits
- Attachment C: Site Investigation History
- Attachment D: Standard Operating Procedures
- Attachment E: Soil Boring Logs
- Attachment F: Photographs
- Attachment G: Waste Disposal
- Attachment H: Laboratory Analytical Reports
- Attachment I: GeoTracker Pages

cc: Mr. John Protopappas
Madison Park Financial Corporation
155 Grand Avenue, Suite 1025
Oakland, California 94612

FIGURES



Site Vicinity Map

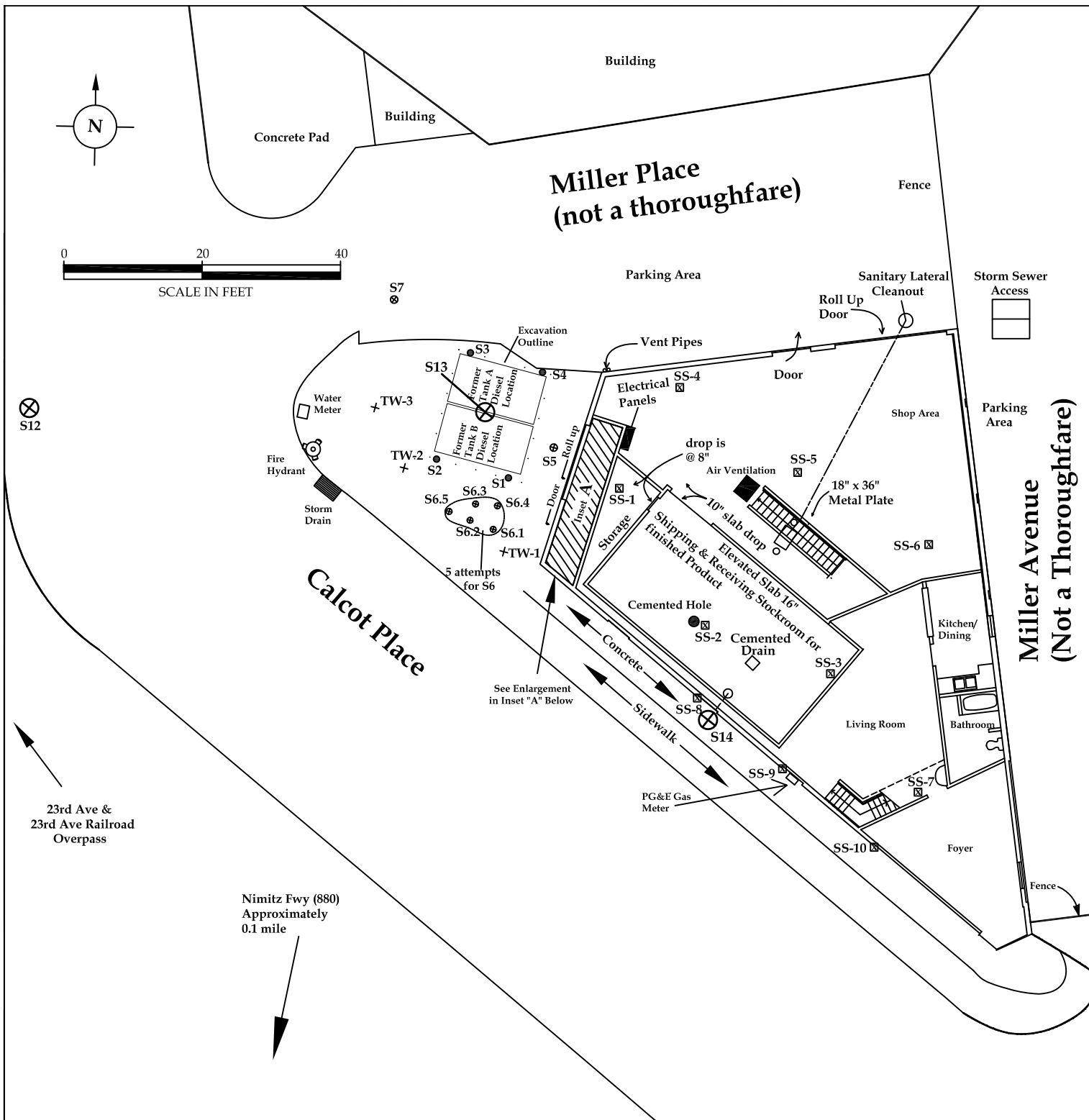
1125 Miller Avenue
Oakland, California

CLEARWATER GROUP

Project No.
CB018

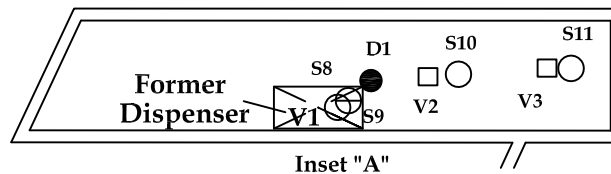
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Figure
1



LEGEND

- ⊗ S12-S13 Soil Boring Locations (11/28/11)
- ⊗-⊙ S14 Slanted Soil Boring Location (11/28/11)
- ☒ SS-1-SS-10 Sub-slab Vapor Location (06/17/10, 11/04/10) and 11/10/11)
- ⊕ S1-S4 Soil Boring Location (12/2/98)
- ⊕ S5-S8 Soil Boring Location (11/16/05)
- D1 Soil Boring Location (10/24/00)
- + TW-3 Temporary Well (10/24/00)
- S9-S11 Soil Boring Location (11/15/06)
- V1-V3 Soil Vapor Location (11/15/06)
- Excavation Outline



Site Plan

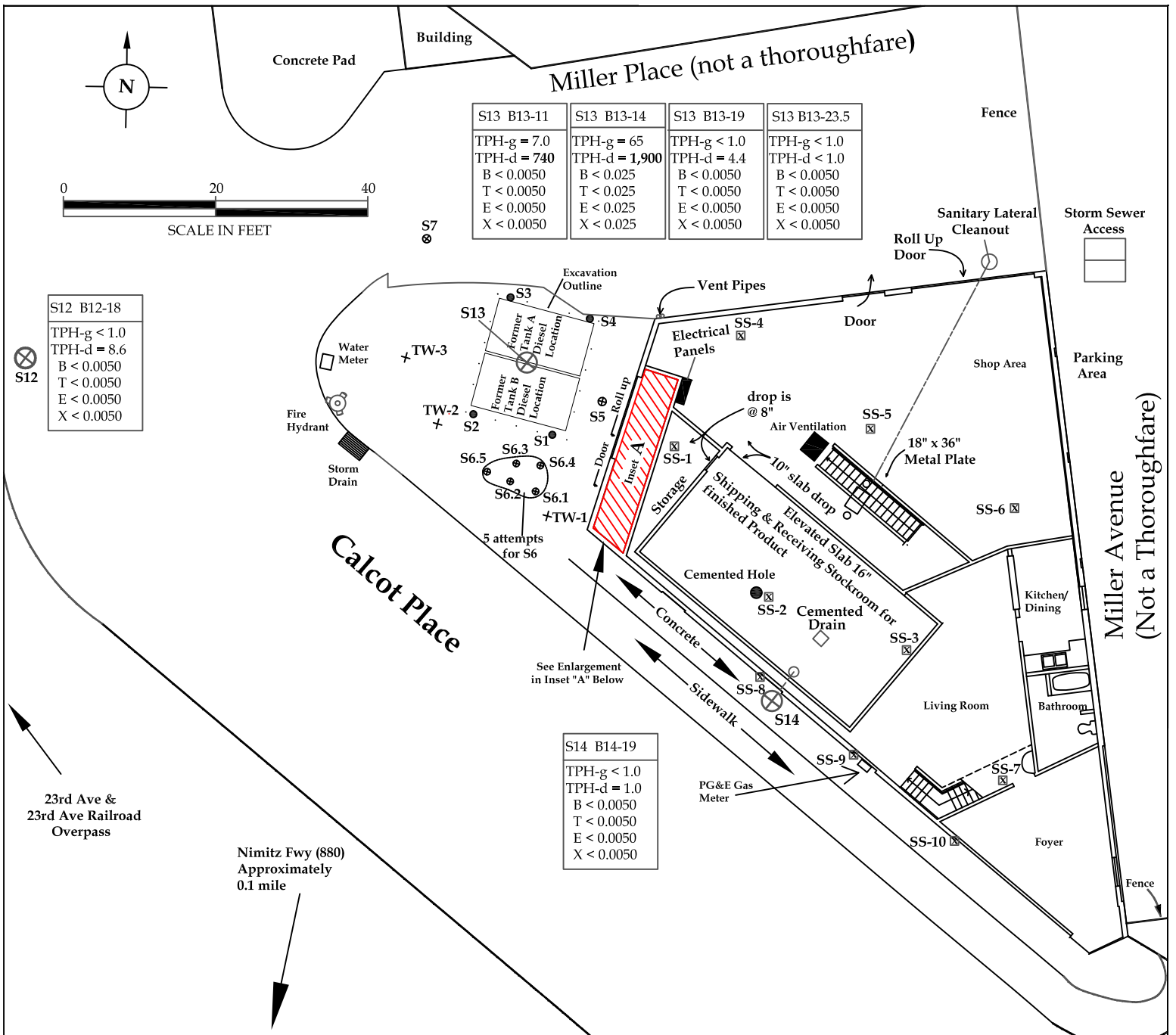
1125 Miller Avenue
Oakland, California

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Project No.
CB018

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2

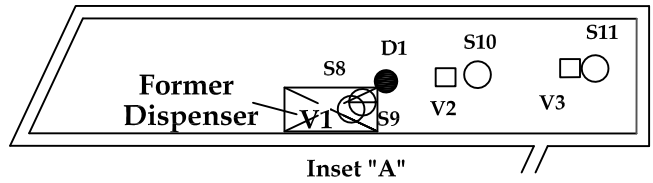


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- ⊗ S12-S13 Soil Boring Locations 11/28/11
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- D1 Soil Boring Location (10/24/00)
- + TW-3 Temporary Well (10/24/00)
- S9-S11 Soil Boring Location (11/15/06)
- V1-V3 Soil Vapor Location (11/15/06)

TPH-g Total petroleum hydrocarbons as gasoline
 TPH-d Total petroleum hydrocarbons as diesel
 B Benzene
 T Toluene
 E Ethyl Benzene
 X Xylenes

Bold Concentration reported by laboratory in excess of the environmental screening levels.

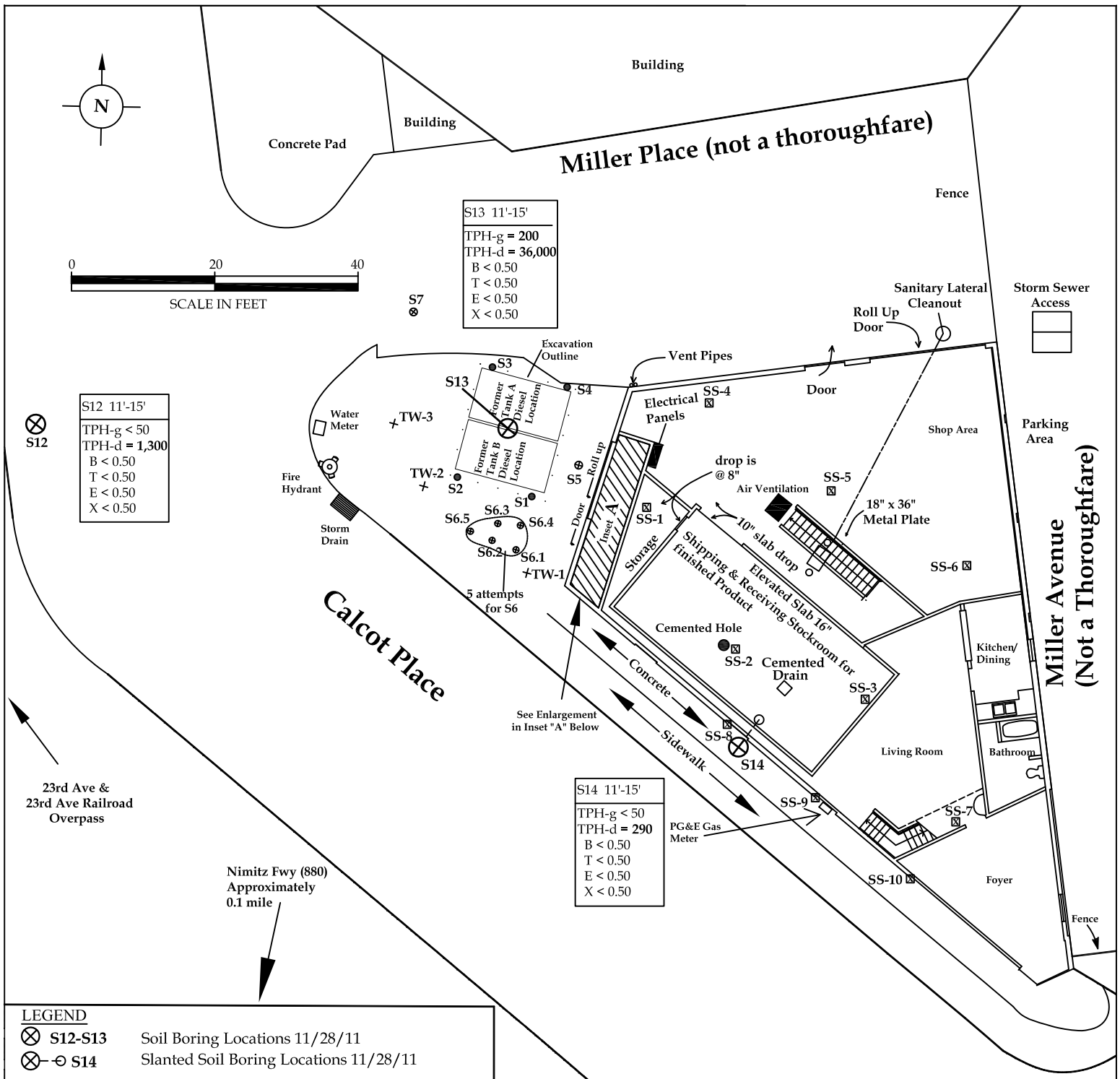


Soil Sample Analytical Results 11/28/11

1125 Miller Avenue
Oakland, California

CLEARWATER GROUP

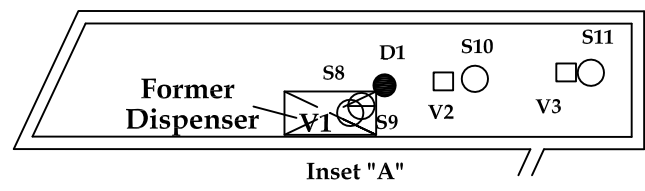
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LEGEND

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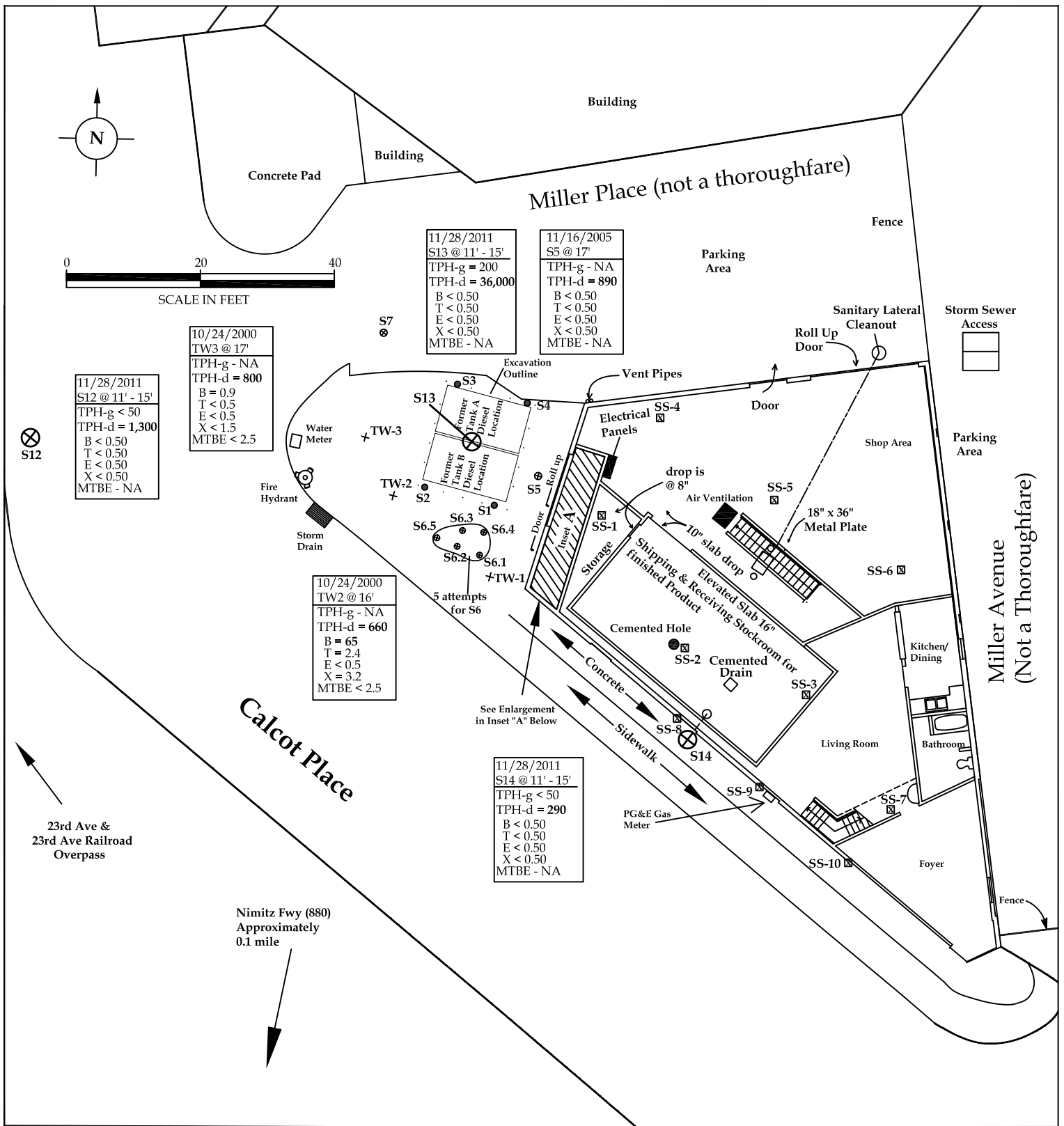
TPH-g Total petroleum hydrocarbons as gasoline
 TPH-d Total petroleum hydrocarbons as diesel
 B Benzene
 T Toluene
 E Ethyl Benzene
 X Xylenes
Bold Concentration reported by laboratory in excess of the environmental screening levels.



Grab Groundwater Sample Analytical Results 11/28/11

1125 Miller Avenue
Oakland, California

CLEARWATER GROUP		
Project No. CB018	Figure Date 2/12	Figure 4



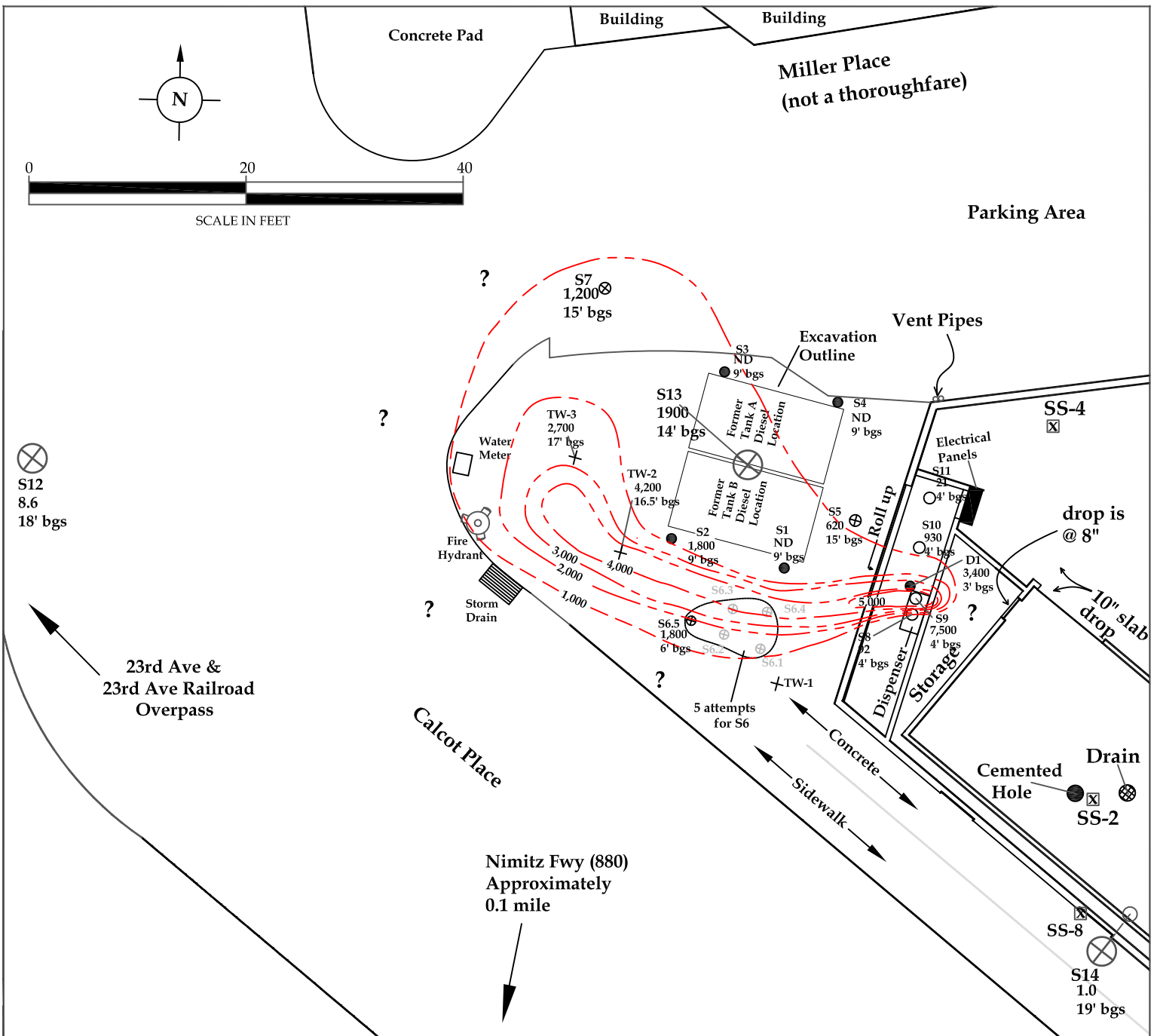
LEGEND

- ⊗ S12-S13 Soil Boring Locations (11/28/11)
- ⊗-○ S14 Slanted Soil Boring Locations (11/28/11)
- ▣ SS-1-SS-10 Sub-slab Vapor Location (06/17/10, 11/04/10, and 11/10/11)
- ⊕ S1-S4 Soil Boring Location (12/2/98)
- ⊕ S5-S8 Soil Boring Location (11/16/05)
- D1 Soil Boring Location (10/24/00)
- + TW-3 Temporary Well (10/24/00)
- S9-S11 Soil Boring Location (11/15/06)
- V1-V3 Soil Vapor Location (11/15/06)

Former Dispenser

Inset "A"

Cumulative Groundwater Sample Analytical Data	CLEARWATER GROUP		
	1125 Miller Avenue Oakland, California	Project No. CB018	Figure Date 2/12



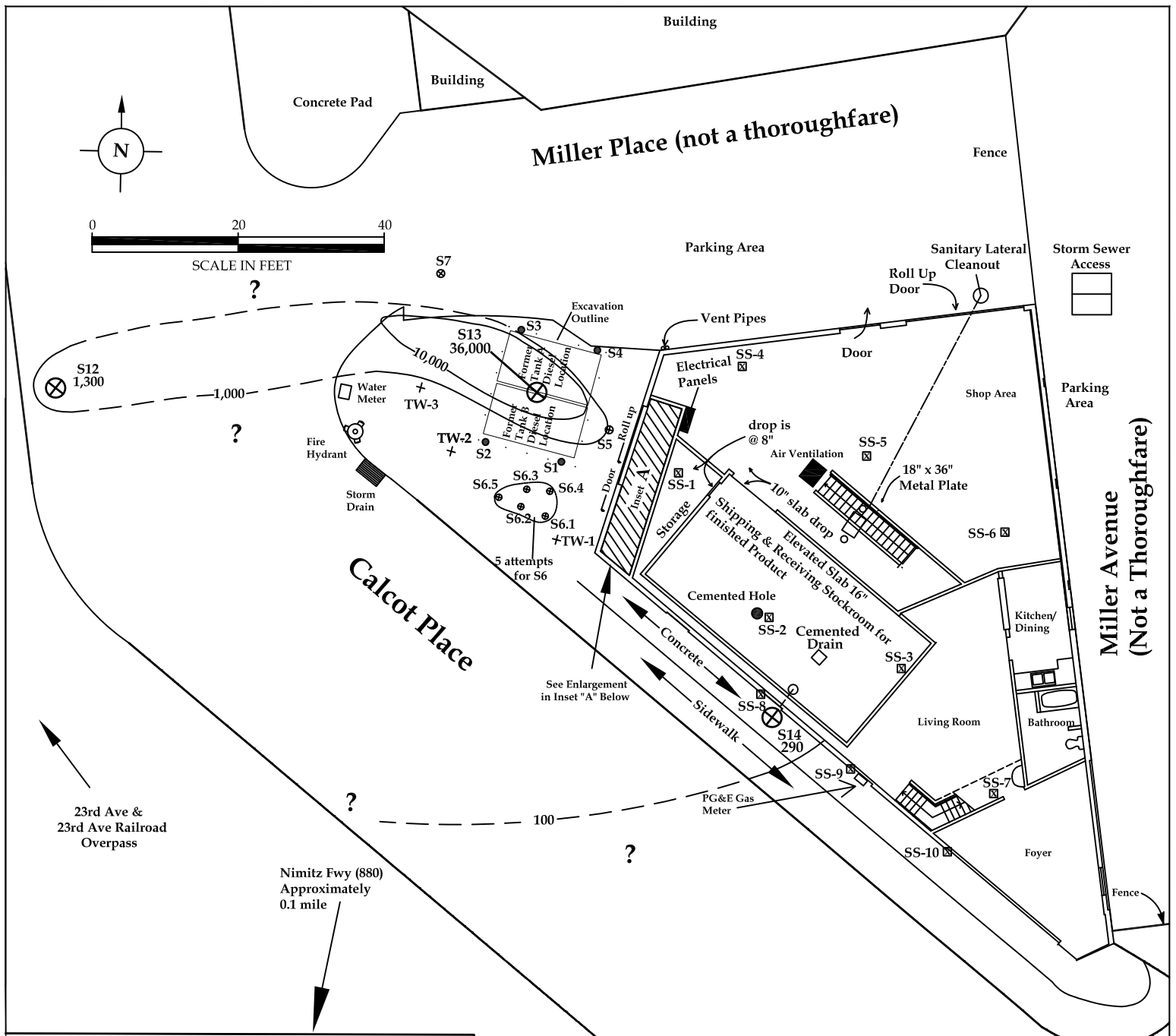
LEGEND

- ⊗ S12-S14 Soil Boring Locations (11/28/11)
- ⊗-⊙ S14 Slanted Soil Boring Location (11/28/11)
- ⊕ S1-S4 Soil Boring Location (12/2/98)
- ⊕ S5-S8 Soil Boring Location (11/16/05)
- D1 Soil Boring Location (10/24/00)
- + TW-3 Temporary Well (10/24/00)
- S9-S11 Soil Boring Location (11/15/06)
- ND Not Detected Above Laboratory Reporting Limits
- 1,000 (red dashed line) TPH-d Soil Contour
- ? Definition of TPH-d impacts not complete in this direction

Note: Soil sample collected over 13-year period between 1998 and 2011. Some TPH-d concentrations may have changed during this time.

Soil Sample TPH-d Iso-Concentration Contour Map
 1125 Miller Avenue
 Oakland, California

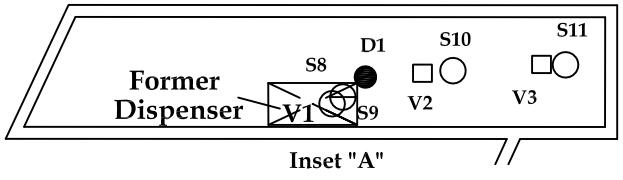
CLEARWATER GROUP		
Project No. CB018	Figure Date 3/12	Figure 6



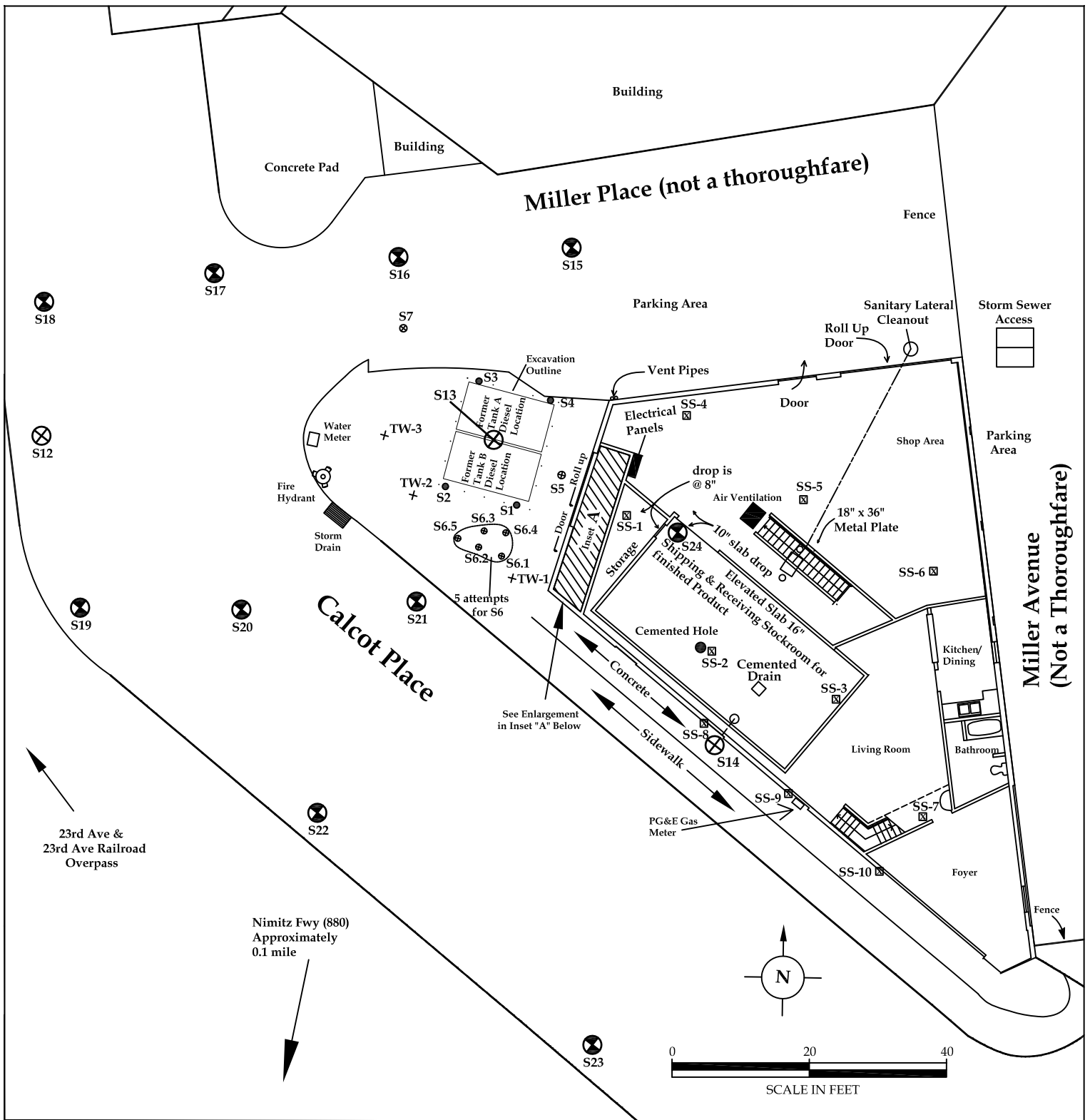
LEGEND

- ⊗ S12-S13 Soil Boring Locations (11/28/11)
- ⊗ S14 Slanted Soil Boring Locations (11/28/11)
- ⊠ SS-1-SS-10 Sub-slab Vapor Location (06/17/10, 11/04/10, and 11/10/11)
- ⊕ S1-S4 Soil Boring Location (12/2/98)
- ⊕ S5-S8 Soil Boring Location (11/16/05)
- D1 Soil Boring Location (10/24/00)
- + TW-3 Temporary Well (10/24/00)
- S9-S11 Soil Boring Location (11/15/06)
- V1-V3 Soil Vapor Location (11/15/06)
- 1,000 TPH-d groundwater contour
- - - Contour lines dashed where inferred
- ? Definition of TPH-d impacts not complete in this direction.

Note: Sample data shown were collected between 2,000 and 2011, over an 11-year period. TPH-d concentrations may have changed in this time.

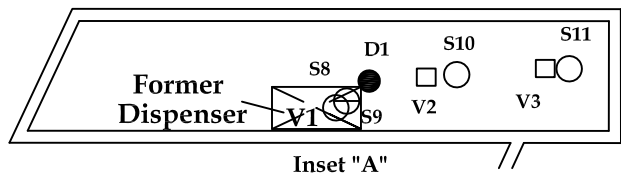


Grab Groundwater Sample TPH-d Iso-Concentration Contour Map 1125 Miller Avenue Oakland, California	CLEARWATER GROUP		
	Project No. CB018	Figure Date 2/12	Figure 7



LEGEND

- ⊗ S12-S13 Soil Boring Locations (11/28/11)
- ⊗-⊙ S14 Slanted Soil Boring Locations (11/28/11)
- ▣ SS-1-SS-10 Sub-slab Vapor Location (06/17/10, 11/04/10, and 11/10/11)
- ⊕ S1-S4 Soil Boring Location (12/2/98)
- ⊕ S5-S8 Soil Boring Location (11/16/05)
- D1 Soil Boring Location (10/24/00)
- + TW-3 Temporary Well (10/24/00)
- S9-S11 Soil Boring Location (11/15/06)
- V1-V3 Soil Vapor Location (11/15/06)
- ⊗ S15-S24 Proposed Soil Boring Locations



Proposed Soil Boring Locations

1125 Miller Avenue
Oakland, California

CLEARWATER GROUP

Project No.
CB018

Figure Date
3/12

Figure
8

TABLES

Table 1
Cumulative Soil Sample Analytical Results
P & D 23rd Avenue Associates, LLC
1125 Miller Avenue, Oakland, CA
Clearwater Project No. CB018

Soil Boring ID	Sample ID	Collection Depth (feet)	Sampling Date	TPH-d (mg/kg)	TPH-g (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)	MTBE (mg/kg)
Shallow Soil ESL^A for Residential/ Commercial Use				83	83	0.044	2.9	2.3/ 3.3	2.3	0.023
Deep Soil ESL^A for Residential/ Commercial Use				83	83	0.044	2.9	3.3	2.3	0.023
<i>S1</i>	<i>S1-9</i>	<i>9</i>	<i>12/01/1998</i>	<i>ND</i>	<i>NA</i>	<i>ND</i>	<i>ND</i>	<i>ND</i>	<i>ND</i>	<i>ND</i>
<i>S2</i>	<i>S2-9</i>	<i>9</i>	<i>12/01/1998</i>	1,800	<i>NA</i>	<i>ND</i>	<i>ND</i>	<i>ND</i>	<i>0.51</i>	<i>ND</i>
<i>S3</i>	<i>S3-9</i>	<i>9</i>	<i>12/01/1998</i>	<i>ND</i>	<i>NA</i>	<i>ND</i>	<i>ND</i>	<i>ND</i>	<i>ND</i>	<i>ND</i>
<i>S4</i>	<i>S4-9</i>	<i>9</i>	<i>12/01/1998</i>	<i>ND</i>	<i>NA</i>	<i>ND</i>	<i>ND</i>	<i>ND</i>	<i>ND</i>	<i>ND</i>
<i>TW2</i>	<i>TW2 -16.5</i>	<i>16.5</i>	<i>10/24/2000</i>	4,200	<i>NA</i>	1.4	<i>ND</i>	<i>ND</i>	<i>ND</i>	<i>ND</i>
<i>TW3</i>	<i>TW3-17</i>	<i>17</i>	<i>10/24/2000</i>	2,700	<i>NA</i>	<i>ND</i>	<i>ND</i>	<i>ND</i>	<i>ND</i>	<i>ND</i>
<i>D1</i>	<i>D1-3</i>	<i>3</i>	<i>10/24/2000</i>	3,400	<i>NA</i>	<i>ND</i>	<i>ND</i>	<i>ND</i>	<i>ND</i>	<i>ND</i>
<i>D1</i>	<i>D1-8</i>	<i>8</i>	<i>10/24/2000</i>	<i>34</i>	<i>NA</i>	<i>ND</i>	<i>ND</i>	<i>ND</i>	<i>ND</i>	<i>ND</i>
<i>S5</i>	<i>S5-5</i>	<i>5</i>	<i>11/16/2005</i>	14 ^B	<i>NA</i>	<0.0050	<0.0050	<0.0050	<0.0050	NA ^D
<i>S5</i>	<i>S5-10</i>	<i>10</i>	<i>11/16/2005</i>	610	<i>NA</i>	<0.0050	<0.0050	<0.0050	<0.0050	NA ^D
<i>S5</i>	<i>S5-15</i>	<i>15</i>	<i>11/16/2005</i>	620	<i>NA</i>	<0.0050	<0.0050	<0.0050	<0.0050	NA ^D
<i>S5</i>	<i>S5-20</i>	<i>20</i>	<i>11/16/2005</i>	5.8	<i>NA</i>	<0.0050	<0.0050	<0.0050	<0.0050	NA ^D
<i>S6</i>	<i>S6-6</i>	<i>6</i>	<i>11/16/2005</i>	1,800^B	<i>NA</i>	NA ^C	NA ^C	NA ^C	NA ^C	NA ^D
<i>S7</i>	<i>S7-5</i>	<i>5</i>	<i>11/16/2005</i>	150 ^B	<i>NA</i>	<0.0050	<0.0050	<0.0050	<0.0050	NA ^D
<i>S7</i>	<i>S7-10</i>	<i>10</i>	<i>11/16/2005</i>	32 ^B	<i>NA</i>	<0.0050	<0.0050	<0.0050	<0.0050	NA ^D
<i>S7</i>	<i>S7-15</i>	<i>15</i>	<i>11/16/2005</i>	1,200	<i>NA</i>	<0.0050	<0.0050	<0.0050	<0.0050	NA ^D
<i>S7</i>	<i>S7-20</i>	<i>20</i>	<i>11/16/2005</i>	300	<i>NA</i>	<0.0050	<0.0050	<0.0050	<0.0050	NA ^D
<i>S8</i>	<i>S8-4</i>	<i>4</i>	<i>11/16/2005</i>	92	<i>NA</i>	<0.0050	<0.0050	<0.0050	<0.0050	NA ^D
<i>S9</i>	<i>S9-4.0</i>	<i>4</i>	<i>11/15/2006</i>	7,500	<i>NA</i>	<0.0050	<0.0050	<0.0050	<0.0050	NA ^D
<i>S10</i>	<i>S10-4.0</i>	<i>4</i>	<i>11/15/2006</i>	930	<i>NA</i>	<0.0050	<0.0050	<0.0050	<0.0050	NA ^D
<i>S11</i>	<i>S11-4.0</i>	<i>4</i>	<i>11/15/2006</i>	21	<i>NA</i>	<0.0050	<0.0050	<0.0050	<0.0050	NA ^D
<i>S12</i>	<i>B12-18</i>	<i>18</i>	<i>11/28/2011</i>	8.6 ^E	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	NA ^D
<i>S13</i>	<i>B13-11</i>	<i>11</i>	<i>11/28/2011</i>	740	7.0	<0.0050	<0.0050	<0.0050	<0.0050	NA ^D
<i>S13</i>	<i>B13-14</i>	<i>14</i>	<i>11/28/2011</i>	1,900	65	<0.025	<0.025	<0.025	<0.025	NA ^D
<i>S13</i>	<i>B13-19</i>	<i>19</i>	<i>11/28/2011</i>	4.4 ^E	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	NA ^D
<i>S13</i>	<i>B13-23.5</i>	<i>23.5</i>	<i>11/28/2011</i>	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	NA ^D
<i>S14</i>	<i>B14-19</i>	<i>19</i>	<i>11/28/2011</i>	1.0 ^E	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	NA ^D

Notes:

ESL's Environmental Screening Levels for Shallow Soils (<3 meters below ground surface) and Deep Soils (>3 meters below ground surface) where Groundwater is a Current or Potential Source of Drinking Water, Residential and Commercial/Industrial Land Use (separated by a slash respectively when different); from *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater*, available from www.waterboards.ca.gov/sanfranciscobay/water_issues/available_documents/ESL_May_2008.pdf - Obtained on January 6, 2012

TPH-d Total petroleum hydrocarbons as diesel using EPA Method 8015/8020 (modified)
TPH-g Total petroleum hydrocarbons as gasoline using EPA Method 8260B
BTEX Benzene, Toluene, Ethylbenzene, Xylenes using EPA Method 8015/8020 (modified)
MTBE Methyl tertiary-butyl ether using EPA Method 8260
mg/kg Milligrams per kilogram (approximately equal to parts per million)
ND Not detected above laboratory reporting limits
NA Not analyzed

<0.0050 Not detected in concentrations exceeding the indicated laboratory reporting limit

bold Contamination in the sample exceeded Environmental Screening Levels.

Footnote A San Francisco Bay Regional Water Quality Control Board (June 2001) *Table B. Surface Soil (≤3m bgs) Soil and Groundwater Environmental Screening Levels*

Footnote B Concentration reported is atypical for diesel, these hydrocarbons have a higher boiling point

Footnote C Analysis not performed due to lack of sample volume.

Footnote D Analysis of MTBE not required by ACEH.

Footnote E Laboratory Notes: Discrete peaks in Diesel range, atypical for Diesel Fuel.

Analytical results reported in italics are from the December 31, 2001 *Subsurface Exploration Report* prepared by Environmental Bio-Systems.

Table 2
Cumulative Groundwater Sample Analytical Results

P & D 23rd Avenue Associates LLC
1125 Miller Avenue, Oakland, CA
Clearwater Project No. CB018H

Sample Point Location	Sample ID	Sampling Date	Depth (feet bgs)	TPH-d (µg/L)	TPH-g (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)
Environmental Screening Levels in µg/L ^A				100	100	1.0	40	30	20	5.0
TW2	TW2	10/24/2000	16'	660	NA	65	2.4	<0.5	3.2	<2.5
TW3	TW3	10/24/2000	17'	800	NA	0.9	<0.5	<0.5	<1.5	<2.5
S5	S5	11/16/2005	17'	890	NA	<0.50	<0.50	<0.50	<0.50	NA
S12	S-12	11/28/2011	11-15'	1,300 ^B	<50	<0.50	<0.50	<0.50	<0.50	NA
S13	S-13	11/28/2011	11-15'	36,000	200	<0.50	<0.50	<0.50	<0.50	NA
S14	S-14	11/28/2011	11-15'	290 ^B	<50	<0.50	<0.50	<0.50	<0.50	NA

Notes:

- TPH-d Total petroleum hydrocarbons as diesel using EPA Method 8015/8020 (modified)
- TPH-g Total petroleum hydrocarbons as gasoline using EPA Method 8260B
- B Benzene using EPA Method 8020/8260B
- T Toluene using EPA Method 8020/8260B
- E Ethylene using EPA Method 8020/8260B
- X Xylenes using EPA Method 8020/8260B
- MTBE Methyl tertiary-butyl ether using EPA Method 8260B
- µg/L Micrograms per liter (approximately equal to parts per billion: ppb)
- NA Not analyzed
- <### Not detected in concentrations exceeding the indicated laboratory reporting limit
- bgs Below Ground Surface
- bold** Contamination in the sample exceeded environmental screening limits.

Footnote A Environmental Screening Levels (ESLs) for Deep Soils where Groundwater is a Current or Potential Source of Drinking Water from Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, available from www.waterboards.ca.gov/sanfranciscobay/water_issues/available_documents/ESL_May_2008.pdf

Footnote B Laboratory notes: Discrete peaks, higher boiling hydrocarbons present, atypical for Diesel Fuel.

Analytical results reported in *italics* are from the December 31, 2001 *Subsurface Exploration Report* prepared by Environmental Bio-Systems.

TABLE 1
Soil Vapor Sample Analytical Results
P & D 23rd Avenue Associates LLC
1125 Miller Avenue, Oakland, CA
Clearwater Project No. CB018H

Sample (ID)	Sampling Date	Analytical Method	TPH-d (µg/m ³)	Naphthalene (µg/m ³)	1-Methyl naphthalene (µg/m ³)	2-Methyl naphthalene (µg/m ³)	TPH-g (µg/m ³)	B (µg/m ³)	T (µg/m ³)	E (µg/m ³)	X ^E (µg/m ³)	MTBE (µg/m ³)	TBA (µg/m ³)	ETBE TAME DIPE (µg/m ³)	2-Propanol (µg/m ³)	Propane
CHHSLs, Commercial ¹			NE	32	NE	NE	NE	36	140,000	420	320,000	4	NE	NE	NE	NE
ESLs, Lowest Residential ^A			10,000	72	NE	NE	10,000	84	63,000	980	21,000	9,400	NE	NE	NE	NE
V2.2 Suma	11/15/2006	TO-15	--	--	--	--	--	41	43	<7.9	28.4	--	--	--	--	--
V2.2 Suma Duplicate	11/15/2006	TO-15	--	--	--	--	--	42	46	<7.9	29.8	--	--	--	--	--
V2.4 Suma	11/15/2006	TO-15	--	--	--	--	--	<21	<28	<24	<28	--	--	--	--	--
V1.4 1L	11/15/2006	TO-17	>150,000 ^F	--	--	--	--	--	--	--	--	--	--	--	--	--
V1.4 4L	11/15/2006	NIOSH 1550	580,000	--	--	--	--	--	--	--	--	--	--	--	--	--
V1.4 4L Duplicate	11/15/2006	NIOSH 1550	600,000	--	--	--	--	--	--	--	--	--	--	--	--	--
V2.2 1L	11/15/2006	NIOSH 1550	710,000	--	--	--	--	--	--	--	--	--	--	--	--	--
V2.2 4L	11/15/2006	NIOSH 1550	180,000	--	--	--	--	--	--	--	--	--	--	--	--	--
V2.4 1L	11/15/2006	NIOSH 1550	280,000	--	--	--	--	--	--	--	--	--	--	--	--	--
V2.4 4L	11/15/2006	NIOSH 1550	700,000	--	--	--	--	--	--	--	--	--	--	--	--	--
V3.4 1L	11/15/2006	NIOSH 1550	7,300,000	--	--	--	--	--	--	--	--	--	--	--	--	--
V3.4 4L	11/15/2006	NIOSH 1550	570,000	--	--	--	--	--	--	--	--	--	--	--	--	--
SS-1	06/17/2010	8260B/ 8015M ^C	<50,000	<100	--	--	<10,000	<100	<200	<100	<200	<100	<1,000	<100	--	--
SS-1	11/04/2010	TO-17/TO-15 ^B	<5,000	<2.5	<2.5	<2.5	<240	<3.8	<4.5	<5.1	<5.1	<4.3	<14	<20 ^D	<12	--
SS-1	04/01/2011	TO-17/TO-15 ^B	<5,000	<2.5	<2.5	<2.5	540	<3.7	<4.4	<5.0	<5.0	<4.2	<14	<19 ^D	<11	--
SS-1	12/09/2011	TO-17/TO-15 ^B	<5,000	<2.5	<2.5	<2.5	<160	<2.5	<2.9	<3.4	<3.4	<2.8	<9.4	<13	<7.6	--
SS-2	06/17/2010	8260B/ 8015M ^C	<50,000	<100	--	--	<10,000	<100	<200	<100	<200	<100	<1,000	<100	--	--
SS-2	11/04/2010	TO-17/TO-15 ^B	<5,000	<2.5	<2.5	<2.5	<240	<3.8	<4.5	<5.2	5.3	<4.3	<14	<20 ^D	<12	--
SS-2	04/01/2011	TO-17/TO-15 ^B	<5,000	<2.5	<2.5	<2.5	530	<3.7	<4.4	<5.0	<5.0	<4.2	<14	<19 ^D	<11	--
SS-2	12/09/2011	TO-17/TO-15 ^B	<5,000	<2.5	<2.5	<2.5	<160	<2.5	<3.0	<3.4	<3.4	<2.8	<9.6	<13	<7.8	--
SS-3	06/17/2010	8260B/ 8015M ^C	<50,000	<100	--	--	37,000	<100	2,600	2,000	6,050	<100	<1,000	<100	--	--
SS-3 Duplicate	06/17/2010	8260B/ 8015M ^C	<50,000	<100	--	--	30,000	<100	2,100	1,600	4,990	<100	<1,000	<100	--	--
SS-3	11/04/2010	TO-17/TO-15 ^B	5,800	8.0	24	36	13,000	<8.2	60	560	2,940	<9.2	<31	<43 ^D	<25	--
SS-3	11/04/2010	Modified ASTM D-1945	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.0051%
SS-3	04/01/2011	TO-17/TO-15 ^B	8,200	4.2	7.0	<2.5	8,600	3.8	16	110	650	<3.8	<13	<18 ^D	<10	--
SS-3	12/08/2011	TO-17/TO-15 ^B	<5,000	3.7	8.0	<2.5	12,000	<2.5	3.8	19	119	<2.8	<9.6	<13	<7.8	--
SS-3	12/08/2011	Modified ASTM D-1945	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.0016%
SS-4	06/17/2010	8260B/ 8015M ^C	<50,000	<100	--	--	<10,000	<100	<200	<100	<200	<100	<1,000	<100	--	--
SS-4	11/04/2010	TO-17/TO-15 ^B	<5,000	<2.5	<2.5	<2.5	<240	<3.8	<4.5	<5.2	<5.2	<4.3	<14	<20 ^D	<12	--
SS-4	04/01/2011	TO-17/TO-15 ^B	<5,000	<2.5	<2.5	<2.5	520	<3.7	<4.4	<5.0	<5.0	<4.2	<14	<19 ^D	<11	--
SS-4	12/08/2011	TO-17/TO-15 ^B	9,500 ^G	<2.5	<2.5	<2.5	<160	<2.5	<2.9	<3.4	<3.4	<2.8	<9.4	<13	<7.6	--
SS-5	06/17/2010	8260B/ 8015M ^C	<50,000	<100	--	--	<10,000	<100	<200	<100	<200	<100	<1,000	<100	--	--
SS-5	11/04/2010	TO-17/TO-15 ^B	<5,000	<2.5	<2.5	<2.5	<260	<4.0	<4.7	<5.5	<5.5	<4.5	<15	<21 ^D	<12	--
SS-5 (IPA)	11/04/2010	Modified TO-15 GC/MS	--	--	--	--	--	--	--	--	--	--	--	--	81,000	--

TABLE 1
Soil Vapor Sample Analytical Results
P & D 23rd Avenue Associates LLC
1125 Miller Avenue, Oakland, CA
Clearwater Project No. CB018H

Sample (ID)	Sampling Date	Analytical Method	TPH-d (µg/m ³)	Naphthalene (µg/m ³)	1-Methyl naphthalene (µg/m ³)	2-Methyl naphthalene (µg/m ³)	TPH-g (µg/m ³)	B (µg/m ³)	T (µg/m ³)	E (µg/m ³)	X ^E (µg/m ³)	MTBE (µg/m ³)	TBA (µg/m ³)	ETBE TAME (µg/m ³)	DIPE (µg/m ³)	2-Propanol (µg/m ³)	Propane
CHHSLs, Commercial¹			NE	32	NE	NE	NE	36	140,000	420	320,000	4	NE	NE	NE	NE	NE
ESLs, Lowest Residential^A			10,000	72	NE	NE	10,000	84	63,000	980	21,000	9,400	NE	NE	NE	NE	NE
SS-5	04/01/2011	TO-17/TO-15 ^B	<5,000	<2.5	<2.5	<2.5	880	<3.7	8.2	<5.0	<5.0	<4.2	<14	<19 ^D	<11	--	--
SS-5	12/08/2011	TO-15	<5,000	<2.5	<2.5	<2.5	<160	<2.5	<2.9	<3.4	<3.4	<2.8	<9.4	<13	<7.6	--	--
SS-6	06/17/2010	8260B/ 8015M ^C	<50,000	<100	--	--	<10,000	<100	<200	<100	<200	<100	<1,000	<100	--	--	--
SS-6	11/04/2010	TO-17/TO-15 ^A	<5,000	4.6	<2.5	4.3	<250	<3.9	<4.6	<5.3	<5.3	<4.4	<15	<20 ^D	<12	--	--
SS-6	04/01/2011	TO-17/TO-15 ^B	<5,000	<2.5	<2.5	<2.5	400	<3.8	<4.5	<5.2	<5.2	<4.3	<14	<20 ^D	<12	--	--
SS-6	12/09/2011	TO-17/TO-15 ^B	<5,000	<2.5	<2.5	<2.5	<160	<2.5	<3.0	<3.4	<3.4	<2.8	<9.6	<13	<7.8	--	--
SS-7	04/01/2011	TO-17/TO-15 ^B	<5,000	10	9.0	10	690	<3.8	5.9	<5.2	<5.2	<4.3	<14	<20 ^D	85	--	--
SS-7 (IPA)	04/01/2011	TO-15	--	--	--	--	--	--	--	--	--	--	--	--	93,000	--	--
SS-7	12/09/2011	TO-17/TO-15 ^B	<5,000	<2.5	<2.5	<2.5	520 ^F	<2.5	<2.9	<3.4	<3.4	<2.8	<9.4	<13	<7.6	--	--
SS-7 (IPA)	12/09/2011	TO-15	--	--	--	--	--	--	--	--	--	--	--	--	20,000 ^H	--	--
SS-8	12/08/2011	TO-17/TO-15 ^B	<5,000	<2.5	<2.5	<2.5	340	<2.6	<3.1	<3.6	<3.6	<3.0	<9.9	<14	<8.1	--	--
SS-9	12/08/2011	TO-17/TO-15 ^B	<5,000	<2.5	<2.5	<2.5	310	<2.6	<3.0	<3.5	<3.5	<2.9	<9.8	<13	<7.9	--	--
SS-10	12/08/2011	TO-17/TO-15 ^B	<5,000	<2.5	<2.5	<2.5	1,900	37	160	37	208	<2.7	<9.2	<13	<7.5	--	--

Notes:

- ESL Environmental Screening Limit
- (µg/m³) Micrograms per cubic meter
- TO-15 Samples analyzed using modified EPA method TO-15 for soil vapor collected in specially prepared canisters and analyzed by gas chromatography/mass spectrometry (GC/MS).
- TO-17 Samples analyzed using modified EPA method TO-17 for soil vapor samples collected using multi-bed sorbent tubes and analyzed by GC/MS.
- NIOSH 1550 Alternative analytical method used for saturated sorbent tubes using chemical extraction (carbon disulfide) and analyzed using gas chromatography/flame ionization detector
- ASTM D-1945 Sample analyzed using modified ASTM D-1945
- TPH-d Total petroleum hydrocarbons detected within the diesel range of C10-C28
- TPH-g Total petroleum hydrocarbons detected within the gasoline range of C6-C12
- B Benzene
- T Toluene
- E Ethylbenzene
- X Total
- MTBE Methyl-t-butyl ether
- ETBE Ethyl-t-
- TAME Tert-amyl methyl ether
- DIPE Diisopropyl ether
- TBA tert-Butanol
- 2-Propanol 2-Propanol is also known as Isopropyl alcohol (IPA)
- Not Analyzed
- <# Contamination in the sample was below method reporting limits
- bold** Contamination in the sample exceeded environmental screening limits
- NE Standard Not Established
- (ID) Identification
- CHHSL California Human Health Screening Level

TABLE 1
Soil Vapor Sample Analytical Results
P & D 23rd Avenue Associates LLC
1125 Miller Avenue, Oakland, CA
Clearwater Project No. CB018H

Sample (ID)	Sampling Date	Analytical Method	TPH-d (µg/m ³)	Naphthalene (µg/m ³)	1-Methyl naphthalene (µg/m ³)	2-Methyl naphthalene (µg/m ³)	TPH-g (µg/m ³)	B (µg/m ³)	T (µg/m ³)	E (µg/m ³)	X ^E (µg/m ³)	MTBE (µg/m ³)	TBA (µg/m ³)	ETBE TAME DIPE (µg/m ³)	2-Propanol (µg/m ³)	Propane (µg/m ³)
CHHSLs, Commercial ¹			NE	32	NE	NE	NE	36	140,000	420	320,000	4	NE	NE	NE	NE
ESLs, Lowest Residential ^A			10,000	72	NE	NE	10,000	84	63,000	980	21,000	9,400	NE	NE	NE	NE

Footnote A Environmental Screening Levels (ESLs), Lowest Residential, from *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, Revised by May 2008*, Table E-2 Shallow Soil Gas Screening Levels for Evaluation of Potential Vapor Intrusion concerns available from www.waterboards.ca.gov/sanfranciscobay/water_issues/available_documents/ESL_May_2008.pdf

Footnote B TPH-d, Naphthalene, 1-Methylnaphthalene, 2-Methylnaphthalene by Modified TO-17 VI; TPH-g, B, T, E, X, MTBE, TBA, ETBE, TAME, DIPE by Modified TO-15.

Footnote C BTEX, Naphthalene, Oxygenates and TPH-g by EPA method 8260B; TPH-d by EPA method 8015n

Footnote D Analyte is listed as isopropyl ether, not diisopropyl ether

Footnote E Xylene is reported as the sum of m,p-Xylene and o-Xylene

Footnote F Laboratory notes: TPH gasoline was detected at a concentration less than 5 times the reporting limit. Because the preceding sample contained high concentration of TPH-g, the result for TPH-g in this sample may be biased high for possible carry-over. A re-analysis of this sample was not possible due to insufficient sample volume

Footnote G Laboratory Notes: The TPH pattern did not resemble that of diesel fuel. The hydrocarbons were distributed in the lighter carbon range of diesel

Footnote H Laboratory Notes: Dilution was performed on this sample due to the presence of high level target species

Footnote I CHHSLs - *California Human Health Screening Levels, Revised September 2010*. Table 3 Soil Gas Screening Numbers for Volatile Chemicals Below Buildings Constructed Without Engineered Fill Below Sub-Slab Gravel

V2.2 Summa (200 mL/min*30 min) Vapor sample collected at 2 feet below ground surface using 6-liter Summa canister at a flow rate of 200 mL per minute for 30 minutes.

V2.4 Summa (200 mL/min*30 min) Vapor sample collected at 4 feet below ground surface using 6-liter Summa canister at a flow rate of 200 mL per minute for 30 minutes.

V1.4 1L Vapor sample collected at 4 feet below ground surface using TO-17 Carbotrap 300 tube at a flow rate of 66.7 mL per minute for 15 minutes. Sample was analyzed using modified EPA method TO-17.

V1.4 4L Vapor sample collected at 4 feet below ground surface using TO-17 Carbotrap 300 tube at a flow rate of 133.3 mL per minute for 30 minutes.

> ## (S) Sample results are flagged as greater than saturated peak for analyte.

1L Sample flow rate equal to 66.7 milliliters per minute for 15 minutes.

4L Sample flow rate equal to 133.3 milliliters per minute for 30 minutes.

ATTACHMENTS

ATTACHMENT A
Regulatory Correspondence



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

January 19, 2011

Mr. John Protopappas
P&D 23rd Avenue Associates LLC
P.O. Box 687
Oakland, CA 94604
(Sent via E-mail to: John@MPFCorp.com)

Subject: Work Plan for Fuel Leak Case No. RO0000294 and GeoTracker Global ID T0600177455, 23rd Avenue Partners, 1125 Miller Avenue, Oakland, CA 94601

Dear Mr. Protopappas:

Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file for the above-referenced site including the most recently submitted document entitled, "*Historic Property Uses Report*," dated December 20, 2010, "*Results of Additional Sub-Slab Vapor Investigation Report*," dated December 10, 2010, and "*Site Characterization Workplan*," dated December 20, 2010 (Work Plan). The results from these reports and Work Plan were discussed during a meeting conducted on January 19, 2011 between Mr. John Protopappas of Madison Park Financial Corporation, James Jacobs of Clearwater Group, Erik Lervaag of Clearwater Group, Olivia Jacobs of Clearwater Group, and Jerry Wickham of ACEH.

Based on our review of the documents and the results of the meeting, we request that you prepare a Revised Work Plan that incorporates the revisions discussed during our January 19, 2011 meeting. These revisions are briefly summarized in the technical comments below.

TECHNICAL COMMENTS

1. **Soil Borings.** Three soil borings are to be advanced for collection of soil and groundwater samples at the locations discussed during our January 19, 2011 meeting; one near or within the former tank pit, one west of the tank pit, and one west of SS-3.
2. **Sub-slab Vapor Samples.** One additional sub-slab vapor probe is to be installed within the first-floor living space to assess whether a source in addition to the former diesel USTs may exist in this area. Vapor samples from the additional vapor probe and existing probes are to be analyzed for volatile organic compounds and total petroleum hydrocarbons as gasoline using EPA Method TO-15.
3. **Removal of Product Lines and Vent Lines.** In the Work Plan requested below, please include plans to remove the product lines from the former dispenser and vent lines. Please propose screening criteria for removing contaminated soil observed during the line removal and collecting confirmation soil samples.

Mr. John Protopappas
RO000294
January 19, 2011
Page 2

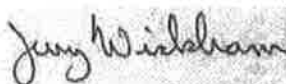
TECHNICAL REPORT REQUEST

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

- **March 18, 2011** – Revised Work Plan

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

Sincerely,



Digitally signed by Jerry Wickham
DN: cn=Jerry Wickham, o=Alameda County
Environmental Health, ou,
email=jerry.wickham@acgov.org, c=US
Date: 2011.01.19 15:56:43 -08'00'

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

Attachment: Responsible Party(ies) Legal Requirements/Obligations

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Leroy Griffin, Oakland Fire Department, 250 Frank H. Ogawa Plaza, Ste. 3341, Oakland, CA 94612-2032 2032 (*Sent via E-mail to: lgriffin@oaklandnet.com*)

Erik Lervaag, Clearwater Group, 229 Tewksbury Avenue, Pt. Richmond, CA 94801 (*Sent via E-mail to: ELervaag@clearwatergroup.com*)

Olivia Jacobs, Clearwater Group, 229 Tewksbury Avenue, Pt. Richmond, CA 94801 (*Sent via E-mail to: OJacobs@clearwatergroup.com*)

James Jacobs, Clearwater Group, 229 Tewksbury Avenue, Pt. Richmond, CA 94801 (*Sent via E-mail to: augerpro@sbcglobal.net*)

Donna Drogos, ACEH (*Sent via E-mail to: donna.drogos@acgov.org*)

Jerry Wickham, ACEH (*Sent via E-mail to: jerry.wickham@acgov.org*)

GeoTracker, File



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

February 1, 2011

Mr. John Protopappas
P&D 23rd Avenue Associates LLC
P.O. Box 687
Oakland, CA 94604
(Sent via E-mail to: John@MPFCorp.com)

Subject: Work Plan Approval for Fuel Leak Case No. RO0000294 and GeoTracker Global ID T0600177455, 23rd Avenue Partners, 1125 Miller Avenue, Oakland, CA 94601

Dear Mr. Protopappas:

Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file for the above-referenced site including the most recently submitted document entitled, "*Revised Workplan*," dated January 24, 2011 (Work Plan). The Work Plan presents detailed plans for several tasks that were discussed during a meeting conducted on January 19, 2011 between Mr. John Protopappas of Madison Park Financial Corporation, James Jacobs of Clearwater Group, Erik Lervaag of Clearwater Group, Olivia Jacobs of Clearwater Group, and Jerry Wickham of ACEH.

The proposed scope of work is acceptable and may be implemented as proposed. We request that you perform the proposed work and send us the reports requested below.

TECHNICAL REPORT REQUEST

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

- **July 2, 2011** – Site Investigation and Piping Removal Report

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

Sincerely,

Handwritten signature of Jerry Wickham in black ink.

Digitally signed by Jerry Wickham
DN: cn=Jerry Wickham, o=Alameda County
Environmental Health, ou,
email=jerry.wickham@acgov.org, c=US
Date: 2011.02.01 11:18:44 -08'00'

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

Mr. John Protopappas
RO000294
February 1, 2011
Page 2

Attachment: Responsible Party(ies) Legal Requirements/Obligations

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Leroy Griffin, Oakland Fire Department, 250 Frank H. Ogawa Plaza, Ste. 3341, Oakland, CA 94612-2032 2032 (*Sent via E-mail to: lgriffin@oaklandnet.com*)

Erik Lervaag, Clearwater Group, 229 Tewksbury Avenue, Pt. Richmond, CA 94801 (*Sent via E-mail to: ELervaag@clearwatergroup.com*)

Olivia Jacobs, Clearwater Group, 229 Tewksbury Avenue, Pt. Richmond, CA 94801 (*Sent via E-mail to: OJacobs@clearwatergroup.com*)

James Jacobs, Clearwater Group, 229 Tewksbury Avenue, Pt. Richmond, CA 94801 (*Sent via E-mail to: augerpro@sbcglobal.net*)

Donna Drogos, ACEH (*Sent via E-mail to: donna.drogos@acgov.org*)

Jerry Wickham, ACEH (*Sent via E-mail to: jerry.wickham@acgov.org*)

GeoTracker, File

ATTACHMENT B

Permits

Alameda County Public Works Agency - Water Resources Well Permit



399 Elmhurst Street
Hayward, CA 94544-1395
Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 11/23/2011 By Jamesy

Permit Numbers: W2011-0720
Permits Valid from 11/28/2011 to 11/28/2011

Application Id: 1321573296164
Site Location: 1125 Miller Avenue
Project Start Date: 11/28/2011
Assigned Inspector: Contact James Yoo at (510) 670-6633 or jamesy@acpwa.org

City of Project Site: Oakland
Completion Date: 11/28/2011

Applicant: Clearwater Group - Erik Lervaag
229 Tewksbury Avenue, Point Richmond, CA 94801
Phone: 510-307-9943 x227

Property Owner: P&D 23rd Avenue Associates, LLC
PO Box 687, Oakland, CA 94604
Phone: 510-452-2944

Client: ** same as Property Owner **
Contact: Erik Lervaag
Phone: --
Cell: 510-590-1097

	Total Due:	\$265.00
Receipt Number: WR2011-0346	Total Amount Paid:	\$265.00
Payer Name : Olivia Jacobs	Paid By: VISA	PAID IN FULL

Works Requesting Permits:

Borehole(s) for Geo Probes-Sampling 24 to 72 hours only - 3 Boreholes
Driller: Fast-Tek Engineering Support Services - Lic #: 624461 - Method: DP **Work Total: \$265.00**

Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2011-0720	11/23/2011	02/26/2012	3	2.00 in.	20.00 ft

Specific Work Permit Conditions

1. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site. The containers shall be clearly labeled to the ownership of the container and labeled hazardous or non-hazardous.
2. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.
3. Applicant shall contact James Yoo for an inspection time at 510-670-6633 at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.
4. Permittee, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.
5. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of \$500.00.

Alameda County Public Works Agency - Water Resources Well Permit

6. Prior to any drilling activities onto any public right-of-ways, it shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits required for that City or to the County and follow all City or County Ordinances. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County a Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

7. Permit is valid only for the purpose specified herein. No changes in construction procedures, as described on this permit application. Boreholes shall not be converted to monitoring wells, without a permit application process.

CITY OF OAKLAND • Community and Economic Development Agency
250 Frank H. Ogawa Plaza, 2nd Floor, Oakland, CA 94612 • Phone (510) 238-3443 • Fax (510) 238-2263

Applications for which no permit is issued within 180 days shall expire by limitation. No refund more than 180 days after expiration or final.

Appl# X1101315 Job Site 1125 MILLER AV Parcel# 019 -0099-001-01

Descr Soil boring(s) on Calcot Place Permit Issued 11/17/11

No impact on traffic lane allowed.

Call PWA INSPECTION prior to start: 510-238-3651. 4th FLOOR.

Work Type EXCAVATION-PRIVATE P

USA # Util Co. Job # CB018 Acctg#:
Util Fund #:

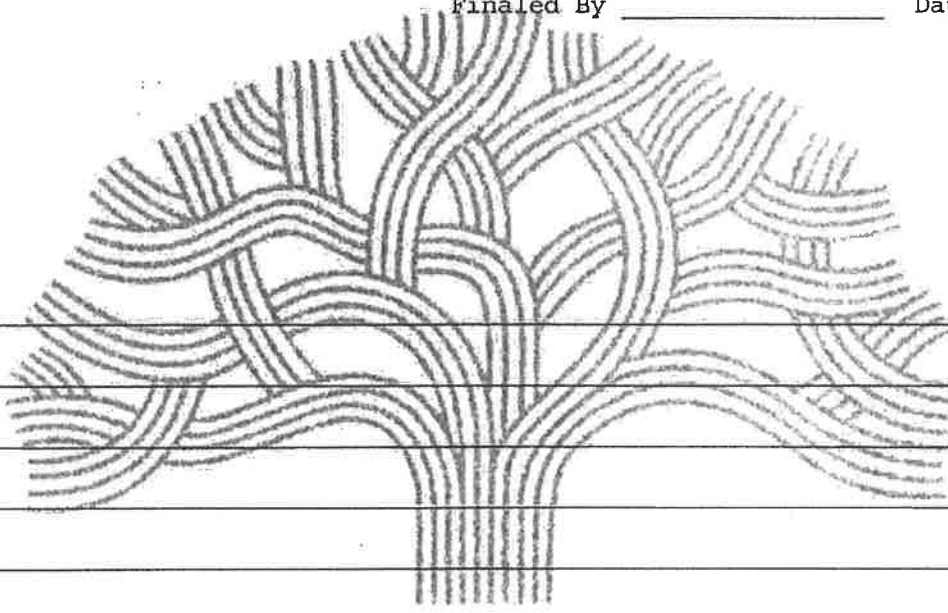
	Applc#	Phone#	Lic#	--License Classes--
Owner	TWENTY THIRD AVENUE PARTNERS			
Contractor	THE AUGER GROUP INC	X	(510)307-9943	624461 A C57 B
Arch/Engr				
Agent				
Applic Addr	227 A TEWKSBURY AVENUE, POINT RICHMOND, CA, 94801			

\$436.05 FEES TO BE PAID AT ISSUANCE		
\$71.00	Applic	\$309.00 Permit
\$.00	Process	\$36.10 Rec Mgmt
\$.00	Gen Plan	\$.00 Invstg
\$.00	Other	\$19.95 Tech Enh

JOB SITE

Permit Issued By  Date: _____

Finald By _____ Date: _____



DIST: ADDRESS:

CITY OF OAKLAND

Date: 11/17/11 Amt Paid: \$436.05
By: SYK Register ROS Receipt# 162215

Applications for which no permit is issued within 180 days shall expire by limitation. No refund more than 180 days after expiration or final.

Permit No. X1101315 Parcel #: 019 -0099-001-01
Project Address: 1125 MILLER AV

Page 2 of 2

Licensed Contractors' Declaration

I hereby affirm under penalty of perjury that I am licensed under provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

Construction Lending Agency Declaration

I hereby affirm under penalty of perjury that there is a construction-lending agency for the performance of the work for which this permit is issued, as provided by Section 3097 of the Business and Professions Code. N/A under Lender implies No Lending Agency.

Lender _____ Address _____

Workers' Compensation Declaration

I hereby affirm under penalty of perjury one of the following declarations:

[] I have and will maintain a certificate of consent to self-insure for workers' compensation, as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.

[] I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.

CARRIER: _____ POLICY NO. _____

[] I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California, and agree that if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

WARNING: FAILURE TO SECURE WORKERS' COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS, IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3707 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.

Hazardous Materials Declaration

I hereby affirm that the intended occupancy [] WILL [] WILL NOT use, handle or store any hazardous, or acutely hazardous, materials. (Checking "WILL" acknowledges that Sections 25505, 25533, & 25534 of the Health & Safety Code, as well as filing instructions, were made available to you.)

I HEREBY CERTIFY THE FOLLOWING: That I have read this document; that the above information is correct; and that I have truthfully affirmed all applicable declarations contained in this document. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection. I am fully authorized by the owner and to perform the work authorized by this permit.

ADDRESS:

DIST:

PRINT NAME

Signature [] Contractor, or [] Agent

Date



ONLINE SERVICES

WELLS PERMIT APPLICATION

PUBLIC WORKS AGENCY

[Public Works Agency](#)

To view your Application status, provide your Application ID and the Email Address used in the application.
Or search by one of the following:

Search

Application ID: 1321573296164

Email Address: elervaag@clearwatergroup

Applicant Business:

Driller's Name:



Project Site City:

1 application match found

Date Applied	Application ID	Applicant Name	Project Site	Driller Name	Application Status
11/17/2011	1321573296164	Clearwater Group - Erik Lervaag	Oakland 1125 Miller Avenue	Fast-Tek Engineering Support Services	Approved on 11/23/2011

Questions on Public Works Wells Permit Applications?
E-mail us at: wells@acpwa.org

ATTACHMENT C
Site Investigation History

SUMMARY OF SITE INVESTIGATION ACTIVITIES AND REFERENCES LIST

P&D 23rd Avenue Associates, LLC
1125 Miller Avenue
Oakland, California
ACEH Site Number RO#0000294
Clearwater Group Project Number CB018

Site Location

The P&D 23rd Avenue Associates, LLC property (*site*), an underground storage tank (UST) fuel release *site*, is located at 1125 Miller Avenue, in the City of Oakland, County of Alameda, California. The *site* is improved with a two-story structure constructed on a single slab on grade foundation, which is currently in use as a “work-live” building by a graphic artist who operates a t-shirt production workshop and lives in an apartment located adjacent to and above the work space. The United States Geological Survey Oakland East Quadrangle Map shows the *site* to be located in Section 6, Township 2 south, Range 3 west of the Mount Diablo Base and Meridian (USGS, 1980).

Miller Avenue bounds the *site* to the east, and Miller Place bounds the *site* to the north. Calcot Place defines the property to the southwest. A “work-live” apartment building is located across Miller Place to the northwest, north, and northeast, and a fenced parking and storage lot abuts the *site* to the northeast, east, and southeast. The main line of the Union Pacific Railroad is located to the north, beyond the “work-live” apartments and behind a chain-link fence. The 23rd Avenue railroad overcrossing ramp structure lies across Calcot Place to the west.

Site History

1870 to 1998 – History before the UST removal

Historical records for the *site* and neighboring properties as far back as the 1870’s were obtained from local resources. Between 1870 and 1998 the *site* and neighboring properties have had many uses, including industrial, commercial, and most recently, residential. The former north and east parcel boundaries of the 1125 Miller Avenue *site* were established in 1903. In 1963, after part of the block was taken by the City of Oakland by “eminent domain,” the current hypotenuse property boundary was formed and defined by Calcot Place.

- Between 1878 and 1903, the current property was part of 25th Avenue and a block defined by Park Avenue (now 23rd Avenue), East 10th Street, 26th Avenue, 25th Avenue, and the Central Pacific Railroad Company railroad bed. No information, except that about ownership, regarding specific use of the *site* is reasonably ascertainable from the locally available historical data record for this time period. Data were reported in the December 1, 2010 “Historical Property Uses” Report produced by Clearwater Group (Clearwater).
- Between 1924 and 1928 (after subdivision), the west half of the northern half of the current *site* (Parcels 1 and 2) was developed with a commercial/industrial structure.
- Between 1928 (first phone directory listing) and 1946, the *site* (Parcels 1 and 2) was used by Bay Cities Forge Company, for blacksmithing and general metal “forgings,” as stated in the Polk’s Telephone Directory (listing and advertisement). The interior work area of the Forge (west half of Parcels 1 and 2) aligns with five refusals at soil boring S6 as well as the refusal at TW1 shown in **Figure A**. The unimproved backyard (east half of Parcels

1 and 2) was improved, by 1950, with a brick incinerator (at the current location of the workshop and the kitchen and bathroom). In 1947, Parcel 3 was improved with a Residence fronting on 23rd Avenue, and in 1950 Parcel 4 was improved with a soda bottling works.

- The Sanborn map shows that, in the backyard of the Residence, a garage structure (structure labeled “auto”) and a garden were present at the *site* (Parcel 3). The former location of the auto garage is approximately equivalent to the current position of part of the living room, bathroom, and kitchen.
- According to Mr. Ronald Dreisbach (a part owner of P&D 23rd Avenue Associates, LLC), the *site* (Parcel 1 and 2) was used for lumber storage, and the neighboring property to the north was used as a planing mill and a lumber yard as early as 1940; these uses are corroborated by Mr. Dreisbach’s photo of his father at the property and by the Sanborn Maps. The incinerator that was at the *site* was built for the burning of sawdust and wood debris originating from the lumber planing operation. The incinerator was constructed in the current location of the kitchen/dining area and a large portion of the current printing workshop at the *site*. According to the telephone directories, the planing mill operation to the north ceased in approximately 1955 and was replaced by a box and lumber operation, which was replaced by a fruit sorting and packing operation.
- In 1952-1957, the *site* was used as a warehouse (except for the incinerator) for Parcels 1 and 2, a residence for Parcel 3, and a venetian blind factory for Parcel 4.
- In 1959, the *site* was used for the storage of firewood and old machinery as well as for a records storage warehouse; the incinerator was no longer in use on Parcels 1 and 2. Parcel 3 was razed, and Parcel 4 remained as a venetian blind factory.
- In 1960, Parcels 1 and 2 continued to be used for a records storage warehouse as well as for a woodworking shop. Parcel 3 was improved with a steel warehouse. Parcel 4 remained in use as a venetian blind factory.
- Between 1962 and 1963, the City of Oakland (City) took the *site* by eminent domain for construction of its 23rd Avenue railroad overcrossing ramp. After the City took the property, the *site* buildings were razed.
- After the block was razed, a new street, Calcot Place, was constructed across the block. The Dreisbachs, who had owned Parcels 1 and 2 of the block, became the owners of the new “triangle” property upon which they built a new building (Architect Plans are dated 1966), which is the current building.
- No records are present regarding the year that the two 5,000-gallon fuel tanks were installed. However, the architect’s drawing dated 1966 for the *site* indicates the existence of plans for a canopy to be built over a concrete pad, which corresponds to the location of the tank pit. This suggests that the tanks were considered in the planning of the 1966 architectural design. Mr. Dreisbach reported the use of gas and diesel in the tanks since the 1970’s.
- According to Sanborn maps, a printing company operated at the *site* between 1967 and 1969. Between 1970 and 1980, according to street directories, the *site* was used as a U.S. Department of Agriculture (USDA) meat inspection facility and warehouse. Two floor drains and a grease trap that drained to the sanitary sewer (see **Figure A**), were likely installed during this time for use with the meat inspection facility operations.
- Telephone directory records indicate that between 1980 and 1981 the USDA meat inspection facility ceased operations at the *site*.

- Between 1981 and 1990, the *site* was used as a mechanics shop for the rebuilding of Cummins diesel injectors. Hazardous materials were stored or used on *site* for this operation.
- In 1985 the fire department reported that two 5,000-gallon diesel tanks were in use. (Again, the date of tank installation is not reasonably ascertainable in the record.) Hazardous waste was reported to have been generated in the form of diesel, solvents, and sludge originating from the injectors. [Until recently (2010), two floor drains from the meat packing operation (the current t-shirt warehouse area) were open. They are now cemented closed.]
- In 1989, leakage was detected at the unions of the delivery lines on both fuel pumps, during a routine inspection.
- In March 1990, Heitz Trucking, Inc. began to use the *site*.
- In 1993, a routine inspection reported the generation of waste oil and solvents, which were being stored at the *site*.
- In 1995, the *site* was re-developed as an artist “work-live” space; however, the truck refueling facility remained in operation.
- In 1996, a routine inspection reported that fuel had spilled into the storm sewer system and that the UST vent pipes were broken.
- In 1998, a fuel spill from the fuel tank dispenser into the storm sewer was reported, and broken vent pipes were noted.
- In 1990, Mechanic Jim Brooks claimed that he had “worked with the tank system for 10 years.”
- During December 1990, seepage of fuel at a vent pipe coupling located one foot above ground was reported, according to the Fire Department.

December 1998

Environmental Bio-Systems (EBS) excavated and removed two 5,000-gallon diesel USTs and the associated product piping from the tank pit at the *site*. A total of four soil samples were collected near the ends of each tank from approximately nine feet below ground surface (bgs). All four soil samples were subsequently analyzed for total petroleum hydrocarbons detected as diesel (TPH-d); benzene, toluene, ethylbenzene, and total xylenes (BTEX); and methyl tertiary butyl ether (MTBE). Samples were collected from the pit wall northeast and southeast of Tank A (the northern tank). No detections were reported above the method detection limit in the samples collected from the northeast and southeast ends of Tank A. Samples were collected from the pit wall northwest and southwest of Tank B (the southern tank); the northwest sample was found to contain 1,800 milligrams per kilogram (mg/kg) TPH-d and 0.051 mg/kg xylenes, and no detections were reported above the method detection limit in the southwest sample.

February 2000

The February 18, 2000 “Workplan: Subsurface Exploration” was produced by EBS.

October 2000

In October 2000, EBS drilled four soil borings (designated TW1, TW2, TW3, and D1). Soil borings TW1 through TW3 were drilled in the concrete-paved area surrounding the former UST excavation. Boring D1 was drilled in the building, adjacent to the former dispenser location, which had been housed within an enclosed room at the west end of the building.

EBS collected four soil samples from the borings and installed pre-packed temporary well points in two of the borings (TW2 and TW3). Soil sample TW2 was collected at 16.5 feet bgs, and soil sample TW3 was collected at 17 feet bgs; two soil samples were collected from D1. The drilling and sampling were performed by FAST-TEK Engineering Support Services of Point Richmond, California (C-57 Lic. #624461) using a Geoprobe 5400 direct push rig. Borings TW2 and TW3 were drilled to a total depth of 22 feet bgs. Boring D1 was drilled to a total depth of 8 feet bgs, and boring TW1 was abandoned at 3 feet bgs because of subsurface obstructions; neither the soil nor groundwater was sampled at this location. Groundwater was encountered between 16.5 feet and 17.0 feet bgs. EBS submitted four soil samples and two groundwater samples to Analytical Sciences, Inc. of Petaluma, California, a California State-certified laboratory for TPH-d, BTEX, and MtBE analyses. The results were presented in the EBS "Subsurface Exploration Report" dated December 31, 2001.

Soil sample TW2-16.5' was found to contain 4,200 mg/kg TPH-d and 1.4 mg/kg benzene. Soil sample TW3-17' was found to contain 2,700 mg/kg TPH-d. Soil samples D1-3' and D1-8' were found to contain 3,400 and 34 mg/kg TPH-d, respectively. Groundwater sample TW2-H₂O was found to contain 660 micrograms per liter (µg/L) TPH-d, 65 µg/L benzene, 2.4 µg/L toluene, and 3.2 µg/L total xylenes. Groundwater sample TW3-H₂O was found to contain 800 µg/L TPH-d and 0.9 µg/L benzene.

April 2002

On April 15, 2002, Alameda County Environmental Health Department (ACEH) approved the work proposed in Clearwater's "Site Closure Workplan" (dated March 21, 2002). An October 3, 2002, "Site Closure Report" reported findings of the work that had been approved in the workplan. Sensitive receptors listed in the "Site Closure Report" included the residents of the building, and Clearwater recommended that migration pathways (via concrete cracks and other permeable features) be sealed. On the basis of information on groundwater flow available in reports on other local sites, the groundwater flow direction was found to be north at a gradient of 0.01. No drinking water wells were found to be present in the direct vicinity per the EDR report. However, subsequently, several wells per block have been identified on the Sanborn Maps. The only subsurface conduits identified were the utility trenches under and around the property.

November 2005

On November 16, 2005, Clearwater supervised the advancement of four soil borings (S5 through S8) at the *site*. One grab groundwater sample was collected from soil boring S5, which was located between the dispenser and the former tank pit. Boring logs indicated that the subsurface (to 20 feet) is composed of mostly clayey gravel (most likely this reflects backfill), and the laboratory results showed no detectable concentrations of BTEX. The concentrations of TPH-d in soil ranged from 5.8 mg/kg in S5-20' to 1,200 mg/kg in S7-15'. Analytical results of the groundwater sample at S5 indicated a TPH-d concentration of 890 µg/L, and no other constituents of concern were reported. Evidence of previous forge use was observed in the drilling of soil boring S6 (5 refusals), consisting of metal slag, debris, and general fill materials. These results were reported in the February 23, 2006, Clearwater document titled "Subsurface Investigation Results."

June 2006

On the basis of approvals by ACEH on June 13, 2006, and August 4, 2006, Clearwater performed a soil investigation and soil vapor survey at the *site*. Soil samples were collected from S9 through S11 at 4 feet bgs. Soil vapor samples were collected at borings V1 through V3. TPH-d was reported at concentrations ranging between 21 mg/kg in S11 to 7,500 mg/kg in S9. No soil sample results showed concentrations of BTEX above the laboratory reporting limit of 0.0050 mg/kg. Two soil vapor samples were collected from each vapor boring at 4 feet bgs. Concentrations of TPH-d detected in vapor samples ranged from 180,000 micrograms per cubic-meter ($\mu\text{g}/\text{m}^3$) in V2.2 4L (V2 at 2 feet bgs using a 4 liter canister) to 7,300,000 $\mu\text{g}/\text{m}^3$ in V3.4 1L. Results were documented in the January 11, 2007, Clearwater report titled “Results of Soil Vapor and Soil Boring Sampling Investigation – Risk Based Corrective Analysis Report.”

June 2010

On October 28, 2009, ACEH concurred with Clearwater’s work plan titled “Work Plan for Sub-Slab Vapor Sampling” (dated September 9, 2008), and this work phase was begun on June 10, 2010. Soil vapor samples were collected from the soil vapor points on June 17, 2010. Samples were collected at installed soil vapor points SS-1 through SS-6. The constituent of concern, TPH-d, was not detected in any of the soil vapor samples. Toluene (T) was detected in SS-3 at 2,600 $\mu\text{g}/\text{m}^3$. Xylenes (X) were detected in SS-3 at 6,050 $\mu\text{g}/\text{m}^3$. Ethylbenzene (E) was detected in SS-3 at 2,000 $\mu\text{g}/\text{m}^3$. TPH-g was detected in SS-3 at 37,000 $\mu\text{g}/\text{m}^3$. No other constituents of concern were detected. The source for TPH-g and TEX was unknown. This information is documented in the Clearwater July 23, 2010, report titled “Results of Sub-Slab Soil Vapor Investigation Report.” To rule out propane as the TPH-g source (SS-3 is close to a 3-inch diameter natural gas line servicing the building structure but not currently in use), both methane and PG&E’s leak detection gas were tested for. The results for both were negative.

Because of the elevated reporting levels reported in the soil vapor samples collected June 17, 2010, ACEH requested re-sampling of the 6 soil vapor sample points, in a letter dated August 16, 2010. Re-sampling was performed on November 4, 2010. The re-sampling results indicated a TPH-d concentration of 5,800 $\mu\text{g}/\text{m}^3$ at vapor sampling point SS-3. No other detections of TPH-d were reported by the laboratory. Naphthalene was detected in SS-3 (8.0 $\mu\text{g}/\text{m}^3$) and in SS-6 (4.6 $\mu\text{g}/\text{m}^3$). Analytes 1-methylnaphthalene (24 $\mu\text{g}/\text{m}^3$) and 2-methylnaphthalene (36 $\mu\text{g}/\text{m}^3$) were both detected in SS-3. Analyte 2-methylnaphthalene was also detected in SS-6 (4.3 $\mu\text{g}/\text{m}^3$). Concentrations of TPH-g and TEX were detected above detection limits in SS-3 (TPH-g at 13,000 $\mu\text{g}/\text{m}^3$, toluene at 60 $\mu\text{g}/\text{m}^3$, ethylbenzene at 560 $\mu\text{g}/\text{m}^3$, and xylenes at 2,940 $\mu\text{g}/\text{m}^3$).

The focus of the investigation shifted to identifying the source that was contributing to the TPH-g and TEX detections. The lack of benzene detections indicated that the detected fraction of TPH-g was likely a weathered fuel and thus the evidence of a relatively old release. Concurrently, Clearwater obtained data on historical uses for information on the possible source of such a release. The uses of interest include an auto garage, a truck parts repair company, an incinerator, a forgings (blacksmith), and the fueling facility. The utility infrastructure in the surrounding streets may provide a conduit. But no clear source was identified. The “Historical Uses” Report on the *site* was produced on December 1, 2010.

The November 4, 2010, soil vapor sampling results were documented in the December 10, 2010, report titled “Results of Additional Sub-Slab Vapor Investigation.” This investigation included a workplan.

Clearwater staff met with ACEH staff to review the workplan. Discussion during the meeting resulted in the following changes to the projected plan of work at the *site*: 1) the installation of an additional vapor sample point (SS-7) within the first floor living area; 2) a round of sampling of all existing vapor points (SS-1 through SS-7); 3) three soil borings for the collection of soil and groundwater data near the former tank pit, west of the former tank pit, and west of SS-3; and 4) the (limited) excavation of impacted soil and removal of the vent pipes and dispenser island. Clearwater produced a workplan addendum to address these changes.

February 2011

Per the February 1, 2011, ACEH approval of Clearwater’s January 24, 2011, work plan addendum titled “Revised Workplan,” soil vapor points SS-5R and SS-7 were installed on February 10, 2011. SS-5R replaced SS-5 because the original SS-5 had been crushed by a t-shirt printer. SS-7 was installed within the living room as a step-out from SS-3. On April 1, 2011, soil vapor probes SS-1 through SS-7 were sampled. TPH-g was detected in all the samples collected during the April 2011 event, at concentrations ranging from $<160 \mu\text{g}/\text{m}^3$ in several samples to $12,000 \mu\text{g}/\text{m}^3$ in sample SS-3. In addition to naphthalene ($8,200 \mu\text{g}/\text{m}^3$) and TPH-g ($12,000 \mu\text{g}/\text{m}^3$), all the BTEX components were detected in sample SS-3. Only toluene was detected in samples SS-5 ($8.2 \mu\text{g}/\text{m}^3$) and SS-7 ($5.9 \mu\text{g}/\text{m}^3$). Naphthalene was also detected in SS-7 at a concentration of $10 \mu\text{g}/\text{m}^3$. TPH-d was detected above the detection limit in SS-3 ($8,200 \mu\text{g}/\text{m}^3$) and SS-4 ($9,500 \mu\text{g}/\text{m}^3$). Because of inconclusive source information, Clearwater requested the installation of additional step-out soil vapor sampling points, which ACEH approved.

November 2011

Per concurrence from ACEH on June 6, 2011, Clearwater installed soil vapor points SS-8 through SS-10 on November 10, 2011. A soil and groundwater investigation took place on November 28, 2011. Soil samples were collected at various depths in soil borings S12 through S14. The highest TPH-d concentration in soil [(in the tank pit) $1,900 \text{ mg}/\text{kg}$] was detected in S13 at 14 feet bgs. TPH-g was detected at $65 \text{ mg}/\text{kg}$ in S13 at 14 feet bgs. A total of three grab groundwater samples were collected during the November 28, 2011, investigation, at borings S-12, S-13, and S-14. The highest TPH-d concentration was detected in S-13 at $36,000 \mu\text{g}/\text{L}$ (collected between 11 and 15 feet bgs). The highest TPH-g concentration was detected in S-13 at $200 \mu\text{g}/\text{L}$ (collected between 11 and 15 feet bgs).

December 2011

On December 8, 2011, soil vapor samples were collected at sample points SS-1 through SS-10.

REFERENCES LIST

U.S. Geological Survey (USGS), Oakland East, California Quadrangle Map, 7.5-Minute Series, Topographic, 1959, Photorevised 1980.

Environmental Bio-Systems, Inc., April 21, 1999, UST Excavation, 23rd Avenue Partners, 1125 Miller Avenue, Oakland, CA.

Environmental Bio-Systems, Inc., February 18, 2000, Workplan: Subsurface Exploration, Project #079-541B, 23rd Avenue Partners, 1125 Miller Avenue, Oakland, CA.

Environmental Bio-Systems, Inc., December 31, 2001, Subsurface Exploration, Project #079-541A, 23rd Avenue Partners, 1125 Miller Avenue, Oakland, CA.

Environmental Bio-Systems, Inc., March 21, 2002, Site Closure Workplan, Project #590, 23rd Avenue Partners, 1125 Miller Avenue, Oakland, CA.

Environmental Data Resources, April 29, 2002, The EDR Radius Map with GeoCheck; Topographic Maps, Sanborn Insurance Maps, Historic Aerial Photographs; 23rd Avenue Partners, 1125 Miller Ave., Oakland, CA 94617; Inquiry Number: 770535.3S, Southport, Connecticut.

Environmental Bio-Systems, Inc., October 3, 2002, Site Closure Report, 23rd Avenue Partners, 1125 Miller Avenue, Oakland, CA 94617.

Environmental Bio-Systems, Inc., January 26, 2004, Work Plan: Groundwater Monitoring Well Installation, 23rd Avenue Partners, 1125 Miller Avenue, Oakland, CA 94617.

Clearwater Group, October 12, 2005, Response to Agency Comments and Workplan Addendum, 1125 Miller Avenue, Oakland, CA 94617.

Clearwater Group, February 23, 2006, Subsurface Investigation Results, 23rd Avenue Partners, 1125 Miller Ave., Oakland, CA 94617.

Clearwater Group, January 11, 2007, Results of Soil Vapor and Soil Boring Sampling Investigation – Risk Based Corrective Analysis Report, 23rd Avenue Partners, 1125 Miller Ave., Oakland, CA 94617.

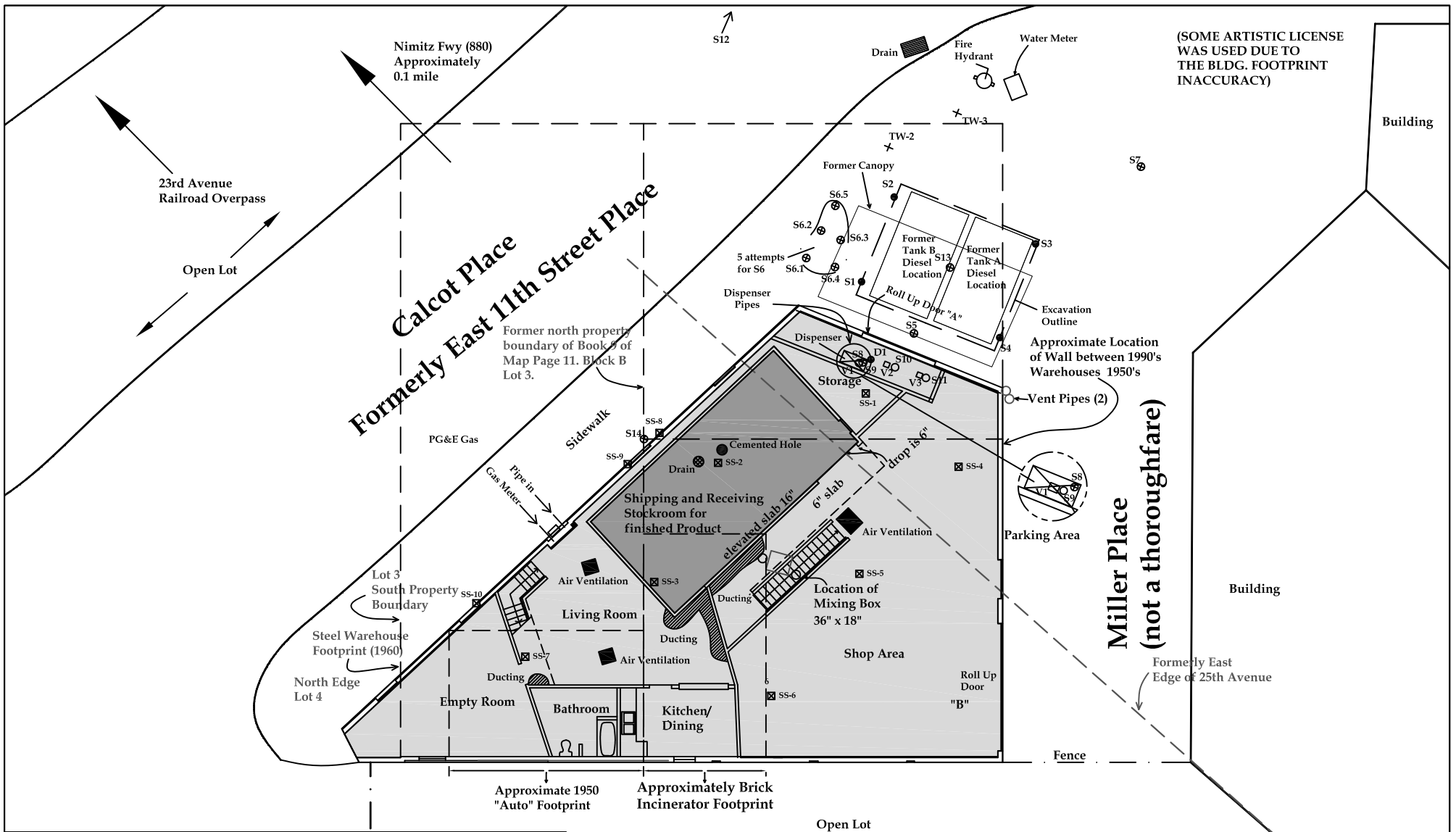
Clearwater Group, September 9, 2008, Work Plan for Sub-Slab Vapor Sampling, 23rd Avenue Partners, 1125 Miller Ave., Oakland, CA 94617.

Clearwater Group, July 23, 2010, Results of Sub-Slab Soil Vapor Investigation Report, 23rd Avenue Partners, 1125 Miller Ave., Oakland, CA 94617.

Clearwater Group, December 1, 2010, Historical Property Uses, 23rd Avenue Partners, 1125 Miller Ave., Oakland, CA 94617.

Clearwater Group, December 10, 2010, Results of Additional Sub-Slab Vapor Investigation, 23rd Avenue Partners, 1125 Miller Ave., Oakland, CA 94617.

Clearwater Group, January 24, 2011, Revised Workplan, 23rd Avenue Partners, 1125 Miller Ave., Oakland, CA 94617.



(SOME ARTISTIC LICENSE WAS USED DUE TO THE BLDG. FOOTPRINT INACCURACY)

Building

Building

Miller Place
(not a thoroughfare)

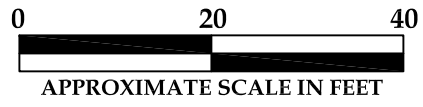
S7



LEGEND

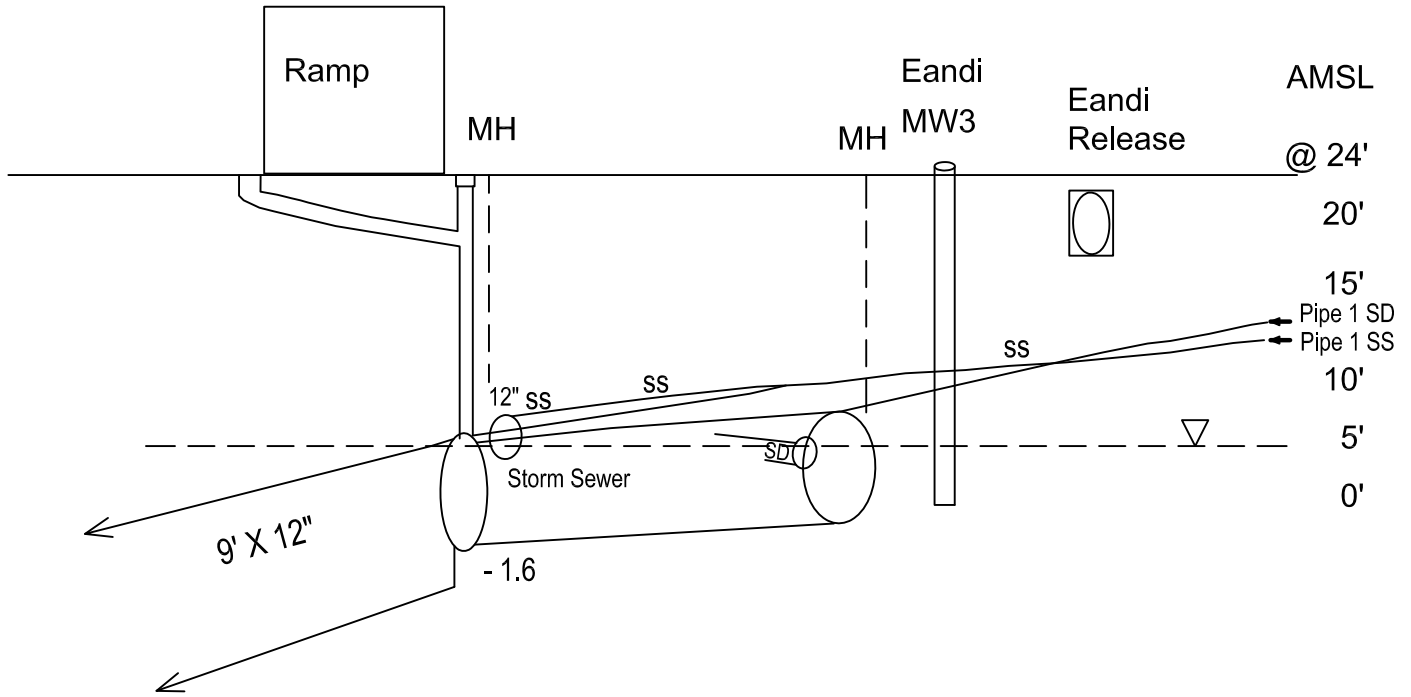
	Floor Pad Elevation Relative to Roll Up Door "A" +8"
	Floor Pad Elevation Relative to Roll Up Door "A" +18"
	SS-1-SS-10 Sub-Slab Vapor Location (06/17/10, 11/04/10, and 11/10/11)
	S1-S14 Soil Boring Location (12/2/98, 11/16/05, and 11/28/11)
	D1 Soil Boring Location (10/24/00)
	TW-3 Temporary Well (10/24/00)
	S9-S11 Soil Boring Location (11/15/06)
	V1-V3 Soil Vapor Location (11/15/06)

*Note: Five attempts to bore S6 met refusal at 4'-6' due to subsurface debris.
Air Ventilation and Ducting are all in Ceiling



Floor Plan with Historic Overlay - Floor Plan with Incinerator Footprint, Former Property Line Footprints, Former Street Footprint and Concrete Floor Slabs Indicated
1125 Miller Avenue
Oakland, California

CLEARWATER GROUP		
Project No. CB018	Figure Date 02/12	Figure A



E. 11th Street
Cross Section

Eandi Release and Local Infrastructure

1125 Miller Avenue
Oakland, California

CLEARWATER GROUP

Project No.
CB018

Figure Date
3/12

Figure
B

ATTACHMENT D
Standard Operating Procedures

CLEARWATER GROUP
Direct-Push Drilling Investigation Procedures

The direct-push method of drilling soil borings has several advantages over hollow-stem auger drilling. The direct-push method produces no drill cuttings and is capable of 150 to 200 feet of soil boring or well installation work per day. Direct-push drilling can be used for soil gas surveys, soil sampling, groundwater sampling, and installation of small-diameter monitoring well and remediation system components such as air sparge points. The equipment required to perform direct-push work is varied, ranging from a roto-hammer and operator to a pickup truck-mounted rig capable of substantial static downward force combined with percussive force. This method allows subsurface investigation work to be performed in areas inaccessible to conventional drill rigs such as basements, beneath canopies, or below power lines. Direct-push equipment is ideal at sites with unconsolidated soil or overburden, and for sampling depths less than 30 feet. This method is not appropriate for boring through bedrock or gravelly soils.

Permitting and Site Preparation

Prior to direct-push drilling, Clearwater Group will obtain all necessary permits and locate all underground and above-ground utilities through Underground Service Alert and a thorough site inspection. All drilling equipment will be inspected daily and will be maintained in safe operating condition. All down-hole drilling equipment will be cleaned prior to arriving on-site. Working components of the rig near the borehole, as well as casing and sampling equipment, will be thoroughly decontaminated between each boring location by either steam cleaning or washing with an Alconox® solution. All drilling and sampling methods will be consistent with ASTM Method D-1452-80 and county, state, and federal regulations.

Boring Installation and Soil Sampling

Direct-push drilling uses a 1.5-inch outer barrel with an inner rod held in place during pushing. Soil samples are collected by penetrating to the desired depth, retracting the inner rod, and attaching a soil sampler. The sampler is then thrust beyond the outer barrel into native soil. Soil samples are recovered in brass, stainless steel, or acetate sample tubes held inside the sampler.

Soil removed from the upper tube section is used for lithologic descriptions, according to the Unified Soil Classification System. If organic vapors will be analyzed in the field, a portion of each soil sample will be placed in a plastic zip-lock bag. The bag will be sealed and warmed for approximately 10 minutes to allow soil vapors to be released from the sample and diffused into the head space of the bag. The bag is then pierced with the probe of a calibrated organic vapor detector and the detector readings recorded with the lithologic descriptions on the soil boring log. Soil samples selected for laboratory analysis will be covered on both ends with Teflon™ tape and plastic end caps. The samples will then be labeled, recorded on a chain-of-custody document, stored on ice in a cooler, and transported to a state-certified analytical laboratory.

Temporary Well Installation and Groundwater Sampling

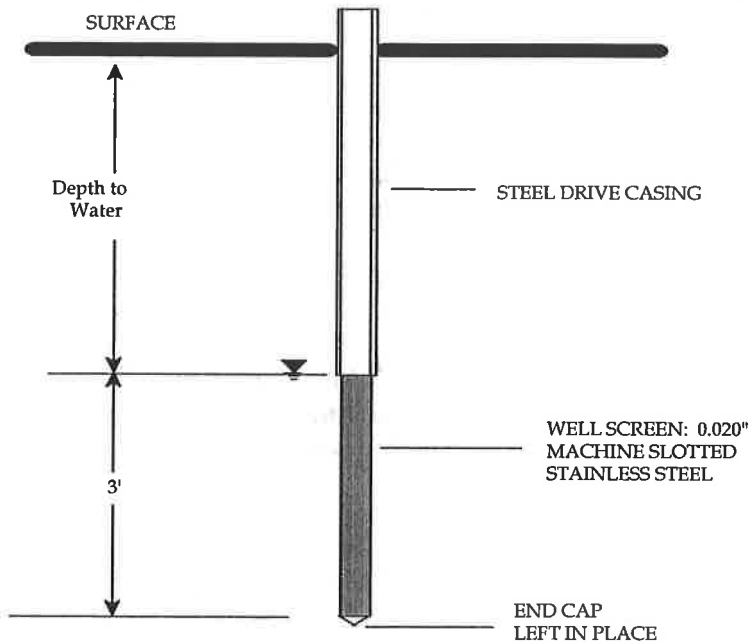


Figure 1

Grab Groundwater Sample Collection

Groundwater samples are collected by removing the inner rod and attaching a 4-foot stainless steel screen with a drive point at the end (Figure 1). The screen and rod are then inserted inside the outer barrel and driven to the desired depth, where the outer rod is retracted to expose the screen. If enough water for sampling is not produced through the stainless well screen, a 1-inch PVC screen can be installed in the boring and the outer rod retracted to leave a temporary well point for collecting groundwater samples, water level, or other parameters.

Monitoring Well Installation and Development

Permanent small-diameter monitoring wells are installed by driving a 2-inch diameter outer barrel and inner rod as described above. Upon reaching the desired depth, the system is removed, and 1-inch outside diameter (OD) (1/2-inch inside diameter [ID]) pre-packed PVC piping is installed. The well plug is created using granular bentonite. The well seal is constructed of cement and sealed at the surface with a conventional "Christy® Box" or similar vault. Monitoring wells are developed by surging the well with a small-diameter bailer and removing approximately 10 casing volumes of water, until the water is clear.

Groundwater Sample Collection and Water Level Measurement from Monitoring Wells

Before groundwater is collected from the wells, the water levels are measured in all wells using an electronic water-level gauge. Monitoring wells are prepared for sampling by purging three or more well volumes of water. Water is removed using small-diameter bailers, a peristaltic pump, or by manually pumping using tubing with a check valve at the bottom. During removal of each well volume of water, the temperature, pH, and conductivity are measured and recorded on the field sampling form. Successive well volumes are removed until the parameters have stabilized

or the well has gone dry. Prior to sampling, the well is allowed to recover to within 90% of the stabilized water levels. The groundwater samples¹ are collected using small-diameter bailers.

The samples are decanted into laboratory-supplied containers, labeled, recorded on a chain-of-custody document, stored on ice in a cooler, and transported to a certified analytical laboratory for analysis.

¹ Small-diameter wells often produce small sample quantities and are appropriate for analysis of volatile and aromatic compounds and dissolved metals analysis using VOA vials. Obtaining liter-size samples can be difficult and time consuming. Monitoring wells installed by the direct-push method are most effective at sites where the subsurface soils are more coarse than silt, gasoline components are the key contaminants of concern, and water levels are not more than 25 feet below ground surface.

CLEARWATER GROUP
Direct-Push Drilling Investigation Procedures
Single Rod Macro-Core® Sampler

The direct-push method produces no drill cuttings and is capable of 150 to 200 feet of soil boring per day. Direct-push drilling can be used for soil sampling, grab groundwater sample collection, soil gas surveys, and installation of remediation system components, such as air sparge points.

A pickup truck-mounted rig is used to drive the direct-push soil sampler. This method allows subsurface investigation work to be performed in areas inaccessible to conventional drill rigs such as beneath canopies, or below power lines. Direct-push equipment is ideal at sites with unconsolidated soil or overburden, and for sampling depths less than 30 feet. This method is not appropriate for boring into bedrock.

Permitting and Site Preparation

Prior to direct-push drilling, Clearwater Group will obtain all necessary permits and locate the underground utilities through Underground Service Alert and a thorough site inspection. The drilling equipment will be inspected daily and will be maintained in safe operating condition. The down-hole drilling equipment will be cleaned prior to arriving on-site. Working components of the drill rig near the borehole, as well as casing and sampling equipment, will be thoroughly decontaminated between each boring location by either steam cleaning or washing with an Alconox® solution. The drilling and sampling methods will be consistent with county, state, and federal regulations.

Soil Boring and Sampling

Single rod Macro-Core® direct-push drilling uses a 4-foot long by 1.5-inch diameter steel sample barrel with an inner, removable acetate liner. The sample barrel is open at the bottom. Soil samples are collected in four-foot sample intervals by driving the barrel into the soil, retracting the barrel, and removing the inner acetate liner, which has been filled with soil. The sample collection process is repeated for each four-foot depth interval. Following sample collection the boring is grouted according to regulatory agency requirements.

The four-foot long, clear, acetate liners are visually inspected and 6-inch sections of the liner, selected for laboratory analysis, are sawn from the liner and capped on both ends with tight-fitting plastic caps. The samples are labeled, recorded on a chain-of-custody document, stored on ice in a cooler, and transported to a state-certified analytical laboratory.

The remainder of the liner is split open and the soil examined in order to prepare lithologic descriptions according to the Unified Soil Classification System. A photo-ionization detector is used to scan the soil for organic vapors.

Head Space Method

To obtain a head space reading a portion of soil is placed in a plastic zip-lock bag. The bag is sealed and warmed for approximately 10 minutes to allow soil vapors to be released from the soil and diffused into the head space of the bag. The bag is then pierced with the probe of a calibrated photoionization detector and the detector reading is recorded on the soil boring log.

Grab Groundwater Sample Collection

Groundwater samples are collected by removing the sampler from the soil boring and lowering a disposable bailer into the boring. If enough water for sampling is not produced, or the boring is prone to caving, a 1-inch diameter PVC screen and casing can be installed in the boring to leave a temporary well for collecting groundwater samples, or depth to groundwater information. The groundwater samples are collected using small-diameter bailers.

The samples are decanted into laboratory-supplied containers, labeled, recorded on a chain-of-custody document, stored on ice in a cooler, and transported to a certified analytical laboratory for analysis.

CLEARWATER GROUP

Soil Sampling Procedures

Soil samples are typically collected in six-inch long, two-inch diameter brass or acetate tubes. If copper or zinc contamination is the subject of the investigation, acetate or stainless steel liners are used instead of brass. Soil sample locations are typically selected by field screening a portion of the soil for organic vapors using a calibrated organic vapor meter.

Once the sampling location has been determined, a small thickness of superficial soil is removed prior to collection, to prevent cross contamination. If the location being sampled has been exposed to the air for more than a few minutes, hand-tools will be used to dig at least 12 inches into the soil in order to collect as fresh a sample as possible. The sample is collected by pushing the tube into the soil by hand, or a rubber mallet may be used if the tube can not be driven by hand. If it is not possible to drive the tube into the soil, loose soil may be scraped from the freshly exposed surface and placed in the tube by hand.

Soil samples may also be collected using a hand auger and a slide hammer-driven sampler. The hand auger is advanced the desired depth into the soil, then withdrawn and replaced with the slide hammer sampler. The slide hammer sampler contains a 6-inch long by 2-inch diameter brass sample liner (or two 3-inch long liners) inserted inside the threaded core barrel, which is attached to the slide hammer by an extension rod. The core barrel is driven into the soil by the slide hammer, then withdrawn, unscrewed, and the sample liner removed.

Soil samples selected for laboratory analysis are immediately sealed on both ends with Teflon[®] lined plastic end caps, labeled, documented on a chain-of-custody form, and placed in a chilled cooler for transport to a state-certified laboratory.

To prevent cross-contamination of the samples, Clearwater personnel adhere to the following procedures in the field:

- A new, clean pair of latex or nitrile gloves are donned prior to collecting each sample.
- All hand-digging and sampling equipment is thoroughly decontaminated between each sample, by scrubbing equipment in a wash of Alconox[®] solution, followed by a double rinse in potable water. If required the second rinse will consist of distilled water.

ATTACHMENT E

Soil Boring Logs

SOIL BORING AND WELL CONSTRUCTION LOG:
CLEARWATER GROUP

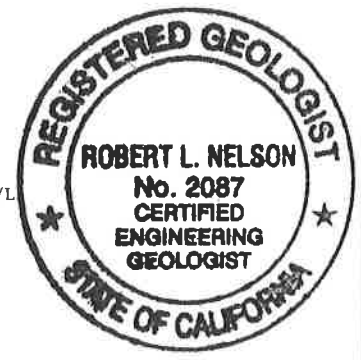
Project No. CB018H

Sheet 1 of 1

	CLIENT/LOCATION: 23RD AVENUE PARTNERS	CITY: OAKLAND	JOB NO.: CB018H	BORING/WELL NO.: S12
	DRILLING CONTRACTOR: FAST TECK	DRILL RIG TYPE: GEOPROBE 5400	WELL DEPTH: NA	BORING DIAMETER: 2.0 INCHES
	DRILL RIG OPERATOR: KEVIN POPE	WELL MATERIAL: NA	BORING DEPTH: 24.0 FT	FILTER PACK: NA
	NOTE: G = TPH - Gasoline Concentration in mg/kg (Soil) or µg/L (Water) D = TPH - Diesel Concentration in mg/kg (Soil) or µg/L (Water) S = Soil W = Water			DRILLING DATE: 11/28/2011

ANALYTICAL RESULTS: SOIL in mg/kg WATER in µg/L	SAMPLE DEPTH and TYPE	INCHES DRIVEN	INCHES RECOVERED	SAMPLE CONDITION	ODOR	PID	DEPTH (FEET)	GRAPHIC LOG	SAMPLING METHOD: MACROCORE
									MONITORING INSTRUMENT: PHOTOIONIZATION DETECTOR
G = <50 D = 1,300							1	3" Asphalt	
					NO	0	2	Baserock: Dark Yellowish Brown (10YR 4/6) sandstone gravel, loose, dry	
					NO	0	3	Clayey Sand (SC), Very Dark Grey (10YR 3/1), soft, moist, 60% very fine sand, 40% clay, moderately plastic	
					NO	0	4		
		36	36	G	NO	0	5	Sandy Lean Clay with Gravel (CL), Dark Olive Grey (5Y4/2), stiff, moist, 50% lean clay, 25% fine sand, 25% fine gravel	
					NO	0	6		
		48	48	G			8	Sandy Lean Clay (CL), Dark Olive Grey (5Y4/2), medium stiff, moist, low to moderate plasticity, 65% clay, 35% fine sand, color change at 10' to Olive Grey (5Y 4/2)	
					NO	0	9		
					NO	0	10		
		W					11	Sandy Lean Clay (CL), Olive (5Y5/3), stiff, wet, low to moderate plasticity, 60% clay, 40% fine sand	
	G = <1.0 D = 8.6		48	40	G-F	NO	0	12	
					NO	0	13		
					NO	0	14		
		48	45	G			16	Sandy Clay with Gravel (GC)	
					NO	0	17	Silty Sand (SM), Yellowish Brown (10YR 5/4), loose, wet, 40% silt, 60% fine sand, sands become coarser with depth to medium fine at 17'	
		S					18	Well Graded Sand with Silt and Gravel (SW-SM), Yellowish Brown (10YR 5/6), dense, wet, 10% silt, 65% fine to medium sand, 25% fine subrounded gravel. Gravels are iron stained sandstone and chert, gravel content increases with depth.	
					NO	0	19		
		48	48	G			20	Sandy Lean Clay (CL), Light Olive Brown (2.5Y 5/4), stiff, wet, moderately plastic, 60% clay, 40% very fine to fine sand, light iron stain	
					NO	0	21		
					NO	0	22		
					NO	0	23	50% clay, 20% very fine to fine sand, 30% dark grey fine gravel	
				NO	0	24			
				NO	0	25			
				NO	0	26			
				NO	0	27			
				NO	0	28			
				NO	0	29			
				NO	0	30			
				NO	0	31			
				NO	0	32			

LOGGED BY: Robert L. Nelson, PG, CEG APPROVED BY: James A. Jacobs, PG, CHG



Sample Type
 S = Soil; Soil Sample Results in mg/kg
 W = Water; Groundwater Sample Results in µg/L

**SOIL BORING AND WELL CONSTRUCTION LOG:
CLEARWATER GROUP**

Project No. CB018H

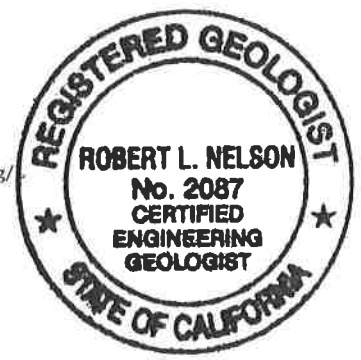
Sheet 1 of 1

	CLIENT/LOCATION:	CITY:	JOB NO.:	BORING/WELL NO.:
	23RD AVENUE PARTNERS	OAKLAND	CB018H	S13
	DRILLING CONTRACTOR:	DRILL RIG TYPE:	WELL DEPTH:	BORING DIAMETER:
	FAST TECK	GEOPROBE 5400	NA	2.0 INCHES
DRILL RIG OPERATOR:	WELL MATERIAL:	BORING DEPTH:	FILTER PACK:	
KEVIN POPE	NA	24.0 FT	NA	
NOTE: G = TPH - Gasoline Concentration in mg/kg (Soil) or µg/L (Water) D = TPH - Diesel Concentration in mg/kg (Soil) or µg/L (Water) S = Soil W = Water				DRILLING DATE: 11/28/2011

ANALYTICAL RESULTS: SOIL in mg/kg WATER in µg/L	SAMPLE DEPTH AND TYPE	INCHES DRIVEN	INCHES RECOVERED	SAMPLE CONDITION	ODOR	PID	DEPTH (FEET)	GRAPHIC LOG	SAMPLING METHOD: MACROCORE	
									MONITORING INSTRUMENT: PHOTOIONIZATION DETECTOR	
							1		4" Concrete	
					NO	0	2		Fill: Silty Sand (SM), Dark Yellowish Brown (10YR 4/6), loose, dry to moist, 25% silt, 70% fine sand, 5% fine gravel	
					NO	0	3			
					NO	0	4			
		36	30	F			5			
							6		Sandy Lean Clay with Gravel (CL), Olive (5Y 4/3), stiff, moist to wet, 60% clay, 25% fine sand, 15% fine gravel	
							7			
		48	48	G	NO	0	8			
							9			
							10		Sandy Silt (ML), Dark Greenish Grey (10Y 4/1), stiff, moist, 10% clay, 50% silt, 40% very fine sand, trace of fine gravel, strong odor to 16'	
G = 7.0 D = 740	S W				Strong	100	11			
G = 200 D = 36,000		48	48	G	Strong	65	12			
					Strong	125	13			13.5'-15' 25% silt, 75% fine sand
					Strong	25	14			
G = 65 D = 1,900	S						15		Silty Gravel with Sand (GM), Yellowish Brown (10YR 5/4), loose, wet, 25% fines (mostly silt), 25% very fine to fine sand, 50% fine subangular to subrounded gravel. Gravel is mostly sandstone with some chert	
		48	45	G			16			
					Weak	10	17			
					NO	0	18			
G = 4.0 D = 4.4	S				NO	0	19			
		48	48	G			20			
					NO	0	21			
							22		Sandy Lean Clay (CL), Light Olive Brown (2.5Y 5/4), stiff, wet, moderately plastic, 60% clay, 40% fine sand, light iron stain	
G = <1.0 D = <1.0	S				NO	0	23			
							24			
							25			
							26			
							27			
							28			
							29			
							30			
							31			
							32			

APPROVED BY: James A. Jacobs, PG, CHG
LOGGED BY: Robert L. Nelson, PG, CEG

Sample Type
S = Soil; Soil Sample Results in mg/Kg
W = Water; Groundwater Sample Results in µg/L



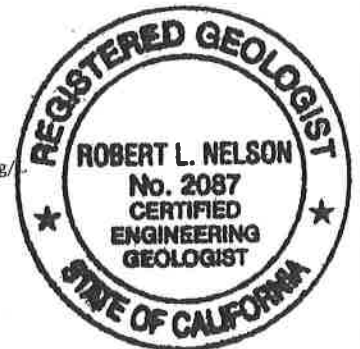
SOIL BORING AND WELL CONSTRUCTION LOG:
CLEARWATER GROUP

Project No. CB018H
 Sheet 1 of 1

	CLIENT/LOCATION: 23RD AVENUE PARTNERS	CITY: OAKLAND	JOB NO.: CB018H	BORING/WELL NO.: S14
	DRILLING CONTRACTOR: FAST TECK	DRILL RIG TYPE: GEOPROBE 5400	WELL DEPTH: NA	BORING DIAMETER: 2.0 INCHES
	DRILL RIG OPERATOR: KEVIN POPE	WELL MATERIAL: NA	BORING DEPTH: 24.0 FT	FILTER PACK: NA
	NOTE: G = TPH - Gasoline Concentration in mg/kg (Soil) or µg/L (Water) D = TPH - Diesel Concentration in mg/kg (Soil) or µg/L (Water) S = Soil W = Water			DRILLING DATE: 11/28/2011

ANALYTICAL RESULTS: SOIL in mg/kg WATER in µg/L	SAMPLE DEPTH AND TYPE	INCHES DRIVEN	INCHES RECOVERED	SAMPLE CONDITION	ODOR	PTD	DEPTH (FEET)	GRAPHIC LOG	SAMPLING METHOD: MACROCORE	
									MONITORING INSTRUMENT: PHOTOIONIZATION DETECTOR	
							1	2" Concrete		
					YES	3.0	2	Clayey Sand (SC), Very Dark Grey (10YR 3/1), soft, moist, moderately plastic, 40% clay, 60% very fine sand		
					NO	0.1	3			
							4			
		36	36	F	NO	0	5			
					NO	0	6	Sandy Lean Clay (CL), Brown (7.5YR 4/2), stiff, moist, 60% clay, 35% very fine to fine sand, 5% fine deeply weathered gravel		
							7			
		48	48	G	NO	0	8	Gravelly Lean Clay (CL) Dark Yellowish Brown (10YR 4/6), stiff, moist, 35% clay, 25% silt, 40% fine gravel. Gravels are deeply weathered sandstone and chert		
							9			
							10	Silty Sand (SM), Yellowish Brown (10YR 5/6), soft, moist, 40% silt, 60% fine sand, trace mica, iron stained		
					NO	0	11			
G = <50 D = 290	W				NO	0	12	Sandy Silt (ML), Dark Yellowish Brown (10YR 4/4), soft, moist, plastic, 10% clay, 50% silt, 40% fine sand		
		48	48	G	NO	0	13			
							14			
							15	Gravelly Lean Clay with Sand (CL), Light Olive Brown (2.5Y 5/4), stiff, moist to wet, 45% clay, 35% fine sand, 20% fine deeply weathered sandstone gravel, trace of chert gravel		
		48	40	F-G			16			
							17			
					NO	0	18			
G = <1.0 D = <1.0	S				NO	0	19	Clayey Sand with Gravel (SC), Olive Brown (2.5Y 4/3), loose, wet, 15% clay, 70% fine sand, 15% fine gravel		
		48	48	G			20			
							21			
							22	Clayey Gravel with Sand (GC), Dark Yellowish Brown (10YR 4/4), dense, wet, 10% clay, 30% fine sand, 60% fine subangular gravel. Gravels are primarily sandstone with lesser shale and chert		
					NO	0	23			
					NO	0	24			
							25			
							26			
							27			
							28			
							29			
							30			
							31			
							32			

APPROVED BY: James A. Jacobs, PG, CHG
 LOGGED BY: Robert L. Nelson, PG, CEG



ATTACHMENT F

Photographs



S12



Site looking east



Hand auger S12 showing 4" gas line



Set up on S12

ATTACHMENT G

Waste Disposal

NON-HAZARDOUS WASTE MANIFEST

CB018H

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.		Manifest Document No.	2. Page 1 of 1
3. Generator's Name and Mailing Address 2322 Aye Associates PO Box 187 OAKLAND, CA 94612		Bill to: Clearwater Group 229 Tewksbury Ave Pt. Richmond, CA 94801			
4. Generator's Phone (510) 452-2944					
5. Transporter 1 Company Name Clearwater Group	6. US EPA ID Number N/A	A. State Transporter's ID			
7. Transporter 2 Company Name	8. US EPA ID Number	B. Transporter 1 Phone			
		C. State Transporter's ID			
		D. Transporter 2 Phone			
9. Designated Facility Name and Site Address Instrat Rivista, CA		10. US EPA ID Number NA		E. State Facility's ID	
				F. Facility's Phone	
11. WASTE DESCRIPTION		12. Containers		13. Total Quantity	14. Unit Wt./Vol.
		No.	Type		
a. Decon water from soil borings		1	Bucket	5	gal
b.					
c.					
d.					
G. Additional Descriptions for Materials Listed Above		H. Handling Codes for Wastes Listed Above			
15. Special Handling Instructions and Additional Information					
16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.					
Printed/Typed Name Erik Lervag for		Signature <i>Erik Lervag</i>		Date 11 28 11	
17. Transporter 1 Acknowledgement of Receipt of Materials					
Printed/Typed Name Erik Lervag		Signature <i>Erik Lervag</i>		Date 11 28 11	
18. Transporter 2 Acknowledgement of Receipt of Materials					
Printed/Typed Name Garnett Sibert		Signature <i>Garnett Sibert</i>		Date 11 28 11	
19. Discrepancy Indication Space					
20. Facility Owner or Operator; Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.					
Printed/Typed Name MICHAEL WHITEHEAD		Signature <i>Michael Whitehead</i>		Date 11 18 12	

NON-HAZARDOUS WASTE

GENERATOR

TRANSPORTER

FACILITY

received 2/9/12

CBS18H



INTEGRATED WASTESTREAM MANAGEMENT, INC.
1945 CONCOURSE DRIVE, SAN JOSE, CA 95131
PHONE: 408.433.1990 FAX: 408.433.9521

CERTIFICATE OF DISPOSAL

Generator Name: John Protopappas
Address: P.O. Box 687
Oakland, CA 94604
Contact: John Protopappas
Phone: 510-452-2944

Facility Name: P&D 23rd Avenue Associates
Address: 1125 Miller Avenue
Oakland, CA
Facility Contact: Aysha Massell, Clearwater Group
Phone: 510-307-9943

IWM Job #:	<u>99913-PS</u>
Description of Waste:	<u>2 Pail(s) of</u> <u>Non-Hazardous</u> <u>Soil</u>
Removal Date:	<u>1/27/12</u>
Ticket #:	<u>RSVRL270112</u>

Transporter Information

Name: IWM, Inc.
Address: 1945 Concourse Drive
San Jose, CA 95131
Phone: (408) 433-1990

Disposal Facility Information

Name: Republic Services Vasco Road Landfill
Address: 4001 N. Vasco Road
Livermore, CA 94550
Phone: (925) 447-0491

IWM, INC. CERTIFIES THAT THE ABOVE LISTED NON-HAZARDOUS WASTE WILL BE TREATED AND DISPOSED AT THE DESIGNATED FACILITY IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS.

William T. DeLon *William T. DeLon*
Authorized Representative (Print Name and Signature)

1/27/12
Date

Received 2/9/12

A5077H



INTEGRATED WASTESTREAM MANAGEMENT, INC.
1945 CONCOURSE DRIVE, SAN JOSE, CA 95131
PHONE: 408.433.1990 FAX: 408.433.9521

CERTIFICATE OF DISPOSAL

Generator Name: Mitchell Enterprise Inc
Address: 1000 American Street
San Carlos, CA 94070
Contact: Earl Mitchell
Phone: 650-593-3183

Facility Name: State Plumbing and Heating Supplies
Address: 1000 American Street
San Carlos, CA
Facility Contact: Aysha Massell, Clearwater Group
Phone: 510-307-9943

IWM Job #:	<u>99914-PS</u>
Description of Waste:	<u>1 Pail(s) of</u> <u>Non-Hazardous</u> <u>Soil</u>
Removal Date:	<u>1/27/12</u>
Ticket #:	<u>RSVRL270112</u>

Transporter Information

Name: IWM, Inc.
Address: 1945 Concourse Drive
San Jose, CA 95131
Phone: (408) 433-1990

Disposal Facility Information

Name: Republic Services Vasco Road Landfill
Address: 4001 N. Vasco Road
Livermore, CA 94550
Phone: (925) 447-0491

IWM, INC. CERTIFIES THAT THE ABOVE LISTED NON-HAZARDOUS WASTE WILL BE TREATED AND DISPOSED AT THE DESIGNATED FACILITY IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS.

William T. DeLon *William T. DeLon*
Authorized Representative (Print Name and Signature)

1/27/12
Date

ATTACHMENT H
Laboratory Analytical Reports



Laboratory Results

Erik Lervaag
The Auger Group
229 Tewksbury Avenue
Point Richmond, CA 94801

Subject : 3 Water Samples
Project Name : 23rd Avenue Associates
Project Number : CB018H

Dear Mr. Lervaag,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed. Testing procedures comply with the 2003 NELAC standard. All soil samples are reported on a total weight (wet weight) basis unless noted otherwise in the case narrative. Laboratory results relate only to the samples tested. This report may be freely reproduced in full, but may only be reproduced in part with the express permission of Kiff Analytical, LLC. Kiff Analytical, LLC is certified by the State of California under the National Environmental Laboratory Accreditation Program (NELAP), lab # 08263CA. If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,



Joel Kiff

Project Name : **23rd Avenue Associates**

Project Number : **CB018H**

Sample : **S-12**

Matrix : Water

Lab Number : 79647-01

Sample Date :11/28/2011

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	12/06/11 22:44
Toluene	< 0.50	0.50	ug/L	EPA 8260B	12/06/11 22:44
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	12/06/11 22:44
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	12/06/11 22:44
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	12/06/11 22:44
1,2-Dichloroethane-d4 (Surr)	99.1		% Recovery	EPA 8260B	12/06/11 22:44
Toluene - d8 (Surr)	98.6		% Recovery	EPA 8260B	12/06/11 22:44
TPH as Diesel	1300	50	ug/L	M EPA 8015	12/07/11 11:06
(Note: Discrete peaks, higher boiling hydrocarbons present, atypical for Diesel Fuel.)					
Octacosane (Diesel Surrogate)	121		% Recovery	M EPA 8015	12/07/11 11:06

Project Name : **23rd Avenue Associates**

Project Number : **CB018H**

Sample : **S-13**

Matrix : Water

Lab Number : 79647-02

Sample Date :11/28/2011

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	12/07/11 00:34
Toluene	< 0.50	0.50	ug/L	EPA 8260B	12/07/11 00:34
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	12/07/11 00:34
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	12/07/11 00:34
TPH as Gasoline	200	50	ug/L	EPA 8260B	12/07/11 00:34
1,2-Dichloroethane-d4 (Surr)	100		% Recovery	EPA 8260B	12/07/11 00:34
Toluene - d8 (Surr)	98.7		% Recovery	EPA 8260B	12/07/11 00:34
TPH as Diesel	36000	50	ug/L	M EPA 8015	12/07/11 11:35
Octacosane (Diesel Surrogate)	104		% Recovery	M EPA 8015	12/07/11 11:35

Project Name : **23rd Avenue Associates**

Project Number : **CB018H**

Sample : **S-14**

Matrix : Water

Lab Number : 79647-03

Sample Date :11/28/2011

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	12/07/11 01:10
Toluene	< 0.50	0.50	ug/L	EPA 8260B	12/07/11 01:10
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	12/07/11 01:10
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	12/07/11 01:10
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	12/07/11 01:10
1,2-Dichloroethane-d4 (Surr)	98.0		% Recovery	EPA 8260B	12/07/11 01:10
Toluene - d8 (Surr)	99.3		% Recovery	EPA 8260B	12/07/11 01:10
TPH as Diesel	290	50	ug/L	M EPA 8015	12/07/11 12:04
(Note: Discrete peaks, higher boiling hydrocarbons present, atypical for Diesel Fuel.)					
Octacosane (Diesel Surrogate)	99.7		% Recovery	M EPA 8015	12/07/11 12:04

QC Report : Method Blank Data

Project Name : **23rd Avenue Associates**

Project Number : **CB018H**

<u>Parameter</u>	<u>Measured Value</u>	<u>Method Reporting Limit</u>	<u>Units</u>	<u>Analysis Method</u>	<u>Date Analyzed</u>
TPH as Diesel	< 50	50	ug/L	M EPA 8015	12/05/2011
Octacosane (Diesel Surrogate)	91.8		%	M EPA 8015	12/05/2011
Benzene	< 0.50	0.50	ug/L	EPA 8260B	12/06/2011
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	12/06/2011
Toluene	< 0.50	0.50	ug/L	EPA 8260B	12/06/2011
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	12/06/2011
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	12/06/2011
1,2-Dichloroethane-d4 (Surr)	99.2		%	EPA 8260B	12/06/2011
Toluene - d8 (Surr)	98.3		%	EPA 8260B	12/06/2011

<u>Parameter</u>	<u>Measured Value</u>	<u>Method Reporting Limit</u>	<u>Units</u>	<u>Analysis Method</u>	<u>Date Analyzed</u>
------------------	-----------------------	-------------------------------	--------------	------------------------	----------------------

QC Report : Matrix Spike/ Matrix Spike DuplicateProject Name : **23rd Avenue Associates**Project Number : **CB018H**

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Benzene	79647-01	<0.50	39.9	39.9	41.3	41.2	ug/L	EPA 8260B	12/6/11	103	103	0.0963	80-120	25
Ethylbenzene	79647-01	<0.50	39.9	39.9	42.8	42.9	ug/L	EPA 8260B	12/6/11	107	107	0.145	80-120	25
P + M Xylene	79647-01	<0.50	39.9	39.9	40.8	41.3	ug/L	EPA 8260B	12/6/11	102	103	1.01	76.8-120	25
Toluene	79647-01	<0.50	39.9	39.9	40.9	40.8	ug/L	EPA 8260B	12/6/11	102	102	0.295	80-120	25
TPH as Diesel	BLANK	<50	1000	1000	928	952	ug/L	M EPA 8015	12/5/11	92.8	95.2	2.49	70-130	25

QC Report : Laboratory Control Sample (LCS)Project Name : **23rd Avenue Associates**Project Number : **CB018H**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	40.0	ug/L	EPA 8260B	12/6/11	104	80-120
Ethylbenzene	40.0	ug/L	EPA 8260B	12/6/11	108	80-120
P + M Xylene	40.0	ug/L	EPA 8260B	12/6/11	104	76.8-120
Toluene	40.0	ug/L	EPA 8260B	12/6/11	103	80-120



2795 2nd Street, Suite 300
 Davis, CA 95618
 Lab: 530.297.4800
 Fax: 530.297.4802

SRG # / Lab No. 79647

Project Contact (Hardcopy or PDF To): Erik Lervaag
 Company / Address: The Clearwater Group
 229 Tewksbury Ave., Pt. Richmond, CA 94801
 Phone Number: 510-307-9943
 Fax Number: 510-232-2823
 Project #: CB018H P.O. #:
 Project Name: 23rd Avenue Associates

California EDF Report? Yes No

Sampling Company Log Code: CWGO
 Global ID: T0600177455
 EDF Deliverable To (Email Address): gfisco@clearwatergroup.com
 Bill to: The Clearwater Group
 Sampler Signature:

Chain-of-Custody Record and Analysis Request

Sample Designation	Field Point Name	Sampling		Container				Preservative			Matrix			TPH Gas (EPA 8260B)	BTEX (EPA 8260B)	TPH as Diesel (8015M)	TAT	For Lab Use Only	
		Date	Time	40 ml VOA	Sleeve	Poly	Glass	Tedlar	HCl	HNO ₃	None	Water	Soil						Air
S-12		11/28/11	1345	5					X				X			X			01
S-13		11/28/11	1605	5					X				X			X			02
S-14		11/28/11	1415	5					X				X			X			03

Relinquished by: Date: 11/29/11 Time: 0800 Received by: _____

Relinquished by: _____ Date: _____ Time: _____ Received by: _____

Relinquished by: _____ Date: 120111 Time: 1413 Received by Laboratory: KIFF Analytical LLC

Remarks:

For Lab Use Only: Sample Receipt

Temp °C	Initials	Date	Time	Therm. ID #	Coolant Present
					Yes / No

SAMPLE RECEIPT CHECKLIST

SRG#: 79647 Date: 120111

Project ID: 23rd Avenue Associates

Method of Receipt: Courier Over-the-counter Shipper

COC Inspection

- Is COC present? Yes No
- Custody seals on shipping container? Intact Broken Not present N/A
- Is COC Signed by Relinquisher? Yes No Dated? Yes No
- Is sampler name legibly indicated on COC? Yes No
- Is analysis or hold requested for all samples? Yes No
- Is the turnaround time indicated on COC? Yes No
- Is COC free of whiteout and uninitialed cross-outs? Yes No, Whiteout No, Cross-outs

Sample Inspection

- Coolant Present: Yes No (includes water)
- Temperature °C 5.2 Therm. ID# IR-5 Initial TJB Date/Time 120111/1711 N/A
- Are there custody seals on sample containers? Intact Broken Not present
- Do containers match COC? Yes No No, COC lists absent sample(s) No, Extra sample(s) present
- Are there samples matrices other than soil, water, air or carbon? Yes No
- Are any sample containers broken, leaking or damaged? Yes No
- Are preservatives indicated? Yes, on sample containers Yes, on COC Not indicated N/A
- Are preservatives correct for analyses requested? Yes No N/A
- Are samples within holding time for analyses requested? Yes No
- Are the correct sample containers used for the analyses requested? Yes No
- Is there sufficient sample to perform testing? Yes No
- Does any sample contain product, have strong odor or are otherwise suspected to be hot? Yes No

Receipt Details

Matrix WA Container type VQA # of containers received 15
 Matrix _____ Container type _____ # of containers received _____
 Matrix _____ Container type _____ # of containers received _____
 Date and Time Sample Put into Temp Storage Date: 120111 Time: 1714

Quicklog

- Are the Sample ID's indicated: On COC On sample container(s) On Both Not indicated
- If Sample ID's are listed on both COC and containers, do they all match? Yes No N/A
- Is the Project ID indicated: On COC On sample container(s) On Both Not indicated
- If project ID is listed on both COC and containers, do they all match? Yes No N/A
- Are the sample collection dates indicated: On COC On sample container(s) On Both Not indicated
- If collection dates are listed on both COC and containers, do they all match? Yes No N/A
- Are the sample collection times indicated: On COC On sample container(s) On Both Not indicated
- If collection times are listed on both COC and containers, do they all match? Yes No N/A

COMMENTS:



Laboratory Results

Rob Nelson
Clearwater Group, Inc.
229 Tewksbury Avenue
Point Richmond, CA 94801

Subject : 6 Soil Samples
Project Name : 23rd Ave Associates
Project Number : CB018H

Dear Mr. Nelson,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed. Testing procedures comply with the 2003 NELAC standard. All soil samples are reported on a total weight (wet weight) basis unless noted otherwise in the case narrative. Laboratory results relate only to the samples tested. This report may be freely reproduced in full, but may only be reproduced in part with the express permission of Kiff Analytical, LLC. Kiff Analytical, LLC is certified by the State of California under the National Environmental Laboratory Accreditation Program (NELAP), lab # 08263CA. If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,



Joel Kiff



Report Number : 79648

Date : 01/13/2012

Subject : 6 Soil Samples
Project Name : 23rd Ave Associates
Project Number : CB018H

Case Narrative

A version of this report was previously issued on 12/08/11. This revised version replaces that report.

Project Name : **23rd Ave Associates**

Project Number : **CB018H**

Sample : **B12-18**

Matrix : Soil

Lab Number : 79648-01

Sample Date :11/28/2011

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	12/03/11 22:34
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	12/03/11 22:34
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	12/03/11 22:34
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	12/03/11 22:34
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	12/03/11 22:34
1,2-Dichloroethane-d4 (Surr)	102		% Recovery	EPA 8260B	12/03/11 22:34
Toluene - d8 (Surr)	99.5		% Recovery	EPA 8260B	12/03/11 22:34
TPH as Diesel	8.6	1.0	mg/Kg	M EPA 8015	12/07/11 19:34
(Note: Discrete peaks in Diesel range, atypical for Diesel Fuel.)					
Octacosane (Diesel Surrogate)	97.0		% Recovery	M EPA 8015	12/07/11 19:34

Project Name : **23rd Ave Associates**

Project Number : **CB018H**

Sample : **B14-19**

Matrix : Soil

Lab Number : 79648-02

Sample Date :11/28/2011

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	12/03/11 21:25
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	12/03/11 21:25
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	12/03/11 21:25
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	12/03/11 21:25
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	12/03/11 21:25
1,2-Dichloroethane-d4 (Surr)	106		% Recovery	EPA 8260B	12/03/11 21:25
Toluene - d8 (Surr)	99.9		% Recovery	EPA 8260B	12/03/11 21:25
TPH as Diesel	1.0	1.0	mg/Kg	M EPA 8015	12/07/11 17:36
(Note: Discrete peaks in Diesel range, atypical for Diesel Fuel.)					
Octacosane (Diesel Surrogate)	85.3		% Recovery	M EPA 8015	12/07/11 17:36

Project Name : **23rd Ave Associates**

Project Number : **CB018H**

Sample : **B13-11**

Matrix : Soil

Lab Number : 79648-03

Sample Date :11/28/2011

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	12/08/11 04:53
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	12/08/11 04:53
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	12/08/11 04:53
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	12/08/11 04:53
TPH as Gasoline	7.0	1.0	mg/Kg	EPA 8260B	12/08/11 04:53
1,2-Dichloroethane-d4 (Surr)	98.3		% Recovery	EPA 8260B	12/08/11 04:53
Toluene - d8 (Surr)	99.4		% Recovery	EPA 8260B	12/08/11 04:53
TPH as Diesel	740	2.0	mg/Kg	M EPA 8015	12/08/11 11:53
Octacosane (Diesel Surrogate)	95.6		% Recovery	M EPA 8015	12/08/11 11:53

Project Name : **23rd Ave Associates**

Project Number : **CB018H**

Sample : **B13-14**

Matrix : Soil

Lab Number : 79648-04

Sample Date :11/28/2011

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Lead	4.9	0.50	mg/Kg	EPA 6010B	01/13/12 15:35
Benzene	< 0.025	0.025	mg/Kg	EPA 8260B	12/06/11 12:02
Toluene	< 0.025	0.025	mg/Kg	EPA 8260B	12/06/11 12:02
Ethylbenzene	< 0.025	0.025	mg/Kg	EPA 8260B	12/06/11 12:02
Total Xylenes	< 0.025	0.025	mg/Kg	EPA 8260B	12/06/11 12:02
TPH as Gasoline	65	2.5	mg/Kg	EPA 8260B	12/06/11 12:02
1,2-Dichloroethane-d4 (Surr)	101		% Recovery	EPA 8260B	12/06/11 12:02
Toluene - d8 (Surr)	99.3		% Recovery	EPA 8260B	12/06/11 12:02
2-Bromochlorobenzene (Surr)	86.8		% Recovery	EPA 8260B	12/06/11 12:02
TPH as Diesel	1900	5.0	mg/Kg	M EPA 8015	12/08/11 12:22
Octacosane (Diesel Surrogate)	93.8		% Recovery	M EPA 8015	12/08/11 12:22

Project Name : **23rd Ave Associates**

Project Number : **CB018H**

Sample : **B13-19**

Matrix : Soil

Lab Number : 79648-05

Sample Date :11/28/2011

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	12/03/11 23:08
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	12/03/11 23:08
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	12/03/11 23:08
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	12/03/11 23:08
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	12/03/11 23:08
1,2-Dichloroethane-d4 (Surr)	103		% Recovery	EPA 8260B	12/03/11 23:08
Toluene - d8 (Surr)	99.4		% Recovery	EPA 8260B	12/03/11 23:08
TPH as Diesel	4.4	1.0	mg/Kg	M EPA 8015	12/07/11 16:09
(Note: Discrete peaks in Diesel range, atypical for Diesel Fuel.)					
Octacosane (Diesel Surrogate)	86.0		% Recovery	M EPA 8015	12/07/11 16:09

Project Name : **23rd Ave Associates**

Project Number : **CB018H**

Sample : **B13-23.5**

Matrix : Soil

Lab Number : 79648-06

Sample Date :11/28/2011

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	12/03/11 22:00
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	12/03/11 22:00
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	12/03/11 22:00
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	12/03/11 22:00
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	12/03/11 22:00
1,2-Dichloroethane-d4 (Surr)	105		% Recovery	EPA 8260B	12/03/11 22:00
Toluene - d8 (Surr)	99.2		% Recovery	EPA 8260B	12/03/11 22:00
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	12/08/11 10:25
Octacosane (Diesel Surrogate)	89.3		% Recovery	M EPA 8015	12/08/11 10:25

QC Report : Method Blank DataProject Name : **23rd Ave Associates**Project Number : **CB018H**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Lead	< 0.50	0.50	mg/Kg	EPA 6010B	01/13/2012
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	12/07/2011
Octacosane (Diesel Surrogate)	78.7		%	M EPA 8015	12/07/2011
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	12/03/2011
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	12/03/2011
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	12/03/2011
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	12/03/2011
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	12/03/2011
1,2-Dichloroethane-d4 (Surr)	103		%	EPA 8260B	12/03/2011
Toluene - d8 (Surr)	98.1		%	EPA 8260B	12/03/2011
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	12/03/2011
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	12/03/2011
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	12/03/2011
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	12/03/2011
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	12/03/2011
1,2-Dichloroethane-d4 (Surr)	106		%	EPA 8260B	12/03/2011
Toluene - d8 (Surr)	99.8		%	EPA 8260B	12/03/2011

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	12/07/2011
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	12/07/2011
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	12/07/2011
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	12/07/2011
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	12/07/2011
1,2-Dichloroethane-d4 (Surr)	102		%	EPA 8260B	12/07/2011
Toluene - d8 (Surr)	97.6		%	EPA 8260B	12/07/2011

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : **23rd Ave Associates**Project Number : **CB018H**

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
TPH as Diesel	79690-21	3.4	19.5	19.5	16.8	17.5	mg/Kg	M EPA 8015	12/7/11	69.0	72.5	4.91	60-140	25
Benzene	79636-01	<0.0050	0.0400	0.0397	0.0396	0.0395	mg/Kg	EPA 8260B	12/3/11	99.1	99.6	0.510	67.9-120	25
Ethylbenzene	79636-01	<0.0050	0.0400	0.0397	0.0404	0.0397	mg/Kg	EPA 8260B	12/3/11	101	100	0.951	65.5-127	25
P + M Xylene	79636-01	<0.0050	0.0400	0.0397	0.0377	0.0376	mg/Kg	EPA 8260B	12/3/11	94.3	94.7	0.425	62.5-124	25
Toluene	79636-01	<0.0050	0.0400	0.0397	0.0366	0.0370	mg/Kg	EPA 8260B	12/3/11	91.5	93.2	1.90	65.7-120	25
Benzene	79671-01	<0.0050	0.0369	0.0369	0.0364	0.0374	mg/Kg	EPA 8260B	12/3/11	98.6	101	2.85	67.9-120	25
Ethylbenzene	79671-01	<0.0050	0.0369	0.0369	0.0362	0.0372	mg/Kg	EPA 8260B	12/3/11	98.2	101	2.78	65.5-127	25
P + M Xylene	79671-01	<0.0050	0.0369	0.0369	0.0364	0.0378	mg/Kg	EPA 8260B	12/3/11	98.7	102	3.59	62.5-124	25
Toluene	79671-01	<0.0050	0.0369	0.0369	0.0361	0.0370	mg/Kg	EPA 8260B	12/3/11	97.8	100	2.53	65.7-120	25

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : **23rd Ave Associates**Project Number : **CB018H**

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Benzene	79713-01	<0.0050	0.0386	0.0375	0.0379	0.0366	mg/Kg	EPA 8260B	12/7/11	98.1	97.4	0.653	67.9-120	25
Ethylbenzene	79713-01	<0.0050	0.0386	0.0375	0.0393	0.0384	mg/Kg	EPA 8260B	12/7/11	102	102	0.424	65.5-127	25
P + M Xylene	79713-01	0.0059	0.0386	0.0375	0.0418	0.0413	mg/Kg	EPA 8260B	12/7/11	92.9	94.3	1.50	62.5-124	25
Toluene	79713-01	<0.0050	0.0386	0.0375	0.0370	0.0362	mg/Kg	EPA 8260B	12/7/11	95.9	96.3	0.487	65.7-120	25
Lead	79987-02	4.8	50.0	50.0	48.3	48.0	mg/Kg	EPA 6010B	1/13/12	86.9	86.4	0.529	75-125	20

QC Report : Laboratory Control Sample (LCS)Project Name : **23rd Ave Associates**Project Number : **CB018H**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Lead	50.0	mg/Kg	EPA 6010B	1/13/12	99.6	85-115
TPH as Diesel	20.0	mg/Kg	M EPA 8015	12/7/11	87.3	70-130
Benzene	0.0395	mg/Kg	EPA 8260B	12/3/11	97.4	67.9-120
Ethylbenzene	0.0395	mg/Kg	EPA 8260B	12/3/11	103	65.5-127
P + M Xylene	0.0395	mg/Kg	EPA 8260B	12/3/11	97.5	62.5-124
Toluene	0.0395	mg/Kg	EPA 8260B	12/3/11	96.9	65.7-120
Benzene	0.0389	mg/Kg	EPA 8260B	12/3/11	105	67.9-120
Ethylbenzene	0.0389	mg/Kg	EPA 8260B	12/3/11	105	65.5-127
P + M Xylene	0.0389	mg/Kg	EPA 8260B	12/3/11	105	62.5-124
Toluene	0.0389	mg/Kg	EPA 8260B	12/3/11	105	65.7-120
Benzene	0.0385	mg/Kg	EPA 8260B	12/7/11	104	67.9-120
Ethylbenzene	0.0385	mg/Kg	EPA 8260B	12/7/11	108	65.5-127
P + M Xylene	0.0385	mg/Kg	EPA 8260B	12/7/11	103	62.5-124
Toluene	0.0385	mg/Kg	EPA 8260B	12/7/11	103	65.7-120

Project Contact (Hardcopy or PDF To): California EDF Report? Yes No

Company / Address: Clearwater Group
229 Tewksbury Ave. Point Richmond, CA
Phone Number: 510-307-9943
Fax Number: 510-232-2823
Project #: CB010H P.O. #:
Project Name: 23rd Ave Associates

Sampling Company Log Code: CWGO
Global ID: T0600177455
EDF Deliverable To (Email Address): gfisco@clearwatergroup.com
Bill to: Clearwater Group
Sampler Signature: Robert Nelson

Chain-of-Custody Record and Analysis Request

Sample Designation	Sampling		Container				Preservative			Matrix			MTBE @ 0.5 ppb (EPA 8260B)	BTEX (EPA 8260B)	TPH Gas (EPA 8260B)	5 Oxygenates (MTBE, DIPE, ETBE, TAME, TBA) (EPA 8260B)	7 Oxygenates (5 oxy + EtOH, MeOH) (EPA 8260B)	Lead Scav. (1,2 DCA & 1,2 EDB) (EPA 8260B)	Volatile Halocarbons (EPA 8260B)	Volatile Organics Full List (EPA 8260B)	Volatile Organics (EPA 524.2 Drinking Water)	TPH as Diesel (EPA 8015M)	TPH as Motor Oil (EPA 8015M)	circle method		Total Lead (EPA 200.7 / 6010)	W.E.T. Lead (STLC)	TAT	
	Date	Time	40 ml VOA	Sleeve	Poly	Glass	Tedlar	HCl	HNO ₃	None	Water	Soil												Air	5 Waste Oil Metals (Cd,Cr,Ni,Pb,Zn) (EPA 200.7 / 6010)				Mercury (EPA 245.1 / 7470 / 7471)
B12-18	11-28-2011	1210	X						X		X		X	X						X									01
B14-19		1315	X						X		X		X	X						X									02
B13-11		1510	X						X		X		X	X						X									03
B13-14		1520	X						X		X		X	X						X									04
B13-19		1530	X						X		X		X	X						X									05
B13-23.5		1540	X						X		X		X	X						X									06
Run																													

Relinquished by: Robert Nelson Date: 11/29/2011 Time: 0800 Received by: _____

Relinquished by: _____ Date: _____ Time: _____ Received by: _____

Relinquished by: _____ Date: 120111 Time: 1417 Received by Laboratory: KIFF Analytical LLC

Remarks:

For Lab Use Only: Sample Receipt

Temp °C	Initials	Date	Time	Therm. ID #	Coolant Present
					Yes / No



SAMPLE RECEIPT CHECKLIST

RECEIVER
TJB
Initials

SRG#: 79648 Date: 120111
Project ID: 23rd Ave Associates
Method of Receipt: Courier Over-the-counter Shipper

COC Inspection

Is COC present? Yes No
Custody seals on shipping container? Intact Broken Not present N/A
Is COC Signed by Relinquisher? Yes No Dated? Yes No
Is sampler name legibly indicated on COC? Yes No
Is analysis or hold requested for all samples? Yes No
Is the turnaround time indicated on COC? Yes No
Is COC free of whiteout and uninitialed cross-outs? Yes No, Whiteout No, Cross-outs

Sample Inspection

Coolant Present: Yes No (includes water)
Temperature °C 5.2 Therm. ID# FR-5 Initial TJB Date/Time 120111/1711 N/A
Are there custody seals on sample containers? Intact Broken Not present
Do containers match COC? Yes No No, COC lists absent sample(s) No, Extra sample(s) present
Are there samples matrices other than soil, water, air or carbon? Yes No
Are any sample containers broken, leaking or damaged? Yes No
Are preservatives indicated? Yes, on sample containers Yes, on COC Not indicated N/A
Are preservatives correct for analyses requested? Yes No N/A
Are samples within holding time for analyses requested? Yes No
Are the correct sample containers used for the analyses requested? Yes No
Is there sufficient sample to perform testing? Yes No
Does any sample contain product, have strong odor or are otherwise suspected to be hot? Yes No
Receipt Details
Matrix SO Container type sleeve # of containers received 6
Matrix _____ Container type _____ # of containers received _____
Matrix _____ Container type _____ # of containers received _____
Date and Time Sample Put into Temp Storage Date: 120111 Time: 1718

Quicklog

Are the Sample ID's indicated: On COC On sample container(s) On Both Not indicated
If Sample ID's are listed on both COC and containers, do they all match? Yes No N/A
Is the Project ID indicated: On COC On sample container(s) On Both Not indicated
If project ID is listed on both COC and containers, do they all match? Yes No N/A
Are the sample collection dates indicated: On COC On sample container(s) On Both Not indicated
If collection dates are listed on both COC and containers, do they all match? Yes No N/A
Are the sample collection times indicated: On COC On sample container(s) On Both Not indicated
If collection times are listed on both COC and containers, do they all match? Yes No N/A

COMMENTS:

ATTACHMENT I

Geotracker Pages

UPLOADING A EDF FILE

SUCCESS

Processing is complete. No errors were found!
Your file has been successfully submitted!

<u>Submittal Type:</u>	EDF - Soil and Water Investigation Report
<u>Submittal Title:</u>	2011 Soil and Groundwater Investigation (79647)
<u>Facility Global ID:</u>	T0600177455
<u>Facility Name:</u>	23RD AVENUE PARTNERS
<u>File Name:</u>	EDF_23rdAvenueAssociates_79647.ZIP
<u>Organization Name:</u>	Clearwater Group
<u>Username:</u>	CLEARWATERGROUP
<u>IP Address:</u>	98.210.164.49
<u>Submittal Date/Time:</u>	12/15/2011 1:59:34 PM
<u>Confirmation Number:</u>	3948670387

[VIEW QC REPORT](#)

[VIEW DETECTIONS REPORT](#)

STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER ESI

UPLOADING A EDF FILE

SUCCESS

Processing is complete. No errors were found!
Your file has been successfully submitted!

<u>Submittal Type:</u>	EDF - Soil and Water Investigation Report
<u>Submittal Title:</u>	2011 Soil and Groundwater Investigation (79648)
<u>Facility Global ID:</u>	T0600177455
<u>Facility Name:</u>	23RD AVENUE PARTNERS
<u>File Name:</u>	EDF_23rdAveAssociates_79648.ZIP
<u>Organization Name:</u>	Clearwater Group
<u>Username:</u>	CLEARWATERGROUP
<u>IP Address:</u>	173.13.151.1
<u>Submittal Date/Time:</u>	1/19/2012 9:59:50 AM
<u>Confirmation Number:</u>	2810418665

[VIEW QC REPORT](#)

[VIEW DETECTIONS REPORT](#)

STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER ESI

UPLOADING A GEO_REPORT FILE

SUCCESS

Your GEO_REPORT file has been successfully submitted!

<u>Submittal Type:</u>	GEO_REPORT
<u>Report Title:</u>	Revised Workplan
<u>Report Type:</u>	Soil and Water Investigation Workplan
<u>Report Date:</u>	1/24/2011
<u>Facility Global ID:</u>	T0600177455
<u>Facility Name:</u>	23RD AVENUE PARTNERS
<u>File Name:</u>	CB018H - Revised Workplan 1.24.2011.pdf
<u>Organization Name:</u>	Clearwater Group
<u>Username:</u>	CLEARWATERGROUP
<u>IP Address:</u>	209.76.203.27
<u>Submittal Date/Time:</u>	1/26/2011 11:16:34 AM
<u>Confirmation Number:</u>	8384858489

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STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER ESI

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