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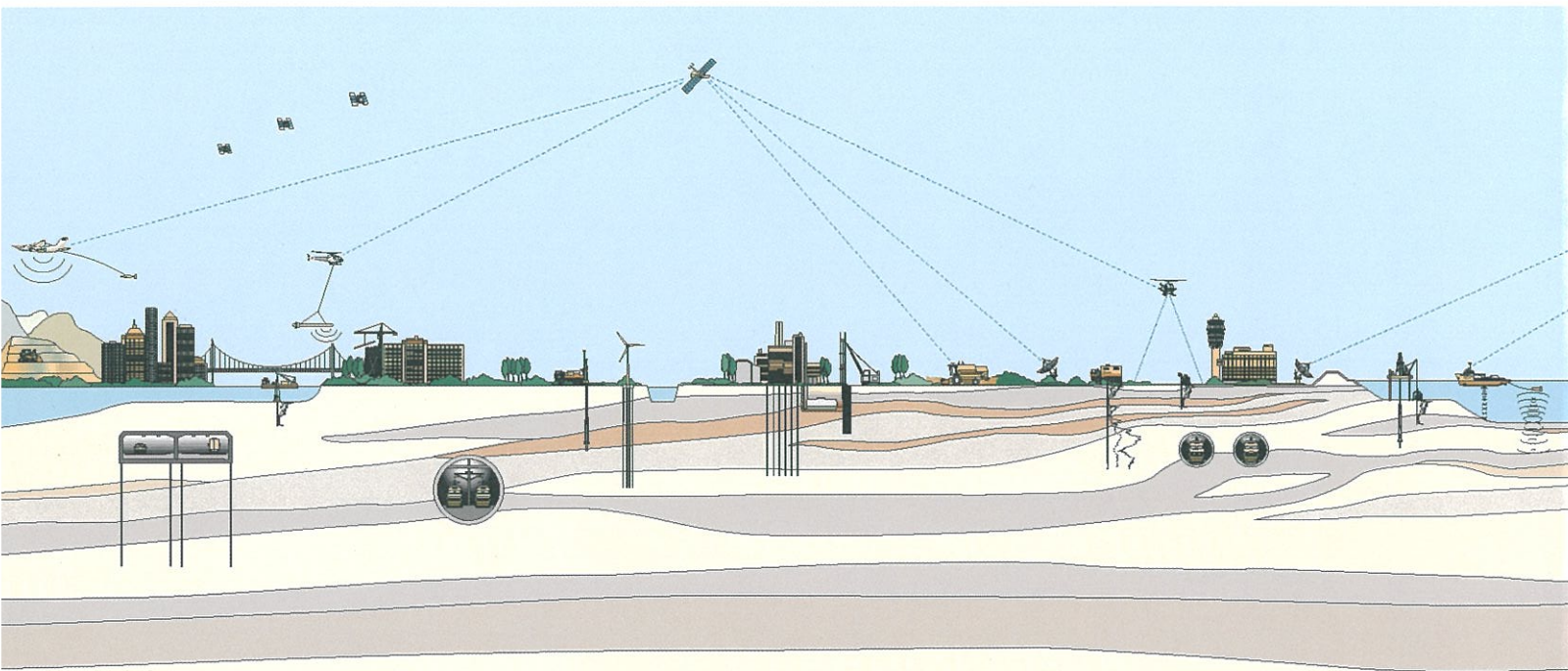
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Alameda County  
Environmental Health

**SITE INVESTIGATION REPORT AND  
SUMMER 2009 QUARTERLY  
GROUNDWATER MONITORING REPORT  
2250 TELEGRAPH AVENUE  
OAKLAND, CALIFORNIA**

Prepared for:  
ALAMEDA COUNTY ENVIRONMENTAL HEALTH

November 2009  
Fugro Project No. 609.004





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November 20, 2009  
Project No. 609.004

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Alameda County Health Care Services Agency  
1161 Harbor Bay Parkway, Suite 250  
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Subject: Site Investigation Report and Summer 2009 Quarterly Groundwater  
Monitoring Report  
2250 Telegraph Avenue, Oakland, California, RO00000359

Dear Ms. Jakub:

Fugro West, Inc. (Fugro) is pleased to present this report that documents recent site investigation activities conducted to comply with Alameda County Environmental Health (ACEH) requirements. The report summarizes the results of studies conducted to date to characterize former releases from USTs and presents the results of additional site investigation as described in the ACEH approved Work Plan, dated January 16, 2009. In general, the study confirms that contaminated soil from former UST releases exists in both the vadose and groundwater zones, and that the limits of groundwater zone impacts have not been fully defined. However, the presence of the impacted soil and groundwater do not represent a significant risk to create an inhalation risk to current Site occupants based on recent soil-gas data. Fugro recommends continued groundwater monitoring on a semi-annual basis, and the installation of two new monitoring wells to evaluate the distal end of the groundwater plume. Once the new well data is obtained, we believe sufficient data will exist to prepare a Corrective Action Plan (CAP).

If you should have any questions regarding the information present in this report, please feel free to contact the undersigned at (510) 268-0461.

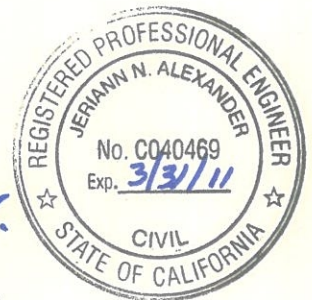
Sincerely:  
FUGRO WEST INC.

A handwritten signature in blue ink that reads "Karen A. Emery".

Karen A. Emery  
Project Geologist



Jeriann Alexander, PE, R.E.A.  
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KAE/JNA:afp  
Copies Submitted:

(1 pdf) Addressee  
(1) Ms. Marianne Robison, Buttner Properties

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## 1.0 EXECUTIVE SUMMARY

This report presents the findings of recent site investigation and groundwater monitoring activities conducted by Fugro West, Inc. (Fugro) for the property located at 2250 Telegraph Avenue, Oakland, California (Site). Fugro was retained by the property owner, Buttner Properties, to complete the scope of work described in our Work Plan, dated January 16, 2009. Fugro staff have been assisting Buttner Properties since early 1990 with underground storage tank (UST) removal actions, groundwater monitoring and site investigation activities in general accordance with requirements of the local regulatory agency, Alameda County Environmental Health (ACEH).

The Site is situated at the northeast corner of Telegraph Avenue and West Grand Avenue, in a commercially zoned area near downtown Oakland. The Site was historically used as a gasoline service station, up until the late 1980's when fuel dispensing ceased and the property changed over to operation as an automotive repair shop (Dave's Station). The Site is currently occupied by a one-story former service station building that still includes two vehicle servicing bays and an office. Exterior areas are completely covered by pavement.

Three USTs associated with the former service station were removed in 1990 under the observation of Fugro staff. Source removal activities conducted in 1990 removed about 500 cubic yards of gasoline impacted soil, and source removal activities conducted in 1994 removed about 70 cubic yards of waste-oil and gasoline impacted soils. Four monitoring wells (MW-1 through MW-4) are located onsite, and two additional wells (MW-5 and MW-6) are located offsite, in areas along West Grand Avenue, down and cross-gradient of the former UST improvements.

In general, investigations indicate that the Site is underlain by a layer of fill consisting of clayey and sandy gravel varying in depth from about 2 to 5 feet below existing grades. The fill materials are underlain by layers of fat to lean clays to the maximum depth explored of 20 feet below the existing ground surface (bgs). The clayey soils within the groundwater fluctuation zone are of relatively low permeability based on the low rates of water recharge within borings and wells. Groundwater at the Site has been monitored since 1994 and has fluctuated between depths of 8 to 13 feet bgs.

The contaminants of concern in both soil and groundwater include petroleum hydrocarbons within the gasoline, diesel, and motor oil range, and the volatile additives and constituents of petroleum fuels. Vadose zone soils in the former waste oil UST area also contain heavy metals and polynuclear aromatic hydrocarbons (PAHs) commonly found in waste oil products.

No free-floating hydrocarbon product has been observed by Fugro staff during groundwater monitoring events. Further, based on the existing data it appears that the existing contaminant plume is relatively stable.

The recent study confirms that vadose zone soil impacts are localized to the former waste oil tank vicinity and extend below the existing building. The groundwater zone impacts

appear to be limited as they do not appear to extend to the offsite wells (MW-5 and MW-6) located to the southeast and east of the Site. The presence of the impacted soil and groundwater do not however, represent a significant risk of exposure via an inhalation route based on recent soil-gas data and current Site use. Further, potential inhalation risks can be further mitigated through groundwater remediation efforts in the future. The possible risk of dermal contact and ingestion by future construction workers can be mitigated through implementing proper Site controls and Health and Safety measures during below grade repairs or future site construction.

As there is no imminent significant risk of human exposure, Fugro recommends the following:

- Abandon Wells MW-3, MW-4, and MW-6. Wells MW-3 and MW-4 are situated in close proximity to former UST pits and sufficient data exists to characterize these pit areas. Well MW-6 doesn't reflect groundwater contamination originating from the Site. As such these wells should be abandoned.
- Well MW-5 is located beyond the distal limit of the plume and should be abandoned after the installation and monitoring of two new wells located closer to the Site perimeter. The new wells should be positioned to provide boundary information to the south and east of the Site. One new well should be located between well locations MW-3 and MW-6, and the second new well should be located between well locations MW-4 and MW-5.
- A Corrective Action Plan (CAP) should be prepared once two monitoring events with the new well network have been completed. The CAP will evaluate several options for remediation at the Site.
- Continued groundwater monitoring on a semi-annual basis with the new network of wells.



## **2.0 INTRODUCTION**

This report presents the findings of recent site investigation activities conducted by Fugro West, Inc. (Fugro) for the property located at 2250 Telegraph Avenue, Oakland, California (Site). Fugro was retained by the property owner, Buttner Properties, to complete the scope of work described in our Work Plan, dated January 16, 2009. Fugro staff have been assisting Buttner Properties since early 1990 with underground storage tank (UST) removal actions, groundwater monitoring and site investigation activities in general accordance with requirements of the local regulatory agency, Alameda County Environmental Health (ACEH).

This report summarizes past studies and presents the results of the most recent investigation to document the extent of onsite soil and groundwater contamination. The report includes a preliminary risk assessment, and provides ACEH requested information regarding preferential pathways and local registered monitoring wells. The report further documents the results of the Summer 2009 Groundwater Monitoring event.

## **3.0 LIMITATIONS**

Fugro has prepared this report in a professional manner, using that degree of skill and care exercised for similar projects under similar conditions by reputable and competent environmental consultants. Fugro shall not be responsible for conditions or consequences arising from relevant facts that were concealed, withheld, or not fully disclosed at the time the report was prepared. Fugro also notes that the facts and conditions referenced in this report may change over time and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report. Fugro believes that conclusions stated wherein to be factual, but no guarantee is made or implied. This report has been prepared for the benefit of ACEH and Buttner Properties.

The information contained in this report, including all exhibits and attachments, may not be used by any party other than the ACEH or Buttner Properties, without the express written consent of Fugro West, Inc.

## **4.0 SITE DESCRIPTION**

The Site is located at 2250 Telegraph Avenue, situated at the northeast corner of Telegraph Avenue and West Grand Avenue, in Oakland, California (Plates 1 and 2). The Site and immediately adjacent properties are zoned for commercial development and use. The Site was formerly occupied by a gasoline service station up until the late 1980's when fuel dispensing ceased and the property changed over to operation as an automotive repair shop (Dave's Station). The Site is currently occupied by a one-story former service station building that still includes two vehicle servicing bays and an office. Exterior areas are paved and used mainly as a parking/storage area for vehicles. A chain link fence and two rolling gates located along Telegraph Avenue and West Grand Avenue encompass the entire Site.





Three USTs associated with the former service station were removed in 1990 under the observation of Fugro staff. Four monitoring wells (MW-1 through MW-4) are located onsite, and two additional wells (MW-5 and MW-6) are located offsite, in areas along West Grand Avenue, down and cross-gradient of the former UST improvements.

The Site is bounded on the west by Telegraph Avenue and to the south by West Grand Avenue. The adjacent property to the east, also owned by Buttner Properties, is occupied by a single story structure and paved parking and use areas (460 West Grand Avenue). The 460 Grand Avenue site is currently used as a nursery school. The nursery school building is situated approximately 90 feet east, and down gradient of the former service station building, and cross and down gradient of the former USTs. An outdoor play area comprising play structures situated over a mat-covered, paved surface exists between the 2250 West Grand Avenue building and the nursery school building.

The adjacent property to the north and up-gradient of the former service station is used as a restaurant. A Chevron service station (2200 Telegraph Avenue) is located south of the Site, across West Grand Avenue, a Valero service station (2225 Telegraph Avenue) is located southwest of the Site, and a Taco Bell restaurant and parking area (2255 Telegraph Avenue) is located to the west, across Telegraph Avenue. Historic information suggests that the 2255 Telegraph Avenue site was also a service station in the past.

## **5.0 ENVIRONMENTAL SETTING**

### **5.1 TOPOGRAPHY**

The general terrain in the Site vicinity is flat with a gradual surface gradient to the southeast, toward Lake Merritt. Topography across the Site is relatively flat, with a ground surface elevation of approximately 20 feet mean sea level (MSL).

### **5.2 GENERAL GEOLOGIC SETTING**

The geologic map titled: *Geologic Map of the Oakland Metropolitan Area, Alameda, Contra Costa, and San Francisco Counties, California* (U.S. Geological Survey, dated 2000) shows that the Site area is geologically mapped as Holocene and Pleistocene-aged Merritt Sands (Qms). These deposits tend to be fine-grained, very well sorted, well-drained alluvial deposits of western Alameda County. Locally, the Merritt Sand formation is overlain by miscellaneous or artificial fill materials and alluvial deposits. The fill and alluvial deposits comprise interbedded deposits of clay, silt, and sandy soils which appear as discontinuous lenses and layers.

The Site is located in a seismically active region of California; however, it is not within an Alquist-Priolo Earthquake Fault Zone (CGS, 2007), a zone that delineates areas of known active faults, as defined by the State of California. The closest fault zone is associated with the Hayward fault system, a right lateral strike-slip fault, located approximately 3.2 miles northeast of the Site. The Site is also within the California Geological Survey Seismic Hazard Zone [formerly California Division of Mines and Geology (CDMG), 2003] for liquefaction.

### **5.3 SURFACE WATER**

The nearest body of surface water is Lake Merritt, located approximately 0.36 miles southeast of the Site. Lake Merritt is a tidally influenced lake into which stormwater is allowed to drain from local upland areas. Other surface water bodies include the Oakland Inner Harbor Channel, located approximately 1.3 miles south of the Site and the San Francisco Bay, which is located approximately 2.1 miles to the northwest and 3.2 miles to the southwest.

### **5.4 GROUNDWATER CONDITIONS**

Groundwater at the Site has been monitored since 1994 and has fluctuated between depths of 8 to 13 feet below the existing ground surface (bgs). No free-floating hydrocarbon product has been observed by Fugro staff during monitoring events. However, based on the results of the numerous monitoring events, dissolved hydrocarbons are present within the groundwater beneath the Site. The groundwater plume appears limited in that it has not reached offsite monitoring wells MW-5 or MW-6.

Groundwater monitoring has shown that the groundwater flow direction is predominately toward the east-southeast. The groundwater gradient has been shown to be consistently flat. Monitoring activities suggest that the water-bearing stratum below the Site is a relatively low permeability formation, in that groundwater recharges very slowly in onsite wells and borings.

## **6.0 OVERVIEW OF UST REMOVAL, REMEDIATION, AND SITE STUDIES**

Long-term use of the Site as a service station and automobile repair facility have resulted in impacts to both soil and groundwater as described in the following sections.

### **6.1 FORMER GASOLINE UST AREA AND DISPENSER ISLANDS**

Former gasoline USTs were situated in an area to the southwest of the existing station building. Upon removal of the USTs in August 1990, Fugro staff did not observe visible deterioration of the gasoline USTs and no free floating product was observed in the excavation. Two fuel dispensing islands (each with two dispensers), and all related piping, were also removed coincident with the UST removal project.

Analysis of thirteen (13) soil samples collected from the tank and dispenser island excavations indicated that elevated levels of total petroleum hydrocarbons within the gasoline range (TPHg) and Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX) were present in soil suggesting releases to the ground had occurred. In October 1990 a remedial effort was undertaken to remove significantly impacted materials within accessible limits. During the October 1990 excavation, additional fill material was encountered along the western wall of the extended excavation which varied in consistency and color from the material removed in August.

Research conducted into the Site's history indicated that two USTs were previously located adjacent to the west side of the excavation area. Records further indicated that the



tanks were removed in the early 1960's, and as a result, the additional fill material likely represented material from that former excavation. Analytical results indicated that the fill possessed elevated concentrations of petroleum hydrocarbons. As a result, the older fill material was also removed to its horizontal limits later in 1990. Fourteen (14) additional soil samples were collected from the expanded excavation area, as well as from the former dispenser island locations. The final gasoline UST excavation area measured approximately 31 by 35 feet in plan view and extended to a depth of about 17 feet below the adjacent ground surface. During removal activities, groundwater was encountered at approximately 10.5 feet bgs, and a noticeable band of impacted soil coincident with the groundwater fluctuation zone was observed at the limits of excavation. The limits of excavation completed in 1990 are shown on Plate 2.

Review of the analytical results from the additional excavation indicated that no TPHg nor BTEX were detected in any of the samples collected from the former dispenser locations. This indicated that excavation was successful in removing impacted soils from the dispenser island areas which were removed in 1990.

Analytical results of samples collected from the extended limits of the former UST excavation indicated that although soil remediation activities removed approximately 500 cubic yards of impacted soil, concentrations of petroleum hydrocarbons and their volatile constituents had been left in-place in soil at the limits of the excavation. The contamination appeared to exist in a thin layer coincident with the groundwater fluctuation zone, observed at the time to be situated between depths of about 9 and 11 feet bgs. Given the Site's active use and the location of existing building, it was determined that it was not feasible to extend the excavation limits any further. The excavation areas were backfilled with engineered fill and the areas were capped with asphalt pavement.

Maximum contaminant concentrations left in-place in the gasoline UST source area are summarized below. The locations of samples obtained from the dispenser island and gasoline UST excavation areas are presented in Plate 3. Historic chemical data is presented in Tables 1 and 2.

#### Maximum Soil Concentrations Left-In Place

| Analyte      | Gasoline UST Excavation Area | Dispenser Island Area |
|--------------|------------------------------|-----------------------|
| TPHg         | 310 mg/kg                    | <2.5 mg/kg            |
| TPHd         | 100 mg/kg                    | <5.0 mg/kg            |
| Benzene      | 820 µg/kg                    | <5.0 µg/kg            |
| Toluene      | 59 µg/kg                     | <5.0 µg/kg            |
| Ethylbenzene | 1,300 µg/kg                  | <5.0 µg/kg            |
| Xylene       | 1,600 µg/kg                  | <5.0 µg/kg            |



## 6.2 FORMER WASTE OIL TANK AREA

The former waste oil UST was situated adjacent to the east side of the existing former station building. The fill inlet for the tank was located within the former station building as a floor inlet. During tank removal activities in August 1990, Fugro staff observed numerous holes in the top of the waste oil UST and its bottom had been corroded through. A thin layer of oil was observed floating on the water surface in the pit following tank removal activities.

To characterize this potential source area, six (6) soil samples from within the UST excavation were obtained (sample locations are shown on Plate 3). Two soil samples were obtained from the soil present within the tank pit and four samples were obtained from the material removed from the tank pit.

Results of the analyses indicated that elevated levels of TPHg, total petroleum hydrocarbons within the diesel range (TPHd), lead, and oil and grease were present in soil at elevated concentrations within the former tank excavation. The excavation area was backfilled with soil which had been removed with the waste-oil UST pending further remediation. The soil was encapsulated in plastic and the area was resurfaced.

In February 1994, soil remediation was conducted in an attempt to remove the significantly impacted material within accessible limits in the area of the former waste oil UST. The final excavation measured approximately 10 by 15 feet in plan view and was extended to a depth of approximately 12 feet bgs. During removal activities, groundwater was encountered at approximately 11.5 feet bgs. A thin layer of residual soil possessing a green hue and a strong hydrocarbon odor was observed by Fugro staff between depths of 9 and 11 feet bgs, which coincides with the groundwater fluctuation zone observed onsite.

Nine (9) additional soil samples were collected from the former waste oil UST area following soil remediation activities. Analytical results of samples collected from the limits of the former UST excavation indicated that although soil remediation removed approximately 70 cubic yards of soil, impacted soil still remains in-place and likely extends below the existing repair shop building.

Maximum elevated contaminant concentrations left in-place in the waste-oil UST source area are summarized below. The locations of samples obtained from this excavation area are presented in Plate 3. Historic chemical data is presented in Tables 1 and 2.

### Maximum Soil Concentrations Left-In Place

| Analyte      | Waste Oil UST Pit |
|--------------|-------------------|
| TPHg         | 240 mg/kg         |
| TPHd         | 680 mg/kg         |
| TPHmo        | 1,700 mg/kg       |
| Oil & Grease | 3,900 mg/kg       |
| Lead         | 590 mg/kg         |

| Analyte      | Waste Oil UST Pit |
|--------------|-------------------|
| Benzene      | 580 µg/kg         |
| Toluene      | 1800 µg/kg        |
| Ethylbenzene | 2500 µg/kg        |
| Xylene       | 16,000 µg/kg      |
| PNAs         | varies            |

### 6.3 1994 GROUNDWATER MONITORING WELL INSTALLATION

In February 1994, four groundwater monitoring wells (MW-1 through MW-4) were installed onsite and a groundwater monitoring program was implemented. Soil samples were obtained from monitoring wells MW-1, MW-2, and MW-3, at a depth of 10 feet bgs, as these locations were all situated within about 5 feet of the limits of the former gasoline UST excavation. The concentrations of contaminants of concern in the samples obtained from the well borings showed a marked decrease when compared to the sidewall samples from the UST excavation. Water elevation and analytical data from Wells MW-1 to MW-4 are presented in Tables 2 and 3.

Soil samples were also obtained from monitoring well boring MW-4 installed immediately adjacent to the excavation for the former waste-oil UST. The concentrations of contaminants of concern in the sample from a depth of 10 feet bgs showed a marked decrease when compared to the sidewall samples from the excavation, which suggested that the release was limited to soil in the immediate vicinity of the UST.

Groundwater monitoring data from wells MW-1, MW-2, and MW-3 indicated that the releases from the gasoline UST source area had impacted groundwater, and that the plume may have extended offsite. Similarly, groundwater monitoring data from well MW-4 indicated that releases from the waste oil UST source area had also impacted groundwater, and that the plume may extend offsite to the east. However, given that the source areas had been remediated to the extent practical, areas directly above the plumes were paved, the plumes appeared stabilized, and there was no plan to redevelop the Site, the potential risks posed to human health appeared limited, and no further remedial action was deemed necessary.

### 6.4 1996 AND 1997 SITE CHARACTERIZATION INVESTIGATIONS

In a letter dated November 8, 1995, ACEH requested an investigation be performed to evaluate the extent of groundwater contamination downgradient of the Site. In May 1996, five temporary well points (TWPs) were installed and grab groundwater samples were obtained to assist in determining locations for two new offsite groundwater monitoring wells. Although the results of the samples obtained from the TWPs were not judged to be comparable to samples obtained from monitoring wells due to their observed turbid nature, the data could nonetheless be useful in evaluating the extent of the groundwater plume.

Grab groundwater sample data is presented in Table 5. The samples were noticeably turbid as they contained appreciable sediment. The samples were collected of the first



encountered water accumulated within temporary slotted casings which had been inserted into smaller diameter borings which did not have any filtering media. Review of the boring logs confirmed that the borings were extended to depths of about 19 feet bgs and soils encountered below a depth of 5 feet bgs comprised very fine grained silty and clayey materials with varying amounts of sand. As a result, the grab groundwater data is believed representative of both total and dissolved constituents.

Based on these results, monitoring wells MW-5 and MW-6 were installed at offsite locations in June 1997, cross-gradient and downgradient from the former UST excavations (Plate 3). Monitoring well MW-5 was located in the eastbound parking lane of West Grand Avenue while well MW-6 was located in the westbound lane close to the median. Wells MW-5 and MW-6 were completed to depths of 20 and 21.5 feet bgs, respectively. Water elevation and analytical data from Well MW-5 and MW-6 are presented in Tables 2 and 3.

No significant contaminants of concern were detected in soil or groundwater samples collected from Well MW-5. Elevated concentrations of contaminants of concern were detected in the groundwater sample from Well MW-6; however the fingerprint pattern is unique from the pattern detected in onsite groundwater samples. In addition, MTBE is a contaminant of concern in Well MW-6 and it is not an identified contaminant in onsite soils, which is reasonable given that fuel dispensing at the Site ceased prior to widespread use of MTBE. As such, Fugro believes the contamination observed in Well MW-6 is not related to releases from the Site. Further, since well MW-5 is a clean well, its data suggests that the plume has not migrated that far from the Site.

## **6.5 GROUNDWATER MONITORING ACTIVITIES**

Fugro has conducted groundwater monitoring at the Site since 1994. The data generated to date confirms that the Site is impacted by releases from the petroleum UST source areas. The onsite wells are comprised of about 10 feet of slotted well screen positioned to intercept the groundwater fluctuation zone and the zone of observed soil contamination. Based on a review of the groundwater data from 1994 to current, the groundwater fluctuation zone has varied seasonally up to 1 to 2 feet. The well screens for the two offsite wells were composed of 15 feet of screen.

Groundwater at the Site flows within shallow, fine to very fine grained sediments, and for this reason the shallow wells recharge very slowly. Well construction details included a filter pack comprised of No.3 washed sand which appears now to have been an adequate choice and has allowed the filter pack to become well-graded over time. No appreciable sediment has been observed entrained in the water samples collected from the wells and submitted to the analytical laboratory for testing during our monitoring events. This is contrasted with the significant presence of sediment in the samples collected from the temporary wells installed and sampled in 1996 and those installed recently, as will be discussed subsequently. Petroleum hydrocarbons have an affinity to adhere to fine grained (silt and clay fraction) sediments and thus grab groundwater samples from borings/temporary wells extended into fine grained sediments have a tendency to not be very representative of dissolved groundwater conditions.





As a result, Fugro has used the data from grab groundwater samples only to qualitatively assess the nature of the plumes and to select other well locations.

## **7.0 2009 SITE INVESTIGATION STUDIES**

### **7.1 INVESTIGATION OBJECTIVES**

A review of soil and groundwater data collected during source removal activities, site characterization and monitoring well installation studies, and groundwater monitoring events conducted onsite since March 1994, indicates that soil and groundwater below the Site has been impacted by petroleum hydrocarbon releases. The groundwater plume has appeared stable, that is, the data does not suggest that the plume is expanding, and overall concentrations have not increased over time. Additionally, previous risk assessment activities suggest that no significant risk is posed to the ongoing commercial use of the property as a result of the underlying soil and groundwater impacts. These findings notwithstanding, ACEH requested that additional Site characterization be conducted to further define the lateral and vertical extent of contamination and to assess the potential volatilization pathway. In addition, ACEH also requested an update to the preferential pathway and well survey studies.

To meet these data investigation objectives the following tasks were performed in general accordance with our ACEH approved Work Plan:

- Conduct additional soil and groundwater sampling to further characterize the lateral and vertical extent of impacts onsite.
- Conduct a soil gas survey to assess the volatilization pathway. The methodology to conduct the soil gas survey was modified from the methods outlined in the work plan based on new information presented during the June 2009 ITRC 2-day training for Vapor Intrusion Pathway assessments which was attended by Fugro staff. The methods followed, as described herein are based on research conducted and presented by Dr. Blayne Hartman at the ITRC training event.
- Conduct additional research and review of preferential pathways and historic well information for the area to the extent practical.

Concurrent with this investigation Fugro also conducted the Summer 2009 groundwater monitoring event, the results of which are presented herein.

Boring locations for the 2009 Site Investigation are presented on Plate 4. Additionally, generalized cross-sections showing the relationship between the UST source areas, soil types encountered during the various studies, and groundwater elevation data is presented on Plates 5 and 6. Analytical data is not presented in the cross-sections due to the volume of the data available. The analytical data is presented in Tables 4 and 5.

## **7.2 FIELD ACTIVITIES**

Prior to commencement of fieldwork, Fugro obtained a drilling permit from Alameda County Public Works Agency (ACPWA). A copy of the permit is presented in Appendix A. Fugro also retained a private utility locator to clear proposed sampling locations and alerted the Underground Service Alert (USA) at least 48 hours prior to intrusive field activities.

Field activities were conducted on July 27 through July 31, 2009, and September 8, 2009 using standard industry practices regarding worker health and safety. Vironex Inc., a State of California licensed drilling contractor, conducted soil and groundwater drilling activities at the Site using direct push drilling methods. In addition, TEG-Northern California, Inc. (TEG), a State of California licensed drilling contractor, conducted the soil-gas drilling activities at the Site in semi-permanent probes also installed using direct push drilling methods. Fieldwork included the completion of twelve (12) direct push borings/temporary well points (B-1 through B-12) to depths ranging from 15 feet to 20 feet bgs, and the installation of seven (7) semi-permanent soil-gas probes/borings (SG-1 through SG-7) completed to a depth of 5.0 feet bgs.

All drilling and sampling equipment was decontaminated prior to each use, using a high-pressure steam cleaner and/or by washing with a soap solution followed by water rinses. Soil cuttings and decontamination water were placed in Department of Transportation-approved and labeled 55-gallon drums, which were stored onsite, pending chemical classification and offsite disposal.

Upon completion, direct push borings B-1 through B-12 were backfilled with neat cement grout and restored to existing conditions. ACPWA has temporarily allowed soil-gas borings SG-1 through SG-7 to remain onsite pending the review of the data by ACEH.

### **7.2.1 Soil and Groundwater Investigation**

Drilling and sampling activities were conducted under the supervision of Fugro's field personnel. Fugro's field geologist logged Borings B-1 through B-12 in accordance with the Unified Soil Classification System (USCS) and screened selected soil samples in the field using an Organic Vapor Meter (OVM). Discrete soil samples were collected from a variety of depths from each boring depending on field sample recovery. In general, soil samples were collected from the surface, 1.0, 2.0, 5.0, 7.5, 10, and 15 feet bgs within the direct push borings.

Selected soil samples for chemical analyses were retained in polyethylene tubing, sealed with Teflon<sup>®</sup> sheeting and plastic end-caps. Samples were stored in an ice-chilled cooler pending delivery to the analytical laboratory. All samples were delivered under appropriate chain-of-custody protocol to a state-certified analytical laboratory, for chemical analyses.

In accordance with the ACEH approved work plan, selected soil samples were submitted to a certified laboratory for various soil property tests. Samples were submitted from depths representing vadose zone soils within 0 to 5 feet and 5 to 10 feet bgs, as well as from a deeper soil zone, 10 to 15 feet bgs.

Groundwater was not immediately encountered during drilling activities. With permission from ACPWA, all borings were allowed to remain open over-night to allow groundwater to recharge into the borings. Clean PVC casing was placed in each boring to facilitate the collection of a grab groundwater sample from each location. Prior to obtaining water samples, the depth to water was measured. The depth to groundwater in the temporary borings ranged from 11.2 to 19.5 feet bgs. These depths do not represent the static groundwater surface based on data collected from existing groundwater monitoring wells.

Grab groundwater samples were collected from Borings B-1 through B-10 and B-12. Only trace amounts of groundwater were encountered in Boring B-11 even after allowing the boring to remain open overnight. As such, groundwater was not sampled from this location. Samples were collected from the other temporary borings using clean disposable bailers. Water was decanted into pre-cleaned laboratory provided bottles.

### **7.2.2 Soil-Gas Investigation**

The soil-gas investigation was conducted using the expertise of TEG a company operating both mobile and stationary soil-gas laboratories from Rancho Cordova. TEG staff followed field sampling and testing methods approved by the DTSC as described in their standard operating procedures included with the soil-gas data in Appendix C. The soil-gas probe installation and subsequent sampling was conducted in accordance with one of the two industry-wide accepted methodologies described in the June 2009 Interstate Technical & Research Council (ITRC) Vapor Intrusion Pathway training by Dr. Blayne Hartman, an authority in the soil vapor sampling and testing arena and a primary ITRC technical trainer and researcher.

Each soil-gas boring/probe was completed using ¼ inch Teflon tubing fitted with a ¼ inch diameter sampling point with a compression fitting in accordance with one of the accepted methodologies described at the June 2009 ITRC training seminar. After the drill rod was retracted, the Teflon tubing and sampling point was emplaced within the borehole midway between a one foot thick sand pack. One foot of dry granular bentonite was placed over the sand pack, followed by hydrated bentonite grout to the surface. To prevent infiltration of surface water and ambient air, each tube was secured with a cap fitting and secured beneath a traffic grade well box.

Due to the low permeability clays present at the Site, TEG waited approximately 48 hours after the installation of the probes before commencing sampling. TEG sampled the soil-gas probes using a 50 cubic centimeter glass syringe, connected to the ¼ inch Teflon tubing surface point via an on-off valve. The syringe was then used to place a vacuum on the sample train testing the integrity of all the connections.

A purge volume test was conducted at the beginning of the soil-gas survey at location SG-6 to purge ambient air from the sampling system. Three different volumes were sampled (1, 3, and 7 purge volumes) and analyzed immediately by TEG using their onsite mobile laboratory to determine the Site-specific draw volume with the highest concentration. Based on the result



of the purge volume test, a one-volume purge was deemed sufficient and used during the entire soil-gas investigation.

A tracer compound (1,1 Difluoroethane) was used during the soil-gas sampling investigation to test for leaks around the ground surface and near the syringe sampling system. Given that the syringe sample collection system is immediately ready to draw a sample and there is no waiting time, a shroud is not used in the sampling train following application of the tracer gas.

Soil-gas samples were obtained using gas-tight, 50 cubic centimeter glass syringes. Once soil-gas samples were obtained, they were immediately analyzed using TEG's onsite mobile laboratory. .

### **7.2.3 Subsurface Conditions**

Boring and sampling locations for the 2009 Site Investigation are presented on Plate 4 and Logs of Borings are presented in Appendix B. Generalized cross-sections showing the relationship between the UST source areas, and soil conditions encountered during the various Site studies, are presented on Plates 5 and 6.

In general, the investigation confirmed our previous findings that the Site is underlain by a layer of fill consisting of clayey and sandy gravel varying in depth from about 2 to 5 feet. Artificial fill materials also exist in the former UST pit excavations to depths of 12 to 17 feet bgs. The fill materials are underlain by layers of silty clay to lean clay to the maximum depth explored of 20 feet bgs. As shown on the generalized geologic cross sections, a few pockets of silty sand were also encountered interlayered in the clayey soils (Borings B-3 through B-5 and B-10 through B-12).

Fugro's field geologist screened soil samples in the field using an OVM. Moderate to strong light and heavy hydrocarbon odors were detected within most borings from depths ranging from about 9 to 17 feet bgs coincident with the historic groundwater fluctuation zone. Sample B-4a @12.5' yielded the highest OVM reading of 113.9 ppm.

A total of four soil samples were obtained and submitted to Fugro's certified geotechnical testing laboratory for various soil property tests including some or all of the following:

- Grain-size distribution;
- Bulk density;
- Moisture content; and
- Porosity.

The gradation test results indicated that soil within the upper 5 feet of the Site would be classified as clayey sand (SC). Soil from depths of 5 to 15 feet bgs would be classified as fat clays (CH). Moisture content and dry density tests were conducted on soil from a depth of 0 to 5.0 feet bgs with average values of 21% and 102 pounds per cubic foot (pcf), respectively.

Percent porosity for 0 to 5.0 feet bgs, 5.0 to 10 feet bgs, and 10 to 15 feet bgs are reported as 36.2%, 41.0%, and 39.0%, respectively. The porosity results of about 40% are consistent with a characterization of a clayey material.

Depth to groundwater ranged from 11.2 to 19.5 feet bgs when encountered during this study. No free phase hydrocarbons were observed in any of the grab groundwater samples collected, however, strong hydrocarbon odors were detected in groundwater samples obtained from several of the borings.

## **8.0 RESULTS OF ANALYSES**

Upon completion of field activities all soil and groundwater samples were transported under chain-of-custody documentation to Curtis and Tompkins, a State of California-certified testing laboratory. Soil-gas samples were immediately analyzed using TEG's onsite mobile laboratory. Analytical reports from Curtis and Tompkins Ltd and TEG are presented in Appendix C. TPHg and benzene concentrations in groundwater are illustrated on Plates 7 and 8. TPHg concentrations in soil-gas are illustrated on Plate 9. Results of chemical analyses for soil, groundwater, and soil-gas samples are summarized in Tables 4 through 6, and are discussed below.

### **8.1 SOIL SAMPLES**

A total of fifty-six (56) soil samples were submitted for chemical analyses. In accordance with our work plan, samples were analyzed for some or all of the following:

- Total Petroleum Hydrocarbons as gasoline (TPHg) using EPA Method 5030/8260b;
- Total Petroleum Hydrocarbons as diesel and motor oil (TPHd and TPHmo) using EPA Methods 8015m, with silica gel cleanup;
- Lead scavengers (1,2-dichloroethane and 1,2-dibromoethane) using EPA Method 5030/8260b;
- Five fuel oxygenates (MTBE, TAME, ETBE, TBA, and DIPE) using EPA Method 5030/8260b;
- BTEX using EPA Method 5030/8260b; and/or
- Total organic carbon.

Analyses did not detect the five fuel oxygenates or the two lead scavengers in any of the soil samples analyzed. Total organic carbon was measured at concentrations of 0.05 to 0.87 percent.

Benzene was detected in six (6) out of forty-nine (49) samples with concentrations ranging from 10 micrograms per kilogram ( $\mu\text{g/kg}$ ) to 500 $\mu\text{g/kg}$ . Benzene concentrations exceeded residential land use Environmental Screening Levels (ESLs) in Sample B-8@20' bgs,



and both residential and commercial ESLs in Samples B-8@15' bgs; both samples were located within the groundwater fluctuation zone in an area directly adjacent to the former UST pit.

Ethylbenzene was encountered in ten (10) out of forty-nine (49) samples with concentrations ranging from 22 µg/kg to 12,000 µg/kg. Concentrations exceeding residential and/or commercial land use ESLs were detected in samples from the groundwater fluctuation zone at borings B-1@10', B-1@12', B-9@10', and B-9@15' bgs.

Concentrations of total xylenes were detected in eight (8) out of forty-nine (49) samples, ranging from 9.7 µg/kg to 53,000 µg/kg. Total xylenes exceeding residential and commercial land use ESLs were detected in samples from the groundwater fluctuation zone at borings B-1@10' bgs and B-1@12' bgs.

Toluene was encountered in three (3) out of forty-nine (49) samples with concentrations up to 4,000 µg/kg, below both the residential and commercial land use screening levels.

Analysis detected TPHg concentrations ranging from 1.1 mg/kg to 320 mg/kg in sixteen (16) out of forty-nine (49) samples analyzed. TPHg concentrations exceeded the residential land use ESL of 100 mg/kg in samples from the groundwater fluctuation zone at borings B-1@10' bgs, B-1@12' bgs, and B-9@15' bgs. TPHg concentrations exceeded the commercial land use ESL of 180 mg/kg in a sample from the groundwater fluctuation zone at boring B-1@12' bgs.

TPHd was detected in thirty-seven (37) out of forty-nine (49) samples analyzed with concentrations ranging from 1.0 mg/kg to 1,100 mg/kg. TPHd concentrations exceeded both residential and commercial land use ESLs in samples from the groundwater fluctuation zone at borings B-3@15' bgs, B-4a@12' bgs, B-4a@15' bgs, B-5@12' bgs, and B-12@12' bgs.

Analysis also detected TPHmo in thirty (30) out of forty-nine (49) samples analyzed with concentrations ranging from 5.9 mg/kg to 850 mg/kg. TPHmo concentrations also exceeded the residential land use ESL of 370 mg/kg in samples from the groundwater fluctuation zone at borings B-3@15'bgs, B-4a@12'bgs, B-4a@15' bgs, and B-5@12' bgs. TPHmo concentrations exceeded the residential land use ESL of 370 mg/kg in three shallow samples (B-1@2' bgs, B-6@2' bgs, and B-11@2' bgs). The impacts detected in the shallow samples are most likely related to shallow surficial releases at the Site which are not related to the UST sources.

## **8.2 GRAB GROUNDWATER SAMPLES**

A total of eleven (11) grab groundwater samples were submitted for chemical analysis. The grab groundwater samples were analyzed for some or all of the following:

- TPHg using EPA Methods 5030/8015m;
- TPHd and TPHmo using EPA Method 8015m with silica gel clean up;
- BTEX and MTBE using EPA Method 5030/8260b;

- Lead scavengers (1,2-dichloroethane and 1,2-dibromoethane) using EPA Method 5030/8260b;
- Five Fuel Oxygenates (MTBE TAME, ETBE, TBA, and DIPE) using EPA Method 5030/8260b; and/or
- Total Dissolved Solids using EPA Method 160.1.

Insufficient groundwater recharge in Boring B-6 prevented sample collection for TPHd and TPHmo. Additionally, the glass sample container containing the groundwater obtained from Boring B-1 for TPHd and TPHmo analysis broke on the way to the laboratory, therefore no sample from this location was submitted for TPHd and TPHmo analysis.

The data for the grab groundwater samples do reflect that the samples represent total and dissolved contaminant constituents. The detected total dissolved solids ranged from 460 milligrams per liter (mg/L) to 1,200 mg/L confirming that the samples were turbid and brackish.

Analyses detected total and dissolved petroleum hydrocarbon as TPHg ranging from 360 micrograms per liter ( $\mu\text{g/L}$ ) to 41,000  $\mu\text{g/L}$  and TPHd ranging from 290  $\mu\text{g/L}$  to 240,000  $\mu\text{g/L}$ . Additionally, TPHmo was detected in six (6) out of nine (9) samples analyzed with concentrations ranging from 400  $\mu\text{g/L}$  to 110,000  $\mu\text{g/L}$ .

With the exception of benzene, no other BTEX constituent was detected above the residential or commercial land use ESL for potential vapor intrusion concerns. Total and dissolved Benzene was detected in six (6) of the eleven (11) samples analyzed with concentrations ranging from 0.57  $\mu\text{g/L}$  to 2,800  $\mu\text{g/L}$ . Total and dissolved Toluene was detected in seven (7) out of eleven (11) samples analyzed with concentrations ranging from 0.58  $\mu\text{g/L}$  to 780  $\mu\text{g/L}$ . Analyses also detected total and dissolved ethylbenzene in six (6) out of the eleven (11) samples analyzed with concentrations ranging from 0.75  $\mu\text{g/L}$  to 950  $\mu\text{g/L}$ . Total and dissolved xylenes were detected in six (6) out of eleven (11) samples analyzed with concentrations ranging from 0.66  $\mu\text{g/L}$  to 3,700  $\mu\text{g/L}$ .

Of the five fuel oxygenates analyzed, only MTBE and TBA were detected in the grab groundwater samples collected from the Site. MTBE was detected in four (4) of the eleven (11) samples analyzed with concentrations ranging up to 2.1  $\mu\text{g/L}$ . TBA was detected in four (4) of the eleven (11) samples analyzed with concentrations ranging up to 32  $\mu\text{g/L}$ . 1,2-Dichloroethane was the only lead scavenger detected in the grab samples, being detected in four (4) of the eleven (11) samples with concentrations ranging up to 3.8  $\mu\text{g/L}$ .

### **8.3 SOIL-GAS SAMPLES**

A total of eleven (11) samples were analyzed in an onsite laboratory, inclusive of 7 locations co-located to borings, one duplicate sample (SG-7dup), one resample for location SG-3), two additional purge volume samples from SG-6 and one ambient air sample collected for QA/QC purposes. The soil-gas samples were analyzed for the following:

- Total petroleum hydrocarbons as gasoline (TPHg);



- Total petroleum hydrocarbons as diesel (TPHd);
- Benzene, toluene, ethylbenzene, xylenes (BTEX), and Methyl tert butyl ether (MTBE); and
- Carbon Dioxide, methane, oxygen, and 1,1 Difluoroethane content.

The ambient air sample was reported to contain 21% oxygen and none of the testing program compounds. All samples soil vapor samples contained oxygen and carbon dioxide.

Analysis only detected 36,000 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) of TPHg in Sample SG-7. This sample result exceeded the Lowest Residential Exposure ESL of 10,000  $\mu\text{g}/\text{m}^3$  and the Lowest Commercial Exposure ESL of 29,000  $\mu\text{g}/\text{m}^3$ . Sample location SG-7 is located in an exterior area adjacent to a significant pocket of permeable fill placed during UST removal activities conducted in 1990. It is possible that the boring sample is more representative of soil-gas vapor present in the permeable tank fill which is not representative of conditions across the Site.

Concentrations of m,p-Xylene and o-Xylene were detected in Samples SG-1 and SG-5 through SG-7 ranging up to 320  $\mu\text{g}/\text{m}^3$  and 140  $\mu\text{g}/\text{m}^3$ , respectively. These concentrations are below the respective Lowest Residential and Commercial Exposure ESLs.

No TPHd, benzene, toluene, ethylbenzene, or MTBE concentrations were detected in any of the soil-gas samples analyzed.

Methane was not detected in any of the soil-gas samples obtained from the Site. Concentrations of Oxygen detected in the soil-gas samples ranged from 3.2% to 20%. Carbon Dioxide was detected with concentrations ranging from 1.5% to 16%.

The leak check compound used during this investigation was 1,1-Difluoroethane, which was only detected in Sample SG-3 at 37,000  $\mu\text{g}/\text{m}^3$ . Since it was detected in SG-3, this location was resampled. The second soil-gas sample collected from this location reported 19,000  $\mu\text{g}/\text{m}^3$ . It is unknown if there is an exposure to ambient air at the ground surface, around the top of the probe or if there was an insufficient seal between the tube fitting and the glass syringe. Although 19,000  $\mu\text{g}/\text{m}^3$  of the leak check compound was detected, this amount equates to 0.007% of the starting concentration. Since the second sampling attempt reported a decrease in the amount of leak check compound detected and the amount detected was so small compared to starting concentrations, in Fugro's opinion, the presence of leak check compound in the resample is considered insignificant and the data is considered useful and representative of actual conditions at this location.

## **9.0 SUMMER 2009 GROUNDWATER MONITORING EVENT**

### **9.1 FIELD ACTIVITIES**

Fugro conducted this monitoring event on July 30, 2009. Prior to sampling, the presence of free product was checked and the depth to groundwater was measured in all six



wells. Fugro's field personnel noticed hydrocarbon odor during purging and sampling of monitoring wells MW-1, MW-2, MW-3, and MW-4; however, no free product was observed. Traffic control permit was not obtained in time; therefore, no sampling was conducted at monitoring well MW-6 located within West Grand Avenue.

Each well was then purged of approximately three casing volumes of water while monitoring for changes in pH, conductivity, and temperature. Due to the slow recharge of the monitoring wells, wells were sampled the next day once the groundwater levels had stabilized. The wells were then sampled with clean disposable bailers. Samples were retained in glass containers pre-cleaned by the laboratory in accordance with Environmental Protection Agency (EPA) protocols. The containers were placed in an ice-filled cooler and kept chilled, pending delivery to the laboratory.

The samples for this event were submitted under chain-of-custody documents to Curtis & Tompkins, Ltd., a laboratory certified by the State of California Department of Health Services for hazardous waste and water testing. A sample from each well was analyzed for the following constituents:

- TPHg, EPA Methods 5030/8015;
- TPHd and TPHmo, EPA Methods 8015m, using silica gel cleanup;
- Lead scavengers including: dichloroethane and dibromoethane;
- Five fuel oxygenates by EPA Methods 8260 including: MTBE, TBA, DIPE, ETBE, and TAME using EPA Method 8260; and
- BTEX using EPA method 8260.

Well sampling forms are presented in Appendix D. Groundwater elevation data are summarized in Table 3, analytical test results are summarized in Table 7.

## 9.2 EVENT RESULTS

The historic groundwater flow directions for this Site are presented in the Rose Diagram on Plate 2. As previously stated the gradient for this event was 0.02 feet/feet<sup>1</sup> directed towards the east-southeast. Based on the groundwater elevation data presented in Table 3, the groundwater gradient remains generally consistent with previous measurements. Groundwater was generally encountered at lower elevations compared to the March 2009 event, which is expected given that this monitoring event was conducted during the height of the dry season.

Concentrations of the analytes detected during this sampling event are generally within the historic range of data. TPHg was detected during this event in samples from wells MW-1 (160 µg/L, MW-3 (360 µg/L), and MW-4 (1,400 µg/L). TPHd was detected in samples from

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<sup>1</sup> Data based on current measurements in wells MW-1, MW-2, MW-3, and MW-4. Data from wells MW-5 and MW-6 are not judged to be representative of site conditions.



wells MW-3 (71 µg/L) and MW-4 (1,100 µg/L). TPHmo was detected in one of the samples collected from well MW-4 (1,300 µg/L).

Analysis detected benzene and total xylenes in monitoring well MW-3 at concentrations of 14 µg/L and 1.2 µg/L, respectively. No concentrations of benzene, toluene, ethylbenzene, or total xylenes were detected in any of the remaining samples tested. No MTBE concentrations were detected in any of the samples tested during this event. None of the lead scavengers or fuel oxygenates were detected in any of the samples analyzed.

Based on a review of all groundwater data collected to date, it appears that sufficient data exists to characterize the plume in the vicinity of both former UST pit areas. Wells MW-3 and MW-4 have consistently shown elevated concentrations exist near the former UST pits, and this data is well documented. No further characterization data is needed from these areas. Additionally, it is apparent that wells MW-5 and MW-6 are situated beyond the distal limit of the plume. To address these issues, consideration should be given to abandoning wells MW-3, MW-4, MW-5, and MW-6, and installing two new wells (MW-7 and MW-8) to address the distal limit of the plume. One new well should be positioned between wells MW-3 and MW-6, and the other between wells MW-4 and MW-5. Abandonment activities should be conducted once the new wells have been installed and sampled to confirm better definition of the distal plume limits.

### 9.3 NO-PURGE EVENT

As discussed previously, Fugro has observed significant differences in contaminant concentrations measured in grab groundwater samples obtained from temporary well screens installed in borings and samples obtained from permanent well installations. Notwithstanding the notion that the grab groundwater samples represent a total and dissolved contaminant concentration, Fugro decided to conduct a limited no-purge sampling event, to provide data to check the effectiveness of the existing well screens, and to evaluate whether the plumes are experiencing any significant partitioning which the permanent wells may not be able to detect. As a result, Fugro re-sampled monitoring wells MW-1, MW-3, and MW-4 on September 8, 2009 without benefit of completing any purging event. The samples were submitted for TPHg and BTEX testing to compare with the data for the current event. A comparison of the TPHg data from the two events is presented below.

| Well | Purge Event, TPHg | No-Purge Event, TPHg |
|------|-------------------|----------------------|
| MW-1 | 160 ug/L          | 56 ug/L              |
| MW-3 | 360 ug/L          | 1,200 ug/L           |
| MW-4 | 1,400 ug/L        | 580 ug/L             |

Although the results shown above indicate that there is sampling variation in concentrations between the purge and no-purge events (an expected finding), the data between the events do not vary substantially. The lack of significant sample result variation supports the notion that the wells are performing as designed, and are adequate to continue their use to monitor plume characteristics. This data also strongly suggests that there is no significant

partitioning of the hydrocarbon plumes and thus confirms that the grab groundwater samples are not detecting a layer of highly contaminated groundwater that the wells are not able to detect, but are significantly affected due to entrained contaminated sediments. Coupled with the observation that the grab groundwater samples are turbid, this experiment further substantiates our conclusion that the data from the grab groundwater sampling events should only be used to suggest where the plume boundaries may exist, and should not be considered representative of actual plume concentrations.

## **10.0 UPDATED PREFERENTIAL PATHWAY SURVEY**

Fugro prepared a preferential pathway survey for the Site in February 2004. Based on comments from ACEH in July 2008, Fugro has updated the preferential pathway survey to include East Bay Municipal Utility District (EBMUD) water conveyance pipelines. In general, the updated research has not identified a preferential pathway or a known potable well which may be at risk of being impacted by the Site contaminant groundwater plume. All reported well locations in close proximity to the Site were visited by our staff to confirm their address and location as reported herein.

### **10.1 EVALUATION OF UNDERGROUND UTILITIES**

Fugro previously contacted the City of Oakland Engineering and Building Department and reviewed available maps of subsurface utility lines in the area. A copy of one of the maps from the City of Oakland is presented in Appendix E. The City maps show a 16-inch diameter sanitary sewer main and a 12-inch storm drain conduit located beneath Telegraph Avenue. Also shown are a 16-inch diameter storm drain conduit and a 16-inch sanitary sewer line located (between 7.2 and 6.0 feet above sea level) beneath Valley Street, with a single 10-inch lateral line connecting to the property block near the eastern block line. The approximate location and orientation of the utility lines are shown on Plate 4.

As previously reported, a shallow sanitary sewer line extends from the Site, toward Telegraph Avenue. A small storm drain catch basin exists along the West Grand Avenue curb line just beyond the southeast corner of the Site. This under-curb drain is not shown on the City maps we reviewed. The drain is apparently shallow and connected to a shallow-bedded pipeline, which conveys flow into the storm drain collector at Valley Street. This pipeline is also shown on the Plate 4.

In accordance with the request from ACEH for additional information with respect to the potential presence of water conveyance pipelines, which may act as preferential migration pathways, Fugro contacted EBMUD and reviewed historic groundwater depth information collected at the Site since 1994. Fugro met with EBMUD engineers and reviewed a number of blueprints and historic pipeline installation data, which suggest that all EBMUD pipelines adjacent to the Site are situated above the groundwater table. Excluding discrete areas where short runs of pipelines were installed below City of Oakland infrastructures, EBMUD pipelines were generally embedded at depths ranging from approximately 3.5 to 9.5 feet below the existing grade on the north side of West Grand Avenue, and approximately 4.0 to 5.5 feet below the existing grade of Valley Street, situated 165 feet east of the Site. The as-built maps and

field data notes, which provide pipeline details, do not indicate the type of trench bedding used. Many of the original pipelines were installed in the early 1920s to 1930's. Based on data collected for the onsite wells (MW-1 through MW-4) since 1994, the depth to groundwater has fluctuated between approximate depths of about 8 to 13 feet below the existing ground surface, which suggests that the groundwater surface is predominately located below the elevation of the pipelines. Copies of the EBMUD documents are also presented in Appendix E.

A continuing underground utility of interest is the Bay Area Rapid Transit (BART) tunnel, which may be influencing groundwater flow patterns in the area. The tunnel extends below the Chevron service station property located immediately south of the Site. The BART alignment runs from northwest to southeast below the Chevron property as shown on Plates 4 and 10. The construction and operation of the tunnel should be viewed as a contributing influence on changing groundwater flows in the area.

Based on our review of all underground utilities in the Site vicinity, we judge that it is unlikely that preferential contaminant migration along utility lines is occurring. By the time that the contaminant plume reaches the property lines to the west, east and south, the depth of the plume varies from 8 to 17 feet. The closest pipeline to the Site is a shallow under-curb drain along West Grand Avenue and a sanitary sewer pipeline below Telegraph Avenue, approximately 30 feet away from the Site. The flow lines of these pipelines are situated above the plume surface. The closest storm drain line is situated more than 60 feet away from the Site in a cross gradient direction from the plume, and therefore judged not likely to intercept the plume.

## **10.2 REGISTERED WELL SURVEY**

Fugro's previous registered well survey conducted in 2004 identified nine registered wells located within close proximity (0.25-mile) of the Site. Of the nine registered wells, two were listed with a use of "irrigation" and seven were listed with a use as "unknown". Given the significant number of years since the previous pathway survey was completed, Fugro requested that the California Department of Water Resources (DWR) complete another search of wells within 0.25-mile of the Site. DWR identified fifteen registered well properties within the 0.25-mile radius. For the purposes of this report, Fugro assigned a number to each well and illustrated the approximate location of each well on Plate 10. The Water Well Drillers Reports provided by the DWR well search are presented in Appendix F.

In general, of the fifteen (15) "well" properties listed within the surrounding area, approximately ten (10) were upgradient/cross-gradient and five were downgradient of the Site. These 15 "well" properties account for a total of forty-two wells. According to information obtained in the well search, the nearest documented downgradient wells are located at the Old Oakland Tribune Garage at 23<sup>rd</sup> Street and Valdez Street, Kaiser Center Plaza at 300 Lakeside Drive, the Ordway Building at 1 Kaiser Plaza, and properties located at 327 21<sup>st</sup> Street and 21<sup>st</sup> Street and Broadway.

Fugro conducted a reconnaissance of the four downgradient properties, as well as the former Great Western Power Co. property located at 520 20<sup>th</sup> Street as requested by ACEH, to



confirm location of the wells if possible. The Old Oakland Tribune Garage has been redeveloped into a covered and uncovered parking garage; the Great Western Power Co. has been redeveloped into an indoor rock climbing gym, and 327 21<sup>st</sup> Street and the property located at 21<sup>st</sup> Street and Broadway have both been redeveloped into parking lots. Kaiser Center Plaza at 300 Lakeside Drive and the Ordway Building at 1 Kaiser Plaza are utilized as office buildings with an uncovered parking and a covered, multi-story parking garage. Fugro inquired about the presence of wells on each of these properties. Personnel at each location were unaware of any wells, and no wells were observed at any of the locations during our reconnaissance.

The most recent well inventory obtained from the DWR does not include information about wells installed for the LUST investigations in the area. As such, the well survey has been updated to include these monitoring wells.

### **10.3 SURROUNDING PROPERTY SURVEY**

The Site is located in a predominantly commercial section of Oakland, California. The property is bounded on the west and south by Telegraph Avenue and West Grand Avenue, respectively. The adjacent property to the east, which is also owned by Buttner Properties, is occupied by a nursery school (460 West Grand Avenue). The outdoor paved play area used by the school abuts the eastern fence line of the Site. The nursery school building is situated about 90 feet to the east and downgradient of the former waste oil tank location. The adjacent property north of the Site is a restaurant (2270 Telegraph Avenue). A Chevron service station (2200 Telegraph Avenue) is located south of the Site, across West Grand Avenue, a Valero service station (2225 Telegraph Avenue) is located southwest of the Site, and a Taco Bell restaurant (2255 Telegraph Avenue) is located west of the Site, across Telegraph Avenue.

Fugro conducted a review of available files located on the Regional Water Quality Control Board's (RWQCB) GeoTracker website for some of the surrounding properties of environmental interest including the adjacent service station properties. Results of this file review are presented below.

#### **10.3.1 2200 Telegraph Avenue – Chevron Service Station**

This property is located cross-gradient from the Site. Available records for this property indicate at least two different UST locations. Additionally, as previously stated, a BART tunnel was constructed directly below this property. Studies have been periodically conducted to evaluate the UST locations and have documented two unauthorized releases of petroleum product which have impacted groundwater. In 1986, Blaine-Tech reported TPHg and benzene at concentrations of 480,000 µg/L and 10,000 µg/L, respectively, in a groundwater sample obtained from one of the tank pits. In 1992, Groundwater Technology reported TPHg and benzene at concentrations of 42,000 µg/L and 3,300 µg/L, respectively, in a grab groundwater sample from a vadose well. In 2000, Gettler-Ryan detected TPHg and benzene at concentrations of 29,000 µg/L and 180 µg/L, respectively in a grab groundwater sample obtained from a boring located on the north side of the station. This sample also contained 730 µg/L of MTBE and 380 µg/L of TBA. This property has reportedly undergone groundwater



monitoring activities since at least 2005. It is not clear from the GeoTracker review whether any of these groundwater releases were ever cleaned up.

### **10.3.2 2225 Telegraph Avenue - Valero (formerly Exxon) Service Station**

This property is located cross-gradient from the Site. Available records for this property indicate that Texaco operated the gasoline station from 1963 until 1988 when the property was transferred to Exxon-Mobil. Exxon-Mobil sold the property to Valero in 2000, who subsequently sold the property to Mr. Lam Truong who currently operates the property as a Valero service station. Groundwater samples collected following tank removal detected elevated levels of TPHg, benzene, and MTBE onsite. The plume as depicted by Environmental Resolutions, Inc., in maps dated April 2009, was inferred to extend a limited distance into the adjacent streets. Prior to 1990, a pump and treat remediation system was installed onsite to remediate impacted groundwater and treated water was discharged to the sanitary sewer. The pump and treat system was shut down in 1990 and replaced with a SVE system which reportedly operated from approximately 1991 through 1996, when ownership transferred from Texaco to Exxon-Mobil. The SVE system has not been operated since then.

## **11.0 PRELIMINARY RISK ASSESSMENT**

Several studies of the impacts to soil and groundwater have been conducted at the Site, all of which have been conducted by Fugro staff. These studies and the results of groundwater monitoring have provided sufficient information to assess potential risks posed to human health and the environment resulting from previous UST releases. To assist in the evaluation of the potential risks we have summarized the pertinent Site constraints and the exposure pathways, which in our opinion, would be considered driving forces.

### **11.1 CONTAMINANTS OF CONCERN**

Contaminants of concern (COC) include those chemicals typically associated with service stations and automobile repair garages. Site research suggests at least three UST locations were onsite; two associated with dispensing fuels and one associated with the waste oil tank. Contaminants of potential concern would include the full range of petroleum hydrocarbon products, as well as products used to service automobiles including chlorinated solvents (used to increase the solubility of oils and greases, antifreeze, and fuel additives.

Since the service station was not in operation when the gasoline additive MTBE was in use, MTBE is not judged to represent a potential COC. Testing for MTBE has been conducted at various times to check for possible MTBE impacts, and with the exception of historic Well MW-6 data and a recent low hit of MTBE in Well MW-4, Site data supports the finding that MTBE is not a COC.

Automotive chemical usage is ongoing with the operation of the existing repair shop onsite. This facility uses lubricants and greases, and other chemicals in smaller quantities and has appropriate storage and disposal practices in place with respect to the chemicals in use. Site specific studies show that only oil based waste products discharged previously into the



waste oil UST system have been shown to impact soil and groundwater at the Site, and thus these would represent COC for the waste oil UST area.

Gasoline fuels were dispensed at the Site for at least the late 1940's. Site specific studies show that releases from these USTs have impacted soil and groundwater.

Based on the foregoing summation, COCs at the Site comprise the following compounds.

- TPHg = Total petroleum hydrocarbons within the gasoline range, present due to former gasoline and waste oil UST system releases.
- TPHd = Total petroleum hydrocarbons within the diesel range, may represent either releases from a former UST system or be observed as a degradation component of gasoline.
- TPHog and TPHmo = Total petroleum hydrocarbons within the oil and grease range and the motor oil range, present due to former waste oil UST system releases.
- BTEX, 1,2 DCA = Benzene, toluene, ethylbenzene, and total xylenes, and 1,2 Dichloroethane present in both source areas as a result of releases of refined petroleum products from the former UST systems.
- Lead, PNAs, VOCs = Present due to releases from the former waste oil UST system.

## 11.2 SUBSURFACE CONDITIONS

With the exception of the vadose zone impacts to soil in the vicinity of the former waste oil UST system which extends below the existing shop building, soil impacts correlate with historic groundwater fluctuation across the Site. Residual soil impacted by UST source area releases is present between depths of 8 and 17 feet bgs across the Site. The predominate soil type within the groundwater fluctuation zone is clay.

Groundwater has been measured in the existing onsite wells at depths ranging from approximately 9 to 12 feet bgs. However, based on a review of analytical data of soil samples, it appears that the groundwater fluctuation zone extends from about 8 to 17 feet bgs.

No free product has ever been observed floating on the groundwater surface in any of the existing wells or in any of the borings drilled at the Site. The contaminant plume appears to be stable based on the lack of significant changes in concentrations over time, and the finding that it has not expanded as wells MW-6 and MW-5 are not showing any impacts resulting from the plume. Plume stability is also a reasonable finding given the existence of a flat gradient and the presence of clayey soils within the groundwater fluctuation zone which impede plume movement.

As shown on the Plate 4 and Cross-Section A-A', presented on Plate 5, no utility lines are present along West Grand Avenue in a location where they may otherwise have created



preferential pathways and conduits to spread contamination. The primary subsurface conduits extend below Telegraph Avenue, west of the Site.

### **11.3 EXTENT OF SOIL IMPACTS**

The impacts to soil are localized to the area of the former waste oil UST system and within the groundwater fluctuation zone. To preliminarily evaluate the lateral and vertical extent of soil impacts we elected to compare measured TPHg, TPHd and TPHmo concentrations to 100mg/kg, the ESL threshold for a potential residential use of the Site.

Within the former waste oil UST area, soils are suspected to be impacted in the immediate area of previous UST system improvements located within and below the existing building. The improvements included a floor drain which has since been closed and conveyance piping leading over to the former waste oil UST. Sampling inside the structure has been limited due to the presence of a number of storage cabinets and improvements, and the presence of a long-standing viable repair business. Based on the limited sampling inside the structure and the data from the waste oil UST removal we believe that impacted soil extends from below the floor and east wall foundation wall to depths up to 17 feet. Once at the groundwater surface the plume extended along the groundwater flow path. The lateral extent of soil impacts within the groundwater fluctuation zone has not been defined to the 100 mg/kg level to the east. The area of impact is shown on Plate 11.

Within the former gasoline UST area, the vertical extent of soil impacts are coincident with the groundwater fluctuation zone. No other shallow pockets of vadose zone impacted soils have been identified to date. Using data collected from well installations, UST remediation efforts and borings it appears that once contamination encountered the groundwater surface the plume extended along the groundwater flow path. The lateral extent of soil impacts within the groundwater fluctuation zone has not been defined to the 100 mg/kg level at the west or east ends of the flow path. The area of impact is shown on Plate 11.

Based on the existing soil data, the area of the waste oil UST system improvements would only represent a risk to human health (potential dermal contact) for future construction workers on the Site during below grade repairs or future remediation/construction at the Site.

### **11.4 EXTENT OF GROUNDWATER IMPACTS**

Groundwater below the Site has been impacted by releases of both gasoline and waste oil products. The two points of release have resulted in a commingling of contaminant plumes as there is not sufficient separation at the Site and no identified boundary conditions to keep the plume areas separate.

Based on a review of all groundwater data collected to date, it appears that sufficient data exists to characterize the plume in the vicinity of both former UST pit areas. The groundwater zone impacts appear to be limited as they do not appear to extend to the offsite wells (MW-5 and MW-6) located to the southeast and east of the Site. The presence of the impacted groundwater does not however, represent a significant risk of exposure via an

inhalation route based on recent soil-gas data and current Site use. Potential inhalation risks can be further mitigated through groundwater remediation efforts in the future. The possible risk of dermal contact and ingestion by future construction workers can be mitigated through implementing proper Site controls and Health and Safety measures during below grade repairs or future site construction.

## **11.5 ROUTES OF EXPOSURE AND COMPLETED PATHWAYS**

The potential routes of exposure to impacted soil or groundwater and whether there is an indication that the pathway is complete are shown below.

- Ingestion of soil or groundwater – Pathway potentially complete for future construction workers. Risks can be mitigated through implementing proper Site controls and Health and Safety measures during below grade repairs or future site construction/remediation.
- Inhalation of TPHg vapors – Pathway is not complete. No sensitive uses or structures are located over the portion of the existing plume where elevated soil gas vapors have been identified. Potential future risks can be mitigated prior to Site redevelopment through groundwater remediation efforts.
- Dermal contact with soil or groundwater – Pathway potentially complete for future construction workers. Risks can be mitigated through implementing proper Site controls and Health and Safety measures during below grade repairs or future site construction/remediation.
- Environmental Impacts – Pathway is complete with soil and groundwater being impacted. However, no viable beneficial use has been identified for the shallow water and the exiting plume is not threatening a surface water body. Further, no preferential pathways have been identified which could become impacted.

## **12.0 RECOMMENDATIONS**

Considering the current commercial use of the Site, the areas of impacted soil and groundwater do not appear to pose a significant risk to human health or the environment. The rationale for this consideration is summarized below:

- The Site is zoned and used for commercial purposes and is likely to remain that way for the foreseeable future.
- Onsite source areas have been remediated to the extent feasible given the Site's current and continued commercial use.
- Residual impacted soil in the vadose zone is limited to the former waste oil UST area.
- Residual impacted soil and groundwater are coincident along the groundwater flow path.





- Detected COC do not appear to pose a significant risk to human health via an inhalation pathway based on the recently collected soil-gas study and considering that the site is paved and is under current commercial use. The extent of potential soil vapor appears limited to the area of the former gasoline USTs.
- There is no viable, current beneficial use of groundwater at the Site.
- No identified preferential pathways or sensitive surface waters in the immediate vicinity of the plume.

As there is no significant risk of human exposure and there is no immediate threat to a surface water body, it appears appropriate to continue to monitor groundwater conditions on a semi-annual basis using a new monitoring well network which identifies the limits of the plume. To evaluate the location of the distal end of the plume, Fugro proposes to abandon wells MW-3, MW-4, MW-5, and MW-6, and to install two new wells at the locations shown on Plate 11. The abandonment of the two wells should be done in a phased manner. Initially, Wells MW-3, MW-4, and MW-6 should be abandoned first. The abandonment of MW-5 would be delayed until the data from the monitoring of the two new wells has been reviewed.

Remediation and ultimate regulatory closure of the Site is the desired goal of the property owner, Buttner Properties. Following collection of data from two monitoring events using the new well network, sufficient data will exist to prepare a Corrective Action Plan (CAP). With the regulatory oversight of ACEH, Buttner Properties envisions obtaining approval of the CAP in late 2010, and completing remediation activities and obtaining Site closure in 2011.

## TABLES

Table 1  
Summary of Chemical Concentrations in Soil - During Remediation  
2250 Telegraph Avenue, Oakland, California



| Sample Location<br>and Depth in Feet             | Sample Date | Petroleum Hydrocarbons |                     |                   |                      |                  | PCBs                      | Volatile Organic Compounds |         |              |         |       |               | Metals  |          |       |       |        |        | Semi-Volatile Organic Compounds |                     |                      |             |
|--|-------------|------------------------|---------------------|-------------------|----------------------|------------------|---------------------------|----------------------------|---------|--------------|---------|-------|---------------|---------|----------|-------|-------|--------|--------|---------------------------------|---------------------|----------------------|-------------|
|  |             | TPH, Gasoline Range    | TPH, Kerosene Range | TPH, Diesel Range | TPH, Motor Oil Range | Total Oil Grease | Polychlorinated Biphenyls | Benzene                    | Toluene | Ethylbenzene | Xylenes | PCE   | Chlorobenzene | Cadmium | Chromium | Lead  | Zinc  | Nickel | Copper | 2-Methylphenol                  | 2-Methylnaphthalene | Di-N-Butyl Phthalate | Naphthalene |
|  |             | mg/kg                  | mg/kg               | mg/kg             | mg/kg                | mg/kg            | mg/kg                     | µg/kg                      | µg/kg   | µg/kg        | µg/kg   | µg/kg | µg/kg         | mg/kg   | mg/kg    | mg/kg | mg/kg | mg/kg  | mg/kg  | mg/kg                           | mg/kg               | mg/kg                | mg/kg       |
| Gasoline Tank and Dispenser Area                 |             |                        |                     |                   |                      |                  |                           |                            |         |              |         |       |               |         |          |       |       |        |        |                                 |                     |                      |             |
| G3@ 10   | 8/29/1990   | 120                    | --                  | --                | --                   | --               | --                        | 820                        | 560     | 2,300        | 4,000   | --    | --            | --      | --       | 9.07  | --    | --     | --     | --                              | --                  | --                   | --          |
| G4@ 10   | 8/29/1990   | 18                     | --                  | --                | --                   | --               | --                        | 89                         | 11      | 150          | 520     | --    | --            | --      | --       | 19.2  | --    | --     | --     | --                              | --                  | --                   | --          |
| G5@ 10   | 8/29/1990   | 270                    | --                  | --                | --                   | --               | --                        | 2,300                      | 220     | 3,400        | 410     | --    | --            | --      | --       | 5.43  | --    | --     | --     | --                              | --                  | --                   | --          |
| G6@ 15   | 8/29/1990   | 8.3                    | --                  | --                | --                   | --               | --                        | 320                        | 6.3     | 170          | 220     | --    | --            | --      | --       | 4.93  | --    | --     | --     | --                              | --                  | --                   | --          |
| G7@ 11   | 8/29/1990   | 6.3                    | --                  | --                | --                   | --               | --                        | 270                        | 34      | <5.0         | 160     | --    | --            | --      | --       | 8.45  | --    | --     | --     | --                              | --                  | --                   | --          |
| G8@16  | 8/29/1990   | <2.5                   | --                  | --                | --                   | --               | --                        | 19                         | 5.6     | <5.0         | <5.0    | --    | --            | --      | --       | 6.65  | --    | --     | --     | --                              | --                  | --                   | --          |
| G9@ 10   | 8/29/1990   | <2.5                   | --                  | --                | --                   | --               | --                        | <5.0                       | <5.0    | <5.0         | <5.0    | --    | --            | --      | --       | 5.54  | --    | --     | --     | --                              | --                  | --                   | --          |
| G10@ 16  | 8/29/1990   | 260                    | --                  | --                | --                   | --               | --                        | 1,600                      | 670     | 1,300        | 460     | --    | --            | --      | --       | 8.36  | --    | --     | --     | --                              | --                  | --                   | --          |
| G11@ 10  | 8/29/1990   | <2.5                   | --                  | --                | --                   | --               | --                        | <5.0                       | <5.0    | <5.0         | <5.0    | --    | --            | --      | --       | 6.01  | --    | --     | --     | --                              | --                  | --                   | --          |
| D1@ 0.5  | 8/29/1990   | <2.5                   | --                  | --                | --                   | --               | --                        | <5.0                       | <5.0    | <5.0         | <5.0    | --    | --            | --      | --       | 201   | --    | --     | --     | --                              | --                  | --                   | --          |
| D2@ 0.5  | 8/29/1990   | 1,700                  | --                  | --                | --                   | --               | --                        | 2,300                      | 9,500   | 35,000       | 77,000  | --    | --            | --      | --       | 107   | --    | --     | --     | --                              | --                  | --                   | --          |
| D3@ 0.5  | 8/29/1990   | 200                    | --                  | --                | --                   | --               | --                        | 850                        | 1,600   | 3,800        | 18,000  | --    | --            | --      | --       | 91.7  | --    | --     | --     | --                              | --                  | --                   | --          |
| D4@ 0.5  | 8/29/1990   | <2.5                   | --                  | --                | --                   | --               | --                        | <5.0                       | <5.0    | <5.0         | 9.1     | --    | --            | --      | --       | 537   | --    | --     | --     | --                              | --                  | --                   | --          |
| Waste Oil Tank Area                              |             |                        |                     |                   |                      |                  |                           |                            |         |              |         |       |               |         |          |       |       |        |        |                                 |                     |                      |             |
| WO-1   | 8/31/1990   | 40                     | --                  | 290               | 3,800                | 1,700            | <0.05                     | 1,800                      | 880     | 800          | 1,200   | 39    | 40            | 0.431   | 23.4     | 151   | 167   | 32.5   | 38.4   | 0.9                             | 2.4                 | 0.5                  | 1.3         |
| WO-2   | 8/31/1990   | 740                    | --                  | 640               | 5,100                | 3,600            | --                        | 12,000                     | 15,000  | 10,000       | 18,000  | 470   | <10           | 0.522   | 25.6     | 112   | 140   | 30.2   | 32.5   | --                              | --                  | --                   | --          |
| WP1,2,3,4  | 8/31/1990   | 130                    | --                  | 1,000             | 4,800                | 3,200            | --                        | 11000                      | 1,700   | 2,100        | 3,900   | 66    | <10           | 0.482   | 26.0     | 85.9  | 70.6  | 27.5   | 23.3   | --                              | --                  | --                   | --          |
| ESLs Residential Land Use <sup>1</sup>           |             | 100                    | 100                 | 100               | 370                  | 370              | 0.22                      | 120                        | 9,300   | 2,300        | 11,000  | 370   | 1,500         | 1.7     | 750      | 200   | 600   | 150    | 230    | NE                              | 0.25                | NE                   | 1.3         |
| ESLs Commercial/Industrial Land Use <sup>1</sup> |             | 180                    | 180                 | 180               | 2,500                | 2,500            | 0.74                      | 270                        | 9,300   | 4,700        | 11,000  | 950   | 1,500         | 7.4     | 750      | 750   | 600   | 150    | 230    | NE                              | 0.25                | NE                   | 2.8         |

Notes

- TPH = Total petroleum hydrocarbons
- DCA = Dichloroethane
- TCA = Trichloroethane
- PCE = Tetrachloroethene
- NE = No value established
- mg/kg = milligrams per kilogram = parts per million
- µg/kg = micrograms per kilogram = parts per billion
- <1 = Chemical not present at a concentration greater than the laboratory detection limit shown or stated on test reports
- = Chemical not tested for

ESLs = San Francisco Bay Regional Water Quality Control Board, Screening for Environmental Concerns at Sites with Contaminated Soil and Grounwater, Interim Final November 2007, Revised May 2008

<sup>1</sup> = Table B Shallow Soil Screening Levels, Groundwater is not a Current or Potential Source of Drinking Water



Table 2  
Summary of Chemical Concentrations in Soil - After Remediation  
2250 Telegraph Avenue, Oakland, California



|  |             | Petroleum Hydrocarbons |                     |                   |                      |                  | Volatile Organic Compounds |         |              |         |           |         |       |               | Metals | Semi-Volatile Organic Compounds |            |                            |                      |                      |              |          |             |              |                        |              |        |
|--|-------------|------------------------|---------------------|-------------------|----------------------|------------------|----------------------------|---------|--------------|---------|-----------|---------|-------|---------------|--------|---------------------------------|------------|----------------------------|----------------------|----------------------|--------------|----------|-------------|--------------|------------------------|--------------|--------|
| Sample Location and Depth in Feet                | Sample Date | TPH, Gasoline Range    | TPH, Kerosene Range | TPH, Diesel Range | TPH, Motor Oil Range | Total Oil Grease | Benzene                    | Toluene | Ethylbenzene | Xylenes | 1,1,1-TCA | 1,2-DCA | PCE   | Chlorobenzene | Lead   | 2-Methylnaphthalene             | Anthracene | Bis-2-ethylhexyl Phthalate | Butylbenzylphthalate | Di-N-Butyl Phthalate | Fluoranthene | Fluorene | Naphthalene | Nitrobenzene | N-Nitrosodiphenylamine | Phenanthrene | Pyrene |
|  |             | mg/kg                  | mg/kg               | mg/kg             | mg/kg                | mg/kg            | µg/kg                      | µg/kg   | µg/kg        | µg/kg   | µg/kg     | µg/kg   | µg/kg | µg/kg         | mg/kg  | mg/kg                           | mg/kg      | mg/kg                      | mg/kg                | mg/kg                | mg/kg        | mg/kg    | mg/kg       | mg/kg        | mg/kg                  | mg/kg        | mg/kg  |
| Gasoline Tank and Dispenser Area                 |             |                        |                     |                   |                      |                  |                            |         |              |         |           |         |       |               |        |                                 |            |                            |                      |                      |              |          |             |              |                        |              |        |
| G10@ 17  | 10/10/90    | <2.5                   | --                  | <5                | <50                  | --               | 73                         | <5      | <5           | <5      | --        | --      | --    | --            | --     | --                              | --         | --                         | --                   | --                   | --           | --       | --          | --           | --                     | --           | --     |
| G12@ 10  | 10/5/90     | 52                     | --                  | 110               | <50                  | --               | 110                        | 45      | 480          | 140     | --        | --      | --    | --            | --     | --                              | --         | --                         | --                   | --                   | --           | --       | --          | --           | --                     | --           | --     |
| G13@ 10  | 10/8/90     | 12                     | --                  | <5                | <50                  | --               | 220                        | 43      | 60           | 130     | --        | --      | --    | --            | --     | --                              | --         | --                         | --                   | --                   | --           | --       | --          | --           | --                     | --           | --     |
| G14@ 7.5   | 10/8/90     | <2.5                   | --                  | <5                | 100                  | --               | <5                         | <5      | <5           | <5      | --        | --      | --    | --            | --     | --                              | --         | --                         | --                   | --                   | --           | --       | --          | --           | --                     | --           | --     |
| G15@ 9.5   | 10/8/90     | 310                    | --                  | <5                | <50                  | --               | 820                        | 59      | 1,300        | 1,600   | --        | --      | --    | --            | --     | --                              | --         | --                         | --                   | --                   | --           | --       | --          | --           | --                     | --           | --     |
| G16@11   | 10/8/90     | 19                     | --                  | <5                | <50                  | --               | 200                        | 41      | 210          | 46      | --        | --      | --    | --            | --     | --                              | --         | --                         | --                   | --                   | --           | --       | --          | --           | --                     | --           | --     |
| G17@ 6   | 10/10/90    | 24.0                   | --                  | <5                | <50                  | --               | 38                         | 20      | 12           | 18      | --        | --      | --    | --            | --     | --                              | --         | --                         | --                   | --                   | --           | --       | --          | --           | --                     | --           | --     |
| G18@ 8   | 10/17/90    | <2.5                   | --                  | <5                | <50                  | --               | <5                         | <5      | <5           | <5      | --        | --      | --    | --            | --     | --                              | --         | --                         | --                   | --                   | --           | --       | --          | --           | --                     | --           | --     |
| G19@ 10  | 10/17/90    | <2.5                   | --                  | <5                | <50                  | --               | <5                         | <5      | <5           | <5      | --        | --      | --    | --            | --     | --                              | --         | --                         | --                   | --                   | --           | --       | --          | --           | --                     | --           | --     |
| G20@ 17  | 10/17/90    | <2.5                   | --                  | <5                | <50                  | --               | <5                         | <5      | <5           | <5      | --        | --      | --    | --            | --     | --                              | --         | --                         | --                   | --                   | --           | --       | --          | --           | --                     | --           | --     |
| G21@ 10  | 10/17/90    | <2.5                   | --                  | <5                | <50                  | --               | <5                         | <5      | <5           | <5      | --        | --      | --    | --            | --     | --                              | --         | --                         | --                   | --                   | --           | --       | --          | --           | --                     | --           | --     |
| G22@ 10  | 10/17/90    | <2.5                   | --                  | <5                | 87                   | --               | <5                         | <5      | <5           | <5      | --        | --      | --    | --            | --     | --                              | --         | --                         | --                   | --                   | --           | --       | --          | --           | --                     | --           | --     |
| D2@ 4.5  | 10/8/90     | <2.5                   | --                  | <5                | <50                  | --               | <5                         | <5      | <5           | <5      | --        | --      | --    | --            | --     | --                              | --         | --                         | --                   | --                   | --           | --       | --          | --           | --                     | --           | --     |
| D3@ 4.5  | 10/4/90     | <2.5                   | --                  | <5                | <50                  | --               | <5                         | <5      | <5           | <5      | --        | --      | --    | --            | --     | --                              | --         | --                         | --                   | --                   | --           | --       | --          | --           | --                     | --           | --     |
| Waste Oil Tank Area                              |             |                        |                     |                   |                      |                  |                            |         |              |         |           |         |       |               |        |                                 |            |                            |                      |                      |              |          |             |              |                        |              |        |
| 3@ 6   | 2/9/94      | <1                     | <1                  | <1                | 27                   | <50              | <5                         | <5      | <5           | <5      | --        | --      | --    | --            | 8      | --                              | --         | --                         | --                   | --                   | --           | --       | --          | --           | --                     | --           | --     |
| 4@ 11  | 2/9/94      | <1                     | <1                  | <1                | 20                   | 80               | <5                         | <5      | <5           | <5      | --        | --      | --    | --            | 11     | --                              | --         | --                         | --                   | --                   | --           | --       | --          | --           | --                     | --           | --     |
| 5@ 6   | 2/9/94      | 240                    | <1                  | 560               | 1,700                | 3,900            | 300                        | 1,800   | 2,500        | 16,000  | <5        | 36      | 29    | 16            | 590    | 2.7                             | 0.13       | <0.05                      | <0.05                | <0.05                | 0.14         | 0.12     | 1.8         | 0.39         | <0.05                  | 0.45         | 0.26   |
| 6@ 11  | 2/9/94      | 31                     | <1                  | 250               | 640                  | 1,700            | 580                        | 670     | 550          | 2,700   | <5        | <5      | 8.0   | 8.4           | 45     | 3.7                             | 0.18       | <0.05                      | <0.05                | 1.6                  | 0.15         | 0.14     | 2.5         | <0.05        | 0.21                   | 0.39         | 0.27   |
| 7@ 6   | 2/9/94      | <1                     | <1                  | <1                | <10                  | <50              | <5                         | <5      | <5           | 31      | <5        | <5      | <5    | <5            | 19     | <0.05                           | <0.05      | 0.32                       | 0.93                 | 1.7                  | <0.05        | <0.05    | <0.05       | <0.05        | <0.05                  | <0.05        | <0.05  |
| 8@ 11.5  | 2/9/94      | 100                    | <1                  | 680               | 1,100                | 2,700            | 360                        | 300     | 1,300        | 6,700   | --        | --      | --    | --            | 21     | --                              | --         | --                         | --                   | --                   | --           | --       | --          | --           | --                     | --           | --     |
| 9@ 6   | 2/9/94      | <1                     | <1                  | <1                | <10                  | <50              | <5                         | <5      | <5           | <5      | --        | --      | --    | --            | 8.6    | --                              | --         | --                         | --                   | --                   | --           | --       | --          | --           | --                     | --           | --     |
| 10@ 11.5   | 2/9/94      | 6.5                    | <1                  | 210               | 360                  | 470              | 100                        | 7.3     | 100          | 160     | --        | --      | --    | --            | 14     | --                              | --         | --                         | --                   | --                   | --           | --       | --          | --           | --                     | --           | --     |
| 11@ 13   | 2/9/94      | 15                     | <1                  | 210               | 450                  | 780              | 430                        | 45      | 350          | 960     | <5        | <5      | <5    | 7.6           | 60     | 0.39                            | <0.05      | <0.05                      | <0.05                | 2                    | 0.05         | 0.08     | 0.34        | <0.05        | <0.05                  | 0.2          | 0.1    |
| Well Boring Samples                              |             |                        |                     |                   |                      |                  |                            |         |              |         |           |         |       |               |        |                                 |            |                            |                      |                      |              |          |             |              |                        |              |        |
| MW1 @10  | 3/2/94      | 260                    | <1                  | <1                | <10                  | --               | <20                        | <20     | 970          | 770     | <5        | <5      | <5    | <5            | --     | --                              | --         | --                         | --                   | --                   | --           | --       | --          | --           | --                     | --           | --     |
| MW2 @10  | 3/1/94      | <1                     | <1                  | <1                | <10                  | --               | <90                        | <90     | <5           | <5      | <5        | <5      | <5    | <5            | --     | --                              | --         | --                         | --                   | --                   | --           | --       | --          | --           | --                     | --           | --     |
| MW3 @10  | 3/1/94      | 620                    | <1                  | 5.6               | <10                  | --               | <90                        | <90     | 840          | 2,700   | 7.4       | <5      | 11    | <5            | --     | --                              | --         | --                         | --                   | --                   | --           | --       | --          | --           | --                     | --           | --     |
| MW4 @10  | 3/2/94      | 1.9                    | <1                  | 8.9               | 22                   | --               | <20                        | <20     | <5           | <5      | <5        | <5      | <5    | <5            | --     | --                              | --         | --                         | --                   | --                   | --           | --       | --          | --           | --                     | --           | --     |
| MW5 @4   | 6/23/97     | <1                     | --                  | <1                | --                   | --               | <5                         | <5      | <5           | <5      | <5        | <5      | <5    | <5            | --     | --                              | --         | --                         | --                   | --                   | --           | --       | --          | --           | --                     | --           | --     |
| MW5 @8   | 6/23/97     | 3.1                    | --                  | 5.1               | --                   | --               | <5                         | <5      | 5.7          | 17      | <5        | <5      | <5    | <5            | --     | --                              | --         | --                         | --                   | --                   | --           | --       | --          | --           | --                     | --           | --     |
| MW6 @6   | 6/23/97     | <1                     | --                  | <1                | --                   | --               | <5                         | <5      | <5           | <5      | <5        | <5      | <5    | <5            | --     | --                              | --         | --                         | --                   | --                   | --           | --       | --          | --           | --                     | --           | --     |
| MW6 @10  | 6/23/97     | 4.4                    | --                  | 6.5               | --                   | --               | <5                         | <5      | 26           | <5      | <5        | <5      | <5    | <5            | --     | --                              | --         | --                         | --                   | --                   | --           | --       | --          | --           | --                     | --           | --     |
| ESLs Residential Land Use <sup>1</sup>           |             | 100                    | 100                 | 100               | 370                  | 370              | 120                        | 9,300   | 2,300        | 11,000  | 7,800     | 220     | 370   | 1,500         | 200    | 0.25                            | 2.8        | 35                         | NE                   | NE                   | 40           | 8.9      | 1.3         | NE           | NE                     | 11           | 85     |
| ESLs Commercial/Industrial Land Use <sup>1</sup> |             | 180                    | 180                 | 180               | 2,500                | 2,500            | 270                        | 9,300   | 4,700        | 11,000  | 7,800     | 480     | 950   | 1,500         | 750    | 0.25                            | 2.8        | 120                        | NE                   | NE                   | 40           | 8.9      | 2.8         | NE           | NE                     | 11           | 85     |

Notes

TPH = Total petroleum hydrocarbons

DCA = Dichloroethane

TCA = Trichloroethane

PCE = Tetrachloroethene

NE = No value established

mg/kg = milligrams per kilogram = parts per million

µg/kg = micrograms per kilogram = parts per billion

<1 = Chemical not present at a concentration greater than the laboratory  
detection limit shown or stated on test reports

-- = Chemical not tested for

ESLs = San Francisco Bay Regional Water Quality Control Board, Screening for Environmental Concerns at  
Sites with Contaminated Soil and Grounwater, Interim Final November 2007, Revised May 2008

<sup>1</sup> = Table B Shallow Soil Screening Levels, Groundwater is not a Current or Potential Source of Drinking Water





**Table 3**  
**Groundwater Elevation Data**  
**2250 Telegraph Avenue, Oakland, California**

| Monitoring Well | Date       | TOC Elevation (Feet MSL) | DTW (feet) | Elevation (Feet MSL) |
|-----------------|------------|--------------------------|------------|----------------------|
| MW-1            | 3/3/1994   | 20.55                    | 10.39      | 10.16                |
|                 | 3/10/1994  |                          | 10.54      | 10.01                |
|                 | 6/6/1994   |                          | 11.36      | 9.19                 |
|                 | 9/7/1994   |                          | 11.92      | 8.63                 |
|                 | 12/22/1994 |                          | 10.83      | 9.72                 |
|                 | 3/17/1995  |                          | 9.73       | 10.82                |
|                 | 6/27/1995  |                          | 10.51      | 10.04                |
|                 | 9/18/1995  |                          | 11.12      | 9.43                 |
|                 | 5/30/1996  |                          | 10.49      | 10.06                |
|                 | 7/9/1997   |                          | 11.79      | 8.76                 |
|                 | 8/21/1998  |                          | 11.00      | 9.55                 |
|                 | 10/6/1998  |                          | 11.84      | 8.71                 |
|                 | 2/24/1999  |                          | 9.74       | 10.81                |
|                 | 6/30/2000  |                          | 11.28      | 9.27                 |
|                 | 4/27/2001  |                          | 10.56      | 9.99                 |
|                 | 4/14/2005  |                          | 10.12      | 10.43                |
|                 | 8/1/2005   |                          | 10.56      | 9.99                 |
|                 | 11/9/2005  |                          | 12.53      | 8.02                 |
|                 | 3/21/2006  |                          | 9.71       | 10.84                |
|                 | 8/7/2006   |                          | 11.40      | 9.15                 |
|                 | 10/27/2006 |                          | 11.39      | 9.16                 |
|                 | 3/20/2007  |                          | 10.94      | 9.61                 |
|                 | 8/8/2007   |                          | 11.21      | 9.34                 |
|                 | 2/5/2008   |                          | 9.52       | 11.03                |
|                 | 8/14/2008  |                          | 11.00      | 9.55                 |
|                 | 3/3/2009   |                          | 9.69       | 10.86                |
|                 | 7/30/2009  |                          | 11.10      | 9.45                 |
|                 | 9/8/2009   |                          | 11.77      | 8.78                 |
| MW-2            | 3/3/1994   | 20.03                    | 10.37      | 9.66                 |
|                 | 3/10/1994  |                          | 10.53      | 9.50                 |
|                 | 6/6/1994   |                          | 11.15      | 8.88                 |
|                 | 9/7/1994   |                          | 11.72      | 8.31                 |
|                 | 12/22/1994 |                          | 11.27      | 8.76                 |
|                 | 3/17/1995  |                          | 9.85       | 10.18                |
|                 | 6/27/1995  |                          | 10.70      | 9.33                 |
|                 | 9/18/1995  |                          | 11.67      | 8.36                 |
|                 | 5/30/1996  |                          | 11.56      | 8.47                 |
|                 | 7/9/1997   |                          | 11.52      | 8.51                 |
|                 | 8/21/1998  |                          | 11.91      | 8.12                 |
|                 | 10/6/1998  |                          | 11.57      | 8.46                 |
|                 | 2/24/1999  |                          | 9.91       | 10.12                |
|                 | 6/30/2000  |                          | 11.16      | 8.87                 |
|                 | 4/27/2001  |                          | 11.32      | 8.71                 |
|                 | 4/14/2005  |                          | 11.00      | 9.03                 |
|                 | 8/1/2005   |                          | 11.67      | 8.36                 |
|                 | 11/9/2005  |                          | 11.54      | 8.49                 |
|                 | 3/21/2006  |                          | 11.02      | 9.01                 |
|                 | 8/7/2006   |                          | 11.84      | 8.19                 |
|                 | 10/27/2006 |                          | 11.92      | 8.11                 |
|                 | 3/20/2007  |                          | 12.52      | 7.51                 |
|                 | 8/8/2007   |                          | 12.82      | 7.21                 |
|                 | 2/5/2008   |                          | 10.39      | 9.64                 |
|                 | 8/14/2008  |                          | 9.10       | 10.93                |
|                 | 3/3/2009   |                          | 12.31      | 7.72                 |
|                 | 7/30/2009  |                          | 11.41      | 8.62                 |





**Table 3**  
**Groundwater Elevation Data**  
**2250 Telegraph Avenue, Oakland, California**

| Monitoring Well | Date       | TOC Elevation (Feet MSL) | DTW (feet) | Elevation (Feet MSL) |
|-----------------|------------|--------------------------|------------|----------------------|
| MW-3            | 3/3/1994   | 18.97                    | 9.50       | 9.47                 |
|                 | 3/10/1994  |                          | 9.51       | 9.46                 |
|                 | 6/6/1994   |                          | 10.28      | 8.69                 |
|                 | 9/7/1994   |                          | 10.75      | 8.22                 |
|                 | 12/22/1994 |                          | 9.74       | 9.23                 |
|                 | 3/17/1995  |                          | 8.85       | 10.12                |
|                 | 6/27/1995  |                          | 9.94       | 9.03                 |
|                 | 9/18/1995  |                          | 10.54      | 8.43                 |
|                 | 5/30/1996  |                          | 9.69       | 9.28                 |
|                 | 7/9/1997   |                          | 10.60      | 8.37                 |
|                 | 8/21/1998  |                          | 10.36      | 8.61                 |
|                 | 10/6/1998  |                          | 10.64      | 8.33                 |
|                 | 2/24/1999  |                          | 8.58       | 10.39                |
|                 | 6/30/2000  |                          | 10.21      | 8.76                 |
|                 | 4/27/2001  |                          | 9.85       | 9.12                 |
|                 | 4/14/2005  |                          | 9.58       | 9.39                 |
|                 | 8/1/2005   |                          | 10.24      | 8.73                 |
|                 | 11/9/2005  |                          | 10.45      | 8.52                 |
|                 | 3/21/2006  |                          | 8.77       | 10.20                |
|                 | 8/7/2006   |                          | 10.30      | 8.67                 |
|                 | 10/27/2006 |                          | 10.63      | 8.34                 |
|                 | 3/20/2007  |                          | 9.72       | 9.25                 |
|                 | 8/8/2007   |                          | 10.48      | 8.49                 |
|                 | 2/5/2008   |                          | 8.61       | 10.36                |
|                 | 8/14/2008  |                          | 10.53      | 8.44                 |
|                 | 3/2/2009   |                          | 8.11       | 10.86                |
|                 | 7/30/2009  |                          | 10.41      | 8.56                 |
|                 | 9/8/2009   |                          | 10.60      | 8.37                 |
| MW-4            | 3/3/1994   | 19.88                    | 10.89      | 8.99                 |
|                 | 3/10/1994  |                          | 11.19      | 8.69                 |
|                 | 6/6/1994   |                          | 11.85      | 8.03                 |
|                 | 9/7/1994   |                          | 12.86      | 7.02                 |
|                 | 12/22/1994 |                          | 12.26      | 7.62                 |
|                 | 3/17/1995  |                          | 10.10      | 9.78                 |
|                 | 6/27/1995  |                          | 11.05      | 8.83                 |
|                 | 9/18/1995  |                          | 11.84      | 8.04                 |
|                 | 5/30/1996  |                          | 10.97      | 8.91                 |
|                 | 7/9/1997   |                          | 12.08      | 7.80                 |
|                 | 8/21/1998  |                          | 11.86      | 8.02                 |
|                 | 10/6/1998  |                          | 12.84      | 7.04                 |
|                 | 2/24/1999  |                          | 10.79      | 9.09                 |
|                 | 6/30/2000  |                          | 12.39      | 7.49                 |
|                 | 4/27/2001  |                          | 11.26      | 8.62                 |
|                 | 4/14/2005  |                          | 12.01      | 7.87                 |
|                 | 8/1/2005   |                          | 11.78      | 8.10                 |
|                 | 11/9/2005  |                          | 12.42      | 7.46                 |
|                 | 3/21/2006  |                          | 10.00      | 9.88                 |
|                 | 8/7/2006   |                          | 11.90      | 7.98                 |
|                 | 10/27/2006 |                          | 12.75      | 7.13                 |
|                 | 3/20/2007  |                          | 11.20      | 8.68                 |
|                 | 8/8/2007   |                          | 12.00      | 7.88                 |
|                 | 2/5/2008   |                          | 10.40      | 9.48                 |
|                 | 8/14/2008  |                          | 11.47      | 8.41                 |
|                 | 3/2/2009   |                          | 11.13      | 8.75                 |
|                 | 7/30/2009  |                          | 11.81      | 8.07                 |
|                 | 9/8/2009   |                          | 12.11      | 7.77                 |



**Table 3**  
**Groundwater Elevation Data**  
**2250 Telegraph Avenue, Oakland, California**

| Monitoring Well  | Date       | TOC Elevation (Feet MSL) | DTW (feet) | Elevation (Feet MSL) |
|--|------------|--------------------------|------------|----------------------|
| MW-5   | 6/26/1997  | 16.02                    | 8.44       | 7.58                 |
|  | 7/9/1997   |                          | 8.48       | 7.54                 |
|  | 8/21/1998  |                          | 8.32       | 7.70                 |
|  | 10/6/1998  |                          | 8.51       | 7.51                 |
|  | 2/24/1999  |                          | 6.86       | 9.16                 |
|  | 6/30/2000  |                          | 7.63       | 8.39                 |
|  | 4/27/2001  |                          | 7.60       | 8.42                 |
|  | 4/15/2005  |                          | 7.20       | 8.82                 |
|  | 8/1/2005   |                          | 8.16       | 7.86                 |
|  | 11/9/2005  |                          | 7.92       | 8.10                 |
|  | 3/21/2006  |                          | 6.58       | 9.44                 |
|  | 8/7/2006   |                          | 8.27       | 7.75                 |
|  | 10/27/2006 |                          | 8.48       | 7.54                 |
|  | 3/20/2007  |                          | 7.67       | 8.35                 |
|  | 8/8/2007   |                          | 8.43       | 7.59                 |
|  | 2/5/2008   |                          | 6.76       | 9.26                 |
|  | 8/14/2008  |                          | 8.31       | 7.71                 |
|  | 3/2/2009   |                          | 6.20       | 9.82                 |
|  | 7/30/2009  | 8.13                     | 7.89       |                      |
| MW-6   | 6/26/1997  | 18.36                    | 10.89      | 7.47                 |
|  | 7/9/1997   |                          | 10.98      | 7.38                 |
|  | 8/21/1998  |                          | 11.00      | 7.36                 |
|  | 10/6/1998  |                          | 10.79      | 7.57                 |
|  | 2/24/1999  |                          | 9.32       | 9.04                 |
|  | 6/30/2000  |                          | 10.37      | 7.99                 |
|  | 4/27/2001  |                          | 10.10      | 8.26                 |
|  | 4/15/2005  |                          | 9.55       | 8.81                 |
|  | 8/1/2005   |                          | 10.54      | 7.82                 |
|  | 11/9/2005  |                          | NA         | NA                   |
|  | 3/21/2006  |                          | 9.11       | 9.25                 |
|  | 8/7/2006   |                          | 10.59      | 7.77                 |
|  | NA         |                          | NA         | NA                   |
|  | 3/20/2007  |                          | 10.10      | 8.26                 |
|  | 8/8/2007   |                          | 10.85      | 7.51                 |
|  | 2/5/2008   |                          | 9.27       | 9.09                 |
|  | 8/14/2008  |                          | 10.71      | 7.65                 |
|  | 3/3/2009   |                          | 8.60       | 9.76                 |
|  | 7/30/2009  | No Access                |            |                      |
| TOC = Top of Casing<br>DTW = Depth to Water<br>Elevation Reference: USGS benchmark W1197, 1969 with a reported elevation of +21.06 feet MSL datum. |            |                          |            |                      |



|                            |       | Sample ID        |                  |                 |                 |                 |                  |                 |                  |                  |                  |                 |                 |                 |                   |                  |                  |                  |                 |                  |                 | Regulatory Criteria                          |  |
|----------------------------|-------|------------------|------------------|-----------------|-----------------|-----------------|------------------|-----------------|------------------|------------------|------------------|-----------------|-----------------|-----------------|-------------------|------------------|------------------|------------------|-----------------|------------------|-----------------|--|--|
| Analyte                    | Units | B-1@2            | B-1@ 7.5         | B-1@10          | B-1@12          | B-1@15          | B-1@17           | B-1@20          | B-2@5            | B-2@7.5          | B-2@10           | B-2@12          | B-2@15          | B-2@17          | B-2@19.5          | B-3@1            | B-3@5            | B-3@10           | B-3@12          | B-3@15           | B-3@17          | ESLs <sup>1</sup><br>Residential<br>Land Use | ESLs <sup>1</sup><br>Commerical/Industrial<br>Land Use |
| Date<br>Sample Depth       | feet  | 7/27/2009<br>2.0 | 7/27/2009<br>7.5 | 7/27/2009<br>10 | 7/27/2009<br>12 | 7/27/2009<br>15 | 7/27/2009<br>17  | 7/27/2009<br>20 | 7/27/2009<br>5.0 | 7/27/2009<br>7.5 | 7/27/2009<br>10  | 7/27/2009<br>12 | 7/27/2009<br>15 | 7/27/2009<br>17 | 7/27/2009<br>19.5 | 7/27/2009<br>1.0 | 7/27/2009<br>5.0 | 7/27/2009<br>10  | 7/27/2009<br>12 | 7/27/2009<br>15  | 7/27/2009<br>17 |  |  |
| Petroleum Hydrocarbons     |       |                  |                  |                 |                 |                 |                  |                 |                  |                  |                  |                 |                 |                 |                   |                  |                  |                  |                 |                  |                 |  |  |
| TVHg                       | mg/kg | <0.98            | <0.97            | 170             | 320             | 1.1             | 2.0 <sup>Y</sup> | <1.0            | <0.97            | <1.0             | <0.96            | <1.0            | 16 <sup>Y</sup> | 33 <sup>Y</sup> | <0.99             | --               | --               | <1.0             | <0.98           | 8.7 <sup>Y</sup> | --              | 100  | 180  |
| TPHd                       | mg/kg | 29 <sup>Y</sup>  | 15 <sup>Y</sup>  | --              | 57 <sup>Y</sup> | --              | --               | --              | <1.0             | --               | 1.9 <sup>Y</sup> | --              | 17 <sup>Y</sup> | --              | --                | <5.0             | 4.0 <sup>Y</sup> | 7.6 <sup>Y</sup> | 33 <sup>Y</sup> | 150 <sup>Y</sup> | 44 <sup>Y</sup> | 100  | 180  |
| TPHmo                      | mg/kg | 450              | 98               | --              | <5.0            | --              | --               | --              | 5.9              | --               | <5.0             | --              | <5.0            | --              | --                | 33               | 10               | <5.0             | 110             | 400              | 140             | 370  | 2,500  |
| TPHhy                      | mg/kg | --               | --               | --              | --              | --              | --               | --              | --               | --               | --               | --              | --              | --              | --                | --               | --               | --               | --              | --               | --              | 370  | 2,500  |
| Volatile Organic Compounds |       |                  |                  |                 |                 |                 |                  |                 |                  |                  |                  |                 |                 |                 |                   |                  |                  |                  |                 |                  |                 |  |  |
| Benzene                    | µg/kg | <4.7             | <4.6             | <500            | <830            | 10              | 34               | <4.6            | <5.0             | <4.7             | <4.8             | <4.7            | <46             | <50             | <4.8              | --               | --               | <4.9             | <4.8            | <4.8             | --              | 120  | 270  |
| Toluene                    | µg/kg | <4.7             | <4.6             | 1,300           | 4,000           | <4.9            | <4.7             | <4.6            | <5.0             | <4.7             | <4.8             | <4.7            | <46             | <50             | <4.8              | --               | --               | <4.9             | <4.8            | <4.8             | --              | 9,300  | 9,300  |
| Ethylbenzene               | µg/kg | <4.7             | <4.6             | 6,900           | 12,000          | 22              | 23               | <4.6            | <5.0             | <4.7             | <4.8             | <4.7            | <46             | <50             | <4.8              | --               | --               | <4.9             | <4.8            | <4.8             | --              | 2,300  | 4,700  |
| Xylenes                    | µg/kg | <9.4             | <9.2             | 28,000          | 53,000          | 65              | <9.4             | <9.2            | <10              | <9.4             | <9.6             | <9.4            | <92             | <100            | <9.6              | --               | --               | <9.8             | <9.6            | <9.6             | --              | 11,000                                       | 11,000   |
| MTBE                       | µg/kg | <4.7             | <4.6             | <500            | <830            | <4.9            | <4.7             | <4.6            | <5.0             | <4.7             | <4.8             | <4.7            | <46             | <50             | <4.8              | --               | --               | <4.9             | <4.8            | <4.8             | --              | 8,400  | 8,400  |
| TBA                        | µg/kg | <95              | <92              | <10,000         | <17,000         | <97             | <95              | <93             | <100             | <94              | <96              | <93             | <930            | <1,000          | <96               | --               | --               | <99              | <95             | <96              | --              | 100,000                                      | 110,000  |
| TAME                       | µg/kg | <4.7             | <4.6             | <500            | <830            | <4.9            | <4.7             | <4.6            | <5.0             | <4.7             | <4.8             | <4.7            | <46             | <50             | <4.8              | --               | --               | <4.9             | <4.8            | <4.8             | --              | NE   | NE   |
| DIPE                       | µg/kg | <4.7             | <4.6             | <500            | <830            | <4.9            | <4.7             | <4.6            | <5.0             | <4.7             | <4.8             | <4.7            | <46             | <50             | <4.8              | --               | --               | <4.9             | <4.8            | <4.8             | --              | NE   | NE   |
| ETBE                       | µg/kg | <4.7             | <4.6             | <500            | <830            | <4.9            | <4.7             | <4.6            | <5.0             | <4.7             | <4.8             | <4.7            | <46             | <50             | <4.8              | --               | --               | <4.9             | <4.8            | <4.8             | --              | NE   | NE   |
| 1,2-DCA                    | µg/kg | <4.7             | <4.6             | <500            | <830            | <4.9            | <4.7             | <4.6            | <5.0             | <4.7             | <4.8             | <4.7            | <46             | <50             | <4.8              | --               | --               | <4.9             | <4.8            | <4.8             | --              | 220  | 480  |
| 1,2-DBA                    | µg/kg | <4.7             | <4.6             | <500            | <830            | <4.9            | <4.7             | <4.6            | <5.0             | <4.7             | <4.8             | <4.7            | <46             | <50             | <4.8              | --               | --               | <4.9             | <4.8            | <4.8             | --              | 19   | 44   |
| Total Organic Carbon       |       |                  |                  |                 |                 |                 |                  |                 |                  |                  |                  |                 |                 |                 |                   |                  |                  |                  |                 |                  |                 |  |  |
|                            | %     | --               | --               | --              | --              | --              | --               | --              | 0.53             | --               | --               | --              | --              | --              | --                | --               | --               | --               | --              | --               | --              | NE   | NE   |

Notes:

TVHg = Total Volatile Hydrocarbons as gasoline  
TPHd = Total Petroleum Hydrocarbons as diesel  
TPHmo = Total Petroleum Hydrocarbons as motor oil  
TPHhy = Total Petroleum Hydrocarbons as hydraulicfluid  
DCA = Dichloroethane  
DBA = Dibromoethane  
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MTBE = tert-Butyl methyl ether  
TBA = tert-Butyl alcohol  
DIPE = Diisopropyl ether  
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µg/kg = micrograms per kilogram  
mg/kg = milligrams per kilogram  
Detected concentrations are shown in **Bold**  
ND = Not detected at or above respective reporting limit  
< = not detected at or above the listed laboratory reporting limit  
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Y = Sample exhibits chromatographic pattern which does not resemble standard

ESLs = San Francisco Bay Regional Water Quality Control Board, Screening for Environmental Concerns at Sites with Contaminated Soil and Grounwater, Interim Final November 2007, Revised May 2008  
<sup>1</sup> = Table B Shallow Soil Screening Levels, Groundwater is not a Current or Potential Source of Drinking Water



Table 4  
Summary of Chemical Concentrations - Soil  
2250 Telegraph Avenue, Oakland, California



|                            |       | Sample ID        |                  |                  |                  |                 |                 |                  |                  |                  |                  |                  |                  |                 |                 |                  |                  |                  |                 | Regulatory Criteria                          |  |
|----------------------------|-------|------------------|------------------|------------------|------------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------------|-----------------|------------------|------------------|------------------|-----------------|--|--|
| Analyte                    | Units | B-4a@5           | B-4a@7.5         | B-4a@10          | B-4a@12          | B-4a@15         | B-4a@18         | B-5@2            | B-5@7.5          | B-5@12           | B-5@15           | B-6@2            | B-6@7.5          | B-6@12          | B-6@15          | B-7@5            | B-7@7.5          | B-7@12           | B-7@15          | ESLs <sup>2</sup><br>Residential<br>Land Use | ESLs <sup>2</sup><br>Commerical/Industrial<br>Land Use |
| Date<br>Sample Depth       | feet  | 7/27/2009<br>5.0 | 7/27/2009<br>7.5 | 7/27/2009<br>10  | 7/27/2009<br>12  | 7/27/2009<br>15 | 7/27/2009<br>18 | 7/27/2009<br>2.0 | 7/27/2009<br>7.5 | 7/27/2009<br>12  | 7/27/2009<br>15  | 7/27/2009<br>2.0 | 7/27/2009<br>7.5 | 7/27/2009<br>12 | 7/27/2009<br>15 | 7/27/2009<br>5.0 | 7/27/2009<br>7.5 | 7/27/2009<br>12  | 7/27/2009<br>15 |  |  |
| Petroleum Hydrocarbons     |       |                  |                  |                  |                  |                 |                 |                  |                  |                  |                  |                  |                  |                 |                 |                  |                  |                  |                 |  |  |
| TVHg                       | mg/kg | --               | --               | --               | 4.5 <sup>Y</sup> | <0.99           | --              | <0.96            | <1.0             | 8.8 <sup>Y</sup> | <0.96            | <1.0             | <0.99            | <0.96           | 11 <sup>Y</sup> | <0.97            | <1.0             | <1.0             | <0.97           | 100  | 180  |
| TPHd                       | mg/kg | 1.9 <sup>Y</sup> | 1.0 <sup>Y</sup> | 1.6 <sup>Y</sup> | 1,100            | 310             | 42              | 4.1 <sup>Y</sup> | <1.0             | 1,100            | 2.8 <sup>Y</sup> | 55 <sup>Y</sup>  | <0.99            | 29 <sup>Y</sup> | 17 <sup>Y</sup> | 10 <sup>Y</sup>  | 2.9 <sup>Y</sup> | 1.6 <sup>Y</sup> | <1.0            | 100  | 180  |
| TPHmo                      | mg/kg | 10               | 9.8              | 13               | 850              | 120             | 23              | 32               | 6.9              | 520              | <5.0             | 460              | <5.0             | 39              | <5.0            | 53               | 6.6              | <5.0             | <5.0            | 370  | 2,500  |
| TPHhy                      | mg/kg | --               | --               | --               | --               | --              | --              | --               | --               | --               | --               | --               | --               | --              | --              | --               | --               | --               | --              | 370  | 2,500  |
| Volatile Organic Compounds |       |                  |                  |                  |                  |                 |                 |                  |                  |                  |                  |                  |                  |                 |                 |                  |                  |                  |                 |  |  |
| Benzene                    | µg/kg | --               | --               | --               | <47              | <4.8            | --              | <4.8             | <4.8             | <5.0             | <4.9             | <4.9             | <4.8             | <4.8            | 39              | <4.8             | <4.8             | <4.8             | <4.9            | 120  | 270  |
| Toluene                    | µg/kg | --               | --               | --               | <47              | <4.8            | --              | <4.8             | <4.8             | <5.0             | <4.9             | <4.9             | <4.8             | <4.8            | <25             | <4.8             | <4.8             | <4.8             | <4.9            | 9,300  | 9,300  |
| Ethylbenzene               | µg/kg | --               | --               | --               | <47              | <4.8            | --              | <4.8             | <4.8             | <5.0             | <4.9             | <4.9             | <4.8             | <4.8            | 80              | <4.8             | <4.8             | <4.8             | <4.9            | 2,300  | 4,700  |
| Xylenes                    | µg/kg | --               | --               | --               | <94              | <9.6            | --              | <9.6             | <9.6             | <10              | <9.8             | <9.8             | <9.6             | <9.6            | <50             | <9.6             | <9.6             | <9.6             | <9.8            | 11,000                                       | 11,000   |
| MTBE                       | µg/kg | --               | --               | --               | <47              | <4.8            | --              | <4.8             | <4.8             | <5.0             | <4.9             | <4.9             | <4.8             | <4.8            | <25             | <4.8             | <4.8             | <4.8             | <4.9            | 8,400  | 8,400  |
| TBA                        | µg/kg | --               | --               | --               | <940             | <97             | --              | <96              | <96              | <100             | <99              | <98              | <97              | <96             | <500            | <96              | <96              | <97              | <98             | 100,000                                      | 110,000  |
| TAME                       | µg/kg | --               | --               | --               | <47              | <4.8            | --              | <4.8             | <4.8             | <5.0             | <4.9             | <4.9             | <4.8             | <4.8            | <25             | <4.8             | <4.8             | <4.8             | <4.9            | NE   | NE   |
| DIPE                       | µg/kg | --               | --               | --               | <47              | <4.8            | --              | <4.8             | <4.8             | <5.0             | <4.9             | <4.9             | <4.8             | <4.8            | <25             | <4.8             | <4.8             | <4.8             | <4.9            | NE   | NE   |
| ETBE                       | µg/kg | --               | --               | --               | <47              | <4.8            | --              | <4.8             | <4.8             | <5.0             | <4.9             | <4.9             | <4.8             | <4.8            | <25             | <4.8             | <4.8             | <4.8             | <4.9            | NE   | NE   |
| 1,2-DCA                    | µg/kg | --               | --               | --               | <47              | <4.8            | --              | <4.8             | <4.8             | <5.0             | <4.9             | <4.9             | <4.8             | <4.8            | <25             | <4.8             | <4.8             | <4.8             | <4.9            | 220  | 480  |
| 1,2-DBA                    | µg/kg | --               | --               | --               | <47              | <4.8            | --              | <4.8             | <4.8             | <5.0             | <4.9             | <4.9             | <4.8             | <4.8            | <25             | <4.8             | <4.8             | <4.8             | <4.9            | 19   | 44   |
| Total Organic Carbon       |       |                  |                  |                  |                  |                 |                 |                  |                  |                  |                  |                  |                  |                 |                 |                  |                  |                  |                 |  |  |
|                            | %     | --               | --               | --               | --               | --              | --              | --               | --               | --               | --               | --               | --               | --              | --              | --               | --               | --               | --              | NE   | NE   |

Notes:

TVHg = Total Volatile Hydrocarbons as gasoline  
TPHd = Total Petroleum Hydrocarbons as diesel  
TPHmo = Total Petroleum Hydrocarbons as motor oil  
TPHhy = Total Petroleum Hydrocarbons as hydraulic fluid  
DCA = Dichloroethane  
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µg/kg = micrograms per kilogram  
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Detected concentrations are shown in **Bold**  
ND = Not detected at or above respective reporting limit  
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Y = Sample exhibits chromatographic pattern which does not resemble standard

ESLs = San Francisco Bay Regional Water Quality Control Board, Screening for Environmental Concerns at Sites with Contaminated Soil and Grounwater, Interim Final November 2007, Revised May 2008

<sup>1</sup> = Table B Shallow Soil Screening Levels, Groundwater is not a Current or Potential Source of Drinking Water



Table 4  
Summary of Chemical Concentrations - Soil  
2250 Telegraph Avenue, Oakland, California



|                            |       | Sample ID        |                  |                 |                  |                 |                 |                 |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                 |                   | Regulatory Criteria                          |  |
|----------------------------|-------|------------------|------------------|-----------------|------------------|-----------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------------|-------------------|--|--|
| Analyte                    | Units | B-8@7.5          | B-8@15           | B-8@20          | B-9@5            | B-9@10          | B-9@15          | B-9@20          | B-10@2           | B-10@5           | B-10@10          | B-10@15          | B-11@2           | B-11@7.5         | B-11@12          | B-12@5           | B-12@7.5         | B-12@12          | B-12@15         | B-13@8            | ESLs <sup>2</sup><br>Residential<br>Land Use | ESLs <sup>2</sup><br>Commerical/Industrial<br>Land Use |
| Date<br>Sample Depth       | feet  | 7/27/2009<br>7.5 | 7/27/2009<br>15  | 7/27/2009<br>20 | 7/27/2009<br>5.0 | 7/27/2009<br>10 | 7/27/2009<br>15 | 7/27/2009<br>20 | 7/27/2009<br>2.0 | 7/27/2009<br>5.0 | 7/27/2009<br>10  | 7/27/2009<br>15  | 7/27/2009<br>2.0 | 7/27/2009<br>7.5 | 7/27/2009<br>12  | 7/27/2009<br>5.0 | 7/27/2009<br>7.5 | 7/27/2009<br>12  | 7/27/2009<br>15 | 10/19/2009<br>8.0 |  |  |
| Petroleum Hydrocarbons     |       |                  |                  |                 |                  |                 |                 |                 |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                 |                   |  |  |
| TVHg                       | mg/kg | 13 <sup>Y</sup>  | 8.0              | <0.98           | 1.9              | 56              | 140             | <1.0            | <1.0             | <1.0             | <0.97            | <1.0             | <0.99            | <1.0             | <1.0             | <1.0             | <1.0             | 7.8 <sup>Y</sup> | <0.97           | <0.99             | 100  | 180  |
| TPHd                       | mg/kg | 9.3 <sup>Y</sup> | 1.3 <sup>Y</sup> | <1.0            | 28 <sup>Y</sup>  | 44 <sup>Y</sup> | 31 <sup>Y</sup> | <0.99           | <1.0             | 2.5 <sup>Y</sup> | 5.7 <sup>Y</sup> | 1.7 <sup>Y</sup> | 42 <sup>Y</sup>  | <0.99            | 1.4 <sup>Y</sup> | <1.0             | 9.1 <sup>Y</sup> | 590              | <1.0            | 73 <sup>Y</sup>   | 100  | 180  |
| TPHmo                      | mg/kg | <5.0             | <5.0             | <5.0            | 46               | 49              | 19              | <5.0            | <5.0             | 10               | 21               | <5.0             | 440              | <5.0             | 13               | <5.0             | 88               | 270              | <5.0            | 300 <sup>Y</sup>  | 370  | 2,500  |
| TPHhy                      | mg/kg | --               | --               | --              | --               | --              | --              | --              | --               | --               | --               | --               | --               | --               | --               | --               | --               | --               | --              | 390               | 370  | 2,500  |
| Volatile Organic Compounds |       |                  |                  |                 |                  |                 |                 |                 |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                 |                   |  |  |
| Benzene                    | µg/kg | 28               | 500              | 140             | <4.9             | <250            | <250            | <4.8            | <4.9             | <4.7             | <4.9             | <4.7             | <5.0             | <4.8             | <4.9             | <4.9             | <5.0             | <250             | <4.8            | <5.0              | 120  | 270  |
| Toluene                    | µg/kg | <26              | 140              | <4.8            | <4.9             | <250            | <250            | <4.8            | <4.9             | <4.7             | <4.9             | <4.7             | <5.0             | <4.8             | <4.9             | <4.9             | <5.0             | <250             | <4.8            | <5.0              | 9,300  | 9,300  |
| Ethylbenzene               | µg/kg | 790              | 250              | 37              | <4.9             | 3,300           | 2,800           | <4.8            | <4.9             | <4.7             | <4.9             | <4.7             | <5.0             | <4.8             | <4.9             | <4.9             | <5.0             | <250             | <4.8            | <5.0              | 2,300  | 4,700  |
| Xylenes                    | µg/kg | 320              | 770              | 9.7             | <9.8             | 9,900           | 8,600           | <9.6            | <9.8             | <9.4             | <9.8             | <9.4             | <10              | <9.6             | <9.8             | <9.8             | <10              | <500             | <9.6            | <10               | 11,000                                       | 11,000   |
| MTBE                       | µg/kg | <26              | <19              | <4.8            | <4.9             | <250            | <250            | <4.8            | <4.9             | <4.7             | <4.9             | <4.7             | <5.0             | <4.8             | <4.9             | <4.9             | <5.0             | <250             | <4.8            | --                | 8,400  | 8,400  |
| TBA                        | µg/kg | <520             | <390             | <97             | <97              | <5,000          | <5,000          | <96             | <98              | <94              | <99              | <95              | <100             | <95              | <98              | <97              | <99              | <5,000           | <96             | --                | 100,000                                      | 110,000  |
| TAME                       | µg/kg | <26              | <19              | <4.8            | <4.9             | <250            | <250            | <4.8            | <4.9             | <4.7             | <4.9             | <4.7             | <5.0             | <4.8             | <4.9             | <4.9             | <5.0             | <250             | <4.8            | --                | NE   | NE   |
| DIPE                       | µg/kg | <26              | <19              | <4.8            | <4.9             | <250            | <250            | <4.8            | <4.9             | <4.7             | <4.9             | <4.7             | <5.0             | <4.8             | <4.9             | <4.9             | <5.0             | <250             | <4.8            | --                | NE   | NE   |
| ETBE                       | µg/kg | <26              | <19              | <4.8            | <4.9             | <250            | <250            | <4.8            | <4.9             | <4.7             | <4.9             | <4.7             | <5.0             | <4.8             | <4.9             | <4.9             | <5.0             | <250             | <4.8            | --                | NE   | NE   |
| 1,2-DCA                    | µg/kg | <26              | <19              | <4.8            | <4.9             | <250            | <250            | <4.8            | <4.9             | <4.7             | <4.9             | <4.7             | <5.0             | <4.8             | <4.9             | <4.9             | <5.0             | <250             | <4.8            | --                | 220  | 480  |
| 1,2-DBA                    | µg/kg | <26              | <19              | <4.8            | <4.9             | <250            | <250            | <4.8            | <4.9             | <4.7             | <4.9             | <4.7             | <5.0             | <4.8             | <4.9             | <4.9             | <5.0             | <250             | <4.8            | --                | 19   | 44   |
| Total Organic Carbon       |       |                  |                  |                 |                  |                 |                 |                 |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                 |                   |  |  |
|                            | %     | 0.10             | --               | --              | --               | --              | --              | --              | --               | 0.87             | --               | --               | --               | 0.05             | --               | --               | --               | --               | --              | --                | NE   | NE   |

Notes:

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TPHd = Total Petroleum Hydrocarbons as diesel  
TPHmo = Total Petroleum Hydrocarbons as motor oil  
TPHhy = Total Petroleum Hydrocarbons as hydraulic fluid  
DCA = Dichloroethane  
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<sup>1</sup> = Table B Shallow Soil Screening Levels, Groundwater is not a Current or Potential Source of Drinking Water







|                            |       | Sample ID |           |           |           |           |                  |                    |                    |                            |                  |                    |                    |                    |                     |                    |                    | Regulatory Criteria |  |  |
|----------------------------|-------|-----------|-----------|-----------|-----------|-----------|------------------|--------------------|--------------------|----------------------------|------------------|--------------------|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|--|--|
| Analyte                    | Units | TW-1      | TW-2      | TW-3      | TW-4      | TW-5      | B-1 <sup>†</sup> | B-2                | B-3                | B-4a                       | B-5              | B-6 <sup>†</sup>   | B-7                | B-8                | B-9                 | B-10               | B-12               | ESLs <sup>1</sup>   | ESLs <sup>2</sup><br>Residential<br>Land Use | ESLs <sup>2</sup><br>Commerical/Industrial<br>Land Use |
| Date                       |       | 5/31/1996 | 5/30/1996 | 5/30/1996 | 5/31/1996 | 5/30/1996 | 7/30/2009        | 7/31/2009          | 7/28/2009          | 7/28/2009                  | 7/28/2009        | 7/30/2009          | 7/28/2009          | 7/28/2009          | 7/28/2009           | 7/28/2009          | 7/28/2009          |                     |  |  |
| Petroleum Hydrocarbons     |       |           |           |           |           |           |                  |                    |                    |                            |                  |                    |                    |                    |                     |                    |                    |                     |  |  |
| TVHg                       | µg/L  | 13,000    | 250       | <50       | 11,000    | 70        | 41,000           | 1,300 <sup>Y</sup> | 360 <sup>Y</sup>   | 10,000 <sup>&gt;LR,Y</sup> | 410 <sup>Y</sup> | 4,400 <sup>Y</sup> | 1,200 <sup>Y</sup> | 6,800 <sup>Y</sup> | 25,000 <sup>Y</sup> | 1,400 <sup>Y</sup> | 500 <sup>Y,b</sup> | 210                 | NE   | NE   |
| TPHd                       | µg/L  | 37,000    | <50       | 83        | 1,900     | 180       | --               | 530 <sup>Y</sup>   | 7,600 <sup>Y</sup> | 240,000                    | 3,400            | --                 | 910 <sup>Y</sup>   | 290 <sup>Y</sup>   | 1,600 <sup>Y</sup>  | 59,000             | 27,000             | 210                 | NE   | NE   |
| TPHmo                      | µg/L  | --        | --        | --        | --        | --        | --               | <300               | 25,000             | 110,000                    | 1,500            | --                 | 400                | <300               | <300                | 33,000             | 13,000             | 210                 | NE   | NE   |
| Volatile Organic Compounds |       |           |           |           |           |           |                  |                    |                    |                            |                  |                    |                    |                    |                     |                    |                    |                     |  |  |
| Benzene                    | µg/L  | <50       | <0.5      | <0.5      | 130       | <0.5      | 630              | <0.50              | 0.57               | <0.50                      | <0.50            | 280                | 2.3                | 400                | 2,800               | <0.50              | <2.5 <sup>b</sup>  | 46                  | 540  | 1,800  |
| Toluene                    | µg/L  | <50       | <0.5      | <0.5      | 66        | <0.5      | 780              | <0.50              | 0.65               | 0.58                       | <0.50            | 4.1                | 1.3                | 73                 | 50                  | <0.50              | <2.5 <sup>b</sup>  | 130                 | 380,000                                      | 530,000  |
| Ethylbenzene               | µg/L  | <50       | 13        | <0.5      | 340       | <0.5      | 910              | <0.50              | <0.50              | 0.75                       | <0.50            | 90                 | 16                 | 250                | 950                 | <0.50              | <2.5 <sup>b</sup>  | 43                  | 170,000                                      | 170,000  |
| Xylenes                    | µg/L  | 380       | 3.4       | <0.5      | 260       | <0.5      | 3,700            | <0.50              | <0.50              | 0.66                       | <0.50            | 14.71              | 2.46               | 760                | 2,850               | <0.50              | <2.5 <sup>b</sup>  | 100                 | 160,000                                      | 160,000  |
| MTBE                       | µg/L  | --        | --        | --        | --        | --        | <13              | <0.50              | 0.58               | 2.1                        | <0.50            | 1.6                | <0.50              | <3.1               | <17                 | 1.5                | <2.5 <sup>b</sup>  | 1,800               | 24,000                                       | 80,000   |
| TBA                        | µg/L  | --        | --        | --        | --        | --        | <250             | 32                 | <10                | 12                         | <10              | 19                 | 18                 | <63                | <330                | <10                | <50 <sup>b</sup>   | 18,000              | NE   | NE   |
| TAME                       | µg/L  | --        | --        | --        | --        | --        | <13              | <0.50              | <0.50              | <0.50                      | <0.50            | <0.50              | <0.50              | <3.1               | <17                 | <0.50              | <2.5 <sup>b</sup>  | NE                  | NE   | NE   |
| DIPE                       | µg/L  | --        | --        | --        | --        | --        | <13              | <0.50              | <0.50              | <0.50                      | <0.50            | <0.50              | <0.50              | <3.1               | <17                 | <0.50              | <2.5 <sup>b</sup>  | NE                  | NE   | NE   |
| ETBE                       | µg/L  | --        | --        | --        | --        | --        | <13              | <0.50              | <0.50              | <0.50                      | <0.50            | <0.50              | <0.50              | <3.1               | <17                 | <0.50              | <2.5 <sup>b</sup>  | NE                  | NE   | NE   |
| 1,2-DCA                    | µg/L  | <1.0      | <1.0      | 20        | <1.0      | <1.0      | <13              | <0.50              | <0.50              | 1.0                        | <0.50            | 0.83               | <0.50              | 3.8                | <17                 | 1.1                | <2.5 <sup>b</sup>  | 200                 | 200  | 690  |
| 1,2-DBA                    | µg/L  | --        | --        | --        | --        | --        | <13              | <0.50              | <0.50              | <0.50                      | <0.50            | <0.50              | <0.50              | <3.1               | <17                 | <0.50              | <2.5 <sup>b</sup>  | 150                 | 150  | 510  |
| 1,1,1-TCA                  | µg/L  | <1.0      | <1.0      | <1.0      | <1.0      | <1.0      | --               | --                 | --                 | --                         | --               | --                 | --                 | --                 | --                  | --                 | --                 | 62                  | 130,000                                      | 360,000  |
| PCE                        | µg/L  | <1.0      | <1.0      | <1.0      | <1.0      | <1.0      | --               | --                 | --                 | --                         | --               | --                 | --                 | --                 | --                  | --                 | --                 | 120                 | 120  | 420  |
| Chlorobenzene              | µg/L  | <1.0      | <1.0      | <1.0      | <1.0      | <1.0      | --               | --                 | --                 | --                         | --               | --                 | --                 | --                 | --                  | --                 | --                 | 25                  | 13,000                                       | 37,000   |
| Total Dissolved Solids     |       |           |           |           |           |           |                  |                    |                    |                            |                  |                    |                    |                    |                     |                    |                    |                     |  |  |
|                            | mg/L  | --        | --        | --        | --        | --        | 880              | 770                | 880                | 1,200                      | 520              | 730                | 990                | 720                | 770                 | 970                | 460                | NE                  | NE   | NE   |

Notes:  
TVHg = Total Volatile Hydrocarbons as gasoline  
TPHd = Total Petroleum Hydrocarbons as diesel  
TPHmo = Total Petroleum Hydrocarbons as motor oil  
DCA = Dichloroethane  
DBA = Dibromoethane  
MTBE = tert-Butyl methyl ether  
TBA = tert-Butyl alcohol  
DIPE = Diisopropyl ether  
ETBE = Ethyl tert butyl ether  
TAME = Methyl tert amyl ether  
TCA = Trichloroethane  
PCE = Tetrachloroethene

µg/L = micrograms per liter  
Detected concentrations are shown in **Bold**  
ND = Not detected at or above respective reporting limit  
< = not detected at or above the listed laboratory reporting limit  
NE = Not established  
-- Not Analyzed  
>LR = Response exceeds instrument's linear range  
Y = Sample exhibits chromatographic pattern which does not resemble standard  
b = Sample analyzed two minutes after hold time expired. No technical impact on sample data  
† = Sample for TPHd and TPHmo analysis were obtained from B-1, however sample container broke on way to laboratory.  
Sample for TPHd and TPHmo analysis were not obtained from B-6 due to inefficient groundwater recharge

ESLs = San Francisco Bay Regional Water Quality Control Board, Screening for Environmental Concerns at Sites with Contaminated Soil and Grounwater, Interim Final November 2007, Revised May 2008  
<sup>1</sup> = Table F-1b Final Groundwater Screening Levels  
<sup>2</sup> = Table E-1: Groundwater Screening Levels for Evaluation of Potential Vapor Intrusion Concerns (volatile chemicals only)



Table 6  
Summary of Chemical Concentrations - Soil Gas  
2250 Telegraph Avenue, Oakland, California



|                                  |                   | Sample ID  |            |               |                    |            |            |            |            |            |               |                     |           | Regulatory Criteria                              |   |
|----------------------------------|-------------------|------------|------------|---------------|--------------------|------------|------------|------------|------------|------------|---------------|---------------------|-----------|--|---|
| Analyte                          | Units             | SG-1       | SG-2       | SG-3          | SG-3<br>(Resample) | SG-4       | SG-5       | SG-6       | SG-6       | SG-6       | SG-7          | SG-7<br>(Duplicate) | Air Blank | ESLs <sup>1</sup> Lowest<br>Residential Exposure | ESLs <sup>1</sup> Lowest<br>Commerical/Industrial<br>Exposure |
| Purge Volume                     |                   | 1.0        | 1.0        | 1.0           | 1.0                | 1.0        | 1.0        | 1.0        | 3.0        | 7.0        | 1.0           | 1.0                 | --        |  |   |
| Date                             |                   | 7/31/2009  | 7/31/2009  | 7/31/2009     | 7/31/2009          | 7/31/2009  | 7/31/2009  | 7/31/2009  | 7/31/2009  | 7/31/2009  | 7/31/2009     | 7/31/2009           | 7/31/2009 |  |   |
| Petroleum Hydrocarbons           |                   |            |            |               |                    |            |            |            |            |            |               |                     |           |  |   |
| TPHg                             | µg/m <sup>3</sup> | <10,000    | <10,000    | <10,000       | <10,000            | <10,000    | <10,000    | <10,000    | <10,000    | <10,000    | <b>36,000</b> | <b>31,000</b>       | <10,000   | 10,000   | 29,000  |
| TPHd                             | µg/m <sup>3</sup> | <50,000    | <50,000    | <50,000       | <50,000            | <50,000    | <50,000    | <50,000    | <50,000    | <50,000    | <50,000       | <50,000             | <50,000   | 10,000   | 29,000  |
| Volatile Organic Compounds       |                   |            |            |               |                    |            |            |            |            |            |               |                     |           |  |   |
| Benzene                          | µg/m <sup>3</sup> | <80        | <80        | <80           | <80                | <80        | <80        | <80        | <80        | <80        | <80           | <80                 | <80       | 84   | 280   |
| Toluene                          | µg/m <sup>3</sup> | <200       | <200       | <200          | <200               | <200       | <200       | <200       | <200       | <200       | <200          | <200                | <200      | 63,000   | 180,000   |
| Ethylbenzene                     | µg/m <sup>3</sup> | <100       | <100       | <100          | <100               | <100       | <100       | <100       | <100       | <100       | <100          | <100                | <100      | 980  | 3,300   |
| m,p-Xylene                       | µg/m <sup>3</sup> | <b>300</b> | <200       | <200          | <200               | <200       | <b>320</b> | <b>250</b> | <200       | <200       | <b>260</b>    | <b>230</b>          | <200      | 21,000   | 21,000  |
| o-Xylene                         | µg/m <sup>3</sup> | <b>130</b> | <100       | <100          | <100               | <100       | <b>140</b> | <b>120</b> | <100       | <100       | <b>100</b>    | <b>100</b>          | <100      |  |   |
| MTBE                             | µg/m <sup>3</sup> | <10        | <10        | <10           | <10                | <10        | <10        | <10        | <10        | <10        | <10           | <10                 | <10       | 9,400  | 31,000  |
| Dissolved Gases                  |                   |            |            |               |                    |            |            |            |            |            |               |                     |           |  |   |
| Methane                          | % Vol             | <500       | <500       | <500          | <500               | <500       | <500       | <500       | <500       | <500       | <500          | <500                | <500      | NE   | NE  |
| Oxygen                           | % Vol             | <b>16</b>  | <b>9.6</b> | <b>20</b>     | <b>19</b>          | <b>11</b>  | <b>13</b>  | <b>8.7</b> | <b>3.2</b> | <b>9.7</b> | <b>16</b>     | <b>6.8</b>          | <b>21</b> | NE   | NE  |
| Carbon Dioxide                   | % Vol             | <b>4.0</b> | <b>7.2</b> | <b>1.5</b>    | <b>2.0</b>         | <b>9.2</b> | <b>6.8</b> | <b>11</b>  | <b>16</b>  | <b>10</b>  | <b>4.9</b>    | <b>12</b>           | <1.0      | NE   | NE  |
| Leak Check Compound              |                   |            |            |               |                    |            |            |            |            |            |               |                     |           |  |   |
| % of 1,1-Difluoroethane Detected | %                 | <0.04      | <0.04      | <b>0.14</b>   | <b>0.07</b>        | <0.04      | <0.04      | <0.04      | <0.04      | <0.04      | <0.04         | <0.04               | <0.04     |  |   |
| 1,1-Difluoroethane               | µg/m <sup>3</sup> | <10,000    | <10,000    | <b>37,000</b> | <b>19,000</b>      | <10,000    | <10,000    | <10,000    | <10,000    | <10,000    | <10,000       | <10,000             | <10,000   | NE   | NE  |

**Notes:**  
TPHg = Total Petroleum Hydrocarbons as gasoline  
TPHd = Total Petroleum Hydrocarbons as diesel  
Detected concentrations are shown in **Bold**  
NE = Not established  
µg/m<sup>3</sup> = micrograms per cubic meter  
-- = Not Applicable

< = not detected at or above the listed laboratory reporting limit  
ESLs = San Francisco Bay Regional Water Quality Control Board, Screening for Environmental Concerns at Sites with Contaminated Soil and Grounwater, Interim Final November 2007, Revised May 2008  
<sup>1</sup> = Table E-2 Sahlflow Soil Gas Screening Levels for Evaluation of Potential Vapor Intrusion Concerns (volatile chemicals only)



Table 7  
Summary of Chemical Concentrations - Groundwater Monitoring Wells  
2250 Telegraph Avenue, Oakland, California



|               |          |                                  | Petroleum Hydrocarbons  |                         |                       |                          | Volatile Organics |                 |                      |                       |                    |                    |              |              |              |              |                   |                 |                 |             |                       |
|---------------|----------|----------------------------------|-------------------------|-------------------------|-----------------------|--------------------------|-------------------|-----------------|----------------------|-----------------------|--------------------|--------------------|--------------|--------------|--------------|--------------|-------------------|-----------------|-----------------|-------------|-----------------------|
| Well          | Date     | Groundwater Elevation (Feet MSL) | TVH as Gasoline<br>µg/L | TEH as Kerosene<br>µg/L | TEH as Diesel<br>µg/L | TEH as Motor Oil<br>µg/L | Benzene<br>µg/L   | Toluene<br>µg/L | Ethylbenzene<br>µg/L | Total Xylenes<br>µg/L | MTBE -8020<br>µg/L | MTBE -8260<br>µg/L | TBA<br>µg/L  | DIPE<br>µg/L | ETBE<br>µg/L | TAME<br>µg/L | 1,1,1-TCA<br>µg/L | 1,2-DCA<br>µg/L | 1,2-DBA<br>µg/L | PCE<br>µg/L | Chlorobenzene<br>µg/L |
| Soil Gas ESL* |          |                                  | NV<br>210               | NV<br>210               | NV<br>210             | NE<br>210                | 540<br>46.0       | 380,000<br>130  | 170,000<br>43        | 160,000<br>100        | 24,000<br>1,800    | 24,000<br>1,800    | NV<br>18,000 | NE<br>NE     | NE<br>NE     | NE<br>NE     | 130,000<br>62     | 200<br>200      | 150<br>150      | 120<br>120  | 13,000<br>25          |
| MW-1          | 3/3/94   | 10.16                            | 300                     | <50                     | <50                   | <500                     | 1.3               | <0.5            | 2.7                  | 3.1                   | --                 | --                 | --           | --           | --           | --           | <0.5              | 5.5             | --              | <0.5        | <0.5                  |
|               | 6/6/94   | 9.19                             | 430                     | 180+                    | <50                   | <500                     | 10                | 2.2             | 6.1                  | 7.6                   | --                 | --                 | --           | --           | --           | --           | <0.5              | <0.5            | --              | <0.5        | <0.5                  |
|               | 9/7/94   | 8.63                             | 410                     | <50                     | <50                   | <500                     | 6.4               | 0.8             | 2.6                  | 3.8                   | --                 | --                 | --           | --           | --           | --           | <0.5              | 3.8             | --              | <0.5        | <0.5                  |
|               | 12/22/94 | 9.72                             | 130                     | <50                     | <50                   | <500                     | 0.7               | <0.5            | 0.6                  | 0.8                   | --                 | --                 | --           | --           | --           | --           | <0.5              | 3.4             | --              | <0.5        | <0.5                  |
|               | 3/17/95  | 10.82                            | 1,600                   | 170                     | <50                   | <500                     | 29                | <0.5            | 9.1                  | 6.9                   | --                 | --                 | --           | --           | --           | --           | <0.5              | <0.5            | --              | <0.5        | <0.5                  |
|               | 6/27/95  | 10.04                            | 1,100                   | <50                     | <50                   | <500                     | 14                | <0.5            | 7.1                  | 5.0                   | --                 | --                 | --           | --           | --           | --           | <0.5              | 3.3             | --              | <0.5        | <0.5                  |
|               | 9/18/95  | 9.43                             | 370                     | --                      | 110+                  | --                       | 4.4               | 0.6             | 2.0                  | 1.4                   | --                 | --                 | --           | --           | --           | --           | <0.5              | 2.4             | --              | <0.5        | <0.5                  |
|               | 8/21/98  | 9.55                             | 170                     | --                      | 62+                   | --                       | <0.5              | 0.76            | 0.79                 | <0.5                  | <2.0               | --                 | --           | --           | --           | --           | --                | --              | --              | --          | --                    |
|               | 2/24/99  | 10.81                            | 20                      | --                      | 280+                  | --                       | <0.5              | <0.5            | <0.5                 | <0.5                  | --                 | <2.0               | --           | --           | --           | --           | --                | --              | --              | --          | --                    |
|               | 6/30/00  | 13.47                            | 240                     | --                      | <50                   | --                       | 0.7               | 0.8             | <0.5                 | 0.74                  | 4.0                | --                 | --           | --           | --           | --           | --                | --              | --              | --          | --                    |
|               | 4/27/01  | 9.99                             | 160                     | --                      | <50                   | --                       | 3.3               | <0.5            | 0.86                 | <0.50                 | <2.0               | --                 | --           | --           | --           | --           | --                | --              | --              | --          | --                    |
|               | 4/15/05  | 10.43                            | 520                     | --                      | 99 <sup>LY</sup>      | <300                     | 3.3 <sup>C</sup>  | 1.8             | <0.5                 | 4.6                   | --                 | <0.5               | <10          | <0.5         | <0.5         | <0.5         | --                | 0.6             | <0.5            | --          | --                    |
|               | 8/1/05   | 9.99                             | 480                     | --                      | 62 <sup>LY</sup>      | <300                     | <0.5              | <0.5            | <0.5                 | 2.3                   | --                 | <0.5               | 18           | <0.5         | <0.5         | <0.5         | --                | <0.5            | <0.5            | --          | --                    |
|               | 11/9/05  | 8.02                             | 290 <sup>Y</sup>        | --                      | <50                   | <300                     | <0.5              | <0.5            | <0.5                 | <0.5                  | --                 | <0.5               | 14           | <0.5         | <0.5         | <0.5         | --                | <0.5            | <0.5            | --          | --                    |
|               | 3/21/06  | 10.84                            | 390                     | --                      | 97 <sup>LY</sup>      | <300                     | 1.0               | <0.5            | 0.6                  | <0.5                  | --                 | <0.5               | 16           | <0.5         | <0.5         | <0.5         | --                | <0.5            | <0.5            | --          | --                    |
|               | 8/7/06   | 9.15                             | 720                     | --                      | 130 <sup>LY</sup>     | <300                     | <0.5              | <0.5            | <0.5                 | <0.5                  | --                 | <0.5               | 18           | <0.5         | <0.5         | <0.5         | --                | <0.5            | <0.5            | --          | --                    |
|               | 10/27/06 | 9.16                             | 250                     | --                      | <50                   | <300                     | <0.5              | <0.5            | <0.5                 | <0.5                  | --                 | <0.5               | 12           | <0.5         | <0.5         | <0.5         | --                | <0.5            | <0.5            | --          | --                    |
|               | 3/20/07  | 9.61                             | 290 <sup>Y</sup>        | --                      | 74 <sup>LY</sup>      | <300                     | <0.5              | <0.5            | 0.58                 | <0.5                  | --                 | <0.5               | <10          | <0.5         | <0.5         | <0.5         | --                | <0.5            | <0.5            | --          | --                    |
|               | 8/8/07   | 9.34                             | 300 <sup>LY</sup>       | --                      | 95 <sup>LY</sup>      | <300                     | <0.5              | <0.5            | <0.5                 | <0.5                  | --                 | <0.5               | <10          | <0.5         | <0.5         | <0.5         | --                | <0.5            | <0.5            | --          | --                    |
|               | 2/5/08   | 11.03                            | 100 <sup>Y</sup>        | --                      | 62 <sup>Y</sup>       | <300                     | <0.5              | <0.5            | <0.5                 | <0.5                  | --                 | <0.5               | <10          | <0.5         | <0.5         | <0.5         | --                | <0.5            | <0.5            | --          | --                    |
|               | 8/14/08  | 9.55                             | 71 <sup>Y</sup>         | --                      | <50                   | <300                     | <0.5              | <0.5            | <0.5                 | <0.5                  | --                 | <0.5               | <10          | <0.5         | <0.5         | <0.5         | --                | <0.5            | <0.5            | --          | --                    |
|               | 3/3/09   | 10.86                            | 73 <sup>Y</sup>         | --                      | 93 <sup>Y</sup>       | <300                     | <0.5              | <0.5            | <0.5                 | <1.0                  | --                 | <0.5               | <10          | <0.5         | <0.5         | <0.5         | --                | <0.5            | <0.5            | --          | --                    |
|               | 7/30/09  | 9.45                             | 160 <sup>Y</sup>        | --                      | <50                   | <300                     | <0.5              | <0.5            | <0.5                 | <1.0                  | --                 | <0.5               | <10          | <0.5         | <0.5         | <0.5         | --                | <0.5            | <0.5            | --          | --                    |
|               | 9/8/09   | 8.78                             | 56 <sup>Y</sup>         | --                      | --                    | --                       | <0.5              | <0.5            | <0.5                 | 0.56 <sup>C</sup>     | --                 | <2.0               | --           | --           | --           | --           | --                | --              | --              | --          | --                    |
| MW-2          | 3/3/94   | 9.66                             | 110                     | <50                     | <50                   | <500                     | <0.5              | 1.7             | 0.58                 | 2.7                   | --                 | --                 | --           | --           | --           | --           | <0.5              | <0.5            | --              | <0.5        | <0.5                  |
|               | 6/6/94   | 8.88                             | 100                     | <50                     | <50                   | <500                     | 11                | <0.5            | 0.7                  | 1.1                   | --                 | --                 | --           | --           | --           | --           | <0.5              | <0.5            | --              | <0.5        | <0.5                  |
|               | 9/7/94   | 8.31                             | <50                     | <50                     | <50                   | <500                     | <0.5              | <0.5            | <0.5                 | <0.5                  | --                 | --                 | --           | --           | --           | --           | <0.5              | <0.5            | --              | <0.5        | <0.5                  |
|               | 12/22/94 | 8.76                             | <50                     | <50                     | <50                   | <500                     | 0.8               | <0.5            | <0.5                 | 0.8                   | --                 | --                 | --           | --           | --           | --           | <0.5              | <0.5            | --              | <0.5        | <0.5                  |
|               | 3/17/95  | 10.18                            | 180                     | 100                     | <50                   | <500                     | 31                | <0.5            | 1.0                  | 1.8                   | --                 | --                 | --           | --           | --           | --           | <0.5              | <0.5            | --              | <0.5        | <0.5                  |
|               | 6/27/95  | 9.33                             | 80                      | <50                     | <50                   | <500                     | 6.0               | <0.5            | <0.5                 | <0.5                  | --                 | --                 | --           | --           | --           | --           | <0.5              | <0.5            | --              | <0.5        | <0.5                  |
|               | 9/18/95  | 8.36                             | <50                     | --                      | <50                   | --                       | <0.5              | <0.5            | <0.5                 | <0.5                  | --                 | --                 | --           | --           | --           | --           | <0.5              | <0.5            | --              | <0.5        | <0.5                  |
|               | 8/21/98  | 8.12                             | <50                     | --                      | <50                   | --                       | <0.5              | <0.5            | <0.5                 | <0.5                  | <2.0               | --                 | --           | --           | --           | --           | --                | --              | --              | --          | --                    |
|               | 2/24/99  | 10.12                            | <50                     | --                      | <50                   | --                       | <0.5              | <0.5            | <0.5                 | <0.5                  | --                 | <2.0               | --           | --           | --           | --           | --                | --              | --              | --          | --                    |
|               | 6/30/00  | 14.24                            | <50                     | --                      | <50                   | --                       | <0.5              | <0.5            | <0.5                 | <0.5                  | 2.0                | --                 | --           | --           | --           | --           | --                | --              | --              | --          | --                    |
|               | 4/27/01  | 8.71                             | <50                     | --                      | <50                   | --                       | <0.5              | <0.5            | <0.5                 | <0.5                  | <2.0               | --                 | --           | --           | --           | --           | --                | --              | --              | --          | --                    |
|               | 4/15/05  | 9.03                             | <50                     | --                      | <50                   | <300                     | <0.5              | <0.5            | <0.5                 | <0.5                  | --                 | <0.5               | <10          | <0.5         | <0.5         | <0.5         | --                | <0.5            | <0.5            | --          | --                    |
|               | 8/1/05   | 8.36                             | <50                     | --                      | <50                   | <300                     | <0.5              | <0.5            | <0.5                 | <0.5                  | --                 | <0.5               | <10          | <0.5         | <0.5         | <0.5         | --                | <0.5            | <0.5            | --          | --                    |
|               | 11/9/05  | 8.49                             | <50                     | --                      | <50                   | <300                     | <0.5              | <0.5            | <0.5                 | <0.5                  | --                 | <0.5               | <10          | <0.5         | <0.5         | <0.5         | --                | <0.5            | <0.5            | --          | --                    |
|               | 3/21/06  | 9.01                             | <50                     | --                      | <50                   | <300                     | <0.5              | <0.5            | <0.5                 | <0.5                  | --                 | <0.5               | <10          | <0.5         | <0.5         | <0.5         | --                | <0.5            | <0.5            | --          | --                    |
|               | 8/7/06   | 8.19                             | <50                     | --                      | <50                   | <300                     | <0.5              | <0.5            | <0.5                 | <0.5                  | --                 | <0.5               | <10          | <0.5         | <0.5         | <0.5         | --                | <0.5            | <0.5            | --          | --                    |
|               | 10/27/06 | 8.11                             | <50                     | --                      | <50                   | <300                     | <0.5              | <0.5            | <0.5                 | <0.5                  | --                 | <0.5               | <10          | <0.5         | <0.5         | <0.5         | --                | <0.5            | <0.5            | --          | --                    |
|               | 3/20/07  | 7.51                             | <50                     | --                      | <50                   | <300                     | <0.5              | <0.5            | <0.5                 | <0.5                  | --                 | <0.5               | <10          | <0.5         | <0.5         | <0.5         | --                | <0.5            | <0.5            | --          | --                    |
|               | 8/8/07   | 7.21                             | <50                     | --                      | <50                   | <300                     | <0.5              | <0.5            | <0.5                 | <0.5                  | --                 | <0.5               | <10          | <0.5         | <0.5         | <0.5         | --                | <0.5            | <0.5            | --          | --                    |
|               | 2/5/08   | 9.64                             | <50                     | --                      | <50                   | <300                     | <0.5              | <0.5            | <0.5                 | <0.5                  | --                 | <0.5               | <10          | <0.5         | <0.5         | <0.5         | --                | <0.5            | <0.5            | --          | --                    |
|               | 8/14/08  | 10.93                            | <50                     | --                      | <50                   | <300                     | <0.5              | <0.5            | <0.5                 | <0.5                  | --                 | <0.5               | <10          | <0.5         | <0.5         | <0.5         | --                | <0.5            | <0.5            | --          | --                    |
|               | 3/3/09   | 7.72                             | <50                     | --                      | <50                   | <300                     | <0.5              | <0.5            | <0.5                 | <1.0                  | --                 | <0.5               | <10          | <0.5         | <0.5         | <0.5         | --                | <0.5            | <0.5            | --          | --                    |
|               | 7/30/09  | 8.62                             | <50                     | --                      | <50                   | <300                     | <0.5              | <0.5            | <0.5                 | <1.0                  | --                 | <0.5               | <10          | <0.5         | <0.5         | <0.5         | --                | <0.5            | <0.5            | --          | --                    |



Table 7  
Summary of Chemical Concentrations - Groundwater Monitoring Wells  
2250 Telegraph Avenue, Oakland, California



|                   |          |                                  | Petroleum Hydrocarbons |                      |                                  |                       | Volatile Organics |              |                   |                    |                 |                  |          |           |           |           |                |              |              |          |                    |
|-------------------|----------|----------------------------------|------------------------|----------------------|----------------------------------|-----------------------|-------------------|--------------|-------------------|--------------------|-----------------|------------------|----------|-----------|-----------|-----------|----------------|--------------|--------------|----------|--------------------|
| Well              | Date     | Groundwater Elevation (Feet MSL) | TVH as Gasoline µg/L   | TEH as Kerosene µg/L | TEH as Diesel µg/L               | TEH as Motor Oil µg/L | Benzene µg/L      | Toluene µg/L | Ethylbenzene µg/L | Total Xylenes µg/L | MTBE -8020 µg/L | MTBE -8260 µg/L  | TBA µg/L | DIPE µg/L | ETBE µg/L | TAME µg/L | 1,1,1-TCA µg/L | 1,2-DCA µg/L | 1,2-DBA µg/L | PCE µg/L | Chlorobenzene µg/L |
| Soil Gas ESL*     |          |                                  | NV                     | NV                   | NV                               | NE                    | 540               | 380,000      | 170,000           | 160,000            | 24,000          | 24,000           | NV       | NE        | NE        | NE        | 130,000        | 200          | 150          | 120      | 13,000             |
| Groundwater ESL** |          |                                  | 210                    | 210                  | 210                              | 210                   | 46.0              | 130          | 43                | 100                | 1,800           | 1,800            | 18,000   | NE        | NE        | NE        | 62             | 200          | 150          | 120      | 25                 |
| MW-3              | 3/3/94   | 9.47                             | 85                     | <50                  | <50                              | <500                  | <0.5              | 0.77         | <0.5              | 3.7                | --              | --               | --       | --        | --        | --        | <0.5           | <0.5         | --           | <0.5     | <0.5               |
|                   | 6/6/94   | 8.69                             | 100                    | 110+                 | <50                              | <500                  | <0.5              | <0.5         | <0.5              | <0.5               | --              | --               | --       | --        | --        | --        | 2.5            | 0.8          | --           | 2.1      | <0.5               |
|                   | 9/7/94   | 8.22                             | 220                    | <50                  | <50                              | <500                  | 11                | 1.8          | 2.6               | 3.5                | --              | --               | --       | --        | --        | --        | <0.5           | <0.5         | --           | 0.6      | <0.5               |
|                   | 12/22/94 | 9.23                             | 130                    | 95+                  | <50                              | <500                  | 3.8               | 0.5          | 0.6               | 1.2                | --              | --               | --       | --        | --        | --        | <0.5           | <0.5         | --           | <0.5     | <0.5               |
|                   | 3/17/95  | 10.12                            | 1,500                  | 270                  | <50                              | <500                  | 83                | 6.0          | 10                | 15                 | --              | --               | --       | --        | --        | --        | <0.5           | <0.5         | --           | <0.5     | <0.5               |
|                   | 6/27/95  | 9.03                             | 2,500                  | <50                  | <50                              | <500                  | 330               | 8.9          | 8.1               | 20                 | --              | --               | --       | --        | --        | --        | <0.5           | <0.5         | --           | <0.5     | <0.5               |
|                   | 9/18/95  | 8.43                             | 1,500                  | --                   | 770+                             | --                    | 400               | 11           | 2.2               | 3.3                | --              | --               | --       | --        | --        | --        | <0.5           | <0.5         | --           | <0.5     | <0.5               |
|                   | 8/21/98  | 8.61                             | 2,300                  | --                   | 600+                             | --                    | 410               | 9.3          | 36                | 25                 | <10             | --               | --       | --        | --        | --        | --             | --           | --           | --       | --                 |
|                   | 2/24/99  | 10.39                            | 55                     | --                   | 110+                             | --                    | <0.5              | <0.5         | <0.5              | <0.5               | --              | <2.0             | --       | --        | --        | --        | --             | --           | --           | --       | --                 |
|                   | 6/30/00  | 10.83                            | 110                    | --                   | 83+                              | --                    | <0.5              | <0.5         | 0.51              | <0.5               | <2.0            | --               | --       | --        | --        | --        | --             | --           | --           | --       | --                 |
|                   | 4/27/01  | 8.67                             | <50                    | --                   | 690+                             | --                    | <0.5              | <0.5         | <0.5              | <0.5               | <2.0            | --               | --       | --        | --        | --        | --             | --           | --           | --       | --                 |
|                   | 4/14/05  | 9.12                             | <50                    | --                   | <50                              | <300                  | <0.5              | <0.5         | <0.5              | <0.5               | --              | <0.5             | <10      | <0.5      | <0.5      | <0.5      | --             | <0.5         | <0.5         | --       | --                 |
|                   | 8/1/05   | 9.39                             | 410                    | --                   | 150 <sup>HL</sup> <sub>Y</sub>   | 750                   | 17                | <0.5         | 0.87 <sup>c</sup> | 1.4                | --              | <0.5             | <10      | <0.5      | <0.5      | <0.5      | --             | <0.5         | <0.5         | --       | --                 |
|                   | 11/9/05  | 8.73                             | 1,100 <sup>Y</sup>     | --                   | 110 <sup>LY</sup>                | <300                  | 150               | 3.4          | 6.1               | 3.8                | --              | <0.5             | 13       | <0.5      | <0.5      | <0.5      | --             | <0.5         | <0.5         | --       | --                 |
|                   | 3/21/06  | 10.20                            | 100                    | --                   | 61 <sup>Y</sup>                  | <300                  | <0.5              | <0.5         | <0.5              | <0.5               | --              | <0.5             | 12       | <0.5      | <0.5      | <0.5      | --             | <0.5         | <0.5         | --       | --                 |
|                   | 8/7/06   | 8.67                             | 4,000 <sup>Y</sup>     | --                   | 280 <sup>LY</sup>                | <300                  | 630               | 9            | 31                | 12                 | --              | <0.5             | 18       | <0.5      | <0.5      | <0.5      | --             | <0.5         | <0.5         | --       | --                 |
|                   | 10/27/06 | 8.34                             | 5,300                  | --                   | 240 <sup>LY</sup>                | <300                  | 950               | 13           | 17                | 11                 | --              | <10              | <200     | <10       | <10       | <10       | --             | <10          | <10          | --       | --                 |
|                   | 3/20/07  | 9.25                             | 1,000 <sup>LY</sup>    | --                   | 180 <sup>LY</sup>                | <300                  | 100               | 1.5          | 2.1               | 3.3                | --              | <0.5             | <10      | <0.5      | <0.5      | <0.5      | --             | <0.5         | <0.5         | --       | --                 |
|                   | 8/8/07   | 8.49                             | 2,100 <sup>LY</sup>    | --                   | 130 <sup>LY</sup>                | <300                  | 260               | 5.1          | 5.8               | 3.6                | --              | <2.0             | <40      | <2.0      | <2.0      | <2.0      | --             | <2.0         | <2.0         | --       | --                 |
|                   | 2/5/08   | 10.36                            | 100                    | --                   | 50 <sup>Y</sup>                  | <300                  | 7.6               | <0.5         | <0.5              | 0.5                | --              | <0.5             | <10      | <0.5      | <0.5      | <0.5      | --             | <0.5         | <0.5         | --       | --                 |
|                   | 8/14/08  | 8.44                             | 1,400                  | --                   | 200 <sup>Y</sup>                 | <300                  | 510               | 8.2          | 22                | 7.2                | --              | <3.6             | <71      | <3.6      | <3.6      | <3.6      | --             | <3.6         | <3.6         | --       | --                 |
|                   | 3/2/09   | 10.86                            | 170 <sup>Y</sup>       | --                   | <50                              | <300                  | 16                | <0.5         | <0.5              | 2.4                | --              | <0.5             | <10      | <0.5      | <0.5      | <0.5      | --             | <0.5         | <0.5         | --       | --                 |
|                   | 7/30/09  | 8.56                             | 360                    | --                   | 71 <sup>Y</sup>                  | <300                  | 14                | <0.5         | 1.2               | <1.0               | --              | <0.5             | 13       | <0.5      | <0.5      | <0.5      | --             | <0.5         | <0.5         | --       | --                 |
|                   | 9/8/09   | 8.37                             | 1200 <sup>Y</sup>      | --                   | --                               | --                    | 280               | 2.4          | 9.2 <sup>c</sup>  | 3.08 <sup>c</sup>  | --              | <2.0             | --       | --        | --        | --        | --             | --           | --           | --       | --                 |
| MW-4              | 3/3/94   | 8.99                             | 4,300                  | <50                  | 240                              | <500                  | 220               | 20           | 7.5               | 17                 | --              | --               | --       | --        | --        | --        | <0.5           | 5.9          | --           | <0.5     | 4.4                |
|                   | 6/6/94   | 8.03                             | 4,400                  | <50                  | 800+                             | <500                  | 140               | <0.5         | <0.5              | <0.5               | --              | --               | --       | --        | --        | --        | <0.5           | <0.5         | --           | <0.5     | <0.5               |
|                   | 9/7/94   | 7.02                             | 10,000                 | 490+                 | 280+                             | <500                  | 84                | <0.5         | 42                | 69                 | --              | --               | --       | --        | --        | --        | <0.5           | 4.4          | --           | 0.5      | 4.3                |
|                   | 12/22/94 | 7.62                             | 2,400                  | 450+                 | 54+                              | <500                  | 11                | <0.5         | 7.1               | 11                 | --              | --               | --       | --        | --        | --        | <0.5           | 3.6          | --           | 3.6      | <0.5               |
|                   | 3/17/95  | 9.78                             | 2,200                  | 380                  | 160+                             | <500                  | <0.5              | <0.5         | 7.9               | 10                 | --              | --               | --       | --        | --        | --        | <0.5           | 1.7          | --           | <0.5     | 4.5                |
|                   | 6/27/95  | 8.83                             | 3,100                  | <50                  | 82                               | <500                  | <0.5              | <0.5         | 13                | 19                 | --              | --               | --       | --        | --        | --        | <0.5           | 2.3          | --           | <0.5     | 4.8                |
|                   | 9/18/95  | 8.04                             | 3,000                  | --                   | 1,231+                           | --                    | 12                | <0.7         | 6.9               | 8.3                | --              | --               | --       | --        | --        | --        | <0.5           | 1.9          | --           | <0.5     | 4.0                |
|                   | 8/21/98  | 8.02                             | 1,700                  | --                   | 600+                             | --                    | 8.2               | 12           | 13                | 5.2                | <2.0            | -                | --       | --        | --        | --        | --             | --           | --           | --       | --                 |
|                   | 2/24/99  | 9.09                             | 2,700                  | --                   | 2,100+                           | --                    | 4.3               | 0.64         | <0.5              | 0.54               | --              | <2.0             | --       | --        | --        | --        | --             | --           | --           | --       | --                 |
|                   | 6/30/00  | 11.74                            | 6,700                  | --                   | 3,200+                           | --                    | 3.1               | 1.7          | 11                | 16.7               | 27              | --               | --       | --        | --        | --        | --             | --           | --           | --       | --                 |
|                   | 4/27/01  | 8.62                             | 1,900                  | --                   | 710                              | --                    | <0.5              | <0.5         | <0.5              | <0.5               | 14              | --               | --       | --        | --        | --        | --             | --           | --           | --       | --                 |
|                   | 4/14/05  | 7.87                             | 2,900                  | --                   | 2,200 <sup>HL</sup> <sub>Y</sub> | 2,500                 | <0.5              | <0.5         | <0.5              | 5.1                | --              | <0.5             | <10      | <0.5      | <0.5      | <0.5      | --             | <0.5         | <0.5         | --       | --                 |
|                   | 8/1/05   | 8.10                             | 2,000                  | --                   | 2,100 <sup>HL</sup> <sub>Y</sub> | 3400 <sup>L</sup>     | <0.5              | <0.5         | <0.5              | 5.8 <sup>c</sup>   | --              | <0.5             | <10      | <0.5      | <0.5      | <0.5      | --             | <0.5         | <0.5         | --       | --                 |
|                   | 11/9/05  | 7.46                             | 2,000 <sup>Y</sup>     | --                   | 1,900 <sup>HL</sup> <sub>Y</sub> | 2,300 <sup>L</sup>    | 1.2               | <0.5         | <0.5              | 0.8                | --              | <0.5             | <10      | <0.5      | <0.5      | <0.5      | --             | <0.5         | <0.5         | --       | --                 |
|                   | 3/21/06  | 9.88                             | 2,200                  | --                   | 2,800 <sup>HL</sup> <sub>Y</sub> | 4,000 <sup>L</sup>    | 1.2               | <0.5         | <0.5              | 0.7                | --              | <0.5             | <10      | <0.5      | <0.5      | <0.5      | --             | <0.5         | <0.5         | --       | --                 |
|                   | 8/7/06   | 7.98                             | 2,500 <sup>Y</sup>     | --                   | 4,700 <sup>HL</sup> <sub>Y</sub> | 7,200 <sup>L</sup>    | 0.6               | <0.5         | <0.5              | <0.5               | --              | <0.5             | <10      | <0.5      | <0.5      | <0.5      | --             | <0.5         | <0.5         | --       | --                 |
|                   | 10/27/06 | 7.13                             | 2,200 <sup>Y</sup>     | --                   | 2,500 <sup>HL</sup> <sub>Y</sub> | 3,200 <sup>L</sup>    | 0.5               | <0.5         | <0.5              | <0.5               | --              | <0.5             | <10      | <0.5      | <0.5      | <0.5      | --             | <0.5         | <0.5         | --       | --                 |
|                   | 3/20/07  | 8.68                             | 2,700                  | --                   | 2,900 <sup>HL</sup> <sub>Y</sub> | 3,500 <sup>L</sup>    | 0.77              | <0.5         | <0.5              | 0.67               | --              | <0.5             | <10      | <0.5      | <0.5      | <0.5      | --             | <0.5         | <0.5         | --       | --                 |
|                   | 8/8/07   | 7.88                             | 6,100 <sup>LY</sup>    | --                   | 9,200 <sup>HL</sup>              | 12,000 <sup>HL</sup>  | 0.7               | <0.5         | <0.5              | 0.5                | --              | <0.5             | <10      | <0.5      | <0.5      | <0.5      | --             | <0.5         | <0.5         | --       | --                 |
|                   | 2/5/08   | 9.48                             | 2,100                  | --                   | 2,100 <sup>Y</sup>               | 2,200                 | <0.5              | <0.5         | <0.5              | <0.5               | --              | <0.5             | <10      | <0.5      | <0.5      | <0.5      | --             | <0.5         | <0.5         | --       | --                 |
|                   | 8/14/08  | 8.41                             | 1,900 <sup>Y</sup>     | --                   | 370 <sup>Y</sup>                 | <300                  | 1.4               | 0.59         | <0.5              | 0.85               | --              | <0.5             | <10      | <0.5      | <0.5      | <0.5      | --             | <0.5         | <0.5         | --       | --                 |
|                   | 3/2/09   | 8.75                             | 1,300 <sup>Y</sup>     | --                   | 880 <sup>Y</sup>                 | 850                   | <0.5              | <0.5         | <0.5              | <1.0               | --              | <0.5             | <10      | <0.5      | <0.5      | <0.5      | --             | <0.5         | <0.5         | --       | --                 |
|                   | 7/30/09  | 8.07                             | 1,400 <sup>Y</sup>     | --                   | 1,100 <sup>Y</sup>               | 1,300                 | <0.5              | <0.5         | <0.5              | <1.0               | --              | <0.5             | <10      | <0.5      | <0.5      | <0.5      | --             | <0.5         | <0.5         | --       | --                 |
|                   | 9/8/09   | 7.77                             | 580 <sup>Y</sup>       | --                   | --                               | --                    | <0.5              | <0.5         | <0.5              | 7.5 <sup>c</sup>   | --              | 2.4 <sup>c</sup> | --       | --        | --        | --        | --             | --           | --           | --       | --                 |



Table 7  
Summary of Chemical Concentrations - Groundwater Monitoring Wells  
2250 Telegraph Avenue, Oakland, California



|                                    |          |                                  | Petroleum Hydrocarbons          |                         |                       |                          | Volatile Organics |                 |                      |                       |                    |                    |              |              |              |              |                   |                 |                 |             |                       |
|------------------------------------|----------|----------------------------------|---------------------------------|-------------------------|-----------------------|--------------------------|-------------------|-----------------|----------------------|-----------------------|--------------------|--------------------|--------------|--------------|--------------|--------------|-------------------|-----------------|-----------------|-------------|-----------------------|
| Well                               | Date     | Groundwater Elevation (Feet MSL) | TVH as Gasoline<br>µg/L         | TEH as Kerosene<br>µg/L | TEH as Diesel<br>µg/L | TEH as Motor Oil<br>µg/L | Benzene<br>µg/L   | Toluene<br>µg/L | Ethylbenzene<br>µg/L | Total Xylenes<br>µg/L | MTBE -8020<br>µg/L | MTBE -8260<br>µg/L | TBA<br>µg/L  | DIPE<br>µg/L | ETBE<br>µg/L | TAME<br>µg/L | 1,1,1-TCA<br>µg/L | 1,2-DCA<br>µg/L | 1,2-DBA<br>µg/L | PCE<br>µg/L | Chlorobenzene<br>µg/L |
| Soil Gas ESL*<br>Groundwater ESL** |          |                                  | NV<br>210                       | NV<br>210               | NV<br>210             | NE<br>210                | 540<br>46.0       | 380,000<br>130  | 170,000<br>43        | 160,000<br>100        | 24,000<br>1,800    | 24,000<br>1,800    | NV<br>18,000 | NE<br>NE     | NE<br>NE     | NE<br>NE     | 130,000<br>62     | 200<br>200      | 150<br>150      | 120<br>120  | 13,000<br>25          |
| MW-5                               | 6/26/97  | 7.58                             | 120                             | --                      | <50                   | --                       | <0.5              | <0.5            | <0.5                 | <0.5                  | --                 | --                 | --           | --           | --           | --           | <0.5              | <0.5            | --              | 1.6         | <0.5                  |
|                                    | 8/21/98  | 7.70                             | <50                             | --                      | <50                   | --                       | <0.5              | <0.5            | <0.5                 | <0.5                  | <2.0               | --                 | --           | --           | --           | --           | --                | --              | --              | --          | --                    |
|                                    | 2/24/99  | 9.16                             | <50                             | --                      | <50                   | --                       | <0.5              | <0.5            | <0.5                 | <0.5                  | --                 | <2.0               | --           | --           | --           | --           | --                | --              | --              | --          | --                    |
|                                    | 6/30/00  | 8.39                             | <50                             | --                      | <50                   | --                       | <0.5              | <0.5            | <0.5                 | <0.5                  | 5.1                | --                 | --           | --           | --           | --           | --                | --              | --              | --          | --                    |
|                                    | 4/27/01  | 8.42                             | <50                             | --                      | <50                   | --                       | <0.5              | <0.5            | <0.5                 | <0.5                  | <2.0               | --                 | --           | --           | --           | --           | --                | --              | --              | --          | --                    |
|                                    | 4/14/05  | 8.82                             | <50                             | --                      | <50                   | <300                     | <0.5              | <0.5            | <0.5                 | <0.5                  | --                 | <0.5               | <10          | <0.5         | <0.5         | <0.5         | --                | <0.5            | <0.5            | --          | --                    |
|                                    | 8/1/05   | 7.86                             | <50                             | --                      | <50                   | <300                     | <0.5              | <0.5            | <0.5                 | <0.5                  | --                 | <0.5               | <10          | <0.5         | <0.5         | <0.5         | --                | <0.5            | <0.5            | --          | --                    |
|                                    | 11/9/05  | 8.10                             | <50                             | --                      | <50                   | <300                     | <0.5              | <0.5            | <0.5                 | <0.5                  | --                 | <0.5               | <10          | <0.5         | <0.5         | <0.5         | --                | <0.5            | <0.5            | --          | --                    |
|                                    | 3/21/06  | 9.44                             | <50                             | --                      | <50                   | <300                     | <0.5              | <0.5            | <0.5                 | <0.5                  | --                 | <0.5               | <10          | <0.5         | <0.5         | <0.5         | --                | <0.5            | <0.5            | --          | --                    |
|                                    | 8/7/06   | 7.75                             | <50                             | --                      | <50                   | <300                     | <0.5              | <0.5            | <0.5                 | <0.5                  | --                 | <0.5               | <10          | <0.5         | <0.5         | <0.5         | --                | <0.5            | <0.5            | --          | --                    |
|                                    | 10/27/06 | 7.54                             | <50                             | --                      | <50                   | <300                     | <0.5              | <0.5            | <0.5                 | <0.5                  | --                 | <0.5               | <10          | <0.5         | <0.5         | <0.5         | --                | <0.5            | <0.5            | --          | --                    |
|                                    | 3/20/07  | 8.35                             | <50                             | --                      | <50                   | <300                     | <0.5              | <0.5            | <0.5                 | <0.5                  | --                 | <0.5               | <10          | <0.5         | <0.5         | <0.5         | --                | <0.5            | <0.5            | --          | --                    |
|                                    | 8/8/07   | 7.59                             | <50                             | --                      | <50                   | <300                     | <0.5              | <0.5            | <0.5                 | <0.5                  | --                 | <0.5               | <10          | <0.5         | <0.5         | <0.5         | --                | <0.5            | <0.5            | --          | --                    |
|                                    | 2/5/08   | 9.26                             | <50                             | --                      | <50                   | <300                     | <0.5              | <0.5            | <0.5                 | <0.5                  | --                 | <0.5               | <10          | <0.5         | <0.5         | <0.5         | --                | <0.5            | <0.5            | --          | --                    |
|                                    | 8/14/08  | 7.71                             | <50                             | --                      | <50                   | <300                     | <0.5              | <0.5            | <0.5                 | <0.5                  | --                 | <0.5               | <10          | <0.5         | <0.5         | <0.5         | --                | <0.5            | <0.5            | --          | --                    |
|                                    | 3/2/09   | 9.82                             | <50                             | --                      | <50                   | <300                     | <0.5              | <0.5            | <0.5                 | <1.0                  | --                 | <0.5               | <10          | <0.5         | <0.5         | <0.5         | --                | <0.5            | <0.5            | --          | --                    |
|                                    | 7/30/09  | 7.89                             | <50                             | --                      | <50                   | <300                     | <0.5              | <0.5            | <0.5                 | <1.0                  | --                 | <0.5               | <10          | <0.5         | <0.5         | <0.5         | --                | <0.5            | <0.5            | --          | --                    |
| MW-6                               | 6/26/97  | 7.47                             | 1,500+                          | --                      | 450+                  | --                       | <0.5              | <0.5            | 11                   | <0.5                  | -                  | -                  | --           | --           | --           | --           | <0.5              | <0.5            | --              | <0.5        | 1.7                   |
|                                    | 8/21/98  | 7.36                             | 1,400                           | --                      | 540+                  | --                       | <0.5              | 3.6             | 5.6                  | 0.4                   | 5.7                | 3.2                | --           | --           | --           | --           | --                | --              | --              | --          | --                    |
|                                    | 2/24/99  | 9.04                             | 1,600                           | --                      | 600+                  | --                       | <0.5              | <0.5            | 0.56                 | <0.5                  | --                 | 2.3                | --           | --           | --           | --           | --                | --              | --              | --          | --                    |
|                                    | 6/30/00  | 8.04                             | 1,900                           | --                      | 360+                  | --                       | 0.56              | 3.0             | 5.4                  | 3.5                   | 30                 | --                 | --           | --           | --           | --           | --                | --              | --              | --          | --                    |
|                                    | 4/27/01  | 8.26                             | 1,600                           | --                      | 440                   | --                       | <0.5              | <0.5            | <0.5                 | <0.5                  | 3.3                | --                 | --           | --           | --           | --           | --                | --              | --              | --          | --                    |
|                                    | 4/14/05  | 8.81                             | 2,100                           | --                      | 890 <sup>LY</sup>     | <300                     | <0.5              | <0.5            | <0.5                 | 5.9                   | --                 | 0.7                | <10          | <0.5         | <0.5         | <0.5         | --                | <0.5            | <0.5            | --          | --                    |
|                                    | 8/1/05   | 7.82                             | 2,100                           | --                      | 670 <sup>LY</sup>     | <300                     | <0.5              | <0.5            | <0.5                 | <0.5                  | --                 | <0.5               | <10          | <0.5         | <0.5         | <0.5         | --                | <0.5            | <0.5            | --          | --                    |
|                                    | 11/9/05  | NA                               | NA                              | --                      | NA                    | NA                       | NA                | NA              | NA                   | NA                    | NA                 | NA                 | NA           | NA           | NA           | NA           | NA                | NA              | NA              | NA          | NA                    |
|                                    | 3/21/06  | 9.25                             | 1,900                           | --                      | 850 <sup>LY</sup>     | <300                     | <0.5              | <0.5            | <0.5                 | <0.5                  | --                 | 0.5                | <10          | <0.5         | <0.5         | <0.5         | --                | <0.5            | <0.5            | --          | --                    |
|                                    | 8/7/06   | 7.77                             | 2,200 <sup>Y</sup>              | --                      | 940 <sup>LY</sup>     | <300                     | <0.5              | <0.5            | <0.5                 | <0.5                  | --                 | 0.5                | <10          | <0.5         | <0.5         | <0.5         | --                | <0.5            | <0.5            | --          | --                    |
|                                    | 10/27/06 | NA                               | NA                              | --                      | NA                    | NA                       | NA                | NA              | NA                   | NA                    | NA                 | NA                 | NA           | NA           | NA           | NA           | NA                | NA              | NA              | NA          | NA                    |
|                                    | 3/20/07  | 8.26                             | 2,000 <sup>Y</sup>              | --                      | 670L <sup>Y</sup>     | <300                     | <0.5              | <0.5            | <0.5                 | <0.5                  | --                 | <0.5               | <10          | <0.5         | <0.5         | <0.5         | --                | <0.5            | <0.5            | --          | --                    |
|                                    | 8/8/07   | 7.51                             | 2,100 <sup>HL<sup>Y</sup></sup> | --                      | 680 <sup>LY</sup>     | <300                     | <0.5              | <0.5            | <0.5                 | <0.5                  | --                 | <0.5               | <10          | <0.5         | <0.5         | <0.5         | --                | <0.5            | <0.5            | --          | --                    |
|                                    | 2/5/08   | 9.09                             | 1,400                           | --                      | 560 <sup>Y</sup>      | <300                     | <0.5              | <0.5            | <0.5                 | <0.5                  | --                 | <0.5               | <10          | <0.5         | <0.5         | <0.5         | --                | <0.5            | <0.5            | --          | --                    |
|                                    | 8/14/08  | 7.65                             | 1,100 <sup>Y</sup>              | --                      | 390 <sup>Y</sup>      | <300                     | <0.5              | <0.5            | <0.5                 | <0.5                  | --                 | <0.5               | <10          | <0.5         | <0.5         | <0.5         | --                | <0.5            | <0.5            | --          | --                    |
|                                    | 3/3/09   | 9.76                             | 990 <sup>Y</sup>                | --                      | 230 <sup>Y</sup>      | <300                     | <0.5              | <0.5            | <0.5                 | <1.0                  | --                 | <0.5               | <10          | <0.5         | <0.5         | <0.5         | --                | <0.5            | <0.5            | --          | --                    |
| No Access                          |          |                                  |                                 |                         |                       |                          |                   |                 |                      |                       |                    |                    |              |              |              |              |                   |                 |                 |             |                       |

Notes:

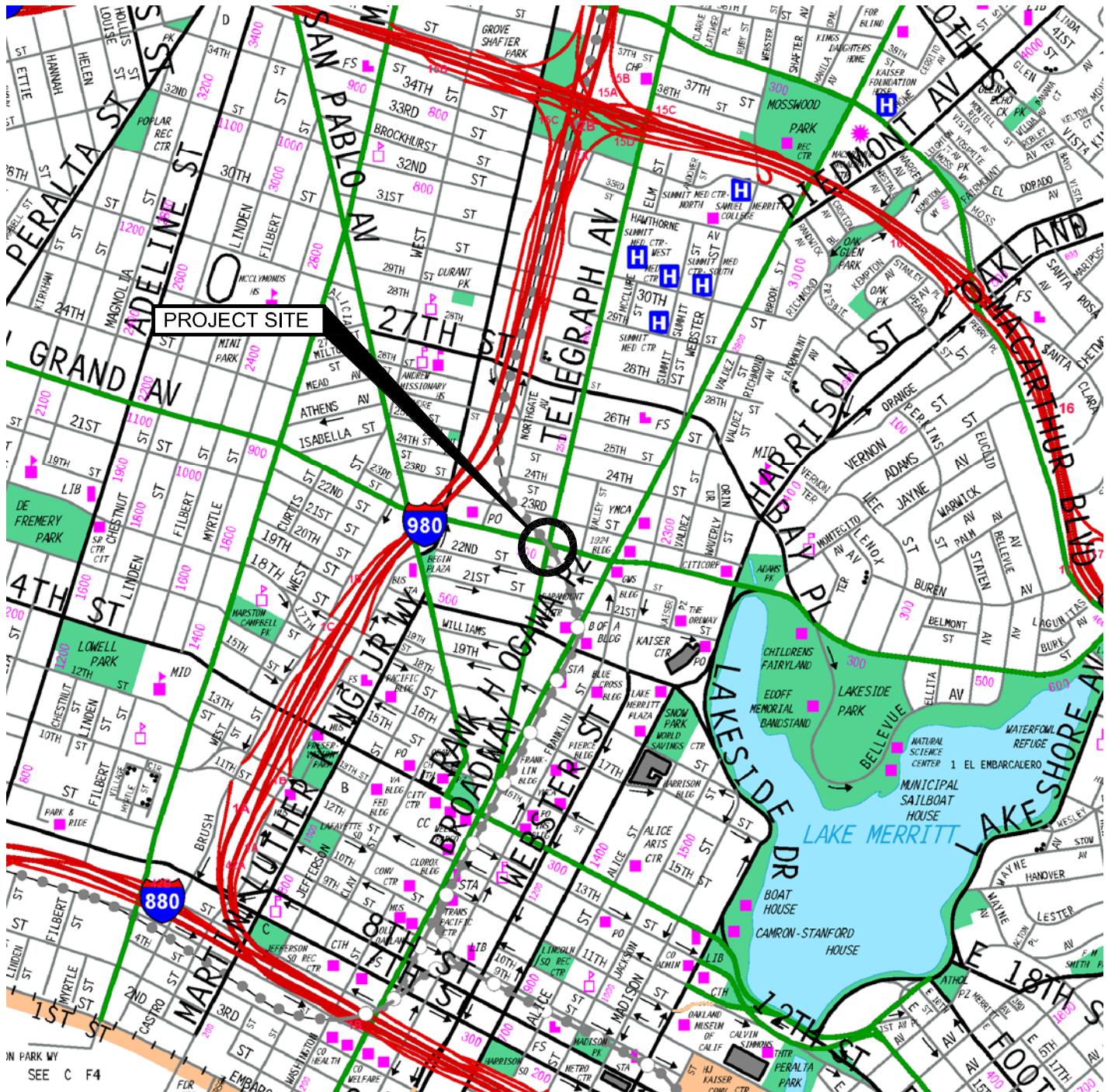
TVH = Total Volatile Hydrocarbons  
TEH = Total Extractable Hydrocarbons  
DCA = Dichloroethane  
DBA = Dibromoethane  
TCA = Trichloroethane  
PCE = Tetrachloroethene  
MTBE = tert-Butyl methyl ether  
TBA = Tert butyl alcohol  
DIPE = Diisopropyl Ether  
ETBE = Ethyl tert butyl ether  
TAME = Methyl tert amyl ether  
-- = Chemical not tested for  
NR = Hydrocarbon range not reported by laboratory  
+ = Uncategorized hydrocarbons quantified in ranges specified

µg/L = micrograms per liter = parts per billion  
<1 = Chemical not present at a concentration greater than the laboratory detection limit shown or stated on test reports  
C = Presence Confirmed, but RPD between columns exceeds 40%  
Y = Sample exhibits chromatographic pattern which does not resemble standard  
H = Heavier hydrocarbon contributed to the quantitation  
L = Lighter hydrocarbon contributed to the quantitation  
ESLs = San Francisco Bay Regional Water Quality Control Board, Screening for Environmental Concerns at Sites with Contaminated Soil and Grounwater, Interim Final November 2007, Revised May 2008  
\* = Table E-1 Groundwater Screening Levels for Evaluation of Potential Vapor Intrusion Concerns  
\*\* = Table F-1a Groundwater Screening Levels (groundwater is a current potential drinking water resource)  
NA = Not Accessible During This Sampling Event  
NE = Not Evaluated  
NV = No Value

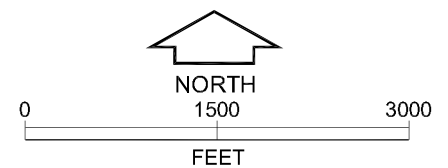


## PLATES

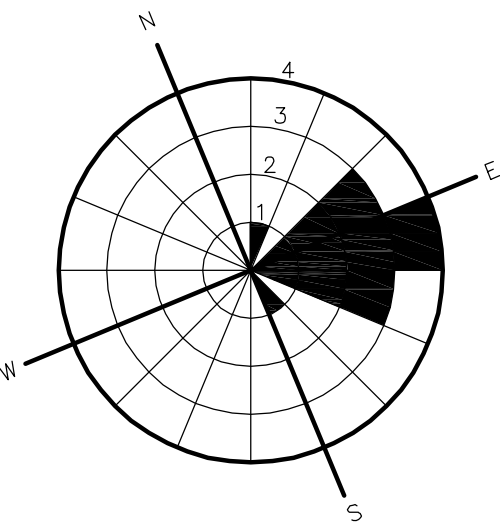
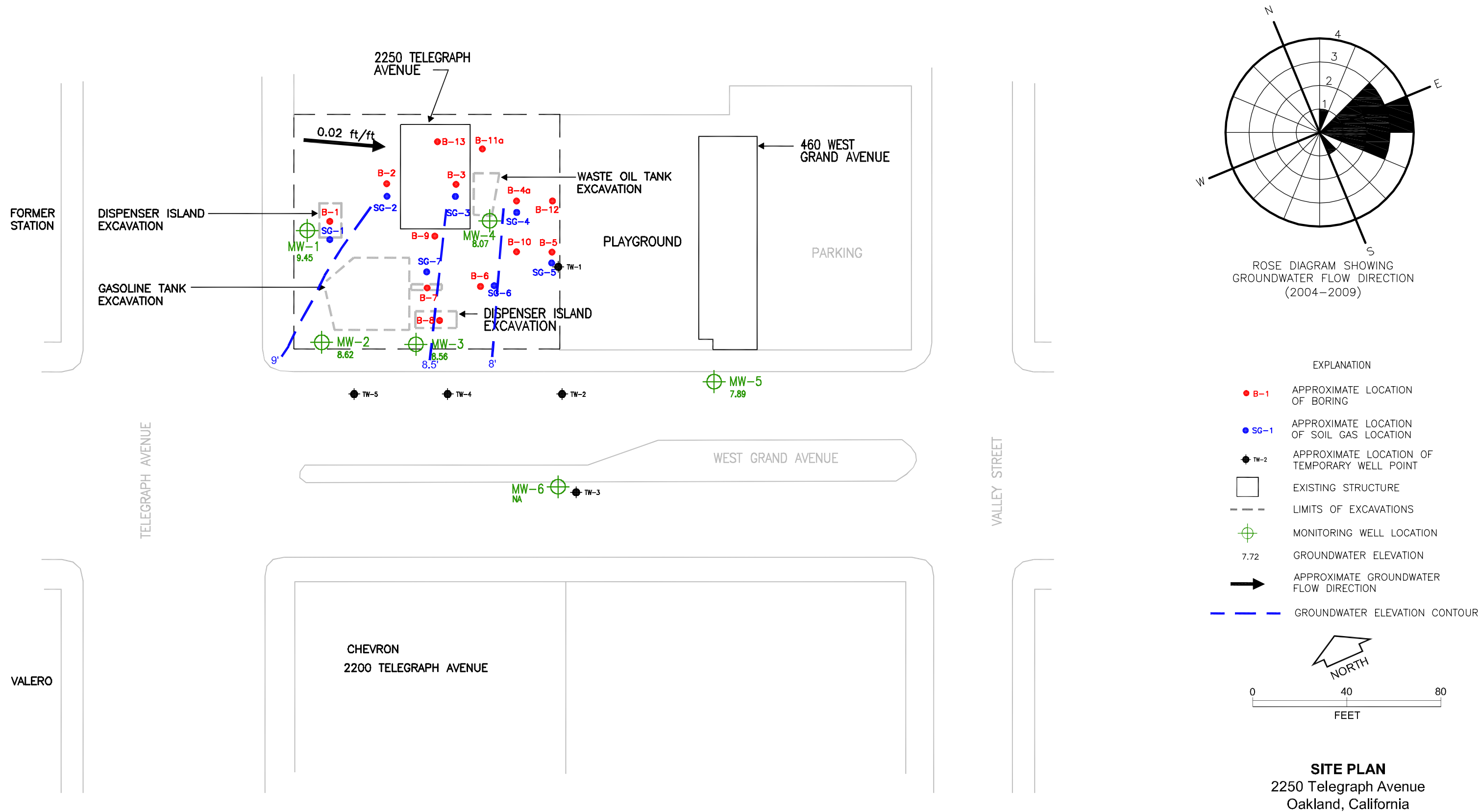




**SOURCE:** This Site Vicinity Map is based on The Thomas Guide Digital Edition 2003, Bay Area Metro, Alameda, Contra Costa, Marin, San Francisco, San Mateo, and Santa Clara Counties.

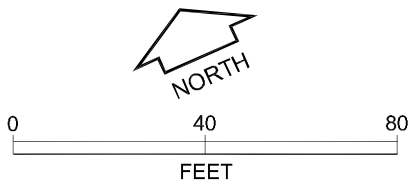


**VICINITY MAP**  
2250 Telegraph Avenue  
Oakland, California



ROSE DIAGRAM SHOWING  
GROUNDWATER FLOW DIRECTION  
(2004-2009)

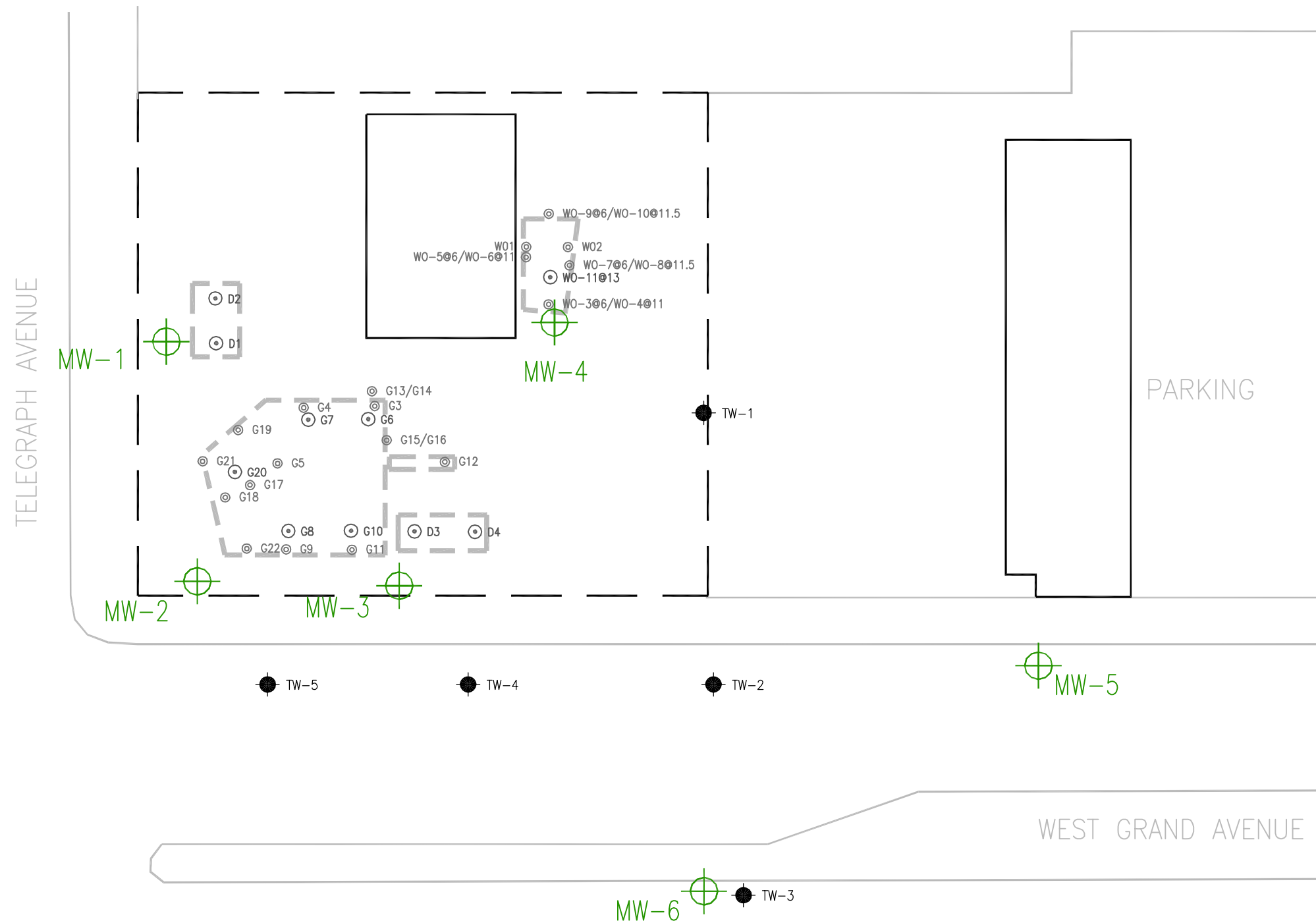
- EXPLANATION
- B-1 APPROXIMATE LOCATION OF BORING
  - SG-1 APPROXIMATE LOCATION OF SOIL GAS LOCATION
  - TW-2 APPROXIMATE LOCATION OF TEMPORARY WELL POINT
  - EXISTING STRUCTURE
  - - - LIMITS OF EXCAVATIONS
  - ⊕ MONITORING WELL LOCATION
  - 7.72 GROUNDWATER ELEVATION
  - APPROXIMATE GROUNDWATER FLOW DIRECTION
  - - - GROUNDWATER ELEVATION CONTOUR



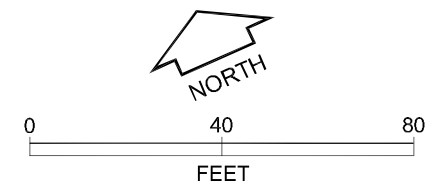
**SITE PLAN**  
2250 Telegraph Avenue  
Oakland, California



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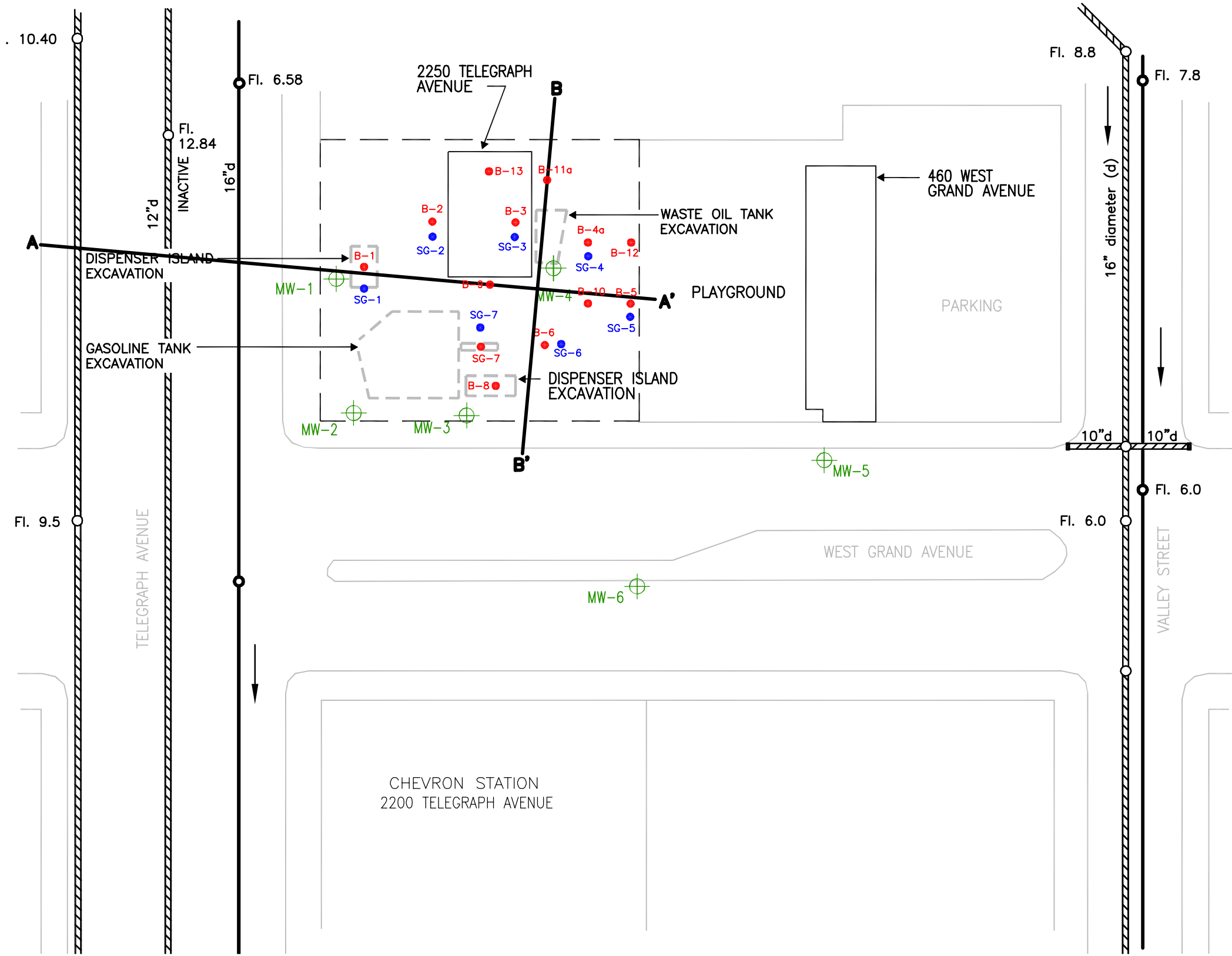
- LEGEND**
- ⊙ G5 APPROXIMATE LOCATION OF PREVIOUS SIDEWALL SAMPLE
  - ⊙ G20 APPROXIMATE LOCATION OF PREVIOUS BOTTOM SAMPLE
  - TW-4 APPROXIMATE LOCATION OF TEMPORARY WELL POINT
  - ⊕ MONITORING WELL LOCATION
  - LIMITS OF EXCAVATION



**SAMPLE LOCATIONS 1990-1997**  
2250 Telegraph Avenue  
Oakland, California

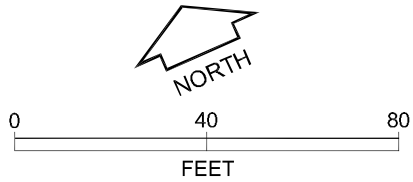


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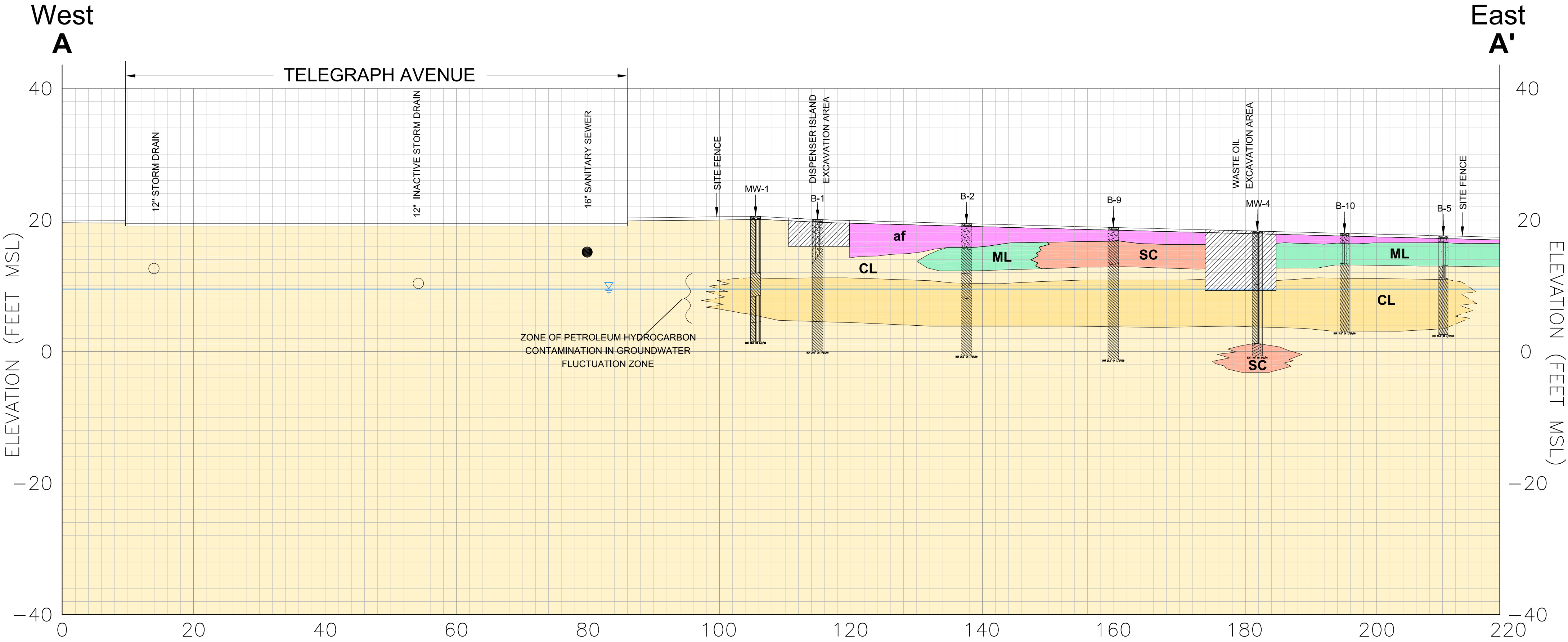
**LEGEND**

- B-1 APPROXIMATE LOCATION OF BORING
- SG-1 APPROXIMATE LOCATION OF SOIL-GAS BORING
- STRUCTURE
- LIMITS OF EXCAVATION
- ⊕ MONITORING WELL LOCATION



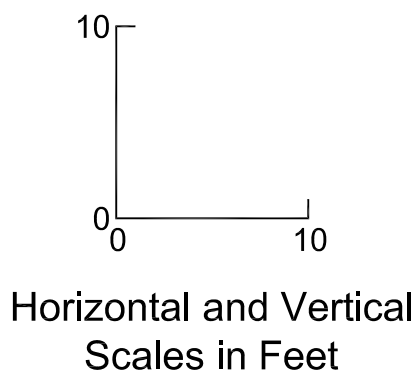
**SAMPLING LOCATIONS 2009**  
2250 Telegraph Avenue  
Oakland, California





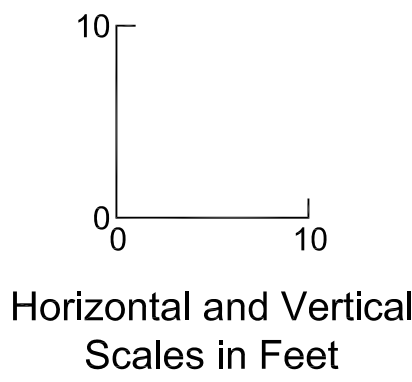
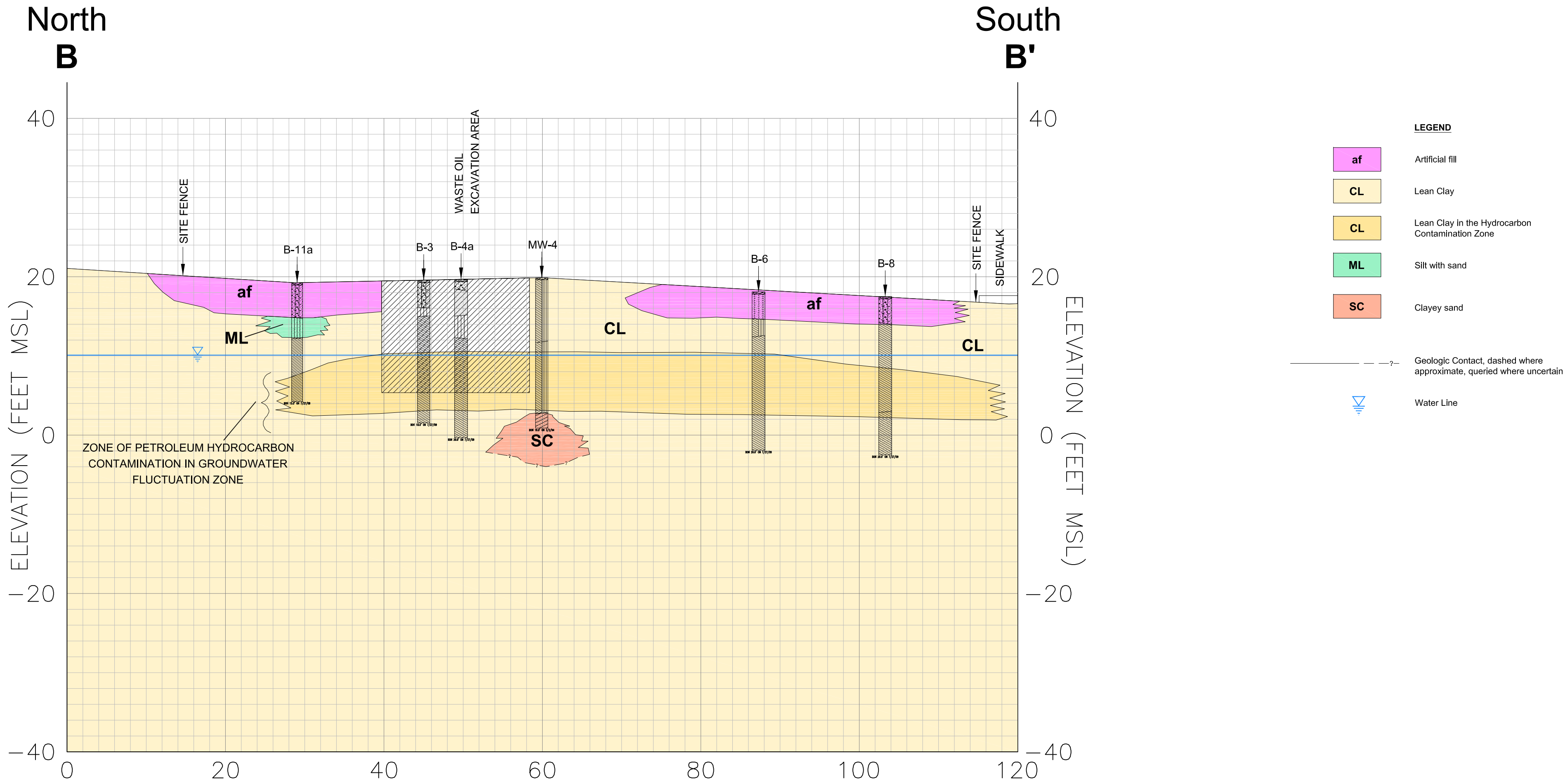
**LEGEND**

|     |   |
|-----|---|
| af  | Artificial fill                                 |
| CL  | Lean Clay                                       |
| CL  | Lean Clay in the Hydrocarbon Contamination Zone |
| ML  | Silt with sand                                  |
| SC  | Clayey sand                                     |
| --- | Geologic Contact, dashed where approximate      |
| ▽   | Water Line                                      |



**GENERALIZED CROSS SECTION A-A'**  
2250 Telegraph Avenue  
Oakland, California

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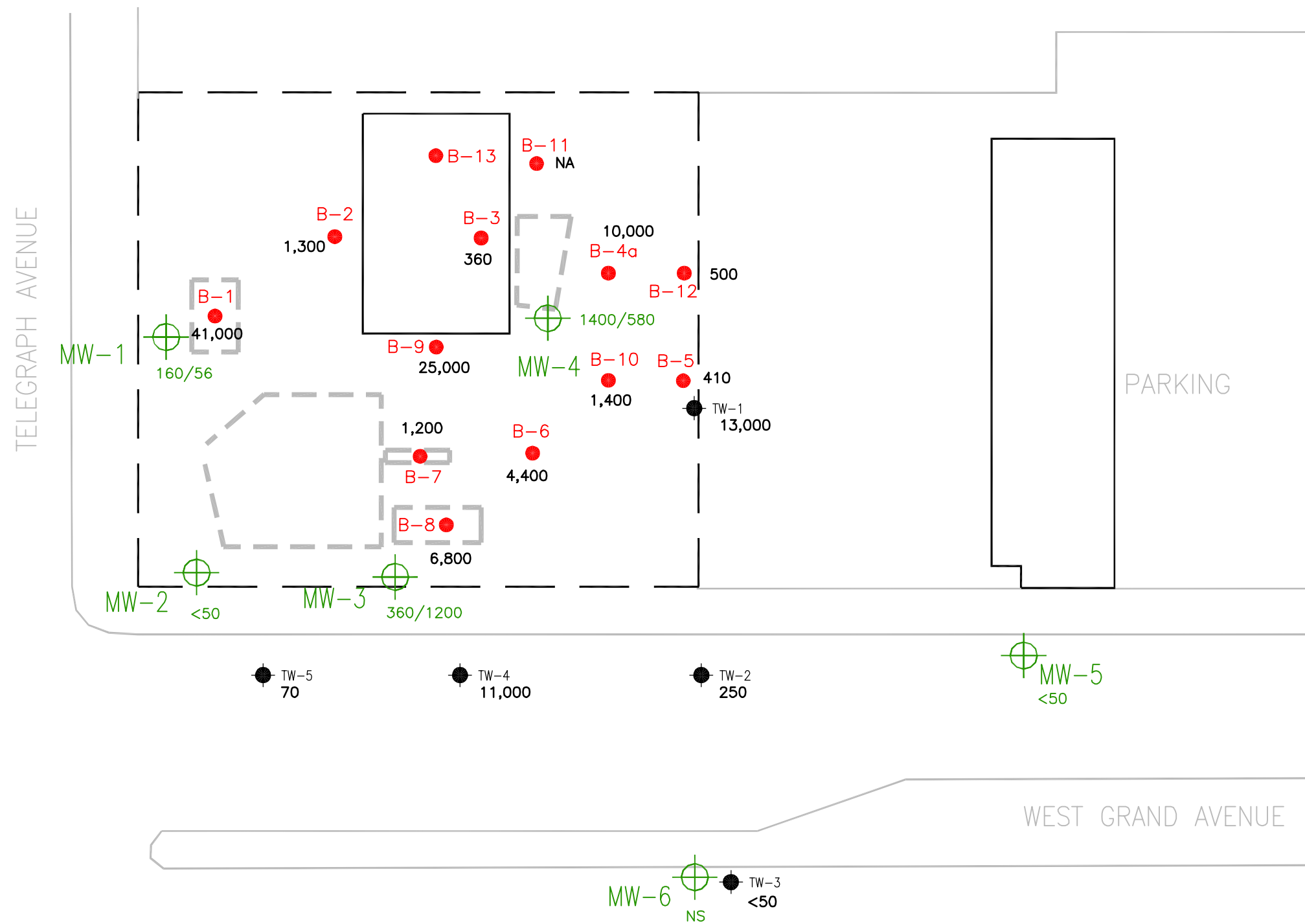


**GENERALIZED CROSS SECTION B-B'**  
2250 Telegraph Avenue  
Oakland, California

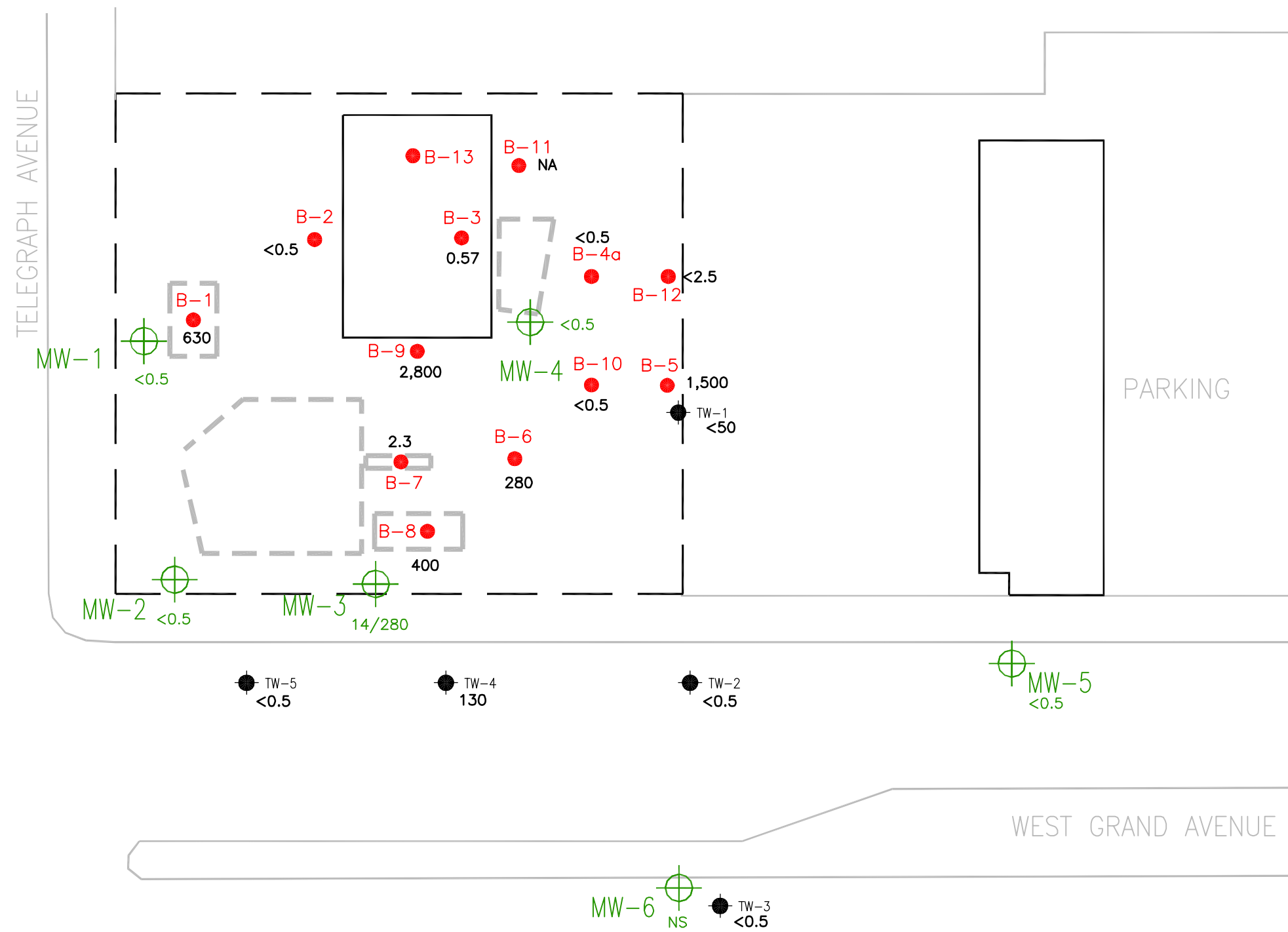




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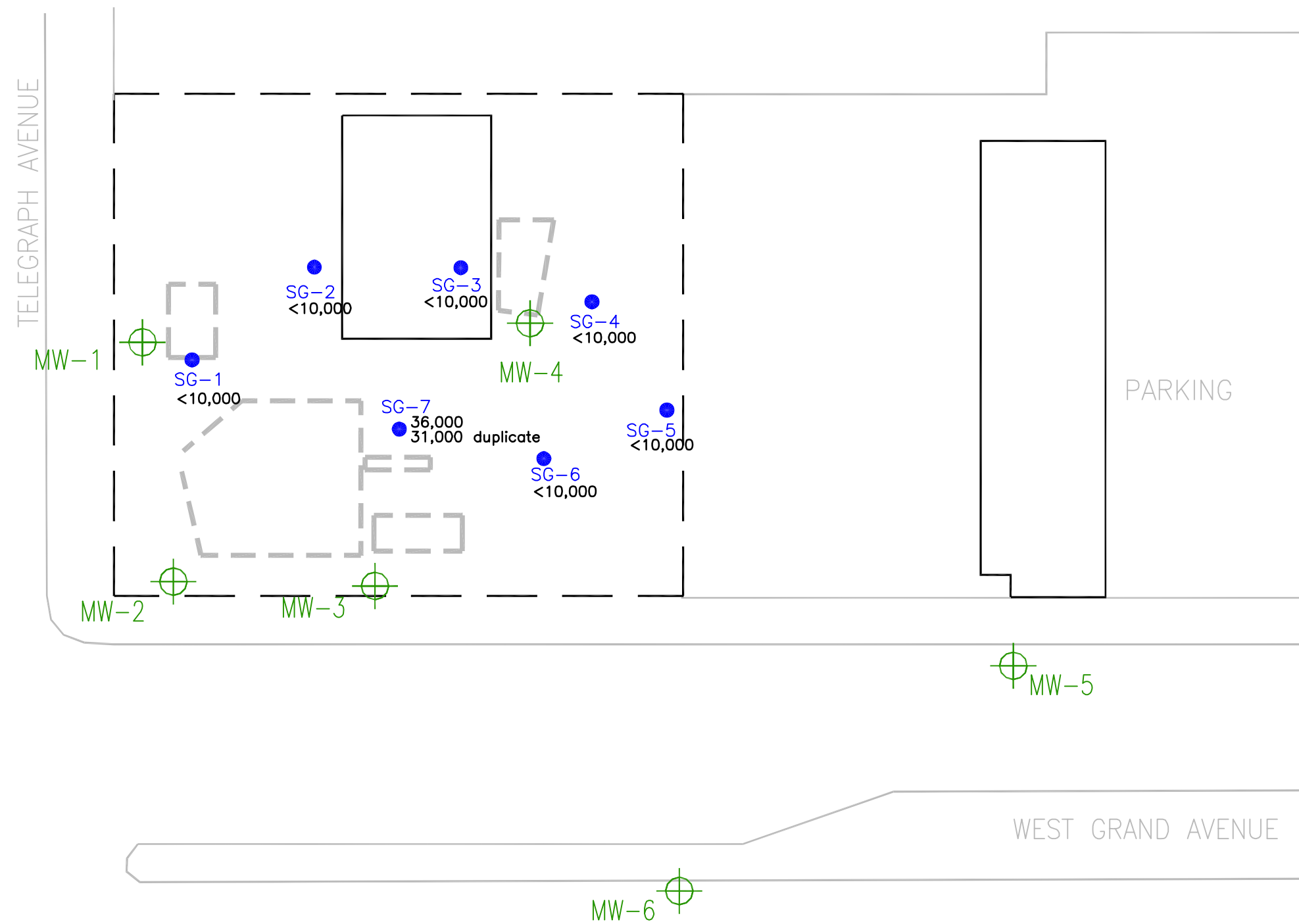


**TVHg CONCENTRATIONS IN GROUNDWATER**  
2250 Telegraph Avenue  
Oakland, California



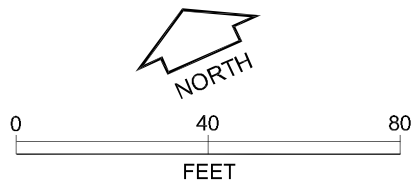
- LEGEND**
- TW-3 APPROXIMATE LOCATION OF TEMPORARY WELL POINT - 1996
  - B-1 APPROXIMATE LOCATION OF TEMPORARY WELL POINT - 2009
  - 1000 BENZENE CONCENTRATIONS IN ug/L
  - STRUCTURE
  - - - LIMITS OF EXCAVATION
  - ⊕ MONITORING WELL LOCATION

**BENZENE CONCENTRATIONS IN GROUNDWATER**  
2250 Telegraph Avenue  
Oakland, California



LEGEND

- SG-1 APPROXIMATE LOCATION OF TEMPORARY SOIL-GAS - 2009
- 1000 TPHg CONCENTRATIONS IN ug/m<sup>3</sup>
- STRUCTURE
- - - LIMITS OF EXCAVATION
- ⊕ MONITORING WELL LOCATION

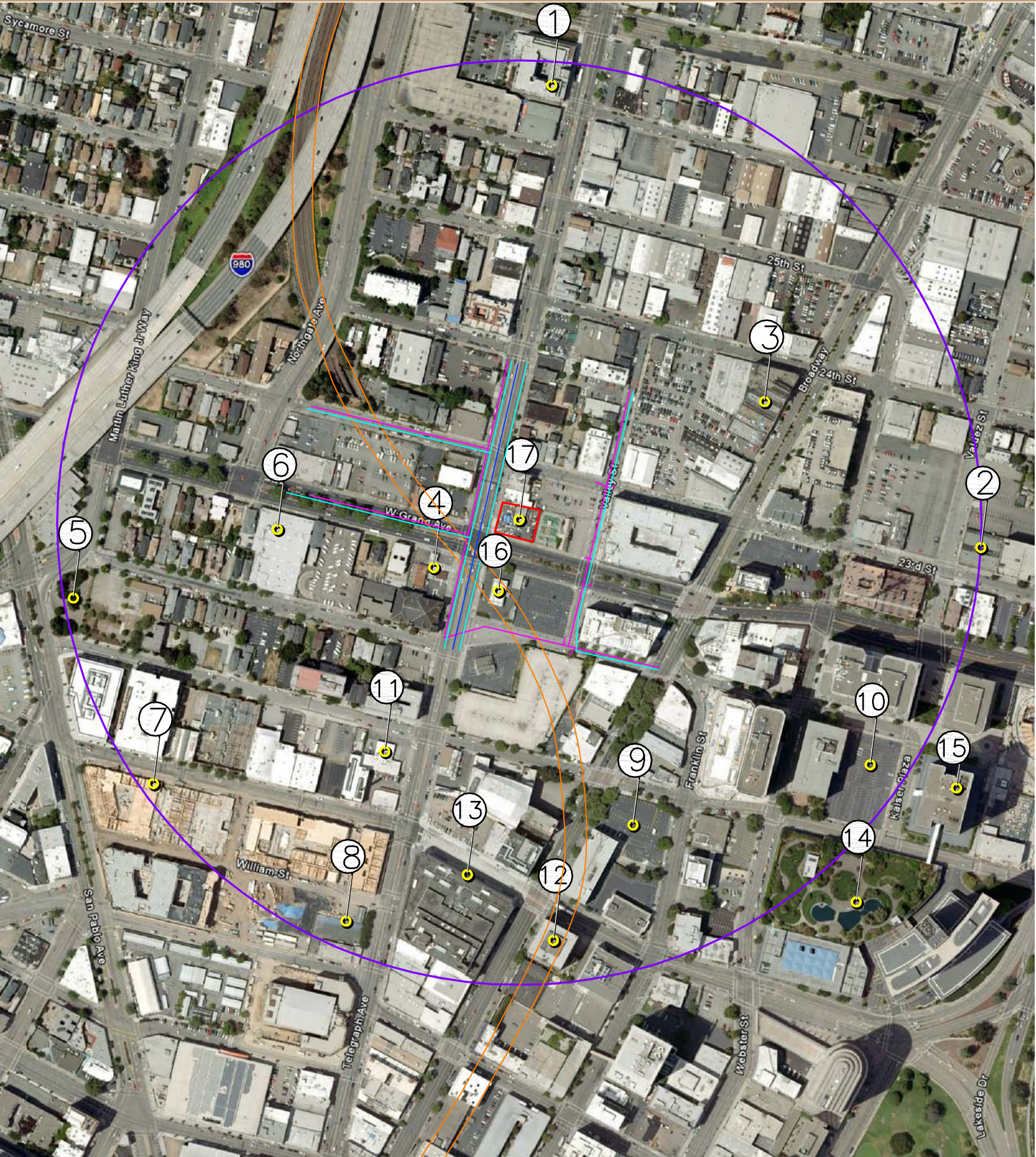


TPHg CONCENTRATIONS IN SOIL-GAS  
2250 Telegraph Avenue  
Oakland, California





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| Location # | Facility Name                               | Address                       | Direction from Site | Number of wells | Use                     |
|------------|---|-------------------------------|---------------------|-----------------|-------------------------|
| 1          | Sears Automotive                            | 2633 Telegraph Avenue         | North               | 5               | Monitoring              |
| 2          | Old Oakland Tribune Garage                  | 23rd Street and Valdez Street | East                | 7               | Former Monitoring       |
| 3          | Negherbon Auto Center                       | 2345 Broadway                 | Northeast           | 1               | Monitoring              |
| 4          | Texaco USA                                  | 2225 Telegraph Avenue         | Southwest           | 10              | Monitoring, 2 destroyed |
| 5          | Private                                     | 22nd and Grove Street         | Southwest           | 1               | Unknown                 |
| 6          | U.S. Postal Service Facility                | 577 West Grand Avenue         | Southwest           | 1               | Monitoring              |
| 7          | Redevelopment Agency of the City of Oakland | 536-585 20th Street           | Southwest           | 3               | Monitoring              |
| 8          | Chevron                                     | 1911 Telegraph Avenue         | Southwest           | 1               | Monitoring              |
| 9          | Unknown                                     | 21st and Broadway             | Southeast           | 1               | Monitoring              |
| 10         | Unknown                                     | 327 21st Street               | Southeast           | 2               | Test Borings            |
| 11         | Great Western Power Co.                     | 520 20th Street               | Southwest           | 2               | Former Industrial       |
| 12         | B.P.O.E #171                                | 20th and Broadway             | Southeast           | 1               | Unknown                 |
| 13         | Redevelopment Agency of the City of Oakland | 20th Street                   | South               | 1               | Monitoring              |
| 14         | Kaiser Center Plaza                         | 300 Lakeside Drive            | Southeast           | 2               | Irrigation, Monitoring  |
| 15         | Ordway Building                             | 1 Kaiser Plaza                | Southeast           | 3               | Monitoring              |
| 16         | Chevron                                     | 2200 Telegraph                | South               | 3               | Monitoring              |
| 17         | Dave's Station                              | 2250 Telegraph Avenue         | Site                | 6               | Monitoring              |

LEGEND

APPROXIMATE LOCATION OF WELL(S)

SITE LOCATION

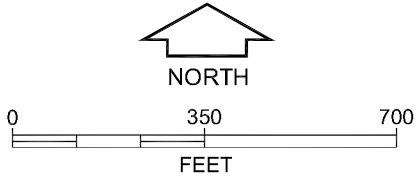
1/4 MILE RADIUS AROUND SITE

BART TRACKS

12" STORM DRAIN

12" INACTIVE STORM DRAIN

16" SANITARY SEWER



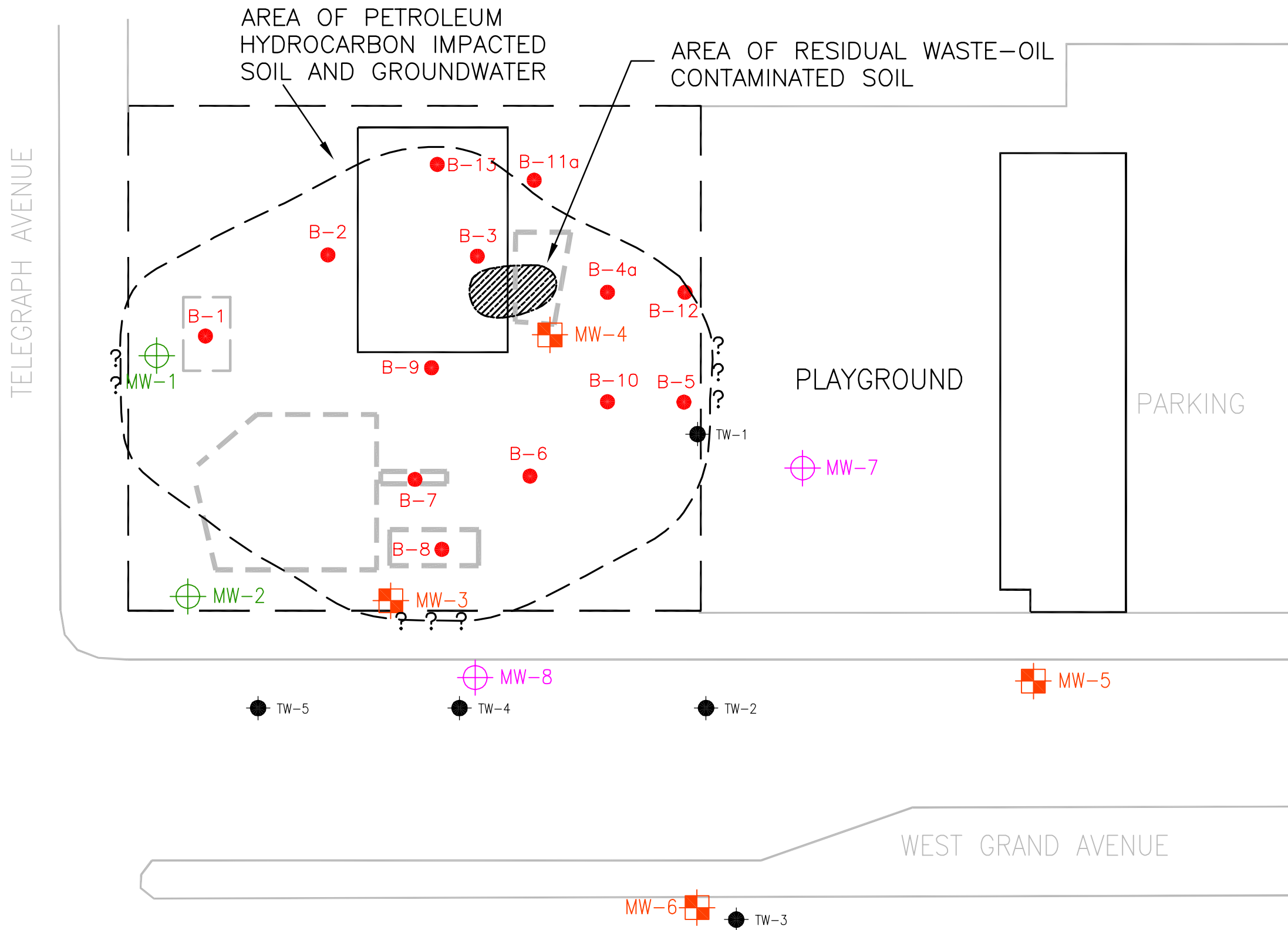
INVENTORY OF  
REGISTERED/PERMITTED WELLS  
2250 Telegraph Avenue  
Oakland, California

BASE MAP SOURCE: This aerial photo obtained from Google Earth Pro.  
NOTE: Utilities are only shown for the 2 block radius around the site.

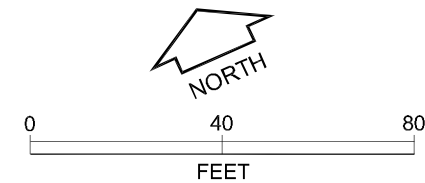




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- EXPLANATION
- B-1 APPROXIMATE LOCATION OF BORING
  - TW-2 APPROXIMATE LOCATION OF TEMPORARY WELL POINT
  - EXISTING STRUCTURE
  - - - LIMITS OF EXCAVATIONS
  - ⊕ MW-1 MONITORING WELL LOCATION
  - ⊕ MW-5 PROPOSED WELL DESTRUCTION
  - ⊕ MW-7 PROPOSED LOCATION OF RE-LOCATED MONITORING WELLS



**EXTENT OF IMPACTS**  
2250 Telegraph Avenue  
Oakland, California

**APPENDIX A**  
**ALAMEDA COUNTY PUBLIC WOKRS AGENCY DRILLING PERMIT**



# 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: 07/16/2009 By jamesy

Permit Numbers: W2009-0651  
Permits Valid from 07/27/2009 to 07/31/2009

Application Id: 1247762084523  
Site Location: 2250 Telegraph Avenue  
Project Start Date: 07/27/2009  
Assigned Inspector: Contact John Shouldice at (510) 670-5424 or johns@acpwa.org

City of Project Site:Oakland

Completion Date:07/31/2009

Applicant: FUGRO West - Karen A Emery  
1000 Broadway, Ste 440, Oakland, CA 94607  
Property Owner: Buttner Properties  
600 W Grand Avenue, Oakland, CA 94612  
Client: \*\* same as Property Owner \*\*

Phone: 510-267-4432

Phone: 510-832-3456

Receipt Number: WR2009-0260 Total Due: \$265.00  
Payer Name : Fugro West Total Amount Paid: \$265.00  
Paid By: CHECK PAID IN FULL

## Works Requesting Permits:

Borehole(s) for Investigation-Contamination Study - 19 Boreholes  
Driller: Vironex, Inc and TEG - C57-706568 - Lic #: 705927 - Method: other

Work Total: \$265.00

## Specifications

| Permit Number | Issued Dt  | Expire Dt  | # Boreholes | Hole Diam | Max Depth |
|---------------|------------|------------|-------------|-----------|-----------|
| W2009-0651    | 07/16/2009 | 10/25/2009 | 19          | 2.00 in.  | 15.00 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. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.
4. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County an 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.
5. Applicant shall contact John Shouldice for an inspection time at 510-670-5424 at least five (5) working days prior to

## **Alameda County Public Works Agency - Water Resources Well Permit**


















starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

6. 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.

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.

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**APPENDIX B**  
**LOGS OF BORINGS B-1 THROUGH B-12**

| MAJOR DIVISIONS  |  |                                  | GROUP NAMES   |   | <b>GENERAL NOTES</b><br><br>Classification of Soils in general accordance with ASTM D2487 or D2488 (based on the Unified Soil Classification System)<br><br>Geologic Formation noted in bold font at the top of interpreted interval<br>Sloped line in break column indicates transitional boundary<br><br>Blow counts for modified California Liner Sampler shown in ( )<br><br>Length of sample symbol approximates recovery length<br><br><b>SAMPLER DRIVING RESISTANCE</b><br><br>Number of blows with 140 lb. hammer, falling 30-in. to drive sampler 1-ft. after seating sampler 6-in.; for example,<br><br>Blows/ft      Description<br>25              25 blows drove sampler 12" after initial 6" of seating<br><br>50/7"           50 blows drove sampler 7" after initial 6" of seating<br><br>Ref/3"          50 blows drove sampler 3" during initial 6" seating interval (Ref=Refusal)<br><br><b>STRENGTH TEST METHOD</b><br><br>U = Unconfined Compression<br>Q = Unconsolidated Undrained Triaxial<br>T = Torvane<br>P = Pocket Penetrometer<br>M = Miniature Vane<br>F = Field Vane<br><br><b>OTHER TESTS</b><br><br>k = Permeability                      EI = Expansion Index<br>Consol = Consolidation              OVM = Organic Vapor<br>Gs = Specific Gravity                      Meter<br>MA = Particle Size Analysis |                      |
|--|--|----------------------------------|---|---|--|----------------------|
| <b>COARSE-GRAINED SOILS</b><br><br>More than 50% retained on the No. 200 sieve | <b>GRAVELS</b><br><br>MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE | Clean gravels less than 5% fines | GW  |    |  | Well-Graded Gravel   |
|  |  |                                  | GP  |    |  | Poorly Graded Gravel |
|  |  | Gravels with more than 12% fines | GM  |    |  | Silty Gravel         |
|  |  |                                  | GC  |    |  | Clayey Gravel        |
|  | <b>SANDS</b><br><br>MORE THAN 50% OF COARSE FRACTION PASSING NO. 4 SIEVE       | Clean sand less than 5% fines    | SW  |    |  | Well-Graded Sand     |
|  |  |                                  | SP  |    |  | Poorly Graded Sand   |
|  |  | Sands with more than 12% fines   | SM  |    |  | Silty Sand           |
|  |  |                                  | SC  |    |  | Clayey Sand          |
| <b>FINE-GRAINED SOILS</b><br><br>50% or more passes the No. 200 sieve          | <b>SILTS AND CLAYS</b><br><br>Liquid Limit Less than 50%                       |                                  | ML  |    |  | Silt                 |
|  |  |                                  | CL  |    | Lean Clay  |                      |
|  |  |                                  | OL  |    | Organic Silt   |                      |
|  | <b>SILTS AND CLAYS</b><br><br>Liquid Limit Greater than 50%                    |                                  | MH  |    | Elastic Silt   |                      |
|  |  |                                  | CH  |    | Fat Clay   |                      |
|  |  |                                  | OH  |   | Organic Clay   |                      |
|  | <b>HIGHLY ORGANIC SOILS</b>  |                                  | PT  |  | Peat or Highly Organic Soils   |                      |
|  |  |                                  | FILL  |  | Debris or Mixed Fill   |                      |
|  |  | AC                               |  | Asphalt Concrete Pavement with Aggregate Base                                       |  |                      |

## GENERAL NOTES

Classification of Soils in general accordance with ASTM D2487 or D2488 (based on the Unified Soil Classification System)

Geologic Formation noted in bold font at the top of interpreted interval  
Sloped line in break column indicates transitional boundary

Blow counts for modified California Liner Sampler shown in ( )

Length of sample symbol approximates recovery length

## SAMPLER DRIVING RESISTANCE

Number of blows with 140 lb. hammer, falling 30-in. to drive sampler 1-ft. after seating sampler 6-in.; for example,

| Blows/ft | Description  |
|----------|--|
| 25       | 25 blows drove sampler 12" after initial 6" of seating                     |
| 50/7"    | 50 blows drove sampler 7" after initial 6" of seating                      |
| Ref/3"   | 50 blows drove sampler 3" during initial 6" seating interval (Ref=Refusal) |

## STRENGTH TEST METHOD

U = Unconfined Compression  
Q = Unconsolidated Undrained Triaxial  
T = Torvane  
P = Pocket Penetrometer  
M = Miniature Vane  
F = Field Vane

## OTHER TESTS

k = Permeability  
Consol = Consolidation  
Gs = Specific Gravity  
MA = Particle Size Analysis  
EI = Expansion Index  
OMV = Organic Vapor Meter

## WATER LEVEL SYMBOLS

▽ Initial or perched water level  
▼ Final ground water level  
~ Seepages encountered

## SAMPLER TYPE AND RECOVERY

|   |                      |                    |                          |                                 |                   |              |                |                  |                     |           |             |  |
|---|----------------------|--------------------|--------------------------|---------------------------------|-------------------|--------------|----------------|------------------|---------------------|-----------|-------------|--|
| 1   | 2                    | 3                  | 4                        | 5                               | 6                 | 7            | 8              | 9                | 10                  | 11        | 12          | 13   |
| SPT   | MC                   | CA                 | SH                       | BB                              | HA                | LS           | PS             | VS               | NR                  | RC        | DP          | ES   |
| Samplers and sampler dimensions (unless otherwise noted in report text) are as follows: |                      |                    |                          |                                 |                   |              |                |                  |                     |           |             |  |
| 1   | 2                    | 3                  | 4                        | 5                               | 6                 | 7            | 8              | 9                | 10                  | 11        | 12          | 13   |
| SPT Sampler, driven   | MOD CA Liner Sampler | CA Liner Sampler   | Thin-walled Tube, pushed | Bulk Bag Sample (from cuttings) | Hand Auger Sample | Lexan Sample | Pitcher Sample | Vibracore Sample | No Sample Recovered | Rock Core | Direct Push | Environmental Sample                         |
| 1 3/8" ID, 2" OD  | 2 3/8" ID, 3" OD     | 1 7/8" ID, 2.5" OD | 2 7/8" ID, 3" OD         |                                 |                   |              |                |                  |                     |           |             | Retained samples listed in sample No. column |

## SOIL STRUCTURE

Fissured: Containing shrinkage or relief cracks, often filled with fine sand or silt, usually more or less vertical.  
Pocket: Inclusion of material of different texture that is smaller than the diameter of the sample.  
Parting: Inclusion less than 1/8 inch thick extending through the sample.  
Seam: Inclusion 1/8 inch to 3 inches thick extending through the sample.  
Layer: Inclusion greater than 3 inches thick extending through the sample.  
Laminated: Soil sample composed of alternating partings or seams of different soil types.  
Interlayered: Soil sample composed of alternating layers of different soil type.  
Intermixed: Soil sample composed of pockets of different soil type, and layered or laminated structure is not evident.

## CONSISTENCY (1)

| Clays      | Blows/Foot SPT | Undrained Shear Strength (ksf) |
|------------|----------------|--------------------------------|
| Very Soft  | 0 - 2          | 0 - 0.25                       |
| Soft       | 2 - 4          | 0.25 - 0.5                     |
| Firm       | 4 - 8          | 0.5 - 1                        |
| Stiff      | 8 - 15         | 1 - 2                          |
| Very Stiff | 15 - 30        | 2 - 4                          |
| Hard       | Over 30        | Over 4                         |

## RELATIVE DENSITY (1)

| Sands and Gravels | Blows/Foot SPT |
|-------------------|----------------|
| Very Loose        | 0 - 4          |
| Loose             | 4 - 10         |
| Medium Dense      | 10 - 30        |
| Dense             | 30 - 50        |
| Very Dense        | Over 50        |

## INCREASING VISUAL MOISTURE CONTENT

Dry  
Moist  
Wet

Information on each boring log is a compilation of subsurface conditions and soil or rock classifications obtained from the field as well as from laboratory testing of samples. Strata have been interpreted by commonly accepted procedures. The stratum lines on the logs may be transitional and approximate in nature. Water level measurements refer only to those observed at the time and places indicated, and can vary with time, geologic condition, or construction activity.

(1) Terzaghi and Peck 1967

## TERMS AND SYMBOLS USED ON BORING LOGS



| DEPTH, ft | MATERIAL SYMBOL | SAMPLE NO. | SAMPLER TYPE | SAMPLER BLOW COUNT/<br>PRESSURE | OVM/PID (ppm) | LOCATION:<br><br>SURFACE EL: ft +/- (rel. MSL datum) | MATERIAL DESCRIPTION   | OTHER TESTS |
|-----------|-----------------|------------|--------------|---------------------------------|---------------|--|--|-------------|
|           |                 | B-1@0      |              |                                 |               |  | Asphalt  |             |
|           |                 | B-1@1      |              |                                 | 2.1           |  | Silty GRAVEL with sand (GM): loose, brown, dry to moist, no odor or staining |             |
|           |                 | B-1@2      |              |                                 | 1             |  |  |             |
|           |                 | B-1@2      |              |                                 | 0.9           |  |  |             |
| 5         |                 | B-1@7      |              |                                 |               |  | 4.5-7.0 Feet: No Return  |             |
|           |                 | B-1@7      |              |                                 | 6.3           |  | Lean CLAY (CL): soft, brown, moist, some gray mottling, slight gasoline odor |             |
|           |                 | B-1@7      |              |                                 |               |  | firm, some gray mottling, stronger gasoline odor                             |             |
|           |                 | B-1@1      |              |                                 | 15.2          |  |  |             |
| 10        |                 | B-1@1      |              |                                 |               |  | soft, gray, moist, some brown mottling, decreasing gasoline odor             |             |
|           |                 | B-1@1      |              |                                 | 64.6          |  |  |             |
|           |                 | B-1@1      |              |                                 | 75.1          |  | very sharp gasoline odor   |             |
| 15        |                 | B-1@1      |              |                                 |               |  | some brown mottling, slight gasoline odor                                    |             |
|           |                 | B-1@1      |              |                                 | 62            |  |  |             |
|           |                 | B-1@1      |              |                                 | 21.4          |  |  |             |
|           |                 | B-1@2      |              |                                 | 1.3           |  | firm, brown, dry to moist, some gray mottling, no odor                       |             |
| 20        |                 | B-1@2      |              |                                 |               |  | END OF BORING: 20 FT   |             |

BORING DEPTH: 20.0 ft  
DEPTH TO WATER: 18.3 ft

COMPLETION DATE: July 27, 2009  
NOTES: 1. Terms and symbols defined on Plate B-1.

DRILLING METHOD: 2-in. dia. Direct Push  
HAMMER TYPE: Automatic Trip  
RIG TYPE: GP6600  
DRILLED BY: Vironex, Joel  
LOGGED BY: Russell Carter

## LOG OF B-1

### Buttner Property

### Oakland, California



| DEPTH, ft | MATERIAL SYMBOL | SAMPLE NO. | SAMPLER TYPE | SAMPLER BLOW COUNT/<br>PRESSURE | OVM/PID (ppm) | LOCATION:<br>SURFACE EL: ft +/- (rel. MSL datum) | MATERIAL DESCRIPTION   | OTHER TESTS |
|-----------|-----------------|------------|--------------|---------------------------------|---------------|--|--|-------------|
|           |                 | B-2@0      |              |                                 |               |  | Asphalt  |             |
|           |                 | B-2@       |              |                                 | 4.1           |  | Clayey GRAVEL with sand (GC): loose, brown, moist, no odor or staining         |             |
|           |                 | B-2@2      |              |                                 | 3.6           |  |  |             |
|           |                 | B-2@       |              |                                 | 3.9           |  |  |             |
| 5         |                 | B-2@5      |              |                                 | 3.8           |  | Lean CLAY (CL): soft, dark brown, moist, no odor or staining                   |             |
|           |                 | B-2@7      |              |                                 | 9.9           |  | Lean CLAY with sand (CL): soft, brown, wet, no odor or staining                |             |
| 10        |                 | B-2@1      |              |                                 | 4.7           |  |  |             |
|           |                 | B-2@1      |              |                                 | 13.6          |  | Lean CLAY (CL): firm, grayish brown, moist, some brown mottling, gasoline odor |             |
| 15        |                 | B-2@1      |              |                                 | 36            |  | soft, wet, gray and brown mottled, gasoline odor                               |             |
|           |                 | B-2@1      |              |                                 | 42.9          |  |  |             |
|           |                 | B-2@1      |              |                                 | 60.2          |  |  |             |
|           |                 | B-2@1      |              |                                 | 70.3          |  | very sharp gasoline odor   |             |
|           |                 | B-2@1      |              |                                 | 12.4          |  |  |             |
| 20        |                 | B-1@19.5   |              |                                 | 1             |  | firm, moist, gray and brown mottling, no odor                                  |             |
|           |                 |            |              |                                 |               |  | END OF BORING: 20 FT   |             |

BORING DEPTH: 20.0 ft  
DEPTH TO WATER: 19.5 ft

COMPLETION DATE: July 27, 2009  
NOTES: 1. Terms and symbols defined on Plate B-1.

DRILLING METHOD: 2-in. dia. Direct Push  
HAMMER TYPE: Automatic Trip  
RIG TYPE: GP6600  
DRILLED BY: Vironex, Joel  
LOGGED BY: Russell Carter

## LOG OF B-2

### Buttner Property

### Oakland, California





| DEPTH, ft | MATERIAL SYMBOL | SAMPLE NO. | SAMPLER TYPE | SAMPLER BLOW COUNT/<br>PRESSURE | OVM/PID (ppm) | LOCATION:<br><br>SURFACE EL: ft +/- (rel. MSL datum) | MATERIAL DESCRIPTION  | OTHER TESTS |
|-----------|-----------------|------------|--------------|---------------------------------|---------------|--|---|-------------|
|           |                 | B-3@0      |              |                                 |               |  | Concrete  |             |
|           |                 | B-3@1      |              |                                 | 4.2           |  | Silty GRAVEL with sand (GM): loose to medium dense, brown, moist, some gray mottling, slight motor oil odor |             |
|           |                 | B-3@2      |              |                                 | 3.9           |  |   |             |
|           |                 | B-3@3      |              |                                 | 3.3           |  |   |             |
|           |                 | B-3@4      |              |                                 | 2.8           |  | SILT with sand (ML): loose, dark brown, moist, some black motor oil staining, slight motor oil odor         |             |
| 5         |                 | B-3@5      |              |                                 | 3.5           |  | Lean CLAY (CL): firm, dark brown, moist, no odor or staining  |             |
|           |                 | B-3@7      |              |                                 | 1.4           |  |   |             |
|           |                 | B-3@1      |              |                                 | 3.9           |  | firm, light gray, moist, slight motor oil odor  |             |
| 10        |                 | B-3@1      |              |                                 | 64.9          |  |   |             |
|           |                 | B-3@1      |              |                                 | 21.4          |  | moist to wet, occasional fine grain sand, some slight motor oil odor  |             |
| 15        |                 | B-3@1      |              |                                 | 1.3           |  | wet, saturated, free water, no free product, no odor  |             |
|           |                 | B-3@1      |              |                                 |               |  | END OF BORING: 18 FT  |             |

BORING DEPTH: 18.0 ft  
DEPTH TO WATER: 13.5 ft

COMPLETION DATE: July 27, 2009  
NOTES: 1. Terms and symbols defined on Plate B-1.

DRILLING METHOD: 2-in. dia. Direct Push  
HAMMER TYPE: Automatic Trip  
RIG TYPE: GP6600  
DRILLED BY: Vironex, Joel  
LOGGED BY: Russell Carter

## LOG OF B-3

### Buttner Property Oakland, California



| DEPTH, ft | MATERIAL SYMBOL | SAMPLE NO. | SAMPLER TYPE | SAMPLER BLOW COUNT/<br>PRESSURE | OVM/PID (ppm) | LOCATION:<br><br>SURFACE EL: ft +/- (rel. MSL datum) | MATERIAL DESCRIPTION  | OTHER TESTS |
|-----------|-----------------|------------|--------------|---------------------------------|---------------|--|---|-------------|
|           |                 | B-4a@      |              |                                 | 1.6           |  | Asphalt   |             |
|           |                 | B-4a@      |              |                                 |               |  | Clayey GRAVEL with sand (GC): loose, light brown, dry to moist, slight earthy odor, no staining                 |             |
|           |                 | B-4a@      |              |                                 | 1.7           |  | Poorly-graded SAND (SP): loose to medium dense, dark brown, moist, slight earthy odor, no staining              |             |
|           |                 | B-4a@      |              |                                 | 1.3           |  |   |             |
| 5         |                 | B-4a@      |              |                                 | 1.4           |  | SILT with sand (ML): firm, dark brown, moist, no odor or staining   |             |
|           |                 | B-4a@      |              |                                 | 1.1           |  |   |             |
|           |                 | B-4a@      |              |                                 |               |  | Lean CLAY (CL): firm, dark brown, moist to wet, some occasional sand, slight earthy odor<br>no odor no staining |             |
| 10        |                 | B-4a@      |              |                                 | 1.4           |  |   |             |
|           |                 | B-4a@      |              |                                 | 1.2           |  | firm, dark gray, moist, slight motor oil odor, no staining  |             |
|           |                 | B-4a@      |              |                                 |               |  | strong motor oil odor, no staining  |             |
|           |                 | B-4a@      |              |                                 | 113.9         |  |   |             |
|           |                 | B-4a@      |              |                                 | 32.9          |  |   |             |
| 15        |                 | B-4a@      |              |                                 | 26.7          |  | stiff, some brown gray mottling, motor oil odor   |             |
|           |                 | B-4a@      |              |                                 | 4.3           |  |   |             |
|           |                 | B-4a@      |              |                                 |               |  | soft, gray, wet, no odor  |             |
|           |                 | B-4a@      |              |                                 | 2             |  | very stiff, some black mottling, no odor  |             |
| 20        |                 | B-4a@      |              |                                 |               |  | END OF BORING: 20 FT  |             |

BORING DEPTH: 20.0 ft  
DEPTH TO WATER: 11.9 ft

COMPLETION DATE: July 27, 2009  
NOTES: 1. Terms and symbols defined on Plate B-1.

DRILLING METHOD: 2-in. dia. Direct Push  
HAMMER TYPE: Automatic Trip  
RIG TYPE: GP6600  
DRILLED BY: Vironex, Joel  
LOGGED BY: Russell Carter

## LOG OF B-4a

### Buttner Property

### Oakland, California



| DEPTH, ft | MATERIAL SYMBOL | SAMPLE NO. | SAMPLER TYPE | SAMPLER BLOW COUNT/<br>PRESSURE | OVM/PID (ppm) | LOCATION:<br>SURFACE EL: ft +/- (rel. MSL datum) | MATERIAL DESCRIPTION  | OTHER TESTS |
|-----------|-----------------|------------|--------------|---------------------------------|---------------|--|---|-------------|
|           |                 | B-5@0      |              |                                 |               |  | Asphalt   |             |
|           |                 | B-5@1      |              |                                 | 0.2           |  | Poorly-graded GRAVEL with sand (GP): loose, light brown, moist, no odor or staining |             |
|           |                 | B-5@2      |              |                                 | 0.2           |  | SILT with sand (ML): soft, brown, moist, no odor or staining                        |             |
|           |                 | B-5@2      |              |                                 | 0.9           |  |   |             |
|           |                 | B-5@3      |              |                                 | 1.1           |  |   |             |
| 5         |                 | B-5@5      |              |                                 | 0.7           |  | Silty CLAY (CL-ML): very soft, brown, moist to wet, no odor or staining             |             |
|           |                 | B-5@7      |              |                                 | 3.9           |  | Lean CLAY (CL): stiff, brown, moist, some gray mottling, motor oil odor             |             |
|           |                 | B-5@7      |              |                                 | 0.1           |  | dry to moist, some gray mottling, no odor   |             |
| 10        |                 | B-5@11     |              |                                 | 2.9           |  |   |             |
|           |                 | B-5@11     |              |                                 | 76.9          |  | some gray mottling, strong motor oil odor   |             |
|           |                 | B-5@11     |              |                                 | 40.2          |  |   |             |
|           |                 | B-5@11     |              |                                 | 9.3           |  | no odor   |             |
| 15        |                 | B-5@11     |              |                                 | 0.7           |  | END OF BORING: 15 FT  |             |

BORING DEPTH: 15.0 ft  
DEPTH TO WATER: 11.3 ft

COMPLETION DATE: July 27, 2009  
NOTES: 1. Terms and symbols defined on Plate B-1.

DRILLING METHOD: 2-in. dia. Direct Push  
HAMMER TYPE: Automatic Trip  
RIG TYPE: GP6600  
DRILLED BY: Vironex, Joel  
LOGGED BY: Russell Carter

## LOG OF B-5

### Buttner Property

### Oakland, California



| DEPTH, ft | MATERIAL SYMBOL | SAMPLE NO. | SAMPLER TYPE | SAMPLER BLOW COUNT/<br>PRESSURE | OVM/PID (ppm) | LOCATION:<br><br>SURFACE EL: ft +/- (rel. MSL datum) | MATERIAL DESCRIPTION  | OTHER TESTS |
|-----------|-----------------|------------|--------------|---------------------------------|---------------|--|---|-------------|
| 0         |                 | B-6@0      |              |                                 |               |  | Asphalt   |             |
| 0.4       |                 | B-6@0.4    |              |                                 |               |  | Poorly-graded GRAVEL with sand (GP): loose, brown, moist, no odor or staining |             |
| 22.9      |                 | B-6@22.9   |              |                                 |               |  |   |             |
| 1.2       |                 |            |              |                                 |               |  | Silty CLAY (CL-ML): soft to firm, brown, moist, no odor or staining           |             |
| 1.9       |                 | B-6@1.9    |              |                                 |               |  |   |             |
| 3.1       |                 |            |              |                                 |               |  | Lean CLAY (CL): firm, brown, moist, some red and dark brown mottling no odor  |             |
| 0.9       |                 | B-6@7.0    |              |                                 |               |  |   |             |
| 10.2      |                 | B-6@10.2   |              |                                 |               |  | motor oil odor, no staining   |             |
| 90.1      |                 | B-6@10.1   |              |                                 |               |  | some gray mottling, strong motor oil odor                                     |             |
| 84.3      |                 |            |              |                                 |               |  |   |             |
| 10.4      |                 | B-6@10.4   |              |                                 |               |  | some gray mottling, very slight motor oil odor                                |             |
| 3.2       |                 |            |              |                                 |               |  |   |             |
| 0.1       |                 | B-6@10.1   |              |                                 |               |  | some gray mottling, no odor   |             |
| 0.3       |                 |            |              |                                 |               |  |   |             |
| 20        |                 |            |              |                                 |               |  | END OF BORING: 20 FT  |             |

BORING DEPTH: 20.0 ft  
DEPTH TO WATER: 19.1 ft

COMPLETION DATE: July 27, 2009  
NOTES: 1. Terms and symbols defined on Plate B-1.

DRILLING METHOD: 2-in. dia. Direct Push  
HAMMER TYPE: Automatic Trip  
RIG TYPE: GP6600  
DRILLED BY: Vironex, Joel  
LOGGED BY: Russell Carter

## LOG OF B-6

### Buttner Property

### Oakland, California



| DEPTH, ft | MATERIAL SYMBOL | SAMPLE NO. | SAMPLER TYPE | SAMPLER BLOW COUNT/<br>PRESSURE | OVM/PID (ppm) | LOCATION:<br>SURFACE EL: ft +/- (rel. MSL datum) | MATERIAL DESCRIPTION  | OTHER TESTS |
|-----------|-----------------|------------|--------------|---------------------------------|---------------|--|---|-------------|
|           |                 | B-7@0      |              |                                 |               |  | Asphalt   |             |
|           |                 | B-7@1      |              |                                 | 0.1           |  | Clayey GRAVEL with sand (GC): loose, light brown, moist, no odor or staining              |             |
|           |                 | B-7@2      |              |                                 | 0.1           |  | no odor or staining   |             |
|           |                 | B-7@3      |              |                                 | 0.5           |  | no odor or staining   |             |
| 5         |                 | B-7@5      |              |                                 |               |  | Lean CLAY (CL): soft, dark brown, moist, occasional sand and gravels, no odor or staining |             |
|           |                 | B-7@7      |              |                                 | 0.7           |  |   |             |
|           |                 | B-7@7      |              |                                 | 1.9           |  |   |             |
|           |                 | B-7@1      |              |                                 | 2.3           |  | firm, brown, moist, some gray mottling, slight motor oil odor                             |             |
| 10        |                 | B-7@1      |              |                                 | 4.7           |  |   |             |
|           |                 | B-7@1      |              |                                 | 6.6           |  | firm, gray, dry, some dark brown mottling, stronger motor oil odor                        |             |
|           |                 | B-7@1      |              |                                 | 5.3           |  |   |             |
|           |                 | B-7@1      |              |                                 | 0.7           |  | moist, no mottling, no odor or staining   |             |
| 15        |                 |            |              |                                 |               |  | END OF BORING: 15 FT  |             |

BORING DEPTH: 15.0 ft  
DEPTH TO WATER: 11.2 ft

COMPLETION DATE: July 27, 2009  
NOTES: 1. Terms and symbols defined on Plate B-1.

DRILLING METHOD: 2-in. dia. Direct Push  
HAMMER TYPE: Automatic Trip  
RIG TYPE: GP6600  
DRILLED BY: Vironex, Joel  
LOGGED BY: Russell Carter

## LOG OF B-7

### Buttner Property

### Oakland, California



| DEPTH, ft | MATERIAL SYMBOL | SAMPLE NO. | SAMPLER TYPE | SAMPLER BLOW COUNT/<br>PRESSURE | OVM/PID (ppm) | LOCATION:<br><br>SURFACE EL: ft +/- (rel. MSL datum) | MATERIAL DESCRIPTION   | OTHER TESTS |
|-----------|-----------------|------------|--------------|---------------------------------|---------------|--|--|-------------|
|           |                 | B-8@0      |              |                                 |               |  | Asphalt  |             |
|           |                 | B-8@0.6    |              |                                 | 0.6           |  | Silty GRAVEL with sand (GM): loose, light brown, moist, no odor or staining      |             |
|           |                 | B-8@1.4    |              |                                 | 0.4           |  |  |             |
|           |                 | B-8@2.2    |              |                                 | 0.9           |  |  |             |
|           |                 | B-8@3.0    |              |                                 | 6.4           |  | Lean CLAY (CL): firm, brown, moist, slight motor oil odor, no staining           |             |
| 5         |                 | B-8@3.0    |              |                                 | 10.9          |  |  |             |
|           |                 | B-8@7.0    |              |                                 | 13            |  | some gray mottling, motor oil odor   |             |
| 10        |                 | B-8@11.0   |              |                                 | 11            |  | soft, gray, moist, motor oil odor, no staining                                   |             |
|           |                 | B-8@11.0   |              |                                 | 10            |  |  |             |
|           |                 | B-8@11.0   |              |                                 | 9.3           |  |  |             |
| 15        |                 | B-8@15.0   |              |                                 | 6.1           |  | Lean CLAY with sand (CL): firm, gray, moist, some green staining, motor oil odor |             |
|           |                 | B-8@15.0   |              |                                 | 5.9           |  |  |             |
|           |                 | B-8@15.0   |              |                                 | 3.2           |  | very slight motor oil odor   |             |
| 20        |                 | B-8@20.0   |              |                                 | 1             |  | brown, no odor or staining   |             |
|           |                 |            |              |                                 |               |  | END OF BORING: 20 FT   |             |

BORING DEPTH: 20.0 ft  
DEPTH TO WATER: 11.5 ft

COMPLETION DATE: July 27, 2009  
NOTES: 1. Terms and symbols defined on Plate B-1.

DRILLING METHOD: 2-in. dia. Direct Push  
HAMMER TYPE: Automatic Trip  
RIG TYPE: GP6600  
DRILLED BY: Vironex, Joel  
LOGGED BY: Russell Carter

## LOG OF B-8

### Buttner Property

### Oakland, California



| DEPTH, ft | MATERIAL SYMBOL | SAMPLE NO. | SAMPLER TYPE | SAMPLER BLOW COUNT/<br>PRESSURE | OVM/PID (ppm) | LOCATION:<br><br>SURFACE EL: ft +/- (rel. MSL datum) | MATERIAL DESCRIPTION  | OTHER TESTS |
|-----------|-----------------|------------|--------------|---------------------------------|---------------|--|---|-------------|
|           |                 | B-9@0      |              |                                 |               |  | Asphalt   |             |
|           |                 | B-9@0.1    |              |                                 |               |  | Clayey GRAVEL with sand (GC): dense, brown, moist, no odor or staining                          |             |
|           |                 | B-9@0.1    |              |                                 |               |  | Lean CLAY with sand (CL): soft to firm, reddish brown, moist, some dark brown mottling, no odor |             |
|           |                 | B-9@2      |              |                                 |               |  | dark brown  |             |
| 5         |                 | B-9@5      |              |                                 |               |  | Lean CLAY (CL): soft, dark brown, moist to wet, no odor or staining                             |             |
|           |                 | B-9@7      |              |                                 |               |  | firm, brown, moist, no odor or staining   |             |
| 10        |                 | B-9@10     |              |                                 |               |  | slight motor oil odor no staining   |             |
|           |                 | B-9@11     |              |                                 |               |  | gray, some brown mottling, strong motor oil odor  |             |
|           |                 | B-9@13     |              |                                 |               |  |   |             |
| 15        |                 | B-9@15     |              |                                 |               |  | moist to wet, some gray mottling, strong motor oil odor   |             |
|           |                 | B-9@17     |              |                                 |               |  |   |             |
|           |                 | B-9@19     |              |                                 |               |  | moist to wet, some gray mottling, no odor   |             |
| 20        |                 | B-9@20     |              |                                 |               |  | END OF BORING: 20 FT  |             |

BORING DEPTH: 20.0 ft  
DEPTH TO WATER: 15.3 ft

COMPLETION DATE: July 27, 2009  
NOTES: 1. Terms and symbols defined on Plate B-1.

DRILLING METHOD: 2-in. dia. Direct Push  
HAMMER TYPE: Automatic Trip  
RIG TYPE: GP6600  
DRILLED BY: Vironex, Joel  
LOGGED BY: Russell Carter

## LOG OF B-9

### Buttner Property Oakland, California





| DEPTH, ft | MATERIAL SYMBOL | SAMPLE NO. | SAMPLER TYPE | SAMPLER BLOW COUNT/<br>PRESSURE | OVM/PID (ppm) | LOCATION:<br><br>SURFACE EL: ft +/- (rel. MSL datum) | MATERIAL DESCRIPTION  | OTHER TESTS |
|-----------|-----------------|------------|--------------|---------------------------------|---------------|--|---|-------------|
|           |                 | B-10@      |              |                                 |               |  | Asphalt   |             |
|           |                 | B-10@      |              |                                 |               |  | 0 Silty GRAVEL with sand (GM): loose, brown, moist, some wood chips |             |
|           |                 | B-10@      |              |                                 |               |  | 0.1 SILT with sand (ML): loose, brown, moist, no odor or staining   |             |
|           |                 |            |              |                                 |               |  | 0.1   |             |
|           |                 |            |              |                                 |               |  | 0.3   |             |
| 5         |                 | B-10@      |              |                                 |               |  | Lean CLAY (CL): stiff, brown, moist, no odor or staining            |             |
|           |                 |            |              |                                 |               |  | 0.2   |             |
|           |                 |            |              |                                 |               |  | 0.3   |             |
|           |                 | B-10@7     |              |                                 |               |  |   |             |
|           |                 |            |              |                                 |               |  | 0.4   |             |
| 10        |                 | B-10@      |              |                                 |               |  | some gray mottling  |             |
|           |                 |            |              |                                 |               |  | slight motor oil odor   |             |
|           |                 | B-10@      |              |                                 |               |  | 12.9 $\nabla$ gray  |             |
|           |                 |            |              |                                 |               |  | 13.1  |             |
|           |                 |            |              |                                 |               |  | some brown mottling   |             |
| 15        |                 | B-10@      |              |                                 |               |  | 1.2 gray, no odor or staining                                       |             |
|           |                 |            |              |                                 |               |  | END OF BORING: 15 FT  |             |

BORING DEPTH: 15.0 ft  
DEPTH TO WATER: 11.7 ft

COMPLETION DATE: July 27, 2009  
NOTES: 1. Terms and symbols defined on Plate B-1.

DRILLING METHOD: 2-in. dia. Direct Push  
HAMMER TYPE: Automatic Trip  
RIG TYPE: GP6600  
DRILLED BY: Vironex, Joel  
LOGGED BY: Russell Carter

## LOG OF B-10

### Buttner Property Oakland, California



| DEPTH, ft | MATERIAL SYMBOL | SAMPLE NO. | SAMPLER TYPE | SAMPLER BLOW COUNT/<br>PRESSURE | OVM/PID (ppm) | LOCATION:<br>SURFACE EL: ft +/- (rel. MSL datum) | MATERIAL DESCRIPTION  | OTHER TESTS |
|-----------|-----------------|------------|--------------|---------------------------------|---------------|--|---|-------------|
|           |                 |            |              |                                 |               |  | Asphalt   |             |
|           |                 | B-11@      |              |                                 |               |  | 0.3-1.0 Feet: No Recovery   |             |
|           |                 | B-11@      |              |                                 | 0.9           |  | Silty GRAVEL with sand (GM): loose, light brown, moist, no odor or staining |             |
|           |                 |            |              |                                 | 0             |  |   |             |
| 5         |                 | B-11@      |              |                                 | 0.2           |  | SILT with sand (ML): soft, dark brown, moist, no odor or staining           |             |
|           |                 |            |              |                                 | 0.3           |  |   |             |
|           |                 | B-11@7     |              |                                 | 0.2           |  | Lean CLAY (CL): firm, brown, dry, no odor or staining                       |             |
| 10        |                 | B-11@9     |              |                                 | 0.1           |  | some red gray mottling, no odor   |             |
|           |                 | B-11@11    |              |                                 | 0.3           |  | stiff, moist, some red/gray mottling, very slight petroleum odor            |             |
| 15        |                 | B-11@13    |              |                                 |               |  | stiff, brown, moist, no odor  |             |
|           |                 |            |              |                                 |               |  | END OF BORING: 15 FT  |             |

BORING DEPTH: 15.0 ft  
DEPTH TO WATER: Not Encountered

COMPLETION DATE: July 27, 2009  
NOTES: 1. Terms and symbols defined on Plate B-1.

DRILLING METHOD: 2-in. dia. Direct Push  
HAMMER TYPE: Automatic Trip  
RIG TYPE: GP6600  
DRILLED BY: Vironex, Joel  
LOGGED BY: Russell Carter

## LOG OF B-11

### Buttner Property

### Oakland, California



| DEPTH, ft | MATERIAL SYMBOL | SAMPLE NO. | SAMPLER TYPE | SAMPLER BLOW COUNT/<br>PRESSURE | OVM/PID (ppm) | LOCATION:<br><br>SURFACE EL: ft +/- (rel. MSL datum) | MATERIAL DESCRIPTION  | OTHER TESTS |
|-----------|-----------------|------------|--------------|---------------------------------|---------------|--|---|-------------|
|           |                 | B-12@0     |              |                                 | 0             |  | Asphalt   |             |
|           |                 | B-12@      |              |                                 | 0.2           |  | Poorly-graded SAND (SP): loose, brown, moist, medium grained, some occasional gravel, no odor or staining |             |
|           |                 | B-12@      |              |                                 | 0             |  | SILT with sand (ML): firm, brown, moist, no odor or staining  |             |
| 5         |                 | B-12@      |              |                                 | 0.2           |  | Lean CLAY (CL): firm, brown, dry to moist, some occasional sand, no odor or staining                      |             |
|           |                 | B-12@7     |              |                                 | 1.3           |  | no odor or staining   |             |
| 10        |                 | B-12@      |              |                                 | 20.9          |  | some gray mottling, no odor   |             |
|           |                 | B-12@      |              |                                 | 17            |  | gray, some black mottling, slight motor oil odor  |             |
| 15        |                 | B-12@      |              |                                 | 1.1           |  | brown, some gray mottling, no odor  |             |
|           |                 |            |              |                                 |               |  | END OF BORING: 15 FT  |             |

BORING DEPTH: 15.0 ft  
DEPTH TO WATER: 11.2 ft

COMPLETION DATE: July 27, 2009  
NOTES: 1. Terms and symbols defined on Plate B-1.

DRILLING METHOD: 2-in. dia. Direct Push  
HAMMER TYPE: Automatic Trip  
RIG TYPE: GP6600  
DRILLED BY: Vironex, Joel  
LOGGED BY: Russell Carter

## LOG OF B-12

### Buttner Property Oakland, California

## Porosity Determination:

### Specimen ID:

|           |             |
|-----------|-------------|
| Project # | 609.004 T11 |
| Boring #  | 4           |
| Depth     | 0 to 5 ft   |

### Specimen Volume:

|          |      |        |
|----------|------|--------|
| Diameter | 1.64 | inches |
| Length   | 4.78 | inches |

|            |          |                 |
|------------|----------|-----------------|
| Volume (V) | 0.005843 | ft <sup>3</sup> |
|------------|----------|-----------------|

### Volume of Solids:

|                 |          |       |
|-----------------|----------|-------|
| Weight Dry Soil | 278      | grams |
| or              | 0.612875 | lbs   |

|                  |       |
|------------------|-------|
| Specific Gravity | 2.636 |
|------------------|-------|

|             |          |
|-------------|----------|
| Volume (Vs) | 0.003726 |
|-------------|----------|

### Volume of Voids:

|        |          |
|--------|----------|
| V - Vs | 0.002117 |
|--------|----------|

### Porosity:

|   |             |   |
|---|-------------|---|
| N | <u>36.2</u> | % |
|---|-------------|---|

## Porosity Determination:

### Specimen ID:

|           |             |
|-----------|-------------|
| Project # | 609.004 T11 |
| Boring #  | B-5         |
| Depth     | 5-10 ft     |

### Specimen Volume:

|          |      |        |
|----------|------|--------|
| Diameter | 1.32 | inches |
| Length   | 3.60 | inches |

|            |          |                 |
|------------|----------|-----------------|
| Volume (V) | 0.002851 | ft <sup>3</sup> |
|------------|----------|-----------------|

### Volume of Solids:

|                 |         |       |
|-----------------|---------|-------|
| Weight Dry Soil | 128.7   | grams |
| or              | 0.28373 | lbs   |

|                  |       |
|------------------|-------|
| Specific Gravity | 2.703 |
|------------------|-------|

|             |          |                 |
|-------------|----------|-----------------|
| Volume (Vs) | 0.001682 | ft <sup>3</sup> |
|-------------|----------|-----------------|

### Volume of Voids:

|        |          |                 |
|--------|----------|-----------------|
| V - Vs | 0.001169 | ft <sup>3</sup> |
|--------|----------|-----------------|

### Porosity:

|   |      |   |
|---|------|---|
| N | 41.0 | % |
|---|------|---|

## Porosity Determination:

### Specimen ID:

|           |             |
|-----------|-------------|
| Project # | 609.004 T11 |
| Boring #  | B-4a        |
| Depth     | 10-15 ft    |

### Specimen Volume:

|          |      |        |
|----------|------|--------|
| Diameter | 1.42 | inches |
| Length   | 3.19 | inches |

|            |          |                 |
|------------|----------|-----------------|
| Volume (V) | 0.002924 | ft <sup>3</sup> |
|------------|----------|-----------------|

### Volume of Solids:

|                 |          |       |
|-----------------|----------|-------|
| Weight Dry Soil | 133.2    | grams |
| or              | 0.293651 | lbs   |

|                  |       |
|------------------|-------|
| Specific Gravity | 2.638 |
|------------------|-------|

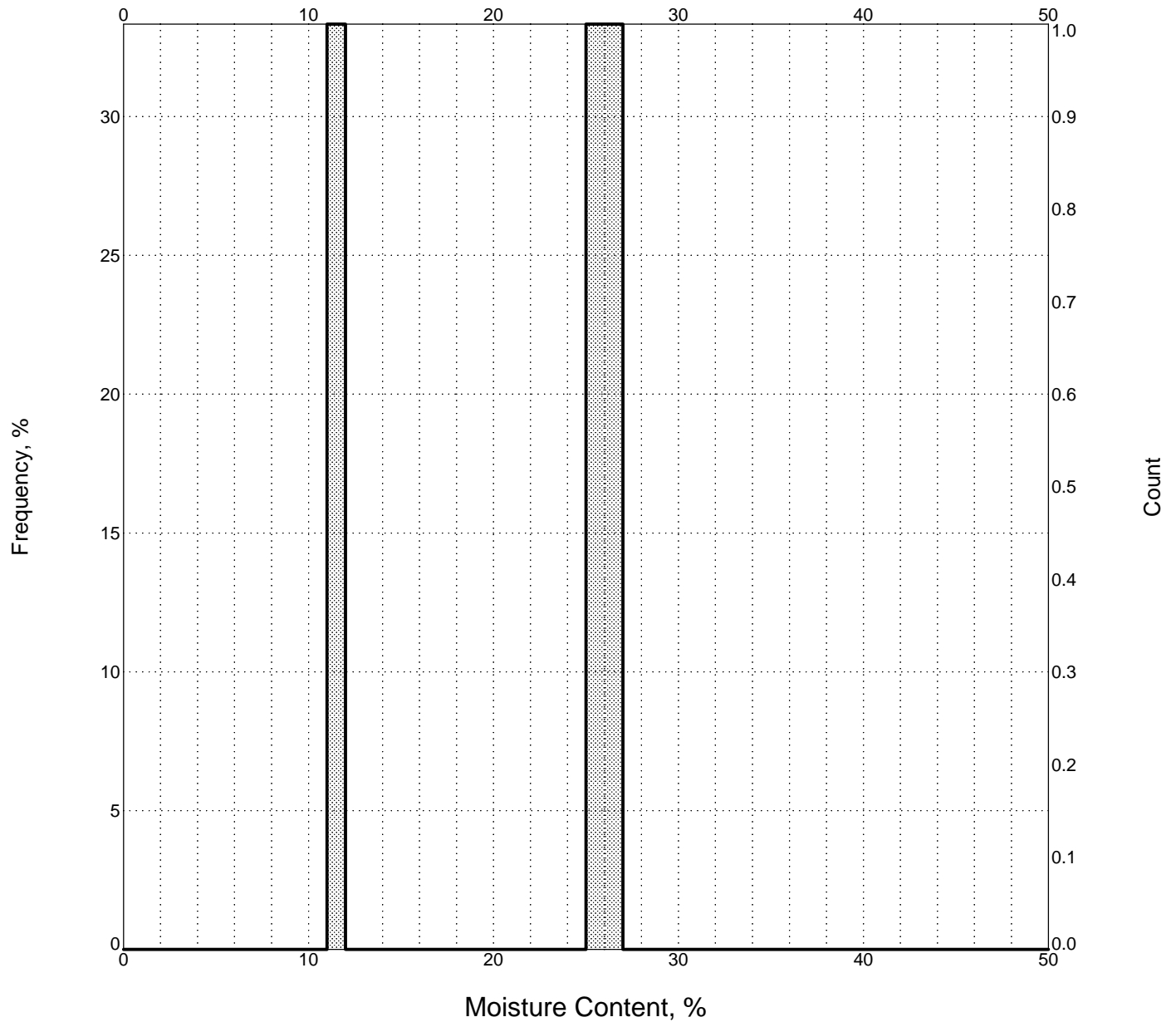
|             |          |                 |
|-------------|----------|-----------------|
| Volume (Vs) | 0.001784 | ft <sup>3</sup> |
|-------------|----------|-----------------|

### Volume of Voids:

|        |         |                 |
|--------|---------|-----------------|
| V - Vs | 0.00114 | ft <sup>3</sup> |
|--------|---------|-----------------|

### Porosity:

|   |      |   |
|---|------|---|
| N | 39.0 | % |
|---|------|---|

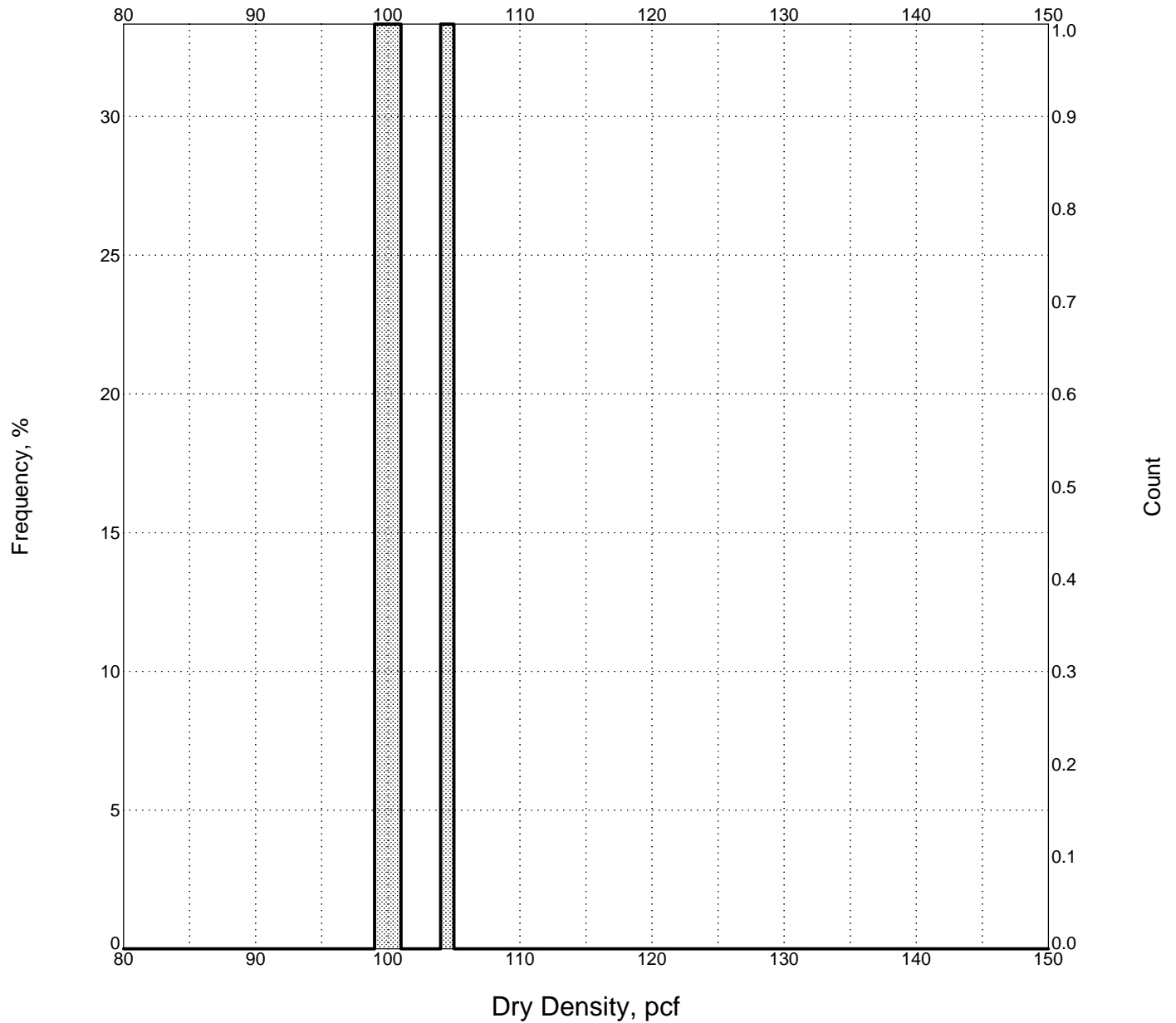


**Point Id B-4a**

Number of Tests: 3  
 Average: 21  
 Minimum: 12  
 Maximum: 26  
 Standard Dev: 8

**MOISTURE CONTENT**  
**2250 TELEGRAPH AVENUE**

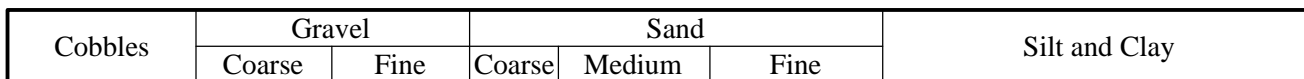




**Point Id B-4a**

Number of Tests: 3  
 Average: 102  
 Minimum: 100  
 Maximum: 105  
 Standard Dev: 3

**DRY DENSITY**  
**2250 TELEGRAPH AVENUE**



| Key Symbol | Boring No. | Depth (Feet) | % Passing No. 200 Sieve | % Passing No. 4 Sieve | Sample Description     | USCS |
|------------|------------|--------------|-------------------------|-----------------------|------------------------|------|
| ●          | B-04       | 0.0          | 30                      | 97                    | Dark brown clayey SAND | SC   |
| ☒          | B-05       | 5.0          | 94                      |                       | Dark brown fat CLAY    | CH   |
| ▲          | B-4a       | 10.0         | 98                      |                       | Olive brown fat CLAY   | CH   |
|            |            |              |                         |                       |                        |      |
|            |            |              |                         |                       |                        |      |
|            |            |              |                         |                       |                        |      |
|            |            |              |                         |                       |                        |      |
|            |            |              |                         |                       |                        |      |



DWG FILE:

**2250 TELEGRAPH AVENUE**  
**Oakland, California**

609.004T11

**APPENDIX C**  
**LABORATORY ANALYTICAL REPORTS**





**Curtis & Tompkins, Ltd.**  
Analytical Laboratories, Since 1878





Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

**Laboratory Job Number 213901  
ANALYTICAL REPORT**

Fugro West Inc.  
1000 Broadway  
Oakland, CA 94607

Project : 609.004  
Location : 2250 Telgraph Av. Oakland  
Level : II

| <u>Sample ID</u> | <u>Lab ID</u> |
|------------------|---------------|
| MW-1             | 213901-001    |
| MW-2             | 213901-002    |
| MW-3             | 213901-003    |
| MW-4             | 213901-004    |
| MW-5             | 213901-005    |
| TRIP BLANK       | 213901-006    |

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature:   
Project Manager

Date: 08/07/2009

NELAP # 01107CA

### CASE NARRATIVE

Laboratory number: 213901  
Client: Fugro West Inc.  
Project: 609.004  
Location: 2250 Telgraph Av. Oakland  
Request Date: 07/31/09  
Samples Received: 07/31/09

This data package contains sample and QC results for five water samples, requested for the above referenced project on 07/31/09. The samples were received cold and intact.

**TPH-Extractables by GC (EPA 8015B):**

No analytical problems were encountered.

**Volatile Organics by GC/MS (EPA 8260B):**

No analytical problems were encountered.



## ES-F10 CHAIN OF CUSTODY

**PAGE 1 OF 1**

PROJECT NAME: 2250 Telegraph Avenue - Oakland

PROJECT NO.: 609.004

LAB: Curtis & Tompkins

PROJECT CONTACT: Karen Emery

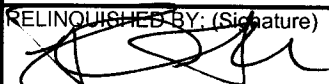
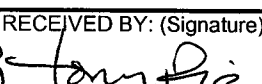
**TURNAROUND: 5 day TAT**

SAMPLED BY: Russell Carter

## ANALYSIS REQUESTED

[illegible]

## CHAIN OF CUSTODY RECORD

|  |                      |   |                      |
|--|----------------------|---|----------------------|
| RELINQUISHED BY: (Signature)<br> | DATE/TIME<br>7/31/13 | RECEIVED BY: (Signature)<br> | DATE/TIME<br>7/31/13 |
| RELINQUISHED BY: (Signature)   | DATE/TIME            | RECEIVED BY: (Signature)  | DATE/TIME            |
| RELINQUISHED BY: (Signature)   | DATE/TIME            | RECEIVED BY: (Signature)  | DATE/TIME            |
| RELINQUISHED BY: (Signature)   | DATE/TIME            | RECEIVED BY: (Signature)  | DATE/TIME            |

**COMMENTS & NOTES: USE QUOTATION # CT17200909MP WHEN INVOICING.**



**FUGRO WEST, INC.**

**1000 Broadway, Suite 440**

**Oakland, California 94607**

**Tel: 510.268.0461 Fax: 510.268.0545**

Approved by Glenn Young, AC 62 Manager, Fugro West, Inc. 10/13/06

Note: If this is a printed copy, please check the online QMS to ensure that it is the latest version.

# COOLER RECEIPT CHECKLIST



Curtis & Tompkins, Ltd.

Login # 213901 Date Received 7/31/09 Number of coolers 2  
 Client FUGRO Project 2250 TULAGAPIT AVE. - OXLEYNO

Date Opened 7/31/09 By (print) M. VILLANUEVA (sign) [Signature]  
 Date Logged in 7-31-09 By (print) Troy Windsor (sign) [Signature]

1. Did cooler come with a shipping slip (airbill, etc) YES ☒ NO  
 Shipping info \_\_\_\_\_

2A. Were custody seals present? ... ☐ YES (circle) on cooler on samples ☒ NO  
 How many \_\_\_\_\_ Name \_\_\_\_\_ Date \_\_\_\_\_

2B. Were custody seals intact upon arrival? \_\_\_\_\_ YES NO N/A

3. Were custody papers dry and intact when received? YES NO

4. Were custody papers filled out properly (ink, signed, etc)? YES NO

5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO

6. Indicate the packing in cooler: (if other, describe) \_\_\_\_\_

☒ Bubble Wrap ☐ Foam blocks ☐ Bags ☐ None  
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation:

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) \_\_\_\_\_

☒ Samples Received on ice & cold without a temperature blank

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? YES ☒ NO

If YES, what time were they transferred to freezer? \_\_\_\_\_

9. Did all bottles arrive unbroken/unopened? YES NO

10. Are samples in the appropriate containers for indicated tests? YES NO

11. Are sample labels present, in good condition and complete? YES NO

12. Do the sample labels agree with custody papers? YES NO

13. Was sufficient amount of sample sent for tests requested? YES NO

14. Are the samples appropriately preserved? YES NO N/A

15. Are bubbles > 6mm absent in VOA samples? YES NO N/A

16. Was the client contacted concerning this sample delivery? YES NO

If YES, Who was called? \_\_\_\_\_ By \_\_\_\_\_ Date: \_\_\_\_\_

## COMMENTS

REC'D 5 TRIP BLANKS NOT ON COC.  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

### Total Extractable Hydrocarbons

|           |                 |           |                           |
|-----------|-----------------|-----------|---------------------------|
| Lab #:    | 213901          | Location: | 2250 Telgraph Av. Oakland |
| Client:   | Fugro West Inc. | Prep:     | EPA 3520C                 |
| Project#: | 609.004         | Analysis: | EPA 8015B                 |
| Matrix:   | Water           | Sampled:  | 07/30/09                  |
| Units:    | ug/L            | Received: | 07/31/09                  |
| Diln Fac: | 1.000           | Prepared: | 08/03/09                  |
| Batch#:   | 153484          | Analyzed: | 08/04/09                  |

Field ID: MW-1      Lab ID: 213901-001  
 Type: SAMPLE      Cleanup Method: EPA 3630C

| Analyte           | Result | RL  |
|-------------------|--------|-----|
| Diesel C10-C24    | ND     | 50  |
| Motor Oil C24-C36 | ND     | 300 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 112  | 61-127 |

Field ID: MW-2      Lab ID: 213901-002  
 Type: SAMPLE      Cleanup Method: EPA 3630C

| Analyte           | Result | RL  |
|-------------------|--------|-----|
| Diesel C10-C24    | ND     | 50  |
| Motor Oil C24-C36 | ND     | 300 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 114  | 61-127 |

Field ID: MW-3      Lab ID: 213901-003  
 Type: SAMPLE      Cleanup Method: EPA 3630C

| Analyte           | Result | RL  |
|-------------------|--------|-----|
| Diesel C10-C24    | 71 Y   | 50  |
| Motor Oil C24-C36 | ND     | 300 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 108  | 61-127 |

Y= Sample exhibits chromatographic pattern which does not resemble standard  
 ND= Not Detected  
 RL= Reporting Limit

### Total Extractable Hydrocarbons

|           |                 |           |                           |
|-----------|-----------------|-----------|---------------------------|
| Lab #:    | 213901          | Location: | 2250 Telgraph Av. Oakland |
| Client:   | Fugro West Inc. | Prep:     | EPA 3520C                 |
| Project#: | 609.004         | Analysis: | EPA 8015B                 |
| Matrix:   | Water           | Sampled:  | 07/30/09                  |
| Units:    | ug/L            | Received: | 07/31/09                  |
| Diln Fac: | 1.000           | Prepared: | 08/03/09                  |
| Batch#:   | 153484          | Analyzed: | 08/04/09                  |

Field ID: MW-4                      Lab ID: 213901-004  
 Type: SAMPLE                      Cleanup Method: EPA 3630C

| Analyte           | Result  | RL  |
|-------------------|---------|-----|
| Diesel C10-C24    | 1,100 Y | 50  |
| Motor Oil C24-C36 | 1,300   | 300 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 87   | 61-127 |

Field ID: MW-5                      Lab ID: 213901-005  
 Type: SAMPLE                      Cleanup Method: EPA 3630C

| Analyte           | Result | RL  |
|-------------------|--------|-----|
| Diesel C10-C24    | ND     | 50  |
| Motor Oil C24-C36 | ND     | 300 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 104  | 61-127 |

Type: BLANK                      Cleanup Method: EPA 3630C  
 Lab ID: QC505977

| Analyte           | Result | RL  |
|-------------------|--------|-----|
| Diesel C10-C24    | ND     | 50  |
| Motor Oil C24-C36 | ND     | 300 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 106  | 61-127 |

Y= Sample exhibits chromatographic pattern which does not resemble standard  
 ND= Not Detected  
 RL= Reporting Limit

## Batch QC Report

| Total Extractable Hydrocarbons |                 |           |                           |
|--------------------------------|-----------------|-----------|---------------------------|
| Lab #:                         | 213901          | Location: | 2250 Telgraph Av. Oakland |
| Client:                        | Fugro West Inc. | Prep:     | EPA 3520C                 |
| Project#:                      | 609.004         | Analysis: | EPA 8015B                 |
| Matrix:                        | Water           | Batch#:   | 153484                    |
| Units:                         | ug/L            | Prepared: | 08/03/09                  |
| Diln Fac:                      | 1.000           | Analyzed: | 08/04/09                  |

Type: BS Cleanup Method: EPA 3630C  
Lab ID: QC505978

| Analyte        | Spiked | Result | %REC | Limits |
|----------------|--------|--------|------|--------|
| Diesel C10-C24 | 2,500  | 2,726  | 109  | 50-120 |

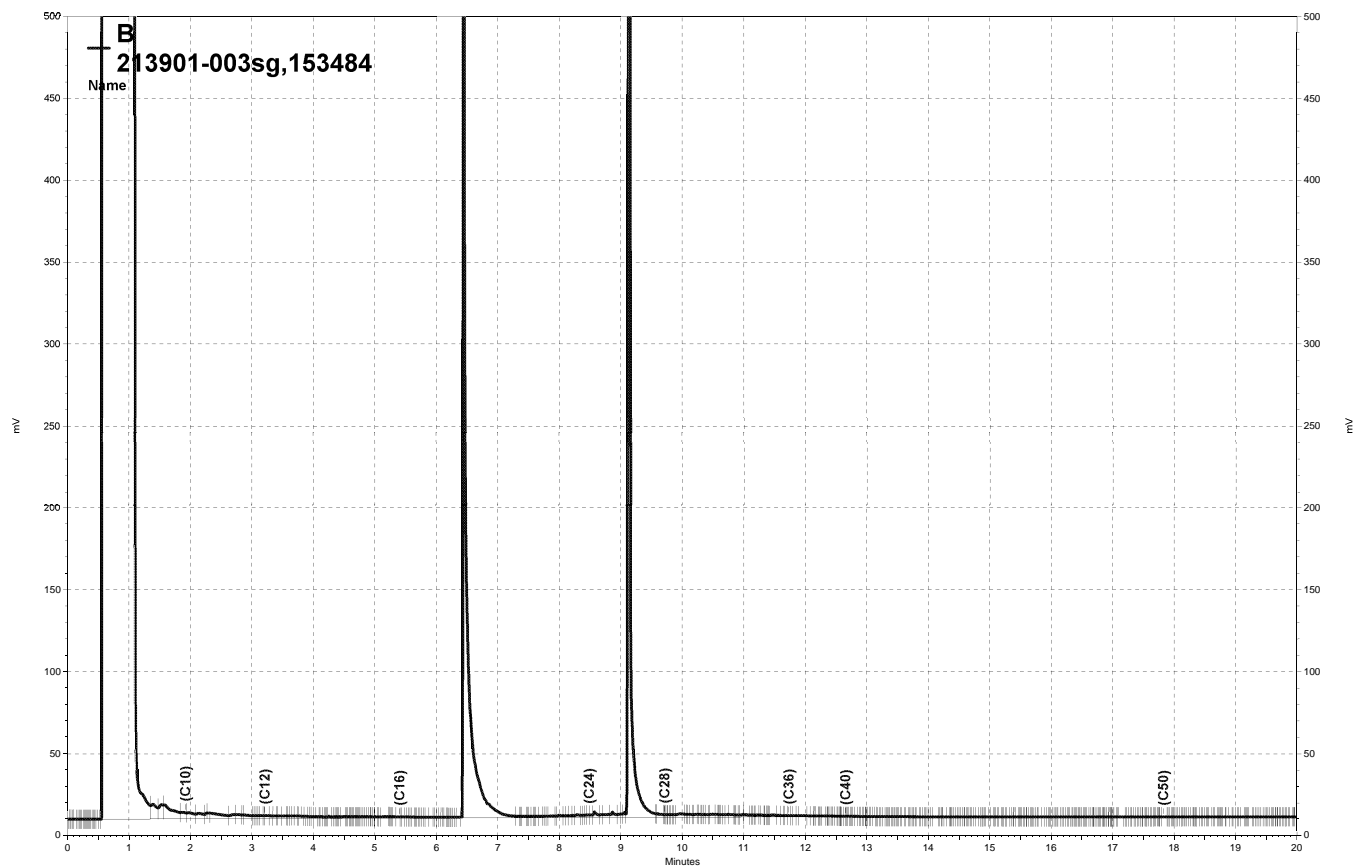
| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 102  | 61-127 |

Type: BSD Cleanup Method: EPA 3630C  
Lab ID: QC505979

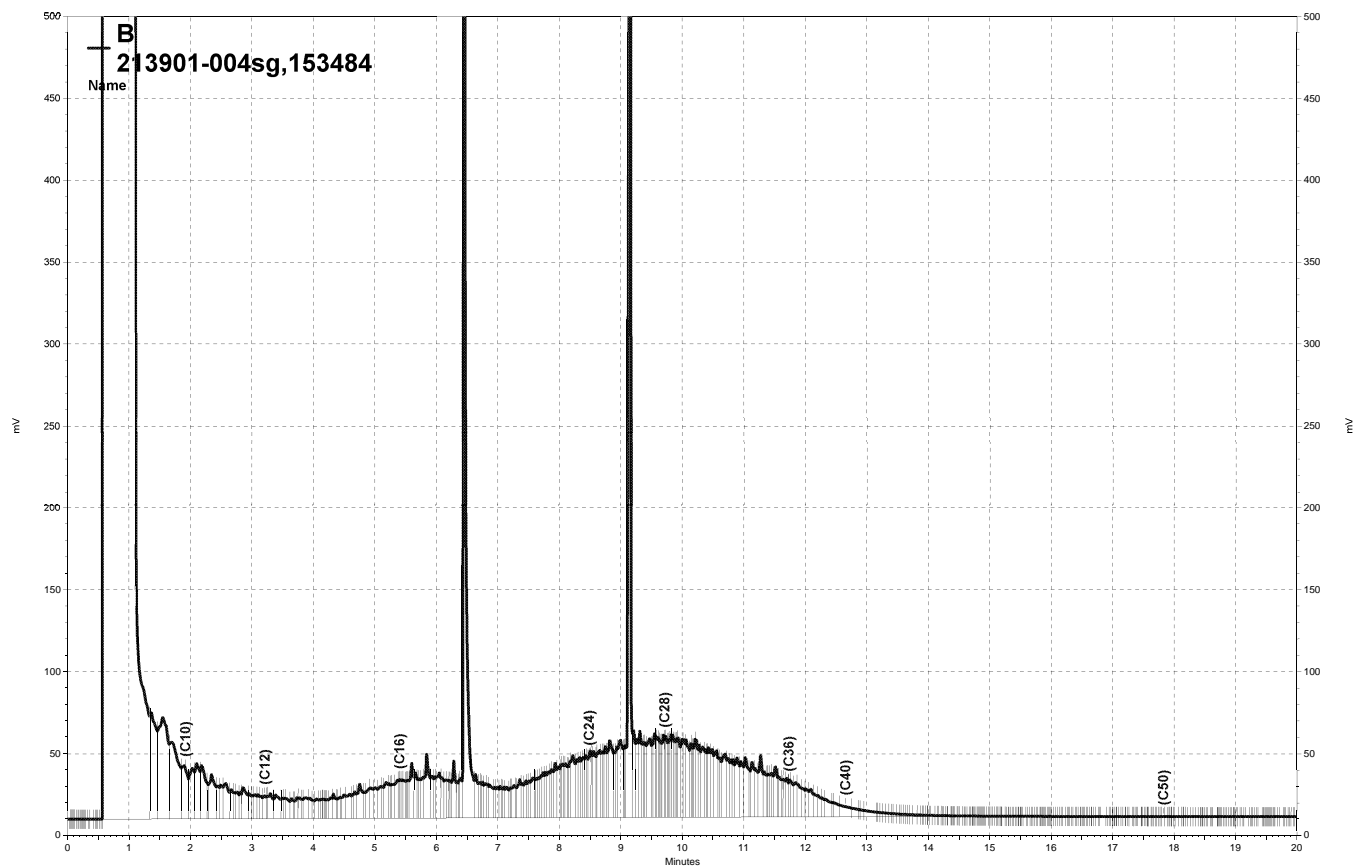
| Analyte        | Spiked | Result | %REC | Limits | RPD | Lim |
|----------------|--------|--------|------|--------|-----|-----|
| Diesel C10-C24 | 2,500  | 2,576  | 103  | 50-120 | 6   | 37  |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 96   | 61-127 |

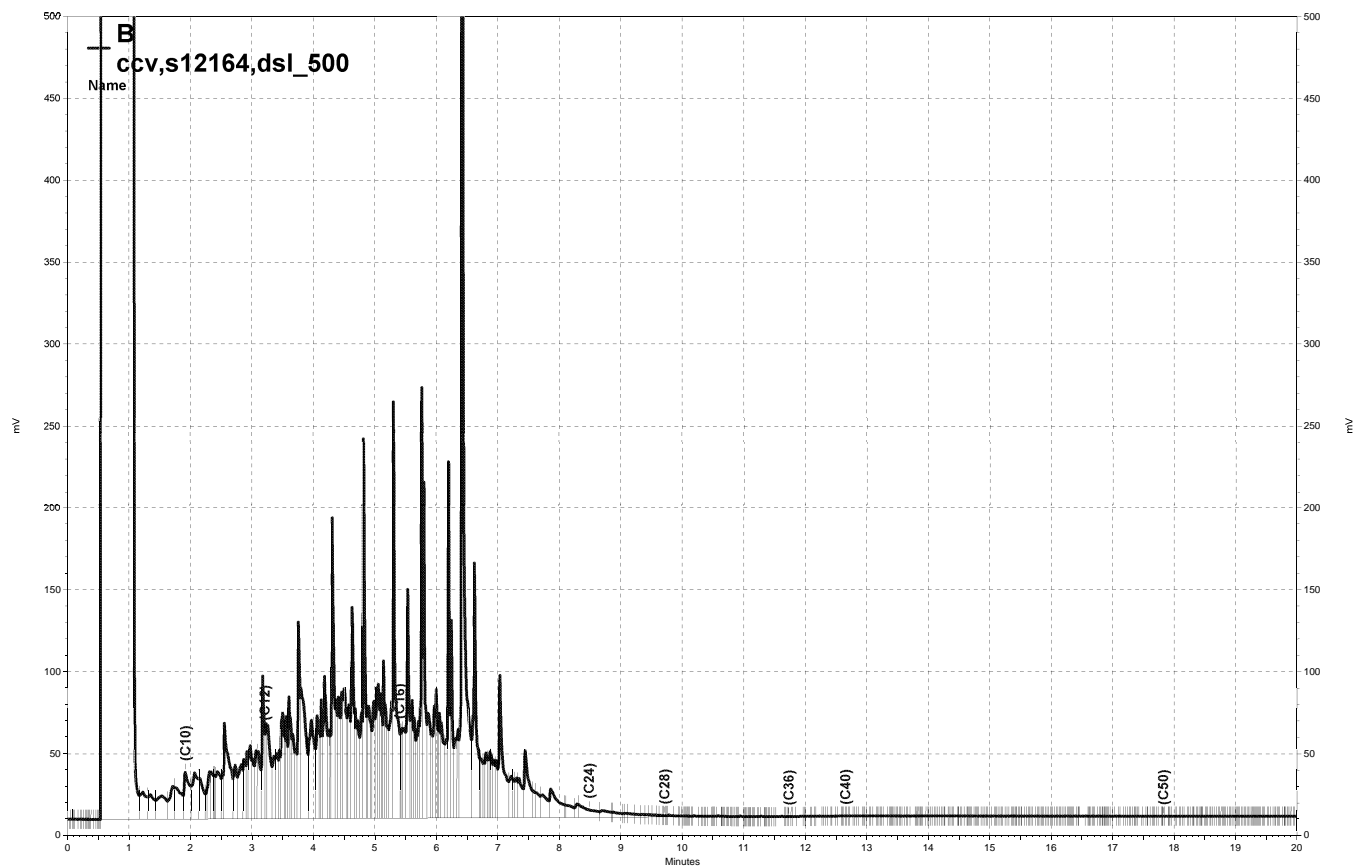
RPD= Relative Percent Difference



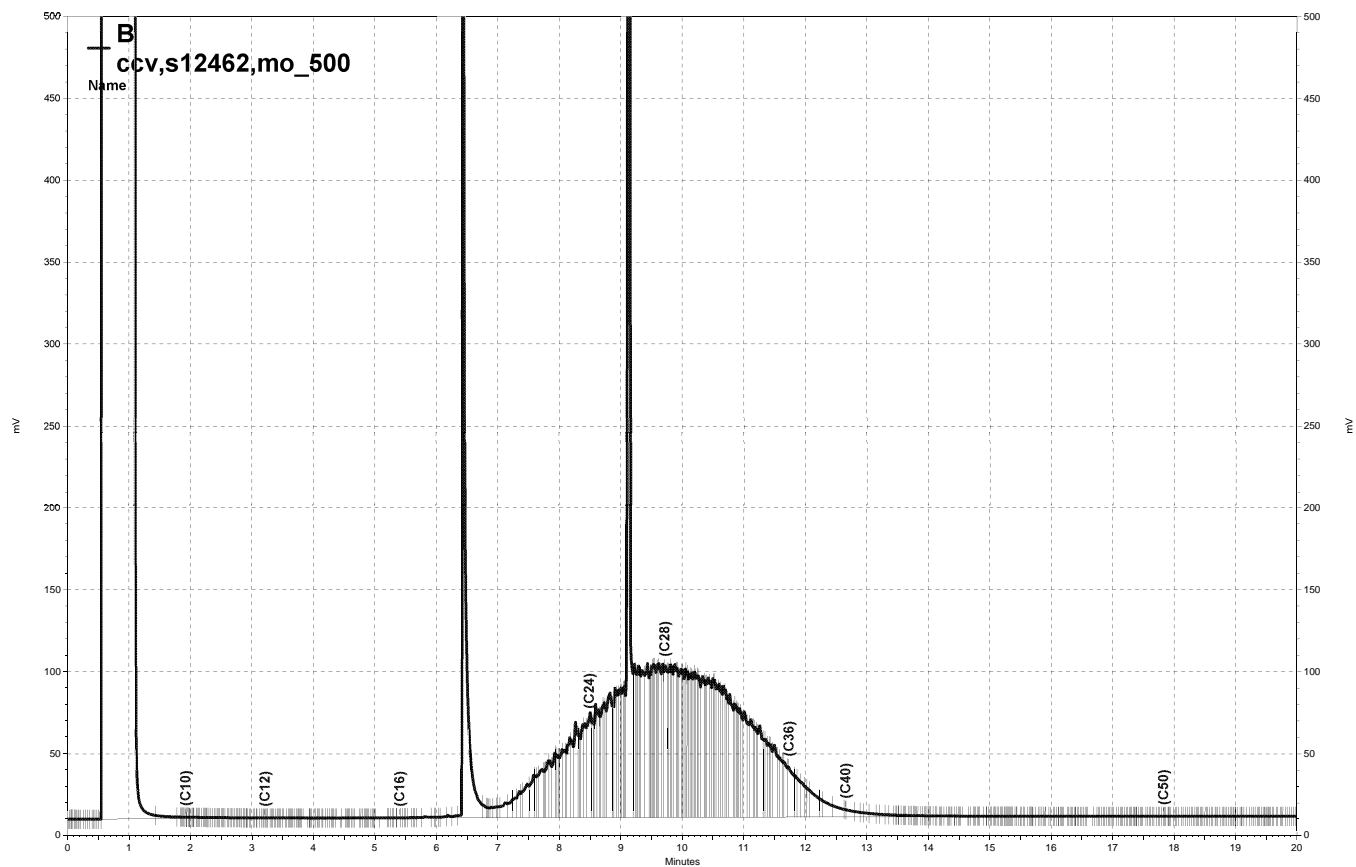
— \\Lims\gdrive\ezchrom\Projects\GC14B\Data\216b019, B







— \\Lims\gdrive\ezchrom\Projects\GC14B\Data\216b010, B



— \\Lims\gdrive\ezchrom\Projects\GC14B\Data\216b011, B

| Gasoline by GC/MS |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213901          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | MW-1            | Batch#:   | 153470                    |
| Lab ID:           | 213901-001      | Sampled:  | 07/30/09                  |
| Matrix:           | Water           | Received: | 07/31/09                  |
| Units:            | ug/L            | Analyzed: | 08/03/09                  |
| Diln Fac:         | 1.000           |           |                           |

| Analyte                       | Result | RL   |
|-------------------------------|--------|------|
| Gasoline C7-C12               | 160 Y  | 50   |
| tert-Butyl Alcohol (TBA)      | ND     | 10   |
| Isopropyl Ether (DIPE)        | ND     | 0.50 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 0.50 |
| Methyl tert-Amyl Ether (TAME) | ND     | 0.50 |
| MTBE                          | ND     | 0.50 |
| 1,2-Dichloroethane            | ND     | 0.50 |
| Benzene                       | ND     | 0.50 |
| Toluene                       | ND     | 0.50 |
| 1,2-Dibromoethane             | ND     | 0.50 |
| Ethylbenzene                  | ND     | 0.50 |
| m,p-Xylenes                   | ND     | 0.50 |
| o-Xylene                      | ND     | 0.50 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 98   | 80-122 |
| 1,2-Dichloroethane-d4 | 104  | 77-137 |
| Toluene-d8            | 99   | 80-120 |
| Bromofluorobenzene    | 105  | 80-125 |

Y= Sample exhibits chromatographic pattern which does not resemble standard  
 ND= Not Detected  
 RL= Reporting Limit

| Gasoline by GC/MS |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213901          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | MW-2            | Batch#:   | 153470                    |
| Lab ID:           | 213901-002      | Sampled:  | 07/30/09                  |
| Matrix:           | Water           | Received: | 07/31/09                  |
| Units:            | ug/L            | Analyzed: | 08/03/09                  |
| Diln Fac:         | 1.000           |           |                           |

| Analyte                       | Result | RL   |
|-------------------------------|--------|------|
| Gasoline C7-C12               | ND     | 50   |
| tert-Butyl Alcohol (TBA)      | ND     | 10   |
| Isopropyl Ether (DIPE)        | ND     | 0.50 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 0.50 |
| Methyl tert-Amyl Ether (TAME) | ND     | 0.50 |
| MTBE                          | ND     | 0.50 |
| 1,2-Dichloroethane            | ND     | 0.50 |
| Benzene                       | ND     | 0.50 |
| Toluene                       | ND     | 0.50 |
| 1,2-Dibromoethane             | ND     | 0.50 |
| Ethylbenzene                  | ND     | 0.50 |
| m,p-Xylenes                   | ND     | 0.50 |
| o-Xylene                      | ND     | 0.50 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 102  | 80-122 |
| 1,2-Dichloroethane-d4 | 106  | 77-137 |
| Toluene-d8            | 98   | 80-120 |
| Bromofluorobenzene    | 105  | 80-125 |

ND= Not Detected  
RL= Reporting Limit

| Gasoline by GC/MS |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213901          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | MW-3            | Batch#:   | 153587                    |
| Lab ID:           | 213901-003      | Sampled:  | 07/30/09                  |
| Matrix:           | Water           | Received: | 07/31/09                  |
| Units:            | ug/L            | Analyzed: | 08/06/09                  |
| Diln Fac:         | 1.000           |           |                           |

| Analyte                       | Result | RL   |
|-------------------------------|--------|------|
| Gasoline C7-C12               | 360    | 50   |
| tert-Butyl Alcohol (TBA)      | 13     | 10   |
| Isopropyl Ether (DIPE)        | ND     | 0.50 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 0.50 |
| Methyl tert-Amyl Ether (TAME) | ND     | 0.50 |
| MTBE                          | ND     | 0.50 |
| 1,2-Dichloroethane            | ND     | 0.50 |
| Benzene                       | 14     | 0.50 |
| Toluene                       | ND     | 0.50 |
| 1,2-Dibromoethane             | ND     | 0.50 |
| Ethylbenzene                  | 1.2    | 0.50 |
| m,p-Xylenes                   | ND     | 0.50 |
| o-Xylene                      | ND     | 0.50 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 100  | 80-122 |
| 1,2-Dichloroethane-d4 | 102  | 77-137 |
| Toluene-d8            | 100  | 80-120 |
| Bromofluorobenzene    | 102  | 80-125 |

ND= Not Detected  
RL= Reporting Limit

| Gasoline by GC/MS |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213901          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | MW-4            | Batch#:   | 153470                    |
| Lab ID:           | 213901-004      | Sampled:  | 07/30/09                  |
| Matrix:           | Water           | Received: | 07/31/09                  |
| Units:            | ug/L            | Analyzed: | 08/03/09                  |
| Diln Fac:         | 1.000           |           |                           |

| Analyte                       | Result  | RL   |
|-------------------------------|---------|------|
| Gasoline C7-C12               | 1,400 Y | 50   |
| tert-Butyl Alcohol (TBA)      | ND      | 10   |
| Isopropyl Ether (DIPE)        | ND      | 0.50 |
| Ethyl tert-Butyl Ether (ETBE) | ND      | 0.50 |
| Methyl tert-Amyl Ether (TAME) | ND      | 0.50 |
| MTBE                          | ND      | 0.50 |
| 1,2-Dichloroethane            | ND      | 0.50 |
| Benzene                       | ND      | 0.50 |
| Toluene                       | ND      | 0.50 |
| 1,2-Dibromoethane             | ND      | 0.50 |
| Ethylbenzene                  | ND      | 0.50 |
| m,p-Xylenes                   | ND      | 0.50 |
| o-Xylene                      | ND      | 0.50 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 98   | 80-122 |
| 1,2-Dichloroethane-d4 | 100  | 77-137 |
| Toluene-d8            | 97   | 80-120 |
| Bromofluorobenzene    | 106  | 80-125 |

Y= Sample exhibits chromatographic pattern which does not resemble standard  
 ND= Not Detected  
 RL= Reporting Limit

| Gasoline by GC/MS |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213901          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | MW-5            | Batch#:   | 153470                    |
| Lab ID:           | 213901-005      | Sampled:  | 07/30/09                  |
| Matrix:           | Water           | Received: | 07/31/09                  |
| Units:            | ug/L            | Analyzed: | 08/03/09                  |
| Diln Fac:         | 1.000           |           |                           |

| Analyte                       | Result | RL   |
|-------------------------------|--------|------|
| Gasoline C7-C12               | ND     | 50   |
| tert-Butyl Alcohol (TBA)      | ND     | 10   |
| Isopropyl Ether (DIPE)        | ND     | 0.50 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 0.50 |
| Methyl tert-Amyl Ether (TAME) | ND     | 0.50 |
| MTBE                          | ND     | 0.50 |
| 1,2-Dichloroethane            | ND     | 0.50 |
| Benzene                       | ND     | 0.50 |
| Toluene                       | ND     | 0.50 |
| 1,2-Dibromoethane             | ND     | 0.50 |
| Ethylbenzene                  | ND     | 0.50 |
| m,p-Xylenes                   | ND     | 0.50 |
| o-Xylene                      | ND     | 0.50 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 100  | 80-122 |
| 1,2-Dichloroethane-d4 | 103  | 77-137 |
| Toluene-d8            | 98   | 80-120 |
| Bromofluorobenzene    | 104  | 80-125 |

ND= Not Detected  
RL= Reporting Limit



# Batch QC Report

| Gasoline by GC/MS |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213901          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Matrix:           | Water           | Batch#:   | 153470                    |
| Units:            | ug/L            | Analyzed: | 08/03/09                  |
| Diln Fac:         | 1.000           |           |                           |

Type: BS Lab ID: QC505922

| Analyte                       | Spiked | Result | %REC | Limits |
|-------------------------------|--------|--------|------|--------|
| tert-Butyl Alcohol (TBA)      | 75.00  | 70.76  | 94   | 55-151 |
| Isopropyl Ether (DIPE)        | 15.00  | 13.76  | 92   | 65-131 |
| Ethyl tert-Butyl Ether (ETBE) | 15.00  | 14.03  | 93   | 75-128 |
| Methyl tert-Amyl Ether (TAME) | 15.00  | 14.73  | 98   | 80-121 |
| MTBE                          | 15.00  | 13.90  | 93   | 73-122 |
| 1,2-Dichloroethane            | 15.00  | 15.87  | 106  | 73-141 |
| Benzene                       | 15.00  | 16.56  | 110  | 80-120 |
| Toluene                       | 15.00  | 16.41  | 109  | 80-120 |
| 1,2-Dibromoethane             | 15.00  | 15.92  | 106  | 80-120 |
| Ethylbenzene                  | 15.00  | 17.09  | 114  | 80-121 |
| m,p-Xylenes                   | 30.00  | 34.17  | 114  | 80-122 |
| o-Xylene                      | 15.00  | 16.98  | 113  | 80-120 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 97   | 80-122 |
| 1,2-Dichloroethane-d4 | 98   | 77-137 |
| Toluene-d8            | 98   | 80-120 |
| Bromofluorobenzene    | 100  | 80-125 |

Type: BSD Lab ID: QC505923

| Analyte                       | Spiked | Result | %REC | Limits | RPD | Lim |
|-------------------------------|--------|--------|------|--------|-----|-----|
| tert-Butyl Alcohol (TBA)      | 75.00  | 58.20  | 78   | 55-151 | 19  | 21  |
| Isopropyl Ether (DIPE)        | 15.00  | 13.24  | 88   | 65-131 | 4   | 20  |
| Ethyl tert-Butyl Ether (ETBE) | 15.00  | 13.12  | 87   | 75-128 | 7   | 20  |
| Methyl tert-Amyl Ether (TAME) | 15.00  | 13.78  | 92   | 80-121 | 7   | 20  |
| MTBE                          | 15.00  | 12.91  | 86   | 73-122 | 7   | 20  |
| 1,2-Dichloroethane            | 15.00  | 14.75  | 98   | 73-141 | 7   | 20  |
| Benzene                       | 15.00  | 15.75  | 105  | 80-120 | 5   | 20  |
| Toluene                       | 15.00  | 15.16  | 101  | 80-120 | 8   | 20  |
| 1,2-Dibromoethane             | 15.00  | 14.78  | 99   | 80-120 | 7   | 20  |
| Ethylbenzene                  | 15.00  | 16.22  | 108  | 80-121 | 5   | 20  |
| m,p-Xylenes                   | 30.00  | 32.04  | 107  | 80-122 | 6   | 20  |
| o-Xylene                      | 15.00  | 16.34  | 109  | 80-120 | 4   | 20  |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 95   | 80-122 |
| 1,2-Dichloroethane-d4 | 96   | 77-137 |
| Toluene-d8            | 98   | 80-120 |
| Bromofluorobenzene    | 99   | 80-125 |

RPD= Relative Percent Difference

# Batch QC Report

| Gasoline by GC/MS |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213901          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Type:             | BLANK           | Diln Fac: | 1.000                     |
| Lab ID:           | QC505924        | Batch#:   | 153470                    |
| Matrix:           | Water           | Analyzed: | 08/03/09                  |
| Units:            | ug/L            |           |                           |

| Analyte                       | Result | RL   |
|-------------------------------|--------|------|
| Gasoline C7-C12               | ND     | 50   |
| tert-Butyl Alcohol (TBA)      | ND     | 10   |
| Isopropyl Ether (DIPE)        | ND     | 0.50 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 0.50 |
| Methyl tert-Amyl Ether (TAME) | ND     | 0.50 |
| MTBE                          | ND     | 0.50 |
| 1,2-Dichloroethane            | ND     | 0.50 |
| Benzene                       | ND     | 0.50 |
| Toluene                       | ND     | 0.50 |
| 1,2-Dibromoethane             | ND     | 0.50 |
| Ethylbenzene                  | ND     | 0.50 |
| m,p-Xylenes                   | ND     | 0.50 |
| o-Xylene                      | ND     | 0.50 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 99   | 80-122 |
| 1,2-Dichloroethane-d4 | 102  | 77-137 |
| Toluene-d8            | 97   | 80-120 |
| Bromofluorobenzene    | 104  | 80-125 |

ND= Not Detected  
 RL= Reporting Limit

## Batch QC Report

| Gasoline by GC/MS |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213901          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Matrix:           | Water           | Batch#:   | 153470                    |
| Units:            | ug/L            | Analyzed: | 08/03/09                  |
| Diln Fac:         | 1.000           |           |                           |

Type: BS Lab ID: QC505927

| Analyte         | Spiked | Result | %REC | Limits |
|-----------------|--------|--------|------|--------|
| Gasoline C7-C12 | 850.0  | 909.4  | 107  | 80-120 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 97   | 80-122 |
| 1,2-Dichloroethane-d4 | 95   | 77-137 |
| Toluene-d8            | 99   | 80-120 |
| Bromofluorobenzene    | 99   | 80-125 |

Type: BSD Lab ID: QC505928

| Analyte         | Spiked | Result | %REC | Limits | RPD | Lim |
|-----------------|--------|--------|------|--------|-----|-----|
| Gasoline C7-C12 | 850.0  | 898.3  | 106  | 80-120 | 1   | 20  |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 104  | 80-122 |
| 1,2-Dichloroethane-d4 | 100  | 77-137 |
| Toluene-d8            | 99   | 80-120 |
| Bromofluorobenzene    | 100  | 80-125 |

RPD= Relative Percent Difference

# Batch QC Report

| Gasoline by GC/MS |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213901          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Matrix:           | Water           | Batch#:   | 153587                    |
| Units:            | ug/L            | Analyzed: | 08/06/09                  |
| Diln Fac:         | 1.000           |           |                           |

Type: BS Lab ID: QC506412

| Analyte                       | Spiked | Result | %REC | Limits |
|-------------------------------|--------|--------|------|--------|
| tert-Butyl Alcohol (TBA)      | 75.00  | 58.53  | 78   | 55-151 |
| Isopropyl Ether (DIPE)        | 15.00  | 13.38  | 89   | 65-131 |
| Ethyl tert-Butyl Ether (ETBE) | 15.00  | 13.17  | 88   | 75-128 |
| Methyl tert-Amyl Ether (TAME) | 15.00  | 13.66  | 91   | 80-121 |
| MTBE                          | 15.00  | 12.87  | 86   | 73-122 |
| 1,2-Dichloroethane            | 15.00  | 15.49  | 103  | 73-141 |
| Benzene                       | 15.00  | 16.15  | 108  | 80-120 |
| Toluene                       | 15.00  | 16.01  | 107  | 80-120 |
| 1,2-Dibromoethane             | 15.00  | 14.88  | 99   | 80-120 |
| Ethylbenzene                  | 15.00  | 16.39  | 109  | 80-121 |
| m,p-Xylenes                   | 30.00  | 32.49  | 108  | 80-122 |
| o-Xylene                      | 15.00  | 16.49  | 110  | 80-120 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 99   | 80-122 |
| 1,2-Dichloroethane-d4 | 96   | 77-137 |
| Toluene-d8            | 99   | 80-120 |
| Bromofluorobenzene    | 102  | 80-125 |

Type: BSD Lab ID: QC506413

| Analyte                       | Spiked | Result | %REC | Limits | RPD | Lim |
|-------------------------------|--------|--------|------|--------|-----|-----|
| tert-Butyl Alcohol (TBA)      | 75.00  | 63.35  | 84   | 55-151 | 8   | 21  |
| Isopropyl Ether (DIPE)        | 15.00  | 13.43  | 90   | 65-131 | 0   | 20  |
| Ethyl tert-Butyl Ether (ETBE) | 15.00  | 13.46  | 90   | 75-128 | 2   | 20  |
| Methyl tert-Amyl Ether (TAME) | 15.00  | 13.81  | 92   | 80-121 | 1   | 20  |
| MTBE                          | 15.00  | 13.10  | 87   | 73-122 | 2   | 20  |
| 1,2-Dichloroethane            | 15.00  | 15.30  | 102  | 73-141 | 1   | 20  |
| Benzene                       | 15.00  | 15.75  | 105  | 80-120 | 2   | 20  |
| Toluene                       | 15.00  | 15.80  | 105  | 80-120 | 1   | 20  |
| 1,2-Dibromoethane             | 15.00  | 15.34  | 102  | 80-120 | 3   | 20  |
| Ethylbenzene                  | 15.00  | 16.04  | 107  | 80-121 | 2   | 20  |
| m,p-Xylenes                   | 30.00  | 32.19  | 107  | 80-122 | 1   | 20  |
| o-Xylene                      | 15.00  | 16.48  | 110  | 80-120 | 0   | 20  |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 99   | 80-122 |
| 1,2-Dichloroethane-d4 | 96   | 77-137 |
| Toluene-d8            | 99   | 80-120 |
| Bromofluorobenzene    | 102  | 80-125 |

RPD= Relative Percent Difference

## Batch QC Report

| Gasoline by GC/MS |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213901          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Matrix:           | Water           | Batch#:   | 153587                    |
| Units:            | ug/L            | Analyzed: | 08/06/09                  |
| Diln Fac:         | 1.000           |           |                           |

Type: BS Lab ID: QC506414

| Analyte         | Spiked | Result | %REC | Limits |
|-----------------|--------|--------|------|--------|
| Gasoline C7-C12 | 850.0  | 882.7  | 104  | 80-120 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 99   | 80-122 |
| 1,2-Dichloroethane-d4 | 102  | 77-137 |
| Toluene-d8            | 106  | 80-120 |
| Bromofluorobenzene    | 103  | 80-125 |

Type: BSD Lab ID: QC506415

| Analyte         | Spiked | Result | %REC | Limits | RPD | Lim |
|-----------------|--------|--------|------|--------|-----|-----|
| Gasoline C7-C12 | 850.0  | 891.3  | 105  | 80-120 | 1   | 20  |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 99   | 80-122 |
| 1,2-Dichloroethane-d4 | 100  | 77-137 |
| Toluene-d8            | 101  | 80-120 |
| Bromofluorobenzene    | 103  | 80-125 |

RPD= Relative Percent Difference

## Batch QC Report

| Gasoline by GC/MS |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213901          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Type:             | BLANK           | Diln Fac: | 1.000                     |
| Lab ID:           | QC506416        | Batch#:   | 153587                    |
| Matrix:           | Water           | Analyzed: | 08/06/09                  |
| Units:            | ug/L            |           |                           |

| Analyte                       | Result | RL   |
|-------------------------------|--------|------|
| Gasoline C7-C12               | ND     | 50   |
| tert-Butyl Alcohol (TBA)      | ND     | 10   |
| Isopropyl Ether (DIPE)        | ND     | 0.50 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 0.50 |
| Methyl tert-Amyl Ether (TAME) | ND     | 0.50 |
| MTBE                          | ND     | 0.50 |
| 1,2-Dichloroethane            | ND     | 0.50 |
| Benzene                       | ND     | 0.50 |
| Toluene                       | ND     | 0.50 |
| 1,2-Dibromoethane             | ND     | 0.50 |
| Ethylbenzene                  | ND     | 0.50 |
| m,p-Xylenes                   | ND     | 0.50 |
| o-Xylene                      | ND     | 0.50 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 99   | 80-122 |
| 1,2-Dichloroethane-d4 | 103  | 77-137 |
| Toluene-d8            | 100  | 80-120 |
| Bromofluorobenzene    | 105  | 80-125 |

ND= Not Detected

RL= Reporting Limit

Date : 03-AUG-2009 20:01

Client ID: DYNA P&amp;T

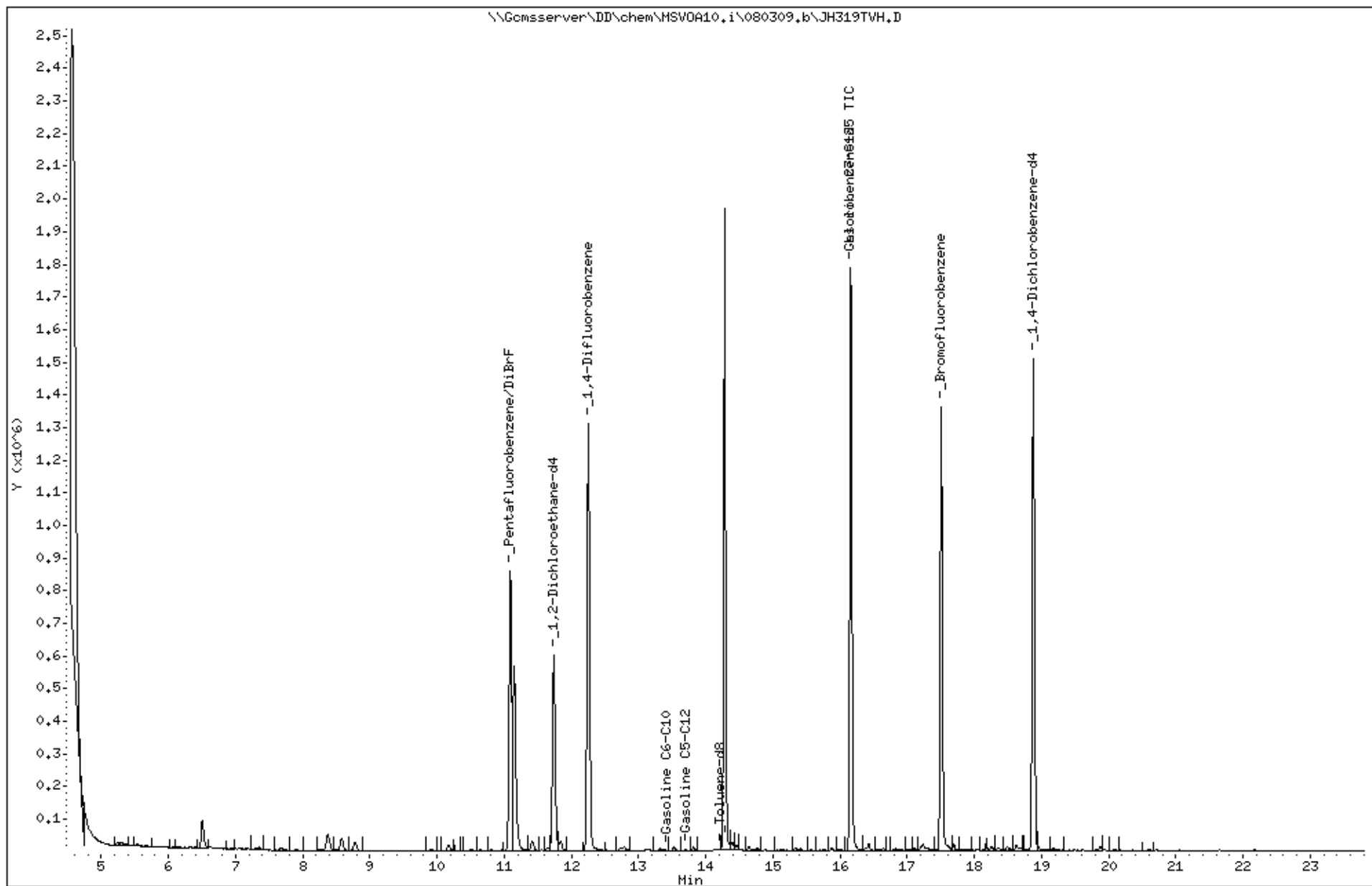
Sample Info: S,213901-001

Instrument: MSV0A10.i

Operator: VOA

Column diameter: 2.00

Column phase:





Data File: \\GCHSSERVER\DD\chem\MSV0A10.i\080609.b\JH622TVH.D

Date : 06-AUG-2009 19:07

Client ID: DYNA P&T

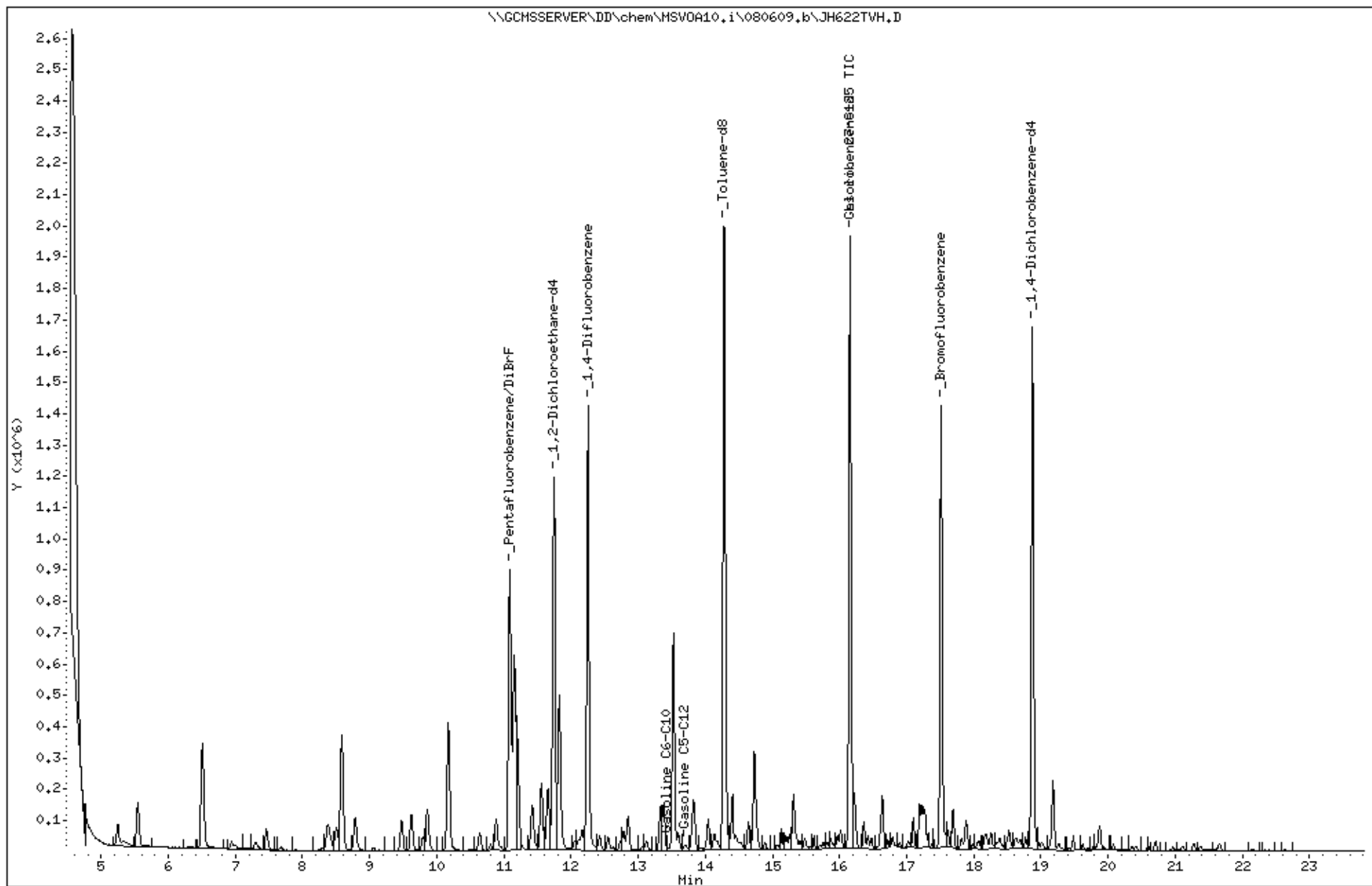
Sample Info: S,213901-003

Instrument: MSV0A10.i

Operator: VOA

Column diameter: 2.00

Column phase:



Date : 03-AUG-2009 21:09

Client ID: DYNA P&amp;T

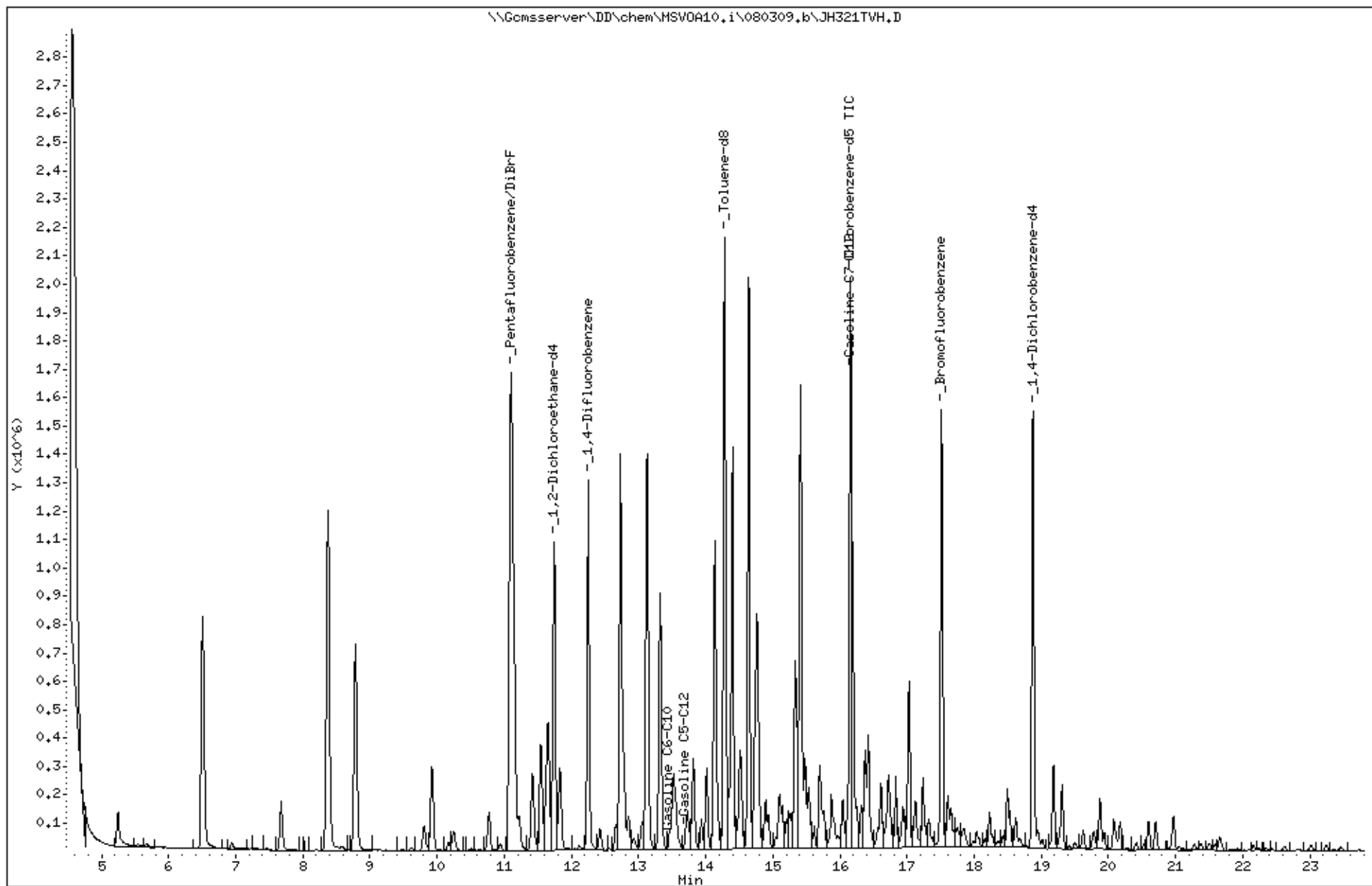
Sample Info: S,213901-004

Instrument: MSV0A10.i

Operator: VOA

Column diameter: 2.00

Column phase:



Date : 03-AUG-2009 12:19

Client ID: DYNA P&amp;T

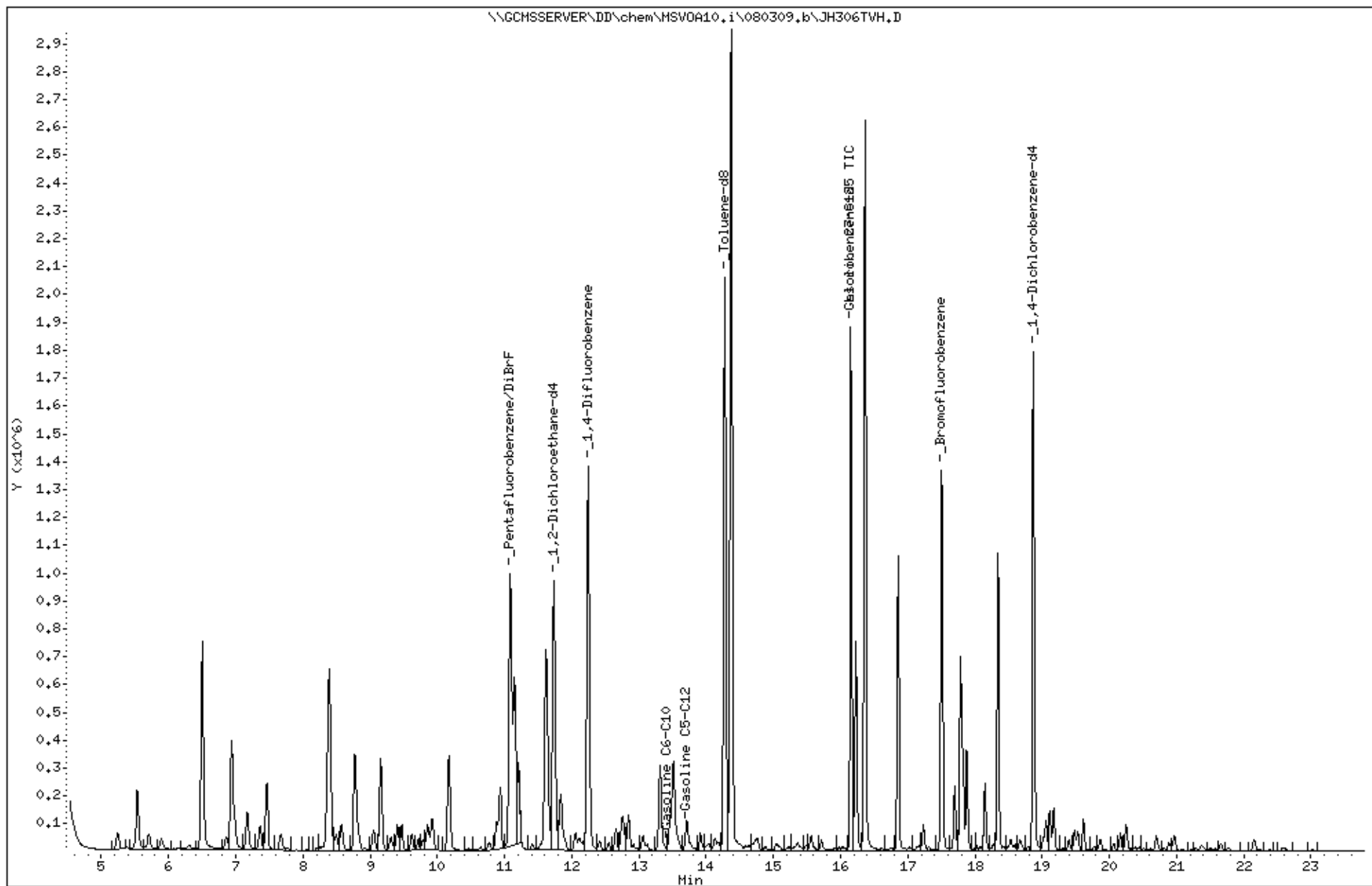
Sample Info: CCV/BS, QC505927

Instrument: MSV0A10.i

Operator: VOA

Column diameter: 2.00

Column phase:







**Curtis & Tompkins, Ltd.**  
Analytical Laboratories, Since 1878





Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

**Laboratory Job Number 213902**  
**ANALYTICAL REPORT**

Fugro West Inc.  
1000 Broadway  
Oakland, CA 94607

Project : 609.004  
Location : 2250 Telgraph Av. Oakland  
Level : II

| <u>Sample ID</u> | <u>Lab ID</u> |
|------------------|---------------|
| B-1              | 213902-001    |
| B-2              | 213902-002    |
| B-3              | 213902-003    |
| B-4A             | 213902-004    |
| B-5              | 213902-005    |
| B-6              | 213902-006    |
| B-7              | 213902-007    |
| B-8              | 213902-008    |
| B-9              | 213902-009    |
| B-10             | 213902-010    |
| B-12             | 213902-011    |
| B-2              | 213902-012    |
| TRIP BLANK       | 213902-013    |

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature:   
Project Manager

Date: 08/10/2009

NELAP # 01107CA

## CASE NARRATIVE

Laboratory number: 213902  
Client: Fugro West Inc.  
Project: 609.004  
Location: 2250 Telgraph Av. Oakland  
Request Date: 07/31/09  
Samples Received: 07/31/09

This data package contains sample and QC results for twelve water samples, requested for the above referenced project on 07/31/09. The samples were received cold and intact.

### TPH-Extractables by GC (EPA 8015B):

No analytical problems were encountered.

### Volatile Organics by GC/MS (EPA 8260B):

Sample B-12 (lab # 213902-011) was analyzed two minutes past the 12 hour tune standard shift clock; affected data was qualified with "b". There is no technical impact on the sample data. Response exceeding the instrument's linear range was observed for gasoline C7-C12 in B-4A (lab # 213902-004); affected data was qualified with "b". There were anomalous results between the multiple vials; therefore, the highest value was reported. A number of samples had pH greater than 2. No other analytical problems were encountered.

### Total Dissolved Solids (TDS) (SM2540C):

No analytical problems were encountered.

213902

## ES-F10 CHAIN OF CUSTODY

PAGE 1 OF 1

PROJECT NAME: 2250 Telegraph Avenue - Oakland

PROJECT NO.: 609.004

LAB: Curtis &amp; Tompkins

PROJECT CONTACT: Karen Emery

TURNAROUND: 5 day TAT

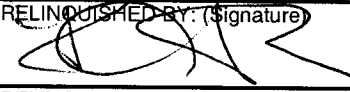

SAMPLED BY: Russell Carter

## ANALYSIS REQUESTED

| LABORATORY<br>I.D. NUMBER | FIELD SAMPLE I.D. | MATRIX |  |  |  | CONTAINERS |  |  |  |  | PRESERVATIVE |  |  |  |  | SAMPLING DATE |  |  |  |  |  |  |  | Quantity | TVHg | TPHd and TPHmo with<br>scavengers | BTEX, MTBE, Fuel Ox<br>Scavengers | TDS | EDF Reporting |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|-------------------|--------|--|--|--|------------|--|--|--|--|--------------|--|--|--|--|---------------|--|--|--|--|--|--|--|----------|------|-----------------------------------|-----------------------------------|-----|---------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|---------------------------|-------------------|--------|--|--|--|------------|--|--|--|--|--------------|--|--|--|--|---------------|--|--|--|--|--|--|--|----------|------|-----------------------------------|-----------------------------------|-----|---------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|

## CHAIN OF CUSTODY RECORD

COMMENTS &amp; NOTES: USE QUOTATION # CT17200909MP WHEN INVOICING.

|  |           |   |           |
|--|-----------|---|-----------|
| RELINQUISHED BY: (Signature)   | DATE/TIME | RECEIVED BY: (Signature)  | DATE/TIME |
|  | 7/31/09   |  | 7/31/09   |
| RELINQUISHED BY: (Signature)   | DATE/TIME | RECEIVED BY: (Signature)  | DATE/TIME |
|  |           |   |           |
| RELINQUISHED BY: (Signature)   | DATE/TIME | RECEIVED BY: (Signature)  | DATE/TIME |
|  |           |   |           |
| RELINQUISHED BY: (Signature)   | DATE/TIME | RECEIVED BY: (Signature)  | DATE/TIME |
|  |           |   |           |



FUGRO WEST, INC.

1000 Broadway, Suite 440

Oakland, California 94607

Tel: 510.268.0461 Fax: 510.268.0545

Approved by Glenn Young, AC 62 Manager, Fugro West, Inc. 10/13/06

Note: If this is a printed copy, please check the online QMS to ensure that it is the latest version.



## COOLER RECEIPT CHECKLIST



Curtis &amp; Tompkins, Ltd.

Login # 213902 Date Received 7/31/09 Number of coolers 2  
 Client FUGRO Project 2250 TELEGRAPH AVE. - OAKLAND

Date Opened 7/31/09 By (print) M. VILLANUEVE (sign) [Signature]  
 Date Logged in 7-31-09 By (print) Tray Windsor (sign) [Signature]

1. Did cooler come with a shipping slip (airbill, etc) YES ☒ NO  
 Shipping info \_\_\_\_\_

2A. Were custody seals present? ... ☐ YES (circle) on cooler on samples ☒ NO  
 How many \_\_\_\_\_ Name \_\_\_\_\_ Date \_\_\_\_\_

2B. Were custody seals intact upon arrival? YES NO N/A

3. Were custody papers dry and intact when received? YES NO

4. Were custody papers filled out properly (ink, signed, etc)? YES NO

5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO

6. Indicate the packing in cooler: (if other, describe) \_\_\_\_\_

☒ Bubble Wrap

☒ Foam blocks

☒ Bags

☐ None

☐ Cloth material

☐ Cardboard

☐ Styrofoam

☐ Paper towels

7. Temperature documentation:

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) \_\_\_\_\_

☒ Samples Received on ice & cold without a temperature blank

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? YES ☒ NO

If YES, what time were they transferred to freezer? \_\_\_\_\_

9. Did all bottles arrive unbroken/unopened? YES NO

10. Are samples in the appropriate containers for indicated tests? YES NO

11. Are sample labels present, in good condition and complete? YES NO

12. Do the sample labels agree with custody papers? YES NO

13. Was sufficient amount of sample sent for tests requested? YES ☒ NO

14. Are the samples appropriately preserved? YES NO N/A

15. Are bubbles > 6mm absent in VOA samples? YES NO N/A

16. Was the client contacted concerning this sample delivery? YES NO

If YES, Who was called? \_\_\_\_\_ By \_\_\_\_\_ Date: \_\_\_\_\_

COMMENTS #1 #6 #2  
 SAMPLE B-1, B-6 & B-2 NO CONTAINER RECD FOR TETHX

SAMPLE # 4, 7, 10 & 11 RECD UNP. VOAC

RECD 5 TRIP BLANKS NOT ON CDC

| Total Extractable Hydrocarbons |                 |           |                           |
|--------------------------------|-----------------|-----------|---------------------------|
| Lab #:                         | 213902          | Location: | 2250 Telgraph Av. Oakland |
| Client:                        | Fugro West Inc. | Prep:     | EPA 3520C                 |
| Project#:                      | 609.004         | Analysis: | EPA 8015B                 |
| Matrix:                        | Water           | Received: | 07/31/09                  |
| Units:                         | ug/L            |           |                           |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-3        | Sampled:        | 07/28/09  |
| Type:     | SAMPLE     | Prepared:       | 08/05/09  |
| Lab ID:   | 213902-003 | Analyzed:       | 08/07/09  |
| Diln Fac: | 1.000      | Cleanup Method: | EPA 3630C |
| Batch#:   | 153575     |                 |           |

| Analyte           | Result  | RL  |
|-------------------|---------|-----|
| Diesel C10-C24    | 7,600 Y | 50  |
| Motor Oil C24-C36 | 25,000  | 300 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 74   | 61-127 |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-4A       | Sampled:        | 07/28/09  |
| Type:     | SAMPLE     | Prepared:       | 08/03/09  |
| Lab ID:   | 213902-004 | Analyzed:       | 08/05/09  |
| Diln Fac: | 20.00      | Cleanup Method: | EPA 3630C |
| Batch#:   | 153484     |                 |           |

| Analyte           | Result  | RL    |
|-------------------|---------|-------|
| Diesel C10-C24    | 240,000 | 1,000 |
| Motor Oil C24-C36 | 110,000 | 6,000 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | DO   | 61-127 |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-5        | Sampled:        | 07/28/09  |
| Type:     | SAMPLE     | Prepared:       | 08/03/09  |
| Lab ID:   | 213902-005 | Analyzed:       | 08/04/09  |
| Diln Fac: | 1.000      | Cleanup Method: | EPA 3630C |
| Batch#:   | 153484     |                 |           |

| Analyte           | Result | RL  |
|-------------------|--------|-----|
| Diesel C10-C24    | 3,400  | 50  |
| Motor Oil C24-C36 | 1,500  | 300 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 96   | 61-127 |

Y= Sample exhibits chromatographic pattern which does not resemble standard  
 DO= Diluted Out  
 ND= Not Detected  
 RL= Reporting Limit

| Total Extractable Hydrocarbons |                 |           |                           |
|--------------------------------|-----------------|-----------|---------------------------|
| Lab #:                         | 213902          | Location: | 2250 Telgraph Av. Oakland |
| Client:                        | Fugro West Inc. | Prep:     | EPA 3520C                 |
| Project#:                      | 609.004         | Analysis: | EPA 8015B                 |
| Matrix:                        | Water           | Received: | 07/31/09                  |
| Units:                         | ug/L            |           |                           |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-7        | Sampled:        | 07/28/09  |
| Type:     | SAMPLE     | Prepared:       | 08/03/09  |
| Lab ID:   | 213902-007 | Analyzed:       | 08/04/09  |
| Diln Fac: | 1.000      | Cleanup Method: | EPA 3630C |
| Batch#:   | 153484     |                 |           |

| Analyte           | Result | RL  |
|-------------------|--------|-----|
| Diesel C10-C24    | 910 Y  | 50  |
| Motor Oil C24-C36 | 400    | 300 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 72   | 61-127 |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-8        | Sampled:        | 07/28/09  |
| Type:     | SAMPLE     | Prepared:       | 08/03/09  |
| Lab ID:   | 213902-008 | Analyzed:       | 08/04/09  |
| Diln Fac: | 1.000      | Cleanup Method: | EPA 3630C |
| Batch#:   | 153484     |                 |           |

| Analyte           | Result | RL  |
|-------------------|--------|-----|
| Diesel C10-C24    | 290 Y  | 50  |
| Motor Oil C24-C36 | ND     | 300 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 88   | 61-127 |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-9        | Sampled:        | 07/28/09  |
| Type:     | SAMPLE     | Prepared:       | 08/03/09  |
| Lab ID:   | 213902-009 | Analyzed:       | 08/04/09  |
| Diln Fac: | 1.000      | Cleanup Method: | EPA 3630C |
| Batch#:   | 153484     |                 |           |

| Analyte           | Result  | RL  |
|-------------------|---------|-----|
| Diesel C10-C24    | 1,600 Y | 50  |
| Motor Oil C24-C36 | ND      | 300 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 74   | 61-127 |

Y= Sample exhibits chromatographic pattern which does not resemble standard  
 DO= Diluted Out  
 ND= Not Detected  
 RL= Reporting Limit

| Total Extractable Hydrocarbons |                 |           |                           |
|--------------------------------|-----------------|-----------|---------------------------|
| Lab #:                         | 213902          | Location: | 2250 Telgraph Av. Oakland |
| Client:                        | Fugro West Inc. | Prep:     | EPA 3520C                 |
| Project#:                      | 609.004         | Analysis: | EPA 8015B                 |
| Matrix:                        | Water           | Received: | 07/31/09                  |
| Units:                         | ug/L            |           |                           |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-10       | Sampled:        | 07/28/09  |
| Type:     | SAMPLE     | Prepared:       | 08/05/09  |
| Lab ID:   | 213902-010 | Analyzed:       | 08/08/09  |
| Diln Fac: | 5.000      | Cleanup Method: | EPA 3630C |
| Batch#:   | 153575     |                 |           |

| Analyte           | Result | RL    |
|-------------------|--------|-------|
| Diesel C10-C24    | 59,000 | 250   |
| Motor Oil C24-C36 | 33,000 | 1,500 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 94   | 61-127 |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-12       | Sampled:        | 07/28/09  |
| Type:     | SAMPLE     | Prepared:       | 08/05/09  |
| Lab ID:   | 213902-011 | Analyzed:       | 08/07/09  |
| Diln Fac: | 1.000      | Cleanup Method: | EPA 3630C |
| Batch#:   | 153575     |                 |           |

| Analyte           | Result | RL  |
|-------------------|--------|-----|
| Diesel C10-C24    | 27,000 | 56  |
| Motor Oil C24-C36 | 13,000 | 330 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 87   | 61-127 |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-2        | Sampled:        | 07/31/09  |
| Type:     | SAMPLE     | Prepared:       | 08/03/09  |
| Lab ID:   | 213902-012 | Analyzed:       | 08/04/09  |
| Diln Fac: | 1.000      | Cleanup Method: | EPA 3630C |
| Batch#:   | 153484     |                 |           |

| Analyte           | Result | RL  |
|-------------------|--------|-----|
| Diesel C10-C24    | 530 Y  | 50  |
| Motor Oil C24-C36 | ND     | 300 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 97   | 61-127 |

Y= Sample exhibits chromatographic pattern which does not resemble standard  
DO= Diluted Out  
ND= Not Detected  
RL= Reporting Limit

| Total Extractable Hydrocarbons |                 |           |                           |
|--------------------------------|-----------------|-----------|---------------------------|
| Lab #:                         | 213902          | Location: | 2250 Telgraph Av. Oakland |
| Client:                        | Fugro West Inc. | Prep:     | EPA 3520C                 |
| Project#:                      | 609.004         | Analysis: | EPA 8015B                 |
| Matrix:                        | Water           | Received: | 07/31/09                  |
| Units:                         | ug/L            |           |                           |

|           |          |                 |           |
|-----------|----------|-----------------|-----------|
| Type:     | BLANK    | Prepared:       | 08/03/09  |
| Lab ID:   | QC505977 | Analyzed:       | 08/04/09  |
| Diln Fac: | 1.000    | Cleanup Method: | EPA 3630C |
| Batch#:   | 153484   |                 |           |

| Analyte           | Result | RL  |
|-------------------|--------|-----|
| Diesel C10-C24    | ND     | 50  |
| Motor Oil C24-C36 | ND     | 300 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 106  | 61-127 |

|           |          |                 |           |
|-----------|----------|-----------------|-----------|
| Type:     | BLANK    | Prepared:       | 08/05/09  |
| Lab ID:   | QC506358 | Analyzed:       | 08/07/09  |
| Diln Fac: | 1.000    | Cleanup Method: | EPA 3630C |
| Batch#:   | 153575   |                 |           |

| Analyte           | Result | RL  |
|-------------------|--------|-----|
| Diesel C10-C24    | ND     | 50  |
| Motor Oil C24-C36 | ND     | 300 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 103  | 61-127 |

Y= Sample exhibits chromatographic pattern which does not resemble standard  
 DO= Diluted Out  
 ND= Not Detected  
 RL= Reporting Limit

## Batch QC Report

| Total Extractable Hydrocarbons |                 |           |                           |
|--------------------------------|-----------------|-----------|---------------------------|
| Lab #:                         | 213902          | Location: | 2250 Telgraph Av. Oakland |
| Client:                        | Fugro West Inc. | Prep:     | EPA 3520C                 |
| Project#:                      | 609.004         | Analysis: | EPA 8015B                 |
| Matrix:                        | Water           | Batch#:   | 153484                    |
| Units:                         | ug/L            | Prepared: | 08/03/09                  |
| Diln Fac:                      | 1.000           | Analyzed: | 08/04/09                  |

Type: BS Cleanup Method: EPA 3630C  
Lab ID: QC505978

| Analyte        | Spiked | Result | %REC | Limits |
|----------------|--------|--------|------|--------|
| Diesel C10-C24 | 2,500  | 2,726  | 109  | 50-120 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 102  | 61-127 |

Type: BSD Cleanup Method: EPA 3630C  
Lab ID: QC505979

| Analyte        | Spiked | Result | %REC | Limits | RPD | Lim |
|----------------|--------|--------|------|--------|-----|-----|
| Diesel C10-C24 | 2,500  | 2,576  | 103  | 50-120 | 6   | 37  |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 96   | 61-127 |

RPD= Relative Percent Difference

## Batch QC Report

| Total Extractable Hydrocarbons |                 |           |                           |
|--------------------------------|-----------------|-----------|---------------------------|
| Lab #:                         | 213902          | Location: | 2250 Telgraph Av. Oakland |
| Client:                        | Fugro West Inc. | Prep:     | EPA 3520C                 |
| Project#:                      | 609.004         | Analysis: | EPA 8015B                 |
| Matrix:                        | Water           | Batch#:   | 153575                    |
| Units:                         | ug/L            | Prepared: | 08/05/09                  |
| Diln Fac:                      | 1.000           |           |                           |

Type: BS Analyzed: 08/08/09  
Lab ID: QC506359 Cleanup Method: EPA 3630C

| Analyte        | Spiked | Result | %REC | Limits |
|----------------|--------|--------|------|--------|
| Diesel C10-C24 | 2,500  | 2,529  | 101  | 50-120 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 103  | 61-127 |

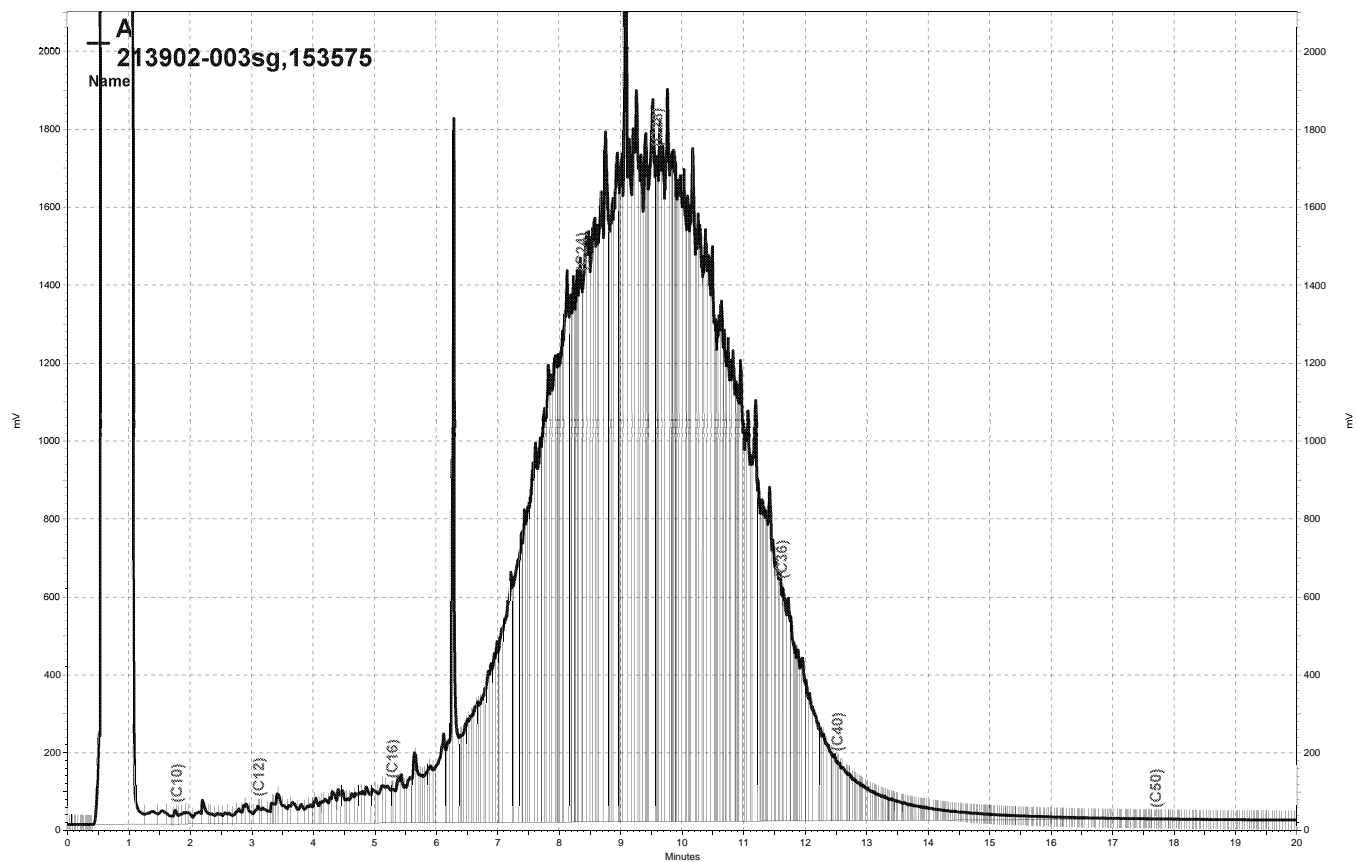
Type: BSD Analyzed: 08/07/09  
Lab ID: QC506360 Cleanup Method: EPA 3630C

| Analyte        | Spiked | Result | %REC | Limits | RPD | Lim |
|----------------|--------|--------|------|--------|-----|-----|
| Diesel C10-C24 | 2,500  | 2,367  | 95   | 50-120 | 7   | 37  |

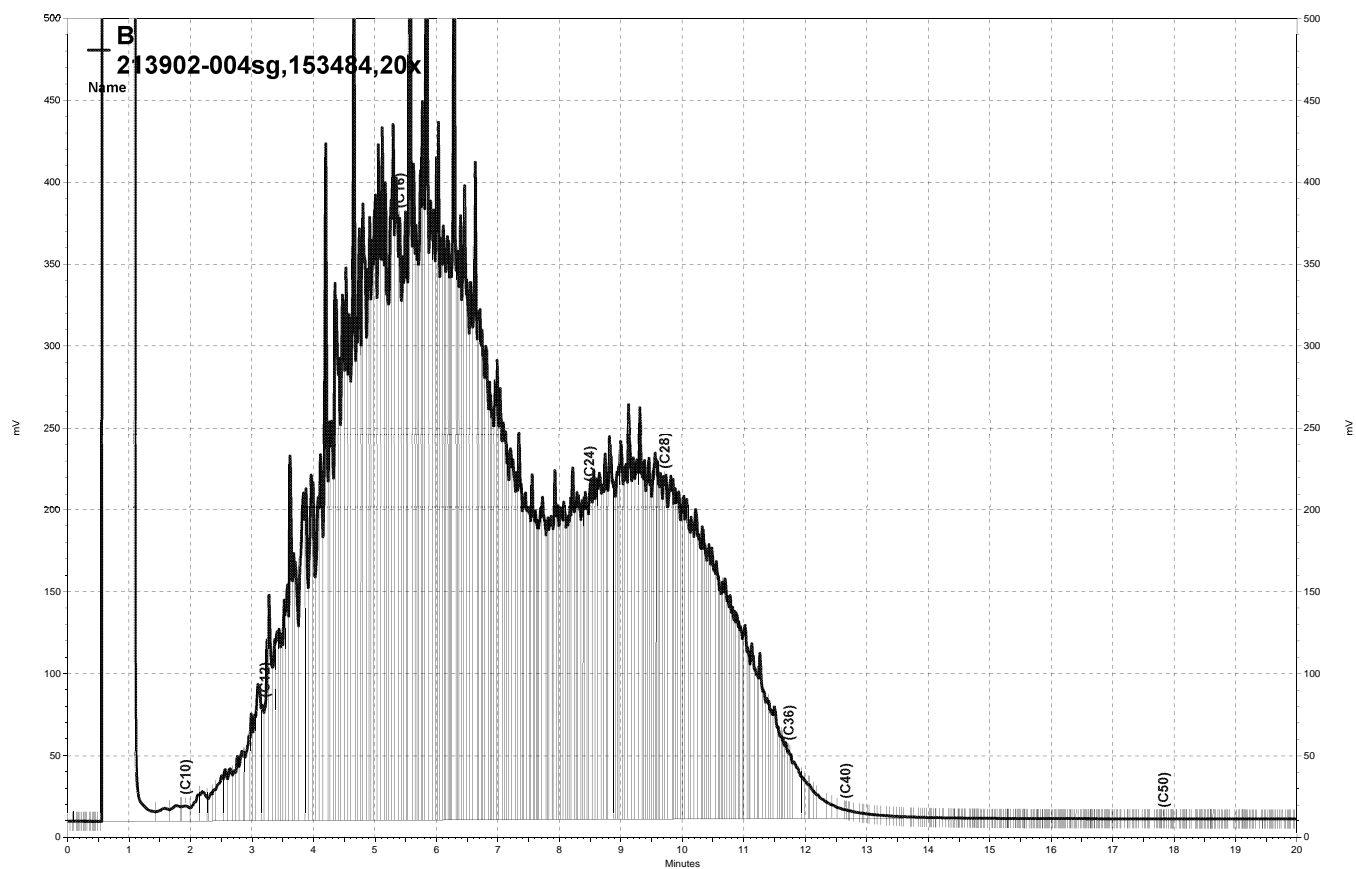
| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 97   | 61-127 |

RPD= Relative Percent Difference

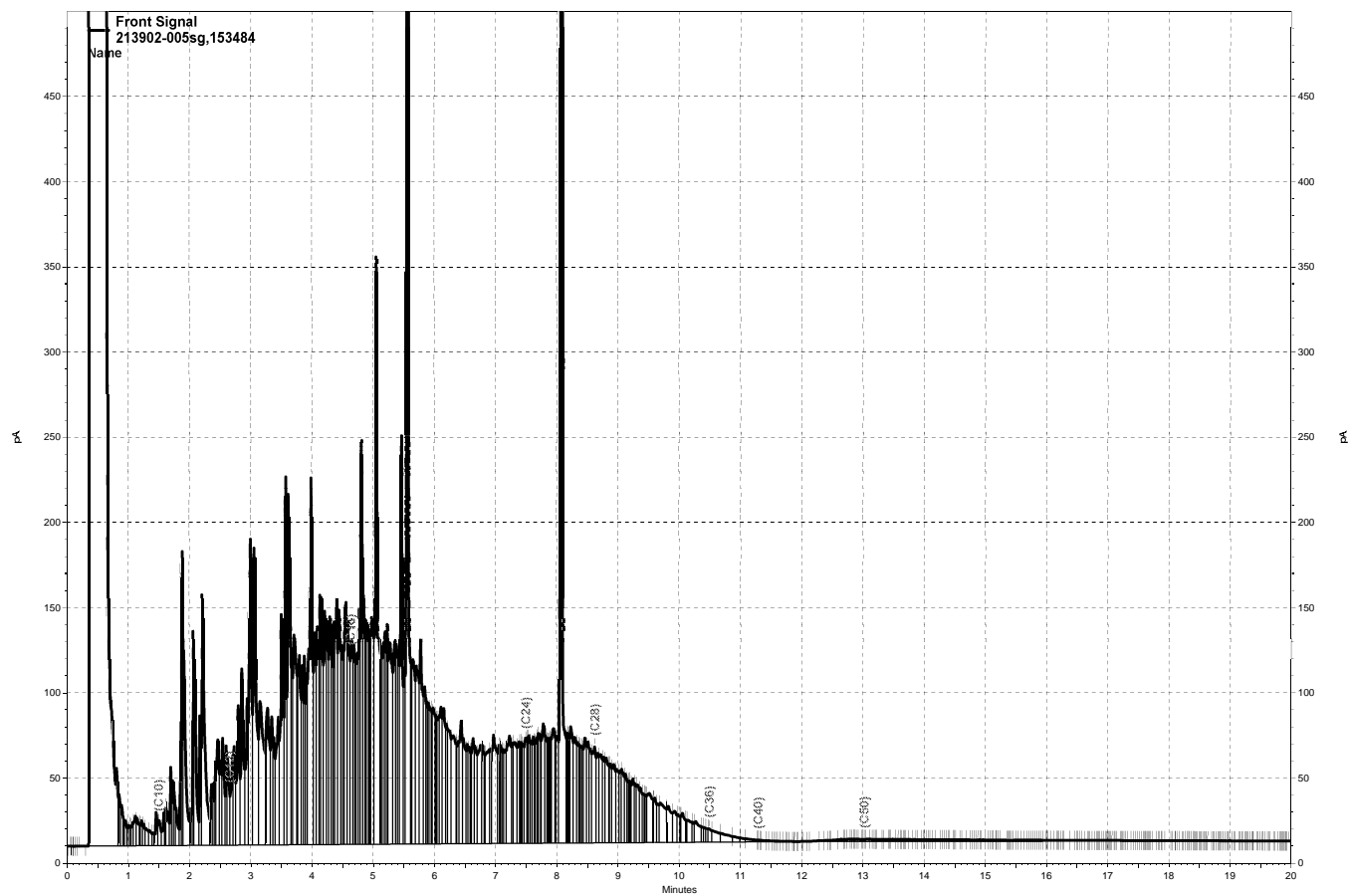




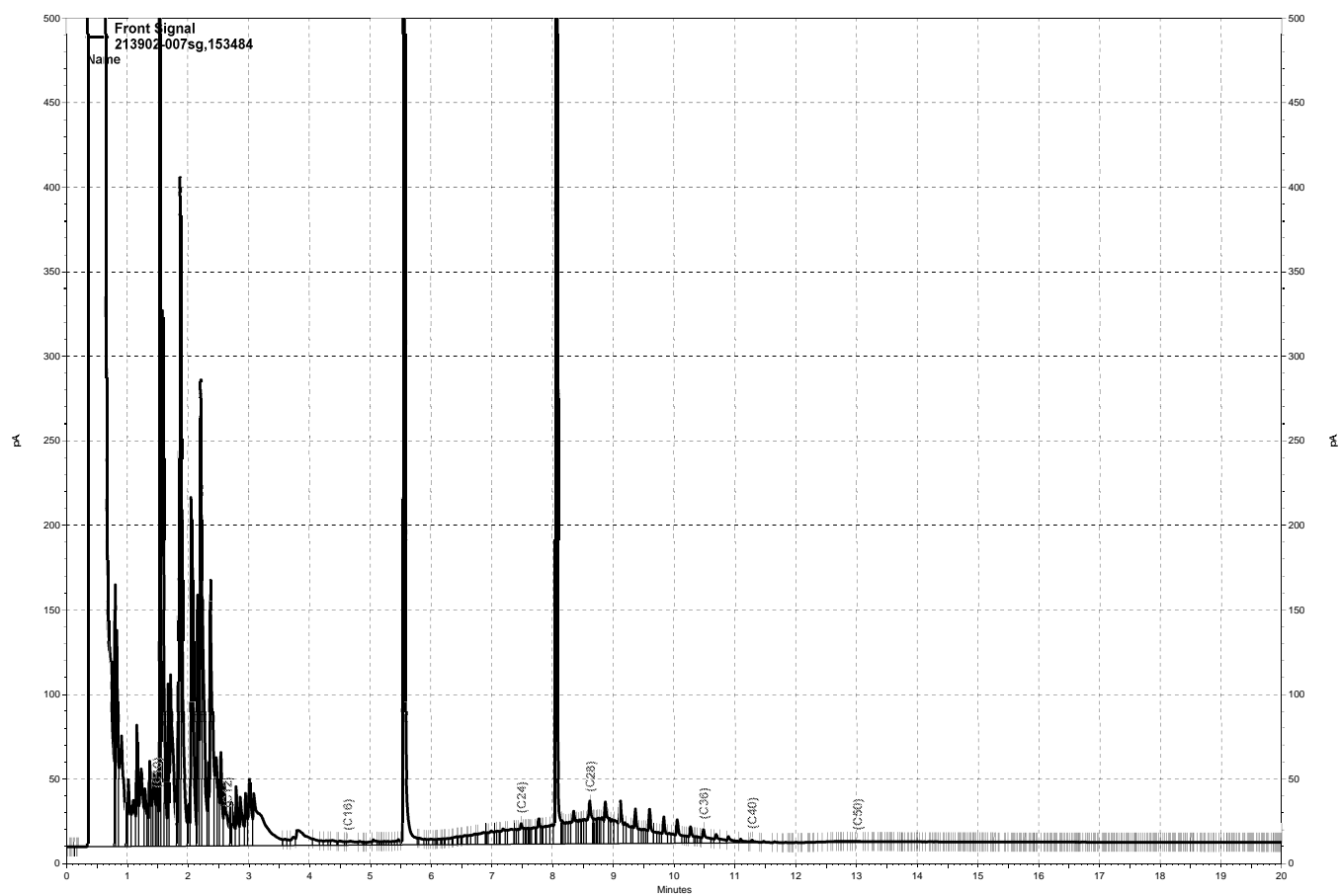
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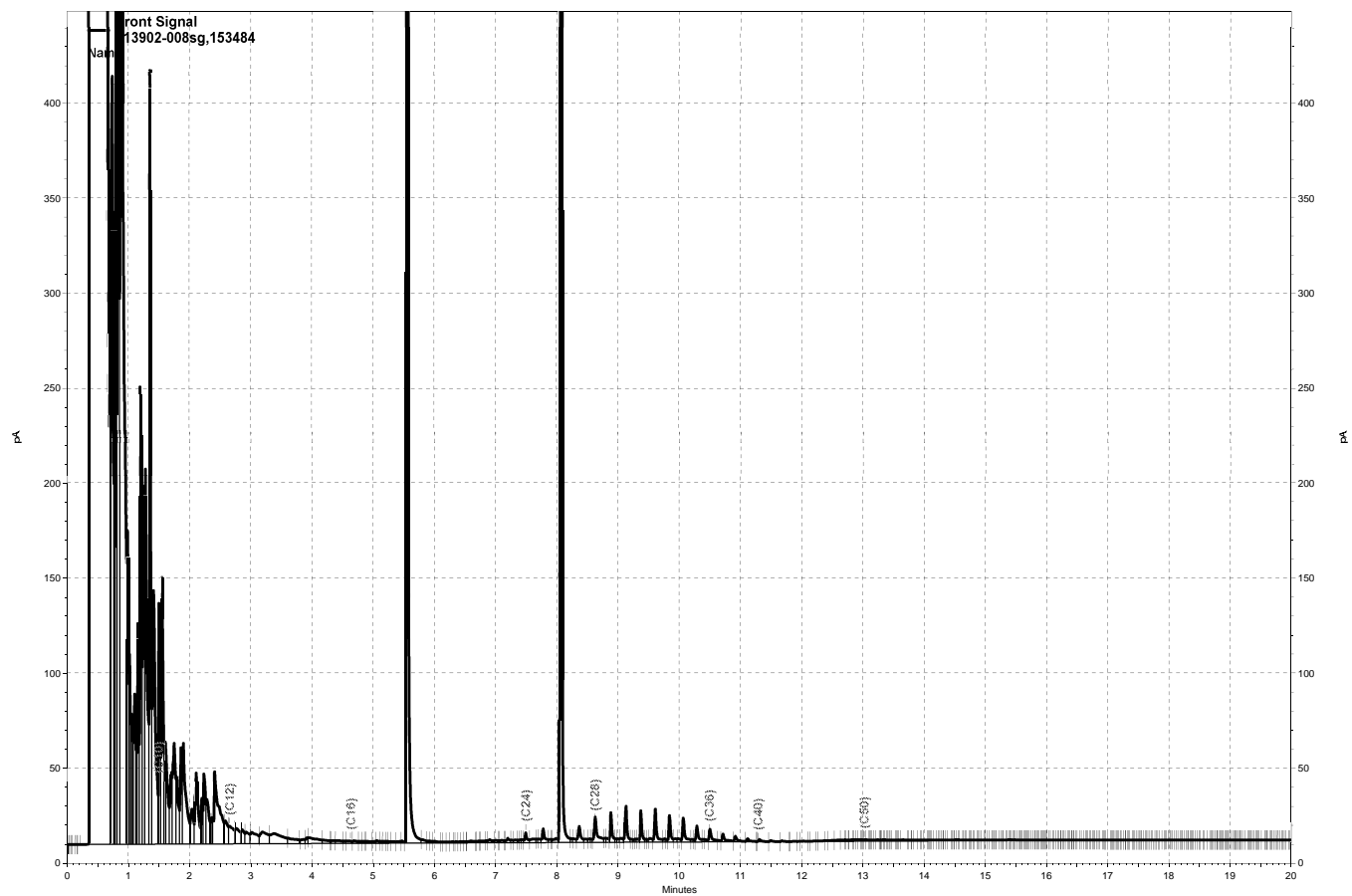
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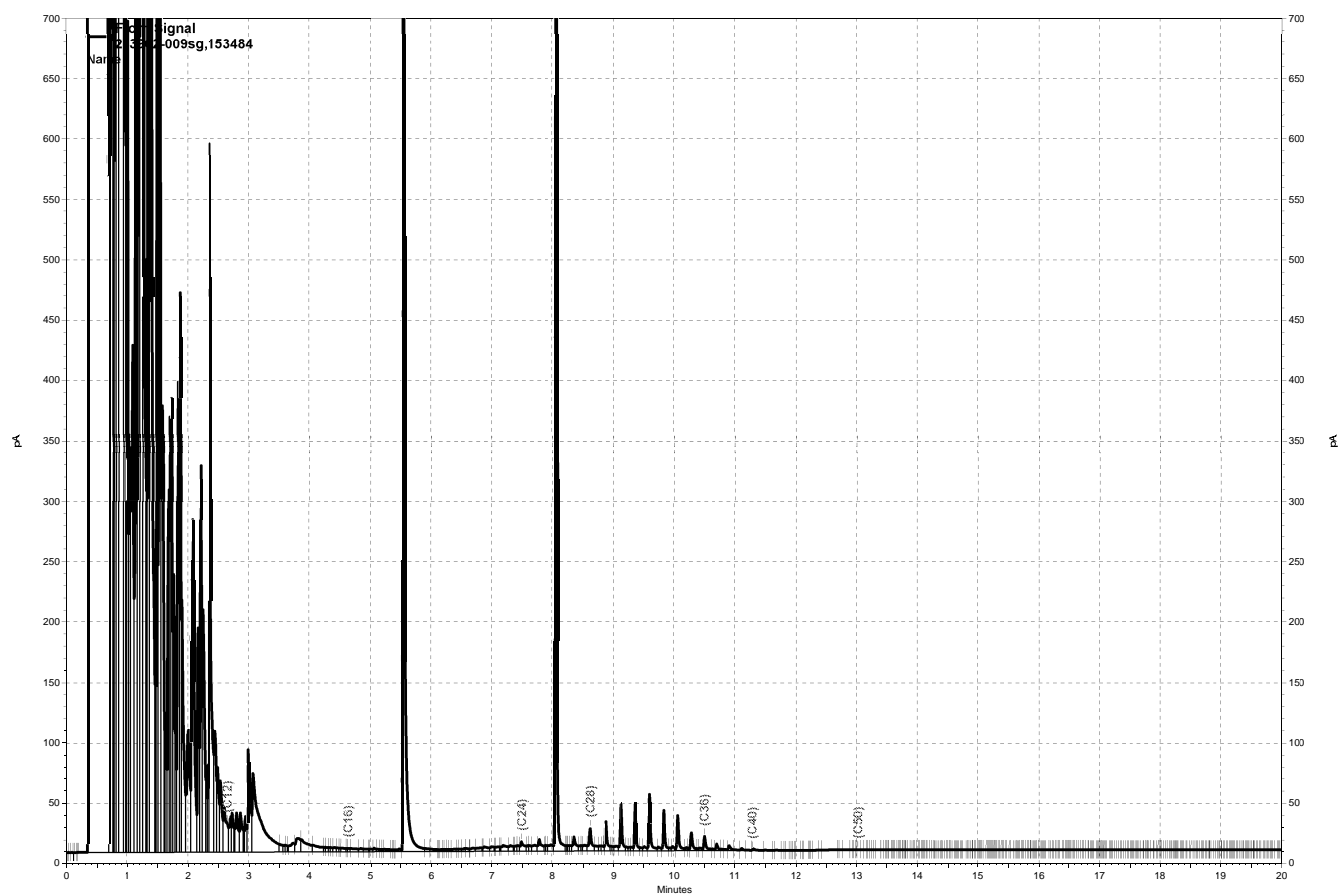
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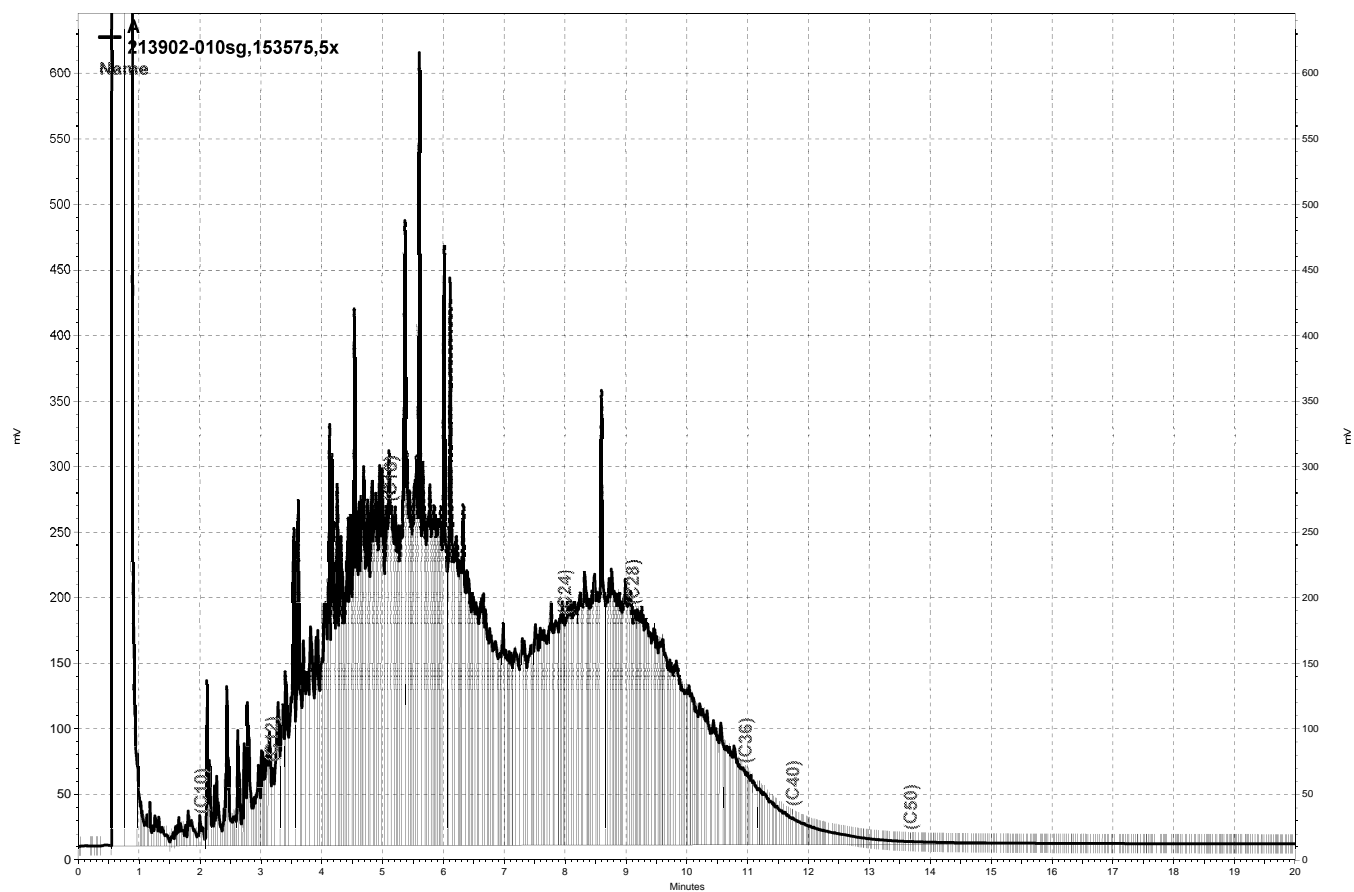
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— G:\ezchrom\Projects\GC27\Data\216a011.dat, Front Signal

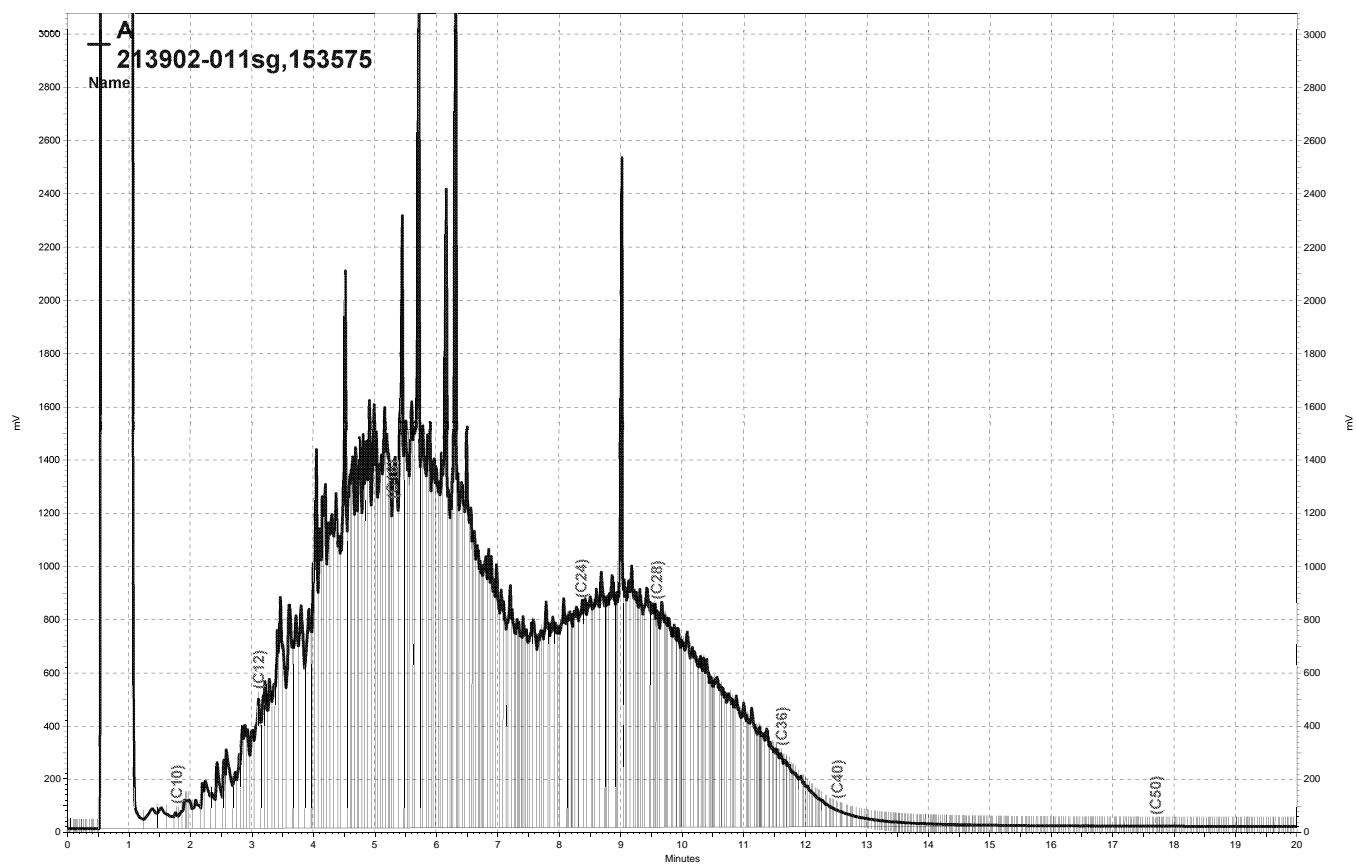


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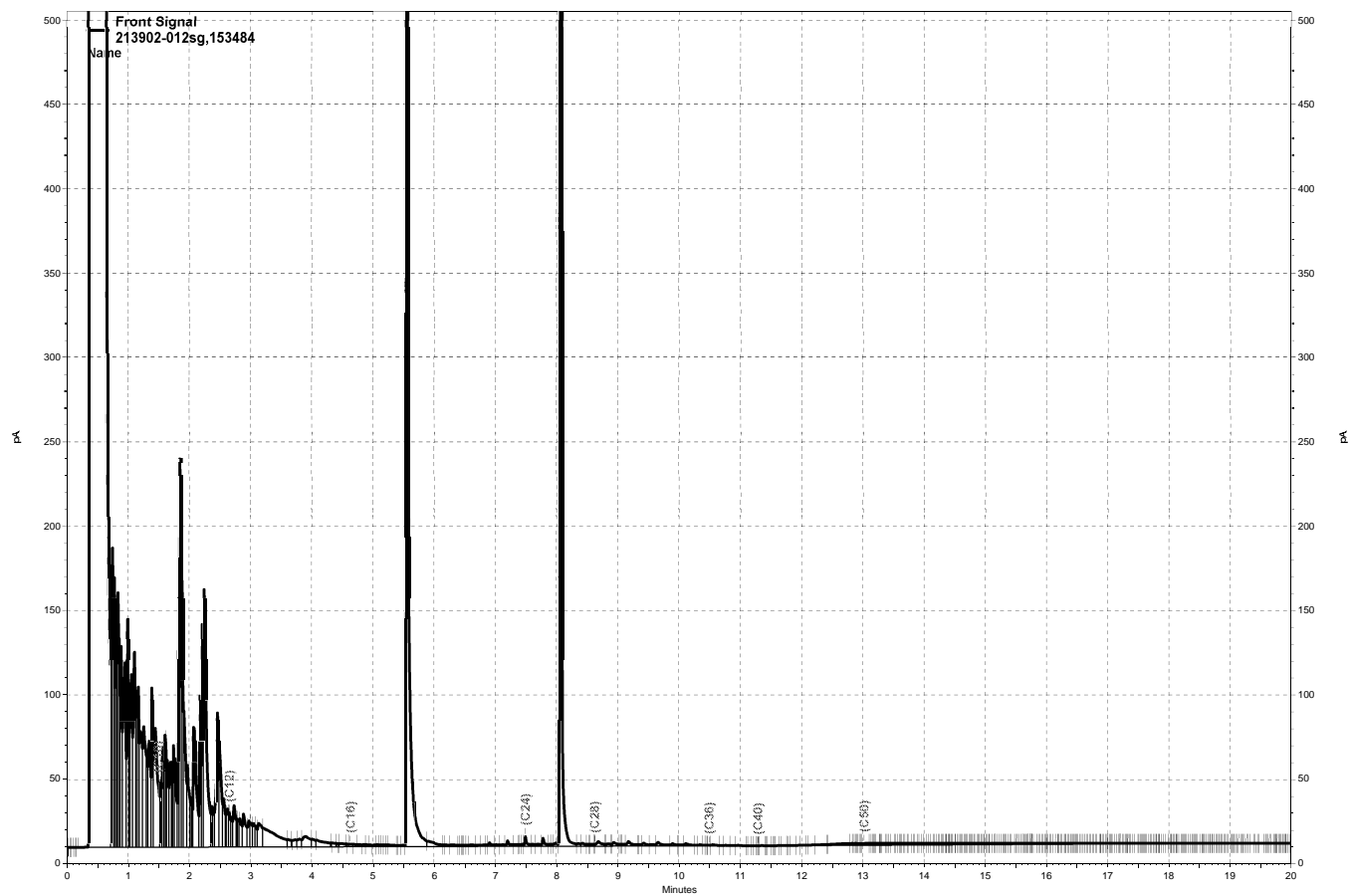


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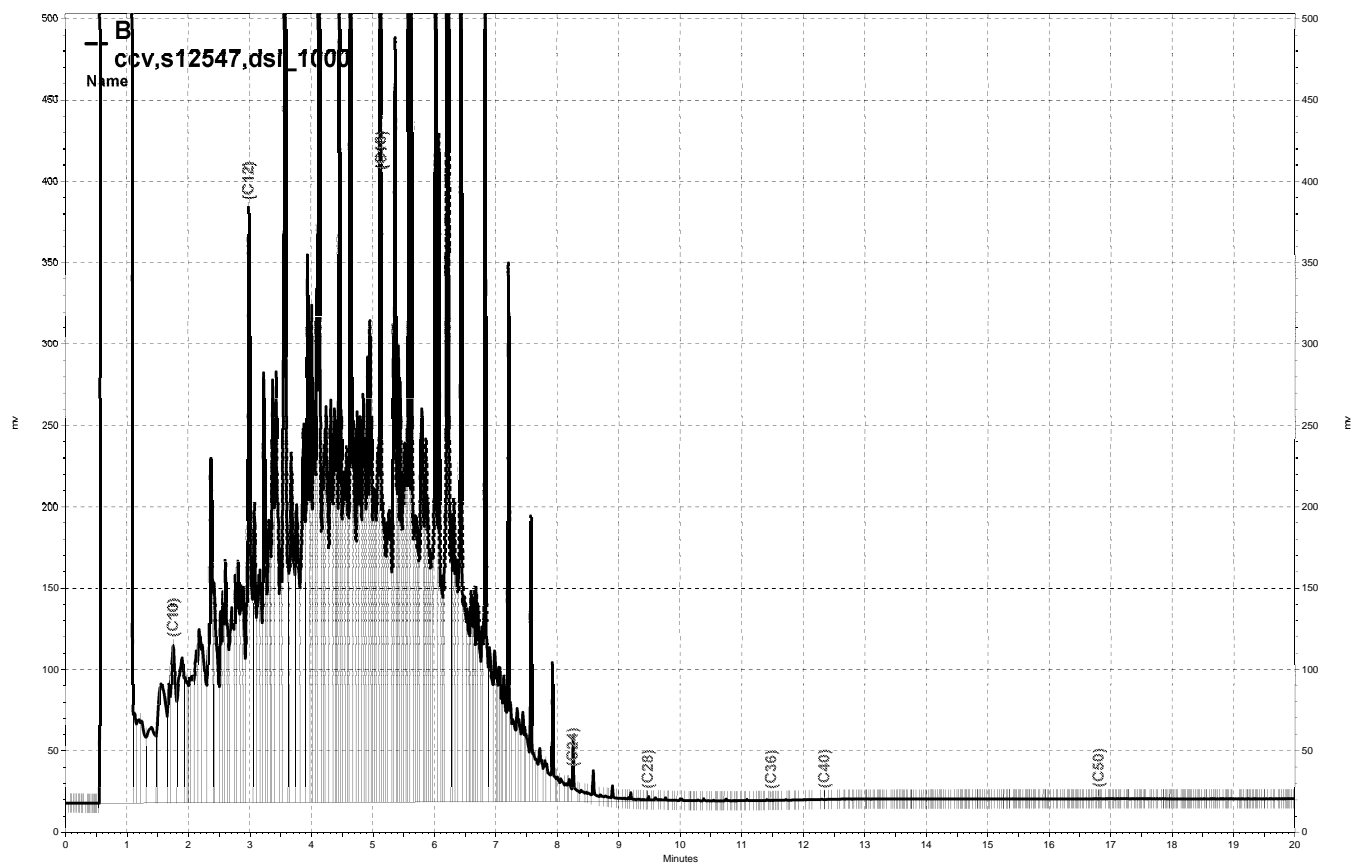




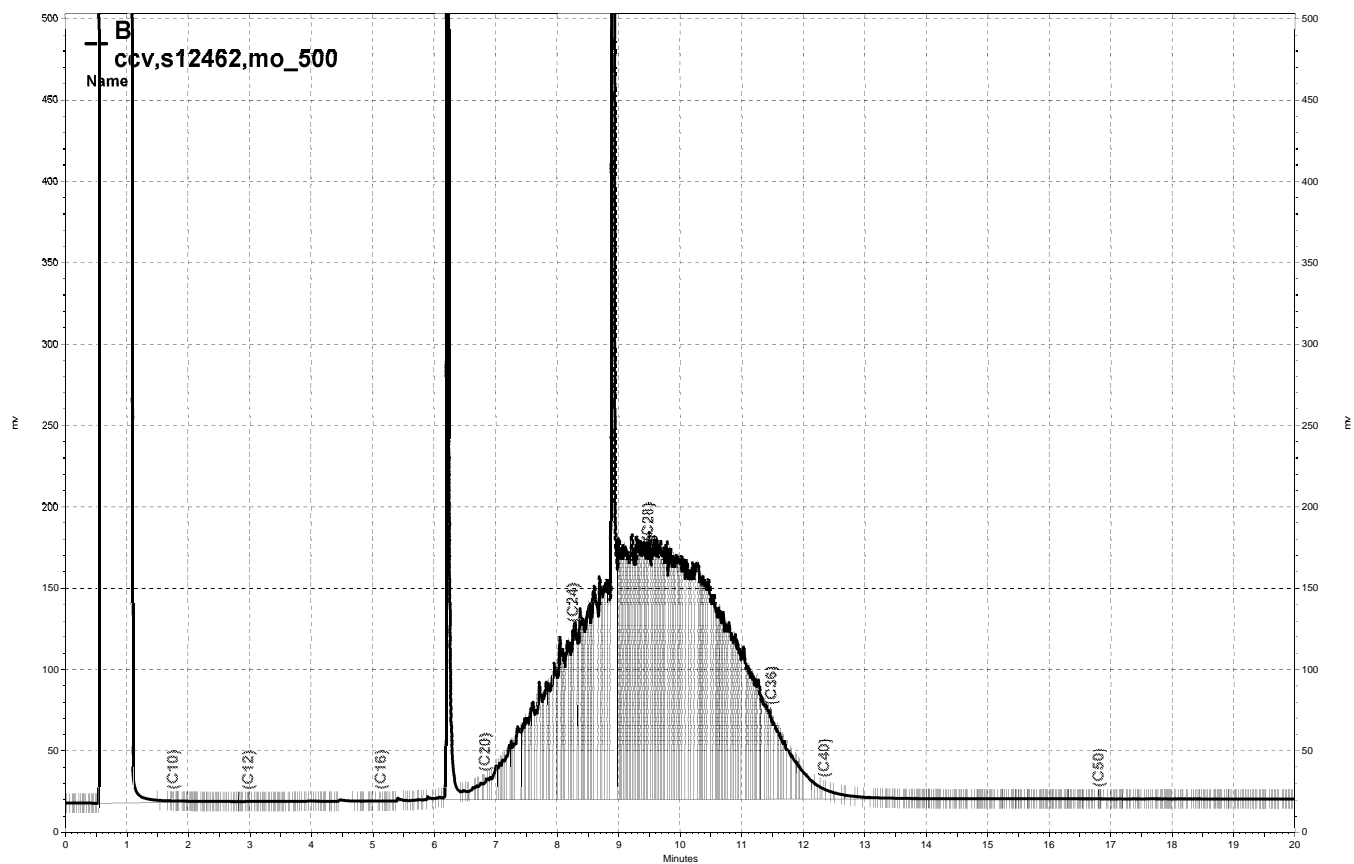
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| Gasoline by GC/MS |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213902          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-1             | Units:    | ug/L                      |
| Lab ID:           | 213902-001      | Sampled:  | 07/30/09                  |
| Matrix:           | Water           | Received: | 07/31/09                  |

| Analyte                       | Result | RL    | Diln Fac | Batch# | Analyzed |
|-------------------------------|--------|-------|----------|--------|----------|
| Gasoline C7-C12               | 41,000 | 6,300 | 125.0    | 153505 | 08/04/09 |
| tert-Butyl Alcohol (TBA)      | ND     | 250   | 25.00    | 153563 | 08/06/09 |
| Isopropyl Ether (DIPE)        | ND     | 13    | 25.00    | 153563 | 08/06/09 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 13    | 25.00    | 153563 | 08/06/09 |
| Methyl tert-Amyl Ether (TAME) | ND     | 13    | 25.00    | 153563 | 08/06/09 |
| MTBE                          | ND     | 13    | 25.00    | 153563 | 08/06/09 |
| 1,2-Dichloroethane            | ND     | 13    | 25.00    | 153563 | 08/06/09 |
| Benzene                       | 630    | 13    | 25.00    | 153563 | 08/06/09 |
| Toluene                       | 780    | 13    | 25.00    | 153563 | 08/06/09 |
| 1,2-Dibromoethane             | ND     | 13    | 25.00    | 153563 | 08/06/09 |
| Ethylbenzene                  | 910    | 13    | 25.00    | 153563 | 08/06/09 |
| m,p-Xylenes                   | 2,600  | 13    | 25.00    | 153563 | 08/06/09 |
| o-Xylene                      | 1,100  | 13    | 25.00    | 153563 | 08/06/09 |

| Surrogate             | %REC | Limits | Diln Fac | Batch# | Analyzed |
|-----------------------|------|--------|----------|--------|----------|
| Dibromofluoromethane  | 121  | 80-122 | 25.00    | 153563 | 08/06/09 |
| 1,2-Dichloroethane-d4 | 115  | 77-137 | 25.00    | 153563 | 08/06/09 |
| Toluene-d8            | 105  | 80-120 | 25.00    | 153563 | 08/06/09 |
| Bromofluorobenzene    | 105  | 80-125 | 25.00    | 153563 | 08/06/09 |

ND= Not Detected  
RL= Reporting Limit

| Gasoline by GC/MS |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213902          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-2             | Batch#:   | 153505                    |
| Lab ID:           | 213902-002      | Sampled:  | 07/30/09                  |
| Matrix:           | Water           | Received: | 07/31/09                  |
| Units:            | ug/L            | Analyzed: | 08/04/09                  |
| Diln Fac:         | 1.000           |           |                           |

| Analyte                       | Result  | RL   |
|-------------------------------|---------|------|
| Gasoline C7-C12               | 1,300 Y | 50   |
| tert-Butyl Alcohol (TBA)      | 32      | 10   |
| Isopropyl Ether (DIPE)        | ND      | 0.50 |
| Ethyl tert-Butyl Ether (ETBE) | ND      | 0.50 |
| Methyl tert-Amyl Ether (TAME) | ND      | 0.50 |
| MTBE                          | ND      | 0.50 |
| 1,2-Dichloroethane            | ND      | 0.50 |
| Benzene                       | ND      | 0.50 |
| Toluene                       | ND      | 0.50 |
| 1,2-Dibromoethane             | ND      | 0.50 |
| Ethylbenzene                  | ND      | 0.50 |
| m,p-Xylenes                   | ND      | 0.50 |
| o-Xylene                      | ND      | 0.50 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 98   | 80-122 |
| 1,2-Dichloroethane-d4 | 95   | 77-137 |
| Toluene-d8            | 96   | 80-120 |
| Bromofluorobenzene    | 106  | 80-125 |

Y= Sample exhibits chromatographic pattern which does not resemble standard  
ND= Not Detected  
RL= Reporting Limit

| Gasoline by GC/MS |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213902          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-3             | Batch#:   | 153505                    |
| Lab ID:           | 213902-003      | Sampled:  | 07/28/09                  |
| Matrix:           | Water           | Received: | 07/31/09                  |
| Units:            | ug/L            | Analyzed: | 08/04/09                  |
| Diln Fac:         | 1.000           |           |                           |

| Analyte                       | Result | RL   |
|-------------------------------|--------|------|
| Gasoline C7-C12               | 360 Y  | 50   |
| tert-Butyl Alcohol (TBA)      | ND     | 10   |
| Isopropyl Ether (DIPE)        | ND     | 0.50 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 0.50 |
| Methyl tert-Amyl Ether (TAME) | ND     | 0.50 |
| MTBE                          | 0.58   | 0.50 |
| 1,2-Dichloroethane            | ND     | 0.50 |
| Benzene                       | 0.57   | 0.50 |
| Toluene                       | 0.65   | 0.50 |
| 1,2-Dibromoethane             | ND     | 0.50 |
| Ethylbenzene                  | ND     | 0.50 |
| m,p-Xylenes                   | ND     | 0.50 |
| o-Xylene                      | ND     | 0.50 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 96   | 80-122 |
| 1,2-Dichloroethane-d4 | 92   | 77-137 |
| Toluene-d8            | 95   | 80-120 |
| Bromofluorobenzene    | 102  | 80-125 |

Y= Sample exhibits chromatographic pattern which does not resemble standard  
 ND= Not Detected  
 RL= Reporting Limit

| Gasoline by GC/MS |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213902          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-4A            | Batch#:   | 153505                    |
| Lab ID:           | 213902-004      | Sampled:  | 07/28/09                  |
| Matrix:           | Water           | Received: | 07/31/09                  |
| Units:            | ug/L            | Analyzed: | 08/04/09                  |
| Diln Fac:         | 1.000           |           |                           |

| Analyte                       | Result         | RL   |
|-------------------------------|----------------|------|
| Gasoline C7-C12               | 10,000 >LR Y b | 50   |
| tert-Butyl Alcohol (TBA)      | 12             | 10   |
| Isopropyl Ether (DIPE)        | ND             | 0.50 |
| Ethyl tert-Butyl Ether (ETBE) | ND             | 0.50 |
| Methyl tert-Amyl Ether (TAME) | ND             | 0.50 |
| MTBE                          | 2.1            | 0.50 |
| 1,2-Dichloroethane            | 1.0            | 0.50 |
| Benzene                       | ND             | 0.50 |
| Toluene                       | 0.58           | 0.50 |
| 1,2-Dibromoethane             | ND             | 0.50 |
| Ethylbenzene                  | 0.75           | 0.50 |
| m,p-Xylenes                   | ND             | 0.50 |
| o-Xylene                      | 0.66           | 0.50 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 98   | 80-122 |
| 1,2-Dichloroethane-d4 | 83   | 77-137 |
| Toluene-d8            | 93   | 80-120 |
| Bromofluorobenzene    | 105  | 80-125 |

Y= Sample exhibits chromatographic pattern which does not resemble standard

b= See narrative

ND= Not Detected

RL= Reporting Limit

>LR= Response exceeds instrument's linear range



| Gasoline by GC/MS |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213902          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-5             | Batch#:   | 153477                    |
| Lab ID:           | 213902-005      | Sampled:  | 07/28/09                  |
| Matrix:           | Water           | Received: | 07/31/09                  |
| Units:            | ug/L            | Analyzed: | 08/03/09                  |
| Diln Fac:         | 1.000           |           |                           |

| Analyte                       | Result | RL   |
|-------------------------------|--------|------|
| Gasoline C7-C12               | 410 Y  | 50   |
| tert-Butyl Alcohol (TBA)      | ND     | 10   |
| Isopropyl Ether (DIPE)        | ND     | 0.50 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 0.50 |
| Methyl tert-Amyl Ether (TAME) | ND     | 0.50 |
| MTBE                          | ND     | 0.50 |
| 1,2-Dichloroethane            | ND     | 0.50 |
| Benzene                       | ND     | 0.50 |
| Toluene                       | ND     | 0.50 |
| 1,2-Dibromoethane             | ND     | 0.50 |
| Ethylbenzene                  | ND     | 0.50 |
| m,p-Xylenes                   | ND     | 0.50 |
| o-Xylene                      | ND     | 0.50 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 97   | 80-122 |
| 1,2-Dichloroethane-d4 | 90   | 77-137 |
| Toluene-d8            | 96   | 80-120 |
| Bromofluorobenzene    | 101  | 80-125 |

Y= Sample exhibits chromatographic pattern which does not resemble standard  
ND= Not Detected  
RL= Reporting Limit

| Gasoline by GC/MS |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213902          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-6             | Units:    | ug/L                      |
| Lab ID:           | 213902-006      | Sampled:  | 07/30/09                  |
| Matrix:           | Water           | Received: | 07/31/09                  |

| Analyte                       | Result  | RL   | Diln Fac | Batch# | Analyzed |
|-------------------------------|---------|------|----------|--------|----------|
| Gasoline C7-C12               | 4,400 Y | 200  | 4.000    | 153505 | 08/04/09 |
| tert-Butyl Alcohol (TBA)      | 19      | 10   | 1.000    | 153544 | 08/05/09 |
| Isopropyl Ether (DIPE)        | ND      | 0.50 | 1.000    | 153544 | 08/05/09 |
| Ethyl tert-Butyl Ether (ETBE) | ND      | 0.50 | 1.000    | 153544 | 08/05/09 |
| Methyl tert-Amyl Ether (TAME) | ND      | 0.50 | 1.000    | 153544 | 08/05/09 |
| MTBE                          | 1.6     | 0.50 | 1.000    | 153544 | 08/05/09 |
| 1,2-Dichloroethane            | 0.83    | 0.50 | 1.000    | 153544 | 08/05/09 |
| Benzene                       | 280     | 2.0  | 4.000    | 153505 | 08/04/09 |
| Toluene                       | 4.1     | 0.50 | 1.000    | 153544 | 08/05/09 |
| 1,2-Dibromoethane             | ND      | 0.50 | 1.000    | 153544 | 08/05/09 |
| Ethylbenzene                  | 90      | 0.50 | 1.000    | 153544 | 08/05/09 |
| m,p-Xylenes                   | 14      | 0.50 | 1.000    | 153544 | 08/05/09 |
| o-Xylene                      | 0.71    | 0.50 | 1.000    | 153544 | 08/05/09 |

| Surrogate             | %REC | Limits | Diln Fac | Batch# | Analyzed |
|-----------------------|------|--------|----------|--------|----------|
| Dibromofluoromethane  | 96   | 80-122 | 1.000    | 153544 | 08/05/09 |
| 1,2-Dichloroethane-d4 | 87   | 77-137 | 1.000    | 153544 | 08/05/09 |
| Toluene-d8            | 98   | 80-120 | 1.000    | 153544 | 08/05/09 |
| Bromofluorobenzene    | 101  | 80-125 | 1.000    | 153544 | 08/05/09 |

Y= Sample exhibits chromatographic pattern which does not resemble standard  
 ND= Not Detected  
 RL= Reporting Limit

| Gasoline by GC/MS |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213902          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-7             | Batch#:   | 153477                    |
| Lab ID:           | 213902-007      | Sampled:  | 07/28/09                  |
| Matrix:           | Water           | Received: | 07/31/09                  |
| Units:            | ug/L            | Analyzed: | 08/03/09                  |
| Diln Fac:         | 1.000           |           |                           |

| Analyte                       | Result  | RL   |
|-------------------------------|---------|------|
| Gasoline C7-C12               | 1,200 Y | 50   |
| tert-Butyl Alcohol (TBA)      | 18      | 10   |
| Isopropyl Ether (DIPE)        | ND      | 0.50 |
| Ethyl tert-Butyl Ether (ETBE) | ND      | 0.50 |
| Methyl tert-Amyl Ether (TAME) | ND      | 0.50 |
| MTBE                          | ND      | 0.50 |
| 1,2-Dichloroethane            | ND      | 0.50 |
| Benzene                       | 2.3     | 0.50 |
| Toluene                       | 1.3     | 0.50 |
| 1,2-Dibromoethane             | ND      | 0.50 |
| Ethylbenzene                  | 16      | 0.50 |
| m,p-Xylenes                   | 1.6     | 0.50 |
| o-Xylene                      | 0.86    | 0.50 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 97   | 80-122 |
| 1,2-Dichloroethane-d4 | 86   | 77-137 |
| Toluene-d8            | 95   | 80-120 |
| Bromofluorobenzene    | 102  | 80-125 |

Y= Sample exhibits chromatographic pattern which does not resemble standard  
ND= Not Detected  
RL= Reporting Limit

| Gasoline by GC/MS |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213902          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-8             | Batch#:   | 153505                    |
| Lab ID:           | 213902-008      | Sampled:  | 07/28/09                  |
| Matrix:           | Water           | Received: | 07/31/09                  |
| Units:            | ug/L            | Analyzed: | 08/04/09                  |
| Diln Fac:         | 6.250           |           |                           |

| Analyte                       | Result  | RL  |
|-------------------------------|---------|-----|
| Gasoline C7-C12               | 6,800 Y | 310 |
| tert-Butyl Alcohol (TBA)      | ND      | 63  |
| Isopropyl Ether (DIPE)        | ND      | 3.1 |
| Ethyl tert-Butyl Ether (ETBE) | ND      | 3.1 |
| Methyl tert-Amyl Ether (TAME) | ND      | 3.1 |
| MTBE                          | ND      | 3.1 |
| 1,2-Dichloroethane            | 3.8     | 3.1 |
| Benzene                       | 400     | 3.1 |
| Toluene                       | 73      | 3.1 |
| 1,2-Dibromoethane             | ND      | 3.1 |
| Ethylbenzene                  | 250     | 3.1 |
| m,p-Xylenes                   | 550     | 3.1 |
| o-Xylene                      | 210     | 3.1 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 96   | 80-122 |
| 1,2-Dichloroethane-d4 | 86   | 77-137 |
| Toluene-d8            | 99   | 80-120 |
| Bromofluorobenzene    | 103  | 80-125 |

Y= Sample exhibits chromatographic pattern which does not resemble standard  
ND= Not Detected  
RL= Reporting Limit

| Gasoline by GC/MS |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213902          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-9             | Batch#:   | 153505                    |
| Lab ID:           | 213902-009      | Sampled:  | 07/28/09                  |
| Matrix:           | Water           | Received: | 07/31/09                  |
| Units:            | ug/L            | Analyzed: | 08/04/09                  |
| Diln Fac:         | 33.33           |           |                           |

| Analyte                       | Result   | RL    |
|-------------------------------|----------|-------|
| Gasoline C7-C12               | 25,000 Y | 1,700 |
| tert-Butyl Alcohol (TBA)      | ND       | 330   |
| Isopropyl Ether (DIPE)        | ND       | 17    |
| Ethyl tert-Butyl Ether (ETBE) | ND       | 17    |
| Methyl tert-Amyl Ether (TAME) | ND       | 17    |
| MTBE                          | ND       | 17    |
| 1,2-Dichloroethane            | ND       | 17    |
| Benzene                       | 2,800    | 17    |
| Toluene                       | 50       | 17    |
| 1,2-Dibromoethane             | ND       | 17    |
| Ethylbenzene                  | 950      | 17    |
| m,p-Xylenes                   | 2,300    | 17    |
| o-Xylene                      | 550      | 17    |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 95   | 80-122 |
| 1,2-Dichloroethane-d4 | 83   | 77-137 |
| Toluene-d8            | 96   | 80-120 |
| Bromofluorobenzene    | 106  | 80-125 |

Y= Sample exhibits chromatographic pattern which does not resemble standard  
ND= Not Detected  
RL= Reporting Limit

| Gasoline by GC/MS |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213902          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-10            | Batch#:   | 153505                    |
| Lab ID:           | 213902-010      | Sampled:  | 07/28/09                  |
| Matrix:           | Water           | Received: | 07/31/09                  |
| Units:            | ug/L            | Analyzed: | 08/04/09                  |
| Diln Fac:         | 1.000           |           |                           |

| Analyte                       | Result  | RL   |
|-------------------------------|---------|------|
| Gasoline C7-C12               | 1,400 Y | 50   |
| tert-Butyl Alcohol (TBA)      | ND      | 10   |
| Isopropyl Ether (DIPE)        | ND      | 0.50 |
| Ethyl tert-Butyl Ether (ETBE) | ND      | 0.50 |
| Methyl tert-Amyl Ether (TAME) | ND      | 0.50 |
| MTBE                          | 1.5     | 0.50 |
| 1,2-Dichloroethane            | 1.1     | 0.50 |
| Benzene                       | ND      | 0.50 |
| Toluene                       | ND      | 0.50 |
| 1,2-Dibromoethane             | ND      | 0.50 |
| Ethylbenzene                  | ND      | 0.50 |
| m,p-Xylenes                   | ND      | 0.50 |
| o-Xylene                      | ND      | 0.50 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 95   | 80-122 |
| 1,2-Dichloroethane-d4 | 92   | 77-137 |
| Toluene-d8            | 98   | 80-120 |
| Bromofluorobenzene    | 103  | 80-125 |

Y= Sample exhibits chromatographic pattern which does not resemble standard  
 ND= Not Detected  
 RL= Reporting Limit

| Gasoline by GC/MS |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213902          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-12            | Batch#:   | 153477                    |
| Lab ID:           | 213902-011      | Sampled:  | 07/28/09                  |
| Matrix:           | Water           | Received: | 07/31/09                  |
| Units:            | ug/L            | Analyzed: | 08/03/09                  |
| Diln Fac:         | 5.000           |           |                           |

| Analyte                       | Result  | RL  |
|-------------------------------|---------|-----|
| Gasoline C7-C12               | 510 Y b | 250 |
| tert-Butyl Alcohol (TBA)      | ND b    | 50  |
| Isopropyl Ether (DIPE)        | ND b    | 2.5 |
| Ethyl tert-Butyl Ether (ETBE) | ND b    | 2.5 |
| Methyl tert-Amyl Ether (TAME) | ND b    | 2.5 |
| MTBE                          | ND b    | 2.5 |
| 1,2-Dichloroethane            | ND b    | 2.5 |
| Benzene                       | ND b    | 2.5 |
| Toluene                       | ND b    | 2.5 |
| 1,2-Dibromoethane             | ND b    | 2.5 |
| Ethylbenzene                  | ND b    | 2.5 |
| m,p-Xylenes                   | ND b    | 2.5 |
| o-Xylene                      | ND b    | 2.5 |

| Surrogate             | %REC  | Limits |
|-----------------------|-------|--------|
| Dibromofluoromethane  | 104 b | 80-122 |
| 1,2-Dichloroethane-d4 | 95 b  | 77-137 |
| Toluene-d8            | 97 b  | 80-120 |
| Bromofluorobenzene    | 103 b | 80-125 |

Y= Sample exhibits chromatographic pattern which does not resemble standard

b= See narrative

ND= Not Detected

RL= Reporting Limit

# Batch QC Report

| Gasoline by GC/MS |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213902          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Matrix:           | Water           | Batch#:   | 153477                    |
| Units:            | ug/L            | Analyzed: | 08/03/09                  |
| Diln Fac:         | 1.000           |           |                           |

Type: BS Lab ID: QC505936

| Analyte                       | Spiked | Result | %REC | Limits |
|-------------------------------|--------|--------|------|--------|
| tert-Butyl Alcohol (TBA)      | 125.0  | 98.72  | 79   | 55-151 |
| Isopropyl Ether (DIPE)        | 25.00  | 25.29  | 101  | 65-131 |
| Ethyl tert-Butyl Ether (ETBE) | 25.00  | 23.02  | 92   | 75-128 |
| Methyl tert-Amyl Ether (TAME) | 25.00  | 21.51  | 86   | 80-121 |
| MTBE                          | 25.00  | 22.19  | 89   | 73-122 |
| 1,2-Dichloroethane            | 25.00  | 21.84  | 87   | 73-141 |
| Benzene                       | 25.00  | 26.74  | 107  | 80-120 |
| Toluene                       | 25.00  | 26.30  | 105  | 80-120 |
| 1,2-Dibromoethane             | 25.00  | 24.07  | 96   | 80-120 |
| Ethylbenzene                  | 25.00  | 27.25  | 109  | 80-121 |
| m,p-Xylenes                   | 50.00  | 55.88  | 112  | 80-122 |
| o-Xylene                      | 25.00  | 27.66  | 111  | 80-120 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 101  | 80-122 |
| 1,2-Dichloroethane-d4 | 85   | 77-137 |
| Toluene-d8            | 97   | 80-120 |
| Bromofluorobenzene    | 102  | 80-125 |

Type: BSD Lab ID: QC505937

| Analyte                       | Spiked | Result | %REC | Limits | RPD | Lim |
|-------------------------------|--------|--------|------|--------|-----|-----|
| tert-Butyl Alcohol (TBA)      | 125.0  | 103.1  | 82   | 55-151 | 4   | 21  |
| Isopropyl Ether (DIPE)        | 25.00  | 25.87  | 103  | 65-131 | 2   | 20  |
| Ethyl tert-Butyl Ether (ETBE) | 25.00  | 23.77  | 95   | 75-128 | 3   | 20  |
| Methyl tert-Amyl Ether (TAME) | 25.00  | 23.09  | 92   | 80-121 | 7   | 20  |
| MTBE                          | 25.00  | 23.33  | 93   | 73-122 | 5   | 20  |
| 1,2-Dichloroethane            | 25.00  | 22.67  | 91   | 73-141 | 4   | 20  |
| Benzene                       | 25.00  | 27.39  | 110  | 80-120 | 2   | 20  |
| Toluene                       | 25.00  | 27.13  | 109  | 80-120 | 3   | 20  |
| 1,2-Dibromoethane             | 25.00  | 25.90  | 104  | 80-120 | 7   | 20  |
| Ethylbenzene                  | 25.00  | 28.34  | 113  | 80-121 | 4   | 20  |
| m,p-Xylenes                   | 50.00  | 58.30  | 117  | 80-122 | 4   | 20  |
| o-Xylene                      | 25.00  | 29.04  | 116  | 80-120 | 5   | 20  |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 100  | 80-122 |
| 1,2-Dichloroethane-d4 | 86   | 77-137 |
| Toluene-d8            | 97   | 80-120 |
| Bromofluorobenzene    | 104  | 80-125 |

RPD= Relative Percent Difference



## Batch QC Report

| Gasoline by GC/MS |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213902          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Matrix:           | Water           | Batch#:   | 153477                    |
| Units:            | ug/L            | Analyzed: | 08/03/09                  |
| Diln Fac:         | 1.000           |           |                           |

Type: BS Lab ID: QC505938

| Analyte         | Spiked | Result | %REC | Limits |
|-----------------|--------|--------|------|--------|
| Gasoline C7-C12 | 2,000  | 1,971  | 99   | 80-120 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 99   | 80-122 |
| 1,2-Dichloroethane-d4 | 89   | 77-137 |
| Toluene-d8            | 96   | 80-120 |
| Bromofluorobenzene    | 107  | 80-125 |

Type: BSD Lab ID: QC505939

| Analyte         | Spiked | Result | %REC | Limits | RPD | Lim |
|-----------------|--------|--------|------|--------|-----|-----|
| Gasoline C7-C12 | 2,000  | 2,032  | 102  | 80-120 | 3   | 20  |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 97   | 80-122 |
| 1,2-Dichloroethane-d4 | 86   | 77-137 |
| Toluene-d8            | 97   | 80-120 |
| Bromofluorobenzene    | 105  | 80-125 |

RPD= Relative Percent Difference

## Batch QC Report

| Gasoline by GC/MS |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213902          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Type:             | BLANK           | Diln Fac: | 1.000                     |
| Lab ID:           | QC505940        | Batch#:   | 153477                    |
| Matrix:           | Water           | Analyzed: | 08/03/09                  |
| Units:            | ug/L            |           |                           |

| Analyte                       | Result | RL   |
|-------------------------------|--------|------|
| Gasoline C7-C12               | ND     | 50   |
| tert-Butyl Alcohol (TBA)      | ND     | 10   |
| Isopropyl Ether (DIPE)        | ND     | 0.50 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 0.50 |
| Methyl tert-Amyl Ether (TAME) | ND     | 0.50 |
| MTBE                          | ND     | 0.50 |
| 1,2-Dichloroethane            | ND     | 0.50 |
| Benzene                       | ND     | 0.50 |
| Toluene                       | ND     | 0.50 |
| 1,2-Dibromoethane             | ND     | 0.50 |
| Ethylbenzene                  | ND     | 0.50 |
| m,p-Xylenes                   | ND     | 0.50 |
| o-Xylene                      | ND     | 0.50 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 97   | 80-122 |
| 1,2-Dichloroethane-d4 | 89   | 77-137 |
| Toluene-d8            | 96   | 80-120 |
| Bromofluorobenzene    | 102  | 80-125 |

ND= Not Detected

RL= Reporting Limit

# Batch QC Report

| Gasoline by GC/MS |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213902          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Matrix:           | Water           | Batch#:   | 153505                    |
| Units:            | ug/L            | Analyzed: | 08/04/09                  |
| Diln Fac:         | 1.000           |           |                           |

Type: BS Lab ID: QC506071

| Analyte                       | Spiked | Result | %REC | Limits |
|-------------------------------|--------|--------|------|--------|
| tert-Butyl Alcohol (TBA)      | 125.0  | 98.33  | 79   | 55-151 |
| Isopropyl Ether (DIPE)        | 25.00  | 27.70  | 111  | 65-131 |
| Ethyl tert-Butyl Ether (ETBE) | 25.00  | 25.22  | 101  | 75-128 |
| Methyl tert-Amyl Ether (TAME) | 25.00  | 22.77  | 91   | 80-121 |
| MTBE                          | 25.00  | 23.70  | 95   | 73-122 |
| 1,2-Dichloroethane            | 25.00  | 24.01  | 96   | 73-141 |
| Benzene                       | 25.00  | 27.60  | 110  | 80-120 |
| Toluene                       | 25.00  | 25.02  | 100  | 80-120 |
| 1,2-Dibromoethane             | 25.00  | 23.02  | 92   | 80-120 |
| Ethylbenzene                  | 25.00  | 26.91  | 108  | 80-121 |
| m,p-Xylenes                   | 50.00  | 55.07  | 110  | 80-122 |
| o-Xylene                      | 25.00  | 27.28  | 109  | 80-120 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 108  | 80-122 |
| 1,2-Dichloroethane-d4 | 93   | 77-137 |
| Toluene-d8            | 97   | 80-120 |
| Bromofluorobenzene    | 101  | 80-125 |

Type: BSD Lab ID: QC506072

| Analyte                       | Spiked | Result | %REC | Limits | RPD | Lim |
|-------------------------------|--------|--------|------|--------|-----|-----|
| tert-Butyl Alcohol (TBA)      | 125.0  | 104.6  | 84   | 55-151 | 6   | 21  |
| Isopropyl Ether (DIPE)        | 25.00  | 28.50  | 114  | 65-131 | 3   | 20  |
| Ethyl tert-Butyl Ether (ETBE) | 25.00  | 26.40  | 106  | 75-128 | 5   | 20  |
| Methyl tert-Amyl Ether (TAME) | 25.00  | 23.76  | 95   | 80-121 | 4   | 20  |
| MTBE                          | 25.00  | 24.85  | 99   | 73-122 | 5   | 20  |
| 1,2-Dichloroethane            | 25.00  | 24.78  | 99   | 73-141 | 3   | 20  |
| Benzene                       | 25.00  | 28.58  | 114  | 80-120 | 4   | 20  |
| Toluene                       | 25.00  | 26.26  | 105  | 80-120 | 5   | 20  |
| 1,2-Dibromoethane             | 25.00  | 24.84  | 99   | 80-120 | 8   | 20  |
| Ethylbenzene                  | 25.00  | 27.80  | 111  | 80-121 | 3   | 20  |
| m,p-Xylenes                   | 50.00  | 57.21  | 114  | 80-122 | 4   | 20  |
| o-Xylene                      | 25.00  | 28.28  | 113  | 80-120 | 4   | 20  |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 108  | 80-122 |
| 1,2-Dichloroethane-d4 | 91   | 77-137 |
| Toluene-d8            | 98   | 80-120 |
| Bromofluorobenzene    | 103  | 80-125 |

RPD= Relative Percent Difference

## Batch QC Report

| Gasoline by GC/MS |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213902          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Matrix:           | Water           | Batch#:   | 153505                    |
| Units:            | ug/L            | Analyzed: | 08/04/09                  |
| Diln Fac:         | 1.000           |           |                           |

Type: BS Lab ID: QC506073

| Analyte         | Spiked | Result | %REC | Limits |
|-----------------|--------|--------|------|--------|
| Gasoline C7-C12 | 1,000  | 1,030  | 103  | 80-120 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 104  | 80-122 |
| 1,2-Dichloroethane-d4 | 94   | 77-137 |
| Toluene-d8            | 98   | 80-120 |
| Bromofluorobenzene    | 102  | 80-125 |

Type: BSD Lab ID: QC506080

| Analyte         | Spiked | Result | %REC | Limits | RPD | Lim |
|-----------------|--------|--------|------|--------|-----|-----|
| Gasoline C7-C12 | 1,000  | 941.7  | 94   | 80-120 | 9   | 20  |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 101  | 80-122 |
| 1,2-Dichloroethane-d4 | 90   | 77-137 |
| Toluene-d8            | 97   | 80-120 |
| Bromofluorobenzene    | 102  | 80-125 |

RPD= Relative Percent Difference

## Batch QC Report

| Gasoline by GC/MS |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213902          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Type:             | BLANK           | Diln Fac: | 1.000                     |
| Lab ID:           | QC506081        | Batch#:   | 153505                    |
| Matrix:           | Water           | Analyzed: | 08/04/09                  |
| Units:            | ug/L            |           |                           |

| Analyte                       | Result | RL   |
|-------------------------------|--------|------|
| Gasoline C7-C12               | ND     | 50   |
| tert-Butyl Alcohol (TBA)      | ND     | 10   |
| Isopropyl Ether (DIPE)        | ND     | 0.50 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 0.50 |
| Methyl tert-Amyl Ether (TAME) | ND     | 0.50 |
| MTBE                          | ND     | 0.50 |
| 1,2-Dichloroethane            | ND     | 0.50 |
| Benzene                       | ND     | 0.50 |
| Toluene                       | ND     | 0.50 |
| 1,2-Dibromoethane             | ND     | 0.50 |
| Ethylbenzene                  | ND     | 0.50 |
| m,p-Xylenes                   | ND     | 0.50 |
| o-Xylene                      | ND     | 0.50 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 106  | 80-122 |
| 1,2-Dichloroethane-d4 | 97   | 77-137 |
| Toluene-d8            | 97   | 80-120 |
| Bromofluorobenzene    | 105  | 80-125 |

ND= Not Detected

RL= Reporting Limit

## Batch QC Report

| Gasoline by GC/MS |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213902          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Matrix:           | Water           | Batch#:   | 153544                    |
| Units:            | ug/L            | Analyzed: | 08/05/09                  |
| Diln Fac:         | 1.000           |           |                           |

Type: BS Lab ID: QC506241

| Analyte                       | Spiked | Result | %REC | Limits |
|-------------------------------|--------|--------|------|--------|
| tert-Butyl Alcohol (TBA)      | 125.0  | 104.0  | 83   | 55-151 |
| Isopropyl Ether (DIPE)        | 25.00  | 22.78  | 91   | 65-131 |
| Ethyl tert-Butyl Ether (ETBE) | 25.00  | 22.73  | 91   | 75-128 |
| Methyl tert-Amyl Ether (TAME) | 25.00  | 23.58  | 94   | 80-121 |
| MTBE                          | 25.00  | 22.23  | 89   | 73-122 |
| 1,2-Dichloroethane            | 25.00  | 25.92  | 104  | 73-141 |
| Benzene                       | 25.00  | 26.65  | 107  | 80-120 |
| Toluene                       | 25.00  | 25.54  | 102  | 80-120 |
| 1,2-Dibromoethane             | 25.00  | 25.59  | 102  | 80-120 |
| Ethylbenzene                  | 25.00  | 26.53  | 106  | 80-121 |
| m,p-Xylenes                   | 50.00  | 53.59  | 107  | 80-122 |
| o-Xylene                      | 25.00  | 27.15  | 109  | 80-120 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 99   | 80-122 |
| 1,2-Dichloroethane-d4 | 98   | 77-137 |
| Toluene-d8            | 101  | 80-120 |
| Bromofluorobenzene    | 101  | 80-125 |

Type: BSD Lab ID: QC506242

| Analyte                       | Spiked | Result | %REC | Limits | RPD | Lim |
|-------------------------------|--------|--------|------|--------|-----|-----|
| tert-Butyl Alcohol (TBA)      | 125.0  | 119.9  | 96   | 55-151 | 14  | 21  |
| Isopropyl Ether (DIPE)        | 25.00  | 22.50  | 90   | 65-131 | 1   | 20  |
| Ethyl tert-Butyl Ether (ETBE) | 25.00  | 22.76  | 91   | 75-128 | 0   | 20  |
| Methyl tert-Amyl Ether (TAME) | 25.00  | 23.32  | 93   | 80-121 | 1   | 20  |
| MTBE                          | 25.00  | 22.72  | 91   | 73-122 | 2   | 20  |
| 1,2-Dichloroethane            | 25.00  | 25.50  | 102  | 73-141 | 2   | 20  |
| Benzene                       | 25.00  | 25.20  | 101  | 80-120 | 6   | 20  |
| Toluene                       | 25.00  | 24.38  | 98   | 80-120 | 5   | 20  |
| 1,2-Dibromoethane             | 25.00  | 25.39  | 102  | 80-120 | 1   | 20  |
| Ethylbenzene                  | 25.00  | 24.96  | 100  | 80-121 | 6   | 20  |
| m,p-Xylenes                   | 50.00  | 50.50  | 101  | 80-122 | 6   | 20  |
| o-Xylene                      | 25.00  | 25.99  | 104  | 80-120 | 4   | 20  |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 103  | 80-122 |
| 1,2-Dichloroethane-d4 | 100  | 77-137 |
| Toluene-d8            | 101  | 80-120 |
| Bromofluorobenzene    | 103  | 80-125 |

RPD= Relative Percent Difference

## Batch QC Report

| Gasoline by GC/MS |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213902          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Matrix:           | Water           | Batch#:   | 153544                    |
| Units:            | ug/L            | Analyzed: | 08/05/09                  |
| Diln Fac:         | 1.000           |           |                           |

Type: BS Lab ID: QC506243

| Analyte         | Spiked | Result | %REC | Limits |
|-----------------|--------|--------|------|--------|
| Gasoline C7-C12 | 1,000  | 1,106  | 111  | 80-120 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 100  | 80-122 |
| 1,2-Dichloroethane-d4 | 100  | 77-137 |
| Toluene-d8            | 99   | 80-120 |
| Bromofluorobenzene    | 105  | 80-125 |

Type: BSD Lab ID: QC506244

| Analyte         | Spiked | Result | %REC | Limits | RPD | Lim |
|-----------------|--------|--------|------|--------|-----|-----|
| Gasoline C7-C12 | 1,000  | 1,106  | 111  | 80-120 | 0   | 20  |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 98   | 80-122 |
| 1,2-Dichloroethane-d4 | 101  | 77-137 |
| Toluene-d8            | 100  | 80-120 |
| Bromofluorobenzene    | 103  | 80-125 |

RPD= Relative Percent Difference

## Batch QC Report

| Gasoline by GC/MS |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213902          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Type:             | BLANK           | Diln Fac: | 1.000                     |
| Lab ID:           | QC506245        | Batch#:   | 153544                    |
| Matrix:           | Water           | Analyzed: | 08/05/09                  |
| Units:            | ug/L            |           |                           |

| Analyte                       | Result | RL   |
|-------------------------------|--------|------|
| Gasoline C7-C12               | ND     | 50   |
| tert-Butyl Alcohol (TBA)      | ND     | 10   |
| Isopropyl Ether (DIPE)        | ND     | 0.50 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 0.50 |
| Methyl tert-Amyl Ether (TAME) | ND     | 0.50 |
| MTBE                          | ND     | 0.50 |
| 1,2-Dichloroethane            | ND     | 0.50 |
| Benzene                       | ND     | 0.50 |
| Toluene                       | ND     | 0.50 |
| 1,2-Dibromoethane             | ND     | 0.50 |
| Ethylbenzene                  | ND     | 0.50 |
| m,p-Xylenes                   | ND     | 0.50 |
| o-Xylene                      | ND     | 0.50 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 102  | 80-122 |
| 1,2-Dichloroethane-d4 | 104  | 77-137 |
| Toluene-d8            | 101  | 80-120 |
| Bromofluorobenzene    | 106  | 80-125 |

ND= Not Detected

RL= Reporting Limit



# Batch QC Report

| Gasoline by GC/MS |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213902          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Matrix:           | Water           | Batch#:   | 153563                    |
| Units:            | ug/L            | Analyzed: | 08/05/09                  |
| Diln Fac:         | 1.000           |           |                           |

Type: BS Lab ID: QC506311

| Analyte                       | Spiked | Result | %REC | Limits |
|-------------------------------|--------|--------|------|--------|
| tert-Butyl Alcohol (TBA)      | 125.0  | 109.5  | 88   | 55-151 |
| Isopropyl Ether (DIPE)        | 25.00  | 25.18  | 101  | 65-131 |
| Ethyl tert-Butyl Ether (ETBE) | 25.00  | 23.39  | 94   | 75-128 |
| Methyl tert-Amyl Ether (TAME) | 25.00  | 22.38  | 90   | 80-121 |
| MTBE                          | 25.00  | 23.09  | 92   | 73-122 |
| 1,2-Dichloroethane            | 25.00  | 27.20  | 109  | 73-141 |
| Benzene                       | 25.00  | 26.92  | 108  | 80-120 |
| Toluene                       | 25.00  | 26.35  | 105  | 80-120 |
| 1,2-Dibromoethane             | 25.00  | 26.30  | 105  | 80-120 |
| Ethylbenzene                  | 25.00  | 25.56  | 102  | 80-121 |
| m,p-Xylenes                   | 50.00  | 49.76  | 100  | 80-122 |
| o-Xylene                      | 25.00  | 24.47  | 98   | 80-120 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 112  | 80-122 |
| 1,2-Dichloroethane-d4 | 110  | 77-137 |
| Toluene-d8            | 106  | 80-120 |
| Bromofluorobenzene    | 101  | 80-125 |

Type: BSD Lab ID: QC506312

| Analyte                       | Spiked | Result | %REC | Limits | RPD | Lim |
|-------------------------------|--------|--------|------|--------|-----|-----|
| tert-Butyl Alcohol (TBA)      | 125.0  | 113.5  | 91   | 55-151 | 4   | 21  |
| Isopropyl Ether (DIPE)        | 25.00  | 25.07  | 100  | 65-131 | 0   | 20  |
| Ethyl tert-Butyl Ether (ETBE) | 25.00  | 23.47  | 94   | 75-128 | 0   | 20  |
| Methyl tert-Amyl Ether (TAME) | 25.00  | 22.60  | 90   | 80-121 | 1   | 20  |
| MTBE                          | 25.00  | 23.70  | 95   | 73-122 | 3   | 20  |
| 1,2-Dichloroethane            | 25.00  | 26.72  | 107  | 73-141 | 2   | 20  |
| Benzene                       | 25.00  | 25.93  | 104  | 80-120 | 4   | 20  |
| Toluene                       | 25.00  | 25.46  | 102  | 80-120 | 3   | 20  |
| 1,2-Dibromoethane             | 25.00  | 26.12  | 104  | 80-120 | 1   | 20  |
| Ethylbenzene                  | 25.00  | 24.63  | 99   | 80-121 | 4   | 20  |
| m,p-Xylenes                   | 50.00  | 48.98  | 98   | 80-122 | 2   | 20  |
| o-Xylene                      | 25.00  | 23.72  | 95   | 80-120 | 3   | 20  |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 110  | 80-122 |
| 1,2-Dichloroethane-d4 | 110  | 77-137 |
| Toluene-d8            | 104  | 80-120 |
| Bromofluorobenzene    | 102  | 80-125 |

RPD= Relative Percent Difference

## Batch QC Report

| Gasoline by GC/MS |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213902          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Type:             | BLANK           | Diln Fac: | 1.000                     |
| Lab ID:           | QC506313        | Batch#:   | 153563                    |
| Matrix:           | Water           | Analyzed: | 08/05/09                  |
| Units:            | ug/L            |           |                           |

| Analyte                       | Result | RL   |
|-------------------------------|--------|------|
| Gasoline C7-C12               | NA     |      |
| tert-Butyl Alcohol (TBA)      | ND     | 10   |
| Isopropyl Ether (DIPE)        | ND     | 0.50 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 0.50 |
| Methyl tert-Amyl Ether (TAME) | ND     | 0.50 |
| MTBE                          | ND     | 0.50 |
| 1,2-Dichloroethane            | ND     | 0.50 |
| Benzene                       | ND     | 0.50 |
| Toluene                       | ND     | 0.50 |
| 1,2-Dibromoethane             | ND     | 0.50 |
| Ethylbenzene                  | ND     | 0.50 |
| m,p-Xylenes                   | ND     | 0.50 |
| o-Xylene                      | ND     | 0.50 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 113  | 80-122 |
| 1,2-Dichloroethane-d4 | 108  | 77-137 |
| Toluene-d8            | 103  | 80-120 |
| Bromofluorobenzene    | 109  | 80-125 |

NA= Not Analyzed  
ND= Not Detected  
RL= Reporting Limit

Date : 04-AUG-2009 19:24

Client ID: DYNA P&amp;T

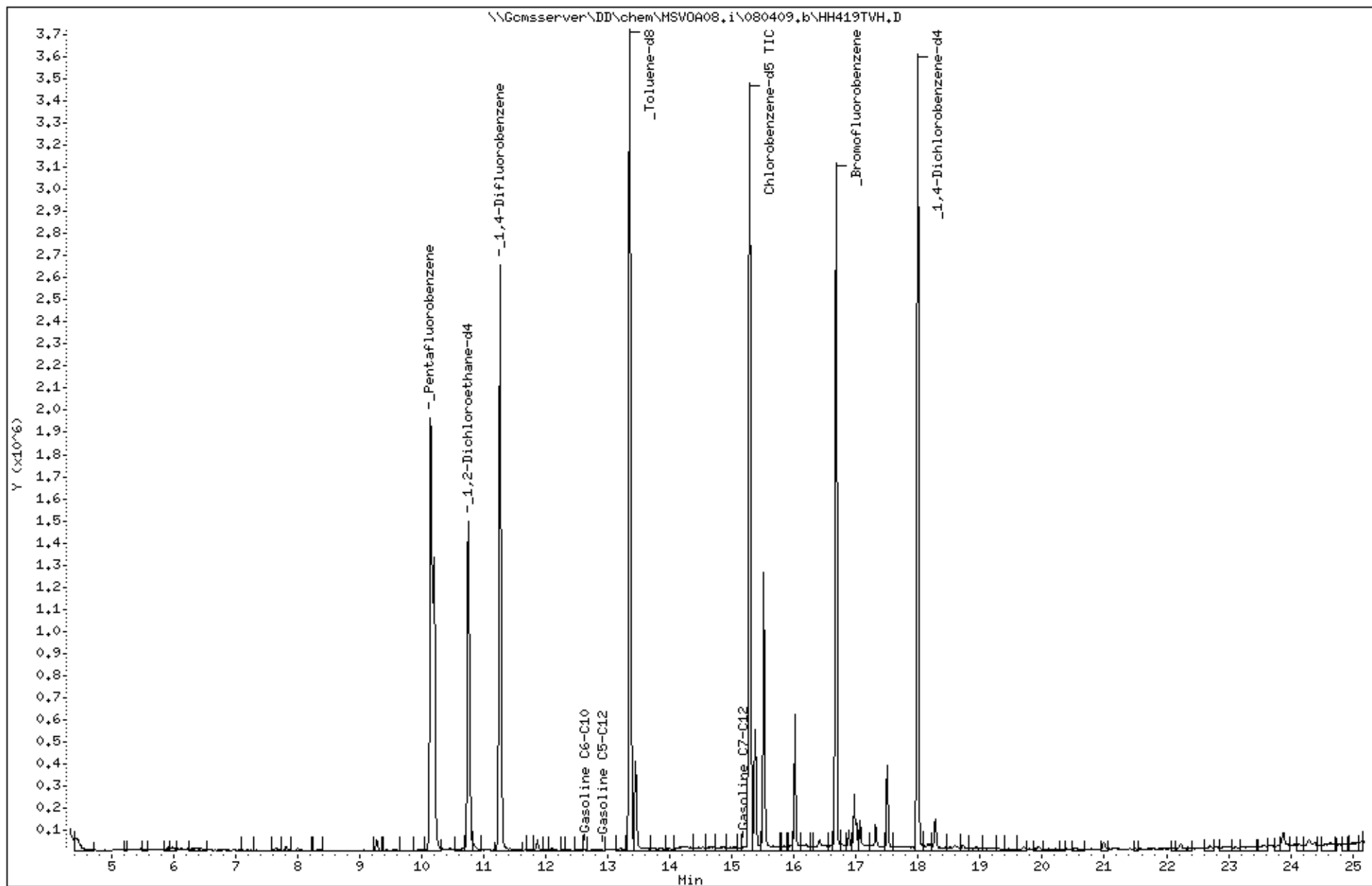
Sample Info: S,213902-001

Instrument: MSV0A08.i

Operator: voc

Column diameter: 2.00

Column phase:



Date : 04-AUG-2009 14:36

Client ID: DYNA P&amp;T

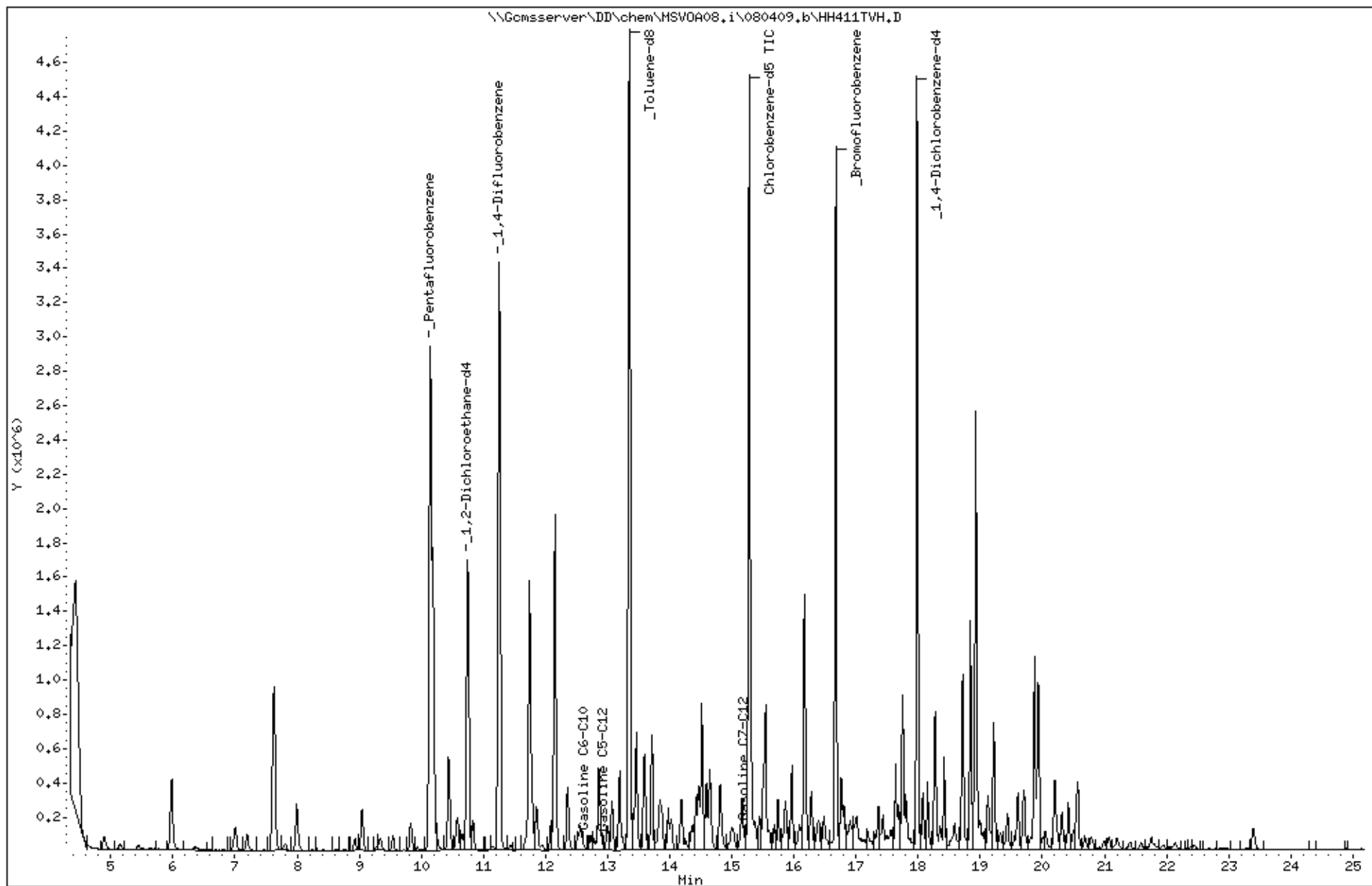
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Instrument: MSV0A08.i

Operator: voc

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Column phase:



Date : 04-AUG-2009 15:12

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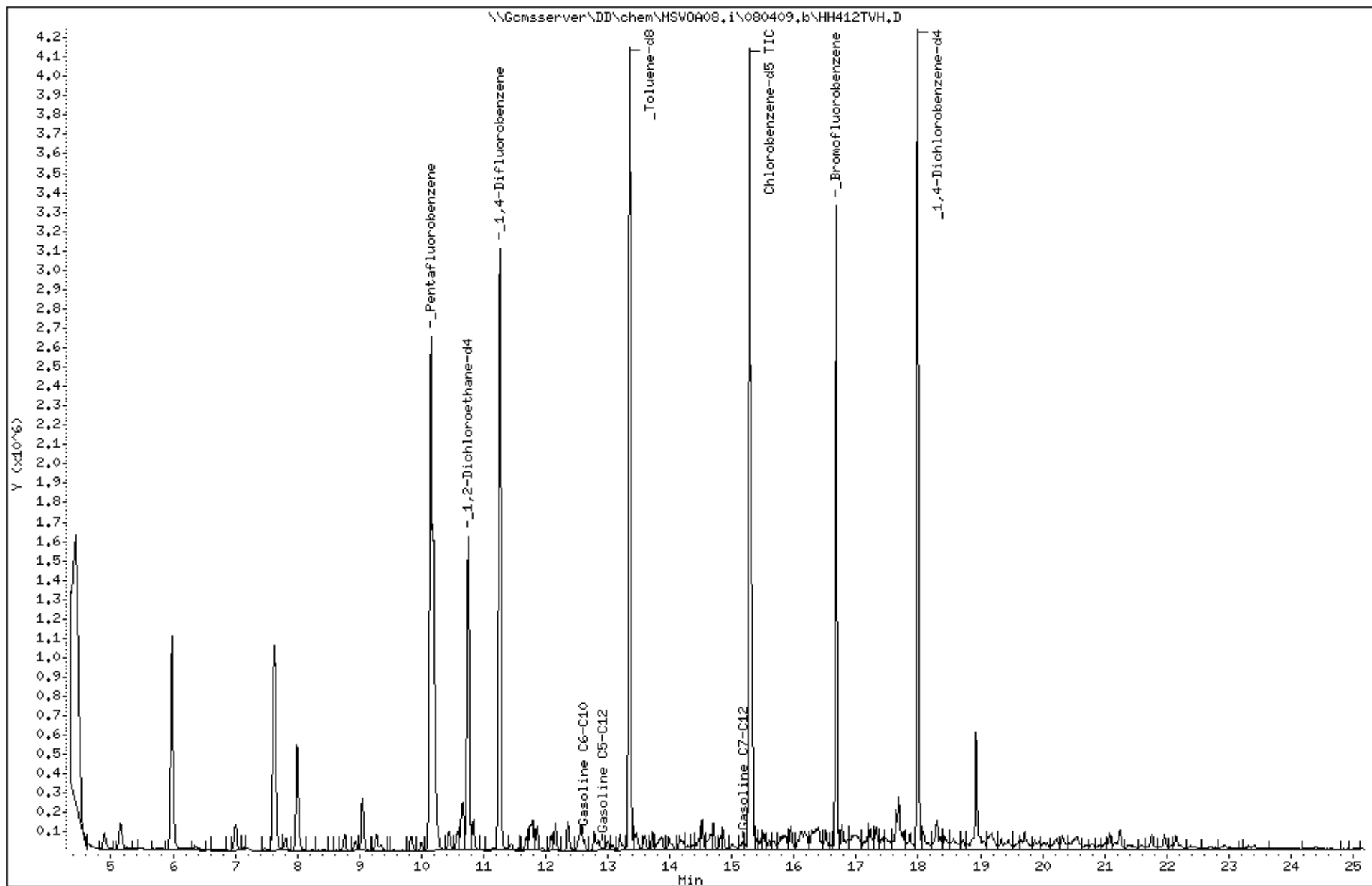
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Instrument: MSV0A08.i

Operator: voc

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Column phase:



Date : 04-AUG-2009 15:48

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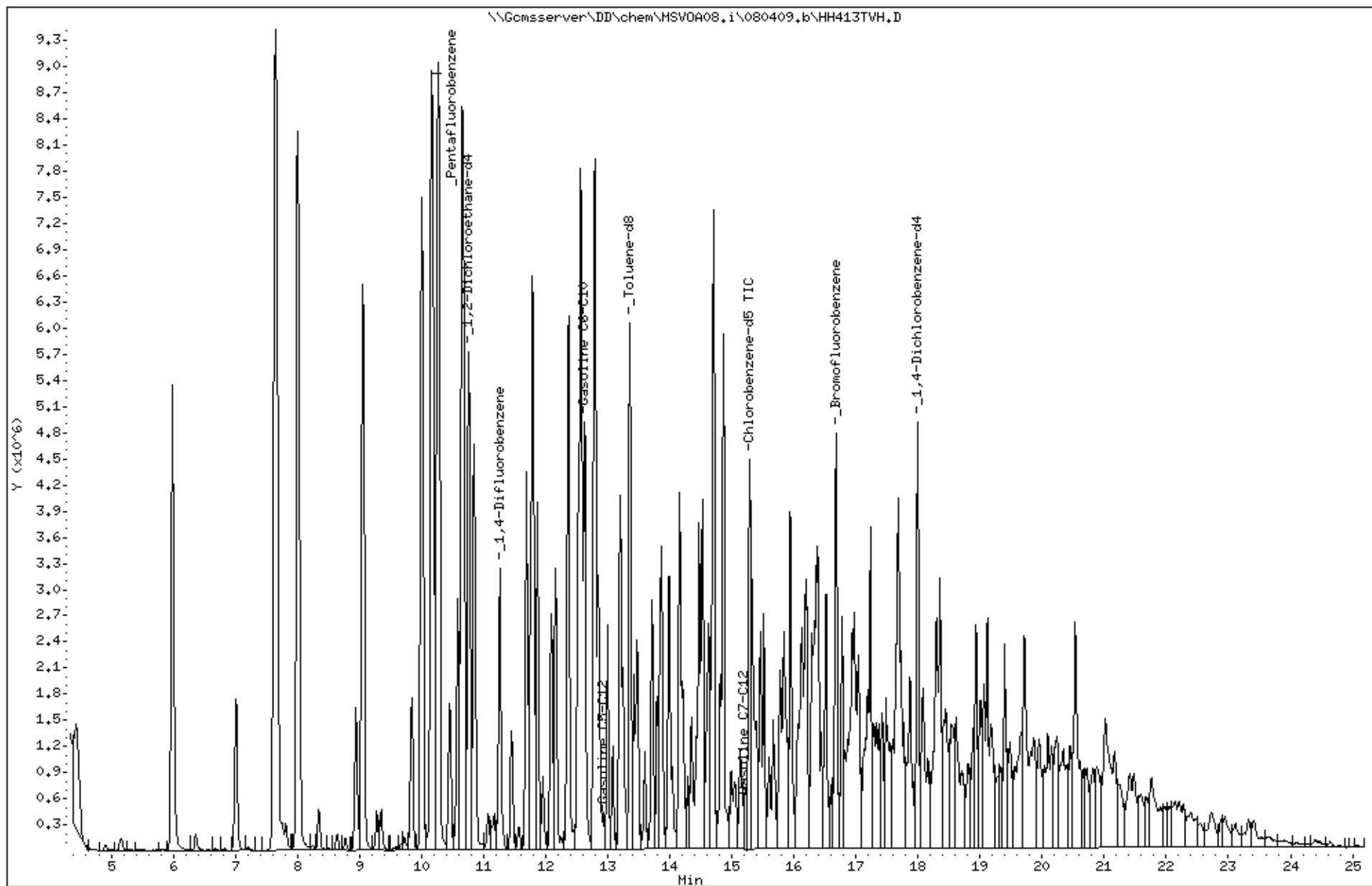
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Instrument: MSV0A08.i

Operator: voc

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Column phase:



Date : 03-AUG-2009 14:58

Client ID: DYNA P&amp;T

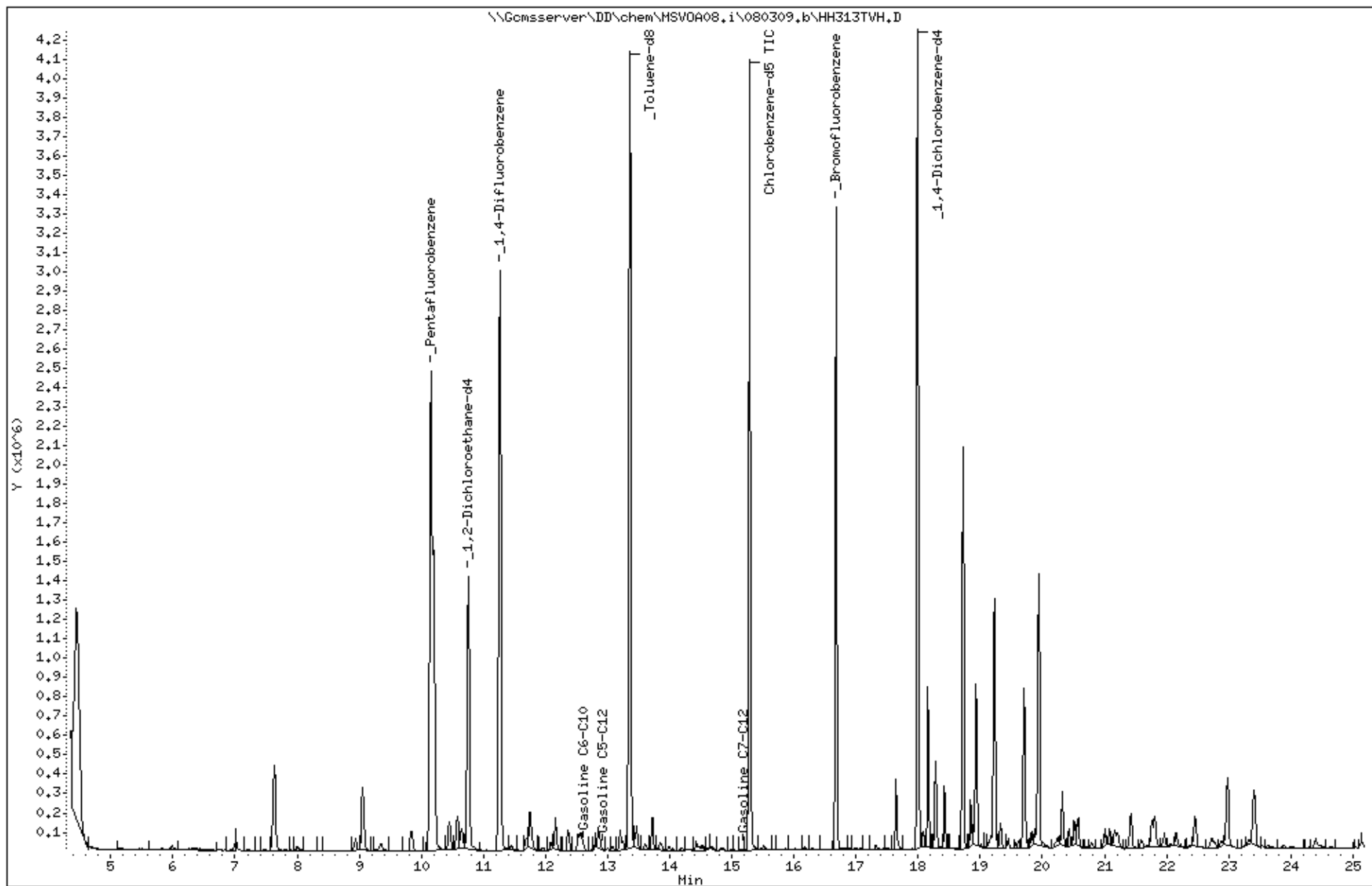
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Operator: voc

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Column phase:



Date : 04-AUG-2009 17:00

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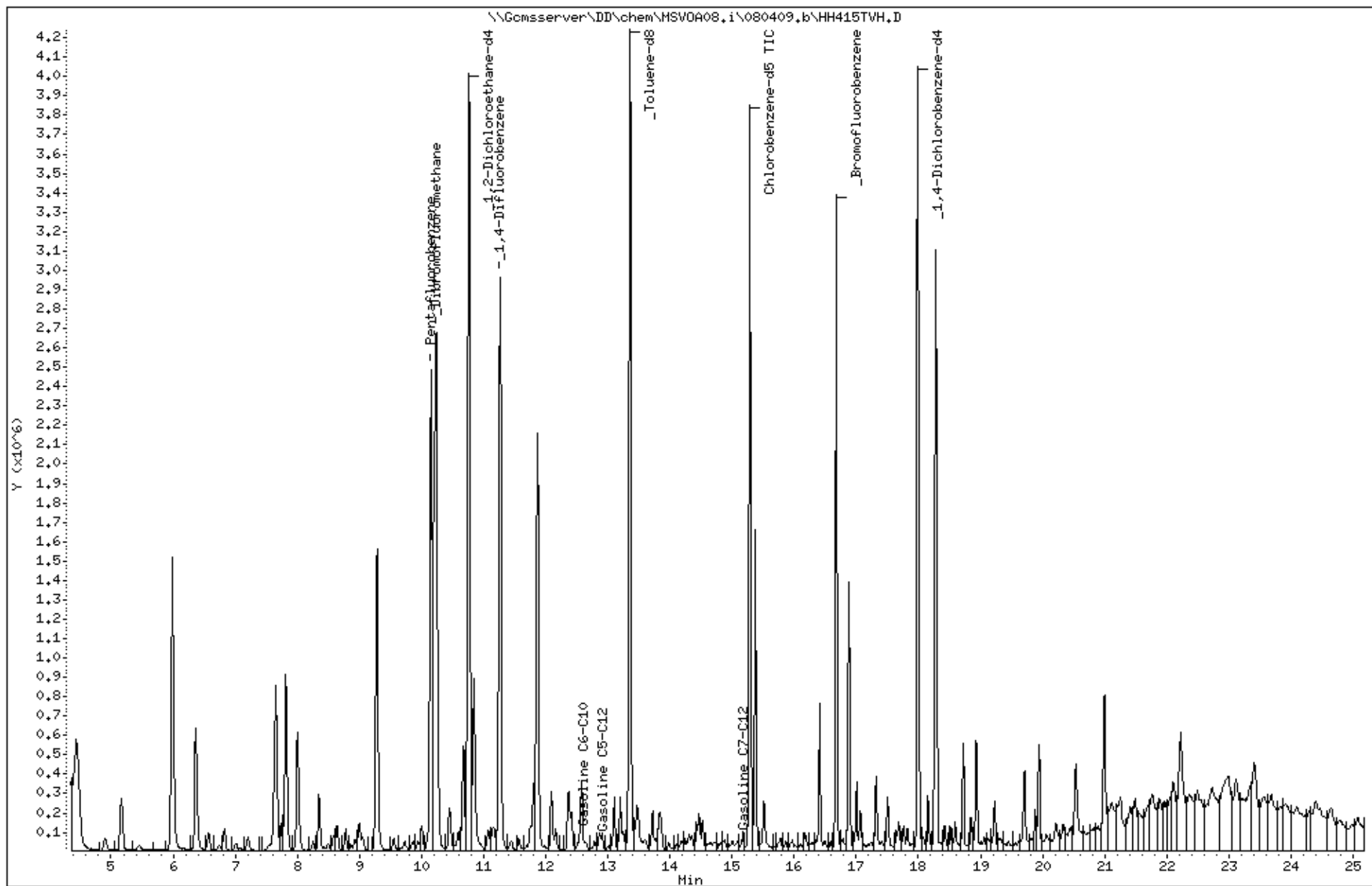
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Instrument: MSV0A08.i

Operator: voc

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Column phase:





Date : 03-AUG-2009 15:34

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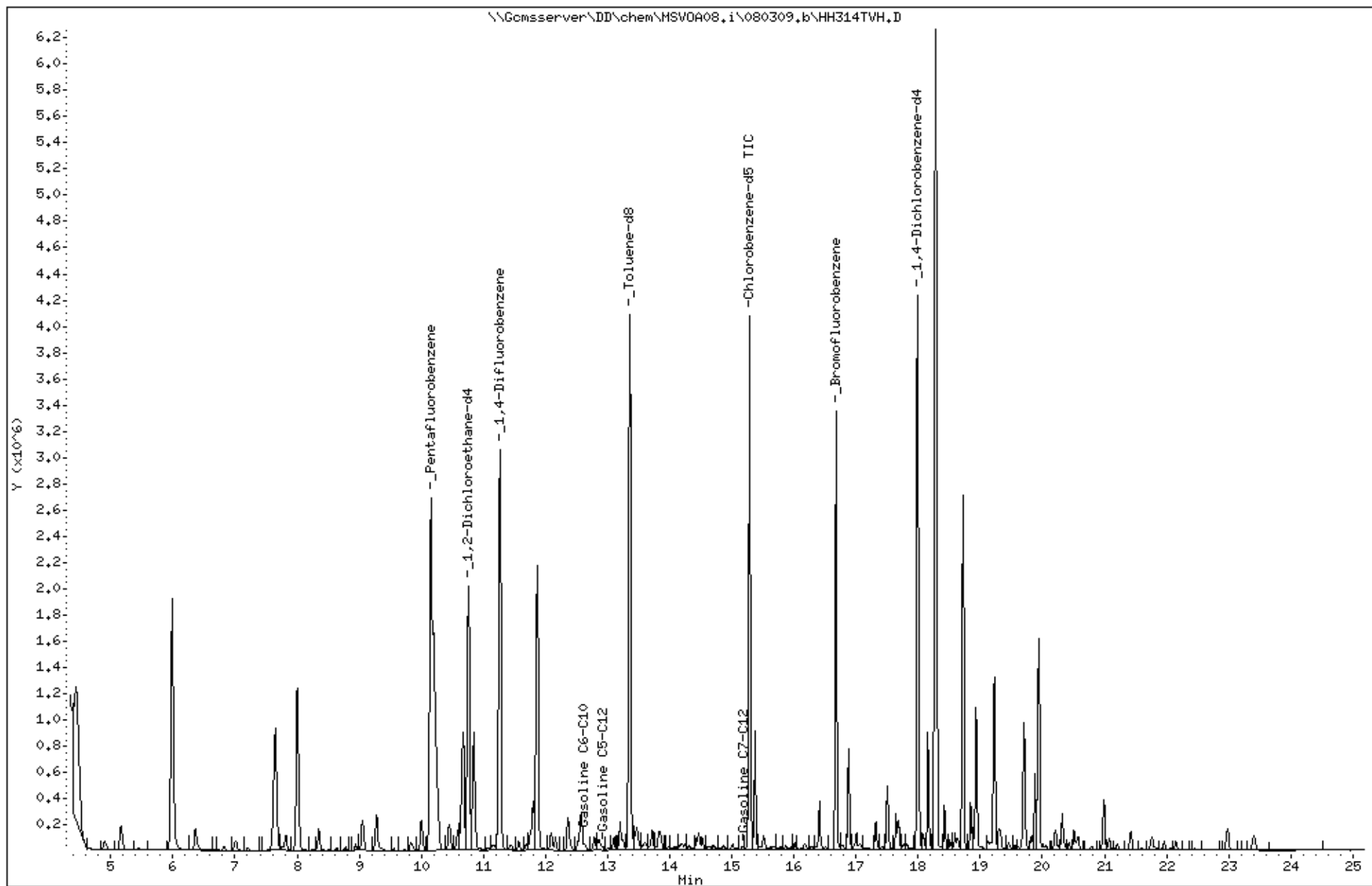
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Instrument: MSV0A08.i

Operator: voc

Column diameter: 2.00

Column phase:



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Date : 04-AUG-2009 17:36

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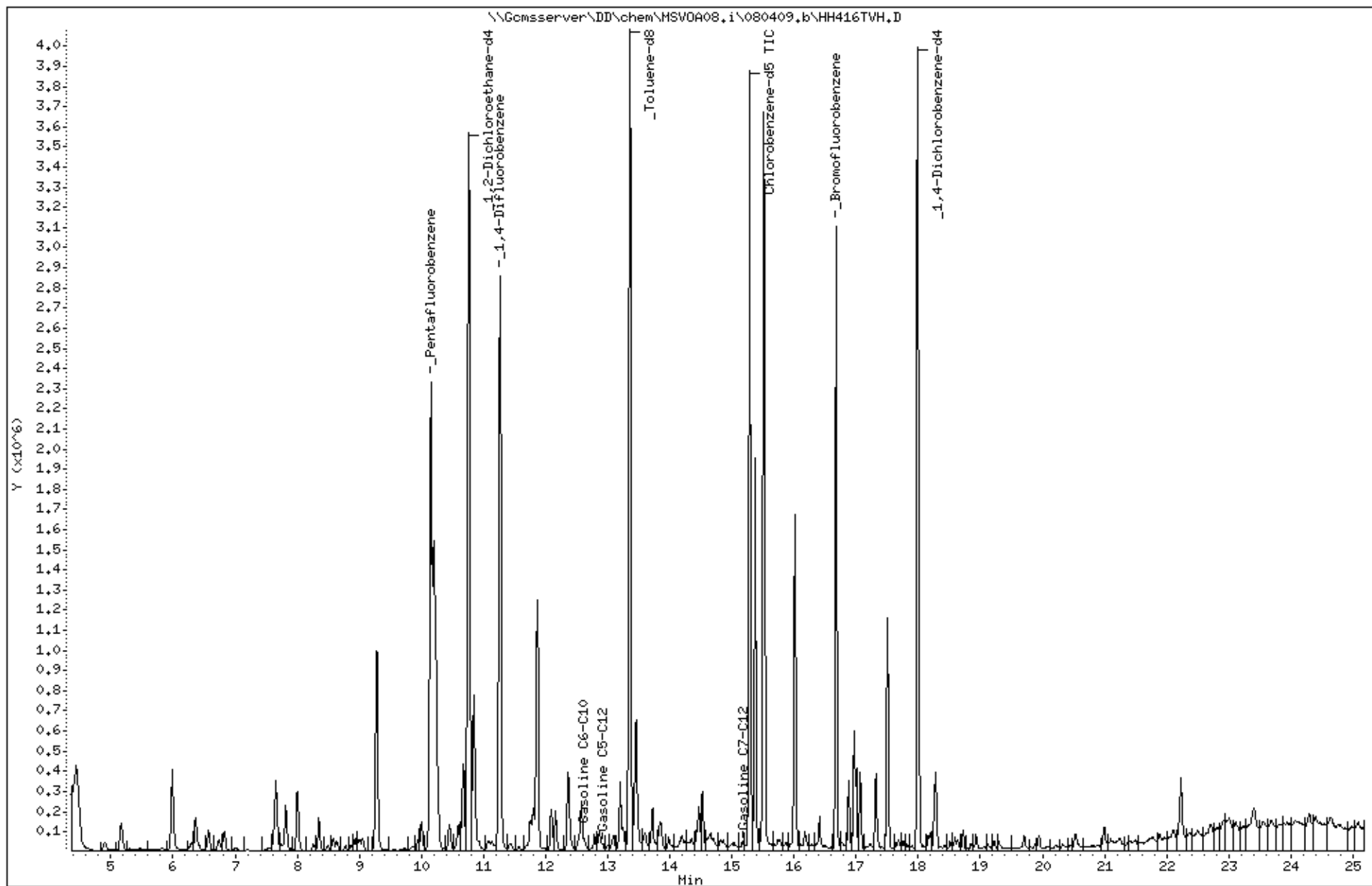
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Instrument: MSV0A08.i

Operator: voc

Column diameter: 2.00

Column phase:



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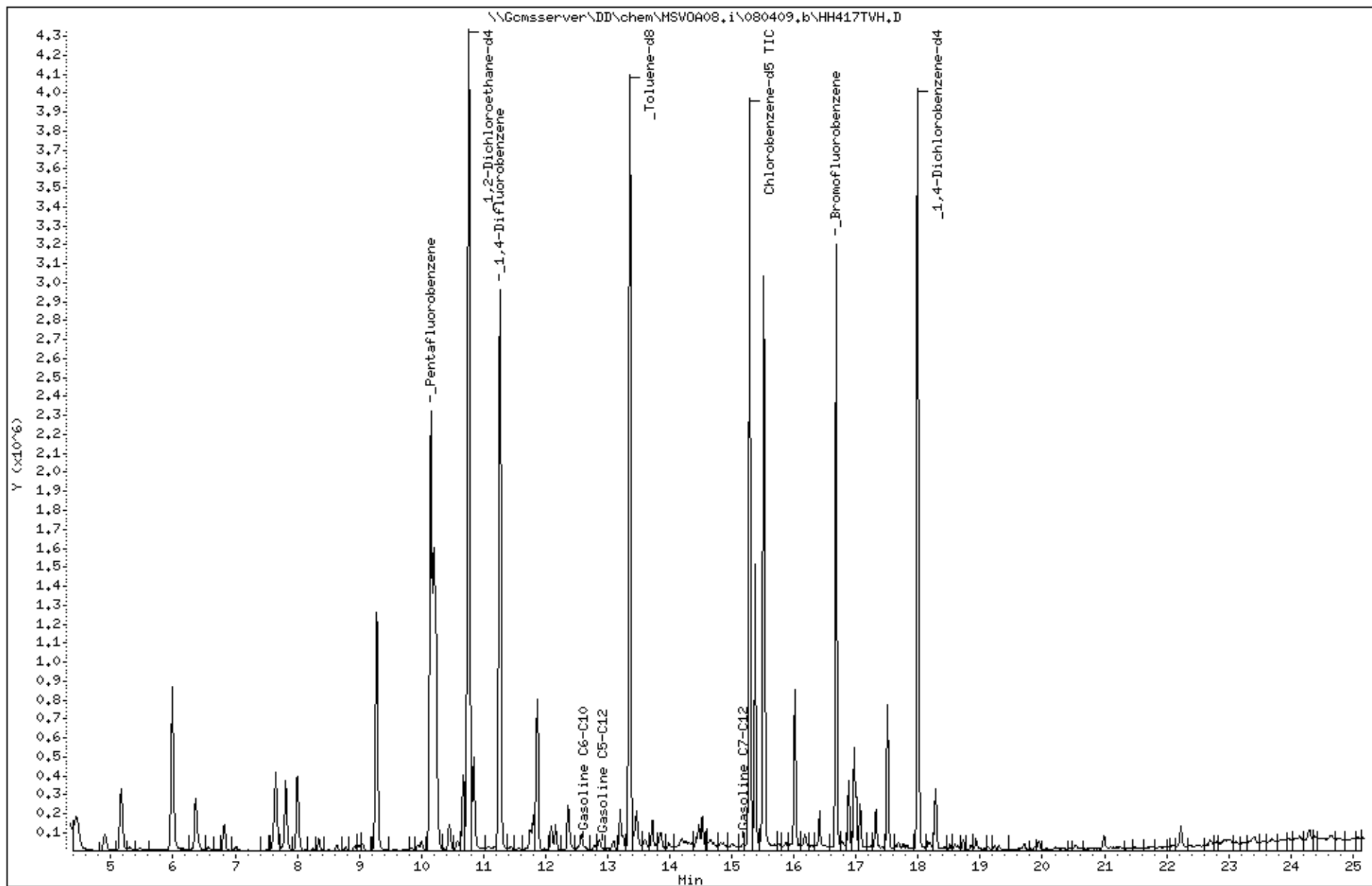
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Instrument: MSV0A08.i

Operator: voc

Column diameter: 2.00

Column phase:



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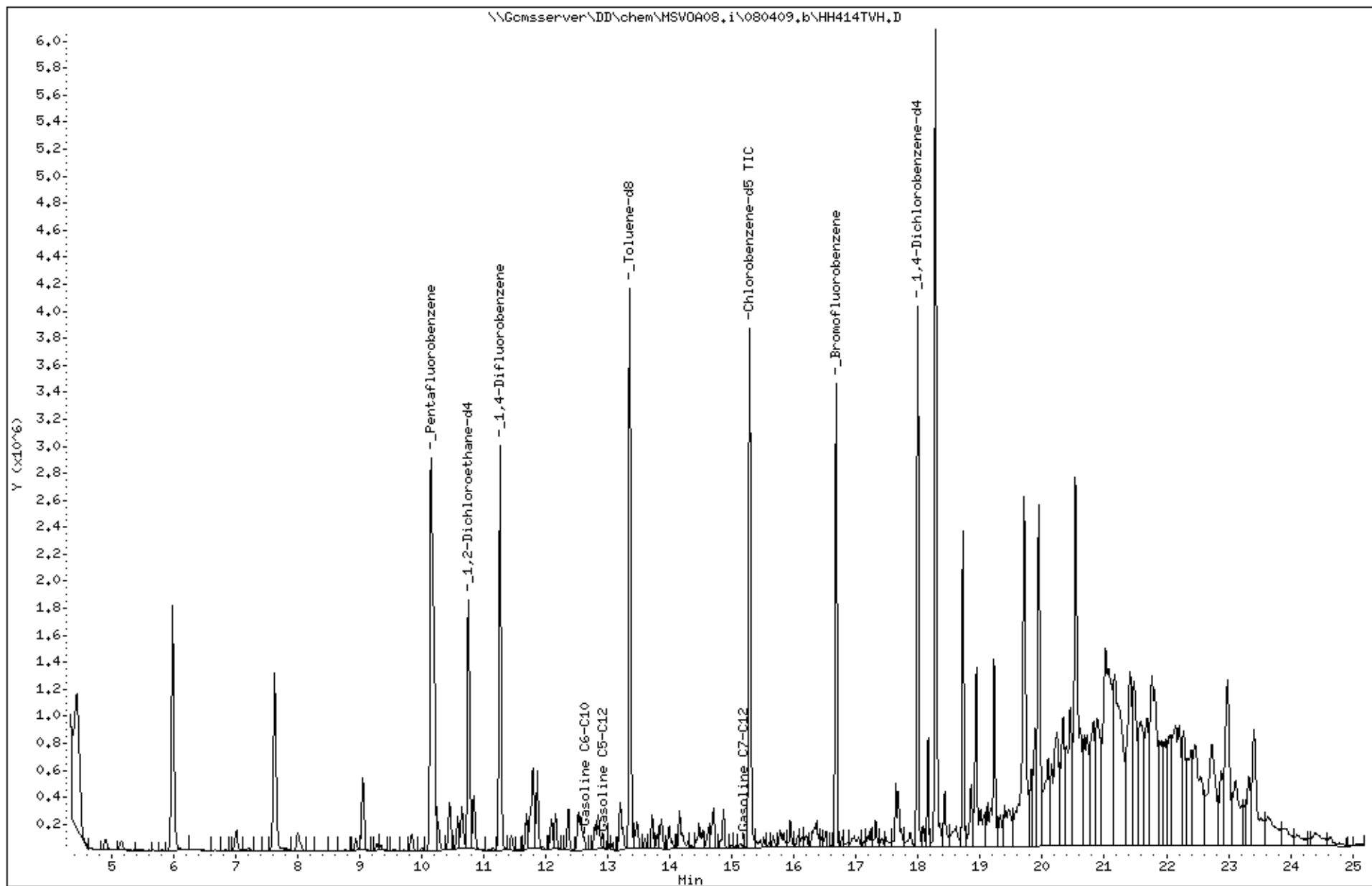
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Instrument: MSV0A08.i

Operator: voc

Column diameter: 2.00

Column phase:



Data File: \\GCHSSERVER\DD\chem\MSV0A08.i\080309.b\HH325TVH.D

Date : 03-AUG-2009 22:10

Client ID: DYNA P&T

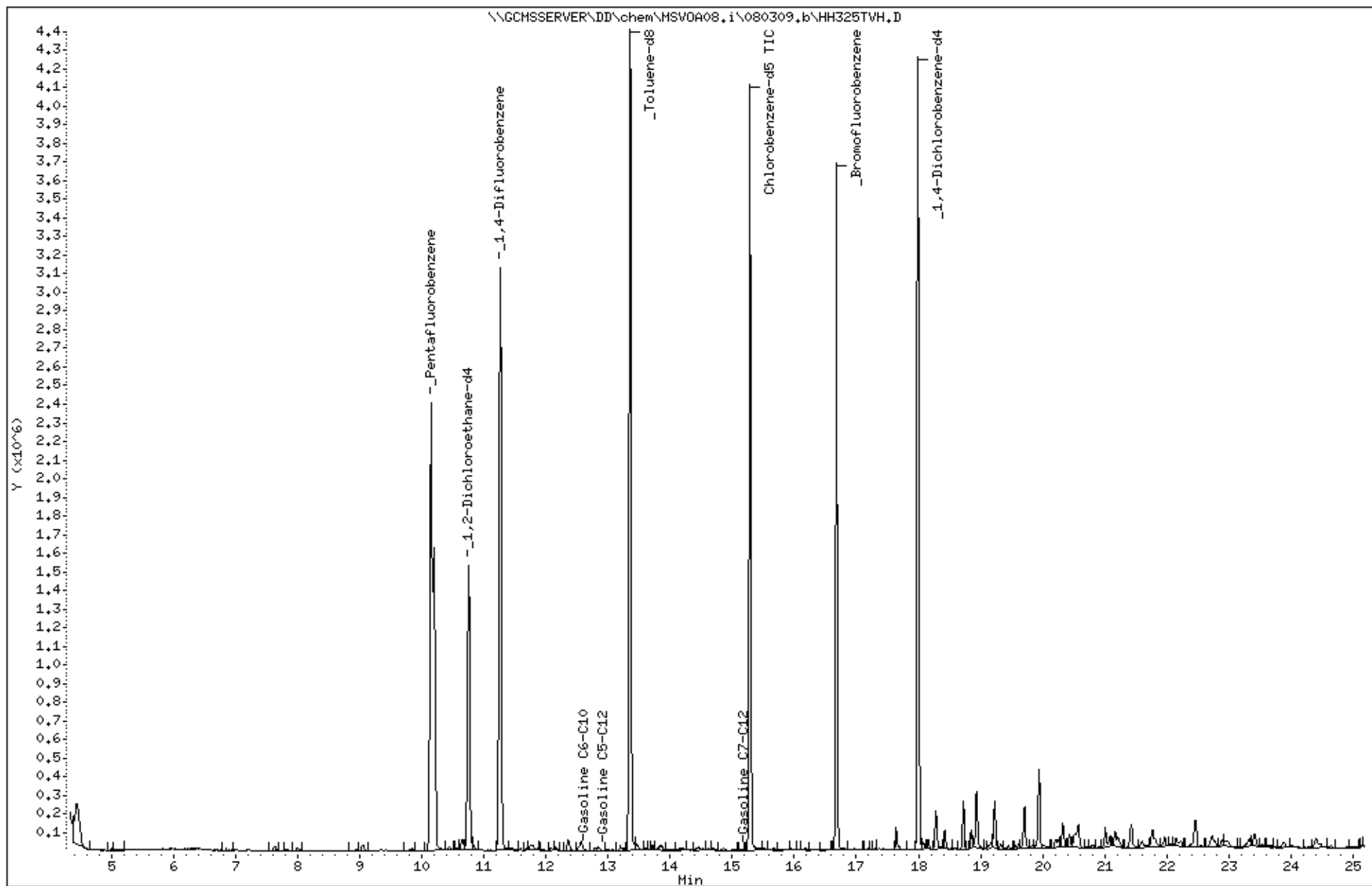
Sample Info: S,213902-011

Instrument: MSV0A08.i

Operator: voc

Column diameter: 2.00

Column phase:



Data File: \\Gomsserver\DD\chem\MSV0A08.i\080309.b\HH309TVH.D

Date : 03-AUG-2009 12:34

Client ID: DYNA P&T

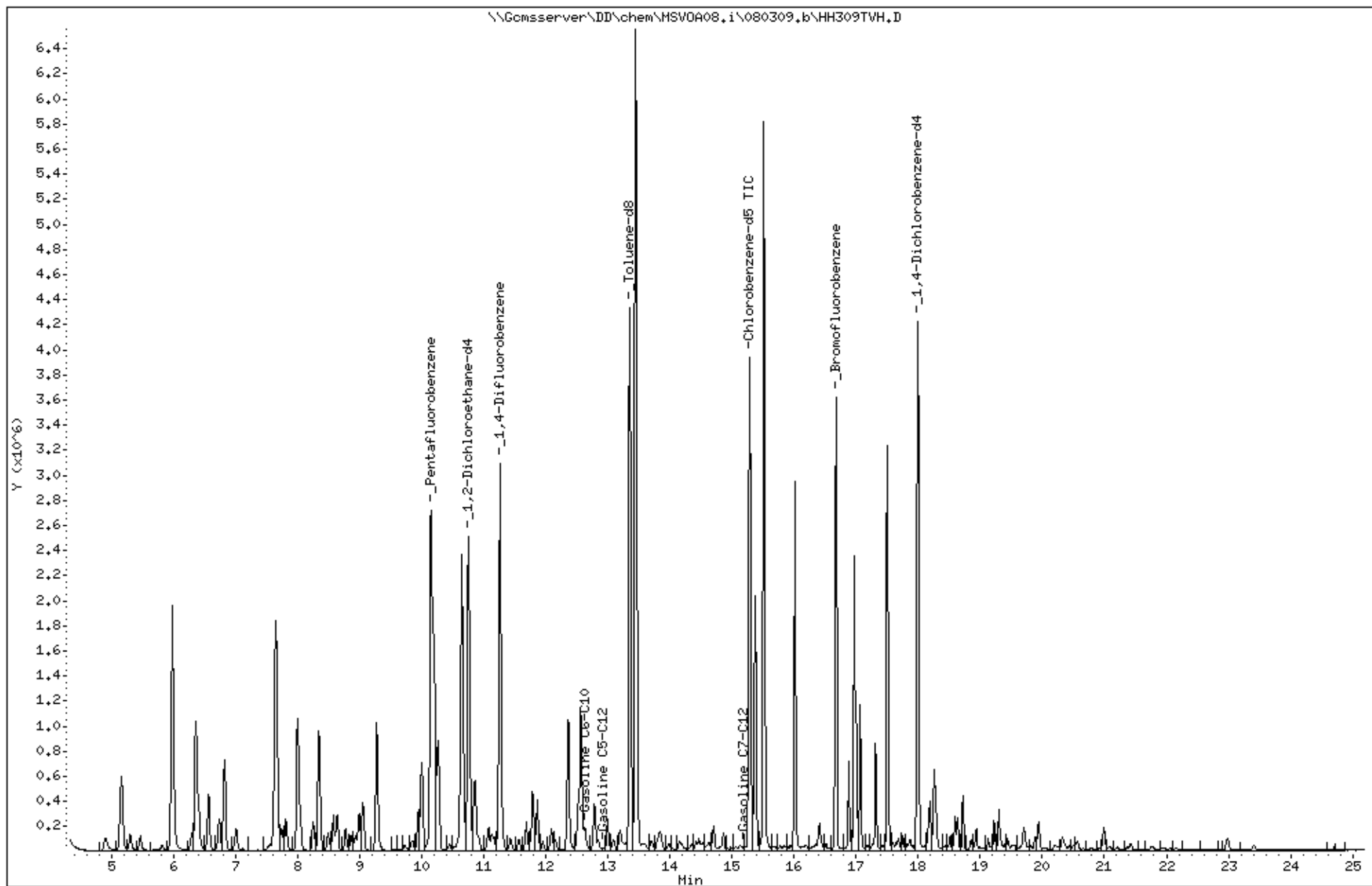
Sample Info: CCV/BS, QC505938

Column phase:

Instrument: MSV0A08.i

Operator: voc

Column diameter: 2.00



| Total Dissolved Solids (TDS) |                        |           |                           |
|------------------------------|------------------------|-----------|---------------------------|
| Lab #:                       | 213902                 | Location: | 2250 Telgraph Av. Oakland |
| Client:                      | Fugro West Inc.        | Prep:     | METHOD                    |
| Project#:                    | 609.004                | Analysis: | SM2540C                   |
| Analyte:                     | Total Dissolved Solids | Received: | 07/31/09                  |
| Matrix:                      | Water                  | Prepared: | 08/04/09                  |
| Units:                       | mg/L                   | Analyzed: | 08/05/09                  |
| Batch#:                      | 153532                 |           |                           |

| Field ID | Type   | Lab ID     | Result | RL | Diln Fac | Sampled  |
|----------|--------|------------|--------|----|----------|----------|
| B-1      | SAMPLE | 213902-001 | 880    | 10 | 1.000    | 07/30/09 |
| B-2      | SAMPLE | 213902-002 | 770    | 10 | 1.000    | 07/30/09 |
| B-3      | SAMPLE | 213902-003 | 880    | 10 | 1.000    | 07/28/09 |
| B-4A     | SAMPLE | 213902-004 | 1,200  | 11 | 1.111    | 07/28/09 |
| B-5      | SAMPLE | 213902-005 | 520    | 10 | 1.000    | 07/28/09 |
| B-6      | SAMPLE | 213902-006 | 730    | 10 | 1.000    | 07/30/09 |
| B-7      | SAMPLE | 213902-007 | 990    | 11 | 1.111    | 07/28/09 |
| B-8      | SAMPLE | 213902-008 | 720    | 10 | 1.000    | 07/28/09 |
| B-9      | SAMPLE | 213902-009 | 770    | 10 | 1.000    | 07/28/09 |
| B-10     | SAMPLE | 213902-010 | 970    | 11 | 1.111    | 07/28/09 |
| B-12     | SAMPLE | 213902-011 | 460    | 10 | 1.000    | 07/28/09 |
|          | BLANK  | QC506190   | ND     | 10 | 1.000    |          |

ND= Not Detected  
 RL= Reporting Limit

## Batch QC Report

| Total Dissolved Solids (TDS) |                        |           |                           |
|------------------------------|------------------------|-----------|---------------------------|
| Lab #:                       | 213902                 | Location: | 2250 Telgraph Av. Oakland |
| Client:                      | Fugro West Inc.        | Prep:     | METHOD                    |
| Project#:                    | 609.004                | Analysis: | SM2540C                   |
| Analyte:                     | Total Dissolved Solids | Batch#:   | 153532                    |
| Field ID:                    | B-1                    | Sampled:  | 07/30/09                  |
| MSS Lab ID:                  | 213902-001             | Received: | 07/31/09                  |
| Matrix:                      | Water                  | Prepared: | 08/04/09                  |
| Units:                       | mg/L                   | Analyzed: | 08/05/09                  |
| Diln Fac:                    | 1.000                  |           |                           |

| Type | Lab ID   | MSS Result | Spiked | Result | RL    | %REC | Limits | RPD | Lim |
|------|----------|------------|--------|--------|-------|------|--------|-----|-----|
| BS   | QC506191 |            | 104.0  | 92.00  |       | 88   | 75-120 |     |     |
| BSD  | QC506192 |            | 104.0  | 96.00  |       | 92   | 75-120 | 4   | 20  |
| SDUP | QC506193 | 878.0      |        | 868.0  | 10.00 |      |        | 1   | 20  |

RL= Reporting Limit

RPD= Relative Percent Difference





**Curtis & Tompkins, Ltd.**  
Analytical Laboratories, Since 1878





Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

**Laboratory Job Number 213913**  
**ANALYTICAL REPORT**

Fugro West Inc.  
1000 Broadway  
Oakland, CA 94607

Project : 609.004  
Location : 2250 Telegraph Av. Oakland  
Level : II

| <u>Sample ID</u> | <u>Lab ID</u> | <u>Sample ID</u> | <u>Lab ID</u> |
|------------------|---------------|------------------|---------------|
| B-1@2            | 213913-001    | B-5@12           | 213913-029    |
| B-1@7.5          | 213913-002    | B-5@15           | 213913-030    |
| B-1@10           | 213913-003    | B-6@2            | 213913-031    |
| B-1@12           | 213913-004    | B-6@7.5          | 213913-032    |
| B-1@15           | 213913-005    | B-6@12           | 213913-033    |
| B-1@17           | 213913-006    | B-6@15           | 213913-034    |
| B-1@20           | 213913-007    | B-7@5            | 213913-035    |
| B-2@5            | 213913-008    | B-7@7.5          | 213913-036    |
| B-2@7.5          | 213913-009    | B-7@12           | 213913-037    |
| B-2@10           | 213913-010    | B-7@15           | 213913-038    |
| B-2@12           | 213913-011    | B-8@7.5          | 213913-039    |
| B-2@15           | 213913-012    | B-8@15           | 213913-040    |
| B-2@17           | 213913-013    | B-8@20           | 213913-041    |
| B-2@19.5         | 213913-014    | B-9@5            | 213913-042    |
| B-3@1            | 213913-015    | B-9@10           | 213913-043    |
| B-3@5            | 213913-016    | B-9@15           | 213913-044    |
| B-3@10           | 213913-017    | B-9@20           | 213913-045    |
| B-3@12           | 213913-018    | B-10@2           | 213913-046    |
| B-3@15           | 213913-019    | B-10@5           | 213913-047    |
| B-3@17           | 213913-020    | B-10@10          | 213913-048    |
| B-4A@5           | 213913-021    | B-10@15          | 213913-049    |
| B-4A@7.5         | 213913-022    | B-11@2           | 213913-050    |
| B-4A@10          | 213913-023    | B-11@7.5         | 213913-051    |
| B-4A@12          | 213913-024    | B-11@12          | 213913-052    |
| B-4A@15          | 213913-025    | B-12@5           | 213913-053    |
| B-4A@18          | 213913-026    | B-12@7.5         | 213913-054    |
| B-5@2            | 213913-027    | B-12@12          | 213913-055    |
| B-5@7.5          | 213913-028    | B-12@15          | 213913-056    |

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature:   
Project Manager

Date: 08/12/2009

NELAP # 01107CA

## CASE NARRATIVE

Laboratory number: 213913  
Client: Fugro West Inc.  
Project: 609.004  
Location: 2250 Telgraph Av. Oakland  
Request Date: 08/03/09  
Samples Received: 08/03/09

This data package contains sample and QC results for fifty six soil samples, requested for the above referenced project on 08/03/09. The samples were received cold and intact.

### TPH-Purgeables and/or BTXE by GC (EPA 8015B):

High surrogate recoveries were observed for bromofluorobenzene (FID) and trifluorotoluene (FID) in many samples, due to interference from coeluting hydrocarbon peaks. No other analytical problems were encountered.

### TPH-Extractables by GC (EPA 8015B):

High recovery was observed for diesel C10-C24 in the MS of B-3@1 (lab # 213913-015); the LCS was within limits. High RPD was also observed for diesel C10-C24 in the MS/MSD of B-3@1 (lab # 213913-015). B-1@2 (lab # 213913-001), B-6@2 (lab # 213913-031), and B-11@2 (lab # 213913-050) were diluted due to the dark and viscous nature of the sample extracts. No other analytical problems were encountered.

### Volatile Organics by GC/MS (EPA 8260B):

High response was observed for tert-butyl alcohol (TBA) in the CCV analyzed 08/05/09 13:38; affected data was qualified with "b". High recovery was observed for tert-butyl alcohol (TBA) in the MSD of B-11@2 (lab # 213913-050); the LCS was within limits, the associated RPD was within limits, and this analyte was not detected at or above the RL in the associated samples. High recovery was observed for tert-butyl alcohol (TBA) in the LCS for batch 153546; this analyte was not detected at or above the RL in the associated samples. High recoveries were observed for 1,2-dichloroethane and tert-butyl alcohol (TBA) in the MS/MSD of B-12@15 (lab # 213913-056); the associated RPDs were within limits, and these analytes were not detected at or above the RL in the associated samples. Low recoveries were observed for ethylbenzene and methyl tert-amyl ether (TAME) in the MS/MSD of B-8@20 (lab # 213913-041); the LCS was within limits, and the associated RPDs were within limits. High RPD was observed for benzene. High surrogate recovery was observed for dibromofluoromethane in B-2@10 (lab # 213913-010); no target analytes were detected in the sample. High surrogate recovery was observed for bromofluorobenzene in B-2@15 (lab # 213913-012); no target analytes were detected in the sample. High surrogate recoveries were observed for 1,2-dichloroethane-d4 in many samples. A number of samples were diluted due to high hydrocarbons. B-9@10 (lab # 213913-043) and B-9@15 (lab # 213913-044) were diluted due to high non-target analytes. No other analytical problems were encountered.

# CASE NARRATIVE

Laboratory number: 213913  
Client: Fugro West Inc.  
Project: 609.004  
Location: 2250 Telgraph Av. Oakland  
Request Date: 08/03/09  
Samples Received: 08/03/09

## Total Organic Carbon (TOC) (WALKLEY-BLACK):

No analytical problems were encountered.

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PAGE 1 OF 5

PROJECT NO.: 609.004

LAB: Curtis & Tompkins

PROJECT CONTACT: Karen Emery

**TURNAROUND: 5 day TAT**

SAMPLED BY: Russell Carter

## ANALYSIS REQUESTED

| LABORATORY<br>I.D. NUMBER | FIELD SAMPLE I.D. | MATRIX |      |     | CONTAINERS |       |      |      | PRESERVATIVE |                                |                  |     |       | SAMPLING DATE |       |     |      | Quantity | TVHg | TPHd and TPHmo with<br>BTEX, MTBE, Fuel Oil<br>Lead Scavengers | TOC | EDF Reporting |      |   |
|---------------------------|-------------------|--------|------|-----|------------|-------|------|------|--------------|--------------------------------|------------------|-----|-------|---------------|-------|-----|------|----------|------|--|-----|---------------|------|---|
|                           |                   | WATER  | SOIL | AIR | VOA        | LITER | PINT | TUBE | HCL          | H <sub>2</sub> SO <sub>4</sub> | HNO <sub>3</sub> | ICE | OTHER | NONE          | MONTH | DAY | YEAR |          |      |  |     |               | TIME |   |
|                           | B-1@2             |        | X    |     |            |       |      | X    |              |                                |                  | X   |       |               | 07    | 27  | 09   | 1533     | 1    | X  | X   | X             |      | X |
|                           | B-1@7.5           |        | X    |     |            |       |      | X    |              |                                |                  | X   |       |               | 07    | 27  | 09   | 1535     | 1    | X  | X   | X             |      | X |
|                           | B-1@10            |        | X    |     |            |       |      | X    |              |                                |                  | X   |       |               | 07    | 27  | 09   | 1539     | 1    | X  |     | X             |      | X |
|                           | B-1@12            |        | X    |     |            |       |      | X    |              |                                |                  | X   |       |               | 07    | 27  | 09   | 1540     | 1    | X  | X   | X             |      | X |
|                           | B-1@15            |        | X    |     |            |       |      | X    |              |                                |                  | X   |       |               | 07    | 27  | 09   | 1544     | 1    | X  |     | X             |      | X |
|                           | B-1@17            |        | X    |     |            |       |      | X    |              |                                |                  | X   |       |               | 07    | 27  | 09   | 1547     | 1    | X  |     | X             |      | X |
|                           | B-1@20            |        | X    |     |            |       |      | X    |              |                                |                  | X   |       |               | 07    | 27  | 09   | 1549     | 1    | X  |     | X             |      | X |
|                           | B-2@5             |        | X    |     |            |       |      | X    |              |                                |                  | X   |       |               | 07    | 27  | 09   | 1603     | 1    | X  | X   | X             | X    | X |
|                           | B-2@7.5           |        | X    |     |            |       |      | X    |              |                                |                  | X   |       |               | 07    | 27  | 09   | 1605     | 1    | X  |     | X             |      | X |
|                           | B-2@10            |        | X    |     |            |       |      | X    |              |                                |                  | X   |       |               | 07    | 27  | 09   | 1606     | 1    | X  | X   | X             |      | X |
|                           | B-2@12            |        | X    |     |            |       |      | X    |              |                                |                  | X   |       |               | 07    | 27  | 09   | 1608     | 1    | X  |     | X             |      | X |
|                           | B-2@15            |        | X    |     |            |       |      | X    |              |                                |                  | X   |       |               | 07    | 27  | 09   | 1610     | 1    | X  | X   | X             |      | X |
|                           | B-2@17            |        | X    |     |            |       |      | X    |              |                                |                  | X   |       |               | 07    | 27  | 09   | 1611     | 1    | X  |     | X             |      | X |

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**FUGRO WEST, INC.**

**1000 Broadway, Suite 440**

**Oakland, California 94607**

**Tel: 510.268.0461 Fax: 510.268.0545**

Approved by Glenn Young, AC 62 Manager, Fugro West, Inc. 10/13/06

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# ES-F10 CHAIN OF CUSTODY

213913

PAGE 2 of 5

PROJECT NAME: 2250 Telegraph Avenue - Oakland

PROJECT NO.: 609.004

LAB: Curtis & Tompkins

PROJECT CONTACT: Karen Emery

TURNAROUND: 5 day TAT

SAMPLED BY: Russell Carter

## ANALYSIS REQUESTED

| LABORATORY<br>I.D. NUMBER | FIELD SAMPLE I.D. | MATRIX |      |     | CONTAINERS |       |      |      | PRESERVATIVE |                                |                  |     |       | SAMPLING DATE |       |     |      | Quantity | TVHg | TPHd and TPHmo with<br>BTEX, MTBE, Fuel Ox<br>Lead Scavengers | TOC | EDF Reporting |      |   |
|---------------------------|-------------------|--------|------|-----|------------|-------|------|------|--------------|--------------------------------|------------------|-----|-------|---------------|-------|-----|------|----------|------|---|-----|---------------|------|---|
|                           |                   | WATER  | SOIL | AIR | VOA        | LITER | PINT | TUBE | HCL          | H <sub>2</sub> SO <sub>4</sub> | HNO <sub>3</sub> | ICE | OTHER | NONE          | MONTH | DAY | YEAR |          |      |   |     |               | TIME |   |
|                           | B-2@19.5          |        | X    |     |            |       |      | X    |              |                                |                  | X   |       |               | 07    | 27  | 09   | 1612     | 1    |   |     |               |      | X |
|                           | B-3@1             |        | X    |     |            |       |      | X    |              |                                |                  | X   |       |               | 07    | 27  | 09   | 1000     | 1    |   | X   |               |      | X |
|                           | B-3@5             |        | X    |     |            |       |      | X    |              |                                |                  | X   |       |               | 07    | 27  | 09   | 1007     | 1    |   | X   |               |      | X |
|                           | B-3@10            |        | X    |     |            |       |      | X    |              |                                |                  | X   |       |               | 07    | 27  | 09   | 1014     | 1    |   | X   | X             | X    | X |
|                           | B-3@12            |        | X    |     |            |       |      | X    |              |                                |                  | X   |       |               | 07    | 27  | 09   | 1023     | 1    |   | X   | X             | X    | X |
|                           | B-3@15            |        | X    |     |            |       |      | X    |              |                                |                  | X   |       |               | 07    | 27  | 09   | 1033     | 1    |   | X   | X             | X    | X |
|                           | B-3@17            |        | X    |     |            |       |      | X    |              |                                |                  | X   |       |               | 07    | 27  | 09   | 1030     | 1    |   | X   | X             |      | X |
|                           | B-4@5             |        | X    |     |            |       |      | X    |              |                                |                  | X   |       |               | 07    | 27  | 09   | 0931     | 1    |   | X   |               |      | X |
|                           | B-4@7.5           |        | X    |     |            |       |      | X    |              |                                |                  | X   |       |               | 07    | 27  | 09   | 0934     | 1    |   | X   |               |      | X |
|                           | B-4@10            |        | X    |     |            |       |      | X    |              |                                |                  | X   |       |               | 07    | 27  | 09   | 0937     | 1    |   | X   | X             | X    | X |
|                           | B-4@12            |        | X    |     |            |       |      | X    |              |                                |                  | X   |       |               | 07    | 27  | 09   | 0939     | 1    |   | X   | X             | X    | X |
|                           | B-4@15            |        | X    |     |            |       |      | X    |              |                                |                  | X   |       |               | 07    | 27  | 09   | 0941     | 1    |   | X   | X             | X    | X |
|                           | B-4@18            |        | X    |     |            |       |      | X    |              |                                |                  | X   |       |               | 07    | 27  | 09   | 1102     | 1    |   | X   | X             |      | X |

## CHAIN OF CUSTODY RECORD

|                              |             |                          |             |
|------------------------------|-------------|--------------------------|-------------|
| RELINQUISHED BY: (Signature) | DATE/TIME   | RECEIVED BY: (Signature) | DATE/TIME   |
| <i>Karen Emery</i>           | 8/3/09 1300 | <i>Russell Carter</i>    | 8/3/09 1300 |
| RELINQUISHED BY: (Signature) | DATE/TIME   | RECEIVED BY: (Signature) | DATE/TIME   |
|                              |             |                          |             |
| RELINQUISHED BY: (Signature) | DATE/TIME   | RECEIVED BY: (Signature) | DATE/TIME   |
|                              |             |                          |             |
| RELINQUISHED BY: (Signature) | DATE/TIME   | RECEIVED BY: (Signature) | DATE/TIME   |
|                              |             |                          |             |

COMMENTS & NOTES: USE QUOTATION # CT17200909MP WHEN INVOICING.



FUGRO WEST, INC.

1000 Broadway, Suite 440

Oakland, California 94607

Tel: 510.268.0461 Fax: 510.268.0545

Approved by Glenn Young, AC 62 Manager, Fugro West, Inc. 10/13/06

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213913

PAGE 3 OF 5

PROJECT NO.: 609.004


LAB: Curtis & Tompkins

PROJECT CONTACT: Karen Emery

**TURNAROUND: 5 day TAT**

SAMPLED BY: Russell Carter

|     | LABORATORY<br>I.D. NUMBER | FIELD SAMPLE I.D. | MATRIX |      |     | CONTAINERS |       |      |      | PRESERVATIVE |                                |                  |     |       |      | SAMPLING DATE |     |      |      | Quantity | TVHg | TPHd and TPHmo with<br>BTEX, MTBE, Fuel Ox<br>Lead Scavengers | TDC | EDF Reporting |  |  |  |  |  |  |
|-----|---------------------------|-------------------|--------|------|-----|------------|-------|------|------|--------------|--------------------------------|------------------|-----|-------|------|---------------|-----|------|------|----------|------|---|-----|---------------|--|--|--|--|--|--|
|     |                           |                   | WATER  | SOIL | AIR | VOA        | LITER | PINT | TUBE | HCL          | H <sub>2</sub> SO <sub>4</sub> | HNO <sub>3</sub> | ICE | OTHER | NONE | MONTH         | DAY | YEAR | TIME |          |      |   |     |               |  |  |  |  |  |  |
| -27 |                           | B-5@ 2            | X      |      |     |            |       |      |      |              | X                              |                  |     |       | 07   | 27            | 09  | 1321 | 1    | X        | X    | X   |     | X             |  |  |  |  |  |  |
| -28 |                           | B-5@ 7.5          | X      |      |     |            |       |      |      |              | X                              |                  |     |       | 07   | 27            | 09  | 1325 | 1    | X        | X    | X   |     | X             |  |  |  |  |  |  |
| -29 |                           | B-5@ 12           | X      |      |     |            |       |      |      |              | X                              |                  |     |       | 07   | 27            | 09  | 1328 | 1    | X        | X    | X   |     | X             |  |  |  |  |  |  |
| -30 |                           | B-5@ 15           | X      |      |     |            |       |      |      |              | X                              |                  |     |       | 07   | 27            | 09  | 1332 | 1    | X        | X    | X   |     | X             |  |  |  |  |  |  |
| -31 |                           | B-6@ 2            | X      |      |     |            |       |      |      |              | X                              |                  |     |       | 07   | 27            | 09  | 1345 | 1    | X        | X    | X   |     | X             |  |  |  |  |  |  |
| -32 |                           | B-6@ 7.5          | X      |      |     |            |       |      |      |              | X                              |                  |     |       | 07   | 27            | 09  | 1349 | 1    | X        | X    | X   |     | X             |  |  |  |  |  |  |
| -33 |                           | B-6@ 12           | X      |      |     |            |       |      |      |              | X                              |                  |     |       | 07   | 27            | 09  | 1451 | 1    | X        | X    | X   |     | X             |  |  |  |  |  |  |
| -34 |                           | B-6@ 15           | X      |      |     |            |       |      |      |              | X                              |                  |     |       | 07   | 27            | 09  | 1354 | 1    | X        | X    | X   |     | X             |  |  |  |  |  |  |
| -35 |                           | B-7@ 5            | X      |      |     |            |       |      |      |              | X                              |                  |     |       | 07   | 27            | 09  | 1443 | 1    | X        | X    | X   |     | X             |  |  |  |  |  |  |
| -36 |                           | B-7@ 7.5          | X      |      |     |            |       |      |      |              | X                              |                  |     |       | 07   | 27            | 09  | 1445 | 1    | X        | X    | X   |     | X             |  |  |  |  |  |  |
| -37 |                           | B-7@ 12           | X      |      |     |            |       |      |      |              | X                              |                  |     |       | 07   | 27            | 09  | 1455 | 1    | X        | X    | X   |     | X             |  |  |  |  |  |  |
| -38 |                           | B-7@ 15           | X      |      |     |            |       |      |      |              | X                              |                  |     |       | 07   | 27            | 09  | 1455 | 1    | X        | X    | X   |     | X             |  |  |  |  |  |  |
| -39 |                           | B-8@ 7.5          | X      |      |     |            |       |      |      |              | X                              |                  |     |       | 07   | 27            | 09  | 1415 | 1    | X        | X    | X   |     | X             |  |  |  |  |  |  |

| CHAIN OF CUSTODY RECORD                            |                          |  |                          | COMMENTS & NOTES: USE QUOTATION # CT17200909MP WHEN INVOICING.   |  |
|--|--------------------------|--|--------------------------|--|--|
| RELINQUISHED BY: (Signature)<br><i>Haven Emory</i> | DATE/TIME<br>8/3/09 1300 | RECEIVED BY: (Signature)<br><i>[Signature]</i> | DATE/TIME<br>8/3/09 1300 | B-7@7.5 time 14:53   |  |
| RELINQUISHED BY: (Signature)                       | DATE/TIME                | RECEIVED BY: (Signature)                       | DATE/TIME                |  |  |
| RELINQUISHED BY: (Signature)                       | DATE/TIME                | RECEIVED BY: (Signature)                       | DATE/TIME                |  <div> <b>FUGRO WEST, INC.</b><br/>           1000 Broadway, Suite 440<br/>           Oakland, California 94607<br/>           Tel: 510.268.0461 Fax: 510.268.0545         </div> |  |
| RELINQUISHED BY: (Signature)                       | DATE/TIME                | RECEIVED BY: (Signature)                       | DATE/TIME                |  |  |

Approved by Glenn Young, AC 62 Manager, Fugro West, Inc. 10/13/06  
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# ES-F10 CHAIN OF CUSTODY

213913

PAGE 4 OF 5

PROJECT NAME: 2250 Telegraph Avenue - Oakland

PROJECT NO.: 609.004

LAB: Curtis & Tompkins

PROJECT CONTACT: Karen Emery

TURNAROUND: 5 day TAT

SAMPLED BY: Russell Carter

## ANALYSIS REQUESTED

| LABORATORY I.D. NUMBER | FIELD SAMPLE I.D. | MATRIX |      |     | CONTAINERS |       |      |      | PRESERVATIVE |                                |                  |     |       | SAMPLING DATE |       |     |      | Quantity | ANALYSIS REQUESTED |  |   |               |   |  |
|------------------------|-------------------|--------|------|-----|------------|-------|------|------|--------------|--------------------------------|------------------|-----|-------|---------------|-------|-----|------|----------|--------------------|--|---|---------------|---|--|
|                        |                   | WATER  | SOIL | AIR | VOA        | LITER | PINT | TUBE | HCL          | H <sub>2</sub> SO <sub>4</sub> | HNO <sub>3</sub> | ICE | OTHER | NONE          | MONTH | DAY | YEAR | TIME     | TVHg               | TPHd and TPHmo with silica gel cleanup | BTEX, MTBE, Fuel Oxygenates & Lead Scavengers | EDF Reporting |   |  |
| -40                    | B-8@15            |        | X    |     |            |       |      | X    |              |                                |                  | X   |       |               | 07    | 27  | 09   | 1428     | 1                  | X                                      | X   | X             | X |  |
| -41                    | B-8@20            |        | X    |     |            |       |      | X    |              |                                |                  | X   |       |               | 07    | 27  | 09   | 1431     | 1                  | X                                      | X   | X             | X |  |
| -42                    | B-9@5             |        | X    |     |            |       |      | X    |              |                                |                  | X   |       |               | 07    | 27  | 09   | 1513     | 1                  | X                                      | X   | X             | X |  |
| -43                    | B-9@10            |        | X    |     |            |       |      | X    |              |                                |                  | X   |       |               | 07    | 27  | 09   | 1516     | 1                  | X                                      | X   | X             | X |  |
| -44                    | B-9@15            |        | X    |     |            |       |      | X    |              |                                |                  | X   |       |               | 07    | 27  | 09   | 1519     | 1                  | X                                      | X   | X             | X |  |
| -45                    | B-9@20            |        | X    |     |            |       |      | X    |              |                                |                  | X   |       |               | 07    | 27  | 09   | 1527     | 1                  | X                                      | X   | X             | X |  |
| -46                    | B-10@2            |        | X    |     |            |       |      | X    |              |                                |                  | X   |       |               | 07    | 27  | 09   | 1302     | 1                  | X                                      | X   | X             | X |  |
| -47                    | B-10@5            |        | X    |     |            |       |      | X    |              |                                |                  | X   |       |               | 07    | 27  | 09   | 1305     | 1                  | X                                      | X   | X             | X |  |
| -48                    | B-10@10           |        | X    |     |            |       |      | X    |              |                                |                  | X   |       |               | 07    | 27  | 09   | 1310     | 1                  | X                                      | X   | X             | X |  |
| -49                    | B-10@15           |        | X    |     |            |       |      | X    |              |                                |                  | X   |       |               | 07    | 27  | 09   | 1314     | 1                  | X                                      | X   | X             | X |  |
| -50                    | B-11@2            |        | X    |     |            |       |      | X    |              |                                |                  | X   |       |               | 07    | 27  | 09   | 1110     | 1                  | X                                      | X   | X             | X |  |
| -51                    | B-11@7.5          |        | X    |     |            |       |      | X    |              |                                |                  | X   |       |               | 07    | 27  | 09   | 1125     | 1                  | X                                      | X   | X             | X |  |
| -52                    | B-11@12           |        | X    |     |            |       |      | X    |              |                                |                  | X   |       |               | 07    | 27  | 09   | 1136     | 1                  | X                                      | X   | X             | X |  |

## CHAIN OF CUSTODY RECORD

|                              |             |                          |             |
|------------------------------|-------------|--------------------------|-------------|
| RELINQUISHED BY: (Signature) | DATE/TIME   | RECEIVED BY: (Signature) | DATE/TIME   |
| <i>Karen Emery</i>           | 8/3/09 1300 | <i>Russell Carter</i>    | 8/3/09 1300 |
| RELINQUISHED BY: (Signature) | DATE/TIME   | RECEIVED BY: (Signature) | DATE/TIME   |
|                              |             |                          |             |
| RELINQUISHED BY: (Signature) | DATE/TIME   | RECEIVED BY: (Signature) | DATE/TIME   |
|                              |             |                          |             |
| RELINQUISHED BY: (Signature) | DATE/TIME   | RECEIVED BY: (Signature) | DATE/TIME   |
|                              |             |                          |             |

COMMENTS & NOTES: USE QUOTATION # CT17200909MP WHEN INVOICING.



FUGRO WEST, INC.

1000 Broadway, Suite 440

Oakland, California 94607

Tel: 510.268.0461 Fax: 510.268.0545

Approved by Glenn Young, AC 62 Manager, Fugro West, Inc. 10/13/06

Note: If this is a printed copy, please check the online QMS to ensure that it is the latest version.

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213913

## ES-F10 CHAIN OF CUSTODY

PAGE 5 OF 5

PROJECT NAME: 2250 Telegraph Avenue - Oakland

PROJECT NO.: 609.004

LAB: Curtis &amp; Tompkins

PROJECT CONTACT: Karen Emery

TURNAROUND: 5 day TAT

SAMPLED BY: Russell Carter

## ANALYSIS REQUESTED

| LABORATORY<br>I.D. NUMBER | FIELD SAMPLE I.D. | MATRIX |  |  | CONTAINERS |  |  |  | PRESERVATIVE |  |  |  |  | SAMPLING DATE |  |  |  | Quantity | TVHg | TPHd and TPHmo with<br>BTEX, MTBE, Fuel Ox<br>Lead Scavengers | TOC<br>EDF Reporting |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|-------------------|--------|--|--|------------|--|--|--|--------------|--|--|--|--|---------------|--|--|--|----------|------|---|----------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|---------------------------|-------------------|--------|--|--|------------|--|--|--|--------------|--|--|--|--|---------------|--|--|--|----------|------|---|----------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|

## CHAIN OF CUSTODY RECORD

|  |                          |   |                          |
|--|--------------------------|---|--------------------------|
| RELINQUISHED BY: (Signature)<br><i>Karen Emery</i> | DATE/TIME<br>8/3/09 1300 | RECEIVED BY: (Signature)<br><i>Russell Carter</i> | DATE/TIME<br>8/3/09 1300 |
| RELINQUISHED BY: (Signature)                       | DATE/TIME                | RECEIVED BY: (Signature)                          | DATE/TIME                |
| RELINQUISHED BY: (Signature)                       | DATE/TIME                | RECEIVED BY: (Signature)                          | DATE/TIME                |
| RELINQUISHED BY: (Signature)                       | DATE/TIME                | RECEIVED BY: (Signature)                          | DATE/TIME                |

COMMENTS &amp; NOTES: USE QUOTATION # CT17200909MP WHEN INVOICING.



FUGRO WEST, INC.

1000 Broadway, Suite 440

Oakland, California 94607

Tel: 510.268.0461 Fax: 510.268.0545

Approved by Glenn Young, AC 62 Manager, Fugro West, Inc. 10/13/06

Note: If this is a printed copy, please check the online QMS to ensure that it is the latest version.

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8 of 187

**Micah Smith**

**From:** "Emery, Karen [FWI]" <kemery@fugro.com>  
**To:** "Micah Smith" <micah.smith@ctberk.com>; "Young, Glenn [FWI]" <gyoung@fugro.com>  
**Sent:** Wednesday, August 05, 2009 8:30 AM  
**Attach:** Revised COC pg2.PDF  
**Subject:** RE: 609.004 - C&T Login Summary (213913)

Hi Micah-

Please find revised page 2 of COC. Please analyze sample B-2@19.5 for TVHg and BTEX, MTBE, fuel oxygenates & lead scavengers.

8260 will be fine for the water samples. Please let me know if you have any questions.

Thanks,  
 Karen

---

**From:** Micah Smith [mailto:micah.smith@ctberk.com]  
**Sent:** Monday, August 03, 2009 5:33 PM  
**To:** Young, Glenn [FWI]; Emery, Karen [FWI]  
**Subject:** 609.004 - C&T Login Summary (213913)

Sample B-2@19.5 (lab # 213913-014) did not have any analyses selected and is logged in on hold. Also the water samples that came in last week were logged in to run the TPH-gas by 8260. With soils we can only run TPH-gas by GC 8015. Do you need the waters reported by GC as well or will 8260 be fine for the waters. Thanks Micah

### C&T Login Summary for 213913


|  |                                   |                                 |
|--|-----------------------------------|---------------------------------|
| <b>Project:</b> 609.004                | <b>Report To:</b> Fugro West Inc. | <b>Bill To:</b> Fugro West Inc. |
| <b>Site:</b> 2250 Telgraph Av. Oakland | 1000 Broadway                     | 1000 Broadway                   |
| <b>Lab Login #:</b> 213913             | Suite 440                         | Suite 440                       |
| <b>Report Due:</b> 08/10/09            | Oakland, CA 94607                 | Oakland, CA                     |
| <b>PO#:</b>                            | ATTN: Karen Emery                 | ATTN: Karen                     |
| <b>C&amp;T Proj Mgr:</b> Micah Smith   | (510) 268-0461                    | (510) 268-04                    |

| Client ID | Lab ID | Sampled | Received | Matrix | Analyses   | COC # | Comments   |
|-----------|--------|---------|----------|--------|------------|-------|------------|
| B-1@2     | 001    | 07/27   | 08/03    |        |            |       |            |
|           |        |         |          | Soil   | BTOX       |       |            |
|           |        |         |          | Soil   | EDF        |       |            |
|           |        |         |          | Soil   | SILICA GEL |       |            |
|           |        |         |          | Soil   | TEHM       |       | Silica Gel |
|           |        |         |          |        |            |       |            |

PAGE 2 OF 5

SAMPLED BY: Russell Carter

| LABORATORY<br>I.D. NUMBER | FIELD SAMPLE I.D. | MATRIX |      |     | CONTAINERS |       |      |      | PRESERVATIVE |                                |                  |     |       | SAMPLING DATE |       |     |      | Quantity | TVHg | TPHd and TPHmo with s | BTEX, MTBE, Fuel Oxy<br>Lead Scavengers | TOC | EDF Reporting |      |  |  |  |
|---------------------------|-------------------|--------|------|-----|------------|-------|------|------|--------------|--------------------------------|------------------|-----|-------|---------------|-------|-----|------|----------|------|-----------------------|---|-----|---------------|------|--|--|--|
|                           |                   | WATER  | SOIL | AIR | VOA        | LITER | PINT | TUBE | HCL          | H <sub>2</sub> SO <sub>4</sub> | HNO <sub>3</sub> | ICE | OTHER | NONE          | MONTH | DAY | YEAR |          |      |                       |   |     |               | TIME |  |  |  |
|                           | B-2@19.5          |        | X    |     |            |       |      |      |              |                                |                  | X   |       |               | 07    | 27  | 09   | 1612     | 1    | X                     |   | X   |               |      |  |  |  |
|                           | B-3@1             |        | X    |     |            |       |      |      |              |                                |                  | X   |       |               | 07    | 27  | 09   | 1000     | 1    |                       | X                                       |     |               |      |  |  |  |
|                           | B-3@5             |        | X    |     |            |       |      |      |              |                                |                  | X   |       |               | 07    | 27  | 09   | 1007     | 1    |                       | X                                       |     |               |      |  |  |  |
|                           | B-3@10            |        | X    |     |            |       |      |      |              |                                |                  | X   |       |               | 07    | 27  | 09   | 1014     | 1    | X                     | X                                       | X   |               |      |  |  |  |
|                           | B-3@12            |        | X    |     |            |       |      |      |              |                                |                  | X   |       |               | 07    | 27  | 09   | 1023     | 1    | X                     | X                                       | X   | X             |      |  |  |  |
|                           | B-3@15            |        | X    |     |            |       |      |      |              |                                |                  | X   |       |               | 07    | 27  | 09   | 1033     | 1    | X                     | X                                       | X   | X             |      |  |  |  |
|                           | B-3@17            |        | X    |     |            |       |      |      |              |                                |                  | X   |       |               | 07    | 27  | 09   | 1033     | 1    | X                     | X                                       | X   | X             |      |  |  |  |
|                           | B-4@5             |        | X    |     |            |       |      |      |              |                                |                  | X   |       |               | 07    | 27  | 09   | 1030     | 1    |                       | X                                       |     |               |      |  |  |  |
|                           | B-4@7.5           |        | X    |     |            |       |      |      |              |                                |                  | X   |       |               | 07    | 27  | 09   | 0931     | 1    |                       | X                                       |     |               |      |  |  |  |
|                           | B-4@10            |        | X    |     |            |       |      |      |              |                                |                  | X   |       |               | 07    | 27  | 09   | 0934     | 1    |                       | X                                       |     |               |      |  |  |  |
|                           | B-4@12            |        | X    |     |            |       |      |      |              |                                |                  | X   |       |               | 07    | 27  | 09   | 0937     | 1    |                       | X                                       |     |               |      |  |  |  |
|                           | B-4@15            |        | X    |     |            |       |      |      |              |                                |                  | X   |       |               | 07    | 27  | 09   | 0939     | 1    | X                     | X                                       |     | X             |      |  |  |  |
|                           | B-4@18            |        | X    |     |            |       |      |      |              |                                |                  | X   |       |               | 07    | 27  | 09   | 0941     | 1    | X                     | X                                       |     | X             |      |  |  |  |
|                           |                   |        |      |     |            |       |      |      |              |                                |                  |     |       |               | 07    | 27  | 09   | 1102     | 1    |                       | X                                       |     |               |      |  |  |  |

| CHAIN OF CUSTODY RECORD      |              |                          |              | COMMENTS & NOTES: USE QUOTATION # CT17200909MP WHEN INVOICING.   |  |
|------------------------------|--------------|--------------------------|--------------|--|--|
| RELINQUISHED BY: (Signature) | DATE/TIME    | RECEIVED BY: (Signature) | DATE/TIME    |  <p><b>FUGRO WEST, INC.</b><br/> 1000 Broadway, Suite 440<br/> Oakland, California 94607<br/> Tel: 510.268.0461 Fax: 510.268.0545</p> |  |
| <i>[Signature]</i>           | 8/3/09 13:50 | <i>[Signature]</i>       | 8/3/09 13:00 |  |  |
| RELINQUISHED BY: (Signature) | DATE/TIME    | RECEIVED BY: (Signature) | DATE/TIME    |  |  |
|                              |              |                          |              |  |  |
| RELINQUISHED BY: (Signature) | DATE/TIME    | RECEIVED BY: (Signature) | DATE/TIME    |  |  |
|                              |              |                          |              |  |  |
| RELINQUISHED BY: (Signature) | DATE/TIME    | RECEIVED BY: (Signature) | DATE/TIME    |  |  |
|                              |              |                          |              |  |  |

Approved by Glenn Young, AC 62 Manager, Fugro West, Inc. 10/13/06

Note: If this is a printed copy, please check the online OMS to ensure that it is the latest.

**FUGRO WEST, INC.**

**1000 Broadway, Suite 440**

**Oakland, California 94607**

**Tel: 510.268.0461 Fax: 510.268.0545**

# COOLER RECEIPT CHECKLIST



Curtis & Tompkins, Ltd.

Login # 213913 Date Received 8-3-09 Number of coolers 1  
 Client Fugro Project 609.004

Date Opened 8-3-09 By (print) Troy Windsor (sign) Troy Windsor  
 Date Logged in 8-3-09 By (print) Troy Windsor (sign) Troy Windsor

1. Did cooler come with a shipping slip (airbill, etc) YES NO  
 Shipping info \_\_\_\_\_

2A. Were custody seals present? ... ☐ YES (circle) on cooler on samples ☒ NO  
 How many \_\_\_\_\_ Name \_\_\_\_\_ Date \_\_\_\_\_

2B. Were custody seals intact upon arrival? YES NO N/A

3. Were custody papers dry and intact when received? YES NO

4. Were custody papers filled out properly (ink, signed, etc)? YES NO

5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO

6. Indicate the packing in cooler: (if other, describe) \_\_\_\_\_

☐ Bubble Wrap ☐ Foam blocks ☐ Bags ☒ None  
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation:

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) \_\_\_\_\_

☒ Samples Received on ice & cold without a temperature blank

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? YES NO

If YES, what time were they transferred to freezer? \_\_\_\_\_

9. Did all bottles arrive unbroken/unopened? YES NO

10. Are samples in the appropriate containers for indicated tests? YES NO

11. Are sample labels present, in good condition and complete? YES NO

12. Do the sample labels agree with custody papers? YES NO

13. Was sufficient amount of sample sent for tests requested? YES NO

14. Are the samples appropriately preserved? YES NO N/A

15. Are bubbles > 6mm absent in VOA samples? YES NO N/A

16. Was the client contacted concerning this sample delivery? YES NO

If YES, Who was called? \_\_\_\_\_ By \_\_\_\_\_ Date: \_\_\_\_\_

## COMMENTS

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

| Total Volatile Hydrocarbons |                 |           |                           |
|-----------------------------|-----------------|-----------|---------------------------|
| Lab #:                      | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:                     | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:                   | 609.004         | Analysis: | EPA 8015B                 |
| Matrix:                     | Soil            | Sampled:  | 07/27/09                  |
| Units:                      | mg/Kg           | Received: | 08/03/09                  |
| Basis:                      | as received     |           |                           |

|           |            |           |          |
|-----------|------------|-----------|----------|
| Field ID: | B-1@2      | Diln Fac: | 1.000    |
| Type:     | SAMPLE     | Batch#:   | 153520   |
| Lab ID:   | 213913-001 | Analyzed: | 08/04/09 |

| Analyte         | Result | RL   |
|-----------------|--------|------|
| Gasoline C7-C12 | ND     | 0.98 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 94   | 54-152 |
| Bromofluorobenzene (FID) | 91   | 50-152 |

|           |            |           |          |
|-----------|------------|-----------|----------|
| Field ID: | B-1@7.5    | Diln Fac: | 1.000    |
| Type:     | SAMPLE     | Batch#:   | 153520   |
| Lab ID:   | 213913-002 | Analyzed: | 08/04/09 |

| Analyte         | Result | RL   |
|-----------------|--------|------|
| Gasoline C7-C12 | ND     | 0.97 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 95   | 54-152 |
| Bromofluorobenzene (FID) | 92   | 50-152 |

|           |            |           |          |
|-----------|------------|-----------|----------|
| Field ID: | B-1@10     | Diln Fac: | 20.00    |
| Type:     | SAMPLE     | Batch#:   | 153638   |
| Lab ID:   | 213913-003 | Analyzed: | 08/07/09 |

| Analyte         | Result | RL |
|-----------------|--------|----|
| Gasoline C7-C12 | 170    | 20 |

| Surrogate                | %REC  | Limits |
|--------------------------|-------|--------|
| Trifluorotoluene (FID)   | 161 * | 54-152 |
| Bromofluorobenzene (FID) | 155 * | 50-152 |

|           |            |           |          |
|-----------|------------|-----------|----------|
| Field ID: | B-1@12     | Diln Fac: | 20.00    |
| Type:     | SAMPLE     | Batch#:   | 153638   |
| Lab ID:   | 213913-004 | Analyzed: | 08/07/09 |

| Analyte         | Result | RL |
|-----------------|--------|----|
| Gasoline C7-C12 | 320    | 20 |

| Surrogate                | %REC  | Limits |
|--------------------------|-------|--------|
| Trifluorotoluene (FID)   | 108   | 54-152 |
| Bromofluorobenzene (FID) | 207 * | 50-152 |

\*= Value outside of QC limits; see narrative  
Y= Sample exhibits chromatographic pattern which does not resemble standard  
ND= Not Detected  
RL= Reporting Limit

| Total Volatile Hydrocarbons |                 |           |                           |
|-----------------------------|-----------------|-----------|---------------------------|
| Lab #:                      | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:                     | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:                   | 609.004         | Analysis: | EPA 8015B                 |
| Matrix:                     | Soil            | Sampled:  | 07/27/09                  |
| Units:                      | mg/Kg           | Received: | 08/03/09                  |
| Basis:                      | as received     |           |                           |

Field ID: B-1@15 Diln Fac: 1.000  
 Type: SAMPLE Batch#: 153520  
 Lab ID: 213913-005 Analyzed: 08/04/09

| Analyte         | Result | RL  |
|-----------------|--------|-----|
| Gasoline C7-C12 | 1.1    | 1.0 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 112  | 54-152 |
| Bromofluorobenzene (FID) | 111  | 50-152 |

Field ID: B-1@17 Diln Fac: 1.000  
 Type: SAMPLE Batch#: 153520  
 Lab ID: 213913-006 Analyzed: 08/04/09

| Analyte         | Result | RL  |
|-----------------|--------|-----|
| Gasoline C7-C12 | 2.0 Y  | 1.0 |

| Surrogate                | %REC  | Limits |
|--------------------------|-------|--------|
| Trifluorotoluene (FID)   | 160 * | 54-152 |
| Bromofluorobenzene (FID) | 128   | 50-152 |

Field ID: B-1@20 Diln Fac: 1.000  
 Type: SAMPLE Batch#: 153520  
 Lab ID: 213913-007 Analyzed: 08/04/09

| Analyte         | Result | RL  |
|-----------------|--------|-----|
| Gasoline C7-C12 | ND     | 1.0 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 86   | 54-152 |
| Bromofluorobenzene (FID) | 84   | 50-152 |

Field ID: B-2@5 Diln Fac: 1.000  
 Type: SAMPLE Batch#: 153520  
 Lab ID: 213913-008 Analyzed: 08/04/09

| Analyte         | Result | RL   |
|-----------------|--------|------|
| Gasoline C7-C12 | ND     | 0.97 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 97   | 54-152 |
| Bromofluorobenzene (FID) | 88   | 50-152 |

\*= Value outside of QC limits; see narrative  
 Y= Sample exhibits chromatographic pattern which does not resemble standard  
 ND= Not Detected  
 RL= Reporting Limit

| Total Volatile Hydrocarbons |                 |           |                           |
|-----------------------------|-----------------|-----------|---------------------------|
| Lab #:                      | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:                     | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:                   | 609.004         | Analysis: | EPA 8015B                 |
| Matrix:                     | Soil            | Sampled:  | 07/27/09                  |
| Units:                      | mg/Kg           | Received: | 08/03/09                  |
| Basis:                      | as received     |           |                           |

Field ID: B-2@7.5      Diln Fac: 1.000  
 Type: SAMPLE      Batch#: 153520  
 Lab ID: 213913-009      Analyzed: 08/05/09

| Analyte         | Result | RL  |
|-----------------|--------|-----|
| Gasoline C7-C12 | ND     | 1.0 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 96   | 54-152 |
| Bromofluorobenzene (FID) | 87   | 50-152 |

Field ID: B-2@10      Diln Fac: 1.000  
 Type: SAMPLE      Batch#: 153520  
 Lab ID: 213913-010      Analyzed: 08/05/09

| Analyte         | Result | RL   |
|-----------------|--------|------|
| Gasoline C7-C12 | ND     | 0.96 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 119  | 54-152 |
| Bromofluorobenzene (FID) | 119  | 50-152 |

Field ID: B-2@12      Diln Fac: 1.000  
 Type: SAMPLE      Batch#: 153520  
 Lab ID: 213913-011      Analyzed: 08/05/09

| Analyte         | Result | RL  |
|-----------------|--------|-----|
| Gasoline C7-C12 | ND     | 1.0 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 118  | 54-152 |
| Bromofluorobenzene (FID) | 121  | 50-152 |

Field ID: B-2@15      Diln Fac: 10.00  
 Type: SAMPLE      Batch#: 153638  
 Lab ID: 213913-012      Analyzed: 08/07/09

| Analyte         | Result | RL |
|-----------------|--------|----|
| Gasoline C7-C12 | 16 Y   | 10 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 116  | 54-152 |
| Bromofluorobenzene (FID) | 126  | 50-152 |

\*= Value outside of QC limits; see narrative  
 Y= Sample exhibits chromatographic pattern which does not resemble standard  
 ND= Not Detected  
 RL= Reporting Limit

| Total Volatile Hydrocarbons |                 |           |                           |
|-----------------------------|-----------------|-----------|---------------------------|
| Lab #:                      | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:                     | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:                   | 609.004         | Analysis: | EPA 8015B                 |
| Matrix:                     | Soil            | Sampled:  | 07/27/09                  |
| Units:                      | mg/Kg           | Received: | 08/03/09                  |
| Basis:                      | as received     |           |                           |

|           |            |           |          |
|-----------|------------|-----------|----------|
| Field ID: | B-2@17     | Diln Fac: | 5.000    |
| Type:     | SAMPLE     | Batch#:   | 153638   |
| Lab ID:   | 213913-013 | Analyzed: | 08/08/09 |

| Analyte         | Result | RL  |
|-----------------|--------|-----|
| Gasoline C7-C12 | 33 Y   | 5.0 |

| Surrogate                | %REC  | Limits |
|--------------------------|-------|--------|
| Trifluorotoluene (FID)   | 173 * | 54-152 |
| Bromofluorobenzene (FID) | 189 * | 50-152 |

|           |            |           |          |
|-----------|------------|-----------|----------|
| Field ID: | B-2@19.5   | Diln Fac: | 1.000    |
| Type:     | SAMPLE     | Batch#:   | 153600   |
| Lab ID:   | 213913-014 | Analyzed: | 08/07/09 |

| Analyte         | Result | RL   |
|-----------------|--------|------|
| Gasoline C7-C12 | ND     | 0.99 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 101  | 54-152 |
| Bromofluorobenzene (FID) | 103  | 50-152 |

|           |            |           |          |
|-----------|------------|-----------|----------|
| Field ID: | B-3@10     | Diln Fac: | 1.000    |
| Type:     | SAMPLE     | Batch#:   | 153520   |
| Lab ID:   | 213913-017 | Analyzed: | 08/05/09 |

| Analyte         | Result | RL  |
|-----------------|--------|-----|
| Gasoline C7-C12 | ND     | 1.0 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 94   | 54-152 |
| Bromofluorobenzene (FID) | 95   | 50-152 |

|           |            |           |          |
|-----------|------------|-----------|----------|
| Field ID: | B-3@12     | Diln Fac: | 1.000    |
| Type:     | SAMPLE     | Batch#:   | 153520   |
| Lab ID:   | 213913-018 | Analyzed: | 08/05/09 |

| Analyte         | Result | RL   |
|-----------------|--------|------|
| Gasoline C7-C12 | ND     | 0.98 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 120  | 54-152 |
| Bromofluorobenzene (FID) | 95   | 50-152 |

\*= Value outside of QC limits; see narrative  
Y= Sample exhibits chromatographic pattern which does not resemble standard  
ND= Not Detected  
RL= Reporting Limit



| Total Volatile Hydrocarbons |                 |           |                           |
|-----------------------------|-----------------|-----------|---------------------------|
| Lab #:                      | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:                     | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:                   | 609.004         | Analysis: | EPA 8015B                 |
| Matrix:                     | Soil            | Sampled:  | 07/27/09                  |
| Units:                      | mg/Kg           | Received: | 08/03/09                  |
| Basis:                      | as received     |           |                           |

|           |            |           |          |
|-----------|------------|-----------|----------|
| Field ID: | B-3@15     | Diln Fac: | 1.000    |
| Type:     | SAMPLE     | Batch#:   | 153520   |
| Lab ID:   | 213913-019 | Analyzed: | 08/05/09 |

| Analyte         | Result | RL   |
|-----------------|--------|------|
| Gasoline C7-C12 | 8.7 Y  | 0.99 |

| Surrogate                | %REC  | Limits |
|--------------------------|-------|--------|
| Trifluorotoluene (FID)   | 434 * | 54-152 |
| Bromofluorobenzene (FID) | 295 * | 50-152 |

|           |            |           |          |
|-----------|------------|-----------|----------|
| Field ID: | B-4A@12    | Diln Fac: | 1.000    |
| Type:     | SAMPLE     | Batch#:   | 153520   |
| Lab ID:   | 213913-024 | Analyzed: | 08/05/09 |

| Analyte         | Result | RL  |
|-----------------|--------|-----|
| Gasoline C7-C12 | 4.5 Y  | 1.0 |

| Surrogate                | %REC  | Limits |
|--------------------------|-------|--------|
| Trifluorotoluene (FID)   | 166 * | 54-152 |
| Bromofluorobenzene (FID) | 166 * | 50-152 |

|           |            |           |          |
|-----------|------------|-----------|----------|
| Field ID: | B-4A@15    | Diln Fac: | 1.000    |
| Type:     | SAMPLE     | Batch#:   | 153520   |
| Lab ID:   | 213913-025 | Analyzed: | 08/05/09 |

| Analyte         | Result | RL   |
|-----------------|--------|------|
| Gasoline C7-C12 | ND     | 0.99 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 98   | 54-152 |
| Bromofluorobenzene (FID) | 98   | 50-152 |

|           |            |           |          |
|-----------|------------|-----------|----------|
| Field ID: | B-5@2      | Diln Fac: | 1.000    |
| Type:     | SAMPLE     | Batch#:   | 153520   |
| Lab ID:   | 213913-027 | Analyzed: | 08/05/09 |

| Analyte         | Result | RL   |
|-----------------|--------|------|
| Gasoline C7-C12 | ND     | 0.96 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 93   | 54-152 |
| Bromofluorobenzene (FID) | 91   | 50-152 |

\*= Value outside of QC limits; see narrative  
Y= Sample exhibits chromatographic pattern which does not resemble standard  
ND= Not Detected  
RL= Reporting Limit

| Total Volatile Hydrocarbons |                 |           |                           |
|-----------------------------|-----------------|-----------|---------------------------|
| Lab #:                      | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:                     | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:                   | 609.004         | Analysis: | EPA 8015B                 |
| Matrix:                     | Soil            | Sampled:  | 07/27/09                  |
| Units:                      | mg/Kg           | Received: | 08/03/09                  |
| Basis:                      | as received     |           |                           |

Field ID: B-5@7.5      Diln Fac: 1.000  
 Type: SAMPLE      Batch#: 153520  
 Lab ID: 213913-028      Analyzed: 08/05/09

| Analyte         | Result | RL  |
|-----------------|--------|-----|
| Gasoline C7-C12 | ND     | 1.0 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 94   | 54-152 |
| Bromofluorobenzene (FID) | 87   | 50-152 |

Field ID: B-5@12      Diln Fac: 1.000  
 Type: SAMPLE      Batch#: 153530  
 Lab ID: 213913-029      Analyzed: 08/05/09

| Analyte         | Result | RL  |
|-----------------|--------|-----|
| Gasoline C7-C12 | 8.8 Y  | 1.0 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 144  | 54-152 |
| Bromofluorobenzene (FID) | 130  | 50-152 |

Field ID: B-5@15      Diln Fac: 1.000  
 Type: SAMPLE      Batch#: 153530  
 Lab ID: 213913-030      Analyzed: 08/04/09

| Analyte         | Result | RL   |
|-----------------|--------|------|
| Gasoline C7-C12 | ND     | 0.96 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 104  | 54-152 |
| Bromofluorobenzene (FID) | 104  | 50-152 |

Field ID: B-6@2      Diln Fac: 1.000  
 Type: SAMPLE      Batch#: 153530  
 Lab ID: 213913-031      Analyzed: 08/04/09

| Analyte         | Result | RL  |
|-----------------|--------|-----|
| Gasoline C7-C12 | ND     | 1.0 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 91   | 54-152 |
| Bromofluorobenzene (FID) | 90   | 50-152 |

\*= Value outside of QC limits; see narrative  
 Y= Sample exhibits chromatographic pattern which does not resemble standard  
 ND= Not Detected  
 RL= Reporting Limit

| Total Volatile Hydrocarbons |                 |           |                           |
|-----------------------------|-----------------|-----------|---------------------------|
| Lab #:                      | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:                     | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:                   | 609.004         | Analysis: | EPA 8015B                 |
| Matrix:                     | Soil            | Sampled:  | 07/27/09                  |
| Units:                      | mg/Kg           | Received: | 08/03/09                  |
| Basis:                      | as received     |           |                           |

Field ID: B-6@7.5      Diln Fac: 1.000  
 Type: SAMPLE      Batch#: 153530  
 Lab ID: 213913-032      Analyzed: 08/04/09

| Analyte         | Result | RL   |
|-----------------|--------|------|
| Gasoline C7-C12 | ND     | 0.99 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 110  | 54-152 |
| Bromofluorobenzene (FID) | 109  | 50-152 |

Field ID: B-6@12      Diln Fac: 1.000  
 Type: SAMPLE      Batch#: 153530  
 Lab ID: 213913-033      Analyzed: 08/04/09

| Analyte         | Result | RL   |
|-----------------|--------|------|
| Gasoline C7-C12 | ND     | 0.96 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 112  | 54-152 |
| Bromofluorobenzene (FID) | 110  | 50-152 |

Field ID: B-6@15      Diln Fac: 1.000  
 Type: SAMPLE      Batch#: 153530  
 Lab ID: 213913-034      Analyzed: 08/05/09

| Analyte         | Result | RL   |
|-----------------|--------|------|
| Gasoline C7-C12 | 11 Y   | 0.98 |

| Surrogate                | %REC  | Limits |
|--------------------------|-------|--------|
| Trifluorotoluene (FID)   | 176 * | 54-152 |
| Bromofluorobenzene (FID) | 180 * | 50-152 |

Field ID: B-7@5      Diln Fac: 1.000  
 Type: SAMPLE      Batch#: 153530  
 Lab ID: 213913-035      Analyzed: 08/05/09

| Analyte         | Result | RL   |
|-----------------|--------|------|
| Gasoline C7-C12 | ND     | 0.97 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 106  | 54-152 |
| Bromofluorobenzene (FID) | 107  | 50-152 |

\*= Value outside of QC limits; see narrative  
 Y= Sample exhibits chromatographic pattern which does not resemble standard  
 ND= Not Detected  
 RL= Reporting Limit

| Total Volatile Hydrocarbons |                 |           |                           |
|-----------------------------|-----------------|-----------|---------------------------|
| Lab #:                      | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:                     | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:                   | 609.004         | Analysis: | EPA 8015B                 |
| Matrix:                     | Soil            | Sampled:  | 07/27/09                  |
| Units:                      | mg/Kg           | Received: | 08/03/09                  |
| Basis:                      | as received     |           |                           |

|           |            |           |          |
|-----------|------------|-----------|----------|
| Field ID: | B-7@7.5    | Diln Fac: | 1.000    |
| Type:     | SAMPLE     | Batch#:   | 153530   |
| Lab ID:   | 213913-036 | Analyzed: | 08/05/09 |

| Analyte         | Result | RL  |
|-----------------|--------|-----|
| Gasoline C7-C12 | ND     | 1.0 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 106  | 54-152 |
| Bromofluorobenzene (FID) | 106  | 50-152 |

|           |            |           |          |
|-----------|------------|-----------|----------|
| Field ID: | B-7@12     | Diln Fac: | 1.000    |
| Type:     | SAMPLE     | Batch#:   | 153530   |
| Lab ID:   | 213913-037 | Analyzed: | 08/05/09 |

| Analyte         | Result | RL  |
|-----------------|--------|-----|
| Gasoline C7-C12 | ND     | 1.0 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 102  | 54-152 |
| Bromofluorobenzene (FID) | 101  | 50-152 |

|           |            |           |          |
|-----------|------------|-----------|----------|
| Field ID: | B-7@15     | Diln Fac: | 1.000    |
| Type:     | SAMPLE     | Batch#:   | 153530   |
| Lab ID:   | 213913-038 | Analyzed: | 08/05/09 |

| Analyte         | Result | RL   |
|-----------------|--------|------|
| Gasoline C7-C12 | ND     | 0.97 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 103  | 54-152 |
| Bromofluorobenzene (FID) | 103  | 50-152 |

|           |            |           |          |
|-----------|------------|-----------|----------|
| Field ID: | B-8@7.5    | Diln Fac: | 1.000    |
| Type:     | SAMPLE     | Batch#:   | 153600   |
| Lab ID:   | 213913-039 | Analyzed: | 08/06/09 |

| Analyte         | Result | RL  |
|-----------------|--------|-----|
| Gasoline C7-C12 | 13 Y   | 1.0 |

| Surrogate                | %REC  | Limits |
|--------------------------|-------|--------|
| Trifluorotoluene (FID)   | 174 * | 54-152 |
| Bromofluorobenzene (FID) | 140   | 50-152 |

\*= Value outside of QC limits; see narrative  
Y= Sample exhibits chromatographic pattern which does not resemble standard  
ND= Not Detected  
RL= Reporting Limit

| Total Volatile Hydrocarbons |                 |           |                           |
|-----------------------------|-----------------|-----------|---------------------------|
| Lab #:                      | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:                     | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:                   | 609.004         | Analysis: | EPA 8015B                 |
| Matrix:                     | Soil            | Sampled:  | 07/27/09                  |
| Units:                      | mg/Kg           | Received: | 08/03/09                  |
| Basis:                      | as received     |           |                           |

|           |            |           |          |
|-----------|------------|-----------|----------|
| Field ID: | B-8@15     | Diln Fac: | 1.000    |
| Type:     | SAMPLE     | Batch#:   | 153600   |
| Lab ID:   | 213913-040 | Analyzed: | 08/06/09 |

| Analyte         | Result | RL  |
|-----------------|--------|-----|
| Gasoline C7-C12 | 8.0    | 1.0 |

| Surrogate                | %REC  | Limits |
|--------------------------|-------|--------|
| Trifluorotoluene (FID)   | 164 * | 54-152 |
| Bromofluorobenzene (FID) | 111   | 50-152 |

|           |            |           |          |
|-----------|------------|-----------|----------|
| Field ID: | B-8@20     | Diln Fac: | 1.000    |
| Type:     | SAMPLE     | Batch#:   | 153600   |
| Lab ID:   | 213913-041 | Analyzed: | 08/07/09 |

| Analyte         | Result | RL   |
|-----------------|--------|------|
| Gasoline C7-C12 | ND     | 0.98 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 107  | 54-152 |
| Bromofluorobenzene (FID) | 101  | 50-152 |

|           |            |           |          |
|-----------|------------|-----------|----------|
| Field ID: | B-9@5      | Diln Fac: | 1.000    |
| Type:     | SAMPLE     | Batch#:   | 153600   |
| Lab ID:   | 213913-042 | Analyzed: | 08/06/09 |

| Analyte         | Result | RL  |
|-----------------|--------|-----|
| Gasoline C7-C12 | 1.9    | 1.0 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 101  | 54-152 |
| Bromofluorobenzene (FID) | 96   | 50-152 |

|           |            |           |          |
|-----------|------------|-----------|----------|
| Field ID: | B-9@10     | Diln Fac: | 10.00    |
| Type:     | SAMPLE     | Batch#:   | 153638   |
| Lab ID:   | 213913-043 | Analyzed: | 08/08/09 |

| Analyte         | Result | RL |
|-----------------|--------|----|
| Gasoline C7-C12 | 56     | 10 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 133  | 54-152 |
| Bromofluorobenzene (FID) | 133  | 50-152 |

\*= Value outside of QC limits; see narrative  
Y= Sample exhibits chromatographic pattern which does not resemble standard  
ND= Not Detected  
RL= Reporting Limit

| Total Volatile Hydrocarbons |                 |           |                           |
|-----------------------------|-----------------|-----------|---------------------------|
| Lab #:                      | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:                     | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:                   | 609.004         | Analysis: | EPA 8015B                 |
| Matrix:                     | Soil            | Sampled:  | 07/27/09                  |
| Units:                      | mg/Kg           | Received: | 08/03/09                  |
| Basis:                      | as received     |           |                           |

|           |            |           |          |
|-----------|------------|-----------|----------|
| Field ID: | B-9@15     | Diln Fac: | 10.00    |
| Type:     | SAMPLE     | Batch#:   | 153638   |
| Lab ID:   | 213913-044 | Analyzed: | 08/08/09 |

| Analyte         | Result | RL |
|-----------------|--------|----|
| Gasoline C7-C12 | 140    | 10 |

| Surrogate                | %REC  | Limits |
|--------------------------|-------|--------|
| Trifluorotoluene (FID)   | 143   | 54-152 |
| Bromofluorobenzene (FID) | 153 * | 50-152 |

|           |            |           |          |
|-----------|------------|-----------|----------|
| Field ID: | B-9@20     | Diln Fac: | 1.000    |
| Type:     | SAMPLE     | Batch#:   | 153600   |
| Lab ID:   | 213913-045 | Analyzed: | 08/06/09 |

| Analyte         | Result | RL  |
|-----------------|--------|-----|
| Gasoline C7-C12 | ND     | 1.0 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 100  | 54-152 |
| Bromofluorobenzene (FID) | 98   | 50-152 |

|           |            |           |          |
|-----------|------------|-----------|----------|
| Field ID: | B-10@2     | Diln Fac: | 1.000    |
| Type:     | SAMPLE     | Batch#:   | 153600   |
| Lab ID:   | 213913-046 | Analyzed: | 08/06/09 |

| Analyte         | Result | RL  |
|-----------------|--------|-----|
| Gasoline C7-C12 | ND     | 1.0 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 100  | 54-152 |
| Bromofluorobenzene (FID) | 96   | 50-152 |

|           |            |           |          |
|-----------|------------|-----------|----------|
| Field ID: | B-10@5     | Diln Fac: | 1.000    |
| Type:     | SAMPLE     | Batch#:   | 153600   |
| Lab ID:   | 213913-047 | Analyzed: | 08/07/09 |

| Analyte         | Result | RL  |
|-----------------|--------|-----|
| Gasoline C7-C12 | ND     | 1.0 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 105  | 54-152 |
| Bromofluorobenzene (FID) | 99   | 50-152 |

\*= Value outside of QC limits; see narrative  
Y= Sample exhibits chromatographic pattern which does not resemble standard  
ND= Not Detected  
RL= Reporting Limit

| Total Volatile Hydrocarbons |                 |           |                           |
|-----------------------------|-----------------|-----------|---------------------------|
| Lab #:                      | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:                     | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:                   | 609.004         | Analysis: | EPA 8015B                 |
| Matrix:                     | Soil            | Sampled:  | 07/27/09                  |
| Units:                      | mg/Kg           | Received: | 08/03/09                  |
| Basis:                      | as received     |           |                           |

|           |            |           |          |
|-----------|------------|-----------|----------|
| Field ID: | B-10@10    | Diln Fac: | 1.000    |
| Type:     | SAMPLE     | Batch#:   | 153600   |
| Lab ID:   | 213913-048 | Analyzed: | 08/07/09 |

| Analyte         | Result | RL   |
|-----------------|--------|------|
| Gasoline C7-C12 | ND     | 0.97 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 104  | 54-152 |
| Bromofluorobenzene (FID) | 99   | 50-152 |

|           |            |           |          |
|-----------|------------|-----------|----------|
| Field ID: | B-10@15    | Diln Fac: | 1.000    |
| Type:     | SAMPLE     | Batch#:   | 153530   |
| Lab ID:   | 213913-049 | Analyzed: | 08/04/09 |

| Analyte         | Result | RL  |
|-----------------|--------|-----|
| Gasoline C7-C12 | ND     | 1.0 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 106  | 54-152 |
| Bromofluorobenzene (FID) | 113  | 50-152 |

|           |            |           |          |
|-----------|------------|-----------|----------|
| Field ID: | B-11@2     | Diln Fac: | 1.000    |
| Type:     | SAMPLE     | Batch#:   | 153600   |
| Lab ID:   | 213913-050 | Analyzed: | 08/07/09 |

| Analyte         | Result | RL   |
|-----------------|--------|------|
| Gasoline C7-C12 | ND     | 0.99 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 104  | 54-152 |
| Bromofluorobenzene (FID) | 101  | 50-152 |

|           |            |           |          |
|-----------|------------|-----------|----------|
| Field ID: | B-11@7.5   | Diln Fac: | 1.000    |
| Type:     | SAMPLE     | Batch#:   | 153600   |
| Lab ID:   | 213913-051 | Analyzed: | 08/07/09 |

| Analyte         | Result | RL  |
|-----------------|--------|-----|
| Gasoline C7-C12 | ND     | 1.0 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 104  | 54-152 |
| Bromofluorobenzene (FID) | 102  | 50-152 |

\*= Value outside of QC limits; see narrative  
Y= Sample exhibits chromatographic pattern which does not resemble standard  
ND= Not Detected  
RL= Reporting Limit

| Total Volatile Hydrocarbons |                 |           |                           |
|-----------------------------|-----------------|-----------|---------------------------|
| Lab #:                      | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:                     | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:                   | 609.004         | Analysis: | EPA 8015B                 |
| Matrix:                     | Soil            | Sampled:  | 07/27/09                  |
| Units:                      | mg/Kg           | Received: | 08/03/09                  |
| Basis:                      | as received     |           |                           |

|           |            |           |          |
|-----------|------------|-----------|----------|
| Field ID: | B-11@12    | Diln Fac: | 1.000    |
| Type:     | SAMPLE     | Batch#:   | 153600   |
| Lab ID:   | 213913-052 | Analyzed: | 08/07/09 |

| Analyte         | Result | RL  |
|-----------------|--------|-----|
| Gasoline C7-C12 | ND     | 1.0 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 101  | 54-152 |
| Bromofluorobenzene (FID) | 101  | 50-152 |

|           |            |           |          |
|-----------|------------|-----------|----------|
| Field ID: | B-12@5     | Diln Fac: | 1.000    |
| Type:     | SAMPLE     | Batch#:   | 153600   |
| Lab ID:   | 213913-053 | Analyzed: | 08/07/09 |

| Analyte         | Result | RL  |
|-----------------|--------|-----|
| Gasoline C7-C12 | ND     | 1.0 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 98   | 54-152 |
| Bromofluorobenzene (FID) | 99   | 50-152 |

|           |            |           |          |
|-----------|------------|-----------|----------|
| Field ID: | B-12@7.5   | Diln Fac: | 1.000    |
| Type:     | SAMPLE     | Batch#:   | 153600   |
| Lab ID:   | 213913-054 | Analyzed: | 08/07/09 |

| Analyte         | Result | RL  |
|-----------------|--------|-----|
| Gasoline C7-C12 | ND     | 1.0 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 103  | 54-152 |
| Bromofluorobenzene (FID) | 101  | 50-152 |

|           |            |           |          |
|-----------|------------|-----------|----------|
| Field ID: | B-12@12    | Diln Fac: | 1.000    |
| Type:     | SAMPLE     | Batch#:   | 153600   |
| Lab ID:   | 213913-055 | Analyzed: | 08/07/09 |

| Analyte         | Result | RL  |
|-----------------|--------|-----|
| Gasoline C7-C12 | 7.8 Y  | 1.0 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 120  | 54-152 |
| Bromofluorobenzene (FID) | 124  | 50-152 |

\*= Value outside of QC limits; see narrative  
Y= Sample exhibits chromatographic pattern which does not resemble standard  
ND= Not Detected  
RL= Reporting Limit



| Total Volatile Hydrocarbons |                 |           |                           |
|-----------------------------|-----------------|-----------|---------------------------|
| Lab #:                      | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:                     | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:                   | 609.004         | Analysis: | EPA 8015B                 |
| Matrix:                     | Soil            | Sampled:  | 07/27/09                  |
| Units:                      | mg/Kg           | Received: | 08/03/09                  |
| Basis:                      | as received     |           |                           |

|           |            |           |          |
|-----------|------------|-----------|----------|
| Field ID: | B-12@15    | Diln Fac: | 1.000    |
| Type:     | SAMPLE     | Batch#:   | 153600   |
| Lab ID:   | 213913-056 | Analyzed: | 08/07/09 |

| Analyte         | Result | RL   |
|-----------------|--------|------|
| Gasoline C7-C12 | ND     | 0.97 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 100  | 54-152 |
| Bromofluorobenzene (FID) | 101  | 50-152 |

|           |          |           |          |
|-----------|----------|-----------|----------|
| Type:     | BLANK    | Batch#:   | 153520   |
| Lab ID:   | QC506135 | Analyzed: | 08/04/09 |
| Diln Fac: | 1.000    |           |          |

| Analyte         | Result | RL  |
|-----------------|--------|-----|
| Gasoline C7-C12 | ND     | 1.0 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 90   | 54-152 |
| Bromofluorobenzene (FID) | 88   | 50-152 |

|           |          |           |          |
|-----------|----------|-----------|----------|
| Type:     | BLANK    | Batch#:   | 153530   |
| Lab ID:   | QC506178 | Analyzed: | 08/04/09 |
| Diln Fac: | 1.000    |           |          |

| Analyte         | Result | RL  |
|-----------------|--------|-----|
| Gasoline C7-C12 | ND     | 1.0 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 97   | 54-152 |
| Bromofluorobenzene (FID) | 97   | 50-152 |

|           |          |           |          |
|-----------|----------|-----------|----------|
| Type:     | BLANK    | Batch#:   | 153600   |
| Lab ID:   | QC506460 | Analyzed: | 08/06/09 |
| Diln Fac: | 1.000    |           |          |

| Analyte         | Result | RL  |
|-----------------|--------|-----|
| Gasoline C7-C12 | ND     | 1.0 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 97   | 54-152 |
| Bromofluorobenzene (FID) | 97   | 50-152 |

\*= Value outside of QC limits; see narrative  
Y= Sample exhibits chromatographic pattern which does not resemble standard  
ND= Not Detected  
RL= Reporting Limit

| Total Volatile Hydrocarbons |                 |           |                           |
|-----------------------------|-----------------|-----------|---------------------------|
| Lab #:                      | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:                     | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:                   | 609.004         | Analysis: | EPA 8015B                 |
| Matrix:                     | Soil            | Sampled:  | 07/27/09                  |
| Units:                      | mg/Kg           | Received: | 08/03/09                  |
| Basis:                      | as received     |           |                           |

|           |          |           |          |
|-----------|----------|-----------|----------|
| Type:     | BLANK    | Batch#:   | 153638   |
| Lab ID:   | QC506613 | Analyzed: | 08/07/09 |
| Diln Fac: | 1.000    |           |          |

| Analyte         | Result | RL  |
|-----------------|--------|-----|
| Gasoline C7-C12 | ND     | 1.0 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 93   | 54-152 |
| Bromofluorobenzene (FID) | 86   | 50-152 |

\*= Value outside of QC limits; see narrative  
 Y= Sample exhibits chromatographic pattern which does not resemble standard  
 ND= Not Detected  
 RL= Reporting Limit

## Batch QC Report

| Total Volatile Hydrocarbons |                 |           |                           |
|-----------------------------|-----------------|-----------|---------------------------|
| Lab #:                      | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:                     | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:                   | 609.004         | Analysis: | EPA 8015B                 |
| Type:                       | LCS             | Diln Fac: | 1.000                     |
| Lab ID:                     | QC506136        | Batch#:   | 153520                    |
| Matrix:                     | Soil            | Analyzed: | 08/04/09                  |
| Units:                      | mg/Kg           |           |                           |

| Analyte         | Spiked | Result | %REC | Limits |
|-----------------|--------|--------|------|--------|
| Gasoline C7-C12 | 5.000  | 5.195  | 104  | 77-120 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 125  | 54-152 |
| Bromofluorobenzene (FID) | 115  | 50-152 |

## Batch QC Report

| Total Volatile Hydrocarbons |                 |           |                           |
|-----------------------------|-----------------|-----------|---------------------------|
| Lab #:                      | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:                     | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:                   | 609.004         | Analysis: | EPA 8015B                 |
| Field ID:                   | B-1@2           | Diln Fac: | 1.000                     |
| MSS Lab ID:                 | 213913-001      | Batch#:   | 153520                    |
| Matrix:                     | Soil            | Sampled:  | 07/27/09                  |
| Units:                      | mg/Kg           | Received: | 08/03/09                  |
| Basis:                      | as received     | Analyzed: | 08/04/09                  |

Type: MS Lab ID: QC506137

| Analyte         | MSS Result | Spiked | Result | %REC | Limits |
|-----------------|------------|--------|--------|------|--------|
| Gasoline C7-C12 | 0.05494    | 10.00  | 10.71  | 107  | 31-120 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 140  | 54-152 |
| Bromofluorobenzene (FID) | 123  | 50-152 |

Type: MSD Lab ID: QC506138

| Analyte         | Spiked | Result | %REC | Limits | RPD | Lim |
|-----------------|--------|--------|------|--------|-----|-----|
| Gasoline C7-C12 | 10.00  | 10.41  | 104  | 31-120 | 3   | 34  |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 140  | 54-152 |
| Bromofluorobenzene (FID) | 129  | 50-152 |

RPD= Relative Percent Difference

## Batch QC Report

| Total Volatile Hydrocarbons |                 |           |                           |
|-----------------------------|-----------------|-----------|---------------------------|
| Lab #:                      | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:                     | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:                   | 609.004         | Analysis: | EPA 8015B                 |
| Type:                       | LCS             | Diln Fac: | 1.000                     |
| Lab ID:                     | QC506179        | Batch#:   | 153530                    |
| Matrix:                     | Soil            | Analyzed: | 08/04/09                  |
| Units:                      | mg/Kg           |           |                           |

| Analyte         | Spiked | Result | %REC | Limits |
|-----------------|--------|--------|------|--------|
| Gasoline C7-C12 | 5.000  | 4.486  | 90   | 77-120 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 127  | 54-152 |
| Bromofluorobenzene (FID) | 112  | 50-152 |

## Batch QC Report

| Total Volatile Hydrocarbons |                 |           |                           |
|-----------------------------|-----------------|-----------|---------------------------|
| Lab #:                      | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:                     | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:                   | 609.004         | Analysis: | EPA 8015B                 |
| Field ID:                   | B-10@15         | Diln Fac: | 1.000                     |
| MSS Lab ID:                 | 213913-049      | Batch#:   | 153530                    |
| Matrix:                     | Soil            | Sampled:  | 07/27/09                  |
| Units:                      | mg/Kg           | Received: | 08/03/09                  |
| Basis:                      | as received     | Analyzed: | 08/04/09                  |

Type: MS Lab ID: QC506180

| Analyte         | MSS Result | Spiked | Result | %REC | Limits |
|-----------------|------------|--------|--------|------|--------|
| Gasoline C7-C12 | 0.07892    | 9.901  | 9.174  | 92   | 31-120 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 131  | 54-152 |
| Bromofluorobenzene (FID) | 119  | 50-152 |

Type: MSD Lab ID: QC506181

| Analyte         | Spiked | Result | %REC | Limits | RPD | Lim |
|-----------------|--------|--------|------|--------|-----|-----|
| Gasoline C7-C12 | 9.804  | 9.492  | 96   | 31-120 | 4   | 34  |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 133  | 54-152 |
| Bromofluorobenzene (FID) | 119  | 50-152 |

RPD= Relative Percent Difference

## Batch QC Report

| Total Volatile Hydrocarbons |                 |           |                           |
|-----------------------------|-----------------|-----------|---------------------------|
| Lab #:                      | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:                     | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:                   | 609.004         | Analysis: | EPA 8015B                 |
| Type:                       | LCS             | Diln Fac: | 1.000                     |
| Lab ID:                     | QC506461        | Batch#:   | 153600                    |
| Matrix:                     | Soil            | Analyzed: | 08/06/09                  |
| Units:                      | mg/Kg           |           |                           |

| Analyte         | Spiked | Result | %REC | Limits |
|-----------------|--------|--------|------|--------|
| Gasoline C7-C12 | 5.000  | 4.842  | 97   | 77-120 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 118  | 54-152 |
| Bromofluorobenzene (FID) | 101  | 50-152 |

## Batch QC Report

| Total Volatile Hydrocarbons |                 |           |                           |
|-----------------------------|-----------------|-----------|---------------------------|
| Lab #:                      | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:                     | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:                   | 609.004         | Analysis: | EPA 8015B                 |
| Field ID:                   | B-10@2          | Diln Fac: | 1.000                     |
| MSS Lab ID:                 | 213913-046      | Batch#:   | 153600                    |
| Matrix:                     | Soil            | Sampled:  | 07/27/09                  |
| Units:                      | mg/Kg           | Received: | 08/03/09                  |
| Basis:                      | as received     | Analyzed: | 08/06/09                  |

Type: MS Lab ID: QC506462

| Analyte         | MSS Result | Spiked | Result | %REC | Limits |
|-----------------|------------|--------|--------|------|--------|
| Gasoline C7-C12 | 0.07514    | 10.10  | 9.512  | 93   | 31-120 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 142  | 54-152 |
| Bromofluorobenzene (FID) | 102  | 50-152 |

Type: MSD Lab ID: QC506463

| Analyte         | Spiked | Result | %REC | Limits | RPD | Lim |
|-----------------|--------|--------|------|--------|-----|-----|
| Gasoline C7-C12 | 9.804  | 9.747  | 99   | 31-120 | 5   | 34  |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 138  | 54-152 |
| Bromofluorobenzene (FID) | 101  | 50-152 |

RPD= Relative Percent Difference



## Batch QC Report

| Total Volatile Hydrocarbons |                 |           |                           |
|-----------------------------|-----------------|-----------|---------------------------|
| Lab #:                      | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:                     | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:                   | 609.004         | Analysis: | EPA 8015B                 |
| Type:                       | LCS             | Diln Fac: | 1.000                     |
| Lab ID:                     | QC506616        | Batch#:   | 153638                    |
| Matrix:                     | Soil            | Analyzed: | 08/07/09                  |
| Units:                      | mg/Kg           |           |                           |

| Analyte         | Spiked | Result | %REC | Limits |
|-----------------|--------|--------|------|--------|
| Gasoline C7-C12 | 5.000  | 5.519  | 110  | 77-120 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 149  | 54-152 |
| Bromofluorobenzene (FID) | 121  | 50-152 |

## Batch QC Report

| Total Volatile Hydrocarbons |                 |           |                           |
|-----------------------------|-----------------|-----------|---------------------------|
| Lab #:                      | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:                     | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:                   | 609.004         | Analysis: | EPA 8015B                 |
| Field ID:                   | ZZZZZZZZZZ      | Diln Fac: | 1.000                     |
| MSS Lab ID:                 | 214030-001      | Batch#:   | 153638                    |
| Matrix:                     | Soil            | Sampled:  | 08/05/09                  |
| Units:                      | mg/Kg           | Received: | 08/06/09                  |
| Basis:                      | as received     | Analyzed: | 08/07/09                  |

Type: MS Lab ID: QC506617

| Analyte         | MSS Result | Spiked | Result | %REC | Limits |
|-----------------|------------|--------|--------|------|--------|
| Gasoline C7-C12 | 0.1087     | 10.31  | 7.630  | 73   | 31-120 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 112  | 54-152 |
| Bromofluorobenzene (FID) | 120  | 50-152 |

Type: MSD Lab ID: QC506618

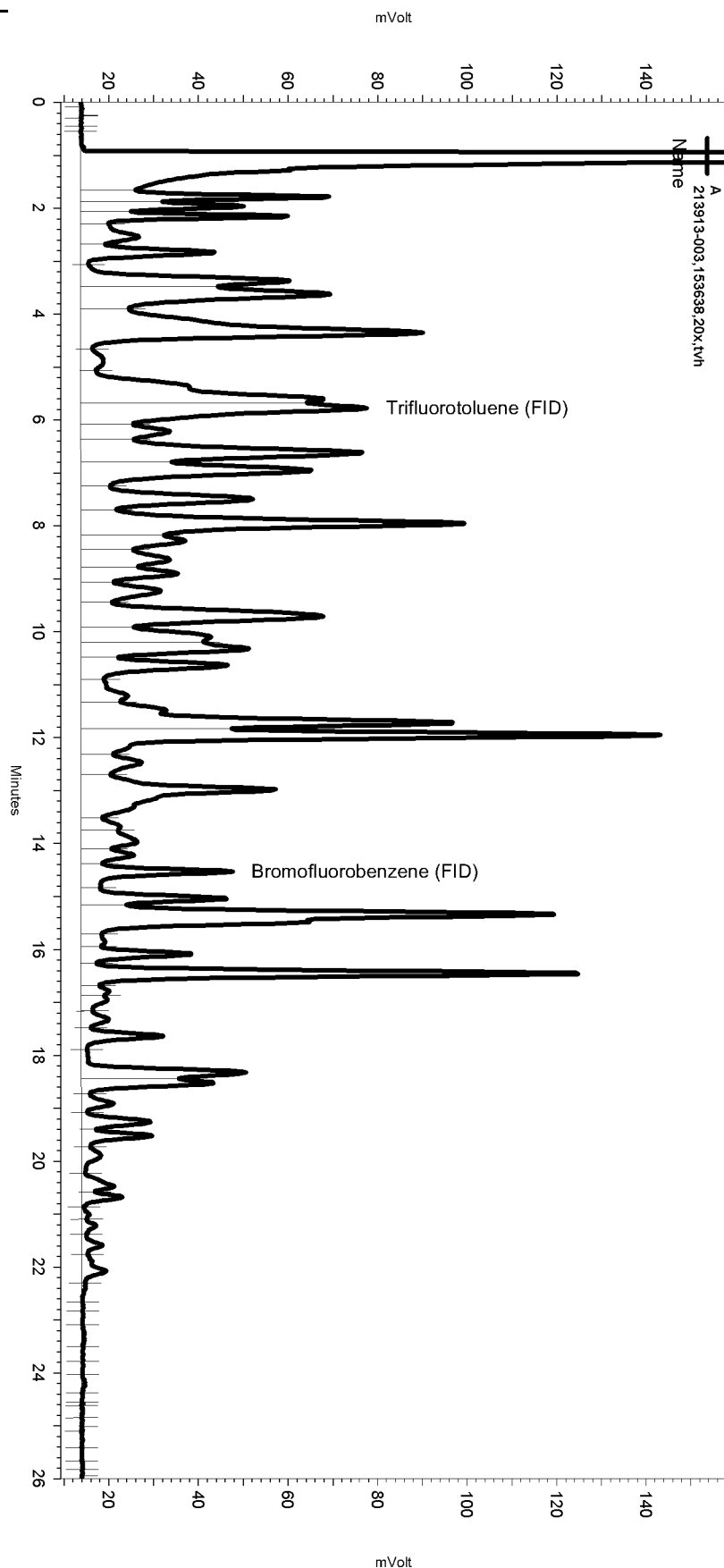
| Analyte         | Spiked | Result | %REC | Limits | RPD | Lim |
|-----------------|--------|--------|------|--------|-----|-----|
| Gasoline C7-C12 | 10.42  | 7.588  | 72   | 31-120 | 2   | 34  |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 114  | 54-152 |
| Bromofluorobenzene (FID) | 117  | 50-152 |

RPD= Relative Percent Difference

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC04\Sequence\219.seq  
Sample Name: 213913-003,153638,20x,tvh  
Data File: \\Lims\gdrive\ezchrom\Projects\GC04\Data\219\_022  
Instrument: GC04 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)  
Method Name: \\Lims\gdrive\ezchrom\Projects\GC04\Method\lvhbt219.met

Software Version 3.1.7  
Run Date: 8/7/2009 10:23:06 PM  
Analysis Date: 8/8/2009 12:41:11 PM  
Sample Amount: 1 Multiplier: 1  
Vial & pH or Core ID: a



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

| Enabled | Event Type | Start<br>(Minutes) | Stop<br>(Minutes) | Value |
|---------|------------|--------------------|-------------------|-------|
| Yes     | Width      | 0                  | 0                 | 0.2   |
| Yes     | Threshold  | 0                  | 0                 | 50    |

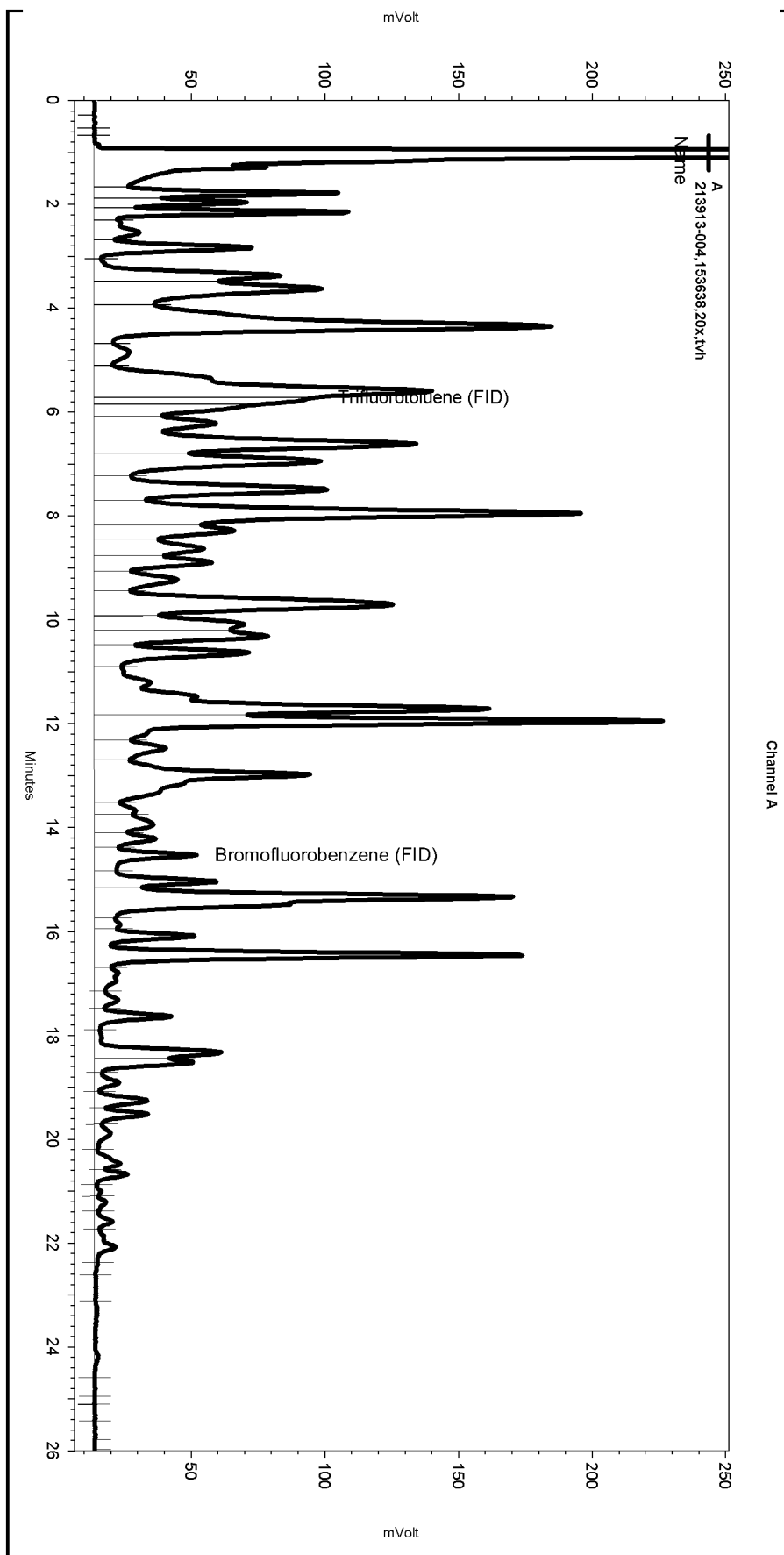
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC04\Data\219\_022

| Enabled | Event Type | Start<br>(Minutes) | Stop<br>(Minutes) | Value |
|---------|------------|--------------------|-------------------|-------|
| Yes     | Split Peak | 5.683              | 0                 | 0     |

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC04\Sequence\219.seq  
Sample Name: 213913-004,153638,20x,tvh  
Data File: \\Lims\gdrive\ezchrom\Projects\GC04\Data\219\_023  
Instrument: GC04 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)  
Method Name: \\Lims\gdrive\ezchrom\Projects\GC04\Method\lvhbt219.met

Software Version 3.1.7  
Run Date: 8/7/2009 11:00:42 PM  
Analysis Date: 8/8/2009 12:42:08 PM  
Sample Amount: 1 Multiplier: 1  
Vial & pH or Core ID: a



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

#### Integration Events

| Enabled | Event Type | Start<br>(Minutes) | Stop<br>(Minutes) | Value |
|---------|------------|--------------------|-------------------|-------|
| Yes     | Width      | 0                  | 0                 | 0.2   |
| Yes     | Threshold  | 0                  | 0                 | 50    |

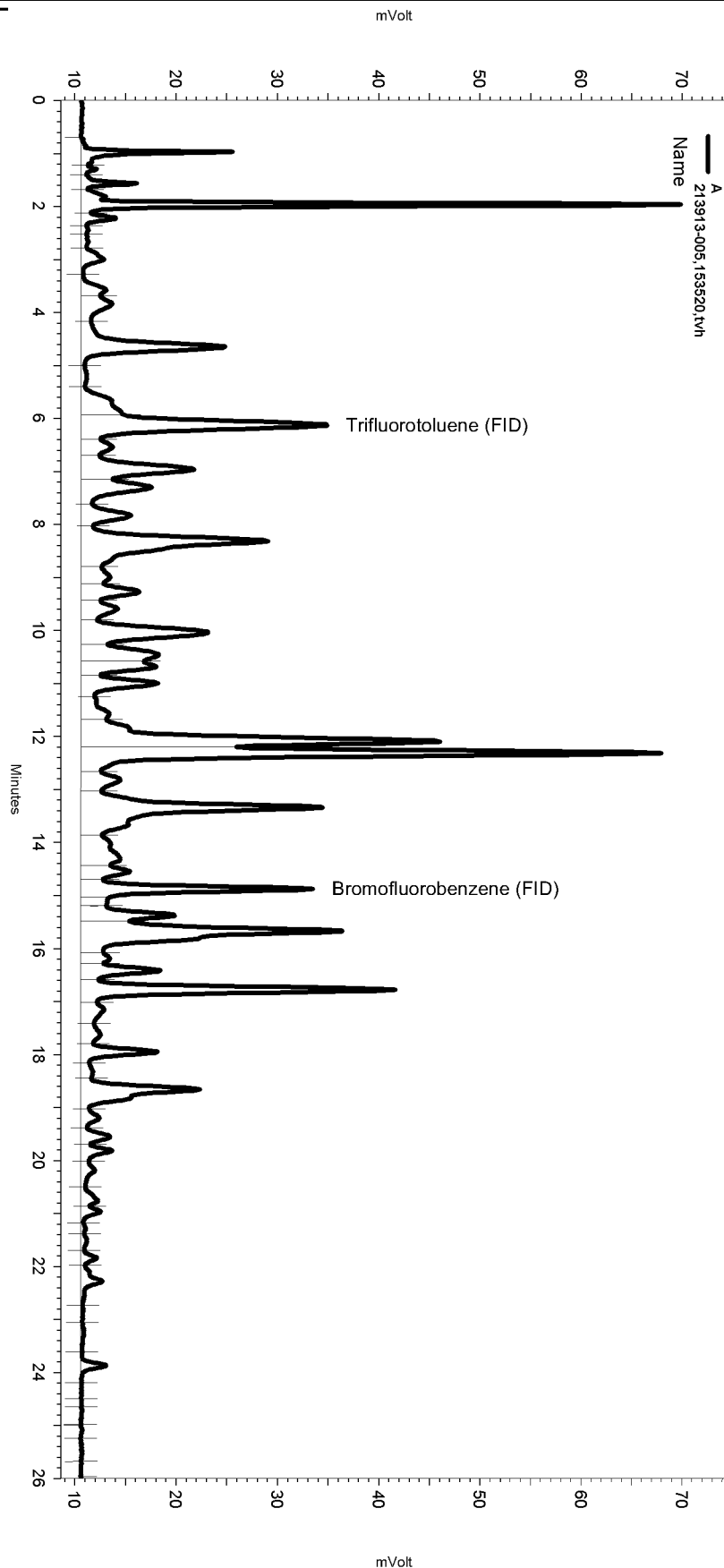
#### Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC04\Data\219\_023

| Enabled | Event Type | Start<br>(Minutes) | Stop<br>(Minutes) | Value |
|---------|------------|--------------------|-------------------|-------|
| Yes     | Split Peak | 5.722              | 0                 | 0     |
| Yes     | Split Peak | 5.858              | 0                 | 0     |

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC19\Sequence\216.seq  
Sample Name: 213913-005,153520,tvh  
Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\216\_012  
Instrument: GC19 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)  
Method Name: \\Lims\gdrive\ezchrom\Projects\GC19\Method\lvhbtxe188.met

Software Version 3.1.7  
Run Date: 8/4/2009 8:00:53 PM  
Analysis Date: 8/6/2009 12:36:04 PM  
Sample Amount: 1 Multiplier: 1  
Vial & pH or Core ID: a



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

| Enabled | Event Type | Start<br>(Minutes) | Stop<br>(Minutes) | Value |
|---------|------------|--------------------|-------------------|-------|
| Yes     | Width      | 0                  | 0                 | 0.2   |
| Yes     | Threshold  | 0                  | 0                 | 50    |

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\216\_012

| Enabled | Event Type | Start<br>(Minutes) | Stop<br>(Minutes) | Value |
|---------|------------|--------------------|-------------------|-------|
| Yes     | Split Peak | 5.934              | 0                 | 0     |
| Yes     | Split Peak | 15.026             | 0                 | 0     |

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC19\Sequence\216.seq  
Sample Name: 213913-006,153520,tvh  
Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\216\_013  
Instrument: GC19 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)  
Method Name: \\Lims\gdrive\ezchrom\Projects\GC19\Method\lvhbtxe188.met

Software Version 3.1.7  
Run Date: 8/4/2009 8:38:30 PM  
Analysis Date: 8/6/2009 12:37:01 PM  
Sample Amount: 0.98 Multiplier: 0.98  
Vial & pH or Core ID: a

---< General Method Parameters >---

No items selected for this section

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No items selected for this section

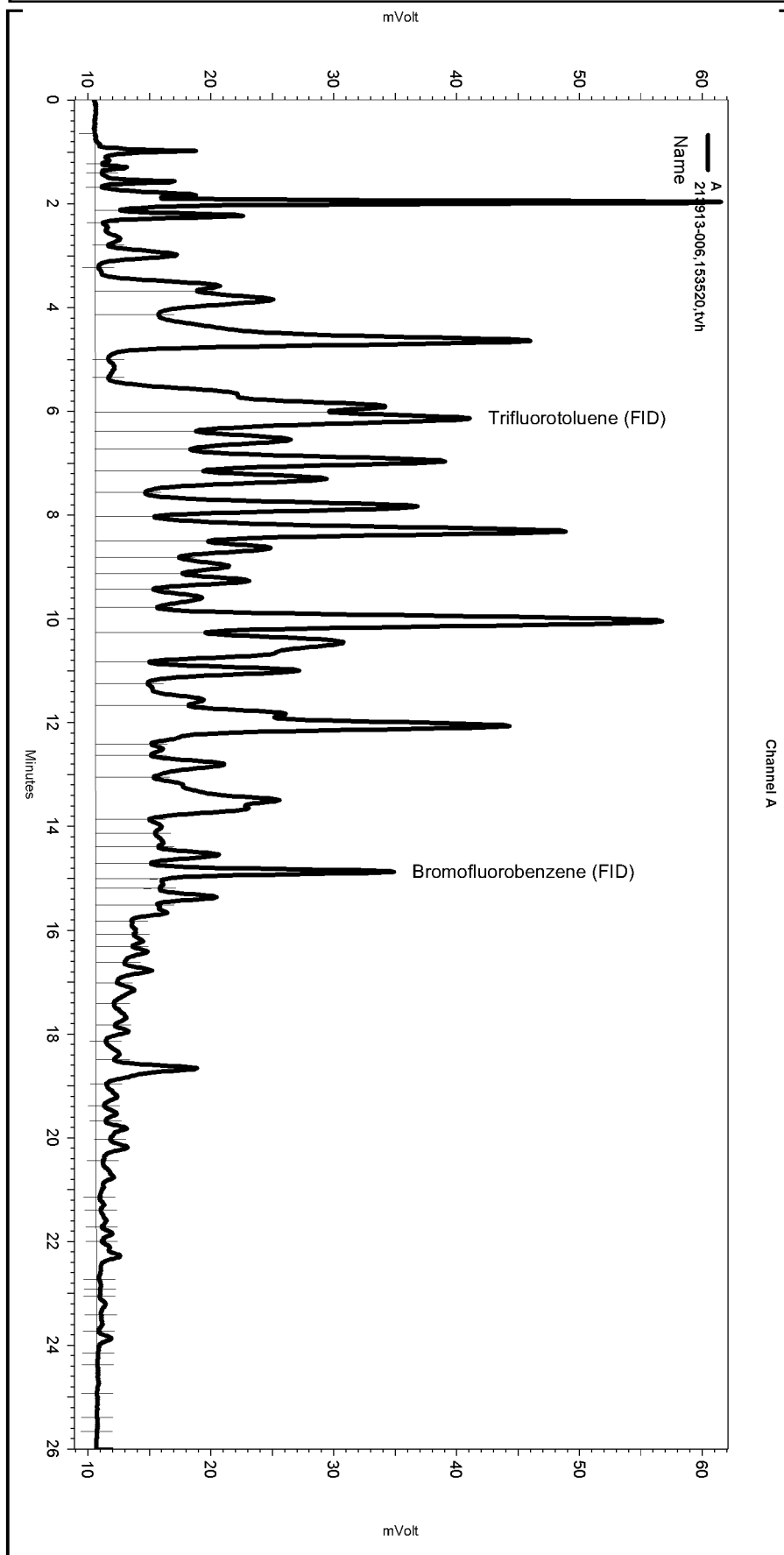
Integration Events

| Enabled | Event Type | Start<br>(Minutes) | Stop<br>(Minutes) | Value |
|---------|------------|--------------------|-------------------|-------|
| Yes     | Width      | 0                  | 0                 | 0.2   |
| Yes     | Threshold  | 0                  | 0                 | 50    |

Manual Integration Fixes

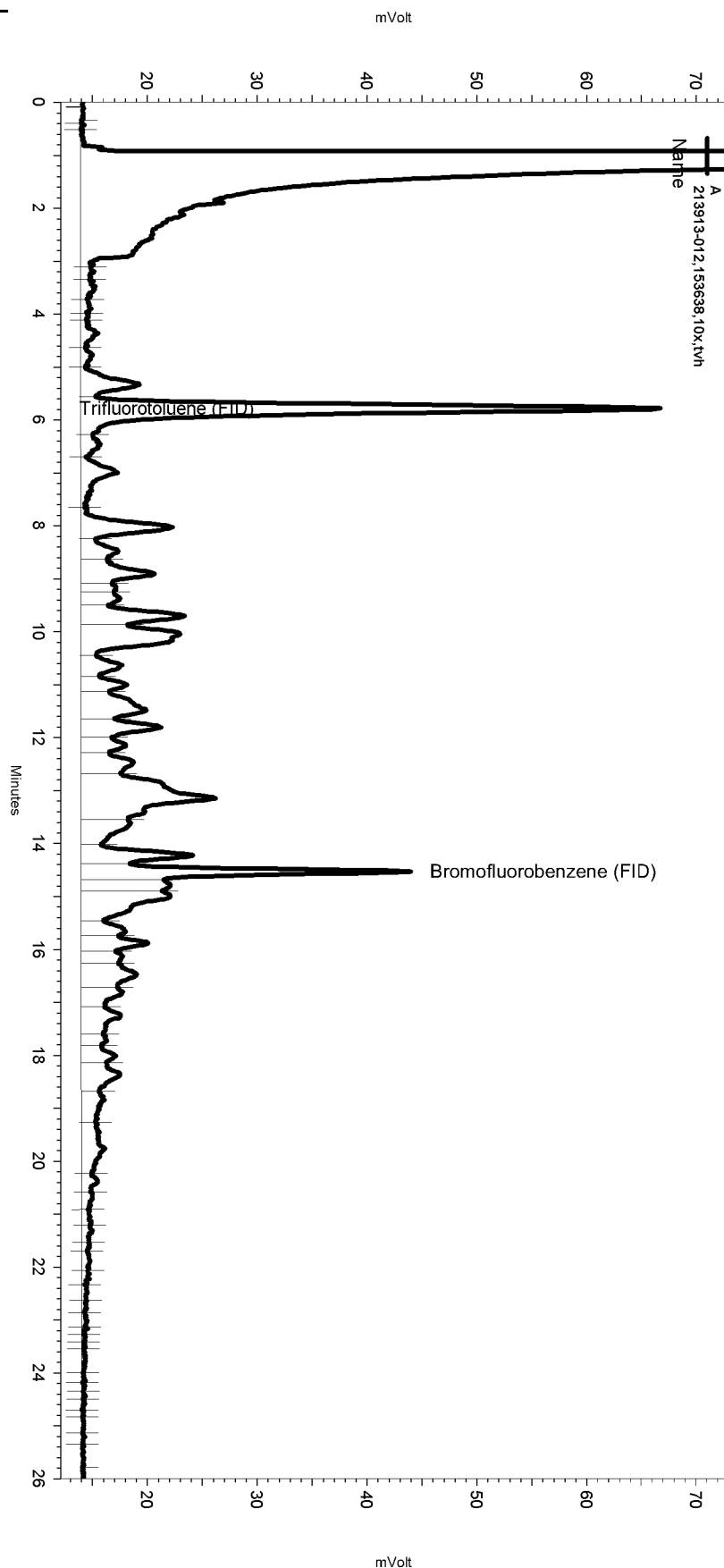
Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\216\_013

| Enabled | Event Type | Start<br>(Minutes) | Stop<br>(Minutes) | Value |
|---------|------------|--------------------|-------------------|-------|
| Yes     | Split Peak | 15.019             | 0                 | 0     |



Sequence File: \\Lims\gdrive\ezchrom\Projects\GC04\Sequence\219.seq  
Sample Name: 213913-012,153638,10x,tvh  
Data File: \\Lims\gdrive\ezchrom\Projects\GC04\Data\219\_024  
Instrument: GC04 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)  
Method Name: \\Lims\gdrive\ezchrom\Projects\GC04\Method\lvhbtxe219.met

Software Version 3.1.7  
Run Date: 8/7/2009 11:38:16 PM  
Analysis Date: 8/8/2009 7:57:29 AM  
Sample Amount: 1 Multiplier: 1  
Vial & pH or Core ID: a



---< General Method Parameters >---

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---< A >---

No items selected for this section

#### Integration Events

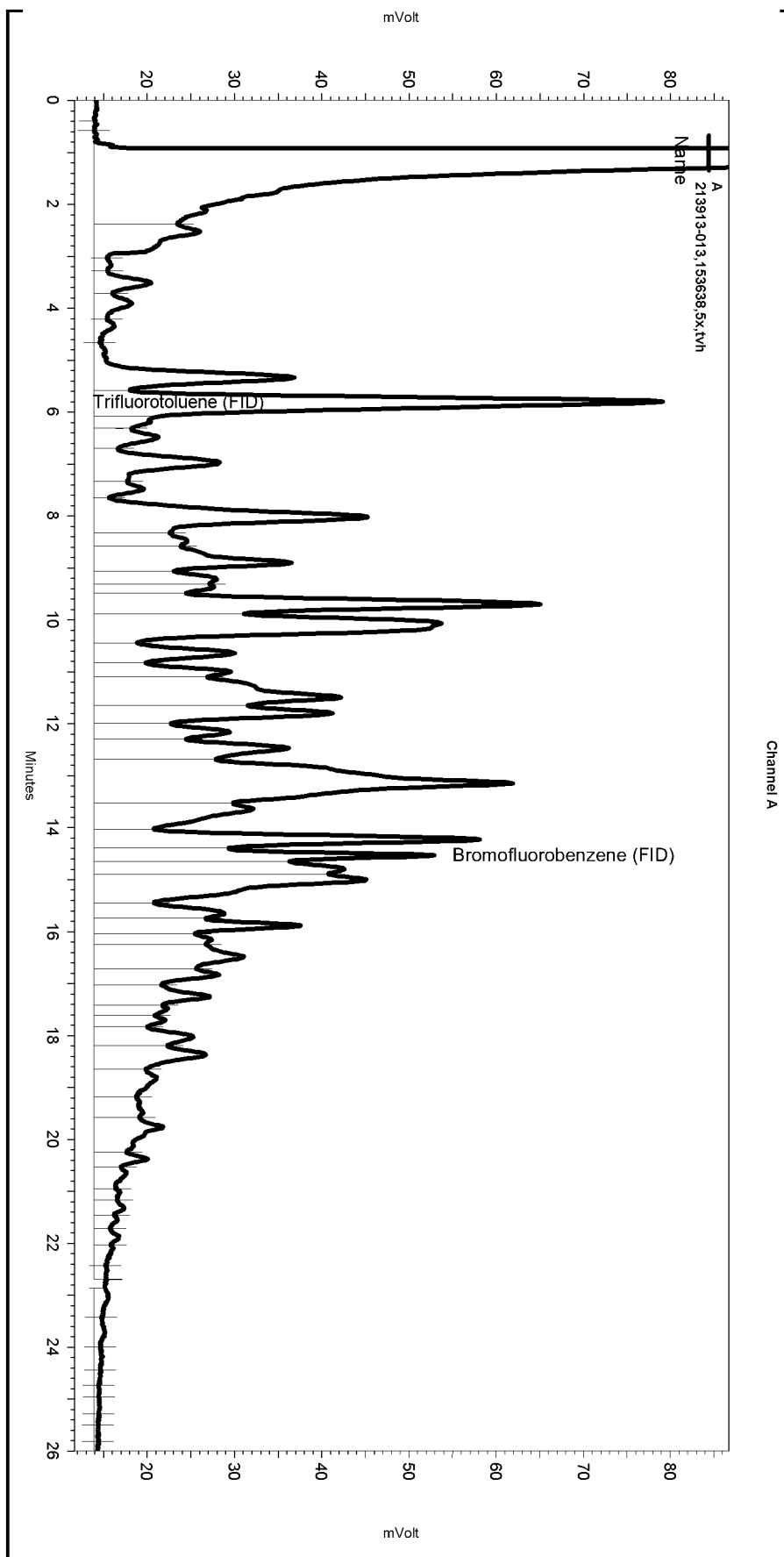
| Enabled | Event Type | Start<br>(Minutes) | Stop<br>(Minutes) | Value |
|---------|------------|--------------------|-------------------|-------|
| Yes     | Width      | 0                  | 0                 | 0.2   |
| Yes     | Threshold  | 0                  | 0                 | 50    |

#### Manual Integration Fixes

| Data File: \\Lims\gdrive\ezchrom\Projects\GC04\Data\219_024 |            |                    |                   |       |
|---|------------|--------------------|-------------------|-------|
| Enabled   | Event Type | Start<br>(Minutes) | Stop<br>(Minutes) | Value |
| None  |            |                    |                   |       |

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC04\Sequence\219.seq  
Sample Name: 213913-013,153638,5x,tvh  
Data File: \\Lims\gdrive\ezchrom\Projects\GC04\Data\219\_025  
Instrument: GC04 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)  
Method Name: \\Lims\gdrive\ezchrom\Projects\GC04\Method\lvhbtxe219.met

Software Version 3.1.7  
Run Date: 8/8/2009 12:15:52 AM  
Analysis Date: 8/8/2009 12:44:24 PM  
Sample Amount: 1 Multiplier: 1  
Vial & pH or Core ID: a



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

#### Integration Events

| Enabled | Event Type | Start<br>(Minutes) | Stop<br>(Minutes) | Value |
|---------|------------|--------------------|-------------------|-------|
| Yes     | Width      | 0                  | 0                 | 0.2   |
| Yes     | Threshold  | 0                  | 0                 | 50    |

#### Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC04\Data\219\_025

| Enabled | Event Type                     | Start<br>(Minutes) | Stop<br>(Minutes) | Value |
|---------|--------------------------------|--------------------|-------------------|-------|
| Yes     | Lowest Point Horizontal Baseli | 0                  | 26.017            | 0     |
| Yes     | Split Peak                     | 6.077              | 0                 | 0     |



Sequence File: \\Lims\gdrive\ezchrom\Projects\GC19\Sequence\216.seq  
Sample Name: 213913-019,153520,tvh  
Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\216\_026  
Instrument: GC19 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)  
Method Name: \\Lims\gdrive\ezchrom\Projects\GC19\Method\lvhbtxe188.met

Software Version 3.1.7  
Run Date: 8/5/2009 4:47:08 AM  
Analysis Date: 8/6/2009 12:39:57 PM  
Sample Amount: 1.01 Multiplier: 1.01  
Vial & pH or Core ID: a

---< General Method Parameters >---

No items selected for this section

---< A >---

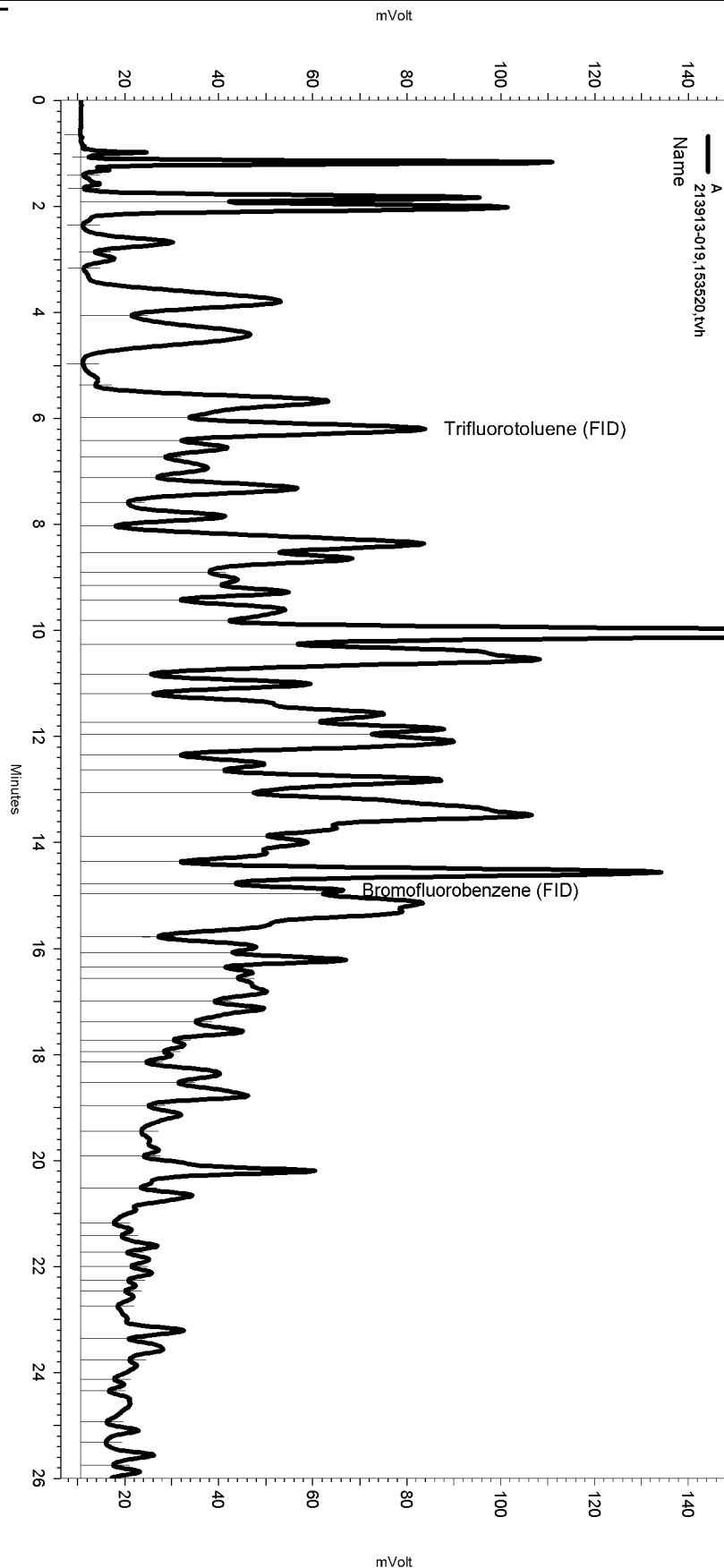
No items selected for this section

Integration Events

| Enabled | Event Type | Start<br>(Minutes) | Stop<br>(Minutes) | Value |
|---------|------------|--------------------|-------------------|-------|
| Yes     | Width      | 0                  | 0                 | 0.2   |
| Yes     | Threshold  | 0                  | 0                 | 50    |

Manual Integration Fixes

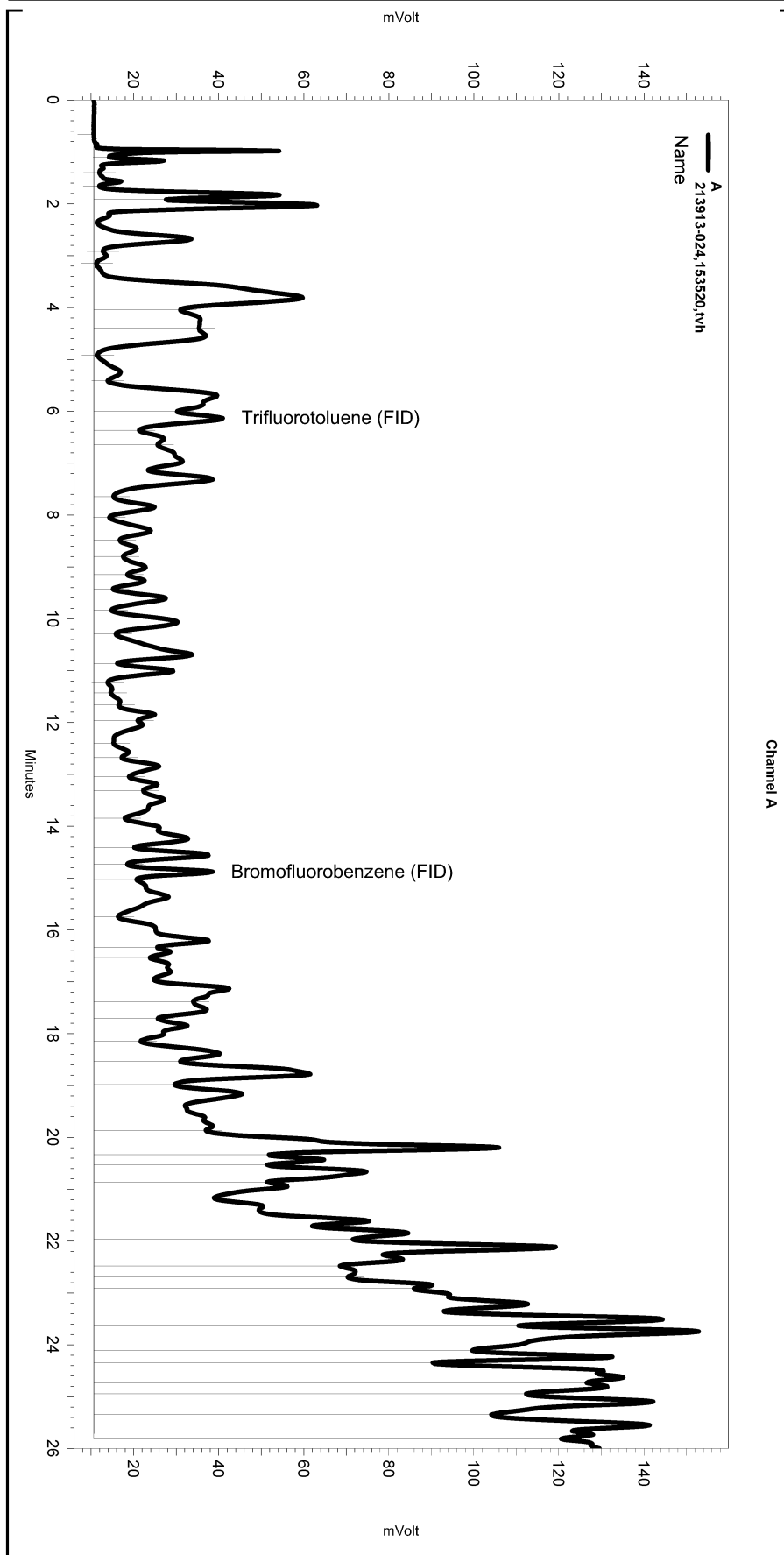
| Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\216_026 |                                |                    |                   |       |
|---|--------------------------------|--------------------|-------------------|-------|
| Enabled   | Event Type                     | Start<br>(Minutes) | Stop<br>(Minutes) | Value |
| Yes   | Lowest Point Horizontal Baseli | 0                  | 26.017            | 0     |
| Yes   | Split Peak                     | 14.973             | 0                 | 0     |



Channel A

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC19\Sequence\216.seq  
Sample Name: 213913-024,153520,tvh  
Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\216\_030  
Instrument: GC19 (Offline) Vial: N/A Operator: TVH 4. Analyst (lms2k3\tvh4)  
Method Name: \\Lims\gdrive\ezchrom\Projects\GC19\Method\tvhbtxe188.met

Software Version 3.1.7  
Run Date: 8/5/2009 7:17:31 AM  
Analysis Date: 8/5/2009 10:59:16 AM  
Sample Amount: 0.99 Multiplier: 0.99  
Vial & pH or Core ID: a



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

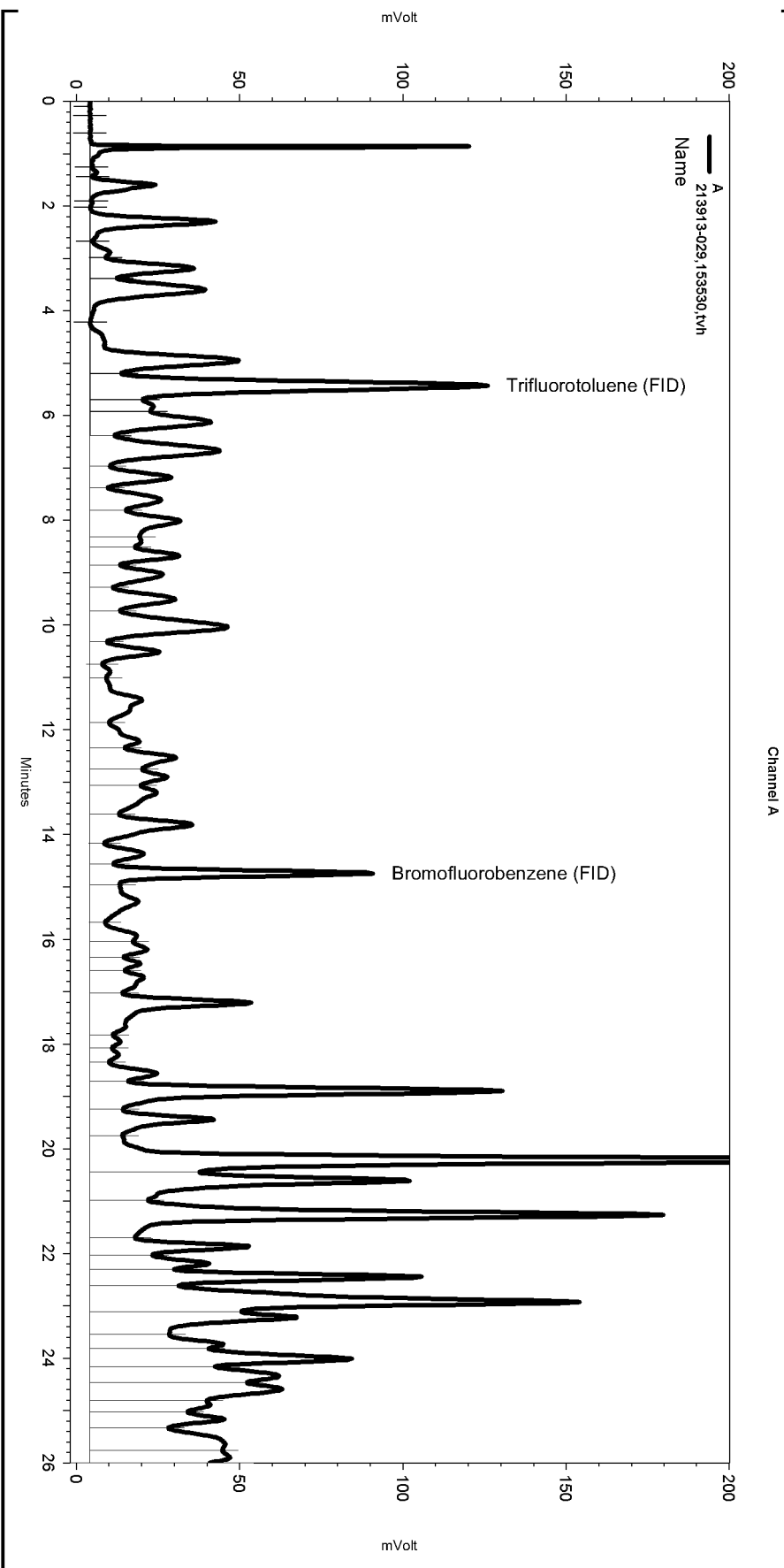
| Enabled | Event Type | Start<br>(Minutes) | Stop<br>(Minutes) | Value |
|---------|------------|--------------------|-------------------|-------|
| Yes     | Width      | 0                  | 0                 | 0.2   |
| Yes     | Threshold  | 0                  | 0                 | 50    |

Manual Integration Fixes

| Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\216_030 |                                  |                    |                   |       |
|---|----------------------------------|--------------------|-------------------|-------|
| Enabled   | Event Type                       | Start<br>(Minutes) | Stop<br>(Minutes) | Value |
| Yes   | Lowest Point Horizontal Baseline | 0                  | 26.017            | 0     |

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC05\Sequence\216.seq  
Sample Name: 213913-029,153530.tvh  
Data File: \\Lims\gdrive\ezchrom\Projects\GC05\Data\216\_023  
Instrument: GC05 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)  
Method Name: \\Lims\gdrive\ezchrom\Projects\GC05\Method\tvhbtxe195.met

Software Version 3.1.7  
Run Date: 8/5/2009 3:23:36 AM  
Analysis Date: 8/5/2009 10:07:27 AM  
Sample Amount: 0.97 Multiplier: 0.97  
Vial & pH or Core ID: a



#### General Method Parameters

No items selected for this section

#### A

No items selected for this section

#### Integration Events

| Enabled | Event Type | Start (Minutes) | Stop (Minutes) | Value |
|---------|------------|-----------------|----------------|-------|
| Yes     | Width      | 0               | 0              | 0.2   |
| Yes     | Threshold  | 0               | 0              | 50    |

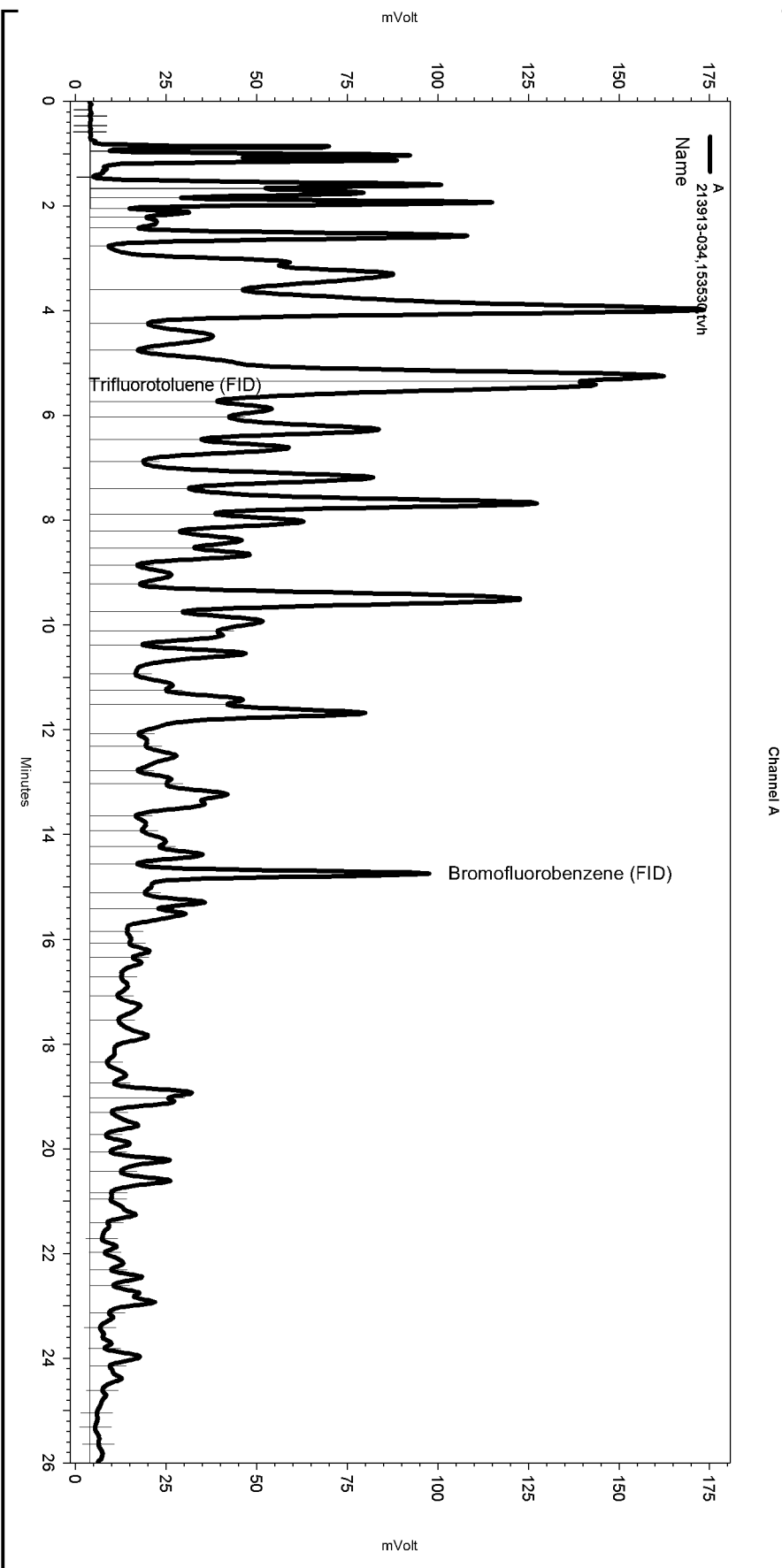
#### Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC05\Data\216\_023

| Enabled | Event Type                     | Start (Minutes) | Stop (Minutes) | Value |
|---------|--------------------------------|-----------------|----------------|-------|
| Yes     | Lowest Point Horizontal Baseli | 0               | 26.017         | 0     |

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC05\Sequence\216.seq  
Sample Name: 213913-034,153530.tvh  
Data File: \\Lims\gdrive\ezchrom\Projects\GC05\Data\216\_018  
Instrument: GC05 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)  
Method Name: \\Lims\gdrive\ezchrom\Projects\GC05\Method\tvhbtxe195.met

Software Version 3.1.7  
Run Date: 8/5/2009 12:25:45 AM  
Analysis Date: 8/5/2009 10:06:07 AM  
Sample Amount: 1.02 Multiplier: 1.02  
Vial & pH or Core ID: a



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

#### Integration Events

| Enabled | Event Type | Start<br>(Minutes) | Stop<br>(Minutes) | Value |
|---------|------------|--------------------|-------------------|-------|
| Yes     | Width      | 0                  | 0                 | 0.2   |
| Yes     | Threshold  | 0                  | 0                 | 50    |

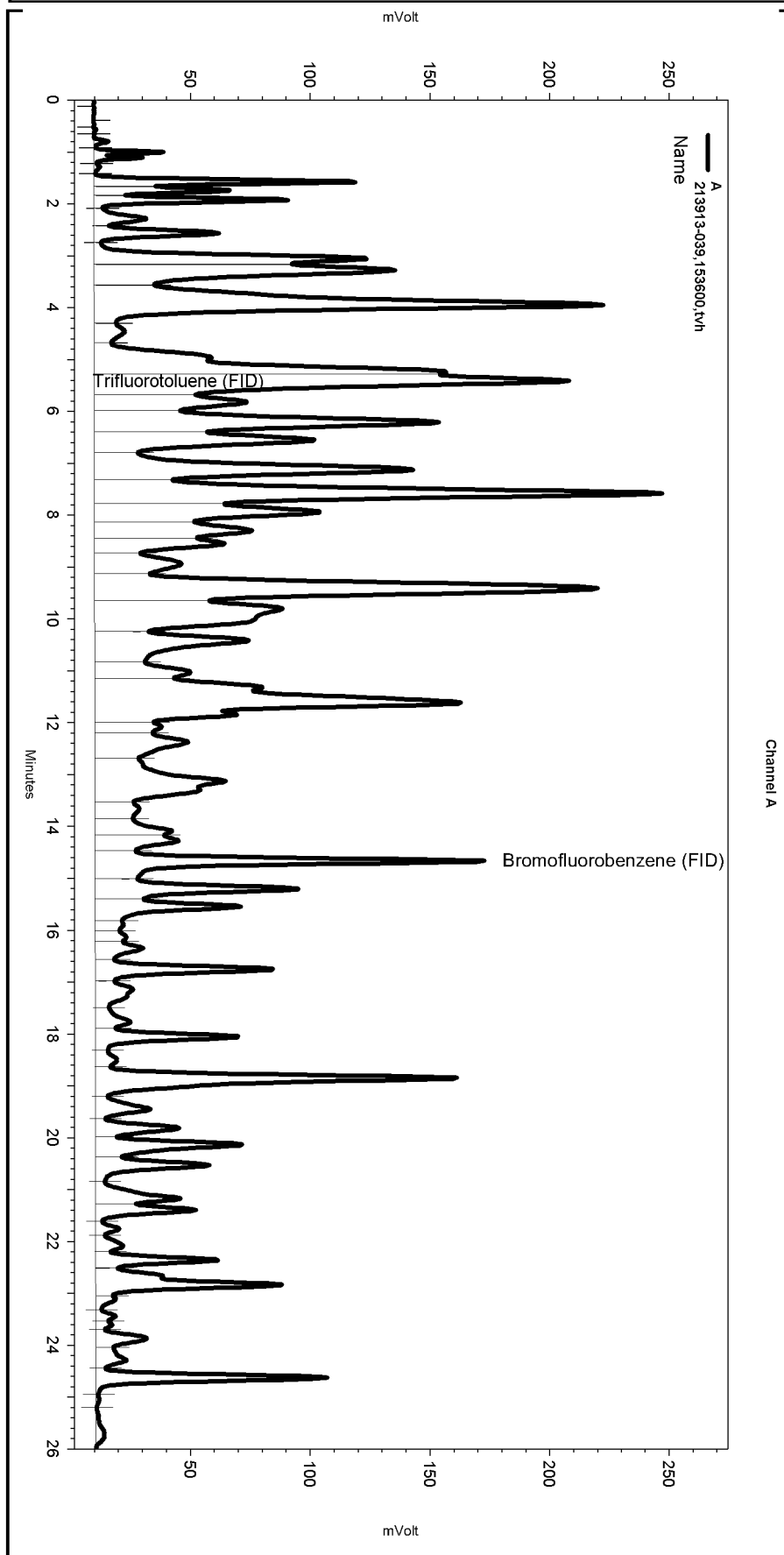
#### Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC05\Data\216\_018

| Enabled | Event Type                     | Start<br>(Minutes) | Stop<br>(Minutes) | Value |
|---------|--------------------------------|--------------------|-------------------|-------|
| Yes     | Lowest Point Horizontal Baseli | 0                  | 26.017            | 0     |
| Yes     | Split Peak                     | 5.349              | 0                 | 0     |

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC07\Sequence\218.seq  
Sample Name: 213913-039,153600,tvh  
Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\218\_011  
Instrument: GC07 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)  
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\TVHBTX194.met

Software Version 3.1.7  
Run Date: 8/6/2009 4:35:39 PM  
Analysis Date: 8/8/2009 1:25:25 PM  
Sample Amount: 1.01 Multiplier: 1.01  
Vial & pH or Core ID: a



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

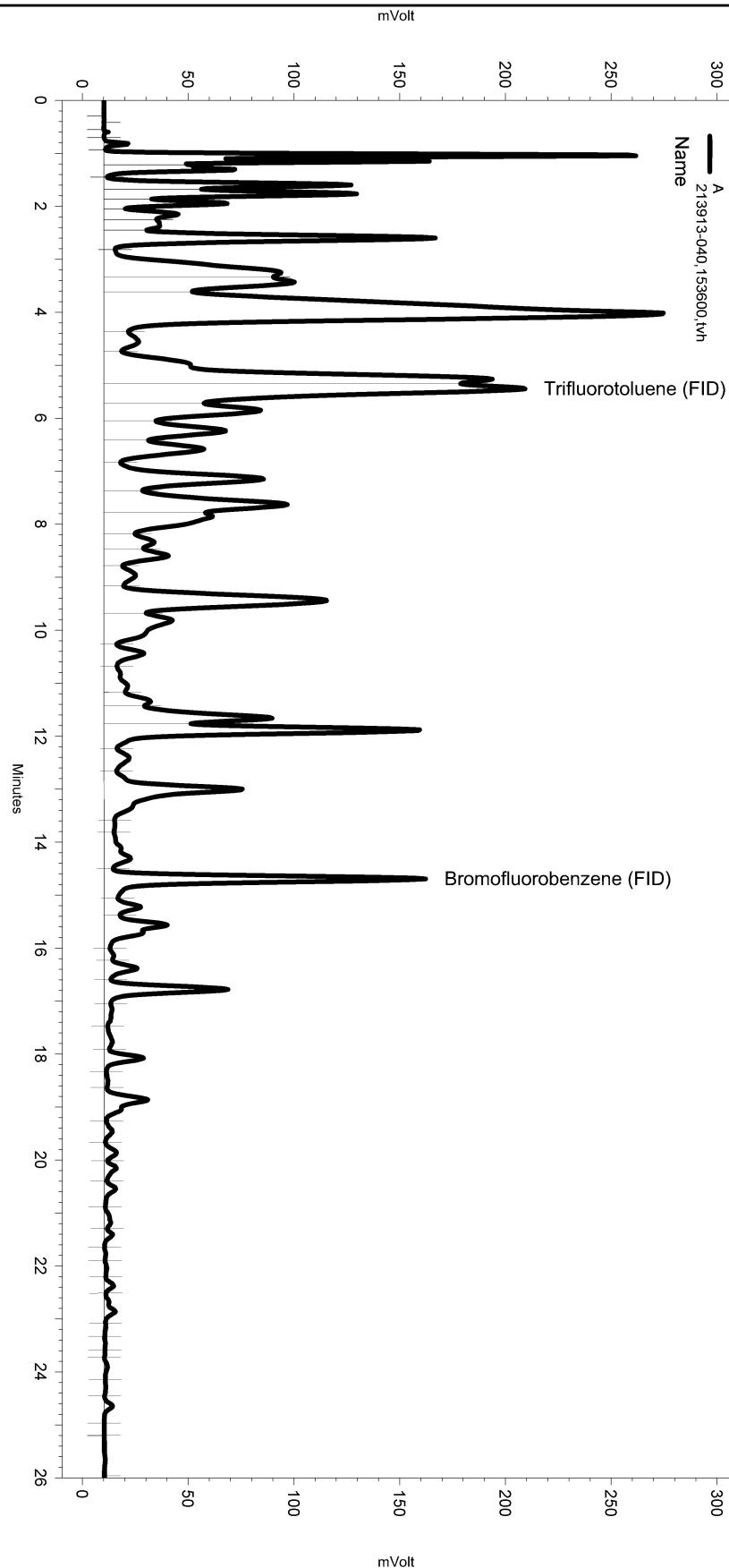
| Enabled | Event Type | Start<br>(Minutes) | Stop<br>(Minutes) | Value |
|---------|------------|--------------------|-------------------|-------|
| Yes     | Width      | 0                  | 0                 | 0.2   |
| Yes     | Threshold  | 0                  | 0                 | 50    |

Manual Integration Fixes

| Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\218_011 |            |                    |                   |       |
|---|------------|--------------------|-------------------|-------|
| Enabled   | Event Type | Start<br>(Minutes) | Stop<br>(Minutes) | Value |
| Yes   | Split Peak | 5.281              | 0                 | 0     |

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC07\Sequence\218.seq  
Sample Name: 213913-040,153600,tvh  
Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\218\_023  
Instrument: GC07 Vial: N/A Operator: lims2k3\lvh3  
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\lvhbtxe194.met

Software Version 3.1.7  
Run Date: 8/6/2009 11:42:04 PM  
Analysis Date: 8/7/2009 12:10:47 AM  
Sample Amount: 1 Multiplier: 1  
Vial & pH or Core ID: a



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

| Enabled | Event Type | Start<br>(Minutes) | Stop<br>(Minutes) | Value |
|---------|------------|--------------------|-------------------|-------|
| Yes     | Width      | 0                  | 0                 | 0.2   |
| Yes     | Threshold  | 0                  | 0                 | 50    |

Manual Integration Fixes

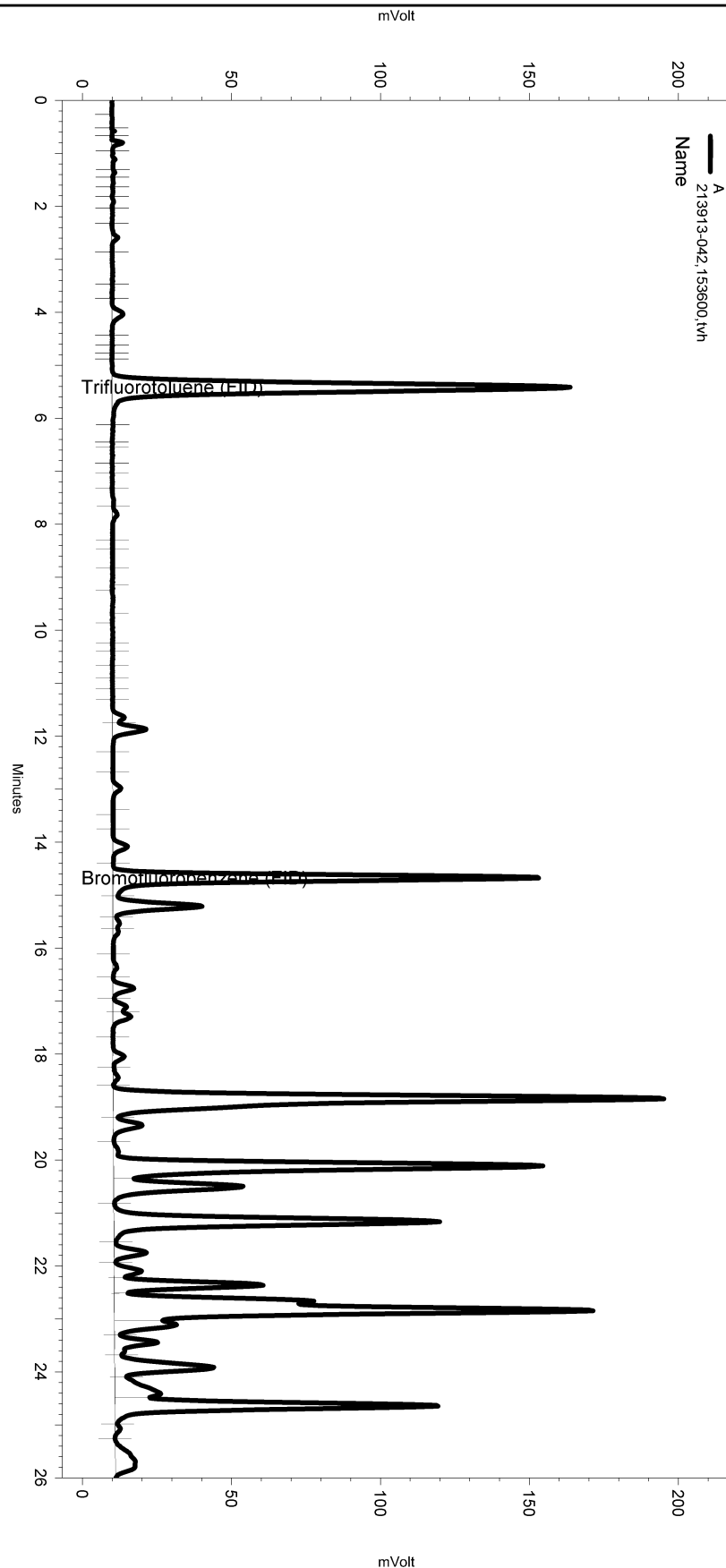
Data File: C:\Documents and Settings\All Users\Application  
Data\ChromatographySystem\Recovery  
Data\Instrument.10049\218\_023\_0459.tmp

| Enabled | Event Type | Start<br>(Minutes) | Stop<br>(Minutes) | Value |
|---------|------------|--------------------|-------------------|-------|
| None    |            |                    |                   |       |

Channel A

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC07\Sequence\218.seq  
Sample Name: 213913-042,153600,tvh  
Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\218\_013  
Instrument: GC07 Vial: N/A Operator: lms2k3\lvh3  
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\lvhbtxe194.met

Software Version 3.1.7  
Run Date: 8/6/2009 5:47:03 PM  
Analysis Date: 8/6/2009 6:15:46 PM  
Sample Amount: 1 Multiplier: 1  
Vial & pH or Core ID: a



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

#### Integration Events

| Enabled | Event Type | Start (Minutes) | Stop (Minutes) | Value |
|---------|------------|-----------------|----------------|-------|
| Yes     | Width      | 0               | 0              | 0.2   |
| Yes     | Threshold  | 0               | 0              | 50    |

#### Manual Integration Fixes

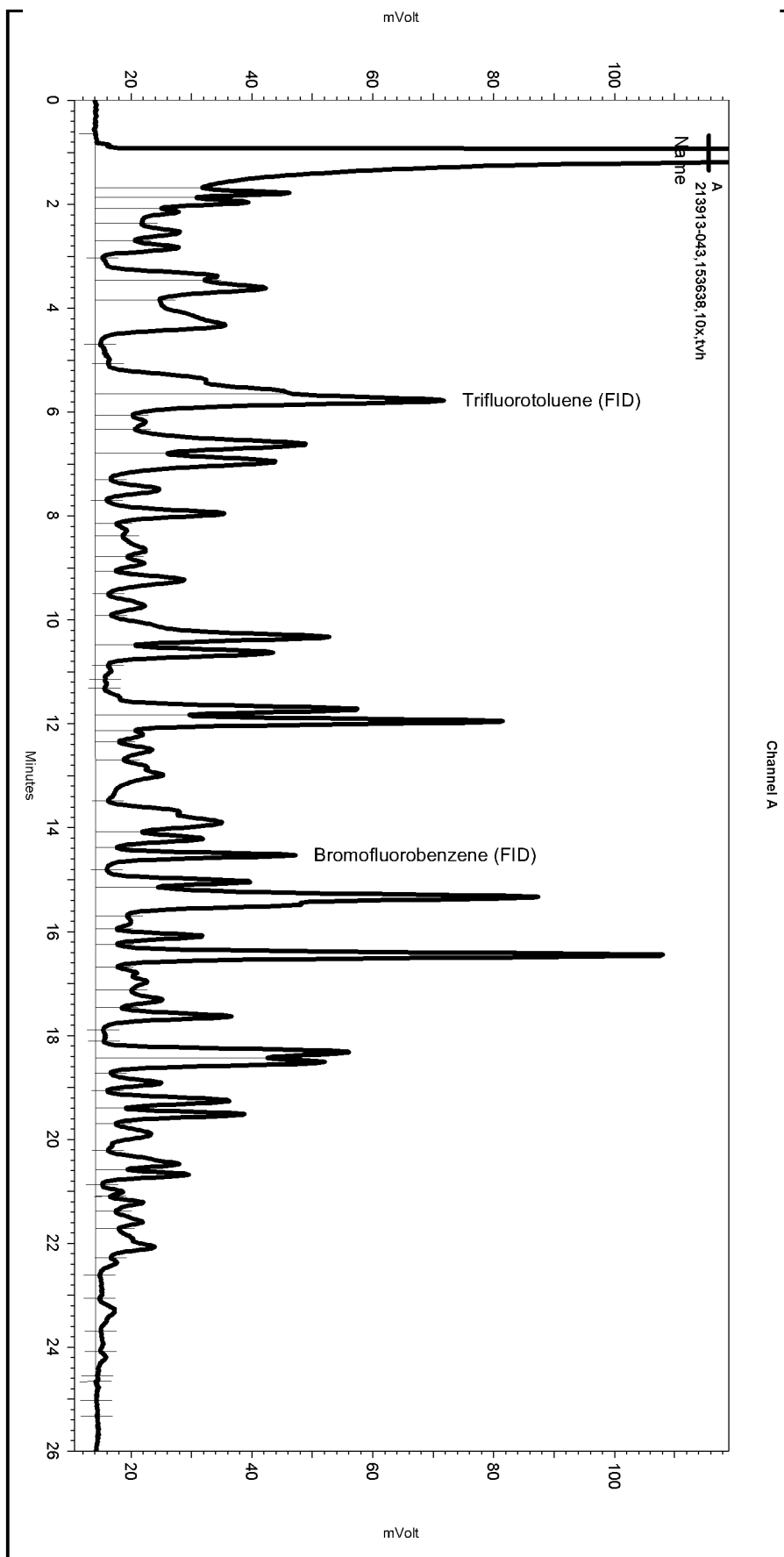
Data File: C:\Documents and Settings\All Users\Application  
Data\ChromatographySystem\Recovery  
Data\Instrument.10049\218\_013\_044F.tmp

| Enabled | Event Type | Start (Minutes) | Stop (Minutes) | Value |
|---------|------------|-----------------|----------------|-------|
| None    |            |                 |                |       |

Channel A

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC04\Sequence\219.seq  
Sample Name: 213913-043,153638,10x,tvh  
Data File: \\Lims\gdrive\ezchrom\Projects\GC04\Data\219\_026  
Instrument: GC04 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)  
Method Name: \\Lims\gdrive\ezchrom\Projects\GC04\Method\lvhbt219.met

Software Version 3.1.7  
Run Date: 8/8/2009 12:53:26 AM  
Analysis Date: 8/8/2009 12:45:28 PM  
Sample Amount: 1 Multiplier: 1  
Vial & pH or Core ID: a



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

#### Integration Events

| Enabled | Event Type | Start<br>(Minutes) | Stop<br>(Minutes) | Value |
|---------|------------|--------------------|-------------------|-------|
| Yes     | Width      | 0                  | 0                 | 0.2   |
| Yes     | Threshold  | 0                  | 0                 | 50    |

#### Manual Integration Fixes

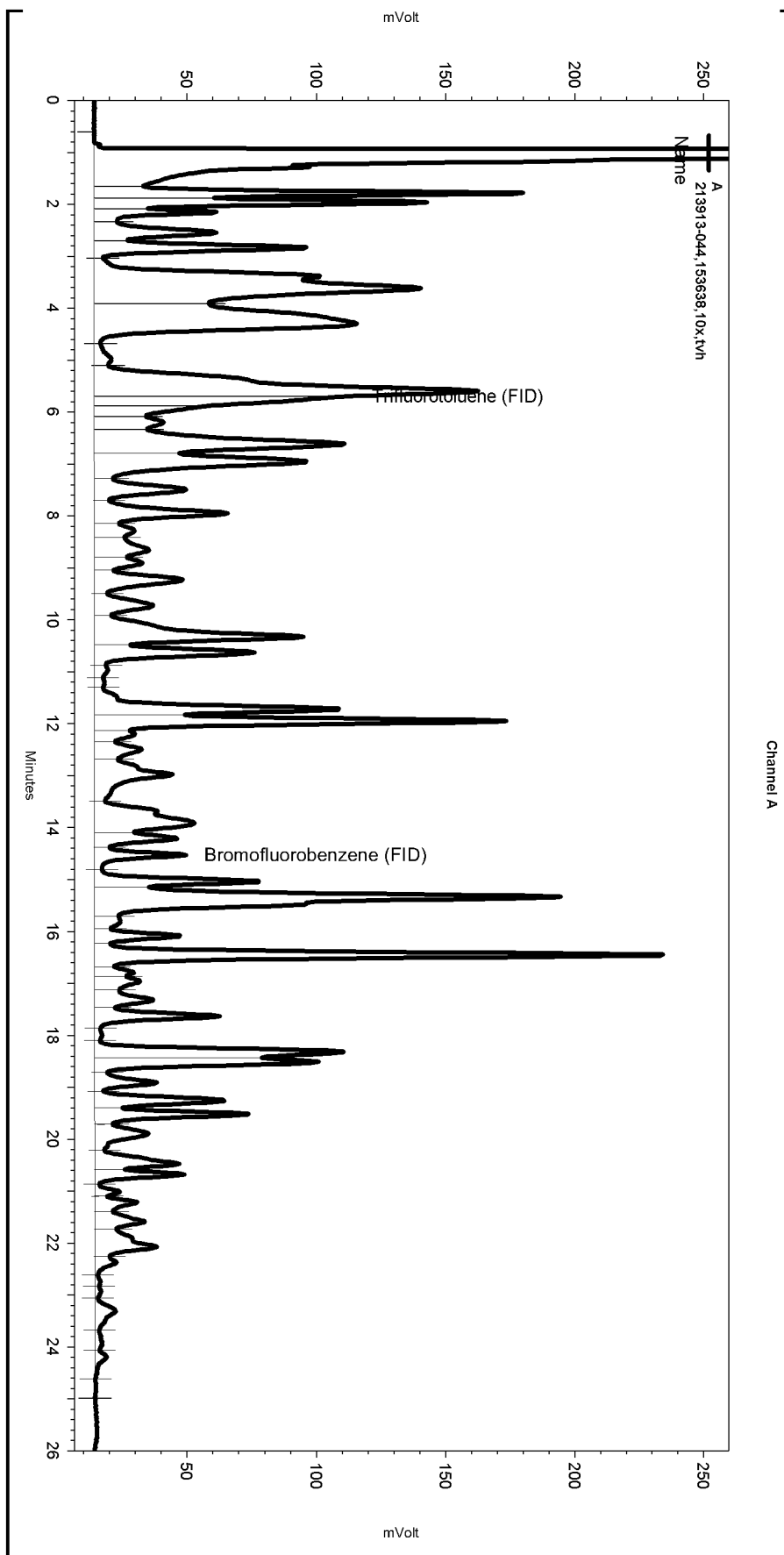
Data File: \\Lims\gdrive\ezchrom\Projects\GC04\Data\219\_026

| Enabled | Event Type | Start<br>(Minutes) | Stop<br>(Minutes) | Value |
|---------|------------|--------------------|-------------------|-------|
| Yes     | Split Peak | 5.654              | 0                 | 0     |



Sequence File: \\Lims\gdrive\ezchrom\Projects\GC04\Sequence\219.seq  
Sample Name: 213913-044,153638,10x,tvh  
Data File: \\Lims\gdrive\ezchrom\Projects\GC04\Data\219\_027  
Instrument: GC04 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)  
Method Name: \\Lims\gdrive\ezchrom\Projects\GC04\Method\lvhbt219.met

Software Version 3.1.7  
Run Date: 8/8/2009 1:31:01 AM  
Analysis Date: 8/8/2009 12:45:31 PM  
Sample Amount: 1 Multiplier: 1  
Vial & pH or Core ID: a



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

#### Integration Events

| Enabled | Event Type | Start<br>(Minutes) | Stop<br>(Minutes) | Value |
|---------|------------|--------------------|-------------------|-------|
| Yes     | Width      | 0                  | 0                 | 0.2   |
| Yes     | Threshold  | 0                  | 0                 | 50    |

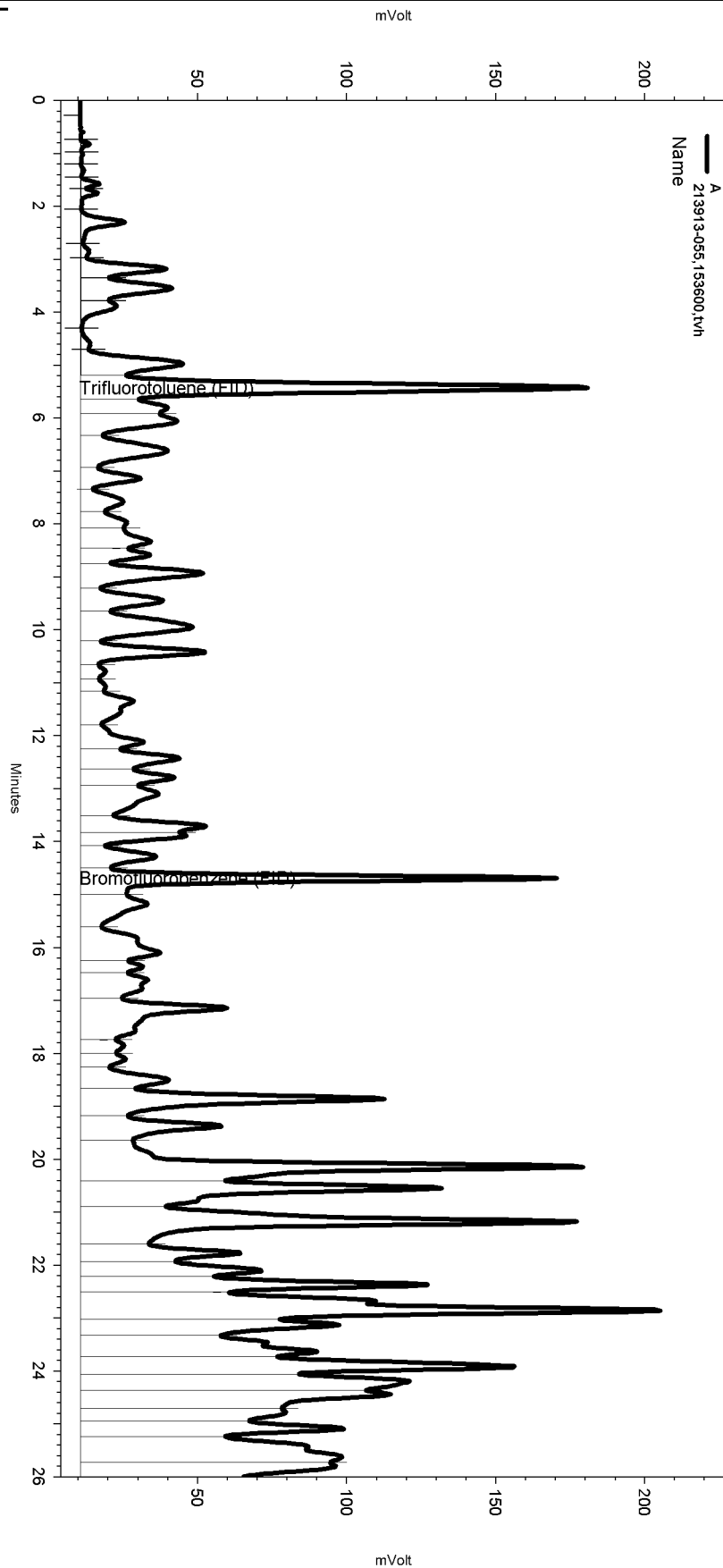
#### Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC04\Data\219\_027

| Enabled | Event Type | Start<br>(Minutes) | Stop<br>(Minutes) | Value |
|---------|------------|--------------------|-------------------|-------|
| Yes     | Split Peak | 5.706              | 0                 | 0     |
| Yes     | Split Peak | 5.881              | 0                 | 0     |

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC07\Sequence\218.seq  
Sample Name: 213913-055,153600,tvh  
Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\218\_032  
Instrument: GC07 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)  
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\lvhbtxe194.met

Software Version 3.1.7  
Run Date: 8/7/2009 5:00:56 AM  
Analysis Date: 8/8/2009 1:42:45 PM  
Sample Amount: 1 Multiplier: 1  
Vial & pH or Core ID: a



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

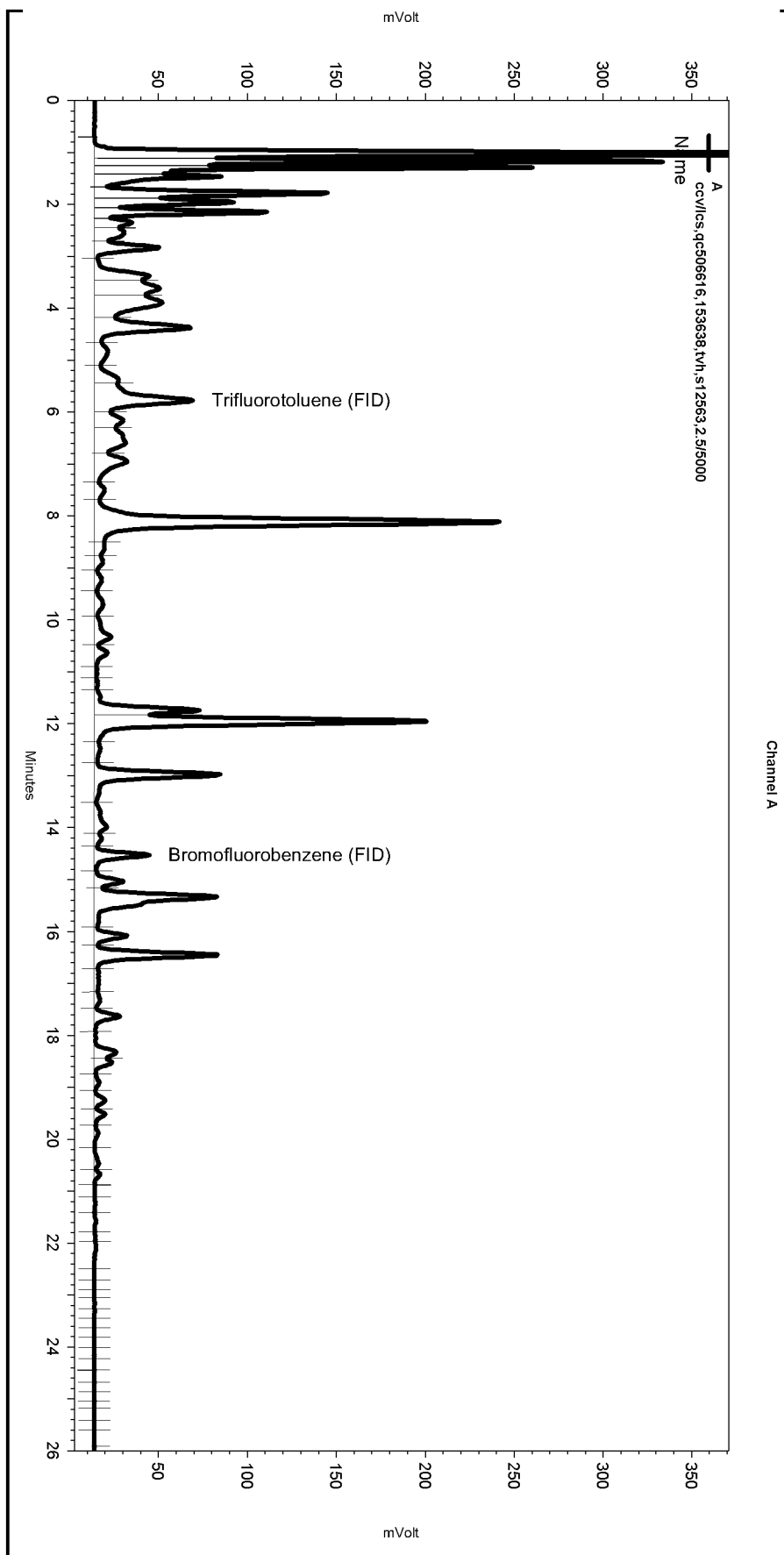
| Enabled | Event Type | Start<br>(Minutes) | Stop<br>(Minutes) | Value |
|---------|------------|--------------------|-------------------|-------|
| Yes     | Width      | 0                  | 0                 | 0.2   |
| Yes     | Threshold  | 0                  | 0                 | 50    |

Manual Integration Fixes

| Data File: | \\Lims\gdrive\ezchrom\Projects\GC07\Data\218_032 |                    |                   |       |
|------------|--|--------------------|-------------------|-------|
| Enabled    | Event Type                                       | Start<br>(Minutes) | Stop<br>(Minutes) | Value |
| Yes        | Lowest Point Horizontal Baseli                   | 0                  | 26.017            | 0     |

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC04\Sequence\219.seq  
Sample Name: ccv\lcs,qc506616,153638,tvh,s12563,2.5/5000  
Data File: \\Lims\gdrive\ezchrom\Projects\GC04\Data\219\_003  
Instrument: GC04 (Offline) Vial: N/A Operator: Tvh 2: Analyst (lms2k3\tvh2)  
Method Name: \\Lims\gdrive\ezchrom\Projects\GC04\Method\lvhbtxe219.met

Software Version 3.1.7  
Run Date: 8/7/2009 10:04:48 AM  
Analysis Date: 8/8/2009 7:55:52 AM  
Sample Amount: 1 Multiplier: 1  
Vial & pH or Core ID: {Data Description}



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

#### Integration Events

| Enabled | Event Type | Start<br>(Minutes) | Stop<br>(Minutes) | Value |
|---------|------------|--------------------|-------------------|-------|
| Yes     | Width      | 0                  | 0                 | 0.2   |
| Yes     | Threshold  | 0                  | 0                 | 50    |

#### Manual Integration Fixes

| Data File: \\Lims\gdrive\ezchrom\Projects\GC04\Data\219_003 |            |                    |                   |       |
|---|------------|--------------------|-------------------|-------|
| Enabled   | Event Type | Start<br>(Minutes) | Stop<br>(Minutes) | Value |
| None  |            |                    |                   |       |

| Total Extractable Hydrocarbons |                 |           |                           |
|--------------------------------|-----------------|-----------|---------------------------|
| Lab #:                         | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:                        | Fugro West Inc. | Prep:     | SHAKER TABLE              |
| Project#:                      | 609.004         | Analysis: | EPA 8015B                 |
| Matrix:                        | Soil            | Sampled:  | 07/27/09                  |
| Units:                         | mg/Kg           | Received: | 08/03/09                  |
| Basis:                         | as received     |           |                           |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-1@2      | Batch#:         | 153518    |
| Type:     | SAMPLE     | Prepared:       | 08/04/09  |
| Lab ID:   | 213913-001 | Analyzed:       | 08/06/09  |
| Diln Fac: | 25.00      | Cleanup Method: | EPA 3630C |

| Analyte           | Result | RL  |
|-------------------|--------|-----|
| Diesel C10-C24    | 29 Y   | 25  |
| Motor Oil C24-C36 | 450    | 120 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | DO   | 53-133 |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-1@7.5    | Batch#:         | 153518    |
| Type:     | SAMPLE     | Prepared:       | 08/04/09  |
| Lab ID:   | 213913-002 | Analyzed:       | 08/06/09  |
| Diln Fac: | 1.000      | Cleanup Method: | EPA 3630C |

| Analyte           | Result | RL   |
|-------------------|--------|------|
| Diesel C10-C24    | 15 Y   | 0.99 |
| Motor Oil C24-C36 | 98     | 5.0  |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 88   | 53-133 |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-1@12     | Batch#:         | 153518    |
| Type:     | SAMPLE     | Prepared:       | 08/04/09  |
| Lab ID:   | 213913-004 | Analyzed:       | 08/06/09  |
| Diln Fac: | 1.000      | Cleanup Method: | EPA 3630C |

| Analyte           | Result | RL   |
|-------------------|--------|------|
| Diesel C10-C24    | 57 Y   | 0.99 |
| Motor Oil C24-C36 | ND     | 5.0  |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 82   | 53-133 |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-2@5      | Batch#:         | 153518    |
| Type:     | SAMPLE     | Prepared:       | 08/04/09  |
| Lab ID:   | 213913-008 | Analyzed:       | 08/06/09  |
| Diln Fac: | 1.000      | Cleanup Method: | EPA 3630C |

| Analyte           | Result | RL  |
|-------------------|--------|-----|
| Diesel C10-C24    | ND     | 1.0 |
| Motor Oil C24-C36 | 5.9    | 5.0 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 86   | 53-133 |

Y= Sample exhibits chromatographic pattern which does not resemble standard  
 DO= Diluted Out  
 ND= Not Detected  
 RL= Reporting Limit

| Total Extractable Hydrocarbons |                 |           |                           |
|--------------------------------|-----------------|-----------|---------------------------|
| Lab #:                         | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:                        | Fugro West Inc. | Prep:     | SHAKER TABLE              |
| Project#:                      | 609.004         | Analysis: | EPA 8015B                 |
| Matrix:                        | Soil            | Sampled:  | 07/27/09                  |
| Units:                         | mg/Kg           | Received: | 08/03/09                  |
| Basis:                         | as received     |           |                           |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-2@10     | Batch#:         | 153518    |
| Type:     | SAMPLE     | Prepared:       | 08/04/09  |
| Lab ID:   | 213913-010 | Analyzed:       | 08/06/09  |
| Diln Fac: | 1.000      | Cleanup Method: | EPA 3630C |

| Analyte           | Result | RL  |
|-------------------|--------|-----|
| Diesel C10-C24    | 1.9 Y  | 1.0 |
| Motor Oil C24-C36 | ND     | 5.0 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 72   | 53-133 |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-2@15     | Batch#:         | 153518    |
| Type:     | SAMPLE     | Prepared:       | 08/04/09  |
| Lab ID:   | 213913-012 | Analyzed:       | 08/06/09  |
| Diln Fac: | 1.000      | Cleanup Method: | EPA 3630C |

| Analyte           | Result | RL   |
|-------------------|--------|------|
| Diesel C10-C24    | 17 Y   | 0.99 |
| Motor Oil C24-C36 | ND     | 5.0  |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 82   | 53-133 |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-3@1      | Batch#:         | 153518    |
| Type:     | SAMPLE     | Prepared:       | 08/04/09  |
| Lab ID:   | 213913-015 | Analyzed:       | 08/06/09  |
| Diln Fac: | 5.000      | Cleanup Method: | EPA 3630C |

| Analyte           | Result | RL  |
|-------------------|--------|-----|
| Diesel C10-C24    | ND     | 5.0 |
| Motor Oil C24-C36 | 33     | 25  |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 85   | 53-133 |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-3@5      | Batch#:         | 153518    |
| Type:     | SAMPLE     | Prepared:       | 08/04/09  |
| Lab ID:   | 213913-016 | Analyzed:       | 08/06/09  |
| Diln Fac: | 1.000      | Cleanup Method: | EPA 3630C |

| Analyte           | Result | RL  |
|-------------------|--------|-----|
| Diesel C10-C24    | 4.0 Y  | 1.0 |
| Motor Oil C24-C36 | 10     | 5.0 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 82   | 53-133 |

Y= Sample exhibits chromatographic pattern which does not resemble standard  
DO= Diluted Out  
ND= Not Detected  
RL= Reporting Limit

| Total Extractable Hydrocarbons |                 |           |                           |
|--------------------------------|-----------------|-----------|---------------------------|
| Lab #:                         | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:                        | Fugro West Inc. | Prep:     | SHAKER TABLE              |
| Project#:                      | 609.004         | Analysis: | EPA 8015B                 |
| Matrix:                        | Soil            | Sampled:  | 07/27/09                  |
| Units:                         | mg/Kg           | Received: | 08/03/09                  |
| Basis:                         | as received     |           |                           |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-3@10     | Batch#:         | 153518    |
| Type:     | SAMPLE     | Prepared:       | 08/04/09  |
| Lab ID:   | 213913-017 | Analyzed:       | 08/06/09  |
| Diln Fac: | 1.000      | Cleanup Method: | EPA 3630C |

| Analyte           | Result | RL   |
|-------------------|--------|------|
| Diesel C10-C24    | 7.6 Y  | 0.99 |
| Motor Oil C24-C36 | ND     | 5.0  |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 65   | 53-133 |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-3@12     | Batch#:         | 153518    |
| Type:     | SAMPLE     | Prepared:       | 08/04/09  |
| Lab ID:   | 213913-018 | Analyzed:       | 08/06/09  |
| Diln Fac: | 1.000      | Cleanup Method: | EPA 3630C |

| Analyte           | Result | RL   |
|-------------------|--------|------|
| Diesel C10-C24    | 33 Y   | 0.99 |
| Motor Oil C24-C36 | 110    | 5.0  |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 64   | 53-133 |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-3@15     | Batch#:         | 153518    |
| Type:     | SAMPLE     | Prepared:       | 08/04/09  |
| Lab ID:   | 213913-019 | Analyzed:       | 08/06/09  |
| Diln Fac: | 1.000      | Cleanup Method: | EPA 3630C |

| Analyte           | Result | RL  |
|-------------------|--------|-----|
| Diesel C10-C24    | 150 Y  | 1.0 |
| Motor Oil C24-C36 | 400    | 5.0 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 69   | 53-133 |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-3@17     | Batch#:         | 153518    |
| Type:     | SAMPLE     | Prepared:       | 08/04/09  |
| Lab ID:   | 213913-020 | Analyzed:       | 08/06/09  |
| Diln Fac: | 1.000      | Cleanup Method: | EPA 3630C |

| Analyte           | Result | RL  |
|-------------------|--------|-----|
| Diesel C10-C24    | 44 Y   | 1.0 |
| Motor Oil C24-C36 | 140    | 5.0 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 68   | 53-133 |

Y= Sample exhibits chromatographic pattern which does not resemble standard  
DO= Diluted Out  
ND= Not Detected  
RL= Reporting Limit

| Total Extractable Hydrocarbons |                 |           |                           |
|--------------------------------|-----------------|-----------|---------------------------|
| Lab #:                         | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:                        | Fugro West Inc. | Prep:     | SHAKER TABLE              |
| Project#:                      | 609.004         | Analysis: | EPA 8015B                 |
| Matrix:                        | Soil            | Sampled:  | 07/27/09                  |
| Units:                         | mg/Kg           | Received: | 08/03/09                  |
| Basis:                         | as received     |           |                           |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-4A@5     | Batch#:         | 153518    |
| Type:     | SAMPLE     | Prepared:       | 08/04/09  |
| Lab ID:   | 213913-021 | Analyzed:       | 08/06/09  |
| Diln Fac: | 1.000      | Cleanup Method: | EPA 3630C |

| Analyte           | Result | RL  |
|-------------------|--------|-----|
| Diesel C10-C24    | 1.9 Y  | 1.0 |
| Motor Oil C24-C36 | 10     | 5.0 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 83   | 53-133 |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-4A@7.5   | Batch#:         | 153518    |
| Type:     | SAMPLE     | Prepared:       | 08/04/09  |
| Lab ID:   | 213913-022 | Analyzed:       | 08/06/09  |
| Diln Fac: | 1.000      | Cleanup Method: | EPA 3630C |

| Analyte           | Result | RL   |
|-------------------|--------|------|
| Diesel C10-C24    | 1.0 Y  | 0.99 |
| Motor Oil C24-C36 | 9.8    | 5.0  |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 71   | 53-133 |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-4A@10    | Batch#:         | 153518    |
| Type:     | SAMPLE     | Prepared:       | 08/04/09  |
| Lab ID:   | 213913-023 | Analyzed:       | 08/06/09  |
| Diln Fac: | 1.000      | Cleanup Method: | EPA 3630C |

| Analyte           | Result | RL  |
|-------------------|--------|-----|
| Diesel C10-C24    | 1.6 Y  | 1.0 |
| Motor Oil C24-C36 | 13     | 5.0 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 79   | 53-133 |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-4A@12    | Batch#:         | 153518    |
| Type:     | SAMPLE     | Prepared:       | 08/04/09  |
| Lab ID:   | 213913-024 | Analyzed:       | 08/07/09  |
| Diln Fac: | 10.00      | Cleanup Method: | EPA 3630C |

| Analyte           | Result | RL |
|-------------------|--------|----|
| Diesel C10-C24    | 1,100  | 10 |
| Motor Oil C24-C36 | 850    | 50 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | DO   | 53-133 |

Y= Sample exhibits chromatographic pattern which does not resemble standard  
DO= Diluted Out  
ND= Not Detected  
RL= Reporting Limit

| Total Extractable Hydrocarbons |                 |           |                           |
|--------------------------------|-----------------|-----------|---------------------------|
| Lab #:                         | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:                        | Fugro West Inc. | Prep:     | SHAKER TABLE              |
| Project#:                      | 609.004         | Analysis: | EPA 8015B                 |
| Matrix:                        | Soil            | Sampled:  | 07/27/09                  |
| Units:                         | mg/Kg           | Received: | 08/03/09                  |
| Basis:                         | as received     |           |                           |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-4A@15    | Batch#:         | 153518    |
| Type:     | SAMPLE     | Prepared:       | 08/04/09  |
| Lab ID:   | 213913-025 | Analyzed:       | 08/10/09  |
| Diln Fac: | 1.000      | Cleanup Method: | EPA 3630C |

| Analyte           | Result | RL  |
|-------------------|--------|-----|
| Diesel C10-C24    | 310    | 1.0 |
| Motor Oil C24-C36 | 120    | 5.0 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 102  | 53-133 |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-4A@18    | Batch#:         | 153518    |
| Type:     | SAMPLE     | Prepared:       | 08/04/09  |
| Lab ID:   | 213913-026 | Analyzed:       | 08/06/09  |
| Diln Fac: | 1.000      | Cleanup Method: | EPA 3630C |

| Analyte           | Result | RL  |
|-------------------|--------|-----|
| Diesel C10-C24    | 42     | 1.0 |
| Motor Oil C24-C36 | 23     | 5.0 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 73   | 53-133 |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-5@2      | Batch#:         | 153518    |
| Type:     | SAMPLE     | Prepared:       | 08/04/09  |
| Lab ID:   | 213913-027 | Analyzed:       | 08/06/09  |
| Diln Fac: | 1.000      | Cleanup Method: | EPA 3630C |

| Analyte           | Result | RL  |
|-------------------|--------|-----|
| Diesel C10-C24    | 4.1 Y  | 1.0 |
| Motor Oil C24-C36 | 32     | 5.0 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 88   | 53-133 |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-5@7.5    | Batch#:         | 153518    |
| Type:     | SAMPLE     | Prepared:       | 08/04/09  |
| Lab ID:   | 213913-028 | Analyzed:       | 08/06/09  |
| Diln Fac: | 1.000      | Cleanup Method: | EPA 3630C |

| Analyte           | Result | RL  |
|-------------------|--------|-----|
| Diesel C10-C24    | ND     | 1.0 |
| Motor Oil C24-C36 | 6.9    | 5.0 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 99   | 53-133 |

Y= Sample exhibits chromatographic pattern which does not resemble standard  
DO= Diluted Out  
ND= Not Detected  
RL= Reporting Limit



| Total Extractable Hydrocarbons |                 |           |                           |
|--------------------------------|-----------------|-----------|---------------------------|
| Lab #:                         | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:                        | Fugro West Inc. | Prep:     | SHAKER TABLE              |
| Project#:                      | 609.004         | Analysis: | EPA 8015B                 |
| Matrix:                        | Soil            | Sampled:  | 07/27/09                  |
| Units:                         | mg/Kg           | Received: | 08/03/09                  |
| Basis:                         | as received     |           |                           |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-5@12     | Batch#:         | 153540    |
| Type:     | SAMPLE     | Prepared:       | 08/04/09  |
| Lab ID:   | 213913-029 | Analyzed:       | 08/08/09  |
| Diln Fac: | 10.00      | Cleanup Method: | EPA 3630C |

| Analyte           | Result | RL  |
|-------------------|--------|-----|
| Diesel C10-C24    | 1,100  | 9.9 |
| Motor Oil C24-C36 | 520    | 50  |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | DO   | 53-133 |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-5@15     | Batch#:         | 153540    |
| Type:     | SAMPLE     | Prepared:       | 08/04/09  |
| Lab ID:   | 213913-030 | Analyzed:       | 08/07/09  |
| Diln Fac: | 1.000      | Cleanup Method: | EPA 3630C |

| Analyte           | Result | RL  |
|-------------------|--------|-----|
| Diesel C10-C24    | 2.8 Y  | 1.0 |
| Motor Oil C24-C36 | ND     | 5.0 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 61   | 53-133 |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-6@2      | Batch#:         | 153540    |
| Type:     | SAMPLE     | Prepared:       | 08/04/09  |
| Lab ID:   | 213913-031 | Analyzed:       | 08/07/09  |
| Diln Fac: | 10.00      | Cleanup Method: | EPA 3630C |

| Analyte           | Result | RL |
|-------------------|--------|----|
| Diesel C10-C24    | 55 Y   | 10 |
| Motor Oil C24-C36 | 460    | 50 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | DO   | 53-133 |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-6@7.5    | Batch#:         | 153540    |
| Type:     | SAMPLE     | Prepared:       | 08/04/09  |
| Lab ID:   | 213913-032 | Analyzed:       | 08/07/09  |
| Diln Fac: | 1.000      | Cleanup Method: | EPA 3630C |

| Analyte           | Result | RL   |
|-------------------|--------|------|
| Diesel C10-C24    | ND     | 0.99 |
| Motor Oil C24-C36 | ND     | 5.0  |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 64   | 53-133 |

Y= Sample exhibits chromatographic pattern which does not resemble standard  
DO= Diluted Out  
ND= Not Detected  
RL= Reporting Limit

| Total Extractable Hydrocarbons |                 |           |                           |
|--------------------------------|-----------------|-----------|---------------------------|
| Lab #:                         | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:                        | Fugro West Inc. | Prep:     | SHAKER TABLE              |
| Project#:                      | 609.004         | Analysis: | EPA 8015B                 |
| Matrix:                        | Soil            | Sampled:  | 07/27/09                  |
| Units:                         | mg/Kg           | Received: | 08/03/09                  |
| Basis:                         | as received     |           |                           |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-6@12     | Batch#:         | 153540    |
| Type:     | SAMPLE     | Prepared:       | 08/04/09  |
| Lab ID:   | 213913-033 | Analyzed:       | 08/07/09  |
| Diln Fac: | 1.000      | Cleanup Method: | EPA 3630C |

| Analyte           | Result | RL   |
|-------------------|--------|------|
| Diesel C10-C24    | 29 Y   | 0.99 |
| Motor Oil C24-C36 | 39     | 5.0  |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 85   | 53-133 |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-6@15     | Batch#:         | 153540    |
| Type:     | SAMPLE     | Prepared:       | 08/04/09  |
| Lab ID:   | 213913-034 | Analyzed:       | 08/07/09  |
| Diln Fac: | 1.000      | Cleanup Method: | EPA 3630C |

| Analyte           | Result | RL  |
|-------------------|--------|-----|
| Diesel C10-C24    | 17 Y   | 1.0 |
| Motor Oil C24-C36 | ND     | 5.0 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 84   | 53-133 |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-7@5      | Batch#:         | 153540    |
| Type:     | SAMPLE     | Prepared:       | 08/04/09  |
| Lab ID:   | 213913-035 | Analyzed:       | 08/07/09  |
| Diln Fac: | 1.000      | Cleanup Method: | EPA 3630C |

| Analyte           | Result | RL  |
|-------------------|--------|-----|
| Diesel C10-C24    | 10 Y   | 1.0 |
| Motor Oil C24-C36 | 53     | 5.0 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 81   | 53-133 |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-7@7.5    | Batch#:         | 153540    |
| Type:     | SAMPLE     | Prepared:       | 08/04/09  |
| Lab ID:   | 213913-036 | Analyzed:       | 08/07/09  |
| Diln Fac: | 1.000      | Cleanup Method: | EPA 3630C |

| Analyte           | Result | RL   |
|-------------------|--------|------|
| Diesel C10-C24    | 2.9 Y  | 0.99 |
| Motor Oil C24-C36 | 6.6    | 5.0  |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 67   | 53-133 |

Y= Sample exhibits chromatographic pattern which does not resemble standard  
DO= Diluted Out  
ND= Not Detected  
RL= Reporting Limit

| Total Extractable Hydrocarbons |                 |           |                           |
|--------------------------------|-----------------|-----------|---------------------------|
| Lab #:                         | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:                        | Fugro West Inc. | Prep:     | SHAKER TABLE              |
| Project#:                      | 609.004         | Analysis: | EPA 8015B                 |
| Matrix:                        | Soil            | Sampled:  | 07/27/09                  |
| Units:                         | mg/Kg           | Received: | 08/03/09                  |
| Basis:                         | as received     |           |                           |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-7@12     | Batch#:         | 153540    |
| Type:     | SAMPLE     | Prepared:       | 08/04/09  |
| Lab ID:   | 213913-037 | Analyzed:       | 08/07/09  |
| Diln Fac: | 1.000      | Cleanup Method: | EPA 3630C |

| Analyte           | Result | RL  |
|-------------------|--------|-----|
| Diesel C10-C24    | 1.6 Y  | 1.0 |
| Motor Oil C24-C36 | ND     | 5.0 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 57   | 53-133 |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-7@15     | Batch#:         | 153711    |
| Type:     | SAMPLE     | Prepared:       | 08/10/09  |
| Lab ID:   | 213913-038 | Analyzed:       | 08/11/09  |
| Diln Fac: | 1.000      | Cleanup Method: | EPA 3630C |

| Analyte           | Result | RL   |
|-------------------|--------|------|
| Diesel C10-C24    | ND     | 0.99 |
| Motor Oil C24-C36 | ND     | 5.0  |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 86   | 53-133 |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-8@7.5    | Batch#:         | 153540    |
| Type:     | SAMPLE     | Prepared:       | 08/04/09  |
| Lab ID:   | 213913-039 | Analyzed:       | 08/07/09  |
| Diln Fac: | 1.000      | Cleanup Method: | EPA 3630C |

| Analyte           | Result | RL  |
|-------------------|--------|-----|
| Diesel C10-C24    | 9.3 Y  | 1.0 |
| Motor Oil C24-C36 | ND     | 5.0 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 63   | 53-133 |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-8@15     | Batch#:         | 153540    |
| Type:     | SAMPLE     | Prepared:       | 08/04/09  |
| Lab ID:   | 213913-040 | Analyzed:       | 08/07/09  |
| Diln Fac: | 1.000      | Cleanup Method: | EPA 3630C |

| Analyte           | Result | RL   |
|-------------------|--------|------|
| Diesel C10-C24    | 1.3 Y  | 0.99 |
| Motor Oil C24-C36 | ND     | 5.0  |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 53   | 53-133 |

Y= Sample exhibits chromatographic pattern which does not resemble standard  
DO= Diluted Out  
ND= Not Detected  
RL= Reporting Limit

| Total Extractable Hydrocarbons |                 |           |                           |
|--------------------------------|-----------------|-----------|---------------------------|
| Lab #:                         | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:                        | Fugro West Inc. | Prep:     | SHAKER TABLE              |
| Project#:                      | 609.004         | Analysis: | EPA 8015B                 |
| Matrix:                        | Soil            | Sampled:  | 07/27/09                  |
| Units:                         | mg/Kg           | Received: | 08/03/09                  |
| Basis:                         | as received     |           |                           |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-8@20     | Batch#:         | 153540    |
| Type:     | SAMPLE     | Prepared:       | 08/04/09  |
| Lab ID:   | 213913-041 | Analyzed:       | 08/07/09  |
| Diln Fac: | 1.000      | Cleanup Method: | EPA 3630C |

| Analyte           | Result | RL  |
|-------------------|--------|-----|
| Diesel C10-C24    | ND     | 1.0 |
| Motor Oil C24-C36 | ND     | 5.0 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 59   | 53-133 |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-9@5      | Batch#:         | 153540    |
| Type:     | SAMPLE     | Prepared:       | 08/04/09  |
| Lab ID:   | 213913-042 | Analyzed:       | 08/07/09  |
| Diln Fac: | 1.000      | Cleanup Method: | EPA 3630C |

| Analyte           | Result | RL  |
|-------------------|--------|-----|
| Diesel C10-C24    | 28 Y   | 1.0 |
| Motor Oil C24-C36 | 46     | 5.0 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 72   | 53-133 |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-9@10     | Batch#:         | 153540    |
| Type:     | SAMPLE     | Prepared:       | 08/04/09  |
| Lab ID:   | 213913-043 | Analyzed:       | 08/07/09  |
| Diln Fac: | 1.000      | Cleanup Method: | EPA 3630C |

| Analyte           | Result | RL  |
|-------------------|--------|-----|
| Diesel C10-C24    | 44 Y   | 1.0 |
| Motor Oil C24-C36 | 49     | 5.0 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 61   | 53-133 |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-9@15     | Batch#:         | 153540    |
| Type:     | SAMPLE     | Prepared:       | 08/04/09  |
| Lab ID:   | 213913-044 | Analyzed:       | 08/07/09  |
| Diln Fac: | 1.000      | Cleanup Method: | EPA 3630C |

| Analyte           | Result | RL  |
|-------------------|--------|-----|
| Diesel C10-C24    | 31 Y   | 1.0 |
| Motor Oil C24-C36 | 19     | 5.0 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 80   | 53-133 |

Y= Sample exhibits chromatographic pattern which does not resemble standard  
DO= Diluted Out  
ND= Not Detected  
RL= Reporting Limit

| Total Extractable Hydrocarbons |                 |           |                           |
|--------------------------------|-----------------|-----------|---------------------------|
| Lab #:                         | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:                        | Fugro West Inc. | Prep:     | SHAKER TABLE              |
| Project#:                      | 609.004         | Analysis: | EPA 8015B                 |
| Matrix:                        | Soil            | Sampled:  | 07/27/09                  |
| Units:                         | mg/Kg           | Received: | 08/03/09                  |
| Basis:                         | as received     |           |                           |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-9@20     | Batch#:         | 153540    |
| Type:     | SAMPLE     | Prepared:       | 08/04/09  |
| Lab ID:   | 213913-045 | Analyzed:       | 08/07/09  |
| Diln Fac: | 1.000      | Cleanup Method: | EPA 3630C |

| Analyte           | Result | RL   |
|-------------------|--------|------|
| Diesel C10-C24    | ND     | 0.99 |
| Motor Oil C24-C36 | ND     | 5.0  |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 63   | 53-133 |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-10@2     | Batch#:         | 153540    |
| Type:     | SAMPLE     | Prepared:       | 08/04/09  |
| Lab ID:   | 213913-046 | Analyzed:       | 08/07/09  |
| Diln Fac: | 1.000      | Cleanup Method: | EPA 3630C |

| Analyte           | Result | RL  |
|-------------------|--------|-----|
| Diesel C10-C24    | ND     | 1.0 |
| Motor Oil C24-C36 | ND     | 5.0 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 74   | 53-133 |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-10@5     | Batch#:         | 153540    |
| Type:     | SAMPLE     | Prepared:       | 08/04/09  |
| Lab ID:   | 213913-047 | Analyzed:       | 08/07/09  |
| Diln Fac: | 1.000      | Cleanup Method: | EPA 3630C |

| Analyte           | Result | RL   |
|-------------------|--------|------|
| Diesel C10-C24    | 2.5 Y  | 0.99 |
| Motor Oil C24-C36 | 10     | 5.0  |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 75   | 53-133 |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-10@10    | Batch#:         | 153540    |
| Type:     | SAMPLE     | Prepared:       | 08/04/09  |
| Lab ID:   | 213913-048 | Analyzed:       | 08/07/09  |
| Diln Fac: | 1.000      | Cleanup Method: | EPA 3630C |

| Analyte           | Result | RL  |
|-------------------|--------|-----|
| Diesel C10-C24    | 5.7 Y  | 1.0 |
| Motor Oil C24-C36 | 21     | 5.0 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 53   | 53-133 |

Y= Sample exhibits chromatographic pattern which does not resemble standard  
DO= Diluted Out  
ND= Not Detected  
RL= Reporting Limit

| Total Extractable Hydrocarbons |                 |           |                           |
|--------------------------------|-----------------|-----------|---------------------------|
| Lab #:                         | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:                        | Fugro West Inc. | Prep:     | SHAKER TABLE              |
| Project#:                      | 609.004         | Analysis: | EPA 8015B                 |
| Matrix:                        | Soil            | Sampled:  | 07/27/09                  |
| Units:                         | mg/Kg           | Received: | 08/03/09                  |
| Basis:                         | as received     |           |                           |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-10@15    | Batch#:         | 153564    |
| Type:     | SAMPLE     | Prepared:       | 08/05/09  |
| Lab ID:   | 213913-049 | Analyzed:       | 08/06/09  |
| Diln Fac: | 1.000      | Cleanup Method: | EPA 3630C |

| Analyte           | Result | RL  |
|-------------------|--------|-----|
| Diesel C10-C24    | 1.7 Y  | 1.0 |
| Motor Oil C24-C36 | ND     | 5.0 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 71   | 53-133 |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-11@2     | Batch#:         | 153564    |
| Type:     | SAMPLE     | Prepared:       | 08/05/09  |
| Lab ID:   | 213913-050 | Analyzed:       | 08/06/09  |
| Diln Fac: | 20.00      | Cleanup Method: | EPA 3630C |

| Analyte           | Result | RL  |
|-------------------|--------|-----|
| Diesel C10-C24    | 42 Y   | 20  |
| Motor Oil C24-C36 | 440    | 100 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | DO   | 53-133 |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-11@7.5   | Batch#:         | 153564    |
| Type:     | SAMPLE     | Prepared:       | 08/05/09  |
| Lab ID:   | 213913-051 | Analyzed:       | 08/06/09  |
| Diln Fac: | 1.000      | Cleanup Method: | EPA 3630C |

| Analyte           | Result | RL   |
|-------------------|--------|------|
| Diesel C10-C24    | ND     | 0.99 |
| Motor Oil C24-C36 | ND     | 5.0  |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 59   | 53-133 |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-11@12    | Batch#:         | 153564    |
| Type:     | SAMPLE     | Prepared:       | 08/05/09  |
| Lab ID:   | 213913-052 | Analyzed:       | 08/06/09  |
| Diln Fac: | 1.000      | Cleanup Method: | EPA 3630C |

| Analyte           | Result | RL  |
|-------------------|--------|-----|
| Diesel C10-C24    | 1.4 Y  | 1.0 |
| Motor Oil C24-C36 | 13     | 5.0 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 72   | 53-133 |

Y= Sample exhibits chromatographic pattern which does not resemble standard  
DO= Diluted Out  
ND= Not Detected  
RL= Reporting Limit

| Total Extractable Hydrocarbons |                 |           |                           |
|--------------------------------|-----------------|-----------|---------------------------|
| Lab #:                         | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:                        | Fugro West Inc. | Prep:     | SHAKER TABLE              |
| Project#:                      | 609.004         | Analysis: | EPA 8015B                 |
| Matrix:                        | Soil            | Sampled:  | 07/27/09                  |
| Units:                         | mg/Kg           | Received: | 08/03/09                  |
| Basis:                         | as received     |           |                           |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-12@5     | Batch#:         | 153564    |
| Type:     | SAMPLE     | Prepared:       | 08/05/09  |
| Lab ID:   | 213913-053 | Analyzed:       | 08/06/09  |
| Diln Fac: | 1.000      | Cleanup Method: | EPA 3630C |

| Analyte           | Result | RL  |
|-------------------|--------|-----|
| Diesel C10-C24    | ND     | 1.0 |
| Motor Oil C24-C36 | ND     | 5.0 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 59   | 53-133 |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-12@7.5   | Batch#:         | 153564    |
| Type:     | SAMPLE     | Prepared:       | 08/05/09  |
| Lab ID:   | 213913-054 | Analyzed:       | 08/06/09  |
| Diln Fac: | 1.000      | Cleanup Method: | EPA 3630C |

| Analyte           | Result | RL  |
|-------------------|--------|-----|
| Diesel C10-C24    | 9.1 Y  | 1.0 |
| Motor Oil C24-C36 | 88     | 5.0 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 69   | 53-133 |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-12@12    | Batch#:         | 153564    |
| Type:     | SAMPLE     | Prepared:       | 08/05/09  |
| Lab ID:   | 213913-055 | Analyzed:       | 08/06/09  |
| Diln Fac: | 1.000      | Cleanup Method: | EPA 3630C |

| Analyte           | Result | RL   |
|-------------------|--------|------|
| Diesel C10-C24    | 590    | 0.99 |
| Motor Oil C24-C36 | 270    | 5.0  |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 81   | 53-133 |

|           |            |                 |           |
|-----------|------------|-----------------|-----------|
| Field ID: | B-12@15    | Batch#:         | 153711    |
| Type:     | SAMPLE     | Prepared:       | 08/10/09  |
| Lab ID:   | 213913-056 | Analyzed:       | 08/11/09  |
| Diln Fac: | 1.000      | Cleanup Method: | EPA 3630C |

| Analyte           | Result | RL  |
|-------------------|--------|-----|
| Diesel C10-C24    | ND     | 1.0 |
| Motor Oil C24-C36 | ND     | 5.0 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 73   | 53-133 |

Y= Sample exhibits chromatographic pattern which does not resemble standard  
DO= Diluted Out  
ND= Not Detected  
RL= Reporting Limit

| Total Extractable Hydrocarbons |                 |           |                           |
|--------------------------------|-----------------|-----------|---------------------------|
| Lab #:                         | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:                        | Fugro West Inc. | Prep:     | SHAKER TABLE              |
| Project#:                      | 609.004         | Analysis: | EPA 8015B                 |
| Matrix:                        | Soil            | Sampled:  | 07/27/09                  |
| Units:                         | mg/Kg           | Received: | 08/03/09                  |
| Basis:                         | as received     |           |                           |

|           |          |                 |           |
|-----------|----------|-----------------|-----------|
| Type:     | BLANK    | Prepared:       | 08/04/09  |
| Lab ID:   | QC506127 | Analyzed:       | 08/05/09  |
| Diln Fac: | 1.000    | Cleanup Method: | EPA 3630C |
| Batch#:   | 153518   |                 |           |

| Analyte           | Result | RL  |
|-------------------|--------|-----|
| Diesel C10-C24    | ND     | 1.0 |
| Motor Oil C24-C36 | ND     | 5.0 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 83   | 53-133 |

|           |          |                 |           |
|-----------|----------|-----------------|-----------|
| Type:     | BLANK    | Prepared:       | 08/04/09  |
| Lab ID:   | QC506227 | Analyzed:       | 08/07/09  |
| Diln Fac: | 1.000    | Cleanup Method: | EPA 3630C |
| Batch#:   | 153540   |                 |           |

| Analyte           | Result | RL  |
|-------------------|--------|-----|
| Diesel C10-C24    | ND     | 1.0 |
| Motor Oil C24-C36 | ND     | 5.0 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 80   | 53-133 |

|           |          |                 |           |
|-----------|----------|-----------------|-----------|
| Type:     | BLANK    | Prepared:       | 08/05/09  |
| Lab ID:   | QC506314 | Analyzed:       | 08/07/09  |
| Diln Fac: | 1.000    | Cleanup Method: | EPA 3630C |
| Batch#:   | 153564   |                 |           |

| Analyte           | Result | RL   |
|-------------------|--------|------|
| Diesel C10-C24    | ND     | 0.99 |
| Motor Oil C24-C36 | ND     | 5.0  |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 71   | 53-133 |

|           |          |                 |           |
|-----------|----------|-----------------|-----------|
| Type:     | BLANK    | Prepared:       | 08/10/09  |
| Lab ID:   | QC506927 | Analyzed:       | 08/11/09  |
| Diln Fac: | 1.000    | Cleanup Method: | EPA 3630C |
| Batch#:   | 153711   |                 |           |

| Analyte           | Result | RL  |
|-------------------|--------|-----|
| Diesel C10-C24    | ND     | 1.0 |
| Motor Oil C24-C36 | ND     | 5.0 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 80   | 53-133 |

Y= Sample exhibits chromatographic pattern which does not resemble standard  
DO= Diluted Out  
ND= Not Detected  
RL= Reporting Limit



## Batch QC Report

| Total Extractable Hydrocarbons |                 |           |                           |
|--------------------------------|-----------------|-----------|---------------------------|
| Lab #:                         | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:                        | Fugro West Inc. | Prep:     | SHAKER TABLE              |
| Project#:                      | 609.004         | Analysis: | EPA 8015B                 |
| Type:                          | LCS             | Diln Fac: | 1.000                     |
| Lab ID:                        | QC506128        | Batch#:   | 153518                    |
| Matrix:                        | Soil            | Prepared: | 08/04/09                  |
| Units:                         | mg/Kg           | Analyzed: | 08/06/09                  |

Cleanup Method: EPA 3630C

| Analyte        | Spiked | Result | %REC | Limits |
|----------------|--------|--------|------|--------|
| Diesel C10-C24 | 49.66  | 42.29  | 85   | 52-128 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 80   | 53-133 |

## Batch QC Report

| Total Extractable Hydrocarbons |                 |           |                           |
|--------------------------------|-----------------|-----------|---------------------------|
| Lab #:                         | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:                        | Fugro West Inc. | Prep:     | SHAKER TABLE              |
| Project#:                      | 609.004         | Analysis: | EPA 8015B                 |
| Field ID:                      | B-3@1           | Batch#:   | 153518                    |
| MSS Lab ID:                    | 213913-015      | Sampled:  | 07/27/09                  |
| Matrix:                        | Soil            | Received: | 08/03/09                  |
| Units:                         | mg/Kg           | Prepared: | 08/04/09                  |
| Basis:                         | as received     | Analyzed: | 08/06/09                  |
| Diln Fac:                      | 10.00           |           |                           |

Type: MS Cleanup Method: EPA 3630C  
Lab ID: QC506129

| Analyte        | MSS Result | Spiked | Result | %REC  | Limits |
|----------------|------------|--------|--------|-------|--------|
| Diesel C10-C24 | 2.705      | 49.89  | 91.41  | 178 * | 33-145 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | DO   | 53-133 |

Type: MSD Cleanup Method: EPA 3630C  
Lab ID: QC506130

| Analyte        | Spiked | Result | %REC | Limits | RPD  | Lim |
|----------------|--------|--------|------|--------|------|-----|
| Diesel C10-C24 | 49.93  | 57.83  | 110  | 33-145 | 45 * | 44  |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | DO   | 53-133 |

\*= Value outside of QC limits; see narrative  
DO= Diluted Out  
RPD= Relative Percent Difference

## Batch QC Report

| Total Extractable Hydrocarbons |                 |           |                           |
|--------------------------------|-----------------|-----------|---------------------------|
| Lab #:                         | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:                        | Fugro West Inc. | Prep:     | SHAKER TABLE              |
| Project#:                      | 609.004         | Analysis: | EPA 8015B                 |
| Type:                          | LCS             | Diln Fac: | 1.000                     |
| Lab ID:                        | QC506228        | Batch#:   | 153540                    |
| Matrix:                        | Soil            | Prepared: | 08/04/09                  |
| Units:                         | mg/Kg           | Analyzed: | 08/07/09                  |

Cleanup Method: EPA 3630C

| Analyte        | Spiked | Result | %REC | Limits |
|----------------|--------|--------|------|--------|
| Diesel C10-C24 | 49.85  | 48.76  | 98   | 52-128 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 100  | 53-133 |

## Batch QC Report

| Total Extractable Hydrocarbons |                 |           |                           |
|--------------------------------|-----------------|-----------|---------------------------|
| Lab #:                         | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:                        | Fugro West Inc. | Prep:     | SHAKER TABLE              |
| Project#:                      | 609.004         | Analysis: | EPA 8015B                 |
| Field ID:                      | B-10@10         | Batch#:   | 153540                    |
| MSS Lab ID:                    | 213913-048      | Sampled:  | 07/27/09                  |
| Matrix:                        | Soil            | Received: | 08/03/09                  |
| Units:                         | mg/Kg           | Prepared: | 08/04/09                  |
| Basis:                         | as received     | Analyzed: | 08/07/09                  |
| Diln Fac:                      | 1.000           |           |                           |

Type: MS Cleanup Method: EPA 3630C  
Lab ID: QC506229

| Analyte        | MSS Result | Spiked | Result | %REC | Limits |
|----------------|------------|--------|--------|------|--------|
| Diesel C10-C24 | 5.675      | 49.73  | 52.77  | 95   | 33-145 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 97   | 53-133 |

Type: MSD Cleanup Method: EPA 3630C  
Lab ID: QC506230

| Analyte        | Spiked | Result | %REC | Limits | RPD | Lim |
|----------------|--------|--------|------|--------|-----|-----|
| Diesel C10-C24 | 49.84  | 36.20  | 61   | 33-145 | 37  | 44  |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 70   | 53-133 |

RPD= Relative Percent Difference

## Batch QC Report

| Total Extractable Hydrocarbons |                 |           |                           |
|--------------------------------|-----------------|-----------|---------------------------|
| Lab #:                         | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:                        | Fugro West Inc. | Prep:     | SHAKER TABLE              |
| Project#:                      | 609.004         | Analysis: | EPA 8015B                 |
| Type:                          | LCS             | Diln Fac: | 1.000                     |
| Lab ID:                        | QC506315        | Batch#:   | 153564                    |
| Matrix:                        | Soil            | Prepared: | 08/05/09                  |
| Units:                         | mg/Kg           | Analyzed: | 08/07/09                  |

Cleanup Method: EPA 3630C

| Analyte        | Spiked | Result | %REC | Limits |
|----------------|--------|--------|------|--------|
| Diesel C10-C24 | 49.60  | 45.72  | 92   | 52-128 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 95   | 53-133 |

## Batch QC Report

| Total Extractable Hydrocarbons |                 |           |                           |
|--------------------------------|-----------------|-----------|---------------------------|
| Lab #:                         | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:                        | Fugro West Inc. | Prep:     | SHAKER TABLE              |
| Project#:                      | 609.004         | Analysis: | EPA 8015B                 |
| Field ID:                      | ZZZZZZZZZZ      | Batch#:   | 153564                    |
| MSS Lab ID:                    | 213937-001      | Sampled:  | 08/03/09                  |
| Matrix:                        | Soil            | Received: | 08/04/09                  |
| Units:                         | mg/Kg           | Prepared: | 08/05/09                  |
| Basis:                         | as received     | Analyzed: | 08/07/09                  |
| Diln Fac:                      | 2.000           |           |                           |

Type: MS Cleanup Method: EPA 3630C  
Lab ID: QC506316

| Analyte        | MSS Result | Spiked | Result | %REC    | Limits |
|----------------|------------|--------|--------|---------|--------|
| Diesel C10-C24 | 1,065      | 49.84  | 883.1  | -366 NM | 33-145 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 83   | 53-133 |

Type: MSD Cleanup Method: EPA 3630C  
Lab ID: QC506317

| Analyte        | Spiked | Result | %REC    | Limits | RPD | Lim |
|----------------|--------|--------|---------|--------|-----|-----|
| Diesel C10-C24 | 49.72  | 937.0  | -258 NM | 33-145 | 6   | 44  |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 89   | 53-133 |

NM= Not Meaningful: Sample concentration > 4X spike concentration  
RPD= Relative Percent Difference

## Batch QC Report

| Total Extractable Hydrocarbons |                 |           |                           |
|--------------------------------|-----------------|-----------|---------------------------|
| Lab #:                         | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:                        | Fugro West Inc. | Prep:     | SHAKER TABLE              |
| Project#:                      | 609.004         | Analysis: | EPA 8015B                 |
| Type:                          | LCS             | Diln Fac: | 1.000                     |
| Lab ID:                        | QC506928        | Batch#:   | 153711                    |
| Matrix:                        | Soil            | Prepared: | 08/10/09                  |
| Units:                         | mg/Kg           | Analyzed: | 08/11/09                  |

Cleanup Method: EPA 3630C

| Analyte        | Spiked | Result | %REC | Limits |
|----------------|--------|--------|------|--------|
| Diesel C10-C24 | 50.32  | 38.23  | 76   | 52-128 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 69   | 53-133 |

## Batch QC Report

| Total Extractable Hydrocarbons |                 |           |                           |
|--------------------------------|-----------------|-----------|---------------------------|
| Lab #:                         | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:                        | Fugro West Inc. | Prep:     | SHAKER TABLE              |
| Project#:                      | 609.004         | Analysis: | EPA 8015B                 |
| Field ID:                      | ZZZZZZZZZZ      | Batch#:   | 153711                    |
| MSS Lab ID:                    | 214078-003      | Sampled:  | 08/10/09                  |
| Matrix:                        | Soil            | Received: | 08/10/09                  |
| Units:                         | mg/Kg           | Prepared: | 08/10/09                  |
| Basis:                         | as received     | Analyzed: | 08/11/09                  |
| Diln Fac:                      | 1.000           |           |                           |

Type: MS Cleanup Method: EPA 3630C  
Lab ID: QC506929

| Analyte        | MSS Result | Spiked | Result | %REC | Limits |
|----------------|------------|--------|--------|------|--------|
| Diesel C10-C24 | 0.1686     | 49.78  | 51.46  | 103  | 33-145 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 108  | 53-133 |

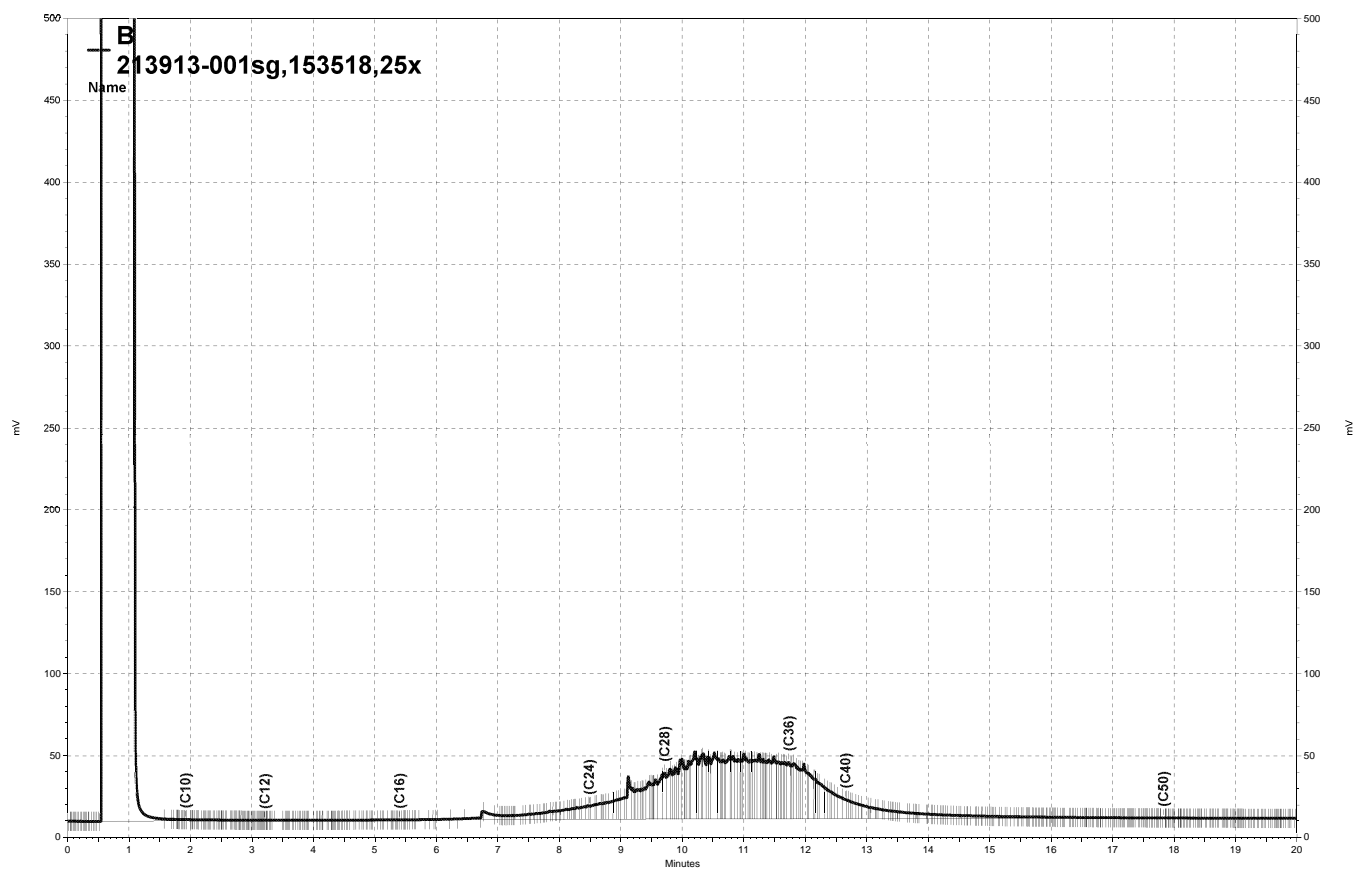
Type: MSD Cleanup Method: EPA 3630C  
Lab ID: QC506930

| Analyte        | Spiked | Result | %REC | Limits | RPD | Lim |
|----------------|--------|--------|------|--------|-----|-----|
| Diesel C10-C24 | 49.79  | 46.90  | 94   | 33-145 | 9   | 44  |

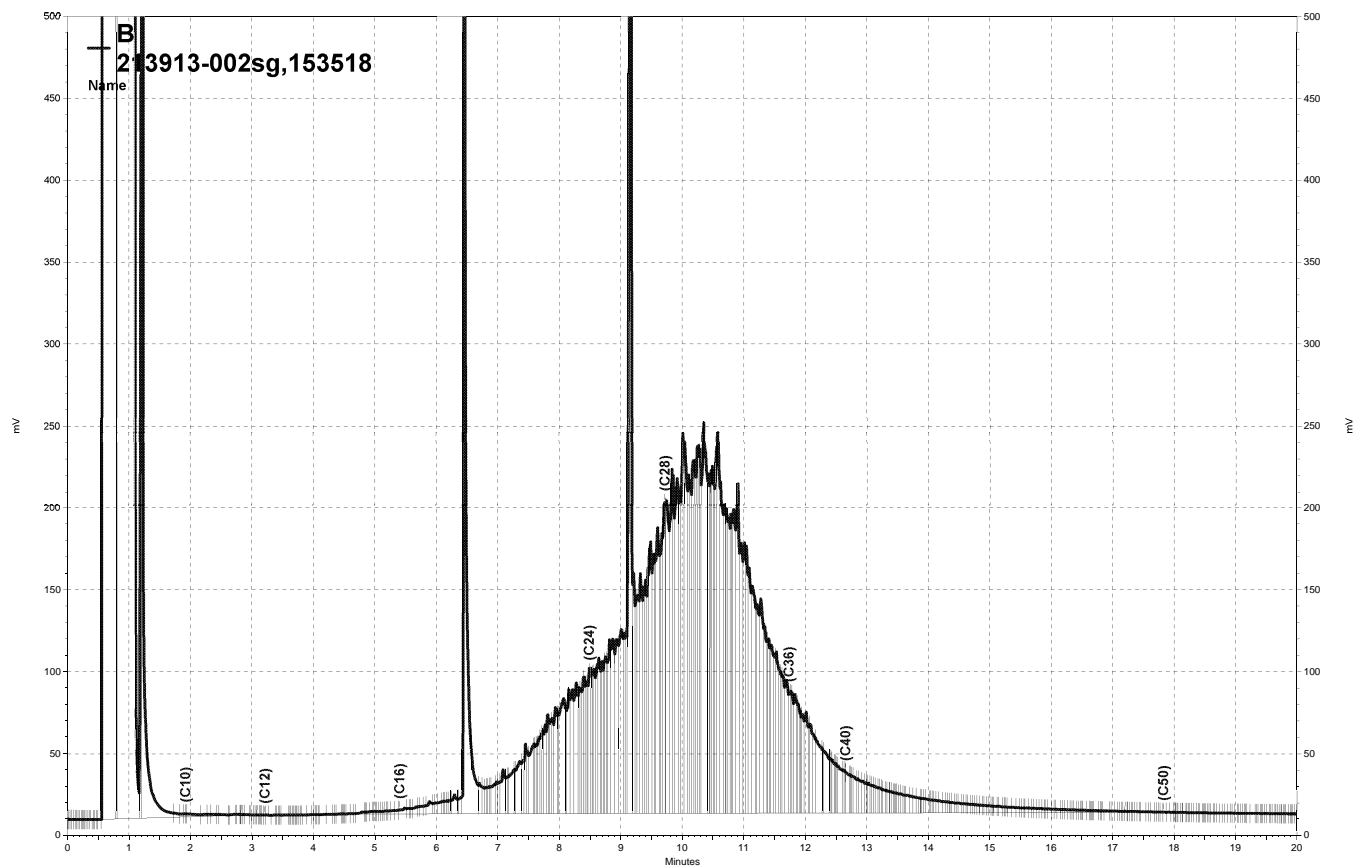
| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 100  | 53-133 |

RPD= Relative Percent Difference

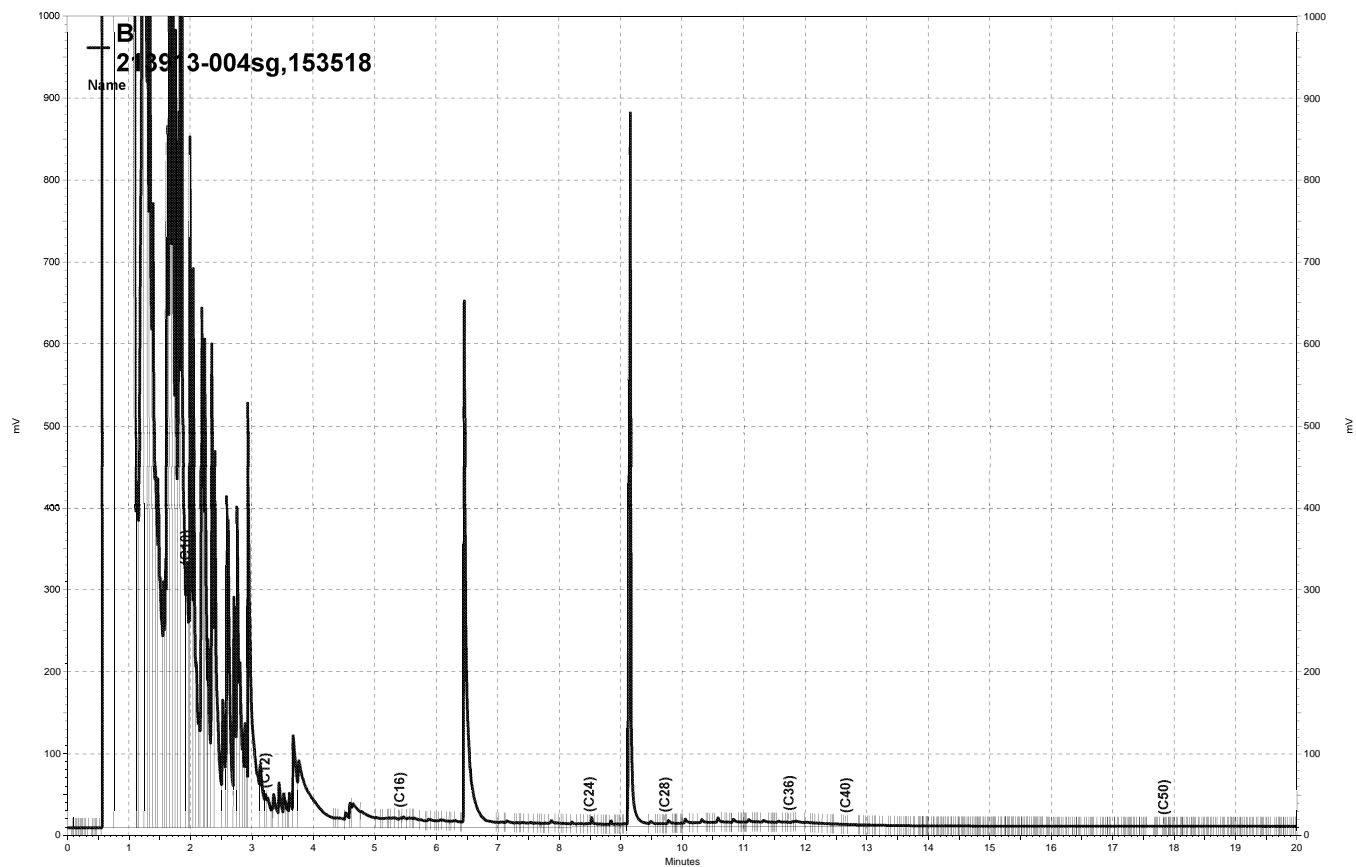




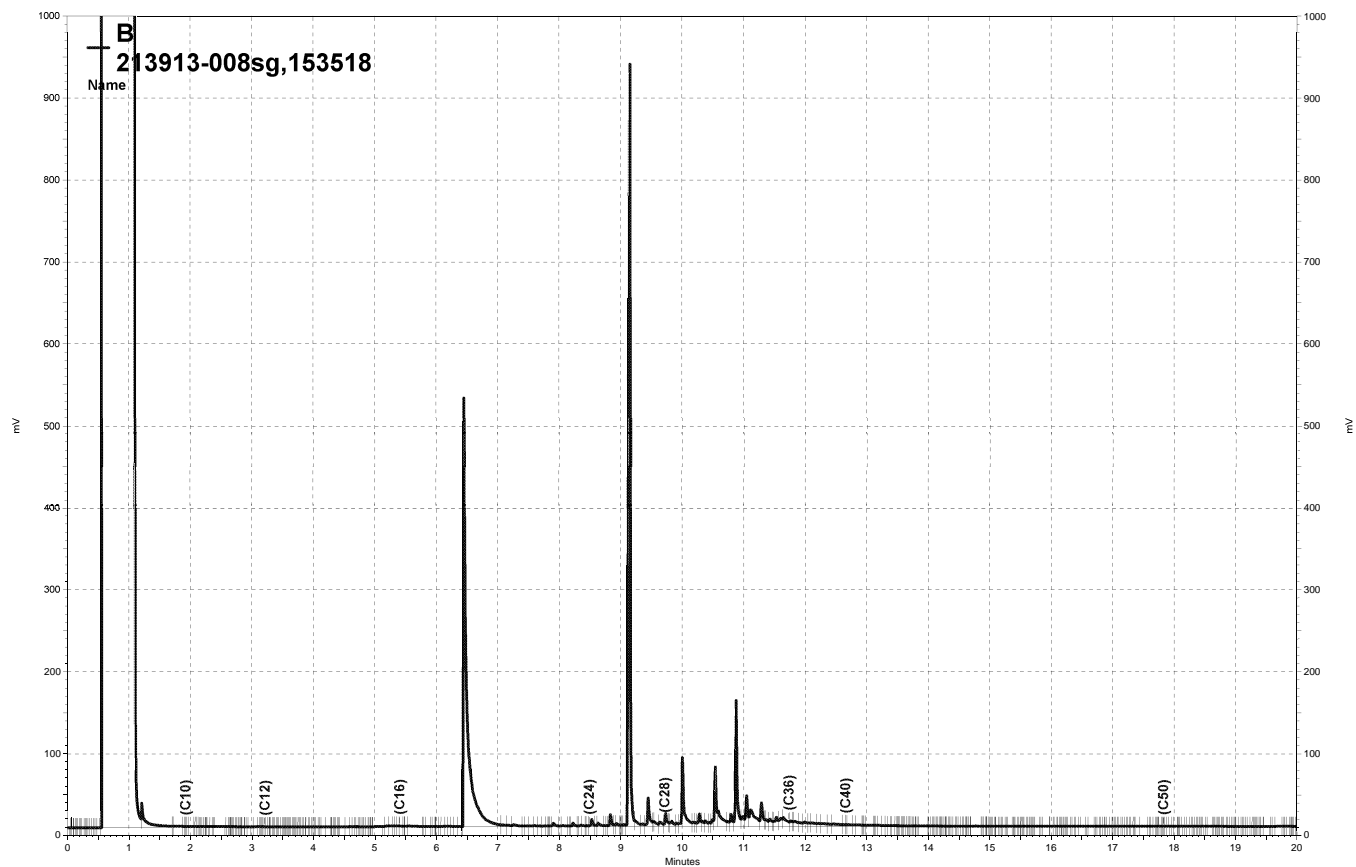
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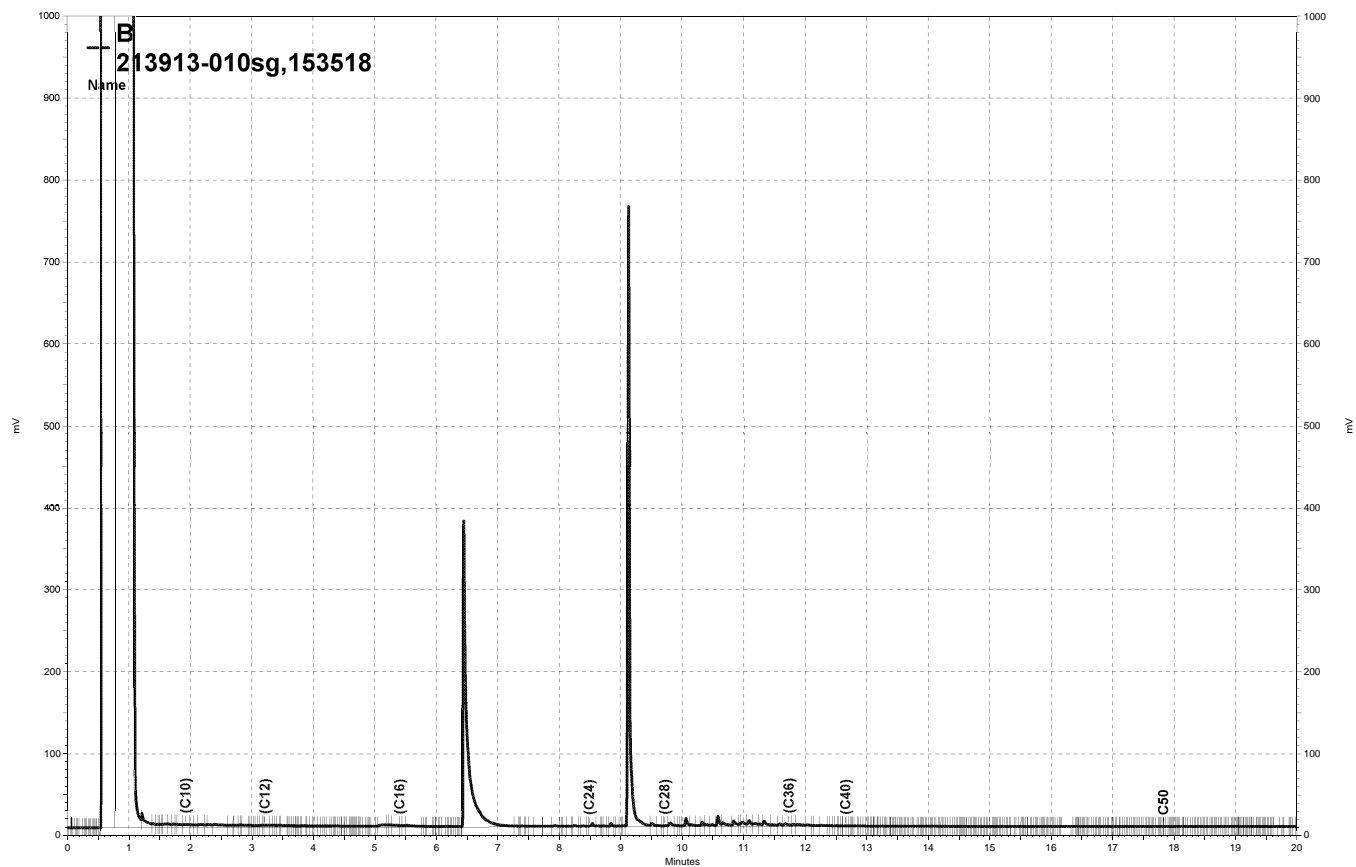
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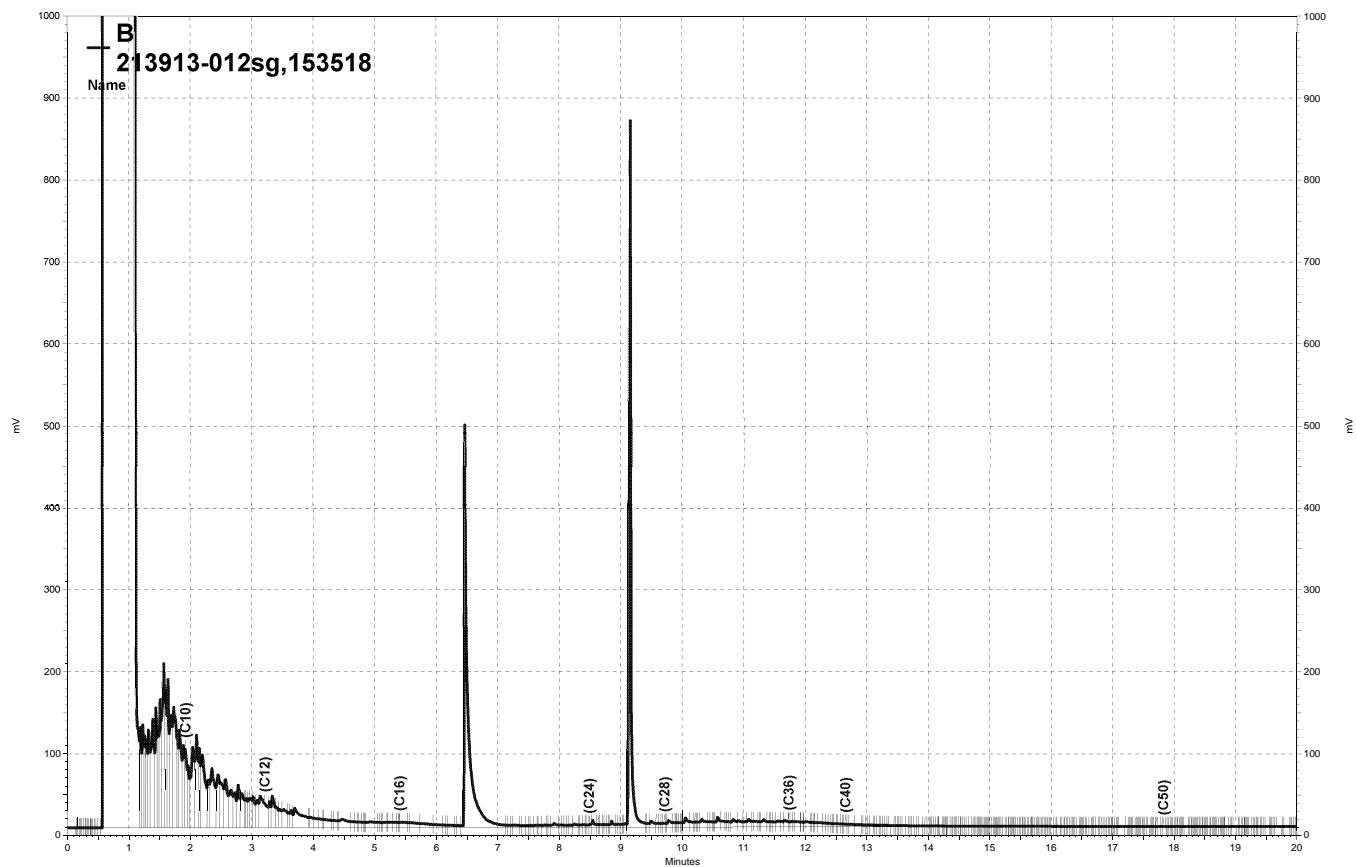
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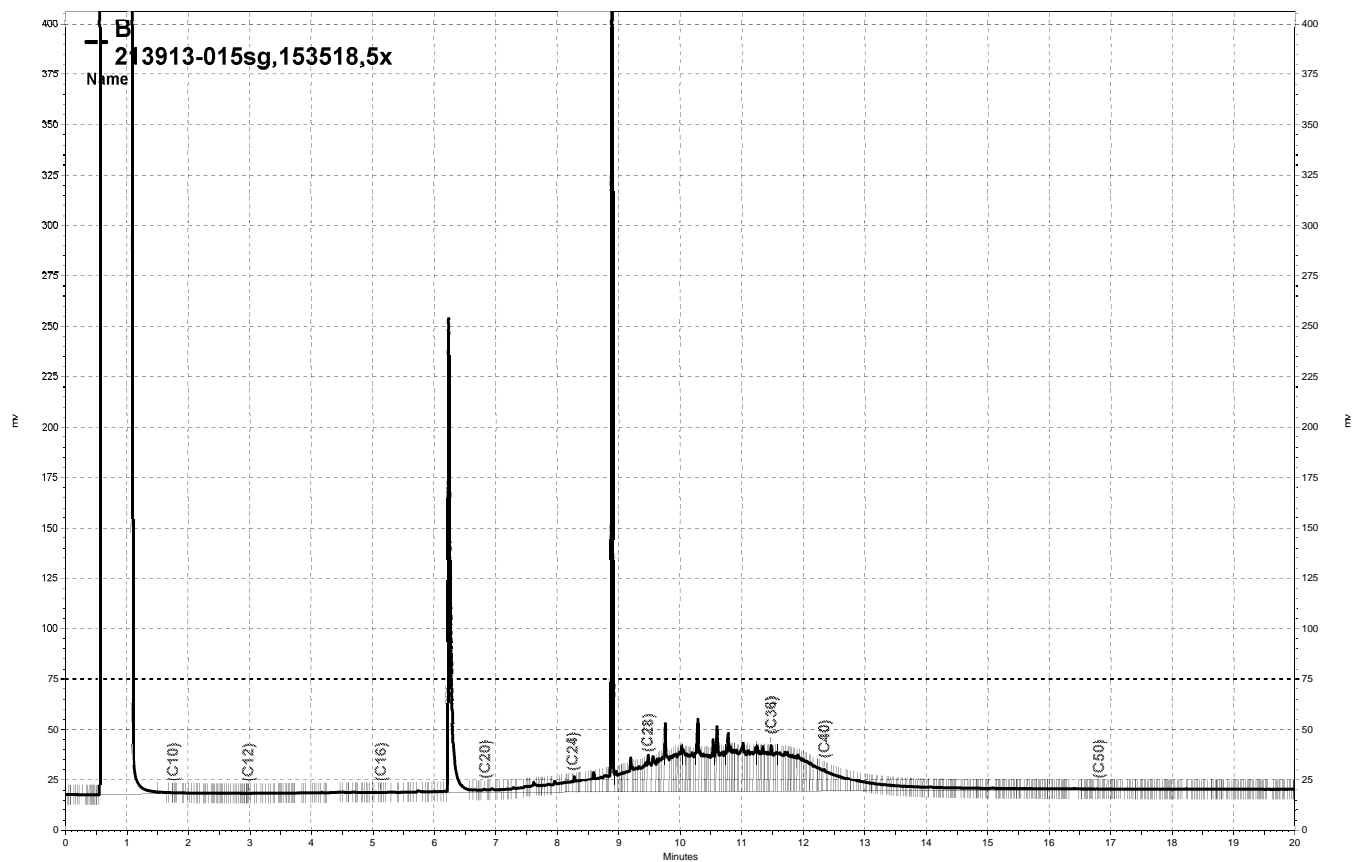
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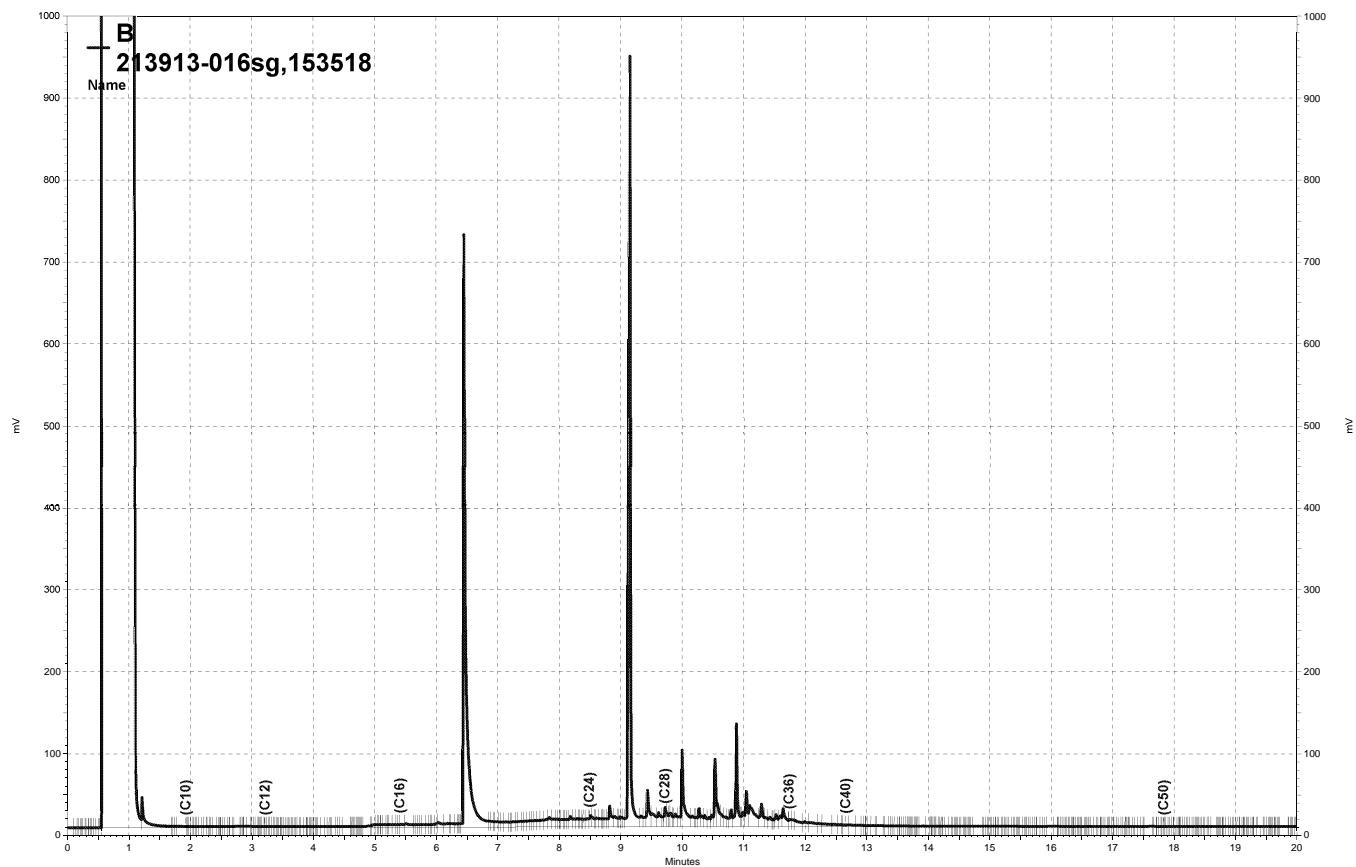
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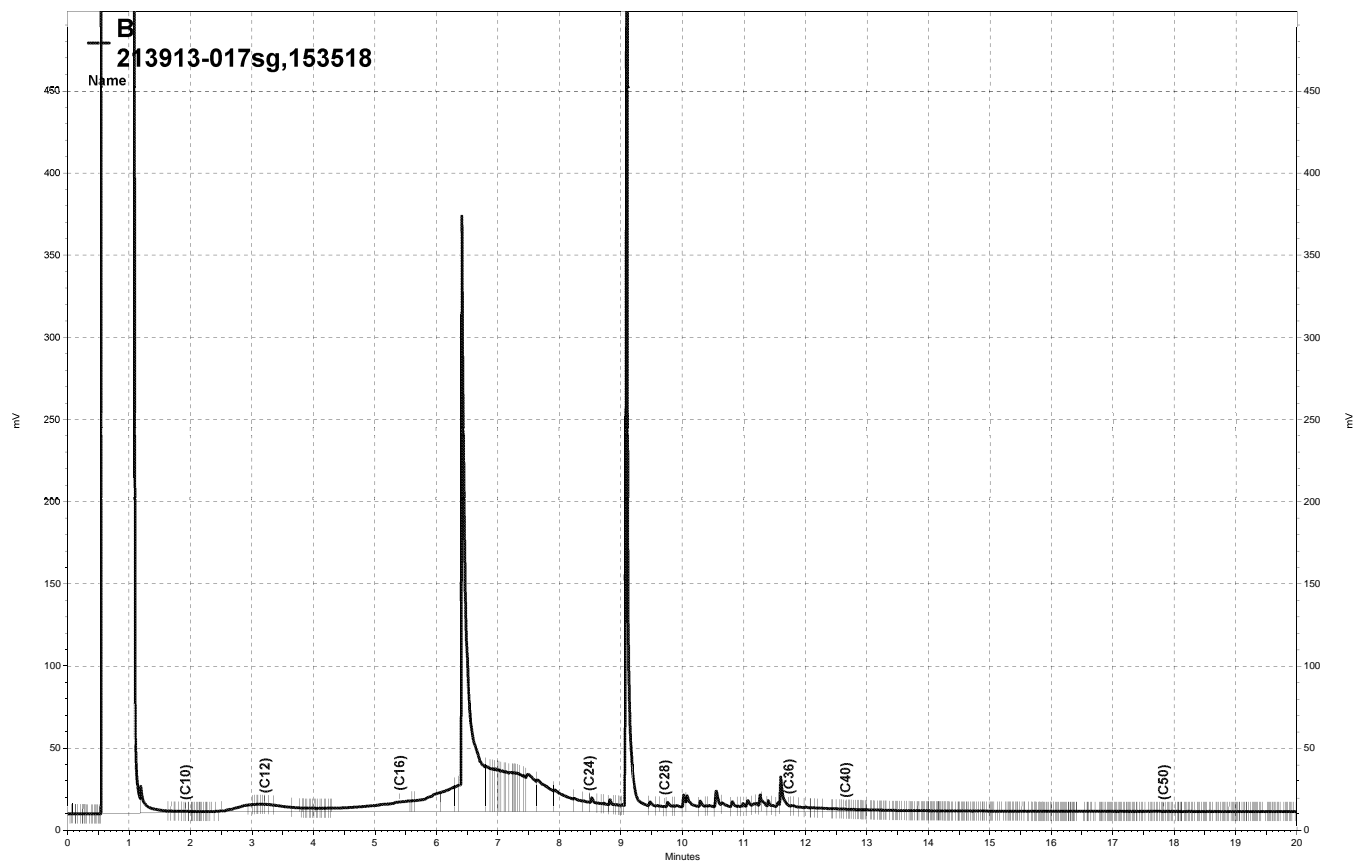


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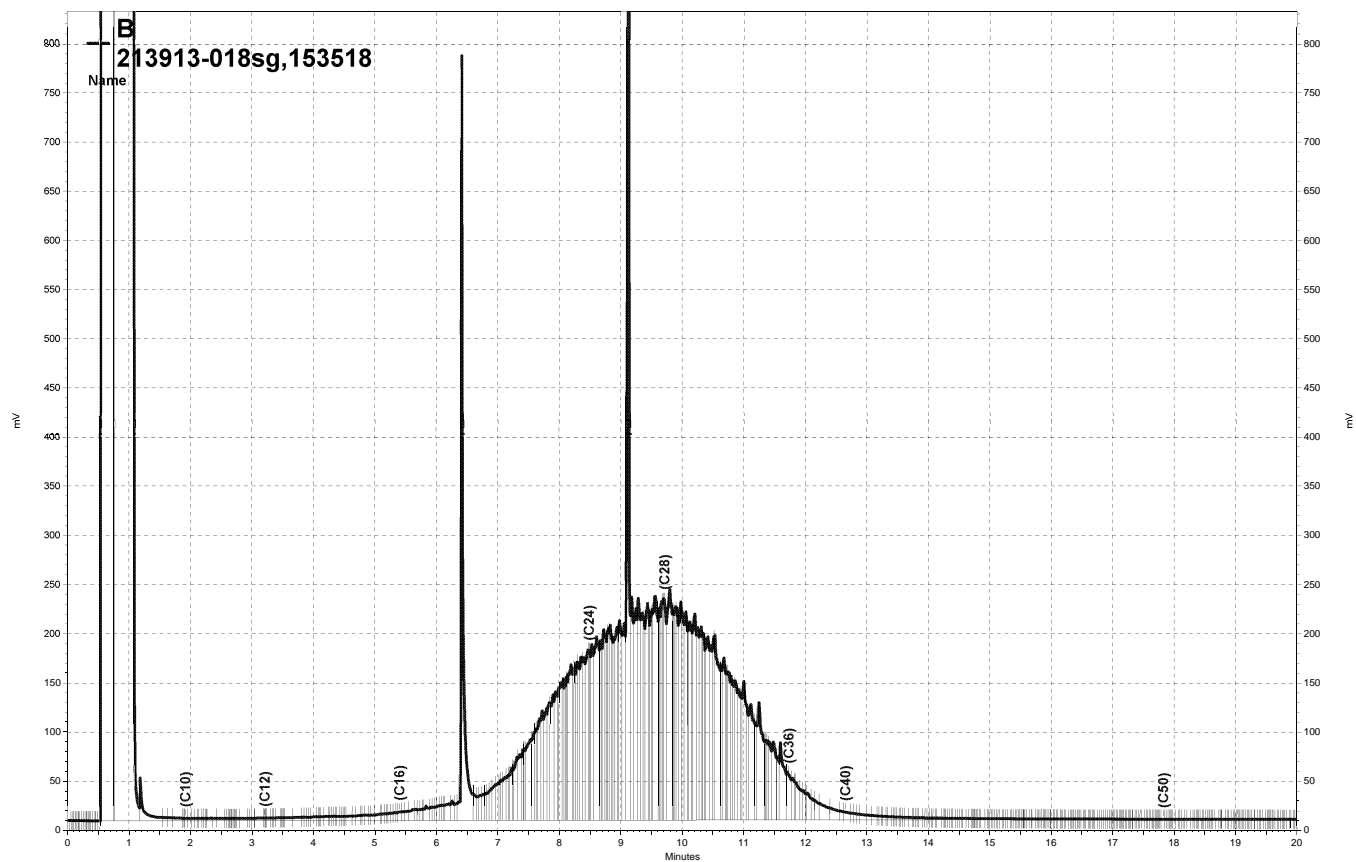


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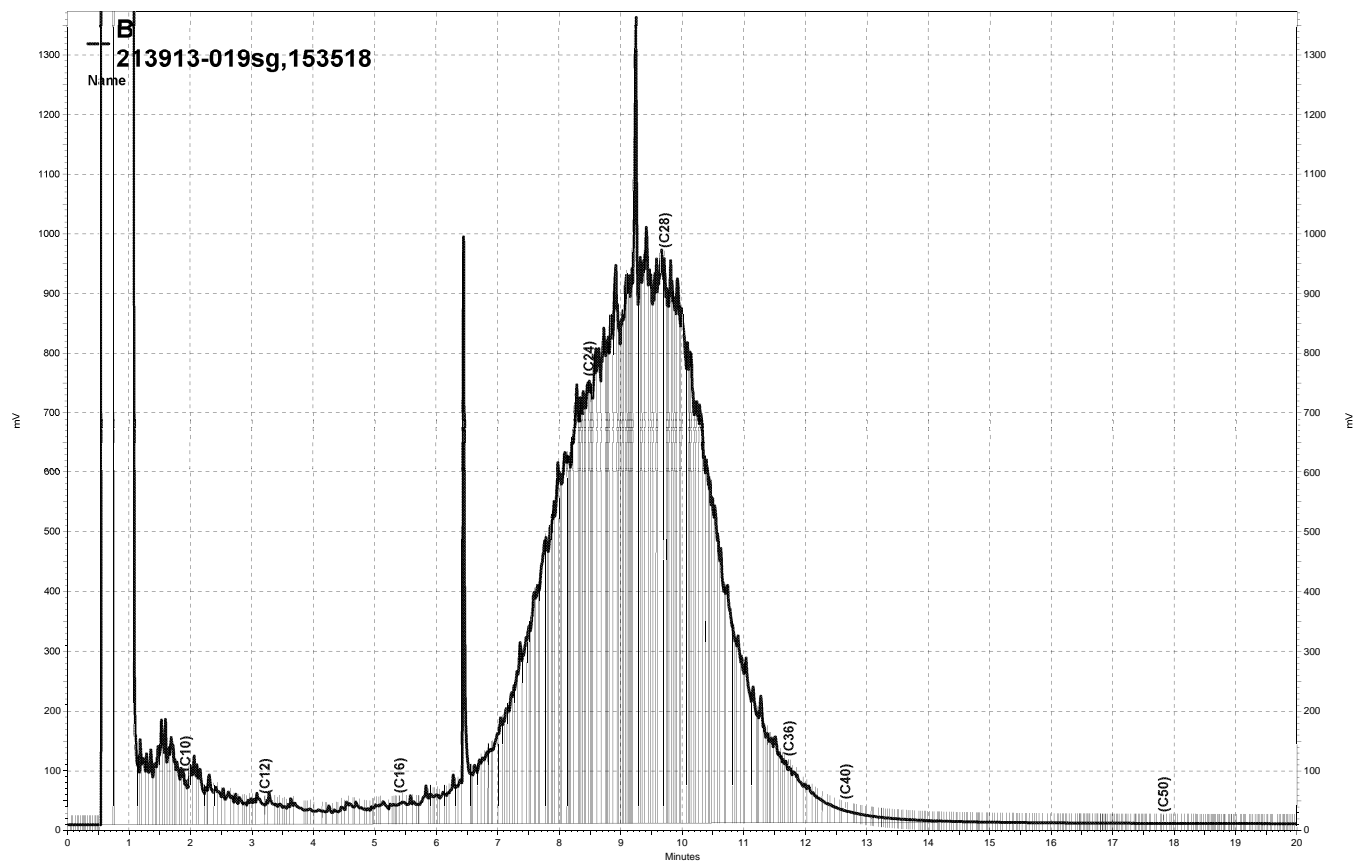




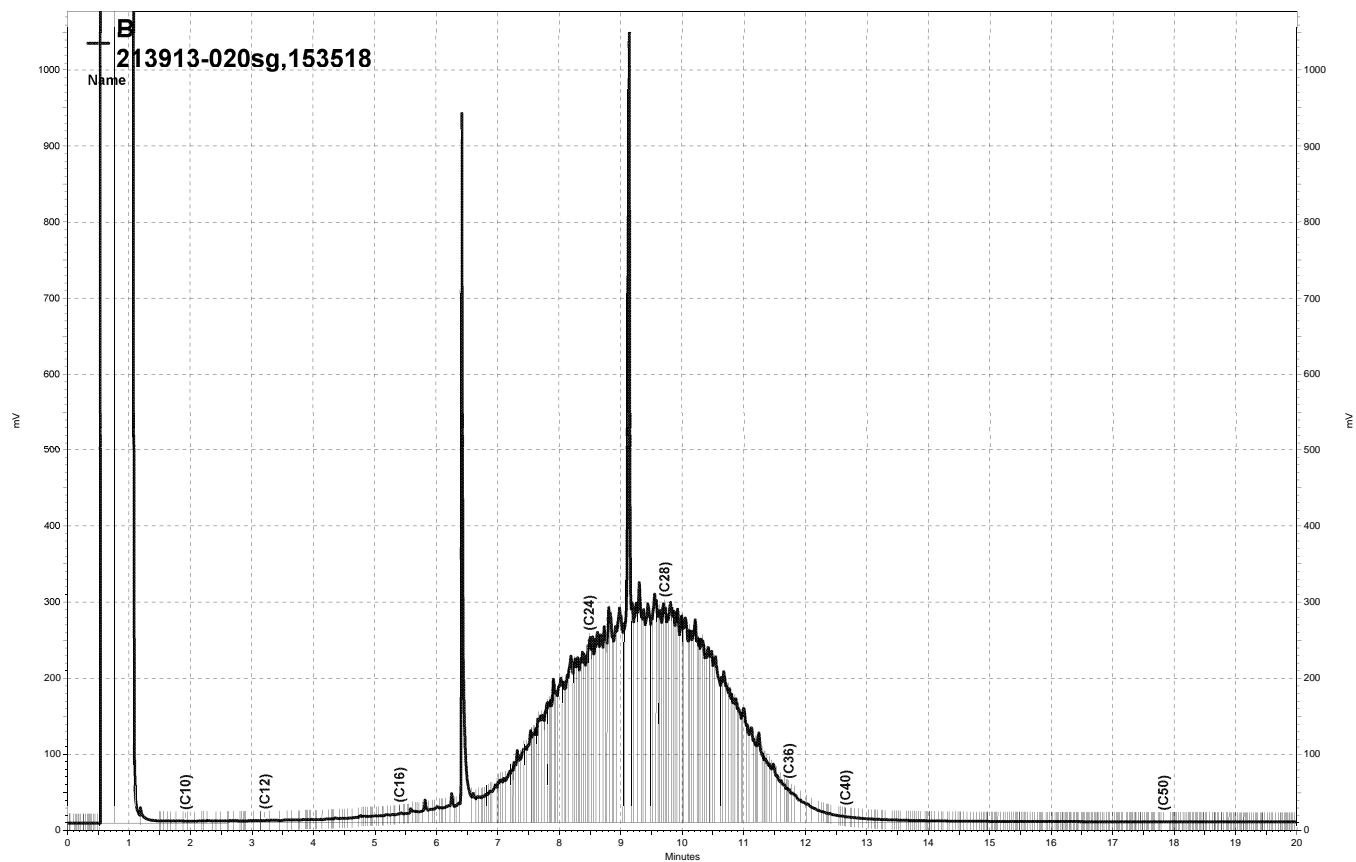
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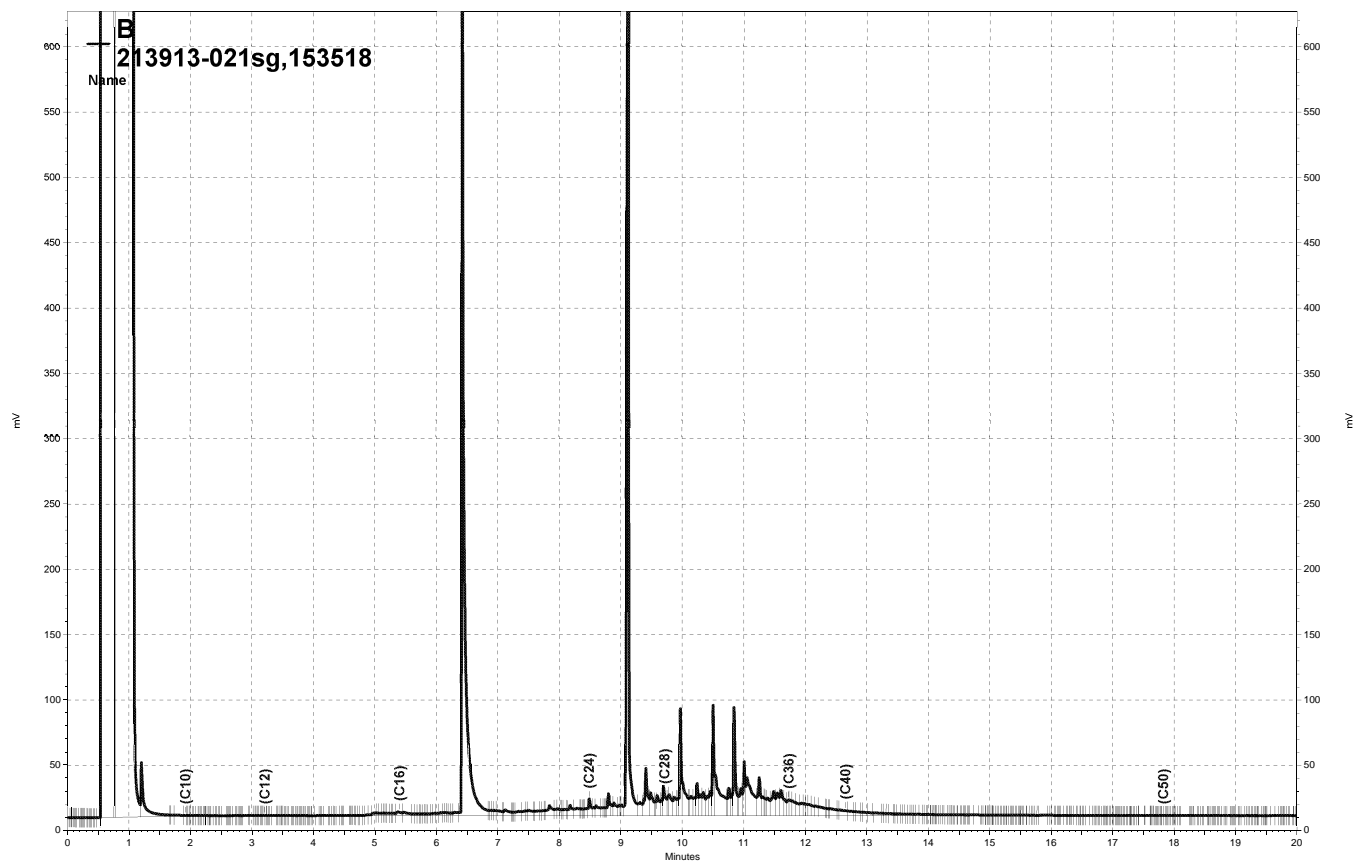
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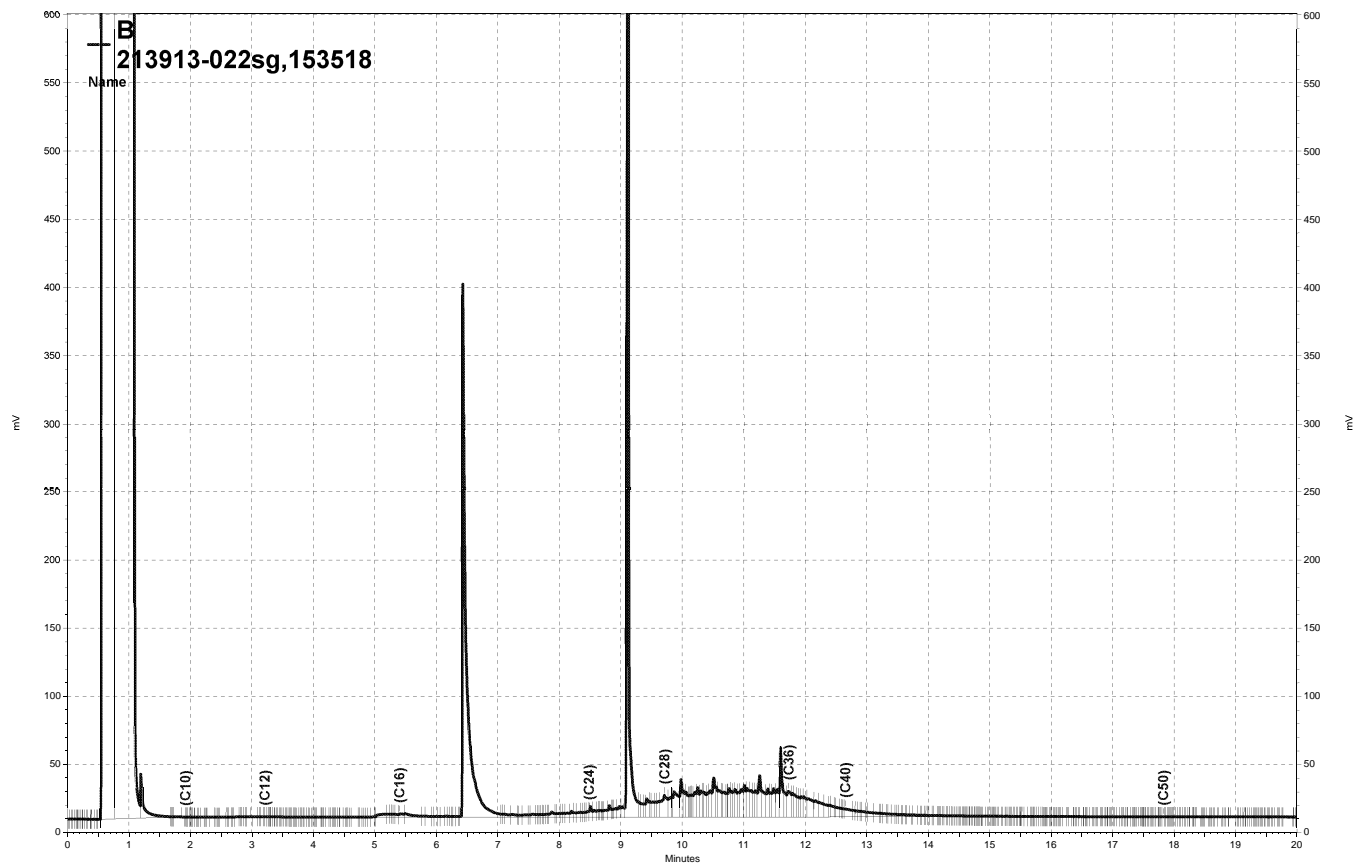
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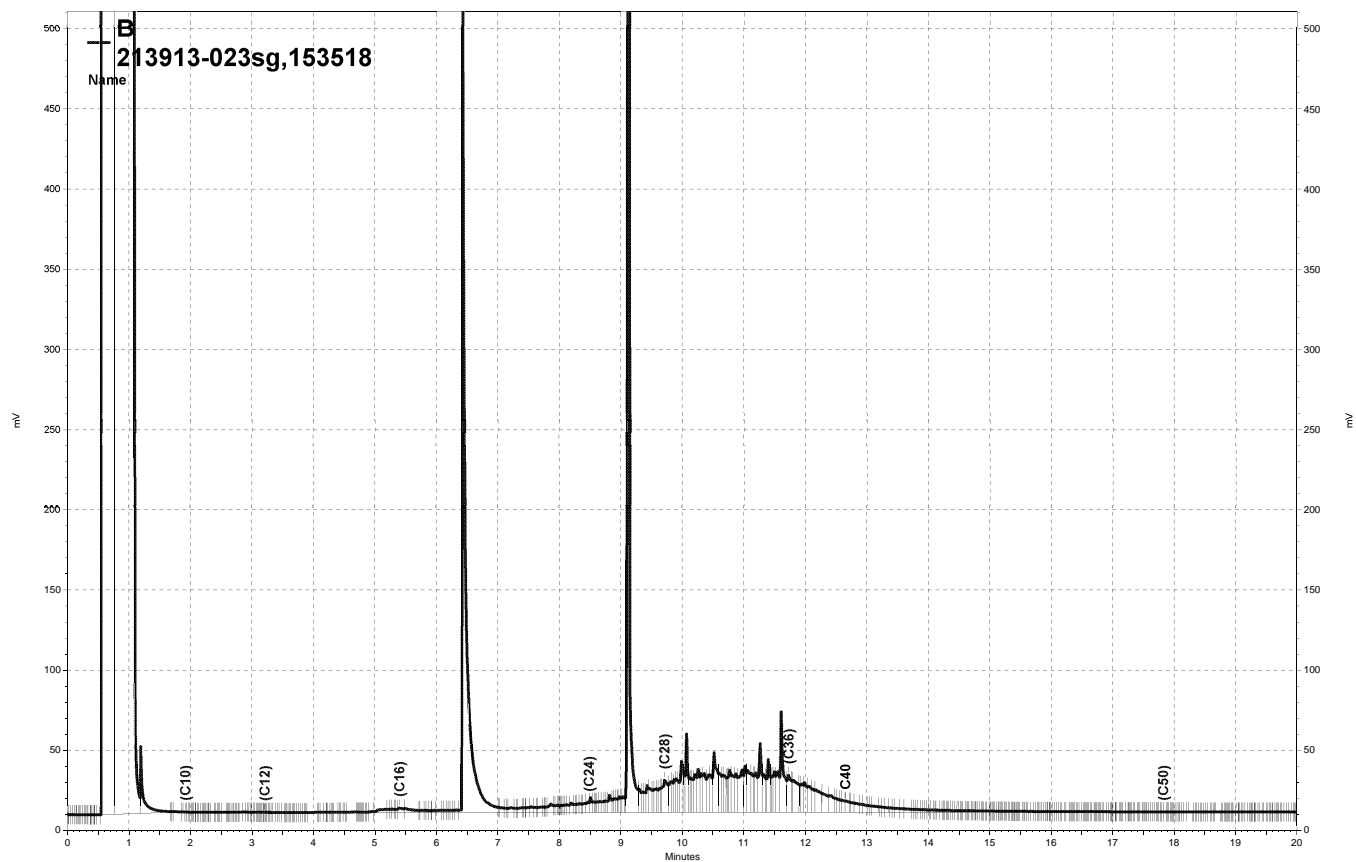
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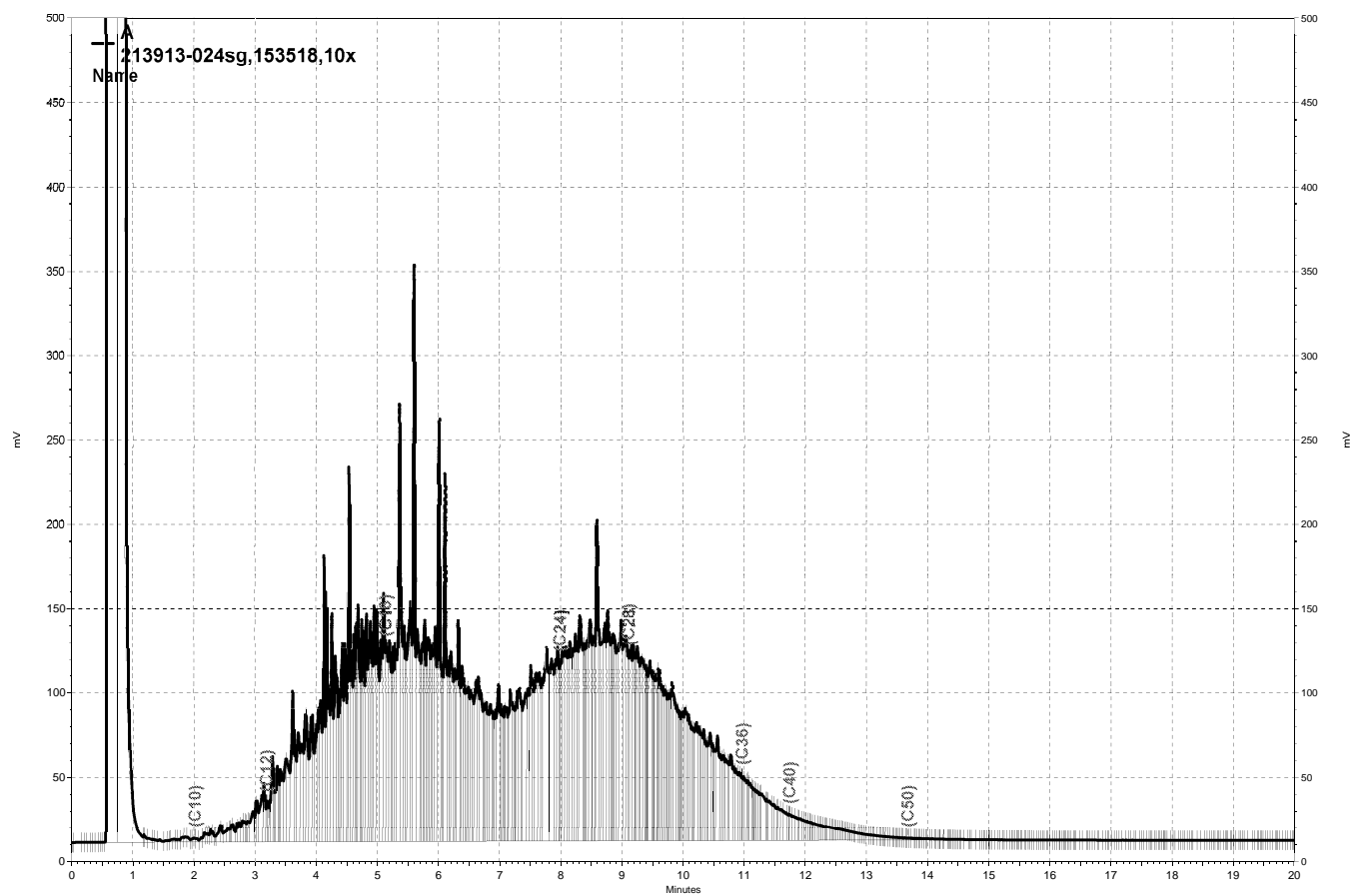
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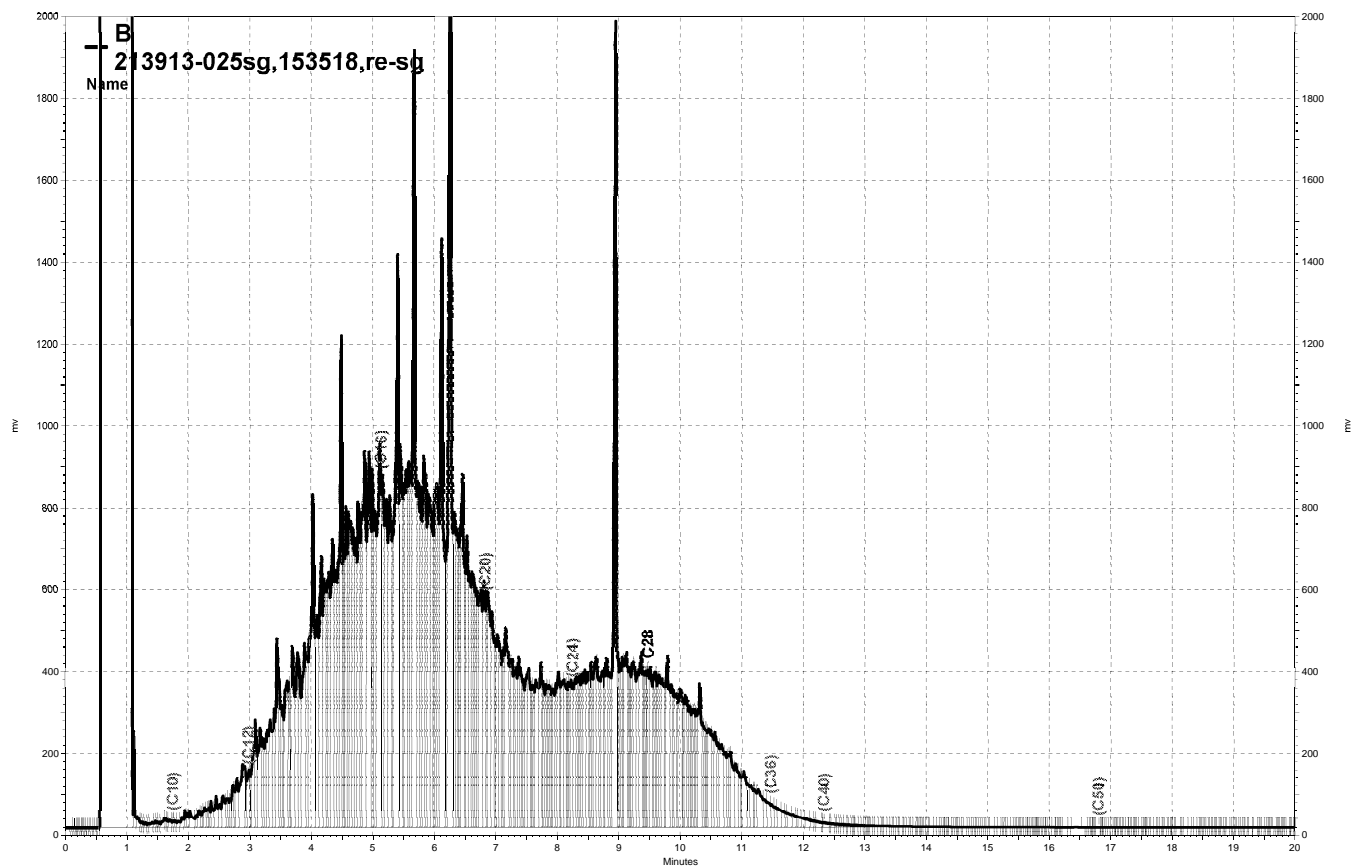


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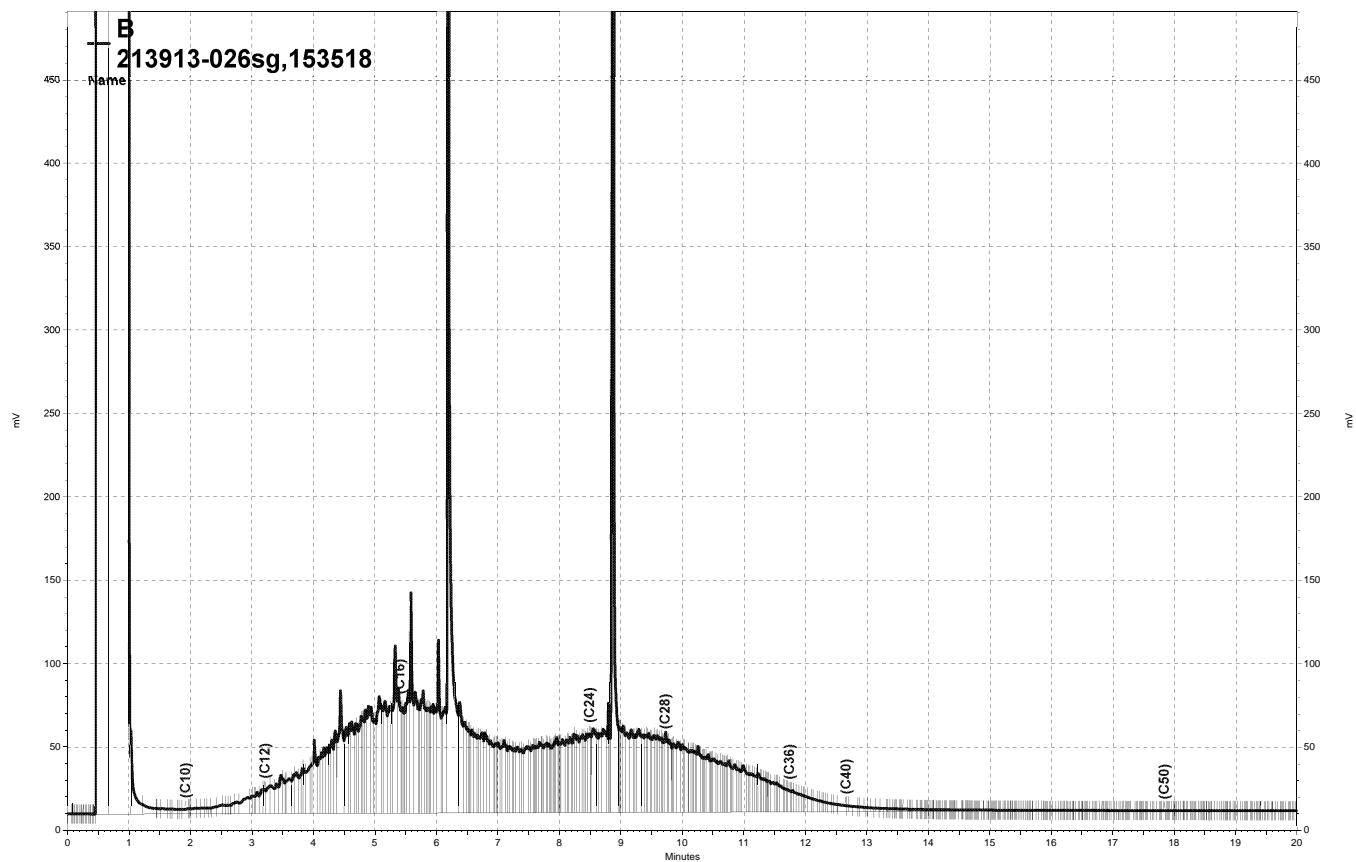


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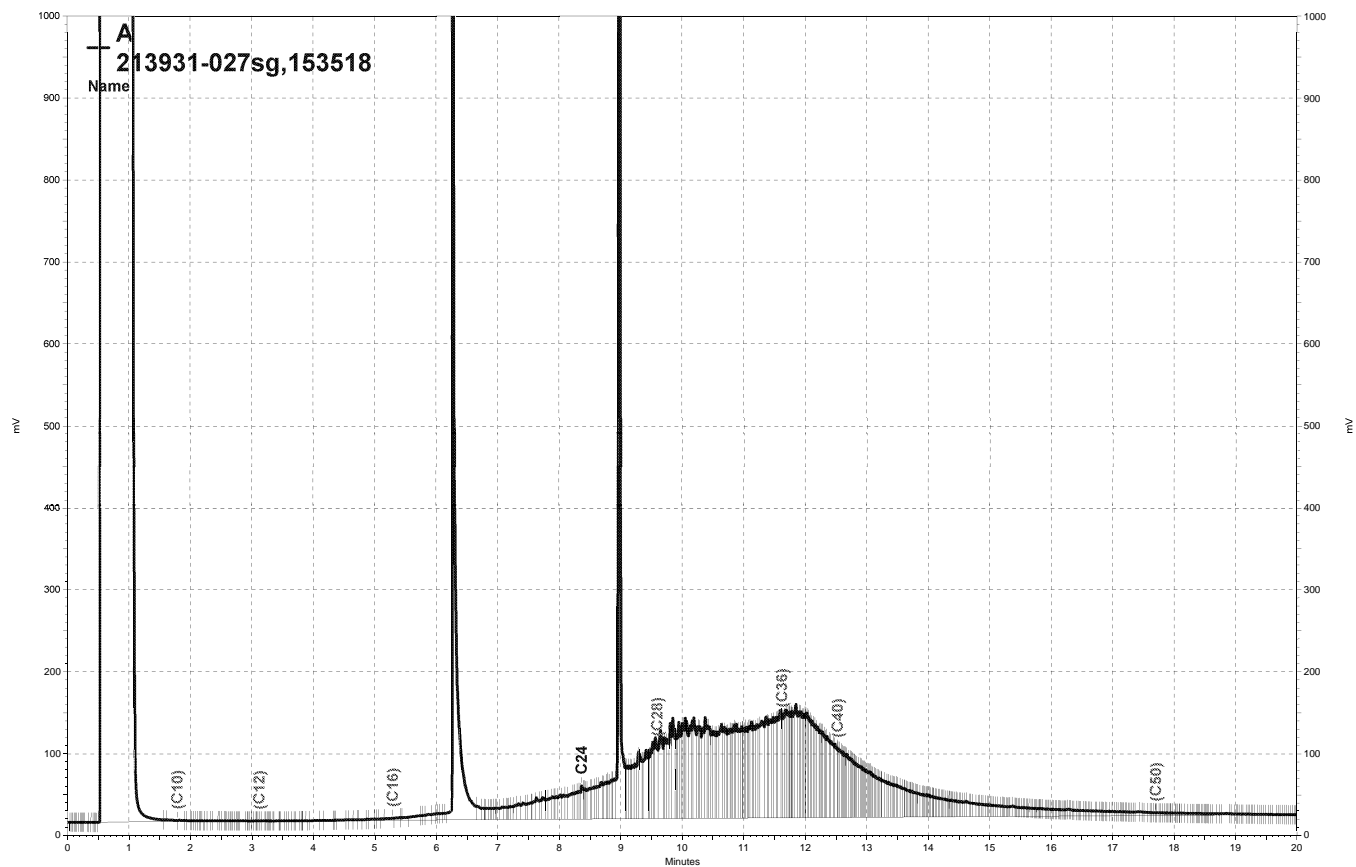




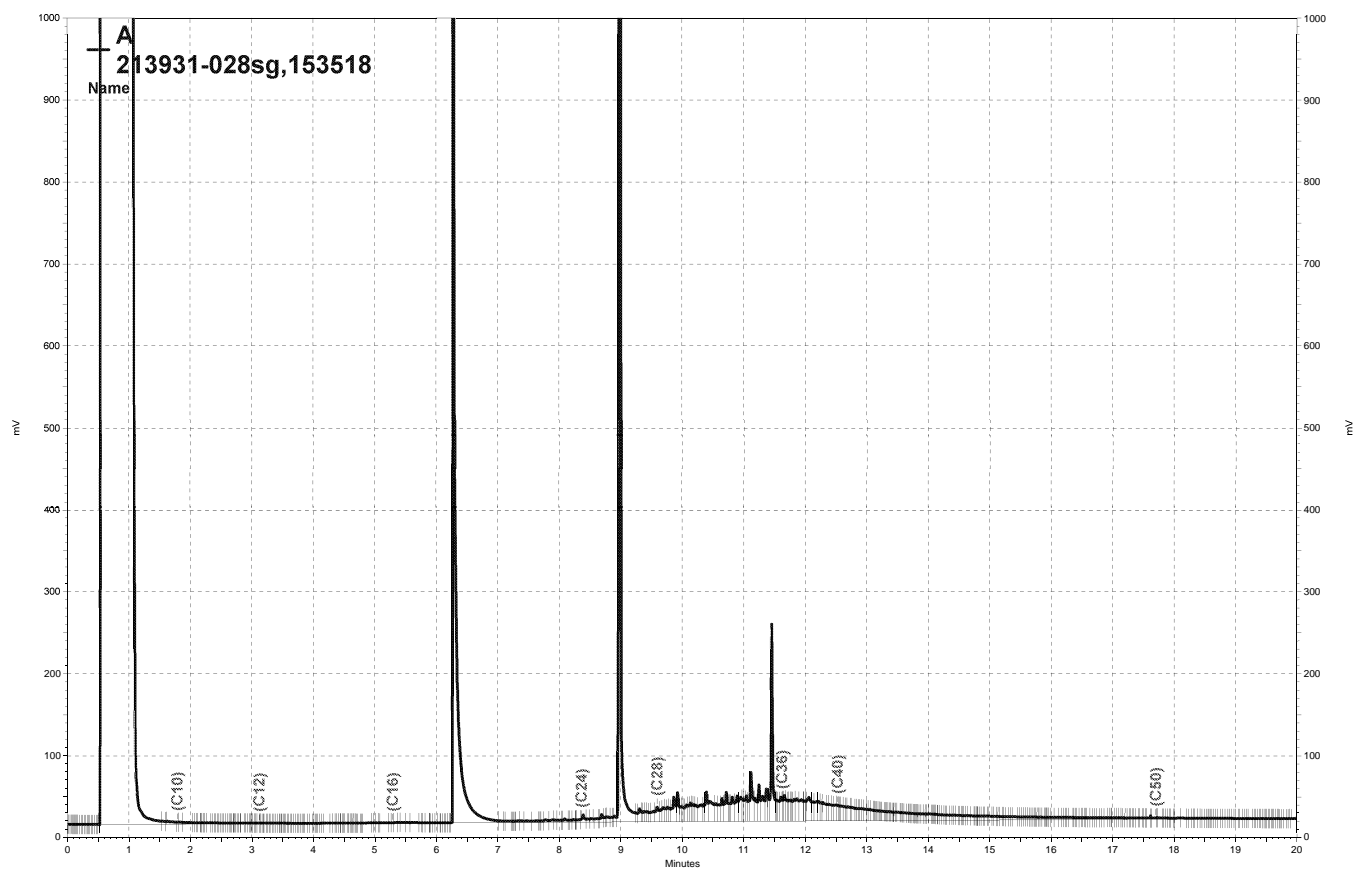
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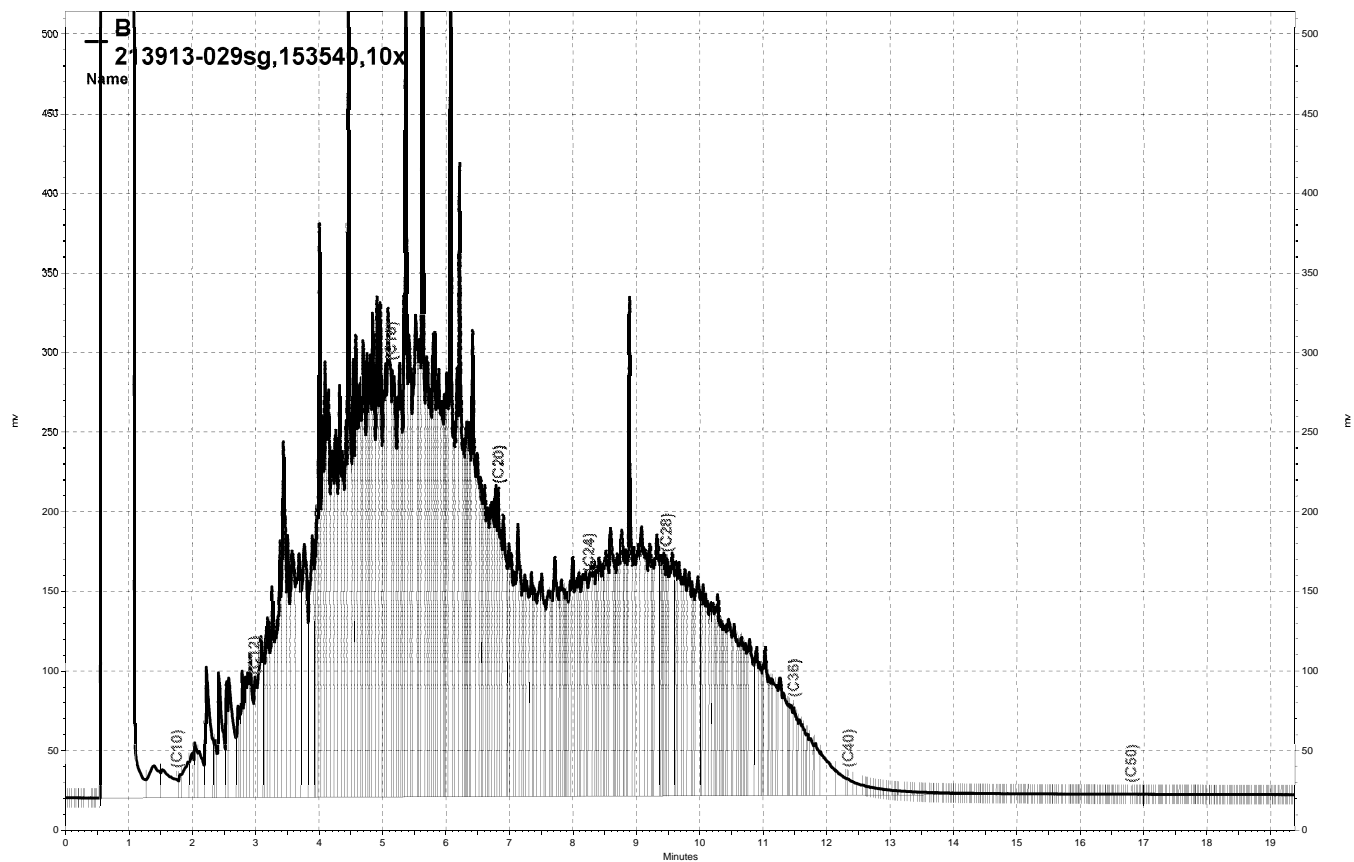
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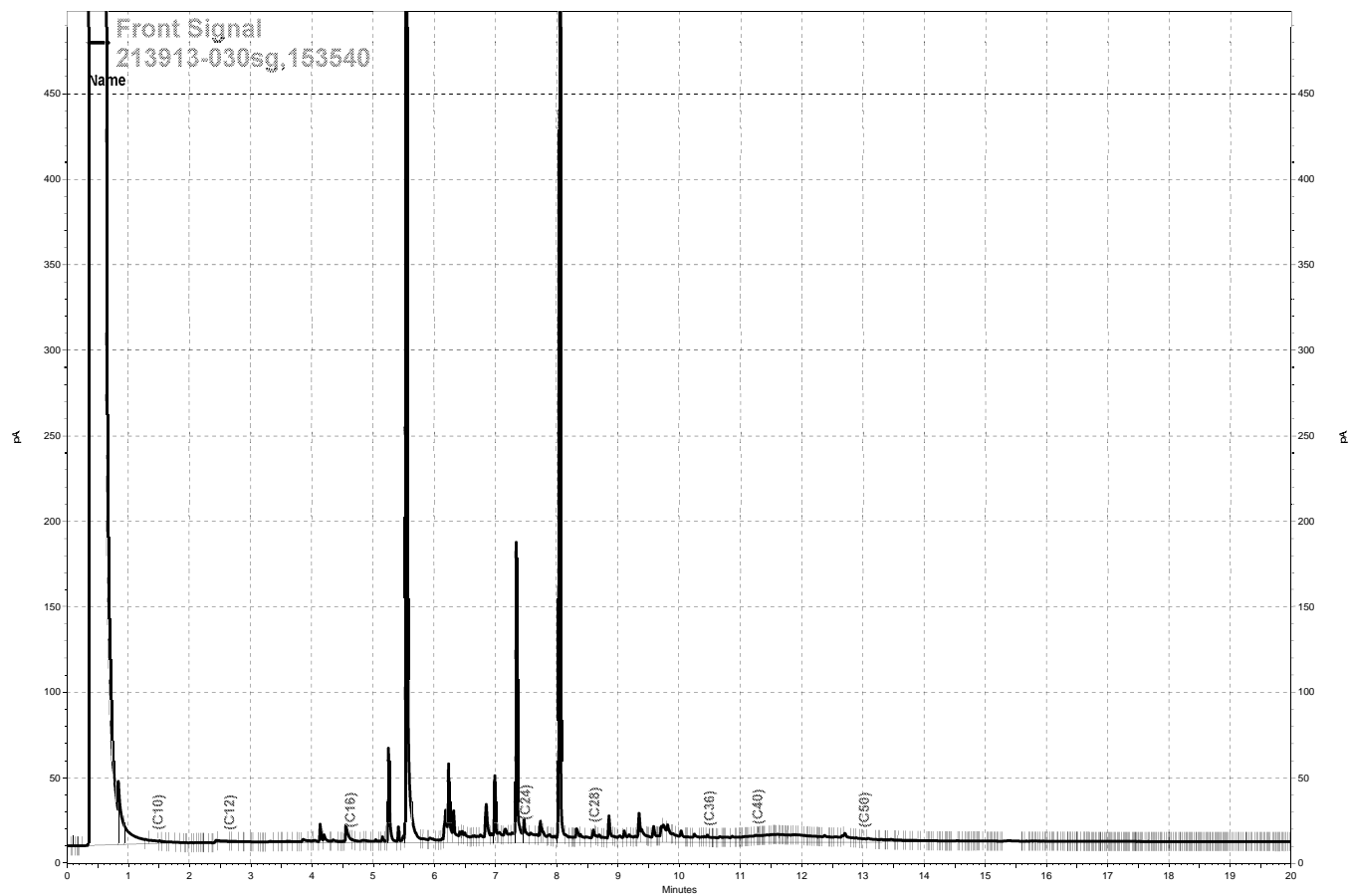
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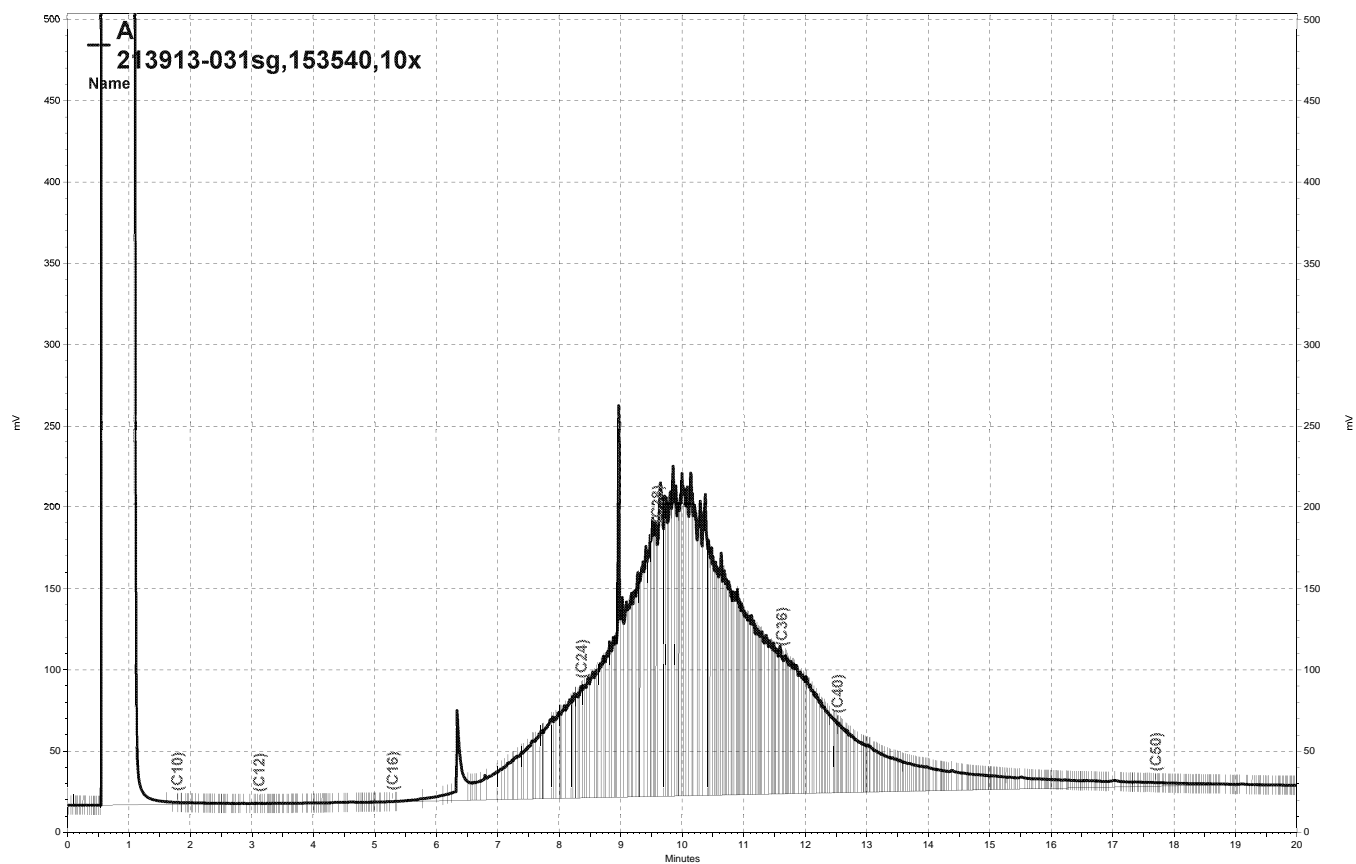
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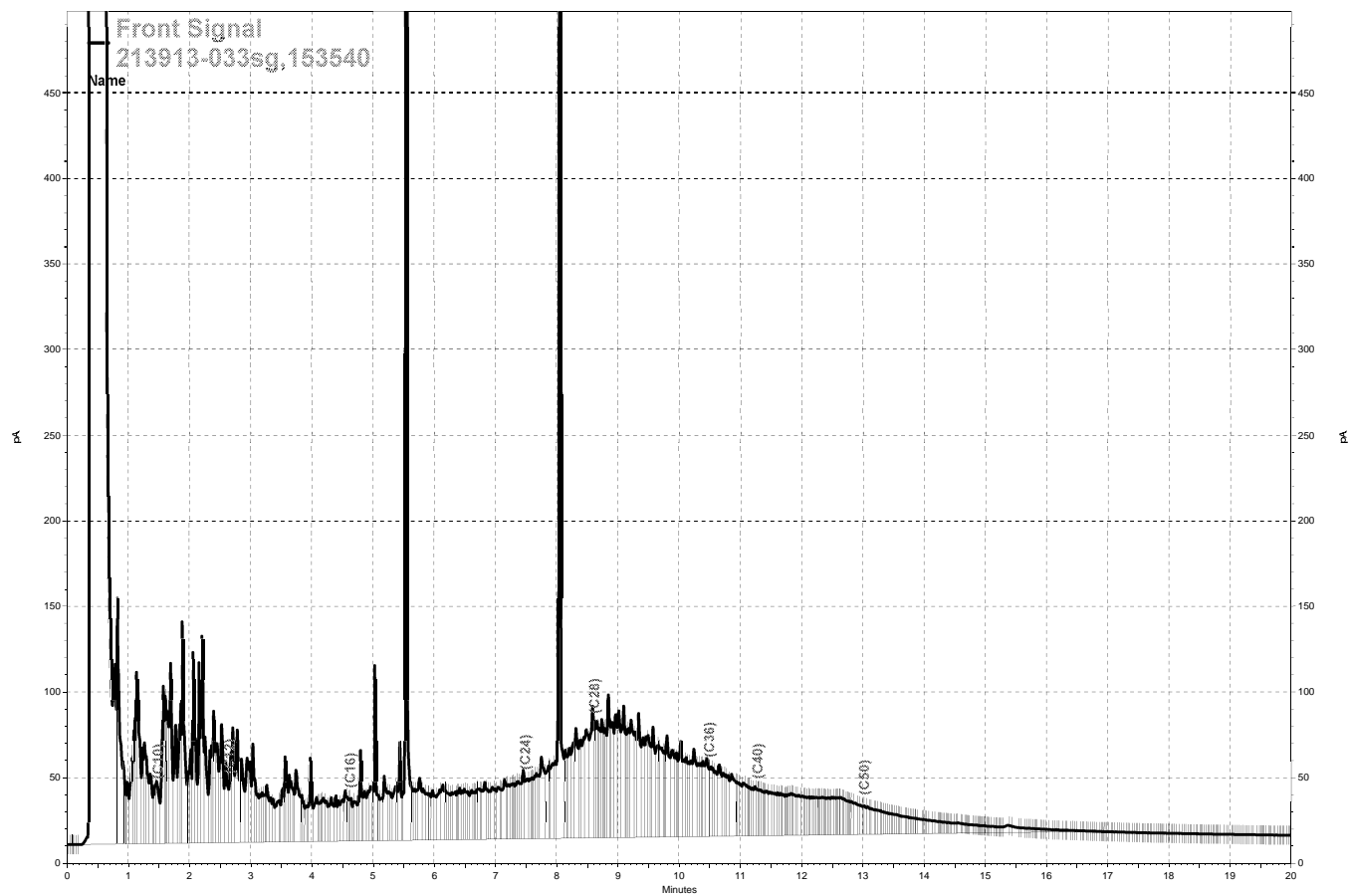
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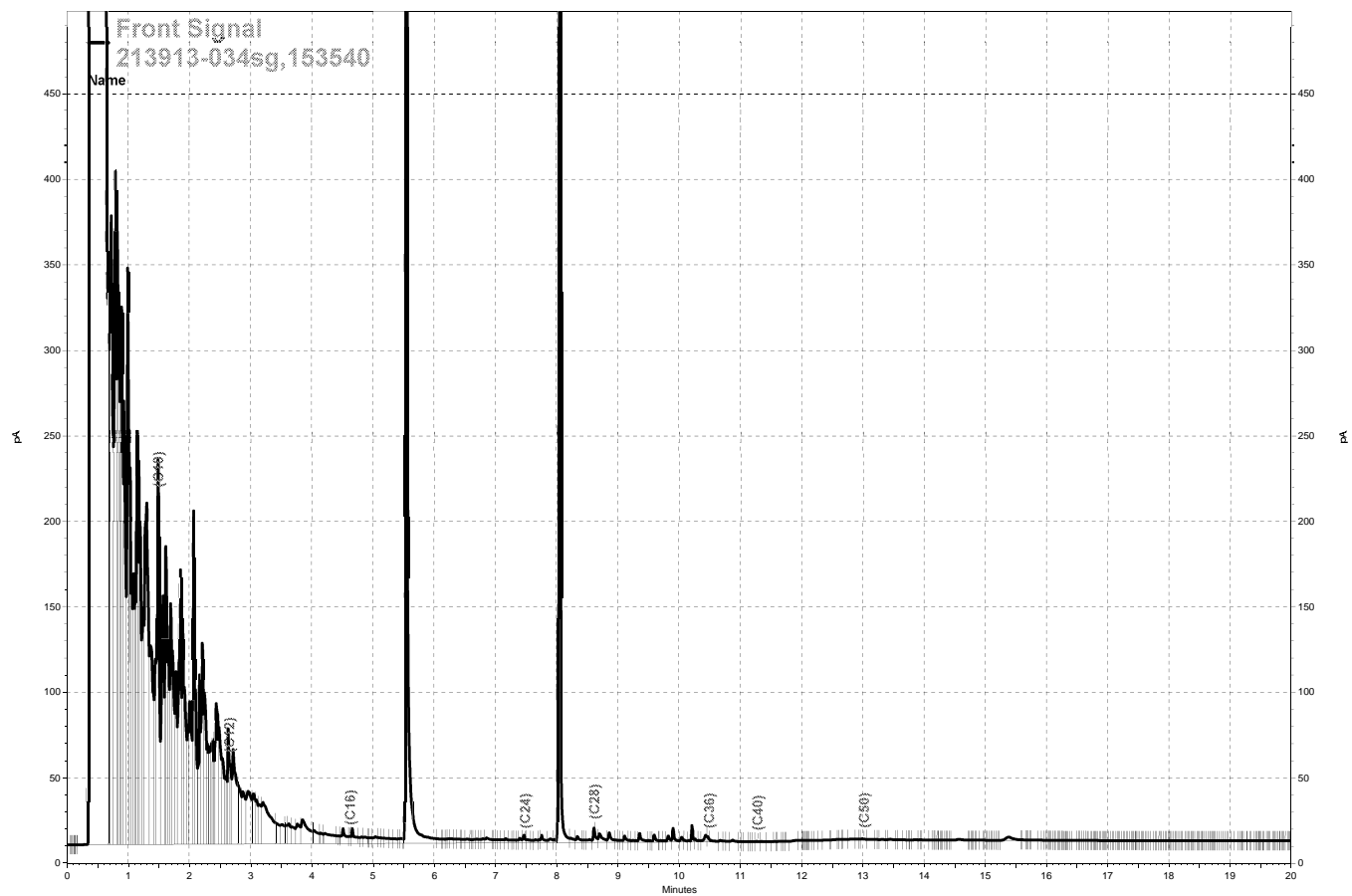


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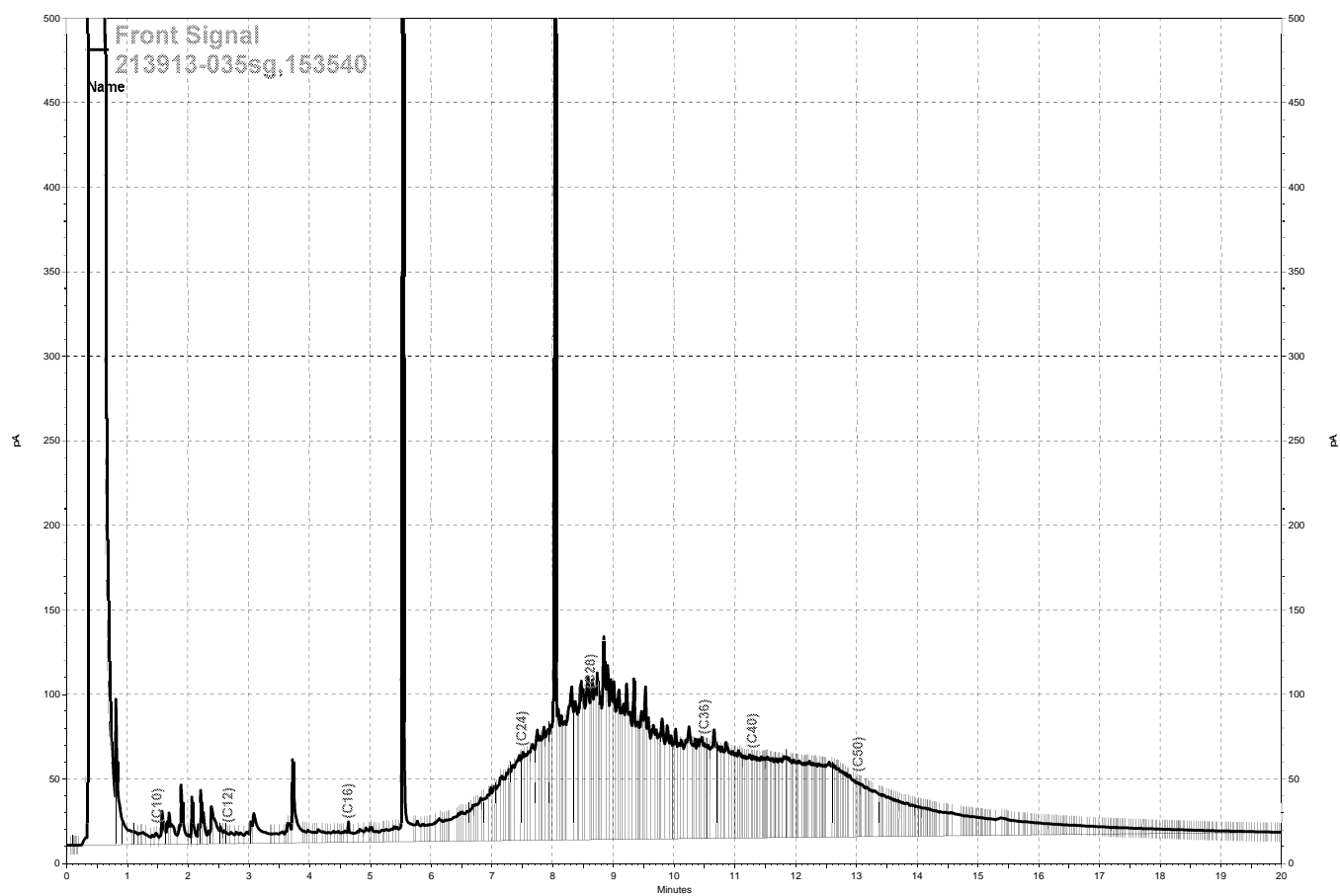


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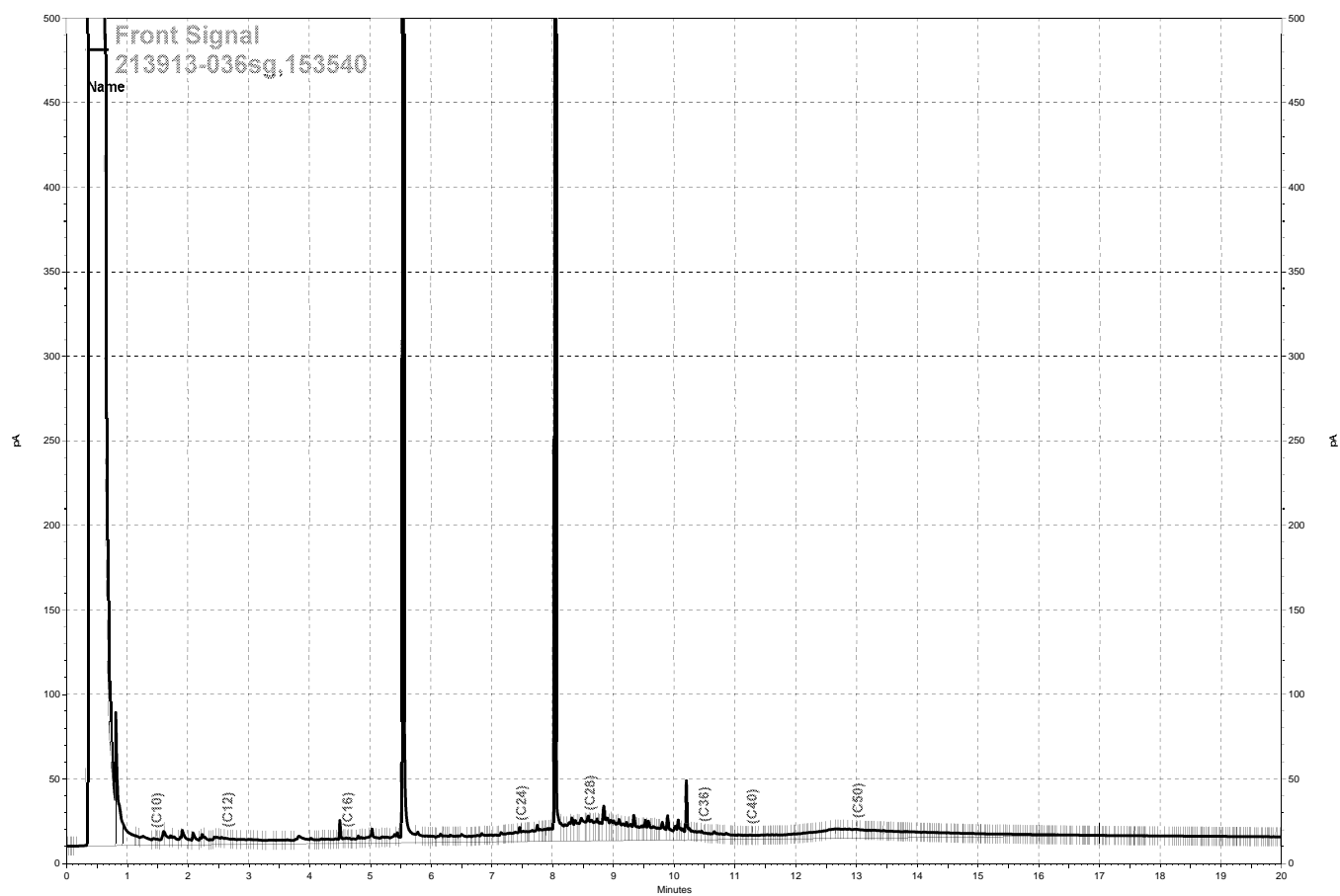




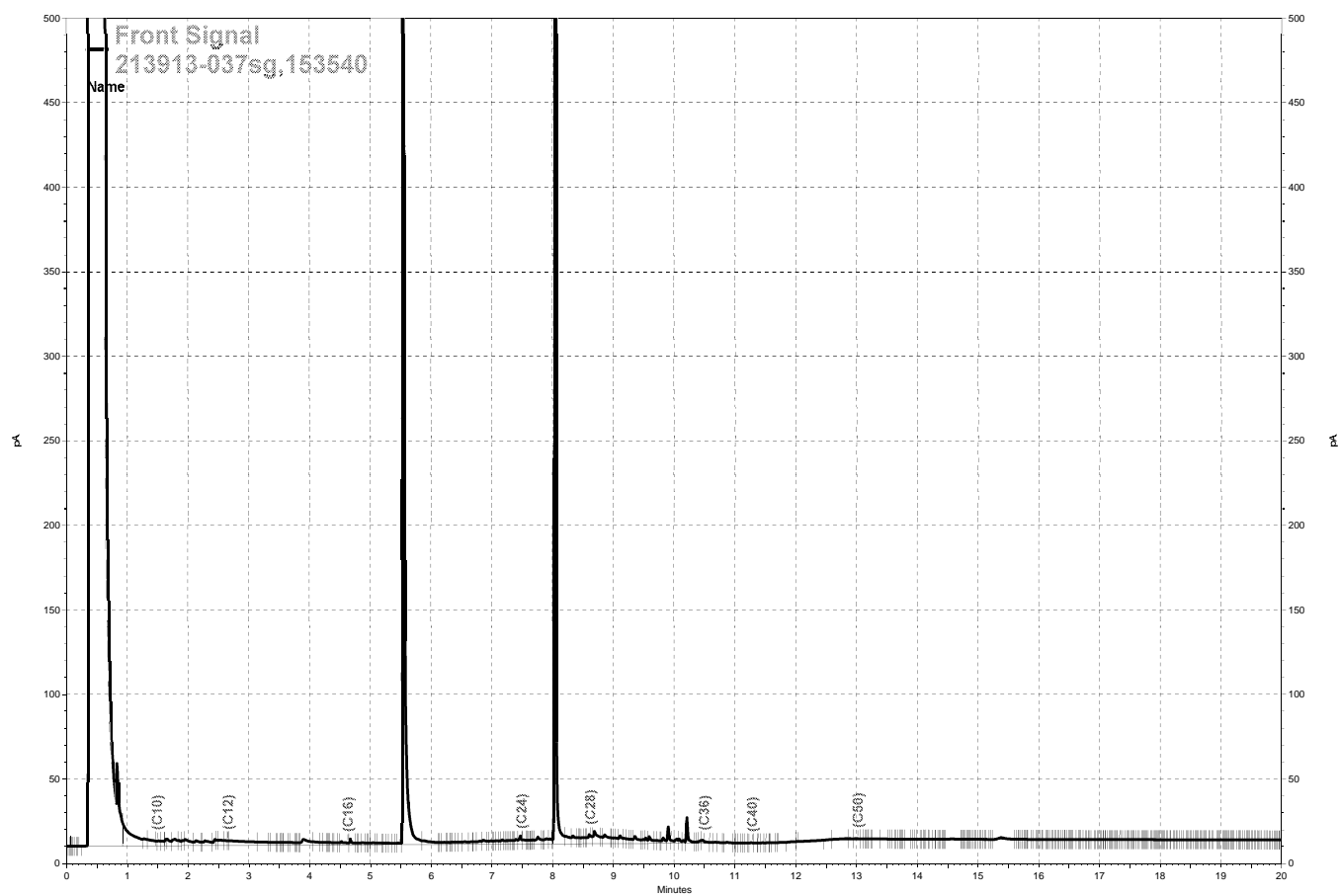
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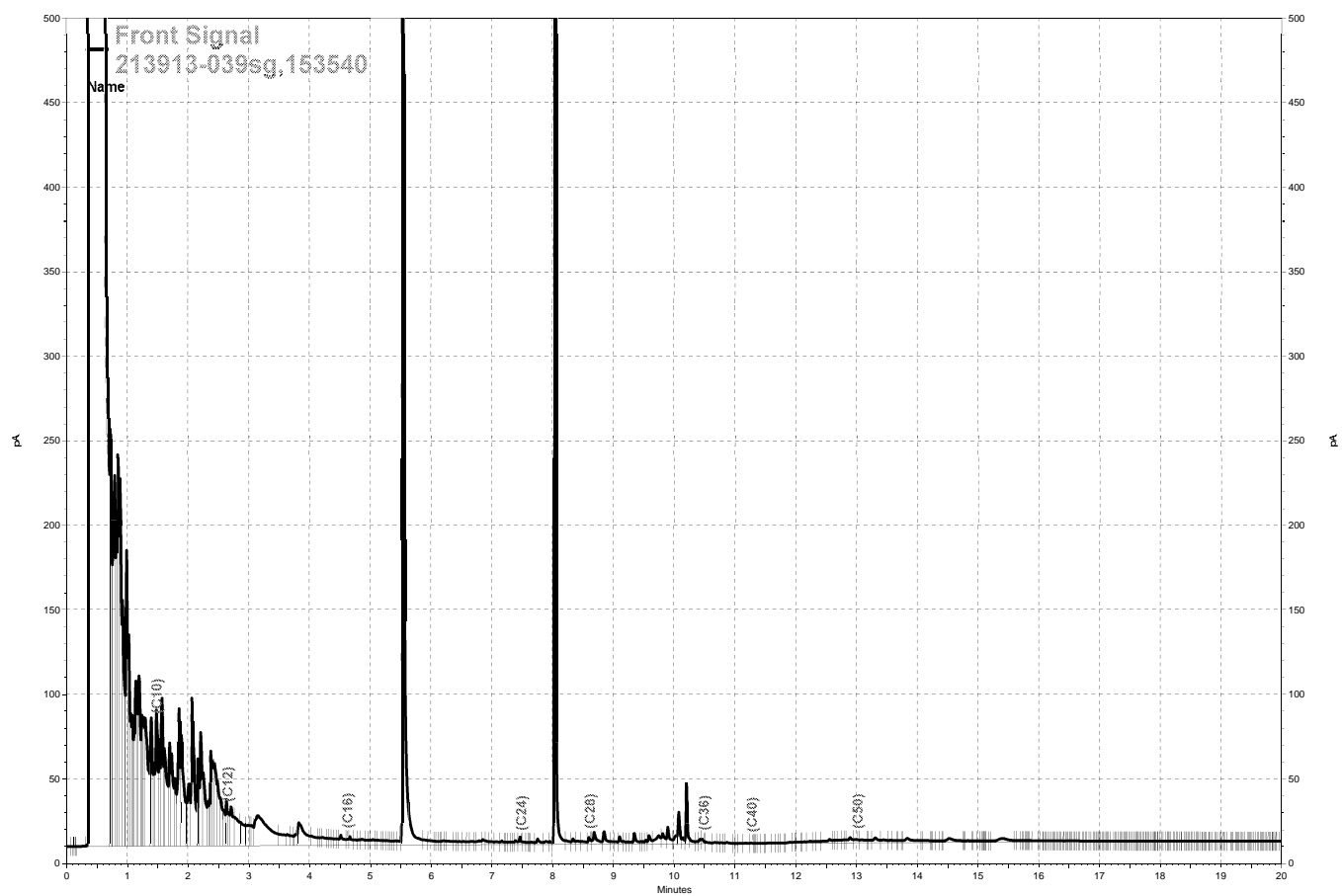
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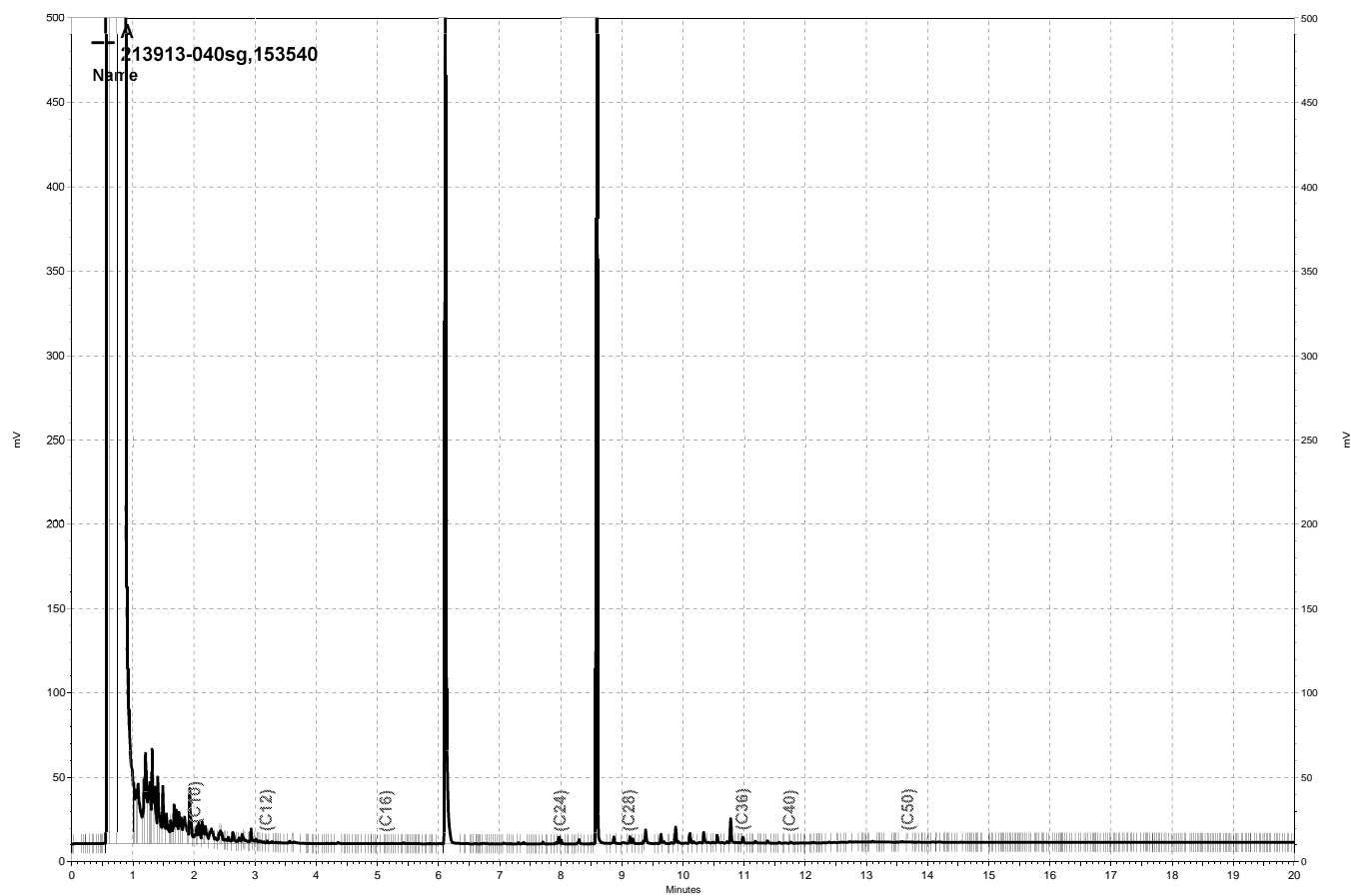
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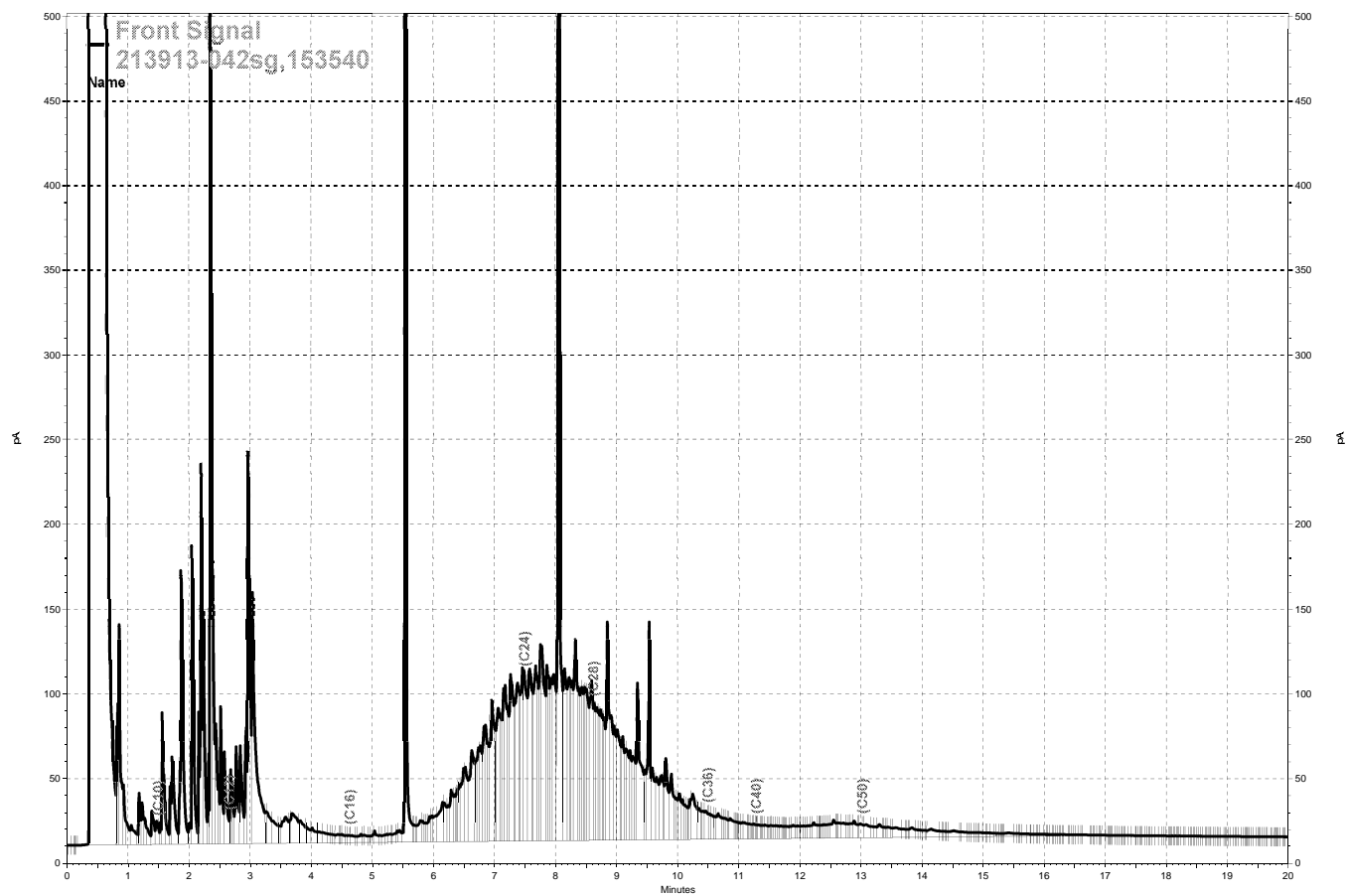


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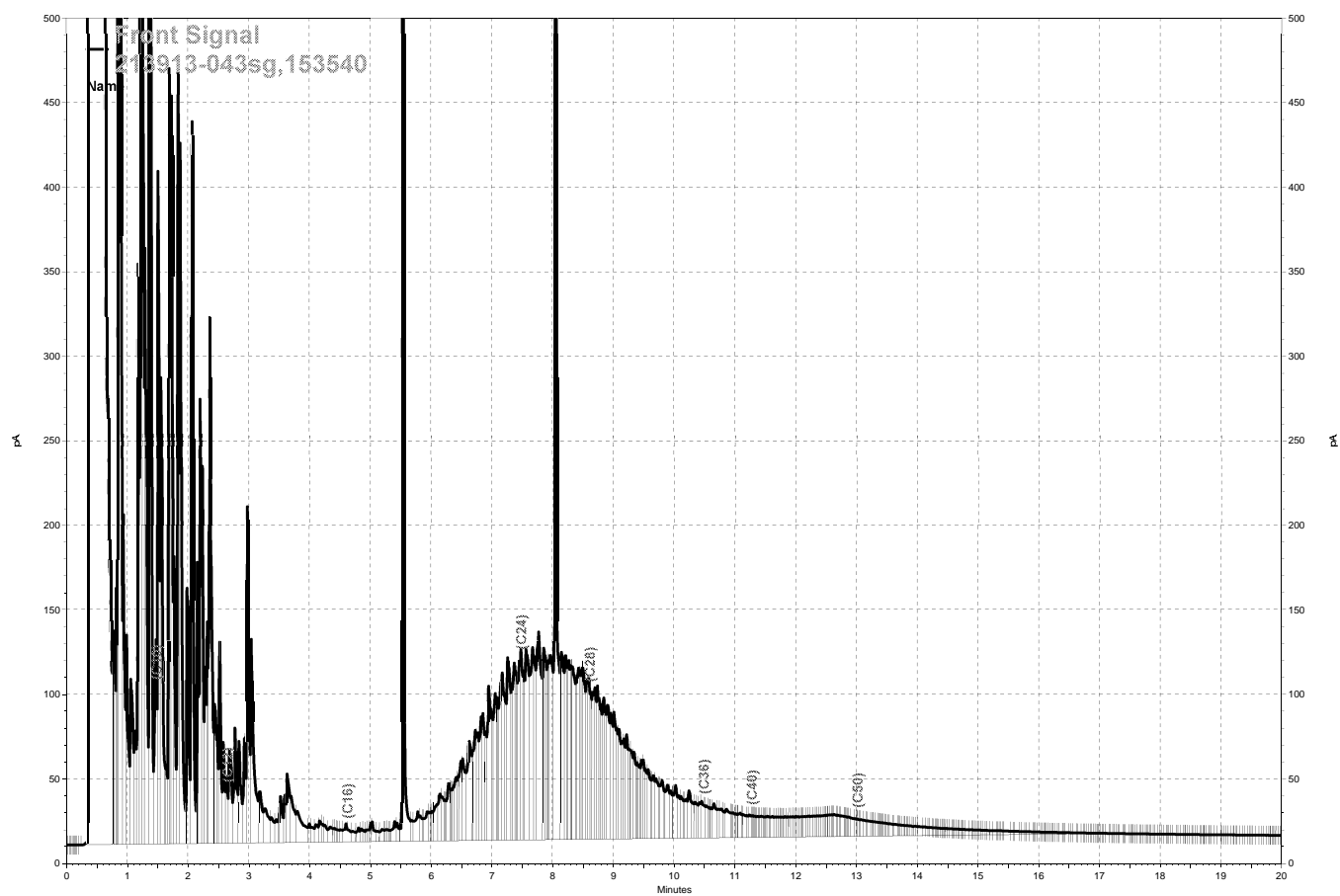


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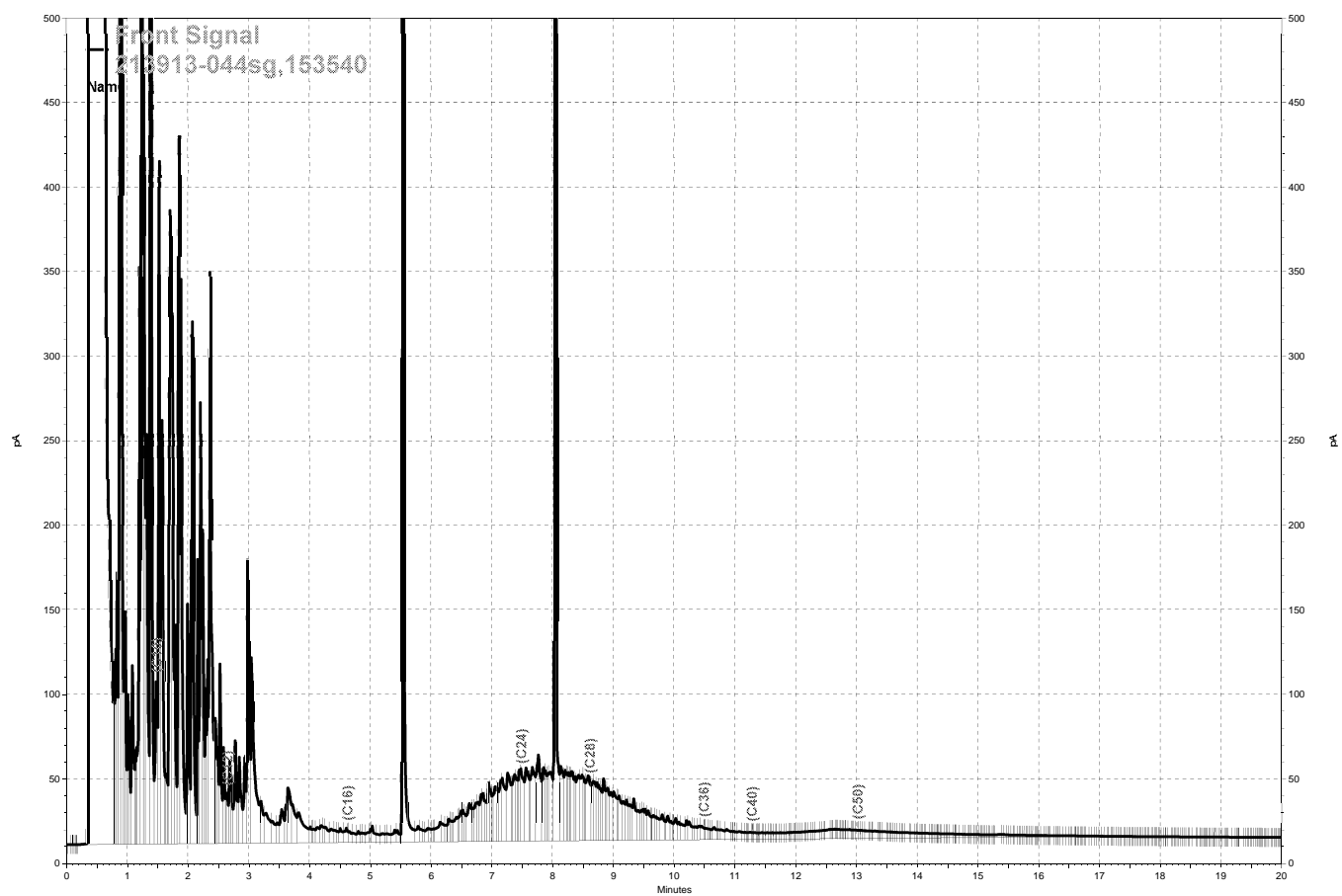


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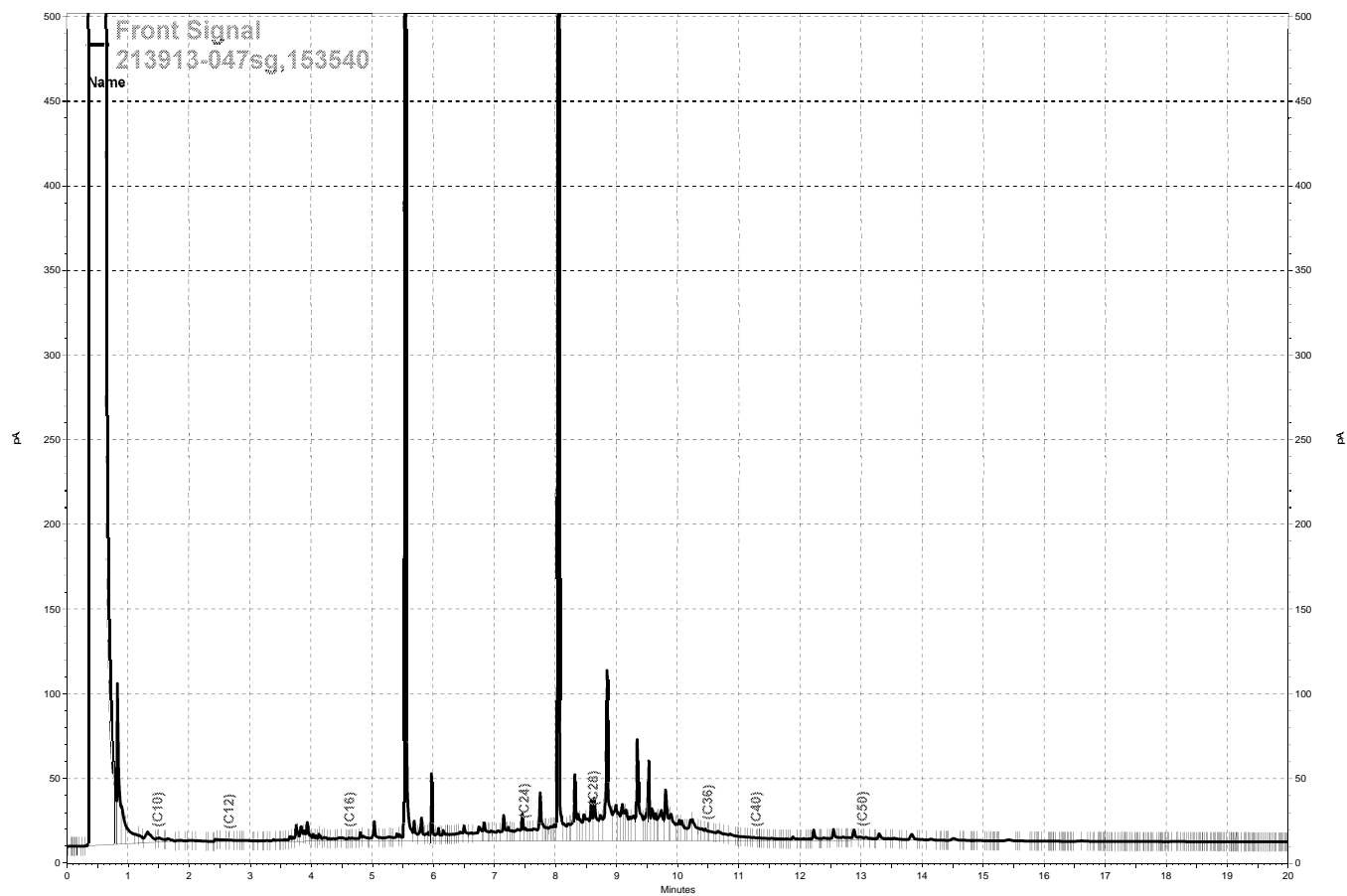


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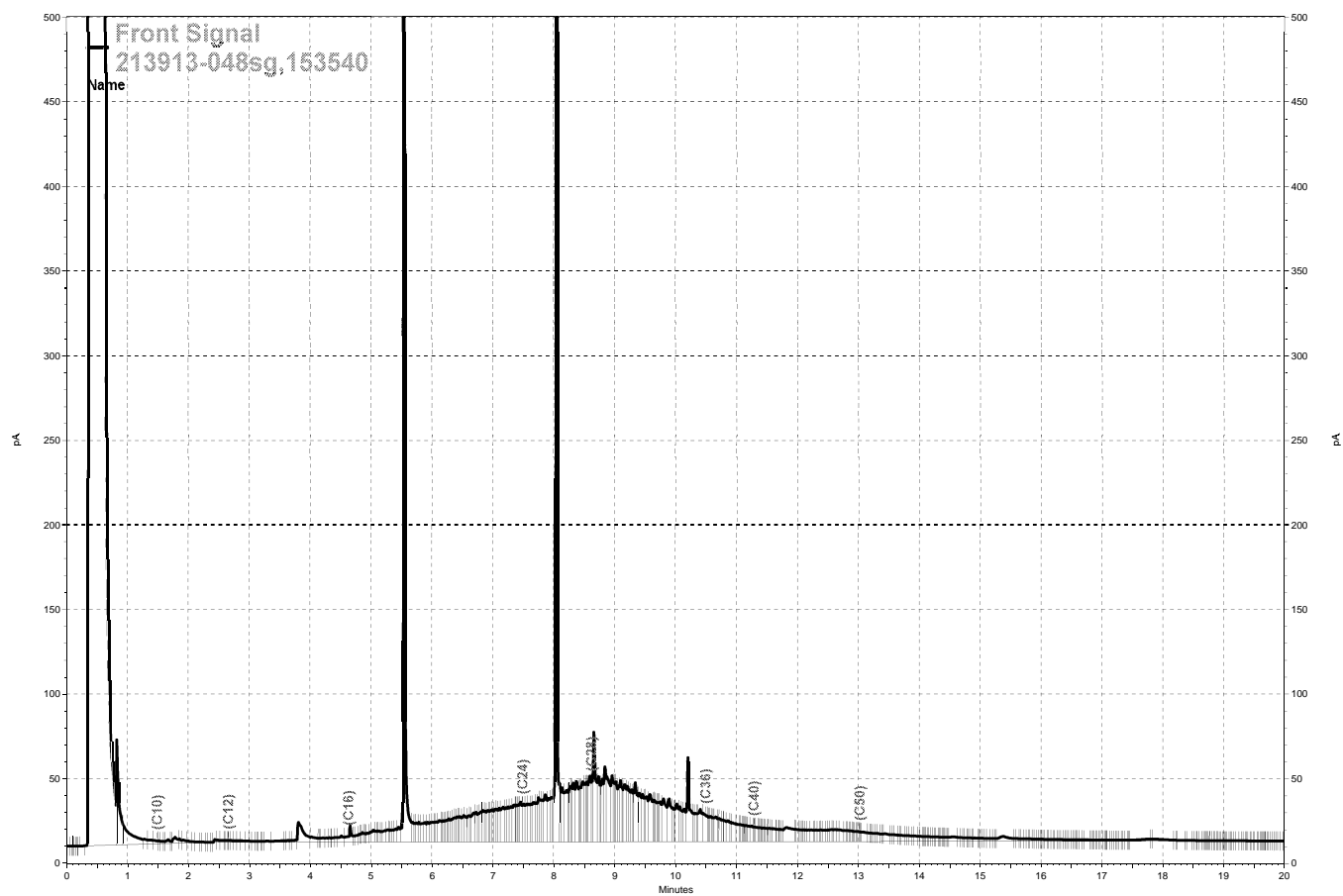




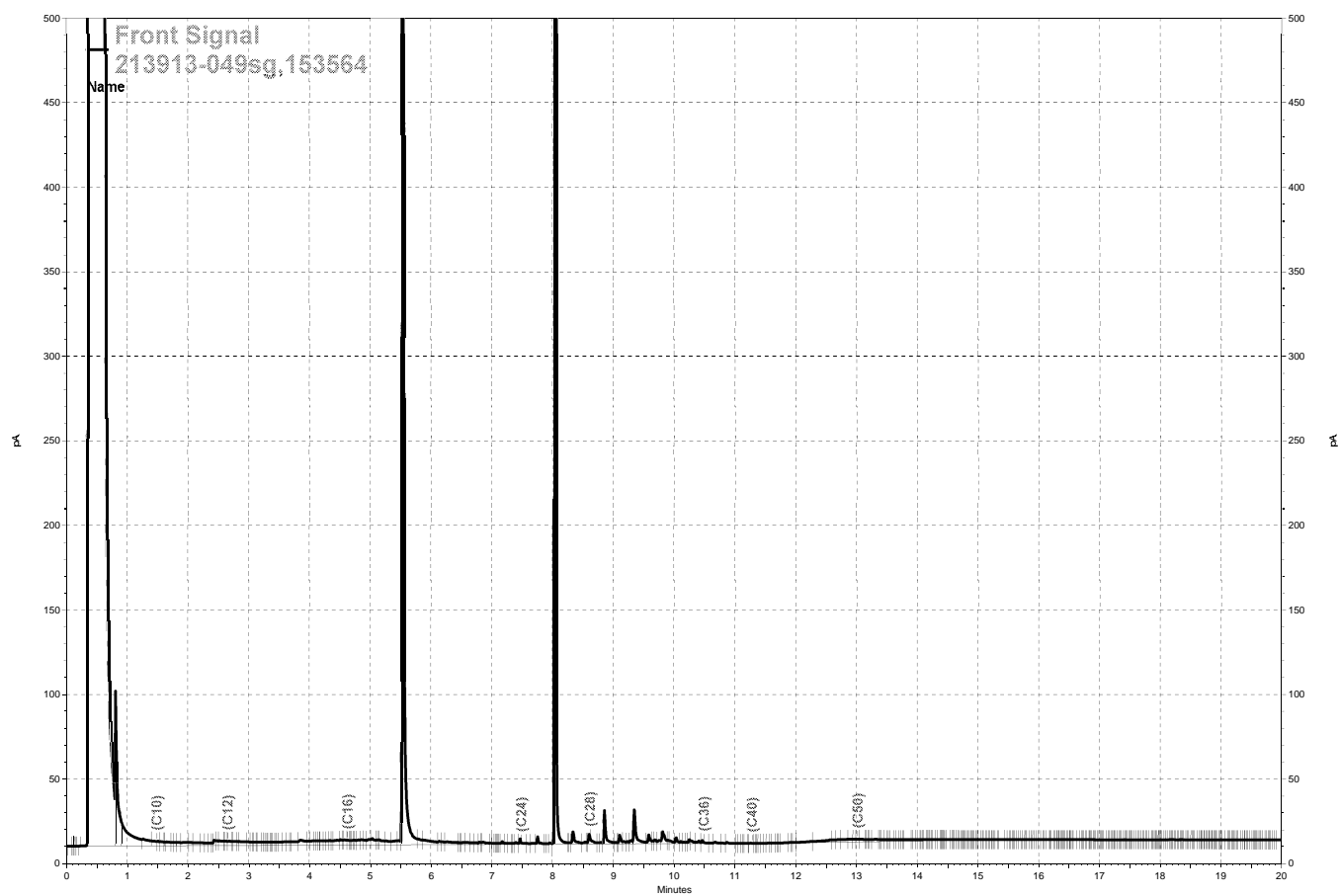
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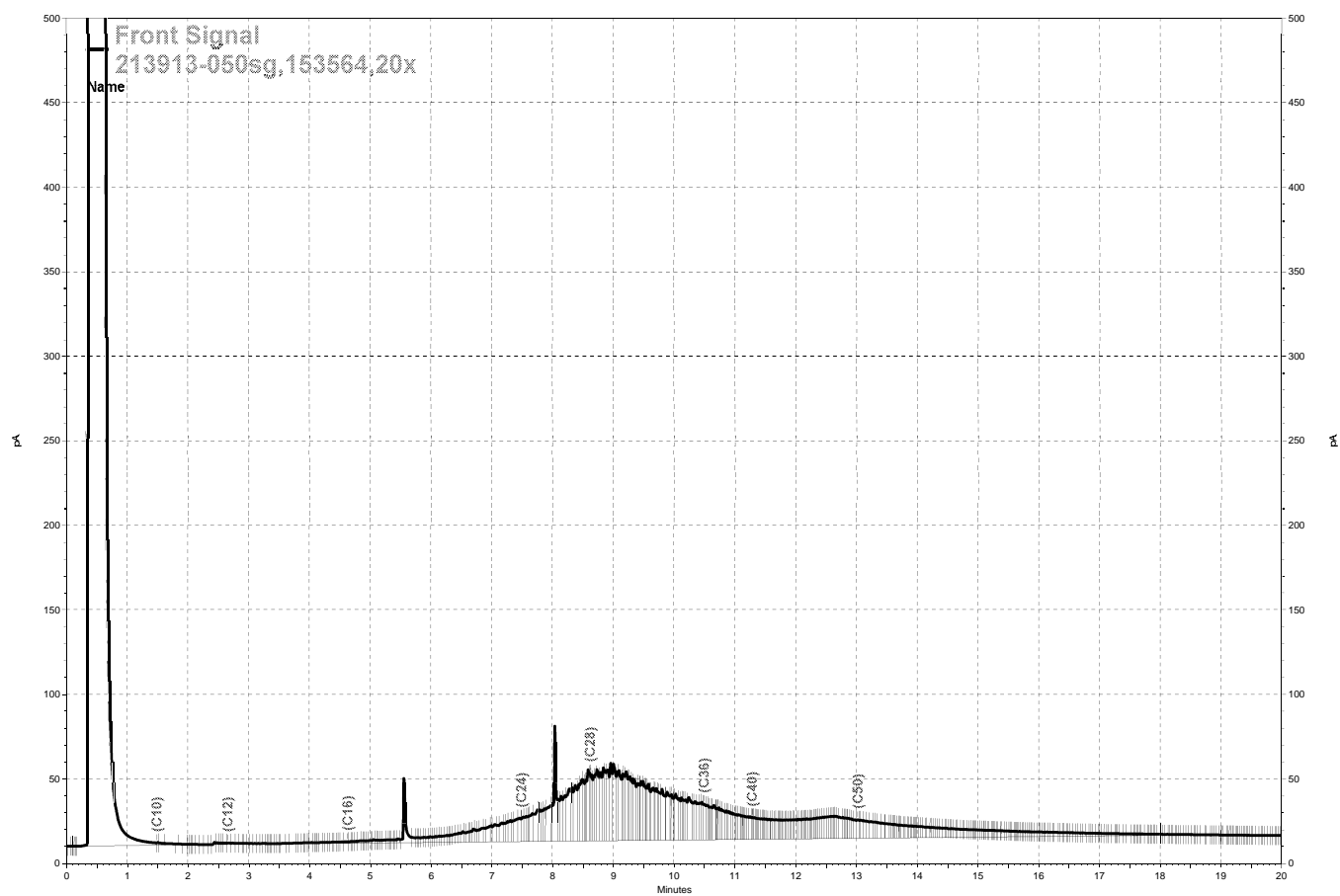
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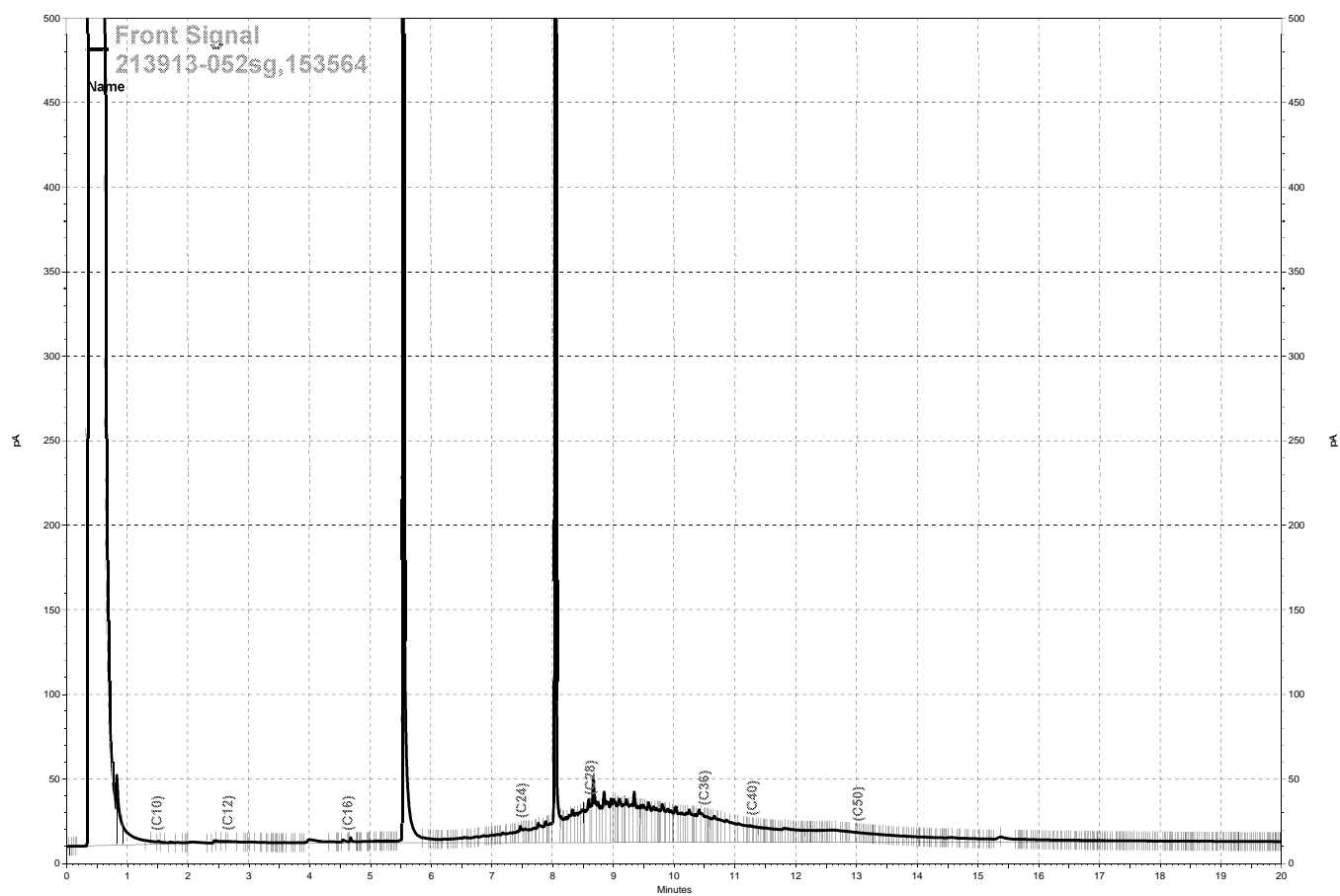
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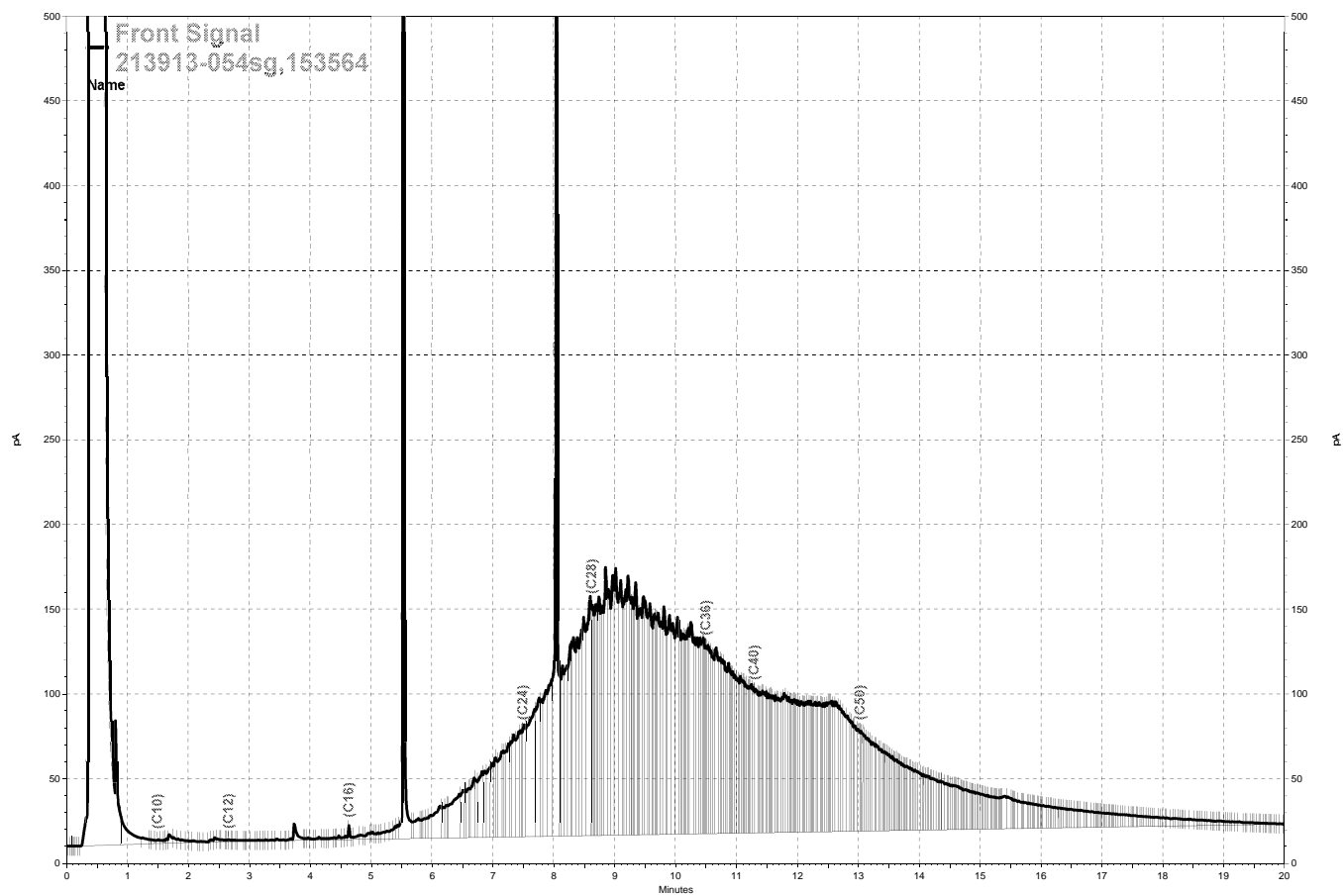
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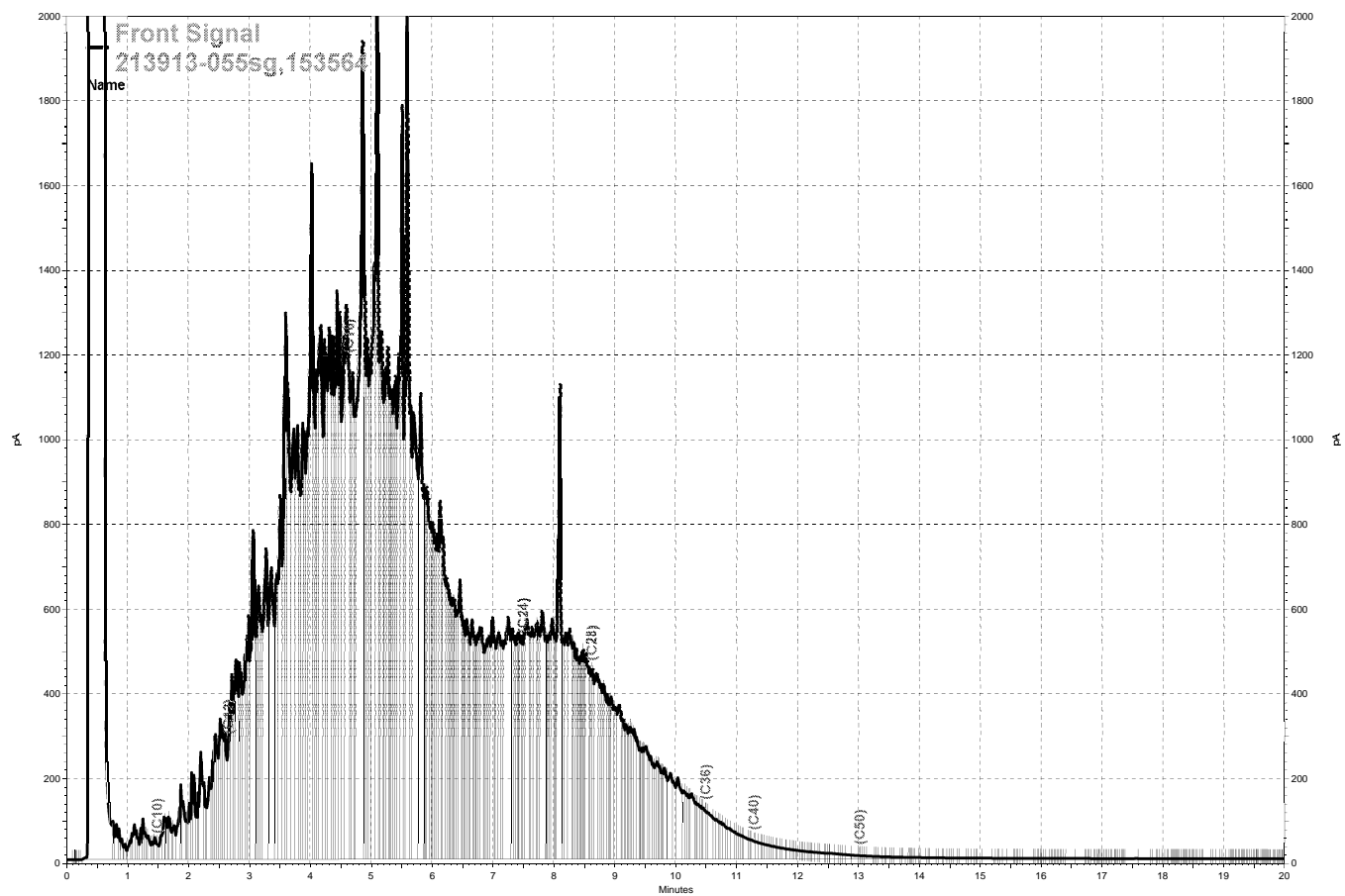
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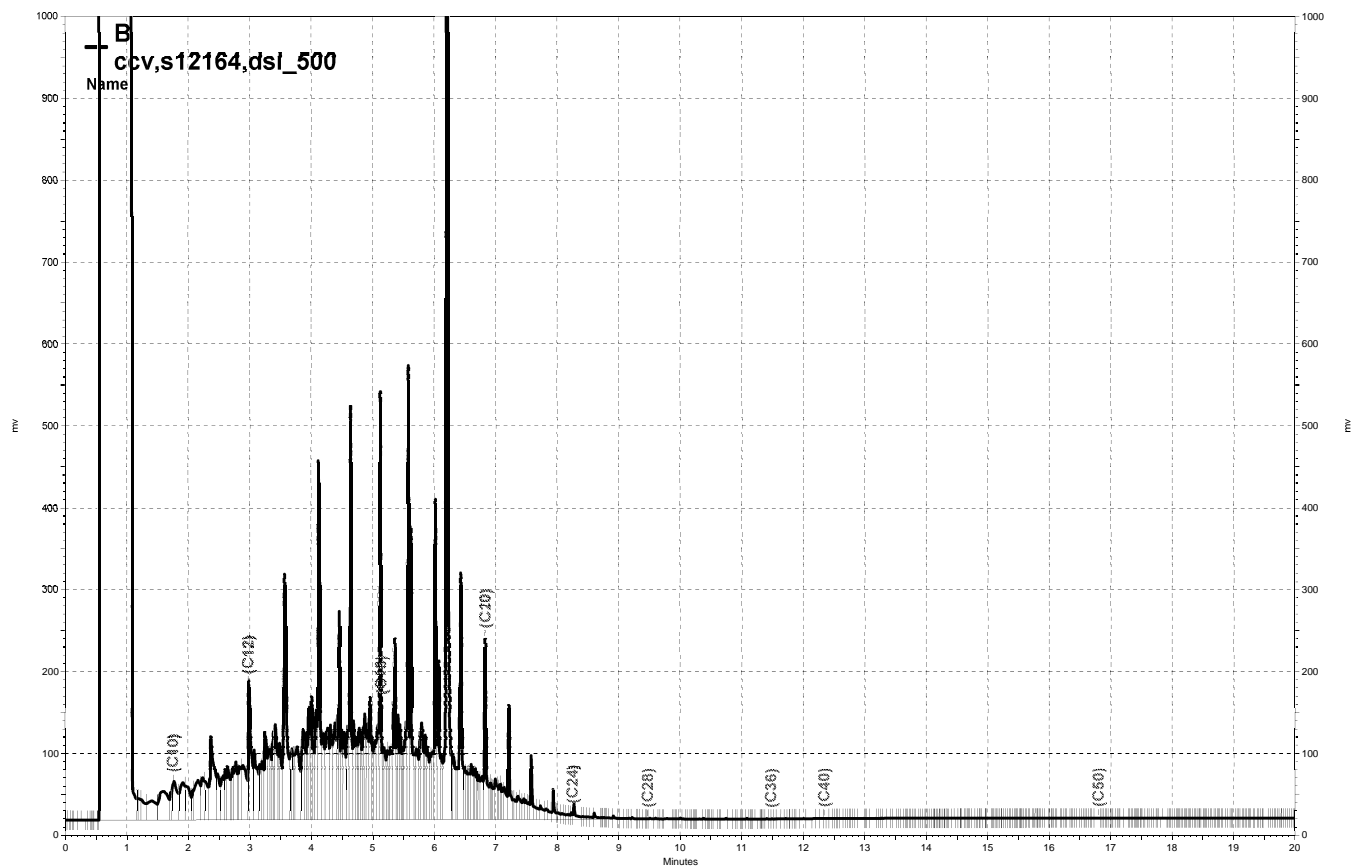


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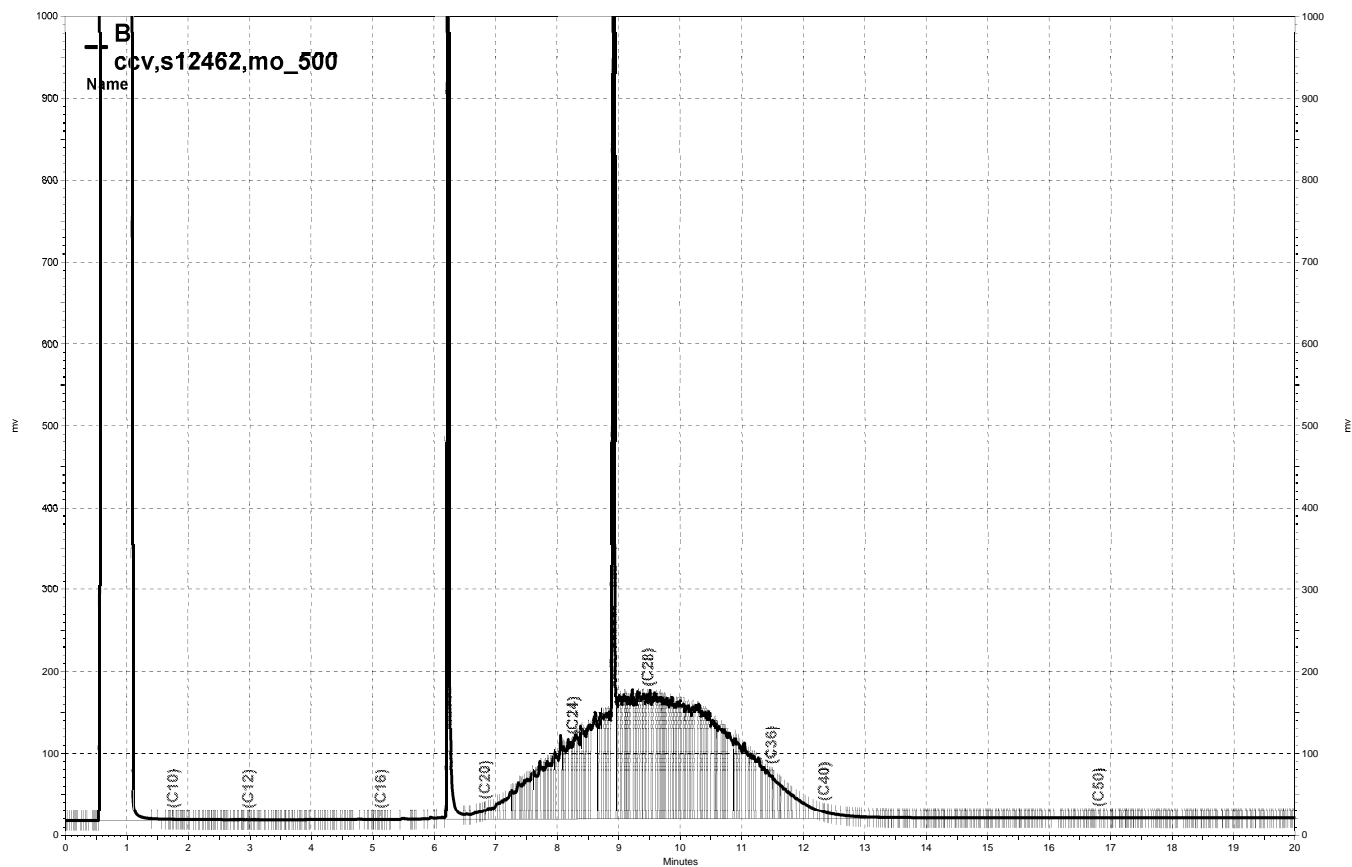


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\\Lims\gdrive\ezchrom\Projects\GC15B\Data\218b004, B



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| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-1@2           | Diln Fac: | 0.9470                    |
| Lab ID:           | 213913-001      | Batch#:   | 153504                    |
| Matrix:           | Soil            | Sampled:  | 07/27/09                  |
| Units:            | ug/Kg           | Received: | 08/03/09                  |
| Basis:            | as received     | Analyzed: | 08/04/09                  |

| Analyte                       | Result | RL  |
|-------------------------------|--------|-----|
| tert-Butyl Alcohol (TBA)      | ND     | 95  |
| MTBE                          | ND     | 4.7 |
| Isopropyl Ether (DIPE)        | ND     | 4.7 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 4.7 |
| 1,2-Dichloroethane            | ND     | 4.7 |
| Benzene                       | ND     | 4.7 |
| Methyl tert-Amyl Ether (TAME) | ND     | 4.7 |
| Toluene                       | ND     | 4.7 |
| 1,2-Dibromoethane             | ND     | 4.7 |
| Ethylbenzene                  | ND     | 4.7 |
| m,p-Xylenes                   | ND     | 4.7 |
| o-Xylene                      | ND     | 4.7 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 124  | 71-128 |
| 1,2-Dichloroethane-d4 | 119  | 69-135 |
| Toluene-d8            | 87   | 80-120 |
| Bromofluorobenzene    | 115  | 77-131 |

ND= Not Detected  
RL= Reporting Limit

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-1@7.5         | Diln Fac: | 0.9242                    |
| Lab ID:           | 213913-002      | Batch#:   | 153504                    |
| Matrix:           | Soil            | Sampled:  | 07/27/09                  |
| Units:            | ug/Kg           | Received: | 08/03/09                  |
| Basis:            | as received     | Analyzed: | 08/04/09                  |

| Analyte                       | Result | RL  |
|-------------------------------|--------|-----|
| tert-Butyl Alcohol (TBA)      | ND     | 92  |
| MTBE                          | ND     | 4.6 |
| Isopropyl Ether (DIPE)        | ND     | 4.6 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 4.6 |
| 1,2-Dichloroethane            | ND     | 4.6 |
| Benzene                       | ND     | 4.6 |
| Methyl tert-Amyl Ether (TAME) | ND     | 4.6 |
| Toluene                       | ND     | 4.6 |
| 1,2-Dibromoethane             | ND     | 4.6 |
| Ethylbenzene                  | ND     | 4.6 |
| m,p-Xylenes                   | ND     | 4.6 |
| o-Xylene                      | ND     | 4.6 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 125  | 71-128 |
| 1,2-Dichloroethane-d4 | 116  | 69-135 |
| Toluene-d8            | 87   | 80-120 |
| Bromofluorobenzene    | 115  | 77-131 |

ND= Not Detected  
RL= Reporting Limit

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-1@10          | Diln Fac: | 100.0                     |
| Lab ID:           | 213913-003      | Batch#:   | 153589                    |
| Matrix:           | Soil            | Sampled:  | 07/27/09                  |
| Units:            | ug/Kg           | Received: | 08/03/09                  |
| Basis:            | as received     | Analyzed: | 08/06/09                  |

| Analyte                       | Result | RL     |
|-------------------------------|--------|--------|
| tert-Butyl Alcohol (TBA)      | ND     | 10,000 |
| MTBE                          | ND     | 500    |
| Isopropyl Ether (DIPE)        | ND     | 500    |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 500    |
| 1,2-Dichloroethane            | ND     | 500    |
| Benzene                       | ND     | 500    |
| Methyl tert-Amyl Ether (TAME) | ND     | 500    |
| Toluene                       | 1,300  | 500    |
| 1,2-Dibromoethane             | ND     | 500    |
| Ethylbenzene                  | 6,900  | 500    |
| m,p-Xylenes                   | 21,000 | 500    |
| o-Xylene                      | 7,000  | 500    |

| Surrogate               | %REC | Limits |
|-------------------------|------|--------|
| Dibromofluoromethane    | 89   | 71-128 |
| 1,2-Dichloroethane-d4   | 94   | 69-135 |
| Toluene-d8              | 96   | 80-120 |
| Bromofluorobenzene      | 124  | 77-131 |
| Trifluorotoluene (MeOH) | 102  | 56-147 |

ND= Not Detected  
RL= Reporting Limit

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-1@12          | Diln Fac: | 166.7                     |
| Lab ID:           | 213913-004      | Batch#:   | 153589                    |
| Matrix:           | Soil            | Sampled:  | 07/27/09                  |
| Units:            | ug/Kg           | Received: | 08/03/09                  |
| Basis:            | as received     | Analyzed: | 08/06/09                  |

| Analyte                       | Result | RL     |
|-------------------------------|--------|--------|
| tert-Butyl Alcohol (TBA)      | ND     | 17,000 |
| MTBE                          | ND     | 830    |
| Isopropyl Ether (DIPE)        | ND     | 830    |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 830    |
| 1,2-Dichloroethane            | ND     | 830    |
| Benzene                       | ND     | 830    |
| Methyl tert-Amyl Ether (TAME) | ND     | 830    |
| Toluene                       | 4,000  | 830    |
| 1,2-Dibromoethane             | ND     | 830    |
| Ethylbenzene                  | 12,000 | 830    |
| m,p-Xylenes                   | 39,000 | 830    |
| o-Xylene                      | 14,000 | 830    |

| Surrogate               | %REC | Limits |
|-------------------------|------|--------|
| Dibromofluoromethane    | 84   | 71-128 |
| 1,2-Dichloroethane-d4   | 84   | 69-135 |
| Toluene-d8              | 91   | 80-120 |
| Bromofluorobenzene      | 111  | 77-131 |
| Trifluorotoluene (MeOH) | 105  | 56-147 |

ND= Not Detected  
RL= Reporting Limit

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-1@15          | Diln Fac: | 0.9709                    |
| Lab ID:           | 213913-005      | Batch#:   | 153504                    |
| Matrix:           | Soil            | Sampled:  | 07/27/09                  |
| Units:            | ug/Kg           | Received: | 08/03/09                  |
| Basis:            | as received     | Analyzed: | 08/04/09                  |

| Analyte                       | Result | RL  |
|-------------------------------|--------|-----|
| tert-Butyl Alcohol (TBA)      | ND     | 97  |
| MTBE                          | ND     | 4.9 |
| Isopropyl Ether (DIPE)        | ND     | 4.9 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 4.9 |
| 1,2-Dichloroethane            | ND     | 4.9 |
| Benzene                       | 10     | 4.9 |
| Methyl tert-Amyl Ether (TAME) | ND     | 4.9 |
| Toluene                       | ND     | 4.9 |
| 1,2-Dibromoethane             | ND     | 4.9 |
| Ethylbenzene                  | 22     | 4.9 |
| m,p-Xylenes                   | 48     | 4.9 |
| o-Xylene                      | 17     | 4.9 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 125  | 71-128 |
| 1,2-Dichloroethane-d4 | 116  | 69-135 |
| Toluene-d8            | 83   | 80-120 |
| Bromofluorobenzene    | 104  | 77-131 |

ND= Not Detected  
RL= Reporting Limit

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-1@17          | Diln Fac: | 0.9488                    |
| Lab ID:           | 213913-006      | Batch#:   | 153504                    |
| Matrix:           | Soil            | Sampled:  | 07/27/09                  |
| Units:            | ug/Kg           | Received: | 08/03/09                  |
| Basis:            | as received     | Analyzed: | 08/04/09                  |

| Analyte                       | Result | RL  |
|-------------------------------|--------|-----|
| tert-Butyl Alcohol (TBA)      | ND     | 95  |
| MTBE                          | ND     | 4.7 |
| Isopropyl Ether (DIPE)        | ND     | 4.7 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 4.7 |
| 1,2-Dichloroethane            | ND     | 4.7 |
| Benzene                       | 34     | 4.7 |
| Methyl tert-Amyl Ether (TAME) | ND     | 4.7 |
| Toluene                       | ND     | 4.7 |
| 1,2-Dibromoethane             | ND     | 4.7 |
| Ethylbenzene                  | 23     | 4.7 |
| m,p-Xylenes                   | ND     | 4.7 |
| o-Xylene                      | ND     | 4.7 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 124  | 71-128 |
| 1,2-Dichloroethane-d4 | 114  | 69-135 |
| Toluene-d8            | 83   | 80-120 |
| Bromofluorobenzene    | 105  | 77-131 |

ND= Not Detected  
RL= Reporting Limit



| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-1@20          | Diln Fac: | 0.9276                    |
| Lab ID:           | 213913-007      | Batch#:   | 153504                    |
| Matrix:           | Soil            | Sampled:  | 07/27/09                  |
| Units:            | ug/Kg           | Received: | 08/03/09                  |
| Basis:            | as received     | Analyzed: | 08/04/09                  |

| Analyte                       | Result | RL  |
|-------------------------------|--------|-----|
| tert-Butyl Alcohol (TBA)      | ND     | 93  |
| MTBE                          | ND     | 4.6 |
| Isopropyl Ether (DIPE)        | ND     | 4.6 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 4.6 |
| 1,2-Dichloroethane            | ND     | 4.6 |
| Benzene                       | ND     | 4.6 |
| Methyl tert-Amyl Ether (TAME) | ND     | 4.6 |
| Toluene                       | ND     | 4.6 |
| 1,2-Dibromoethane             | ND     | 4.6 |
| Ethylbenzene                  | ND     | 4.6 |
| m,p-Xylenes                   | ND     | 4.6 |
| o-Xylene                      | ND     | 4.6 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 120  | 71-128 |
| 1,2-Dichloroethane-d4 | 111  | 69-135 |
| Toluene-d8            | 86   | 80-120 |
| Bromofluorobenzene    | 107  | 77-131 |

ND= Not Detected  
RL= Reporting Limit

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-2@5           | Diln Fac: | 1.000                     |
| Lab ID:           | 213913-008      | Batch#:   | 153504                    |
| Matrix:           | Soil            | Sampled:  | 07/27/09                  |
| Units:            | ug/Kg           | Received: | 08/03/09                  |
| Basis:            | as received     | Analyzed: | 08/04/09                  |

| Analyte                       | Result | RL  |
|-------------------------------|--------|-----|
| tert-Butyl Alcohol (TBA)      | ND     | 100 |
| MTBE                          | ND     | 5.0 |
| Isopropyl Ether (DIPE)        | ND     | 5.0 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 5.0 |
| 1,2-Dichloroethane            | ND     | 5.0 |
| Benzene                       | ND     | 5.0 |
| Methyl tert-Amyl Ether (TAME) | ND     | 5.0 |
| Toluene                       | ND     | 5.0 |
| 1,2-Dibromoethane             | ND     | 5.0 |
| Ethylbenzene                  | ND     | 5.0 |
| m,p-Xylenes                   | ND     | 5.0 |
| o-Xylene                      | ND     | 5.0 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 121  | 71-128 |
| 1,2-Dichloroethane-d4 | 110  | 69-135 |
| Toluene-d8            | 87   | 80-120 |
| Bromofluorobenzene    | 113  | 77-131 |

ND= Not Detected  
 RL= Reporting Limit

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-2@7.5         | Diln Fac: | 0.9381                    |
| Lab ID:           | 213913-009      | Batch#:   | 153504                    |
| Matrix:           | Soil            | Sampled:  | 07/27/09                  |
| Units:            | ug/Kg           | Received: | 08/03/09                  |
| Basis:            | as received     | Analyzed: | 08/04/09                  |

| Analyte                       | Result | RL  |
|-------------------------------|--------|-----|
| tert-Butyl Alcohol (TBA)      | ND     | 94  |
| MTBE                          | ND     | 4.7 |
| Isopropyl Ether (DIPE)        | ND     | 4.7 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 4.7 |
| 1,2-Dichloroethane            | ND     | 4.7 |
| Benzene                       | ND     | 4.7 |
| Methyl tert-Amyl Ether (TAME) | ND     | 4.7 |
| Toluene                       | ND     | 4.7 |
| 1,2-Dibromoethane             | ND     | 4.7 |
| Ethylbenzene                  | ND     | 4.7 |
| m,p-Xylenes                   | ND     | 4.7 |
| o-Xylene                      | ND     | 4.7 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 125  | 71-128 |
| 1,2-Dichloroethane-d4 | 113  | 69-135 |
| Toluene-d8            | 92   | 80-120 |
| Bromofluorobenzene    | 114  | 77-131 |

ND= Not Detected  
RL= Reporting Limit

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-2@10          | Diln Fac: | 0.9560                    |
| Lab ID:           | 213913-010      | Batch#:   | 153504                    |
| Matrix:           | Soil            | Sampled:  | 07/27/09                  |
| Units:            | ug/Kg           | Received: | 08/03/09                  |
| Basis:            | as received     | Analyzed: | 08/04/09                  |

| Analyte                       | Result | RL  |
|-------------------------------|--------|-----|
| tert-Butyl Alcohol (TBA)      | ND     | 96  |
| MTBE                          | ND     | 4.8 |
| Isopropyl Ether (DIPE)        | ND     | 4.8 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 4.8 |
| 1,2-Dichloroethane            | ND     | 4.8 |
| Benzene                       | ND     | 4.8 |
| Methyl tert-Amyl Ether (TAME) | ND     | 4.8 |
| Toluene                       | ND     | 4.8 |
| 1,2-Dibromoethane             | ND     | 4.8 |
| Ethylbenzene                  | ND     | 4.8 |
| m,p-Xylenes                   | ND     | 4.8 |
| o-Xylene                      | ND     | 4.8 |

| Surrogate             | %REC  | Limits |
|-----------------------|-------|--------|
| Dibromofluoromethane  | 130 * | 71-128 |
| 1,2-Dichloroethane-d4 | 122   | 69-135 |
| Toluene-d8            | 82    | 80-120 |
| Bromofluorobenzene    | 113   | 77-131 |

\*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-2@12          | Diln Fac: | 0.9311                    |
| Lab ID:           | 213913-011      | Batch#:   | 153504                    |
| Matrix:           | Soil            | Sampled:  | 07/27/09                  |
| Units:            | ug/Kg           | Received: | 08/03/09                  |
| Basis:            | as received     | Analyzed: | 08/04/09                  |

| Analyte                       | Result | RL  |
|-------------------------------|--------|-----|
| tert-Butyl Alcohol (TBA)      | ND     | 93  |
| MTBE                          | ND     | 4.7 |
| Isopropyl Ether (DIPE)        | ND     | 4.7 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 4.7 |
| 1,2-Dichloroethane            | ND     | 4.7 |
| Benzene                       | ND     | 4.7 |
| Methyl tert-Amyl Ether (TAME) | ND     | 4.7 |
| Toluene                       | ND     | 4.7 |
| 1,2-Dibromoethane             | ND     | 4.7 |
| Ethylbenzene                  | ND     | 4.7 |
| m,p-Xylenes                   | ND     | 4.7 |
| o-Xylene                      | ND     | 4.7 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 124  | 71-128 |
| 1,2-Dichloroethane-d4 | 112  | 69-135 |
| Toluene-d8            | 86   | 80-120 |
| Bromofluorobenzene    | 111  | 77-131 |

ND= Not Detected  
RL= Reporting Limit

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-2@15          | Diln Fac: | 9.259                     |
| Lab ID:           | 213913-012      | Batch#:   | 153589                    |
| Matrix:           | Soil            | Sampled:  | 07/27/09                  |
| Units:            | ug/Kg           | Received: | 08/03/09                  |
| Basis:            | as received     | Analyzed: | 08/07/09                  |

| Analyte                       | Result | RL  |
|-------------------------------|--------|-----|
| tert-Butyl Alcohol (TBA)      | ND     | 930 |
| MTBE                          | ND     | 46  |
| Isopropyl Ether (DIPE)        | ND     | 46  |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 46  |
| 1,2-Dichloroethane            | ND     | 46  |
| Benzene                       | ND     | 46  |
| Methyl tert-Amyl Ether (TAME) | ND     | 46  |
| Toluene                       | ND     | 46  |
| 1,2-Dibromoethane             | ND     | 46  |
| Ethylbenzene                  | ND     | 46  |
| m,p-Xylenes                   | ND     | 46  |
| o-Xylene                      | ND     | 46  |

| Surrogate             | %REC  | Limits |
|-----------------------|-------|--------|
| Dibromofluoromethane  | 84    | 71-128 |
| 1,2-Dichloroethane-d4 | 82    | 69-135 |
| Toluene-d8            | 94    | 80-120 |
| Bromofluorobenzene    | 149 * | 77-131 |

\*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-2@17          | Diln Fac: | 10.00                     |
| Lab ID:           | 213913-013      | Batch#:   | 153589                    |
| Matrix:           | Soil            | Sampled:  | 07/27/09                  |
| Units:            | ug/Kg           | Received: | 08/03/09                  |
| Basis:            | as received     | Analyzed: | 08/07/09                  |

| Analyte                       | Result | RL    |
|-------------------------------|--------|-------|
| tert-Butyl Alcohol (TBA)      | ND     | 1,000 |
| MTBE                          | ND     | 50    |
| Isopropyl Ether (DIPE)        | ND     | 50    |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 50    |
| 1,2-Dichloroethane            | ND     | 50    |
| Benzene                       | ND     | 50    |
| Methyl tert-Amyl Ether (TAME) | ND     | 50    |
| Toluene                       | ND     | 50    |
| 1,2-Dibromoethane             | ND     | 50    |
| Ethylbenzene                  | ND     | 50    |
| m,p-Xylenes                   | ND     | 50    |
| o-Xylene                      | ND     | 50    |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 85   | 71-128 |
| 1,2-Dichloroethane-d4 | 82   | 69-135 |
| Toluene-d8            | 94   | 80-120 |
| Bromofluorobenzene    | 97   | 77-131 |

ND= Not Detected  
RL= Reporting Limit

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-2@19.5        | Diln Fac: | 0.9615                    |
| Lab ID:           | 213913-014      | Batch#:   | 153589                    |
| Matrix:           | Soil            | Sampled:  | 07/27/09                  |
| Units:            | ug/Kg           | Received: | 08/03/09                  |
| Basis:            | as received     | Analyzed: | 08/06/09                  |

| Analyte                       | Result | RL  |
|-------------------------------|--------|-----|
| tert-Butyl Alcohol (TBA)      | ND     | 96  |
| MTBE                          | ND     | 4.8 |
| Isopropyl Ether (DIPE)        | ND     | 4.8 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 4.8 |
| 1,2-Dichloroethane            | ND     | 4.8 |
| Benzene                       | ND     | 4.8 |
| Methyl tert-Amyl Ether (TAME) | ND     | 4.8 |
| Toluene                       | ND     | 4.8 |
| 1,2-Dibromoethane             | ND     | 4.8 |
| Ethylbenzene                  | ND     | 4.8 |
| m,p-Xylenes                   | ND     | 4.8 |
| o-Xylene                      | ND     | 4.8 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 90   | 71-128 |
| 1,2-Dichloroethane-d4 | 96   | 69-135 |
| Toluene-d8            | 98   | 80-120 |
| Bromofluorobenzene    | 88   | 77-131 |

ND= Not Detected  
RL= Reporting Limit



| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-3@10          | Diln Fac: | 0.9862                    |
| Lab ID:           | 213913-017      | Batch#:   | 153504                    |
| Matrix:           | Soil            | Sampled:  | 07/27/09                  |
| Units:            | ug/Kg           | Received: | 08/03/09                  |
| Basis:            | as received     | Analyzed: | 08/04/09                  |

| Analyte                       | Result | RL  |
|-------------------------------|--------|-----|
| tert-Butyl Alcohol (TBA)      | ND     | 99  |
| MTBE                          | ND     | 4.9 |
| Isopropyl Ether (DIPE)        | ND     | 4.9 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 4.9 |
| 1,2-Dichloroethane            | ND     | 4.9 |
| Benzene                       | ND     | 4.9 |
| Methyl tert-Amyl Ether (TAME) | ND     | 4.9 |
| Toluene                       | ND     | 4.9 |
| 1,2-Dibromoethane             | ND     | 4.9 |
| Ethylbenzene                  | ND     | 4.9 |
| m,p-Xylenes                   | ND     | 4.9 |
| o-Xylene                      | ND     | 4.9 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 113  | 71-128 |
| 1,2-Dichloroethane-d4 | 106  | 69-135 |
| Toluene-d8            | 85   | 80-120 |
| Bromofluorobenzene    | 96   | 77-131 |

ND= Not Detected  
RL= Reporting Limit

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-3@12          | Diln Fac: | 0.9506                    |
| Lab ID:           | 213913-018      | Batch#:   | 153504                    |
| Matrix:           | Soil            | Sampled:  | 07/27/09                  |
| Units:            | ug/Kg           | Received: | 08/03/09                  |
| Basis:            | as received     | Analyzed: | 08/04/09                  |

| Analyte                       | Result | RL  |
|-------------------------------|--------|-----|
| tert-Butyl Alcohol (TBA)      | ND     | 95  |
| MTBE                          | ND     | 4.8 |
| Isopropyl Ether (DIPE)        | ND     | 4.8 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 4.8 |
| 1,2-Dichloroethane            | ND     | 4.8 |
| Benzene                       | ND     | 4.8 |
| Methyl tert-Amyl Ether (TAME) | ND     | 4.8 |
| Toluene                       | ND     | 4.8 |
| 1,2-Dibromoethane             | ND     | 4.8 |
| Ethylbenzene                  | ND     | 4.8 |
| m,p-Xylenes                   | ND     | 4.8 |
| o-Xylene                      | ND     | 4.8 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 114  | 71-128 |
| 1,2-Dichloroethane-d4 | 102  | 69-135 |
| Toluene-d8            | 87   | 80-120 |
| Bromofluorobenzene    | 97   | 77-131 |

ND= Not Detected  
RL= Reporting Limit

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-3@15          | Diln Fac: | 0.9615                    |
| Lab ID:           | 213913-019      | Batch#:   | 153510                    |
| Matrix:           | Soil            | Sampled:  | 07/27/09                  |
| Units:            | ug/Kg           | Received: | 08/03/09                  |
| Basis:            | as received     | Analyzed: | 08/04/09                  |

| Analyte                       | Result | RL  |
|-------------------------------|--------|-----|
| tert-Butyl Alcohol (TBA)      | ND     | 96  |
| MTBE                          | ND     | 4.8 |
| Isopropyl Ether (DIPE)        | ND     | 4.8 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 4.8 |
| 1,2-Dichloroethane            | ND     | 4.8 |
| Benzene                       | ND     | 4.8 |
| Methyl tert-Amyl Ether (TAME) | ND     | 4.8 |
| Toluene                       | ND     | 4.8 |
| 1,2-Dibromoethane             | ND     | 4.8 |
| Ethylbenzene                  | ND     | 4.8 |
| m,p-Xylenes                   | ND     | 4.8 |
| o-Xylene                      | ND     | 4.8 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 92   | 71-128 |
| 1,2-Dichloroethane-d4 | 102  | 69-135 |
| Toluene-d8            | 99   | 80-120 |
| Bromofluorobenzene    | 112  | 77-131 |

ND= Not Detected  
 RL= Reporting Limit

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-4A@12         | Diln Fac: | 9.434                     |
| Lab ID:           | 213913-024      | Batch#:   | 153510                    |
| Matrix:           | Soil            | Sampled:  | 07/27/09                  |
| Units:            | ug/Kg           | Received: | 08/03/09                  |
| Basis:            | as received     | Analyzed: | 08/04/09                  |

| Analyte                       | Result | RL  |
|-------------------------------|--------|-----|
| tert-Butyl Alcohol (TBA)      | ND     | 940 |
| MTBE                          | ND     | 47  |
| Isopropyl Ether (DIPE)        | ND     | 47  |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 47  |
| 1,2-Dichloroethane            | ND     | 47  |
| Benzene                       | ND     | 47  |
| Methyl tert-Amyl Ether (TAME) | ND     | 47  |
| Toluene                       | ND     | 47  |
| 1,2-Dibromoethane             | ND     | 47  |
| Ethylbenzene                  | ND     | 47  |
| m,p-Xylenes                   | ND     | 47  |
| o-Xylene                      | ND     | 47  |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 84   | 71-128 |
| 1,2-Dichloroethane-d4 | 85   | 69-135 |
| Toluene-d8            | 92   | 80-120 |
| Bromofluorobenzene    | 91   | 77-131 |

ND= Not Detected  
RL= Reporting Limit

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-4A@15         | Diln Fac: | 0.9690                    |
| Lab ID:           | 213913-025      | Batch#:   | 153510                    |
| Matrix:           | Soil            | Sampled:  | 07/27/09                  |
| Units:            | ug/Kg           | Received: | 08/03/09                  |
| Basis:            | as received     | Analyzed: | 08/04/09                  |

| Analyte                       | Result | RL  |
|-------------------------------|--------|-----|
| tert-Butyl Alcohol (TBA)      | ND     | 97  |
| MTBE                          | ND     | 4.8 |
| Isopropyl Ether (DIPE)        | ND     | 4.8 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 4.8 |
| 1,2-Dichloroethane            | ND     | 4.8 |
| Benzene                       | ND     | 4.8 |
| Methyl tert-Amyl Ether (TAME) | ND     | 4.8 |
| Toluene                       | ND     | 4.8 |
| 1,2-Dibromoethane             | ND     | 4.8 |
| Ethylbenzene                  | ND     | 4.8 |
| m,p-Xylenes                   | ND     | 4.8 |
| o-Xylene                      | ND     | 4.8 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 89   | 71-128 |
| 1,2-Dichloroethane-d4 | 88   | 69-135 |
| Toluene-d8            | 94   | 80-120 |
| Bromofluorobenzene    | 93   | 77-131 |

ND= Not Detected  
RL= Reporting Limit

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-5@2           | Diln Fac: | 0.9579                    |
| Lab ID:           | 213913-027      | Batch#:   | 153510                    |
| Matrix:           | Soil            | Sampled:  | 07/27/09                  |
| Units:            | ug/Kg           | Received: | 08/03/09                  |
| Basis:            | as received     | Analyzed: | 08/04/09                  |

| Analyte                       | Result | RL  |
|-------------------------------|--------|-----|
| tert-Butyl Alcohol (TBA)      | ND     | 96  |
| MTBE                          | ND     | 4.8 |
| Isopropyl Ether (DIPE)        | ND     | 4.8 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 4.8 |
| 1,2-Dichloroethane            | ND     | 4.8 |
| Benzene                       | ND     | 4.8 |
| Methyl tert-Amyl Ether (TAME) | ND     | 4.8 |
| Toluene                       | ND     | 4.8 |
| 1,2-Dibromoethane             | ND     | 4.8 |
| Ethylbenzene                  | ND     | 4.8 |
| m,p-Xylenes                   | ND     | 4.8 |
| o-Xylene                      | ND     | 4.8 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 84   | 71-128 |
| 1,2-Dichloroethane-d4 | 85   | 69-135 |
| Toluene-d8            | 98   | 80-120 |
| Bromofluorobenzene    | 93   | 77-131 |

ND= Not Detected  
RL= Reporting Limit

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-5@7.5         | Diln Fac: | 0.9615                    |
| Lab ID:           | 213913-028      | Batch#:   | 153510                    |
| Matrix:           | Soil            | Sampled:  | 07/27/09                  |
| Units:            | ug/Kg           | Received: | 08/03/09                  |
| Basis:            | as received     | Analyzed: | 08/04/09                  |

| Analyte                       | Result | RL  |
|-------------------------------|--------|-----|
| tert-Butyl Alcohol (TBA)      | ND     | 96  |
| MTBE                          | ND     | 4.8 |
| Isopropyl Ether (DIPE)        | ND     | 4.8 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 4.8 |
| 1,2-Dichloroethane            | ND     | 4.8 |
| Benzene                       | ND     | 4.8 |
| Methyl tert-Amyl Ether (TAME) | ND     | 4.8 |
| Toluene                       | ND     | 4.8 |
| 1,2-Dibromoethane             | ND     | 4.8 |
| Ethylbenzene                  | ND     | 4.8 |
| m,p-Xylenes                   | ND     | 4.8 |
| o-Xylene                      | ND     | 4.8 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 86   | 71-128 |
| 1,2-Dichloroethane-d4 | 88   | 69-135 |
| Toluene-d8            | 98   | 80-120 |
| Bromofluorobenzene    | 93   | 77-131 |

ND= Not Detected  
RL= Reporting Limit

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-5@12          | Diln Fac: | 0.9960                    |
| Lab ID:           | 213913-029      | Batch#:   | 153510                    |
| Matrix:           | Soil            | Sampled:  | 07/27/09                  |
| Units:            | ug/Kg           | Received: | 08/03/09                  |
| Basis:            | as received     | Analyzed: | 08/04/09                  |

| Analyte                       | Result | RL  |
|-------------------------------|--------|-----|
| tert-Butyl Alcohol (TBA)      | ND     | 100 |
| MTBE                          | ND     | 5.0 |
| Isopropyl Ether (DIPE)        | ND     | 5.0 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 5.0 |
| 1,2-Dichloroethane            | ND     | 5.0 |
| Benzene                       | ND     | 5.0 |
| Methyl tert-Amyl Ether (TAME) | ND     | 5.0 |
| Toluene                       | ND     | 5.0 |
| 1,2-Dibromoethane             | ND     | 5.0 |
| Ethylbenzene                  | ND     | 5.0 |
| m,p-Xylenes                   | ND     | 5.0 |
| o-Xylene                      | ND     | 5.0 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 90   | 71-128 |
| 1,2-Dichloroethane-d4 | 84   | 69-135 |
| Toluene-d8            | 92   | 80-120 |
| Bromofluorobenzene    | 109  | 77-131 |

ND= Not Detected  
RL= Reporting Limit



| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-5@15          | Diln Fac: | 0.9881                    |
| Lab ID:           | 213913-030      | Batch#:   | 153510                    |
| Matrix:           | Soil            | Sampled:  | 07/27/09                  |
| Units:            | ug/Kg           | Received: | 08/03/09                  |
| Basis:            | as received     | Analyzed: | 08/04/09                  |

| Analyte                       | Result | RL  |
|-------------------------------|--------|-----|
| tert-Butyl Alcohol (TBA)      | ND     | 99  |
| MTBE                          | ND     | 4.9 |
| Isopropyl Ether (DIPE)        | ND     | 4.9 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 4.9 |
| 1,2-Dichloroethane            | ND     | 4.9 |
| Benzene                       | ND     | 4.9 |
| Methyl tert-Amyl Ether (TAME) | ND     | 4.9 |
| Toluene                       | ND     | 4.9 |
| 1,2-Dibromoethane             | ND     | 4.9 |
| Ethylbenzene                  | ND     | 4.9 |
| m,p-Xylenes                   | ND     | 4.9 |
| o-Xylene                      | ND     | 4.9 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 85   | 71-128 |
| 1,2-Dichloroethane-d4 | 88   | 69-135 |
| Toluene-d8            | 96   | 80-120 |
| Bromofluorobenzene    | 93   | 77-131 |

ND= Not Detected  
RL= Reporting Limit

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-6@2           | Diln Fac: | 0.9823                    |
| Lab ID:           | 213913-031      | Batch#:   | 153510                    |
| Matrix:           | Soil            | Sampled:  | 07/27/09                  |
| Units:            | ug/Kg           | Received: | 08/03/09                  |
| Basis:            | as received     | Analyzed: | 08/04/09                  |

| Analyte                       | Result | RL  |
|-------------------------------|--------|-----|
| tert-Butyl Alcohol (TBA)      | ND     | 98  |
| MTBE                          | ND     | 4.9 |
| Isopropyl Ether (DIPE)        | ND     | 4.9 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 4.9 |
| 1,2-Dichloroethane            | ND     | 4.9 |
| Benzene                       | ND     | 4.9 |
| Methyl tert-Amyl Ether (TAME) | ND     | 4.9 |
| Toluene                       | ND     | 4.9 |
| 1,2-Dibromoethane             | ND     | 4.9 |
| Ethylbenzene                  | ND     | 4.9 |
| m,p-Xylenes                   | ND     | 4.9 |
| o-Xylene                      | ND     | 4.9 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 95   | 71-128 |
| 1,2-Dichloroethane-d4 | 87   | 69-135 |
| Toluene-d8            | 97   | 80-120 |
| Bromofluorobenzene    | 95   | 77-131 |

ND= Not Detected  
 RL= Reporting Limit

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-6@7.5         | Diln Fac: | 0.9671                    |
| Lab ID:           | 213913-032      | Batch#:   | 153510                    |
| Matrix:           | Soil            | Sampled:  | 07/27/09                  |
| Units:            | ug/Kg           | Received: | 08/03/09                  |
| Basis:            | as received     | Analyzed: | 08/04/09                  |

| Analyte                       | Result | RL  |
|-------------------------------|--------|-----|
| tert-Butyl Alcohol (TBA)      | ND     | 97  |
| MTBE                          | ND     | 4.8 |
| Isopropyl Ether (DIPE)        | ND     | 4.8 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 4.8 |
| 1,2-Dichloroethane            | ND     | 4.8 |
| Benzene                       | ND     | 4.8 |
| Methyl tert-Amyl Ether (TAME) | ND     | 4.8 |
| Toluene                       | ND     | 4.8 |
| 1,2-Dibromoethane             | ND     | 4.8 |
| Ethylbenzene                  | ND     | 4.8 |
| m,p-Xylenes                   | ND     | 4.8 |
| o-Xylene                      | ND     | 4.8 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 89   | 71-128 |
| 1,2-Dichloroethane-d4 | 89   | 69-135 |
| Toluene-d8            | 96   | 80-120 |
| Bromofluorobenzene    | 87   | 77-131 |

ND= Not Detected  
RL= Reporting Limit

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-6@12          | Diln Fac: | 0.9579                    |
| Lab ID:           | 213913-033      | Batch#:   | 153510                    |
| Matrix:           | Soil            | Sampled:  | 07/27/09                  |
| Units:            | ug/Kg           | Received: | 08/03/09                  |
| Basis:            | as received     | Analyzed: | 08/04/09                  |

| Analyte                       | Result | RL  |
|-------------------------------|--------|-----|
| tert-Butyl Alcohol (TBA)      | ND     | 96  |
| MTBE                          | ND     | 4.8 |
| Isopropyl Ether (DIPE)        | ND     | 4.8 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 4.8 |
| 1,2-Dichloroethane            | ND     | 4.8 |
| Benzene                       | ND     | 4.8 |
| Methyl tert-Amyl Ether (TAME) | ND     | 4.8 |
| Toluene                       | ND     | 4.8 |
| 1,2-Dibromoethane             | ND     | 4.8 |
| Ethylbenzene                  | ND     | 4.8 |
| m,p-Xylenes                   | ND     | 4.8 |
| o-Xylene                      | ND     | 4.8 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 89   | 71-128 |
| 1,2-Dichloroethane-d4 | 88   | 69-135 |
| Toluene-d8            | 95   | 80-120 |
| Bromofluorobenzene    | 102  | 77-131 |

ND= Not Detected  
RL= Reporting Limit

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-6@15          | Diln Fac: | 5.000                     |
| Lab ID:           | 213913-034      | Batch#:   | 153589                    |
| Matrix:           | Soil            | Sampled:  | 07/27/09                  |
| Units:            | ug/Kg           | Received: | 08/03/09                  |
| Basis:            | as received     | Analyzed: | 08/06/09                  |

| Analyte                       | Result | RL  |
|-------------------------------|--------|-----|
| tert-Butyl Alcohol (TBA)      | ND     | 500 |
| MTBE                          | ND     | 25  |
| Isopropyl Ether (DIPE)        | ND     | 25  |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 25  |
| 1,2-Dichloroethane            | ND     | 25  |
| Benzene                       | 39     | 25  |
| Methyl tert-Amyl Ether (TAME) | ND     | 25  |
| Toluene                       | ND     | 25  |
| 1,2-Dibromoethane             | ND     | 25  |
| Ethylbenzene                  | 80     | 25  |
| m,p-Xylenes                   | ND     | 25  |
| o-Xylene                      | ND     | 25  |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 87   | 71-128 |
| 1,2-Dichloroethane-d4 | 84   | 69-135 |
| Toluene-d8            | 90   | 80-120 |
| Bromofluorobenzene    | 95   | 77-131 |

ND= Not Detected  
RL= Reporting Limit

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-7@5           | Diln Fac: | 0.9634                    |
| Lab ID:           | 213913-035      | Batch#:   | 153509                    |
| Matrix:           | Soil            | Sampled:  | 07/27/09                  |
| Units:            | ug/Kg           | Received: | 08/03/09                  |
| Basis:            | as received     | Analyzed: | 08/04/09                  |

| Analyte                       | Result | RL  |
|-------------------------------|--------|-----|
| tert-Butyl Alcohol (TBA)      | ND     | 96  |
| MTBE                          | ND     | 4.8 |
| Isopropyl Ether (DIPE)        | ND     | 4.8 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 4.8 |
| 1,2-Dichloroethane            | ND     | 4.8 |
| Benzene                       | ND     | 4.8 |
| Methyl tert-Amyl Ether (TAME) | ND     | 4.8 |
| Toluene                       | ND     | 4.8 |
| 1,2-Dibromoethane             | ND     | 4.8 |
| Ethylbenzene                  | ND     | 4.8 |
| m,p-Xylenes                   | ND     | 4.8 |
| o-Xylene                      | ND     | 4.8 |

| Surrogate             | %REC  | Limits |
|-----------------------|-------|--------|
| Dibromofluoromethane  | 107   | 71-128 |
| 1,2-Dichloroethane-d4 | 136 * | 69-135 |
| Toluene-d8            | 81    | 80-120 |
| Bromofluorobenzene    | 98    | 77-131 |

\*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-7@7.5         | Diln Fac: | 0.9597                    |
| Lab ID:           | 213913-036      | Batch#:   | 153509                    |
| Matrix:           | Soil            | Sampled:  | 07/27/09                  |
| Units:            | ug/Kg           | Received: | 08/03/09                  |
| Basis:            | as received     | Analyzed: | 08/04/09                  |

| Analyte                       | Result | RL  |
|-------------------------------|--------|-----|
| tert-Butyl Alcohol (TBA)      | ND     | 96  |
| MTBE                          | ND     | 4.8 |
| Isopropyl Ether (DIPE)        | ND     | 4.8 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 4.8 |
| 1,2-Dichloroethane            | ND     | 4.8 |
| Benzene                       | ND     | 4.8 |
| Methyl tert-Amyl Ether (TAME) | ND     | 4.8 |
| Toluene                       | ND     | 4.8 |
| 1,2-Dibromoethane             | ND     | 4.8 |
| Ethylbenzene                  | ND     | 4.8 |
| m,p-Xylenes                   | ND     | 4.8 |
| o-Xylene                      | ND     | 4.8 |

| Surrogate             | %REC  | Limits |
|-----------------------|-------|--------|
| Dibromofluoromethane  | 107   | 71-128 |
| 1,2-Dichloroethane-d4 | 137 * | 69-135 |
| Toluene-d8            | 84    | 80-120 |
| Bromofluorobenzene    | 103   | 77-131 |

\*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-7@12          | Diln Fac: | 0.9671                    |
| Lab ID:           | 213913-037      | Batch#:   | 153509                    |
| Matrix:           | Soil            | Sampled:  | 07/27/09                  |
| Units:            | ug/Kg           | Received: | 08/03/09                  |
| Basis:            | as received     | Analyzed: | 08/04/09                  |

| Analyte                       | Result | RL  |
|-------------------------------|--------|-----|
| tert-Butyl Alcohol (TBA)      | ND     | 97  |
| MTBE                          | ND     | 4.8 |
| Isopropyl Ether (DIPE)        | ND     | 4.8 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 4.8 |
| 1,2-Dichloroethane            | ND     | 4.8 |
| Benzene                       | ND     | 4.8 |
| Methyl tert-Amyl Ether (TAME) | ND     | 4.8 |
| Toluene                       | ND     | 4.8 |
| 1,2-Dibromoethane             | ND     | 4.8 |
| Ethylbenzene                  | ND     | 4.8 |
| m,p-Xylenes                   | ND     | 4.8 |
| o-Xylene                      | ND     | 4.8 |

| Surrogate             | %REC  | Limits |
|-----------------------|-------|--------|
| Dibromofluoromethane  | 104   | 71-128 |
| 1,2-Dichloroethane-d4 | 140 * | 69-135 |
| Toluene-d8            | 99    | 80-120 |
| Bromofluorobenzene    | 104   | 77-131 |

\*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit



| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-7@15          | Diln Fac: | 0.9785                    |
| Lab ID:           | 213913-038      | Batch#:   | 153509                    |
| Matrix:           | Soil            | Sampled:  | 07/27/09                  |
| Units:            | ug/Kg           | Received: | 08/03/09                  |
| Basis:            | as received     | Analyzed: | 08/04/09                  |

| Analyte                       | Result | RL  |
|-------------------------------|--------|-----|
| tert-Butyl Alcohol (TBA)      | ND     | 98  |
| MTBE                          | ND     | 4.9 |
| Isopropyl Ether (DIPE)        | ND     | 4.9 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 4.9 |
| 1,2-Dichloroethane            | ND     | 4.9 |
| Benzene                       | ND     | 4.9 |
| Methyl tert-Amyl Ether (TAME) | ND     | 4.9 |
| Toluene                       | ND     | 4.9 |
| 1,2-Dibromoethane             | ND     | 4.9 |
| Ethylbenzene                  | ND     | 4.9 |
| m,p-Xylenes                   | ND     | 4.9 |
| o-Xylene                      | ND     | 4.9 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 109  | 71-128 |
| 1,2-Dichloroethane-d4 | 133  | 69-135 |
| Toluene-d8            | 89   | 80-120 |
| Bromofluorobenzene    | 109  | 77-131 |

ND= Not Detected  
RL= Reporting Limit

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-8@7.5         | Diln Fac: | 5.208                     |
| Lab ID:           | 213913-039      | Batch#:   | 153547                    |
| Matrix:           | Soil            | Sampled:  | 07/27/09                  |
| Units:            | ug/Kg           | Received: | 08/03/09                  |
| Basis:            | as received     | Analyzed: | 08/05/09                  |

| Analyte                       | Result | RL  |
|-------------------------------|--------|-----|
| tert-Butyl Alcohol (TBA)      | ND     | 520 |
| MTBE                          | ND     | 26  |
| Isopropyl Ether (DIPE)        | ND     | 26  |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 26  |
| 1,2-Dichloroethane            | ND     | 26  |
| Benzene                       | 28     | 26  |
| Methyl tert-Amyl Ether (TAME) | ND     | 26  |
| Toluene                       | ND     | 26  |
| 1,2-Dibromoethane             | ND     | 26  |
| Ethylbenzene                  | 790    | 26  |
| m,p-Xylenes                   | 320    | 26  |
| o-Xylene                      | ND     | 26  |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 86   | 71-128 |
| 1,2-Dichloroethane-d4 | 83   | 69-135 |
| Toluene-d8            | 88   | 80-120 |
| Bromofluorobenzene    | 123  | 77-131 |

ND= Not Detected  
RL= Reporting Limit

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-8@15          | Basis:    | as received               |
| Lab ID:           | 213913-040      | Sampled:  | 07/27/09                  |
| Matrix:           | Soil            | Received: | 08/03/09                  |
| Units:            | ug/Kg           |           |                           |

| Analyte                       | Result | RL  | Diln Fac | Batch# | Analyzed |
|-------------------------------|--------|-----|----------|--------|----------|
| tert-Butyl Alcohol (TBA)      | ND     | 390 | 3.876    | 153589 | 08/06/09 |
| MTBE                          | ND     | 19  | 3.876    | 153589 | 08/06/09 |
| Isopropyl Ether (DIPE)        | ND     | 19  | 3.876    | 153589 | 08/06/09 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 19  | 3.876    | 153589 | 08/06/09 |
| 1,2-Dichloroethane            | ND     | 19  | 3.876    | 153589 | 08/06/09 |
| Benzene                       | 500    | 46  | 9.259    | 153547 | 08/05/09 |
| Methyl tert-Amyl Ether (TAME) | ND     | 19  | 3.876    | 153589 | 08/06/09 |
| Toluene                       | 140    | 19  | 3.876    | 153589 | 08/06/09 |
| 1,2-Dibromoethane             | ND     | 19  | 3.876    | 153589 | 08/06/09 |
| Ethylbenzene                  | 250    | 19  | 3.876    | 153589 | 08/06/09 |
| m,p-Xylenes                   | 560    | 19  | 3.876    | 153589 | 08/06/09 |
| o-Xylene                      | 210    | 19  | 3.876    | 153589 | 08/06/09 |

| Surrogate             | %REC | Limits | Diln Fac | Batch# | Analyzed |
|-----------------------|------|--------|----------|--------|----------|
| Dibromofluoromethane  | 93   | 71-128 | 3.876    | 153589 | 08/06/09 |
| 1,2-Dichloroethane-d4 | 81   | 69-135 | 3.876    | 153589 | 08/06/09 |
| Toluene-d8            | 96   | 80-120 | 3.876    | 153589 | 08/06/09 |
| Bromofluorobenzene    | 87   | 77-131 | 3.876    | 153589 | 08/06/09 |

ND= Not Detected  
RL= Reporting Limit

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-8@20          | Basis:    | as received               |
| Lab ID:           | 213913-041      | Sampled:  | 07/27/09                  |
| Matrix:           | Soil            | Received: | 08/03/09                  |
| Units:            | ug/Kg           |           |                           |

| Analyte                       | Result | RL  | Diln Fac | Batch# | Analyzed |
|-------------------------------|--------|-----|----------|--------|----------|
| tert-Butyl Alcohol (TBA)      | ND     | 97  | 0.9671   | 153589 | 08/06/09 |
| MTBE                          | ND     | 4.8 | 0.9671   | 153589 | 08/06/09 |
| Isopropyl Ether (DIPE)        | ND     | 4.8 | 0.9671   | 153589 | 08/06/09 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 4.8 | 0.9671   | 153589 | 08/06/09 |
| 1,2-Dichloroethane            | ND     | 4.8 | 0.9671   | 153589 | 08/06/09 |
| Benzene                       | 140    | 10  | 1.992    | 153634 | 08/07/09 |
| Methyl tert-Amyl Ether (TAME) | ND     | 4.8 | 0.9671   | 153589 | 08/06/09 |
| Toluene                       | ND     | 4.8 | 0.9671   | 153589 | 08/06/09 |
| 1,2-Dibromoethane             | ND     | 4.8 | 0.9671   | 153589 | 08/06/09 |
| Ethylbenzene                  | 37     | 4.8 | 0.9671   | 153589 | 08/06/09 |
| m,p-Xylenes                   | 9.7    | 4.8 | 0.9671   | 153589 | 08/06/09 |
| o-Xylene                      | ND     | 4.8 | 0.9671   | 153589 | 08/06/09 |

| Surrogate             | %REC | Limits | Diln Fac | Batch# | Analyzed |
|-----------------------|------|--------|----------|--------|----------|
| Dibromofluoromethane  | 93   | 71-128 | 0.9671   | 153589 | 08/06/09 |
| 1,2-Dichloroethane-d4 | 100  | 69-135 | 0.9671   | 153589 | 08/06/09 |
| Toluene-d8            | 100  | 80-120 | 0.9671   | 153589 | 08/06/09 |
| Bromofluorobenzene    | 90   | 77-131 | 0.9671   | 153589 | 08/06/09 |

ND= Not Detected  
 RL= Reporting Limit

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-9@5           | Diln Fac: | 0.9728                    |
| Lab ID:           | 213913-042      | Batch#:   | 153589                    |
| Matrix:           | Soil            | Sampled:  | 07/27/09                  |
| Units:            | ug/Kg           | Received: | 08/03/09                  |
| Basis:            | as received     | Analyzed: | 08/06/09                  |

| Analyte                       | Result | RL  |
|-------------------------------|--------|-----|
| tert-Butyl Alcohol (TBA)      | ND     | 97  |
| MTBE                          | ND     | 4.9 |
| Isopropyl Ether (DIPE)        | ND     | 4.9 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 4.9 |
| 1,2-Dichloroethane            | ND     | 4.9 |
| Benzene                       | ND     | 4.9 |
| Methyl tert-Amyl Ether (TAME) | ND     | 4.9 |
| Toluene                       | ND     | 4.9 |
| 1,2-Dibromoethane             | ND     | 4.9 |
| Ethylbenzene                  | ND     | 4.9 |
| m,p-Xylenes                   | ND     | 4.9 |
| o-Xylene                      | ND     | 4.9 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 89   | 71-128 |
| 1,2-Dichloroethane-d4 | 101  | 69-135 |
| Toluene-d8            | 102  | 80-120 |
| Bromofluorobenzene    | 92   | 77-131 |

ND= Not Detected  
RL= Reporting Limit

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-9@10          | Diln Fac: | 50.00                     |
| Lab ID:           | 213913-043      | Batch#:   | 153547                    |
| Matrix:           | Soil            | Sampled:  | 07/27/09                  |
| Units:            | ug/Kg           | Received: | 08/03/09                  |
| Basis:            | as received     | Analyzed: | 08/05/09                  |

| Analyte                       | Result | RL    |
|-------------------------------|--------|-------|
| tert-Butyl Alcohol (TBA)      | ND     | 5,000 |
| MTBE                          | ND     | 250   |
| Isopropyl Ether (DIPE)        | ND     | 250   |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 250   |
| 1,2-Dichloroethane            | ND     | 250   |
| Benzene                       | ND     | 250   |
| Methyl tert-Amyl Ether (TAME) | ND     | 250   |
| Toluene                       | ND     | 250   |
| 1,2-Dibromoethane             | ND     | 250   |
| Ethylbenzene                  | 3,300  | 250   |
| m,p-Xylenes                   | 8,800  | 250   |
| o-Xylene                      | 1,100  | 250   |

| Surrogate               | %REC | Limits |
|-------------------------|------|--------|
| Dibromofluoromethane    | 82   | 71-128 |
| 1,2-Dichloroethane-d4   | 80   | 69-135 |
| Toluene-d8              | 91   | 80-120 |
| Bromofluorobenzene      | 112  | 77-131 |
| Trifluorotoluene (MeOH) | 96   | 56-147 |

ND= Not Detected  
RL= Reporting Limit

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-9@15          | Diln Fac: | 50.00                     |
| Lab ID:           | 213913-044      | Batch#:   | 153547                    |
| Matrix:           | Soil            | Sampled:  | 07/27/09                  |
| Units:            | ug/Kg           | Received: | 08/03/09                  |
| Basis:            | as received     | Analyzed: | 08/05/09                  |

| Analyte                       | Result | RL    |
|-------------------------------|--------|-------|
| tert-Butyl Alcohol (TBA)      | ND     | 5,000 |
| MTBE                          | ND     | 250   |
| Isopropyl Ether (DIPE)        | ND     | 250   |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 250   |
| 1,2-Dichloroethane            | ND     | 250   |
| Benzene                       | ND     | 250   |
| Methyl tert-Amyl Ether (TAME) | ND     | 250   |
| Toluene                       | ND     | 250   |
| 1,2-Dibromoethane             | ND     | 250   |
| Ethylbenzene                  | 2,800  | 250   |
| m,p-Xylenes                   | 7,500  | 250   |
| o-Xylene                      | 1,100  | 250   |

| Surrogate               | %REC | Limits |
|-------------------------|------|--------|
| Dibromofluoromethane    | 80   | 71-128 |
| 1,2-Dichloroethane-d4   | 79   | 69-135 |
| Toluene-d8              | 94   | 80-120 |
| Bromofluorobenzene      | 112  | 77-131 |
| Trifluorotoluene (MeOH) | 104  | 56-147 |

ND= Not Detected  
RL= Reporting Limit

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-9@20          | Diln Fac: | 0.9597                    |
| Lab ID:           | 213913-045      | Batch#:   | 153547                    |
| Matrix:           | Soil            | Sampled:  | 07/27/09                  |
| Units:            | ug/Kg           | Received: | 08/03/09                  |
| Basis:            | as received     | Analyzed: | 08/05/09                  |

| Analyte                       | Result | RL  |
|-------------------------------|--------|-----|
| tert-Butyl Alcohol (TBA)      | ND     | 96  |
| MTBE                          | ND     | 4.8 |
| Isopropyl Ether (DIPE)        | ND     | 4.8 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 4.8 |
| 1,2-Dichloroethane            | ND     | 4.8 |
| Benzene                       | ND     | 4.8 |
| Methyl tert-Amyl Ether (TAME) | ND     | 4.8 |
| Toluene                       | ND     | 4.8 |
| 1,2-Dibromoethane             | ND     | 4.8 |
| Ethylbenzene                  | ND     | 4.8 |
| m,p-Xylenes                   | ND     | 4.8 |
| o-Xylene                      | ND     | 4.8 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 89   | 71-128 |
| 1,2-Dichloroethane-d4 | 100  | 69-135 |
| Toluene-d8            | 99   | 80-120 |
| Bromofluorobenzene    | 92   | 77-131 |

ND= Not Detected  
RL= Reporting Limit



| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-10@2          | Diln Fac: | 0.9785                    |
| Lab ID:           | 213913-046      | Batch#:   | 153509                    |
| Matrix:           | Soil            | Sampled:  | 07/27/09                  |
| Units:            | ug/Kg           | Received: | 08/03/09                  |
| Basis:            | as received     | Analyzed: | 08/04/09                  |

| Analyte                       | Result | RL  |
|-------------------------------|--------|-----|
| tert-Butyl Alcohol (TBA)      | ND     | 98  |
| MTBE                          | ND     | 4.9 |
| Isopropyl Ether (DIPE)        | ND     | 4.9 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 4.9 |
| 1,2-Dichloroethane            | ND     | 4.9 |
| Benzene                       | ND     | 4.9 |
| Methyl tert-Amyl Ether (TAME) | ND     | 4.9 |
| Toluene                       | ND     | 4.9 |
| 1,2-Dibromoethane             | ND     | 4.9 |
| Ethylbenzene                  | ND     | 4.9 |
| m,p-Xylenes                   | ND     | 4.9 |
| o-Xylene                      | ND     | 4.9 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 111  | 71-128 |
| 1,2-Dichloroethane-d4 | 131  | 69-135 |
| Toluene-d8            | 94   | 80-120 |
| Bromofluorobenzene    | 102  | 77-131 |

ND= Not Detected  
RL= Reporting Limit

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-10@5          | Diln Fac: | 0.9416                    |
| Lab ID:           | 213913-047      | Batch#:   | 153509                    |
| Matrix:           | Soil            | Sampled:  | 07/27/09                  |
| Units:            | ug/Kg           | Received: | 08/03/09                  |
| Basis:            | as received     | Analyzed: | 08/04/09                  |

| Analyte                       | Result | RL  |
|-------------------------------|--------|-----|
| tert-Butyl Alcohol (TBA)      | ND     | 94  |
| MTBE                          | ND     | 4.7 |
| Isopropyl Ether (DIPE)        | ND     | 4.7 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 4.7 |
| 1,2-Dichloroethane            | ND     | 4.7 |
| Benzene                       | ND     | 4.7 |
| Methyl tert-Amyl Ether (TAME) | ND     | 4.7 |
| Toluene                       | ND     | 4.7 |
| 1,2-Dibromoethane             | ND     | 4.7 |
| Ethylbenzene                  | ND     | 4.7 |
| m,p-Xylenes                   | ND     | 4.7 |
| o-Xylene                      | ND     | 4.7 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 110  | 71-128 |
| 1,2-Dichloroethane-d4 | 134  | 69-135 |
| Toluene-d8            | 95   | 80-120 |
| Bromofluorobenzene    | 98   | 77-131 |

ND= Not Detected  
RL= Reporting Limit

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-10@10         | Diln Fac: | 0.9881                    |
| Lab ID:           | 213913-048      | Batch#:   | 153546                    |
| Matrix:           | Soil            | Sampled:  | 07/27/09                  |
| Units:            | ug/Kg           | Received: | 08/03/09                  |
| Basis:            | as received     | Analyzed: | 08/05/09                  |

| Analyte                       | Result | RL  |
|-------------------------------|--------|-----|
| tert-Butyl Alcohol (TBA)      | ND     | 99  |
| MTBE                          | ND     | 4.9 |
| Isopropyl Ether (DIPE)        | ND     | 4.9 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 4.9 |
| 1,2-Dichloroethane            | ND     | 4.9 |
| Benzene                       | ND     | 4.9 |
| Methyl tert-Amyl Ether (TAME) | ND     | 4.9 |
| Toluene                       | ND     | 4.9 |
| 1,2-Dibromoethane             | ND     | 4.9 |
| Ethylbenzene                  | ND     | 4.9 |
| m,p-Xylenes                   | ND     | 4.9 |
| o-Xylene                      | ND     | 4.9 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 108  | 71-128 |
| 1,2-Dichloroethane-d4 | 122  | 69-135 |
| Toluene-d8            | 92   | 80-120 |
| Bromofluorobenzene    | 102  | 77-131 |

ND= Not Detected  
RL= Reporting Limit

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-10@15         | Diln Fac: | 0.9488                    |
| Lab ID:           | 213913-049      | Batch#:   | 153509                    |
| Matrix:           | Soil            | Sampled:  | 07/27/09                  |
| Units:            | ug/Kg           | Received: | 08/03/09                  |
| Basis:            | as received     | Analyzed: | 08/04/09                  |

| Analyte                       | Result | RL  |
|-------------------------------|--------|-----|
| tert-Butyl Alcohol (TBA)      | ND     | 95  |
| MTBE                          | ND     | 4.7 |
| Isopropyl Ether (DIPE)        | ND     | 4.7 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 4.7 |
| 1,2-Dichloroethane            | ND     | 4.7 |
| Benzene                       | ND     | 4.7 |
| Methyl tert-Amyl Ether (TAME) | ND     | 4.7 |
| Toluene                       | ND     | 4.7 |
| 1,2-Dibromoethane             | ND     | 4.7 |
| Ethylbenzene                  | ND     | 4.7 |
| m,p-Xylenes                   | ND     | 4.7 |
| o-Xylene                      | ND     | 4.7 |

| Surrogate             | %REC  | Limits |
|-----------------------|-------|--------|
| Dibromofluoromethane  | 108   | 71-128 |
| 1,2-Dichloroethane-d4 | 152 * | 69-135 |
| Toluene-d8            | 83    | 80-120 |
| Bromofluorobenzene    | 104   | 77-131 |

\*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-11@2          | Diln Fac: | 0.9960                    |
| Lab ID:           | 213913-050      | Batch#:   | 153509                    |
| Matrix:           | Soil            | Sampled:  | 07/27/09                  |
| Units:            | ug/Kg           | Received: | 08/03/09                  |
| Basis:            | as received     | Analyzed: | 08/04/09                  |

| Analyte                       | Result | RL  |
|-------------------------------|--------|-----|
| tert-Butyl Alcohol (TBA)      | ND     | 100 |
| MTBE                          | ND     | 5.0 |
| Isopropyl Ether (DIPE)        | ND     | 5.0 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 5.0 |
| 1,2-Dichloroethane            | ND     | 5.0 |
| Benzene                       | ND     | 5.0 |
| Methyl tert-Amyl Ether (TAME) | ND     | 5.0 |
| Toluene                       | ND     | 5.0 |
| 1,2-Dibromoethane             | ND     | 5.0 |
| Ethylbenzene                  | ND     | 5.0 |
| m,p-Xylenes                   | ND     | 5.0 |
| o-Xylene                      | ND     | 5.0 |

| Surrogate             | %REC  | Limits |
|-----------------------|-------|--------|
| Dibromofluoromethane  | 110   | 71-128 |
| 1,2-Dichloroethane-d4 | 138 * | 69-135 |
| Toluene-d8            | 83    | 80-120 |
| Bromofluorobenzene    | 113   | 77-131 |

\*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-11@7.5        | Diln Fac: | 0.9506                    |
| Lab ID:           | 213913-051      | Batch#:   | 153509                    |
| Matrix:           | Soil            | Sampled:  | 07/27/09                  |
| Units:            | ug/Kg           | Received: | 08/03/09                  |
| Basis:            | as received     | Analyzed: | 08/04/09                  |

| Analyte                       | Result | RL  |
|-------------------------------|--------|-----|
| tert-Butyl Alcohol (TBA)      | ND     | 95  |
| MTBE                          | ND     | 4.8 |
| Isopropyl Ether (DIPE)        | ND     | 4.8 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 4.8 |
| 1,2-Dichloroethane            | ND     | 4.8 |
| Benzene                       | ND     | 4.8 |
| Methyl tert-Amyl Ether (TAME) | ND     | 4.8 |
| Toluene                       | ND     | 4.8 |
| 1,2-Dibromoethane             | ND     | 4.8 |
| Ethylbenzene                  | ND     | 4.8 |
| m,p-Xylenes                   | ND     | 4.8 |
| o-Xylene                      | ND     | 4.8 |

| Surrogate             | %REC  | Limits |
|-----------------------|-------|--------|
| Dibromofluoromethane  | 110   | 71-128 |
| 1,2-Dichloroethane-d4 | 136 * | 69-135 |
| Toluene-d8            | 80    | 80-120 |
| Bromofluorobenzene    | 108   | 77-131 |

\*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-11@12         | Diln Fac: | 0.9804                    |
| Lab ID:           | 213913-052      | Batch#:   | 153509                    |
| Matrix:           | Soil            | Sampled:  | 07/27/09                  |
| Units:            | ug/Kg           | Received: | 08/03/09                  |
| Basis:            | as received     | Analyzed: | 08/04/09                  |

| Analyte                       | Result | RL  |
|-------------------------------|--------|-----|
| tert-Butyl Alcohol (TBA)      | ND     | 98  |
| MTBE                          | ND     | 4.9 |
| Isopropyl Ether (DIPE)        | ND     | 4.9 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 4.9 |
| 1,2-Dichloroethane            | ND     | 4.9 |
| Benzene                       | ND     | 4.9 |
| Methyl tert-Amyl Ether (TAME) | ND     | 4.9 |
| Toluene                       | ND     | 4.9 |
| 1,2-Dibromoethane             | ND     | 4.9 |
| Ethylbenzene                  | ND     | 4.9 |
| m,p-Xylenes                   | ND     | 4.9 |
| o-Xylene                      | ND     | 4.9 |

| Surrogate             | %REC  | Limits |
|-----------------------|-------|--------|
| Dibromofluoromethane  | 112   | 71-128 |
| 1,2-Dichloroethane-d4 | 143 * | 69-135 |
| Toluene-d8            | 84    | 80-120 |
| Bromofluorobenzene    | 108   | 77-131 |

\*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-12@5          | Diln Fac: | 0.9747                    |
| Lab ID:           | 213913-053      | Batch#:   | 153509                    |
| Matrix:           | Soil            | Sampled:  | 07/27/09                  |
| Units:            | ug/Kg           | Received: | 08/03/09                  |
| Basis:            | as received     | Analyzed: | 08/04/09                  |

| Analyte                       | Result | RL  |
|-------------------------------|--------|-----|
| tert-Butyl Alcohol (TBA)      | ND     | 97  |
| MTBE                          | ND     | 4.9 |
| Isopropyl Ether (DIPE)        | ND     | 4.9 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 4.9 |
| 1,2-Dichloroethane            | ND     | 4.9 |
| Benzene                       | ND     | 4.9 |
| Methyl tert-Amyl Ether (TAME) | ND     | 4.9 |
| Toluene                       | ND     | 4.9 |
| 1,2-Dibromoethane             | ND     | 4.9 |
| Ethylbenzene                  | ND     | 4.9 |
| m,p-Xylenes                   | ND     | 4.9 |
| o-Xylene                      | ND     | 4.9 |

| Surrogate             | %REC  | Limits |
|-----------------------|-------|--------|
| Dibromofluoromethane  | 106   | 71-128 |
| 1,2-Dichloroethane-d4 | 151 * | 69-135 |
| Toluene-d8            | 80    | 80-120 |
| Bromofluorobenzene    | 103   | 77-131 |

\*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit



| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-12@7.5        | Diln Fac: | 0.9901                    |
| Lab ID:           | 213913-054      | Batch#:   | 153546                    |
| Matrix:           | Soil            | Sampled:  | 07/27/09                  |
| Units:            | ug/Kg           | Received: | 08/03/09                  |
| Basis:            | as received     | Analyzed: | 08/05/09                  |

| Analyte                       | Result | RL  |
|-------------------------------|--------|-----|
| tert-Butyl Alcohol (TBA)      | ND     | 99  |
| MTBE                          | ND     | 5.0 |
| Isopropyl Ether (DIPE)        | ND     | 5.0 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 5.0 |
| 1,2-Dichloroethane            | ND     | 5.0 |
| Benzene                       | ND     | 5.0 |
| Methyl tert-Amyl Ether (TAME) | ND     | 5.0 |
| Toluene                       | ND     | 5.0 |
| 1,2-Dibromoethane             | ND     | 5.0 |
| Ethylbenzene                  | ND     | 5.0 |
| m,p-Xylenes                   | ND     | 5.0 |
| o-Xylene                      | ND     | 5.0 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 108  | 71-128 |
| 1,2-Dichloroethane-d4 | 127  | 69-135 |
| Toluene-d8            | 88   | 80-120 |
| Bromofluorobenzene    | 103  | 77-131 |

ND= Not Detected  
RL= Reporting Limit

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-12@12         | Diln Fac: | 50.00                     |
| Lab ID:           | 213913-055      | Batch#:   | 153547                    |
| Matrix:           | Soil            | Sampled:  | 07/27/09                  |
| Units:            | ug/Kg           | Received: | 08/03/09                  |
| Basis:            | as received     | Analyzed: | 08/05/09                  |

| Analyte                       | Result | RL    |
|-------------------------------|--------|-------|
| tert-Butyl Alcohol (TBA)      | ND     | 5,000 |
| MTBE                          | ND     | 250   |
| Isopropyl Ether (DIPE)        | ND     | 250   |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 250   |
| 1,2-Dichloroethane            | ND     | 250   |
| Benzene                       | ND     | 250   |
| Methyl tert-Amyl Ether (TAME) | ND     | 250   |
| Toluene                       | ND     | 250   |
| 1,2-Dibromoethane             | ND     | 250   |
| Ethylbenzene                  | ND     | 250   |
| m,p-Xylenes                   | ND     | 250   |
| o-Xylene                      | ND     | 250   |

| Surrogate               | %REC | Limits |
|-------------------------|------|--------|
| Dibromofluoromethane    | 89   | 71-128 |
| 1,2-Dichloroethane-d4   | 97   | 69-135 |
| Toluene-d8              | 96   | 80-120 |
| Bromofluorobenzene      | 102  | 77-131 |
| Trifluorotoluene (MeOH) | 98   | 56-147 |

ND= Not Detected  
RL= Reporting Limit

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-12@15         | Diln Fac: | 0.9560                    |
| Lab ID:           | 213913-056      | Batch#:   | 153546                    |
| Matrix:           | Soil            | Sampled:  | 07/27/09                  |
| Units:            | ug/Kg           | Received: | 08/03/09                  |
| Basis:            | as received     | Analyzed: | 08/05/09                  |

| Analyte                       | Result | RL  |
|-------------------------------|--------|-----|
| tert-Butyl Alcohol (TBA)      | ND     | 96  |
| MTBE                          | ND     | 4.8 |
| Isopropyl Ether (DIPE)        | ND     | 4.8 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 4.8 |
| 1,2-Dichloroethane            | ND     | 4.8 |
| Benzene                       | ND     | 4.8 |
| Methyl tert-Amyl Ether (TAME) | ND     | 4.8 |
| Toluene                       | ND     | 4.8 |
| 1,2-Dibromoethane             | ND     | 4.8 |
| Ethylbenzene                  | ND     | 4.8 |
| m,p-Xylenes                   | ND     | 4.8 |
| o-Xylene                      | ND     | 4.8 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 106  | 71-128 |
| 1,2-Dichloroethane-d4 | 130  | 69-135 |
| Toluene-d8            | 85   | 80-120 |
| Bromofluorobenzene    | 103  | 77-131 |

ND= Not Detected  
RL= Reporting Limit

## Batch QC Report

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Type:             | LCS             | Diln Fac: | 1.000                     |
| Lab ID:           | QC506069        | Batch#:   | 153504                    |
| Matrix:           | Soil            | Analyzed: | 08/04/09                  |
| Units:            | ug/Kg           |           |                           |

| Analyte                       | Spiked | Result | %REC | Limits |
|-------------------------------|--------|--------|------|--------|
| tert-Butyl Alcohol (TBA)      | 125.0  | 110.7  | 89   | 56-140 |
| MTBE                          | 25.00  | 26.31  | 105  | 66-129 |
| Isopropyl Ether (DIPE)        | 25.00  | 26.27  | 105  | 65-131 |
| Ethyl tert-Butyl Ether (ETBE) | 25.00  | 26.96  | 108  | 66-132 |
| 1,2-Dichloroethane            | 25.00  | 28.68  | 115  | 70-128 |
| Benzene                       | 25.00  | 25.25  | 101  | 80-125 |
| Methyl tert-Amyl Ether (TAME) | 25.00  | 23.82  | 95   | 75-128 |
| Toluene                       | 25.00  | 22.36  | 89   | 80-126 |
| 1,2-Dibromoethane             | 25.00  | 24.22  | 97   | 80-122 |
| Ethylbenzene                  | 25.00  | 22.56  | 90   | 80-127 |
| m,p-Xylenes                   | 50.00  | 43.28  | 87   | 80-125 |
| o-Xylene                      | 25.00  | 20.95  | 84   | 80-122 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 125  | 71-128 |
| 1,2-Dichloroethane-d4 | 112  | 69-135 |
| Toluene-d8            | 93   | 80-120 |
| Bromofluorobenzene    | 109  | 77-131 |

## Batch QC Report

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Type:             | BLANK           | Diln Fac: | 1.000                     |
| Lab ID:           | QC506070        | Batch#:   | 153504                    |
| Matrix:           | Soil            | Analyzed: | 08/04/09                  |
| Units:            | ug/Kg           |           |                           |

| Analyte                       | Result | RL  |
|-------------------------------|--------|-----|
| tert-Butyl Alcohol (TBA)      | ND     | 100 |
| MTBE                          | ND     | 5.0 |
| Isopropyl Ether (DIPE)        | ND     | 5.0 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 5.0 |
| 1,2-Dichloroethane            | ND     | 5.0 |
| Benzene                       | ND     | 5.0 |
| Methyl tert-Amyl Ether (TAME) | ND     | 5.0 |
| Toluene                       | ND     | 5.0 |
| 1,2-Dibromoethane             | ND     | 5.0 |
| Ethylbenzene                  | ND     | 5.0 |
| m,p-Xylenes                   | ND     | 5.0 |
| o-Xylene                      | ND     | 5.0 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 119  | 71-128 |
| 1,2-Dichloroethane-d4 | 116  | 69-135 |
| Toluene-d8            | 92   | 80-120 |
| Bromofluorobenzene    | 112  | 77-131 |

ND= Not Detected

RL= Reporting Limit

# Batch QC Report

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-1@2           | Batch#:   | 153504                    |
| MSS Lab ID:       | 213913-001      | Sampled:  | 07/27/09                  |
| Matrix:           | Soil            | Received: | 08/03/09                  |
| Units:            | ug/Kg           | Analyzed: | 08/04/09                  |
| Basis:            | as received     |           |                           |

Type: MS  
Lab ID: QC506074

Diln Fac: 0.9690

| Analyte                       | MSS Result | Spiked | Result | %REC | Limits |
|-------------------------------|------------|--------|--------|------|--------|
| tert-Butyl Alcohol (TBA)      | <18.94     | 242.2  | 245.0  | 101  | 42-139 |
| MTBE                          | <0.9470    | 48.45  | 52.95  | 109  | 53-127 |
| Isopropyl Ether (DIPE)        | <0.9470    | 48.45  | 56.20  | 116  | 49-130 |
| Ethyl tert-Butyl Ether (ETBE) | <0.9470    | 48.45  | 56.23  | 116  | 52-130 |
| 1,2-Dichloroethane            | <0.9470    | 48.45  | 49.22  | 102  | 51-124 |
| Benzene                       | <0.9470    | 48.45  | 52.18  | 108  | 56-126 |
| Methyl tert-Amyl Ether (TAME) | <0.9470    | 48.45  | 51.07  | 105  | 58-126 |
| Toluene                       | <0.9470    | 48.45  | 41.37  | 85   | 52-125 |
| 1,2-Dibromoethane             | <0.9470    | 48.45  | 36.69  | 76   | 52-121 |
| Ethylbenzene                  | <0.9470    | 48.45  | 41.00  | 85   | 48-126 |
| m,p-Xylenes                   | <0.9470    | 96.90  | 79.23  | 82   | 46-125 |
| o-Xylene                      | <0.9470    | 48.45  | 38.44  | 79   | 46-122 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 111  | 71-128 |
| 1,2-Dichloroethane-d4 | 97   | 69-135 |
| Toluene-d8            | 87   | 80-120 |
| Bromofluorobenzene    | 100  | 77-131 |

Type: MSD  
Lab ID: QC506075

Diln Fac: 0.9208

| Analyte                       | Spiked | Result | %REC | Limits | RPD | Lim |
|-------------------------------|--------|--------|------|--------|-----|-----|
| tert-Butyl Alcohol (TBA)      | 230.2  | 251.1  | 109  | 42-139 | 8   | 36  |
| MTBE                          | 46.04  | 50.41  | 109  | 53-127 | 0   | 28  |
| Isopropyl Ether (DIPE)        | 46.04  | 52.57  | 114  | 49-130 | 2   | 27  |
| Ethyl tert-Butyl Ether (ETBE) | 46.04  | 51.71  | 112  | 52-130 | 3   | 26  |
| 1,2-Dichloroethane            | 46.04  | 47.08  | 102  | 51-124 | 1   | 23  |
| Benzene                       | 46.04  | 48.17  | 105  | 56-126 | 3   | 26  |
| Methyl tert-Amyl Ether (TAME) | 46.04  | 48.65  | 106  | 58-126 | 0   | 25  |
| Toluene                       | 46.04  | 36.36  | 79   | 52-125 | 8   | 29  |
| 1,2-Dibromoethane             | 46.04  | 35.47  | 77   | 52-121 | 2   | 26  |
| Ethylbenzene                  | 46.04  | 34.82  | 76   | 48-126 | 11  | 29  |
| m,p-Xylenes                   | 92.08  | 67.89  | 74   | 46-125 | 10  | 30  |
| o-Xylene                      | 46.04  | 33.80  | 73   | 46-122 | 8   | 30  |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 113  | 71-128 |
| 1,2-Dichloroethane-d4 | 99   | 69-135 |
| Toluene-d8            | 85   | 80-120 |
| Bromofluorobenzene    | 101  | 77-131 |

RPD= Relative Percent Difference

## Batch QC Report

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Type:             | BLANK           | Diln Fac: | 1.000                     |
| Lab ID:           | QC506091        | Batch#:   | 153509                    |
| Matrix:           | Soil            | Analyzed: | 08/04/09                  |
| Units:            | ug/Kg           |           |                           |

| Analyte                       | Result | RL  |
|-------------------------------|--------|-----|
| tert-Butyl Alcohol (TBA)      | ND     | 100 |
| MTBE                          | ND     | 5.0 |
| Isopropyl Ether (DIPE)        | ND     | 5.0 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 5.0 |
| 1,2-Dichloroethane            | ND     | 5.0 |
| Benzene                       | ND     | 5.0 |
| Methyl tert-Amyl Ether (TAME) | ND     | 5.0 |
| Toluene                       | ND     | 5.0 |
| 1,2-Dibromoethane             | ND     | 5.0 |
| Ethylbenzene                  | ND     | 5.0 |
| m,p-Xylenes                   | ND     | 5.0 |
| o-Xylene                      | ND     | 5.0 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 106  | 71-128 |
| 1,2-Dichloroethane-d4 | 126  | 69-135 |
| Toluene-d8            | 92   | 80-120 |
| Bromofluorobenzene    | 104  | 77-131 |

ND= Not Detected

RL= Reporting Limit

## Batch QC Report

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Type:             | LCS             | Diln Fac: | 1.000                     |
| Lab ID:           | QC506092        | Batch#:   | 153509                    |
| Matrix:           | Soil            | Analyzed: | 08/04/09                  |
| Units:            | ug/Kg           |           |                           |

| Analyte                       | Spiked | Result | %REC | Limits |
|-------------------------------|--------|--------|------|--------|
| tert-Butyl Alcohol (TBA)      | 125.0  | 154.8  | 124  | 56-140 |
| MTBE                          | 25.00  | 23.04  | 92   | 66-129 |
| Isopropyl Ether (DIPE)        | 25.00  | 22.06  | 88   | 65-131 |
| Ethyl tert-Butyl Ether (ETBE) | 25.00  | 22.24  | 89   | 66-132 |
| 1,2-Dichloroethane            | 25.00  | 27.05  | 108  | 70-128 |
| Benzene                       | 25.00  | 24.61  | 98   | 80-125 |
| Methyl tert-Amyl Ether (TAME) | 25.00  | 23.40  | 94   | 75-128 |
| Toluene                       | 25.00  | 21.43  | 86   | 80-126 |
| 1,2-Dibromoethane             | 25.00  | 24.22  | 97   | 80-122 |
| Ethylbenzene                  | 25.00  | 22.67  | 91   | 80-127 |
| m,p-Xylenes                   | 50.00  | 45.64  | 91   | 80-125 |
| o-Xylene                      | 25.00  | 21.57  | 86   | 80-122 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 106  | 71-128 |
| 1,2-Dichloroethane-d4 | 116  | 69-135 |
| Toluene-d8            | 93   | 80-120 |
| Bromofluorobenzene    | 103  | 77-131 |



## Batch QC Report

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Type:             | BLANK           | Diln Fac: | 1.000                     |
| Lab ID:           | QC506093        | Batch#:   | 153510                    |
| Matrix:           | Soil            | Analyzed: | 08/04/09                  |
| Units:            | ug/Kg           |           |                           |

| Analyte                       | Result | RL  |
|-------------------------------|--------|-----|
| tert-Butyl Alcohol (TBA)      | ND     | 100 |
| MTBE                          | ND     | 5.0 |
| Isopropyl Ether (DIPE)        | ND     | 5.0 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 5.0 |
| 1,2-Dichloroethane            | ND     | 5.0 |
| Benzene                       | ND     | 5.0 |
| Methyl tert-Amyl Ether (TAME) | ND     | 5.0 |
| Toluene                       | ND     | 5.0 |
| 1,2-Dibromoethane             | ND     | 5.0 |
| Ethylbenzene                  | ND     | 5.0 |
| m,p-Xylenes                   | ND     | 5.0 |
| o-Xylene                      | ND     | 5.0 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 88   | 71-128 |
| 1,2-Dichloroethane-d4 | 93   | 69-135 |
| Toluene-d8            | 97   | 80-120 |
| Bromofluorobenzene    | 94   | 77-131 |

ND= Not Detected

RL= Reporting Limit

## Batch QC Report

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Type:             | LCS             | Diln Fac: | 1.000                     |
| Lab ID:           | QC506094        | Batch#:   | 153510                    |
| Matrix:           | Soil            | Analyzed: | 08/04/09                  |
| Units:            | ug/Kg           |           |                           |

| Analyte                       | Spiked | Result | %REC | Limits |
|-------------------------------|--------|--------|------|--------|
| tert-Butyl Alcohol (TBA)      | 125.0  | 95.45  | 76   | 56-140 |
| MTBE                          | 25.00  | 19.50  | 78   | 66-129 |
| Isopropyl Ether (DIPE)        | 25.00  | 18.69  | 75   | 65-131 |
| Ethyl tert-Butyl Ether (ETBE) | 25.00  | 19.69  | 79   | 66-132 |
| 1,2-Dichloroethane            | 25.00  | 21.97  | 88   | 70-128 |
| Benzene                       | 25.00  | 25.61  | 102  | 80-125 |
| Methyl tert-Amyl Ether (TAME) | 25.00  | 23.07  | 92   | 75-128 |
| Toluene                       | 25.00  | 24.83  | 99   | 80-126 |
| 1,2-Dibromoethane             | 25.00  | 24.28  | 97   | 80-122 |
| Ethylbenzene                  | 25.00  | 24.76  | 99   | 80-127 |
| m,p-Xylenes                   | 50.00  | 52.06  | 104  | 80-125 |
| o-Xylene                      | 25.00  | 25.26  | 101  | 80-122 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 89   | 71-128 |
| 1,2-Dichloroethane-d4 | 91   | 69-135 |
| Toluene-d8            | 97   | 80-120 |
| Bromofluorobenzene    | 94   | 77-131 |

## Batch QC Report

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-11@2          | Basis:    | as received               |
| MSS Lab ID:       | 213913-050      | Batch#:   | 153509                    |
| Matrix:           | Soil            | Sampled:  | 07/27/09                  |
| Units:            | ug/Kg           | Received: | 08/03/09                  |

Type: MS Diln Fac: 0.9747  
Lab ID: QC506186 Analyzed: 08/04/09

| Analyte                       | MSS Result | Spiked | Result | %REC | Limits |
|-------------------------------|------------|--------|--------|------|--------|
| tert-Butyl Alcohol (TBA)      | <19.92     | 243.7  | 328.1  | 135  | 42-139 |
| MTBE                          | <0.9960    | 48.73  | 43.87  | 90   | 53-127 |
| Isopropyl Ether (DIPE)        | <0.9960    | 48.73  | 40.51  | 83   | 49-130 |
| Ethyl tert-Butyl Ether (ETBE) | <0.9960    | 48.73  | 39.90  | 82   | 52-130 |
| 1,2-Dichloroethane            | <0.9960    | 48.73  | 46.44  | 95   | 51-124 |
| Benzene                       | <0.9960    | 48.73  | 36.57  | 75   | 56-126 |
| Methyl tert-Amyl Ether (TAME) | <0.9960    | 48.73  | 38.12  | 78   | 58-126 |
| Toluene                       | <0.9960    | 48.73  | 35.74  | 73   | 52-125 |
| 1,2-Dibromoethane             | <0.9960    | 48.73  | 38.69  | 79   | 52-121 |
| Ethylbenzene                  | <0.9960    | 48.73  | 35.19  | 72   | 48-126 |
| m,p-Xylenes                   | 1.903      | 97.47  | 68.29  | 68   | 46-125 |
| o-Xylene                      | <0.9960    | 48.73  | 33.81  | 69   | 46-122 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 107  | 71-128 |
| 1,2-Dichloroethane-d4 | 129  | 69-135 |
| Toluene-d8            | 87   | 80-120 |
| Bromofluorobenzene    | 102  | 77-131 |

Type: MSD Diln Fac: 0.9690  
Lab ID: QC506187 Analyzed: 08/05/09

| Analyte                       | Spiked | Result | %REC  | Limits | RPD | Lim |
|-------------------------------|--------|--------|-------|--------|-----|-----|
| tert-Butyl Alcohol (TBA)      | 242.2  | 339.1  | 140 * | 42-139 | 4   | 36  |
| MTBE                          | 48.45  | 48.09  | 99    | 53-127 | 10  | 28  |
| Isopropyl Ether (DIPE)        | 48.45  | 42.48  | 88    | 49-130 | 5   | 27  |
| Ethyl tert-Butyl Ether (ETBE) | 48.45  | 44.88  | 93    | 52-130 | 12  | 26  |
| 1,2-Dichloroethane            | 48.45  | 47.83  | 99    | 51-124 | 4   | 23  |
| Benzene                       | 48.45  | 39.55  | 82    | 56-126 | 8   | 26  |
| Methyl tert-Amyl Ether (TAME) | 48.45  | 45.48  | 94    | 58-126 | 18  | 25  |
| Toluene                       | 48.45  | 37.67  | 78    | 52-125 | 6   | 29  |
| 1,2-Dibromoethane             | 48.45  | 42.44  | 88    | 52-121 | 10  | 26  |
| Ethylbenzene                  | 48.45  | 37.07  | 77    | 48-126 | 6   | 29  |
| m,p-Xylenes                   | 96.90  | 74.48  | 75    | 46-125 | 9   | 30  |
| o-Xylene                      | 48.45  | 38.03  | 78    | 46-122 | 12  | 30  |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 110  | 71-128 |
| 1,2-Dichloroethane-d4 | 128  | 69-135 |
| Toluene-d8            | 95   | 80-120 |
| Bromofluorobenzene    | 104  | 77-131 |

\*= Value outside of QC limits; see narrative  
RPD= Relative Percent Difference

# Batch QC Report

| BTXE & Oxygenates |                 |           |                            |
|-------------------|-----------------|-----------|----------------------------|
| Lab #:            | 213913          | Location: | 2250 Telegraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                  |
| Project#:         | 609.004         | Analysis: | EPA 8260B                  |
| Field ID:         | B-5@2           | Batch#:   | 153510                     |
| MSS Lab ID:       | 213913-027      | Sampled:  | 07/27/09                   |
| Matrix:           | Soil            | Received: | 08/03/09                   |
| Units:            | ug/Kg           | Analyzed: | 08/05/09                   |
| Basis:            | as received     |           |                            |

Type: MS  
Lab ID: QC506188

Diln Fac: 0.9940

| Analyte                       | MSS Result | Spiked | Result | %REC | Limits |
|-------------------------------|------------|--------|--------|------|--------|
| tert-Butyl Alcohol (TBA)      | <19.16     | 248.5  | 170.7  | 69   | 42-139 |
| MTBE                          | <0.9579    | 49.70  | 39.91  | 80   | 53-127 |
| Isopropyl Ether (DIPE)        | <0.9579    | 49.70  | 36.59  | 74   | 49-130 |
| Ethyl tert-Butyl Ether (ETBE) | <0.9579    | 49.70  | 37.49  | 75   | 52-130 |
| 1,2-Dichloroethane            | <0.9579    | 49.70  | 39.66  | 80   | 51-124 |
| Benzene                       | <0.9579    | 49.70  | 47.78  | 96   | 56-126 |
| Methyl tert-Amyl Ether (TAME) | <0.9579    | 49.70  | 44.85  | 90   | 58-126 |
| Toluene                       | <0.9579    | 49.70  | 46.12  | 93   | 52-125 |
| 1,2-Dibromoethane             | <0.9579    | 49.70  | 44.77  | 90   | 52-121 |
| Ethylbenzene                  | <1.264     | 49.70  | 46.28  | 93   | 48-126 |
| m,p-Xylenes                   | <0.9579    | 99.40  | 96.30  | 97   | 46-125 |
| o-Xylene                      | <0.9579    | 49.70  | 47.42  | 95   | 46-122 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 87   | 71-128 |
| 1,2-Dichloroethane-d4 | 81   | 69-135 |
| Toluene-d8            | 97   | 80-120 |
| Bromofluorobenzene    | 90   | 77-131 |

Type: MSD  
Lab ID: QC506189

Diln Fac: 0.9709

| Analyte                       | Spiked | Result | %REC | Limits | RPD | Lim |
|-------------------------------|--------|--------|------|--------|-----|-----|
| tert-Butyl Alcohol (TBA)      | 242.7  | 178.1  | 73   | 42-139 | 7   | 36  |
| MTBE                          | 48.54  | 39.91  | 82   | 53-127 | 2   | 28  |
| Isopropyl Ether (DIPE)        | 48.54  | 36.85  | 76   | 49-130 | 3   | 27  |
| Ethyl tert-Butyl Ether (ETBE) | 48.54  | 38.71  | 80   | 52-130 | 6   | 26  |
| 1,2-Dichloroethane            | 48.54  | 38.55  | 79   | 51-124 | 0   | 23  |
| Benzene                       | 48.54  | 45.30  | 93   | 56-126 | 3   | 26  |
| Methyl tert-Amyl Ether (TAME) | 48.54  | 41.92  | 86   | 58-126 | 4   | 25  |
| Toluene                       | 48.54  | 46.19  | 95   | 52-125 | 3   | 29  |
| 1,2-Dibromoethane             | 48.54  | 43.80  | 90   | 52-121 | 0   | 26  |
| Ethylbenzene                  | 48.54  | 48.10  | 99   | 48-126 | 6   | 29  |
| m,p-Xylenes                   | 97.09  | 101.0  | 104  | 46-125 | 7   | 30  |
| o-Xylene                      | 48.54  | 49.70  | 102  | 46-122 | 7   | 30  |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 89   | 71-128 |
| 1,2-Dichloroethane-d4 | 76   | 69-135 |
| Toluene-d8            | 95   | 80-120 |
| Bromofluorobenzene    | 90   | 77-131 |

RPD= Relative Percent Difference

## Batch QC Report

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Type:             | BLANK           | Diln Fac: | 1.000                     |
| Lab ID:           | QC506251        | Batch#:   | 153546                    |
| Matrix:           | Soil            | Analyzed: | 08/05/09                  |
| Units:            | ug/Kg           |           |                           |

| Analyte                       | Result | RL  |
|-------------------------------|--------|-----|
| tert-Butyl Alcohol (TBA)      | ND     | 100 |
| MTBE                          | ND     | 5.0 |
| Isopropyl Ether (DIPE)        | ND     | 5.0 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 5.0 |
| 1,2-Dichloroethane            | ND     | 5.0 |
| Benzene                       | ND     | 5.0 |
| Methyl tert-Amyl Ether (TAME) | ND     | 5.0 |
| Toluene                       | ND     | 5.0 |
| 1,2-Dibromoethane             | ND     | 5.0 |
| Ethylbenzene                  | ND     | 5.0 |
| m,p-Xylenes                   | ND     | 5.0 |
| o-Xylene                      | ND     | 5.0 |

| Surrogate             | %REC  | Limits |
|-----------------------|-------|--------|
| Dibromofluoromethane  | 107   | 71-128 |
| 1,2-Dichloroethane-d4 | 136 * | 69-135 |
| Toluene-d8            | 98    | 80-120 |
| Bromofluorobenzene    | 105   | 77-131 |

\*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

## Batch QC Report

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Type:             | LCS             | Diln Fac: | 1.000                     |
| Lab ID:           | QC506252        | Batch#:   | 153546                    |
| Matrix:           | Soil            | Analyzed: | 08/05/09                  |
| Units:            | ug/Kg           |           |                           |

| Analyte                       | Spiked | Result  | %REC  | Limits |
|-------------------------------|--------|---------|-------|--------|
| tert-Butyl Alcohol (TBA)      | 125.0  | 185.6 b | 148 * | 56-140 |
| MTBE                          | 25.00  | 25.02   | 100   | 66-129 |
| Isopropyl Ether (DIPE)        | 25.00  | 24.08   | 96    | 65-131 |
| Ethyl tert-Butyl Ether (ETBE) | 25.00  | 25.84   | 103   | 66-132 |
| 1,2-Dichloroethane            | 25.00  | 30.02   | 120   | 70-128 |
| Benzene                       | 25.00  | 22.30   | 89    | 80-125 |
| Methyl tert-Amyl Ether (TAME) | 25.00  | 22.23   | 89    | 75-128 |
| Toluene                       | 25.00  | 20.94   | 84    | 80-126 |
| 1,2-Dibromoethane             | 25.00  | 28.33   | 113   | 80-122 |
| Ethylbenzene                  | 25.00  | 25.01   | 100   | 80-127 |
| m,p-Xylenes                   | 50.00  | 48.91   | 98    | 80-125 |
| o-Xylene                      | 25.00  | 24.76   | 99    | 80-122 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 106  | 71-128 |
| 1,2-Dichloroethane-d4 | 117  | 69-135 |
| Toluene-d8            | 87   | 80-120 |
| Bromofluorobenzene    | 101  | 77-131 |

\*= Value outside of QC limits; see narrative

b= See narrative

## Batch QC Report

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Type:             | BLANK           | Diln Fac: | 1.000                     |
| Lab ID:           | QC506253        | Batch#:   | 153547                    |
| Matrix:           | Soil            | Analyzed: | 08/05/09                  |
| Units:            | ug/Kg           |           |                           |

| Analyte                       | Result | RL  |
|-------------------------------|--------|-----|
| tert-Butyl Alcohol (TBA)      | ND     | 100 |
| MTBE                          | ND     | 5.0 |
| Isopropyl Ether (DIPE)        | ND     | 5.0 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 5.0 |
| 1,2-Dichloroethane            | ND     | 5.0 |
| Benzene                       | ND     | 5.0 |
| Methyl tert-Amyl Ether (TAME) | ND     | 5.0 |
| Toluene                       | ND     | 5.0 |
| 1,2-Dibromoethane             | ND     | 5.0 |
| Ethylbenzene                  | ND     | 5.0 |
| m,p-Xylenes                   | ND     | 5.0 |
| o-Xylene                      | ND     | 5.0 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 86   | 71-128 |
| 1,2-Dichloroethane-d4 | 95   | 69-135 |
| Toluene-d8            | 98   | 80-120 |
| Bromofluorobenzene    | 91   | 77-131 |

ND= Not Detected

RL= Reporting Limit

## Batch QC Report

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Type:             | LCS             | Diln Fac: | 1.000                     |
| Lab ID:           | QC506254        | Batch#:   | 153547                    |
| Matrix:           | Soil            | Analyzed: | 08/05/09                  |
| Units:            | ug/Kg           |           |                           |

| Analyte                       | Spiked | Result | %REC | Limits |
|-------------------------------|--------|--------|------|--------|
| tert-Butyl Alcohol (TBA)      | 125.0  | 97.24  | 78   | 56-140 |
| MTBE                          | 25.00  | 19.71  | 79   | 66-129 |
| Isopropyl Ether (DIPE)        | 25.00  | 19.62  | 78   | 65-131 |
| Ethyl tert-Butyl Ether (ETBE) | 25.00  | 20.20  | 81   | 66-132 |
| 1,2-Dichloroethane            | 25.00  | 22.51  | 90   | 70-128 |
| Benzene                       | 25.00  | 25.36  | 101  | 80-125 |
| Methyl tert-Amyl Ether (TAME) | 25.00  | 22.52  | 90   | 75-128 |
| Toluene                       | 25.00  | 25.24  | 101  | 80-126 |
| 1,2-Dibromoethane             | 25.00  | 23.43  | 94   | 80-122 |
| Ethylbenzene                  | 25.00  | 26.98  | 108  | 80-127 |
| m,p-Xylenes                   | 50.00  | 55.79  | 112  | 80-125 |
| o-Xylene                      | 25.00  | 26.47  | 106  | 80-122 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 91   | 71-128 |
| 1,2-Dichloroethane-d4 | 91   | 69-135 |
| Toluene-d8            | 97   | 80-120 |
| Bromofluorobenzene    | 94   | 77-131 |



# Batch QC Report

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-9@20          | Batch#:   | 153547                    |
| MSS Lab ID:       | 213913-045      | Sampled:  | 07/27/09                  |
| Matrix:           | Soil            | Received: | 08/03/09                  |
| Units:            | ug/Kg           | Analyzed: | 08/05/09                  |
| Basis:            | as received     |           |                           |

Type: MS  
Lab ID: QC506294

Diln Fac: 0.9615

| Analyte                       | MSS     | Result | Spiked | %REC | Limits |
|-------------------------------|---------|--------|--------|------|--------|
| tert-Butyl Alcohol (TBA)      | 28.46   | 240.4  | 218.7  | 79   | 42-139 |
| MTBE                          | <0.9597 | 48.08  | 38.32  | 80   | 53-127 |
| Isopropyl Ether (DIPE)        | <0.9597 | 48.08  | 34.88  | 73   | 49-130 |
| Ethyl tert-Butyl Ether (ETBE) | <0.9597 | 48.08  | 36.13  | 75   | 52-130 |
| 1,2-Dichloroethane            | <0.9597 | 48.08  | 37.32  | 78   | 51-124 |
| Benzene                       | 2.167   | 48.08  | 45.62  | 90   | 56-126 |
| Methyl tert-Amyl Ether (TAME) | <0.9597 | 48.08  | 40.27  | 84   | 58-126 |
| Toluene                       | <0.9597 | 48.08  | 43.63  | 91   | 52-125 |
| 1,2-Dibromoethane             | <0.9597 | 48.08  | 43.58  | 91   | 52-121 |
| Ethylbenzene                  | <1.266  | 48.08  | 44.26  | 92   | 48-126 |
| m,p-Xylenes                   | 1.026   | 96.15  | 94.42  | 97   | 46-125 |
| o-Xylene                      | <0.9597 | 48.08  | 45.60  | 95   | 46-122 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 91   | 71-128 |
| 1,2-Dichloroethane-d4 | 81   | 69-135 |
| Toluene-d8            | 97   | 80-120 |
| Bromofluorobenzene    | 95   | 77-131 |

Type: MSD  
Lab ID: QC506295

Diln Fac: 0.9542

| Analyte                       | Spiked | Result | %REC | Limits | RPD | Lim |
|-------------------------------|--------|--------|------|--------|-----|-----|
| tert-Butyl Alcohol (TBA)      | 238.5  | 209.2  | 76   | 42-139 | 4   | 36  |
| MTBE                          | 47.71  | 38.57  | 81   | 53-127 | 1   | 28  |
| Isopropyl Ether (DIPE)        | 47.71  | 34.88  | 73   | 49-130 | 1   | 27  |
| Ethyl tert-Butyl Ether (ETBE) | 47.71  | 35.87  | 75   | 52-130 | 0   | 26  |
| 1,2-Dichloroethane            | 47.71  | 38.41  | 81   | 51-124 | 4   | 23  |
| Benzene                       | 47.71  | 50.62  | 102  | 56-126 | 11  | 26  |
| Methyl tert-Amyl Ether (TAME) | 47.71  | 40.12  | 84   | 58-126 | 0   | 25  |
| Toluene                       | 47.71  | 45.95  | 96   | 52-125 | 6   | 29  |
| 1,2-Dibromoethane             | 47.71  | 43.80  | 92   | 52-121 | 1   | 26  |
| Ethylbenzene                  | 47.71  | 45.45  | 95   | 48-126 | 3   | 29  |
| m,p-Xylenes                   | 95.42  | 96.46  | 100  | 46-125 | 3   | 30  |
| o-Xylene                      | 47.71  | 48.34  | 101  | 46-122 | 7   | 30  |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 91   | 71-128 |
| 1,2-Dichloroethane-d4 | 83   | 69-135 |
| Toluene-d8            | 95   | 80-120 |
| Bromofluorobenzene    | 89   | 77-131 |

RPD= Relative Percent Difference

# Batch QC Report

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-12@15         | Basis:    | as received               |
| MSS Lab ID:       | 213913-056      | Batch#:   | 153546                    |
| Matrix:           | Soil            | Sampled:  | 07/27/09                  |
| Units:            | ug/Kg           | Received: | 08/03/09                  |

Type: MS Diln Fac: 0.9398  
 Lab ID: QC506340 Analyzed: 08/05/09

| Analyte                       | MSS Result | Spiked | Result  | %REC  | Limits |
|-------------------------------|------------|--------|---------|-------|--------|
| tert-Butyl Alcohol (TBA)      | <19.12     | 235.0  | 376.7 b | 160 * | 42-139 |
| MTBE                          | <0.9560    | 46.99  | 48.90   | 104   | 53-127 |
| Isopropyl Ether (DIPE)        | <0.9560    | 46.99  | 44.84   | 95    | 49-130 |
| Ethyl tert-Butyl Ether (ETBE) | <0.9560    | 46.99  | 42.43   | 90    | 52-130 |
| 1,2-Dichloroethane            | <0.9560    | 46.99  | 59.48   | 127 * | 51-124 |
| Benzene                       | <0.9560    | 46.99  | 44.75   | 95    | 56-126 |
| Methyl tert-Amyl Ether (TAME) | <0.9560    | 46.99  | 45.55   | 97    | 58-126 |
| Toluene                       | <0.9560    | 46.99  | 38.61   | 82    | 52-125 |
| 1,2-Dibromoethane             | <0.9560    | 46.99  | 48.18   | 103   | 52-121 |
| Ethylbenzene                  | <0.9560    | 46.99  | 46.85   | 100   | 48-126 |
| m,p-Xylenes                   | <0.9560    | 93.98  | 92.93   | 99    | 46-125 |
| o-Xylene                      | <0.9560    | 46.99  | 45.63   | 97    | 46-122 |

| Surrogate             | %REC  | Limits |
|-----------------------|-------|--------|
| Dibromofluoromethane  | 102   | 71-128 |
| 1,2-Dichloroethane-d4 | 144 * | 69-135 |
| Toluene-d8            | 83    | 80-120 |
| Bromofluorobenzene    | 97    | 77-131 |

Type: MSD Diln Fac: 0.9709  
 Lab ID: QC506341 Analyzed: 08/06/09

| Analyte                       | Spiked | Result  | %REC  | Limits | RPD | Lim |
|-------------------------------|--------|---------|-------|--------|-----|-----|
| tert-Butyl Alcohol (TBA)      | 242.7  | 360.8 b | 149 * | 42-139 | 8   | 36  |
| MTBE                          | 48.54  | 44.37   | 91    | 53-127 | 13  | 28  |
| Isopropyl Ether (DIPE)        | 48.54  | 42.50   | 88    | 49-130 | 9   | 27  |
| Ethyl tert-Butyl Ether (ETBE) | 48.54  | 41.65   | 86    | 52-130 | 5   | 26  |
| 1,2-Dichloroethane            | 48.54  | 54.97   | 113   | 51-124 | 11  | 23  |
| Benzene                       | 48.54  | 43.66   | 90    | 56-126 | 6   | 26  |
| Methyl tert-Amyl Ether (TAME) | 48.54  | 42.86   | 88    | 58-126 | 9   | 25  |
| Toluene                       | 48.54  | 38.44   | 79    | 52-125 | 4   | 29  |
| 1,2-Dibromoethane             | 48.54  | 45.37   | 93    | 52-121 | 9   | 26  |
| Ethylbenzene                  | 48.54  | 47.03   | 97    | 48-126 | 3   | 29  |
| m,p-Xylenes                   | 97.09  | 91.94   | 95    | 46-125 | 4   | 30  |
| o-Xylene                      | 48.54  | 44.69   | 92    | 46-122 | 5   | 30  |

| Surrogate             | %REC  | Limits |
|-----------------------|-------|--------|
| Dibromofluoromethane  | 107   | 71-128 |
| 1,2-Dichloroethane-d4 | 136 * | 69-135 |
| Toluene-d8            | 92    | 80-120 |
| Bromofluorobenzene    | 99    | 77-131 |

\*= Value outside of QC limits; see narrative  
 b= See narrative  
 RPD= Relative Percent Difference  
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## Batch QC Report

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Type:             | BLANK           | Diln Fac: | 1.000                     |
| Lab ID:           | QC506420        | Batch#:   | 153589                    |
| Matrix:           | Soil            | Analyzed: | 08/06/09                  |
| Units:            | ug/Kg           |           |                           |

| Analyte                       | Result | RL  |
|-------------------------------|--------|-----|
| tert-Butyl Alcohol (TBA)      | ND     | 100 |
| MTBE                          | ND     | 5.0 |
| Isopropyl Ether (DIPE)        | ND     | 5.0 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 5.0 |
| 1,2-Dichloroethane            | ND     | 5.0 |
| Benzene                       | ND     | 5.0 |
| Methyl tert-Amyl Ether (TAME) | ND     | 5.0 |
| Toluene                       | ND     | 5.0 |
| 1,2-Dibromoethane             | ND     | 5.0 |
| Ethylbenzene                  | ND     | 5.0 |
| m,p-Xylenes                   | ND     | 5.0 |
| o-Xylene                      | ND     | 5.0 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 86   | 71-128 |
| 1,2-Dichloroethane-d4 | 94   | 69-135 |
| Toluene-d8            | 96   | 80-120 |
| Bromofluorobenzene    | 94   | 77-131 |

ND= Not Detected

RL= Reporting Limit

# Batch QC Report

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Type:             | LCS             | Diln Fac: | 1.000                     |
| Lab ID:           | QC506421        | Batch#:   | 153589                    |
| Matrix:           | Soil            | Analyzed: | 08/06/09                  |
| Units:            | ug/Kg           |           |                           |

| Analyte                       | Spiked | Result | %REC | Limits |
|-------------------------------|--------|--------|------|--------|
| tert-Butyl Alcohol (TBA)      | 125.0  | 94.77  | 76   | 56-140 |
| MTBE                          | 25.00  | 18.76  | 75   | 66-129 |
| Isopropyl Ether (DIPE)        | 25.00  | 18.51  | 74   | 65-131 |
| Ethyl tert-Butyl Ether (ETBE) | 25.00  | 19.15  | 77   | 66-132 |
| 1,2-Dichloroethane            | 25.00  | 23.02  | 92   | 70-128 |
| Benzene                       | 25.00  | 25.21  | 101  | 80-125 |
| Methyl tert-Amyl Ether (TAME) | 25.00  | 22.62  | 90   | 75-128 |
| Toluene                       | 25.00  | 24.67  | 99   | 80-126 |
| 1,2-Dibromoethane             | 25.00  | 23.96  | 96   | 80-122 |
| Ethylbenzene                  | 25.00  | 25.89  | 104  | 80-127 |
| m,p-Xylenes                   | 50.00  | 54.17  | 108  | 80-125 |
| o-Xylene                      | 25.00  | 26.80  | 107  | 80-122 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 87   | 71-128 |
| 1,2-Dichloroethane-d4 | 89   | 69-135 |
| Toluene-d8            | 99   | 80-120 |
| Bromofluorobenzene    | 94   | 77-131 |

## Batch QC Report

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Type:             | BLANK           | Diln Fac: | 1.000                     |
| Lab ID:           | QC506489        | Batch#:   | 153589                    |
| Matrix:           | Soil            | Analyzed: | 08/06/09                  |
| Units:            | ug/Kg           |           |                           |

| Analyte                       | Result | RL  |
|-------------------------------|--------|-----|
| tert-Butyl Alcohol (TBA)      | ND     | 100 |
| MTBE                          | ND     | 5.0 |
| Isopropyl Ether (DIPE)        | ND     | 5.0 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 5.0 |
| 1,2-Dichloroethane            | ND     | 5.0 |
| Benzene                       | ND     | 5.0 |
| Methyl tert-Amyl Ether (TAME) | ND     | 5.0 |
| Toluene                       | ND     | 5.0 |
| 1,2-Dibromoethane             | ND     | 5.0 |
| Ethylbenzene                  | ND     | 5.0 |
| m,p-Xylenes                   | ND     | 5.0 |
| o-Xylene                      | ND     | 5.0 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 91   | 71-128 |
| 1,2-Dichloroethane-d4 | 102  | 69-135 |
| Toluene-d8            | 101  | 80-120 |
| Bromofluorobenzene    | 95   | 77-131 |

ND= Not Detected

RL= Reporting Limit

# Batch QC Report

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | B-8@20          | Batch#:   | 153589                    |
| MSS Lab ID:       | 213913-041      | Sampled:  | 07/27/09                  |
| Matrix:           | Soil            | Received: | 08/03/09                  |
| Units:            | ug/Kg           | Analyzed: | 08/07/09                  |
| Basis:            | as received     |           |                           |

Type: MS  
Lab ID: QC506508

Diln Fac: 0.9728

| Analyte                       | MSS Result | Spiked | Result | %REC    | Limits |
|-------------------------------|------------|--------|--------|---------|--------|
| tert-Butyl Alcohol (TBA)      | <19.34     | 243.2  | 172.6  | 71      | 42-139 |
| MTBE                          | <0.9671    | 48.64  | 33.69  | 69      | 53-127 |
| Isopropyl Ether (DIPE)        | <0.9671    | 48.64  | 31.66  | 65      | 49-130 |
| Ethyl tert-Butyl Ether (ETBE) | <0.9671    | 48.64  | 33.31  | 68      | 52-130 |
| 1,2-Dichloroethane            | <0.9671    | 48.64  | 35.31  | 73      | 51-124 |
| Benzene                       | 216.4 >LR  | 48.64  | 102.6  | -234 NM | 56-126 |
| Methyl tert-Amyl Ether (TAME) | 6.324      | 48.64  | 37.17  | 63      | 58-126 |
| Toluene                       | 3.158      | 48.64  | 45.62  | 87      | 52-125 |
| 1,2-Dibromoethane             | <0.9671    | 48.64  | 40.59  | 83      | 52-121 |
| Ethylbenzene                  | 37.40      | 48.64  | 52.60  | 31 *    | 48-126 |
| m,p-Xylenes                   | 9.680      | 97.28  | 90.28  | 83      | 46-125 |
| o-Xylene                      | 2.984      | 48.64  | 43.64  | 84      | 46-122 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 91   | 71-128 |
| 1,2-Dichloroethane-d4 | 86   | 69-135 |
| Toluene-d8            | 96   | 80-120 |
| Bromofluorobenzene    | 91   | 77-131 |

Type: MSD  
Lab ID: QC506509

Diln Fac: 0.9709

| Analyte                       | Spiked | Result | %REC    | Limits | RPD  | Lim |
|-------------------------------|--------|--------|---------|--------|------|-----|
| tert-Butyl Alcohol (TBA)      | 242.7  | 150.6  | 62      | 42-139 | 13   | 36  |
| MTBE                          | 48.54  | 29.71  | 61      | 53-127 | 12   | 28  |
| Isopropyl Ether (DIPE)        | 48.54  | 30.46  | 63      | 49-130 | 4    | 27  |
| Ethyl tert-Butyl Ether (ETBE) | 48.54  | 31.26  | 64      | 52-130 | 6    | 26  |
| 1,2-Dichloroethane            | 48.54  | 31.85  | 66      | 51-124 | 10   | 23  |
| Benzene                       | 48.54  | 134.6  | -169 NM | 56-126 | 27 * | 26  |
| Methyl tert-Amyl Ether (TAME) | 48.54  | 33.70  | 56 *    | 58-126 | 10   | 25  |
| Toluene                       | 48.54  | 44.52  | 85      | 52-125 | 2    | 29  |
| 1,2-Dibromoethane             | 48.54  | 37.63  | 78      | 52-121 | 7    | 26  |
| Ethylbenzene                  | 48.54  | 61.17  | 49      | 48-126 | 15   | 29  |
| m,p-Xylenes                   | 97.09  | 90.95  | 84      | 46-125 | 1    | 30  |
| o-Xylene                      | 48.54  | 43.86  | 84      | 46-122 | 1    | 30  |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 89   | 71-128 |
| 1,2-Dichloroethane-d4 | 79   | 69-135 |
| Toluene-d8            | 95   | 80-120 |
| Bromofluorobenzene    | 94   | 77-131 |

\*= Value outside of QC limits; see narrative  
 NM= Not Meaningful: Sample concentration > 4X spike concentration  
 >LR= Response exceeds instrument's linear range  
 RPD= Relative Percent Difference

## Batch QC Report

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Type:             | BLANK           | Diln Fac: | 1.000                     |
| Lab ID:           | QC506594        | Batch#:   | 153634                    |
| Matrix:           | Soil            | Analyzed: | 08/07/09                  |
| Units:            | ug/Kg           |           |                           |

| Analyte                       | Result | RL  |
|-------------------------------|--------|-----|
| tert-Butyl Alcohol (TBA)      | ND     | 100 |
| MTBE                          | ND     | 5.0 |
| Isopropyl Ether (DIPE)        | ND     | 5.0 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 5.0 |
| 1,2-Dichloroethane            | ND     | 5.0 |
| Benzene                       | ND     | 5.0 |
| Methyl tert-Amyl Ether (TAME) | ND     | 5.0 |
| Toluene                       | ND     | 5.0 |
| 1,2-Dibromoethane             | ND     | 5.0 |
| Ethylbenzene                  | ND     | 5.0 |
| m,p-Xylenes                   | ND     | 5.0 |
| o-Xylene                      | ND     | 5.0 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 85   | 71-128 |
| 1,2-Dichloroethane-d4 | 95   | 69-135 |
| Toluene-d8            | 97   | 80-120 |
| Bromofluorobenzene    | 88   | 77-131 |

ND= Not Detected

RL= Reporting Limit

## Batch QC Report

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Type:             | LCS             | Diln Fac: | 1.000                     |
| Lab ID:           | QC506595        | Batch#:   | 153634                    |
| Matrix:           | Soil            | Analyzed: | 08/07/09                  |
| Units:            | ug/Kg           |           |                           |

| Analyte                       | Spiked | Result | %REC | Limits |
|-------------------------------|--------|--------|------|--------|
| tert-Butyl Alcohol (TBA)      | 125.0  | 101.4  | 81   | 56-140 |
| MTBE                          | 25.00  | 19.67  | 79   | 66-129 |
| Isopropyl Ether (DIPE)        | 25.00  | 19.04  | 76   | 65-131 |
| Ethyl tert-Butyl Ether (ETBE) | 25.00  | 19.44  | 78   | 66-132 |
| 1,2-Dichloroethane            | 25.00  | 22.23  | 89   | 70-128 |
| Benzene                       | 25.00  | 24.68  | 99   | 80-125 |
| Methyl tert-Amyl Ether (TAME) | 25.00  | 22.24  | 89   | 75-128 |
| Toluene                       | 25.00  | 25.12  | 100  | 80-126 |
| 1,2-Dibromoethane             | 25.00  | 23.75  | 95   | 80-122 |
| Ethylbenzene                  | 25.00  | 26.55  | 106  | 80-127 |
| m,p-Xylenes                   | 50.00  | 53.72  | 107  | 80-125 |
| o-Xylene                      | 25.00  | 25.83  | 103  | 80-122 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 90   | 71-128 |
| 1,2-Dichloroethane-d4 | 88   | 69-135 |
| Toluene-d8            | 98   | 80-120 |
| Bromofluorobenzene    | 89   | 77-131 |



# Batch QC Report

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Field ID:         | ZZZZZZZZZZ      | Batch#:   | 153634                    |
| MSS Lab ID:       | 213929-017      | Sampled:  | 08/03/09                  |
| Matrix:           | Soil            | Received: | 08/04/09                  |
| Units:            | ug/Kg           | Analyzed: | 08/08/09                  |
| Basis:            | as received     |           |                           |

Type: MS  
Lab ID: QC506640

Diln Fac: 1.022

| Analyte                       | MSS Result | Spiked | Result  | %REC | Limits |
|-------------------------------|------------|--------|---------|------|--------|
| tert-Butyl Alcohol (TBA)      | <21.83     | 255.6  | 203.0 b | 79   | 42-139 |
| MTBE                          | <1.092     | 51.12  | 41.05 b | 80   | 53-127 |
| Isopropyl Ether (DIPE)        | <1.092     | 51.12  | 39.53 b | 77   | 49-130 |
| Ethyl tert-Butyl Ether (ETBE) | <1.092     | 51.12  | 39.04 b | 76   | 52-130 |
| 1,2-Dichloroethane            | <1.092     | 51.12  | 48.12   | 94   | 51-124 |
| Benzene                       | <1.092     | 51.12  | 47.63   | 93   | 56-126 |
| Methyl tert-Amyl Ether (TAME) | <1.092     | 51.12  | 47.29 b | 92   | 58-126 |
| Toluene                       | <1.092     | 51.12  | 47.79   | 93   | 52-125 |
| 1,2-Dibromoethane             | <1.092     | 51.12  | 38.69   | 76   | 52-121 |
| Ethylbenzene                  | <1.441     | 51.12  | 51.12   | 100  | 48-126 |
| m,p-Xylenes                   | <1.092     | 102.2  | 102.2   | 100  | 46-125 |
| o-Xylene                      | <1.092     | 51.12  | 51.45   | 101  | 46-122 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 94   | 71-128 |
| 1,2-Dichloroethane-d4 | 107  | 69-135 |
| Toluene-d8            | 99   | 80-120 |
| Bromofluorobenzene    | 100  | 77-131 |

Type: MSD  
Lab ID: QC506641

Diln Fac: 1.220

| Analyte                       | Spiked | Result  | %REC | Limits | RPD | Lim |
|-------------------------------|--------|---------|------|--------|-----|-----|
| tert-Butyl Alcohol (TBA)      | 304.9  | 284.4 b | 93   | 42-139 | 16  | 36  |
| MTBE                          | 60.98  | 53.05 b | 87   | 53-127 | 8   | 28  |
| Isopropyl Ether (DIPE)        | 60.98  | 50.23 b | 82   | 49-130 | 6   | 27  |
| Ethyl tert-Butyl Ether (ETBE) | 60.98  | 51.72 b | 85   | 52-130 | 10  | 26  |
| 1,2-Dichloroethane            | 60.98  | 58.99   | 97   | 51-124 | 3   | 23  |
| Benzene                       | 60.98  | 59.74   | 98   | 56-126 | 5   | 26  |
| Methyl tert-Amyl Ether (TAME) | 60.98  | 59.57 b | 98   | 58-126 | 5   | 25  |
| Toluene                       | 60.98  | 59.64   | 98   | 52-125 | 5   | 29  |
| 1,2-Dibromoethane             | 60.98  | 51.18   | 84   | 52-121 | 10  | 26  |
| Ethylbenzene                  | 60.98  | 60.14   | 99   | 48-126 | 1   | 29  |
| m,p-Xylenes                   | 122.0  | 123.3   | 101  | 46-125 | 1   | 30  |
| o-Xylene                      | 60.98  | 61.13   | 100  | 46-122 | 0   | 30  |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 96   | 71-128 |
| 1,2-Dichloroethane-d4 | 108  | 69-135 |
| Toluene-d8            | 99   | 80-120 |
| Bromofluorobenzene    | 98   | 77-131 |

b= See narrative  
RPD= Relative Percent Difference  
Page 1 of 1

## Batch QC Report

| BTXE & Oxygenates |                 |           |                           |
|-------------------|-----------------|-----------|---------------------------|
| Lab #:            | 213913          | Location: | 2250 Telgraph Av. Oakland |
| Client:           | Fugro West Inc. | Prep:     | EPA 5030B                 |
| Project#:         | 609.004         | Analysis: | EPA 8260B                 |
| Type:             | BLANK           | Diln Fac: | 1.000                     |
| Lab ID:           | QC506684        | Batch#:   | 153634                    |
| Matrix:           | Soil            | Analyzed: | 08/07/09                  |
| Units:            | ug/Kg           |           |                           |

| Analyte                       | Result | RL  |
|-------------------------------|--------|-----|
| tert-Butyl Alcohol (TBA)      | ND     | 100 |
| MTBE                          | ND     | 5.0 |
| Isopropyl Ether (DIPE)        | ND     | 5.0 |
| Ethyl tert-Butyl Ether (ETBE) | ND     | 5.0 |
| 1,2-Dichloroethane            | ND     | 5.0 |
| Benzene                       | ND     | 5.0 |
| Methyl tert-Amyl Ether (TAME) | ND     | 5.0 |
| Toluene                       | ND     | 5.0 |
| 1,2-Dibromoethane             | ND     | 5.0 |
| Ethylbenzene                  | ND     | 5.0 |
| m,p-Xylenes                   | ND     | 5.0 |
| o-Xylene                      | ND     | 5.0 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 90   | 71-128 |
| 1,2-Dichloroethane-d4 | 103  | 69-135 |
| Toluene-d8            | 100  | 80-120 |
| Bromofluorobenzene    | 101  | 77-131 |

ND= Not Detected

RL= Reporting Limit

| Total Organic Carbon (TOC) |                      |           |                           |
|----------------------------|----------------------|-----------|---------------------------|
| Lab #:                     | 213913               | Location: | 2250 Telgraph Av. Oakland |
| Client:                    | Fugro West Inc.      | Prep:     | METHOD                    |
| Project#:                  | 609.004              | Analysis: | WALKLEY-BLACK             |
| Analyte:                   | Total Organic Carbon | Batch#:   | 153643                    |
| Matrix:                    | Soil                 | Sampled:  | 07/27/09                  |
| Units:                     | %                    | Received: | 08/03/09                  |
| Basis:                     | as received          | Analyzed: | 08/07/09                  |
| Diln Fac:                  | 1.000                |           |                           |

| Field ID | Type   | Lab ID     | Result | RL   |
|----------|--------|------------|--------|------|
| B-2@5    | SAMPLE | 213913-008 | 0.53   | 0.02 |
| B-8@7.5  | SAMPLE | 213913-039 | 0.10   | 0.02 |
| B-10@5   | SAMPLE | 213913-047 | 0.87   | 0.05 |
| B-11@7.5 | SAMPLE | 213913-051 | 0.05   | 0.01 |
|          | BLANK  | QC506635   | ND     | 0.01 |

ND= Not Detected  
RL= Reporting Limit

## Batch QC Report

| Total Organic Carbon (TOC) |                      |           |                           |
|----------------------------|----------------------|-----------|---------------------------|
| Lab #:                     | 213913               | Location: | 2250 Telgraph Av. Oakland |
| Client:                    | Fugro West Inc.      | Prep:     | METHOD                    |
| Project#:                  | 609.004              | Analysis: | WALKLEY-BLACK             |
| Analyte:                   | Total Organic Carbon | Diln Fac: | 1.000                     |
| Field ID:                  | B-2@5                | Batch#:   | 153643                    |
| MSS Lab ID:                | 213913-008           | Sampled:  | 07/27/09                  |
| Matrix:                    | Soil                 | Received: | 08/03/09                  |
| Units:                     | %                    | Analyzed: | 08/07/09                  |
| Basis:                     | as received          |           |                           |

| Type | Lab ID   | MSS Result | Spiked | Result | %REC | Limits | RPD | Lim |
|------|----------|------------|--------|--------|------|--------|-----|-----|
| LCS  | QC506636 |            | 0.1300 | 0.1360 | 104  | 80-120 |     |     |
| MS   | QC506637 | 0.5330     | 0.2637 | 0.7270 | 73   | 37-120 |     |     |
| MSD  | QC506638 |            | 0.2616 | 0.7340 | 77   | 37-120 | 1   | 30  |

RPD= Relative Percent Difference





Curtis & Tompkins, Ltd.

Analytical Laboratories, Since 1878





Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

**Laboratory Job Number 214704**  
**ANALYTICAL REPORT**

Fugro West Inc.  
1000 Broadway  
Oakland, CA 94607

Project : 609.004  
Location : Buttner  
Level : II

Sample ID

MW-1  
MW-3  
MW-4

Lab ID

214704-001  
214704-002  
214704-003

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature:   
Project Manager

Date: 09/10/2009

NELAP # 01107CA

## CASE NARRATIVE

Laboratory number: 214704  
Client: Fugro West Inc.  
Project: 609.004  
Location: Buttner  
Request Date: 09/08/09  
Samples Received: 09/08/09

This data package contains sample and QC results for three water samples, requested for the above referenced project on 09/08/09. The samples were received cold and intact.

### TPH-Purgeables and/or BTXE by GC (EPA 8015B and EPA 8021B):

Low recoveries were observed for gasoline C7-C12 in the MS/MSD for batch 154713; the parent sample was not a project sample, the LCS was within limits, and the associated RPD was within limits. High surrogate recovery was observed for trifluorotoluene (PID) in MW-3 (lab # 214704-002), due to interference from coeluting hydrocarbon peaks; the corresponding bromofluorobenzene (PID) surrogate recovery was within limits. High surrogate recoveries were observed for bromofluorobenzene (FID) and trifluorotoluene (FID) in MW-3 (lab # 214704-002), MW-4 (lab # 214704-003), and the LCS/MS/MSD for batch 154713, due to interference from coeluting hydrocarbon peaks. High surrogate recovery was observed for bromofluorobenzene (PID) in MW-4 (lab # 214704-003), due to interference from coeluting hydrocarbon peaks; the corresponding trifluorotoluene (PID) surrogate recovery was within limits. MW-4 (lab # 214704-003) had pH greater than 2. No other analytical problems were encountered.

21470x/

1

PROJECT NO.: ~~2~~ 609.004

LAB: C E

PROJECT CONTACT: Karen Emery

## TURNAROUND:

## 48-hour Rush

SAMPLED BY: Russell Carter

ANALYSIS REQUESTED

[illegible]

**COMMENTS & NOTES:**

RELINQUISHED BY: (Signature)

DATE/TIME

RECEIVED BY: (Signature)

DATE/TIME

RELINQUISHED BY: (Signature)

DATE/TIME

RECEIVED BY: (Signature)

DATE/TIME

RELINQUISHED BY: (Signature)

DATE/TIME

RECEIVED BY: (Signature)

DATE/TIME

RELINQUISHED BY: (Signature)

DATE/TIME

RECEIVED BY: (Signature)

DATE/TIME



**FUGRO WEST, INC.**

**1000 Broadway, Suite 440**

**Oakland, California 94607**

**Tel: 510.268.0461 Fax: 510.268.0545**

Approved by Glenn Young, AC 62 Manager, Fugro West, Inc. 10/13/06

Note: If this is a printed copy, please check the online QMS to ensure that it is the latest version.

intact cold RO

3 of 14



# COOLER RECEIPT CHECKLIST



Curtis & Tompkins, Ltd.

Login # 214704 Date Received 9-8-9 Number of coolers 1  
 Client Fryco Project 609-004  
 Date Opened 9-8-9 By (print) SEMA (sign) [Signature]  
 Date Logged in / By (print) / (sign) /

1. Did cooler come with a shipping slip (airbill, etc) \_\_\_\_\_ YES NO  
 Shipping info \_\_\_\_\_

2A. Were custody seals present? ... ☐ YES (circle) on cooler on samples NO  
 How many \_\_\_\_\_ Name \_\_\_\_\_ Date \_\_\_\_\_

2B. Were custody seals intact upon arrival? \_\_\_\_\_ YES NO N/A

3. Were custody papers dry and intact when received? YES NO

4. Were custody papers filled out properly (ink, signed, etc)? YES NO

5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO

6. Indicate the packing in cooler: (if other, describe) \_\_\_\_\_

☐ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None  
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation:

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) \_\_\_\_\_

☒ Samples Received on ice & cold without a temperature blank

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? \_\_\_\_\_ YES NO

If YES, what time were they transferred to freezer? \_\_\_\_\_

9. Did all bottles arrive unbroken/unopened? YES NO

10. Are samples in the appropriate containers for indicated tests? YES NO

11. Are sample labels present, in good condition and complete? YES NO

12. Do the sample labels agree with custody papers? YES NO

13. Was sufficient amount of sample sent for tests requested? YES NO

14. Are the samples appropriately preserved? YES NO N/A

15. Are bubbles > 6mm absent in VOA samples? YES NO N/A

16. Was the client contacted concerning this sample delivery? \_\_\_\_\_ YES NO

If YES, Who was called? \_\_\_\_\_ By \_\_\_\_\_ Date: \_\_\_\_\_

## COMMENTS

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### Curtis & Tompkins Laboratories Analytical Report

|           |                 |           |           |
|-----------|-----------------|-----------|-----------|
| Lab #:    | 214704          | Location: | Buttner   |
| Client:   | Fugro West Inc. | Prep:     | EPA 5030B |
| Project#: | 609.004         |           |           |
| Matrix:   | Water           | Sampled:  | 09/08/09  |
| Units:    | ug/L            | Received: | 09/08/09  |
| Diln Fac: | 1.000           |           |           |

Field ID: MW-1                      Lab ID: 214704-001  
Type: SAMPLE

| Analyte         | Result | RL   | Batch# | Analyzed | Analysis  |
|-----------------|--------|------|--------|----------|-----------|
| Gasoline C7-Cl2 | 56 Y   | 50   | 154713 | 09/09/09 | EPA 8015B |
| MTBE            | ND     | 2.0  | 154738 | 09/10/09 | EPA 8021B |
| Benzene         | ND     | 0.50 | 154738 | 09/10/09 | EPA 8021B |
| Toluene         | ND     | 0.50 | 154738 | 09/10/09 | EPA 8021B |
| Ethylbenzene    | ND     | 0.50 | 154738 | 09/10/09 | EPA 8021B |
| m,p-Xylenes     | 0.56 C | 0.50 | 154738 | 09/10/09 | EPA 8021B |
| o-Xylene        | ND     | 0.50 | 154738 | 09/10/09 | EPA 8021B |

| Surrogate                | %REC | Limits | Batch# | Analyzed | Analysis  |
|--------------------------|------|--------|--------|----------|-----------|
| Trifluorotoluene (FID)   | 132  | 64-147 | 154713 | 09/09/09 | EPA 8015B |
| Bromofluorobenzene (FID) | 120  | 71-138 | 154713 | 09/09/09 | EPA 8015B |
| Trifluorotoluene (PID)   | 97   | 45-151 | 154738 | 09/10/09 | EPA 8021B |
| Bromofluorobenzene (PID) | 100  | 54-134 | 154738 | 09/10/09 | EPA 8021B |

Field ID: MW-3                      Lab ID: 214704-002  
Type: SAMPLE

| Analyte         | Result  | RL   | Batch# | Analyzed | Analysis  |
|-----------------|---------|------|--------|----------|-----------|
| Gasoline C7-Cl2 | 1,200 Y | 50   | 154713 | 09/09/09 | EPA 8015B |
| MTBE            | ND      | 2.0  | 154738 | 09/10/09 | EPA 8021B |
| Benzene         | 280     | 0.50 | 154738 | 09/10/09 | EPA 8021B |
| Toluene         | 2.4     | 0.50 | 154738 | 09/10/09 | EPA 8021B |
| Ethylbenzene    | 9.2 C   | 0.50 | 154738 | 09/10/09 | EPA 8021B |
| m,p-Xylenes     | 2.3 C   | 0.50 | 154738 | 09/10/09 | EPA 8021B |
| o-Xylene        | 0.78    | 0.50 | 154738 | 09/10/09 | EPA 8021B |

| Surrogate                | %REC  | Limits | Batch# | Analyzed | Analysis  |
|--------------------------|-------|--------|--------|----------|-----------|
| Trifluorotoluene (FID)   | 169 * | 64-147 | 154713 | 09/09/09 | EPA 8015B |
| Bromofluorobenzene (FID) | 129   | 71-138 | 154713 | 09/09/09 | EPA 8015B |
| Trifluorotoluene (PID)   | 157 * | 45-151 | 154738 | 09/10/09 | EPA 8021B |
| Bromofluorobenzene (PID) | 110   | 54-134 | 154738 | 09/10/09 | EPA 8021B |

\*= Value outside of QC limits; see narrative  
C= Presence confirmed, but RPD between columns exceeds 40%  
Y= Sample exhibits chromatographic pattern which does not resemble standard  
NA= Not Analyzed  
ND= Not Detected  
RL= Reporting Limit

### Curtis & Tompkins Laboratories Analytical Report

|           |                 |           |           |
|-----------|-----------------|-----------|-----------|
| Lab #:    | 214704          | Location: | Buttner   |
| Client:   | Fugro West Inc. | Prep:     | EPA 5030B |
| Project#: | 609.004         |           |           |
| Matrix:   | Water           | Sampled:  | 09/08/09  |
| Units:    | ug/L            | Received: | 09/08/09  |
| Diln Fac: | 1.000           |           |           |

Field ID: MW-4                      Lab ID: 214704-003  
Type: SAMPLE

| Analyte         | Result | RL   | Batch# | Analyzed | Analysis  |
|-----------------|--------|------|--------|----------|-----------|
| Gasoline C7-C12 | 580 Y  | 50   | 154713 | 09/09/09 | EPA 8015B |
| MTBE            | 2.4 C  | 2.0  | 154738 | 09/10/09 | EPA 8021B |
| Benzene         | ND     | 0.50 | 154738 | 09/10/09 | EPA 8021B |
| Toluene         | ND     | 0.50 | 154738 | 09/10/09 | EPA 8021B |
| Ethylbenzene    | ND     | 0.50 | 154738 | 09/10/09 | EPA 8021B |
| m,p-Xylenes     | 2.5 C  | 0.50 | 154738 | 09/10/09 | EPA 8021B |
| o-Xylene        | 5.0 C  | 0.50 | 154738 | 09/10/09 | EPA 8021B |

| Surrogate                | %REC  | Limits | Batch# | Analyzed | Analysis  |
|--------------------------|-------|--------|--------|----------|-----------|
| Trifluorotoluene (FID)   | 174 * | 64-147 | 154713 | 09/09/09 | EPA 8015B |
| Bromofluorobenzene (FID) | 140 * | 71-138 | 154713 | 09/09/09 | EPA 8015B |
| Trifluorotoluene (PID)   | 107   | 45-151 | 154738 | 09/10/09 | EPA 8021B |
| Bromofluorobenzene (PID) | 152 * | 54-134 | 154738 | 09/10/09 | EPA 8021B |

Type: BLANK                      Analyzed: 09/09/09  
Lab ID: QC511287                  Analysis: EPA 8015B  
Batch#: 154713

| Analyte         | Result | RL |
|-----------------|--------|----|
| Gasoline C7-C12 | ND     | 50 |

| Surrogate                | Result | %REC | Limits |
|--------------------------|--------|------|--------|
| Trifluorotoluene (FID)   |        | 127  | 64-147 |
| Bromofluorobenzene (FID) |        | 108  | 71-138 |
| Trifluorotoluene (PID)   | NA     |      |        |
| Bromofluorobenzene (PID) | NA     |      |        |

\*= Value outside of QC limits; see narrative  
C= Presence confirmed, but RPD between columns exceeds 40%  
Y= Sample exhibits chromatographic pattern which does not resemble standard  
NA= Not Analyzed  
ND= Not Detected  
RL= Reporting Limit

### Curtis & Tompkins Laboratories Analytical Report

|           |                 |           |           |
|-----------|-----------------|-----------|-----------|
| Lab #:    | 214704          | Location: | Buttner   |
| Client:   | Fugro West Inc. | Prep:     | EPA 5030B |
| Project#: | 609.004         |           |           |
| Matrix:   | Water           | Sampled:  | 09/08/09  |
| Units:    | ug/L            | Received: | 09/08/09  |
| Diln Fac: | 1.000           |           |           |

|         |          |           |           |
|---------|----------|-----------|-----------|
| Type:   | BLANK    | Analyzed: | 09/10/09  |
| Lab ID: | QC511383 | Analysis: | EPA 8021B |
| Batch#: | 154738   |           |           |

| Analyte      | Result | RL   |
|--------------|--------|------|
| MTBE         | ND     | 2.0  |
| Benzene      | ND     | 0.50 |
| Toluene      | ND     | 0.50 |
| Ethylbenzene | ND     | 0.50 |
| m,p-Xylenes  | ND     | 0.50 |
| o-Xylene     | ND     | 0.50 |

| Surrogate                | Result | %REC | Limits |
|--------------------------|--------|------|--------|
| Trifluorotoluene (FID)   | NA     |      |        |
| Bromofluorobenzene (FID) | NA     |      |        |
| Trifluorotoluene (PID)   |        | 99   | 45-151 |
| Bromofluorobenzene (PID) |        | 101  | 54-134 |

\*= Value outside of QC limits; see narrative

C= Presence confirmed, but RPD between columns exceeds 40%

Y= Sample exhibits chromatographic pattern which does not resemble standard

NA= Not Analyzed

ND= Not Detected

RL= Reporting Limit

## Batch QC Report

| Curtis & Tompkins Laboratories Analytical Report |                 |           |           |
|--|-----------------|-----------|-----------|
| Lab #:   | 214704          | Location: | Buttner   |
| Client:  | Fugro West Inc. | Prep:     | EPA 5030B |
| Project#:  | 609.004         | Analysis: | EPA 8015B |
| Type:  | LCS             | Diln Fac: | 1.000     |
| Lab ID:  | QC511288        | Batch#:   | 154713    |
| Matrix:  | Water           | Analyzed: | 09/09/09  |
| Units:   | ug/L            |           |           |

| Analyte         | Spiked | Result | %REC | Limits |
|-----------------|--------|--------|------|--------|
| Gasoline C7-C12 | 2,000  | 1,814  | 91   | 77-118 |

| Surrogate                | %REC  | Limits |
|--------------------------|-------|--------|
| Trifluorotoluene (FID)   | 158 * | 64-147 |
| Bromofluorobenzene (FID) | 129   | 71-138 |

\*= Value outside of QC limits; see narrative

## Batch QC Report

| Curtis & Tompkins Laboratories Analytical Report |                 |           |           |
|--|-----------------|-----------|-----------|
| Lab #:   | 214704          | Location: | Buttner   |
| Client:  | Fugro West Inc. | Prep:     | EPA 5030B |
| Project#:  | 609.004         | Analysis: | EPA 8015B |
| Field ID:  | ZZZZZZZZZZ      | Batch#:   | 154713    |
| MSS Lab ID:                                      | 214710-002      | Sampled:  | 09/03/09  |
| Matrix:  | Water           | Received: | 09/05/09  |
| Units:   | ug/L            | Analyzed: | 09/09/09  |
| Diln Fac:  | 1.000           |           |           |

Type: MS Lab ID: QC511289

| Analyte         | MSS Result | Spiked | Result | %REC | Limits |
|-----------------|------------|--------|--------|------|--------|
| Gasoline C7-C12 | 2,810      | 2,000  | 3,318  | 25 * | 66-110 |

| Surrogate                | %REC  | Limits |
|--------------------------|-------|--------|
| Trifluorotoluene (FID)   | 178 * | 64-147 |
| Bromofluorobenzene (FID) | 144 * | 71-138 |

Type: MSD Lab ID: QC511290

| Analyte         | Spiked | Result | %REC | Limits | RPD | Lim |
|-----------------|--------|--------|------|--------|-----|-----|
| Gasoline C7-C12 | 2,000  | 3,621  | 41 * | 66-110 | 9   | 11  |

| Surrogate                | %REC  | Limits |
|--------------------------|-------|--------|
| Trifluorotoluene (FID)   | 173 * | 64-147 |
| Bromofluorobenzene (FID) | 147 * | 71-138 |

\*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

## Batch QC Report

| Curtis & Tompkins Laboratories Analytical Report |                 |           |           |
|--|-----------------|-----------|-----------|
| Lab #:   | 214704          | Location: | Buttner   |
| Client:  | Fugro West Inc. | Prep:     | EPA 5030B |
| Project#:  | 609.004         | Analysis: | EPA 8021B |
| Matrix:  | Water           | Batch#:   | 154738    |
| Units:   | ug/L            | Analyzed: | 09/10/09  |
| Diln Fac:  | 1.000           |           |           |

Type: BS Lab ID: QC511381

| Analyte      | Spiked | Result | %REC | Limits |
|--------------|--------|--------|------|--------|
| MTBE         | 10.00  | 10.00  | 100  | 58-143 |
| Benzene      | 10.00  | 8.473  | 85   | 75-116 |
| Toluene      | 10.00  | 9.093  | 91   | 72-124 |
| Ethylbenzene | 10.00  | 9.586  | 96   | 74-127 |
| m,p-Xylenes  | 10.00  | 9.552  | 96   | 73-128 |
| o-Xylene     | 10.00  | 9.506  | 95   | 73-126 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (PID)   | 99   | 45-151 |
| Bromofluorobenzene (PID) | 105  | 54-134 |

Type: BSD Lab ID: QC511382

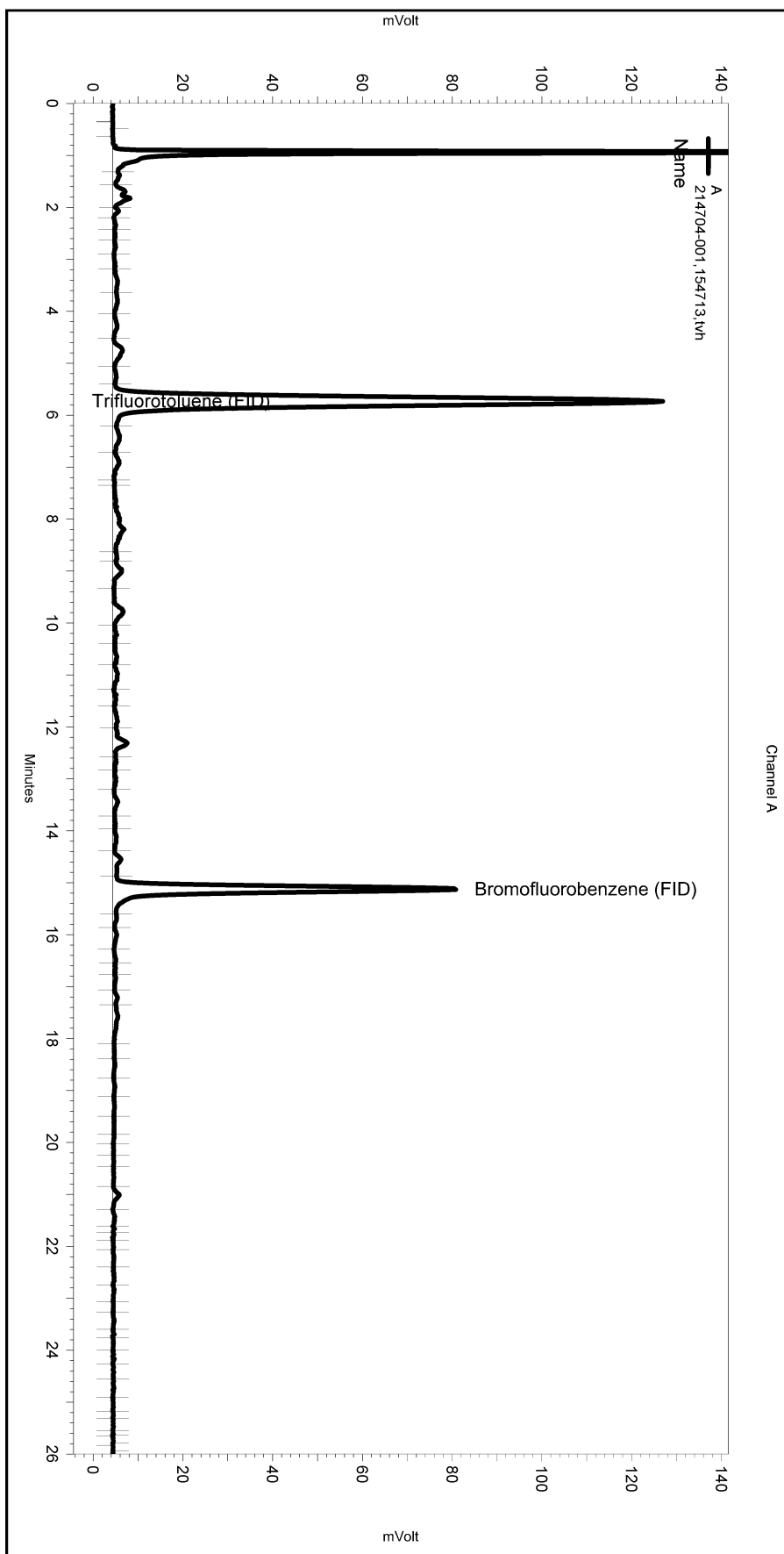
| Analyte      | Spiked | Result | %REC | Limits | RPD | Lim |
|--------------|--------|--------|------|--------|-----|-----|
| MTBE         | 10.00  | 9.321  | 93   | 58-143 | 7   | 31  |
| Benzene      | 10.00  | 8.276  | 83   | 75-116 | 2   | 22  |
| Toluene      | 10.00  | 8.775  | 88   | 72-124 | 4   | 24  |
| Ethylbenzene | 10.00  | 9.144  | 91   | 74-127 | 5   | 25  |
| m,p-Xylenes  | 10.00  | 9.092  | 91   | 73-128 | 5   | 27  |
| o-Xylene     | 10.00  | 9.177  | 92   | 73-126 | 4   | 25  |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (PID)   | 101  | 45-151 |
| Bromofluorobenzene (PID) | 104  | 54-134 |

RPD= Relative Percent Difference

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC05\Sequence\252.seq  
Sample Name: 214704-001,154713,tvh  
Data File: \\Lims\gdrive\ezchrom\Projects\GC05\Data\252\_014  
Instrument: GC05 Vial: N/A Operator: lms2k3\tvh3  
Method Name: \\Lims\gdrive\ezchrom\Projects\GC05\Method\tvhbtxe252.met

Software Version 3.1.7  
Run Date: 9/9/2009 7:35:41 PM  
Analysis Date: 9/9/2009 8:04:24 PM  
Sample Amount: 5 Multiplier: 5  
Vial & pH or Core ID: b1.0



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---< General Method Parameters >-----  
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No items selected for this section

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---< A >-----  
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No items selected for this section

#### Integration Events

| Enabled | Event Type | Start<br>(Minutes) | Stop<br>(Minutes) | Value |
|---------|------------|--------------------|-------------------|-------|
| Yes     | Width      | 0                  | 0                 | 0.2   |
| Yes     | Threshold  | 0                  | 0                 | 50    |

#### Manual Integration Fixes

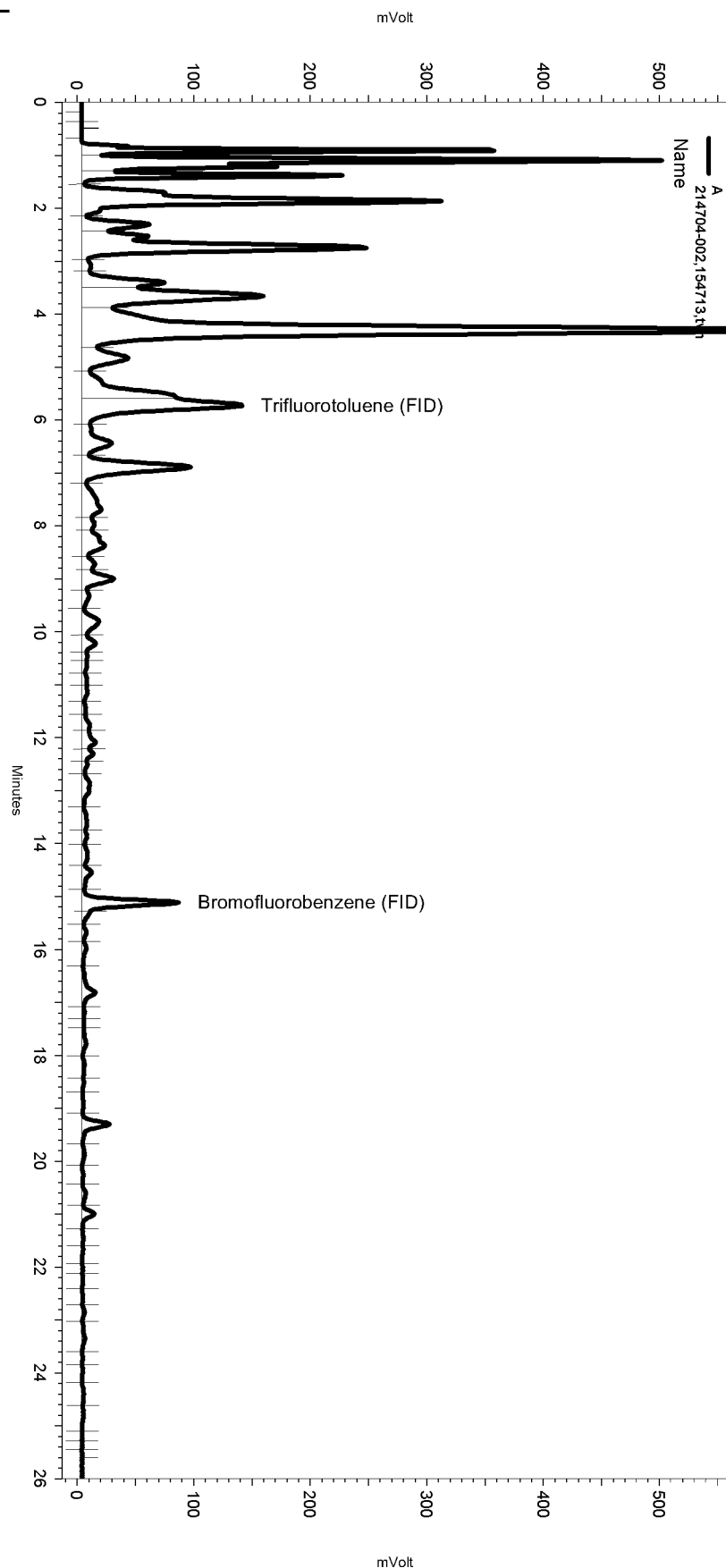
Data File: C:\Documents and Settings\All Users\Application  
Data\ChromatographySystem\Recovery  
Data\Instrument.10048\252\_014\_797C.tmp

| Enabled | Event Type | Start<br>(Minutes) | Stop<br>(Minutes) | Value |
|---------|------------|--------------------|-------------------|-------|
| None    |            |                    |                   |       |



Sequence File: \\Lims\gdrive\ezchrom\Projects\GC05\Sequence\252.seq  
Sample Name: 214704-002,154713.tvh  
Data File: \\Lims\gdrive\ezchrom\Projects\GC05\Data\252\_015  
Instrument: GC05 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)  
Method Name: \\Lims\gdrive\ezchrom\Projects\GC05\Method\tvhbtxe252.met

Software Version 3.1.7  
Run Date: 9/9/2009 8:11:13 PM  
Analysis Date: 9/10/2009 11:25:13 AM  
Sample Amount: 5 Multiplier: 5  
Vial & pH or Core ID: a1.0



Channel A

---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

| Enabled | Event Type | Start<br>(Minutes) | Stop<br>(Minutes) | Value |
|---------|------------|--------------------|-------------------|-------|
| Yes     | Width      | 0                  | 0                 | 0.2   |
| Yes     | Threshold  | 0                  | 0                 | 50    |

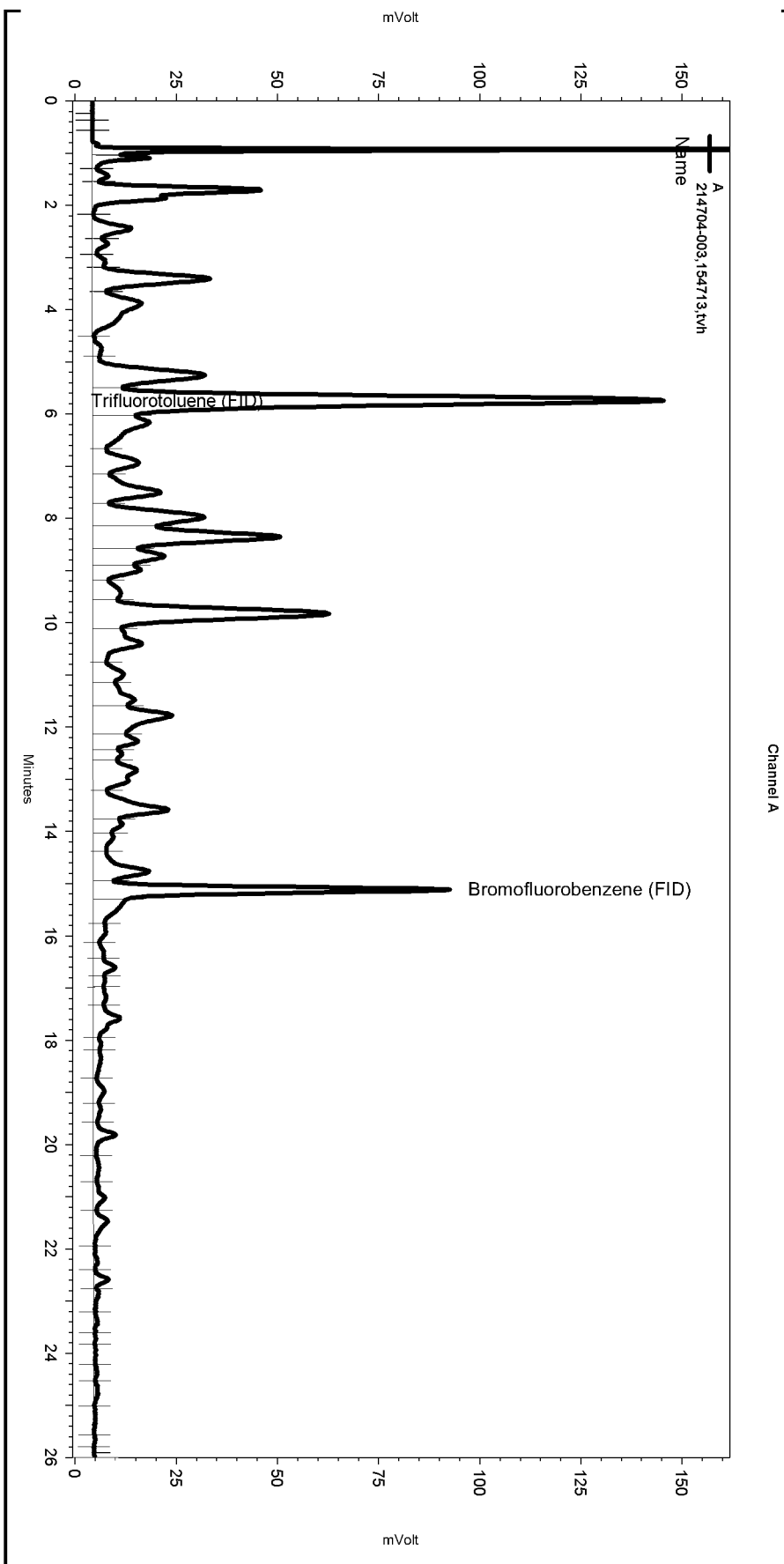
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC05\Data\252\_015

| Enabled | Event Type | Start<br>(Minutes) | Stop<br>(Minutes) | Value |
|---------|------------|--------------------|-------------------|-------|
| Yes     | Split Peak | 5.597              | 0                 | 0     |
| Yes     | Split Peak | 15.284             | 0                 | 0     |

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC05\Sequence\252.seq  
Sample Name: 214704-003,154713.tvh  
Data File: \\Lims\gdrive\ezchrom\Projects\GC05\Data\252\_016  
Instrument: GC05 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)  
Method Name: \\Lims\gdrive\ezchrom\Projects\GC05\Method\tvhbtxe252.met

Software Version 3.1.7  
Run Date: 9/9/2009 8:46:46 PM  
Analysis Date: 9/10/2009 11:26:13 AM  
Sample Amount: 5 Multiplier: 5  
Vial & pH or Core ID: a1.3



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

| Enabled | Event Type | Start<br>(Minutes) | Stop<br>(Minutes) | Value |
|---------|------------|--------------------|-------------------|-------|
| Yes     | Width      | 0                  | 0                 | 0.2   |
| Yes     | Threshold  | 0                  | 0                 | 50    |

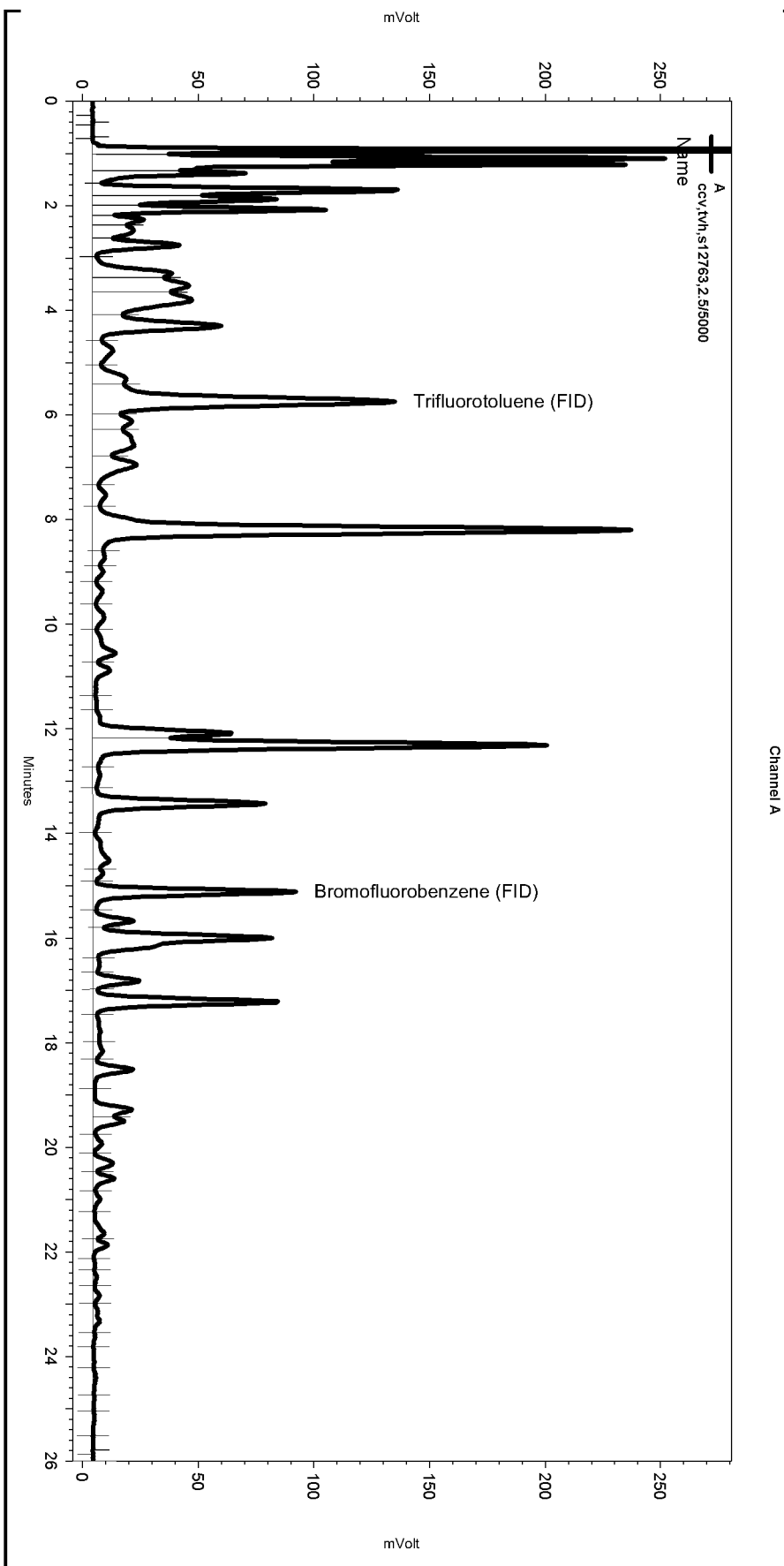
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC05\Data\252\_016

| Enabled | Event Type | Start<br>(Minutes) | Stop<br>(Minutes) | Value |
|---------|------------|--------------------|-------------------|-------|
| Yes     | Split Peak | 15.297             | 0                 | 0     |

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC05\Sequence\252.seq  
Sample Name: ccv,tvh,s12763,2.5/5000  
Data File: \\Lims\gdrive\ezchrom\Projects\GC05\Data\252\_007  
Instrument: GC05 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)  
Method Name: \\Lims\gdrive\ezchrom\Projects\GC05\Method\tvhbtxe252.met

Software Version 3.1.7  
Run Date: 9/9/2009 1:06:32 PM  
Analysis Date: 9/10/2009 8:11:10 AM  
Sample Amount: 5 Multiplier: 5  
Vial & pH or Core ID: {Data Description}



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

#### Integration Events

| Enabled | Event Type | Start<br>(Minutes) | Stop<br>(Minutes) | Value |
|---------|------------|--------------------|-------------------|-------|
| Yes     | Width      | 0                  | 0                 | 0.2   |
| Yes     | Threshold  | 0                  | 0                 | 50    |

#### Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC05\Data\252\_007

| Enabled | Event Type | Start<br>(Minutes) | Stop<br>(Minutes) | Value |
|---------|------------|--------------------|-------------------|-------|
| None    |            |                    |                   |       |





**Curtis & Tompkins, Ltd.**  
Analytical Laboratories, Since 1878





Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

**Laboratory Job Number 215816**  
**ANALYTICAL REPORT**

Fugro West Inc.  
1000 Broadway  
Oakland, CA 94607

Project : 609.004  
Location : 2250 Telegraph Ave.  
Level : II

Sample ID  
B-13@8'

Lab ID  
215816-001

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature:   
Project Manager

Date: 10/26/2009

NELAP # 01107CA

### CASE NARRATIVE

Laboratory number: 215816  
Client: Fugro West Inc.  
Project: 609.004  
Location: 2250 Telgraph Ave.  
Request Date: 10/19/09  
Samples Received: 10/19/09

This data package contains sample and QC results for one soil sample, requested for the above referenced project on 10/19/09. The sample was received cold and intact.

**TPH-Purgeables and/or BTXE by GC (EPA 8015B and EPA 8021B):**

No analytical problems were encountered.

**TPH-Extractables by GC (EPA 8015B):**


No analytical problems were encountered.

PAGE 1 OF 1

SAMPLED BY: Karen Eming

[illegible]

| CHAIN OF CUSTODY RECORD                            |                             |   |                             | COMMENTS & NOTES:<br><br>Please compare results to gas, diesel motor oil, and hydraulic oil chromatographs |
|--|-----------------------------|---|-----------------------------|--|
| RELINQUISHED BY: (Signature)<br><i>Karen Emery</i> | DATE/TIME<br>10/19/99 12:00 | RECEIVED BY: (Signature)<br><i>TB BSM</i> | DATE/TIME<br>10/19/99 12:05 |  |
| RELINQUISHED BY: (Signature)                       | DATE/TIME                   | RECEIVED BY: (Signature)                  | DATE/TIME                   |  |
| RELINQUISHED BY: (Signature)                       | DATE/TIME                   | RECEIVED BY: (Signature)                  | DATE/TIME                   |  |
| RELINQUISHED BY: (Signature)                       | DATE/TIME                   | RECEIVED BY: (Signature)                  | DATE/TIME                   |  |



**FUGRO WEST, INC.**

1000 Broadway, Suite 440

Oakland, California 94607

Tel: 510.268.0461 Fax: 510.268.0545

*Colt*

Approved by Glenn Young, AC 62 Manager, Fugro West, Inc. 10/13/06  
Note: If this is a printed copy, please check the online QMS to ensure that it is the latest version.

# COOLER RECEIPT CHECKLIST



Curtis & Tompkins, Ltd.

Login # 215816 Date Received 10-19 Number of coolers 0  
 Client Fugro Project 2250 Telegraph Ave.

Date Opened 10-19 By (print) Elin T (sign) Elin Tiedik  
 Date Logged in 10-19 By (print) Elin T (sign) Elin Tiedik

1. Did cooler come with a shipping slip (airbill, etc) YES ☒ NO

Shipping info \_\_\_\_\_

2A. Were custody seals present? ... ☐ YES (circle) on cooler on samples ☒ NO

How many \_\_\_\_\_ Name \_\_\_\_\_ Date \_\_\_\_\_

2B. Were custody seals intact upon arrival? YES NO N/A

3. Were custody papers dry and intact when received? YES NO

4. Were custody papers filled out properly (ink, signed, etc)? YES NO

5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO

6. Indicate the packing in cooler: (if other, describe) \_\_\_\_\_

☐ Bubble Wrap ☐ Foam blocks ☐ Bags ☒ None  
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation:

Type of ice used: ☐ Wet ☐ Blue/Gel ☒ None Temp(°C) \_\_\_\_\_

☐ Samples Received on ice & cold without a temperature blank

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? YES ☒ NO

If YES, what time were they transferred to freezer? \_\_\_\_\_

9. Did all bottles arrive unbroken/unopened? YES NO

10. Are samples in the appropriate containers for indicated tests? YES NO

11. Are sample labels present, in good condition and complete? YES NO

12. Do the sample labels agree with custody papers? YES NO

13. Was sufficient amount of sample sent for tests requested? YES NO

14. Are the samples appropriately preserved? YES NO N/A

15. Are bubbles > 6mm absent in VOA samples? YES NO N/A

16. Was the client contacted concerning this sample delivery? YES NO

If YES, Who was called? \_\_\_\_\_ By \_\_\_\_\_ Date: \_\_\_\_\_

## COMMENTS

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### Curtis & Tompkins Laboratories Analytical Report

|           |                 |           |                    |
|-----------|-----------------|-----------|--------------------|
| Lab #:    | 215816          | Location: | 2250 Telgraph Ave. |
| Client:   | Fugro West Inc. | Prep:     | EPA 5030B          |
| Project#: | 609.004         |           |                    |
| Field ID: | B-13@8'         | Batch#:   | 156279             |
| Matrix:   | Soil            | Sampled:  | 10/19/09           |
| Basis:    | as received     | Received: | 10/19/09           |
| Diln Fac: | 1.000           | Analyzed: | 10/20/09           |

Type: SAMPLE Lab ID: 215816-001

| Analyte         | Result | RL   | Units           | Analysis |
|-----------------|--------|------|-----------------|----------|
| Gasoline C7-C12 | ND     | 0.99 | mg/Kg EPA 8015B |          |
| Benzene         | ND     | 5.0  | ug/Kg EPA 8021B |          |
| Toluene         | ND     | 5.0  | ug/Kg EPA 8021B |          |
| Ethylbenzene    | ND     | 5.0  | ug/Kg EPA 8021B |          |
| m,p-Xylenes     | ND     | 5.0  | ug/Kg EPA 8021B |          |
| o-Xylene        | ND     | 5.0  | ug/Kg EPA 8021B |          |

| Surrogate                | %REC | Limits | Analysis  |
|--------------------------|------|--------|-----------|
| Trifluorotoluene (FID)   | 108  | 38-168 | EPA 8015B |
| Bromofluorobenzene (FID) | 106  | 27-175 | EPA 8015B |
| Trifluorotoluene (PID)   | 80   | 10-183 | EPA 8021B |
| Bromofluorobenzene (PID) | 79   | 7-180  | EPA 8021B |

Type: BLANK Lab ID: QC517501

| Analyte         | Result | RL   | Units           | Analysis |
|-----------------|--------|------|-----------------|----------|
| Gasoline C7-C12 | ND     | 0.20 | mg/Kg EPA 8015B |          |
| Benzene         | ND     | 1.0  | ug/Kg EPA 8021B |          |
| Toluene         | ND     | 1.0  | ug/Kg EPA 8021B |          |
| Ethylbenzene    | ND     | 1.0  | ug/Kg EPA 8021B |          |
| m,p-Xylenes     | ND     | 1.0  | ug/Kg EPA 8021B |          |
| o-Xylene        | ND     | 1.0  | ug/Kg EPA 8021B |          |

| Surrogate                | %REC | Limits | Analysis  |
|--------------------------|------|--------|-----------|
| Trifluorotoluene (FID)   | 101  | 38-168 | EPA 8015B |
| Bromofluorobenzene (FID) | 98   | 27-175 | EPA 8015B |
| Trifluorotoluene (PID)   | 75   | 10-183 | EPA 8021B |
| Bromofluorobenzene (PID) | 71   | 7-180  | EPA 8021B |

ND= Not Detected  
RL= Reporting Limit

## Batch QC Report

| Curtis & Tompkins Laboratories Analytical Report |                 |           |                    |
|--|-----------------|-----------|--------------------|
| Lab #:   | 215816          | Location: | 2250 Telgraph Ave. |
| Client:  | Fugro West Inc. | Prep:     | EPA 5030B          |
| Project#:  | 609.004         | Analysis: | EPA 8021B          |
| Matrix:  | Soil            | Batch#:   | 156279             |
| Units:   | ug/Kg           | Analyzed: | 10/20/09           |
| Diln Fac:  | 1.000           |           |                    |

Type: BS Lab ID: QC517502

| Analyte      | Spiked | Result | %REC | Limits |
|--------------|--------|--------|------|--------|
| Benzene      | 100.0  | 101.5  | 102  | 67-124 |
| Toluene      | 100.0  | 95.94  | 96   | 63-135 |
| Ethylbenzene | 100.0  | 101.0  | 101  | 65-138 |
| m,p-Xylenes  | 100.0  | 100.8  | 101  | 66-136 |
| o-Xylene     | 100.0  | 101.6  | 102  | 64-138 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (PID)   | 80   | 10-183 |
| Bromofluorobenzene (PID) | 77   | 7-180  |

Type: BSD Lab ID: QC517503

| Analyte      | Spiked | Result | %REC | Limits | RPD | Lim |
|--------------|--------|--------|------|--------|-----|-----|
| Benzene      | 100.0  | 98.63  | 99   | 67-124 | 3   | 30  |
| Toluene      | 100.0  | 93.60  | 94   | 63-135 | 2   | 32  |
| Ethylbenzene | 100.0  | 96.60  | 97   | 65-138 | 4   | 28  |
| m,p-Xylenes  | 100.0  | 95.54  | 96   | 66-136 | 5   | 28  |
| o-Xylene     | 100.0  | 98.02  | 98   | 64-138 | 4   | 27  |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (PID)   | 77   | 10-183 |
| Bromofluorobenzene (PID) | 79   | 7-180  |

RPD= Relative Percent Difference

## Batch QC Report

| Curtis & Tompkins Laboratories Analytical Report |                 |           |                    |
|--|-----------------|-----------|--------------------|
| Lab #:   | 215816          | Location: | 2250 Telgraph Ave. |
| Client:  | Fugro West Inc. | Prep:     | EPA 5030B          |
| Project#:  | 609.004         | Analysis: | EPA 8015B          |
| Type:  | LCS             | Diln Fac: | 1.000              |
| Lab ID:  | QC517504        | Batch#:   | 156279             |
| Matrix:  | Soil            | Analyzed: | 10/20/09           |
| Units:   | mg/Kg           |           |                    |

| Analyte         | Spiked | Result | %REC | Limits |
|-----------------|--------|--------|------|--------|
| Gasoline C7-C12 | 5.000  | 5.077  | 102  | 74-123 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 120  | 38-168 |
| Bromofluorobenzene (FID) | 105  | 27-175 |

## Batch QC Report

| Curtis & Tompkins Laboratories Analytical Report |                 |           |                    |
|--|-----------------|-----------|--------------------|
| Lab #:   | 215816          | Location: | 2250 Telgraph Ave. |
| Client:  | Fugro West Inc. | Prep:     | EPA 5030B          |
| Project#:  | 609.004         | Analysis: | EPA 8015B          |
| Field ID:  | B-13@8'         | Diln Fac: | 1.000              |
| MSS Lab ID:                                      | 215816-001      | Batch#:   | 156279             |
| Matrix:  | Soil            | Sampled:  | 10/19/09           |
| Units:   | mg/Kg           | Received: | 10/19/09           |
| Basis:   | as received     | Analyzed: | 10/20/09           |

Type: MS Lab ID: QC517505

| Analyte         | MSS Result | Spiked | Result | %REC | Limits |
|-----------------|------------|--------|--------|------|--------|
| Gasoline C7-C12 | 0.08520    | 10.10  | 8.656  | 85   | 14-138 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 137  | 38-168 |
| Bromofluorobenzene (FID) | 106  | 27-175 |

Type: MSD Lab ID: QC517506

| Analyte         | Spiked | Result | %REC | Limits | RPD | Lim |
|-----------------|--------|--------|------|--------|-----|-----|
| Gasoline C7-C12 | 10.10  | 9.691  | 95   | 14-138 | 11  | 52  |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Trifluorotoluene (FID)   | 147  | 38-168 |
| Bromofluorobenzene (FID) | 112  | 27-175 |

RPD= Relative Percent Difference

| Total Extractable Hydrocarbons |                 |           |                    |
|--------------------------------|-----------------|-----------|--------------------|
| Lab #:                         | 215816          | Location: | 2250 Telgraph Ave. |
| Client:                        | Fugro West Inc. | Prep:     | SHAKER TABLE       |
| Project#:                      | 609.004         | Analysis: | EPA 8015B          |
| Field ID:                      | B-13@8'         | Batch#:   | 156217             |
| Matrix:                        | Soil            | Sampled:  | 10/19/09           |
| Units:                         | mg/Kg           | Received: | 10/19/09           |
| Basis:                         | as received     | Prepared: | 10/19/09           |
| Diln Fac:                      | 1.000           | Analyzed: | 10/22/09           |

Type: SAMPLE Cleanup Method: EPA 3630C  
Lab ID: 215816-001

| Analyte                 | Result | RL  |
|-------------------------|--------|-----|
| Diesel C10-C24          | 73 Y   | 1.0 |
| Motor Oil C24-C36       | 300 Y  | 5.0 |
| Hydraulic Fluid, C12-40 | 390    | 5.0 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 79   | 16-164 |

Type: BLANK Cleanup Method: EPA 3630C  
Lab ID: QC517243

| Analyte                 | Result | RL  |
|-------------------------|--------|-----|
| Diesel C10-C24          | ND     | 1.0 |
| Motor Oil C24-C36       | ND     | 5.0 |
| Hydraulic Fluid, C12-40 | ND     | 5.0 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 84   | 16-164 |

Y= Sample exhibits chromatographic pattern which does not resemble standard  
ND= Not Detected  
RL= Reporting Limit

## Batch QC Report

| Total Extractable Hydrocarbons |                 |           |                    |
|--------------------------------|-----------------|-----------|--------------------|
| Lab #:                         | 215816          | Location: | 2250 Telgraph Ave. |
| Client:                        | Fugro West Inc. | Prep:     | SHAKER TABLE       |
| Project#:                      | 609.004         | Analysis: | EPA 8015B          |
| Type:                          | LCS             | Diln Fac: | 1.000              |
| Lab ID:                        | QC517244        | Batch#:   | 156217             |
| Matrix:                        | Soil            | Prepared: | 10/19/09           |
| Units:                         | mg/Kg           | Analyzed: | 10/20/09           |

Cleanup Method: EPA 3630C

| Analyte        | Spiked | Result | %REC | Limits |
|----------------|--------|--------|------|--------|
| Diesel C10-C24 | 49.74  | 39.29  | 79   | 36-151 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 68   | 16-164 |

## Batch QC Report

| Total Extractable Hydrocarbons |                 |           |                    |
|--------------------------------|-----------------|-----------|--------------------|
| Lab #:                         | 215816          | Location: | 2250 Telgraph Ave. |
| Client:                        | Fugro West Inc. | Prep:     | SHAKER TABLE       |
| Project#:                      | 609.004         | Analysis: | EPA 8015B          |
| Field ID:                      | ZZZZZZZZZZ      | Batch#:   | 156217             |
| MSS Lab ID:                    | 215796-007      | Sampled:  | 10/16/09           |
| Matrix:                        | Soil            | Received: | 10/16/09           |
| Units:                         | mg/Kg           | Prepared: | 10/19/09           |
| Basis:                         | as received     | Analyzed: | 10/20/09           |
| Diln Fac:                      | 1.000           |           |                    |

Type: MS Cleanup Method: EPA 3630C  
Lab ID: QC517245

| Analyte        | MSS Result | Spiked | Result | %REC | Limits |
|----------------|------------|--------|--------|------|--------|
| Diesel C10-C24 | 0.7457     | 50.27  | 40.64  | 79   | 3-174  |

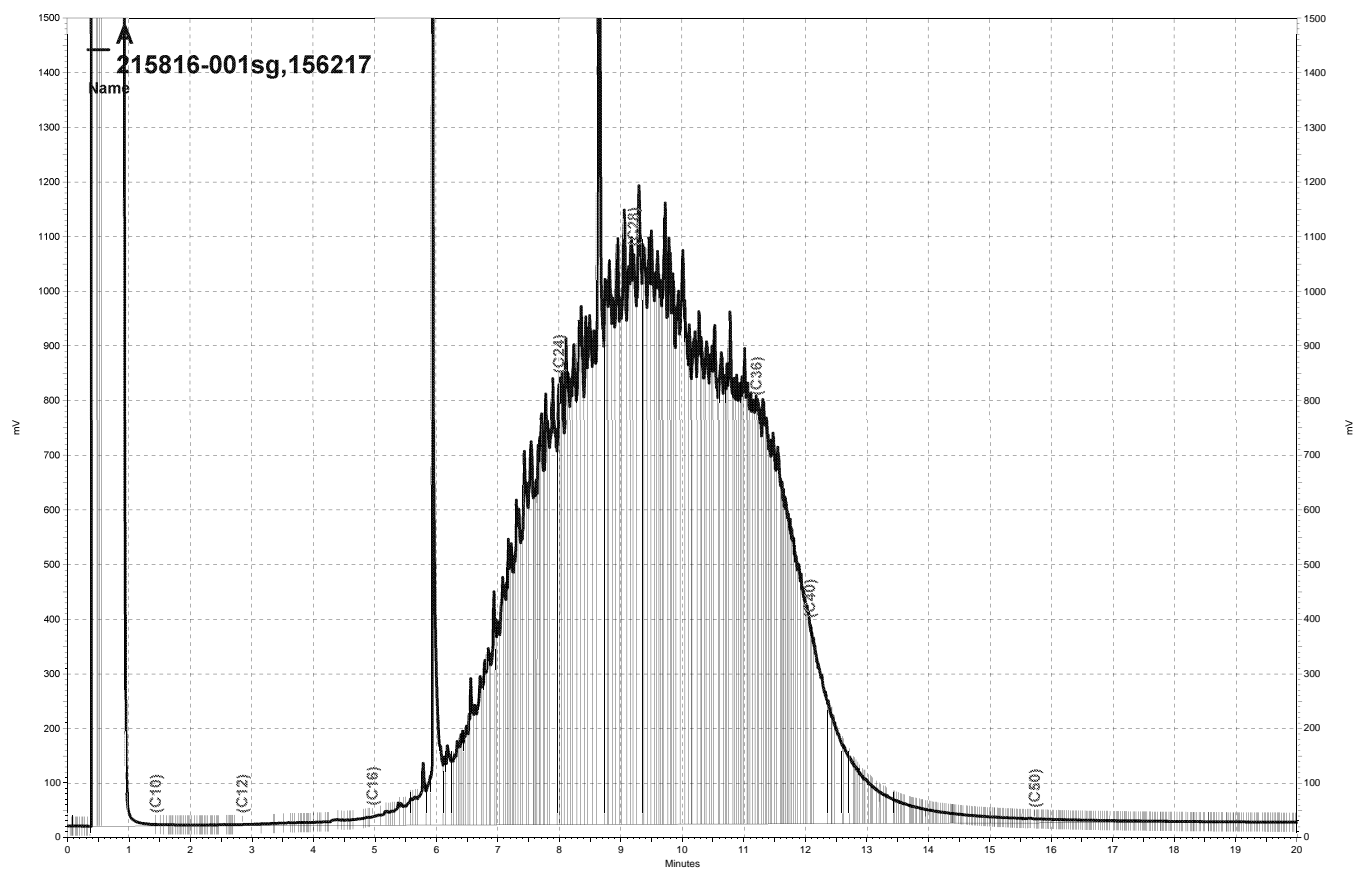
| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 76   | 16-164 |

Type: MSD Cleanup Method: EPA 3630C  
Lab ID: QC517246

| Analyte        | Spiked | Result | %REC | Limits | RPD | Lim |
|----------------|--------|--------|------|--------|-----|-----|
| Diesel C10-C24 | 49.80  | 44.26  | 87   | 3-174  | 9   | 54  |

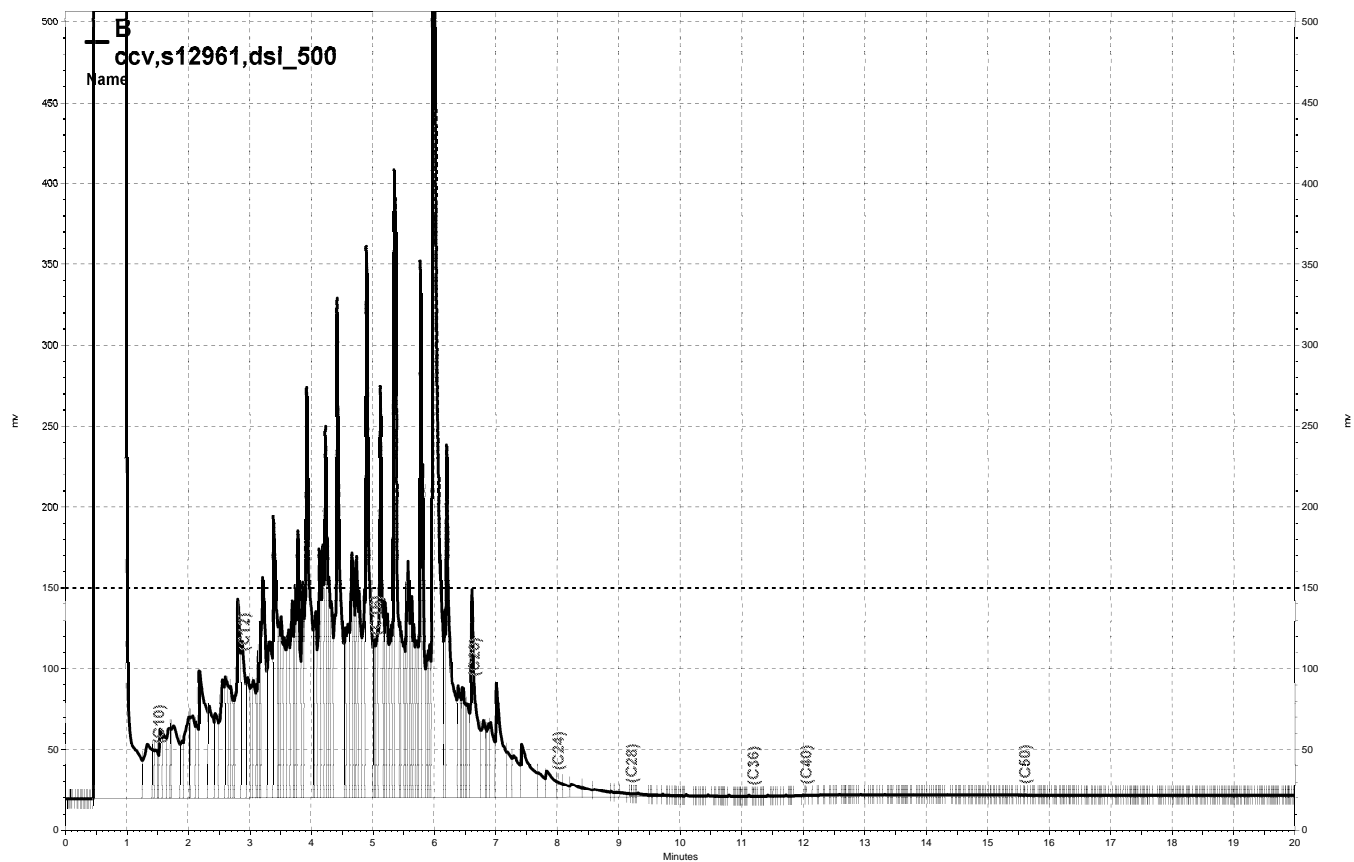
| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 86   | 16-164 |

RPD= Relative Percent Difference

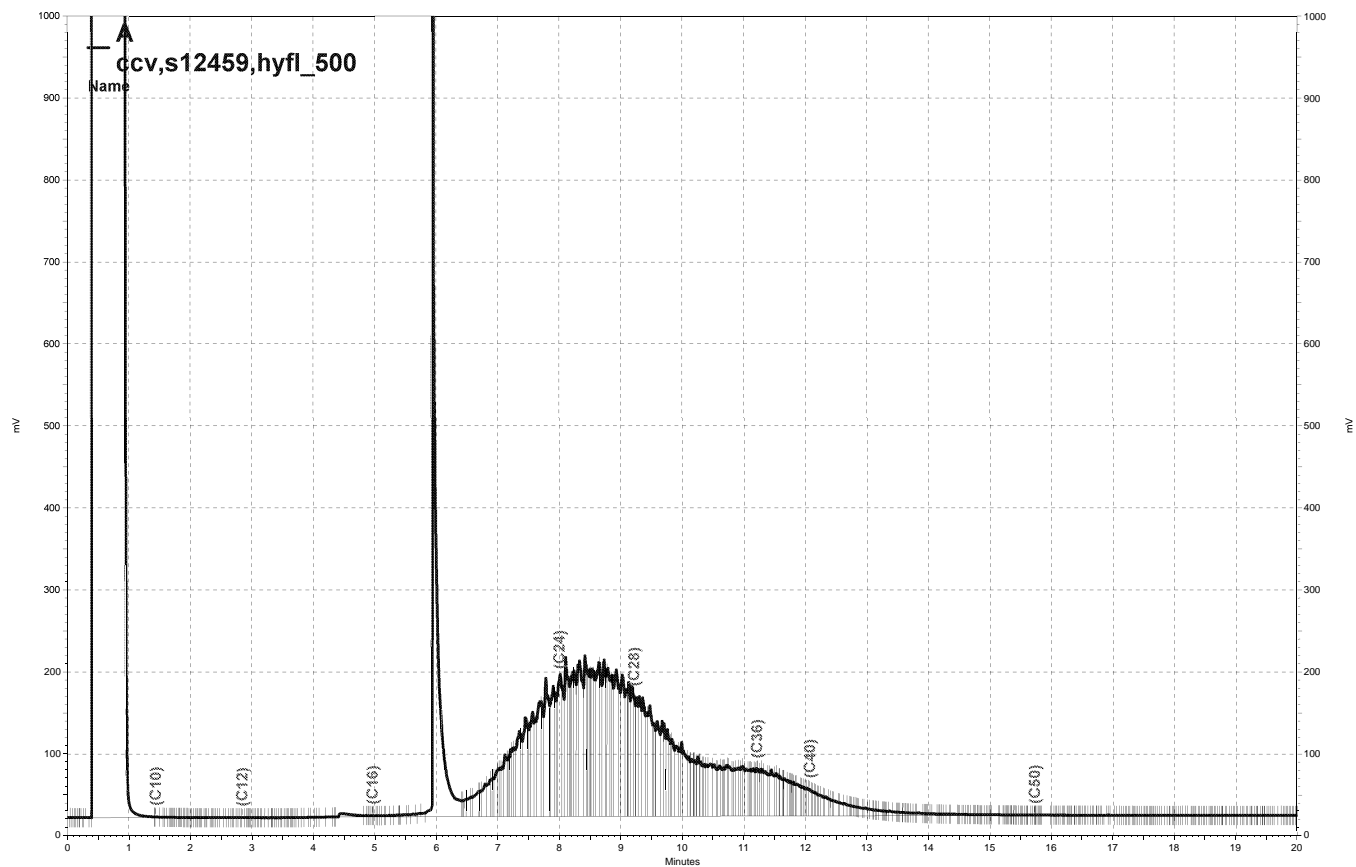


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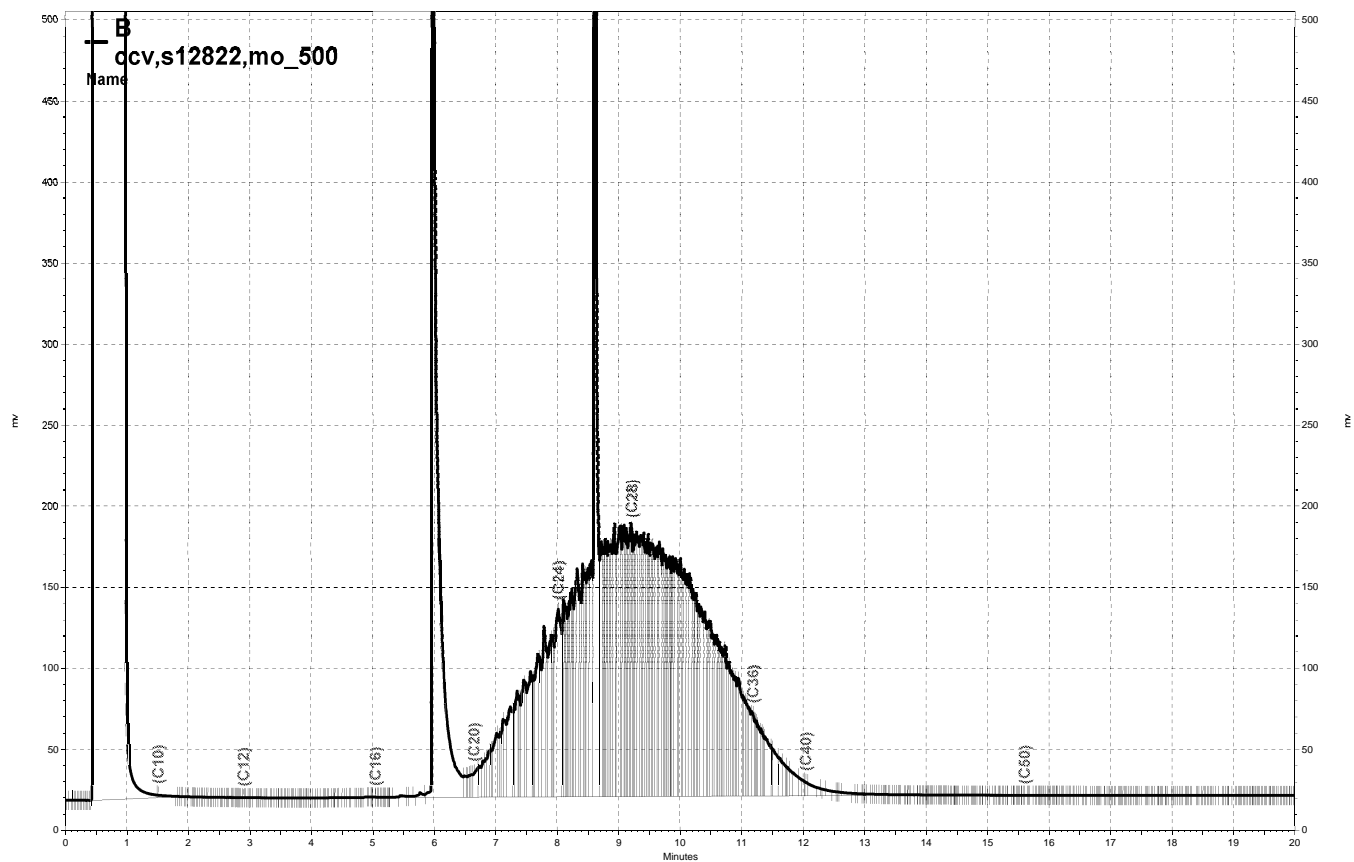




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# **TEG**

## **SOIL VAPOR SURVEY METHODOLOGY**

### **Active Soil Vapor Sampling System**

TEG's low-dead volume soil vapor sampling system has been inspected, endorsed, and is favored by all regulatory agencies who have seen it, including the EPA and CA DTSC. The design eliminates the risk of air leakage down the soil vapor probe, ensures sample collection from the tip, and greatly facilitates decontamination procedures.

### **Soil Gas Sampling**

Soil vapor is withdrawn from inert tubing installed in temporary probes using a calibrated syringe connected via an on-off valve. A purge volume test is conducted by sampling at the first soil vapor location three times after sequentially collecting and discarding one, three, and seven dead volumes of soil vapor gas to flush the sample tubing and fill it with in-situ soil vapor. The purge volume used prior to the sample yielding the highest analytical value is used for all subsequent sampling. After purging, the next 20cc to 50cc of soil vapor are withdrawn in the syringe, plugged, and immediately transferred to the mobile lab for analysis within the required holding time. During sampling, a leak check gas is used to confirm that the sample train and probe rod is tight and leak free. Additional soil vapor may be collected and stored in gas-tight containers (e.g. Summa canisters) as desired.

### **Flushing & Decontamination Procedures**

To minimize the potential for cross-contamination between sites, all external probe parts are cleaned of excess dirt and moisture prior to insertion. The internal inert tubing and sampling syringes are flushed with large volumes of ambient air between samples or discarded as required. If water, dirt, or any material is observed in the tubing, the tubing is discarded and replaced with fresh tubing.

### **Analytical Methodology**

Soil vapor samples collected from each probe will be transferred directly to the on-site mobile laboratory and analyzed immediately. There will be minimal lag time between sample collection and analysis, ensuring that the integrity of the sample is maintained.

Samples will be analyzed on a gas chromatograph equipped with capillary columns and a combination of mass spectrometer (GC/MS), TCD, and FID detectors as needed. This combination of columns and detectors ensures compound separation, recognition, and detection at the required levels.

These detectors enable on-site analysis for petroleum hydrocarbons, volatile aromatics (BTEX), and volatile organic compounds (e.g. DCE, TCE, PCE, vinyl chloride) using EPA approved analytical methodology outlined in methods 8260B and 8015m. Output signals from each detector are processed by computer chromatography software and the results entered into a laboratory computer for on-site processing.

## **Daily instrument Calibration**

Daily continuing calibration is performed at the start of each day by injecting and analyzing a mid-range calibration standard. Acceptable continuing calibration agreement: +/- 15% to 25% to the calibration curve, depending on the compound.

## **Blanks & Duplicates**

Blanks are analyzed at the start of each day and more often as appropriate depending upon the measured concentrations. Typically, when high sample values are encountered, additional blanks may be analyzed. Duplicate samples are analyzed as needed or as requested by the client or regulatory agency.

## **Compound Confirmation**

A MS (mass spectrometer) detector is used for absolute compound identification of VOCs. Also, a surrogate compound is added to each sample during analysis to confirm that the chromatographic retention times have not shifted during the course of the day and that surrogate recovery is adequate showing proper instrument operation and integrity.

## **Health and Safety - Training and Medical Monitoring Programs**

In order to reduce potential employee exposure to hazardous materials and reduce the risk of injury incurred during the normal performance of work, TEG maintains active participation of personnel in a Injury and Illness Prevention Program (IIPP). Each TEG employee that performs work in a laboratory or in the field, is required to have completed a 40-hour training session in accordance with 29 CFR 1910.120. The Health and Safety Officer coordinates all aspects of training and maintaining the Injury and Illness Prevention program, including, but not limited to:

- annual physical examination of field personnel (including an initial baseline exam upon hiring)
- health, safety and hazardous material training
- first aid and Cardio-Pulmonary Resuscitation (CPR) training
- safety equipment inventory and purchasing
- review of health and safety procedures, exposure limits, and plans for each project.

Work procedures and required safety conditions are determined on the basis of anticipated work, environmental conditions and levels of toxic chemicals at a given site. Consultation with client safety personnel or representatives is undertaken to determine potential health hazards to workers at that site. Each TEG employee participates in all pre-job safety meetings at each job site.



19 August 2009

Ms. Karen Emery  
Fugro West Inc.  
1000 Broadway, Suite 440  
Oakland, CA 94607

**SUBJECT: DATA REPORT - Fugro West Inc. Project # 609.004**  
**2250 Telegraph Avenue, Oakland, California**

**TEG Project # 90731F**

Ms. Emery:

Please find enclosed a data report for the samples analyzed from the above referenced project for Fugro West Inc. The samples were analyzed on site in TEG's mobile laboratory. TEG conducted a total of 33 analyses on 11 soil vapor samples.

- 11 analyses on soil vapors for aromatic volatile hydrocarbons (BTEX), fuel oxygenate MtBE, and total petroleum hydrocarbons-gasoline by EPA method 8260B.
- 11 analyses on soil vapors for total petroleum hydrocarbons-diesel by EPA method mod8015.
- 11 analyses on soil vapors for methane, oxygen and carbon dioxide by GC/TCD.

The results of the analyses are summarized in the enclosed tables. Applicable detection limits and calibration data are included in the tables.

TEG appreciates the opportunity to have provided analytical services to Fugro West Inc. on this project. If you have any further questions relating to these data or report, please do not hesitate to contact us.

Sincerely,

Mark Jerpbak  
Director, TEG-Northern California



Fugro West Inc. Project # 609.004  
2250 Telegraph Avenue  
Oakland, California

TEG Project #90731F

Analyses of SOIL VAPOR

BTEX, MtBE, & TPH-gasoline (EPA method 8260B) in micrograms per cubic meter of Vapor

TPH-diesel (EPA method 8015m) in micrograms per cubic meter of Vapor

Methane in ppmV, and Oxygen and Carbon Dioxide in percent by Volume

| SAMPLE NUMBER:                  |       | Air     | SG-1    | SG-2    | SG-3    | SG-3     | SG-4    |
|---------------------------------|-------|---------|---------|---------|---------|----------|---------|
|                                 |       | Blank   |         |         |         | resample |         |
| SAMPLE DEPTH (feet):            |       |         | 5.0     | 5.0     | 5.0     | 5.0      | 5.0     |
| PURGE VOLUME:                   |       |         | 1       | 1       | 1       | 1        | 1       |
| COLLECTION DATE:                |       | 7/31/09 | 7/31/09 | 7/31/09 | 7/31/09 | 7/31/09  | 7/31/09 |
| COLLECTION TIME:                |       | 09:55   | 13:01   | 13:34   | 13:58   | 15:57    | 14:26   |
| DILUTION FACTOR (VOCs):         |       | 1       | 1       | 1       | 1       | 1        | 1       |
|                                 | RL    |         |         |         |         |          |         |
| Benzene                         | 80    | nd      | nd      | nd      | nd      | nd       | nd      |
| Toluene                         | 200   | nd      | nd      | nd      | nd      | nd       | nd      |
| Ethylbenzene                    | 100   | nd      | nd      | nd      | nd      | nd       | nd      |
| m,p-Xylene                      | 200   | nd      | 300     | nd      | nd      | nd       | nd      |
| o-Xylene                        | 100   | nd      | 130     | nd      | nd      | nd       | nd      |
| Methyl-t-butyl ether (MtBE)     | 10    | nd      | nd      | nd      | nd      | nd       | nd      |
| TPH (gasoline range)            | 10000 | nd      | nd      | nd      | nd      | nd       | nd      |
| TPH (diesel range)              | 50000 | nd      | nd      | nd      | nd      | nd       | nd      |
| Methane                         | 500   | nd      | nd      | nd      | nd      | nd       | nd      |
| Oxygen                          | 5.0   | 21      | 16      | 9.6     | 20      | 19       | 11      |
| Carbon Dioxide                  | 1.0   | nd      | 4.0     | 7.2     | 1.5     | 2.0      | 9.2     |
| 1,1 Difluoroethane (leak check) | 10000 | nd      | nd      | nd      | 37000   | 19000    | nd      |
| Surrogate Recovery (DBFM)       |       | 88%     | 91%     | 90%     | 90%     | 94%      | 93%     |
| Surrogate Recovery (1,4-BFB)    |       | 96%     | 90%     | 97%     | 91%     | 90%      | 88%     |

'RL' Indicates reporting limit at a dilution factor of 1

'nd' Indicates not detected at listed reporting limits

Analyses performed in TEG-Northern California's lab  
Analyses performed by: Mr. Jon Edmondson

page 1



Fugro West Inc. Project # 609.004  
2250 Telegraph Avenue  
Oakland, California

TEG Project #90731F

Analyses of SOIL VAPOR

BTEX, MtBE, & TPH-gasoline (EPA method 8260B) in micrograms per cubic meter of Vapor

TPH-diesel (EPA method 8015m) in micrograms per cubic meter of Vapor

Methane in ppmV, and Oxygen and Carbon Dioxide in percent by Volume

| SAMPLE NUMBER:                  |       | SG-5    | SG-6    | SG-6    | SG-6    | SG-7    | SG-7<br>dup |
|---------------------------------|-------|---------|---------|---------|---------|---------|-------------|
| SAMPLE DEPTH (feet):            |       | 5.0     | 5.0     | 5.0     | 5.0     | 5.0     | 5.0         |
| PURGE VOLUME:                   |       | 1       | 1       | 3       | 7       | 1       | 1           |
| COLLECTION DATE:                |       | 7/31/09 | 7/31/09 | 7/31/09 | 7/31/09 | 7/31/09 | 7/31/09     |
| COLLECTION TIME:                |       | 12:41   | 10:30   | 11:02   | 11:36   | 12:05   | 16:27       |
| DILUTION FACTOR (VOCs):         |       | 1       | 1       | 1       | 1       | 1       | 1           |
|                                 | RL    |         |         |         |         |         |             |
| Benzene                         | 80    | nd      | nd      | nd      | nd      | nd      | nd          |
| Toluene                         | 200   | nd      | nd      | nd      | nd      | nd      | nd          |
| Ethylbenzene                    | 100   | nd      | nd      | nd      | nd      | nd      | nd          |
| m,p-Xylene                      | 200   | 320     | 250     | nd      | nd      | 260     | 230         |
| o-Xylene                        | 100   | 140     | 120     | nd      | nd      | 100     | 100         |
| Methyl-t-butyl ether (MtBE)     | 10    | nd      | nd      | nd      | nd      | nd      | nd          |
| TPH (gasoline range)            | 10000 | nd      | nd      | nd      | nd      | 36000   | 31000       |
| TPH (diesel range)              | 50000 | nd      | nd      | nd      | nd      | nd      | nd          |
| Methane                         | 500   | nd      | nd      | nd      | nd      | nd      | nd          |
| Oxygen                          | 5.0   | 13      | 8.7     | 3.2     | 9.7     | 16      | 6.8         |
| Carbon Dioxide                  | 1.0   | 6.8     | 11      | 16      | 10      | 4.9     | 12          |
| 1,1 Difluoroethane (leak check) | 10000 | nd      | nd      | nd      | nd      | nd      | nd          |
| Surrogate Recovery (DBFM)       |       | 87%     | 90%     | 87%     | 92%     | 90%     | 89%         |
| Surrogate Recovery (1,4-BFB)    |       | 95%     | 96%     | 96%     | 95%     | 97%     | 95%         |

'RL' Indicates reporting limit at a dilution factor of 1

'nd' Indicates not detected at listed reporting limits

Analyses performed in TEG-Northern California's lab

Analyses performed by: Mr. Jon Edmondson

page 2





Fugro West Inc. Project # 609.004  
2250 Telegraph Avenue  
Oakland, California

TEG Project #90731F

Continuing Calibration

Instrument: Agilent 5973N MSD

| COMPOUND                    | INITIAL<br>RF | 7/31/09              |       |
|-----------------------------|---------------|----------------------|-------|
|                             |               | Daily Midpoint<br>RF | %DIFF |
| Benzene                     | 1.129         | 1.210                | 7.2%  |
| Toluene                     | 0.674         | 0.718                | 6.5%  |
| Ethylbenzene                | 0.512         | 0.543                | 6.1%  |
| m,p-Xylene                  | 0.610         | 0.661                | 8.4%  |
| o-Xylene                    | 0.586         | 0.640                | 9.2%  |
| Methyl-t-butyl ether (MtBE) | 0.592         | 0.621                | 4.9%  |
| TPH (gasoline range)        | 0.908         | 0.917                | 1.0%  |
| TPH (diesel range)          | 8.052         | 7.424                | 7.8%  |
| Methane                     | 0.0106        | 0.0118               | 11.1% |
| Oxygen                      | 123           | 130                  | 6.0%  |
| Carbon Dioxide              | 56.9          | 58.0                 | 2.0%  |

**APPENDIX D**  
**WELL SAMPLING FORMS**



## ES-F50 WELL SAMPLING FORM

PROJECT NAME: Burner  
PROJECT NO.: 009.009  
SAMPLED BY: IC  
DATE: 7.25.09  
WEATHER: Cloudy

WELL NO.: MW-1  
WELL CASING DIAMETER: 2  
TOC ELEVATION: \_\_\_\_\_

TOTAL DEPTH OF CASING (BTOC): 18.31 FEET  
DEPTH TO GROUNDWATER (BTOC): 11.10 FEET  
FEET OF WATER IN WELL: 7.21 FEET

CALCULATED PURGE VOLUME: 3.53 gallons  
(feet of water \* casing dia<sup>2</sup> \* .0408 \* # of Volumes)

FREE PRODUCT: 0PURGE METHOD: PeristalticMEASUREMENT METHOD: ELECTRONIC SOUNDER or OTHER \_\_\_\_\_

## FIELD MEASUREMENTS

| GALLONS REMOVED      | TIME  | Temp  | pH   | CONDUCTIVITY<br>(µMHOS/CM) | TDS (g/L) | ORP<br>(mV) | DO<br>(mg/l) | COMMENTS<br>(odor, color, ...) |
|----------------------|-------|-------|------|----------------------------|-----------|-------------|--------------|--------------------------------|
| Downhole (Pre-Purge) | 9.18  | 20.15 | 5.94 | 1065                       | -         | 22.9        | 1.6          | -                              |
| 1.2                  | 9.32  | 20.51 | 6.36 | 860                        | -         | 37.2        | 3.74         | clear, slight mo-oda           |
| 2.4                  | 10.15 | 20.15 | 6.74 | 1052                       | -         | -12.3       | 4.00         | clear, slight ga/mo-oda        |
| 3.6                  | 10.58 | 20.18 | 6.77 | 1093                       | -         | -6.6        | 5.01         | "                              |
|                      |       |       |      |                            |           |             |              |                                |
|                      |       |       |      |                            |           |             |              |                                |
|                      |       |       |      |                            |           |             |              |                                |
|                      |       |       |      |                            |           |             |              |                                |

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOC):

12.22TIME SAMPLED: 1225SAMPLING METHOD: Bailer

CONTAINERS / PRESERVATIVE:

6 / HCl  
40 ML1 / Amb  
LITER

Poly

OTHER

ANALYSES: (Note if any samples are field filtered)

\_\_\_\_ TEHd, TEHmo (8015 w/ Silica gel)  
\_\_\_\_ TVHg, BTEX, MTBE (8015/8020)  
\_\_\_\_ VOCs (8260)  
\_\_\_\_ HVOCs (8260)  
\_\_\_\_ Title 22 Metals (6010/9000)

\_\_\_\_ Pesticides (8080)  
\_\_\_\_ PCBs (8080)  
\_\_\_\_ Sulfate (300.0)  
\_\_\_\_ Nitrate (300.0)  
\_\_\_\_ Fe<sup>2+</sup> - Field Filtered

MISC FIELD OBSERVATION:

slight recharge issues, took a few hours to recharge  
to 800

| Equipment    | Serial No.   | Calibration             |
|--------------|--------------|-------------------------|
| Conductivity | <u>YS160</u> | <u>Equipco Calsheet</u> |
| pH           |              |                         |
| Turbidity    |              |                         |
| Temperature  |              |                         |



## ES-F50 WELL SAMPLING FORM

PROJECT NAME: Battine  
PROJECT NO.: 609.004  
SAMPLED BY: REC  
DATE: 7.30.09  
WEATHER: \_\_\_\_\_

WELL NO.: 2 MW 2  
WELL CASING DIAMETER: 2  
TOC ELEVATION: \_\_\_\_\_

TOTAL DEPTH OF CASING (BTOC): 16.85 FEET  
DEPTH TO GROUNDWATER (BTGC): 11.41 FEET  
FEET OF WATER IN WELL: 5.44 FEET

CALCULATED PURGE VOLUME: 2.66 gallons  
(feet of water \* casing dia<sup>2</sup> \* .0408 \* # of Volumes)

FREE PRODUCT: \_\_\_\_\_

PURGE METHOD: PeristalticMEASUREMENT METHOD: ELECTRONIC SOUNDER or OTHER \_\_\_\_\_

## FIELD MEASUREMENTS

| GALLONS REMOVED      | TIME | Temp  | pH   | CONDUCTIVITY<br>(µMHOS/CM) | TDS (g/L) | ORP<br>(mV) | DO<br>(mg/l) | COMMENTS<br>(odor, color, ...) |
|----------------------|------|-------|------|----------------------------|-----------|-------------|--------------|--------------------------------|
| Downhole (Pre-Purge) | 950  | 20.08 | 7.20 | 546                        | -         | 43.7        | 2.80         |                                |
|                      | 953  | 20.01 | 7.05 | 556                        | -         | 76.2        | 4.98         | 4 brown slight no-odor         |
| 1                    | 955  | 20.19 | 7.03 | 561                        | -         | 84.2        | 3.60         | clear, no odor                 |
| 2                    | 957  | 20.13 | 7.07 | 557                        | -         | 89.7        | 3.75         | clear, no odor                 |
|                      |      |       |      |                            |           |             |              |                                |
|                      |      |       |      |                            |           |             |              |                                |
|                      |      |       |      |                            |           |             |              |                                |
|                      |      |       |      |                            |           |             |              |                                |
|                      |      |       |      |                            |           |             |              |                                |

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTGC): 11.52TIME SAMPLED: 1050SAMPLING METHOD disposable bailerCONTAINERS / PRESERVATIVE: 6 / HCl

40 ML

LITER

Poly

OTHER

ANALYSES: (Note if any samples are field filtered)

\_\_\_\_ TEHd, TEHmo (8015 w/ Silica gel)  
\_\_\_\_ TVHg, BTEX, MTBE (8015/8020)  
\_\_\_\_ VOCs (8260)  
\_\_\_\_ HVOs (8260)  
\_\_\_\_ Title 22 Metals (6010/9000)

\_\_\_\_ Pesticides (8080)  
\_\_\_\_ PCBs (8080)  
\_\_\_\_ Sulfate (300.0)  
\_\_\_\_ Nitrate (300.0)  
\_\_\_\_ Fe<sup>2+</sup> - Field Filtered

MISC FIELD OBSERVATION: \_\_\_\_\_

| Equipment    | Serial No. | Calibration |
|--------------|------------|-------------|
| Conductivity | YSI 650    | cert cal    |
| pH           |            |             |
| Turbidity    |            |             |
| Temperature  |            |             |



## ES-F50 WELL SAMPLING FORM

PROJECT NAME: BUTNER  
PROJECT NO.: 609-004  
SAMPLED BY: RC  
DATE: 7.50.09  
WEATHER: cloudy

WELL NO.: MW-3  
WELL CASING DIAMETER: 2  
TOC ELEVATION: \_\_\_\_\_

TOTAL DEPTH OF CASING (BTOC): 16.30 FEET

CALCULATED PURGE VOLUME: 2.88 gallons  
(feet of water \* casing dia<sup>2</sup> \* .0408 \* # of Volumes)

DEPTH TO GROUNDWATER (BTOW): 10.41 FEET

FEET OF WATER IN WELL: 5.89 FEET

FREE PRODUCT: None

PURGE METHOD: Peristaltic

MEASUREMENT METHOD: ELECTRONIC SOUNDER or OTHER \_\_\_\_\_

## FIELD MEASUREMENTS

| GALLONS REMOVED      | TIME | Temp  | pH   | CONDUCTIVITY<br>(µMHOS/CM) | TDS (g/L) | ORP<br>(mV) | DO<br>(mg/l) | COMMENTS<br>(odor, color, ...) |
|----------------------|------|-------|------|----------------------------|-----------|-------------|--------------|--------------------------------|
| Downhole (Pre-Purge) | 1002 | 19.92 | 6.61 | 1027                       | -         | -1.9        | 1.80         | -                              |
| 1                    | 1005 | 19.99 | 6.66 | 976                        | -         | -17.6       | 7.93         | Clear slight Petroleum odor    |
| 2                    | 1009 | 20.17 | 6.64 | 973                        | -         | -0.6        | 5.08         | Clear slight Pet odor          |
| 3                    | 1011 | 20.4  | 6.78 | 1116                       | -         | -0.6        | 5.01         | " "                            |
|                      |      |       |      |                            |           |             |              |                                |
|                      |      |       |      |                            |           |             |              |                                |
|                      |      |       |      |                            |           |             |              |                                |
|                      |      |       |      |                            |           |             |              |                                |

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOW): 11.12

TIME SAMPLED: 17:20

SAMPLING METHOD: Boile

CONTAINERS / PRESERVATIVE: 6 / HCl

40 ML

LITER

Poly

OTHER

ANALYSES: (Note if any samples are field filtered)

\_\_\_\_ TEHd, TEHmo (8015 w/ Silica gel)  
\_\_\_\_ TVHg, BTEX, MTBE (8015/8020)  
\_\_\_\_ VOCs (8260)  
\_\_\_\_ HVOCs (8260)  
\_\_\_\_ Title 22 Metals (6010/9000)

\_\_\_\_ Pesticides (8080)  
\_\_\_\_ PCBs (8080)  
\_\_\_\_ Sulfate (300.0)  
\_\_\_\_ Nitrate (300.0)  
\_\_\_\_ Fe<sup>2+</sup> - Field Filtered

MISC FIELD OBSERVATION: Plenty of recharge during purge, but took  
several hours to return to 80%

| Equipment    | Serial No. | Calibration        |
|--------------|------------|--------------------|
| Conductivity | <u>YSI</u> | <u>650 Equipco</u> |
| pH           |            | <u>Cal sheet</u>   |
| Turbidity    |            |                    |
| Temperature  |            |                    |



## ES-F50 WELL SAMPLING FORM

PROJECT NAME: Burner  
PROJECT NO.: 609004  
SAMPLED BY: PC  
DATE: 7-30-09  
WEATHER: \_\_\_\_\_

WELL NO.: MW-4  
WELL CASING DIAMETER: 2  
TOC ELEVATION: \_\_\_\_\_

TOTAL DEPTH OF CASING (BTOC): 18.30 FEET

CALCULATED PURGE VOLUME: 3.17 gallons  
(feet of water \* casing dia<sup>2</sup> \* .0408 \* # of Volumes)

DEPTH TO GROUNDWATER (BTGC): 11.81 FEET

FREE PRODUCT: None

FEET OF WATER IN WELL: 6.49 FEET

PURGE METHOD: Peristaltic

MEASUREMENT METHOD ELECTRONIC SOUNDER or OTHER \_\_\_\_\_

## FIELD MEASUREMENTS

| GALLONS REMOVED      | TIME | Temp  | pH   | CONDUCTIVITY<br>(µMHOS/CM) | TDS (g/L) | ORP<br>(mV) | DO<br>(mg/l) | COMMENTS<br>(odor, color, ...)     |
|----------------------|------|-------|------|----------------------------|-----------|-------------|--------------|------------------------------------|
| Downhole (Pre-Purge) | 1029 | 19.75 | 6.81 | 2105                       | -         | -80.0       | 1.07         | -                                  |
| 1.1                  | 1032 | 19.70 | 6.75 | 1606                       | -         | -91.4       | 2.25         | dark gray, slight petroleum, clean |
| 2.2                  | 1034 | 20.05 | 6.79 | 1504                       | -         | -96.0       | 4.35         | lt gray, slight steam, no odor     |
| 3.3                  | 1036 | 19.95 | 6.84 | 1606                       | -         | -92.1       | 3.23         | " gray, slight steam, no odor      |
|                      |      |       |      |                            |           |             |              |                                    |
|                      |      |       |      |                            |           |             |              |                                    |
|                      |      |       |      |                            |           |             |              |                                    |
|                      |      |       |      |                            |           |             |              |                                    |

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTGC): 12.91 TIME SAMPLED: 1135

SAMPLING METHOD Bailer

CONTAINERS / PRESERVATIVE: 6 HCl

40 ML

1 Amb  
LITER

/  
Poly

/  
OTHER

ANALYSES: (Note if any samples are field filtered)

\_\_\_\_ TEHd, TEHmo (8015 w/ Silica gel)  
\_\_\_\_ TVHg, BTEX, MTBE (8015/8020)  
\_\_\_\_ VOCs (8260)  
\_\_\_\_ HVOCs (8260)  
\_\_\_\_ Title 22 Metals (6010/9000)

\_\_\_\_ Pesticides (8080)  
\_\_\_\_ PCBs (8080)  
\_\_\_\_ Sulfate (300.0)  
\_\_\_\_ Nitrate (300.0)  
\_\_\_\_ Fe<sup>2+</sup> - Field Filtered

MISC FIELD OBSERVATION: \_\_\_\_\_

| Equipment    | Serial No.     | Calibration             |
|--------------|----------------|-------------------------|
| Conductivity | <u>YSI 650</u> | <u>Equipco CalSheet</u> |
| pH           |                |                         |
| Turbidity    |                |                         |
| Temperature  |                |                         |



## ES-F50 WELL SAMPLING FORM

PROJECT NAME: Bu Am  
PROJECT NO.: 609.004  
SAMPLED BY: 7.58.8  
DATE: Sunny  
WEATHER: Sunny

WELL NO.: MW-5  
WELL CASING DIAMETER: 2  
TOC ELEVATION: \_\_\_\_\_

TOTAL DEPTH OF CASING (BTOC): 17.40 FEET

CALCULATED PURGE VOLUME: 4.53 gallons  
(feet of water \* casing dia<sup>2</sup> \* .0408 \* # of Volumes)

DEPTH TO GROUNDWATER (BTGC): 8.13 FEET

FEET OF WATER IN WELL: 9.27 FEET

FREE PRODUCT: Boiling

PURGE METHOD: Boiling

MEASUREMENT METHOD: ELECTRONIC SOUNDER or OTHER \_\_\_\_\_

## FIELD MEASUREMENTS

| GALLONS REMOVED      | TIME | Temp  | pH   | CONDUCTIVITY<br>(µMHOS/CM) | TDS (g/L) | ORP<br>(mV) | DO<br>(mg/l) | COMMENTS<br>(odor, color, ...) |
|----------------------|------|-------|------|----------------------------|-----------|-------------|--------------|--------------------------------|
| Downhole (Pre-Purge) | 1341 | 20.32 | 6.59 | 445                        | —         | 173.9       | 2.43         |                                |
| 1.5                  | 1345 | 20.92 | 6.45 | 455                        | —         | 195.7       | 2.66         | Milky brown & odor             |
| 3.0                  | 1350 | 20.82 | 6.45 | 451                        | —         | 198.2       | 2.58         | " "                            |
| 4.5                  | 1357 | 20.81 | 6.42 | 453                        | —         | 202.9       | 2.78         | " "                            |
|                      |      |       |      |                            |           |             |              |                                |
|                      |      |       |      |                            |           |             |              |                                |
|                      |      |       |      |                            |           |             |              |                                |
|                      |      |       |      |                            |           |             |              |                                |

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTGC): 9.13

TIME SAMPLED: 1409

SAMPLING METHOD: Boiling

CONTAINERS / PRESERVATIVE: 6/HCl

40 ML

LITER

Poly

OTHER

ANALYSES: (Note if any samples are field filtered)

\_\_\_\_ TEHd, TEHmo (8015 w/ Silica gel)  
\_\_\_\_ TVHg, BTEX, MTBE (8015/8020)  
\_\_\_\_ VOCs (8260)  
\_\_\_\_ HVOCs (8260)  
\_\_\_\_ Title 22 Metals (6010/9000)

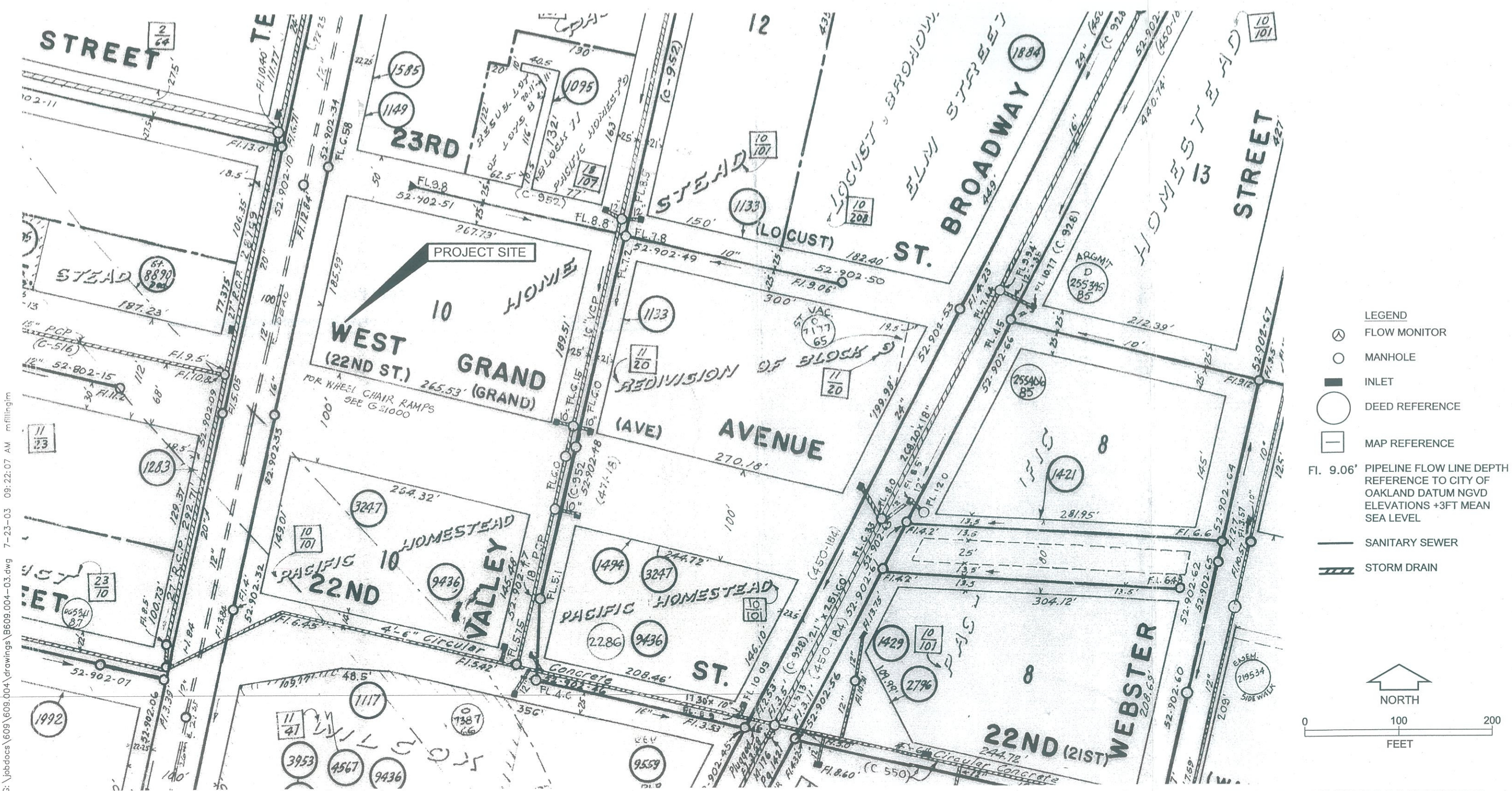
\_\_\_\_ Pesticides (8080)  
\_\_\_\_ PCBs (8080)  
\_\_\_\_ Sulfate (300.0)  
\_\_\_\_ Nitrate (300.0)  
\_\_\_\_ Fe<sup>2+</sup> - Field Filtered

MISC FIELD OBSERVATION: \_\_\_\_\_

| Equipment    | Serial No.    | Calibration             |
|--------------|---------------|-------------------------|
| Conductivity | <u>YS-60D</u> | <u>Equipco Calsheet</u> |
| pH           |               |                         |
| Turbidity    |               |                         |
| Temperature  |               |                         |

**APPENDIX E**  
**UNDERGROUND UTILITY DOCUMENTS**





BASE MAP SOURCE: This Vicinity Map is based on a City of Oakland Department of Engineering drawing, number 1488B482-238, dated 12/31/96.

VICINITY PLAN WITH LOCATION FOR  
STORM DRAINS AND SANITARY SEWER  
2250 Telegraph  
Oakland, California



PR NT DATE: 26-SEP-2008

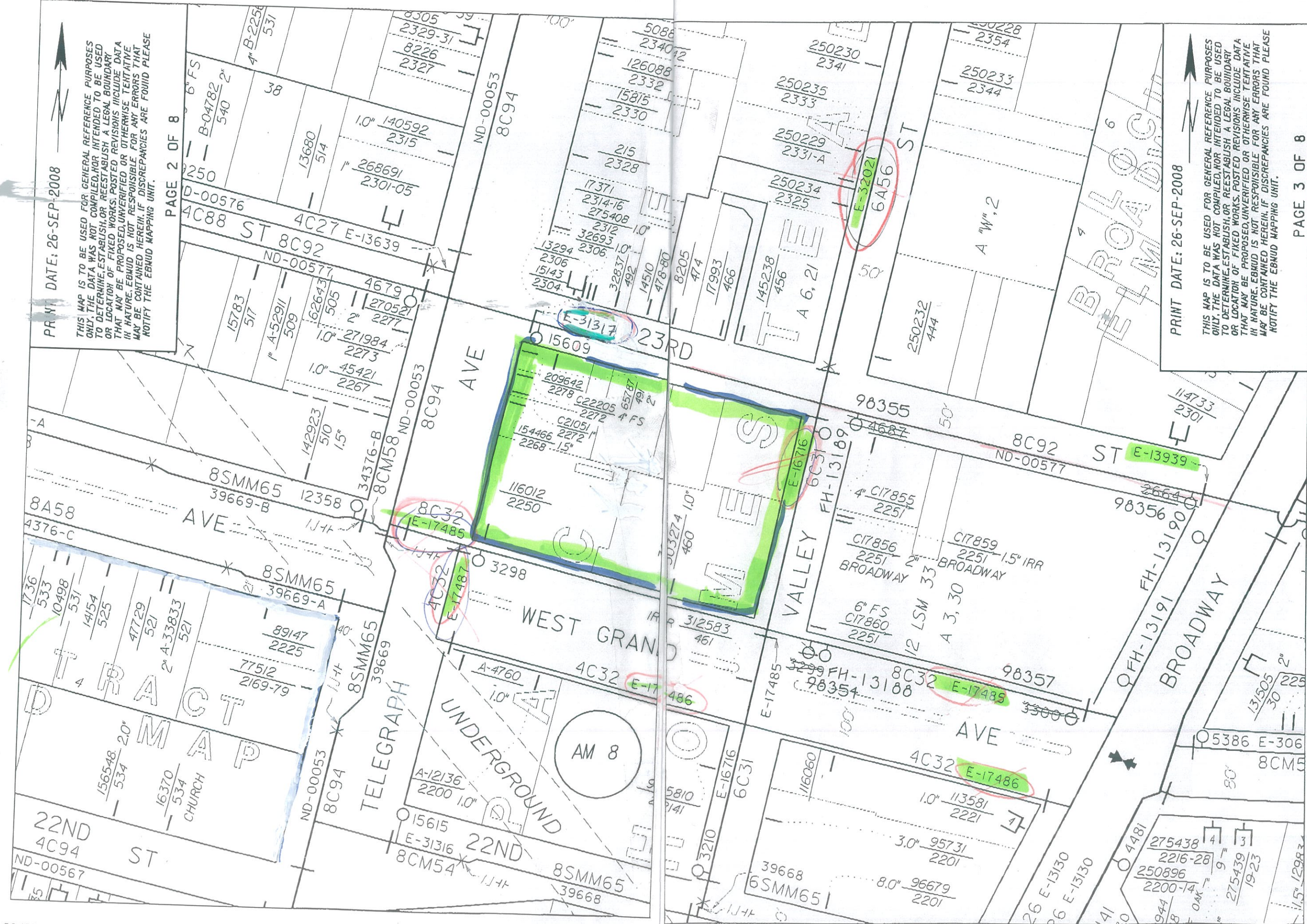
THIS MAP IS TO BE USED FOR GENERAL REFERENCE PURPOSES ONLY. THE DATA WAS NOT COMPILED, NOR INTENDED TO BE USED TO DETERMINE, ESTABLISH, OR REESTABLISH A LEGAL BOUNDARY OR LOCATION OF FIXED WORKS. POSTED REVISIONS INCLUDE DATA THAT MAY BE PROPOSED, UNVERIFIED OR OTHERWISE TENTATIVE IN NATURE. EBMUD IS NOT RESPONSIBLE FOR ANY ERRORS THAT MAY BE CONTAINED HEREIN. IF DISCREPANCIES ARE FOUND PLEASE NOTIFY THE EBMUD MAPPING UNIT.

PAGE 2 OF 8

PRINT DATE: 26-SEP-2008

THIS MAP IS TO BE USED FOR GENERAL REFERENCE PURPOSES ONLY. THE DATA WAS NOT COMPILED, NOR INTENDED TO BE USED TO DETERMINE, ESTABLISH, OR REESTABLISH A LEGAL BOUNDARY OR LOCATION OF FIXED WORKS. POSTED REVISIONS INCLUDE DATA THAT MAY BE PROPOSED, UNVERIFIED OR OTHERWISE TENTATIVE IN NATURE. EBMUD IS NOT RESPONSIBLE FOR ANY ERRORS THAT MAY BE CONTAINED HEREIN. IF DISCREPANCIES ARE FOUND PLEASE NOTIFY THE EBMUD MAPPING UNIT.

PAGE 3 OF 8





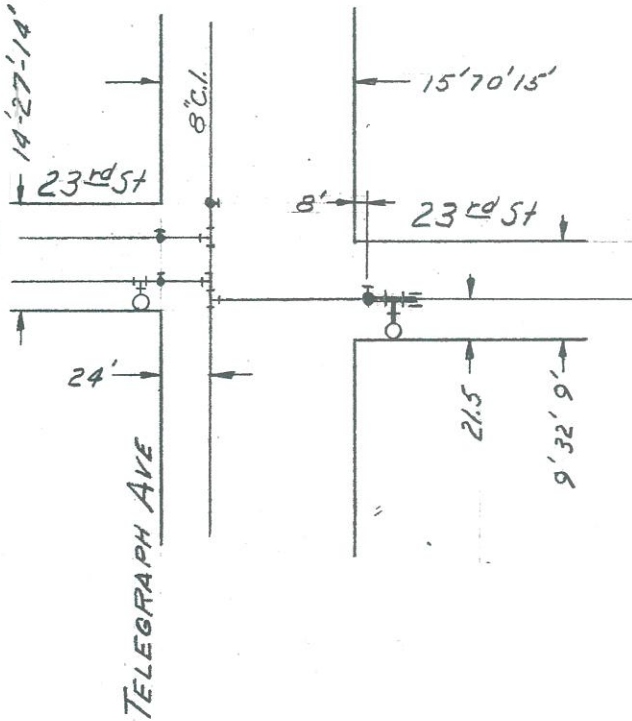
SUBDIV. TITLE \_\_\_\_\_ NO. \_\_\_\_\_  
 AREA OAKLAND  
 PRESSURE ZONE CENTRAL  
 JUSTIFICATION Improving system

WORK ORDER E 31317  
 MAP NO. J4B 1488B482  
 REFERENCE HD 451

RECOMMENDED BY W.S.D  
 APPROVED BY CJB

PREPARED BY I W Ross  
 DRAWN BY L M Henry  
 CHECKED BY Forgerly

ELEVATIONS ARE TO Oakland City DATUM



C=15"  
 0+100 8" Gate  
 Make Rec Sta Open R/T 27  
 C=28"  
 0+02.8 8x6" Tee  
 See Hyd order 5609  
 C=28"  
 0+05.4 8" Sleeve



REVISED AS CONSTRUCTED  
 Started 5-26-54 In Service 5-27-54  
 Completed 5-27-54  
 Recorded Darrin Approved Rolando  
 Revised 1-2-58 By B-Smith

SCALE 1"=100'  
 DATE 2-7-54  
 PAVING OM

| MAPPED | YARD | WALL | 200 | 400 | TAP |
|--------|------|------|-----|-----|-----|
|        |      |      |     |     |     |

JOINTS 6-8" Leads  
 MAKE OF PIPE \_\_\_\_\_  
 CONSTRUCTION BY \_\_\_\_\_  
 CONTRACT NO. \_\_\_\_\_

1-2-58



CITY Oakland

EAST BAY MUNICIPAL UTILITY DISTRICT

PIPE EXTENSION

MAP NO. 1488 B 482MAP RECORD  
TECHNICAL DEPARTMENT

E

17487

## REFERENCES

6/22/32

Installed 89 feet of 4 inch C.I. Pipe on East side ofTelegraph Ave. ---between--- across ---and--- Grand Ave.Connected to 8x4 inch Cross on N/S of Grand Ave and to  
4" Main on S/S of Grand Ave with 4" Tee

## SIDE CONNECTIONS

|           |                  |         |
|-----------|------------------|---------|
| Connected | inch main on the | Side of |
| Connected | inch main on the | Side of |
| Connected | inch main on the | Side of |
| Connected | inch main on the | Side of |
| Connected | inch main on the | Side of |

## VALVES AND COCKS SET ON MAINS:

|     |        |          |        |         |         |           |
|-----|--------|----------|--------|---------|---------|-----------|
| -1- | 4 inch | HE Valve | at the | N. Curb | Line of | Grand Ave |
|     | inch   |          | at the |         | Line of |           |
|     | inch   |          | at the |         | Line of |           |
|     | inch   |          | at the |         | Line of |           |
|     | inch   |          | at the |         | Line of |           |

## VALVES AND COCKS SET ON SIDE CONNECTIONS:

|      |        |    |
|------|--------|----|
| inch | at the | of |
| inch | at the | of |
| inch | at the | of |
| inch | at the | of |
| inch | at the | of |

Number of Gate Covers and Gate Pots Used 1-8" Conc. Valve Box - 30" 8" C.I. Pipe (Pot)Depth of trench to top of pipe 38 to 50 inches. Width of trench 22 inches.Length of trench 94 feet.Main is 9 feet from property line.Work Started 9-1-32

Date

Work Completed 9-6-32

Date

Water Turned on 9-16-32

Date

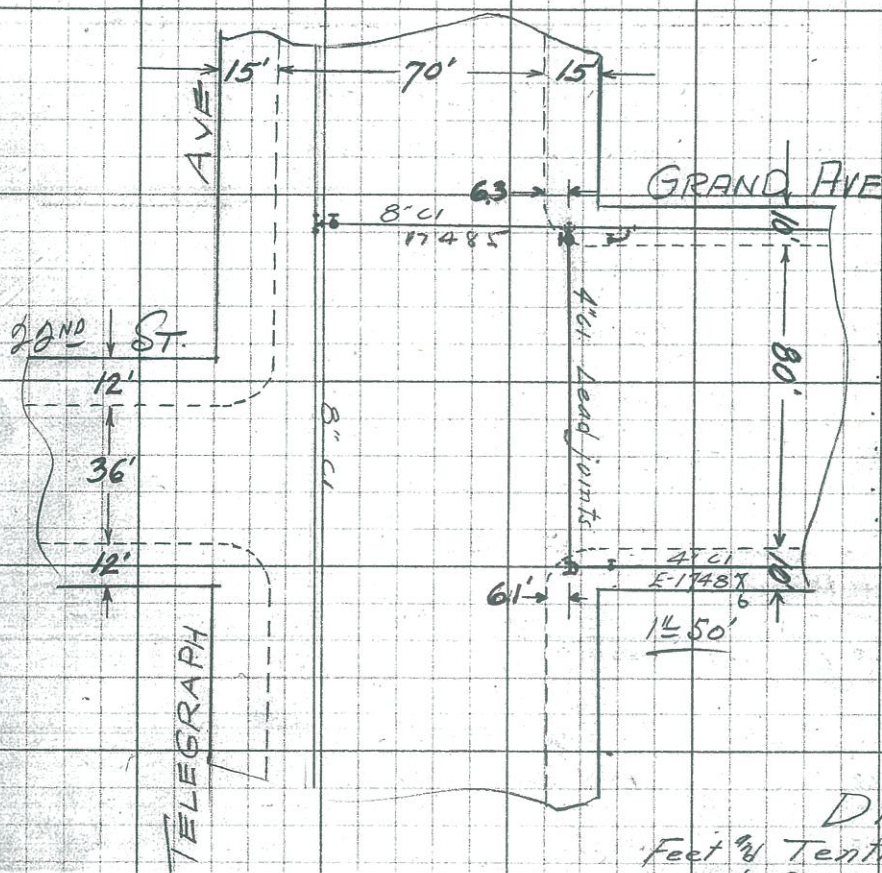
|                                 |                    |                   |
|---------------------------------|--------------------|-------------------|
| ORIGINAL ORDER<br>RECEIVED DATE | MAPPED<br>WALL MAP | MAPPED<br>TRACING |
|                                 | <u>W</u>           | <u>H</u>          |



E 17487

## PIPE EXTENSION

## MAP RECORD



- 1- 4" Valve H.E.
- 1- 8" Conc. Valve Box
- 30'-8" CI Pipe (Pot)
- 10- 4" Lead joints
- 1- 4" Single Collar
- 1- 4" Plug Collar
- 1- 4" Tee CI
- 1- 4" Plug CI
- 1- 2" Plug Se

## DATA

Feet  $\frac{3}{4}$  Tenths

- 0+00 =  $\pm$  8x4 Cross N/S Grand Ave (Inside Curb)
- 0+02.9 =  $\pm$  4" H.E. Valve
- 0+04.7 = North Curb Line Grand Ave (East)
- 0+31.8 = Tile Telephone Conduit - 39" Cover
- 0+54.6 = North Rail Key Route S.F. Tracks
- 0+72 = South Rail Key Route S.F. Tracks
- 0+84.7 = South Curb Line Grand Ave (East)
- 0+89.1 =  $\pm$  4" Tee S/S Grand Ave (inside curb)
- 6.1 ft E. of East Curb Telegraph Ave

Show new main and fittings installed—RED  
 Show mains and fittings connected—BLACK

Drawing by

Timekeeper



Installed by

Foreman



CITY Oakland

EAST BAY MUNICIPAL UTILITY DISTRICT

## PIPE EXTENSION

MAP NO. 4 I 488 B 482

MAP RECORD

TECHNICAL DEPARTMENT

E 17486

## REFERENCES

6/22/32

Installed 595 feet of 4 inch C.I. 01055150 Pipe on South side ofGrand Ave. -- between Telegraph Ave. and BroadwayConnected to 4" inch Tee on E/S of Telegraph Ave.  
and to 8" Main on W/S Broadway with 8x4 Tee

## SIDE CONNECTIONS

Connected 6 inch main on the West Side of Valley StConnected          inch main on the          Side of         Connected          inch main on the          Side of         Connected          inch main on the          Side of         Connected          inch main on the          Side of         

## VALVES AND COCKS SET ON MAINS:

1-4 inch Valve at the East Line of Telegraph1-4 inch Valve at the West Line of Broadway         inch          at the          Line of                  inch          at the          Line of                  inch          at the          Line of         

## VALVES AND COCKS SET ON SIDE CONNECTIONS:

         inch          at the          of                  inch          at the          of                  inch          at the          of                  inch          at the          of                  inch          at the          of         Number of Gate Covers and Gate Pots Used 2-8" Conc. Valve Boxes-43"-8 C.I. Pipe (Pots)Depth of trench to top of pipe 32 to 48 inches. Width of trench 42 inches.Length of trench 602 feet.Main is 5 feet from property line.Work Started 9-6-32

Date

Work Completed 9-16-32

Date

Water Turned on 9-16-32

Date

|                                 |                    |                   |
|---------------------------------|--------------------|-------------------|
| ORIGINAL ORDER<br>RECEIVED DATE | MAPPED<br>WALL MAP | MAPPED<br>TRACING |
|                                 | <u>UH</u>          | <u>UH</u>         |

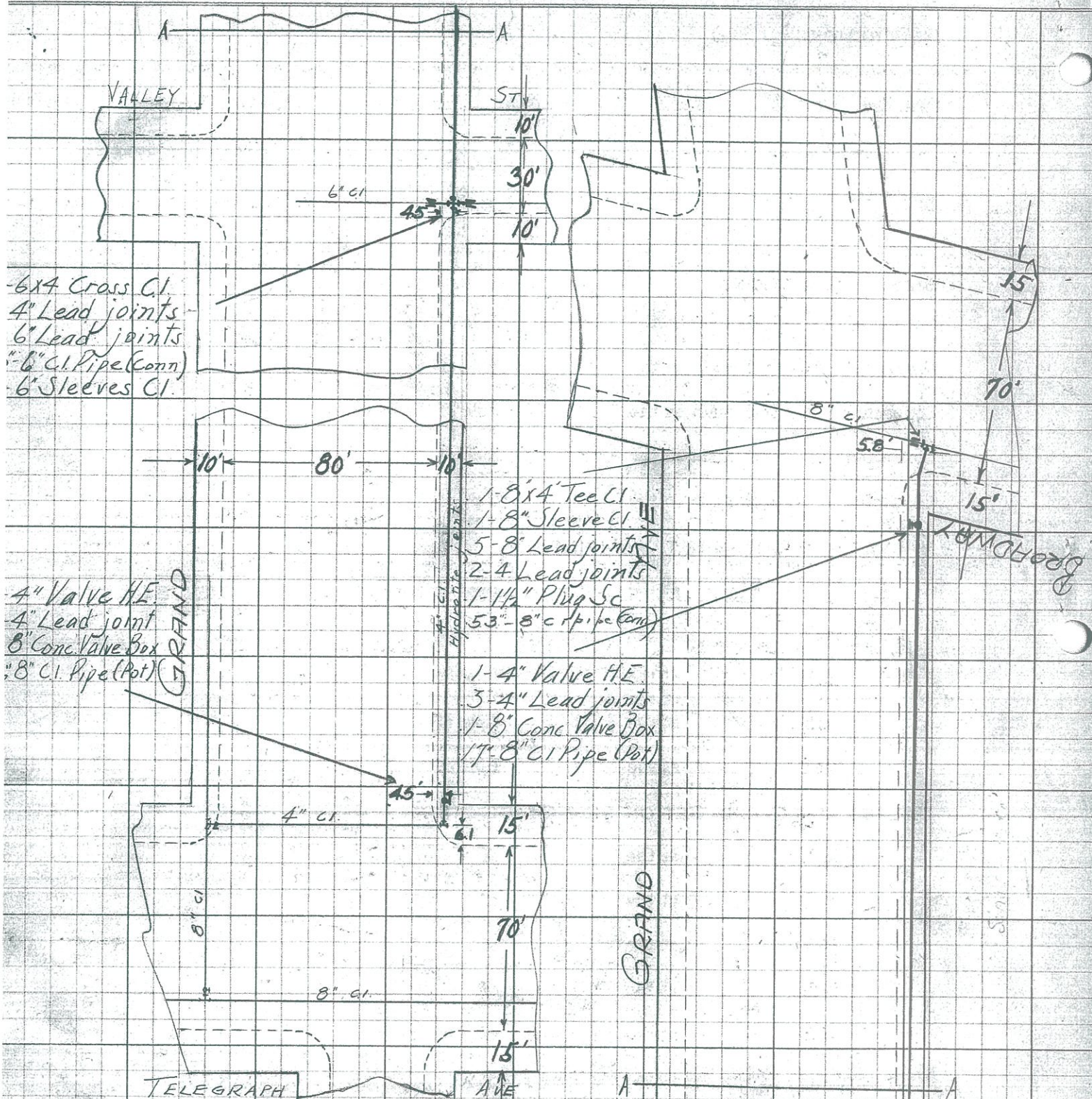


17486

PIPE EXTENSION

MAP RECORD

E



Show new main and fittings installed—RED  
Show mains and fittings connected—BLACK

Scale 1" = 50'

Drawing by

Installed by

Timekeeper

Foreman



# PIPE EXTENSION

## MAP RECORD

--D A T A--

E 17486

Feet and Tenths

|         |   |
|---------|---|
| 0+00    | Ø 4" Tee inside Curb S/s Grand Ave        |
| 0+10.6  | Ø 4" HE Valve E/o E/L Telegraph Ave       |
|         | 4.5 S/o S Curb - (East)                   |
| 0+86.7  | Ø 3" Pipe Diag - 24" Cover                |
| 2+83.5  | W Curb Valley St                          |
| 2+87.4  | Ø 6" x 4" Cross W/s Valley St             |
|         | 4.5' S/o S Curb Grand - 42" Cover         |
| 2+89.3  | Ø 8" x 4" Tile Teleph Conduit - 33" Cover |
| 2+90.2  | Ø 2" Pipe - 16" Cover                     |
| 2+91.7  | Ø 3" Pipe - 28" Cover                     |
| 3+05.5  | Ø 1 1/4" Pipe - 12" Cover                 |
| 3+06.4  | Ø 3" Gas Main - Diag across 4" CI Pipe    |
|         | 28" Cover                                 |
| 3+13.5  | E Curb Valley St                          |
| 3+15.9  | Ø 2" Pipe - 24" Cover                     |
| 3+26.9  | Ø 3" Gas Main - Diag 32" Cover            |
|         | 4" CI Pipe - 39" Cover                    |
| 5+64.75 | Ø 4" HE Valve W/L Broadway                |
|         | 4.4' S/o S Curb Grand (West)              |
| 5+82.7  | Slight Angle Rt                           |
| 5+85.2  | W C/L Broadway                            |
| 5+93.6  | Ø 1" Pipe - 26" Cover                     |
| 5+94.8  | Ø New 8" x 4" Tee W/s Broadway            |
|         | End 4" CI Pipe conn to 8" CI Main         |
|         | 32" Cover - 5.8' S/o S C/L Grand (West)   |
| 5+97.1  | Ø 6" Gas Main - W/s Broadway - 28" Cover  |

*Perfy*  
*ext 0679*  
*security - 2nd floor*  
*Moppin Service*



## - DATA -

Feet <sup>3</sup>/<sub>4</sub> Tenths

|         |   |   |
|---------|---|---|
| 0+00    | = | 4" Tee inside curb S/S Grand Ave  |
| 0+10.6  | = | 4" H.E. Valve E. of E/L Telegraph Ave<br>4.5 South of South Curb - (East)   |
| 0+86.7  | = | 3" Pipe Diag - 24" Cover  |
| 2+83.5  | = | West Curb Valley St   |
| 2+87.4  | = | 6x4 Cross W/S Valley St<br>4.5 South of South Curb Grand - 42" Cover  |
| 2+89.3  | = | 8x4" Tile Teleph. Conduit<br>33" Cover  |
| 2+90.2  | = | 2" Pipe - 16" Cover   |
| 2+91.7  | = | 3" Pipe - 28" Cover   |
| 3+05.5  | = | 1 1/4" Pipe - 12" Cover   |
| 3+06.4  | = | 3" Gas Main - Diag across 4" C.I. Pipe<br>28" Cover   |
| 3+13.5  | = | East Curb Valley St   |
| 3+15.9  | = | 2" Pipe - 24" Cover   |
| 3+26.9  | = | 3" Gas Main - Diag. 32" Cover<br>4" C.I. Pipe - 39" Cover   |
| 5+64.75 | = | 4" H.E. Valve W/L Broadway<br>4.4 South of South Curb Grand - (West)  |
| 5+82.7  | = | Slight Angle Right  |
| 5+85.2  | = | West Curb Line Broadway   |
| 5+93.6  | = | 1" Pipe - 26" Cover   |
| 5+94.8  | = | New 8x4" Tee W/S Broadway<br>End - 4" C.I. Pipe conn to 8" C.I. Main<br>32" Cover - 5.8 S. of S. C/L Grand - (West) |
| 5+97.1  | = | 6" Gas Main - W/L Broadway<br>28" Cover   |



CITY Oakland

EAST BAY MUNICIPAL UTILITY DISTRICT

PIPE EXTENSION

17485

MAP NO. 1488B482MAP RECORD  
TECHNICAL DEPARTMENT

E

## REFERENCES

6/22/32

Installed 685 feet of 8 inch Class 250 C.I. Pipe on N East side ofGrand Ave. between Telegraph Ave. and BroadwayConnected to 8 inch Main on W/S of Telegraph Ave with 8" Tee  
and to 8" Main on W/S Broadway with 8" Tee

## SIDE CONNECTIONS

Connected 6 inch main on the West Side of Valley St.Connected 4 inch main on the East Side of Telegraph AveConnected      inch main on the      Side of     Connected      inch main on the      Side of     Connected      inch main on the      Side of     

## VALVES AND COCKS SET ON MAINS:

1- 8 inch Valve <sup>on</sup> at the West ~~Line~~ <sup>Side</sup> of Telegraph Ave.1- 8 inch Valve at the West Line of Broadway     inch at the      Line of          inch at the      Line of          inch at the      Line of     

## VALVES AND COCKS SET ON SIDE CONNECTIONS:

1- 6 inch Valve at the N. Curbline of Grand Ave on W/S Valley St     inch at the      of          inch at the      of          inch at the      of          inch at the      of     Number of Gate Covers and Gate Pots Used 3-8" Concrete Valve Boxes - 8" CI Pipe PotDepth of trench to top of pipe 28 to 54 inches. Width of trench      inches.Length of trench 696 feet.Main is 5 feet from property line.Work Started 9-1-32 Date     Work Completed 9-16-32 Date     Water Turned on 9-16-32 Date     

|                                 |                    |                   |
|---------------------------------|--------------------|-------------------|
| ORIGINAL ORDER<br>RECEIVED DATE | MAPPED<br>WALL MAP | MAPPED<br>TRACING |
|                                 | <u>    </u>        | <u>    </u>       |

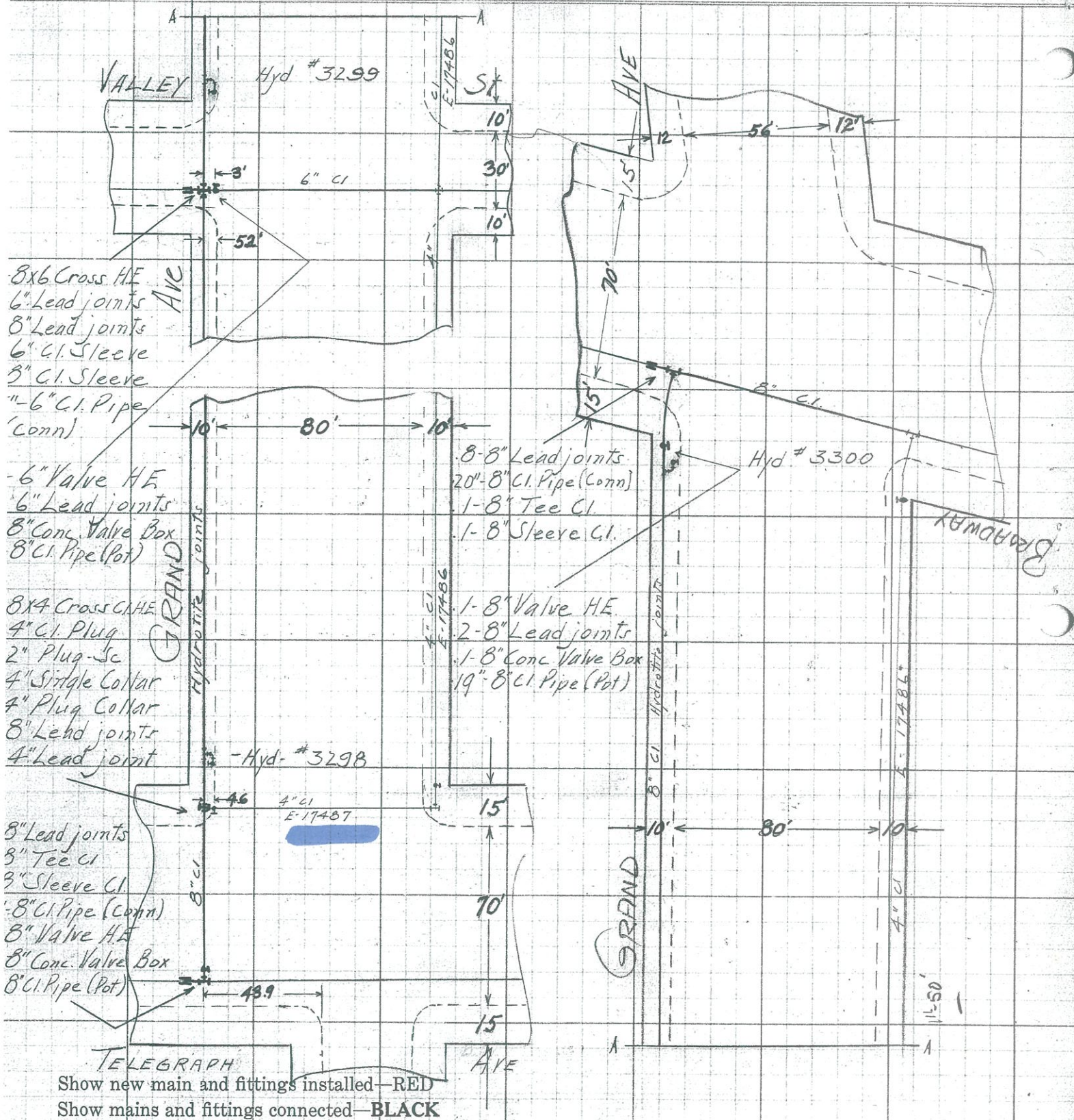


17485

## PIPE EXTENSION

E

## MAP RECORD



Drawing by

J. J. Green

Timekeeper

Installed by

J. Paladine

Foreman



# PIPE EXTENSION

## MAP RECORD

E 17485

--D A T A--

|        |  |
|--------|--|
| 0-09.8 | W Curb Telegraph Ave                                 |
| 0+00   | Ø New 8" Tee - W/s Telegraph Ave                     |
|        | 43.9' N/o N C/L 22nd St (West) - 28" Cover           |
| 0+03.4 | Ø 8" Valve - 32" Cover                               |
| 0+07   | Elect Conduit - 60" Cover                            |
| 0+08.1 | Ø 4" Pipe - 24" Cover                                |
| 0+10.9 | Elect Conduit - 16" Cover                            |
| 0+16.9 | W Rail Car Track                                     |
|        | 8" CI Pipe 39" Cover                                 |
| 0+25.7 | Ø 20" Sewer Pipe - 61" Cover                         |
| 0+33.5 | E Rail Car Track                                     |
|        | 8" CI Pipe - 54" Cover                               |
| 0+42.8 | 24" Elect Conduit - 33" Cover                        |
| 0+48.1 | 24" Teleph. Conduit - 33" Cover                      |
| 0+60.2 | E C/L Telegraph Ave                                  |
| 0+61.2 | 1½" Light Conduit                                    |
| 0+64.8 | 1½" Police Teleph. Conduit                           |
| 0+65.4 | 1½" Fire Alarm Conduit                               |
| 0+66.5 | Ø 8" x 4" Cross - N/s Grand Ave                      |
| 0+83   | Pt Opp 6" Hyd Valve                                  |
| 0+86   | Ø 8" x 6" Tee for Hyd - 46" Cover (beneath Sidewalk) |
|        | 4.6' N/o N Curb Grand                                |
| 3+49.5 | Ø 8" CI Sleeve                                       |
| 3+50.8 | W C/L Valley St                                      |
| 3+56   | Ø 8" x 6" Cross W/s Valley St                        |
|        | 5.2' N/o N Curb Grand                                |
| 3+57.3 | Ø 2" Water Pipe - Dead                               |
| 3+58.9 | Ø - 3" Gas Main                                      |
| 3+80.8 | E C/L Valley St                                      |
| 3+81.7 | 3" Gas Main - 24" Cover                              |
| 3+95.1 | Pt opp 6" Hyd Valve                                  |
| 3+97.7 | Ø 8" x 6" Tee for Hyd - 37" Cover under sidewalk     |
|        | 5' N/o N Curb - Grand Ave                            |
| 6+46   | Ø 8" x 6" Tee for Hyd (under S/W)                    |
| 6+48.9 | Pt opp 6" Hyd Valve                                  |
| 6+56.2 | Ø 8" HE Valve  |
| 6+68.1 | Ø 2" Pipe - 29" Cover                                |
| 6+68.5 | Ø 2" Pipe - 33" Cover                                |
| 6+74.6 | Ø 2" Gas Main - 34" Cover                            |
| 6+75.5 | W Curb Broadway                                      |
| 6+85.1 | Ø 8" CI Tee W/s Broadway                             |
|        | 3.5' N/o N Curb Grand (West)                         |
|        | End of 8" CI Pipe - 31" Cover                        |
| 6+87   | Ø 6" Gas Main W/s Broadway                           |
|        | 26" Cover  |

Revised 4/71

## DATA

|        |   |   |
|--------|---|---|
| 0+09.8 | = | West Curb Telegraph Ave   |
| 0+00   | = | £ New 8" Tee - W/S Telegraph Ave<br>43.9 ft N. of N. Curb Line 22 <sup>nd</sup> St. (West)<br>28" Cover |
| 0+03.4 | = | £ 8" Valve - 32" Cover  |
| 0+07   | = | Elect. Conduit - 60" Cover  |
| 0+08.1 | = | £ 4" Pipe - 24" Cover   |
| 0+10.9 | = | Elect. Conduit - 16" Cover  |
| 0+16.9 | = | West Rail Car Track<br>8" ci. Pipe 39" Cover  |
| 0+25.7 | = | £ 20" Sewer Pipe - 61" Cover  |
| 0+33.5 | = | East Rail Car Track<br>8" ci. Pipe - 54" Cover  |
| 0+42.8 | = | 24" Elect. Conduit - 33" Cover  |
| 0+48.1 | = | 24" Teleph. Conduit - 33" Cover   |
| 0+60.2 | = | East Curb Line Telegraph Ave  |
| 0+61.2 | = | 1 1/2" Light Conduit  |
| 0+64.8 | = | 1 1/4" Police Teleph. Conduit   |
| 0+65.4 | = | 1 1/4" Fire Alarm Conduit   |
| 0+66.5 | = | £ 8x4 Cross - N/S Grand Ave   |
| 0+83.  | = | Pt. opposite 6" Hyd. Valve  |
| 0+86   | = | £ 8x6 Tee for Hyd. 46" Cover (beneath Sidewalk)<br>4.6 ft. N. of North Curb Grand.                      |
| 3+49.5 | = | £ 8" ci. Sleeve   |
| 3+50.8 | = | West Curb Line Valley St  |
| 3+56   | = | £ 8x6 Cross W/S Valley St<br>5.2 N. of North Curb Grand   |
| 3+59.3 | = | £ 2" Water Pipe - Dead  |
| 3+58.9 | = | £ 3" Gas Main   |
| 3+80.8 | = | East Curb Line Valley St  |
| 3+81.7 | = | 3" Gas Main - 24" Cover   |
| 3+95.1 | = | Point opp. 6" Hyd. Valve  |
| 3+97.7 | = | £ 8x6 Tee for Hyd. = 37" Cover - under sidewalk<br>5' N. of North Curb Grand Ave.                       |
| 6+46   | = | £ 8x6 Tee for Hyd. (under sidewalk)   |
| 6+48.9 | = | Point opposite 6" Hyd. Valve  |
| 6+56.2 | = | £ 8" H.E. Valve   |
| 6+68.1 | = | £ 2" Pipe - 29" Cover   |
| 6+68.5 | = | £ 2" Pipe - 33" Cover   |
| 6+74.6 | = | £ 2" Gas Main - 34" Cover   |
| 6+75.5 | = | West Curb Broadway  |
| 6+85.1 | = | £ 8" ci. Tee W/S Broadway<br>35 ft. N. of North Curb Grand. (West)<br>End of 8" ci. Pipe - 31" Cover    |
| 6+87   | = | £ 6" Gas Main W/S Broadway<br>26" Cover   |



CITY Oakland

EAST BAY MUNICIPAL UTILITY DISTRICT

MAP NO. 1488-B 482PIPE EXTENSION  
MAP RECORD  
TECHNICAL DEPARTMENTE 16716REFERENCES K-7008

4/27/31

Installed 528 feet of 6 inch C.I. Pipe on West side ofValley Street between 21st St. and 23rd St.Connected to 2 inch End on N/C of 23 St.8" 8" C.I. 5/5 21 St.

## SIDE CONNECTIONS

95755 Kined 14'Connected 8 inch main on the South Side of 23 St.Connected        inch main on the        Side of       Connected        inch main on the        Side of       Connected        inch main on the        Side of       Connected        inch main on the        Side of       

## VALVES AND COCKS SET ON MAINS:

1-6 inch Valve at the North Line of 23rd St.1-6 inch Valve at the South Line of 23rd St.1-6 inch Valve at the North Line of 21st St.       inch        at the        Line of              inch        at the        Line of       

## VALVES AND COCKS SET ON SIDE CONNECTIONS:

       inch        at the        of              inch        at the        of              inch        at the        of              inch        at the        of              inch        at the        of       

Number of Gate Covers and Gate Pots Used

1-6 Cover G. 29" 6" Pipe C.I.  
1-8 Box Valve Conc 54" 8" Pipe C.I.  
2-8 Covers G.C.I.Depth of trench to top of pipe 30 inches. Width of trench 22 inches.Length of trench 535 feet.Main is 14 feet from property line.

|                                 |                    |                   |
|---------------------------------|--------------------|-------------------|
| ORIGINAL ORDER<br>RECEIVED DATE | MAPPED<br>WALL MAP | MAPPED<br>TRACING |
|                                 | <u>W</u>           | <u>4 &amp; 5</u>  |

Work Started 9-2-31

Date

Work Completed 9-17-31

Date

Water Turned on       

Date

MAPPED 100' W.C.

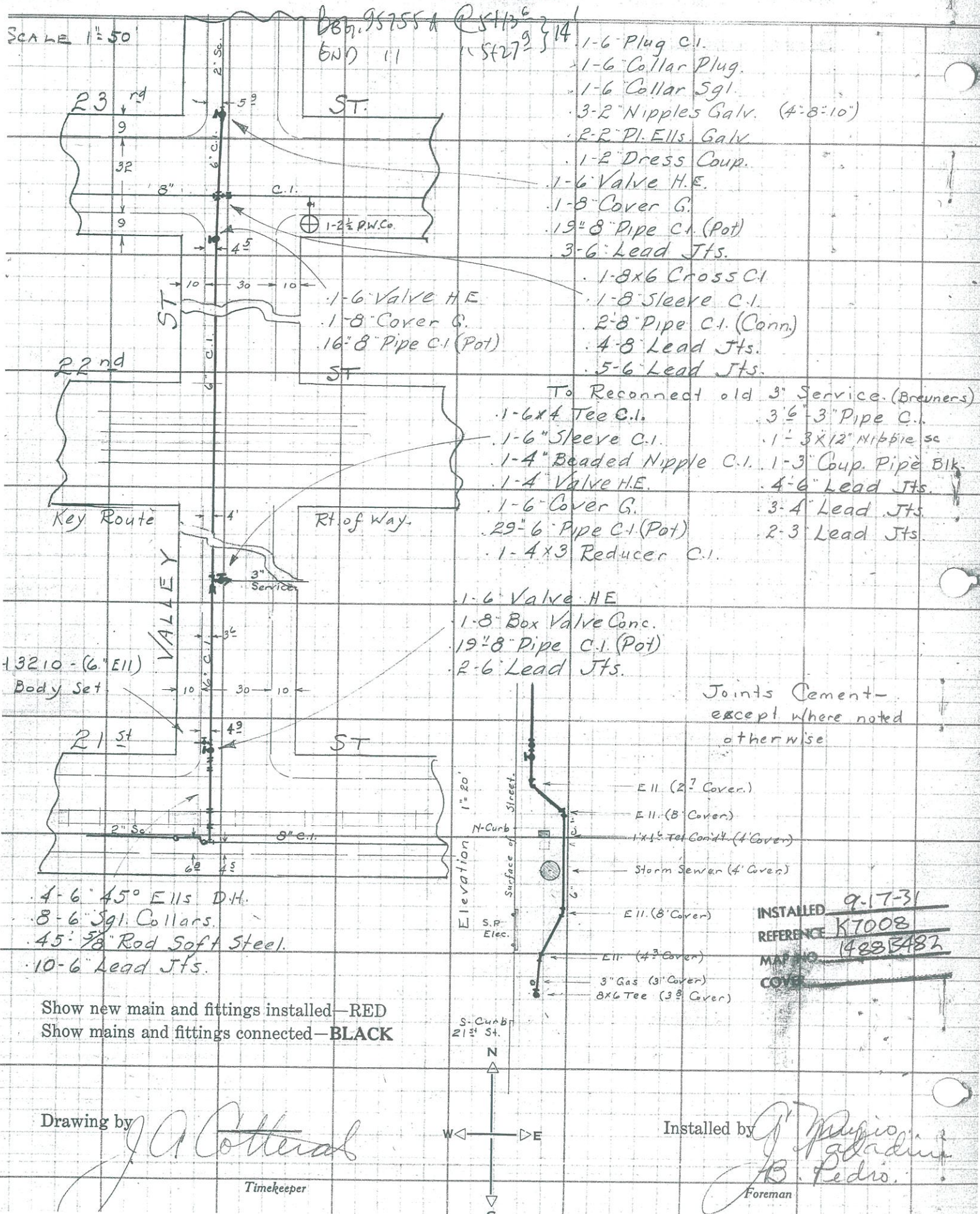


E 16716

## PIPE EXTENSION

## MAP RECORD

SCALE 1"=50'





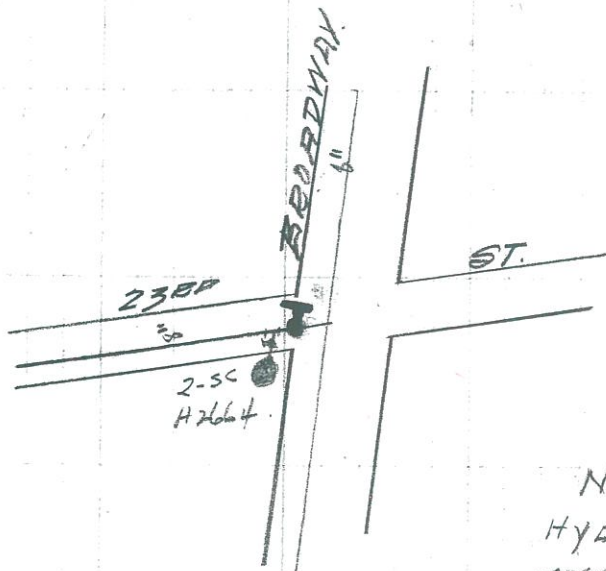
|          |  |                        |
|----------|--|------------------------|
| 0+00     | Beg 6" C.I. Conn. Old 2" Sc (21" Cover)            |                        |
| 0+01.7   | 6" Valve H.E. (32" Cover) (5.9 To W Curb)          |                        |
| 0+10.9   | N Curb 23 <sup>rd</sup> St                         |                        |
| 0+32.3   | 3" Gas Main (34" Cover)                            |                        |
| 0+35.3   | 8x6 Cross 5/5 23 St. (26" Cover)                   |                        |
| 0+42.10  | S Curb 23 <sup>rd</sup> St                         |                        |
| 0+51.5   | 6" Valve H.E. (31" Cover) (4.5 To W Curb)          |                        |
| 2+35     | (36" Cover) (5' To W Curb)                         |                        |
| 2+67.3   | 4" Gas Pipe (24" Cover)                            |                        |
| 2+73.8   | 12" Sewer (33" Cover)                              |                        |
| 2+82.6   | N/L Rt of Way (22 <sup>nd</sup> St)                |                        |
| 2+94.112 | Key Tracks 4.11 Cover over 6" C.I.                 |                        |
| 3+00     |  |                        |
| 3+02.52  | Key Tracks Switch                                  |                        |
| 3+07.73  |  |                        |
| 3+10.102 | Key Tracks 4.3 Cover over 6" C.I.                  |                        |
| 3+16     |  |                        |
| 3+33.7   | S/L Rt of Way (22 <sup>nd</sup> St)                |                        |
| 3+50     | (36" Cover) (4' To W Curb)                         |                        |
| 4+14     | 6x4 Tee C.I. for Breuners Service                  |                        |
| 4+35     | Main is 3.6 To W Curb                              |                        |
| 4+82.4   | 6" Tee for Hyd.                                    |                        |
| 4+84.2   | 6" Valve H.E. 4.9 To W Curb                        | Horizontal Measurement |
| 4+88.11  | 6" 45° Ell. D.H. (Angle Down) (2.7 Cover)          | 4+88.11                |
| 4+95.6   | 6" 45° Ell. D.H. (Angle to Horizontal) (8" Cover)  | 4+93.8                 |
| 4+98.9   | N-Curb 21 <sup>st</sup> St                         | 4+96.3                 |
| 4+99.3   | 12x18 Tel. Cond't (4" Cover)                       | 4+96.9                 |
| 5+05.3   | Storm Sewer (4" Cover)                             | 5+02.9                 |
| 5+12.3   | 6" 45° Ell. D.H. (Angle Up) (8" Cover)             | 5+09.9                 |
|          | N- Rail S.P. Elec.                                 | 5+10.7                 |
|          | S Rail S.P. Elec.                                  | 5+15.8                 |
| 5+20.9   | 6" 45° Ell. D.H. (Angle to Horizontal) (4.3 Cover) | 5+16.10                |
| 5+25.9   | 3" Gas Main  | 5+21.10                |
| 5+27.9   | 8x6 Tee C.I. 5/5 21 <sup>st</sup> (3.8 Cover)      | 5+23.10                |
| 5+32.2   | S-Curb 21 <sup>st</sup> St                         | 5+28.3                 |



13939

# PIPE EXTENSION

## MAP RECORD



Note.  
Hyd # 2664 set at same time valve was  
installed - no sleeve necessary, on the order

INSTALLED 4/26/27  
REFERENCE \_\_\_\_\_  
MAP NO. 1488-482  
COVER 26

Show new main and fittings installed—RED  
Show mains and fittings connected—**BLACK**

Drawing by

*Dr. Becken*  
Timekeeper



Installed by

*Shally*  
Foreman

CITY Oakland

EASTBAY WATER COMPANY

MAP NO. 4 1488 B 482 PIPE EXTENSIONMAP RECORD  
ENGINEERING DEPARTMENT

E 13939

## REFERENCES

4/25/27

Installed 0 feet of 8 inch O.I. Pipe on South side of  
23rd St. between West /L Broadway and  
Connected to inch on of  
and to inch on of

## SIDE CONNECTIONS

|           |                  |         |
|-----------|------------------|---------|
| Connected | inch main on the | Side of |
| Connected | inch main on the | Side of |
| Connected | inch main on the | Side of |
| Connected | inch main on the | Side of |
| Connected | inch main on the | Side of |

## VALVES AND COCKS SET ON MAINS:

|               |             |                 |                         |
|---------------|-------------|-----------------|-------------------------|
| <u>8</u> inch | <u>gate</u> | at the <u>W</u> | Line of <u>Broadway</u> |
| inch          |             | at the          | Line of                 |
| inch          |             | at the          | Line of                 |
| inch          |             | at the          | Line of                 |
| inch          |             | at the          | Line of                 |

## VALVES AND COCKS SET ON SIDE CONNECTIONS:

|      |        |    |
|------|--------|----|
| inch | at the | of |
| inch | at the | of |
| inch | at the | of |
| inch | at the | of |
| inch | at the | of |

Number of Gate Covers and Gate Pots Used 1-8 ROVER (2-8 PRE CI)Depth of trench to top of pipe 25 inches. Width of trench inches.Length of trench feet. Main is feet from property line.

|                                 |                    |                   |
|---------------------------------|--------------------|-------------------|
| ORIGINAL ORDER<br>RECEIVED DATE | MAPPED<br>WALL MAP | MAPPED<br>TRACING |
|                                 | <u>U.E.W.</u>      | <u>HOE</u>        |

Work Started April 26 - 1927Work Completed April 26 - 1927 DateWater turned on April 26 - 1927 Date

MAPPED 100' W. C.



PREPARED BY I. RossDRAWN BY J. H. M. D.CHECKED BY BradburyRECOMMENDED BY BradburyAPPROVED BY Griese

SUBDIV. TITLE OAKLAND # 621 NO.           
AREA CENTRAL  
PRESSURE ZONE Repl. old Street Imp.  
JUSTIFICATION Repl. old Street Imp.

WORK ORDER E-32021  
MAP NO. 14-B 14885 482  
REFERENCE H.O. 811 (E-15132) 90360  
Service Imp. # 1075  
Est. laying Date 10-1-55

SCALE Horizontal 1" = 40' Vertical 1" = 4'  
DATE Jan. 11, 1955  
PAVING Oil Mac.  
MAILED YARD WALL 200 400 TAP  
1/18 MAPPED 100' W.C.

32021

0+01<sup>2</sup> 6" Gate (Exist)  
N/R 23<sup>rd</sup> St.  
0+00 Conn. to 6" CI End  
with 6" Offset C=34"  
Not coated  
0+02<sup>2</sup> End 6" Offset  
C.I. H&S. C=36"

1+00 C=36"

2+00 C=36"

JOINTS 37-6" Coupling 8-6" Ld 3-4" Ld  
MAKE OF PIPE J.M. Ringite  
CONSTRUCTION BY District Forces

3+00 C=36"

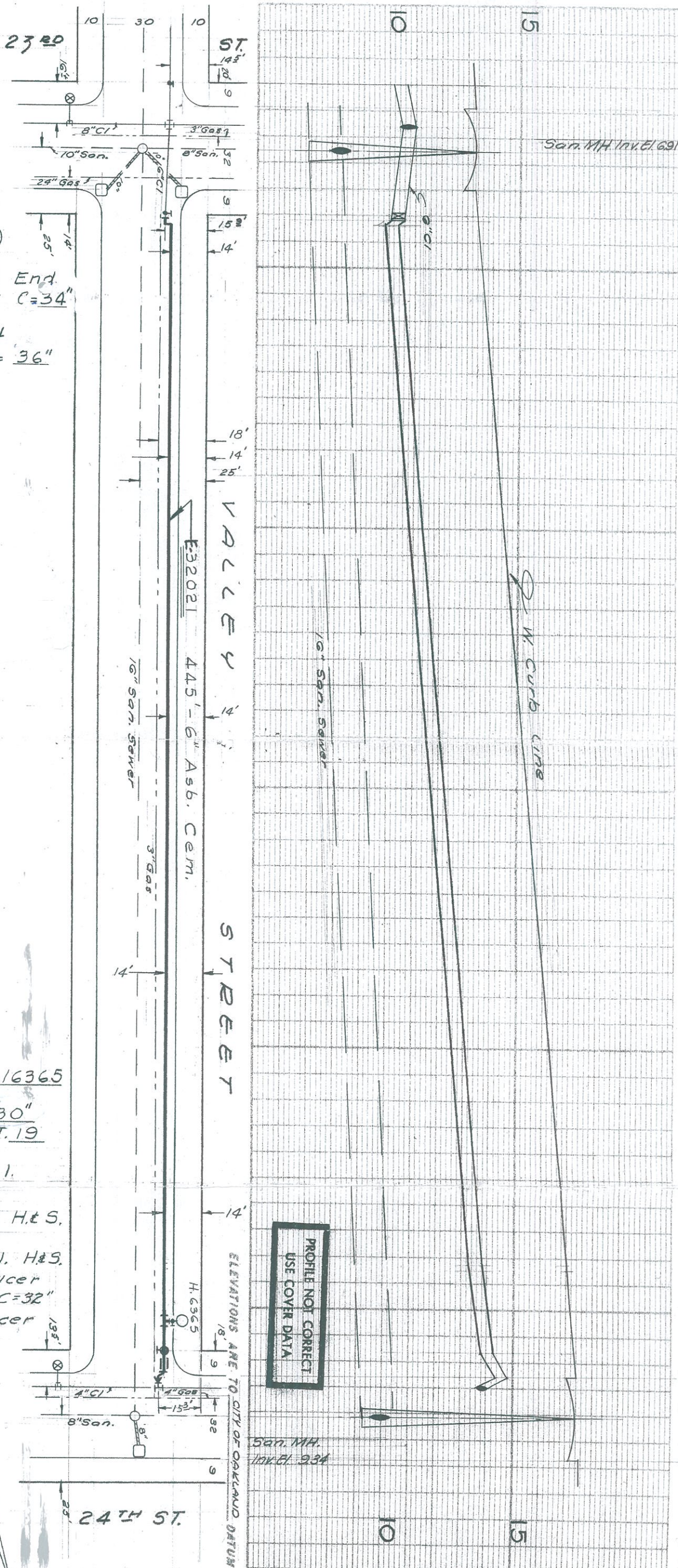
4+00 C=32"  
4+23<sup>2</sup> 6" Hyd. Tee  
Hyd. Ord. 16365  
4+36 S/L 24<sup>th</sup> St.  
6" Gate C=30"  
Make A.P.S. O.R. T. 19

4+45 6" Sleeve C.I.  
End 6" A.C.

4+46<sup>2</sup> Beg. 6" Offset H&S.  
C=22"

4+49<sup>2</sup> End Offset - C.I. H&S.  
Beg. 6"x4" Reducer  
4+51<sup>2</sup> 4" Tee (Exist) C=32"  
End 6"x4" Reducer

REVISED AS CONSTRUCTED  
Started 1-12-56 In Service 1-28-56  
Completed 1-28-56  
Recorded N.Y.D. Approved Cross  
Revised 2-14-57 By Butzen





**APPENDIX F**  
**DEPARTMENT OF WATER RESOURCES WELL SEARCH**



# GROUNDWATER TECHNOLOGY

## Drilling Log

Monitoring Well **MW-1**Project 2633 Telegraph Ave.  
Sears AutomotiveOwner Sears Roebuck & Co.Location Oakland, CAProject No. 020503392Date drilled 12/8/92Surface Elev. 26.95 ft. Total Hole Depth 22.0 ft. Diameter 10.5 in.Top of Casing 26.20 ft. Water Level Initial 11.7 ft. Static 12.2 ft.Screen: Dia 2.0 in. Length 15 ft. Type/Size 0.020 in.Casing: Dia 2.0 in. Length 6.5 ft. Type PVCFilter Pack Material #3 Lonestar Rig/Core Type B-53Drilling Company Kvilhaug Well Drilling Method Hollow Stem Auger Permit # 92601Driller Mike Crocker Log By Kenneth JohnsonChecked By David Kleesattel License No. RG 5136See Site Map  
For Boring Location

COMMENTS:

| Depth<br>(ft.) | Well<br>Completion | PTD<br>(ppm) | Sample ID<br>Blow Count/<br>% Recovery | Graphic<br>Log | USCS<br>Class. | Description<br>(Color, Texture, Structure)<br>Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%.                        |
|----------------|--------------------|--------------|--|----------------|----------------|---|
| -2             |                    |              |  |                |                |   |
| 0              |                    |              |  |                | ASP/GM         | ASPHALT over clayey GRAVEL<br>(coarse base aggregate)   |
| 2              |                    |              |  |                | ML             | Grayish brown clayey SILT<br>(soft, moist, no odor)   |
| 4              |                    |              |  |                | CL             | Dark yellowish brown silty CLAY<br>(soft, moist, some sand, no odor)  |
| 6              |                    | 1            |  |                |                |   |
| 8              |                    |              |  |                | CL             | Moderate yellowish brown gravelly CLAY<br>(soft, moist, no odor, angular to subangular gravel)  |
| 10             |                    | 2            |  |                |                |   |
| 12             |                    | >2000        |  |                |                | (slight product odor)<br>Groundwater Encountered 12/8/92; 900 hours<br>Static water level 12/8/92                                     |
| 14             |                    |              |  |                | SM             | Olive gray coarse SAND<br>(loose, saturated, strong product odor, some silt)  |
| 16             |                    | 123          |  |                |                |   |
| 18             |                    |              |  |                | SM             | Dark yellowish orange to moderate yellowish brown silty SAND<br>(loose, saturated slight product odor)                                |
| 20             |                    |              |  |                | CL             | Dark yellowish orange to moderate yellowish brown silty CLAY<br>(soft, saturated, very slight product odor,<br>little very fine sand) |
| 22             |                    | 1            |  |                |                |   |
| 24             |                    |              |  |                |                | End of boring, installed groundwater monitoring well.   |
| 26             |                    |              |  |                |                |   |

01-533T

01504W26G17



GROUNDWATER  
TECHNOLOGY

# Drilling Log

Monitoring Well **MW-2**

Project Sears Automotive Owner Sears Roebuck & Co.  
 Location Oakland, CA Project No. 020503392 Date drilled 12/8/92  
 Surface Elev. 26.83 ft. Total Hole Depth 22.0 ft. Diameter 10.5 in.  
 Top of Casing 26.50 ft. Water Level Initial 11.7 ft. Static 11.6 ft.  
 Screen: Dia 2.0 in. Length 15 ft. Type/Size 0.020 in.  
 Casing: Dia 2.0 in. Length 6.5 ft. Type PVC  
 Filter Pack Material #3 Lonestar Rig/Core Type B-53  
 Drilling Company Kvilhaug Well Drilling Method Hollow Stem Auger Permit # 92601  
 Driller Mike Crocker Log By Kenneth Johnson  
 Checked By David Kleesattel License No. RG 5136

See Site Map  
For Boring Location

COMMENTS:

| Depth<br>(ft.) | Well<br>Completion | PID<br>(ppm) | Sample ID<br>Blow Count/<br>& Recovery | Graphic<br>Log | USCS<br>Class. | Description<br>(Color, Texture, Structure)<br>Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%            |
|----------------|--------------------|--------------|--|----------------|----------------|--|
| -2             |                    |              |  |                |                |  |
| 0              |                    |              |  |                | Asp<br>GC      | ASPHALT over clayey GRAVEL<br>(coarse base aggregate)  |
| 2              |                    |              |  |                | ML             | Grayish brown clayey sandy SILT<br>(soft, moist, no odor)  |
| 4              |                    |              |  |                |                | Dark yellowish brown silty CLAY<br>(soft, moist, trace organic material, no odor)  |
| 6              |                    | ND           |  |                |                |  |
| 8              |                    |              |  |                | CL             |  |
| 10             |                    |              |  |                |                |  |
| 12             |                    | 2<br>25      |  |                |                | Static Water Level 12/9/92<br>Olive gray clayey, very fine SAND<br>(loose, saturated, strong product odor, trace gravel) |
| 14             |                    |              |  |                | SC             | Groundwater Encountered 12/8/92; 1100 hours<br>(grades to moderate product odor)<br>(moderate product odor)              |
| 16             |                    | 2            |  |                |                |  |
| 18             |                    |              |  |                | CL             | Dark yellowish orange to moderate yellowish brown sandy CLAY<br>(soft, saturated, very slight product odor)              |
| 20             |                    |              |  |                |                |  |
| 22             |                    | ND           |  |                | GC             | Dark gray silty clayey GRAVEL<br>(dense, saturated, no odor)   |
| 24             |                    |              |  |                |                | End of boring, installed groundwater monitoring well.  |
| 26             |                    |              |  |                |                |  |

01 533 U

DIS04W26618

GROUNDWATER  
TECHNOLOGY

## Drilling Log

Monitoring Well MW-3

Project Sears Automotive Owner Sears Roebuck & Co.  
 Location Oakland, CA Project No. 020503392 Date drilled 12/7/92  
 Surface Elev. 26.83 ft. Total Hole Depth 25.0 ft. Diameter 10.5 in.  
 Top of Casing 26.34 ft. Water Level Initial 15.0 ft. Static 13.2 ft.  
 Screen: Dia 2.0 in. Length 15 ft. Type/Size 0.020 in.  
 Casing: Dia 2.0 in. Length 9.5 ft. Type PVC  
 Filter Pack Material #3 Lonestar Rig/Core Type B-53  
 Drilling Company Kvilhaug Well Drilling Method Hollow Stem Auger Permit # 92601  
 Driller Mike Crocker Log By Kenneth Johnson  
 Checked By David Kleesattel License No. RG 5136

See Site Map  
For Boring Location

COMMENTS:

| Depth<br>(ft.) | Well<br>Completion | PID<br>(ppm) | Sample ID<br>Blow Count/<br>% Recovery | Graphic<br>Log | USCS Class. | Description<br>(Color, Texture, Structure)<br>Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%. |
|----------------|--------------------|--------------|--|----------------|-------------|--|
| -2             |                    |              |  |                |             |  |
| 0              |                    |              |  |                | Asp<br>GC   | ASPHALT over clayey GRAVEL<br>(coarse base aggregate)  |
| 2              |                    |              |  |                |             | Dusky yellowish brown sandy CLAY<br>(soft, moist to wet, no odor)  |
| 4              |                    |              |  |                |             |  |
| 6              |                    | ND           |  |                | CL          | (sand interbed)  |
| 8              |                    |              |  |                |             |  |
| 10             |                    | 12           |  |                |             |  |
| 12             |                    | 1216         |  |                | CL          | Olive gray fine sandy CLAY<br>(soft, wet, strong product odor)<br>(very strong product odor)                   |
| 14             |                    |              |  |                |             | Static Water Level 12/8/92   |
| 16             |                    | 12           |  |                |             | Groundwater Encountered 12/7/92; 1320 hours  |
| 18             |                    |              |  |                | CL          | Dark yellowish brown sandy CLAY<br>(soft, saturated, moderate product odor)<br>(fine clayey sand interbed)     |
| 20             |                    | 28           |  |                |             |  |
| 22             |                    |              |  |                | SM          | Grayish olive silty SAND<br>(loose, saturated, slight product odor)  |
| 24             |                    | 2            |  |                | SW          | Dark yellowish orange to Moderate yellowish brown gravelly SAND<br>(loose, saturated, no odor)                 |
| 26             |                    |              |  |                |             | End of boring, installed groundwater monitoring well.  |

01-523V

01504W26G19

GROUNDWATER  
TECHNOLOGY

## Drilling Log

Monitoring Well MW-4

Project Sears Automotive Owner Sears Roebuck & Co.  
 Location Oakland, CA Project No. 020503392 Date drilled 12/8/92  
 Surface Elev. 26.84 ft. Total Hole Depth 23.0 ft. Diameter 10.5 in.  
 Top of Casing 26.17 ft. Water Level Initial 12.7 ft. Static 12.5 ft.  
 Screen: Dia 2.0 in. Length 15 ft. Type/Size 0.020 in.  
 Casing: Dia 2.0 in. Length 7.5 ft. Type PVC  
 Filter Pack Material #3 Lonestar Rig/Core Type B-53  
 Drilling Company Kvilhaug Well Drilling Method Hollow Stem Auger Permit # 92601  
 Driller Mike Crocker Log By Kenneth Johnson  
 Checked By David Kleesattel License No. RG 5136 *David Kleesattel*

See Site Map  
For Boring Location

COMMENTS:

| Depth<br>(ft.) | Well<br>Completion | PID<br>(ppm) | Sample ID<br>Blow Count/<br>% Recovery | Graphic<br>Log | USCS Class.      | Description<br>(Color, Texture, Structure)<br>Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50%. |
|----------------|--------------------|--------------|--|----------------|------------------|--|
| -2             |                    |              |  |                |                  |  |
| 0              |                    |              |  |                | Asp/<br>GC<br>OL | ASPHALT over clayey GRAVEL<br>(coarse base aggregate)  |
| 2              |                    |              |  |                | OL               | Grayish brown silty organic CLAY<br>(soft, moist, no odor)   |
| 4              |                    |              |  |                | CL               | Dark yellowish brown silty CLAY<br>(soft, moist, no odor)  |
| 6              |                    | ND           |  |                |                  |  |
| 8              |                    | 1            |  |                | CL               | Olive gray very fine sandy CLAY<br>(soft, saturated, no odor)  |
| 10             |                    | 25           |  |                |                  |  |
| 12             |                    | 198          |  |                | CL               | Olive gray silty CLAY<br>(soft, saturated, moderate product odor)  |
| 14             |                    |              |  |                |                  | Static Water Level 12/8/92<br>Groundwater Encountered 12/8/92; 1500 hours                                      |
| 16             |                    |              |  |                | SC               | Light olive gray clayey fine SAND<br>(soft, saturated, moderate petroleum odor)                                |
| 18             |                    |              |  |                |                  | (grades yellowish orange)  |
| 20             |                    |              |  |                |                  |  |
| 22             |                    | ND           |  |                | SW               | Yellowish orange gravelly coarse SAND<br>(medium dense, saturated, no odor)                                    |
| 24             |                    | ND           |  |                |                  | End of boring, installed groundwater monitoring well.  |
| 26             |                    |              |  |                |                  |  |



01-533W

01504W26620

GROUNDWATER  
TECHNOLOGY

## Drilling Log

Monitoring Well MW-5

Project Sears Automotive Owner Sears Roebuck & Co.  
 Location Oakland, CA Project No. 020503392 Date drilled 12/7/92  
 Surface Elev. 27.31 ft. Total Hole Depth 25.0 ft. Diameter 10.5 in.  
 Top of Casing 26.98 ft. Water Level Initial 16.0 ft. Static 11.1 ft.  
 Screen: Dia 2.0 in. Length 15 ft. Type/Size 0.020 in.  
 Casing: Dia 2.0 in. Length 9.5 ft. Type PVC  
 Filter Pack Material #3 Lonestar Rig/Core Type B-53  
 Drilling Company Kvilhaug Well Drilling Method Hollow Stem Auger Permit # 92601  
 Driller Mike Crocker Log By Kenneth Johnson  
 Checked By David Kleesattel License No. RG 5136

See Site Map  
For Boring Location

COMMENTS:

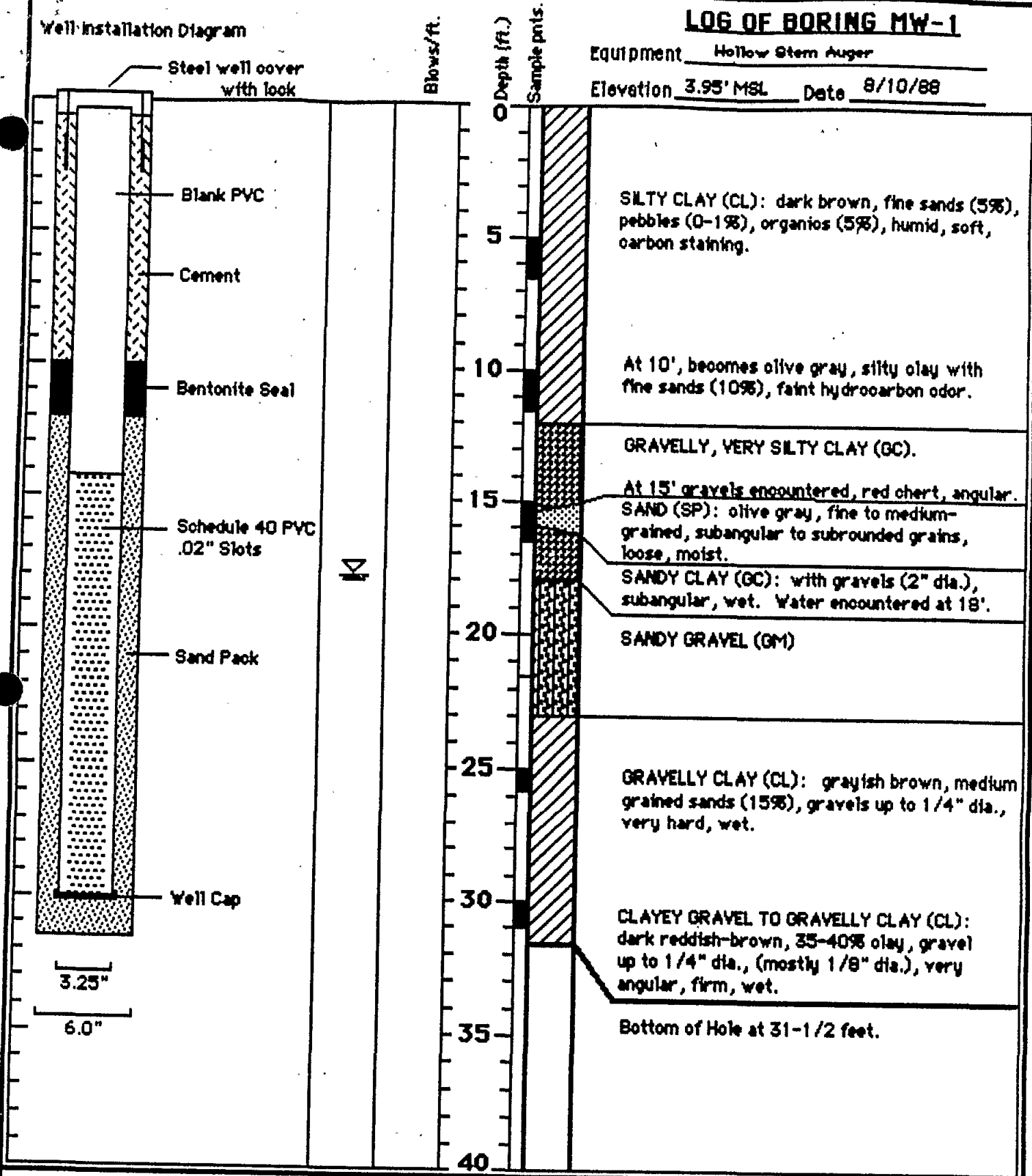
| Depth<br>(ft.) | Well<br>Completion | PTD<br>(ppm) | Sample ID<br>Blow Count/<br>% Recovery | Graphic<br>Log | USCS Class. | Description<br>(Color, Texture, Structure)<br>Trace < 10%, Little 10% to 20%, Some 20% to 35%, And 35% to 50% |
|----------------|--------------------|--------------|--|----------------|-------------|---|
| -2             |                    |              |  |                |             |   |
| 0              |                    |              |  |                | Asp<br>GC   | ASPHALT over clayey GRAVEL<br>(coarse base aggregate)   |
| 2              |                    |              |  |                | OL          | Dark gray silty organic CLAY<br>(stiff, moist, no odor)   |
| 4              |                    |              |  |                |             |   |
| 6              |                    | ND           |  |                | CL          | Dark yellowish brown silty CLAY<br>(soft, moist, no odor)   |
| 8              |                    | ND           |  |                |             |   |
| 10             |                    | 5            |  |                | CL          | Grayish olive sandy CLAY<br>(soft, moist to wet, very slight product odor)                                    |
| 12             |                    |              |  |                |             | Static Water Level 12/8/92  |
| 14             |                    |              |  |                | SC          | Light olive gray clayey SAND<br>(loose, wet, no odor)   |
| 16             |                    | 2            |  |                | SC          | Dark yellowish brown clayey SAND<br>(loose, saturated, no odor)   |
| 18             |                    |              |  |                |             | Groundwater Encountered 12/7/92; 1040 hours   |
| 20             |                    |              |  |                | CL          | Dark yellowish brown sandy CLAY<br>(soft, saturated, no odor)   |
| 22             |                    | ND           |  |                | ML          | Moderate yellowish brown gravelly SILT<br>(soft, saturated, no odor)  |
| 24             |                    |              |  |                | SM          | Moderate yellowish brown silty SAND<br>(loose, saturated, no odor, some organics)                             |
| 26             |                    | ND           |  |                | CL          | Moderate yellowish brown sandy CLAY<br>(soft, saturated, no odor)   |
| 26             |                    |              |  |                |             | End of boring, installed groundwater monitoring well.   |

01-416 X

15/11/12 1

# LOG OF BORING MW-1

Equipment Hollow Stem Auger  
Elevation 3.95' MSL Date 8/10/88



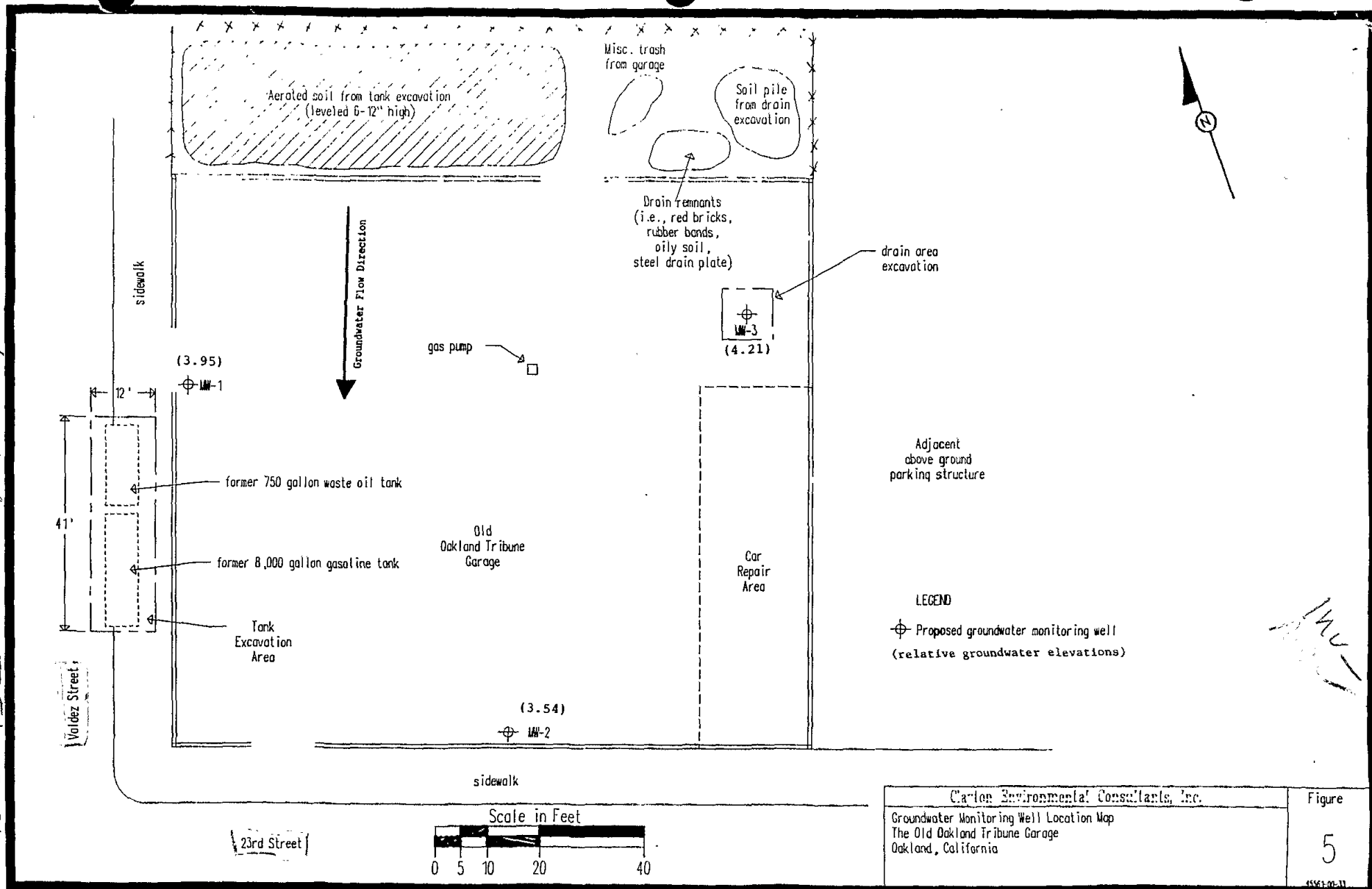
Clayton Environmental Consultants, Inc.

THE OAKLAND TRIBUNE  
23rd ST. AND VALDEZ  
OAKLAND, CALIFORNIA

Document  
1

Job No. 45561-70 Appr. \_\_\_\_\_ Date 10/13/88

Spectrum Exploration CS7-97512268



Carlson Environmental Consultants, Inc.  
 Groundwater Monitoring Well Location Map  
 The Old Oakland Tribune Garage  
 Oakland, California

Figure  
 5

01-416XYZ

014701 06-11-3

# Well Installation Diagram

## LOG OF BORING MW-2

Equipment Hollow Stem Auger

Elevation 3.54' MSL Date 8/10/88

01-416Y

15/4/87 2632

SILTY CLAY (CL): light yellowish-brown, 10% sand, 3% organics, 0-1% pebbles 1/8" dia., very hard, humid.

SILTY CLAY (CL): yellowish-brown, 10% sand, 5% organics, hard, dry.

GRAVELLY SILT (GC): olive gray, 15% sand, loose, moist, very faint hydrocarbon odor. Very hard drilling at 14-1/2 ft.

Groundwater encountered at 18 ft.

SILTY GRAVEL (GM): olive gray, gravels are subangular clasts of chert (up to 1" dia.), saturated, hydrocarbon odor.

Silty gravel, wet, hard.

CLAYEY SILT (ML) (SL): mottled pale brown and brownish-yellow, 0-1% gravel, 0-1% organics, hard, wet.

Bottom of hole at 31-1/2 feet.

Steel well cover with lock

Cement

Blank PVC

Bentonite Seal

Schedule 40 PVC .02" Slots

Sand Pack

Well Cap

Blows/ft.

Depth (ft.)

Sample pnts.

Clayton Environmental Consultants, Inc.

THE OAKLAND TRIBUNE  
23rd ST. AND VALDEZ  
OAKLAND, CALIFORNIA

Document

2

Job No. 45661-70 Appr: \_\_\_\_\_ Date 10/17/88

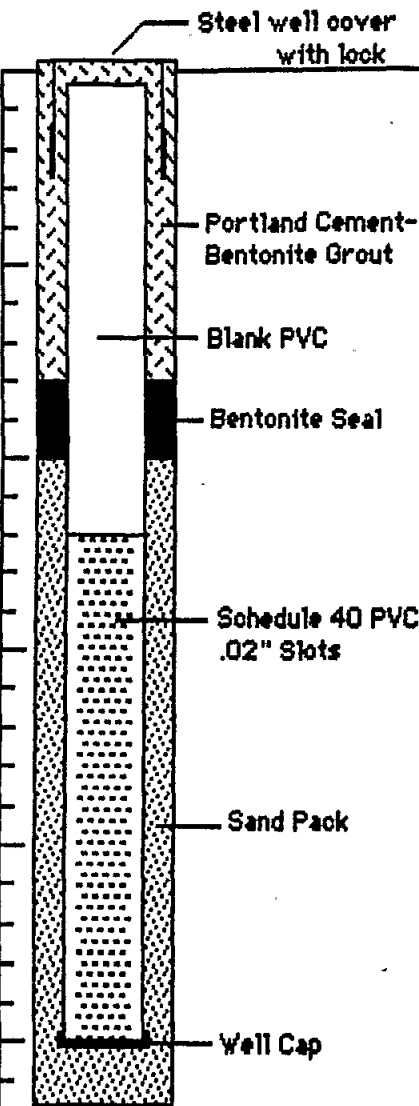
DL-416 Z

# LOG OF BORING MW-3

Equipment Hollow Stem Auger 15/10/2018

Elevation 4.21' MSL Date 8/10/88

## Well Installation Diagram



Blows/ft.

N

Depth (ft.)

Sample pnts.

32

33

49

40

SAND (SP): gray, very fine to fine-grained, well sorted, micaceous, moist, loose.

Imported Fill

SILTY CLAY (CL): gray, slightly sandy, wet, with interbedded CLAYEY SAND, fine-grained, both contain 15% small angular gravel.

Water encountered at 15 feet.

SANDY CLAY (SC): light brown, abundant carbon blebs, slight gray mottling, hydrocarbon odor.

Sand, gray, fine-grained at 25 ft.  
Clayey gravel, tight, moist at 25-1/2 ft.

CLAYEY SAND (SC): light reddish-brown, scattered small angular gravel clasts (1/4" dia.).

Bottom of Hole at 26-1/2 feet.

Clayton Environmental  
Consultants, Inc.

THE OAKLAND TRIBUNE  
23rd ST. AND VALDEZ  
OAKLAND, CALIFORNIA

Document

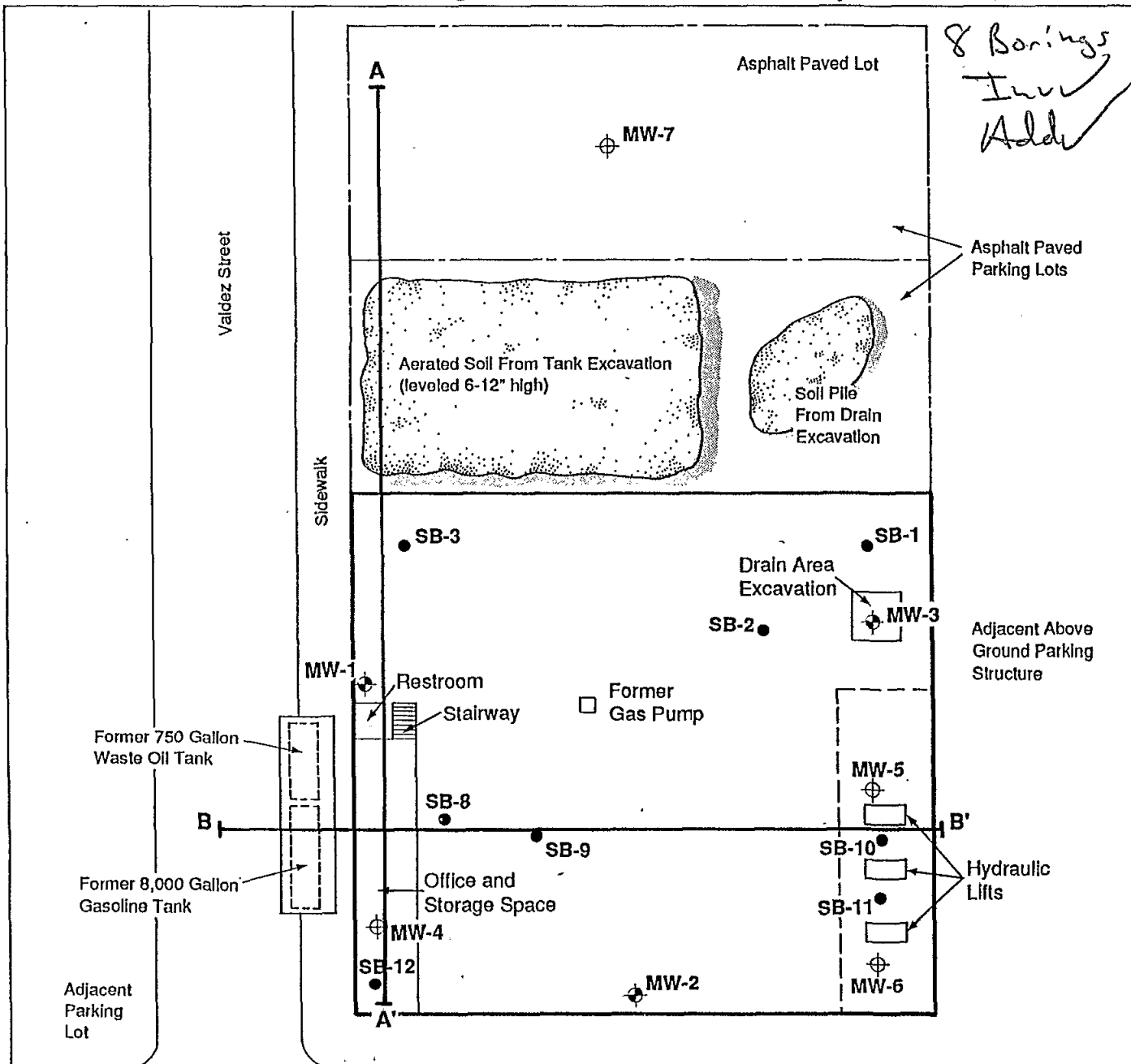
3

Job No. 45561-70 Appr: \_\_\_\_\_ Date 10/17/88

01-032I-T

1S/4W 26 J 41-7  
1S/4W 26 J

8 Borings  
Inv ✓  
Add ✓

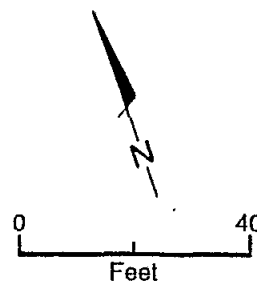


Source: Clayton Environmental Consultants, Inc.

KEY

- ⊕ Groundwater Monitoring Well (Clayton Environmental)
- ⊕ Groundwater Monitoring Well ((Dames & Moore)
- Soil Boring

A — A' Geologic Cross Section



|               |  |  |
|---------------|--|--|
| 19191-001-043 | Oakland Tribune                                      | SOIL BORING AND<br>MONITORING WELL LOCATIONS |
| Dames & Moore | FORMER OAKLAND TRIBUNE GARAGE<br>Oakland, California |  |

415-896 5858

1369

PLATE 3

IS/LW26J  
Inv ✓ Add ✓**BORING SB-1**

DATE DRILLED: 8/3/89

| DEPTH IN FEET | SAMPLING          |              |                     |
|---------------|-------------------|--------------|---------------------|
|               | OVA READING (PPM) | SAMPLER TYPE | SAMPLING RESISTANCE |
| 0             | 0                 | U            | 3                   |
| 5             | 0                 | U            | 20                  |
| 10            | 0                 | U            | 68                  |
| 15            | 0                 | U            | 17                  |
| 20            | 0                 | U            | 70                  |
| 25            | 0                 | U            | 46                  |
| 30            |                   |              |                     |
| 35            |                   |              |                     |

| SAMPLES | SYMBOLS | DESCRIPTION   |
|---------|---------|---|
|         | SC      | CONCRETE FLOOR  |
|         |         | DARK BROWN CLAYEY SAND, fine (slightly moist) (very loose) [FILL]   |
|         | CL      | BROWN SANDY CLAY with some small gravel, 2-5 mm in diameter (slightly moist) (medium stiff)   |
|         |         | Grades with brownish yellow mottling and large amount of subangular to subrounded gravel, 2-35 mm in diameter (slightly moist) (very stiff) |
|         |         | Decreasing gravel, increasing moisture  |
|         |         | Grades with gray mottling; gravel 2-15 mm in diameter (moist) (very stiff to hard)  |
|         |         | Gravel increasing in diameter up to 7 cm, mostly jasper and chert (wet)   |

## NOTES:

1. Boring completed at a depth of 26.5 feet on 8/3/89.
2. Sampling resistance is measured in blows per foot required to drive the sampler 12 inches with a 140 lb. hammer falling 30 inches after sampler has been seated 6 inches.
3. Boring log indicates interpreted subsurface conditions only at the location and the time the boring was drilled.
4. For an explanation of terms used see the Soils Classification Chart and Key to Test Data, Plate B-13.

**LOG OF BORING**

Dames &amp; Moore

15/4W265  
Inv ✓ Add ✓**BORING SB-2**

DATE DRILLED: 8/3/89

| DEPTH IN FEET | SAMPLING          |              |                     |
|---------------|-------------------|--------------|---------------------|
|               | OVA READING (PPM) | SAMPLER TYPE | SAMPLING RESISTANCE |
| 0             | 0                 | U            | 6                   |
| 5             | 0                 | U            | 72                  |
| 10            | 0                 | U            | 50                  |
| 15            | 0                 | U            | 57                  |
| 20            | 0                 | U            | 91                  |
| 25            | 0                 | U            | 68                  |
| 30            |                   |              |                     |
| 35            |                   |              |                     |

SAMPLES

SYMBOLS DESCRIPTION

|  |    |  |
|--|----|--|
|  | SM | CONCRETE FLOOR   |
|  |    | DARK BROWN SILTY SAND, fine (slightly moist) (loose to very loose) [FILL]  |
|  | CL | BROWN TO BROWNISH YELLOW SANDY GRAVELLY CLAY with minor black mottling, gravels up to 5mm in diameter (very stiff to hard) |
|  | SC | BROWN TO BROWNISH YELLOW CLAYEY SAND with some gravel (slightly moist) (very dense)  |
|  |    | Grades with some clay pockets and gravel up to 30mm in diameter  |
|  | SP | BROWN AND BROWNISH YELLOW GRAVELLY SAND (very moist) (very dense)  |
|  | CL | BROWN SANDY CLAY with some gravel (hard)   |

## NOTES:

1. Boring completed at a depth of 24.5 feet on 8/3/89.
2. Sampling resistance is measured in blows per foot required to drive the sampler 12 inches with a 140 lb. hammer falling 30 inches after sampler has been seated 6 inches.
3. Boring log indicates interpreted subsurface conditions only at the location and the time the boring was drilled.
4. For an explanation of terms used see the Soils Classification Chart and Key to Test Data, Plate B-13.

**LOG OF BORING**

Dames &amp; Moore



15/4W 265

Inw Add

**BORING SB-3**

DATE DRILLED: 8/3/89

| DEPTH IN FEET | SAMPLING          |              |                     |
|---------------|-------------------|--------------|---------------------|
|               | OVA READING (PPM) | SAMPLER TYPE | SAMPLING RESISTANCE |
| 0             | 0                 | U            | 35                  |
| 5             | 0                 | U            | 29                  |
| 10            | 0                 | U            | 36                  |
| 15            | >1000             | U            | 76                  |
| 20            | 10                | U            | 95                  |
| 25            |                   |              |                     |
| 30            |                   |              |                     |
| 35            |                   |              |                     |

| SAMPLES | SYMBOLS | DESCRIPTION   |
|---------|---------|---|
|         |         | CONCRETE FLOOR  |
|         | CL      | BROWN GRAVELLY SANDY CLAY with rootlets (slightly moist) (stiff to very stiff)  |
|         |         | Grades with decreasing organics, less gravel  |
|         |         | Grades light brown with some iron oxide staining  |
|         | SP      | BROWN GRAVELLY SAND with some clay and strong gasoline odor; gravels angular to subrounded 5-10mm in diameter (moist) (stiff to hard) |
|         |         | Grades with sand and angular to subrounded gravel up to 30mm in diameter  |
|         | GC      | CLAYEY SANDY GRAVEL with slight gasoline odor, gravels up to 20mm in diameter (wet) (dense)   |

**NOTES:**

1. Boring completed at a depth of 21.5 feet on 8/3/89.
2. Sampling resistance is measured in blows per foot required to drive the sampler 12 inches with a 140 lb. hammer falling 30 inches after sampler has been seated 6 inches.
3. Boring log indicates interpreted subsurface conditions only at the location and the time the boring was drilled.
4. For an explanation of terms used see the Soils Classification Chart and Key to Test Data, Plate B-13.

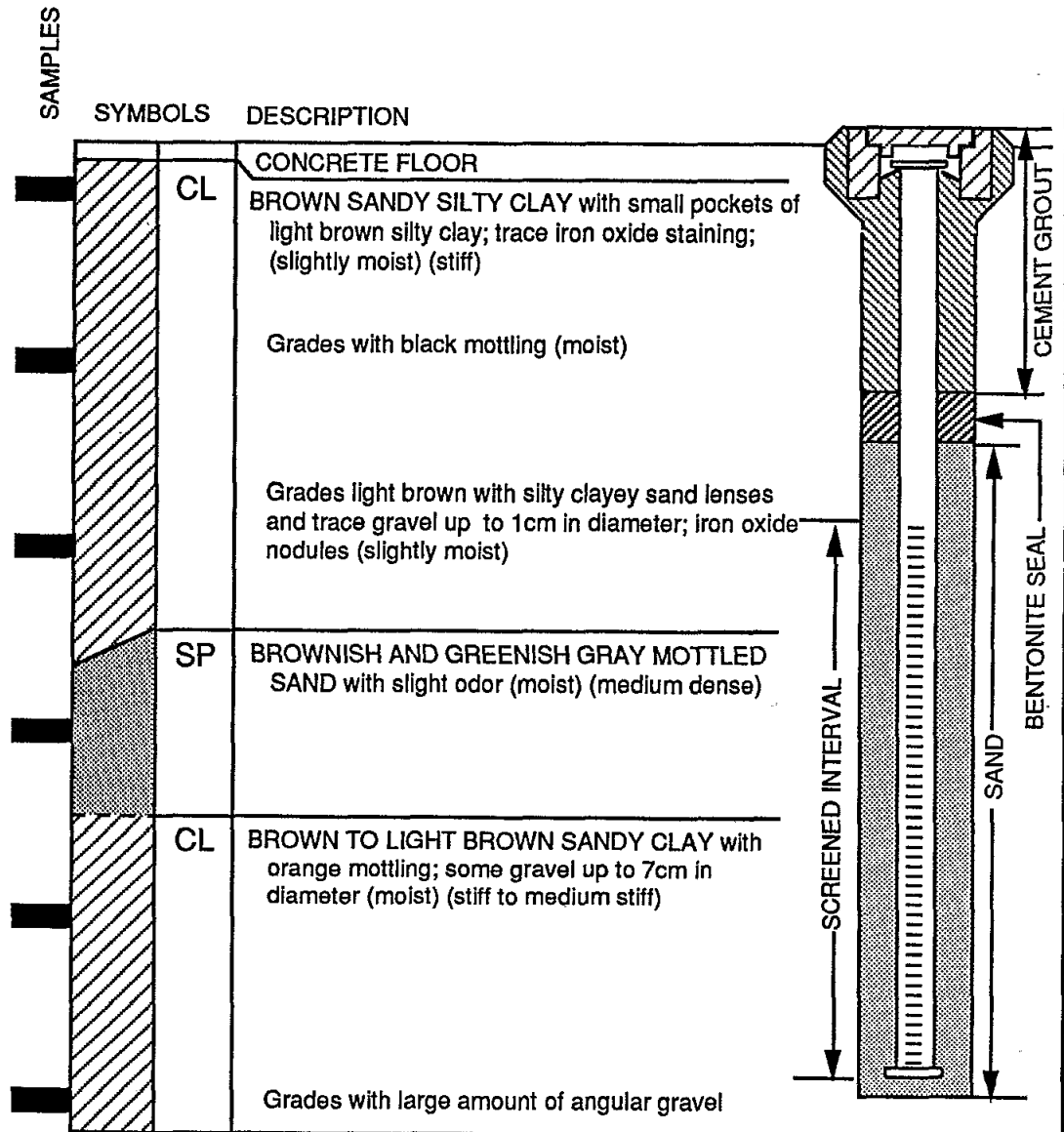
**LOG OF BORING**

Dames &amp; Moore

**BORING SB-4 / MW-4**

DATE DRILLED: 8/8/89

| DEPTH IN FEET | SAMPLING          |              |                     |
|---------------|-------------------|--------------|---------------------|
|               | OVA READING (PPM) | SAMPLER TYPE | SAMPLING RESISTANCE |
| 0             | 0                 | U            | 36                  |
| 5             | 0                 | U            | 35                  |
| 10            | 0                 | U            | 39                  |
| 15            | 8                 | U            | 40                  |
| 20            | 0                 | U            | 23                  |
| 25            | 0                 | U            | 76                  |
| 30            |                   |              |                     |
| 35            |                   |              |                     |

**NOTES:**

1. Boring completed at a depth of 26.5 feet on 8/8/89.
2. 4-inch PVC observation well installed to a depth of 25.5 feet; screened interval from 10.0 to 25.0 feet.
3. Sampling resistance is measured in blows per foot required to drive the sampler 12 inches with a 140 lb. hammer falling 30 inches after sampler has been seated 6 inches.
4. Boring log indicates interpreted subsurface conditions only at the location and the time the boring was drilled.
5. For an explanation of terms used see the Soils Classification Chart and Key to Test Data, Plate B-13.

**LOG OF BORING**

Dames &amp; Moore

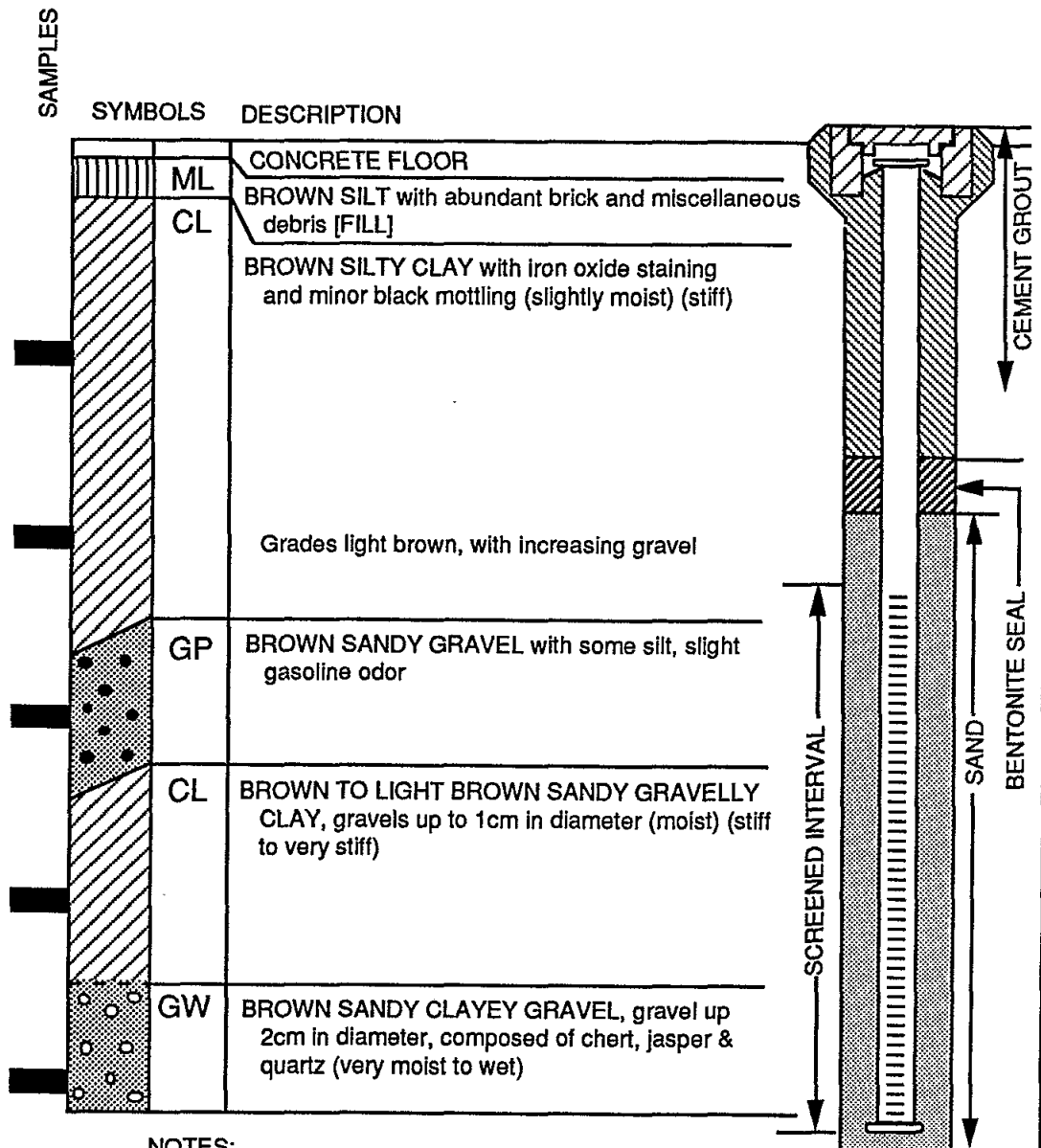
154W 2655

**BORING SB-5 / MW-5**

DATE DRILLED: 8/9/89

Inv Add

| DEPTH IN FEET | SAMPLING          |              |                     |
|---------------|-------------------|--------------|---------------------|
|               | OVA READING (PPM) | SAMPLER TYPE | SAMPLING RESISTANCE |
| 0             |                   |              |                     |
| 5             | 0                 | U            | 41                  |
| 10            | 2                 | U            | 38                  |
| 15            | 200               | U            | 60                  |
| 20            | 0                 | U            | 41                  |
| 25            | 2                 | U            | 86                  |
| 30            |                   |              |                     |
| 35            |                   |              |                     |

**NOTES:**

1. Boring completed at a depth of 26.5 feet on 8/9/89.
2. 4-inch PVC observation well installed to a depth of 27.5 feet; screened interval from 12.0 to 27.0 feet.
3. Sampling resistance is measured in blows per foot required to drive the sampler 12 inches with a 140 lb. hammer falling 30 inches after sampler has been seated 6 inches.
4. Boring log indicates interpreted subsurface conditions only at the location and the time the boring was drilled.
5. For an explanation of terms used see the Soils Classification Chart and Key to Test Data, Plate B-13.

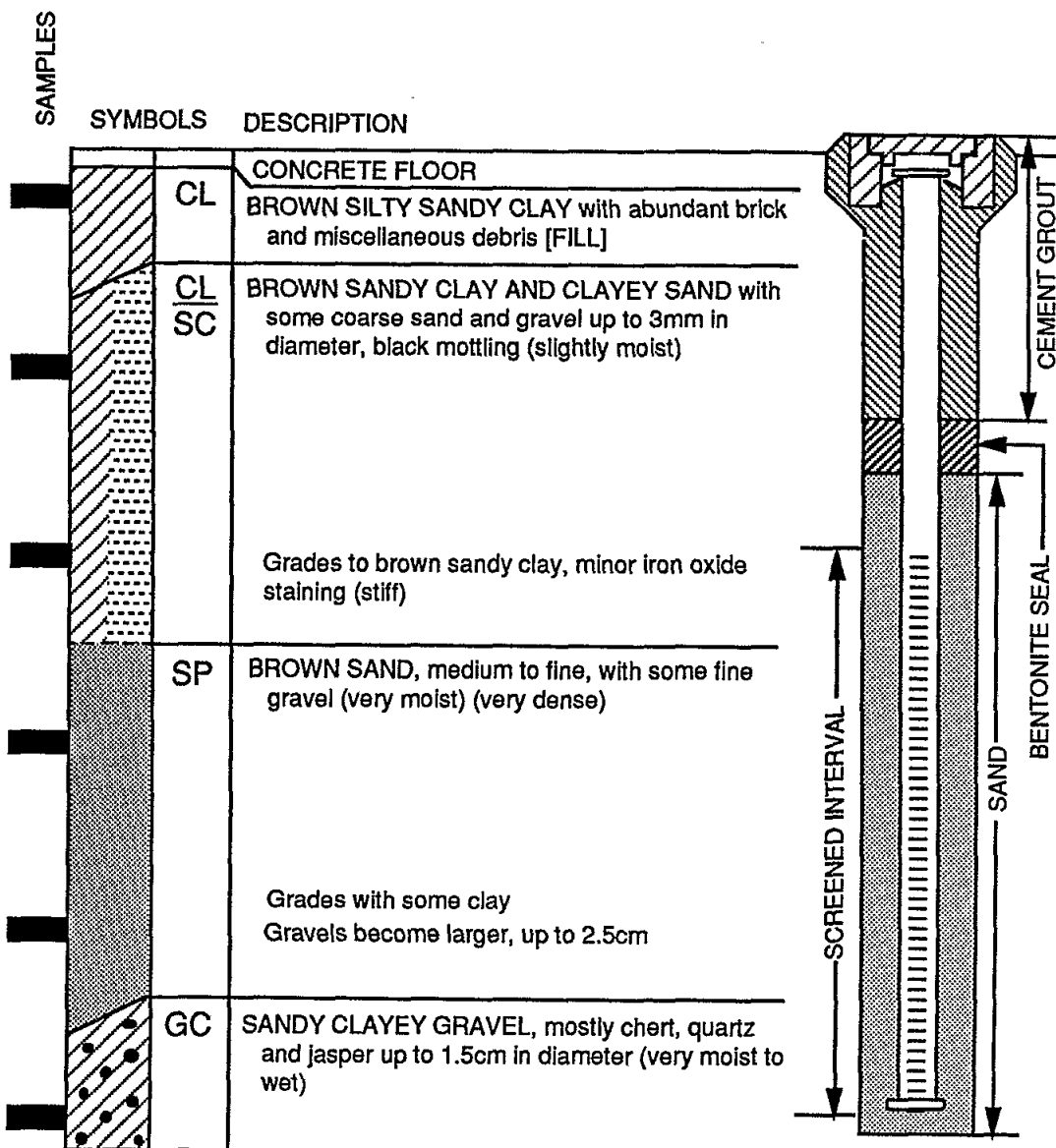
**LOG OF BORING**

Dames &amp; Moore

154W2636  
Inv ✓ Add ✓**BORING SB-6 / MW-6**

DATE DRILLED: 8/9/89

| DEPTH IN FEET | SAMPLING          |              |                     |
|---------------|-------------------|--------------|---------------------|
|               | OVA READING (PPM) | SAMPLER TYPE | SAMPLING RESISTANCE |
| 0             | 0                 | U            | 31                  |
| 5             | 0                 | U            | 35                  |
| 10            | 0                 | U            | 24                  |
| 15            | 0.5               | U            | 85                  |
| 20            | 1.5               | U            | 47                  |
| 25            | 2.5               | U            | 118                 |
| 30            |                   |              |                     |
| 35            |                   |              |                     |

**NOTES:**

1. Boring completed at a depth of 26.5 feet on 8/9/89.
2. 4-inch PVC observation well installed to a depth of 26.0 feet; screened interval from 10.5 to 25.5 feet.
3. Sampling resistance is measured in blows per foot required to drive the sampler 12 inches with a 140 lb. hammer falling 30 inches after sampler has been seated 6 inches.
4. Boring log indicates interpreted subsurface conditions only at the location and the time the boring was drilled.
5. For an explanation of terms used see the Soils Classification Chart and Key to Test Data, Plate B-13.

**LOG OF BORING**

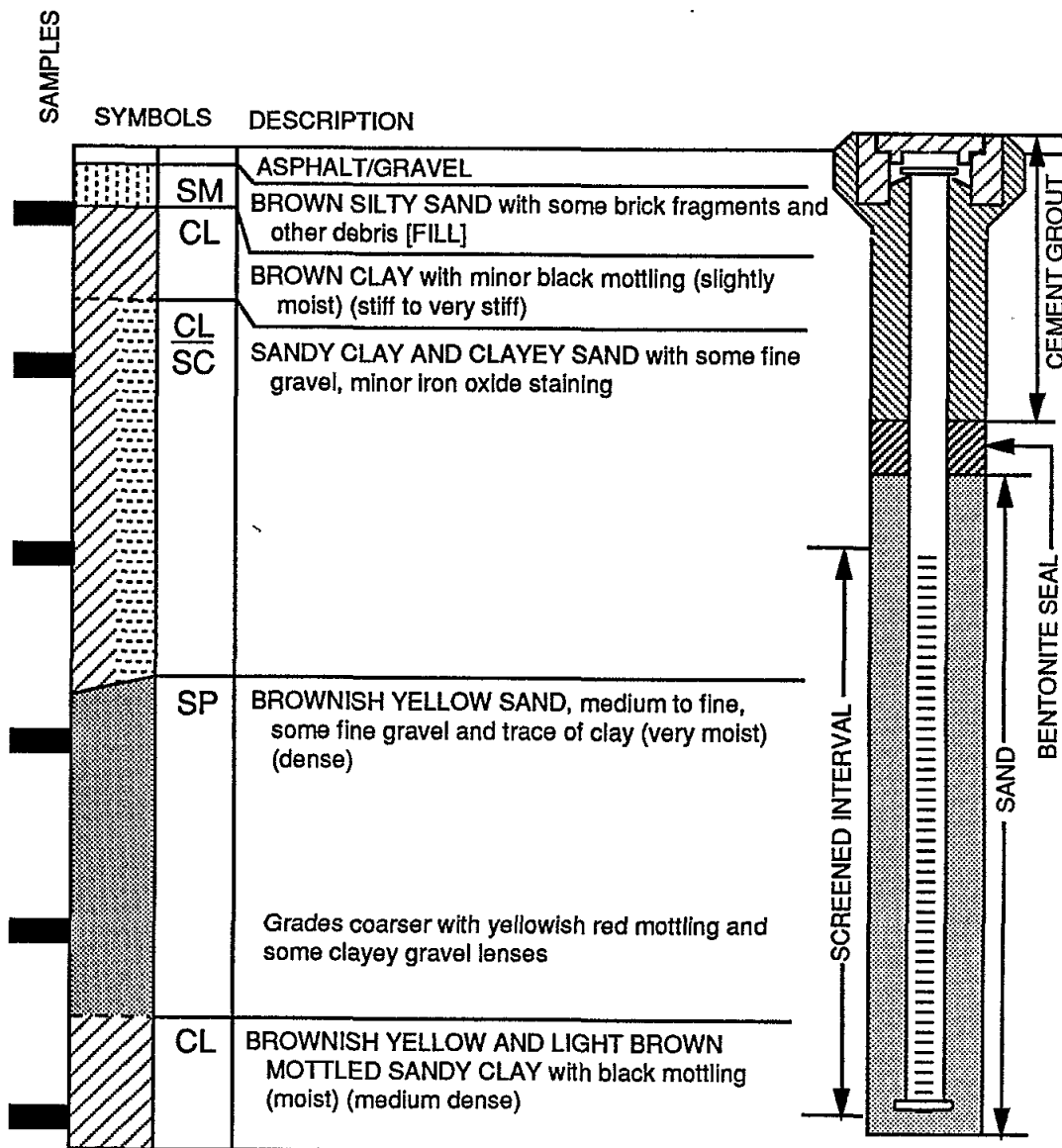
Dames &amp; Moore

**BORING SB-7 / MW-7**

DATE DRILLED: 8/10/89

Inu  
Add

| DEPTH IN FEET | SAMPLING          |              |                     |
|---------------|-------------------|--------------|---------------------|
|               | OVA READING (PPM) | SAMPLER TYPE | SAMPLING RESISTANCE |
| 0             | 0                 | U            | 20                  |
| 5             | 0                 | U            | 47                  |
| 10            | 0                 | U            | 30                  |
| 15            | 0                 | U            | 62                  |
| 20            | 0                 | U            | 57                  |
| 25            | 0                 | U            | 34                  |
| 30            |                   |              |                     |
| 35            |                   |              |                     |

**NOTES:**

1. Boring completed at a depth of 26.5 feet on 8/9/89.
2. 4-inch PVC observation well installed to a depth of 26.0 feet; screened interval from 10.5 to 25.5 feet.
3. Sampling resistance is measured in blows per foot required to drive the sampler 12 inches with a 140 lb. hammer falling 30 inches after sampler has been seated 6 inches.
4. Boring log indicates interpreted subsurface conditions only at the location and the time the boring was drilled.
5. For an explanation of terms used see the Soils Classification Chart and Key to Test Data, Plate B-13.

**LOG OF BORING**

Dames &amp; Moore

**BORING SB-8**

DATE DRILLED: 8/7/89

Jmw  
Add✓

| DEPTH IN FEET | SAMPLING          |              |                     |
|---------------|-------------------|--------------|---------------------|
|               | OVA READING (PPM) | SAMPLER TYPE | SAMPLING RESISTANCE |
| 0             | 0                 | U            | 28                  |
| 5             | 1                 | U            | 46                  |
| 10            | 1                 | U            | 30                  |
| 15            | 20                | U            | 38                  |
| 20            | 10                | U            | 46                  |
| 25            |                   |              |                     |
| 30            |                   |              |                     |
| 35            |                   |              |                     |

| SAMPLES | SYMBOLS | DESCRIPTION   |
|---------|---------|---|
|         |         | CONCRETE FLOOR  |
|         | CL      | BROWN SILTY CLAY with some sand, minor black mottling, trace fine, angular gravels up to 5mm in diameter (slightly moist) (stiff) |
|         |         | Decreasing gravel, becomes slightly stiffer   |
|         |         | Grades with light brown color and black and tan mottling  |
|         |         | Grades with brownish yellow color<br>Becomes very sandy with trace gravel, slight odor  |
|         | GC      | LIGHT BROWN CLAYEY GRAVEL (moist to wet)  |

## NOTES:

1. Boring completed at a depth of 21.5 feet on 8/3/89.
2. Sampling resistance is measured in blows per foot required to drive the sampler 12 inches with a 140 lb. hammer falling 30 inches after sampler has been seated 6 inches.
3. Boring log indicates interpreted subsurface conditions only at the location and the time the boring was drilled.
4. For an explanation of terms used see the Soils Classification Chart and Key to Test Data, Plate B-13.

**LOG OF BORING**

Dames &amp; Moore

15/4W 26J

Inu Addu

**BORING SB-9**

DATE DRILLED: 8/7/89

| DEPTH IN FEET | SAMPLING          |              |                     |
|---------------|-------------------|--------------|---------------------|
|               | OVA READING (PPM) | SAMPLER TYPE | SAMPLING RESISTANCE |
| 0             | 0                 | U            | 26                  |
| 5             | 0                 | U            | 46                  |
| 10            | 0                 | U            | 32                  |
| 15            | 10                | U            | 31                  |
| 20            | 10                | U            | 80                  |
| 25            |                   |              |                     |
| 30            |                   |              |                     |
| 35            |                   |              |                     |

| SAMPLES | SYMBOLS | DESCRIPTION   |
|---------|---------|---|
|         |         | CONCRETE FLOOR  |
|         | CL      | BROWNISH YELLOW SILTY SANDY CLAY with dark brown and orange mottling (slightly moist) (stiff) |
|         |         | Grades brown with iron oxide staining (hard)  |
|         |         | Grades lighter brown with less sand   |
|         | CL      | GREENISH GRAY SANDY GRAVELLY CLAY with slight odor (slightly moist) (stiff to very stiff)     |
|         | GW      | BROWN SILTY SANDY GRAVEL with trace clay (very moist to wet)                                  |

**NOTES:**

1. Boring completed at a depth of 21.5 feet on 8/7/89.
2. Sampling resistance is measured in blows per foot required to drive the sampler 12 inches with a 140 lb. hammer falling 30 inches after sampler has been seated 6 inches.
3. Boring log indicates interpreted subsurface conditions only at the location and the time the boring was drilled.
4. For an explanation of terms used see the Soils Classification Chart and Key to Test Data, Plate B-13.

**LOG OF BORING**

Dames &amp; Moore

**BORING SB-10**

DATE DRILLED: 8/7/89

| DEPTH IN FEET | SAMPLING          |              |                     |
|---------------|-------------------|--------------|---------------------|
|               | OVA READING (PPM) | SAMPLER TYPE | SAMPLING RESISTANCE |
| 0             | 0                 | U            | 14                  |
| 5             | 0                 | U            | 58                  |
| 10            | 0                 | U            | 41                  |
| 15            | 2                 | U            | 25                  |
| 20            | 0                 | U            | 57                  |
| 25            | 0                 | U            | 37                  |
| 30            |                   |              |                     |
| 35            |                   |              |                     |

| SAMPLES | SYMBOLS | DESCRIPTION  |
|---------|---------|--|
|         |         | CONCRETE FLOOR   |
|         | ML      | DARK BROWN CLAYEY SILT with some sand (dry to slightly moist) (loose) [FILL]                                 |
|         | CL      | BROWN TO BROWNISH YELLOW SILTY SANDY CLAY with gravel, black mottling (stiff to hard)                        |
|         |         | Grades to brown to light brown with less sand, iron oxide or manganese nodules (slightly moist) (very stiff) |
|         |         | Grades brown to brownish yellow with more sand   |
|         | SC      | LIGHT BROWN CLAYEY SAND, medium to fine, with black mottling and gravel (moist) (medium dense)               |
|         | GC      | BROWN CLAYEY SANDY GRAVEL, fine (very moist)   |

## NOTES:

1. Boring completed at a depth of 24.0 feet on 8/7/89.
2. Sampling resistance is measured in blows per foot required to drive the sampler 12 inches with a 140 lb. hammer falling 30 inches after sampler has been seated 6 inches.
3. Boring log indicates interpreted subsurface conditions only at the location and the time the boring was drilled.
4. For an explanation of terms used see the Soils Classification Chart and Key to Test Data, Plate B-13.

**LOG OF BORING**

Dames &amp; Moore



IS/4W26J  
Inv ✓ Add ✓**BORING SB-11**

DATE DRILLED: 8/7/89

| DEPTH IN FEET | SAMPLING          |              |                     |
|---------------|-------------------|--------------|---------------------|
|               | OVA READING (PPM) | SAMPLER TYPE | SAMPLING RESISTANCE |
| 0             | 0                 | U            | 21                  |
| 5             | 0                 | U            | 53                  |
| 10            | 5                 | U            | 32                  |
| 15            | 0                 | U            | 76                  |
| 20            | 0.5               | U            | 26                  |
| 25            |                   |              |                     |
| 30            |                   |              |                     |
| 35            |                   |              |                     |

| SAMPLES | SYMBOLS | DESCRIPTION   |
|---------|---------|---|
|         |         | CONCRETE FLOOR  |
|         | CL      | BROWN SANDY CLAY with some fine gravel up to 4mm (slightly moist) (stiff)   |
|         |         | Grades with increasing sand   |
|         |         | Grades with black and tan mottling, some silt, decreasing sand  |
|         | SC      | BROWN-ORANGE TO BROWN CLAYEY GRAVELLY SAND with gravel lenses, gravel primarily chert, up to 2cm in diameter (slightly moist) |
|         | CL      | BROWN TO LIGHT BROWN SANDY GRAVELLY CLAY with orange and black mottling (moist) (stiff)                                       |

**NOTES:**

1. Boring completed at a depth of 24.0 feet on 8/7/89.
2. Sampling resistance is measured in blows per foot required to drive the sampler 12 inches with a 140 lb. hammer falling 30 inches after sampler has been seated 6 inches.
3. Boring log indicates interpreted subsurface conditions only at the location and the time the boring was drilled.
4. For an explanation of terms used see the Soils Classification Chart and Key to Test Data, Plate B-13.

**LOG OF BORING**  
Dames & Moore

1S/4W26J  
Inn Add✓**BORING SB-12**

DATE DRILLED: 8/8/89

| DEPTH IN FEET | SAMPLING          |              |                     |
|---------------|-------------------|--------------|---------------------|
|               | OVA READING (PPM) | SAMPLER TYPE | SAMPLING RESISTANCE |
| 0             | 0                 | U            | 32                  |
| 5             | 0                 | U            | 26                  |
| 10            | 0                 | U            | 27                  |
| 15            | 20                | U            | 94                  |
| 20            | 20                | U            | 59                  |
| 25            |                   |              |                     |
| 30            |                   |              |                     |
| 35            |                   |              |                     |

| SAMPLES | SYMBOLS | DESCRIPTION   |
|---------|---------|---|
|         |         | CONCRETE FLOOR  |
|         | CL      | BROWN TO LIGHT BROWN SANDY CLAY with iron oxide staining (slightly moist) (stiff)   |
|         |         | Grades brown with minor black mottling and some very fine gravel 1-3mm in diameter  |
|         |         | Grades lighter brown with increasing sand, iron oxide staining and black mottling   |
|         | GW      | BROWN AND GREENISH GRAY SANDY CLAYEY GRAVEL, angular to subrounded up to 4cm, gasoline odor (very moist)                                |
|         | SC      | LIGHT BROWN CLAYEY SAND with some brownish yellow mottling and gravel, rounded to subangular up to 5cm, mostly chert, jasper and quartz |

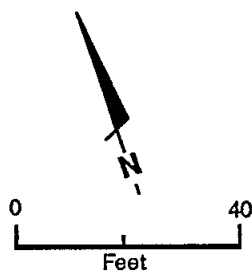
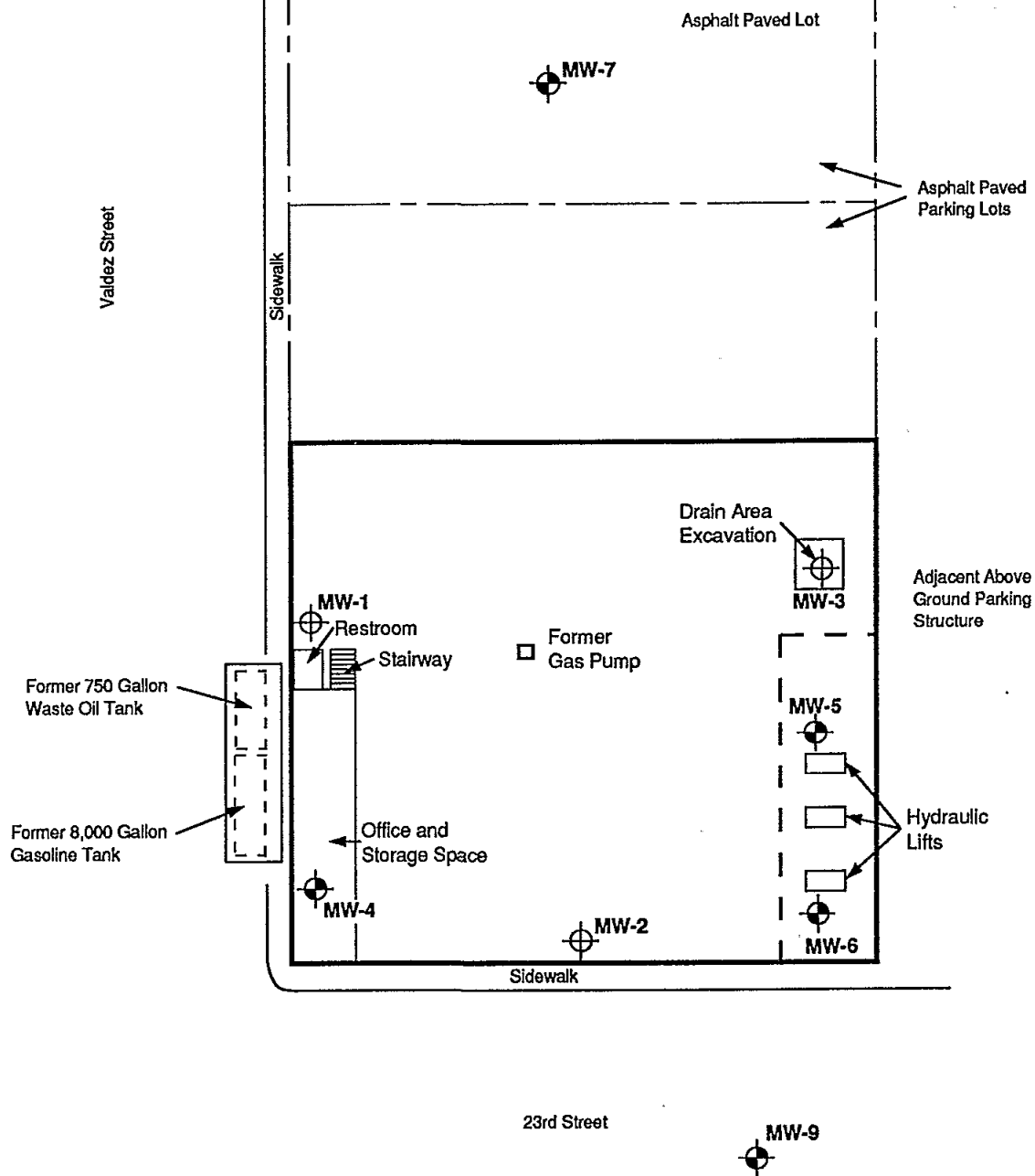
**NOTES:**

1. Boring completed at a depth of 21.5 feet on 8/7/89.
2. Sampling resistance is measured in blows per foot required to drive the sampler 12 inches with a 140 lb. hammer falling 30 inches after sampler has been seated 6 inches.
3. Boring log indicates interpreted subsurface conditions only at the location and the time the boring was drilled.
4. For an explanation of terms used see the Soils Classification Chart and Key to Test Data, Plate B-13.

**LOG OF BORING**

Dames &amp; Moore

01-836



## KEY

Monitoring Well (Dames &amp; Moore)

Monitoring Well (Clayton Environmental)

19191-002-043

Oakland Tribune

Dames &amp; Moore

FORMER OAKLAND TRIBUNE GARAGE  
Oakland, California

## SITE PLAN

28

**MW-8**

DATE DRILLED: 5/14/90

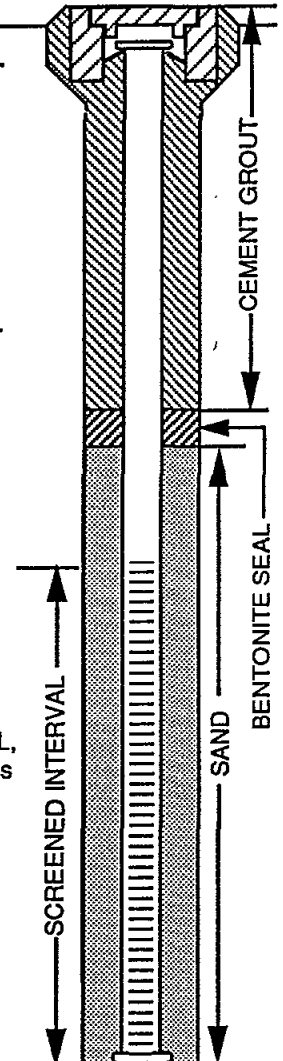
ELEVATION: 22.41 Feet

| DEPTH IN FEET | SAMPLING          |                 |                     |
|---------------|-------------------|-----------------|---------------------|
|               | OVM READING (ppm) | TYPE OF SAMPLER | SAMPLING RESISTANCE |
| 0             | 0                 | U               | 30                  |
| 5             | 0                 | U               | 45                  |
| 10            | 0                 | U               | 38                  |
| 15            | 0                 | U               | —                   |
| 20            | 0                 | U               | 24                  |
| 25            | 0                 | U               | 21                  |
| 30            |                   |                 |                     |
| 35            |                   |                 |                     |

SAMPLES

SYMBOLS DESCRIPTION

|          |   |
|----------|---|
| CL       | ASPHALT   |
|          | YELLOWISH RED CLAY with black and brownish yellow mottling (slightly moist) (stiff) [FILL]                        |
| CL       | DARK BROWN CLAY with trace of black mottling and trace coarse sand and fine gravel (moist)                        |
| SM       | BROWN SILTY SAND with some iron oxide mottling, trace fine gravel, chert and jasper clasts, subrounded to angular |
| SP<br>GP | BROWN GRAVELLY SAND AND SANDY GRAVEL, subrounded to subangular, chert and jasper clasts up to 1.5" in diameter    |
|          | Increase in chert and jasper clasts up to 1" in diameter  |

**NOTES:**

1. Boring completed at a depth of 28.0 feet on 5/14/90.
2. 4-inch PVC observation well installed to a depth of 27.0 feet; screened interval from 14.0 to 27.0 feet.
3. Sampling resistance is measured in blows per foot required to drive the sampler 12 inches with a 140 lb. hammer falling 30 inches after sampler has been seated 6 inches.
4. Boring log indicates interpreted subsurface conditions only at the location and the time the boring was drilled.
5. For an explanation of terms used see the Soils Classification Chart and Key to Test Data, Plate A-3.

**LOG OF BORING****Dames & Moore**

Lic # C57 43 4343

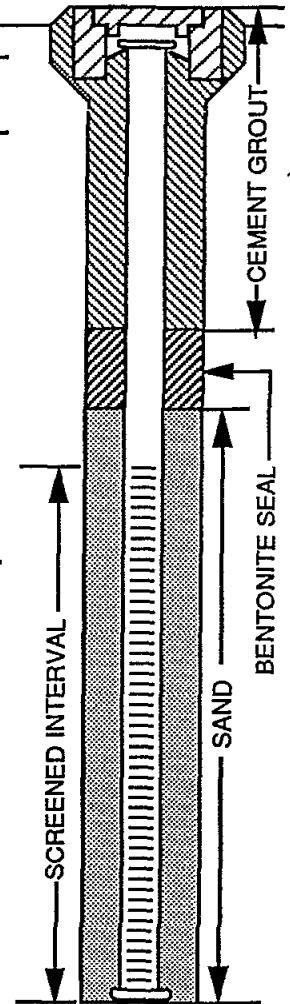
**MW-9**

DATE DRILLED: 5/14/90

ELEVATION: 20.45 Feet

| DEPTH IN FEET | SAMPLING          |                 |                     |
|---------------|-------------------|-----------------|---------------------|
|               | OVM READING (ppm) | TYPE OF SAMPLER | SAMPLING RESISTANCE |
| 0             | 0                 | U               | 39                  |
| 5             | 0                 | U               | 41                  |
| 10            | 0                 | U               | 50                  |
| 15            | 35                | U               | 34                  |
| 20            | 4                 | U               | 39                  |
| 25            | 17                | U               | 14                  |
| 30            |                   |                 |                     |
| 35            |                   |                 |                     |

| SAMPLES | SYMBOLS  | DESCRIPTION  |
|---------|----------|--|
|         | CL       | ASPHALT  |
|         | CL       | YELLOWISH RED CLAY with black and brownish yellow mottling (slightly moist) (stiff) [FILL]                       |
|         |          | GREENISH GRAY CLAY with some fine sand (dry) (stiff)   |
|         |          | Sandier with irregular yellowish red mottling (moist)  |
|         | CL<br>GC | GREENISH GRAY CLAY with interbeds of coarse gravel, black chert and jasper clasts; strong hydrocarbon odor (wet) |
|         |          | Becomes brown with some rounded white and gray chert and jasper clasts, trace of orange-brown mottling           |
|         |          | Decrease in gravel   |

**NOTES:**

1. Boring completed at a depth of 28.0 feet on 5/14/90.
2. 4-Inch PVC observation well installed to a depth of 25.5 feet; screened interval from 11.5 to 25.5 feet.
3. Sampling resistance is measured in blows per foot required to drive the sampler 12 inches with a 140 lb. hammer falling 30 inches after sampler has been seated 6 inches.
4. Boring log indicates interpreted subsurface conditions only at the location and the time the boring was drilled.
5. For an explanation of terms used see the Soils Classification Chart and Key to Test Data, Plate A-3.

**LOG OF BORING****Dames & Moore**

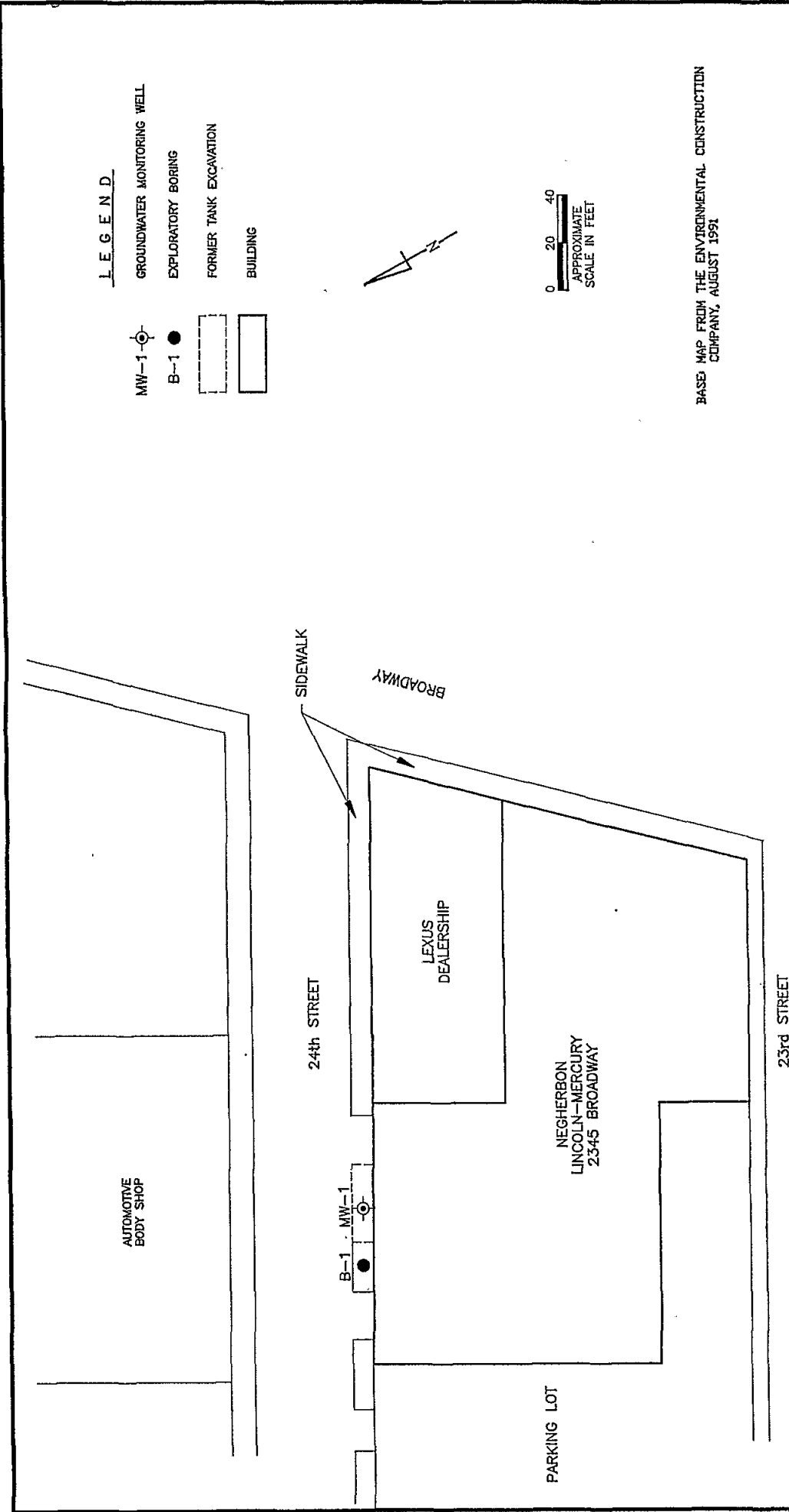
**CONFIDENTIAL**

STATE OF CALIFORNIA DWR  
WELL COMPLETION REPORT  
(WELL LOGS)

**REMOVED**

2075

342611



BASED MAP FROM THE ENVIRONMENTAL CONSTRUCTION COMPANY, AUGUST 1991

|                       |            |
|-----------------------|------------|
| SITE PLAN             |            |
| NEGHERBON AUTO CENTER |            |
| 2345 BROADWAY         |            |
| OAKLAND, CALIFORNIA   |            |
| REVIEWED BY:          |            |
| APPROVED BY:          |            |
| JOB #                 | 3-30107-31 |
| DRAWN BY              | E.C.       |
| DATE                  | 7/1/92     |
| DRAWING #             | FIG. 2     |

RESNA

3010731P

15/4/92 mh/si

3.75

342611

1S/4W 26510

**RESNA** EXPLORATORY BORING LOG

Project Name: Negherbon Auto Center

Boring No. MW-1

Date Drilled: 6/26/92

Project Number: 3-30107-31

Logged By: D. DeMent

| Depth (ft.) | Sample No. | Blows/Foot | Unified Soil Classification | SOIL DESCRIPTION   | Water Level | OVN Reading (ppm) |
|-------------|------------|------------|-----------------------------|--|-------------|-------------------|
| 1           |            |            |                             | Concrete Pavement  |             |                   |
| 2           |            |            |                             | Pea gravel 0.5 - 3.0 feet: Fill  |             |                   |
| 3           |            |            |                             |  |             |                   |
| 4           |            |            |                             | Compacted gravel 3.0 - 14.0 feet: Fill   |             |                   |
| 5           |            |            |                             |  |             |                   |
| 6           |            |            |                             |  |             |                   |
| 7           |            |            |                             |  |             |                   |
| 8           |            |            |                             |  |             |                   |
| 9           |            |            |                             | As above   |             |                   |
| 10          |            |            |                             |  |             |                   |
| 11          |            |            |                             |  |             |                   |
| 12          |            |            |                             |  |             |                   |
| 13          |            |            |                             |  |             |                   |
| 14          |            |            |                             | Driller called bottom of excavation at 14.0 feet   |             |                   |
| 15          |            |            | SC                          | CLAYEY SAND - yellowish brown (10YR 5/6), mottled with pale brown (10YR 6/3), 70-80% sand, very fine grain, low plasticity, trace silt, medium dense, damp |             |                   |
| 16          | MW1-1      |            |                             |  |             | 24                |
| 17          | MW1-1A     |            |                             |  |             |                   |
| 18          | MW1-1B     |            | CL                          | SANDY CLAY - yellowish brown (10YR 5/6), trace silt, 5-15% sand, very fine to fine grain, plasticity, stiff, damp  |             |                   |
| 19          |            |            |                             |  |             |                   |
| 20          | MW1-2      |            |                             |  |             |                   |
| 21          |            |            |                             |  | ▽           | 4                 |

REVIEWED BY R.G./C.E.G.

Page 1 of 1



425

342611

15/4W 26J10

**RESNA** EXPLORATORY BORING LOG

Project Name: Negherbon Auto Center

Boring No. MW-1

Date Drilled: 6/26/92

Project Number: 3-30107-31

Logged By: D. DeMent

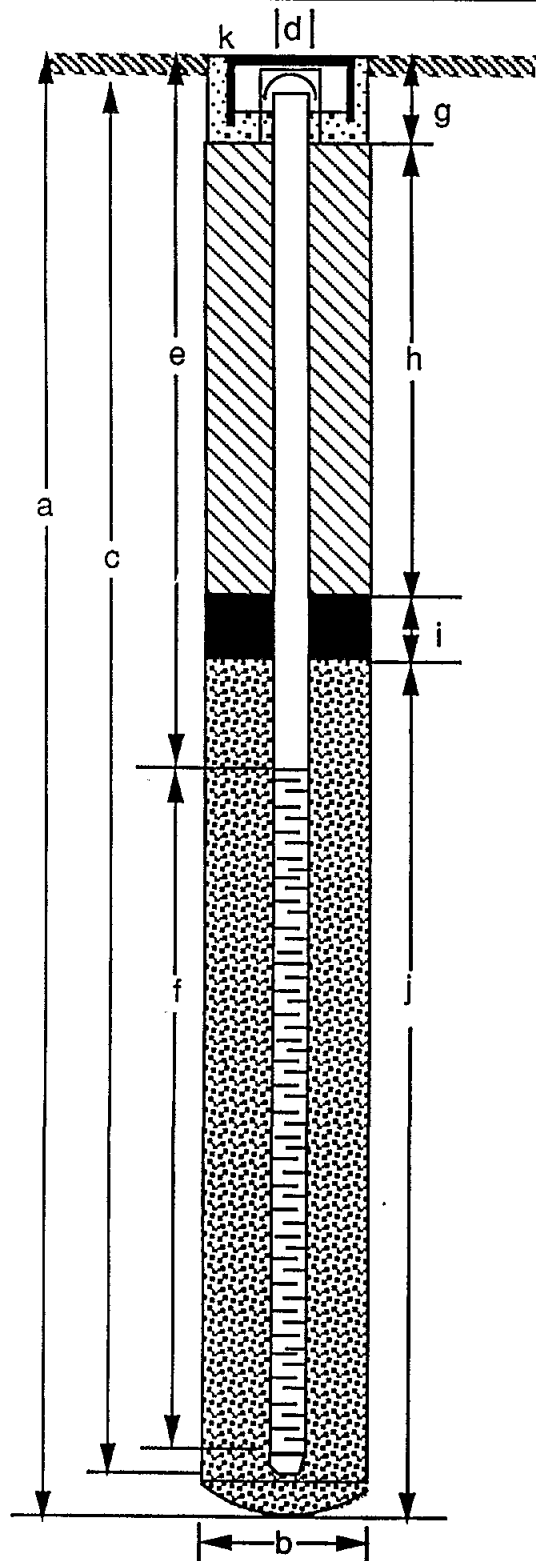
| Depth (ft.) | Sample No. | Blows/Foot | Unified Soil Classification | SOIL DESCRIPTION  | Water Level | OVN Reading (ppm) |
|-------------|------------|------------|-----------------------------|---|-------------|-------------------|
| 22          |            |            | GM                          | SANDY GRAVEL - yellowish brown (10YR 5/6), 60-70% gravel, fine to medium grain, angular, predominantly chert, 20-30% sand, coarse to fine grain, well graded, 10-20% silt, disseminated, medium dense, saturated. |             |                   |
| 23          |            |            |                             |   |             |                   |
| 24          |            |            |                             |   |             |                   |
| 25          |            |            |                             |   |             |                   |
| 26          |            |            |                             |   |             |                   |
| 27          |            |            |                             |   |             |                   |
| 28          |            |            | CL                          | SANDY CLAY - pale brown (10YR 6/3), trace silt, 10-20% sand, very fine to fine grain, trace black organic material, moderate plasticity, stiff, damp  |             |                   |
| 29          |            |            |                             | Bottom of boring 29.0 feet  |             |                   |
| 30          |            |            |                             |   |             |                   |
| 31          |            |            |                             |   |             |                   |
| 32          |            |            |                             |   |             |                   |
| 33          |            |            |                             |   |             |                   |
| 34          |            |            |                             |   |             |                   |
| 35          |            |            |                             |   |             |                   |
| 36          |            |            |                             |   |             |                   |
| 37          |            |            |                             |   |             |                   |
| 38          |            |            |                             |   |             |                   |
| 39          |            |            |                             |   |             |                   |
| 40          |            |            |                             |   |             |                   |
| 41          |            |            |                             |   |             |                   |
| 42          |            |            |                             |   |             |                   |

REVIEWED BY R.G./C.E.G.

Page 2 of 2

# MONITORING WELL DETAIL

Project Number 3-30107-31 Boring/Well No. MW-1  
 Project Name Negherbon Auto Top of Casing Elev. NA  
 County Alameda Ground Surface Elev. NA  
 Well Permit No. 92273 Datum NA



## EXPLORATORY BORING

a. Total depth 29 ft.  
 b. Diameter 7 in.  
 Drilling method Hollow Stem Auger

## WELL CONSTRUCTION

c. Casing length 29 ft.  
 Material Schedule 40 PVC  
 d. Diameter 2 in.  
 e. Depth to top perforations 20 ft.  
 f. Perforated length 9 ft.  
 Perforated interval from 20 to 29 ft.  
 Perforation type slot  
 Perforation size 0.020 in.  
 g. Surface seal 2 ft.  
 Seal material Concrete  
 h. Backfill 15.5 ft.  
 Backfill material Cement  
 i. Seal 2 ft.  
 Seal material Bentonite  
 j. Gravel pack 9.5 ft.  
 Pack material 2/12 Sand  
 k. Watertight, traffic-rated concrete vault  
box with padlock



15/4/86 2-5 100 01-405A-D  
ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

5997 PARKSIDE DRIVE PLEASANTON, CALIFORNIA 94566 (415) 484-2600

GROUNDWATER PROTECTION ORDINANCE PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

FOR OFFICE USE

(1) LOCATION OF PROJECT 2225 Telegraph Avenue  
Oakland, California

PERMIT NUMBER 88233

LOCATION NUMBER \_\_\_\_\_

(2) CLIENT

Name Texaco USA  
Address 10 Universal City Plaza Phone: 818-505-2476  
City Los Angeles Zip 91608

Approved Wyman Hong

Wyman Hong

Date 2 Jun 88

(3) APPLICANT

Name Harding Lawson Associates  
666 Howard Street, 3rd Floor  
Address \_\_\_\_\_ Phone 543-8422  
City San Francisco Zip 94105

PERMIT CONDITIONS

Circled Permit Requirements Apply

(4) DESCRIPTION OF PROJECT

Water Well Construction ☒ Geotechnical \_\_\_\_\_  
Cathodic Protection \_\_\_\_\_ Well Destruction \_\_\_\_\_

(5) PROPOSED WATER WELL USE

Domestic \_\_\_\_\_ Industrial \_\_\_\_\_ Irrigation \_\_\_\_\_  
Municipal \_\_\_\_\_ Monitoring ☒ Other \_\_\_\_\_

(6) PROPOSED CONSTRUCTION

Drilling Method:  
Mud Rotary \_\_\_\_\_ Air Rotary \_\_\_\_\_ Auger ☒  
Cable \_\_\_\_\_ Other \_\_\_\_\_

A. GENERAL

1. A permit application should be submitted so as to arrive at the Zone 7 office five days prior to proposed starting date.
2. Notify this office (484-2600) at least one week prior to starting work on permitted work before placing well seals.
3. Submit to Zone 7 within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Record equivalent for well projects, or bore hole log and location sketch for geotechnical projects. Permitted work is completed when the last surface seal is placed or the last boring is completed.
4. Permit is void if project not begun within 90 days of approval date.

B. WATER WELLS, INCLUDING PIEZOMETERS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie, or equivalent.
2. Minimum seal depth is 50 feet for municipal, industrial wells or 20 feet for domestic, irrigation, and monitoring wells unless a lesser depth is specially approved.

C. GEOTECHNICAL. Backfill bore hole with compacted fillings or heavy bentonite and upper two feet with compacted material.

D. CATHODIC. Fill hole above anode zone with concrete placed by tremie, or equivalent.

E. WELL DESTRUCTION. See attached.

WELL PROJECTS

Drill Hole Diameter 8 in. Depth(s) 20 ft.  
Casing Diameter 2 in. Number \_\_\_\_\_  
Surface Seal Depth 5-10 ft. of Wells 3  
Driller's License No. C61-407379

GEOTECHNICAL PROJECTS

Number \_\_\_\_\_  
Diameter \_\_\_\_\_ in. Maximum Depth \_\_\_\_\_ ft.

(7) ESTIMATED STARTING DATE June 14, 1988

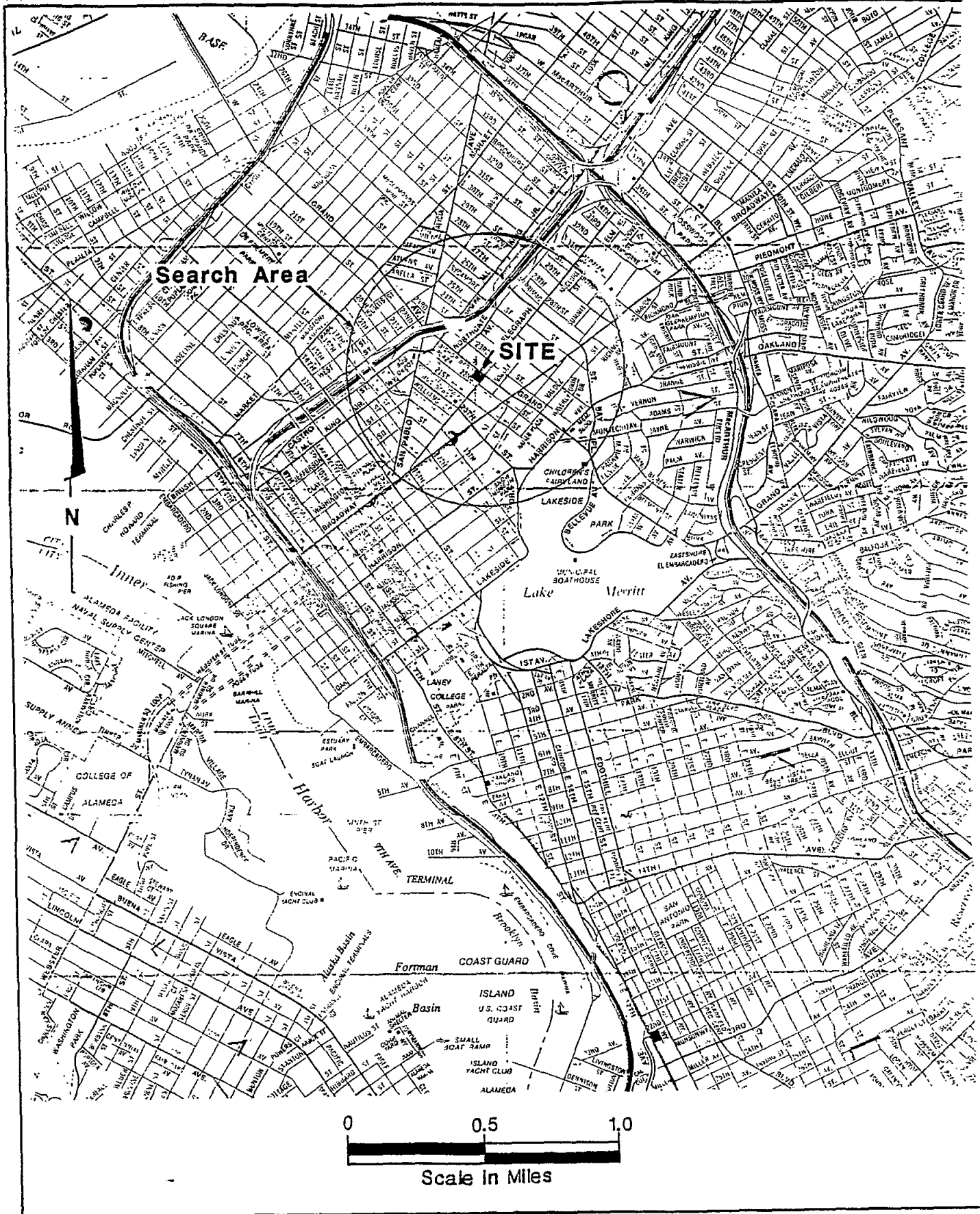
ESTIMATED COMPLETION DATE June 14, 1988

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S  
SIGNATURE

Juan Ordoñez

Date 6-3-88



**Harding Lawson Associates**  
Engineers and Geoscientists

**Vicinity Map**  
Texaco Station -62488000195  
2225 Telegraph Avenue  
Oakland, California

PLA

1

DRAWN

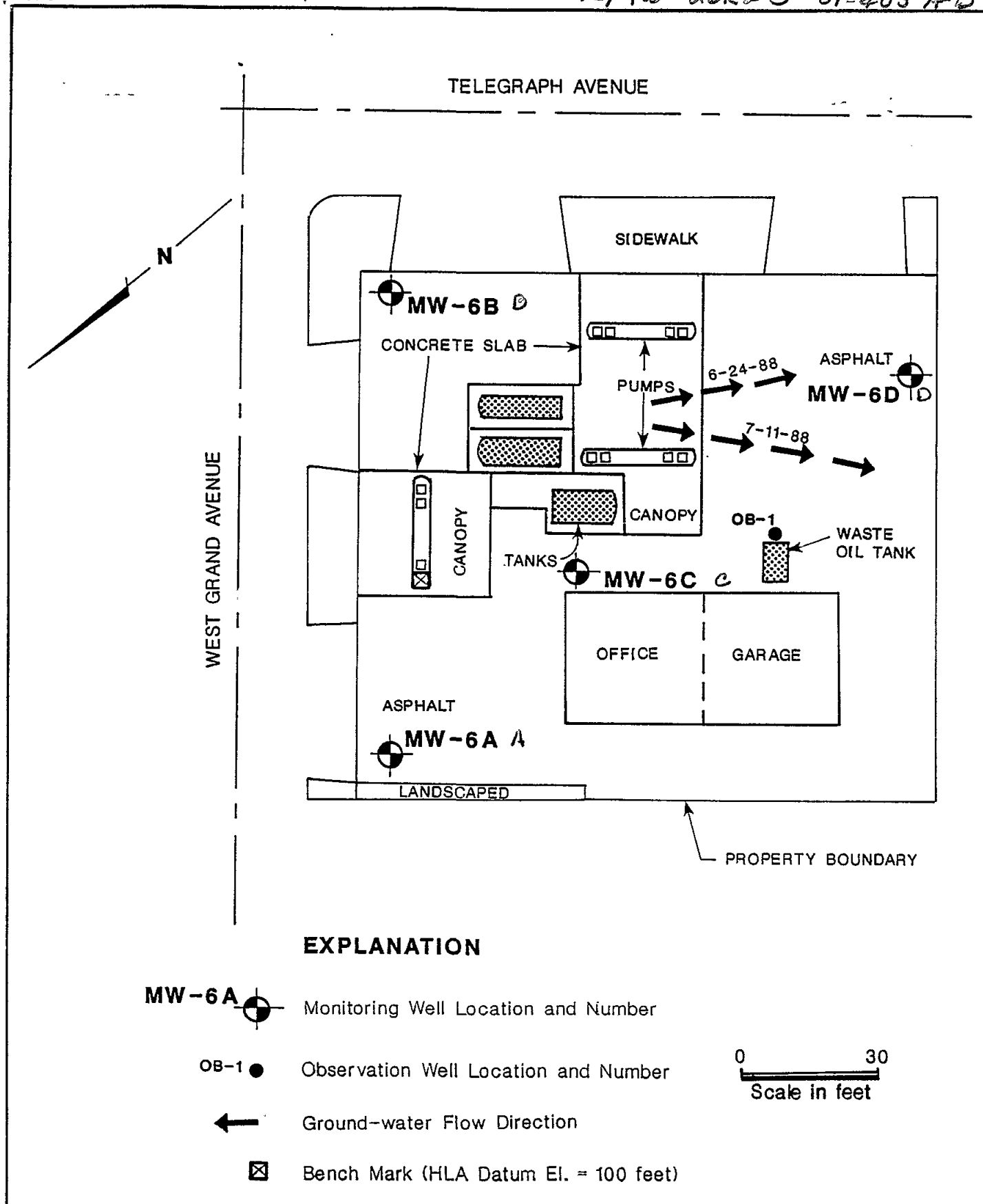
JOB NUMBER  
2251 052 04

APPROVED  
AC

DATE  
5/88

REVISED

DATE



**Harding Lawson Associates**  
Engineers and Geoscientists

**Site Plan**  
Texaco Station-62488000195  
2225 Telegraph Avenue  
Oakland, California

PLATE

2

DRAWN  
AG

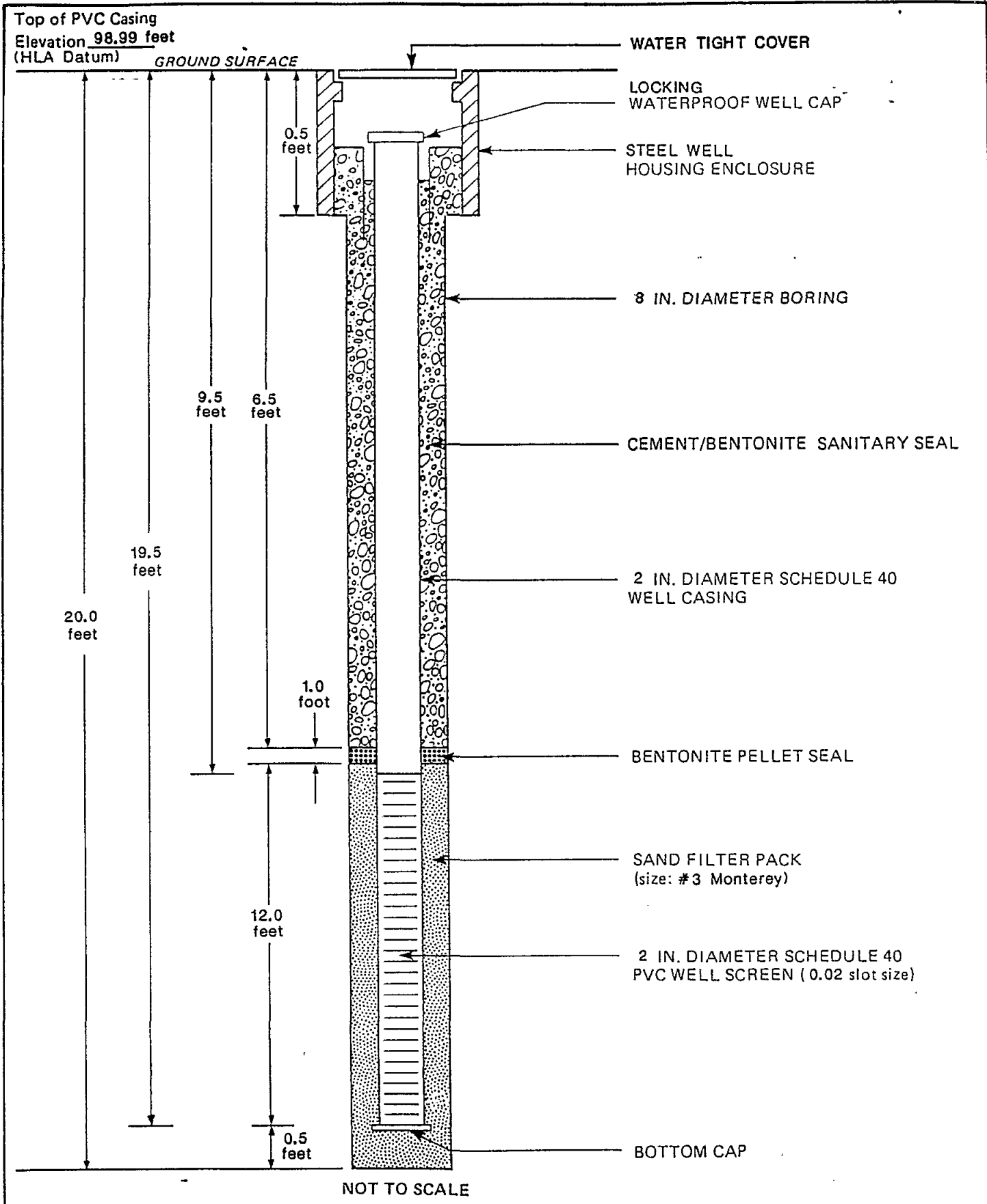
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2251,052.04

APPROVED  
Jo

DATE  
5/88

REVISED

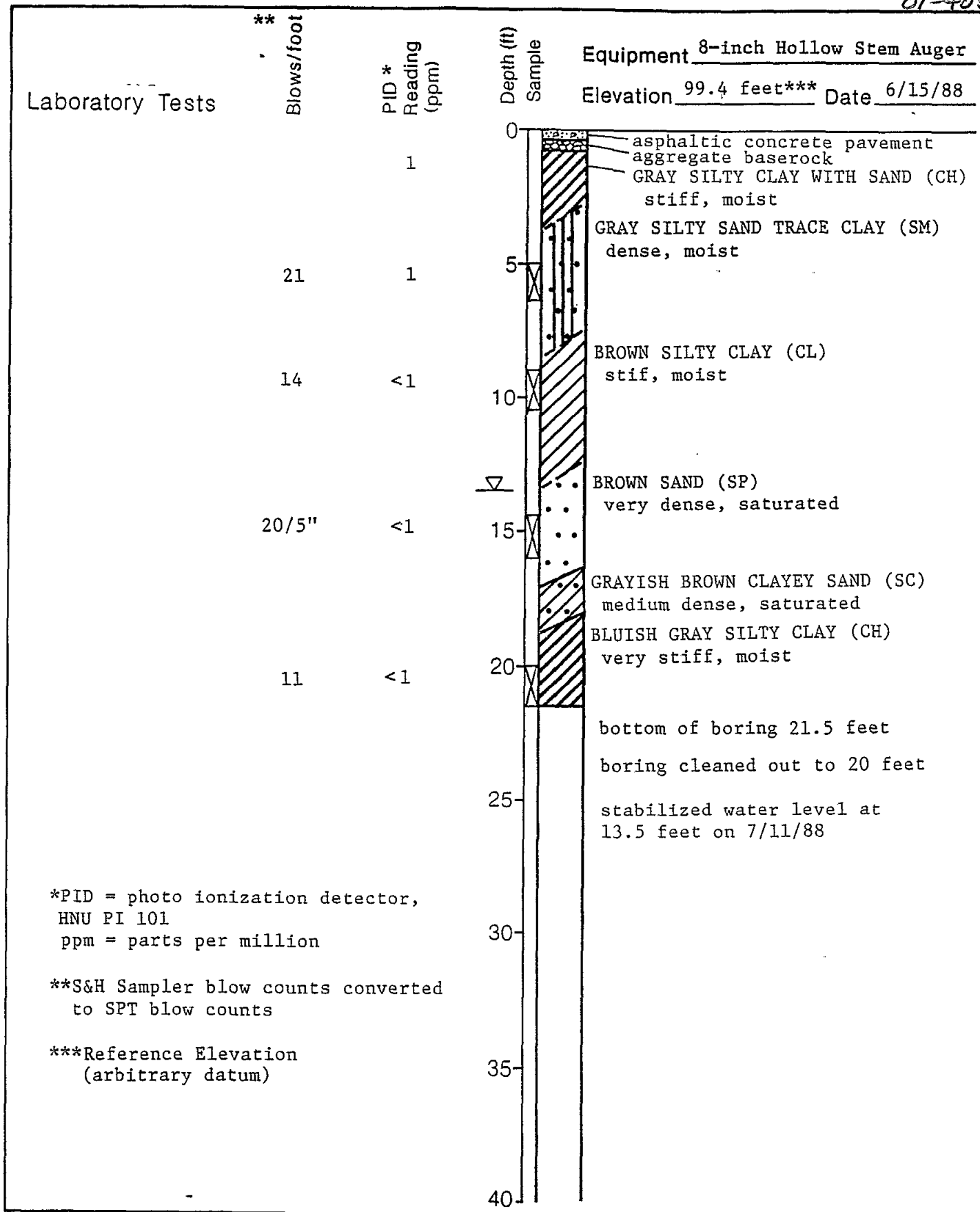
DATE



**Harding Lawson Associates**  
Engineers, Geologists  
& Geophysicists

**Monitoring Well MW-6A  
Completion Detail**  
Texaco Station - 62488000195  
2225 Telegraph Avenue  
Oakland, California

PLATE  
**8**



**Harding Lawson Associates**  
Engineers, Geologists  
& Geophysicists

**Log of Boring MW-6A**  
Texaco Station - 62488000195  
2225 Telegraph Avenue  
Oakland, California

PLATE

**3**

DRAWN  
RS

JOB NUMBER  
2251,052.04

APPROVED  
40

DATE  
7/88

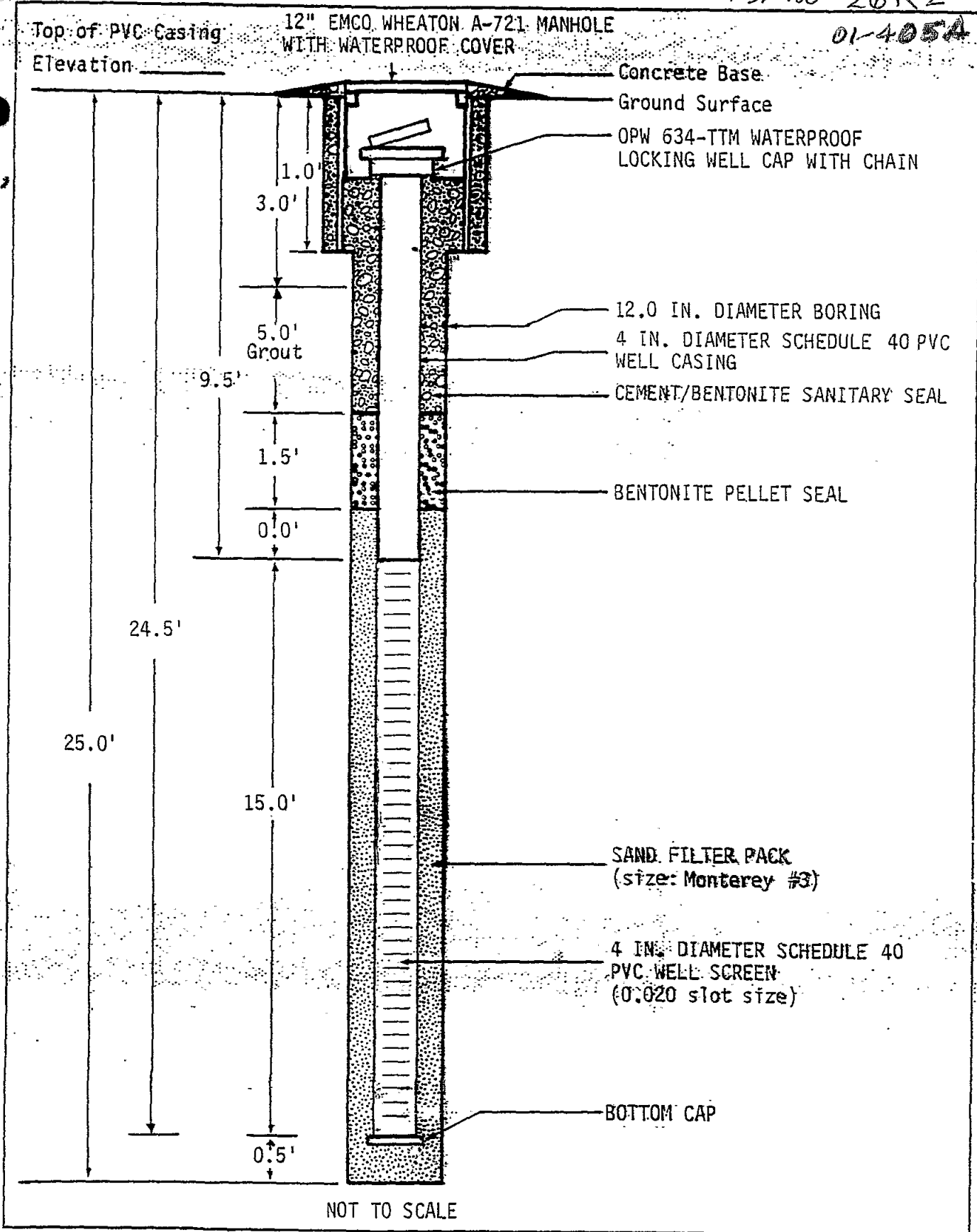
REVISED

DATE

105848

1S/4W 26K2

01-405A





# Texaco Refining & Marketing

01-405A-405A  
15/4W 26K2

## Laboratory Tests

Blows/foot

PID \*  
Reading  
(ppm)

Depth (ft)  
Sample

Equipment Hand Flight Auger

Elevation 99 feet\*\*

Date 05/10/90

22

<1

5

asphaltic concrete pavement  
aggregate baserock  
YELLOW BROWN CLAY (CL)  
stiff, moist

LIGHT BROWN CLAY TRACE SAND (CL)  
very stiff, moist

14

5

10

GRAYISH BROWN CLAY TRACE SAND (CL)  
very stiff, moist

strong petroleum odors between  
12.5 and 15.5 feet

▽  
▽

SAND (SP)

dense, saturated

--

70

15

GRAYISH BROWN SILTY CLAY (CL)  
WITH SAND

very stiff, moist  
no petroleum odors

12

3

20

bottom of boring 20 feet

25

stabilized water level at  
13.5 feet on 7/11/88

30

35

40

\*PID = photo ionization detector,  
HNU PI 101

\*\*Reference Elevation  
(arbitrary datum)



**Harding Lawson Associates**  
Engineers, Geologists  
& Geophysicists

**Log of Boring** RW-2 (Previously MW-6D) PLATE  
Texaco Station - 62488000195  
2225 Telegraph Avenue  
Oakland, California

15/4W 26K2

DRAWN  
RS

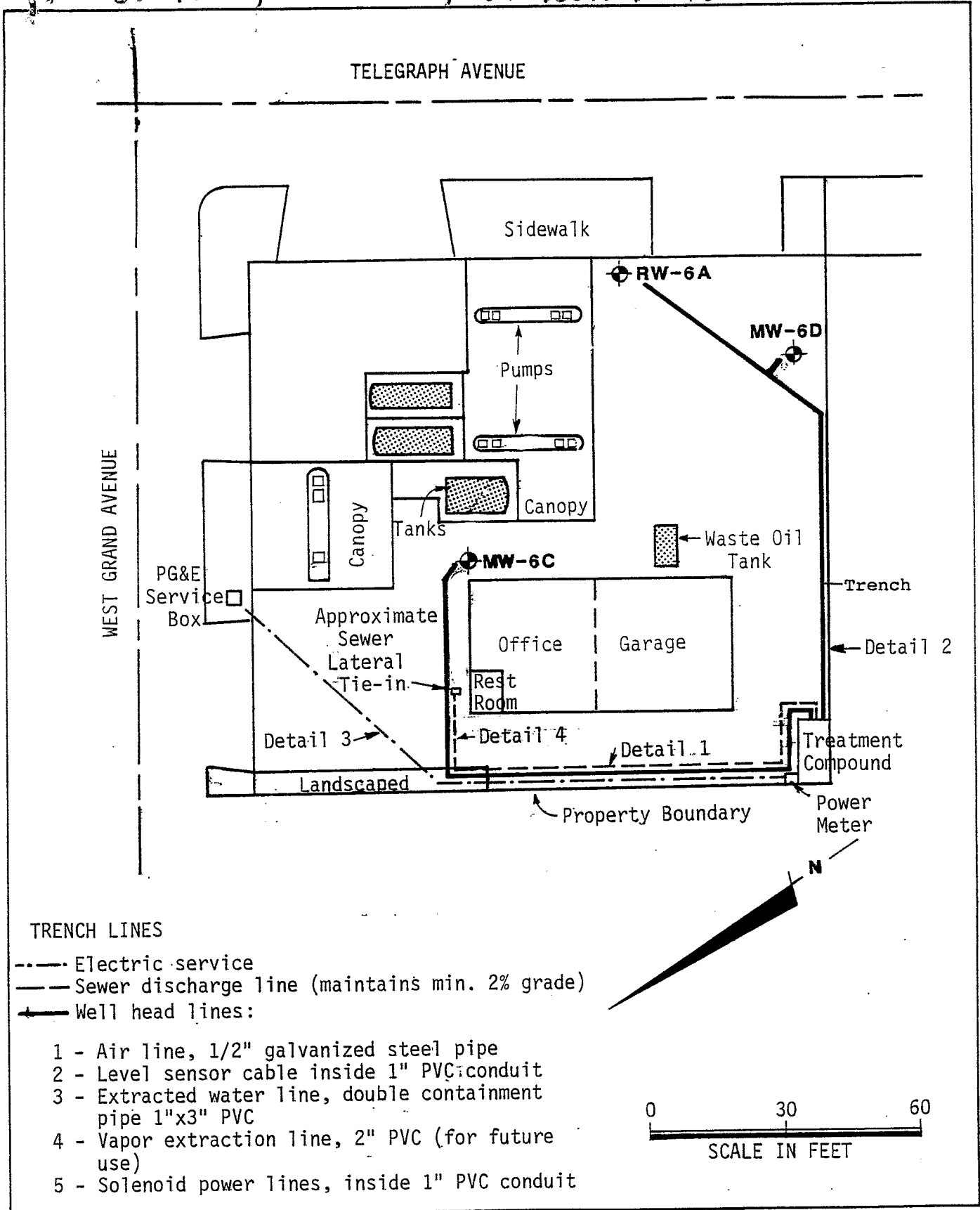
JOB NUMBER  
2251,080.03

APPROVED  
40

DATE

REVISED

DATE



**Harding Lawson Associates**  
Engineering and  
Environmental Services

**Ground-Water Collection System**  
Former Texaco Service Station  
2225 Telegraph Avenue  
Oakland, California

PLATE

**6**

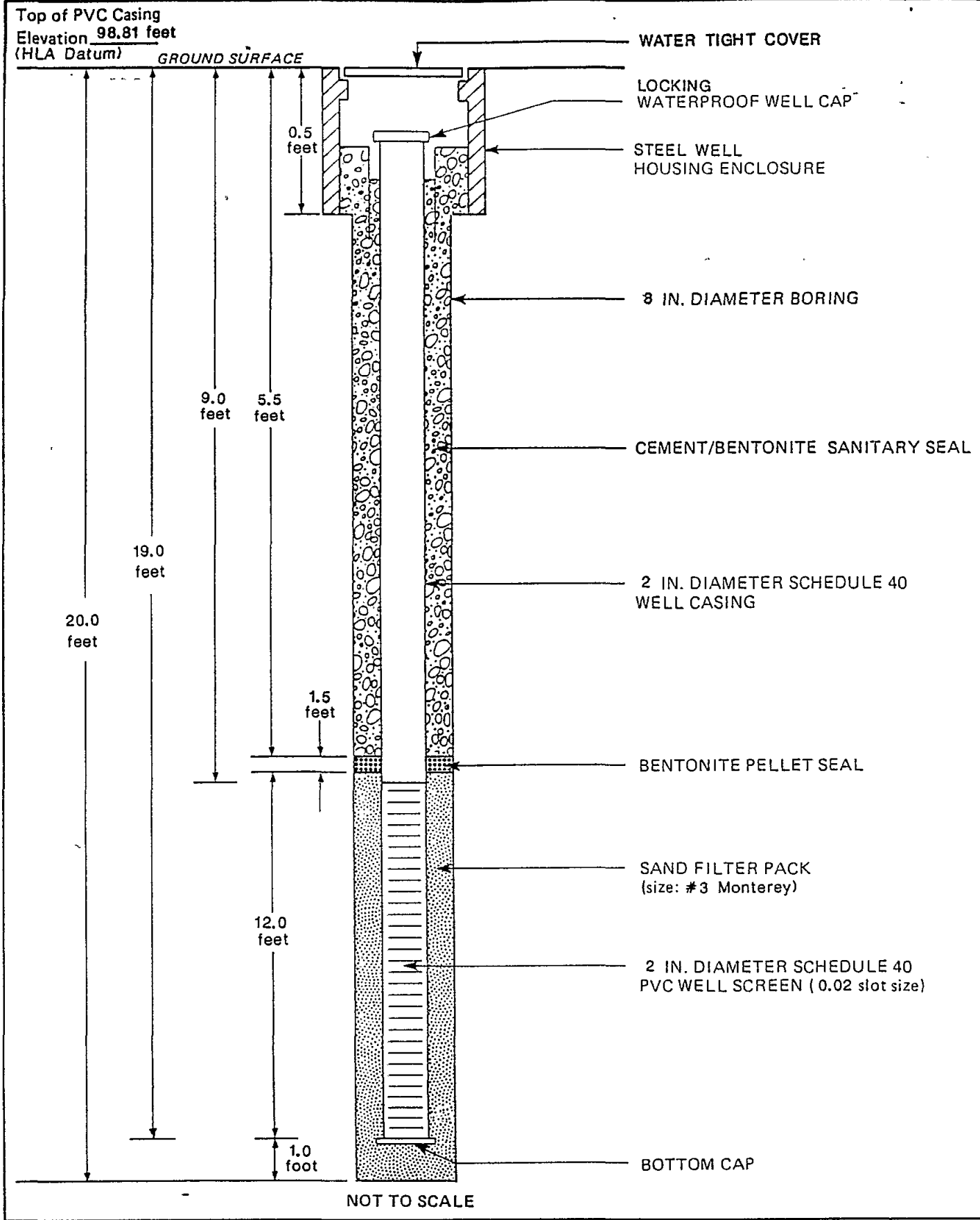
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JOB NUMBER 2251,123.03

APPROVED *[Signature]*

DATE 3/90

REVISED DATE

ph. 415 687 9660



**Harding Lawson Associates**  
Engineers, Geologists  
& Geophysicists

**Monitoring Well MW-6B  
Completion Detail**

Texaco Station - 62488000195  
2225 Telegraph Avenue  
Oakland, California

PLATE

**9**

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JOB NUMBER  
2251,052.04

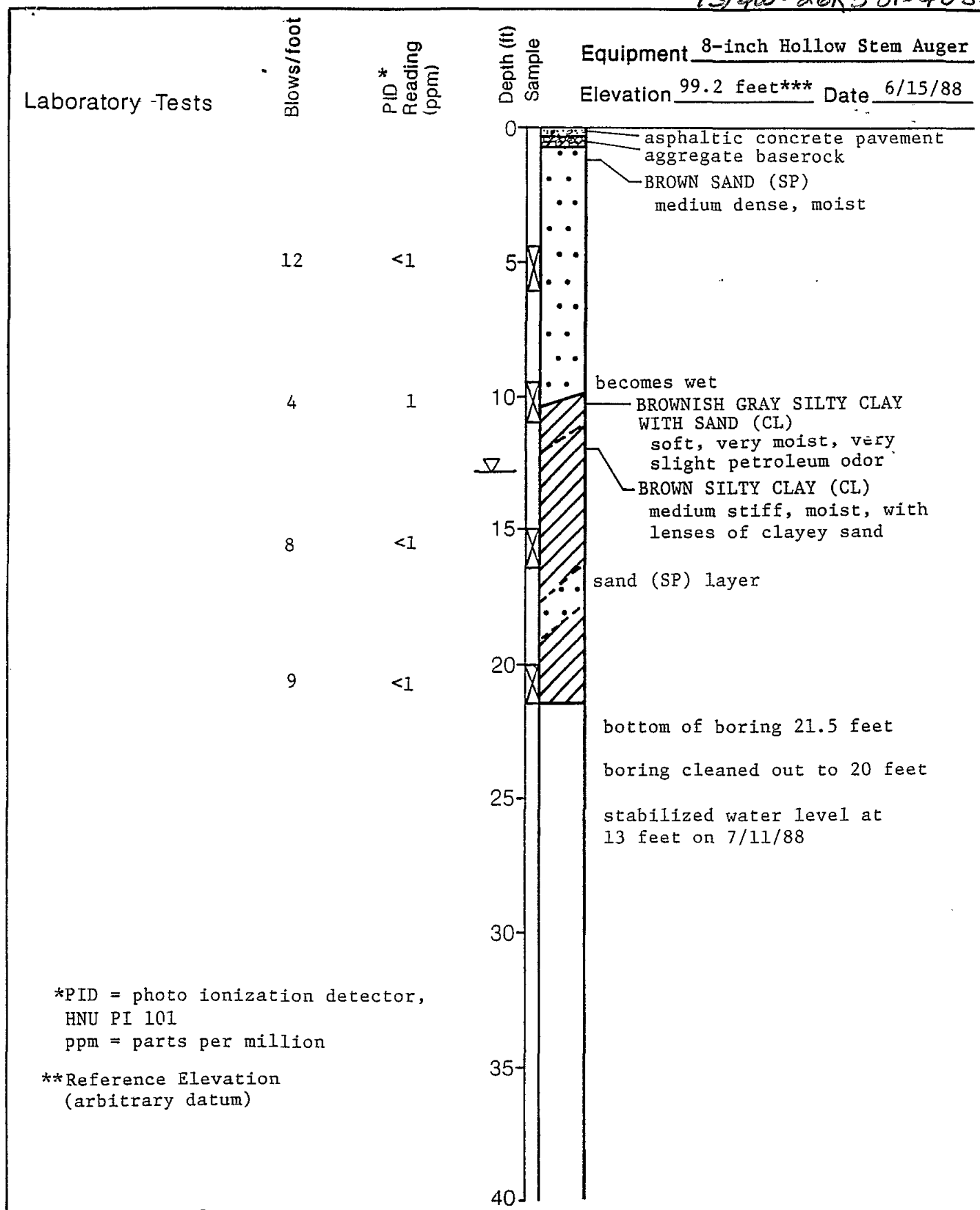
APPROVED

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DATE  
7/88

REVISED

DATE



**Harding Lawson Associates**  
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& Geophysicists

### Log of Boring MW-6B

Texaco Station - 62488000195  
2225 Telegraph Avenue  
Oakland, California

PLATE

**4**

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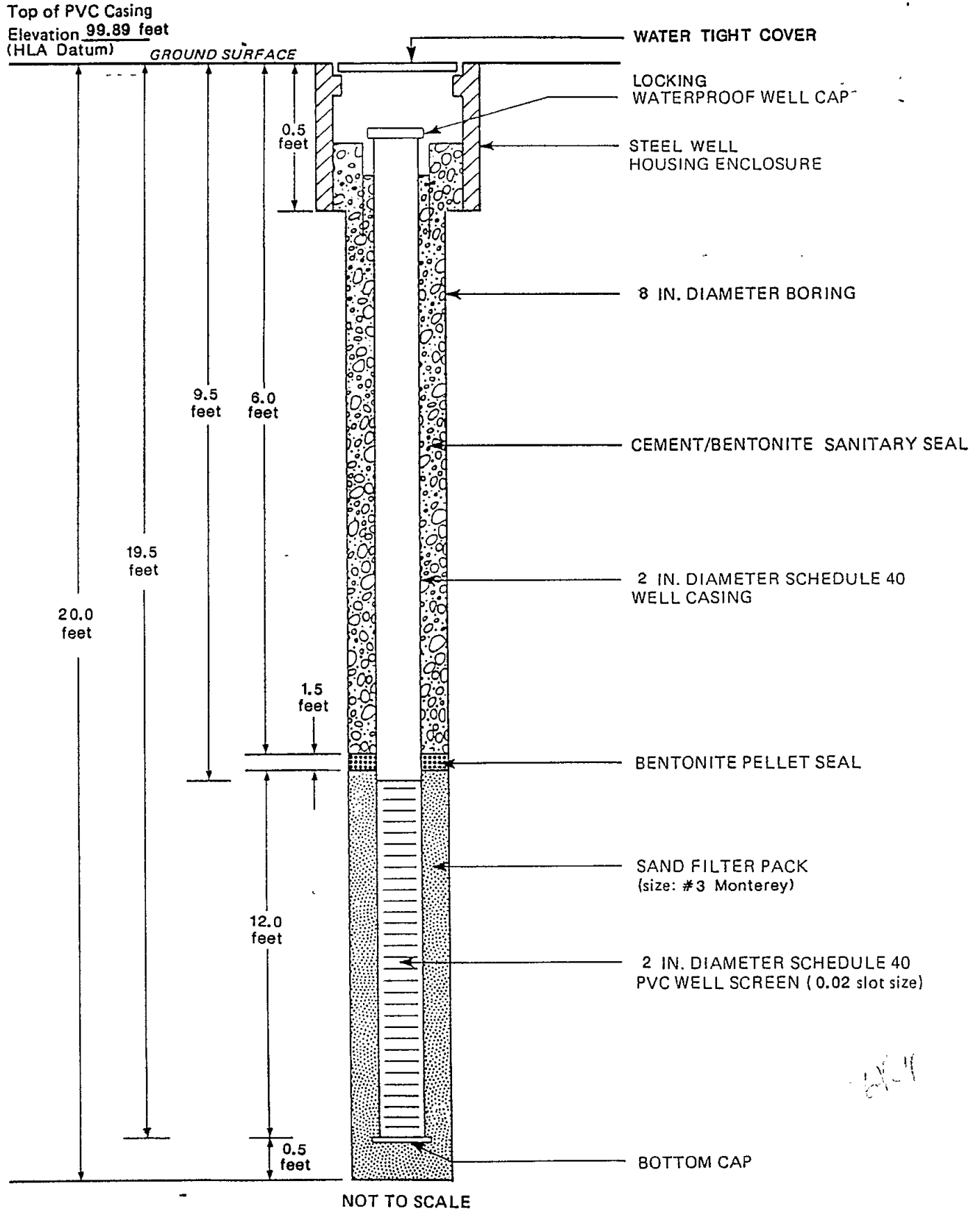
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7/88

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**Monitoring Well MW-6C  
Completion Detail**  
Texaco Station - 62488000195  
2225 Telegraph Avenue  
Oakland, California

PLATE

**10**

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2251,052.04

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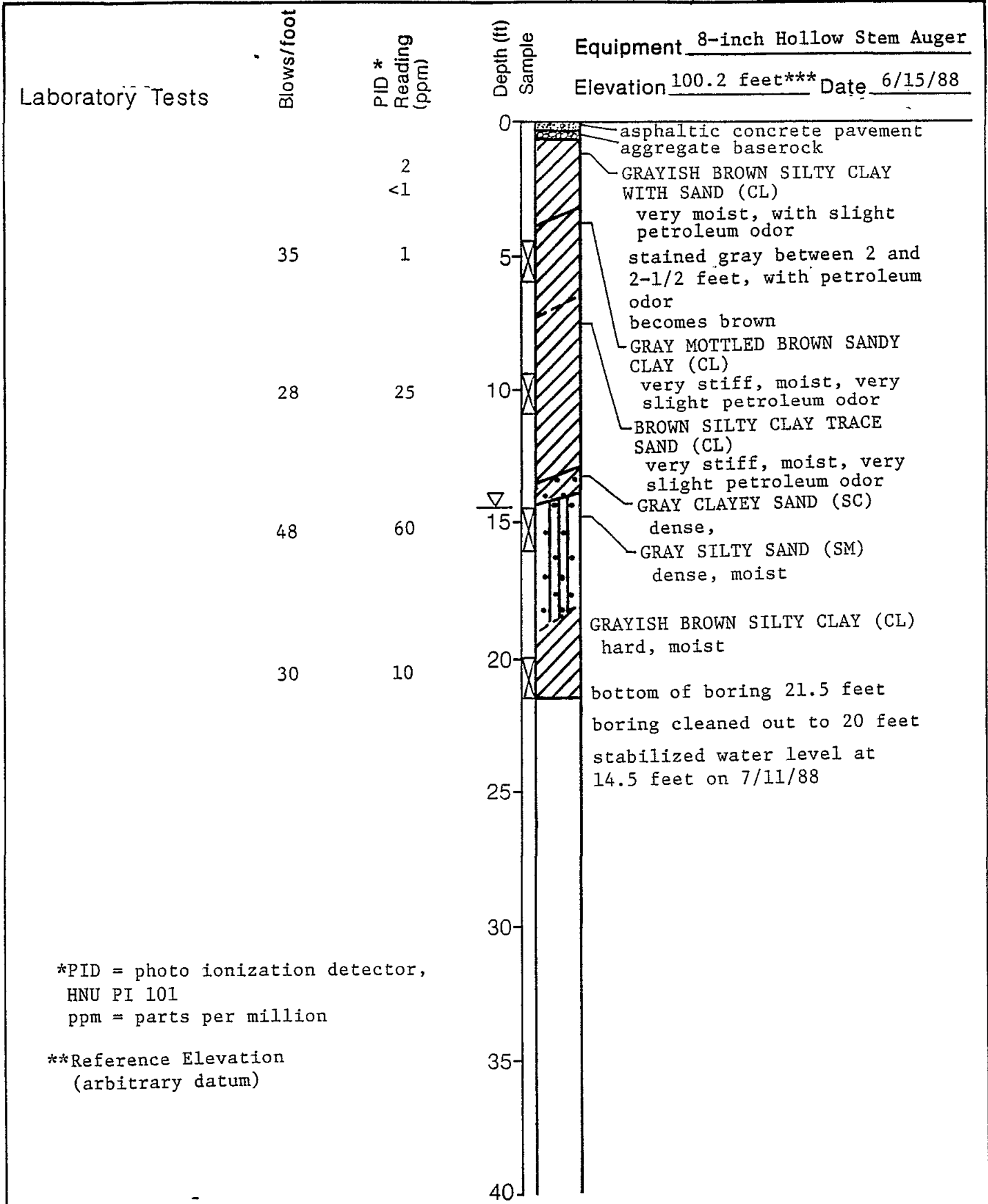
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7/88

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DATE



\*PID = photo ionization detector,  
HNU PI 101  
ppm = parts per million

\*\*Reference Elevation  
(arbitrary datum)



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### Log of Boring MW-6C

Texaco Station - 62488000195  
2225 Telegraph Avenue  
Oakland, California

PLATE

**5**

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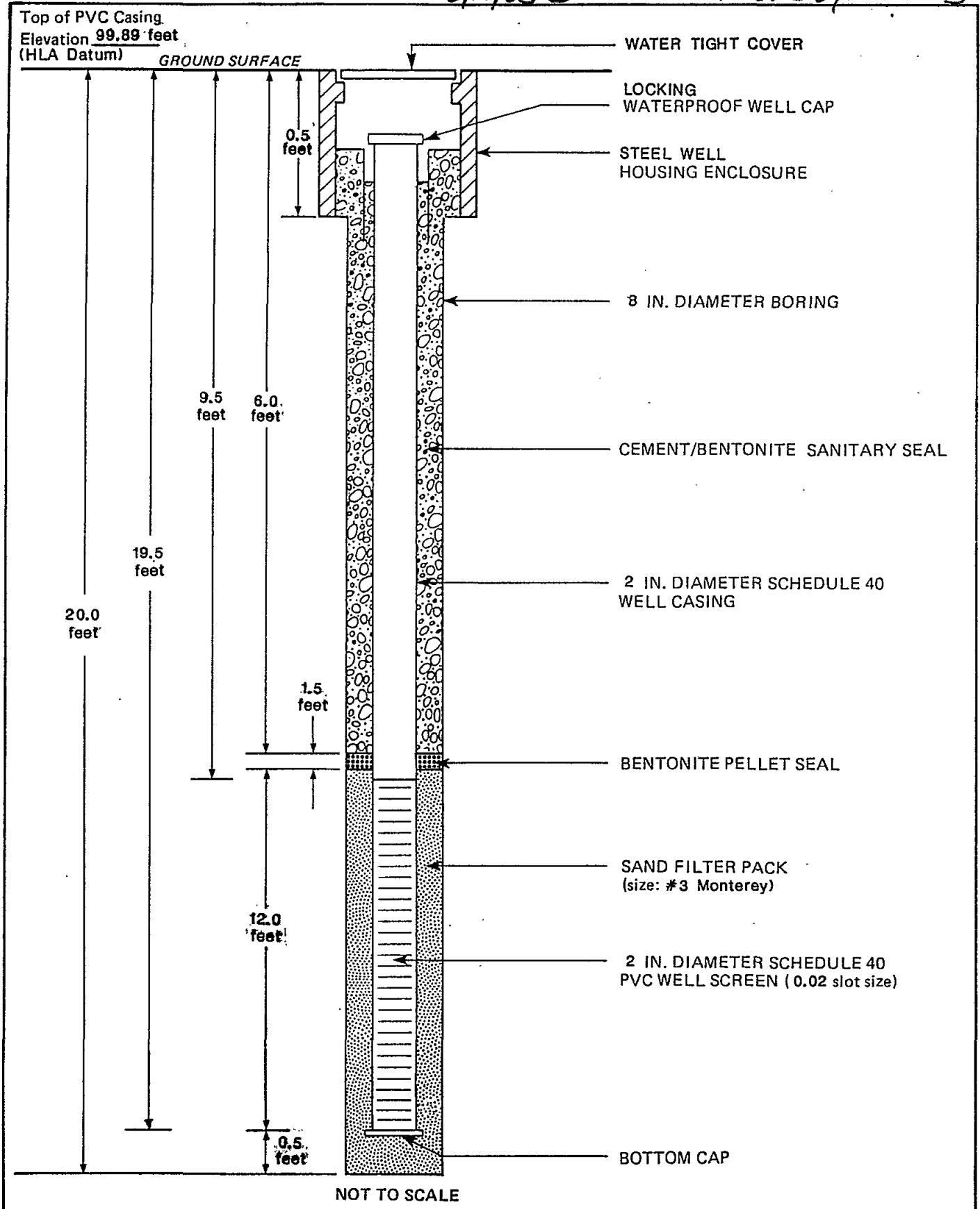
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7/88

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DATE

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**NOT TO SCALE**



**Harding Lawson Associates**  
Engineers, Geologists  
& Geophysicists

**Monitoring Well MW-6C,  
Completion Detail**  
Texaco Station - 62488000195  
2225 Telegraph Avenue  
Oakland, California

PLATE

|          |             |   |      |         |      |
|----------|-------------|---|------|---------|------|
| DRAWN    | JOB NUMBER  | APPROVED  | DATE | REVISED | DATE |
|          | 2251,080.03 |  | 2/89 |         |      |
| FORM GW3 |             |   |      |         |      |

01-405C

01-5087 (DES-11)

013 04W 26653.04

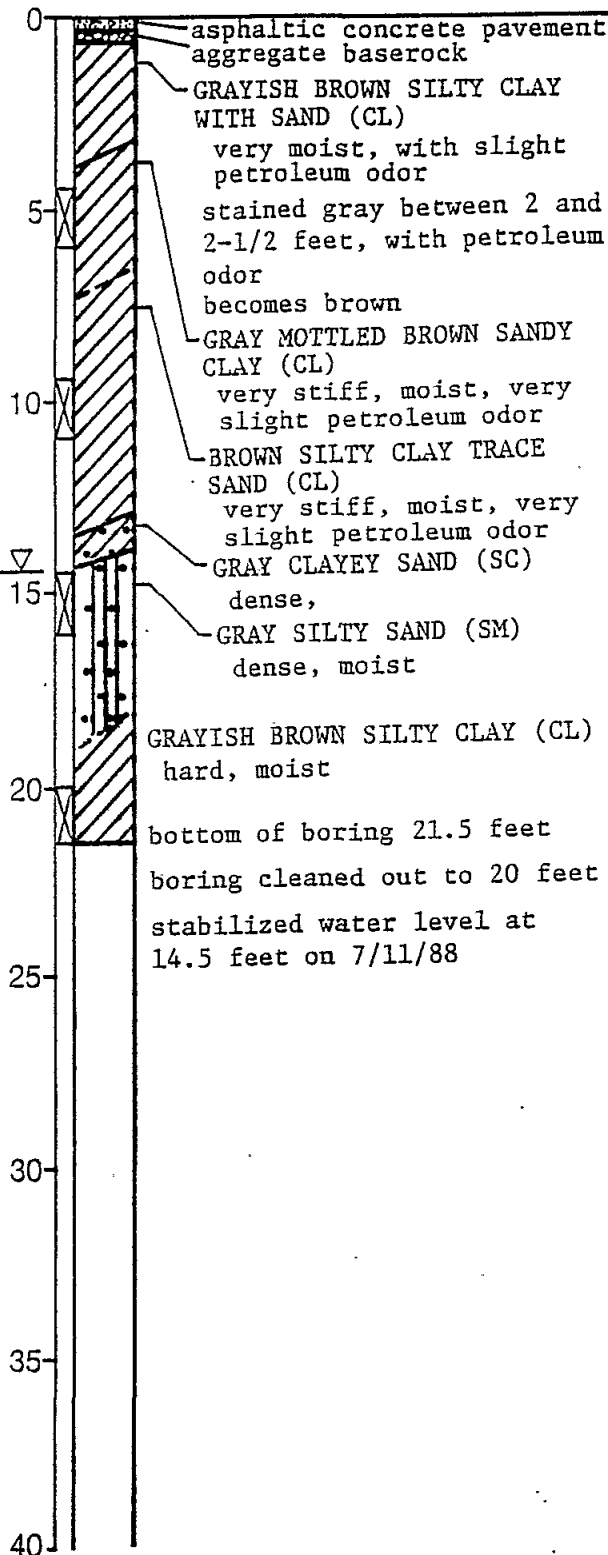
## Laboratory Tests

Blows/foot

PID \*  
Reading  
(ppm)Depth (ft)  
Sample

Equipment 8-inch Hollow Stem Auger

Elevation 100.2 feet\*\* Date 6/15/88



\*PID = photo ionization detector,  
HNU PI 101.  
ppm = parts per million

\*\*Reference Elevation  
(arbitrary datum)



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## Log of Boring MW-6C

Texaco Station - 62488000195  
2225 Telegraph Avenue  
Oakland, California

PLATE

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RS

JOB NUMBER

2251,080.03

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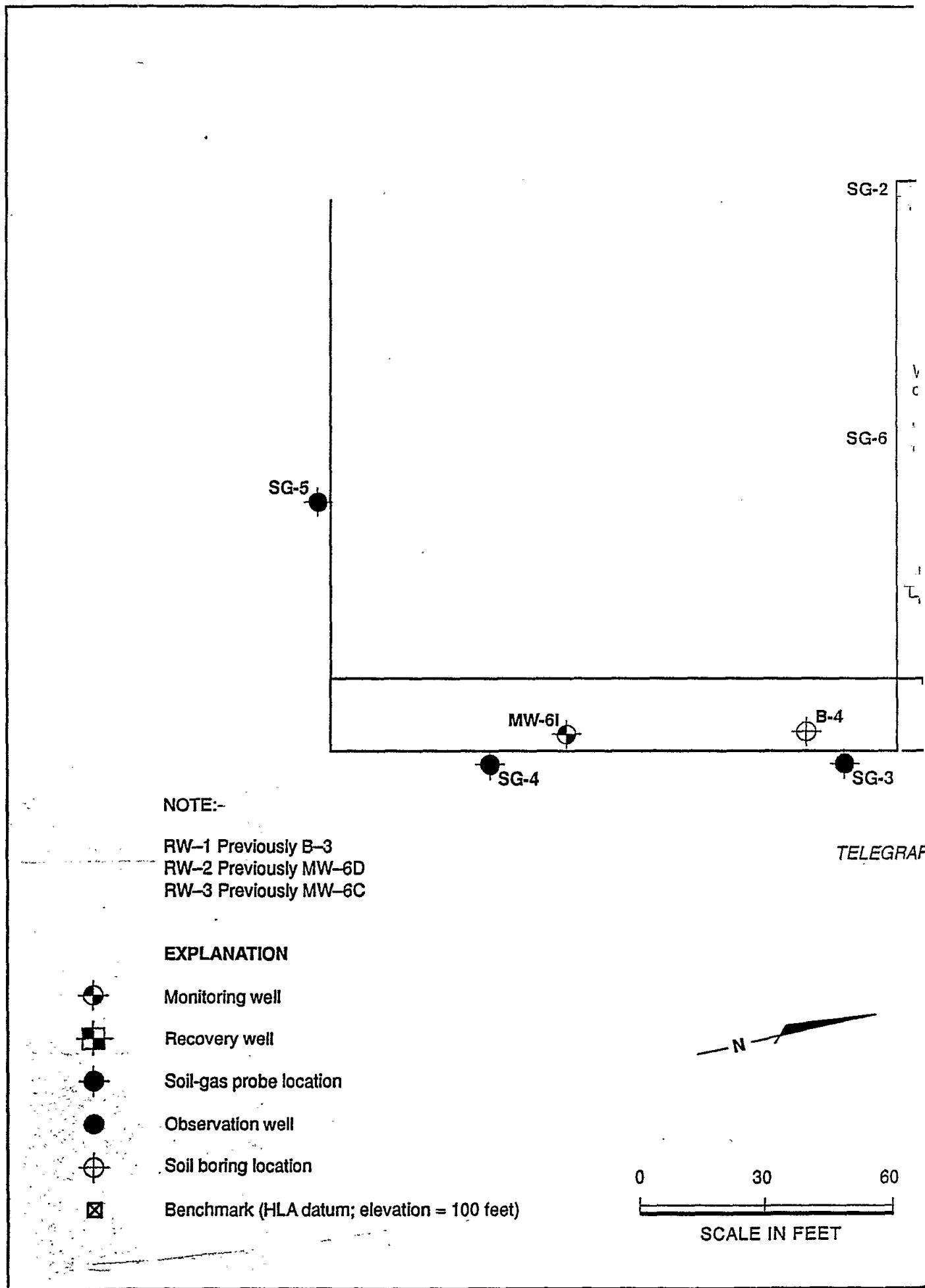
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2/89

REVISED

DATE





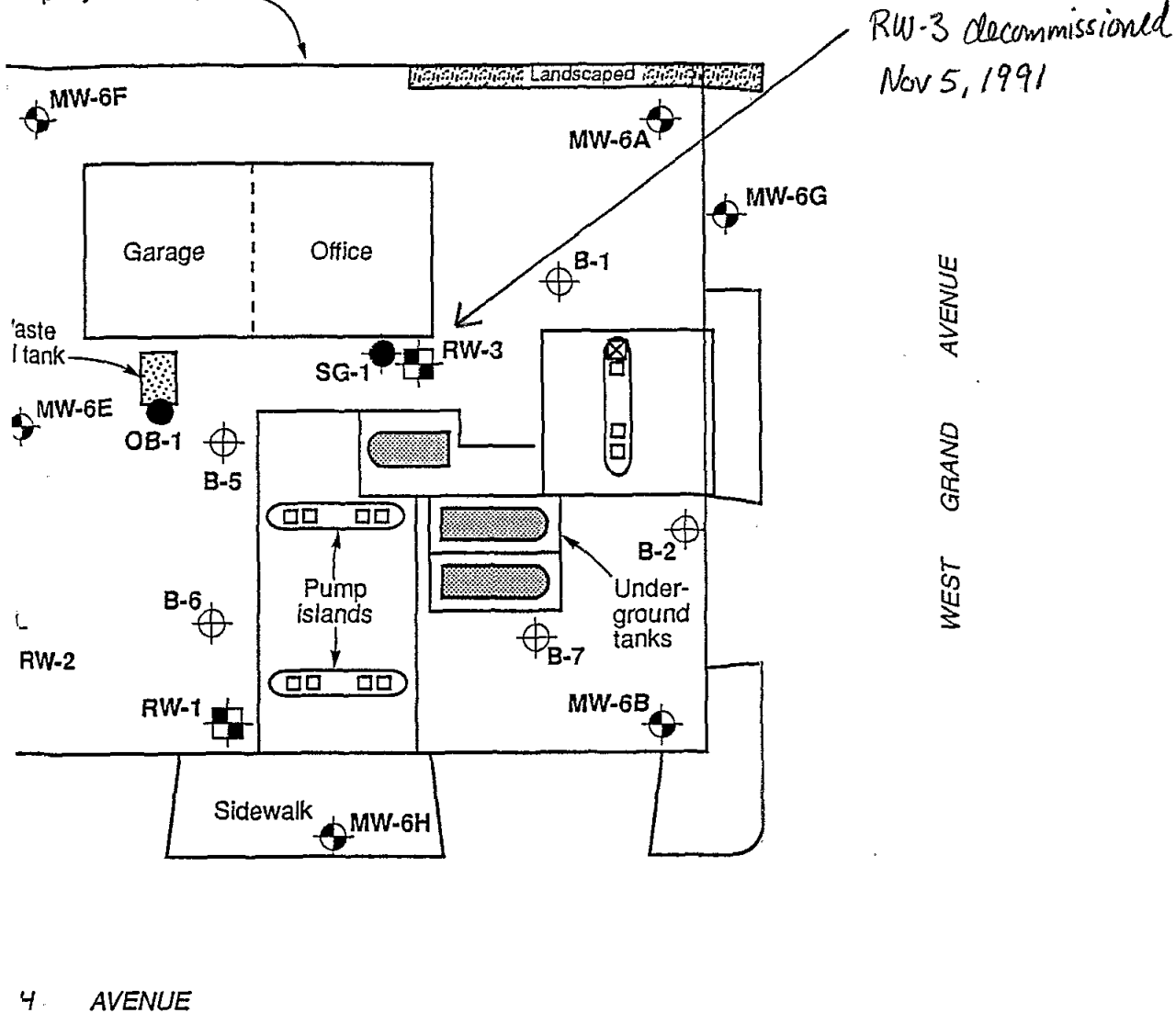
01-405C

01S 04W 26K04

(orig. blue)

01-508Z-DEST.

Property Boundary



**Harding Lawson Associates**  
Engineering and  
Environmental Services

**Site Plan**  
Former Texaco Service Station  
2225 Telegraph Avenue  
Oakland, California

PLATE

1

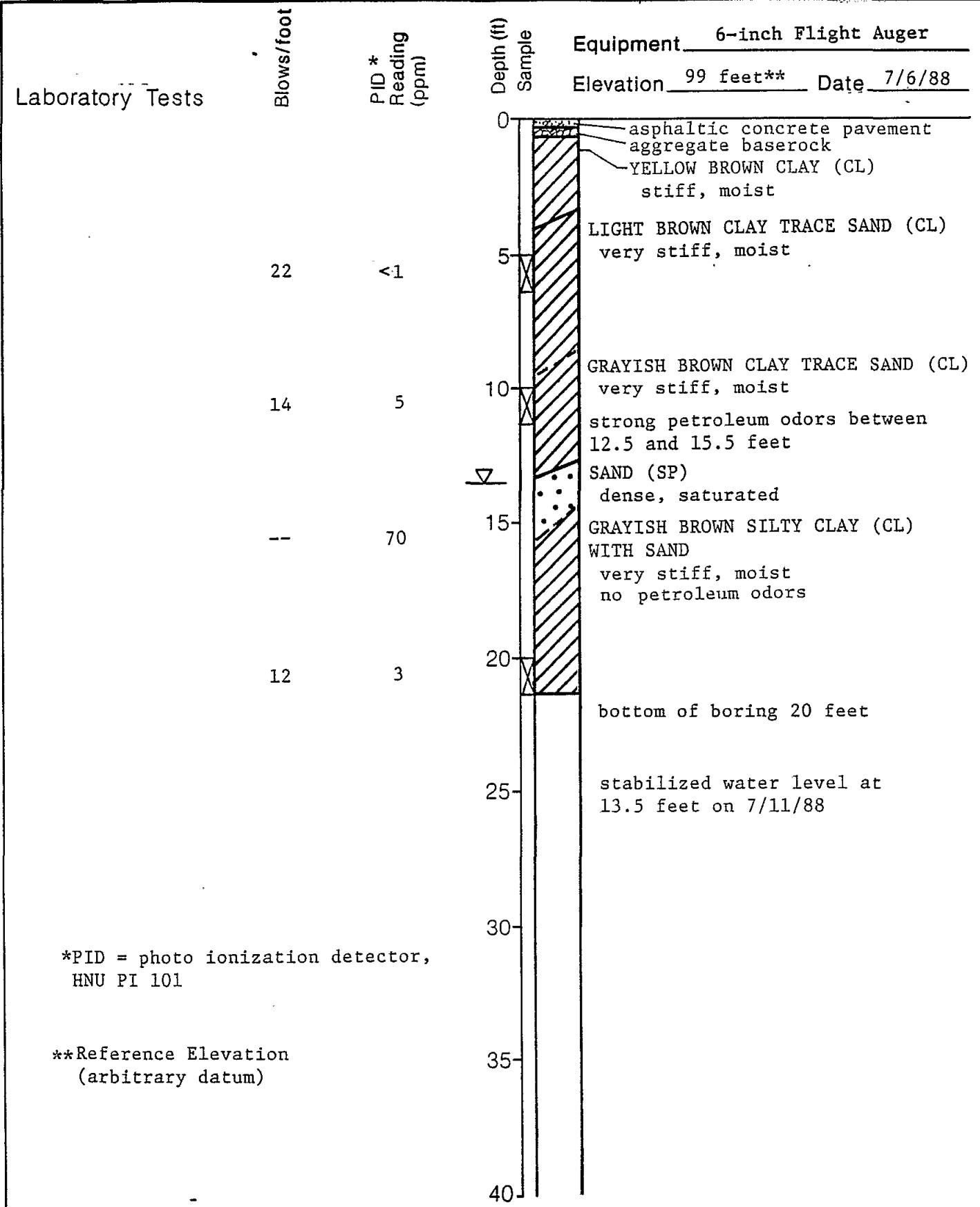
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JOB NUMBER  
2251,146.03

APPROVED  
JS\*

DATE  
1/91

REVISED DATE  
02/22/91



\*PID = photo ionization detector,  
HNU PI 101

\*\*Reference Elevation  
(arbitrary datum)

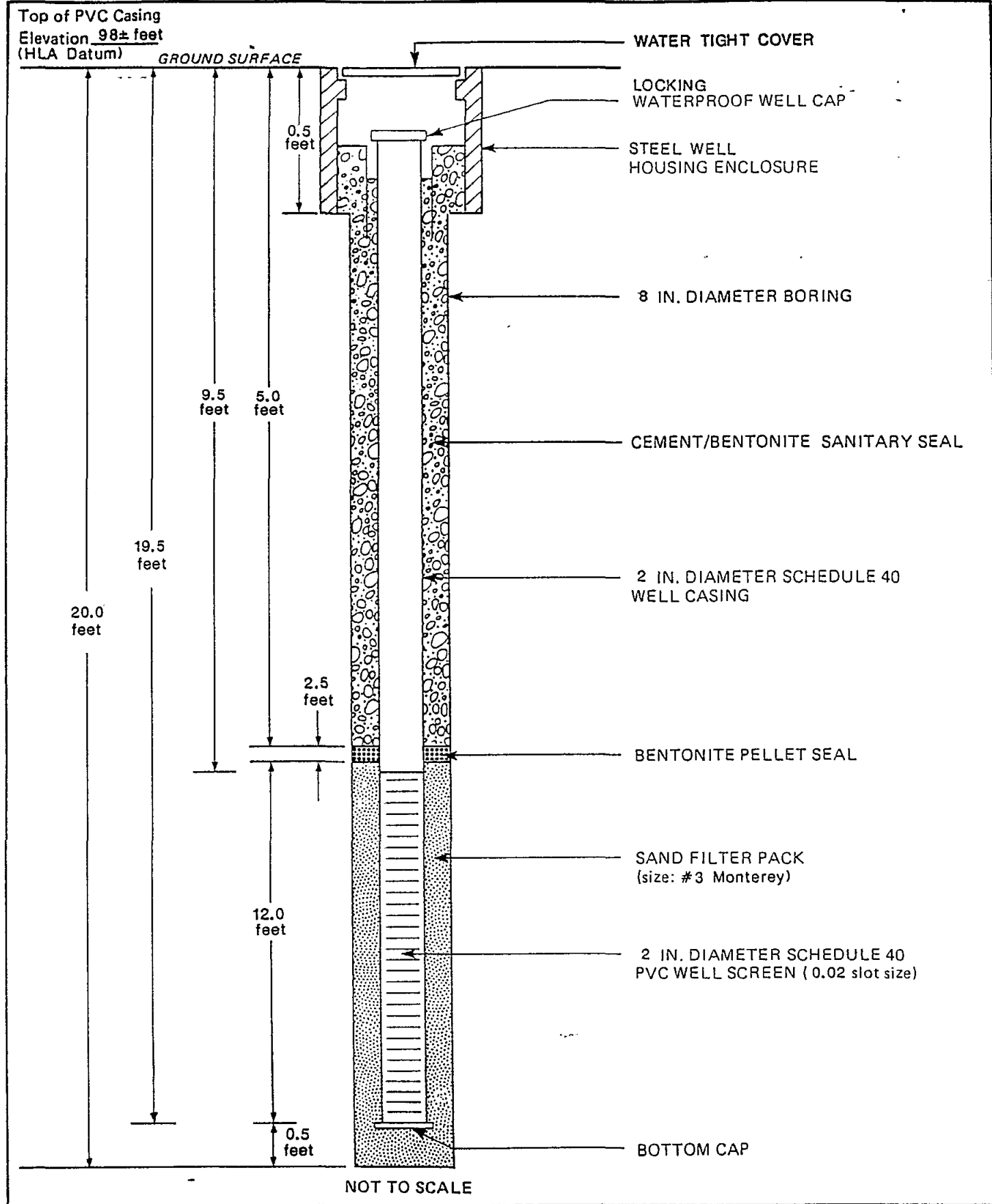


**Harding Lawson Associates**  
Engineers, Geologists  
& Geophysicists

**Log of Boring MW-6D**  
Texaco Station - 62488000195  
2225 Telegraph Avenue  
Oakland, California

PLATE

**6**



**HLA** **Harding Lawson Associates**  
Engineers, Geologists  
& Geophysicists

**Monitoring Well MW-6D**  
**Completion Detail**  
Texaco Station - 62488000195  
2225 Telegraph Avenue  
Oakland, California

PLATE

**11**

Harding Lawson Associates

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JAN 21 1992

ZONE 7, ACFC&WCD



01-508Z

~~01S 04W 26K83~~  
01S 04W 26K04M

January 16, 1992

2251.208.03

Alameda County Flood Control and  
Water Conservation District, Zone 7  
5997 Parkside Drive  
Pleasanton, California 94588

Attention: Mr. Craig A. Mayfield

Gentlemen:

Well Destruction Report  
Permit No. 91623  
2225 Telegraph Avenue  
Oakland, California

Pursuant to the conditions of Well Destruction Permit No. 91623, Harding Lawson Associates (HLA) submits this report on the decommissioning of recovery well RW-3 (formerly MW-6C).

This well is number 1S/4W 26K80 in the Alameda Water Conservation District, Zone 7 files. HLA, acting on behalf of Texaco Environmental Service (TES), decommissioned the well on November 5, 1991.

Attached are a site plan showing the former location of the well, the boring log, and the original well construction details. The well was completed to a depth of 20 feet; the boring was sampled at the bottom, resulting in a total depth of 21.5 feet.

On November 5, 1991, RW-3 was destroyed by HLA personnel and J-Con Drilling (License No. C57 563305) in the following manner:

- Using 11-inch diameter augers, the well was overdrilled to a total depth of 26 feet.
- All of the PVC casing and slotted PVC screen were removed from the well.
- The augers were pulled from the hole, and the hole remained open.

01-508Z

01504W26K04

January 16, 1992

2251.208.03

Mr. Craig A. Mayfield

Alameda County Flood Control and

Page 2

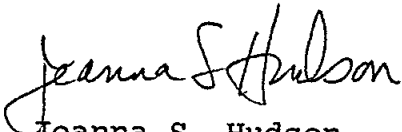
Harding Lawson Associates

- Cement grout was placed in the hole from a depth of 26 feet to the ground surface, by tremie pipe method. Approximately six bags of cement were used.
- Piping associated with the groundwater recovery system had been previously disconnected from the well and removed.

We trust that this report satisfies the requirements of Permit No. 91623. If you have questions, or need additional information, please contact the undersigned.

Yours very truly,

HARDING LAWSON ASSOCIATES

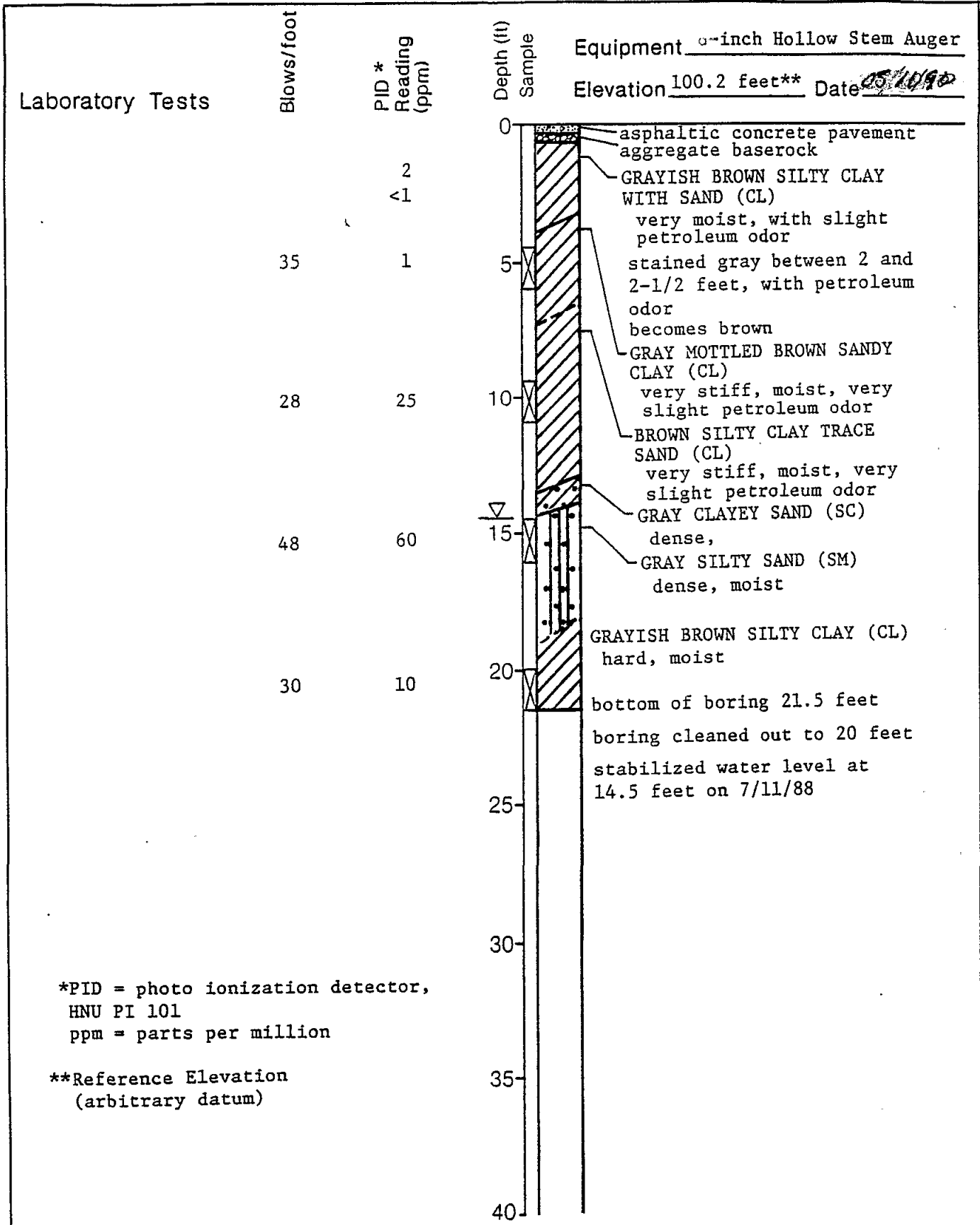


Jeanna S. Hudson  
Senior Geologist

JSH/pkp 032855P/R52

Attachments:    Site Plan  
                  Well Completion Details  
                  Boring Log

01-4206  
15/4W 26K6



\*PID = photo ionization detector,  
HNU PI 101  
ppm = parts per million

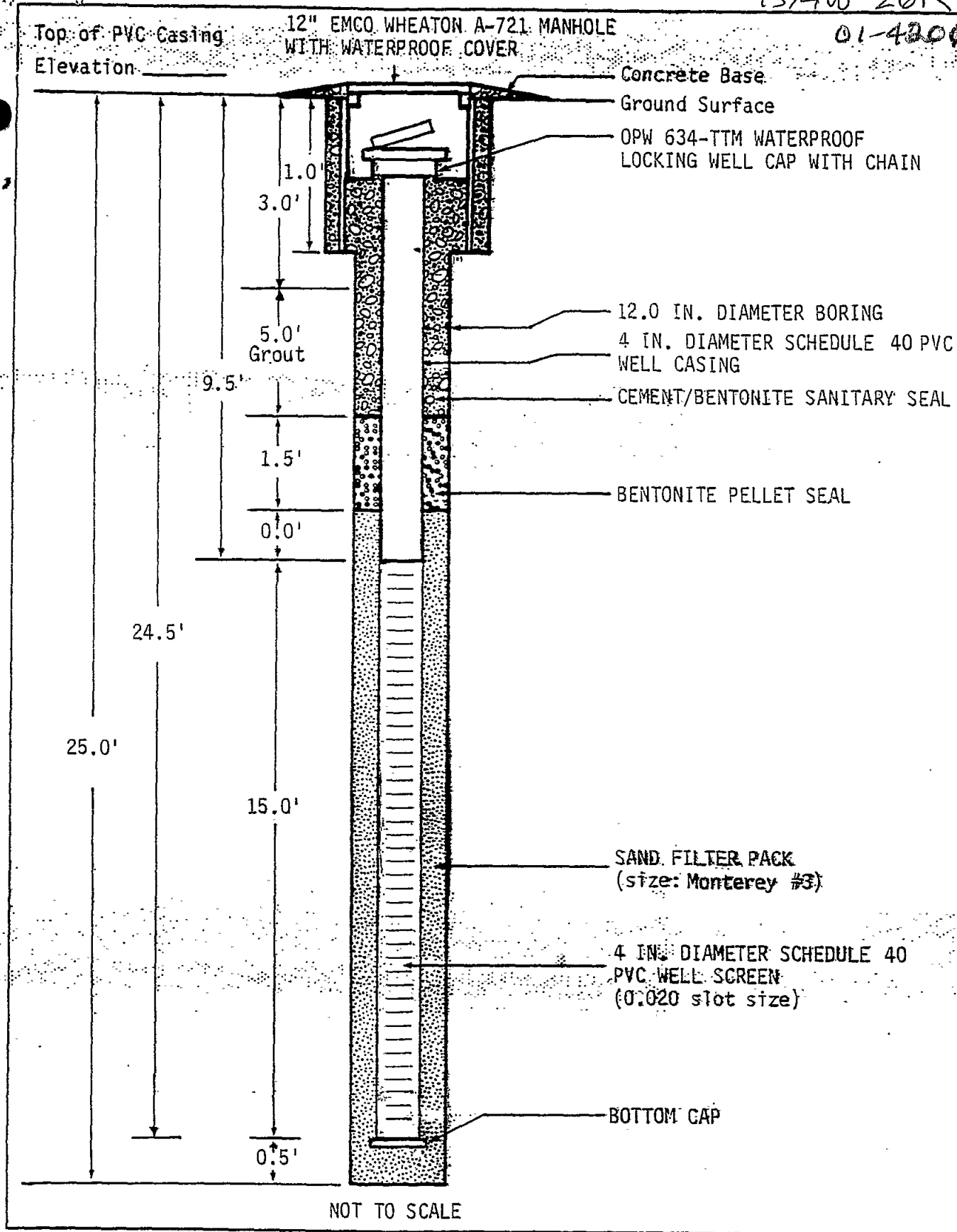
\*\*Reference Elevation  
(arbitrary datum)



**Harding Lawson Associates**  
Engineers, Geologists  
& Geophysicists

**Log of Boring RW-3** (Previously MW-6C) PLATE  
Texaco Station - 62488000195  
2225 Telegraph Avenue  
Oakland, California

15/4W 26K6



**Harding Lawson Associates**  
Engineers and Geoscientists

**Recovery Well Completion Detail RW-3**  
Former Texaco Service Station  
2225 Telegraph Avenue  
Oakland, California

PLATE

DRAWN

YC

JOB NUMBER

2251,123.03

APPROVED

DATE

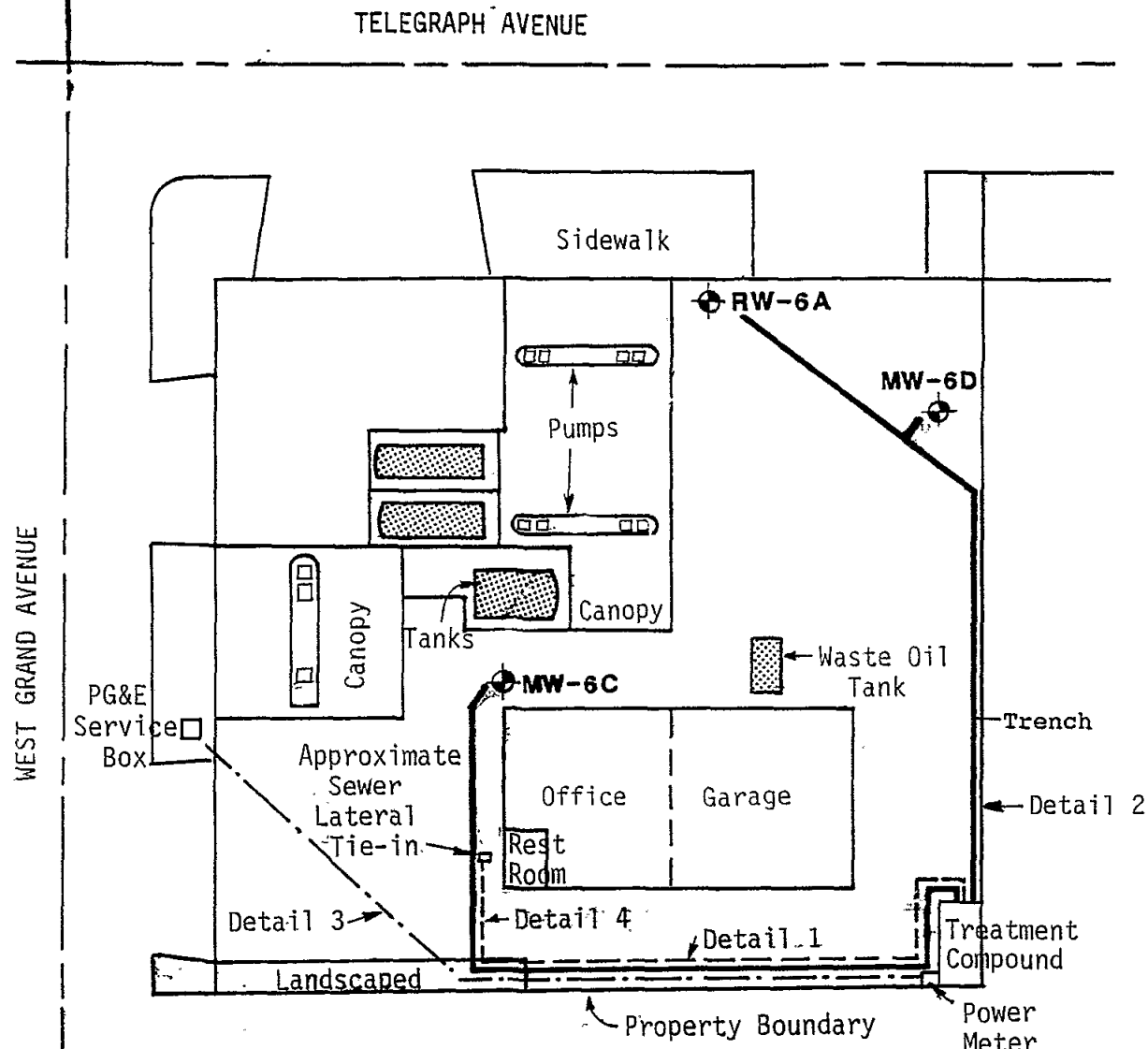
6/90

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DATE

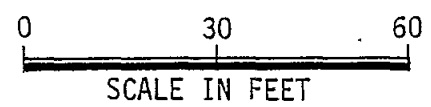


26 K2 26 K 6, 7  
 01-405A, 01-420G, ~~HO-460AED~~ 1S/4W 26K 2.6.7



**TRENCH LINES**

- Electric service
- Sewer discharge line (maintains min. 2% grade)
- Well head lines:
- 1 - Air line, 1/2" galvanized steel pipe
- 2 - Level sensor cable inside 1" PVC conduit
- 3 - Extracted water line, double containment pipe 1"x3" PVC
- 4 - Vapor extraction line, 2" PVC (for future use)
- 5 - Solenoid power lines, inside 1" PVC conduit



**Harding Lawson Associates**  
 Engineering and  
 Environmental Services

**Ground-Water Collection System**  
 Former Texaco Service Station  
 2225 Telegraph Avenue  
 Oakland, California

PLATE  
**6**

|             |                           |                                |              |              |
|-------------|---------------------------|--------------------------------|--------------|--------------|
| DRAWN<br>IC | JOB NUMBER<br>2251,123.03 | APPROVED<br><i>[Signature]</i> | DATE<br>3/90 | REVISED-DATE |
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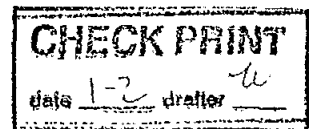
ph. 415 687 9660

01-420 G

15/4W-26K6

| Laboratory Tests | Blows/foot | GAS TECH<br>(ppm)* | Depth (ft)<br>Sample | Equipment   | Date                          |
|------------------|------------|--------------------|----------------------|---|-------------------------------|
|                  |            |                    |                      | 12" Hollow Stem Auger   | **98.99 <sup>1</sup> 10/04/88 |
|                  |            |                    | 0                    | Asphalt   |                               |
|                  |            |                    |                      | Baserock up to 1-Inch Diameter  |                               |
|                  |            | ND                 |                      | YELLOW BROWN LEAN CLAY WITH SAND (CL), Stiff, Moist; Very Fine Grained Sand |                               |
|                  |            | ND                 |                      |   |                               |
|                  | 20         | ND                 | 5                    | Becomes Light Brown, Increase in Fine Sand Content                          |                               |
|                  |            |                    |                      | Becomes Very Stiff  |                               |
|                  |            |                    | 10                   | Becomes Grayish Brown   |                               |
|                  |            |                    |                      | Greenish Staining   |                               |
|                  | 34         | 75                 |                      | ▽ Water Level 10/04/88  |                               |
|                  |            |                    | 15                   | GREENISH GRAY WELL GRADED SAND (SW), Very Dense, Wet, Fine-Grained Sand     |                               |
|                  |            |                    |                      | LIGHT BROWN AND TAN SILT WITH CLAY (ML), Stiff, Saturated                   |                               |
|                  | 9          | ND                 | 20                   |   |                               |
|                  |            |                    |                      | Bottom of Boring at 21.5 feet   |                               |
|                  |            |                    | 25                   |   |                               |
|                  |            |                    | 30                   |   |                               |
|                  |            |                    | 35                   |   |                               |
|                  |            |                    | 40                   |   |                               |

\* Gas-Tech Model 1314,  
Calibrated to Hexane  
ppm - Parts per Million  
\*\* Reference Elevation :  
(Arbitrary Datum)  
ND Non-Detectable



**Harding Lawson Associates**  
Engineers and Geoscientists

**Log of Boring MW-6E**  
2225 Telegraph Avenue  
Oakland, California

PLATE

DRAWN  
YC

JOB NUMBER  
2251,080.03

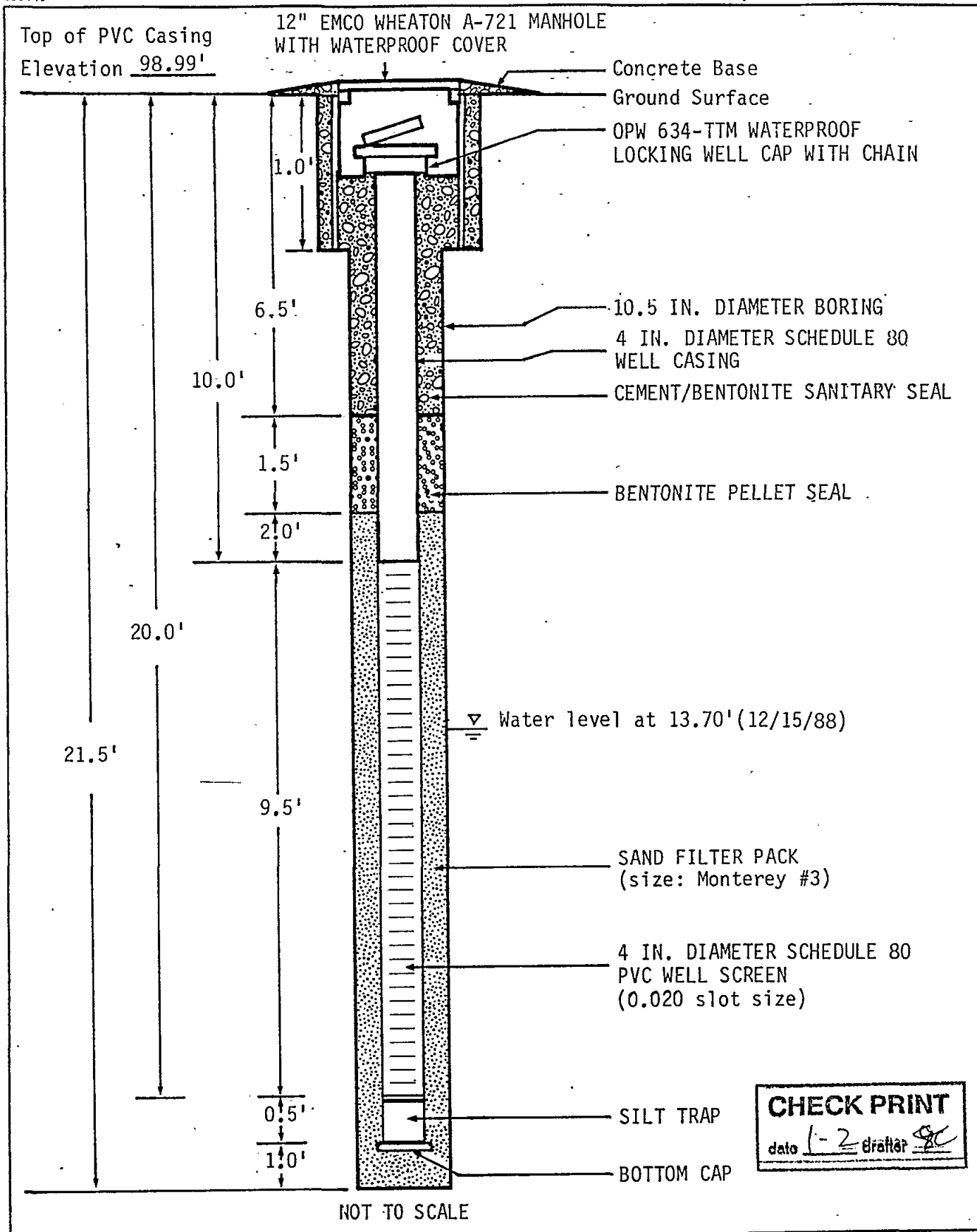
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DATE  
12/88

REVISED

DATE

153



**Harding Lawson Associates**  
Engineers and Geoscientists

**Monitoring Well MW-6E - Construction Detail**  
2225 Telegraph Avenue  
Oakland, California

PLATE

153

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YC

JOB NUMBER  
2251,080.03

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12/88

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DATE

15/4W 26K7 01-430# 5/10/90

# Laboratory Tests

Blows/foot  
GAS TECH  
(ppm)\*

30 125

39 >500

12 200

Depth (ft)  
Sample

Equipment Hollow Stem Auger

Elevation \*\* -98.0' Date 05/10/90

0 Asphalt  
Baserock  
LIGHT BROWN LEAN CLAY WITH  
SILT (CL), Stiff, Dry  
5  
Becomes Brown, Very Stiff,  
Trace Organics  
10  
15  $\nabla$  Water Level  
MOTTLED GRAY BROWN POORLY  
GRADED SAND (SP), Dense, Wet,  
Medium Grained With Silt  
MOTTLED GREENISH BLUE BROWN  
LEAN CLAY WITH SILT (CL),  
Stiff, Wet  
20 Bottom of Boring at 20.5 feet  
25  
30  
35  
40

\* Gas-Tech Model 1314,  
Calibrated to Hexane  
ppm - Parts per Million  
\*\* Reference Elevation  
(Arbitrary Datum)  
ND Non-Detectable



**Harding Lawson Associates**  
Engineers and Geoscientists

**Log of Boring RW-1** (Previously B-3)  
Former Texaco Service Station  
2225 Telegraph Avenue  
Oakland, California

PLATE

15/4W 26K7

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YC

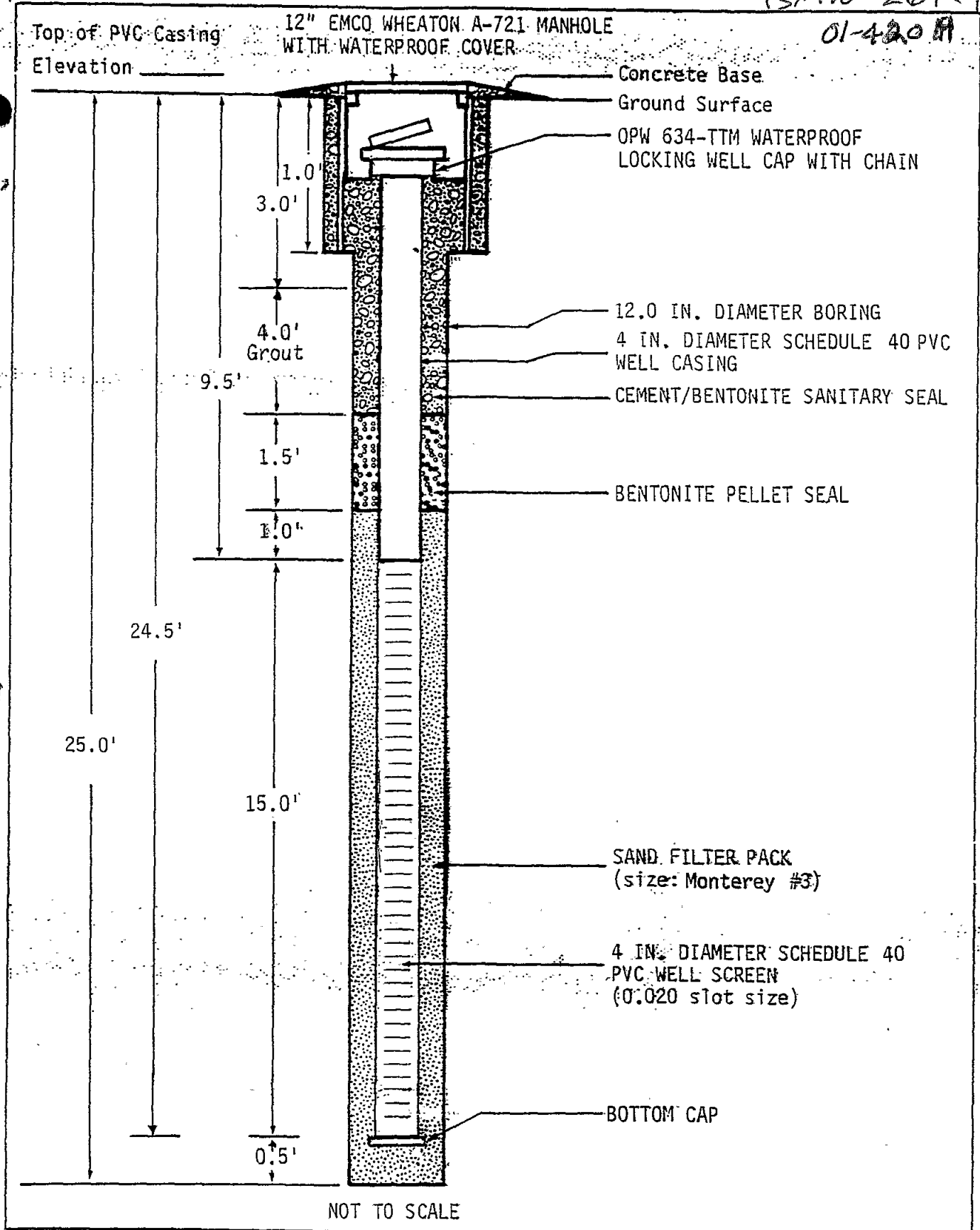
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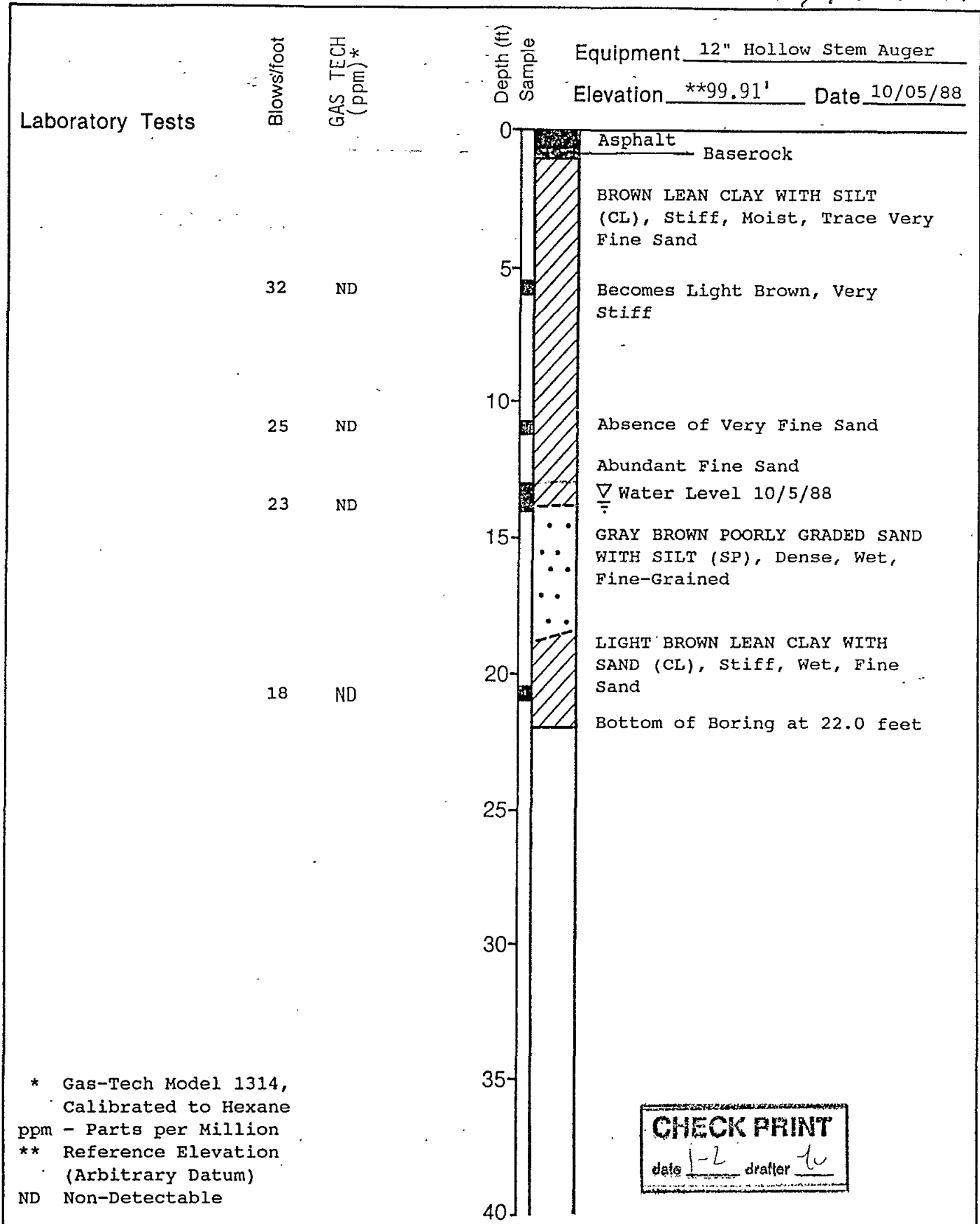
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Harding Lawson Associates  
Engineers and Geoscientists

**Recovery Well Completion Detail RW-1**  
Former Texaco Service Station  
2225 Telegraph Avenue  
Oakland, California

PLATE



**Harding Lawson Associates**  
Engineers and Geoscientists

**Log of Boring MW-6F**  
2225 Telegraph Avenue  
Oakland, California

PLATE

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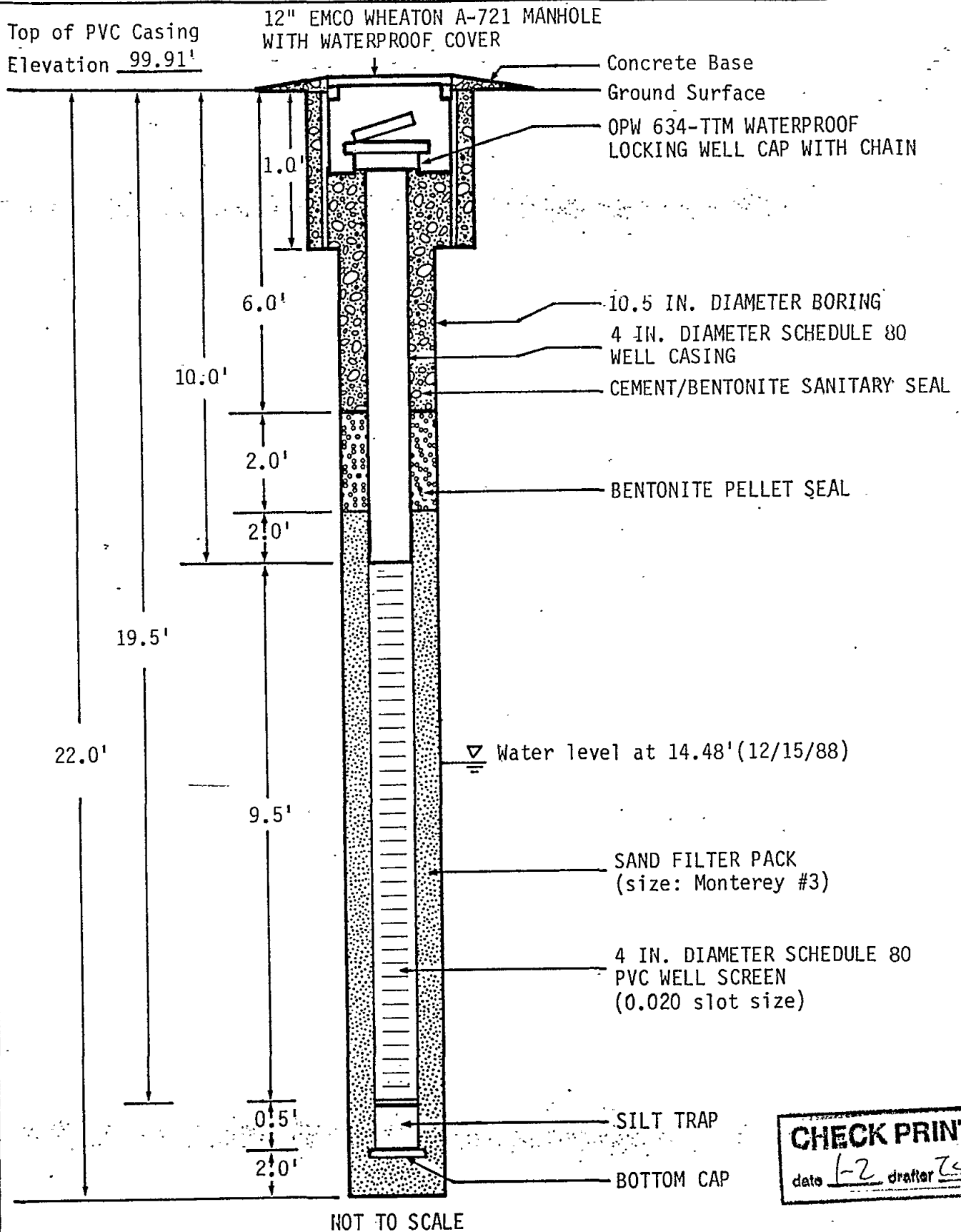
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**Monitoring Well MW-6F - Construction Detail**  
2225 Telegraph Avenue  
Oakland, California

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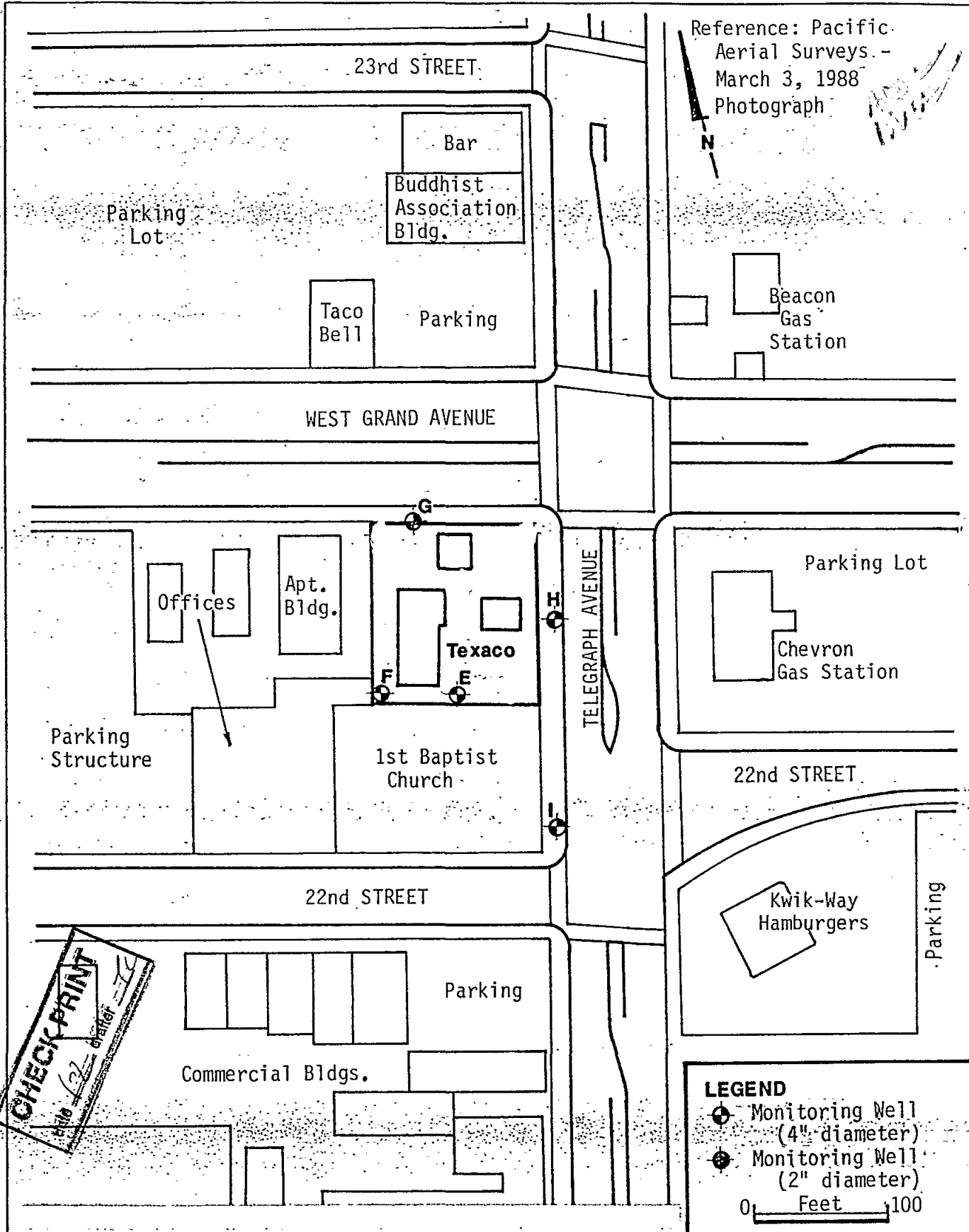
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Driller



**Harding Lawson Associates**  
Engineers and Geoscientists

543-8422

**Area Map**

Texaco Station #6  
2225 Telegraph Avenue  
Oakland, California

Driller:  
Maggara Brothers

PLATE

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JOB NUMBER  
2251,080,03

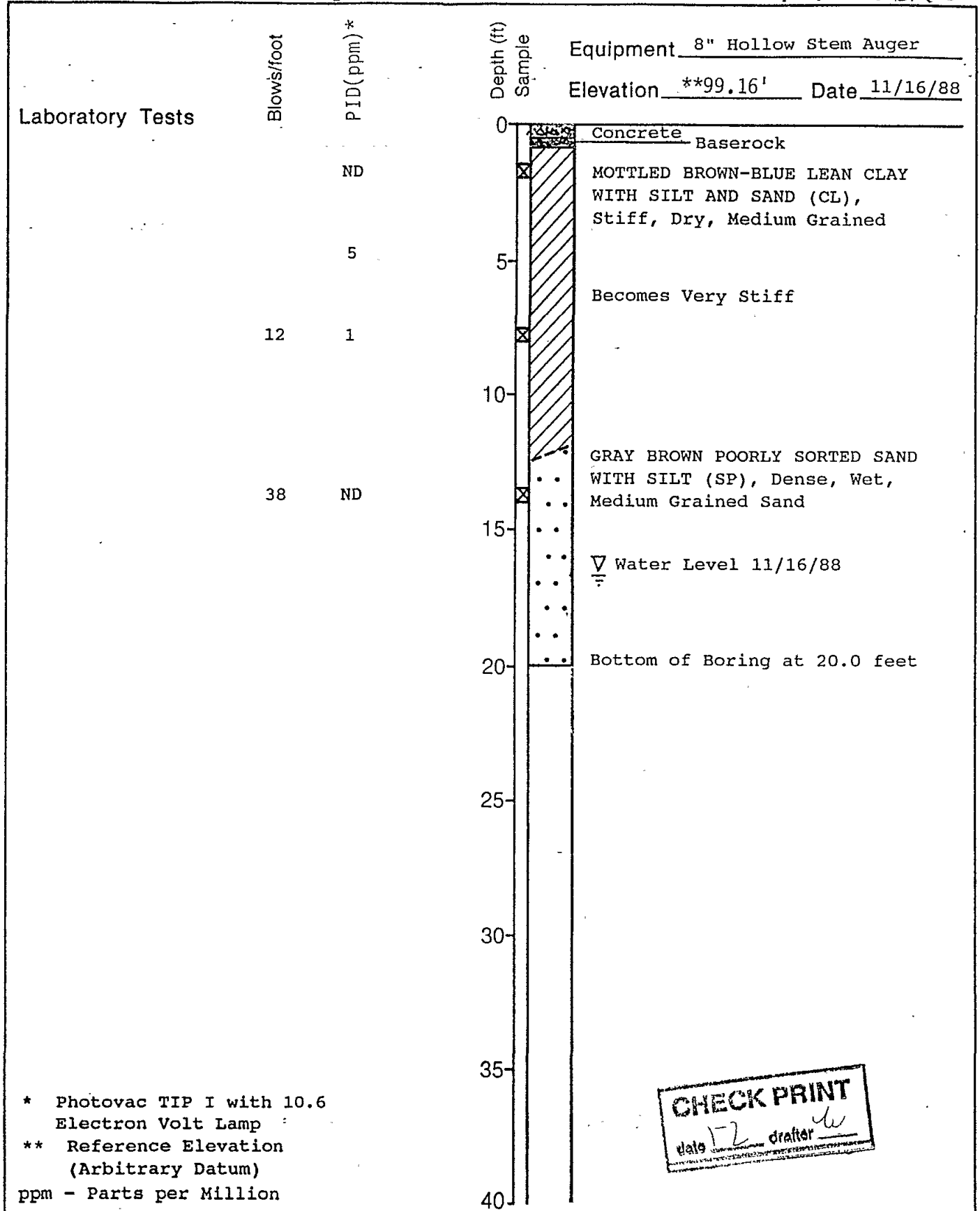
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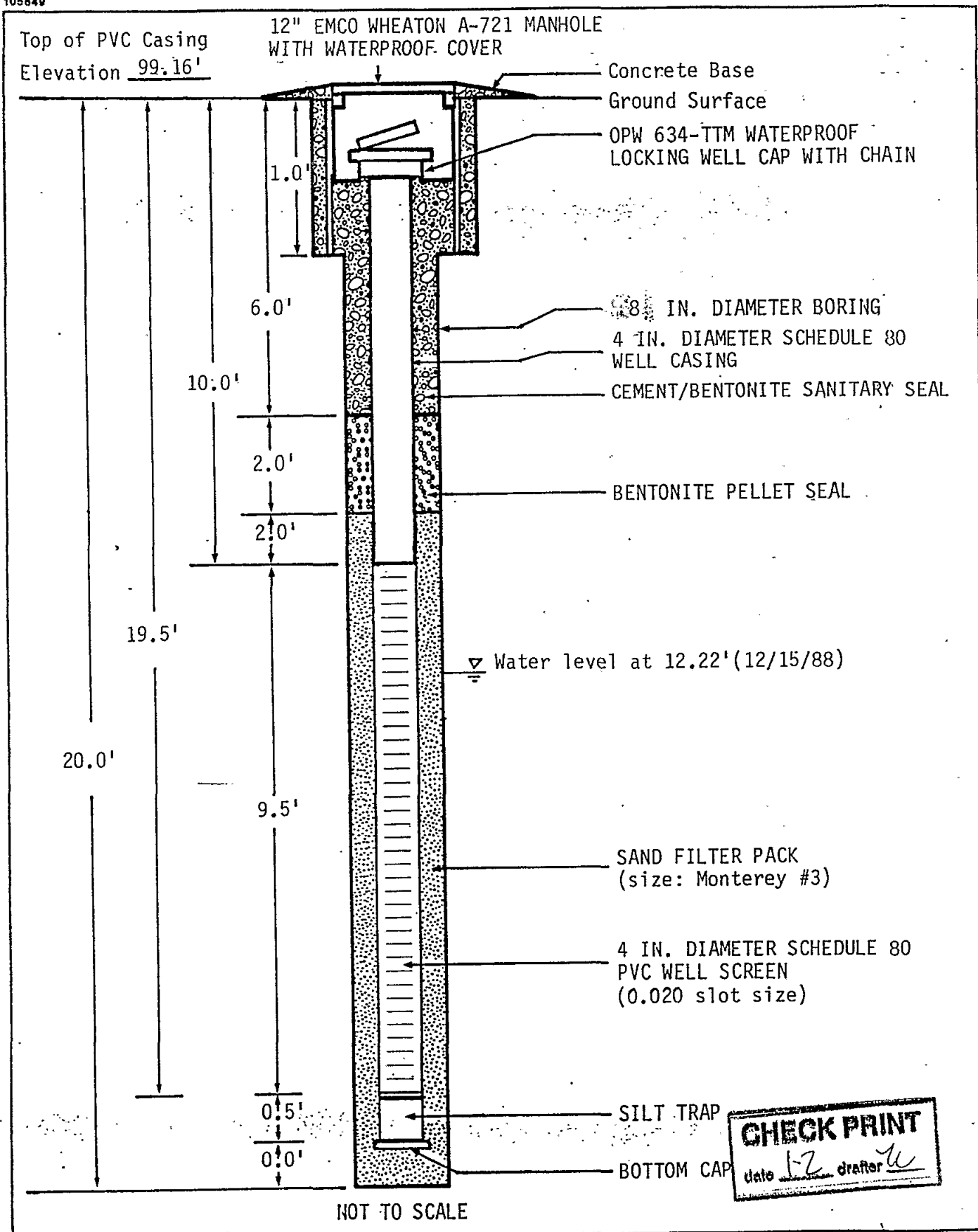


**Harding Lawson Associates**  
 Engineers and Geoscientists

**Log of Boring MW-6G**  
 2225 Telegraph Avenue  
 Oakland, California

PLATE

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|-------------|---------------------------|----------|---------------|---------|------|
| DRAWN<br>YC | JOB NUMBER<br>2251,080.03 | APPROVED | DATE<br>12/88 | REVISED | DATE |
|-------------|---------------------------|----------|---------------|---------|------|



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Engineers and Geoscientists

**Monitoring Well MW-6G - Construction Detail**  
2225 Telegraph Avenue  
Oakland, California

PLATE

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JOB NUMBER  
2251,080.03

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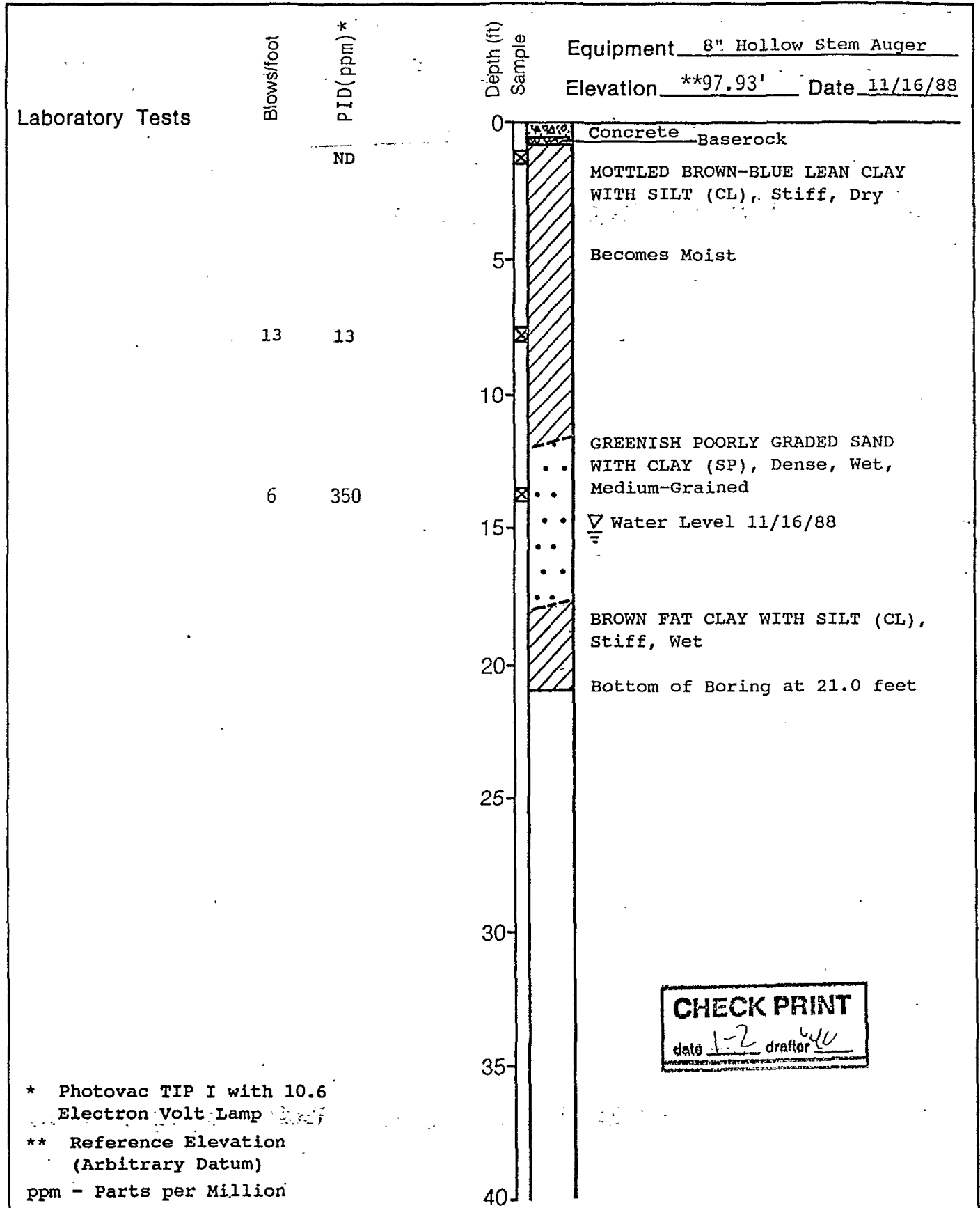
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DATE

01-4205

15/40-26K9



**Harding Lawson Associates**  
Engineers and Geoscientists

**Log of Boring MW-6H**  
2225 Telegraph Avenue  
Oakland, California

PLATE

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YC

JOB NUMBER  
2251,080.03

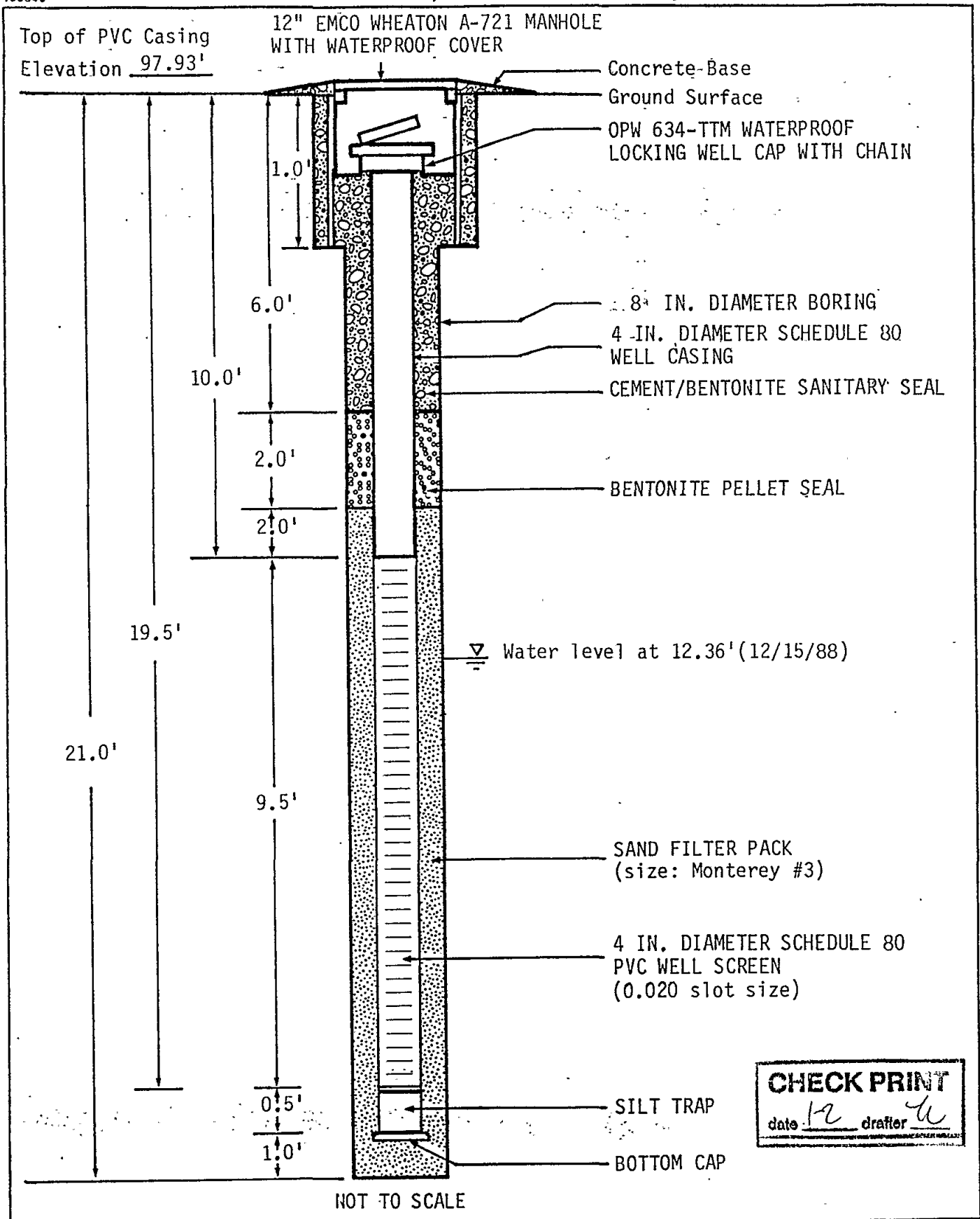
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**Harding Lawson Associates**  
Engineers and Geoscientists

### Monitoring Well MW-6H - Construction Detail

2225 Telegraph Avenue  
Oakland, California

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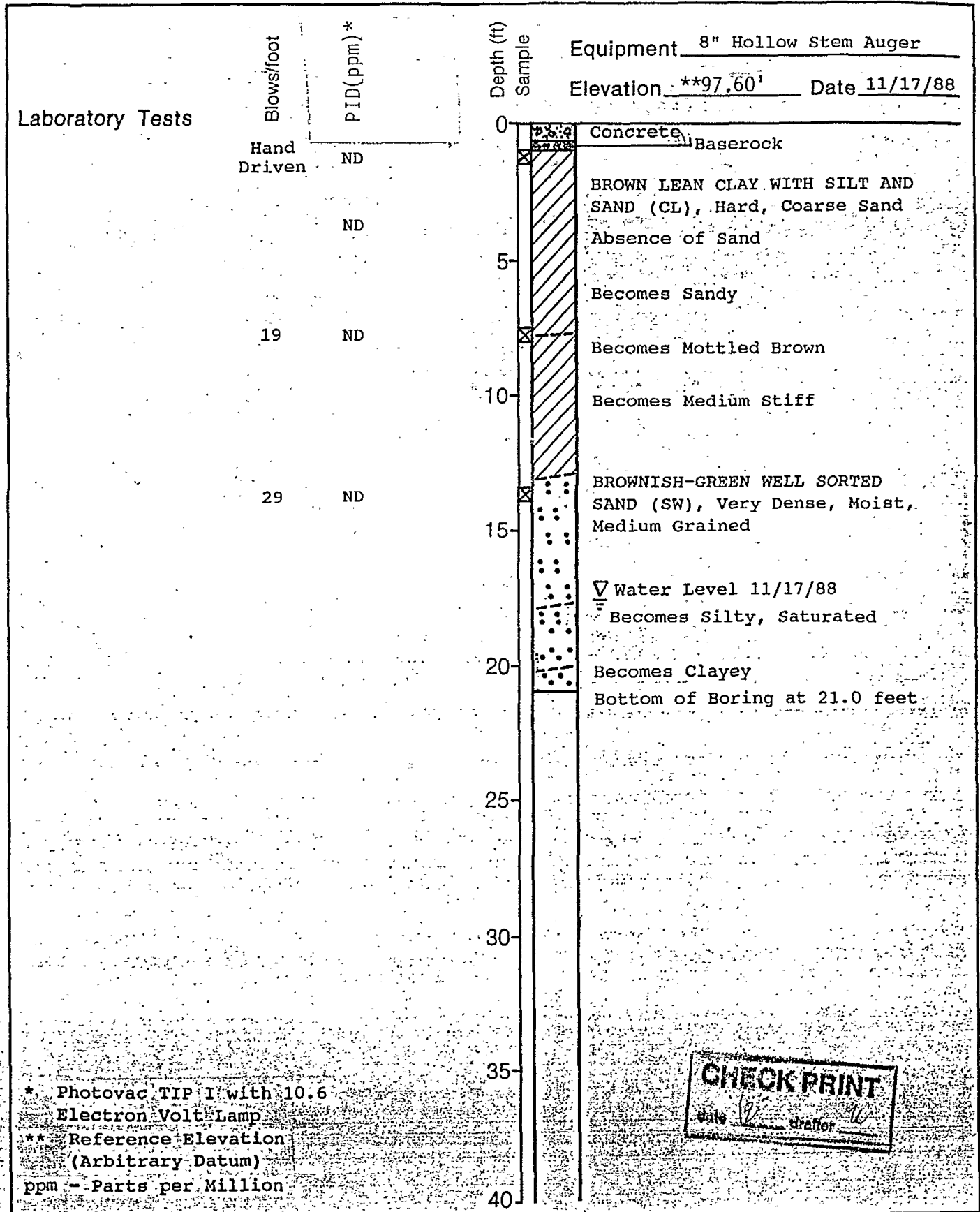
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DATE

01-420K

15/4W-26K10



**Harding Lawson Associates**  
 Engineers and Geoscientists

**Log of Boring MW-61**  
 2225 Telegraph Avenue  
 Oakland, California

PLATE

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JOB NUMBER  
 2251,080.03

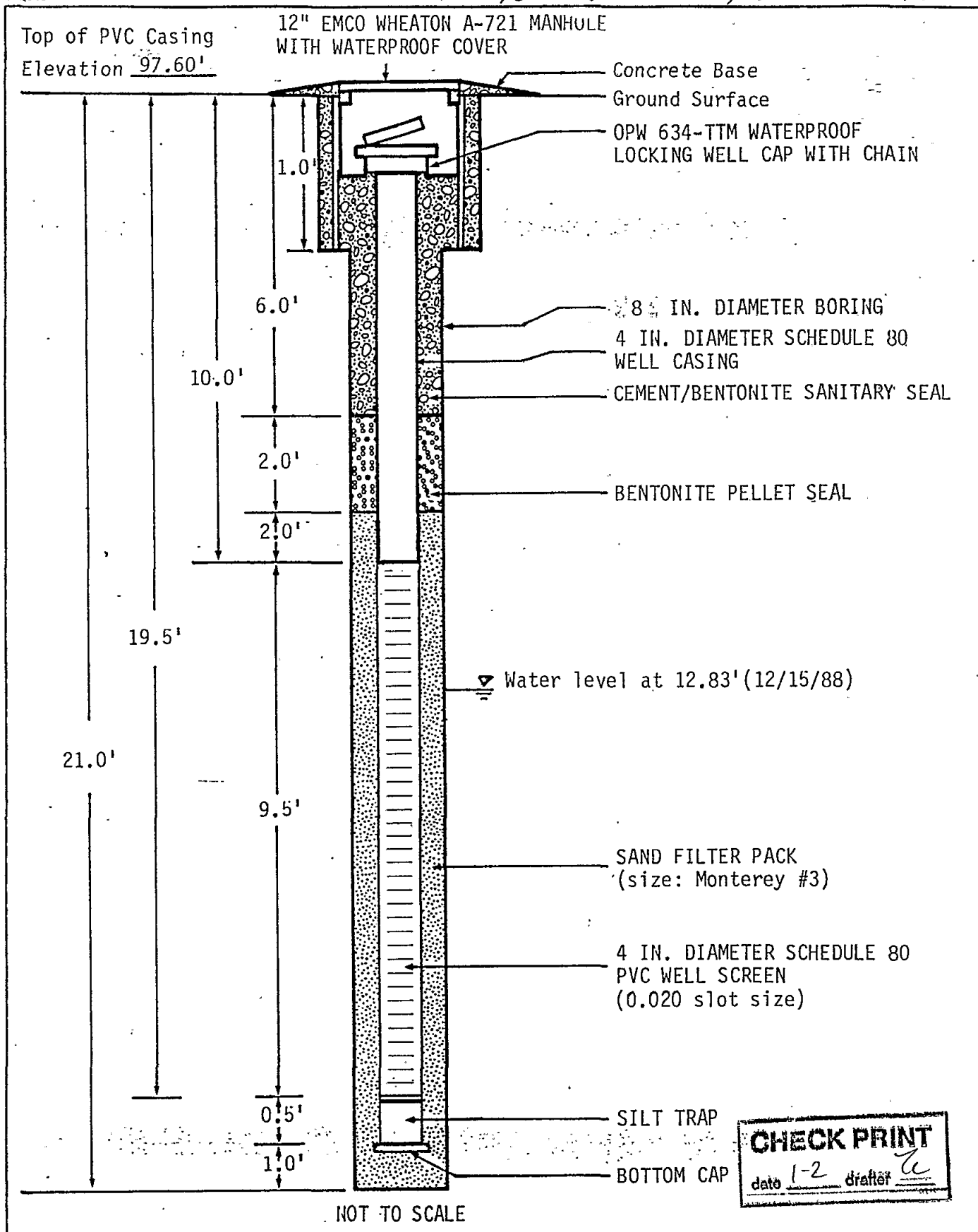
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 12/88

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DATE

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Engineers and Geoscientists

**Monitoring Well MW-61 - Construction Detail**  
2225 Telegraph Avenue  
Oakland, California

PLATE

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JOB NUMBER

APPROVED

DATE

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DATE

YC

2251,080.03

12/88

**CONFIDENTIAL**

STATE OF CALIFORNIA DWR  
WELL COMPLETION REPORT  
(WELL LOGS)

**REMOVED**

Treatment compound

SG-5

SG-6










MW-6 I

B-4

SG-4

SG-3

### EXPLANATION

-  GROUNDWATER MONITORING WELL
-  GROUNDWATER RECOVERY/VAPOR EXTRACTION WELL
-  DECOMMISSIONED RECOVERY WELL (11/5/91)
-  SOIL BORING LOCATION
-  SOIL-GAS PROBE LOCATION
-  SOIL SAMPLE LOCATION, HAND AUGER
-  DECOMMISSIONED OBSERVATION WELL OR MONITORING WELL
-  VAPOR EXTRACTION WELL
-  HLA DATUM, ARBITRARILY SET AT 100 FEET

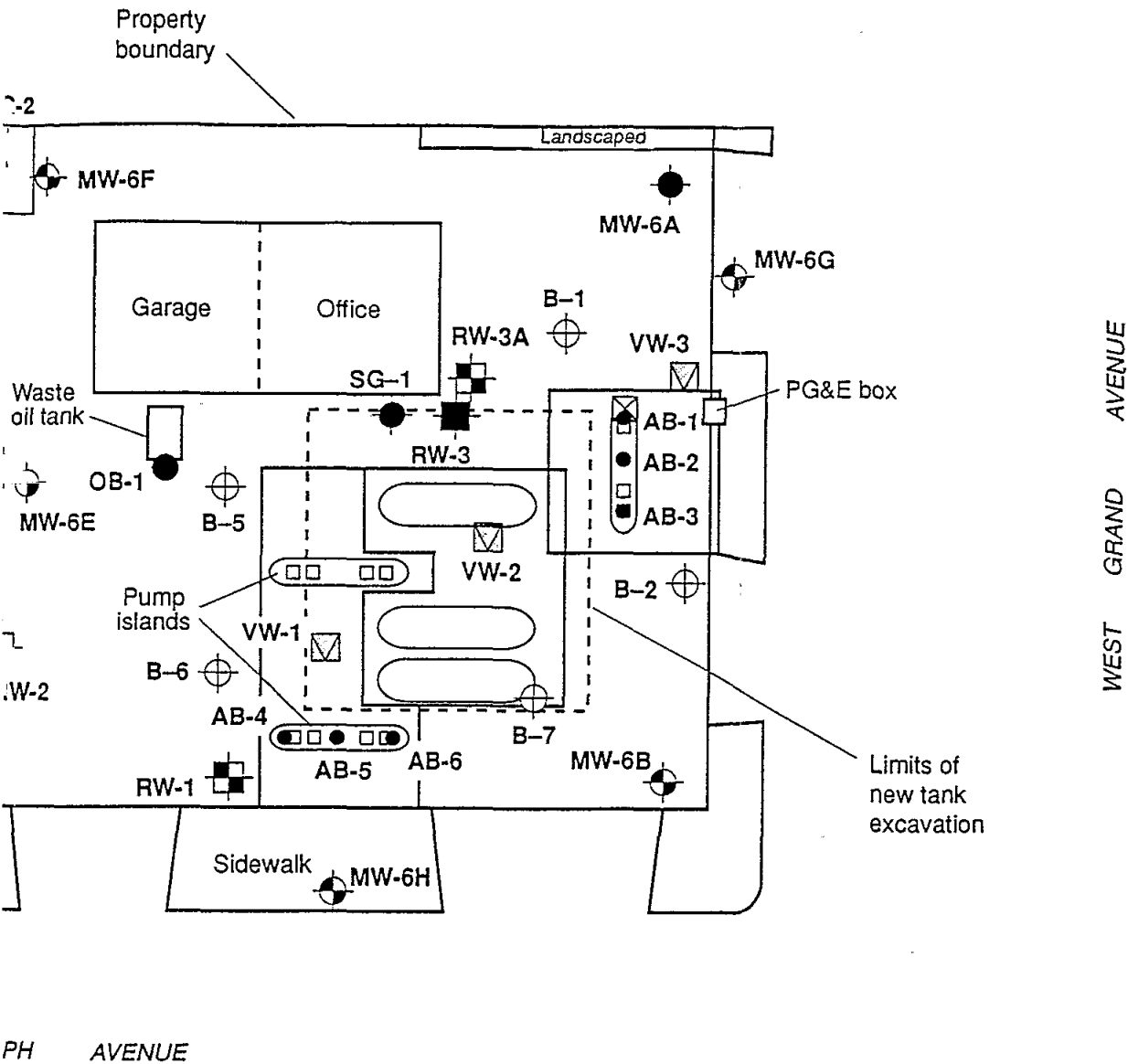
TELEGRA

NOTE :  
RW-1 PREVIOUSLY B-3  
RW-2 PREVIOUSLY MW-6D  
RW-3 PREVIOUSLY MW-6C

0 30 60  
SCALE IN FEET



372268



*Jeanna Hudson*  
**Harding Lawson Associates**  
 Engineering and  
 Environmental Services  
 687-9660

**Site Plan**  
 Exxon Service Station  
 2225 Telegraph Avenue  
 Oakland, California

PLATE

**3**

DRAWN S. Patel  
 JOB NUMBER 2251,162.03

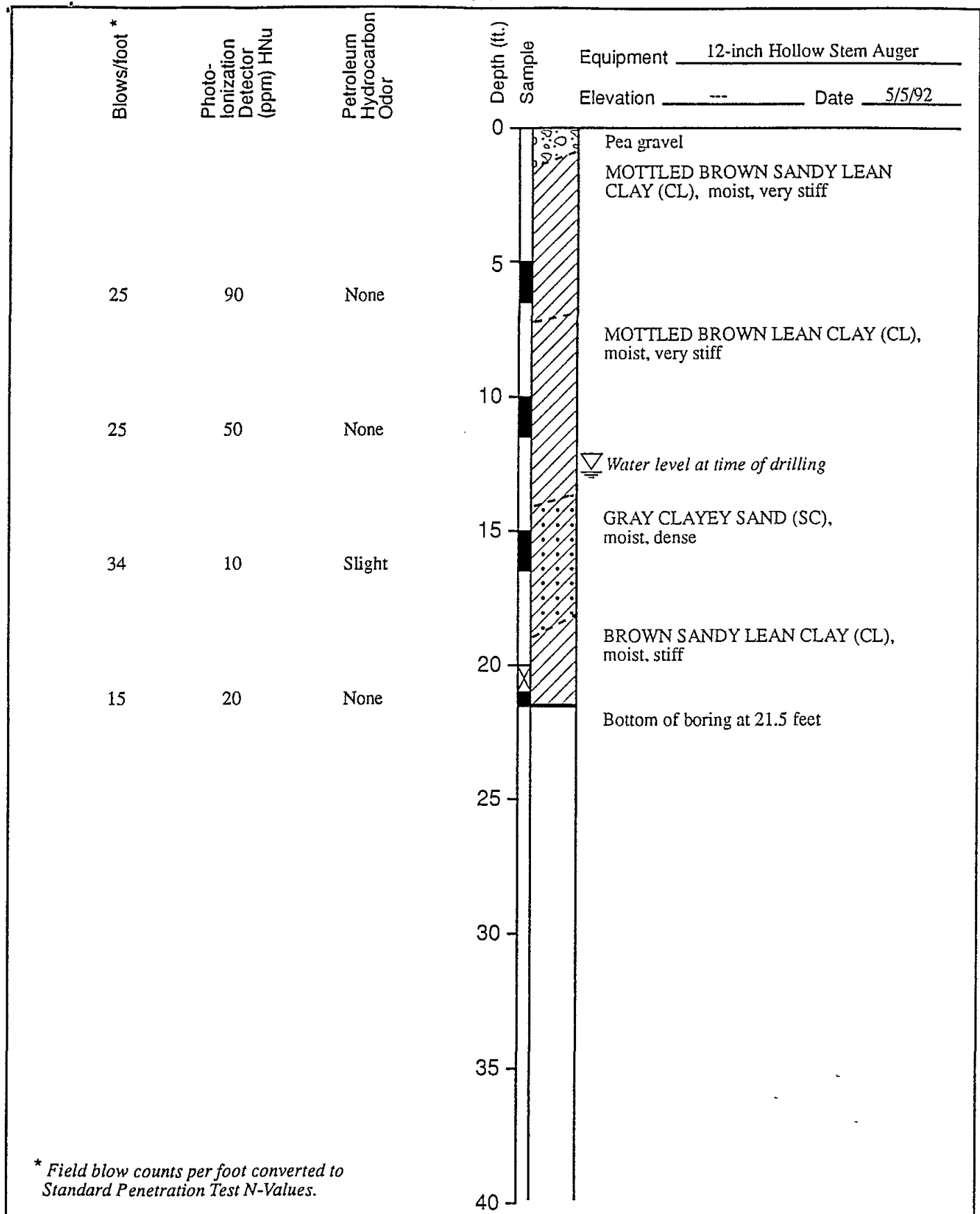
APPROVED

DATE 05/19/92

REVISED DATE

372268

015 04W 26 K11



**Harding Lawson Associates**  
Engineering and  
Environmental Services

**Log of Boring RW-3A**  
Exxon Service Station  
2225 Telegraph Avenue  
Oakland, California

PLATE

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RHC

JOB NUMBER  
2251,162.03

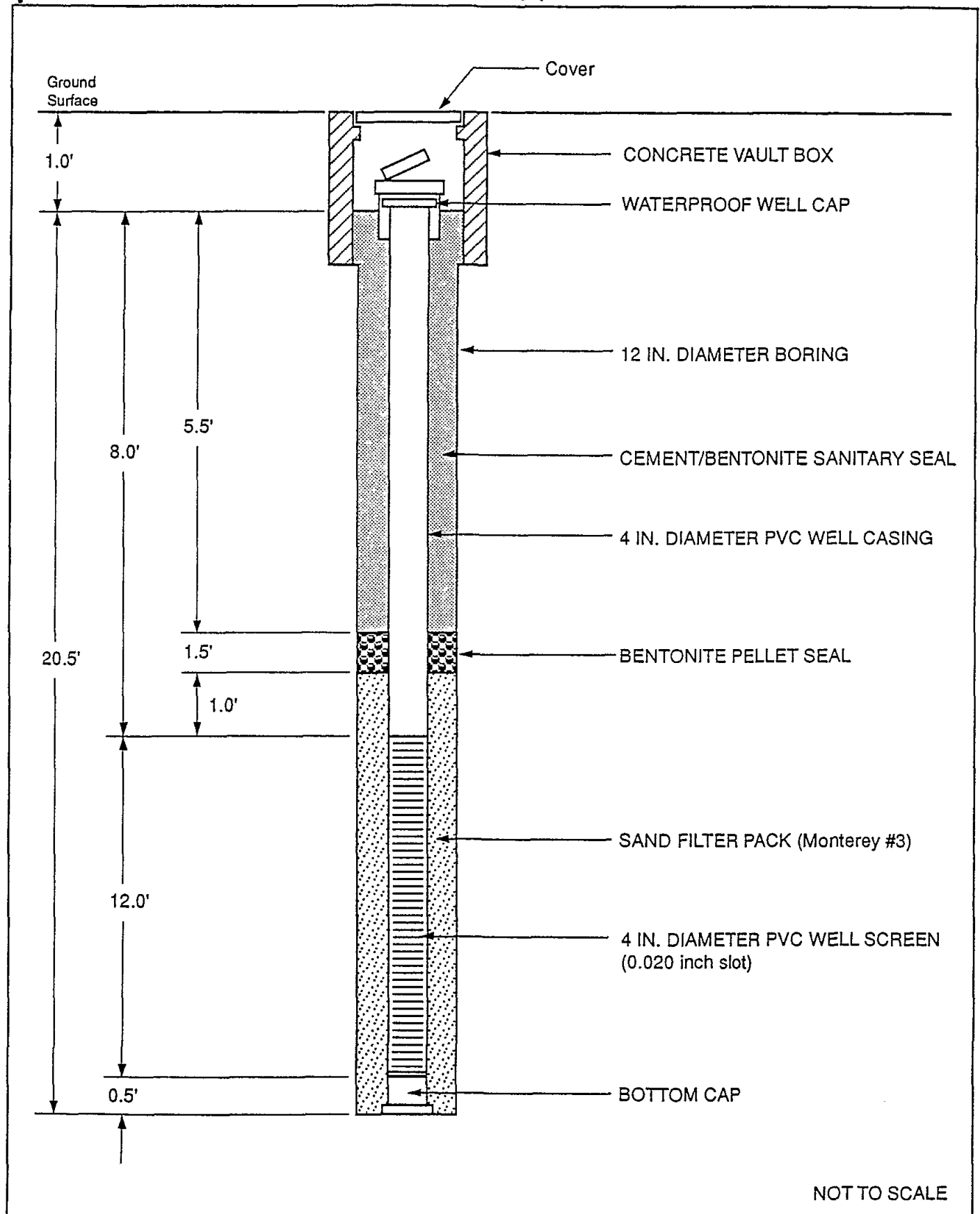
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5/20/92

REVISED DATE

372268

OLS 04W 26K11



**Harding Lawson Associates**  
Engineering and  
Environmental Services

DRAWN S. Patel  
JOB NUMBER 2251,162.03

**Well Completion Diagram RW-3A**  
Exxon Service Station  
2225 Telegraph Avenue  
Oakland, California

APPROVED

DATE

05/11/92

REVISED DATE

PLATE

4

**CONFIDENTIAL**

STATE OF CALIFORNIA DWR  
WELL COMPLETION REPORT  
(WELL LOGS)

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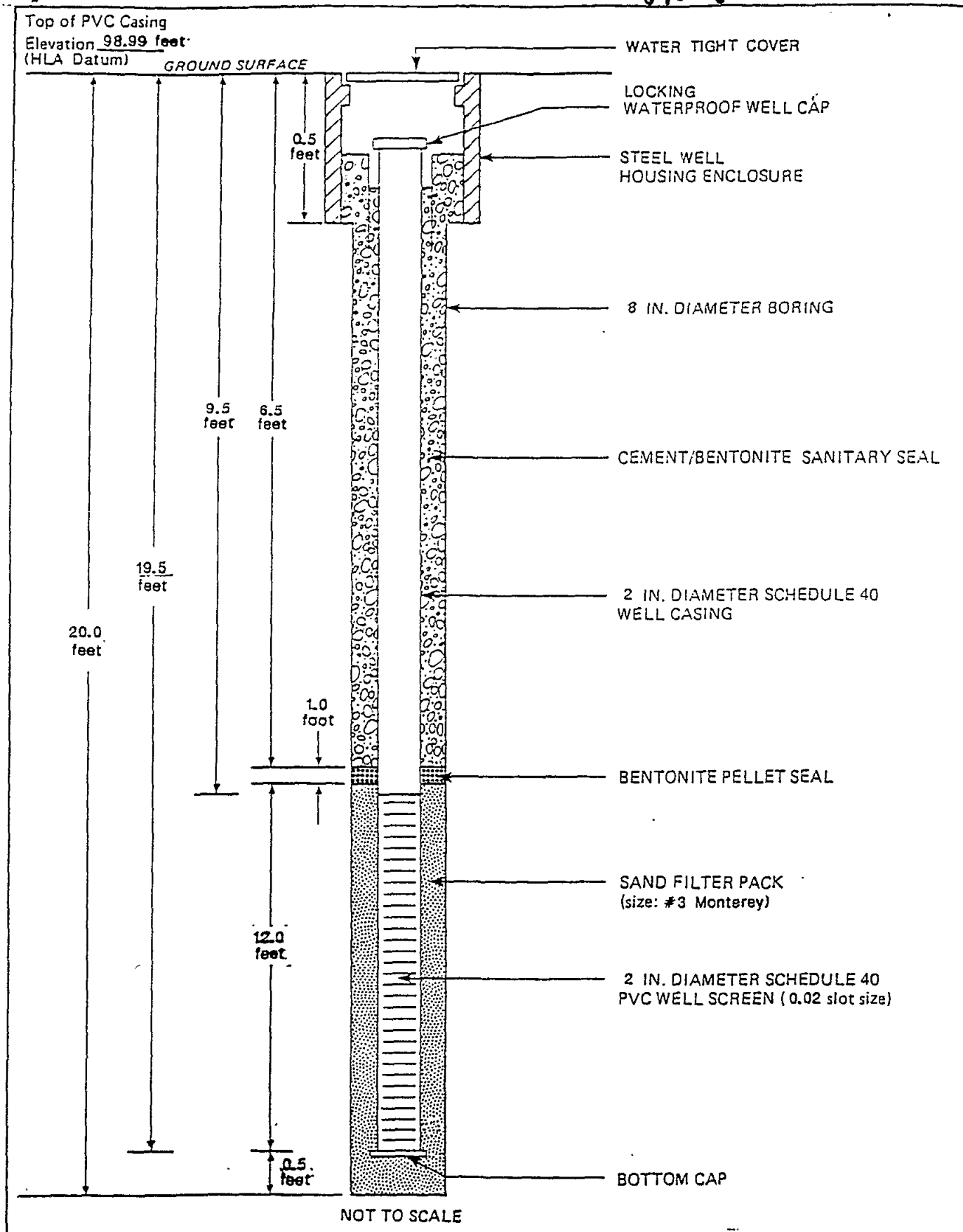
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STATE OF CALIFORNIA DWR  
WELL COMPLETION REPORT  
(WELL LOGS)

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OIS 04N 26K12



**Harding Lawson Associates**  
Engineers, Geologists  
& Geophysicists

**Monitoring Well MW-6A**  
**Completion Detail**  
Texaco Station - 62488000195  
2225 Telegraph Avenue  
Oakland, California

PLATE

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2251,080.03

APPROVED

JO

DATE

2/89

REVISED

DATE

FORM GW3

Well No. 1 - At 22nd and Grove Streets.

100 ft. of 15" surface casing.

16 ft. Gal. Starter

13 ft. of perforator (900)

|                        |              |
|------------------------|--------------|
| Filled in ground ..... | 8            |
| Yellow Sand .....      | 11-19        |
| Blue Clay.....         | 14-33        |
| Yellow Clay.....       | 7-40         |
| Yellow Cement.....     | 43-83        |
| Yellow Clay.....       | 76-166       |
| Yellow Sand Clay.....  | 6-172        |
| Sand & Gravel.....     | 4-176        |
| Gravel.....            | 3-184        |
| Yellow Clay.....       | 4-192        |
| Sand & Gravel.....     | 4-198        |
| Yellow Clay.....       | 197-210 1/2" |

Tools measured up by L. B. Russell

Water table.....53 ft.  
 Water table pumping 1200 gals. per  
 hour - 30 ft.

McCULLEY, FRICK & GILMAN, INC.

CONSULTING  
HYDROLOGISTS  
AND GEOLOGISTS

01-845

5 THIRD STREET, SUITE 918  
SAN FRANCISCO, CA 94103  
(415) 495-7110  
FAX (415) 495-7107

December 9, 1988  
(Project No. 88-2051)

Mr. Bob Eagan  
R.S. Eagan & Company  
150-k Mason Circle  
Concord, California 94520

Subject: Lithologic Logs and Construction Details for  
Monitoring Wells at U.S. Postal Service Facilities  
Northern California

Dear Bob:

McCulley, Frick & Gilman, Inc. (MFG) is pleased to enclose the lithologic logs and well construction details for the monitoring wells at eight U. S. Postal Service facilities in northern California. The observation of the well construction and furnishing of these materials are considered to be our initial assignment discussed in our proposal to you, dated September 30, 1988. The eight facilities are:

Richmond, 2501 Rydin Road  
Richmond, 2100 Chanslor Avenue  
San Rafael, 40 Bellam Boulevard  
Hayward, 24438 Santa Clara Street  
Concord, 2121 Meridian Park Boulevard  
Modesto, 715 Kearney Avenue  
Oakland, 577 West Grand Avenue  
Menlo Park, 3875 Bohannon Drive

The drilling of borings and installation of monitoring wells was performed during the period of October 4 through 13, 1988. This work was observed by Ms. Diane De Lillio, Staff Geologist of MFG. The geologic logging and specification for well installation performed by Ms. De Lillio was supervised by Mr. Jeffrey A. Gilman, Senior Hydrogeologist of MFG and a Certified Engineering Geologist in California. The drilling was performed by Kvilhaug Well Drilling, who was hired directly by you.

The lithologic logs and well construction details are furnished on the standard MFG field forms, as agreed in our September 30, 1988 proposal. A table that summarizes the well construction details for the 13 saturated zone monitoring wells (prefix of "MW-") and nine (9) vadose zone monitoring wells (prefix of "V-") is also enclosed. We have also provided a list of abbreviations used on the lithologic logs and the symbols used for the well construction details.

Lic # 482390

OTHER OFFICES IN BOULDER, COLORADO AND AUSTIN, TEXAS



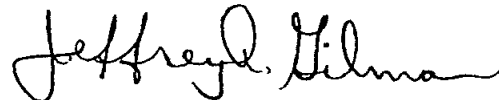
15/4W-26 L2  
01-845

Mr. Bob Eagan  
R.S. Eagan & Company  
December 9, 1988  
Page 2

All wells were constructed with two-inch diameter, flush threaded, schedule 40 polyvinyl chloride (PVC) casing supplied by Diversified Well Products, Inc. The top of each well was fitted with a two-inch PVC slip cap. The bottom of all wells except V-9, V-10, MW-20 and MW-21 was fitted with a two-inch PVC slip cap that was secured to the well casing using stainless steel screws. The bottom of wells V-9, V-10, MW-20 and MW-21 was fitted with a two-inch PVC threaded end plug.

We appreciate the opportunity to provide consulting services to you. Please call the undersigned at (415) 495-7110 if you have any questions.

Sincerely yours,



Jeffrey A. Gilman, C.E.G.  
Vice President and  
Senior Hydrogeologist

Enclosures

eaganrpt.doc

McCULLY, FRICK & GILMAN, INC.

CONSULTING  
HYDROLOGISTS  
AND GEOLOGISTS

5 THIRD STREET, SUITE 916  
SAN FRANCISCO, CA 94103  
(415) 495-7110  
FAX (415) 495-7107

15/4W-26 L2  
01-045

SUMMARY OF WELL CONSTRUCTION DETAILS

U.S. Postal Service Sites  
Northern California

| <u>Site</u>                 | <u>Well No.</u> <sup>1</sup> | <u>Total Depth</u><br>(feet bgl) | <u>Screened Interval</u><br>(feet bgl) |
|-----------------------------|------------------------------|----------------------------------|--|
| Richmond<br>(Rydin Rd.)     | MW-1 *                       | 25                               | 8 - 25                                 |
|                             | MW-2                         | 13                               | 8 - 13                                 |
| Richmond<br>(Chanslor Ave.) | MW-3                         | 16.5                             | 9.5 - 16.5                             |
| San Rafael                  | V-5                          | 12.5                             | 7.5 - 12.5                             |
|                             | V-6 *                        | boring only                      | boring only                            |
|                             | V-7                          | 10                               | 6 - 10                                 |
|                             | V-8                          | 10                               | 6 - 10                                 |
|                             | V-9                          | 10                               | 3.5 - 9.5                              |
|                             | V-10                         | 10                               | 4.0 - 9.5                              |
| Hayward                     | MW-11                        | 46.5                             | 32.5 - 46.5                            |
|                             | V-12                         | 14                               | 9 - 14                                 |
|                             | V-13                         | 14                               | 9 - 14                                 |
|                             | MW-14                        | 46                               | 30 - 46                                |
|                             | MW-15                        | 46                               | 30 - 46                                |
| Concord                     | MW-16 *                      | 15.5                             | 7.5 - 15.5                             |
| Modesto                     | V-17                         | 13                               | 6.5 - 13.0                             |
|                             | V-18                         | 13.5                             | 7.0 - 13.5                             |
|                             | MW-19                        | 62                               | 47 - 62                                |
|                             | MW-20                        | 63                               | 42.5 - 62.5                            |
|                             | MW-21                        | 64.5                             | 44 - 64                                |
| Oakland                     | MW-22                        | 26.5                             | 11.5 - 26.5                            |
| Menlo Park                  | MW-23                        | 24                               | 7.5 - 24.0                             |
|                             | MW-24                        | 24.5                             | 8.0 - 24.5                             |

<sup>1</sup> "MW-" prefix indicates monitoring well completed in saturated zone. "V" prefix indicates vadose zone well completed in fill material.

\* Strong petroleum product odor or free product observed during drilling.

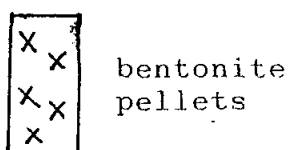
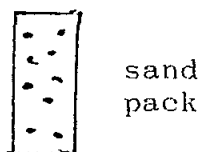
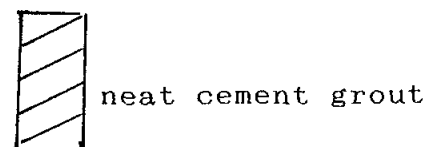
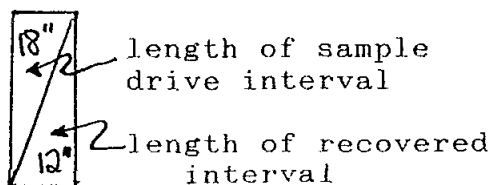
LIST OF ABBREVIATIONS USED IN LITHOLOGIC LOGS  
U.S. POSTAL SERVICE MONITORING WELLS  
Northern California

| <u>color</u> |        | <u>size</u> |        | <u>lithology</u> |          |
|--------------|--------|-------------|--------|------------------|----------|
| dk           | dark   | sm          | small  | cly              | clayey   |
| lt           | light  | fn          | fine   | slty             | silty    |
| gry          | gray   | md          | medium | calc             | calcite  |
| brn          | brown  |             |        | stng             | staining |
| yel          | yellow |             |        |                  |          |
| ol           | olive  |             |        |                  |          |

miscellaneous

|     |                    |
|-----|--------------------|
| grn | grained            |
| sat | saturated          |
| aa  | as above           |
| tr  | trace              |
| v   | very               |
| mod | moderately         |
| sli | slightly           |
| bgl | below ground level |
| cmt | cement             |

EXPLANATION OF SYMBOLS USED ON WELL CONSTRUCTION DETAILS  
U.S. POSTAL SERVICE MONITORING WELLS  
Northern California



# McCulley, Frick & Gilman, Inc.

PROJECT NAME

US Postal Service NO. 88-2051

15/4W-2642  
01-045

|  |                              |   |               |
|--|------------------------------|---|---------------|
| BORING LOCATION<br>11 SPS - 1000 - 1000 - 1000, CA |                              | ELEVATION AND DATUM                               |               |
| DRILLING AGENCY<br>Kulhava                         | DRILLER<br>Bill Bruner       | DATE STARTED<br>DATE FINISHED 10-12-88 / 11-13-88 |               |
| DRILLING EQUIPMENT<br>Hollow Stem Auger            |                              | COMPLETION DEPTH<br>26.5' (well)                  | SAMPLER       |
| DRILLING METHOD<br>Hollow Stem Auger               | DRILL BIT<br>1 1/2" ID 7" OD | NO. OF SAMPLES                                    | DIST. /       |
| SIZE AND TYPE OF CASING<br>2" Diameter 26' PVC     | WATER ELEV.                  | FIRST   | COMPL. 24 HRS |
| TYPE OF PERFORATION<br>0.020" slot                 | FROM 26.5 TO 11.5 FT.        | LOGGED BY<br>D. Delillo                           |               |
| SIZE AND TYPE OF PACK<br>Cemented #2 Sand          | FROM 25 TO 8.5 FT.           | CHECKED BY:<br>J. Gilman                          |               |
| TYPE OF SEAL<br>Neoprene Packings                  | FROM 0 TO 1.5 FT.            | CEG #1375   |               |

| DEPTH (FEET) | DESCRIPTION  | GRAPHIC LOG |                         |               |                 | SAMPLES  |            |                                   | REMARKS<br>(Drill Rate, Fluid loss, Odor, etc.) |
|--------------|--|-------------|-------------------------|---------------|-----------------|----------|------------|-----------------------------------|---|
|              |  | Lithology   | Piezometer Installation | Water Content | Piezometer Data | Type No. | Recon. It. | Penetration Resist. (Blows/6 in.) |   |
| 0            | Asphalt at surface, underlain by concrete slab   |             |                         |               |                 |          |            |                                   |   |
| 1            |  |             |                         |               |                 |          |            |                                   |   |
| 2            |  |             |                         |               |                 |          |            |                                   |   |
| 3            |  |             |                         |               |                 |          |            |                                   |   |
| 4            |  |             |                         |               |                 |          |            |                                   |   |
| 5            | Sand, clay: ol brn (2.5% 4/4), silty, mod plastic, damp to wet, 10% moisture, thin nodules. Grades to silty clay | CL          | X                       | X             |                 | 16"      |            | 5                                 |   |
| 6            |  |             | X                       | X             |                 | 14"      |            | 8                                 |   |
| 7            |  |             | X                       | X             |                 |          |            | 18                                |   |
| 8            |  |             | X                       | X             |                 |          |            |                                   |   |
| 9            |  |             |                         |               |                 |          |            |                                   |   |
| 10           | Silt sand, medium to coarse, mod. damp   | SM          |                         |               |                 | 18"      |            | 25                                |   |
| 11           |  |             |                         |               |                 | 12"      |            | 25                                |   |
| 12           | Silt sand, medium to coarse, mod. damp   | SM          |                         |               |                 | 18"      |            | 50                                |   |
| 13           |  |             |                         |               |                 | 18"      |            |                                   |   |
| 14           |  |             |                         |               |                 | 18"      |            |                                   |   |

Sample 22-1-2 collected + preserved for lab analysis (12.5' - 13.0')

| DEPTH<br>(FEET) | DESCRIPTION  | GRAPHIC LOG |                            | Water<br>Content | Penetrometer<br>Data | SAMPLES |          |                                       | REMARKS<br>(Drill Rate, Fluid loss, Odor, etc.) |
|-----------------|--|-------------|----------------------------|------------------|----------------------|---------|----------|---------------------------------------|---|
|                 |  | Lithology   | Piezometer<br>Installation |                  |                      | Type No | Recon II | Penetria<br>Result<br>(Blow)<br>6 in. |   |
| 15              | silty sand; lt ol brn (2.5Y 5/6),<br>fin-md grn, wet-sat.  | SM          |                            |                  |                      | 12"     |          | 38                                    |   |
| 16              |  |             |                            |                  |                      | 7"      |          | 50                                    |   |
| 17              |  |             |                            |                  |                      |         |          |                                       |   |
| 18              |  |             |                            |                  |                      |         |          |                                       |   |
| 19              |  |             |                            |                  |                      |         |          |                                       |   |
| 20              | Upper 6": silty sand; lt ol brn<br>(2.5Y 5/4), fin-md grn, sat.  | SM          |                            |                  |                      | 12"     |          | 35                                    |   |
| 21              | Lower 6": sand; lt ol brn (2.5Y<br>5/4), fin-md grn, sat.  | SP          |                            |                  |                      | 12"     |          | 50                                    |   |
| 22              |  |             |                            |                  |                      |         |          |                                       |   |
| 23              |  |             |                            |                  |                      |         |          |                                       |   |
| 24              |  |             |                            |                  |                      |         |          |                                       |   |
| 25              | Upper 4": silty sand; gry brn<br>(2.5Y 5/2), clay, fin grn, sat.   | SM          |                            |                  |                      | 18"     |          | 12                                    |   |
| 26              | Lower 8": silty clay; gry brn<br>(2.5Y 5/2) mottled,<br>mod plastic, some iron staining,<br>moist. Grades into silty sand<br>w/ tr sand. | CL          |                            |                  |                      |         |          | 15                                    |   |
| 27              |  | SM          |                            |                  |                      | 12"     |          | 17                                    |   |
| 28              |  |             |                            |                  |                      |         |          |                                       |   |
| 29              |  |             |                            |                  |                      |         |          |                                       |   |
| 30              | silty clay; gry (2.5Y 4.5/), v.<br>stiff, mod. highly plastic, moist,<br>+ sand.   | CL          |                            |                  |                      | 12"     |          | 35                                    |   |
| 31              |  |             |                            |                  |                      | 10"     |          | 50                                    |   |
| 32              | Bottom of Boring at 30 ft.   |             |                            |                  |                      |         |          |                                       |   |

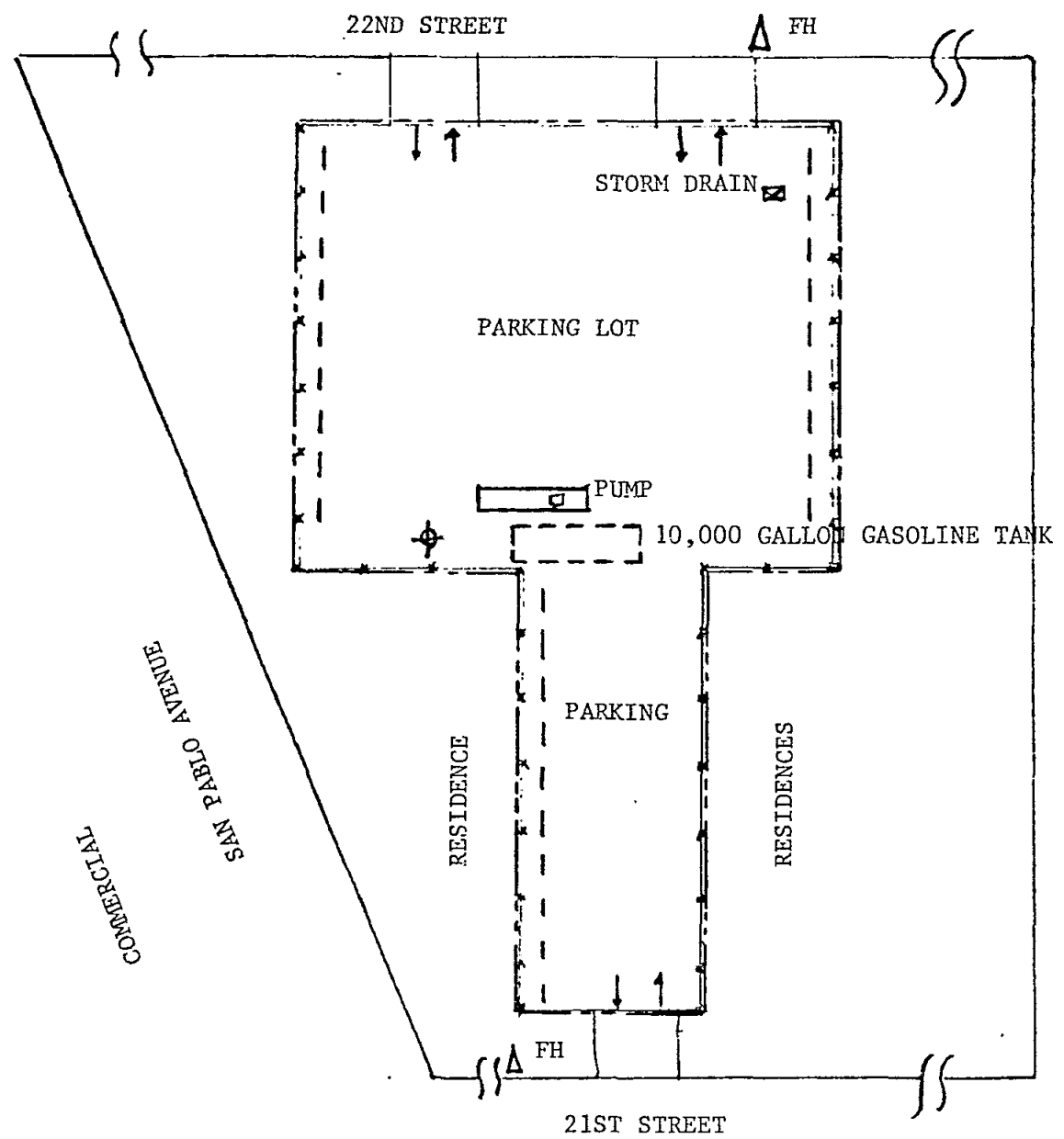
01-845

15/4W-26 L2

RESIDENTIAL/  
COMMERCIAL

577 West Grand Avenue  
U.S. Postal Services  
Carrier Annex

COMMERCIAL



VICINITY AND  
FACILITY STORAGE MAP  
SCALE: 1" = 40'

**CONFIDENTIAL**

STATE OF CALIFORNIA DWR  
WELL COMPLETION REPORT  
(WELL LOGS)

**REMOVED**

**CONFIDENTIAL**

STATE OF CALIFORNIA DWR  
WELL COMPLETION REPORT  
(WELL LOGS)

**REMOVED**



**CONFIDENTIAL**

STATE OF CALIFORNIA DWR  
WELL COMPLETION REPORT  
(WELL LOGS)

**REMOVED**

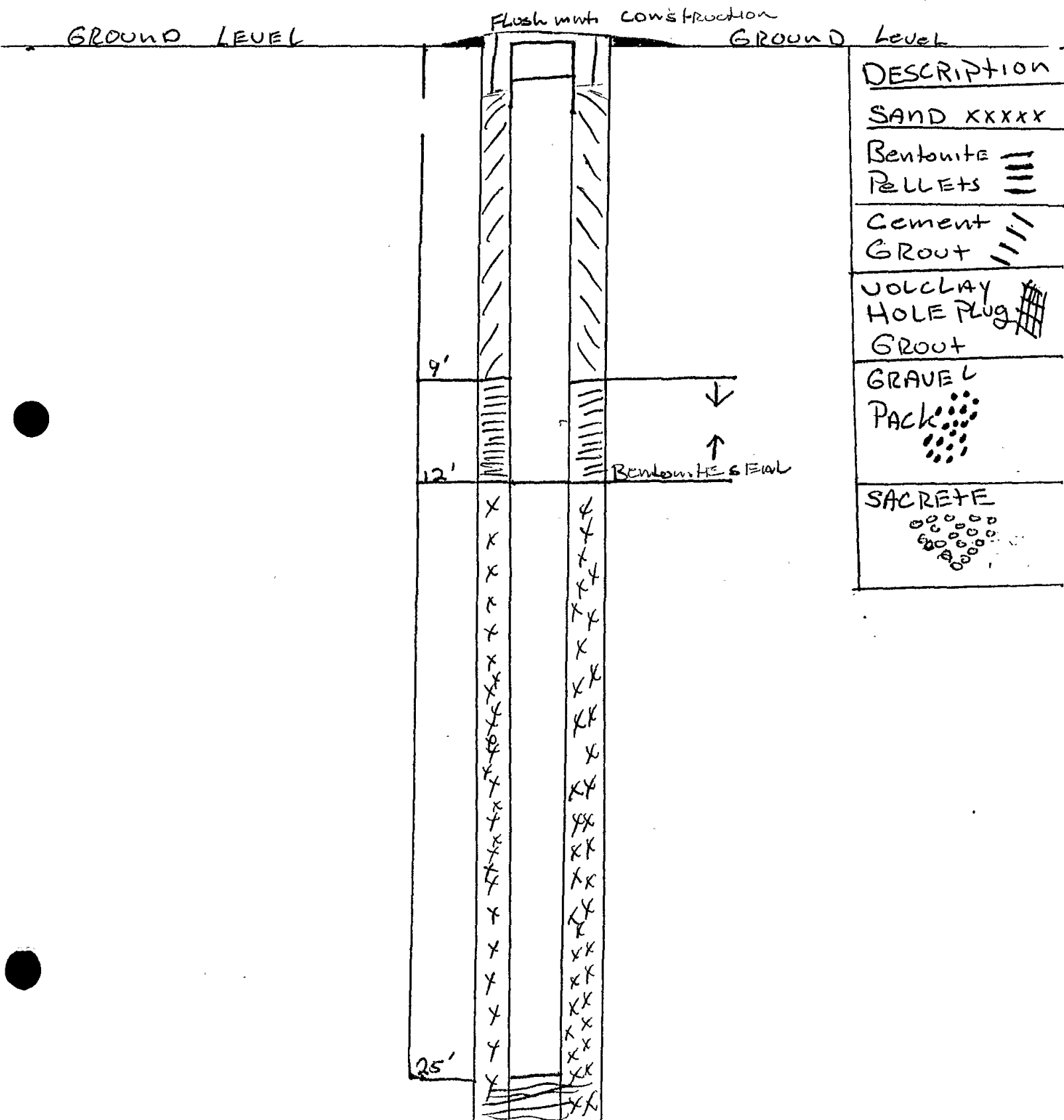
**CONFIDENTIAL**

STATE OF CALIFORNIA DWR  
WELL COMPLETION REPORT  
(WELL LOGS)

**REMOVED**



|                                |            |           |            |
|--------------------------------|------------|-----------|------------|
| GRAVEL PACK - SIZE -           | SCREEN     | Stainless | 277621     |
| HOLE PLUG -                    | SIZE -     | SIZE      | P.V.C      |
| TYPE OF SAND NO. 2/12 OR SIZE  | SLOT -     | SLOT -    | SIZE - 2"  |
| TYPE II                        | RISER -    | "         | RISER - 2" |
| TYPE OF Cement & Bentonite %05 |            |           |            |
| 10CLAY GROUT -                 |            |           |            |
| Bentonite PELLETS SIZE - 1/4   | SACRETE LB |           | 15/4W26 Q3 |



88096

FIELD MEMORANDUM

INV ✓  
AD ✓

01-341  
KCIS - 277621  
15/4W26QX 3 FYI

| ACTION         |                      | INFO                    |
|----------------|----------------------|-------------------------|
| To: Jim Curtis | D. Blamer<br>P. Neff | File: 12606-016-038 RNS |
|                |                      | X-Ref:                  |
|                |                      | Date: March 4, 1988     |

From: C. Toyn

Reply Required By:

Subject: Monitoring Well Information Sheet For Carter Hawley Hale Oakland, CA

Reference(s):

Well No. 1

Installation date 3.4.88

Total depth of boring 26'

Diameter of borehole 8"

Depth to top of saturated zone ~18'

Construction materials:

15 ft. of 2" dia., Sch. 40 PVC pipe

10 ft. of PVC screen, 0.10 slot size

4 bags of sand (2/12 Monterey)

1 bags of bentonite

2 bags of cement

other \_\_\_\_\_

Well development:

method of development bailed

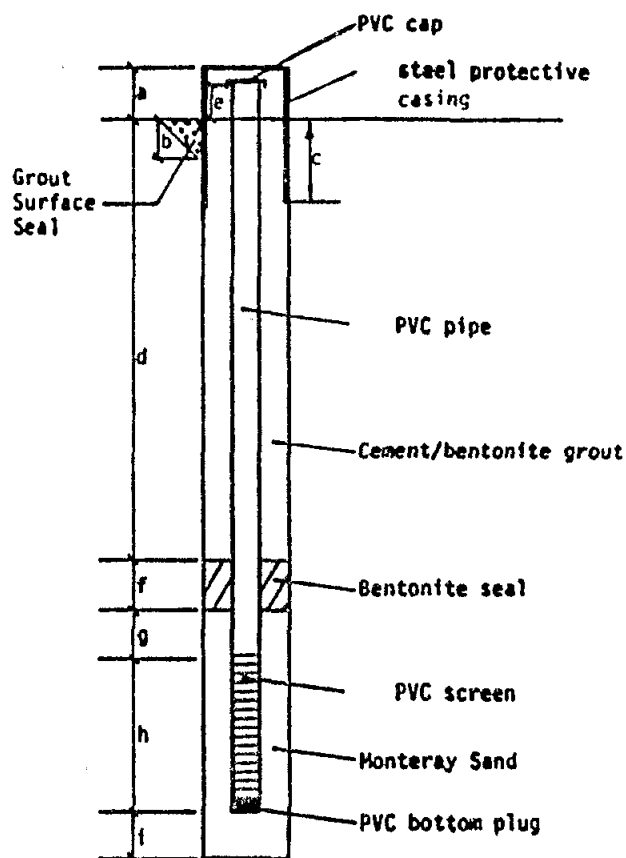
approx. number of hours developed 1 hour

approx. number of gals. removed during development 5

recovery rate .5 gpm after 0 hours

quality of water after development slightly turbid

comments \_\_\_\_\_



NOT TO SCALE

ROUTING

OWNER: EMPORIUM CAPWELL  
ADDRESS: 1911 TELEGRAPH AVE.  
OAKLAND

Well dimensions:

a 0" b — c 10" d 10' e 3" f 2' g 3' h 10' i 1'

DRILLER: MOUNTAIN STATES

#88096

277621

15/4W25 Q4

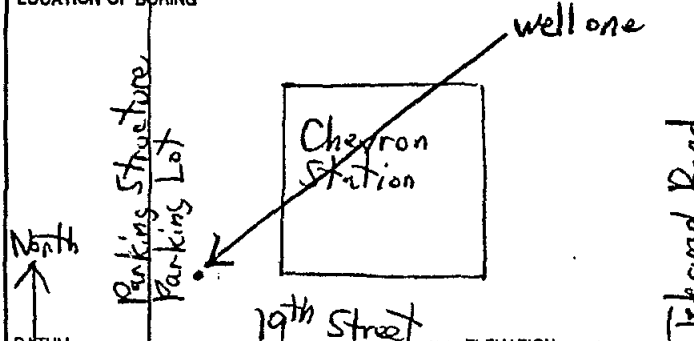
15/4W26 Q4

3

Not To Scale

20th Street

LOCATION OF BORING



|  |                    |              |
|--|--------------------|--------------|
| JOB NUMBER   | CLIENT             | LOCATION     |
| 12606-016-038                                      | Carter Hawley Hale | Oakland, CA. |
| DRILLING METHOD:                                   | BORING NUMBER      |              |
| CME 55 Drill Rig                                   | Well 1             |              |
| 8 inch outside diameter hollow stem auger          | SHEET              |              |
|  | 1 of 2             |              |
| SAMPLING METHOD:                                   | DRILLING           |              |
| 140 pound hammer on a 30 inch drop                 | START              | FINISH       |
| Split - space environmental sampler                | TIME               | TIME         |
|  | 1228               |              |
| SURFACE CONDITIONS:                                | DATE               | DATE         |
| Surfaced with about 5 inches of asphaltic concrete | 3.4.88             |              |

| SAMPLER TYPE | INCHES DRIVEN | TIME | SAMPLE NUMBER | BLOWS/FT. SAMPLER | AUGER | SAMPLE | CUTTINGS | DEPTH IN FEET | SOIL GRAPH |
|--------------|---------------|------|---------------|-------------------|-------|--------|----------|---------------|------------|
|              |               |      |               |                   |       |        |          | 0             |            |
|              |               |      |               |                   |       |        | Oppm     | 1             |            |
|              |               |      |               |                   |       |        |          | 2             |            |
|              |               |      |               |                   |       |        |          | 3             |            |
|              |               |      |               |                   |       |        |          | 4             |            |
|              |               |      |               |                   |       | Oppm   | Oppm     | 5             |            |
|              |               |      |               |                   |       |        |          | 6             |            |
|              |               |      |               |                   |       |        | 64ppm    | 7             |            |
|              |               |      |               |                   |       |        |          | 8             |            |
|              |               |      |               |                   |       | 20ppm  | 36ppm    | 9             |            |
|              | 18"           |      |               |                   |       | 7ppm   | 72ppm    | 10            |            |
|              | 0"            | 13b  |               | 216               |       |        |          | 11            |            |
|              |               |      |               |                   |       |        |          | 12            |            |
|              |               |      |               |                   |       |        |          | 13            |            |
|              |               |      |               |                   |       |        |          | 14            |            |
|              |               |      |               |                   |       |        |          | 15            |            |
|              |               |      |               |                   |       |        |          | 16            |            |
|              |               |      |               |                   |       | 20ppm  | Oppm     | 17            |            |
|              |               |      |               |                   |       |        |          | 18            |            |
|              |               |      |               |                   |       |        |          | 19            |            |
|              |               |      |               |                   |       |        |          | 20            |            |

Brown silty v.f.-m. sand w/ tr. clay, sl. moist, no odor

Gradually becoming finer

Dark brn silty clay w/ tr. v.f.-f. sand, sl. moist-moist, no odor to

Lat brn silty clay w/ some v.f.-m. sand, sl. moist, no odor

as above to

Lat orange-brn v.f.-m. sand w/ tr. silt, moist, no odor (sample not collected to sampler interference)

as above

Approximate ground water depth

as above but saturated

DRILLING CONTRACTOR Mountain States ( Morris Petersen

4811

BY Cameron Tayne

DATE 3.4.88 CHECKED BY

#88096

277621

3

15/4W26Q\*

[illegible]

DRILLING CONTRACTOR Merris Petersen  
Merris Petersen Merris Petersen

5360

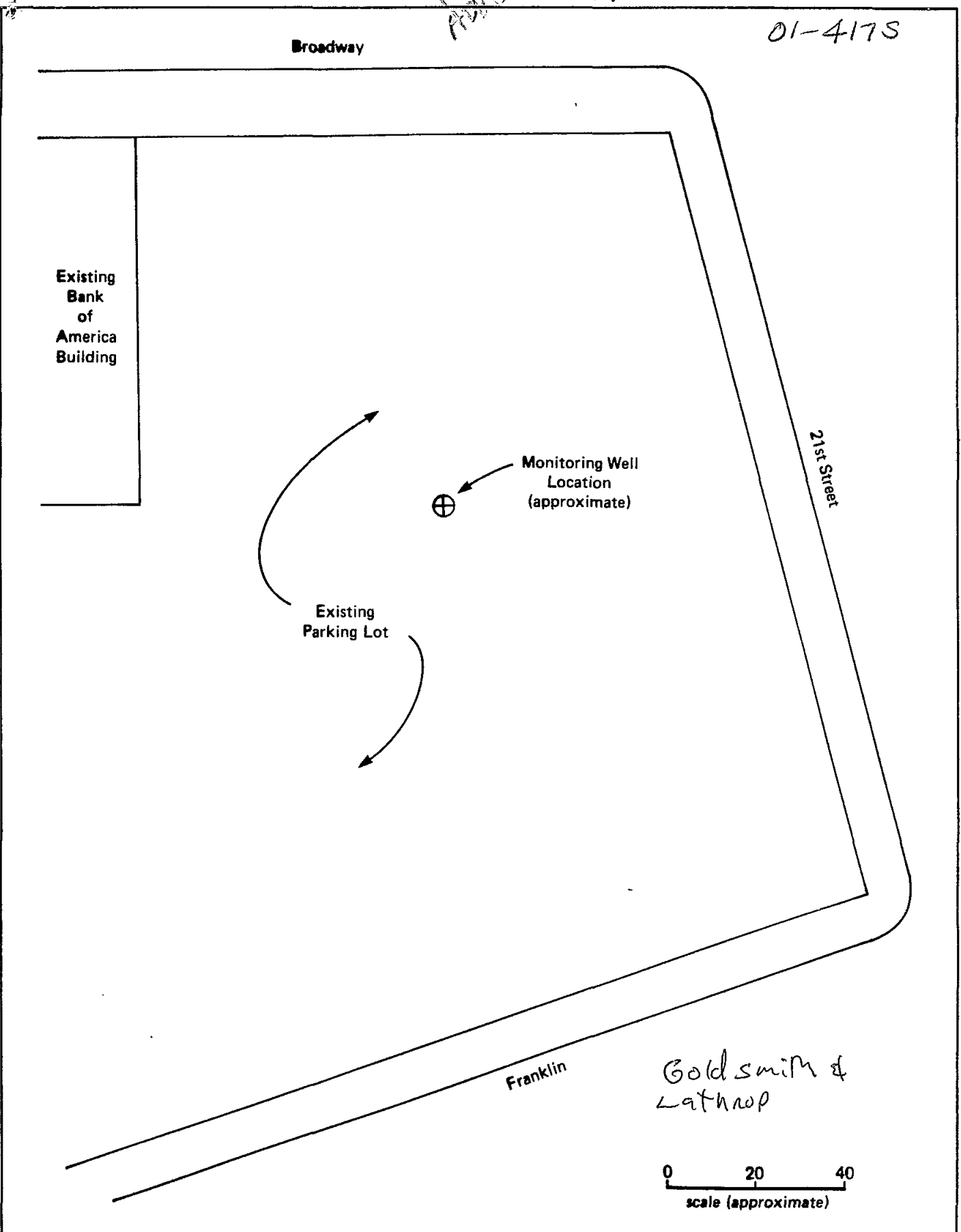
by C. Lyne

DATE 5.4.88 CHECKED BY \_\_\_\_\_

100V-  
P201

15/411 2624

01-417S



|                            |                   |          |           |
|----------------------------|-------------------|----------|-----------|
| Project No.<br>8810171A    | 21st and Broadway | SITE MAP | Nov. 1988 |
| Woodward-Clyde Consultants |                   |          | Figure 1  |



01-4175 15/4w-2694

## Woodward-Clyde Consultants

NO. 8810171A

|                         |  |  |                          |  |  |                     |  |  |                          |  |  |
|-------------------------|--|--|--------------------------|--|--|---------------------|--|--|--------------------------|--|--|
| BORING LOCATION         |  |  | Monitoring Well No. 1    |  |  | ELEVATION AND DATUM |  |  | NA                       |  |  |
| DRILLING AGENCY         |  |  | EnSCO                    |  |  | DRILLER             |  |  | J.R. Richards            |  |  |
| DRILLING EQUIPMENT      |  |  | Diedrich D-25 (Skid Rig) |  |  | DATE STARTED        |  |  | October 26, 1988         |  |  |
| DRILLING METHOD         |  |  | 8" Hollow Stem Augers    |  |  | COMPLETION DEPTH    |  |  | 31.5'                    |  |  |
| DRILL BIT               |  |  | Drag                     |  |  | SAMPLER             |  |  | Modified California Type |  |  |
| SIZE AND TYPE OF CASING |  |  | 2" PVC                   |  |  | NO. OF SAMPLES      |  |  | DIST. NA                 |  |  |
| TYPE OF PERFORATION     |  |  | 0.020" Slots             |  |  | UNDIST.             |  |  | NA                       |  |  |
| SIZE AND TYPE OF PACK   |  |  | #2/12 Monterey Sand      |  |  | WATER LEVEL         |  |  | FIRST 29.6'              |  |  |
| TYPE OF SEAL            |  |  | NO. 1 Bentonite Pellets  |  |  | COMPL.              |  |  | 24 HRS. NA               |  |  |
|                         |  |  | NO. 2 Neat Cement        |  |  | LOGGED BY:          |  |  | D. Baden                 |  |  |
|                         |  |  | FROM 14' TO 29' Fl.      |  |  | CHECKED BY:         |  |  | J. Mc Milan              |  |  |
|                         |  |  | FROM 11.5' TO 30' Fl.    |  |  |                     |  |  |                          |  |  |
|                         |  |  | FROM 8.5' TO 11.5' Fl.   |  |  |                     |  |  |                          |  |  |
|                         |  |  | FROM 8.5' TO 0.5' Fl.    |  |  |                     |  |  |                          |  |  |

| DEPTH (feet) | DESCRIPTION   | GRAPHIC LOG |                         | Water Content | Piezometer Data | SAMPLES      |               |               |               |  | REMARKS<br>(Drill Rate, Fluid Loss, Odor, etc.)   |
|--------------|---|-------------|-------------------------|---------------|-----------------|--------------|---------------|---------------|---------------|--|---|
|              |   | Lithology   | Piezometer Installation |               |                 | Drive Number | Sample Number | Recov. (Feet) | Blow Counts   |  |   |
| 0-3'         | 3" Asphalt Concrete<br>3" Aggregate Base Rock   |             |                         |               |                 |              |               |               |               |  | No odor   |
| 3-5'         | FILL- CLAY (CL)<br>-some silt<br>-little gravel to 1.5"<br>-Brown<br>-low to moderate plasticity<br>-damp<br>-pieces of brick in the fill   |             |                         |               |                 | 1            | DCBA          |               | 7<br>8<br>7   |  | No odor   |
| 5-10'        | FILL- SAND & GRAVEL (SW-GW)<br>-little to some silt<br>-fine to medium sand<br>-medium gravel<br>-Tan to White<br>-non-plastic<br>-damp to dry<br>-loose<br>-wood debris and white chalk like wafers in the fill                    |             |                         |               |                 | 2            | DCBA          |               | 5<br>6<br>7   |  | No odor   |
| 10-15'       | FILL- SAND (SP)<br>-fine sand<br>-Tan to Brown<br>-non-plastic<br>-moist to wet<br>-loose<br>-mottled light and dark in local areas<br>upper half of THE 10' sample is slightly silty and the lower half is relatively clean sand   |             |                         |               |                 | 3            | DCBA          |               | 4<br>6<br>9   |  | No odor   |
| 15-20'       | CLAY (OH) Bay Mud<br>-Black<br>-highly plastic<br>-wet<br>-stiff<br>-rootlets and organic debris throughout the sample  |             |                         |               |                 | 4            | CBA           |               | 3<br>3<br>4   |  | No recovery on the first drive, redrove to obtain the sample.<br>No odor  |
| 20-25'       | SILTY CLAY (CL)<br>-some fine sand<br>-little organic matter as above<br>-Yellow Orange to Gray<br>-low plasticity<br>-wet<br>-medium firm  |             |                         |               |                 | 5            | DCBA          |               | 2<br>2<br>4   |  | No recovery on the first drive, redrove to obtain the sample.<br>No odor  |
| 25-30'       | -some organics  |             |                         |               |                 | 6            | DCBA          |               | 9<br>16<br>15 |  | Driller reports very hard conditions at 27.5'.<br><br>Driller reports very soft conditions at 29.5'.<br>No odor |
| 30-35'       | SAND & GRAVEL (SW-GW)<br>-fine to coarse sand<br>-fine to medium gravel<br>-Gray<br>-non-plastic<br>-saturated<br>-medium dense<br>-sand is generally rounded while the gravel is generally angular and composed primarily of chert |             |                         |               |                 |              |               |               |               |  |   |
| 35'          | Bottom of boring at 31.5' (Augered to 30')  |             |                         |               |                 |              |               |               |               |  |   |

FIELD LOG OF BORING NO MW-1 SHEET 1 OF 1

FIGURE 2

C57-464324

01-857

15/45 - 26N

15/45 - 260

57

Job 1880. 327 2nd St. ✓anner Bros. L.L.B. 327 - 21st.  
Boring Test Holes.

Oakland

LOG OF TEST HOLE #1.

|                               |           |
|-------------------------------|-----------|
| Black soil -----              | 3 feet    |
| Hard yellow sandy clay -----  | 3 to 16 " |
| Dry gray water sand -----     | 16 " 21 " |
| Hard brown sandy clay -----   | 21 " 29 " |
| Hard red cement clay -----    | 29 " 33 " |
| Soft dirty water gravel ----- | 33 " 38 " |
| Hard yellow sand clay -----   | 38 " 43 " |

10 ft. of water in hole.

LOG OF TEST HOLE #2.

|   |           |
|---|-----------|
| Black soil -----                            | 3 feet    |
| Brown sandy clay -----                      | 3 to 10 " |
| Hard dry gray sand -----                    | 10 " 15 " |
| Hard yellow sand clay -----                 | 15 " 27 " |
| Soft yellow clay, some rock mixed with clay | 27 " 34 " |
| Soft yellow sand -----                      | 34 " 42 " |
| Hard yellow sandy clay -----                | 42 " 43 " |

6 ft. of water in hole.

01-858

20th St.  
Oakland

Job #649. Great Western Power Co.

LOG OF WELL

|                            |             | 16 feet |
|----------------------------|-------------|---------|
| Sand                       |             |         |
| Blue Clay                  | 16 to 32 "  |         |
| Cement Gravel              | 32 " 35 "   |         |
| Sandy Clay                 | 35 " 43 "   |         |
| Gravel                     | 43 " 45 "   |         |
| Sandy Clay                 | 45 " 49 "   |         |
| Cement Gravel              | 49 " 59 "   | ✓       |
| Yellow Clay                | 59 " 75 "   |         |
| Cement Gravel              | 75 " 90 "   | ✓       |
| Yellow Clay                | 90 " 110 "  |         |
| Sandy Clay                 | 110 " 118 " |         |
| Gravel                     | 118 " 123 " | ✓       |
| Yellow Clay                | 123 " 134 " |         |
| Sandy Clay                 | 134 " 152 " |         |
| Gravel                     | 152 " 156 " | ✓       |
| Sandy Clay                 | 156 " 159 " |         |
| Blue Clay                  | 159 " 177 " |         |
| Sandy Clay                 | 177 " 180 " |         |
| Shale                      | 180 " 189 " |         |
| Sandy Clay                 | 189 " 204 " |         |
| Blue Clay                  | 204 " 226 " |         |
| Brown Clay                 | 226 " 233 " |         |
| Blue Clay                  | 233 " 250 " |         |
| Clay                       | 250 " 265 " |         |
| Blue sandy clay            | 265 " 266 " |         |
| Blue clay                  | 266 " 289 " |         |
| Blue clay with limestone ✓ | 289 " 325 " |         |
| Brown clay                 | 325 " 327 " |         |
| Yellow clay                | 327 " 340 " |         |
| Red cement                 | 340 " 347 " |         |
| Blue clay                  | 347 " 350 " |         |
| Yellow clay with limestone | 350 " 374 " |         |
| Sandy clay                 | 374 " 378 " |         |
| Yellow clay                | 378 " 388 " |         |
| Blue Clay                  | 388 " 420 " |         |
| Sand and gravel            | 420 " 428 " | ✓       |
| Red cement gravel          | 428 " 436 " |         |
| Yellow clay                | 436 " 442 " |         |
| Cement gravel              | 442 " 447 " |         |
| Yellow clay                | 447 " 450 " |         |
| Cement gravel              | 450 " 456 " |         |
| Yellow clay                | 456 " 458 " |         |

01-859

Job #733. Deepening Well put down under  
Job #642 and # 714.

2 off 57 5/8 inch.

Log of Well.

From 285'

|                            |     |    |     |      |
|----------------------------|-----|----|-----|------|
| Blue clay with Limestone   | 285 | to | 325 | feet |
| Blue clay                  | 325 | "  | 327 | "    |
| Yellow clay                | 327 | "  | 340 | "    |
| Red cement                 | 340 | "  | 347 | "    |
| Blue clay                  | 347 | "  | 350 | "    |
| Yellow clay with limestone | 350 | "  | 374 | "    |
| Sandy clay                 | 374 | "  | 378 | "    |
| Yellow clay                | 378 | "  | 388 | "    |
| Blue clay                  | 388 | "  | 420 | "    |
| Sand and Gravel            | 420 | "  | 428 | "    |
| Red cement                 | 428 | "  | 436 | "    |
| Yellow clay                | 436 | "  | 442 | "    |
| Red cement                 | 442 | "  | 447 | "    |
| Yellow clay                | 447 | "  | 450 | "    |
| Red cement                 | 450 | "  | 456 | "    |
| Yellow clay                | 456 | "  | 470 | "    |
| Blue clay                  | 470 | "  | 480 | "    |
| Red cement                 | 480 | "  | 485 | "    |
| Yellow clay                | 485 | "  | 498 | "    |
| Red cement                 | 498 | "  | 500 | "    |
| Yellow clay                | 500 | "  | 510 | "    |
| Red cement                 | 510 | "  | 528 | "    |
| Yellow clay                | 528 | "  | 545 | "    |
| Red cement                 | 545 | "  | 556 | "    |

01-860

Job # 715. Oakland Lodge #171, B.P.O.E.

*SE corner of 2nd & Broadway*

LOG OF WELL.

|                               |       |        |
|-------------------------------|-------|--------|
| Brown Clay                    |       | 2 feet |
| Sandy clay                    | 2 to  | 13 "   |
| Blue clay, streaked           | 13 "  | 18 "   |
| Heavy Gravel                  | 18 "  | 22 "   |
| Hardpan                       | 22 "  | 26 "   |
| Lime clay                     | 26 "  | 37 "   |
| Heavy red sand & light gravel | 37 "  | 41 "   |
| Hardpan                       | 41 "  | 43 "   |
| Clay, hard & dry              | 43 "  | 45 "   |
| Hardpan                       | 45 "  | 48 "   |
| Sand & clay                   | 48 "  | 49 "   |
| Heavy gravel(some water)      | 49 "  | 50 "   |
| Clay                          | 50 "  | 56 "   |
| Sand & clay                   | 56 "  | 71 "   |
| Sand & Gravel(Not much water) | 71 "  | 75 "   |
| Clay                          | 75 "  | 85 "   |
| Water gravel                  | 85 "  | 87 "   |
| Hard dry brown clay           | 87 "  | 95 "   |
| Hard clay                     | 95 "  | 103 "  |
| Dry sand                      | 103 " | 106 "  |
| Sand, some water              | 106 " | 109 "  |
| Clay & sand                   | 109 " | 118 "  |
| Black sand & gravel           | 118 " | 119 "  |
| Clay, yellow                  | 119 " | 121 "  |
| Gravel, heavy                 | 121 " | 124 "  |
| Dry gray clay                 | 124 " | 126 "  |
| Sandy clay                    | 126 " | 132 "  |
| Cement gravel                 | 132 " | 136 "  |
| Blue shale & clay             | 136 " | 142 "  |
| Cement gravel                 | 142 " | 145 "  |
| Heavy sand                    | 145 " |        |

Casing landed in Blue clay at 153'

Water test 100' ---- 6.78

Water tests 50' ---- 8.62

USEBAUMER, M. D.  
PRESIDENT

GERTRUDE MOORE, M. D.  
SECRETARY & LABORATORY DIRECTOR

# THE WESTERN LABORATORIES

2404 BROADWAY  
OAKLAND, CALIFORNIA

LABORATORIES  
BACTERIOLOGICAL  
BIOLOGICAL  
PATHOLOGICAL  
CHEMICAL  
PHYSIOLOGICAL

15/4/22  
01-861  
TEL 414

Feb. 10th, 1926

J. M. Ough,  
1201 E. 12th St.,  
Oakland, Calif.

Dear Sir;

The following is the report on the  
Industrial Chemical Analysis of Water submitted by you  
from the Elk's Club.

P.P.M.      Grs. per U.S.Gal.

|   |              |        |
|---|--------------|--------|
| Total Solids  | -----4664.00 | 272.40 |
| Volatile & Organic Matter   | -----3412.00 | 199.29 |
| Alkalinity as $\text{CaCO}_3$   | -----200.00  | 11.68  |
| Silica ( $\text{SiO}_2$ )   | -----40.40   | 2.35   |
| Iron & Aluminum Oxide ( $\text{Fe}_2\text{O}_3$ and $\text{Al}_2\text{O}_3$ ) | -----28.80   | 1.68   |
| Calcium ( $\text{CaO}$ )  | -----617.90  | 36.09  |
| Magnesium ( $\text{Mg}_2\text{P}_2\text{O}_7$ )                               | -----1260.20 | 73.60  |
| Sulphuric Anhydride ( $\text{SO}_3$ )   | -----44.24   | 2.58   |
| Chlorine (Cl)   | -----1641.11 | 95.85  |

## ANALYSIS FOR HARDNESS

|                 |              |        |
|-----------------|--------------|--------|
| Total Solids    | -----4664.00 | 272.40 |
| Incrustants     | -----1420.80 | 82.99  |
| Non Incrustants | -----3243.20 | 189.41 |

## INCRUSTANTS

|                    |              |       |
|--------------------|--------------|-------|
| Total Hardness     | -----1420.80 | 82.99 |
| Permanent Hardness | -----1332.00 | 77.80 |
| Temporary Hardness | -----88.80   | 5.19  |

Conclusions; This water is unfit for either domestic  
or industrial purposes, being apparently contaminated by a  
leak from the bay.

THE WESTERN LABORATORIES,

*Gertrude Moore* M.D.  
GERTRUDE MOORE      SEC'TY.

GM:PM

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STATE OF CALIFORNIA DWR  
WELL COMPLETION REPORT  
(WELL LOGS)

**REMOVED**

**CONFIDENTIAL**

STATE OF CALIFORNIA DWR  
WELL COMPLETION REPORT  
(WELL LOGS)

**REMOVED**

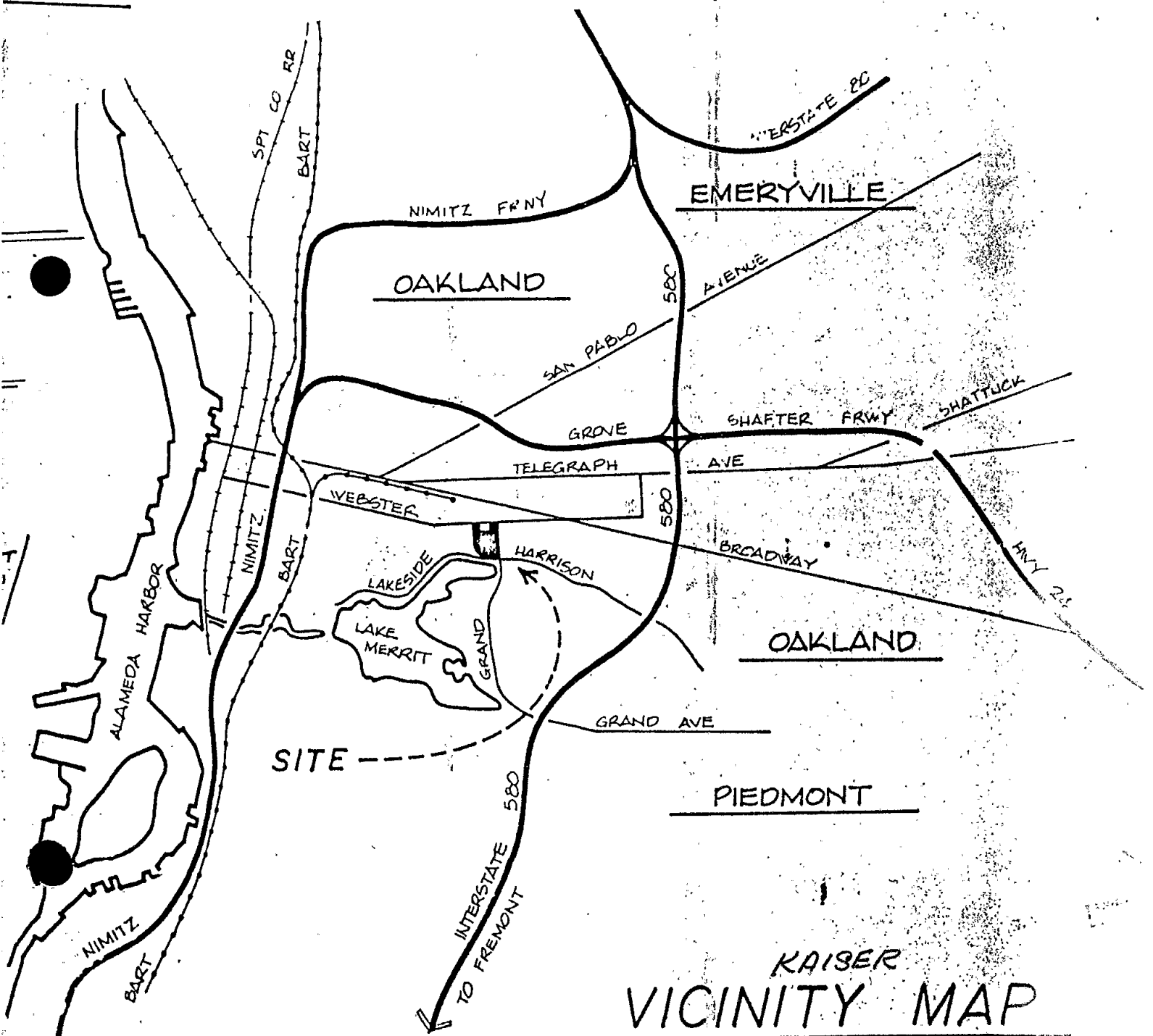


# LEGAL DESCRIPTION

345857

REAL PROPERTY IN THE CITY OF OAKLAND, COUNTY OF ALAMEDA, STATE OF CALIFORNIA DESCRIBED AS FOLLOWS:

BEGINNING AT THE INTERSECTION OF THE NORTH LINE OF TWENTY-FIRST (21ST) STREET WITH THE WEST LINE OF HARRISON STREET; THENCE FROM SAID POINT OF BEGINNING, ALONG SAID NORTH LINE, NORTH  $70^{\circ} 56' 58''$  WEST, 198.80 FEET; THENCE DEPARTING SAID NORTH LINE, NORTH  $13^{\circ} 02' 54''$  EAST, 262.00 FEET TO THE SOUTH LINE OF TWENTY-SECOND (22ND) STREET; THENCE ALONG SAID SOUTH LINE, SOUTH  $70^{\circ} 56' 58''$  EAST, 212.39 FEET TO THE WEST LINE OF HARRISON STREET; THENCE ALONG SAID WEST LINE, SOUTH  $16^{\circ} 01' 04''$  WEST, 262.35 FEET TO THE POINT OF BEGINNING.



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STATE OF CALIFORNIA DWR  
WELL COMPLETION REPORT  
(WELL LOGS)

**REMOVED**

015 04W 26 R 06

PERMIT 92121

ES ENGINEERING - SCIENCE

CLIENT: AHMANSON COMMERCIAL DEVELOPMENT

LOCATION: 21ST/HARRISON STREETS,  
OAKLAND, CALIFORNIA

COMPLETION DATE: 19 March 1991

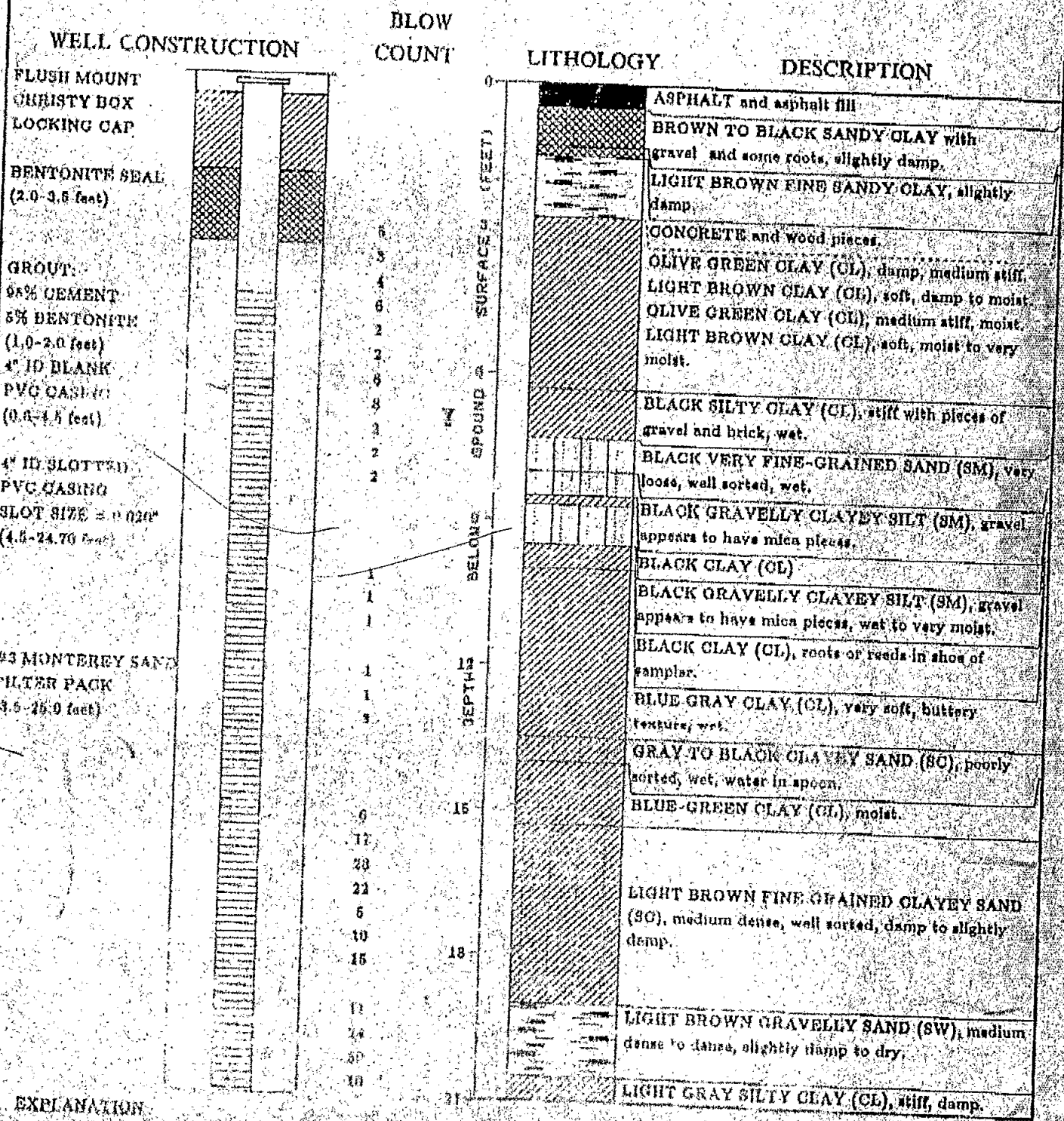
GEOLOGIST: M. FRIEDMAN

TEST HOLE NUMBER: MW-3

DRILLER: AQUA SCIENCE ENGINEERS

DRILLING METHOD: ROTARY

HOLE DIAMETER: 4-INCHES



EXPLANATION

Water Level during drilling

Contact (approximate)

PHD Photoluminescence Detector Reading

Location of sample

ph: 510-769-0100

57 Lic # 487000

06-05-92 02:05 PM FROM ENG-801-ALAMEDA

01-50171-1  
01504W26R06

ES ENGINEERING - SCIENCE

CLIENT: AHMANSON COMMERCIAL DEVELOPMENT

TEST HOLE NUMBER: **MW-3**

LOCATION: 21ST/HARRISON STREETS,  
OAKLAND, CALIFORNIA

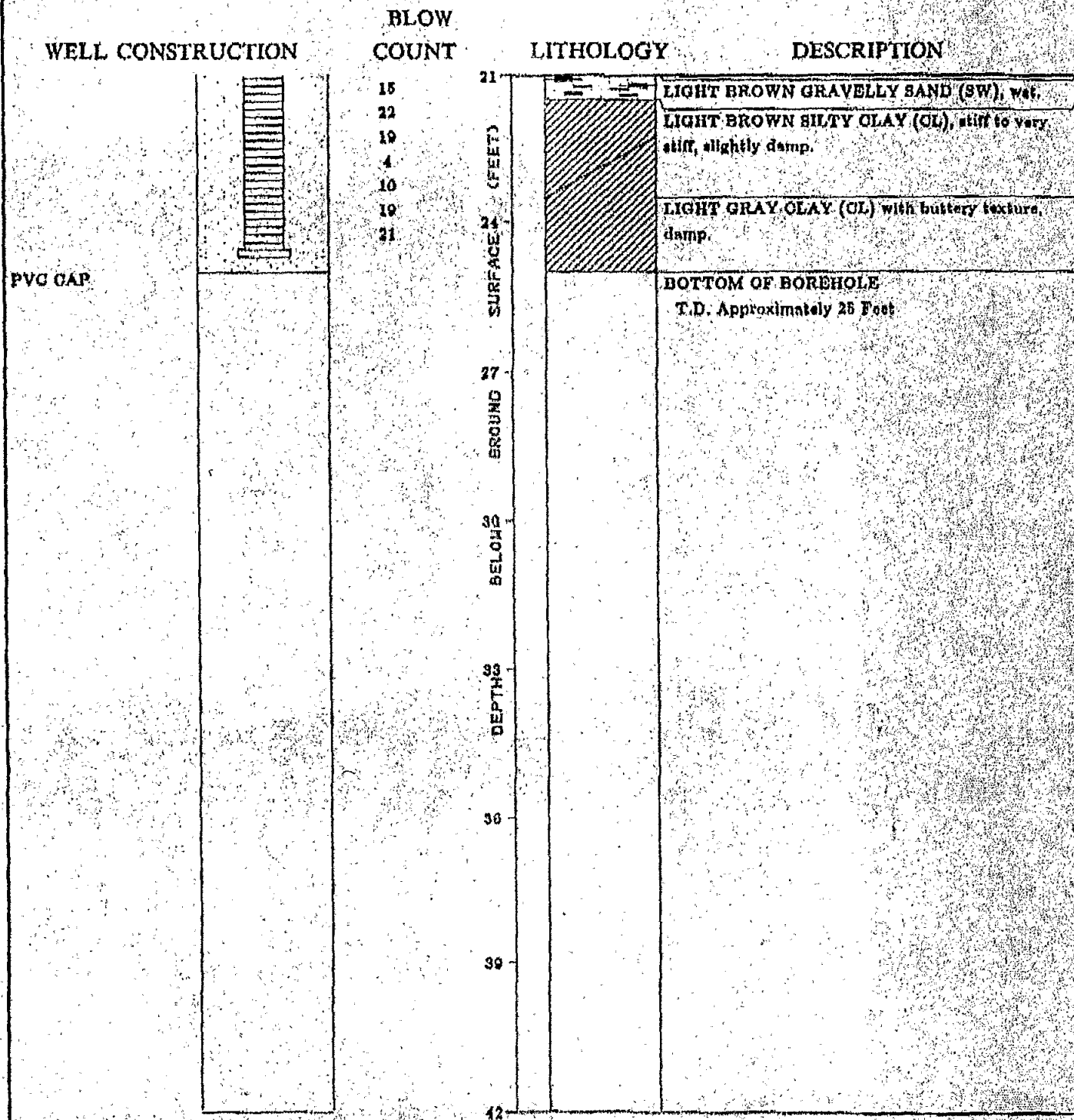
DRILLER: AQUA SCIENCE ENGINEERS

COMPLETION DATE: 12 March 1992

DRILLING METHOD: ROTARY

GEOLOGIST: M. FRIEDMAN

HOLE DIAMETER: 4-INCHES



EXPLANATION

Water Level during drilling

PID Photolionization Detector Reading

Contact (approximate)

Location of sample

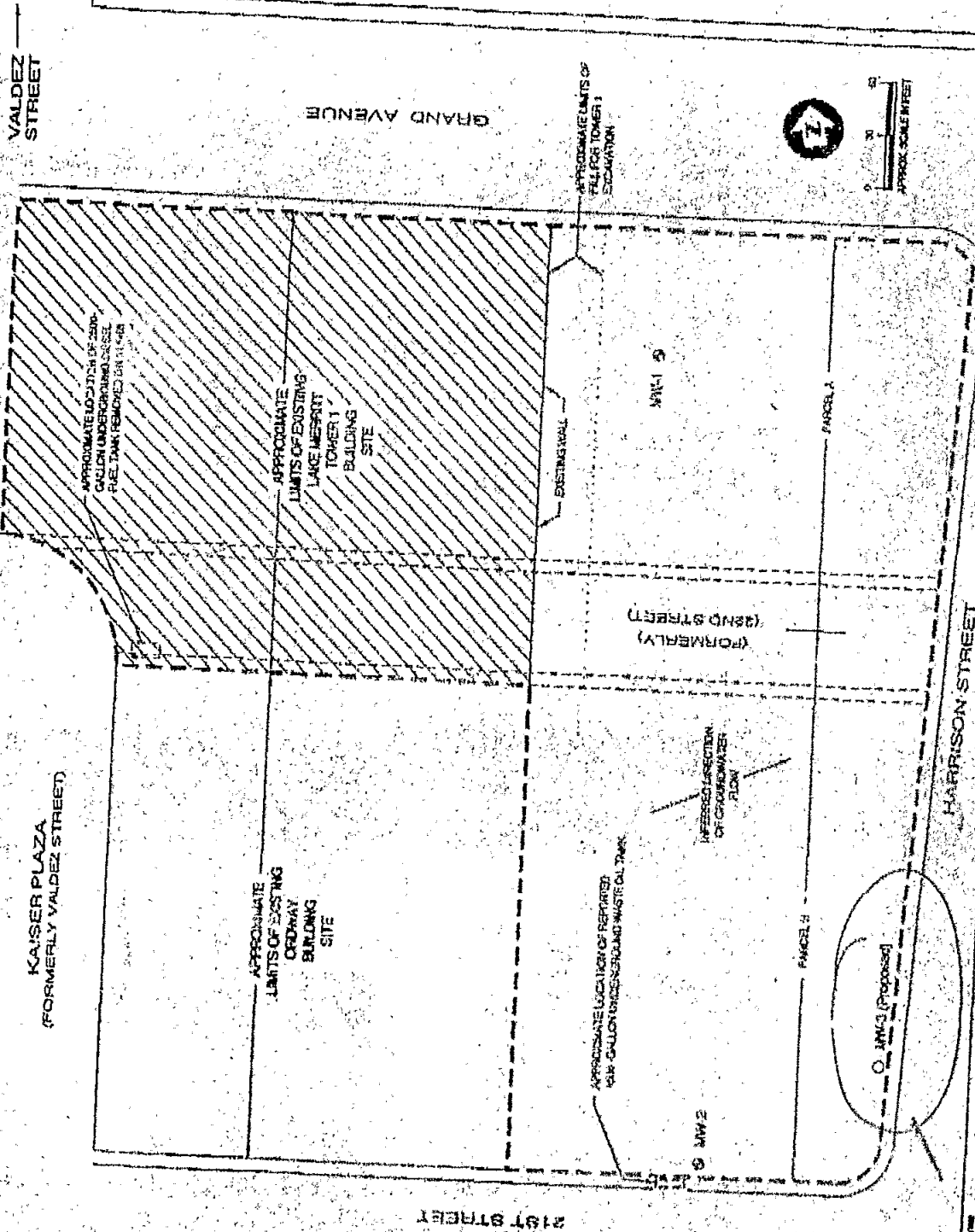
APPROPRIATE LIMITS OF AMBITION  
COMMERCIAL DEVELOPMENT PROPERTY

REINFORCED BY POLYCRYSTALLINE

NEW YORK, N.Y. (UPI) - A NEW YORK CITY POLICE OFFICER HAS BEEN CHARGED WITH KIDNAPING A WOMAN AND HER CHILD.

**SITE PLAN SHOWING  
SITE FEATURES AND  
MONITORING WELLS  
LAKE MERRITT TOWERS  
OAKLAND, CALIFORNIA**

ENGINEERING-SCIENCE, INC.



**CONFIDENTIAL**

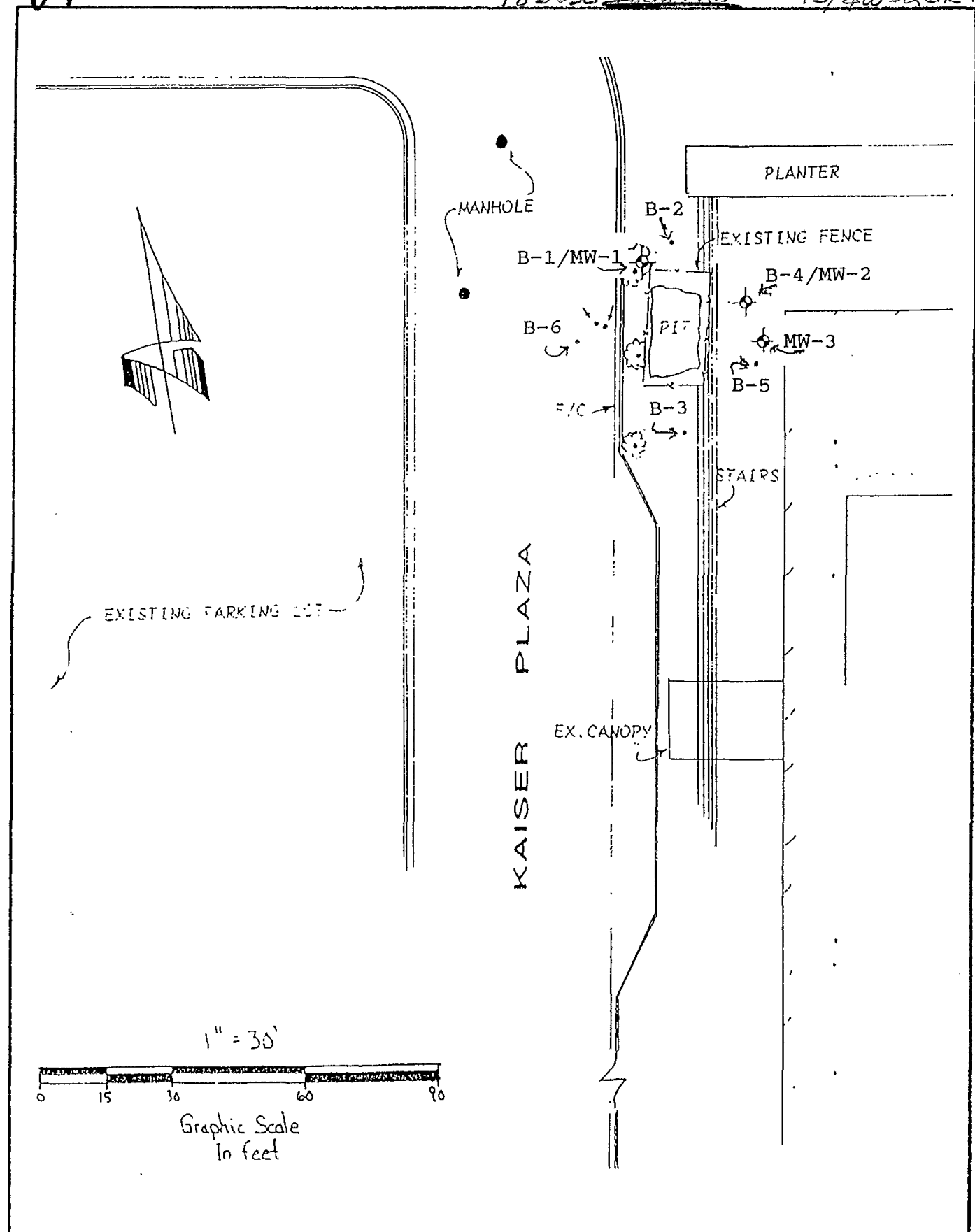
STATE OF CALIFORNIA DWR  
WELL COMPLETION REPORT  
(WELL LOGS)

**REMOVED**

2007

185635-~~XXXXXX~~

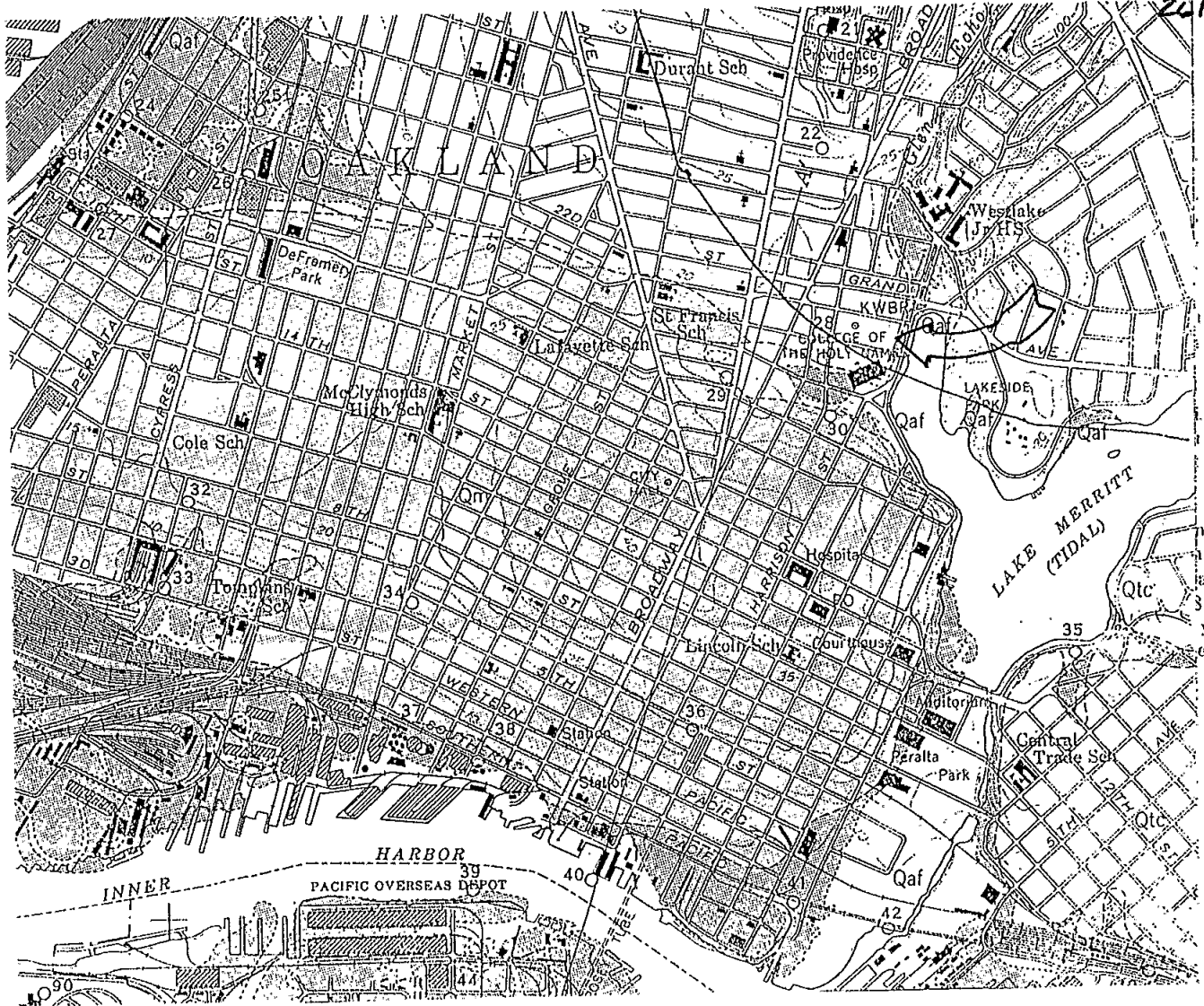
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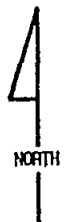
3.087

185635-~~185635~~

MW1 OIS 04W 26R11  
MW2 26R12  
MW3 26R13  
26R



Base from U.S. Geological Survey, Miscellaneous Geologic Investigations Map I-239



### SITE LOCATION MAP

ORDWAY BUILDING  
One Kaiser Plaza, Oakland, California

FIGURE

1



ph: 510-373 9211, C57 Lic # 554979



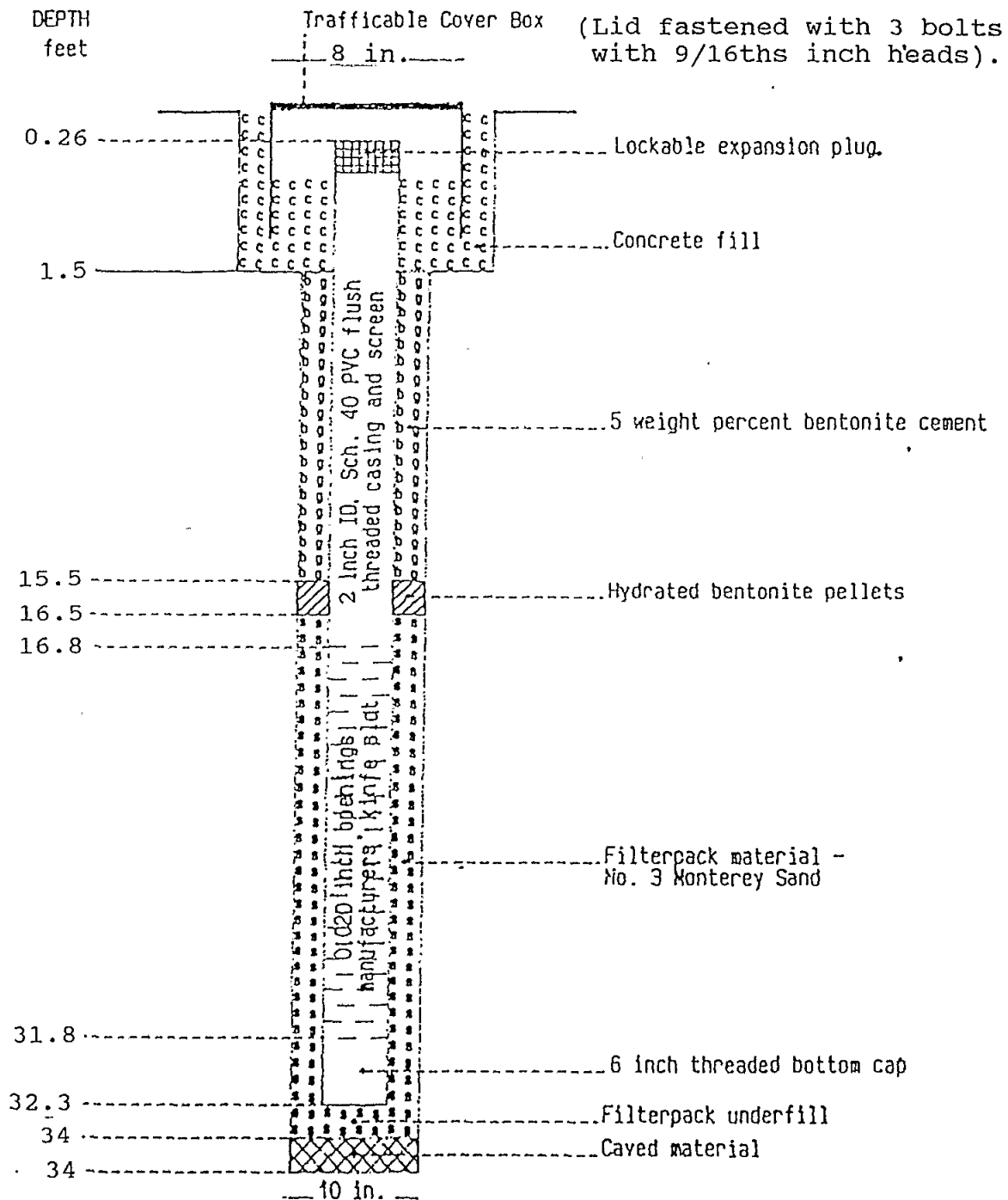
407

185635

15/40-26211

Project No. DES-2  
 Top of Casing Elev. 22.48 FMSL  
 Ground Surface Elev. 22.7 FMSL  
 Depth Datum Ground Surface

Alameda County, California  
 ZONE 7 Permit No. 92116  
 Completion Date 03/27/92



5.87

185635

1S/4W-26R11

| H <sub>2</sub> OGEOL    |                               |               |                          | BOREHOLE LITHOLOGIC LOG   |                           |                        |                              |
|-------------------------|-------------------------------|---------------|--------------------------|---|---------------------------|------------------------|------------------------------|
| Proj. DES-3             |                               |               |                          | BOREHOLE No. <u>B-1</u> , Sheet 3 of <u>3</u><br>Monitoring Well MW-1 |                           |                        |                              |
| SAMPLING<br>BLOW COUNTS | PID/FID<br>HN, OVA<br>READING | DEPTH<br>feet | SOIL<br>SAMPLE<br>NUMBER | TIME  | GRAPHIC<br>SOIL<br>SYMBOL | USCS<br>SOIL<br>SYMBOL |                              |
|                         |                               | 30            |                          |   |                           |                        |                              |
|                         |                               | 31            |                          |   |                           |                        |                              |
|                         |                               | 32            |                          |   |                           | ML                     | Gravelly very sandy silt.    |
|                         |                               | 33            |                          |   |                           |                        |                              |
|                         |                               | 34            |                          |   |                           |                        | Total depth drilled 34 feet. |
|                         |                               | 35            |                          |   |                           |                        |                              |
|                         |                               | 36            |                          |   |                           |                        |                              |
|                         |                               | 37            |                          |   |                           |                        |                              |
|                         |                               | 38            |                          |   |                           |                        |                              |
|                         |                               | 39            |                          |   |                           |                        |                              |
|                         |                               | 40            |                          |   |                           |                        |                              |
|                         |                               | 41            |                          |   |                           |                        |                              |
|                         |                               | 42            |                          |   |                           |                        |                              |
|                         |                               | 43            |                          |   |                           |                        |                              |
|                         |                               | 44            |                          |   |                           |                        |                              |
|                         |                               | 45            |                          |   |                           |                        |                              |

6 of 7

185635

18/40-26211

**H<sub>2</sub>OGEOL****BOREHOLE LITHOLOGIC LOG**

Proj. DES-3

BOREHOLE No. B-1 , Sheet 2 of 3  
Monitoring Well MW-1 ,

| SAMPLING<br>EQUIPMENT | FID/FID<br>H <sub>2</sub> OVA<br>READING | DEPTH<br>feet | SOIL<br>SAMPLE<br>NUMBER | TIME  | GRAPHIC<br>SOIL<br>SYMBOL | USCS<br>SOIL<br>SYMBOL |   |
|-----------------------|--|---------------|--------------------------|-------|---------------------------|------------------------|---|
|                       |  | 14            |                          |       | / / / / /                 | CL                     |   |
| 9                     |  | 15            |                          |       |                           |                        | Light yellowish brown silty clay.   |
| 12<br>13              |  | 16            | 1-3                      | 10:25 |                           | ML                     | Yellowish brown clayey silt, mottled<br>reddish brown. No noticeable odor.        |
|                       |  | 17            |                          |       |                           |                        |   |
|                       |  | 18            |                          |       |                           |                        |   |
|                       |  | 19            |                          |       |                           |                        |   |
| 8                     |  | 20            |                          |       |                           | ML                     | Gravelly clayey silt. .   |
| 9<br>10               |  | 21            | 1-4                      | 10:56 |                           |                        | Yellowish brown very sandy silt,<br>mottled reddish brown. No noticeable<br>odor. |
|                       |  | 22            |                          |       |                           |                        | First encountered water at 22 feet.   |
|                       |  | 23            |                          |       |                           |                        |   |
|                       |  | 24            |                          |       |                           | ML                     |   |
|                       |  | 25            |                          |       |                           |                        |   |
|                       |  | 26            |                          |       |                           |                        |   |
|                       |  | 27            |                          |       |                           |                        |   |
|                       |  | 28            |                          |       |                           |                        | Gravelly silt.  |
|                       |  | 29            |                          |       |                           |                        |   |



# H2OGEOL

A GROUNDWATER CONSULTANCY

## BOREHOLE LITHOLOGIC LOG

BOREHOLE No. B-1 , Sheet 1 of 3  
Monitoring Well MW-1

Project No. DES-3      Date: 03/23/92  
Client: Decon Environmental Services  
Location: The Ordway Building  
Location: One Kaiser Plaza  
            Oakland, California  
Logged by: Gary D. Lowe, R.G., C.E.G.

Drilling Co. West HazMat Drilling, Inc.  
Drill Model: Housier  
Drilling Method: Hollow Stem Auger  
Driller: Rod Reidhead  
Ground Surface Elevation: FMSL  
Datum: Ground Surface

| SAMPLING<br>BLOG COUNTS | PID/AFID<br>HNL OVA<br>READING | DEPTH<br>feet | SOIL<br>SAMPLE<br>NUMBER | TIME  | GRAPHIC<br>SOIL<br>SYMBOL | USCS<br>SOIL<br>SYMBOL | Field Soil Description                         |  |  |  |  |
|-------------------------|--------------------------------|---------------|--------------------------|-------|---------------------------|------------------------|--|--|--|--|--|
|                         |                                |               |                          |       |                           |                        |  |  |  |  |  |
|                         |                                |               |                          |       |                           |                        |  |  |  |  |  |
|                         |                                |               |                          |       |                           |                        |  |  |  |  |  |
|                         |                                | 1             |                          |       |                           | ML                     | Dark brown clayey silt., Planter box top soil. |  |  |  |  |
|                         |                                | 2             |                          |       |                           |                        |  |  |  |  |  |
|                         |                                | 3             |                          |       |                           |                        |  |  |  |  |  |
|                         |                                | 4             |                          |       |                           |                        |  |  |  |  |  |
| 4                       |                                | 5             |                          |       |                           | CL                     |  |  |  |  |  |
| 5                       |                                | 6             | 1-1                      | 09:54 |                           |                        | Light yellowish brown silty clay.              |  |  |  |  |
| 15                      |                                | 7             |                          |       |                           |                        | Stiff. No noticeable odor.                     |  |  |  |  |
|                         |                                | 8             |                          |       |                           |                        |  |  |  |  |  |
|                         |                                | 9             |                          |       |                           | SM                     |  |  |  |  |  |
| 7                       |                                | 10            |                          |       |                           |                        | Olive silty very fine to fine sand.            |  |  |  |  |
| 12                      |                                | 11            | 1-2                      | 10:09 |                           |                        | No noticeable odor.                            |  |  |  |  |
| 50                      |                                | 12            |                          |       |                           |                        |  |  |  |  |  |
|                         |                                | 13            |                          |       |                           |                        |  |  |  |  |  |

13 08 14

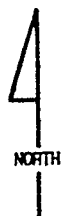
185635-185637D

MW1 OIS 042 26R11  
MW2 26R12  
MW3 26R13  
26R



1000 0 1000 2000 3000 4000 5000 FEET

Base from U.S. Geological Survey, Miscellaneous Geologic Investigations Map I-239

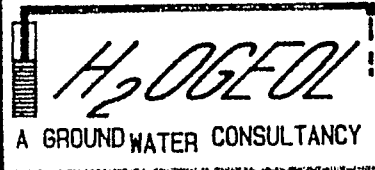


# SITE LOCATION MAP

ORDWAY BUILDING  
One Kaiser Plaza, Oakland, California

FIGURE

1

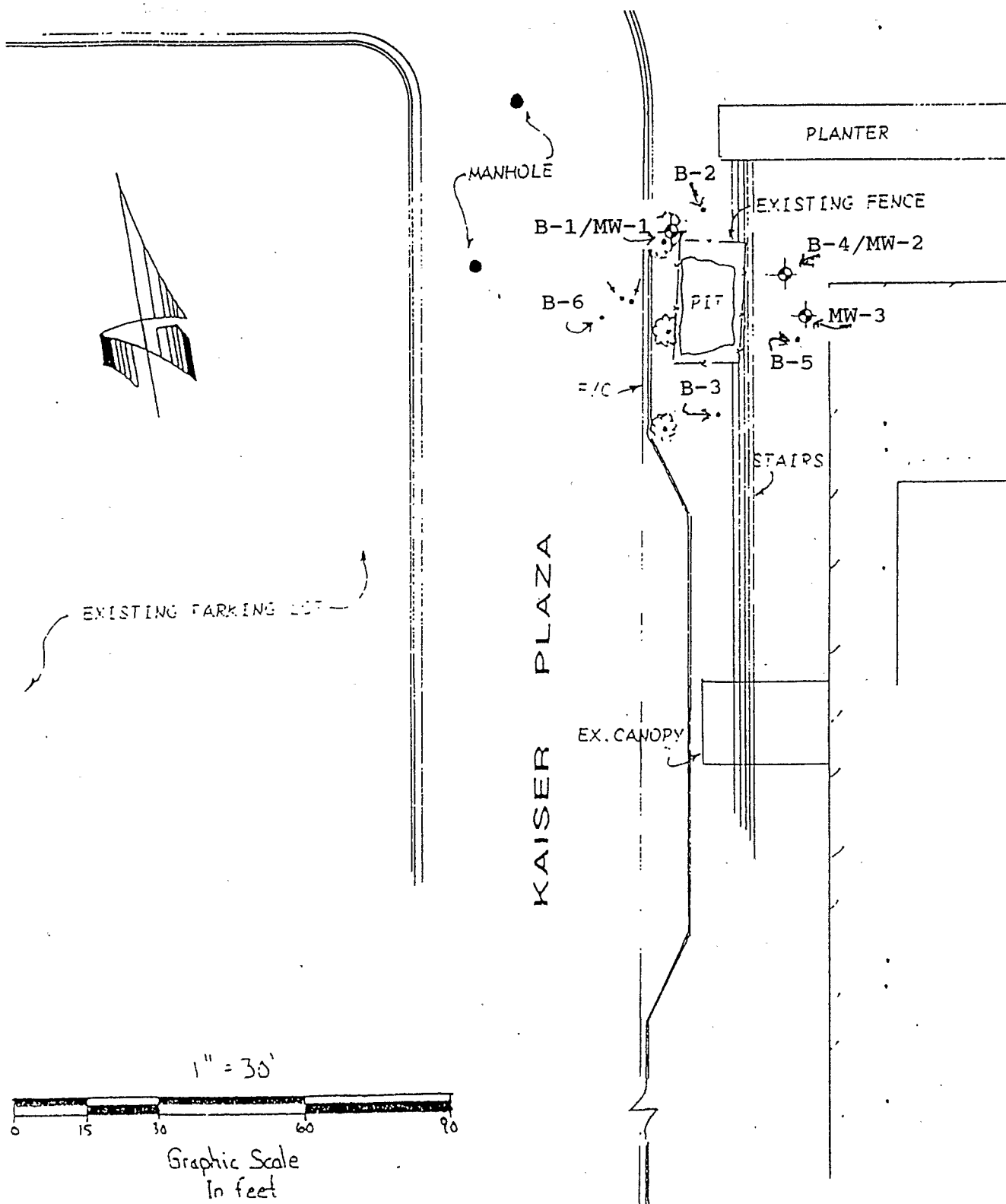


ph: 510-373 9211, C57 Lic # 554979

14 08 14

185635-185637D

15/4W-26R11-13



# BOREHOLE AND MONITORING WELL LOCATIONS

THE ORDWAY BUILDING  
One Kaiser Plaza, Oakland, California

FIGURE

2

**CONFIDENTIAL**

STATE OF CALIFORNIA DWR  
WELL COMPLETION REPORT  
(WELL LOGS)

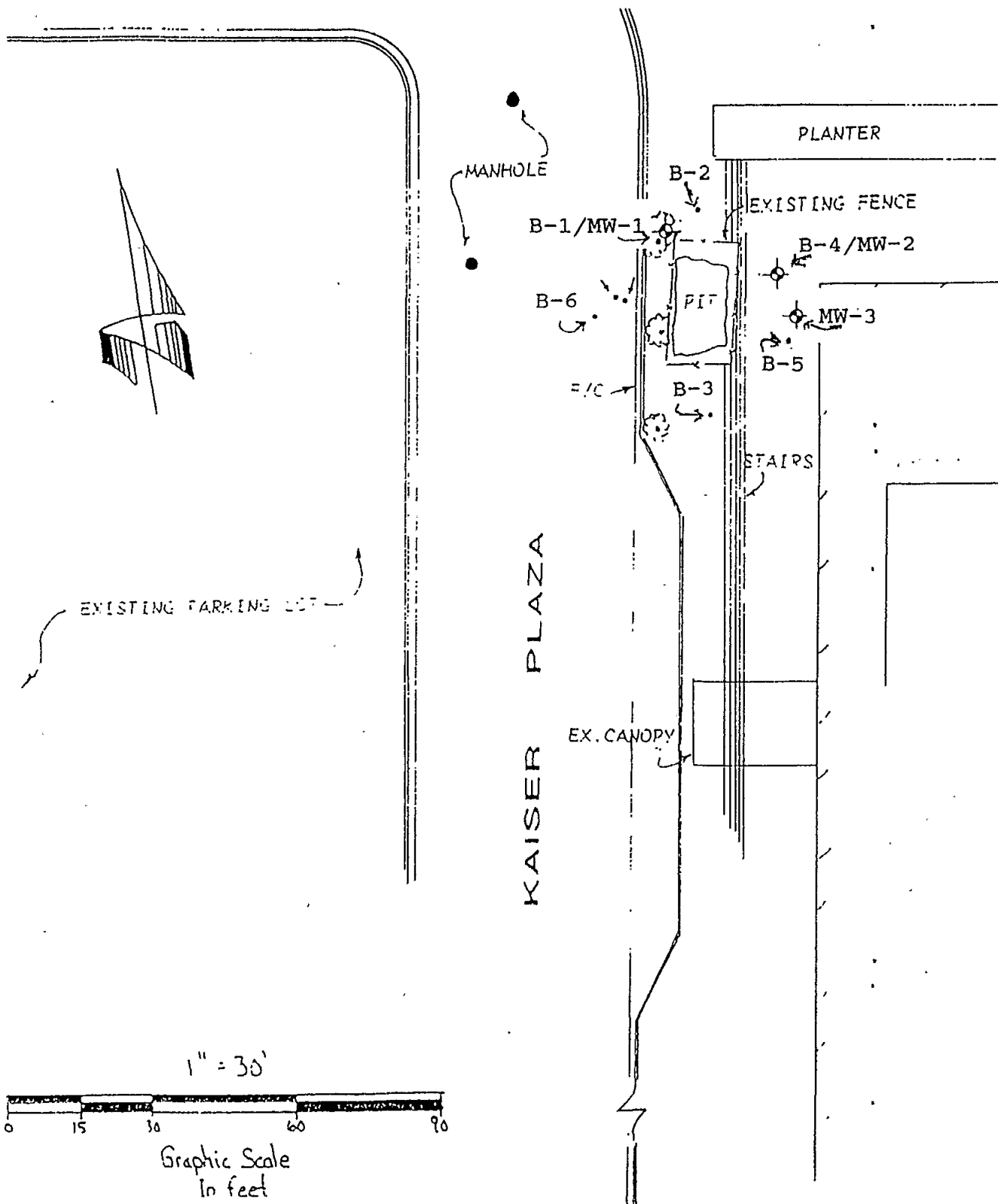
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287

~~185636 185637~~

15/4W-26R17-13

185636



BOREHOLE AND MONITORING WELL LOCATIONS

THE ORDWAY BUILDING  
One Kaiser Plaza, Oakland, California

FIGURE

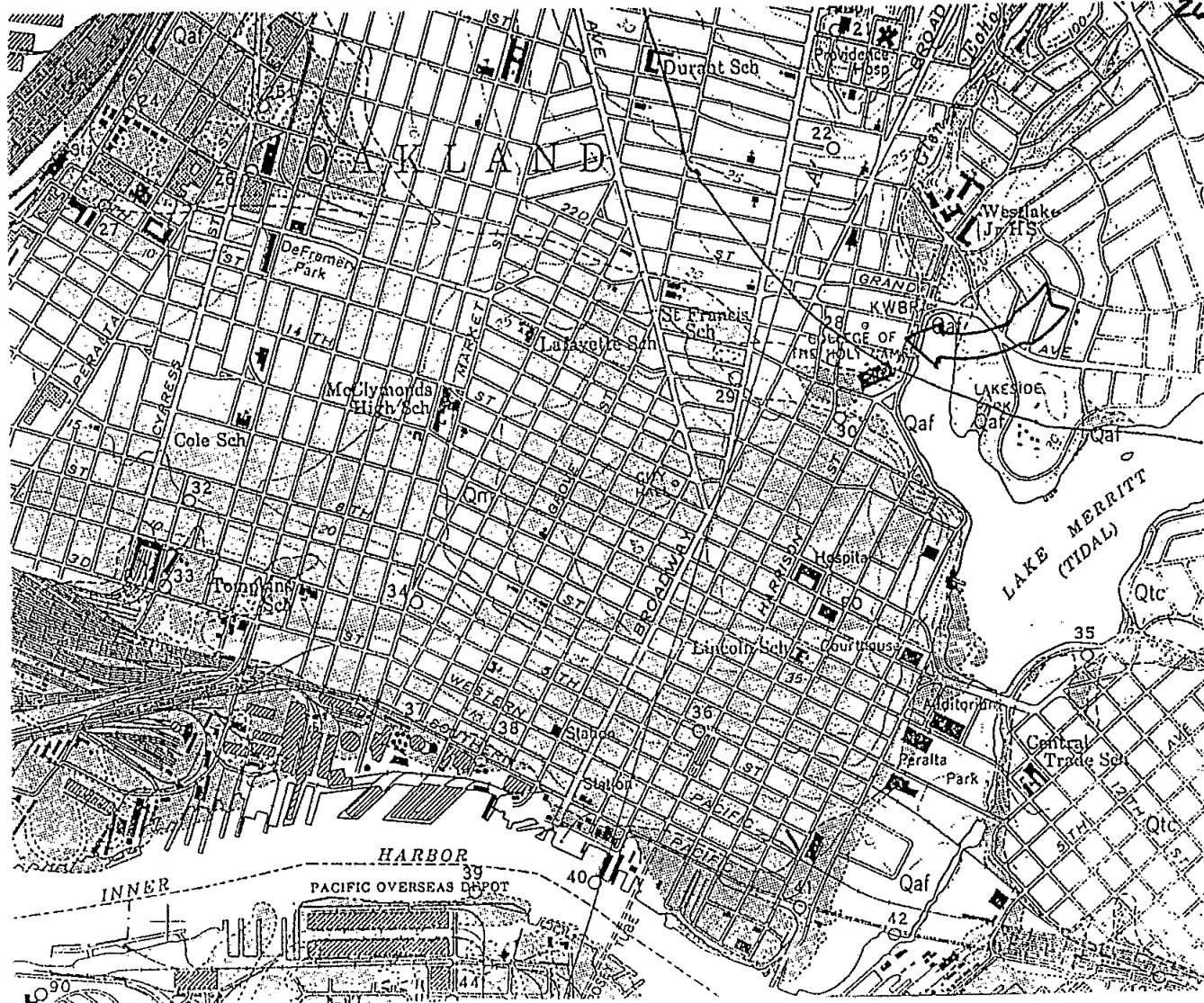
2



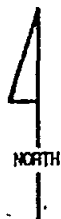
3.087

185636

HW1 OIS 04N 26R11  
 MW2 26R12  
 MW3 26R13  
 24R



Base from U.S. Geological Survey, Miscellaneous Geologic Investigations Map I-229



# SITE LOCATION MAP

OROWAY BUILDING  
 One Kaiser Plaza, Oakland, California

FIGURE

1



ph: 510-373 9211, C57 Lic # 554979

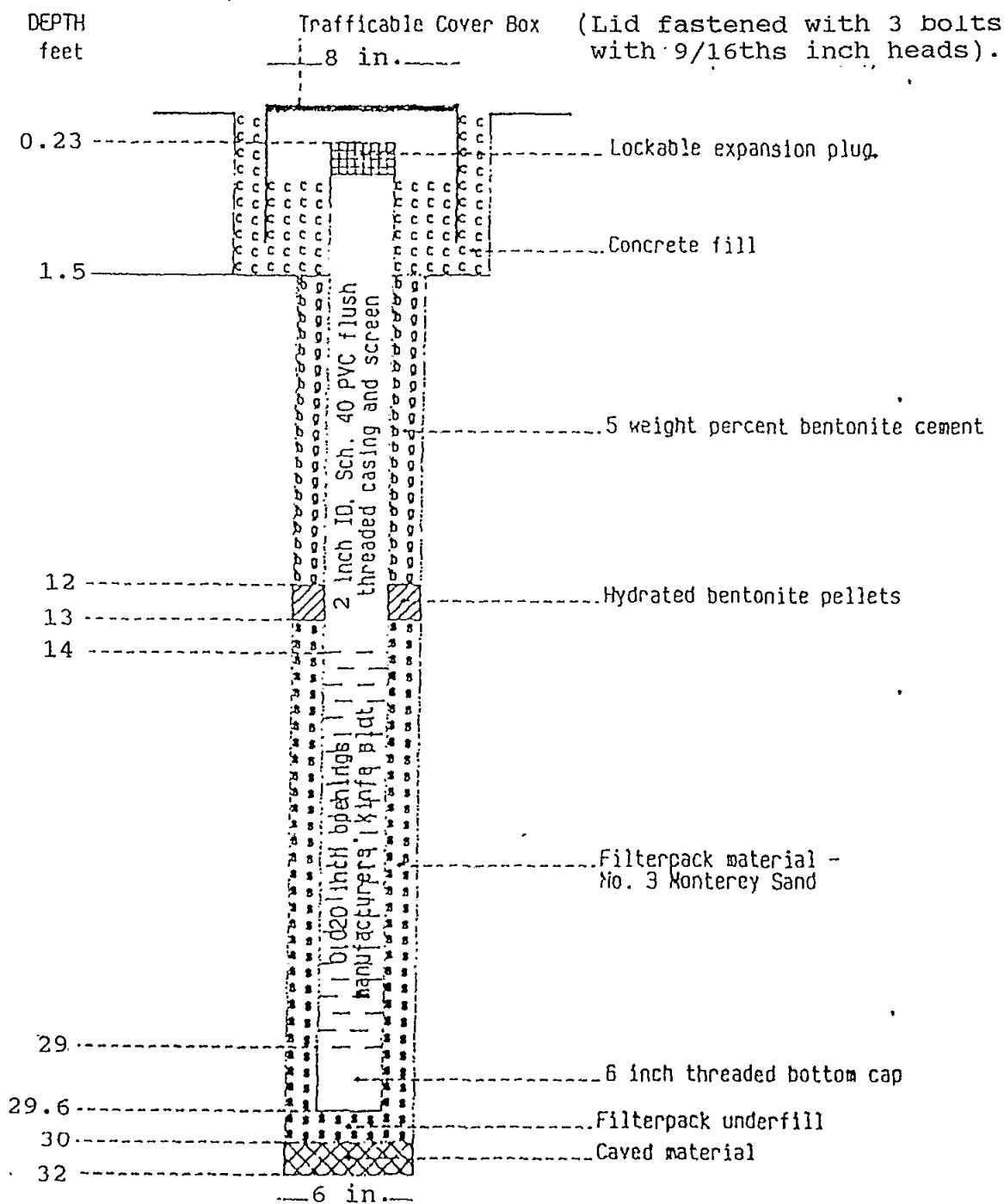
4067

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15/4W-26R12

Project No. DES-2  
 Top of Casing Elev. 19.77 FMSL  
 Ground Surface Elev. 20.0 FMSL  
 Depth Datum Ground Surface

Alameda County, California  
 ZONE 7 Permit No. 92116  
 Completion Date 03/27/92



WELL CONSTRUCTION SCHEMATIC  
 MONITORING WELL MW-2  
 THE ORDWAY BUILDING  
 ONE KAISER PLAZA  
 OAKLAND, CALIFORNIA

D2

587

185636

15/4W-26212

**H<sub>2</sub>OGEOL****BOREHOLE LITHOLOGIC LOG**

Proj. DES-3

BOREHOLE No. B-4 , Sheet 3 of .3  
Monitoring Well MW-2

| SAMPLING<br>BOL COUNTS | FID/FID<br>H <sub>2</sub> OVA<br>READING | DEPTH<br>feet | SOIL<br>SAMPLE<br>NUMBER | TIME | GRAPHIC<br>SOIL<br>SYMBOL | USCS<br>SOIL<br>SYMBOL |                              |
|------------------------|--|---------------|--------------------------|------|---------------------------|------------------------|------------------------------|
|                        |  | 30            |                          |      |                           |                        |                              |
|                        |  | 31            |                          |      |                           |                        |                              |
|                        |  | 32            |                          |      |                           |                        |                              |
|                        |  | 33            |                          |      |                           |                        | Total depth drilled 32 feet. |
|                        |  | 34            |                          |      |                           |                        |                              |
|                        |  | 35            |                          |      |                           |                        |                              |
|                        |  | 36            |                          |      |                           |                        |                              |
|                        |  | 37            |                          |      |                           |                        |                              |
|                        |  | 38            |                          |      |                           |                        |                              |
|                        |  | 39            |                          |      |                           |                        |                              |
|                        |  | 40            |                          |      |                           |                        |                              |
|                        |  | 41            |                          |      |                           |                        |                              |
|                        |  | 42            |                          |      |                           |                        |                              |
|                        |  | 43            |                          |      |                           |                        |                              |
|                        |  | 44            |                          |      |                           |                        |                              |
|                        |  | 45            |                          |      |                           |                        |                              |

C. 587

185636

15/40-26R12

| H <sub>2</sub> OGEOL     |                              | BOREHOLE LITHOLOGIC LOG   |                          |       |                           |                        |   |
|--------------------------|------------------------------|---|--------------------------|-------|---------------------------|------------------------|---|
| Proj. DES-3              |                              | BOREHOLE No. <u>B-4</u> , Sheet 2 of <u>3</u><br>Monitoring Well MW-2 |                          |       |                           |                        |   |
| SAMPLING<br>BLOCK COUNTS | PTD/FID<br>IN/OVA<br>READING | DEPTH<br>feet   | SOIL<br>SAMPLE<br>NUMBER | TIME  | GRAPHIC<br>SOIL<br>SYMBOL | USCS<br>SOIL<br>SYMBOL |   |
|                          |                              | 14  |                          |       |                           |                        |   |
| 0                        |                              | 15  |                          |       |                           |                        |   |
| 10<br>12                 |                              | 16  | 4-3                      | 09:12 |                           |                        | Reddish brown gravelly silt. Fill<br>No noticeable odor.                  |
|                          |                              | 17  |                          |       |                           |                        | Very gravelly silt.   |
|                          |                              | 18  |                          |       |                           |                        | Very gravelly silt.   |
| 12                       |                              | 19  |                          |       |                           |                        |   |
| 11<br>16                 |                              | 20  | 4-4                      | 09:45 |                           | ML                     | First encountered water at 20 feet.<br>Reddish brown gravelly sandy silt. |
|                          |                              | 21  |                          |       |                           |                        | Fill. No noticeable odor.   |
|                          |                              | 22  |                          |       |                           |                        |   |
|                          |                              | 23  |                          |       |                           |                        |   |
|                          |                              | 24  |                          |       |                           |                        |   |
|                          |                              | 25  |                          |       |                           |                        |   |
|                          |                              | 26  |                          |       |                           | GW                     | Gravel. Well Graded. Fill.  |
|                          |                              | 27  |                          |       |                           |                        |   |
|                          |                              | 28  |                          |       |                           | ML                     | Reddish brown gravelly silt. Fill.  |
|                          |                              | 29  |                          |       |                           |                        |   |

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OIS 04/26/12



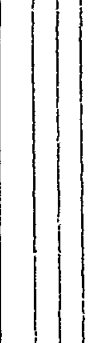


## BOREHOLE LITHOLOGIC LOG

 BOREHOLE No. B-4 , Sheet 1 of 3  
 Monitoring Well MW-2

 Project No. DES-3 Date: 03/24/92  
 Client: Decon Environmental Services  
 Location: The Ordway Building  
 Location: One Kaiser Plaza  
 Oakland, California  
 Logged by: Gary D. Lowe, R.G., C.E.G.

 Drilling Co. West HazMat Drilling, Inc.  
 Drill Model: Housier  
 Drilling Method: Hollow Stem Auger  
 Driller: Rod Reidhead  
 Ground Surface Elevation: FMSL  
 Datum: Grnd Surf Diameter 6-in.

| SAFING<br>BLG COUNTS | PID/FID<br>HN, OVA<br>READING | DEPTH<br>feet | SOIL<br>SAMPLE<br>NUMBER | TIME  | GRAPHIC<br>SOIL<br>SYMBOL   | USCS<br>SOIL<br>SYMBOL | Field Soil Description             |  |  |  |
|----------------------|-------------------------------|---------------|--------------------------|-------|---|------------------------|------------------------------------|--|--|--|
|                      |                               |               |                          |       |   |                        |                                    |  |  |  |
|                      |                               |               |                          |       |   |                        |                                    |  |  |  |
|                      |                               | 1             |                          |       |   |                        | Concrete, etc. 12-inches.          |  |  |  |
|                      |                               | 2             |                          |       |   | CL                     | Reddish brown gravelly clay. Fill. |  |  |  |
|                      |                               | 3             |                          |       |   |                        |                                    |  |  |  |
|                      |                               | 4             |                          |       |   |                        |                                    |  |  |  |
| 14                   |                               | 5             |                          |       |   |                        | Light yellowish brown sandy clayey |  |  |  |
| 7                    |                               | 6             |                          | 08:34 |  | ML                     | silt. Fill                         |  |  |  |
| 8                    |                               | 7             |                          |       |   |                        | (Sample all caved fill).           |  |  |  |
|                      |                               | 8             |                          |       |   |                        | No noticeable odor.                |  |  |  |
|                      |                               | 9             |                          |       |   |                        |                                    |  |  |  |
| 7                    |                               | 10            |                          |       |  | ML                     | Yellowish brown to reddish brown   |  |  |  |
| 22                   |                               | 11            | 4-2                      | 08:50 |   |                        | mottled gravelly clayey silt. Fill |  |  |  |
| 24                   |                               | 12            |                          |       |   |                        | No noticeable odor.                |  |  |  |
|                      |                               | 13            |                          |       |   |                        | Very gravelly silt.                |  |  |  |
|                      |                               |               |                          |       |   |                        | Less gravel.                       |  |  |  |

13 08 14

185635-185637 D

MW1 OIS 042 26R11  
MW2 26R12  
MW3 26R13  
26R



1000 0 1000 2000 3000 4000 5000 FEET

Base from U.S. Geological Survey, Miscellaneous Geologic Investigations Map I-239

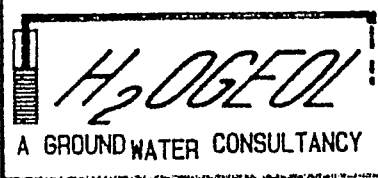


# SITE LOCATION MAP

ORDWAY BUILDING  
One Kaiser Plaza, Oakland, California

FIGURE

1

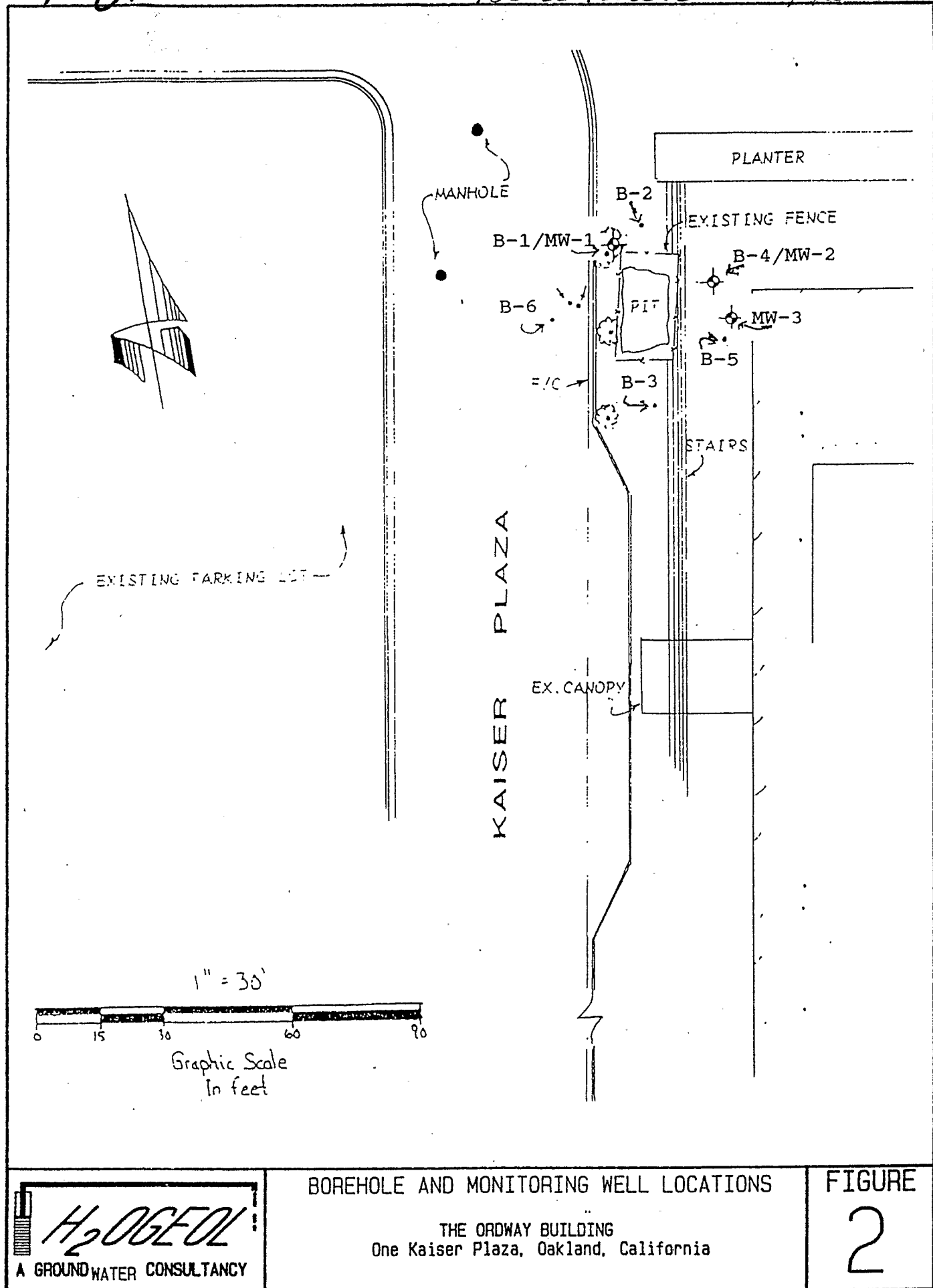


ph: 510-373 9211, C57 Lic # 554979

14 08 14

185635-185637D

15/4W-26R11-13



**CONFIDENTIAL**

**STATE OF CALIFORNIA DWR  
WELL COMPLETION REPORT  
(WELL LOGS)**

**REMOVED**



13 87 14

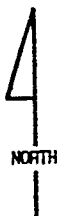
185635-185637D

MW1 OIS 042 26R11  
MW2 26R12  
MW3 26R13  
24R



1000 0 1000 2000 3000 4000 5000 FEET

Base from U.S. Geological Survey, Miscellaneous Geologic Investigations Map I-239

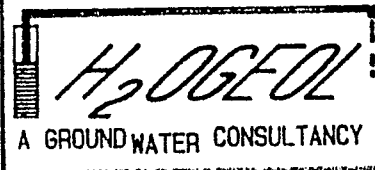


# SITE LOCATION MAP

ORDWAY BUILDING  
One Kaiser Plaza, Oakland, California

FIGURE

1

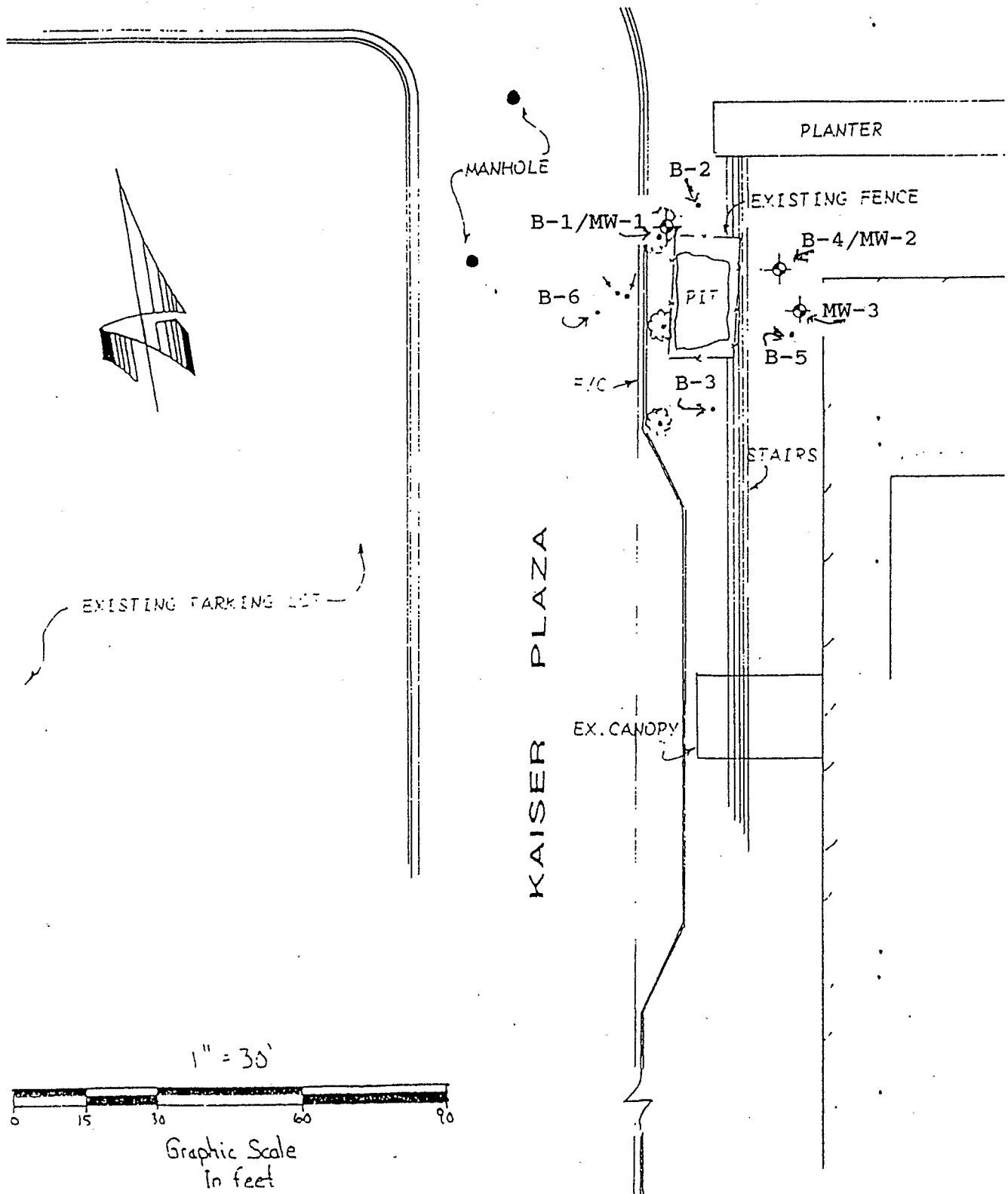


ph: 510-373 9211, C57 Lic # 554979

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185635-185637D

15/4W-26R14-13



# BOREHOLE AND MONITORING WELL LOCATIONS

THE ORDWAY BUILDING  
One Kaiser Plaza, Oakland, California

FIGURE

2

28/14

185637

015 04W 26R13



## BOREHOLE LITHOLOGIC LOG

 BOREHOLE No. MW-3 , Sheet 1 of 2  
 Monitoring Well MW-3

 Project No. DES-3 Date: 03/27/92  
 Client: Decon Environmental Services  
 Location: The Ordway Building  
 Location: One Kaiser Plaza  
 Oakland, California  
 Logged by: Gary D. Lowe, R.G., C.E.G.

 Drilling Co. West HazMat Drilling, Inc.  
 Drill Model: Housier  
 Drilling Method: Hollow Stem Auger  
 Driller: Rod Reidhead  
 Ground Surface Elevation: FMSL  
 Datum: Grnd Surf Diameter 8-in.

| SAMPLING<br>BLOW COUNTS | PTD/FID<br>IN/OVA<br>READING | DEPTH<br>feet | SOIL<br>SAMPLE<br>NUMBER | TIME | GRAPHIC<br>SOIL<br>SYMBOL | USCS<br>SOIL<br>SYMBOL | Field Soil Description                         |  |  |  |  |
|-------------------------|------------------------------|---------------|--------------------------|------|---------------------------|------------------------|--|--|--|--|--|
|                         |                              |               |                          |      |                           |                        | Concrete, etc. 12-inches.                      |  |  |  |  |
|                         |                              |               |                          |      |                           |                        | Reddish brown gravelly clay. Fill.             |  |  |  |  |
|                         |                              |               |                          |      |                           |                        |  |  |  |  |  |
|                         |                              | 1             |                          |      |                           | CL                     |  |  |  |  |  |
|                         |                              | 2             |                          |      |                           |                        |  |  |  |  |  |
|                         |                              | 3             |                          |      |                           |                        |  |  |  |  |  |
|                         |                              | 4             |                          |      |                           |                        |  |  |  |  |  |
|                         |                              | 5             |                          |      |                           | ML                     | Light yellowish brown sandy clayey silt. Fill. |  |  |  |  |
|                         |                              | 6             |                          |      |                           |                        |  |  |  |  |  |
|                         |                              | 7             |                          |      |                           |                        |  |  |  |  |  |
|                         |                              | 8             |                          |      |                           |                        |  |  |  |  |  |
|                         |                              | 9             |                          |      |                           | ML                     |  |  |  |  |  |
|                         |                              | 10            |                          |      |                           |                        | Yellowish brown gravelly clayey silt. Fill.    |  |  |  |  |
|                         |                              | 11            |                          |      |                           |                        |  |  |  |  |  |
|                         |                              | 12            |                          |      |                           |                        |  |  |  |  |  |
|                         |                              | 13            |                          |      |                           |                        |  |  |  |  |  |

3814

185637

15/4W-262 13

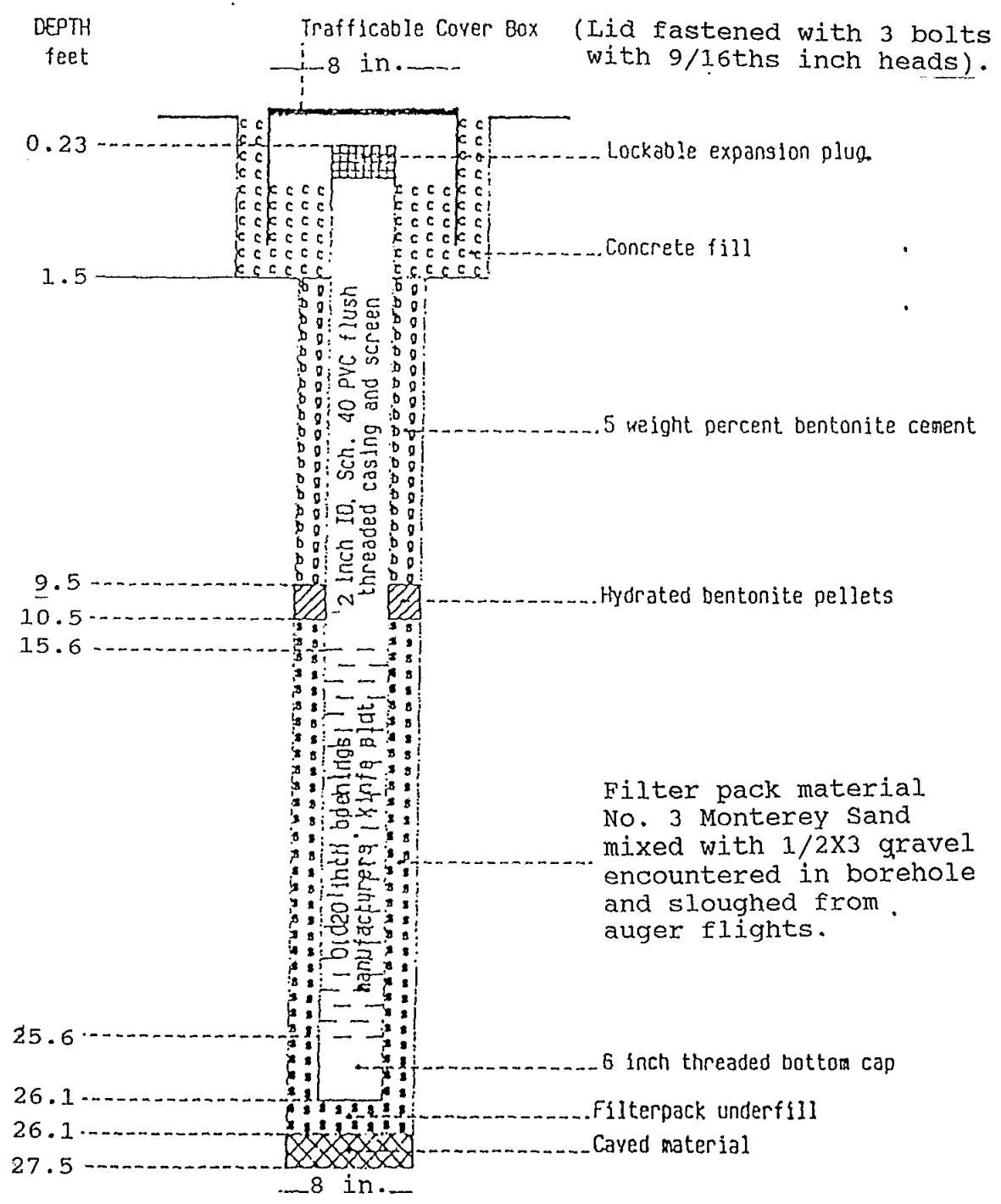
| H <sub>2</sub> OGEOL    |  | BOREHOLE LITHOLOGIC LOG                        |                          |      |                           |                        |   |
|-------------------------|--|--|--------------------------|------|---------------------------|------------------------|---|
| Proj. DES-3             |  | BOREHOLE No. <u>MW-3</u> , Sheet 2 of <u>2</u> |                          |      |                           |                        |   |
| SAMPLING<br>BLDG COUNTS | PID/FTD<br>H <sub>2</sub> O<br>READING | DEPTH<br>feet                                  | SOIL<br>SAMPLE<br>NUMBER | TIME | GRAPHIC<br>SOIL<br>SYMBOL | USCS<br>SOIL<br>SYMBOL |   |
|                         |  | 14   |                          |      |                           |                        |   |
|                         |  | 15   |                          |      |                           |                        |   |
|                         |  | 16   |                          |      |                           |                        |   |
|                         |  | 17   |                          |      |                           |                        | First encountered water at 17 feet.                           |
|                         |  | 18   |                          |      |                           |                        | Gravel. Well graded. Fill                                     |
|                         |  | 19   |                          |      |                           |                        |   |
|                         |  | 20   |                          |      |                           |                        |   |
|                         |  | 21   |                          |      |                           |                        |   |
|                         |  | 22   |                          |      |                           |                        |   |
|                         |  | 23   |                          |      |                           | GW                     |   |
|                         |  | 24   |                          |      |                           |                        |   |
|                         |  | 25   |                          |      |                           |                        |   |
|                         |  | 26   |                          |      |                           |                        |   |
|                         |  | 27   |                          |      |                           |                        | Auger refusal at 27.5 feet. Total<br>depth drilled 27.5 feet. |
|                         |  | 28   |                          |      |                           |                        |   |
|                         |  | 29   |                          |      |                           |                        |   |

4/8/14

185637 15/4W-26R13

Project No. DES-2  
 Top of Casing Elev. 19.86 FMSL  
 Ground Surface Elev. 20.1 FMSL  
 Depth Datum Ground Surface

Alameda County, California  
 ZONE 7 Permit No. 92116  
 Completion Date 03/27/92



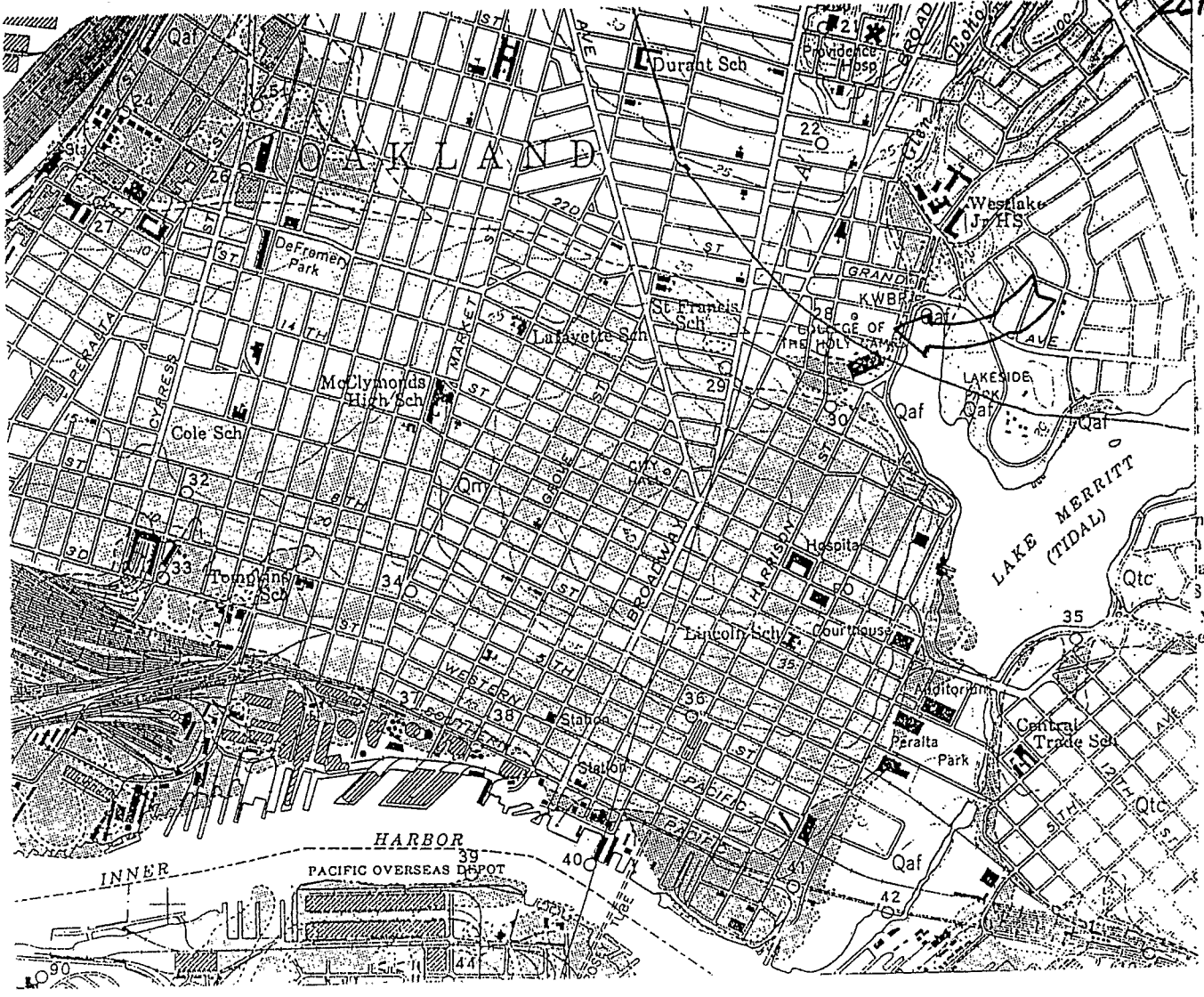
WELL CONSTRUCTION SCHEMATIC  
 MONITORING WELL MW-3  
 THE ORDWAY BUILDING  
 ONE KAISER PLAZA  
 OAKLAND, CALIFORNIA

D3

13 08 14

185635-185637D

MW1 OIS 042 26R11  
MW2 26R12  
MW3 26R13  
26R



Base from U.S. Geological Survey, Miscellaneous Geologic Investigations Map I-239



# SITE LOCATION MAP

ORDWAY BUILDING  
One Kaiser Plaza, Oakland, California

FIGURE

1

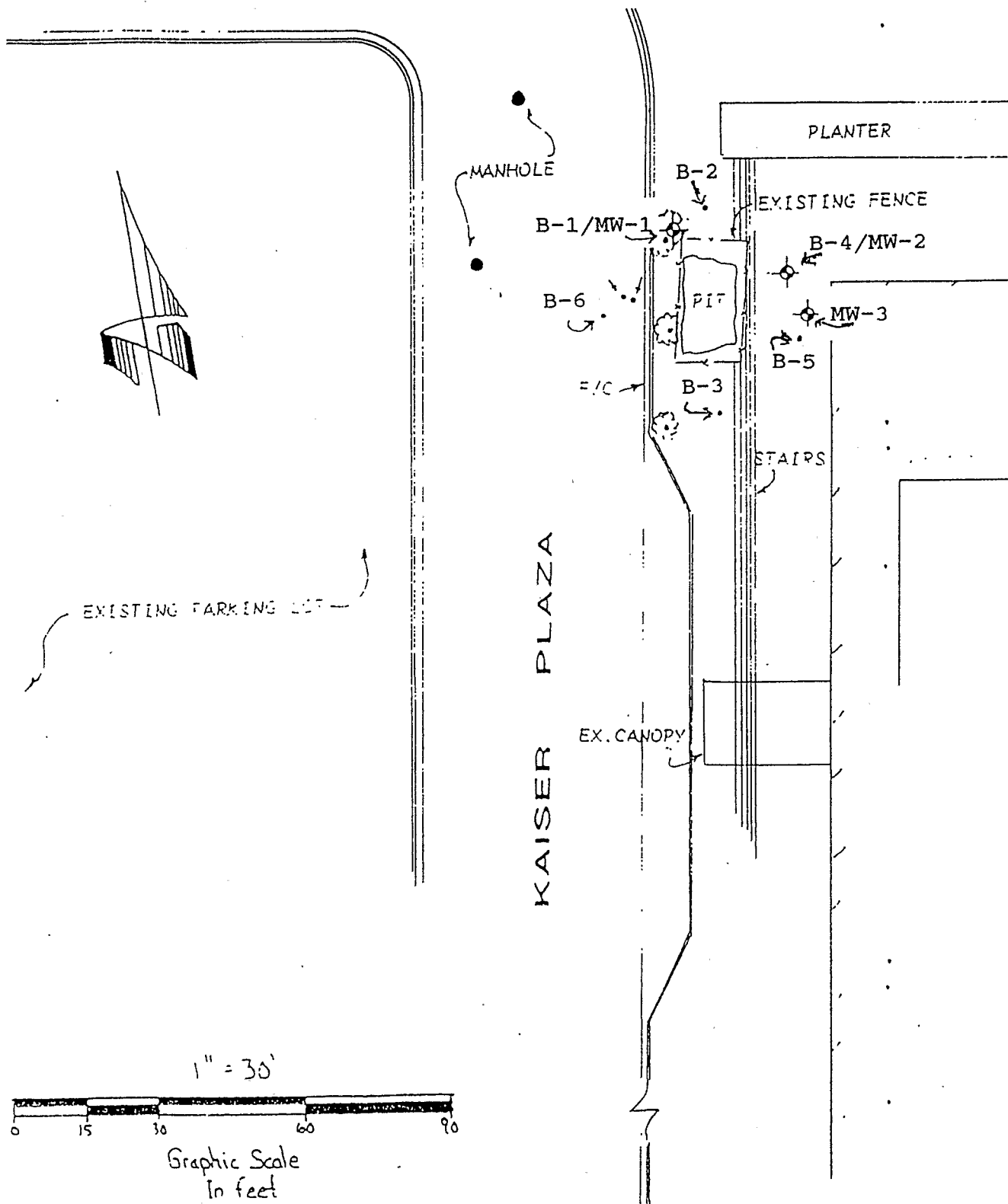


ph: 510-373 9211, C57 Lic # 554979

14 of 14

185635-185637D

15/4W-26R11-13



13 08 14

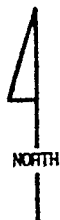
185635-185637D

MW1 OIS 042 26R11  
MW2 26R12  
MW3 26R13  
26R



1000 0 1000 2000 3000 4000 5000 FEET

Base from U.S. Geological Survey, Miscellaneous Geologic Investigations Map I-239



# SITE LOCATION MAP

ORDWAY BUILDING  
One Kaiser Plaza, Oakland, California

FIGURE

1



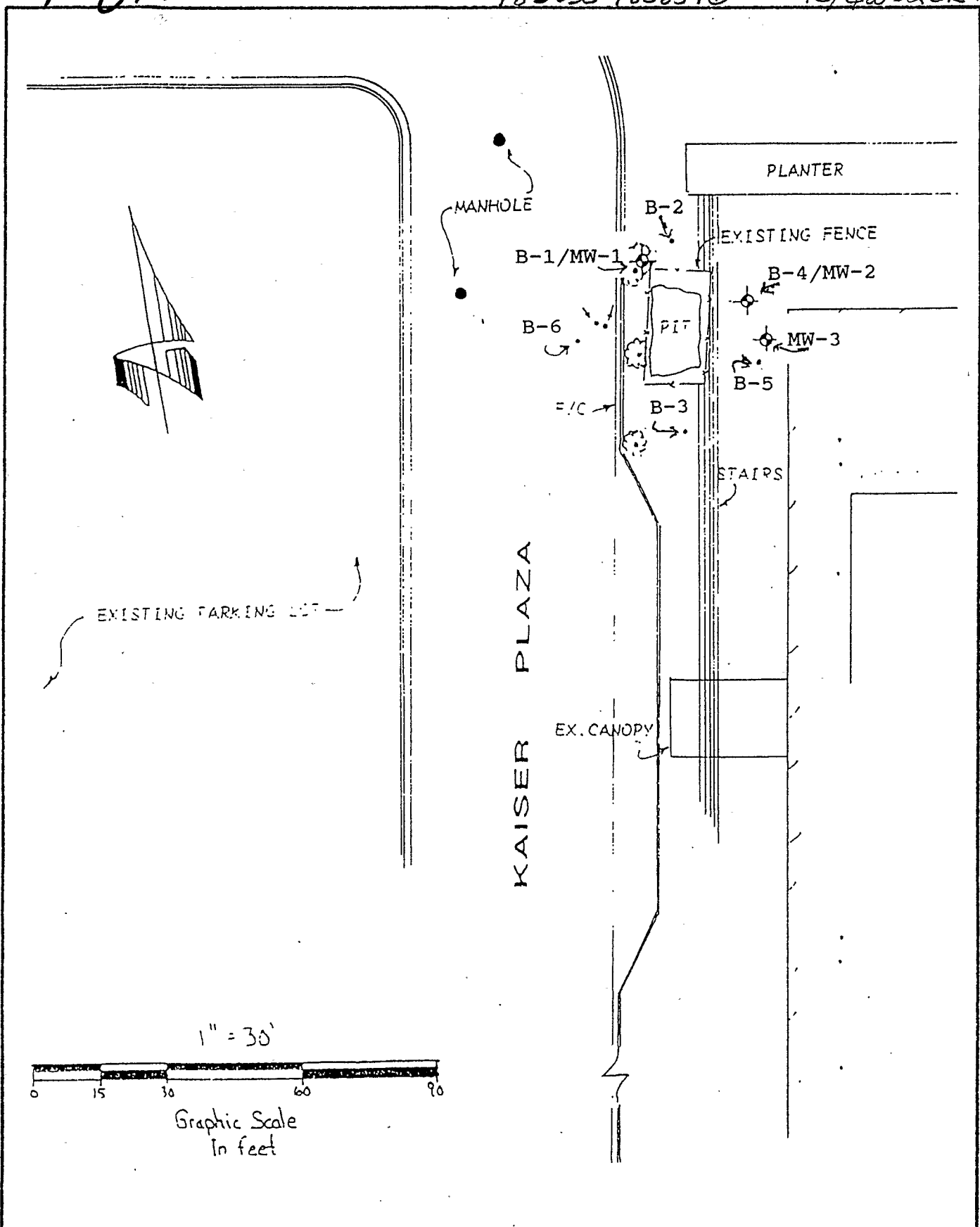
ph: 510-373 9211, C57 Lic # 554979



14 08 14

185635-185637D

15/4W-26R14-13



BOREHOLE AND MONITORING WELL LOCATIONS

THE ORDWAY BUILDING  
One Kaiser Plaza, Oakland, California

FIGURE

2

# BOREHOLE LITHOLOGIC LOG

BOREHOLE No. B-2 , Sheet 1 of 2

Project No. DES-3 Date: 03/23/92  
Client: Decon Environmental Services  
Location: The Ordway Building  
Location: One Kaiser Plaza  
Oakland, California  
Logged by: Gary D. Lowe, R.G., C.E.G.

Drilling Co. West HazMat Drilling, Inc.  
Drill Model: Housier  
Drilling Method: Hollow Stem Auger  
Driller: Rod Reidhead  
Ground Surface Elevation: FMSL  
Datum: Grnd Surf Diameter 6-in.



| SAMPLING<br>BLOW COUNTS | PID/FID<br>HN, OVA<br>READING | DEPTH<br>feet | SOIL<br>SAMPLE<br>NUMBER | TIME  | GRAPHIC<br>SOIL<br>SYMBOL | USCS<br>SOIL<br>SYMBOL | Field Soil Description   |  |  |  |  |
|-------------------------|-------------------------------|---------------|--------------------------|-------|---------------------------|------------------------|--|--|--|--|--|
|                         |                               |               |                          |       |                           |                        | WATER LEVEL  |  |  |  |  |
|                         |                               |               |                          |       |                           |                        | TIME   |  |  |  |  |
|                         |                               |               |                          |       |                           |                        | DATE   |  |  |  |  |
|                         |                               |               |                          |       |                           |                        | Concrete, etc. 10-inches.  |  |  |  |  |
|                         |                               | 1             |                          |       |                           | CL                     |  |  |  |  |  |
|                         |                               | 2             |                          |       |                           |                        | Reddish brown gravelly silty clay. Fill                                |  |  |  |  |
|                         |                               | 3             |                          |       |                           |                        |  |  |  |  |  |
|                         |                               | 4             |                          |       |                           | CL                     | Dark brown gravelly silty clay. Fill                                   |  |  |  |  |
| 5                       |                               | 5             |                          |       |                           |                        |  |  |  |  |  |
| 6                       |                               | 6             | 2-1                      | 14:34 |                           | ML                     | Light yellowish brown sandy clayey                                     |  |  |  |  |
| 16                      |                               |               |                          |       |                           |                        | silt. No noticeable odor.  |  |  |  |  |
|                         |                               | 7             |                          |       |                           |                        |  |  |  |  |  |
|                         |                               | 8             |                          |       |                           | SM                     |  |  |  |  |  |
|                         |                               | 9             |                          |       |                           |                        |  |  |  |  |  |
| 4                       |                               | 10            |                          |       |                           |                        | Dark yellowish brown silty very fine to fine sand. No noticeable odor. |  |  |  |  |
| 9                       |                               | 11            | 2-2                      | 15:01 |                           | SC                     |  |  |  |  |  |
| 18                      |                               |               |                          |       |                           |                        | Gravelly fine sand.  |  |  |  |  |
|                         |                               | 12            |                          |       |                           |                        |  |  |  |  |  |
|                         |                               | 13            |                          |       |                           |                        |  |  |  |  |  |

6 B14  
H<sub>2</sub>OGEOL

185637A 15/4W-26R  
BOREHOLE LITHOLOGIC LOG

Proj. DES-3

BOREHOLE No. B-2 , Sheet 2 of 2

| SAMPLING<br>ELEM COUNTS | FID/FTD<br>H <sub>2</sub> OVA<br>READING | DEPTH<br>feet | SOIL<br>SAMPLE<br>NUMBER | TIME  | GRAPHIC<br>SOIL<br>SYMBOL  | USCS<br>SOIL<br>SYMBOL |   |
|-------------------------|--|---------------|--------------------------|-------|--|------------------------|---|
|                         |  | 14            |                          |       |   | ML                     |   |
| 4                       |  | 15            |                          |       |  |                        |   |
| 6                       |  |               | 2-3                      | 15:18 |  |                        | Dark yellowish brown clayey silt with reddish brown mottles around root   |
| 10                      |  | 16            |                          |       |  |                        | hairs. No noticeable odor.  |
|                         |  | 17            |                          |       |  | CL                     | Yellowish brown silty clay.   |
|                         |  | 18            |                          |       |  |                        |   |
|                         |  | 19            |                          |       |  |                        |   |
| 11                      |  | 20            |                          |       |  |                        |   |
| 9                       |  |               | 2-4                      | 15:43 |  |                        | Yellowish brown silty clay with   |
| 12                      |  | 21            |                          |       |  |                        | reddish brown mottles. No noticeable odor.                                |
|                         |  | 22            |                          |       |  |                        | Total depth drilled 19.5 feet. Sample driven to 21 feet. Borehole grouted |
|                         |  | 23            |                          |       |  |                        | 03/23/92.   |
|                         |  | 24            |                          |       |  |                        |   |
|                         |  | 25            |                          |       |  |                        |   |
|                         |  | 26            |                          |       |  |                        |   |
|                         |  | 27            |                          |       |  |                        |   |
|                         |  | 28            |                          |       |  |                        |   |
|                         |  | 29            |                          |       |  |                        |   |

13 08 14

185635-185637D

MW1 OIS 042 26R11  
MW2 26R12  
MW3 26R13  
26R



1000 0 1000 2000 3000 4000 5000 FEET

Base from U.S. Geological Survey, Miscellaneous Geologic Investigations Map I-239



# SITE LOCATION MAP

ORDWAY BUILDING  
One Kaiser Plaza, Oakland, California

FIGURE

1

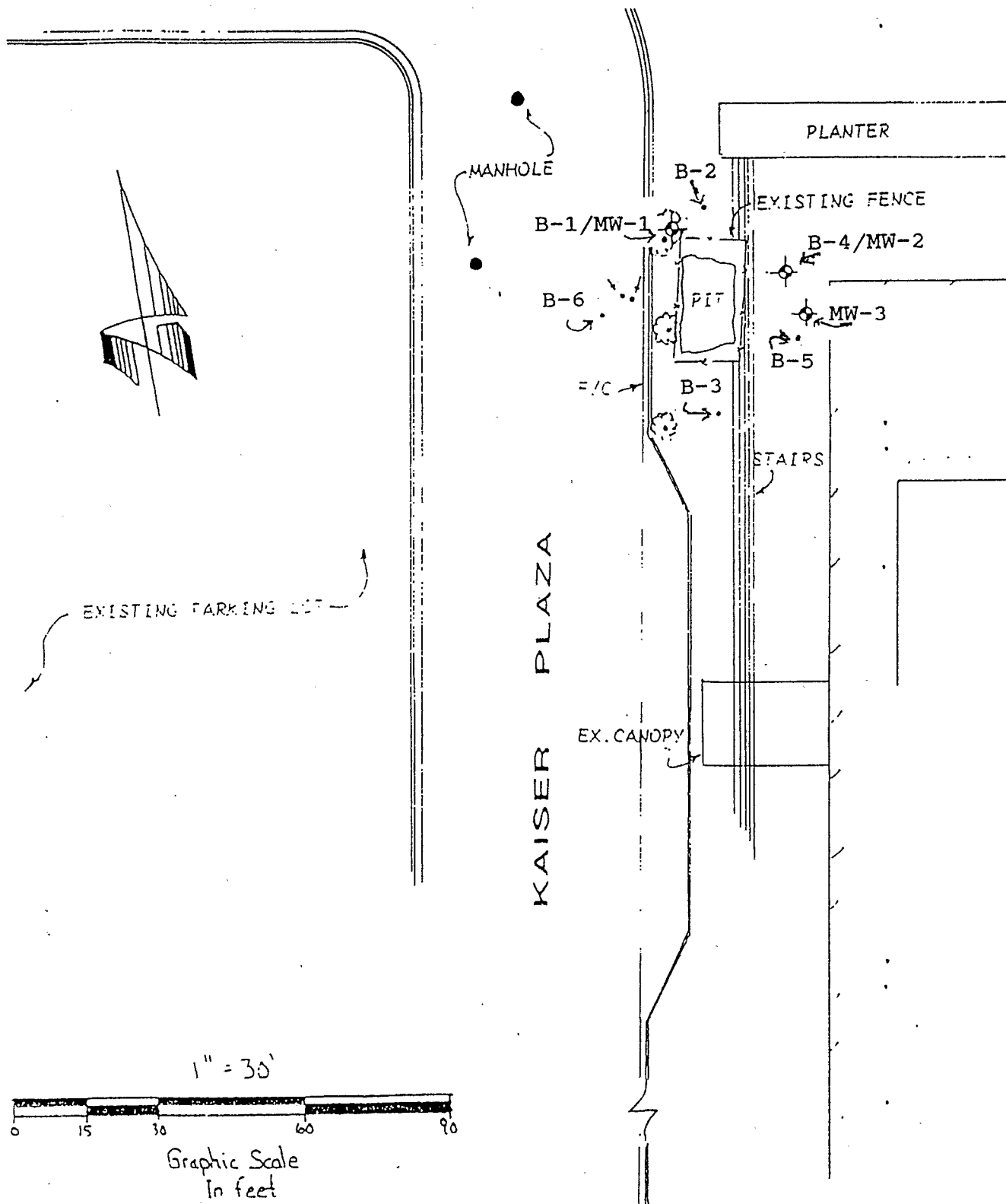


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14 of 14

185635-185637D

15/4W-26R14-13



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STATE OF CALIFORNIA DWR  
WELL COMPLETION REPORT  
(WELL LOGS)

**REMOVED**

7814

185637B

15/4W-26R

**H2OGEOL**

A GROUNDWATER CONSULTANCY

**BOREHOLE LITHOLOGIC LOG**BOREHOLE No. B-3 , Sheet 1 of 2

Project No. DES-3      Date: 03/23/92  
 Client: Decon Environmental Services  
 Location: The Ordway Building  
 Location: One Kaiser Plaza  
                   Oakland, California  
 Logged by: Gary D. Lowe, R.G., C.E.G.

Drilling Co. West HazMat Drilling, Inc.  
 Drill Model: Housier  
 Drilling Method: Hollow Stem Auger  
 Driller: Rod Reidhead  
 Ground Surface Elevation: FMSL  
 Datum: Grnd Surf Diameter 6-in.

| SAMPLING<br>BLOW COUNTS | PID/FID<br>HPL-DNA<br>READING | DEPTH<br>feet | SOIL<br>SAMPLE<br>NUMBER | TIME | GRAPHIC<br>SOIL<br>SYMBOL | USCS<br>SOIL<br>SYMBOL | Field Soil Description   |  |  |  |  |
|-------------------------|-------------------------------|---------------|--------------------------|------|---------------------------|------------------------|--|--|--|--|--|
|                         |                               |               |                          |      |                           |                        | WATER LEVEL  |  |  |  |  |
|                         |                               |               |                          |      |                           |                        | TIME   |  |  |  |  |
|                         |                               |               |                          |      |                           |                        | DATE   |  |  |  |  |
|                         |                               | 1             |                          |      |                           |                        | Concrete, etc. 12-inches.  |  |  |  |  |
|                         |                               | 2             |                          |      |                           | CL                     |  |  |  |  |  |
|                         |                               | 3             |                          |      |                           |                        | Reddish brown gravelly silty clay.<br>Fill                               |  |  |  |  |
|                         |                               | 4             |                          |      |                           |                        | Dark brown gravelly clayey silt.Fill                                     |  |  |  |  |
| 4                       |                               | 5             |                          |      |                           | ML                     |  |  |  |  |  |
| 5<br>5                  |                               | 6             | 16:46                    |      |                           |                        | (Sampler filled with cuttings, no<br>sample retrieved.No noticeable odor |  |  |  |  |
|                         |                               | 7             |                          |      |                           |                        |  |  |  |  |  |
|                         |                               | 8             |                          |      |                           |                        |  |  |  |  |  |
|                         |                               | 9             |                          |      |                           | ML                     |  |  |  |  |  |
| 4                       |                               | 10            |                          |      |                           |                        |  |  |  |  |  |
| 5<br>7                  |                               | 11            | 3-2 17:06                |      |                           |                        | Yellowish brown clayey silt.<br>No noticeable odor.                      |  |  |  |  |
|                         |                               | 12            |                          |      |                           |                        |  |  |  |  |  |
|                         |                               | 13            |                          |      |                           |                        | Yellowish brown silty clay.  |  |  |  |  |
|                         |                               |               |                          |      |                           |                        |  |  |  |  |  |

8.08/14

185637B



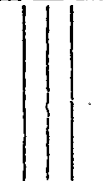
1S/4W-26R

H<sub>2</sub>OGEOL

## BOREHOLE LITHOLOGIC LOG

Proj. DES-3

BOREHOLE No. B-3 , Sheet 2 of 2

| SAMPLING<br>FLOW COUNTS | RID/STD<br>HNL/DVA<br>READING | DEPTH<br>feet | SOIL<br>SAMPLE<br>NUMBER | TIME  | GRAPHIC<br>SOIL<br>SYMBOL  | USCS<br>SOIL<br>SYMBOL |  |
|-------------------------|-------------------------------|---------------|--------------------------|-------|--|------------------------|--|
|                         |                               | 14            |                          |       |   | CL                     |  |
| 10                      |                               | 15            |                          |       |  |                        |  |
| 10<br>15                |                               | 16            | 3-3                      | 17:20 |  |                        | Yellowish brown silty clay. Stiff<br>No noticeable odor. |
|                         |                               | 17            |                          |       |  |                        |  |
|                         |                               | 18            |                          |       |   | SM                     | Yellowish brown silty very fine to<br>fine sand.         |
|                         |                               | 19            |                          |       |  |                        |  |
| 9                       |                               | 20            |                          |       |  | ML                     |  |
| 12<br>20                |                               | 21            | 3-4                      | 17:43 |  |                        | Yellowish brown clayey silt.                             |
|                         |                               | 22            |                          |       |  |                        | No noticeable odor.<br>Total depth drilled 19.5 feet.    |
|                         |                               | 23            |                          |       |  |                        | Sample driven to 21 feet.<br>Borehole grouted 03/23/92.  |
|                         |                               | 24            |                          |       |  |                        |  |
|                         |                               | 25            |                          |       |  |                        |  |
|                         |                               | 26            |                          |       |  |                        |  |
|                         |                               | 27            |                          |       |  |                        |  |
|                         |                               | 28            |                          |       |  |                        |  |
|                         |                               | 29            |                          |       |  |                        |  |



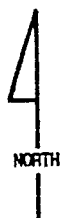
13 08 14

185635-185637D

HW1 OIS 04W 26R11  
HW2 26R12  
HW3 26R13  
24R



Base from U.S. Geological Survey, Miscellaneous Geologic Investigations Map I-239



# SITE LOCATION MAP

ORDWAY BUILDING  
One Kaiser Plaza, Oakland, California

FIGURE

1

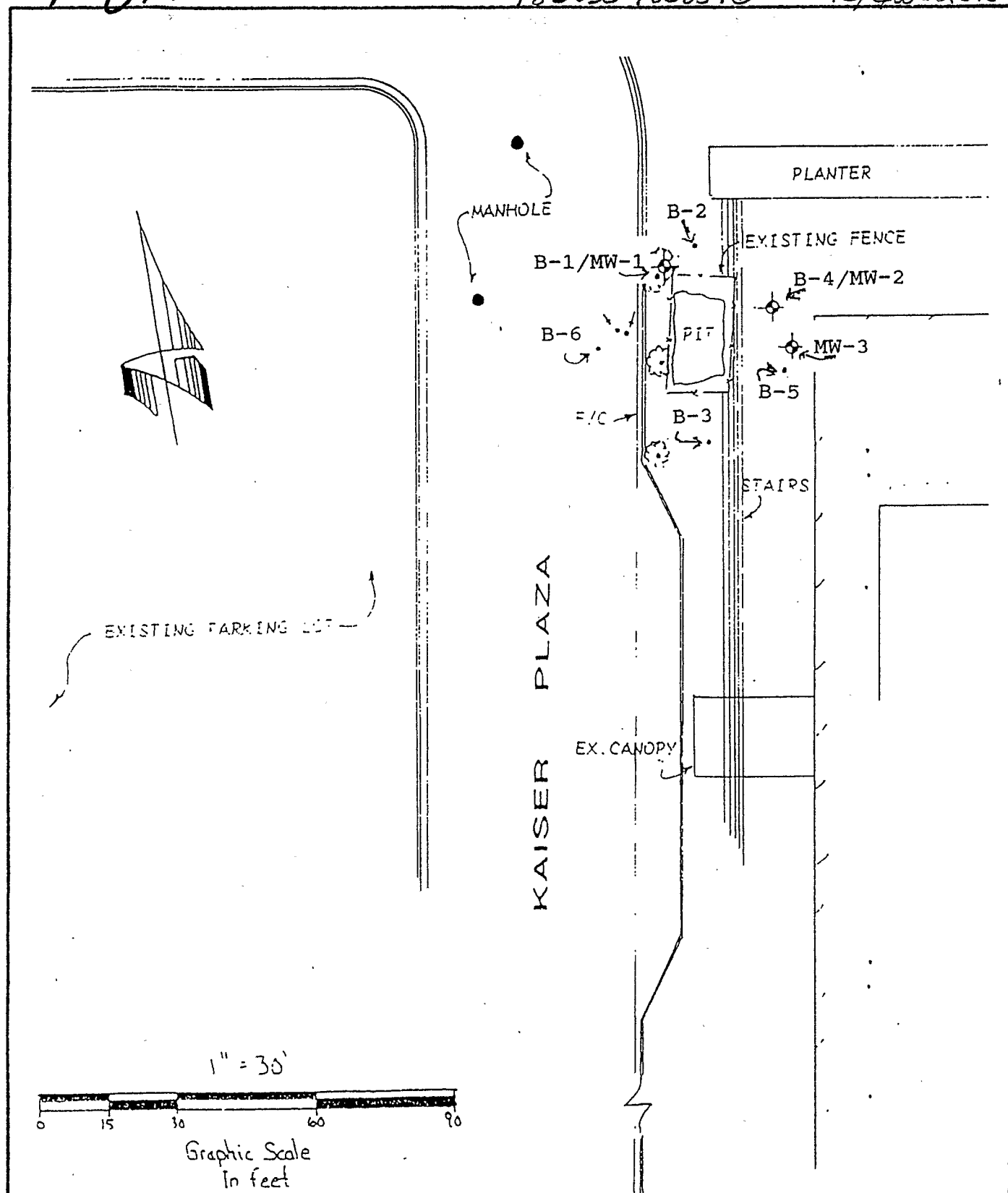


ph: 510-373 9211, C57 Lic # 554979

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185635-185637D

15/4W-26R14-13



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STATE OF CALIFORNIA DWR  
WELL COMPLETION REPORT  
(WELL LOGS)

**REMOVED**

9814

185637C

15/4W-26R



## BOREHOLE LITHOLOGIC LOG

BOREHOLE No. B-5 , Sheet 1 of 2

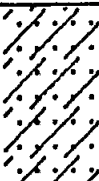
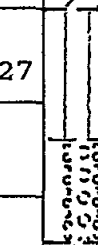
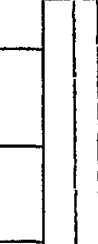
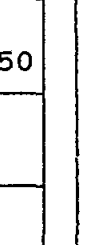

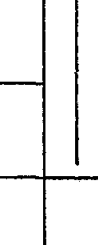

Project No. DES-3 Date: 03/25/92  
 Client: Decon Environmental Services  
 Location: The Ordway Building  
 Location: One Kaiser Plaza  
 Oakland, California  
 Logged by: Gary D. Lowe, R.G., C.E.G.

Drilling Co. West HazMat Drilling, Inc.  
 Drill Model: Housier  
 Drilling Method: Hollow Stem Auger  
 Driller: Rod Reidhead  
 Ground Surface Elevation: FMSL  
 Datum: Grnd Surf Diameter 6-in.

| SAMPLING<br>BLD# COUNT# | FID/FID<br>FNU/GVA<br>READING | DEPTH<br>feet | SOIL<br>SAMPLE<br>NUMBER | TIME  | GRAPHIC<br>SOIL<br>SYMBOL | USCS<br>SOIL<br>SYMBOL | Field Soil Description             |  |  |  |  |
|-------------------------|-------------------------------|---------------|--------------------------|-------|---------------------------|------------------------|------------------------------------|--|--|--|--|
|                         |                               |               |                          |       |                           |                        | WATER LEVEL                        |  |  |  |  |
|                         |                               |               |                          |       |                           |                        | TIME                               |  |  |  |  |
|                         |                               |               |                          |       |                           |                        | DATE                               |  |  |  |  |
|                         |                               | 1             |                          |       |                           |                        | Concrete, etc. 12-inches.          |  |  |  |  |
|                         |                               | 2             |                          |       |                           | ML                     | Reddish brown gravelly silt. Fill. |  |  |  |  |
|                         |                               | 3             |                          |       |                           |                        |                                    |  |  |  |  |
|                         |                               | 4             |                          |       |                           |                        | Yellowish brown fine sand. Well    |  |  |  |  |
| 2                       |                               | 5             |                          |       |                           |                        | graded. Fill.                      |  |  |  |  |
| 2                       |                               | 6             | 5-1                      | 07:59 |                           | SW                     | Yellowish brown fine sand. Fill.   |  |  |  |  |
| 2                       |                               | 7             |                          |       |                           |                        | No noticeable odor.                |  |  |  |  |
|                         |                               | 8             |                          |       |                           |                        | (6-inch sampling auger passed, but |  |  |  |  |
|                         |                               | 9             |                          |       |                           |                        | reaming with 8-inch auger exposed  |  |  |  |  |
|                         |                               | 10            |                          |       |                           |                        | edge of 10-inch pipe at 7.5 feet). |  |  |  |  |
| 10                      |                               | 11            |                          |       |                           | SC/<br>SM              |                                    |  |  |  |  |
| 14                      |                               | 12            | 5-2                      | 08:13 |                           |                        | Yellowish brown clayey/silty sand. |  |  |  |  |
| 16                      |                               | 13            |                          |       |                           |                        | Fill. No noticeable odor.          |  |  |  |  |
|                         |                               |               |                          |       |                           |                        |                                    |  |  |  |  |
|                         |                               |               |                          |       |                           |                        |                                    |  |  |  |  |
|                         |                               |               |                          |       |                           | SC                     | Dark yellowish brown clayey sand.  |  |  |  |  |
|                         |                               |               |                          |       |                           |                        |                                    |  |  |  |  |

10 of 14  
H<sub>2</sub>OGEOL185637C 1S/4W-26R  
BOREHOLE LITHOLOGIC LOGBOREHOLE No. B-5 , Sheet 2 of 2

Proj. DES-3

| SAMPLING<br>BLDG COUNTS | PID/FID<br>HN, OVA<br>READING | DEPTH<br>feet | SOIL<br>SAMPLE<br>NUMBER | TIME  | GRAPHIC<br>SOIL<br>SYMBOL   | USCS<br>SOIL<br>SYMBOL |   |
|-------------------------|-------------------------------|---------------|--------------------------|-------|---|------------------------|---|
|                         |                               | 14            |                          |       |    |                        |   |
| 11                      |                               | 15            |                          |       |   |                        |   |
| 11<br>20                |                               | 16            | 5-3                      | 08:27 |    | ML                     | Reddish brown gravelly silt. Fill<br>No noticeable odor.                  |
|                         |                               | 17            |                          |       |   | GW                     | Gravel. Well graded. Fill   |
|                         |                               | 18            |                          |       |   |                        | Reddish brown gravelly silt. Fill   |
|                         |                               | 19            |                          |       |   |                        |   |
| 6                       |                               | 20            |                          |       |  |                        |   |
| 7<br>12                 |                               | 21            | 5-4                      | 08:50 |   |                        | First encountered water at 20 feet.<br>Reddish brown gravelly sandy silt. |
|                         |                               | 22            |                          |       |  |                        | Fill. No noticeable odor.   |
|                         |                               | 23            |                          |       |   | ML                     |   |
|                         |                               | 24            |                          |       |  |                        |   |
|                         |                               | 25            |                          |       |   |                        |   |
|                         |                               | 26            |                          |       |  |                        |   |
|                         |                               | 27            |                          |       |   |                        | Auger refusal at 27 feet. Total<br>depth drilled 27 feet. Borehole        |
|                         |                               | 28            |                          |       |   |                        | grouted 03/27/92.   |
|                         |                               | 29            |                          |       |   |                        |   |

13 08 14

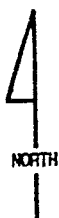
185635-185637D

MW1 OIS 04W 26R11  
MW2 26R12  
MW3 26R13  
2012



1000 0 1000 2000 3000 4000 5000 FEET

Base from U.S. Geological Survey, Miscellaneous Geologic Investigations Map I-239



# SITE LOCATION MAP

OROWAY BUILDING  
One Kaiser Plaza, Oakland, California

FIGURE

1

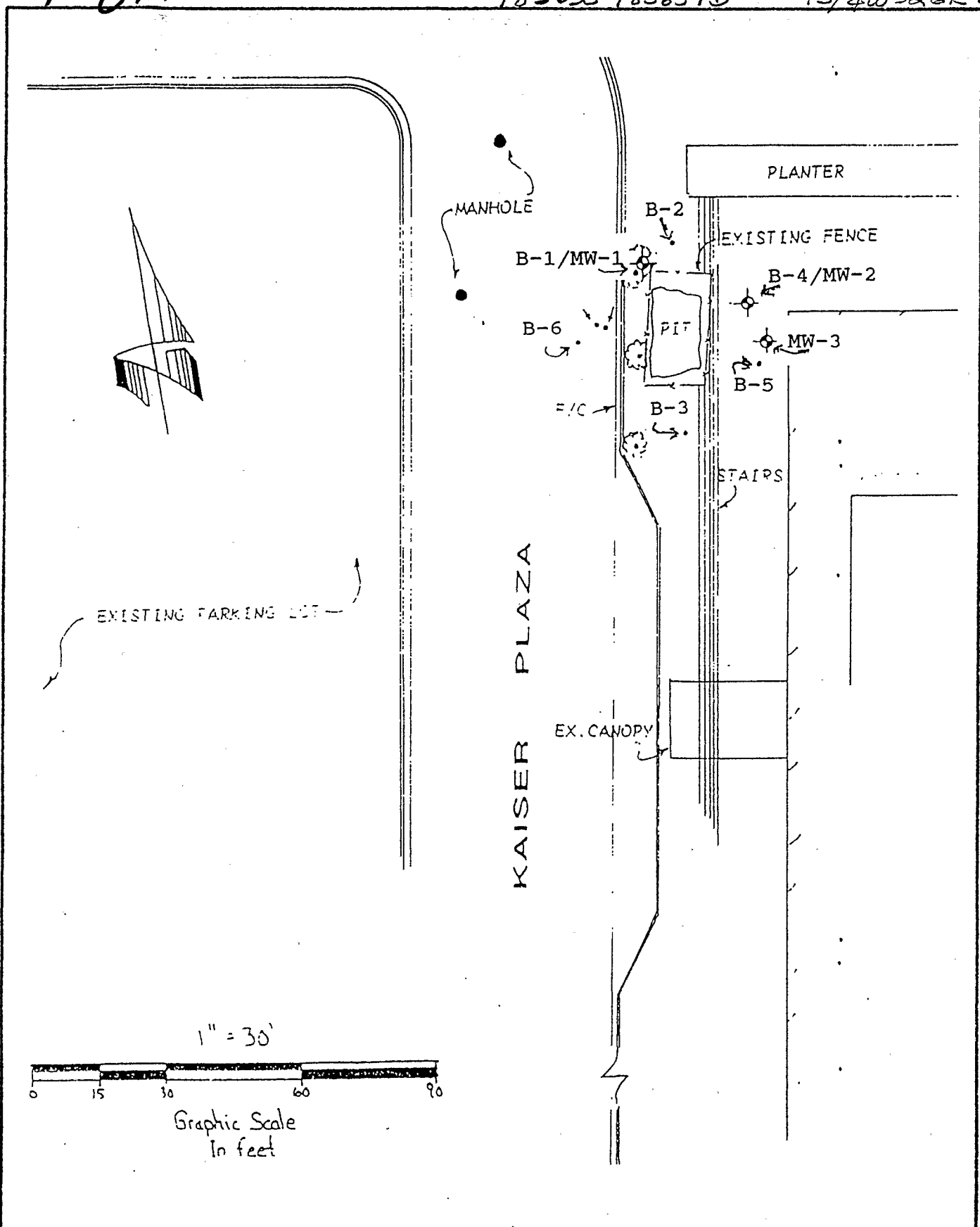


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14 08 14

185635-185637D

15/4W-26R1413



 **H2OGEOLOGICAL**  
A GROUNDWATER CONSULTANCY

BOREHOLE AND MONITORING WELL LOCATIONS

THE ORDWAY BUILDING  
One Kaiser Plaza, Oakland, California

FIGURE  
**2**

**CONFIDENTIAL**

STATE OF CALIFORNIA DWR  
WELL COMPLETION REPORT  
(WELL LOGS)

**REMOVED**



11/28/14

185637D

15/4W-26R

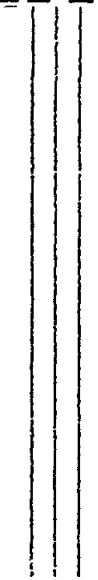

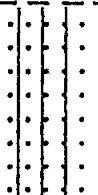
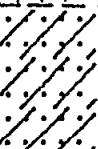



# BOREHOLE LITHOLOGIC LOG

BOREHOLE No. B-6 , Sheet 1 of 2

Project No. DES-3      Date: 03/27/92  
 Client: Decon Environmental Services  
 Location: The Ordway Building  
 Location: One Kaiser Plaza  
                   Oakland, California  
 Logged by: Gary D. Lowe, R.G., C.E.G.

Drilling Co. West HazMat Drilling, Inc.  
 Drill Model: Housier  
 Drilling Method: Hollow Stem Auger  
 Driller: Rod Reidhead  
 Ground Surface Elevation: FMSL  
 Datum: Grnd Surf Diameter 6-in.

| SAFELING<br>ELOW COUNTS | PID/FID<br>HNG. OVA<br>READING | DEPTH<br>feet | SOIL<br>SAMPLE<br>NUMBER | TIME  | GRAPHIC<br>SOIL<br>SYMBOL   | USCS<br>SOIL<br>SYMBOL | Field Soil Description  |   |                                    |  |  |
|-------------------------|--------------------------------|---------------|--------------------------|-------|---|------------------------|---|---|------------------------------------|--|--|
|                         |                                |               |                          |       |   |                        | Asphalt, 4-inches.  |   |                                    |  |  |
|                         |                                |               |                          |       |   |                        | Gravel base.  |   |                                    |  |  |
|                         |                                |               |                          |       |   |                        | Yellowish brown clayey silt.  |   |                                    |  |  |
|                         |                                | 1             |                          |       |   | ML                     |   |   |                                    |  |  |
|                         |                                | 2             |                          |       |   |                        |   |   |                                    |  |  |
|                         |                                | 3             |                          |       |   |                        |   |   |                                    |  |  |
|                         |                                | 4             |                          |       |   |                        |   |   |                                    |  |  |
|                         |                                | 5             |                          |       |   |                        |   |   |                                    |  |  |
|                         |                                | 6             |                          |       |   |                        | (Hand augered past five foot sample)  |   |                                    |  |  |
|                         |                                | 7             |                          |       |  | SM                     | Light yellowish brown silty sand.   |   |                                    |  |  |
|                         |                                | 8             |                          |       |   |                        | ML  | Dark reddish brown gravelly silt.                       |                                    |  |  |
|                         |                                | 9             |                          |       |  | SM                     |   | Light yellowish brown silty sand<br>No noticeable odor. |                                    |  |  |
| 24                      |                                | 10            |                          |       |   |                        |  | SC  | Light yellowish brown clayey sand. |  |  |
| 15<br>25                |                                | 11            | 6-2                      | 10:20 |  |                        |   |   | Light yellowish brown clay.        |  |  |
|                         |                                | 12            |                          |       |   |                        |   |   |                                    |  |  |
|                         |                                | 13            |                          |       |   |                        |   |   |                                    |  |  |

12 86 14  
**H<sub>2</sub>OGEOL**

185237D

1S/4W-26R

**BOREHOLE LITHOLOGIC LOG**

Proj. DES-3

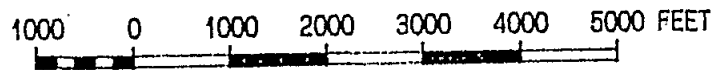
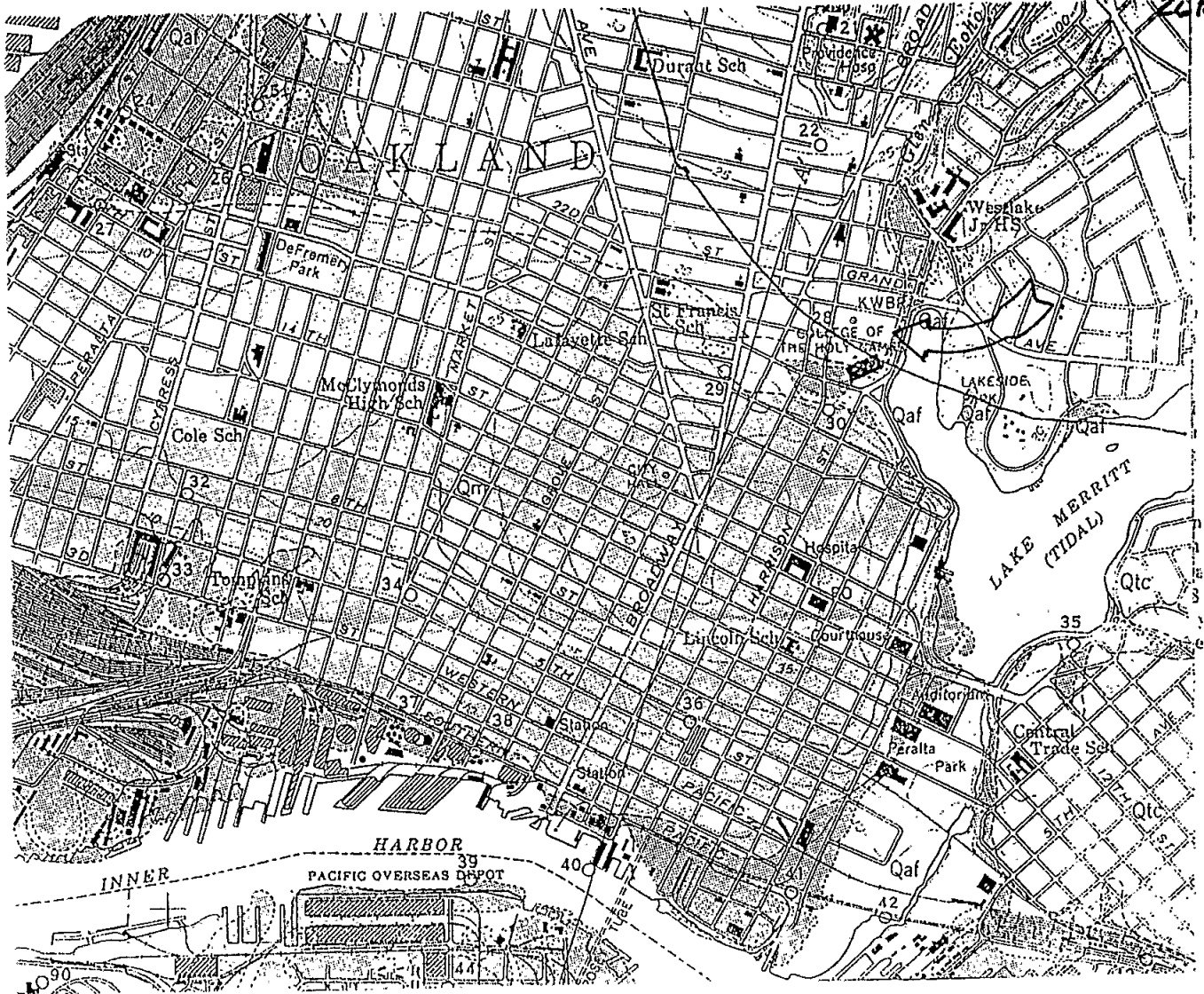
BOREHOLE No. B-6 , Sheet 2 of 2

| SAMPLING<br>FLOW COUNTS | PID/TID<br>H <sub>2</sub> O/A<br>READING | DEPTH<br>feet | SOIL<br>SAMPLE<br>NUMBER | TIME  | GRAPHIC<br>SOIL<br>SYMBOL | USCS<br>SOIL<br>SYMBOL |  |
|-------------------------|--|---------------|--------------------------|-------|---------------------------|------------------------|--|
|                         |  | 14            |                          |       |                           | CL                     |  |
| 8                       |  |               |                          |       |                           |                        |  |
| 11<br>11                |  | 15            | 6-3                      | 10:42 |                           |                        | Yellowish brown silty clay.<br>No noticeable odor.                           |
|                         |  | 16            |                          |       |                           |                        |  |
|                         |  | 17            |                          |       |                           | ML                     | Yellowish brown clayey silt.   |
|                         |  | 18            |                          |       |                           |                        |  |
|                         |  | 19            |                          |       |                           | CL                     |  |
| 11                      |  |               |                          |       |                           |                        |  |
| 16<br>16                |  | 20            | 6-4                      | 11:01 |                           |                        | Yellowish brown silty clay.  |
|                         |  | 21            |                          |       |                           |                        | No noticeable odor.  |
|                         |  | 22            |                          |       |                           |                        | Total depth drilled 19.5 feet. Sample<br>driven to 21 feet. Borehole grouted |
|                         |  | 23            |                          |       |                           |                        | 03/27/92.  |
|                         |  | 24            |                          |       |                           |                        |  |
|                         |  | 25            |                          |       |                           |                        |  |
|                         |  | 26            |                          |       |                           |                        |  |
|                         |  | 27            |                          |       |                           |                        |  |
|                         |  | 28            |                          |       |                           |                        |  |
|                         |  | 29            |                          |       |                           |                        |  |

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MW1 OIS 04N 26R11  
 MW2 26R12  
 MW3 26R13  
 26R



Base from U.S. Geological Survey, Miscellaneous Geologic Investigations Map I-239



# SITE LOCATION MAP

OROWAY BUILDING  
 One Kaiser Plaza, Oakland, California

FIGURE

1

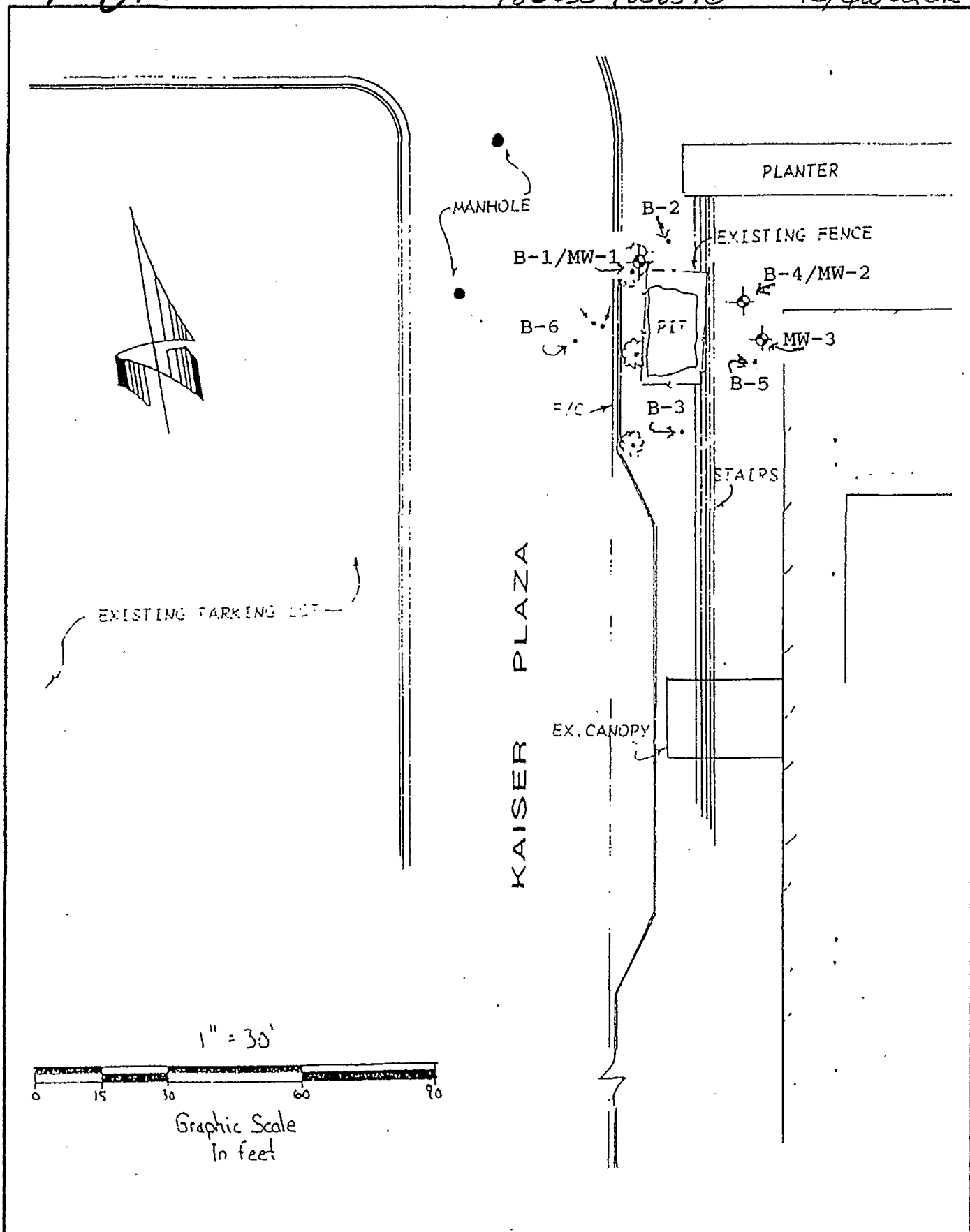


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185635-185637D

15/4W-26R14-13



BOREHOLE AND MONITORING WELL LOCATIONS

THE ORDWAY BUILDING  
One Kaiser Plaza, Oakland, California

FIGURE

2